



Product Catalogue 2011

WAGA®

Georg Fischer Waga N.V.



Connecting



Repairing



Tapping



Additional products

No matter how complicated your connection problem seems, we offer you a solution when it comes to:

Connecting

- MULTI/JOINT® 3000 (Plus)
- MULTI/JOINT® XL
- ST-system
- Stainless steel pipe couplings
- Plast/Joint®

Repairing

- Bell joint leak clamps WAL/V
- Stainless steel repair clamps

Tapping

- Threaded / Flanged saddles
- Multi/Saddle Plus
- Drilling devices

Additional products and spare parts

- Street covers, insert stiffeners, pipe anchors, ratchet spanners, hydrants, and valves

→ We offer

- **Tailor-made solution** for any application in which fluids or gases are conveyed.
- **Competent customer support worldwide** with our sales companies and representatives. We always work with the best distributors in every country. They are our key partners when it comes to product and application know-how and immediate availability of our products.
- **Fast delivery** with our electronic inventory management system and flexible production facilities. Our logistics services are consistently improved to satisfy our customers' high demands.



GEORG FISCHER
PIPING SYSTEMS

Georg Fischer Waga N.V.
Lange Veenteweg 19, 8161 PA Epe
P.O. Box 290, 8160 AG Epe
T +31 (0) 578 678 378
F +31 (0) 578 620 848
waga.ps@georgfischer.com
www.waga.nl

For more product
documentation see
our download center
www.waga.nl

Contents

	page
MULTI/JOINT® 3000 Plus	5
MULTI/JOINT® 3000 (phase out program)	39
MULTI/JOINT® XL	91
ST-System	99
Plast/Joint®	107
Accessories	115
Multi/Clamp	125
WAL/V	157
Multi/Saddle Plus	163
W400 Drilling Device / 410 Drilling Device	169
FGR Stainless Steel Couplings	177
Plastic Street Covers	211
Index	216
Conditions of sale	242



MULTI/JOINT® 3000 Plus

Contents MULTI/JOINT® 3000 Plus

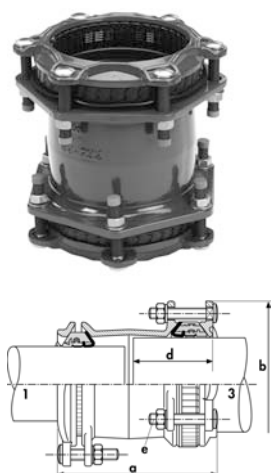
	page
MULTI/JOINT® 3000 Plus Coupling	8
MULTI/JOINT® 3007 Plus Coupling	9
MULTI/JOINT® 3050 Plus Flange adaptor	10
MULTI/JOINT® 3057 Plus Flange adaptor	11
MULTI/JOINT® 3050 AWWA C110 Flange adaptor	12
MULTI/JOINT® 3050 JIS Flange adaptor	13
MULTI/JOINT® 3057 AWWA C110 Flange adaptor	14
MULTI/JOINT® 3057 JIS Flange adaptor	15
MULTI/JOINT® 3100 Plus Reduced coupling	16
MULTI/JOINT® 3107 Plus Reduced coupling	17
MULTI/JOINT® 3150 Plus Reduced flange adaptor	18
MULTI/JOINT® 3157 Plus Reduced flange adaptor	19
MULTI/JOINT® 3200 Plus End-cap blind	20
MULTI/JOINT® 3207 Plus End-cap blind	21
MULTI/JOINT® 3200 Plus End-cap threaded	22
MULTI/JOINT® 3207 Plus End-cap threaded	24
MULTI/JOINT® 3750 Plus T-piece	26
MULTI/JOINT® 3757 Plus T-piece	27
MULTI/JOINT® 3400 Plus Bend	28
MULTI/JOINT® 3407 Plus Bend	29
MULTI/JOINT® 3450 Plus Duckfoot	30
MULTI/JOINT® 3457 Plus Duckfoot	31
MULTI/JOINT® 3550 Plus Reduced duckfoot	32
MULTI/JOINT® 3557 Plus Reduced duckfoot	33
MULTI/JOINT® 3067 Plus PE adaptor	34
MULTI/JOINT® 3080 Plus Spigot End	35
MULTI/JOINT® 3087 Plus Spigot End	36
MULTI/JOINT® 3180 Plus Reduced spigot end	37
MULTI/JOINT® 3187 Plus Reduced spigot end	38

MULTI/JOINT® 3000 Plus DN50 - DN300

MULTI/JOINT® 3000 Plus Wide Range Coupling, non-restraint

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

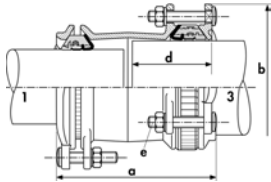


DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
50	46 - 71	46 - 71	709 301 210	709 301 610	709 301 010	
65	63 - 90	63 - 90	709 301 212	709 301 612	709 301 012	
80	84 - 105	84 - 105	709 301 214	709 301 614	709 301 014	
100	104 - 132	104 - 132	709 301 216	709 301 616	709 301 016	
125	132 - 155	132 - 155	709 301 218	709 301 618	709 301 018	
150	154 - 192	154 - 192	709 301 220	709 301 620	709 301 020	
200	192 - 232	192 - 232	709 301 224	709 301 624	709 301 024	
225	230 - 268	230 - 268	709 301 226	709 301 626	709 301 026	
250	267 - 310	267 - 310	709 301 228	709 301 628	709 301 028	
300	315 - 356	315 - 356	709 301 232	709 301 632	709 301 032	

DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
50	46 - 71	46 - 71	709 301 310	4.800	
65	63 - 90	63 - 90	709 301 312	5.400	
80	84 - 105	84 - 105	709 301 314	6.900	
100	104 - 132	104 - 132	709 301 316	9.100	
125	132 - 155	132 - 155	709 301 318	12.500	
150	154 - 192	154 - 192	709 301 320	14.600	
200	192 - 232	192 - 232	709 301 324	28.400	
225	230 - 268	230 - 268	709 301 326	38.900	
250	267 - 310	267 - 310	709 301 328	39.200	
300	315 - 356	315 - 356	709 301 332	51.200	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50	209 - 233	164	95	3xM12	25.0	8.0	
65	220 - 250	186	100	3xM12	25.0	8.0	
80	234 - 262	204	115	3xM12	25.0	8.0	
100	230 - 268	236	110	3xM16	25.0	8.0	
125	246 - 282	264	120	4xM16	25.0	8.0	
150	242 - 298	304	120	4xM16	25.0	8.0	
200	297 - 351	354	140	6xM16	25.0	8.0	
225	342 - 404	386	145	6xM20	25.0	8.0	
250	354 - 424	432	170	6xM20	25.0	8.0	
300	356 - 426	490	170	8xM20	25.0	8.0	

PF 1 54 323 060



MULTI/JOINT® 3007 Plus Wide Range Coupling, restraint, Uni/Fiksers®

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A4 quality (AISI 316) Uni/Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

Note:

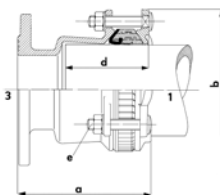
For pipe sizes >ø 284 mm - 310 mm please contact us

DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
50	46 - 71	46 - 71	709 305 210	709 305 610	709 305 010	
65	63 - 90	63 - 90	709 305 212	709 305 612	709 305 012	
80	84 - 105	84 - 105	709 305 214	709 305 614	709 305 014	
100	104 - 132	104 - 132	709 305 216	709 305 616	709 305 016	
125	132 - 155	132 - 155	709 305 218	709 305 618	709 305 018	
150	154 - 192	154 - 192	709 305 220	709 305 620	709 305 020	
200	192 - 232	192 - 232	709 305 224	709 305 624	709 305 024	
225	230 - 268	230 - 268	709 305 226	709 305 626	709 305 026	
250	267 - 310	267 - 310	709 305 228	709 305 628	709 305 028	
300	315 - 356	315 - 356	709 305 232	709 305 632	709 305 032	

DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
50	46 - 71	46 - 71	709 305 310	4.800	
65	63 - 90	63 - 90	709 305 312	5.400	
80	84 - 105	84 - 105	709 305 314	6.900	
100	104 - 132	104 - 132	709 305 316	9.200	
125	132 - 155	132 - 155	709 305 318	12.200	
150	154 - 192	154 - 192	709 305 320	14.600	
200	192 - 232	192 - 232	709 305 324	28.600	
225	230 - 268	230 - 268	709 305 326	39.200	
250	267 - 310	267 - 310	709 305 328	39.500	
300	315 - 356	315 - 356	709 305 332	51.500	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50	209 - 233	164	95	3xM12	16.0	8.0	
65	220 - 250	186	100	3xM12	16.0	8.0	
80	234 - 262	204	115	3xM12	16.0	8.0	
100	230 - 268	236	110	3xM16	16.0	8.0	
125	246 - 282	264	120	4xM16	16.0	8.0	
150	242 - 298	304	120	4xM16	16.0	8.0	
200	297 - 351	354	140	6xM16	16.0	8.0	
225	342 - 404	386	145	6xM20	16.0	8.0	
250	354 - 424	432	170	6xM20	16.0	8.0	
300	356 - 426	490	170	8xM20	10.0	5.0	

PF 1 54 323 061



MULTI/JOINT® 3050 Plus Wide Range Flange adaptor, non-restraint

Model:

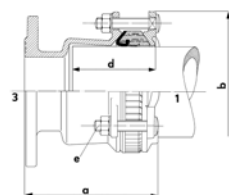
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
50	46 - 71	50	PN16	709 351 210	709 351 610	709 351 010	
65	63 - 90	60/65	PN16	709 351 212	709 351 612	709 351 012	
80	84 - 105	80	PN16	709 351 214	709 351 614	709 351 014	
100	104 - 132	100	PN16	709 351 216	709 351 616	709 351 016	
125	132 - 155	125	PN16	709 351 218	709 351 618	709 351 018	
150	154 - 192	150	PN16	709 351 220	709 351 620	709 351 020	
200	192 - 232	200	PN10	709 351 224	709 351 624	709 351 024	
200	192 - 232	200	PN16	709 351 225	709 351 625	709 351 025	
250	267 - 310	250	PN10	709 351 228	709 351 628	709 351 028	
250	267 - 310	250	PN16	709 351 229	709 351 629	709 351 029	
300	315 - 356	300	PN10	709 351 232	709 351 632	709 351 032	
300	315 - 356	300	PN16	709 351 233	709 351 633	709 351 033	

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	EPDM / A4 Code	kg	
50	46 - 71	50	PN16	709 351 310	5.700	
65	63 - 90	60/65	PN16	709 351 312	6.500	
80	84 - 105	80	PN16	709 351 314	6.400	
100	104 - 132	100	PN16	709 351 316	8.200	
125	132 - 155	125	PN16	709 351 318	13.000	
150	154 - 192	150	PN16	709 351 320	13.600	
200	192 - 232	200	PN10	709 351 324	22.800	
200	192 - 232	200	PN16	709 351 325	22.800	
250	267 - 310	250	PN10	709 351 328	31.600	
250	267 - 310	250	PN16	709 351 329	31.600	
300	315 - 356	300	PN10	709 351 332	41.100	
300	315 - 356	300	PN16	709 351 333	41.100	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50	179 - 194	164	100	3xM12	25.0	8.0	
65	187 - 198	186	95	3xM12	25.0	8.0	
80	183 - 197	204	115	3xM12	25.0	8.0	
100	181 - 200	236	110	3xM16	25.0	8.0	
125	196 - 214	264	120	4xM16	25.0	8.0	
150	194 - 222	304	120	4xM16	25.0	8.0	
200	224 - 251	354	140	6xM16	25.0	8.0	
200	224 - 251	354	140	6xM16	25.0	8.0	
250	260 - 295	432	170	6xM20	25.0	8.0	
250	260 - 295	432	170	6xM20	25.0	8.0	
300	283 - 318	490	170	8xM20	25.0	8.0	
300	283 - 318	490	170	8xM20	25.0	8.0	

PF 1 54 323 060



MULTI/JOINT® 3057 Plus Wide Range Flange adaptor, restraint, Uni/Fiksters®

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A4 quality (AISI 316) Uni/Fiksters®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

Note:

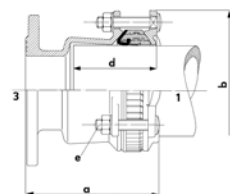
For pipe sizes >ø 284 mm - 310 mm please contact us

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
50	46 - 71	50	PN16	709 355 210	709 355 610	709 355 010	
65	63 - 90	60/65	PN16	709 355 212	709 355 612	709 355 012	
80	84 - 105	80	PN16	709 355 214	709 355 614	709 355 014	
100	104 - 132	100	PN16	709 355 216	709 355 616	709 355 016	
125	132 - 155	125	PN16	709 355 218	709 355 618	709 355 018	
150	154 - 192	150	PN16	709 355 220	709 355 620	709 355 020	
200	192 - 232	200	PN10	709 355 224	709 355 624	709 355 024	
200	192 - 232	200	PN16	709 355 225	709 355 625	709 355 025	
250	267 - 310	250	PN10	709 355 228	709 355 628	709 355 028	
250	267 - 310	250	PN16	709 355 229	709 355 629	709 355 029	
300	315 - 356	300	PN10	709 355 232	709 355 632	709 355 032	
300	315 - 356	300	PN16	709 355 233	709 355 633	709 355 033	

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	EPDM / A4 Code	kg	
50	46 - 71	50	PN16	709 355 310	5.700	
65	63 - 90	60/65	PN16	709 355 312	6.500	
80	84 - 105	80	PN16	709 355 314	6.400	
100	104 - 132	100	PN16	709 355 316	8.200	
125	132 - 155	125	PN16	709 355 318	12.800	
150	154 - 192	150	PN16	709 355 320	13.600	
200	192 - 232	200	PN10	709 355 324	22.900	
200	192 - 232	200	PN16	709 355 325	22.900	
250	267 - 310	250	PN10	709 355 328	31.800	
250	267 - 310	250	PN16	709 355 329	31.800	
300	315 - 356	300	PN10	709 355 332	41.300	
300	315 - 356	300	PN16	709 355 333	41.300	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50	179 - 194	164	100	3xM12	16.0	8.0	
65	187 - 198	186	95	3xM12	16.0	8.0	
80	183 - 197	204	115	3xM12	16.0	8.0	
100	181 - 200	236	110	3xM16	16.0	8.0	
125	196 - 214	264	120	4xM16	16.0	8.0	
150	194 - 222	304	120	4xM16	16.0	8.0	
200	224 - 251	354	140	6xM16	16.0	8.0	
200	224 - 251	354	140	6xM16	16.0	8.0	
250	260 - 295	432	170	6xM20	16.0	8.0	
250	260 - 295	432	170	6xM20	16.0	8.0	
300	283 - 318	490	170	8xM20	10.0	5.0	
300	283 - 318	490	170	8xM20	10.0	5.0	

PF 1 54 323 061



MULTI/JOINT® 3050 Plus Wide Range Flange adaptor, non-restraint, acc. to AWWA C110

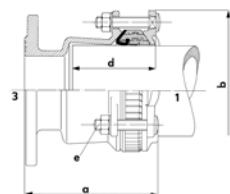
Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.
- For measures and drawings see our product flyer

DN [mm]	DN [inch]	Range 1 [mm]	Range 1 [inch]	Flange 3 [mm]	Flange 3 [inch]	NBR / A2 Code	EPDM / A2 Code	
80	3	84 - 105	3.3 - 4.1	80	3	709 351 240	709 351 640	
100	4	104 - 132	4.1 - 5.2	100	4	709 351 242	709 351 642	
150	6	154 - 192	6.1 - 7.6	150	6	709 351 244	709 351 644	
200	8	192 - 232	7.6 - 9.1	200	8	709 351 246	709 351 646	
250	10	267 - 310	10.5 - 12.2	250	10	709 351 248	709 351 648	
300	12	315 - 356	12.4 - 14.0	300	12	709 351 250	709 351 650	

DN [mm]	DN [inch]	Range 1 [mm]	Range 1 [inch]	Flange 3 [mm]	Flange 3 [inch]	NBR / A4 Code	EPDM / A4 Code	kg
80	3	84 - 105	3.3 - 4.1	80	3	709 351 040	709 351 340	6.400
100	4	104 - 132	4.1 - 5.2	100	4	709 351 042	709 351 342	8.100
150	6	154 - 192	6.1 - 7.6	150	6	709 351 044	709 351 344	13.500
200	8	192 - 232	7.6 - 9.1	200	8	709 351 046	709 351 346	22.800
250	10	267 - 310	10.5 - 12.2	250	10	709 351 048	709 351 348	31.600
300	12	315 - 356	12.4 - 14.0	300	12	709 351 050	709 351 350	41.100

PF 1 54 323 060



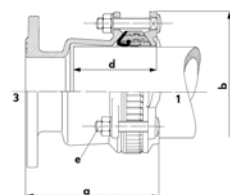
MULTI/JOINT® 3050 Plus Wide Range Flange adaptor, non-restraint, acc. to JIS

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.
- For measures and drawings see our product flyer

DN [mm]	Range 1 [mm]	Flange 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg
80	84 - 105	80	709 351 260	709 351 660	709 351 060	709 351 360	6.400
100	104 - 132	100	709 351 262	709 351 662	709 351 062	709 351 362	8.100
150	154 - 192	150	709 351 264	709 351 664	709 351 064	709 351 364	13.500
200	192 - 232	200	709 351 266	709 351 666	709 351 066	709 351 366	22.800
250	267 - 310	250	709 351 268	709 351 668	709 351 068	709 351 368	31.600
300	315 - 356	300	709 351 270	709 351 670	709 351 070	709 351 370	41.100

PF 1 54 323 060



MULTI/JOINT® 3057 Plus Wide Range Flange adaptor, restraint, Uni/Fiksers® acc. to AWWA C110

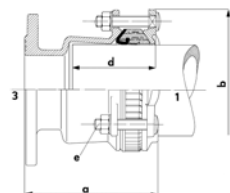
Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A4 quality (AISI 316) Uni/Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook
- For measures and drawings see our product flyer

DN [mm]	DN [inch]	Range 1 [mm]	Range 1 [inch]	Flange 3 [mm]	Flange 3 [inch]	NBR / A2 Code	EPDM / A2 Code	
80	3	84 - 105	3.3 - 4.1	80	3	709 355 240	709 355 640	
100	4	104 - 132	4.1 - 5.2	100	4	709 355 242	709 355 642	
150	6	154 - 192	6.1 - 7.6	150	6	709 355 244	709 355 644	
200	8	192 - 232	7.6 - 9.1	200	8	709 355 246	709 355 646	
250	10	267 - 310	10.5 - 12.2	250	10	709 355 248	709 355 648	
300	12	315 - 356	12.4 - 14.0	300	12	709 355 250	709 355 650	

DN [mm]	DN [inch]	Range 1 [mm]	Range 1 [inch]	Flange 3 [mm]	Flange 3 [inch]	NBR / A4 Code	EPDM / A4 Code	kg
80	3	84 - 105	3.3 - 4.1	80	3	709 355 040	709 355 340	6.400
100	4	104 - 132	4.1 - 5.2	100	4	709 355 042	709 355 342	8.200
150	6	154 - 192	6.1 - 7.6	150	6	709 355 044	709 355 344	13.600
200	8	192 - 232	7.6 - 9.1	200	8	709 355 046	709 355 346	22.900
250	10	267 - 310	10.5 - 12.2	250	10	709 355 048	709 355 348	31.800
300	12	315 - 356	12.4 - 14.0	300	12	709 355 050	709 355 350	41.300

PF 1 54 323 061



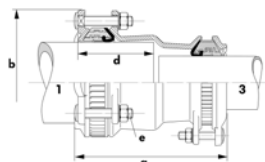
MULTI/JOINT® 3057 Plus Wide Range Flange adaptor, restraint, Uni/Fiksers® acc. to JIS

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A4 quality (AISI 316) Uni/Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook
- For measures and drawings see our product flyer

DN [mm]	Range 1 [mm]	Flange 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg
80	84 - 105	80	709 355 260	709 355 660	709 355 060	709 355 360	6.400
100	104 - 132	100	709 355 262	709 355 662	709 355 062	709 355 362	8.200
150	154 - 192	150	709 355 264	709 355 664	709 355 064	709 355 364	13.600
200	192 - 232	200	709 355 266	709 355 666	709 355 066	709 355 366	22.900
250	267 - 310	250	709 355 268	709 355 668	709 355 068	709 355 368	31.800
300	315 - 356	300	709 355 270	709 355 670	709 355 070	709 355 370	41.300

PF 1 54 323 061



MULTI/JOINT® 3100 Plus Wide Range Reduced Coupling, non-restraint

Model:

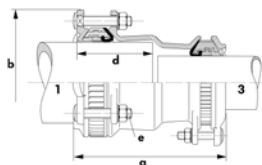
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN-DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
50 - 65	46 - 71	63 - 90	709 401 218	709 401 618	709 401 018	
65 - 80	63 - 90	84 - 105	709 401 220	709 401 620	709 401 020	
80 - 100	84 - 105	104 - 132	709 401 224	709 401 624	709 401 024	
100 - 125	104 - 132	132 - 155	709 401 232	709 401 632	709 401 032	
100 - 150	104 - 132	154 - 192	709 401 236	709 401 636	709 401 036	
125 - 150	132 - 155	154 - 192	709 401 238	709 401 638	709 401 038	
150 - 200	154 - 192	192 - 232	709 401 248	709 401 648	709 401 048	
200 - 225	192 - 232	230 - 268	709 401 278	709 401 678	709 401 078	
225 - 250	230 - 268	267 - 310	709 401 282	709 401 682	709 401 082	
250 - 300	267 - 310	315 - 356	709 401 286	709 401 686	709 401 086	

DN-DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
50 - 65	46 - 71	63 - 90	709 401 318	6.000	
65 - 80	63 - 90	84 - 105	709 401 320	6.800	
80 - 100	84 - 105	104 - 132	709 401 324	8.000	
100 - 125	104 - 132	132 - 155	709 401 332	11.100	
100 - 150	104 - 132	154 - 192	709 401 336	13.300	
125 - 150	132 - 155	154 - 192	709 401 338	15.200	
150 - 200	154 - 192	192 - 232	709 401 348	21.900	
200 - 225	192 - 232	230 - 268	709 401 378	35.800	
225 - 250	230 - 268	267 - 310	709 401 382	41.600	
250 - 300	267 - 310	315 - 356	709 401 386	48.300	

DN-DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50 - 65	242 - 268	186	95	3xM12/3xM12	25.0	8.0	
65 - 80	242 - 268	204	115	3xM12/3xM12	25.0	8.0	
80 - 100	232 - 265	236	110	3xM12/3xM16	25.0	8.0	
100 - 125	238 - 275	264	120	3xM16/4xM16	25.0	8.0	
100 - 150	276 - 323	304	120	4xM16/4xM16	25.0	8.0	
125 - 150	276 - 322	304	120	4xM16/4xM16	25.0	8.0	
150 - 200	265 - 321	354	120	4xM16/6xM16	25.0	8.0	
200 - 225	340 - 398	386	145	6xM16/6xM20	25.0	8.0	
225 - 250	358 - 424	432	170	6xM20/6xM20	25.0	8.0	
250 - 300	356 - 426	490	170	6xM20/8xM20	25.0	8.0	

PF 1 54 323 060



MULTI/JOINT® 3107 Plus Wide Range Reduced Coupling, restraint, Uni/Fiksters®

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A4 quality (AISI 316) Uni/Fiksters®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

Note:

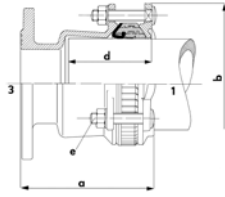
For pipe sizes >ø 284 mm - 310 mm please contact us

DN-DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code
50 - 65	46 - 71	63 - 90	709 405 218	709 405 618	709 405 018
65 - 80	63 - 90	84 - 105	709 405 220	709 405 620	709 405 020
80 - 100	84 - 105	104 - 132	709 405 224	709 405 624	709 405 024
100 - 125	104 - 132	132 - 155	709 405 232	709 405 632	709 405 032
100 - 150	104 - 132	154 - 192	709 405 236	709 405 636	709 405 036
125 - 150	132 - 155	154 - 192	709 405 238	709 405 638	709 405 038
150 - 200	154 - 192	192 - 232	709 405 248	709 405 648	709 405 048
200 - 225	192 - 232	230 - 268	709 405 278	709 405 678	709 405 078
225 - 250	230 - 268	267 - 310	709 405 282	709 405 682	709 405 082
250 - 300	267 - 310	315 - 356	709 405 286	709 405 686	709 405 086

DN-DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg
50 - 65	46 - 71	63 - 90	709 405 318	6.000
65 - 80	63 - 90	84 - 105	709 405 320	6.800
80 - 100	84 - 105	104 - 132	709 405 324	8.000
100 - 125	104 - 132	132 - 155	709 405 332	11.200
100 - 150	104 - 132	154 - 192	709 405 336	13.400
125 - 150	132 - 155	154 - 192	709 405 338	15.000
150 - 200	154 - 192	192 - 232	709 405 348	22.000
200 - 225	192 - 232	230 - 268	709 405 378	36.000
225 - 250	230 - 268	267 - 310	709 405 382	41.900
250 - 300	267 - 310	315 - 356	709 405 386	48.700

DN-DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]
50 - 65	242 - 268	186	95	3xM12/3xM12	16.0	8.0
65 - 80	242 - 268	204	115	3xM12/3xM12	16.0	8.0
80 - 100	232 - 265	236	110	3xM12/3xM16	16.0	8.0
100 - 125	238 - 275	264	120	3xM12/4xM16	16.0	8.0
100 - 150	276 - 323	304	120	3xM16/4xM16	16.0	8.0
125 - 150	276 - 322	304	120	4xM16/4xM16	16.0	8.0
150 - 200	265 - 321	354	120	4xM16/6xM16	16.0	8.0
200 - 225	340 - 398	386	145	6xM16/6xM20	16.0	8.0
225 - 250	358 - 424	432	170	6xM20/6xM20	16.0	8.0
250 - 300	356 - 426	490	170	6xM20/8xM20	10.0	5.0

PF 1 54 323 061



MULTI/JOINT® 3150 Plus Wide Range Reduced flange adaptor, non-restraint

Model:

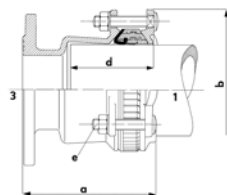
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
50 - 40	46 - 71	40	PN16	709 451 208	709 451 608	709 451 008	
65 - 80	63 - 90	80	PN16	709 451 218	709 451 618	709 451 018	
100 - 80	104 - 132	80	PN16	709 451 224	709 451 624	709 451 024	
125 - 100	132 - 155	100	PN16	709 451 232	709 451 632	709 451 032	
125 - 150	132 - 155	150	PN16	709 451 238	709 451 638	709 451 038	
225 - 200	230 - 268	200	PN10	709 451 278	709 451 678	709 451 078	
225 - 200	230 - 268	200	PN16	709 451 279	709 451 679	709 451 079	
225 - 250	230 - 268	250	PN10	709 451 280	709 451 680	709 451 080	
225 - 250	230 - 268	250	PN16	709 451 281	709 451 681	709 451 081	

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	EPDM / A4 Code	kg	
50 - 40	46 - 71	40	PN16	709 451 308	5.000	
65 - 80	63 - 90	80	PN16	709 451 318	6.600	
100 - 80	104 - 132	80	PN16	709 451 324	8.900	
125 - 100	132 - 155	100	PN16	709 451 332	11.500	
125 - 150	132 - 155	150	PN16	709 451 338	11.400	
225 - 200	230 - 268	200	PN10	709 451 378	28.900	
225 - 200	230 - 268	200	PN16	709 451 379	28.900	
225 - 250	230 - 268	250	PN10	709 451 380	27.900	
225 - 250	230 - 268	250	PN16	709 451 381	27.900	

DN-DN [mm]	a [mm]	a [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50 - 40	185 - 200	164	100	3xM12	25.0	8.0	
65 - 80	198 - 210	186	95	3xM12	25.0	8.0	
100 - 80	196 - 215	236	110	3xM16	25.0	8.0	
125 - 100	197 - 215	264	120	4xM16	25.0	8.0	
125 - 150	276 - 294	264	120	4xM16	25.0	8.0	
225 - 200	274 - 301	386	190	6xM20	25.0	8.0	
225 - 200	274 - 301	386	190	6xM20	25.0	8.0	
225 - 250	212 - 239	386	130	6xM20	25.0	8.0	
225 - 250	212 - 239	386	130	6xM20	25.0	8.0	

PF 1 54 323 060



MULTI/JOINT® 3157 Plus Wide Range Reduced flange adaptor, restraint, Uni/Fikers®

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A4 quality (AISI 316) Uni/Fikers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
50 - 40	46 - 74	40	PN16	709 455 208	709 455 608	709 455 008	
65 - 80	63 - 90	80	PN16	709 455 218	709 455 618	709 455 018	
100 - 80	104 - 132	80	PN16	709 455 224	709 455 624	709 455 024	
125 - 100	132 - 155	100	PN16	709 455 232	709 455 632	709 455 032	
125 - 150	132 - 155	150	PN16	709 455 238	709 455 638	709 455 038	
225 - 200	230 - 268	200	PN10	709 455 278	709 455 678	709 455 078	
225 - 200	230 - 268	200	PN16	709 455 279	709 455 679	709 455 079	
225 - 250	230 - 268	250	PN10	709 455 280	709 455 680	709 455 080	
225 - 250	230 - 268	250	PN16	709 455 281	709 455 681	709 455 081	

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	EPDM / A4 Code	kg	
50 - 40	46 - 74	40	PN16	709 455 308	5.000	
65 - 80	63 - 90	80	PN16	709 455 318	6.600	
100 - 80	104 - 132	80	PN16	709 455 324	8.900	
125 - 100	132 - 155	100	PN16	709 455 332	11.600	
125 - 150	132 - 155	150	PN16	709 455 338	11.400	
225 - 200	230 - 268	200	PN10	709 455 378	29.100	
225 - 200	230 - 268	200	PN16	709 455 379	29.100	
225 - 250	230 - 268	250	PN10	709 455 380	28.100	
225 - 250	230 - 268	250	PN16	709 455 381	28.100	

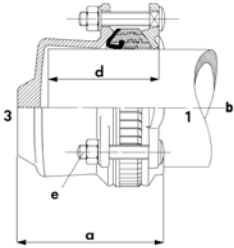
DN-DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50 - 40	185 - 200	164	100	3xM12	16.0	8.0	
65 - 80	198 - 210	186	95	3xM12	16.0	8.0	
100 - 80	196 - 215	236	110	3xM16	16.0	8.0	
125 - 100	197 - 215	264	120	4xM16	16.0	8.0	
125 - 150	276 - 294	264	120	4xM16	16.0	8.0	
225 - 200	274 - 301	386	190	6xM20	16.0	8.0	
225 - 200	274 - 301	386	190	6xM20	16.0	8.0	
225 - 250	212 - 239	386	130	6xM20	16.0	8.0	
225 - 250	212 - 239	386	130	6xM20	16.0	8.0	

PF 1 54 323 061

MULTI/JOINT® 3200 Plus Wide Range end-cap blind, non-restraint

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.



DN [mm]	Range 1 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg	
50	46 - 71	709 371 210	709 371 610	709 371 010	709 371 310	3.500	
65	63 - 90	709 371 212	709 371 612	709 371 012	709 371 312	4.000	
80	84 - 105	709 371 214	709 371 614	709 371 014	709 371 314	4.900	
100	104 - 132	709 371 216	709 371 616	709 371 016	709 371 316	6.200	
125	132 - 155	709 371 218	709 371 618	709 371 018	709 371 318	7.800	
150	154 - 192	709 371 220	709 371 620	709 371 020	709 371 320	9.700	
200	192 - 232	709 371 224	709 371 624	709 371 024	709 371 324	18.200	
225	230 - 268	709 371 226	709 371 626	709 371 026	709 371 326	22.700	
250	267 - 310	709 371 228	709 371 628	709 371 028	709 371 328	26.700	
300	315 - 356	709 371 232	709 371 632	709 371 032	709 371 332	32.300	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50	115 - 130	164	100	3xM12	25.0	8.0	
65	145 - 157	186	95	3xM12	25.0	8.0	
80	142 - 156	204	115	3xM12	25.0	8.0	
100	144 - 163	236	110	3xM16	25.0	8.0	
125	151 - 169	264	120	4xM16	25.0	8.0	
150	149 - 177	304	120	4xM16	25.0	8.0	
200	180 - 207	354	140	6xM16	25.0	8.0	
225	211 - 242	386	145	6xM20	25.0	8.0	
250	214 - 249	432	170	6xM20	25.0	8.0	
300	219 - 254	490	170	8xM20	25.0	8.0	

PF 1 54 323 060



MULTI/JOINT® 3207 Plus Wide Range end-cap blind, restraint, Uni/Fiksers®

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A4 quality (AISI 316) Uni/Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

Note:

For pipe sizes >ø 284 mm - 310 mm please contact us

DN [mm]	Range 1 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg	
50	46 - 71	709 375 210	709 375 610	709 375 010	709 375 310	3.600	
65	63 - 90	709 375 212	709 375 612	709 375 012	709 375 312	4.000	
80	84 - 105	709 375 214	709 375 614	709 375 014	709 375 314	4.900	
100	104 - 132	709 375 216	709 375 616	709 375 016	709 375 316	6.200	
125	132 - 155	709 375 218	709 375 618	709 375 018	709 375 318	7.800	
150	154 - 192	709 375 220	709 375 620	709 375 020	709 375 320	9.700	
200	192 - 232	709 375 224	709 375 624	709 375 024	709 375 324	18.300	
225	230 - 268	709 375 226	709 375 626	709 375 026	709 375 326	22.900	
250	267 - 310	709 375 228	709 375 628	709 375 028	709 375 328	26.900	
300	315 - 356	709 375 232	709 375 632	709 375 032	709 375 332	32.500	

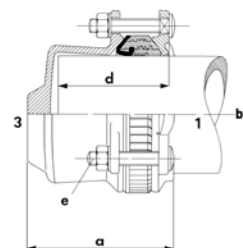
DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50	115 - 130	164	100	3xM12	16.0	8.0	
65	145 - 157	186	95	3xM12	16.0	8.0	
80	142 - 156	204	115	3xM12	16.0	8.0	
100	144 - 163	236	110	3xM16	16.0	8.0	
125	151 - 169	264	120	3xM16	16.0	8.0	
150	149 - 177	304	120	4xM16	16.0	8.0	
200	180 - 207	354	140	6xM16	16.0	8.0	
225	211 - 242	386	145	6xM20	16.0	8.0	
250	214 - 249	432	170	6xM20	16.0*	8.0	
300	219 - 254	490	170	8xM20	10.0	5.0	

PF 1 54 323 061

MULTI/JOINT® 3200 Plus Wide Range end-cap threaded, non-restraint

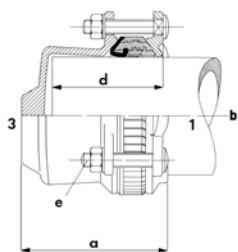
Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.



DN [mm]	Range 1 [mm]	Rp [inch]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg
50	46 - 71	¾	709 381 204	709 381 604	709 381 004	709 381 304	3.500
50	46 - 71	1	709 381 205	709 381 605	709 381 005	709 381 305	3.500
50	46 - 71	1 ¼	709 381 206	709 381 606	709 381 006	709 381 306	3.500
50	46 - 71	1 ½	709 381 207	709 381 607	709 381 007	709 381 307	3.500
50	46 - 71	2	709 381 208	709 381 608	709 381 008	709 381 308	3.500
65	69 - 90	¾	709 381 209	709 381 609	709 381 009	709 381 309	4.000
65	69 - 90	1	709 381 210	709 381 610	709 381 010	709 381 310	4.000
65	69 - 90	1 ¼	709 381 211	709 381 611	709 381 011	709 381 311	4.000
65	69 - 90	1 ½	709 381 212	709 381 612	709 381 012	709 381 312	4.000
65	69 - 90	2	709 381 213	709 381 613	709 381 013	709 381 313	4.000
80	84 - 105	¾	709 381 214	709 381 614	709 381 014	709 381 314	4.900
80	84 - 105	1	709 381 215	709 381 615	709 381 015	709 381 315	4.900
80	84 - 105	1 ¼	709 381 216	709 381 616	709 381 016	709 381 316	4.900
80	84 - 105	1 ½	709 381 217	709 381 617	709 381 017	709 381 317	4.900
80	84 - 105	2	709 381 218	709 381 618	709 381 018	709 381 318	4.900
100	104 - 132	¾	709 381 219	709 381 619	709 381 019	709 381 319	6.200
100	104 - 132	1	709 381 220	709 381 620	709 381 020	709 381 320	6.200
100	104 - 132	1 ¼	709 381 221	709 381 621	709 381 021	709 381 321	6.200
100	104 - 132	1 ½	709 381 222	709 381 622	709 381 022	709 381 322	6.200
100	104 - 132	2	709 381 223	709 381 623	709 381 023	709 381 323	6.200
125	132 - 155	¾	709 381 224	709 381 624	709 381 024	709 381 324	7.800
125	132 - 155	1	709 381 225	709 381 625	709 381 025	709 381 325	7.800
125	132 - 155	1 ¼	709 381 226	709 381 626	709 381 026	709 381 326	7.800
125	132 - 155	1 ½	709 381 227	709 381 627	709 381 027	709 381 327	7.800
125	132 - 155	2	709 381 228	709 381 628	709 381 028	709 381 328	7.800
150	154 - 192	¾	709 381 229	709 381 629	709 381 029	709 381 329	9.700
150	154 - 192	1	709 381 230	709 381 630	709 381 030	709 381 330	9.700
150	154 - 192	1 ¼	709 381 231	709 381 631	709 381 031	709 381 331	9.700
150	154 - 192	1 ½	709 381 232	709 381 632	709 381 032	709 381 332	9.700
150	154 - 192	2	709 381 233	709 381 633	709 381 033	709 381 333	9.700
200	192 - 232	¾	709 381 234	709 381 634	709 381 034	709 381 334	18.200
200	192 - 232	1	709 381 235	709 381 635	709 381 035	709 381 335	18.200
200	192 - 232	1 ¼	709 381 236	709 381 636	709 381 036	709 381 336	18.200
200	192 - 232	1 ½	709 381 237	709 381 637	709 381 037	709 381 337	18.200
200	192 - 232	2	709 381 238	709 381 638	709 381 038	709 381 338	18.200
225	230 - 268	¾	709 381 249	709 381 649	709 381 049	709 381 349	22.700
225	230 - 268	1	709 381 250	709 381 650	709 381 050	709 381 350	22.700
225	230 - 268	1 ¼	709 381 251	709 381 651	709 381 051	709 381 351	22.700
225	230 - 268	1 ½	709 381 252	709 381 652	709 381 052	709 381 352	22.700
225	230 - 268	2	709 381 253	709 381 653	709 381 053	709 381 353	22.700
250	267 - 310	¾	709 381 239	709 381 639	709 381 039	709 381 339	26.700
250	267 - 310	1	709 381 240	709 381 640	709 381 040	709 381 340	26.700
250	267 - 310	1 ¼	709 381 241	709 381 641	709 381 041	709 381 341	26.700
250	267 - 310	1 ½	709 381 242	709 381 642	709 381 042	709 381 342	26.700
250	267 - 310	2	709 381 243	709 381 643	709 381 043	709 381 343	26.700
300	315 - 356	¾	709 381 244	709 381 644	709 381 044	709 381 344	32.300
300	315 - 356	1	709 381 245	709 381 645	709 381 045	709 381 345	32.300
300	315 - 356	1 ¼	709 381 246	709 381 646	709 381 046	709 381 346	32.300
300	315 - 356	1 ½	709 381 247	709 381 647	709 381 047	709 381 347	32.300
300	315 - 356	2	709 381 248	709 381 648	709 381 048	709 381 348	32.300

table continued next page



DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50	115 - 130	164	100	3xM12	25.0	8.0	
50	115 - 130	164	100	3xM12	25.0	8.0	
50	115 - 130	164	100	3xM12	25.0	8.0	
50	115 - 130	164	100	3xM12	25.0	8.0	
50	115 - 130	164	100	3xM12	25.0	8.0	
65	145 - 157	186	95	3xM12	25.0	8.0	
65	145 - 157	186	95	3xM12	25.0	8.0	
65	145 - 157	186	95	3xM12	25.0	8.0	
65	145 - 157	186	95	3xM12	25.0	8.0	
65	145 - 157	186	95	3xM12	25.0	8.0	
80	142 - 156	204	115	3xM12	25.0	8.0	
80	142 - 156	204	115	3xM12	25.0	8.0	
80	142 - 156	204	115	3xM12	25.0	8.0	
80	142 - 156	204	115	3xM12	25.0	8.0	
80	142 - 156	204	115	3xM12	25.0	8.0	
100	144 - 163	236	110	3xM16	25.0	8.0	
100	144 - 163	236	110	3xM16	25.0	8.0	
100	144 - 163	236	110	3xM16	25.0	8.0	
100	144 - 163	236	110	3xM16	25.0	8.0	
100	144 - 163	236	110	3xM16	25.0	8.0	
125	151 - 169	264	120	4xM16	25.0	8.0	
125	151 - 169	264	120	4xM16	25.0	8.0	
125	151 - 169	264	120	4xM16	25.0	8.0	
125	151 - 169	264	120	4xM16	25.0	8.0	
125	151 - 169	264	120	4xM16	25.0	8.0	
150	154 - 192	304	120	4xM16	25.0	8.0	
150	154 - 192	304	120	4xM16	25.0	8.0	
150	154 - 192	304	120	4xM16	25.0	8.0	
150	154 - 192	304	120	4xM16	25.0	8.0	
150	154 - 192	304	120	4xM16	25.0	8.0	
200	180 - 207	354	140	6xM16	25.0	8.0	
200	180 - 207	354	140	6xM16	25.0	8.0	
200	180 - 207	354	140	6xM16	25.0	8.0	
200	180 - 207	354	140	6xM16	25.0	8.0	
200	180 - 207	354	140	6xM16	25.0	8.0	
225	211 - 242	386	145	6xM20	25.0	8.0	
225	211 - 242	386	145	6xM20	25.0	8.0	
225	211 - 242	386	145	6xM20	25.0	8.0	
225	211 - 242	386	145	6xM20	25.0	8.0	
225	211 - 242	386	145	6xM20	25.0	8.0	
250	214 - 249	432	170	6xM20	25.0	8.0	
250	214 - 249	432	170	6xM20	25.0	8.0	
250	214 - 249	432	170	6xM20	25.0	8.0	
250	214 - 249	432	170	6xM20	25.0	8.0	
250	214 - 249	432	170	6xM20	25.0	8.0	
300	219 - 254	490	170	8xM20	25.0	8.0	
300	219 - 254	490	170	8xM20	25.0	8.0	
300	219 - 254	490	170	8xM20	25.0	8.0	
300	219 - 254	490	170	8xM20	25.0	8.0	
300	219 - 254	490	170	8xM20	25.0	8.0	

PF 1 54 323 060

MULTI/JOINT® 3207 Plus Wide Range end-cap threaded, restraint, Uni/Fiksers®

Model:

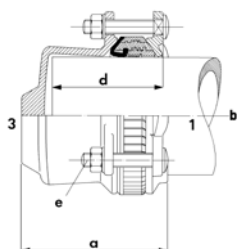
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A4 quality (AISI 316) Uni/Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

Note:

For pipe sizes >ø 284 mm - 310 mm please contact us

DN [mm]	Range 1 [mm]	Rp [inch]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg
50	46 - 71	¾	709 385 204	709 385 604	709 385 004	709 385 304	3.600
50	46 - 71	1	709 385 205	709 385 605	709 385 005	709 385 305	3.600
50	46 - 71	1 ¼	709 385 206	709 385 606	709 385 006	709 385 306	3.600
50	46 - 71	1 ½	709 385 207	709 385 607	709 385 007	709 385 307	3.600
50	46 - 71	2	709 385 208	709 385 608	709 385 008	709 385 308	3.600
65	63 - 90	¾	709 385 209	709 385 609	709 385 009	709 385 309	4.000
65	63 - 90	1	709 385 210	709 385 610	709 385 010	709 385 310	4.000
65	63 - 90	1 ¼	709 385 211	709 385 611	709 385 011	709 385 311	4.000
65	63 - 90	1 ½	709 385 212	709 385 612	709 385 012	709 385 312	4.000
65	63 - 90	2	709 385 213	709 385 613	709 385 013	709 385 313	4.000
80	84 - 105	¾	709 385 214	709 385 614	709 385 014	709 385 314	4.900
80	84 - 105	1	709 385 215	709 385 615	709 385 015	709 385 315	4.900
80	84 - 105	1 ¼	709 385 216	709 385 616	709 385 016	709 385 316	4.900
80	84 - 105	1 ½	709 385 217	709 385 617	709 385 017	709 385 317	4.900
80	84 - 105	2	709 385 218	709 385 618	709 385 018	709 385 318	4.900
100	104 - 132	¾	709 385 219	709 385 619	709 385 019	709 385 319	6.200
100	104 - 132	1	709 385 220	709 385 620	709 385 020	709 385 320	6.200
100	104 - 132	1 ¼	709 385 221	709 385 621	709 385 021	709 385 321	6.200
100	104 - 132	1 ½	709 385 222	709 385 622	709 385 022	709 385 322	6.200
100	104 - 132	2	709 385 223	709 385 623	709 385 023	709 385 323	6.200
125	132 - 155	¾	709 385 224	709 385 624	709 385 024	709 385 324	7.800
125	132 - 155	1	709 385 225	709 385 625	709 385 025	709 385 325	7.800
125	132 - 155	1 ¼	709 385 226	709 385 626	709 385 026	709 385 326	7.800
125	132 - 155	1 ½	709 385 227	709 385 627	709 385 027	709 385 327	7.800
125	132 - 155	2	709 385 228	709 385 628	709 385 028	709 385 328	7.800
150	154 - 192	¾	709 385 229	709 385 629	709 385 029	709 385 329	9.700
150	154 - 192	1	709 385 230	709 385 630	709 385 030	709 385 330	9.700
150	154 - 192	1 ¼	709 385 231	709 385 631	709 385 031	709 385 331	9.700
150	154 - 192	1 ½	709 385 232	709 385 632	709 385 032	709 385 332	9.700
150	154 - 192	2	709 385 233	709 385 633	709 385 033	709 385 333	9.700
200	192 - 232	¾	709 385 234	709 385 634	709 385 034	709 385 334	18.300
200	192 - 232	1	709 385 235	709 385 635	709 385 035	709 385 335	18.300
200	192 - 232	1 ¼	709 385 236	709 385 636	709 385 036	709 385 336	18.300
200	192 - 232	1 ½	709 385 237	709 385 637	709 385 037	709 385 337	18.300
200	192 - 232	2	709 385 238	709 385 638	709 385 038	709 385 338	18.300
225	230 - 268	¾	709 385 249	709 385 649	709 385 049	709 385 349	22.900
225	230 - 268	1	709 385 250	709 385 650	709 385 050	709 385 350	22.900
225	230 - 268	1 ¼	709 385 251	709 385 651	709 385 051	709 385 351	22.900
225	230 - 268	1 ½	709 385 252	709 385 652	709 385 052	709 385 352	22.900
225	230 - 268	2	709 385 253	709 385 653	709 385 053	709 385 353	22.100
250	267 - 310	¾	709 385 239	709 385 639	709 385 039	709 385 339	26.900
250	267 - 310	1	709 385 240	709 385 640	709 385 040	709 385 340	26.900
250	267 - 310	1 ¼	709 385 241	709 385 641	709 385 041	709 385 341	26.900
250	267 - 310	1 ½	709 385 242	709 385 642	709 385 042	709 385 342	26.900
250	267 - 310	2	709 385 243	709 385 643	709 385 043	709 385 343	26.900
300	315 - 356	¾	709 385 244	709 385 644	709 385 044	709 385 344	32.500
300	315 - 356	1	709 385 245	709 385 645	709 385 045	709 385 345	32.500

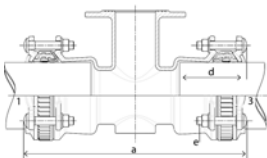
table continued next page



DN [mm]	Range 1 [mm]	Rp [inch]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg	
300	315 - 356	1 ¼	709 385 246	709 385 646	709 385 046	709 385 346	31.100	
300	315 - 356	1 ½	709 385 247	709 385 647	709 385 047	709 385 347	31.100	
300	315 - 356	2	709 385 248	709 385 648	709 385 048	709 385 348	31.100	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50	115 - 130	164	100	3xM12	16.0	8.0	
50	115 - 130	164	100	3xM12	16.0	8.0	
50	115 - 130	164	100	3xM12	16.0	8.0	
50	115 - 130	164	100	3xM12	16.0	8.0	
50	115 - 130	164	100	3xM12	16.0	8.0	
65	145 - 157	186	95	3xM12	16.0	8.0	
65	145 - 157	186	95	3xM12	16.0	8.0	
65	145 - 157	186	95	3xM12	16.0	8.0	
65	145 - 157	186	95	3xM12	16.0	8.0	
65	145 - 157	186	95	3xM12	16.0	8.0	
80	142 - 156	204	115	3xM12	16.0	8.0	
80	142 - 156	204	115	3xM12	16.0	8.0	
80	142 - 156	204	115	3xM12	16.0	8.0	
80	142 - 156	204	115	3xM12	16.0	8.0	
80	142 - 156	204	115	3xM12	16.0	8.0	
100	144 - 163	236	110	3xM16	16.0	8.0	
100	144 - 163	236	110	3xM16	16.0	8.0	
100	144 - 163	236	110	3xM16	16.0	8.0	
100	144 - 163	236	110	3xM16	16.0	8.0	
100	144 - 163	236	110	3xM16	16.0	8.0	
125	151 - 169	264	120	4xM16	16.0	8.0	
125	151 - 169	264	120	4xM16	16.0	8.0	
125	151 - 169	264	120	4xM16	16.0	8.0	
125	151 - 169	264	120	4xM16	16.0	8.0	
125	151 - 169	264	120	4xM16	16.0	8.0	
150	149 - 177	304	120	4xM16	16.0	8.0	
150	149 - 177	304	120	4xM16	16.0	8.0	
150	149 - 177	304	120	4xM16	16.0	8.0	
150	149 - 177	304	120	4xM16	16.0	8.0	
150	149 - 177	304	120	4xM16	16.0	8.0	
200	180 - 207	354	140	6xM16	16.0	8.0	
200	180 - 207	354	140	6xM16	16.0	8.0	
200	180 - 207	354	140	6xM16	16.0	8.0	
200	180 - 207	354	140	6xM16	16.0	8.0	
200	180 - 207	354	140	6xM16	16.0	8.0	
225	211 - 242	386	145	6xM20	16.0	8.0	
225	211 - 242	386	145	6xM20	16.0	8.0	
225	211 - 242	386	145	6xM20	16.0	8.0	
225	211 - 242	386	145	6xM20	16.0	8.0	
225	211 - 242	386	145	6xM20	16.0	8.0	
250	214 - 249	432	170	6xM20	16.0	8.0	
250	214 - 249	432	170	6xM20	16.0	8.0	
250	214 - 249	432	170	6xM20	16.0	8.0	
250	214 - 249	432	170	6xM20	16.0	8.0	
250	214 - 249	432	170	6xM20	16.0	8.0	
300	219 - 254	490	170	8xM20	10.0	5.0	
300	219 - 254	490	170	8xM20	10.0	5.0	
300	219 - 254	490	170	8xM20	10.0	5.0	
300	219 - 254	490	170	8xM20	10.0	5.0	
300	219 - 254	490	170	8xM20	10.0	5.0	

PF 1 54 323 061



MULTI/JOINT® 3750 Plus Wide Range T-piece, non-restraint

Model:

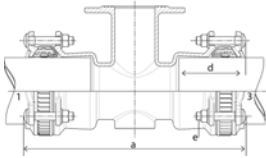
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- Threaded outlet (3/4 - 2 inch) optional
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN [mm]	Range 1 [mm]	Flange 2 [mm]	Range 3 [mm]	Drilling pattern	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code
100	104 - 132	80	104 - 132	PN16	709 501 226	709 501 626	709 501 026
150	154 - 192	80	154 - 192	PN16	709 501 234	709 501 634	709 501 034

DN [mm]	Range 1 [mm]	Flange 2 [mm]	Range 3 [mm]	Drilling pattern	EPDM / A4 Code	kg	
100	104 - 132	80	104 - 132	PN16	709 501 326	15.500	
150	154 - 192	80	154 - 192	PN16	709 501 334	23.900	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	h [mm]	PN Water [bar]	PN Gas [bar]	
100	400 - 438	236	110	3xM16	169	25.0	8.0	
150	412 - 468	304	120	4xM16	184	25.0	8.0	

PF 1 54 323 060



MULTI/JOINT® 3757 Plus Wide Range T-piece, restraint, Uni/Fiksers®

Model:

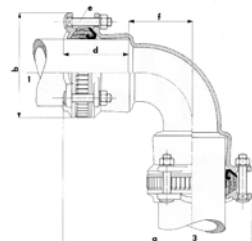
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A4 quality (AISI 316) Uni/Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- Threaded outlet (3/4 - 2 inch) optional
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN [mm]	Range 1 [mm]	Flange 2 [mm]	Range 3 [mm]	Drilling pattern	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code
100	104 - 132	80	104 - 132	PN16	709 505 226	709 505 626	709 505 026
150	154 - 192	80	154 - 192	PN16	709 505 234	709 505 634	709 505 034

DN [mm]	Range 1 [mm]	Flange 2 [mm]	Range 3 [mm]	Drilling pattern	EPDM / A4 Code	kg
100	104 - 132	80	104 - 132	PN16	709 505 326	15.600
150	154 - 192	80	154 - 192	PN16	709 505 334	23.900

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	h [mm]	PN Water [bar]	PN Gas [bar]
100	400 - 438	236	110	3xM16	169	16.0	8.0
150	412 - 468	304	120	4xM16	184	16.0	8.0

PF 1 54 323 061



MULTI/JOINT® 3400 Plus Wide Range Bend, non-restraint

Model:

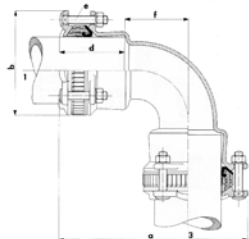
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
80	84 - 105	84 - 105	709 471 214	709 471 614	709 471 014	
100	104 - 132	104 - 132	709 471 216	709 471 616	709 471 016	
150	154 - 192	154 - 192	709 471 220	709 471 620	709 471 020	

DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
80	84 - 105	84 - 105	709 471 314	9.900	
100	104 - 132	104 - 132	709 471 316	13.300	
150	154 - 192	154 - 192	709 471 320	26.500	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	f [mm]	PN Water [bar]	PN Gas [bar]	
80	291 - 315	204	115	3xM12	100	25.0	8.0	
100	346 - 365	236	110	3xM16	125	25.0	8.0	
150	417 - 445	304	120	4xM16	175	25.0	8.0	

PF 1 54 323 060



MULTI/JOINT® 3407 Plus Wide Range Bend, restraint, Uni/Fiksers®

Model:

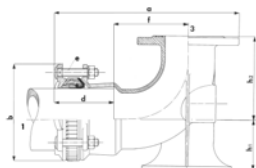
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A4 quality (AISI 316) Uni/Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
80	84 - 105	84 - 105	709 475 214	709 475 614	709 475 014	
100	104 - 132	104 - 132	709 475 216	709 475 616	709 475 016	
150	154 - 192	154 - 192	709 475 220	709 475 620	709 475 020	

DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
80	84 - 105	84 - 105	709 475 314	9.900	
100	104 - 132	104 - 132	709 475 316	13.400	
150	154 - 192	154 - 192	709 475 320	26.500	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	f [mm]	PN Water [bar]	PN Gas [bar]	
80	291 - 315	204	115	3xM12	100	16.0	8.0	
100	346 - 365	236	110	3xM16	125	16.0	8.0	
150	417 - 445	304	120	4xM16	175	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3450 Plus Wide Range Duckfoot, non-restraint

Model:

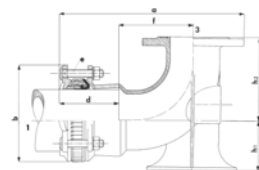
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- Threaded outlet (3/4 - 2 inch) optional
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
80	84 - 105	80	PN16	2	709 481 208	709 481 608	709 481 008	

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	EPDM / A4 Code	kg	
80	84 - 105	80	PN16	2	709 481 308	16.900	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	f [mm]	h1 [mm]	h2 [mm]	PN Water [bar]	
80	380 - 394	204	115	3xM12	165	108	174	25.0	

PF 1 54 323 060



MULTI/JOINT® 3457 Plus Wide Range Duckfoot, restraint, Uni/Fiksers®

Model:

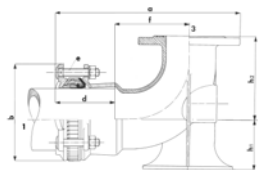
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A4 quality (AISI 316) Uni/Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- Threaded outlet (3/4 - 2 inch) optional
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
80	84 - 105	80	PN16	2	709 485 208	709 485 608	709 485 008	

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	EPDM / A4 Code	kg	
80	84 - 105	80	PN16	2	709 485 308	16.900	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	f [mm]	h1 [mm]	h2 [mm]	PN Water [bar]	
80	380 - 394	204	115	3xM12	165	108	174	16.0	

PF 1 54 323 061



MULTI/JOINT® 3550 Plus Wide Range Reduced duckfoot, non-restraint

Model:

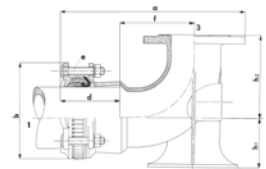
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- Threaded outlet (3/4 - 2 inch) optional
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
50 - 80 100 - 80	46 - 72 104 - 132	80 80	PN16 PN16	2 2	709 491 218 709 491 223	709 491 618 709 491 623	709 491 018 709 491 023	

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	EPDM / A4 Code	kg	
50 - 80 100 - 80	46 - 72 104 - 132	80 80	PN16 PN16	2 2	709 491 318 709 491 323	17.500	

DN-DN [mm]	Range 1 [mm]	a [mm]	b [mm]	d [mm]	e [mm]	f [mm]	h1 [mm]	h2 [mm]	PN Water [bar]	
50 - 80 100 - 80	46 - 72 104 - 132	356 - 371 408 - 426	164 236	100 110	3xM12 3xM16	140 190	90 135	174 184	25.0 25.0	

PF 1 54 323 060



MULTI/JOINT® 3557 Plus Wide Range Reduced duckfoot, restraint, Uni/Fiksters®

Model:

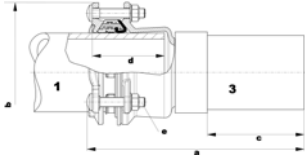
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A4 quality (AISI 316) Uni/Fiksters®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- Threaded outlet (3/4 - 2 inch) optional
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code
50 - 80	46 - 72	80	PN16	2	709 495 218	709 495 618	709 495 018
65 - 80	63 - 90	80	PN10	2	709 495 236	709 495 636	709 495 036
65 - 80	63 - 90	80	PN16	2	709 495 230	709 495 630	709 495 030
100 - 80	104 - 132	80	PN16	2	709 495 223	709 495 623	709 495 023
125 - 80	132 - 155	80	PN16	2	709 495 261	709 495 661	709 495 061
125 - 80	132 - 155	80	PN10	2	709 495 248	709 495 648	709 495 048
150 - 80	154 - 192	80	PN10	2	709 495 273	709 495 673	709 495 073
150 - 80	154 - 192	80	PN16	2	709 495 267	709 495 667	709 495 067

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	EPDM / A4 Code	kg
50 - 80	46 - 72	80	PN16	2	709 495 318	13.100
65 - 80	63 - 90	80	PN10	2	709 495 336	13.100
65 - 80	63 - 90	80	PN16	2	709 495 330	13.100
100 - 80	104 - 132	80	PN16	2	709 495 323	17.500
125 - 80	132 - 155	80	PN16	2	709 495 361	15.900
125 - 80	132 - 155	80	PN10	2	709 495 348	15.900
150 - 80	154 - 192	80	PN10	2	709 495 373	19.100
150 - 80	154 - 192	80	PN16	2	709 495 367	19.100

DN-DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	f [mm]	h1 [mm]	h2 [mm]	PN Water [bar]
50 - 80	356 - 371	164	100	3xM12	140	90	174	16.0
65 - 80	402 - 413	186	95	3xM12	170	90	180	16.0
65 - 80	402 - 413	186	95	3xM12	170	90	180	16.0
100 - 80	408 - 426	236	110	3xM16	190	135	184	16.0
125 - 80	394 - 412	264	120	4xM16	170	135	184	16.0
125 - 80	394 - 412	264	120	4xM16	170	135	184	16.0
150 - 80	407 - 435	264	120	4xM16	180	160	184	16.0
150 - 80	407 - 435	264	120	4xM16	180	160	184	16.0

PF 1 54 323 061



MULTI/JOINT® 3067 Plus Wide Range PE adaptor, restraint, Uni/Fiksers®

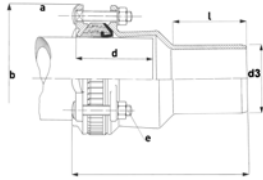
Model:

- Suitable for all kinds of pipe material (MULTI/JOINT® 3067 part)
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- PE: PE100 SDR11
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A4 quality (AISI 316) Uni/Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN [mm]	Range 1 [mm]	PE outlet [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg
65	63 - 90	63	709 365 211	709 365 611	709 365 011	709 365 311	3.830
65	63 - 90	75	709 365 212	709 365 612	709 365 012	709 365 312	4.351
80	84 - 105	90	709 365 214	709 365 614	709 365 014	709 365 314	5.337
80	84 - 105	110	709 365 215	709 365 615	709 365 015	709 365 315	
100	104 - 132	90	709 465 216	709 465 616	709 465 016	709 465 316	6.693
100	104 - 132	110	709 365 216	709 365 616	709 365 016	709 365 316	6.793
100	104 - 132	125	709 465 217	709 465 617	709 465 017	709 465 317	8.053
125	132 - 155	110	709 465 218	709 465 618	709 465 018	709 465 318	8.754
125	132 - 155	125	709 365 218	709 365 618	709 365 018	709 365 318	8.954
125	132 - 155	140	709 465 219	709 465 619	709 465 019	709 465 319	10.730
125	132 - 155	160	709 465 221	709 465 621	709 465 021	709 465 321	
150	154 - 192	160	709 365 220	709 365 620	709 365 020	709 365 320	12.898
150	154 - 192	180	709 465 220	709 465 620	709 465 020	709 465 320	15.148
200	192 - 232	200	709 365 224	709 365 624	709 365 024	709 365 324	22.525
200	192 - 232	225	709 465 224	709 465 624	709 465 024	709 465 324	25.675
250	267 - 310	250	709 365 228	709 365 628	709 365 028	709 365 328	31.409
250	267 - 310	280	709 465 228	709 465 628	709 465 028	709 465 328	39.209
300	315 - 356	315	709 365 232	709 365 632	709 365 032	709 365 332	53.257

DN [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]
65	186	95	3xM12	16.0	8.0
65	186	95	3xM12	16.0	8.0
80	204	115	3xM12	16.0	8.0
80	204	115	3xM12	16.0	8.0
100	236	110	3xM16	16.0	8.0
100	236	110	3xM16	16.0	8.0
100	236	110	3xM16	16.0	8.0
125	264	120	4xM16	16.0	8.0
125	264	120	4xM16	16.0	8.0
125	264	120	4xM16	16.0	8.0
125	264	120	4xM16	16.0	8.0
150	304	120	4xM16	16.0	8.0
150	304	120	4xM16	16.0	8.0
200	354	140	6xM16	16.0	8.0
200	354	140	6xM16	16.0	8.0
250	432	142	6xM20	16.0	8.0
250	432	142	6xM20	16.0	8.0
300	490	168	8xM20	10.0	5.0

PF 1 54 323 061



MULTI/JOINT® 3080 Plus Wide Range Spigot End, non-restraint

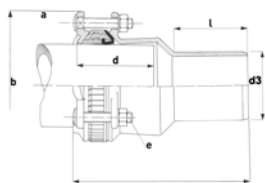
Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN [mm]	d3 [mm]	Range 1 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg	
50	63	46 - 71	709 331 210	709 331 610	709 331 010	709 331 310	3.400	
100	110	104 - 132	709 331 216	709 331 616	709 331 016	709 331 316	7.300	
150	160	154 - 192	709 331 220	709 331 620	709 331 020	709 331 320	11.700	
200	200	192 - 232	709 331 229	709 331 629	709 331 029	709 331 329	20.500	

DN [mm]	d3 [mm]	a [mm]	b [mm]	d [mm]	e [mm]	L [mm]	PN Water [bar]	PN Gas [bar]	
50	63	204 - 219	164	100	3xM12	75	25.0	8.0	
100	110	258 - 277	269	110	3xM16	120	25.0	8.0	
150	160	289 - 317	304	120	4xM16	135	25.0	8.0	
200	200	335 - 362	354	140	6xM16	145	25.0	8.0	

PF 1 54 323 060



MULTI/JOINT® 3087 Plus Wide Range Spigot End, restraint, Uni/Fiksers®

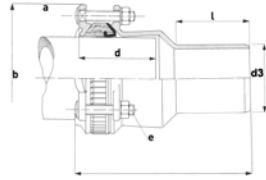
Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A4 quality (AISI 316) Uni/Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN [mm]	d3 [mm]	Range 1 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg	
50	63	46 - 71	709 335 210	709 335 610	709 335 010	709 335 310	3.400	
100	110	104 - 132	709 335 216	709 335 616	709 335 016	709 335 316	7.300	
150	160	154 - 192	709 335 220	709 335 620	709 335 020	709 335 320	11.700	
200	200	192 - 232	709 335 229	709 335 629	709 335 029	709 335 329	20.600	

DN [mm]	d3 [mm]	a [mm]	b [mm]	d [mm]	e [mm]	L [mm]	PN Water [bar]	PN Gas [bar]	
50	63	204 - 219	164	100	3xM12	75	16.0	8.0	
100	110	258 - 277	269	110	3xM16	120	16.0	8.0	
150	160	289 - 317	304	120	4xM16	135	16.0	8.0	
200	200	335 - 362	354	140	6xM16	145	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3180 Plus Wide Range Reduced spigot end, non-restraint

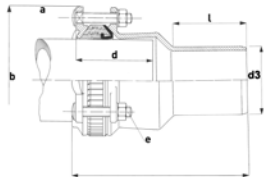
Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN [mm]	d3 [mm]	Range 1 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg	
80	110	84 - 105	709 341 224	709 341 624	709 341 024	709 341 324	5.500	

DN [mm]	d3 [mm]	a [mm]	b [mm]	d [mm]	e [mm]	l [mm]	PN Water [bar]	PN Gas [bar]	
80	110	240 - 254	204	115	3xM12	120	25.0	8.0	

PF 1 54 323 060



MULTI/JOINT® 3187 Plus Wide Range Reduced spigot end, restraint, Uni/Fiksers®

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A4 quality (AISI 316) Uni/Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN [mm]	d3 [mm]	Range 1 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg	
80	110	84 - 105	709 345 224	709 345 624	709 345 024	709 345 324	5.500	

DN [mm]	d3 [mm]	a [mm]	b [mm]	d [mm]	e [mm]	l [mm]	PN Water [bar]	PN Gas [bar]	
80	110	240 - 254	204	115	3xM12	120	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3000
(phase out program)

Contents MULTI/JOINT® 3000 (phase out program)

	page
MULTI/JOINT® 3000 Coupling	42
MULTI/JOINT® 3007 Coupling	43
MULTI/JOINT® 3050 Flange adaptor	46
MULTI/JOINT® 3057 Flange adaptor	47
MULTI/JOINT® 3050 AWWA C110 Flange adaptor	49
MULTI/JOINT® 3050 JIS Flange adaptor	50
MULTI/JOINT® 3057 AWWA C110 Flange adaptor	51
MULTI/JOINT® 3057 JIS Flange adaptor	52
MULTI/JOINT® 3100 Reduced coupling	53
MULTI/JOINT® 3107 Reduced coupling	54
MULTI/JOINT® 3150 Reduced flange adaptor	58
MULTI/JOINT® 3157 Reduced flange adaptor	59
MULTI/JOINT® 3200 End-cap blind	61
MULTI/JOINT® 3207 End-cap blind	62
MULTI/JOINT® 3200 End-cap threaded	64
MULTI/JOINT® 3207 End-cap threaded	66
MULTI/JOINT® 3750 T-piece	69
MULTI/JOINT® 3757 T-piece	70
MULTI/JOINT® 3400 Bend	73
MULTI/JOINT® 3407 Bend	74
MULTI/JOINT® 3450 Duckfoot	77
MULTI/JOINT® 3457 Duckfoot	78
MULTI/JOINT® 3550 Reduced duckfoot	80
MULTI/JOINT® 3557 Reduced duckfoot	81
MULTI/JOINT® 3067 PE adaptor	83
MULTI/JOINT® 3080 Spigot End	84
MULTI/JOINT® 3087 Spigot End	85
MULTI/JOINT® 3180 Reduced spigot end	87
MULTI/JOINT® 3187 Reduced spigot end	88

MULTI/JOINT® 3000 DN50 - DN150 (phase out program)

MULTI/JOINT® 3000 Wide Range Coupling, non-restraint

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

Note:

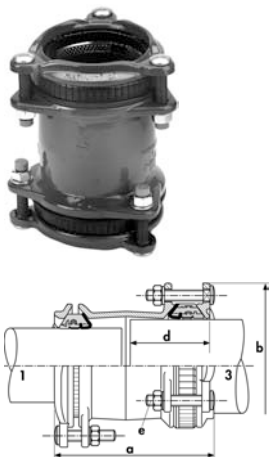
DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
50	46 - 71	46 - 71	709 300 210	709 300 610	709 300 010	
65	69 - 90	69 - 90	709 300 212	709 300 612	709 300 012	
80	84 - 105	84 - 105	709 300 214	709 300 614	709 300 014	
100	104 - 132	104 - 132	709 300 216	709 300 616	709 300 016	
125	132 - 155	132 - 155	709 300 218	709 300 618	709 300 018	
150	154 - 192	154 - 192	709 300 220	709 300 620	709 300 020	

DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
50	46 - 71	46 - 71	709 300 310	4.800	
65	69 - 90	69 - 90	709 300 312	5.400	
80	84 - 105	84 - 105	709 300 314	6.900	
100	104 - 132	104 - 132	709 300 316	9.100	
125	132 - 155	132 - 155	709 300 318	12.500	
150	154 - 192	154 - 192	709 300 320	14.600	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50	209 - 233	164	95	3xM12	25.0	8.0	
65	220 - 250	186	100	3xM12	25.0	8.0	
80	234 - 262	204	115	3xM12	25.0	8.0	
100	230 - 268	236	110	3xM16	25.0	8.0	
125	246 - 282	264	120	4xM16	25.0	8.0	
150	242 - 298	304	120	4xM16	25.0	8.0	

PF 1 54 323 060



MULTI/JOINT® 3007 Wide Range Coupling, restraint, Multi/Fiksers

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Multi/Fiksers: DN50 and DN65: on all pipes. DN80 - DN150: best on rigid pipes (consult us about (asbestos) cement and GRP pipes)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

Note:

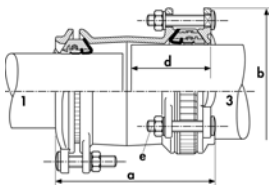
DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
50	46 - 71	46 - 71	709 307 210	709 307 610	709 307 010	
65	69 - 90	69 - 90	709 307 212	709 307 612	709 307 012	
80	84 - 105	84 - 105	709 307 214	709 307 614	709 307 014	
100	104 - 132	104 - 132	709 307 216	709 307 616	709 307 016	
125	132 - 155	132 - 155	709 307 218	709 307 618	709 307 018	
150	154 - 192	154 - 192	709 307 220	709 307 620	709 307 020	

DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
50	46 - 71	46 - 71	709 307 310	4.800	
65	69 - 90	69 - 90	709 307 312	5.400	
80	84 - 105	84 - 105	709 307 314	6.900	
100	104 - 132	104 - 132	709 307 316	9.200	
125	132 - 155	132 - 155	709 307 318	12.200	
150	154 - 192	154 - 192	709 307 320	14.600	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50	209 - 233	164	95	3xM12	16.0	8.0	
65	220 - 250	186	100	3xM12	16.0	8.0	
80	234 - 262	204	115	3xM12	16.0	8.0	
100	230 - 268	236	110	3xM16	16.0	8.0	
125	246 - 282	264	120	4xM16	16.0	8.0	
150	242 - 298	304	120	4xM16	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3007 Wide Range Coupling, restraint, Poly/Fiksers

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Poly/Fiksers: DN50 and DN65: use Multi/Fiksers. DN80 - DN150: best on all polyolefine pipes (PE, PP, ABS)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

Note:

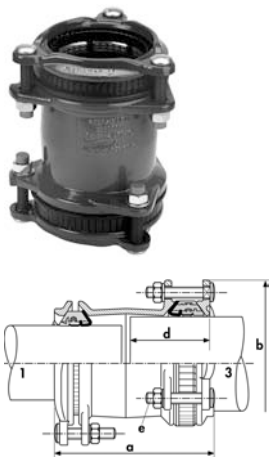
DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
80	84 - 105	84 - 105	709 309 214	709 309 614	709 309 014	
100	104 - 132	104 - 132	709 309 216	709 309 616	709 309 016	
125	132 - 155	132 - 155	709 309 218	709 309 618	709 309 018	
150	154 - 192	154 - 192	709 309 220	709 309 620	709 309 020	

DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
80	84 - 105	84 - 105	709 309 314	6.900	
100	104 - 132	104 - 132	709 309 316	9.200	
125	132 - 155	132 - 155	709 309 318	12.200	
150	154 - 192	154 - 192	709 309 320	14.600	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
80	234 - 262	204	115	3xM12	16.0	8.0	
100	230 - 268	236	110	3xM16	16.0	8.0	
125	246 - 282	264	120	4xM16	16.0	8.0	
150	242 - 298	304	120	4xM16	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3007 Wide Range Coupling, restraint, Multi/Fiksers x Poly/Fiksers

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Multi/Fiksers: DN50 and DN65: on all pipes. DN80 - DN150: best on rigid pipes (consult us about (asbestos) cement and GRP pipes)
- End load resistance with Poly/Fiksers: DN50 and DN65: use Multi/Fiksers. DN80 - DN150: best on all polyolefine pipes (PE, PP, ABS)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

Note:

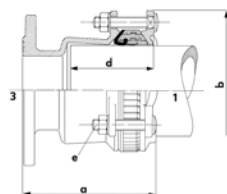
DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
80	84 - 105	84 - 105	709 308 214	709 308 614	709 308 014	
100	104 - 132	104 - 132	709 308 216	709 308 616	709 308 016	
125	132 - 155	132 - 155	709 308 218	709 308 618	709 308 018	
150	154 - 192	154 - 192	709 308 220	709 308 620	709 308 020	

DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
80	84 - 105	84 - 105	709 308 314	6.900	
100	104 - 132	104 - 132	709 308 316	9.200	
125	132 - 155	132 - 155	709 308 318	12.200	
150	154 - 192	154 - 192	709 308 320	14.600	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
80	234 - 262	204	115	3xM12	16.0	8.0	
100	230 - 268	236	110	3xM16	16.0	8.0	
125	246 - 282	264	120	4xM16	16.0	8.0	
150	242 - 298	242	298	4xM16	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3050 Wide Range Flange adaptor, non-restraint

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

Note:

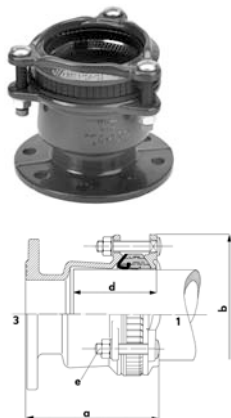
DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
50	46 - 71	50	PN16	709 350 210	709 350 610	709 350 010	
65	69 - 90	60/65	PN16	709 350 212	709 350 612	709 350 012	
80	84 - 105	80	PN16	709 350 214	709 350 614	709 350 014	
100	104 - 132	100	PN16	709 350 216	709 350 616	709 350 016	
125	132 - 155	125	PN16	709 350 218	709 350 618	709 350 018	
150	154 - 192	150	PN16	709 350 220	709 350 620	709 350 020	

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	EPDM / A4 Code	kg	
50	46 - 71	50	PN16	709 350 310	5.700	
65	69 - 90	60/65	PN16	709 350 312	6.500	
80	84 - 105	80	PN16	709 350 314	6.400	
100	104 - 132	100	PN16	709 350 316	8.200	
125	132 - 155	125	PN16	709 350 318	13.000	
150	154 - 192	150	PN16	709 350 320	13.600	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50	179 - 194	164	100	3xM12	25.0	8.0	
65	187 - 198	186	95	3xM12	25.0	8.0	
80	183 - 197	204	115	3xM12	25.0	8.0	
100	181 - 200	236	110	3xM16	25.0	8.0	
125	196 - 214	264	120	4xM16	25.0	8.0	
150	194 - 222	304	120	4xM16	25.0	8.0	

PF 1 54 323 060



MULTI/JOINT® 3057 Wide Range Flange adaptor, restraint, Multi/Fiksers

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Multi/Fiksers: DN50 and DN65: on all pipes. DN80 - DN150: best on rigid pipes (consult us about (asbestos) cement and GRP pipes)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

Note:

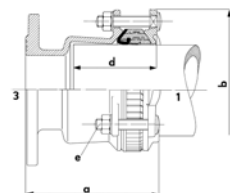
DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
50	46 - 71	50	PN16	709 357 210	709 357 610	709 357 010	
65	69 - 90	60/65	PN16	709 357 212	709 357 612	709 357 012	
80	84 - 105	80	PN16	709 357 214	709 357 614	709 357 014	
100	104 - 132	100	PN16	709 357 216	709 357 616	709 357 016	
125	132 - 155	125	PN16	709 357 218	709 357 618	709 357 018	
150	154 - 192	150	PN16	709 357 220	709 357 620	709 357 020	

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	EPDM / A4 Code	kg	
50	46 - 71	50	PN16	709 357 310	5.700	
65	69 - 90	60/65	PN16	709 357 312	6.500	
80	84 - 105	80	PN16	709 357 314	6.400	
100	104 - 132	100	PN16	709 357 316	8.200	
125	132 - 155	125	PN16	709 357 318	12.800	
150	154 - 192	150	PN16	709 357 320	13.600	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50	179 - 194	164	100	3xM12	16.0	8.0	
65	187 - 198	186	95	3xM12	16.0	8.0	
80	183 - 197	204	115	3xM12	16.0	8.0	
100	181 - 200	236	110	3xM16	16.0	8.0	
125	196 - 214	264	120	4xM16	16.0	8.0	
150	194 - 222	304	120	4xM16	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3057 Wide Range Flange adaptor, restraint, Poly/Fiksers

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Poly/Fiksers: DN50 and DN65: use Multi/Fiksers. DN80 - DN150: best on all polyolefine pipes (PE, PP, ABS)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

Note:

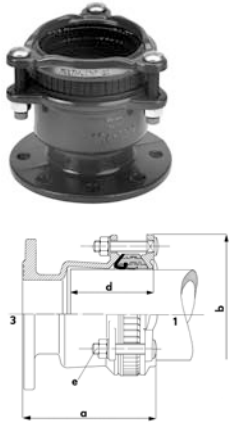
DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
80	84 - 105	80	PN16	709 359 214	709 359 614	709 359 014	
100	104 - 132	100	PN16	709 359 216	709 359 616	709 359 016	
125	132 - 155	125	PN16	709 359 218	709 359 618	709 359 018	
150	154 - 192	150	PN16	709 359 220	709 359 620	709 359 020	

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	EPDM / A4 Code	kg	
80	84 - 105	80	PN16	709 359 314	6.400	
100	104 - 132	100	PN16	709 359 316	8.200	
125	132 - 155	125	PN16	709 359 318	12.800	
150	154 - 192	150	PN16	709 359 320	13.600	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
80	183 - 197	204	115	3xM12	16.0	8.0	
100	181 - 200	236	110	3xM16	16.0	8.0	
125	196 - 214	264	120	4xM16	16.0	8.0	
150	194 - 222	304	120	4xM16	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3050 Wide Range Flange adaptor, non-restraint, acc. to AWWA C110

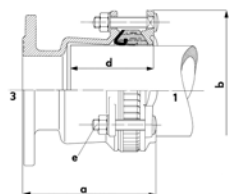
Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.
- For measures and drawings see our product flyer

DN [mm]	DN [inch]	Range 1 [mm]	Range 1 [inch]	Flange 3 [mm]	Flange 3 [inch]	NBR / A2 Code	EPDM / A2 Code	
80	3	84 - 105	3.3 - 4.1	80	3	709 350 240	709 350 640	
100	4	104 - 132	4.1 - 5.2	100	4	709 350 242	709 350 642	
150	6	154 - 192	6.1 - 7.6	150	6	709 350 244	709 350 644	

DN [mm]	DN [inch]	Range 1 [mm]	Range 1 [inch]	Flange 3 [mm]	Flange 3 [inch]	NBR / A4 Code	EPDM / A4 Code	kg
80	3	84 - 105	3.3 - 4.1	80	3	709 350 040	709 350 340	6.400
100	4	104 - 132	4.1 - 5.2	100	4	709 350 042	709 350 342	8.100
150	6	154 - 192	6.1 - 7.6	150	6	709 350 044	709 350 344	13.500

PF 1 54 323 060



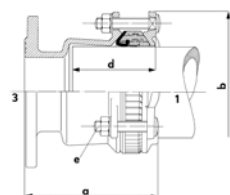
MULTI/JOINT® 3050 Wide Range Flange adaptor, non-restraint, acc. to JIS

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.
- For measures and drawings see our product flyer

DN [mm]	Range 1 [mm]	Flange 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg
80	84 - 105	80	709 350 260	709 350 660	709 350 060	709 350 360	6.400
100	104 - 132	100	709 350 262	709 350 662	709 350 062	709 350 362	8.100
150	154 - 192	150	709 350 264	709 350 664	709 350 064	709 350 364	13.500

PF 1 54 323 060



MULTI/JOINT® 3057 Wide Range Flange adaptor, restraint, acc. to AWWA C110

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook
- For measures and drawings see our product flyer

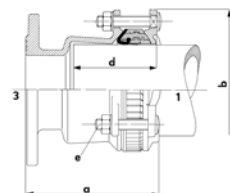
DN [mm]	DN [inch]	Range 1 [mm]	Range 1 [inch]	Flange 3 [mm]	Flange 3 [inch]	Description	NBR / A2 Code
80	3	84 - 105	3.3 - 4.1	80	3	with Multi/Fiksers	709 357 240
100	4	104 - 132	4.1 - 5.2	100	4	with Multi/Fiksers	709 357 242
150	6	154 - 192	6.1 - 7.6	150	6	with Multi/Fiksers	709 357 244
80	3	84 - 105	3.3 - 4.1	80	3	with Poly/Fiksers	709 359 240
100	4	104 - 132	4.1 - 5.2	100	4	with Poly/Fiksers	709 359 242
150	6	154 - 192	6.1 - 7.6	150	6	with Poly/Fiksers	709 359 244

DN [mm]	DN [inch]	Range 1 [mm]	Range 1 [inch]	Flange 3 [mm]	Flange 3 [inch]	Description	EPDM / A2 Code
80	3	84 - 105	3.3 - 4.1	80	3	with Multi/Fiksers	709 357 640
100	4	104 - 132	4.1 - 5.2	100	4	with Multi/Fiksers	709 357 642
150	6	154 - 192	6.1 - 7.6	150	6	with Multi/Fiksers	709 357 644
80	3	84 - 105	3.3 - 4.1	80	3	with Poly/Fiksers	709 359 640
100	4	104 - 132	4.1 - 5.2	100	4	with Poly/Fiksers	709 359 642
150	6	154 - 192	6.1 - 7.6	150	6	with Poly/Fiksers	709 359 644

DN [mm]	DN [inch]	Range 1 [mm]	Range 1 [inch]	Flange 3 [mm]	Flange 3 [inch]	Description	NBR / A4 Code
80	3	84 - 105	3.3 - 4.1	80	3	with Multi/Fiksers	709 357 040
100	4	104 - 132	4.1 - 5.2	100	4	with Multi/Fiksers	709 357 042
150	6	154 - 192	6.1 - 7.6	150	6	with Multi/Fiksers	709 357 044
80	3	84 - 105	3.3 - 4.1	80	3	with Poly/Fiksers	709 359 040
100	4	104 - 132	4.1 - 5.2	100	4	with Poly/Fiksers	709 359 042
150	6	154 - 192	6.1 - 7.6	150	6	with Poly/Fiksers	709 359 044

DN [mm]	DN [inch]	Range 1 [mm]	Range 1 [inch]	Flange 3 [mm]	Flange 3 [inch]	Description	EPDM / A4 Code	kg
80	3	84 - 105	3.3 - 4.1	80	3	with Multi/Fiksers	709 357 340	6.400
100	4	104 - 132	4.1 - 5.2	100	4	with Multi/Fiksers	709 357 342	8.200
150	6	154 - 192	6.1 - 7.6	150	6	with Multi/Fiksers	709 357 344	13.600
80	3	84 - 105	3.3 - 4.1	80	3	with Poly/Fiksers	709 359 340	6.400
100	4	104 - 132	4.1 - 5.2	100	4	with Poly/Fiksers	709 359 342	8.200
150	6	154 - 192	6.1 - 7.6	150	6	with Poly/Fiksers	709 359 344	13.600

PF 1 54 323 061



MULTI/JOINT® 3057 Wide Range Flange adaptor, restraint, acc. to JIS

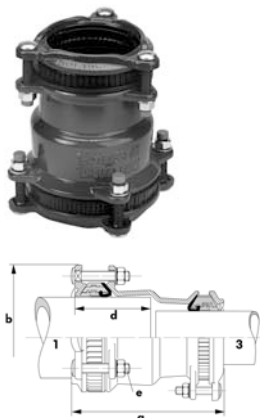
Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook
- For measures and drawings see our product flyer

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Description	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
80	84 - 105	80	with Multi/Fiksers	709 357 260	709 357 660	709 357 060	
100	104 - 132	100	with Multi/Fiksers	709 357 262	709 357 662	709 357 062	
150	154 - 192	150	with Multi/Fiksers	709 357 264	709 357 664	709 357 064	
80	84 - 105	80	with Poly/Fiksers	709 359 260	709 359 660	709 359 060	
100	104 - 132	100	with Poly/Fiksers	709 359 262	709 359 662	709 359 062	
150	154 - 192	150	with Poly/Fiksers	709 359 264	709 359 664	709 359 064	

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Description	EPDM / A4 Code	kg	
80	84 - 105	80	with Multi/Fiksers	709 357 360	6.400	
100	104 - 132	100	with Multi/Fiksers	709 357 362	8.200	
150	154 - 192	150	with Multi/Fiksers	709 357 364	13.600	
80	84 - 105	80	with Poly/Fiksers	709 359 360	6.400	
100	104 - 132	100	with Poly/Fiksers	709 359 362	8.200	
150	154 - 192	150	with Poly/Fiksers	709 359 364	13.600	

PF 1 54 323 061



MULTI/JOINT® 3100 Wide Range Reduced Coupling, non-restraint

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

Note:

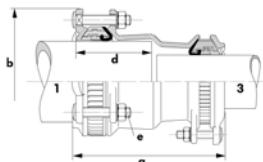
DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN-DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
50 - 65	46 - 71	69 - 90	709 400 218	709 400 618	709 400 018	
65 - 80	69 - 90	84 - 105	709 400 220	709 400 620	709 400 020	
80 - 100	84 - 105	104 - 132	709 400 224	709 400 624	709 400 024	
100 - 125	104 - 132	132 - 155	709 400 232	709 400 632	709 400 032	
100 - 150	104 - 132	154 - 192	709 400 236	709 400 636	709 400 036	
125 - 150	132 - 155	154 - 192	709 400 238	709 400 638	709 400 038	

DN-DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
50 - 65	46 - 71	69 - 90	709 400 318	6.000	
65 - 80	69 - 90	84 - 105	709 400 320	6.800	
80 - 100	84 - 105	104 - 132	709 400 324	8.000	
100 - 125	104 - 132	132 - 155	709 400 332	11.100	
100 - 150	104 - 132	154 - 192	709 400 336	13.300	
125 - 150	132 - 155	154 - 192	709 400 338	15.200	

DN-DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50 - 65	242 - 268	186	95	3xM12/3xM12	25.0	8.0	
65 - 80	242 - 268	204	115	3xM12/3xM12	25.0	8.0	
80 - 100	232 - 265	236	110	3xM12/3xM16	25.0	8.0	
100 - 125	238 - 275	264	120	3xM16/4xM16	25.0	8.0	
100 - 150	276 - 323	304	120	4xM16/4xM16	25.0	8.0	
125 - 150	276 - 322	304	120	4xM16/4xM16	25.0	8.0	

PF 1 54 323 060



MULTI/JOINT® 3107 Wide Range Reduced Coupling, restraint, Multi/Fiksers

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Multi/Fiksers: DN50 and DN65: on all pipes. DN80 - DN150: best on rigid pipes (consult us about (asbestos) cement and GRP pipes)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

Note:

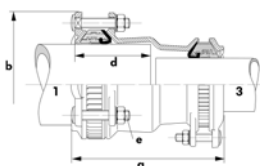
DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN-DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
50 - 65	46 - 71	69 - 90	709 407 218	709 407 618	709 407 018	
65 - 80	69 - 90	84 - 105	709 407 220	709 407 620	709 407 020	
80 - 100	84 - 105	104 - 132	709 407 224	709 407 624	709 407 024	
100 - 125	104 - 132	132 - 155	709 407 232	709 407 632	709 407 032	
100 - 150	104 - 132	154 - 192	709 407 236	709 407 636	709 407 036	
125 - 150	132 - 155	154 - 192	709 407 238	709 407 638	709 407 038	

DN-DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
50 - 65	46 - 71	69 - 90	709 407 318	6.000	
65 - 80	69 - 90	84 - 105	709 407 320	6.800	
80 - 100	84 - 105	104 - 132	709 407 324	8.000	
100 - 125	104 - 132	132 - 155	709 407 332	11.200	
100 - 150	104 - 132	154 - 192	709 407 336	13.400	
125 - 150	132 - 155	154 - 192	709 407 338	15.000	

DN-DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50 - 65	242 - 268	186	95	3xM12/3xM12	16.0	8.0	
65 - 80	242 - 268	204	115	3xM12/3xM12	16.0	8.0	
80 - 100	232 - 265	236	110	3xM12/3xM16	16.0	8.0	
100 - 125	238 - 275	264	120	3xM12/4xM16	16.0	8.0	
100 - 150	276 - 323	304	120	3xM16/4xM16	16.0	8.0	
125 - 150	276 - 322	304	120	4xM16/4xM16	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3107 Wide Range Reduced Coupling, restraint, Multi/Fiksers x Poly/Fiksers

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Multi/Fiksers: DN50 and DN65: on all pipes. DN80 - DN150: best on rigid pipes (consult us about (asbestos) cement and GRP pipes)
- End load resistance with Poly/Fiksers: DN50 and DN65: use Multi/Fiksers. DN80 - DN150: best on all polyolefine pipes (PE, PP, ABS)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

Note:

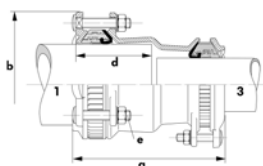
DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN-DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
80 - 100	84 - 105	104 - 132	709 406 224	709 406 624	709 406 024	
100 - 125	104 - 132	132 - 155	709 406 232	709 406 632	709 406 032	
100 - 150	104 - 132	154 - 192	709 406 236	709 406 636	709 406 036	
125 - 150	132 - 155	154 - 192	709 406 238	709 406 638	709 406 038	

DN-DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
80 - 100	84 - 105	104 - 132	709 406 324	8.000	
100 - 125	104 - 132	132 - 155	709 406 332	11.200	
100 - 150	104 - 132	154 - 192	709 406 336	13.400	
125 - 150	132 - 155	154 - 192	709 406 338	15.000	

DN-DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
80 - 100	232 - 265	236	110	3xM12/3xM16	16.0	8.0	
100 - 125	238 - 275	264	120	3xM12/4xM16	16.0	8.0	
100 - 150	276 - 323	304	120	3xM16/4xM16	16.0	8.0	
125 - 150	276 - 322	304	120	4xM16/4xM16	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3107 Wide Range Reduced Coupling, restraint, Poly/Fiksers

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Poly/Fiksers: DN50 and DN65: use Multi/Fiksers. DN80 - DN150: best on all polyolefine pipes (PE, PP, ABS)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

Note:

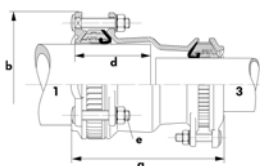
DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN-DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
80 - 100	84 - 105	104 - 132	709 409 224	709 409 624	709 409 024	
100 - 125	104 - 132	132 - 155	709 409 232	709 409 632	709 409 032	
100 - 150	104 - 132	154 - 192	709 409 236	709 409 636	709 409 036	
125 - 150	132 - 155	154 - 192	709 409 238	709 409 638	709 409 038	

DN-DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
80 - 100	84 - 105	104 - 132	709 409 324	8.000	
100 - 125	104 - 132	132 - 155	709 409 332	11.200	
100 - 150	104 - 132	154 - 192	709 409 336	13.400	
125 - 150	132 - 155	154 - 192	709 409 338	15.000	

DN-DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
80 - 100	232 - 265	236	110	3xM12/3xM16	16.0	8.0	
100 - 125	238 - 275	264	120	3xM12/4xM16	16.0	8.0	
100 - 150	276 - 323	304	120	3xM16/4xM16	16.0	8.0	
125 - 150	276 - 322	304	120	4xM16/4xM16	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3107 Wide Range Reduced Coupling, restraint, Poly/Fiksers x Multi/Fiksers

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Multi/Fiksers: DN50 and DN65: on all pipes. DN80 - DN150: best on rigid pipes (consult us about (asbestos) cement and GRP pipes)
- End load resistance with Poly/Fiksers: DN50 and DN65: use Multi/Fiksers. DN80 - DN150: best on all polyolefine pipes (PE, PP, ABS)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

Note:

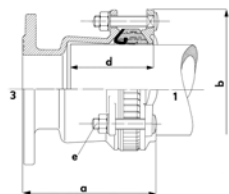
DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN-DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
80 - 100	84 - 105	104 - 132	709 408 224	709 408 624	709 408 024	
100 - 125	104 - 132	132 - 155	709 408 232	709 408 632	709 408 032	
100 - 150	104 - 132	154 - 192	709 408 236	709 408 636	709 408 036	
125 - 150	132 - 155	154 - 192	709 408 238	709 408 638	709 408 038	

DN-DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
80 - 100	84 - 105	104 - 132	709 408 324	8.000	
100 - 125	104 - 132	132 - 155	709 408 332	11.200	
100 - 150	104 - 132	154 - 192	709 408 336	13.400	
125 - 150	132 - 155	154 - 192	709 408 338	15.000	

DN-DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
80 - 100	232 - 265	236	110	3xM12/3xM16	16.0	8.0	
100 - 125	238 - 275	264	120	3xM12/4xM16	16.0	8.0	
100 - 150	276 - 323	304	120	3xM16/4xM16	16.0	8.0	
125 - 150	276 - 322	304	120	4xM16/4xM16	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3150 Wide Range Reduced flange adaptor, non-restraint

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

Note:

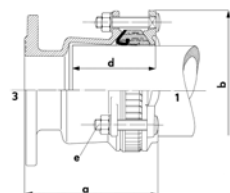
DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
50 - 40	46 - 71	40	PN16	709 450 208	709 450 608	709 450 008	
65 - 80	69 - 90	80	PN16	709 450 218	709 450 618	709 450 018	
100 - 80	104 - 132	80	PN16	709 450 224	709 450 624	709 450 024	
125 - 100	132 - 155	100	PN16	709 450 232	709 450 632	709 450 032	
125 - 150	132 - 155	150	PN16	709 450 238	709 450 638	709 450 038	

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	EPDM / A4 Code	kg	
50 - 40	46 - 71	40	PN16	709 450 308	5.000	
65 - 80	69 - 90	80	PN16	709 450 318	6.600	
100 - 80	104 - 132	80	PN16	709 450 324	8.900	
125 - 100	132 - 155	100	PN16	709 450 332	11.500	
125 - 150	132 - 155	150	PN16	709 450 338	11.400	

DN-DN [mm]	a [mm]	a [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50 - 40	185 - 200	164	100	3xM12	25.0	8.0	
65 - 80	198 - 210	186	95	3xM12	25.0	8.0	
100 - 80	196 - 215	236	110	3xM16	25.0	8.0	
125 - 100	197 - 215	264	120	4xM16	25.0	8.0	
125 - 150	276 - 294	264	120	4xM16	25.0	8.0	

PF 1 54 323 060



MULTI/JOINT® 3157 Wide Range Reduced flange adaptor, restraint, Multi/Fiksers

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Multi/Fiksers: DN50 and DN65: on all pipes. DN80 - DN150: best on rigid pipes (consult us about (asbestos) cement and GRP pipes)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

Note:

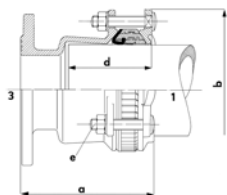
DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
50 - 40	46 - 71	40	PN16	709 457 208	709 457 608	709 457 008	
65 - 80	69 - 90	80	PN16	709 457 218	709 457 618	709 457 018	
100 - 80	104 - 132	80	PN16	709 457 224	709 457 624	709 457 024	
125 - 100	132 - 155	100	PN16	709 457 232	709 457 632	709 457 032	
125 - 150	132 - 155	150	PN16	709 457 238	709 457 638	709 457 038	

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	EPDM / A4 Code	kg	
50 - 40	46 - 71	40	PN16	709 457 308	5.000	
65 - 80	69 - 90	80	PN16	709 457 318	6.600	
100 - 80	104 - 132	80	PN16	709 457 324	8.900	
125 - 100	132 - 155	100	PN16	709 457 332	11.600	
125 - 150	132 - 155	150	PN16	709 457 338	11.400	

DN-DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50 - 40	185 - 200	164	100	3xM12	16.0	8.0	
65 - 80	198 - 210	186	95	3xM12	16.0	8.0	
100 - 80	196 - 215	236	110	3xM16	16.0	8.0	
125 - 100	197 - 215	264	120	4xM16	16.0	8.0	
125 - 150	276 - 294	264	120	4xM16	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3157 Wide Range Reduced flange adaptor, restraint, Poly/Fiksers

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Poly/Fiksers: DN50 and DN65: use Multi/Fiksers. DN80 - DN150: best on all polyolefine pipes (PE, PP, ABS)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

Note:

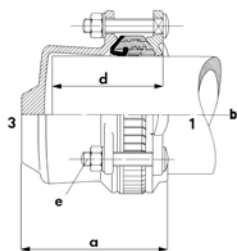
DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
100 - 80	104 - 132	80	PN16	709 459 224	709 459 624	709 459 024	
125 - 100	132 - 155	100	PN16	709 459 232	709 459 632	709 459 032	
125 - 150	132 - 155	150	PN16	709 459 238	709 459 638	709 459 038	

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	EPDM / A4 Code	kg	
100 - 80	104 - 132	80	PN16	709 459 324	8.900	
125 - 100	132 - 155	100	PN16	709 459 332	11.600	
125 - 150	132 - 155	150	PN16	709 459 338	11.400	

DN-DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
100 - 80	196 - 215	236	110	3xM16	16.0	8.0	
125 - 100	197 - 215	264	120	4xM16	16.0	8.0	
125 - 150	276 - 294	264	120	4xM16	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3200 Wide Range end-cap blind, non-restraint

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

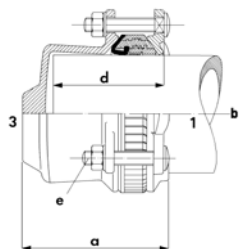
Note:

DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN [mm]	Range 1 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg	
50	46 - 71	709 370 210	709 370 610	709 370 010	709 370 310	3.500	
65	69 - 90	709 370 212	709 370 612	709 370 012	709 370 312	4.000	
80	84 - 105	709 370 214	709 370 614	709 370 014	709 370 314	4.900	
100	104 - 132	709 370 216	709 370 616	709 370 016	709 370 316	6.200	
125	132 - 155	709 370 218	709 370 618	709 370 018	709 370 318	7.800	
150	154 - 192	709 370 220	709 370 620	709 370 020	709 370 320	9.700	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50	115 - 130	164	100	3xM12	25.0	8.0	
65	145 - 157	186	95	3xM12	25.0	8.0	
80	142 - 156	204	115	3xM12	25.0	8.0	
100	144 - 163	236	110	3xM16	25.0	8.0	
125	151 - 169	264	120	4xM16	25.0	8.0	
150	149 - 177	304	120	4xM16	25.0	8.0	

PF 1 54 323 060



MULTI/JOINT® 3207 Wide Range end-cap blind, restraint, Multi/Fiksers

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Multi/Fiksers: DN50 and DN65: on all pipes. DN80 - DN150: best on rigid pipes (consult us about (asbestos) cement and GRP pipes)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

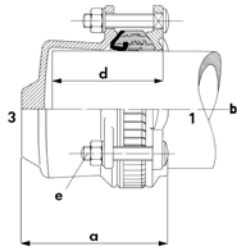
Note:

DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN [mm]	Range 1 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg	
50	46 - 71	709 377 210	709 377 610	709 377 010	709 377 310	3.600	
65	69 - 90	709 377 212	709 377 612	709 377 012	709 377 312	4.000	
80	84 - 105	709 377 214	709 377 614	709 377 014	709 377 314	4.900	
100	104 - 132	709 377 216	709 377 616	709 377 016	709 377 316	6.200	
125	132 - 155	709 377 218	709 377 618	709 377 018	709 377 318	7.800	
150	154 - 192	709 377 220	709 377 620	709 377 020	709 377 320	9.700	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
50	115 - 130	164	100	3xM12	16.0	8.0	
65	145 - 157	186	95	3xM12	16.0	8.0	
80	142 - 156	204	115	3xM12	16.0	8.0	
100	144 - 163	236	110	3xM16	16.0	8.0	
125	151 - 169	264	120	4xM16	16.0	8.0	
150	149 - 177	304	120	4xM16	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3207 Wide Range end-cap blind, restraint, Poly/Fiksers

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Poly/Fiksers: DN50 and DN65: use Multi/Fiksers. DN80 - DN150: best on all polyolefine pipes (PE, PP, ABS)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

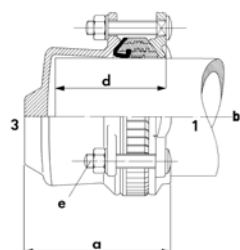
Note:

DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN [mm]	Range 1 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg	
80	84 - 105	709 379 214	709 379 614	709 379 014	709 379 314	4.900	
100	104 - 132	709 379 216	709 379 616	709 379 016	709 379 316	6.200	
125	132 - 155	709 379 218	709 379 618	709 379 018	709 379 318	7.800	
150	154 - 192	709 379 220	709 379 620	709 379 020	709 379 320	9.700	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
80	142 - 156	204	115	3xM12	16.0	8.0	
100	144 - 163	236	110	3xM16	16.0	8.0	
125	151 - 169	264	120	4xM16	16.0	8.0	
150	149 - 177	304	120	4xM16	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3200 Wide Range end-cap threaded, non-restraint

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

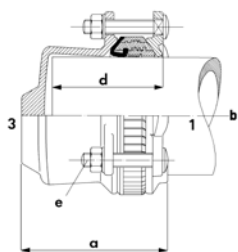
Note:

DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN [mm]	Range 1 [mm]	Rp [inch]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg
50	46 - 71	¾	709 380 204	709 380 604	709 380 004	709 380 304	3.500
50	46 - 71	1	709 380 205	709 380 605	709 380 005	709 380 305	3.500
50	46 - 71	1 ¼	709 380 206	709 380 606	709 380 006	709 380 306	3.500
50	46 - 71	1 ½	709 380 207	709 380 607	709 380 007	709 380 307	3.500
50	46 - 71	2	709 380 208	709 380 608	709 380 008	709 380 308	3.500
65	69 - 90	¾	709 380 209	709 380 609	709 380 009	709 380 309	4.000
65	69 - 90	1	709 380 210	709 380 610	709 380 010	709 380 310	4.000
65	69 - 90	1 ¼	709 380 211	709 380 611	709 380 011	709 380 311	4.000
65	69 - 90	1 ½	709 380 212	709 380 612	709 380 012	709 380 312	4.000
65	69 - 90	2	709 380 213	709 380 613	709 380 013	709 380 313	4.000
80	84 - 105	¾	709 380 214	709 380 614	709 380 014	709 380 314	4.900
80	84 - 105	1	709 380 215	709 380 615	709 380 015	709 380 315	4.900
80	84 - 105	1 ¼	709 380 216	709 380 616	709 380 016	709 380 316	4.900
80	84 - 105	1 ½	709 380 217	709 380 617	709 380 017	709 380 317	4.900
80	84 - 105	2	709 380 218	709 380 618	709 380 018	709 380 318	4.900
100	104 - 132	¾	709 380 219	709 380 619	709 380 019	709 380 319	6.200
100	104 - 132	1	709 380 220	709 380 620	709 380 020	709 380 320	6.200
100	104 - 132	1 ¼	709 380 221	709 380 621	709 380 021	709 380 321	6.200
100	104 - 132	1 ½	709 380 222	709 380 622	709 380 022	709 380 322	6.200
100	104 - 132	2	709 380 223	709 380 623	709 380 023	709 380 323	6.200
125	132 - 155	¾	709 380 224	709 380 624	709 380 024	709 380 324	7.800
125	132 - 155	1	709 380 225	709 380 625	709 380 025	709 380 325	7.800
125	132 - 155	1 ¼	709 380 226	709 380 626	709 380 026	709 380 326	7.800
125	132 - 155	1 ½	709 380 227	709 380 627	709 380 027	709 380 327	7.800
125	132 - 155	2	709 380 228	709 380 628	709 380 028	709 380 328	7.800
150	154 - 192	¾	709 380 229	709 380 629	709 380 029	709 380 329	9.700
150	154 - 192	1	709 380 230	709 380 630	709 380 030	709 380 330	9.700
150	154 - 192	1 ¼	709 380 231	709 380 631	709 380 031	709 380 331	9.700
150	154 - 192	1 ½	709 380 232	709 380 632	709 380 032	709 380 332	9.700
150	154 - 192	2	709 380 233	709 380 633	709 380 033	709 380 333	9.700

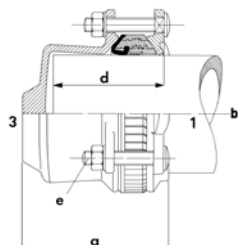
DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]
50	115 - 130	164	100	3xM12	25.0	8.0
50	115 - 130	164	100	3xM12	25.0	8.0
50	115 - 130	164	100	3xM12	25.0	8.0
50	115 - 130	164	100	3xM12	25.0	8.0
50	115 - 130	164	100	3xM12	25.0	8.0
65	145 - 157	186	95	3xM12	25.0	8.0
65	145 - 157	186	95	3xM12	25.0	8.0
65	145 - 157	186	95	3xM12	25.0	8.0
65	145 - 157	186	95	3xM12	25.0	8.0
65	145 - 157	186	95	3xM12	25.0	8.0
80	142 - 156	204	115	3xM12	25.0	8.0
80	142 - 156	204	115	3xM12	25.0	8.0
80	142 - 156	204	115	3xM12	25.0	8.0
80	142 - 156	204	115	3xM12	25.0	8.0

table continued next page



PF 1 54 323 060

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
80	142 - 156	204	115	3xM12	25.0	8.0	
100	144 - 163	236	110	3xM16	25.0	8.0	
100	144 - 163	236	110	3xM16	25.0	8.0	
100	144 - 163	236	110	3xM16	25.0	8.0	
100	144 - 163	236	110	3xM16	25.0	8.0	
100	144 - 163	236	110	3xM16	25.0	8.0	
125	151 - 169	264	120	4xM16	25.0	8.0	
125	151 - 169	264	120	4xM16	25.0	8.0	
125	151 - 169	264	120	4xM16	25.0	8.0	
125	151 - 169	264	120	4xM16	25.0	8.0	
125	151 - 169	264	120	4xM16	25.0	8.0	
150	149 - 177	304	120	4xM16	25.0	8.0	
150	149 - 177	304	120	4xM16	25.0	8.0	
150	149 - 177	304	120	4xM16	25.0	8.0	
150	149 - 177	304	120	4xM16	25.0	8.0	
150	149 - 177	304	120	4xM16	25.0	8.0	



MULTI/JOINT® 3207 Wide Range end-cap threaded, restraint, Multi/Fiksers

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Multi/Fiksers: DN50 and DN65: on all pipes. DN80 - DN150: best on rigid pipes (consult us about (asbestos) cement and GRP pipes)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

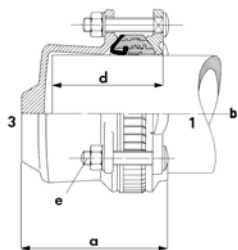
Note:

DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN [mm]	Range 1 [mm]	Rp [inch]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg
50	46 - 71	¾	709 387 204	709 387 604	709 387 004	709 387 304	3.600
50	46 - 71	1	709 387 205	709 387 605	709 387 005	709 387 305	3.600
50	46 - 71	1 ¼	709 387 206	709 387 606	709 387 006	709 387 306	3.600
50	46 - 71	1 ½	709 387 207	709 387 607	709 387 007	709 387 307	3.600
50	46 - 71	2	709 387 208	709 387 608	709 387 008	709 387 308	3.600
65	69 - 90	¾	709 387 209	709 387 609	709 387 009	709 387 309	4.000
65	69 - 90	1	709 387 210	709 387 610	709 387 010	709 387 310	4.000
65	69 - 90	1 ¼	709 387 211	709 387 611	709 387 011	709 387 311	4.000
65	69 - 90	1 ½	709 387 212	709 387 612	709 387 012	709 387 312	4.000
65	69 - 90	2	709 387 213	709 387 613	709 387 013	709 387 313	4.000
80	84 - 105	¾	709 387 214	709 387 614	709 387 014	709 387 314	4.900
80	84 - 105	1	709 387 215	709 387 615	709 387 015	709 387 315	4.900
80	84 - 105	1 ¼	709 387 216	709 387 616	709 387 016	709 387 316	4.900
80	84 - 105	1 ½	709 387 217	709 387 617	709 387 017	709 387 317	4.900
80	84 - 105	2	709 387 218	709 387 618	709 387 018	709 387 318	4.900
100	104 - 132	¾	709 387 219	709 387 619	709 387 019	709 387 319	6.200
100	104 - 132	1	709 387 220	709 387 620	709 387 020	709 387 320	6.200
100	104 - 132	1 ¼	709 387 221	709 387 621	709 387 021	709 387 321	6.200
100	104 - 132	1 ½	709 387 222	709 387 622	709 387 022	709 387 322	6.200
100	104 - 132	2	709 387 223	709 387 623	709 387 023	709 387 323	6.200
125	132 - 155	¾	709 387 224	709 387 624	709 387 024	709 387 324	7.800
125	132 - 155	1	709 387 225	709 387 625	709 387 025	709 387 325	7.800
125	132 - 155	1 ¼	709 387 226	709 387 626	709 387 026	709 387 326	7.800
125	132 - 155	1 ½	709 387 227	709 387 627	709 387 027	709 387 327	7.800
125	132 - 155	2	709 387 228	709 387 628	709 387 028	709 387 328	7.800
150	154 - 192	¾	709 387 229	709 387 629	709 387 029	709 387 329	9.700
150	154 - 192	1	709 387 230	709 387 630	709 387 030	709 387 330	9.700
150	154 - 192	1 ¼	709 387 231	709 387 631	709 387 031	709 387 331	9.700
150	154 - 192	1 ½	709 387 232	709 387 632	709 387 032	709 387 332	9.700
150	154 - 192	2	709 387 233	709 387 633	709 387 033	709 387 333	9.700

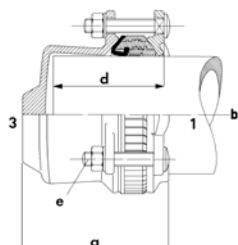
DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]
50	115 - 130	164	100	3xM12	16.0	8.0
50	115 - 130	164	100	3xM12	16.0	8.0
50	115 - 130	164	100	3xM12	16.0	8.0
50	115 - 130	164	100	3xM12	16.0	8.0
50	115 - 130	164	100	3xM12	16.0	8.0
65	145 - 157	186	95	3xM12	16.0	8.0
65	145 - 157	186	95	3xM12	16.0	8.0
65	145 - 157	186	95	3xM12	16.0	8.0
65	145 - 157	186	95	3xM12	16.0	8.0
65	145 - 157	186	95	3xM12	16.0	8.0

table continued next page



DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
80	142 - 156	204	115	3xM12	16.0	8.0	
80	142 - 156	204	115	3xM12	16.0	8.0	
80	142 - 156	204	115	3xM12	16.0	8.0	
80	142 - 156	204	115	3xM12	16.0	8.0	
80	142 - 156	204	115	3xM12	16.0	8.0	
100	144 - 163	236	110	3xM16	16.0	8.0	
100	144 - 163	236	110	3xM16	16.0	8.0	
100	144 - 163	236	110	3xM16	16.0	8.0	
100	144 - 163	236	110	3xM16	16.0	8.0	
100	144 - 163	236	110	3xM16	16.0	8.0	
125	151 - 169	264	120	4xM16	16.0	8.0	
125	151 - 169	264	120	4xM16	16.0	8.0	
125	151 - 169	264	120	4xM16	16.0	8.0	
125	151 - 169	264	120	4xM16	16.0	8.0	
125	151 - 169	264	120	4xM16	16.0	8.0	
150	149 - 177	304	120	4xM16	16.0	8.0	
150	149 - 177	304	120	4xM16	16.0	8.0	
150	149 - 177	304	120	4xM16	16.0	8.0	
150	149 - 177	304	120	4xM16	16.0	8.0	
150	149 - 177	304	120	4xM16	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3207 Wide Range end-cap threaded, re-straint, Poly/Fiksers

Model:

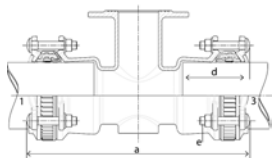
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Poly/Fiksers: DN50 and DN65: use Multi/Fiksers. DN80 - DN150: best on all polyolefine pipes (PE, PP, ABS)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

Note:

DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN [mm]	Range 1 [mm]	Rp [inch]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg
80	84 - 105	¾	709 389 214	709 389 614	709 389 014	709 389 314	4.900
80	84 - 105	1	709 389 215	709 389 615	709 389 015	709 389 315	4.900
80	84 - 105	1 ¼	709 389 216	709 389 616	709 389 016	709 389 316	4.900
80	84 - 105	1 ½	709 389 217	709 389 617	709 389 017	709 389 317	4.900
80	84 - 105	2	709 389 218	709 389 618	709 389 018	709 389 318	4.900
100	104 - 132	¾	709 389 219	709 389 619	709 389 019	709 389 319	6.200
100	104 - 132	1	709 389 220	709 389 620	709 389 020	709 389 320	6.200
100	104 - 132	1 ¼	709 389 221	709 389 621	709 389 021	709 389 321	6.200
100	104 - 132	1 ½	709 389 222	709 389 622	709 389 022	709 389 322	6.200
100	104 - 132	2	709 389 223	709 389 623	709 389 023	709 389 323	6.200
125	132 - 155	¾	709 389 224	709 389 624	709 389 024	709 389 324	7.800
125	132 - 155	1	709 389 225	709 389 625	709 389 025	709 389 325	7.800
125	132 - 155	1 ¼	709 389 226	709 389 626	709 389 026	709 389 326	7.800
125	132 - 155	1 ½	709 389 227	709 389 627	709 389 027	709 389 327	7.800
125	132 - 155	2	709 389 228	709 389 628	709 389 028	709 389 328	7.800
150	154 - 192	¾	709 389 229	709 389 629	709 389 029	709 389 329	9.700
150	154 - 192	1	709 389 230	709 389 630	709 389 030	709 389 330	9.700
150	154 - 192	1 ¼	709 389 231	709 389 631	709 389 031	709 389 331	9.700
150	154 - 192	1 ½	709 389 232	709 389 632	709 389 032	709 389 332	9.700
150	154 - 192	2	709 389 233	709 389 633	709 389 033	709 389 333	9.700

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]
80	142 - 156	204	115	3xM12	16.0	8.0
80	142 - 156	204	115	3xM12	16.0	8.0
80	142 - 156	204	115	3xM12	16.0	8.0
80	142 - 156	204	115	3xM12	16.0	8.0
80	142 - 156	204	115	3xM12	16.0	8.0
100	144 - 163	236	110	3xM16	16.0	8.0
100	144 - 163	236	110	3xM16	16.0	8.0
100	144 - 163	236	110	3xM16	16.0	8.0
100	144 - 163	236	110	3xM16	16.0	8.0
100	144 - 163	236	110	3xM16	16.0	8.0
125	151 - 169	264	120	4xM16	16.0	8.0
125	151 - 169	264	120	4xM16	16.0	8.0
125	151 - 169	264	120	4xM16	16.0	8.0
125	151 - 169	264	120	4xM16	16.0	8.0
125	151 - 169	264	120	4xM16	16.0	8.0
150	149 - 177	304	120	4xM16	16.0	8.0
150	149 - 177	304	120	4xM16	16.0	8.0
150	149 - 177	304	120	4xM16	16.0	8.0
150	149 - 177	304	120	4xM16	16.0	8.0
150	149 - 177	304	120	4xM16	16.0	8.0



MULTI/JOINT® 3750 Wide Range T-piece, non-restraint

Model:

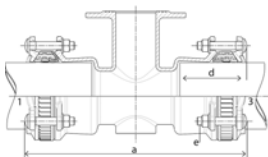
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- Threaded outlet (3/4 - 2 inch) optional
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN [mm]	Range 1 [mm]	Flange 2 [mm]	Range 3 [mm]	Drilling pattern	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code
100	104 - 132	80	104 - 132	PN16	709 500 226	709 500 626	709 500 026
150	154 - 192	80	154 - 192	PN16	709 500 234	709 500 634	709 500 034

DN [mm]	Range 1 [mm]	Flange 2 [mm]	Range 3 [mm]	Drilling pattern	EPDM / A4 Code	kg	
100	104 - 132	80	104 - 132	PN16	709 500 326	15.500	
150	154 - 192	80	154 - 192	PN16	709 500 334	23.900	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	h [mm]	PN Water [bar]	PN Gas [bar]	
100	400 - 438	236	110	3xM16	169	25.0	8.0	
150	412 - 468	304	120	4xM16	184	25.0	8.0	

PF 1 54 323 060



MULTI/JOINT® 3757 Wide Range T-piece, restraint, Multi/Fiksers

Model:

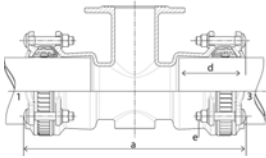
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Multi/Fiksers: DN50 and DN65: on all pipes. DN80 - DN150: best on rigid pipes (consult us about (asbestos) cement and GRP pipes)
- Threaded outlet (3/4 - 2 inch) optional
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN [mm]	Range 1 [mm]	Flange 2 [mm]	Range 3 [mm]	Drilling pattern	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code
100	104 - 132	80	104 - 132	PN16	709 507 226	709 507 626	709 507 026
150	154 - 192	80	154 - 192	PN16	709 507 234	709 507 634	709 507 034

DN [mm]	Range 1 [mm]	Flange 2 [mm]	Range 3 [mm]	Drilling pattern	EPDM / A4 Code	kg	
100	104 - 132	80	104 - 132	PN16	709 507 326	15.600	
150	154 - 192	80	154 - 192	PN16	709 507 334	23.900	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	h [mm]	PN Water [bar]	PN Gas [bar]	
100	400 - 438	236	110	3xM16	169	16.0	8.0	
150	412 - 468	304	120	4xM16	184	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3757 Wide Range T-piece, restraint, Poly/Fiksers

Model:

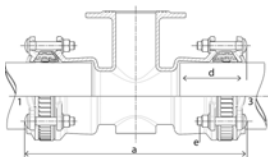
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Poly/Fiksers: DN50 and DN65: use Multi/Fiksers. DN80 - DN150: best on all polyolefine pipes (PE, PP, ABS)
- Threaded outlet (3/4 - 2 inch) optional
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN [mm]	Range 1 [mm]	Flange 2 [mm]	Range 3 [mm]	Drilling pattern	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code
100	104 - 132	80	104 - 132	PN16	709 509 226	709 509 626	709 509 026
150	154 - 192	80	154 - 192	PN16	709 509 234	709 509 634	709 509 034

DN [mm]	Range 1 [mm]	Flange 2 [mm]	Range 3 [mm]	Drilling pattern	EPDM / A4 Code	kg
100	104 - 132	80	104 - 132	PN16	709 509 326	15.600
150	154 - 192	80	154 - 192	PN16	709 509 334	23.900

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	h [mm]	PN Water [bar]	PN Gas [bar]
100	400 - 438	236	110	3xM16	169	16.0	8.0
150	412 - 468	304	120	4xM16	184	16.0	8.0

PF 1 54 323 061



MULTI/JOINT® 3757 Wide Range T-piece, restraint, Multi/Fiksers x Poly/Fiksers

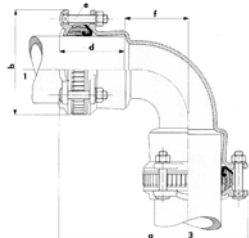
Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Multi/Fiksers: DN50 and DN65: on all pipes. DN80 - DN150: best on rigid pipes (consult us about (asbestos) cement and GRP pipes)
- End load resistance with Poly/Fiksers: DN50 and DN65: use Multi/Fiksers. DN80 - DN150: best on all polyolefine pipes (PE, PP, ABS)
- Threaded outlet (3/4 - 2 inch) optional
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN [mm]	Range 1 [mm]	Flange 2 [mm]	Range 3 [mm]	Drilling pattern	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code
100	104 - 132	80	104 - 132	PN16	709 508 226	709 508 626	709 508 026
150	154 - 192	80	154 - 192	PN16	709 508 234	709 508 634	709 508 034

DN [mm]	Range 1 [mm]	Flange 2 [mm]	Range 3 [mm]	Drilling pattern	EPDM / A4 Code	kg	
100	104 - 132	80	104 - 132	PN16	709 508 326	16.600	
150	154 - 192	80	154 - 192	PN16	709 508 334	22.200	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	h [mm]	PN Water [bar]	PN Gas [bar]	
100	400 - 438	236	110	3xM16	169	16.0	8.0	
150	412 - 468	304	120	4xM16	184	16.0	8.0	



MULTI/JOINT® 3400 Wide Range Bend, non-restraint

Model:

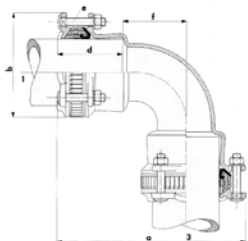
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
80	84 - 105	84 - 105	709 470 214	709 470 614	709 470 014	
100	104 - 132	104 - 132	709 470 216	709 470 616	709 470 016	
150	154 - 192	154 - 192	709 470 220	709 470 620	709 470 020	

DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
80	84 - 105	84 - 105	709 470 314	9.900	
100	104 - 132	104 - 132	709 470 316	13.300	
150	154 - 192	154 - 192	709 470 320	26.500	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	f [mm]	PN Water [bar]	PN Gas [bar]	
80	291 - 315	204	115	3xM12	100	25.0	8.0	
100	346 - 365	236	110	3xM16	125	25.0	8.0	
150	417 - 445	304	120	4xM16	175	25.0	8.0	

PF 1 54 323 060



MULTI/JOINT® 3407 Wide Range Bend, restraint, Multi/Fiksers

Model:

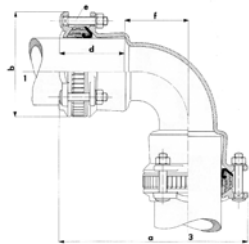
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Multi/Fiksers: DN50 and DN65: on all pipes. DN80 - DN150: best on rigid pipes (consult us about (asbestos) cement and GRP pipes)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
80	84 - 105	84 - 105	709 477 214	709 477 614	709 477 014	
100	104 - 132	104 - 132	709 477 216	709 477 616	709 477 016	
150	154 - 192	154 - 192	709 477 220	709 477 620	709 477 020	

DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
80	84 - 105	84 - 105	709 477 314	9.900	
100	104 - 132	104 - 132	709 477 316	13.400	
150	154 - 192	154 - 192	709 477 320	26.500	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	f [mm]	PN Water [bar]	PN Gas [bar]	
80	291 - 315	204	115	3xM12	100	16.0	8.0	
100	346 - 365	236	110	3xM16	125	16.0	8.0	
150	417 - 445	304	120	4xM16	175	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3407 Wide Range Bend, restraint, Poly/Fiksers

Model:

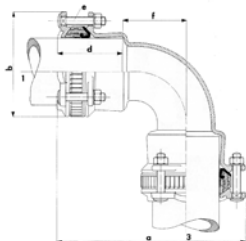
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Poly/Fiksers: DN50 and DN65: use Multi/Fiksers. DN80 - DN150: best on all polyolefine pipes (PE, PP, ABS)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
80	84 - 105	84 - 105	709 479 214	709 479 614	709 479 014	
100	104 - 132	104 - 132	709 479 216	709 479 616	709 479 016	
150	154 - 192	154 - 192	709 479 220	709 479 620	709 479 020	

DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
80	84 - 105	84 - 105	709 479 314	9.900	
100	104 - 132	104 - 132	709 479 316	13.400	
150	154 - 192	154 - 192	709 479 320	26.500	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	f [mm]	PN Water [bar]	PN Gas [bar]	
80	291 - 315	204	115	3xM12	100	16.0	8.0	
100	346 - 365	236	110	3xM16	125	16.0	8.0	
150	417 - 445	304	120	4xM16	175	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3407 Wide Range Bend, restraint, Multi/Fiksers x Poly/Fiksers

Model:

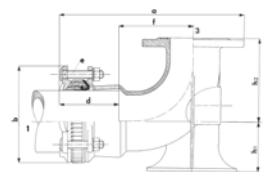
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Multi/Fiksers: DN50 and DN65: on all pipes. DN80 - DN150: best on rigid pipes (consult us about (asbestos) cement and GRP pipes)
- End load resistance with Poly/Fiksers: DN50 and DN65: use Multi/Fiksers. DN80 - DN150: best on all polyolefine pipes (PE, PP, ABS)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
80	84 - 105	84 - 105	709 478 214	709 478 614	709 478 014	
100	104 - 132	104 - 132	709 478 216	709 478 616	709 478 016	
150	154 - 192	154 - 192	709 478 220	709 478 620	709 478 020	

DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
80	84 - 105	84 - 105	709 478 314	9.900	
100	104 - 132	104 - 132	709 478 316	13.400	
150	154 - 192	154 - 192	709 478 320	26.500	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	f [mm]	PN Water [bar]	PN Gas [bar]	
80	291 - 315	204	115	3xM12	100	16.0	8.0	
100	346 - 365	236	110	3xM16	125	16.0	8.0	
150	417 - 445	304	120	4xM16	175	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3450 Wide Range Duckfoot, non-restraint

Model:

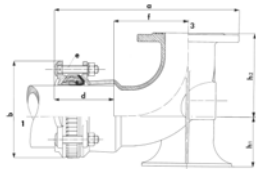
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- Threaded outlet (3/4 - 2 inch) optional
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
80	84 - 105	80	PN16	2	709 480 208	709 480 608	709 480 008	

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	EPDM / A4 Code	kg	
80	84 - 105	80	PN16	2	709 480 308	16.900	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	f [mm]	h1 [mm]	h2 [mm]	PN Water [bar]	
80	380 - 394	204	115	3xM12	165	108	174	25.0	

PF 1 54 323 060



MULTI/JOINT® 3457 Wide Range Duckfoot, restraint, Multi/Fiksers

Model:

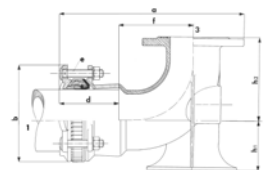
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Multi/Fiksers: DN50 and DN65: on all pipes. DN80 - DN150: best on rigid pipes (consult us about (asbestos) cement and GRP pipes)
- Threaded outlet (3/4 - 2 inch) optional
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
80	84 - 105	80	PN16	2	709 487 208	709 487 608	709 487 008	

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	EPDM / A4 Code	kg	
80	84 - 105	80	PN16	2	709 487 308	16.900	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	f [mm]	h1 [mm]	h2 [mm]	PN Water [bar]	
80	380 - 394	204	115	3xM12	165	108	174	16.0	

PF 1 54 323 061



MULTI/JOINT® 3457 Wide Range Duckfoot, restraint, Poly/Fiksers

Model:

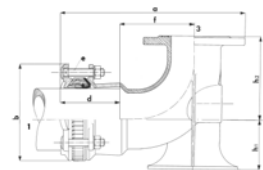
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Poly/Fiksers: DN50 and DN65: use Multi/Fiksers. DN80 - DN150: best on all polyolefine pipes (PE, PP, ABS)
- Threaded outlet (3/4 - 2 inch) optional
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
80	84 - 105	80	PN16	2	709 489 208	709 489 608	709 489 008	

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	EPDM / A4 Code	kg	
80	84 - 105	80	PN16	2	709 489 308	16.900	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	f [mm]	h1 [mm]	h2 [mm]	PN Water [bar]	
80	380 - 394	204	115	3xM12	165	108	174	16.0	

PF 1 54 323 061



MULTI/JOINT® 3550 Wide Range Reduced duckfoot, non-restraint

Model:

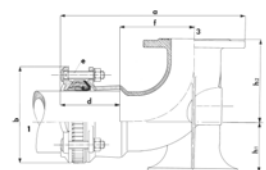
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- Threaded outlet (3/4 - 2 inch) optional
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
50 - 80	46 - 72	80	PN16	2	709 490 218	709 490 618	709 490 018	
100 - 80	104 - 132	80	PN16	2	709 490 223	709 490 623	709 490 023	

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	EPDM / A4 Code	kg	
50 - 80	46 - 72	80	PN16	2	709 490 318	9.800	
100 - 80	104 - 132	80	PN16	2	709 490 323	17.500	

DN-DN [mm]	Range 1 [mm]	a [mm]	b [mm]	d [mm]	e [mm]	f [mm]	h1 [mm]	h2 [mm]	PN Water [bar]	
50 - 80	46 - 72	356 - 371	164	100	3xM12	140	90	174	25.0	
100 - 80	104 - 132	408 - 426	236	110	3xM16	190	135	184	25.0	

PF 1 54 323 060



MULTI/JOINT® 3557 Wide Range Reduced duckfoot, re-straint, Multi/Fiksers

Model:

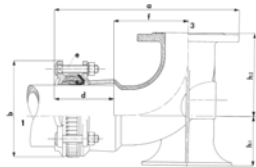
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Multi/Fiksers: DN50 and DN65: on all pipes. DN80 - DN150: best on rigid pipes (consult us about (asbestos) cement and GRP pipes)
- Threaded outlet (3/4 - 2 inch) optional
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code
50 - 80	46 - 72	80	PN16	2	709 497 218	709 497 618	709 497 018
65 - 80	63 - 90	80	PN10	2	709 497 236	709 497 636	709 497 036
65 - 80	63 - 90	80	PN16	2	709 497 230	709 497 630	709 497 030
100 - 80	104 - 132	80	PN10	2	709 497 279	709 497 679	709 497 079
100 - 80	104 - 132	80	PN16	2	709 497 223	709 497 623	709 497 023
125 - 80	132 - 155	80	PN10	2	709 497 261	709 497 661	709 497 061
125 - 80	132 - 155	80	PN16	2	709 497 248	709 497 648	709 497 048
150 - 80	154 - 192	80	PN10	2	709 497 273	709 497 673	709 497 073
150 - 80	154 - 192	80	PN16	2	709 497 267	709 497 667	709 497 067

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	EPDM / A4 Code	kg
50 - 80	46 - 72	80	PN16	2	709 497 318	13.100
65 - 80	63 - 90	80	PN10	2	709 497 336	13.100
65 - 80	63 - 90	80	PN16	2	709 497 330	13.100
100 - 80	104 - 132	80	PN10	2	709 497 379	17.400
100 - 80	104 - 132	80	PN16	2	709 497 323	17.500
125 - 80	132 - 155	80	PN10	2	709 497 361	15.900
125 - 80	132 - 155	80	PN16	2	709 497 348	15.900
150 - 80	154 - 192	80	PN10	2	709 497 373	19.100
150 - 80	154 - 192	80	PN16	2	709 497 367	19.100

DN-DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	f [mm]	h1 [mm]	h2 [mm]	PN Water [bar]
50 - 80	356 - 371	164	100	3xM12	140	90	174	16.0
65 - 80	402 - 413	186	95	3xM12	170	90	180	16.0
65 - 80	402 - 413	186	95	3xM12	170	90	180	16.0
100 - 80	408 - 426	236	110	3xM16	190	135	184	16.0
100 - 80	408 - 426	236	110	3xM16	190	135	184	16.0
125 - 80	394 - 412	264	120	4xM16	170	135	184	16.0
125 - 80	394 - 412	264	120	4xM16	170	135	184	16.0
150 - 80	407 - 435	264	120	4xM16	180	160	184	16.0
150 - 80	407 - 435	264	120	4xM16	180	160	184	16.0

PF 1 54 323 061



MULTI/JOINT® 3557 Wide Range Reduced duckfoot, restraint, Poly/Fiksers

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Poly/Fiksers: DN50 and DN65: use Multi/Fiksers. DN80 - DN150: best on all polyolefine pipes (PE, PP, ABS)
- Threaded outlet (3/4 - 2 inch) optional
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code
50 - 80	46 - 71	80	PN16	2	709 499 218	709 499 618	709 499 018
65 - 80	69 - 90	80	PN10	2	709 499 236	709 499 636	709 499 036
65 - 80	69 - 90	80	PN16	2	709 499 230	709 499 630	709 499 030
100 - 80	104 - 132	80	PN16	2	709 499 223	709 499 623	709 499 023
125 - 80	132 - 155	80	PN10	2	709 499 261	709 499 661	709 499 061
125 - 80	132 - 155	80	PN16	2	709 499 248	709 499 648	709 499 048
150 - 80	154 - 192	80	PN10	2	709 499 273	709 499 673	709 499 073
150 - 80	154 - 192	80	PN16	2	709 499 267	709 499 667	709 499 067

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	Rp [inch]	EPDM / A4 Code	kg
50 - 80	46 - 71	80	PN16	2	709 499 318	9.800
65 - 80	69 - 90	80	PN10	2	709 499 336	
65 - 80	69 - 90	80	PN16	2	709 499 330	
100 - 80	104 - 132	80	PN16	2	709 499 323	17.500
125 - 80	132 - 155	80	PN10	2	709 499 361	15.900
125 - 80	132 - 155	80	PN16	2	709 499 348	15.900
150 - 80	154 - 192	80	PN10	2	709 499 373	19.100
150 - 80	154 - 192	80	PN16	2	709 499 367	19.100

DN-DN [mm]	Range 1 [mm]	a [mm]	b [mm]	d [mm]	e [mm]	f [mm]	h1 [mm]	h2 [mm]	PN Water [bar]
50 - 80	46 - 71	356 - 371	164	100	3xM12	140	90	174	16.0
65 - 80	69 - 90	402 - 413	186	95	3xM12	170	90	180	16.0
65 - 80	69 - 90	402 - 413	186	95	3xM12	170	90	180	16.0
100 - 80	104 - 132	408 - 426	236	110	3xM16	190	135	184	16.0
125 - 80	132 - 155	394 - 412	264	120	4xM16	170	135	184	16.0
125 - 80	132 - 155	394 - 412	264	120	4xM16	170	135	184	16.0
150 - 80	154 - 192	407 - 435	264	120	4xM16	180	160	184	16.0
150 - 80	154 - 192	407 - 435	264	120	4xM16	180	160	184	16.0

PF 1 54 323 061



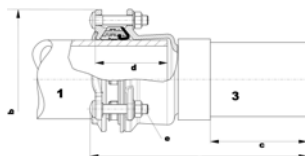
MULTI/JOINT® 3067 Wide Range PE adaptor, restraint, Multi/Fiksers

Model:

- Suitable for all kinds of pipe material (MULTI/JOINT® 3067 part)
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

Note:

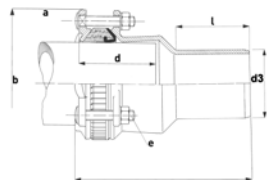
DN150 - DN300: see MULTI/JOINT® 3000 Plus



DN [mm]	Range 1 [mm]	PE outlet [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg
65	69 - 90	63	709 367 211	709 367 611	709 367 011	709 367 311	3.830
65	69 - 90	75	709 367 212	709 367 612	709 367 012	709 367 312	4.351
80	84 - 105	90	709 367 214	709 367 614	709 367 014	709 367 314	5.337
80	84 - 105	110	709 367 215	709 367 615	709 367 015	709 367 315	5.337
100	104 - 132	90	709 467 216	709 467 616	709 467 016	709 467 316	6.693
100	104 - 132	110	709 367 216	709 367 616	709 367 016	709 367 316	6.793
100	104 - 132	125	709 467 217	709 467 617	709 467 017	709 467 317	8.053
125	132 - 155	110	709 467 218	709 467 618	709 467 018	709 467 318	8.754
125	132 - 155	125	709 367 218	709 367 618	709 367 018	709 367 318	8.954
125	132 - 155	140	709 467 219	709 467 619	709 467 019	709 467 319	10.514
125	132 - 155	160	709 467 221	709 467 621	709 467 021	709 467 321	10.514
150	154 - 192	160	709 367 220	709 367 620	709 367 020	709 367 320	12.898
150	154 - 192	180	709 467 220	709 467 620	709 467 020	709 467 320	15.148

DN [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]
65	186	95	3xM12	16.0	8.0
65	186	95	3xM12	16.0	8.0
80	204	115	3xM12	16.0	8.0
80	204	115	3xM12	16.0	8.0
100	236	110	3xM16	16.0	8.0
100	236	110	3xM16	16.0	8.0
100	236	110	3xM16	16.0	8.0
125	264	120	4xM16	16.0	8.0
125	264	120	4xM16	16.0	8.0
125	264	120	4xM16	16.0	8.0
125	264	120	4xM16	16.0	8.0
150	304	120	4xM16	16.0	8.0
150	304	120	4xM16	16.0	8.0

PF 1 54 323 061



MULTI/JOINT® 3080 Wide Range Spigot End, non-restraint

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

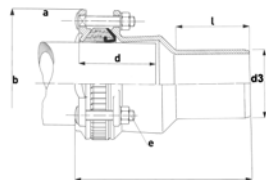
Note:

DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN [mm]	Range 1 [mm]	d3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg	
50	46 - 71	63	709 330 210	709 330 610	709 330 010	709 330 310	3.400	
100	104 - 132	110	709 330 216	709 330 616	709 330 016	709 330 316	7.300	
150	154 - 192	160	709 330 220	709 330 620	709 330 020	709 330 320	11.700	

DN [mm]	Range 1 [mm]	a [mm]	b [mm]	d [mm]	e [mm]	L [mm]	PN Water [bar]	PN Gas [bar]	
50	46 - 71	204 - 219	164	100	3xM12	75	25.0	8.0	
100	104 - 132	258 - 277	269	110	3xM16	120	25.0	8.0	
150	154 - 192	289 - 317	304	120	4xM16	135	25.0	8.0	

PF 1 54 323 060



MULTI/JOINT® 3087 Wide Range Spigot End, restraint, Multi/Fiksers

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Multi/Fiksers: DN50 and DN65: on all pipes. DN80 - DN150: best on rigid pipes (consult us about (asbestos) cement and GRP pipes)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

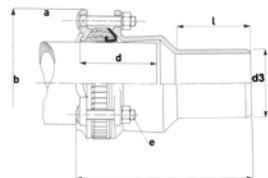
Note:

DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN [mm]	d3 [mm]	Range 1 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg	
50	63	46 - 71	709 337 210	709 337 610	709 337 010	709 337 310	3.400	
100	110	104 - 132	709 337 216	709 337 616	709 337 016	709 337 316	7.300	
150	160	154 - 192	709 337 220	709 337 620	709 337 020	709 337 320	11.700	

DN [mm]	d3 [mm]	a [mm]	b [mm]	d [mm]	e [mm]	L [mm]	PN Water [bar]	PN Gas [bar]	
50	63	204 - 219	164	100	3xM12	75	16.0	8.0	
100	110	258 - 277	269	110	3xM16	120	16.0	8.0	
150	160	289 - 317	304	120	4xM16	135	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3087 Wide Range Spigot End, restraint, Poly/Fiksers

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Poly/Fiksers: DN50 and DN65: use Multi/Fiksers. DN80 - DN150: best on all polyolefine pipes (PE, PP, ABS)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

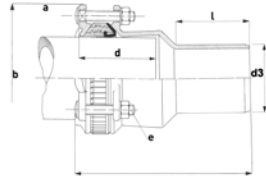
Note:

DN150 - DN300: see MULTI/JOINT® 3000 Plus

DN [mm]	Range 1 [mm]	d3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg	
50	46 - 71	63	709 339 210	709 339 610	709 339 010	709 339 310	3.400	
100	104 - 132	110	709 339 216	709 339 616	709 339 016	709 339 316	7.300	
150	154 - 192	160	709 339 220	709 339 620	709 339 020	709 339 320	11.700	

DN [mm]	Range 1 [mm]	a [mm]	b [mm]	d [mm]	e [mm]	l [mm]	PN Water [bar]	PN Gas [bar]	
50	46 - 71	204 - 219	164	100	3xM12	75	16.0	8.0	
100	104 - 132	258 - 277	269	110	3xM16	120	16.0	8.0	
150	154 - 192	289 - 317	304	120	4xM16	135	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3180 Wide Range Reduced spigot end, non-restraint

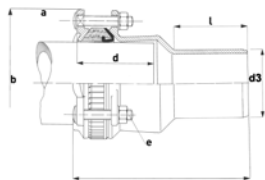
Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN [mm]	d3 [mm]	Range 1 [mm]	NBR / A2 Code		EPDM / A2 Code		NBR / A4 Code		EPDM / A4 Code		kg	
80	110	84 - 105	709 340 224		709 340 624		709 340 024		709 340 324		5.500	

DN [mm]	d3 [mm]	a [mm]	b [mm]	d [mm]	e [mm]	l [mm]	PN Water [bar]	PN Gas [bar]	
80	110	240 - 254	204	115	3xM12	120	25.0	8.0	

PF 1 54 323 060



MULTI/JOINT® 3187 Wide Range Reduced spigot end, restraint, Multi/Fiksers

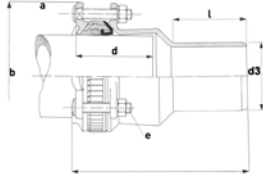
Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Multi/Fiksers: DN50 and DN65: on all pipes. DN80 - DN150: best on rigid pipes (consult us about (asbestos) cement and GRP pipes)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN [mm]	d3 [mm]	Range 1 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg	
80	110	84 - 105	709 347 224	709 347 624	709 347 024	709 347 324	5.500	

DN [mm]	d3 [mm]	a [mm]	b [mm]	d [mm]	e [mm]	l [mm]	PN Water [bar]	PN Gas [bar]	
80	110	240 - 254	204	115	3xM12	120	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® 3187 Wide Range Reduced spigot end, restraint, Poly/Fiksers

Model:

- Suitable for all kinds of pipe material
- Suitable for water and gas
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 8° per socket at installation (based on the middle of the coupling range)
- Nakan GPM Flekscores
- Stainless steel A4 quality (AISI 316) Fiksers®
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- End load resistance with Poly/Fiksers: DN50 and DN65: use Multi/Fiksers. DN80 - DN150: best on all polyolefine pipes (PE, PP, ABS)
- For restraint versions, on plastic pipes, the use of an insert stiffener (see accessories) is mandatory, check our technical handbook

DN [mm]	Range 1 [mm]	d3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	EPDM / A4 Code	kg	
80	84 - 105	110	709 349 224	709 349 624	709 349 024	709 349 324	5.500	

DN [mm]	Range 1 [mm]	a [mm]	b [mm]	d [mm]	e [mm]	l [mm]	PN Water [bar]	PN Gas [bar]	
80	84 - 105	240 - 254	204	115	3xM12	120	16.0	8.0	

PF 1 54 323 061



MULTI/JOINT® XL

Contents MULTI/JOINT® XL

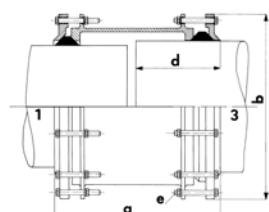
	page
MULTI/JOINT® XL 2500 Coupling	91
MULTI/JOINT® XL 2550 Flange Adaptor	94
MULTI/JOINT® XL 2600 Reduction Coupling	96
MULTI/JOINT® XL 2650 Reduction Flange Adaptor	97

MULTI/JOINT® XL

MULTI/JOINT® XL 2500 Wide Range Coupling, non-restraint

Model:

- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 4° per socket (nominal)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Other dedicated sized couplings up to 2800 mm on request
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

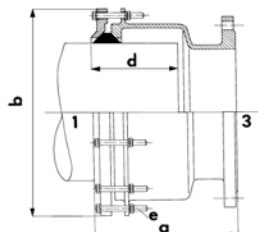


DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
350	356 - 380	356 - 380	709 006 200	709 006 600	709 006 000	
400	400 - 429	400 - 429	709 006 205	709 006 605	709 006 005	
450	450 - 482	450 - 482	709 006 207	709 006 607	709 006 007	
500	500 - 532	500 - 532	709 006 210	709 006 610	709 006 010	
600	605 - 637	605 - 637	709 006 215	709 006 615	709 006 015	

DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
350	356 - 380	356 - 380	709 006 300	99.000	
400	400 - 429	400 - 429	709 006 305	115.000	
450	450 - 482	450 - 482	709 006 307	122.000	
500	500 - 532	500 - 532	709 006 310	149.000	
600	605 - 637	605 - 637	709 006 315	178.000	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
350	520	551	240	8xM16	10.0	4.0	
400	520	600	240	10xM16	10.0	4.0	
450	520	653	240	10xM16	10.0	4.0	
500	520	720	240	10xM20	10.0	4.0	
600	520	820	240	12xM20	10.0	4.0	

PF 1 54 323 062



MULTI/JOINT® XL 2550 Wide Range Flange adaptor, non-restraint

Model:

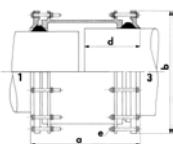
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 4° per socket (nominal)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Other dedicated sized couplings up to 2800 mm on request
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
350	356 - 380	350	PN10	709 008 255	709 008 655	709 008 055	
350	356 - 380	350	PN16	709 008 256	709 008 656	709 008 056	
400	400 - 429	400	PN10	709 008 260	709 008 660	709 008 060	
400	400 - 429	400	PN16	709 008 261	709 008 661	709 008 061	
500	500 - 532	500	PN10	709 008 264	709 008 664	709 008 064	
500	500 - 532	500	PN16	709 008 265	709 008 665	709 008 065	
600	605 - 637	600	PN10	709 008 270	709 008 670	709 008 070	
600	605 - 637	600	PN16	709 008 271	709 008 671	709 008 071	

DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	EPDM / A4 Code	kg	
350	356 - 380	350	PN10	709 008 355	77.000	
350	356 - 380	350	PN16	709 008 356	77.000	
400	400 - 429	400	PN10	709 008 360	88.000	
400	400 - 429	400	PN16	709 008 361	88.000	
500	500 - 532	500	PN10	709 008 364	120.000	
500	500 - 532	500	PN16	709 008 365	120.000	
600	605 - 637	600	PN10	709 008 370	170.000	
600	605 - 637	600	PN16	709 008 371	142.000	

DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
350	360	551	240	8xM16	10.0	4.0	
350	360	551	240	8xM16	10.0	4.0	
400	360	600	240	10xM16	10.0	4.0	
400	360	600	240	10xM16	10.0	4.0	
500	360	720	240	10xM20	10.0	4.0	
500	360	720	240	10xM20	10.0	4.0	
600	360	820	240	12xM20	10.0	4.0	
600	360	820	240	12xM20	10.0	4.0	

PF 1 54 323 062



MULTI/JOINT® XL 2600 Wide Range Reduced Coupling, non-restraint

Model:

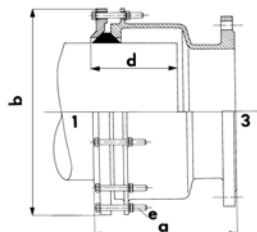
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 4° per socket (nominal)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Other dedicated sized couplings up to 2800 mm on request
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN-DN [mm]	Range 1 [mm]	Range 3 [mm]	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
300 - 350	315 - 337	356 - 380	709 007 205	709 007 605	709 007 005	
350 - 400	356 - 380	400 - 429	709 007 207	709 007 607	709 007 007	
400 - 450	400 - 429	450 - 482	709 007 210	709 007 610	709 007 010	
450 - 500	450 - 482	500 - 532	709 007 212	709 007 612	709 007 012	
500 - 550	500 - 532	548 - 580	709 007 215	709 007 615	709 007 015	

DN-DN [mm]	Range 1 [mm]	Range 3 [mm]	EPDM / A4 Code	kg	
300 - 350	315 - 337	356 - 380	709 007 305	102.000	
350 - 400	356 - 380	400 - 429	709 007 307	114.000	
400 - 450	400 - 429	450 - 482	709 007 310	125.000	
450 - 500	450 - 482	500 - 532	709 007 312	145.000	
500 - 550	500 - 532	548 - 580	709 007 315	160.000	

DN-DN [mm]	Range 1 [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
300 - 350	315 - 337	520	551	240	8xM16/8xM16	10.0	4.0	
350 - 400	356 - 380	520	600	240	10xM16/8xM16	10.0	4.0	
400 - 450	400 - 429	520	653	240	10xM16/10xM16	10.0	4.0	
450 - 500	450 - 482	520	717	240	12xM20/10xM16	10.0	4.0	
500 - 550	500 - 532	520	765	240	12xM20/12xM20	10.0	4.0	

PF 1 54 323 062



MULTI/JOINT® XL 2650 Wide Range Reduced Flange Adaptor, non-restraint

Model:

- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Angular deflection of max. 4° per socket (nominal)
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- Suitable for all kinds of pipe material
- Suitable for water and gas
- Other dedicated sized couplings up to 2800 mm on request
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	NBR / A2 Code	EPDM / A2 Code	NBR / A4 Code	
350 - 300	356 - 380	300	PN10	709 008 250	709 008 650	709 008 050	
350 - 300	356 - 380	300	PN16	709 008 251	709 008 651	709 008 051	
450 - 400	450 - 482	400	PN10	709 008 262	709 008 662	709 008 062	
450 - 400	450 - 482	400	PN16	709 008 263	709 008 663	709 008 063	
550 - 500	548 - 580	500	PN10	709 008 266	709 008 666	709 008 066	
550 - 500	548 - 580	500	PN16	709 008 267	709 008 667	709 008 067	

DN-DN [mm]	Range 1 [mm]	Flange 3 [mm]	Drilling pattern	EPDM / A4 Code	kg	
350 - 300	356 - 380	300	PN10	709 008 350	78.000	
350 - 300	356 - 380	300	PN16	709 008 351	78.000	
450 - 400	450 - 482	400	PN10	709 008 362	94.000	
450 - 400	450 - 482	400	PN16	709 008 363	94.000	
550 - 500	548 - 580	500	PN10	709 008 366	130.000	
550 - 500	548 - 580	500	PN16	709 008 367	128.000	

DN-DN [mm]	a [mm]	b [mm]	d [mm]	e [mm]	PN Water [bar]	PN Gas [bar]	
350 - 300	360	551	240	8xM16	10.0	4.0	
350 - 300	360	551	240	8xM16	10.0	4.0	
450 - 400	360	653	240	10xM16	10.0	4.0	
450 - 400	360	653	240	10xM16	10.0	4.0	
550 - 500	360	765	240	10xM20	10.0	4.0	
550 - 500	360	765	240	10xM20	10.0	4.0	

PF 1 54 323 062



ST-System

Contents ST-system

	page
Coupling, non-restraint	102
Flange Adaptor, non-restraint	103
Reduction Coupling, non-restraint	104
Reduction Flange Adaptor, non-restraint	105

ST-System

Coupling, non-restraint



Model:

- Body and clamp ring: steel (ST 37-2)
- Bolts and nuts: standard stainless steel A2, others on request
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- Gasket: NBR
- Working pressures: Water: 10 bar, 16 bar or 25 bar; Gas: 4
- Ranges: DN40 - DN80 (+2 / -1), DN100 - DN200 (+2 / -1,5), DN250 - DN500 (+4 / -3), DN600 - DN1100 (+5 / -4), DN1200 - DN1600 (+5,5 / -5)
- All kinds of dimensions from DN80 up to DN2800 are possible on request and different lengths and pressure classes are also possible by mentioning exact outside diameter
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN [mm]	Length [mm]	Code	
80	300	DN80C-N	
100	300	DN100C-N	
200	300	DN200C-N	
250	300	DN250C-N	
300	300	DN300C-N	
350	300	DN350C-N	
400	300	DN400C-N	
450	300	DN450C-N	
500	300	DN500C-N	
550	300	DN550C-N	
600	300	DN600C-N	
650	300	DN650C-N	
700	300	DN700C-N	
800	300	DN800C-N	
900	300	DN900C-N	
1000	300	DN1000C-N	
1100	300	DN1100C-N	
1200	300	DN1200C-N	
1300	300	DN1300C-N	
1400	300	DN1400C-N	
1500	300	DN1500C-N	
1600	300	DN1600C-N	
1700	300	DN1700C-N	
1800	300	DN1800C-N	
1900	300	DN1900C-N	
2000	300	DN2000C-N	
2100	300	DN2100C-N	
2200	300	DN2200C-N	
2300	300	DN2300C-N	
2400	300	DN2400C-N	
2500	300	DN2500C-N	
2600	300	DN2600C-N	
2700	300	DN2700C-N	
2800	300	DN2800C-N	



Flange Adaptor, non-restraint

Model:

- Body and clamp ring: steel (ST 37-2)
- Bolts and nuts: standard stainless steel A2, others on request
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- Gasket: NBR
- Working pressures: Water: 10 bar, 16 bar or 25 bar; Gas: 4
- Ranges: DN40 - DN80 (+2 / -1), DN100 - DN200 (+2 / -1,5), DN250 - DN500 (+4 / -3), DN600 - DN1100 (+5 / -4), DN1200 - DN1600 (+5,5 / -5)
- All kinds of dimensions from DN80 up to DN2800 are possible on request and different lengths and pressure classes are also possible by mentioning exact outside diameter
- Flange drilling: PN10, others on request
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN [mm]	DN flange [mm]	Length [mm]	Code	
80	80	300	DN80F-N	
100	100	300	DN100F-N	
200	200	300	DN200F-N	
250	250	300	DN250F-N	
300	300	300	DN300F-N	
350	350	300	DN350F-N	
400	400	300	DN400F-N	
450	450	300	DN450F-N	
500	500	300	DN500F-N	
550	550	300	DN550F-N	
600	600	300	DN600F-N	
650	650	300	DN650F-N	
700	700	300	DN700F-N	
800	800	300	DN800F-N	
900	900	300	DN900F-N	
1000	1000	300	DN1000F-N	
1100	1100	300	DN1100F-N	
1200	1200	300	DN1200F-N	
1300	1300	300	DN1300F-N	
1400	1400	300	DN1400F-N	
1500	1500	300	DN1500F-N	
1600	1600	300	DN1600F-N	
1700	1700	300	DN1700F-N	
1800	1800	300	DN1800F-N	
1900	1900	300	DN1900F-N	
2000	2000	300	DN2000F-N	
2100	2100	300	DN2100F-N	
2200	2200	300	DN2200F-N	
2300	2300	300	DN2300F-N	
2400	2400	300	DN2400F-N	
2500	2500	300	DN2500F-N	
2600	2600	300	DN2600F-N	
2700	2700	300	DN2700F-N	
2800	2800	300	DN2800F-N	



Reduction Coupling, non-restraint

Model:

- Body and clamp ring: steel (ST 37-2)
- Bolts and nuts: standard stainless steel A2, others on request
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- Gasket: NBR
- Working pressures: Water: 10 bar, 16 bar or 25 bar; Gas: 4
- Ranges: DN40 - DN80 (+2 / -1), DN100 - DN200 (+2 / -1,5), DN250 - DN500 (+4 / -3), DN600 - DN1100 (+5 / -4), DN1200 - DN1600 (+5,5 / -5)
- All kinds of dimensions from DN80 up to DN2800 are possible on request and different lengths and pressure classes are also possible by mentioning exact outside diameter
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN [mm]	Length [mm]	Code	
80	300	DN80RC-N	
100	300	DN100RC-N	
200	300	DN200RC-N	
250	300	DN250RC-N	
300	300	DN300RC-N	
350	300	DN350RC-N	
400	300	DN400RC-N	
450	300	DN450RC-N	
500	300	DN500RC-N	
550	300	DN550RC-N	
600	300	DN600RC-N	
650	300	DN650RC-N	
700	300	DN700RC-N	
800	300	DN800RC-N	
900	300	DN900RC-N	
1000	300	DN1000RC-N	
1100	300	DN1100RC-N	
1200	300	DN1200RC-N	
1300	300	DN1300RC-N	
1400	300	DN1400RC-N	
1500	300	DN1500RC-N	
1600	300	DN1600RC-N	
1700	300	DN1700RC-N	
1800	300	DN1800RC-N	
1900	300	DN1900RC-N	
2000	300	DN2000RC-N	
2100	300	DN2100RC-N	
2200	300	DN2200RC-N	
2300	300	DN2300RC-N	
2400	300	DN2400RC-N	
2500	300	DN2500RC-N	
2600	300	DN2600RC-N	
2700	300	DN2700RC-N	
2800	300	DN2800RC-N	



Reduction Flange Adaptor, non-restraint

Model:

- Body and clamp ring: steel (ST 37-2)
- Bolts and nuts: standard stainless steel A2, others on request
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- Gasket: NBR
- Working pressures: Water: 10 bar, 16 bar or 25 bar; Gas: 4
- Ranges: DN40 - DN80 (+2 / -1), DN100 - DN200 (+2 / -1,5), DN250 - DN500 (+4 / -3), DN600 - DN1100 (+5 / -4), DN1200 - DN1600 (+5,5 / -5)
- All kinds of dimensions from DN80 up to DN2800 are possible on request and different lengths and pressure classes are also possible by mentioning exact outside diameter
- Flange drilling: PN10, others on request
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.

DN [mm]	DN flange [mm]	Length [mm]	Code	
80	80 - 2800	300	DN80RF-N	
100	80 - 2800	300	DN100RF-N	
200	80 - 2800	300	DN200RF-N	
250	80 - 2800	300	DN250RF-N	
300	80 - 2800	300	DN300RF-N	
350	80 - 2800	300	DN350RF-N	
400	80 - 2800	300	DN400RF-N	
450	80 - 2800	300	DN450RF-N	
500	80 - 2800	300	DN500RF-N	
550	80 - 2800	300	DN550RF-N	
600	80 - 2800	300	DN600RF-N	
650	80 - 2800	300	DN650RF-N	
700	80 - 2800	300	DN700RF-N	
800	80 - 2800	300	DN800RF-N	
900	80 - 2800	300	DN900RF-N	
1000	80 - 2800	300	DN1000RF-N	
1100	80 - 2800	300	DN1100RF-N	
1200	80 - 2800	300	DN1200RF-N	
1300	80 - 2800	300	DN1300RF-N	
1400	80 - 2800	300	DN1400RF-N	
1500	80 - 2800	300	DN1500RF-N	
1600	80 - 2800	300	DN1600RF-N	
1700	80 - 2800	300	DN1700RF-N	
1800	80 - 2800	300	DN1800RF-N	
1900	80 - 2800	300	DN1900RF-N	
2000	80 - 2800	300	DN2000RF-N	
2100	80 - 2800	300	DN2100RF-N	
2200	80 - 2800	300	DN2200RF-N	
2300	80 - 2800	300	DN2300RF-N	
2400	80 - 2800	300	DN2400RF-N	
2500	80 - 2800	300	DN2500RF-N	
2600	80 - 2800	300	DN2600RF-N	
2700	80 - 2800	300	DN2700RF-N	
2800	80 - 2800	300	DN2800RF-N	



Plast/Joint®

Contents Plast/Joint®

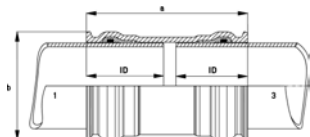
	page
Plast/Joint® 8000 Coupling, non-restraint	110
Plast/Joint® 8007 Coupling, restraint	111
Plast/Joint® 8050 Flange Adaptor, non-restraint	112
Plast/Joint® 8057 Flange Adaptor, restraint	113

Plast/Joint®

Plast/Joint® 8000 Coupling, non-restraint

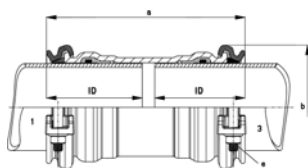
Model:

- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- Gaskets NBR or EPDM
- Suitable for water and gas
- For water applications on PE and PVC pipes SDR 9, SDR 11 and SDR 17 (SDR 17.6) and for bi oriented PVC pipes SDR 21, 34 and 41 insert stiffeners are not required. Note: for all gas applications and for PE pipes with SDR 21 or thinner wall thicknesses, insert stiffeners are mandatory
- For more information on the use of insert stiffeners please contact your local dealer



PF 1 54 932 001

d [mm]	NBR Code	EPDM Code	kg	a [mm]	b [mm]	PN Water [bar]	PN Gas [bar]	insertion depth [mm]
63	709 200 210	709 200 610	2.326	165	94	16.0	8.0	80
75	709 200 212	709 200 612	2.418	165	106	16.0	8.0	80
90	709 200 214	709 200 614	3.279	175	121	16.0	8.0	85
110	709 200 216	709 200 616	4.669	209	141	16.0	8.0	102
125	709 200 218	709 200 618	5.129	218	156	16.0	8.0	106
140	709 200 220	709 200 620	6.168	222	172	16.0	8.0	108
160	709 200 222	709 200 622	8.664	250	197	16.0	8.0	122
180	709 200 224	709 200 624	10.400	269	217	16.0	8.0	132
200	709 200 226	709 200 626	12.752	274	237	16.0	8.0	134
225	709 200 228	709 200 628	14.530	277	262	16.0	8.0	136
250	709 200 230	709 200 630	18.026	337	292	16.0	8.0	166
280	709 200 232	709 200 632	21.186	344	323	16.0	8.0	169
315	709 200 234	709 200 634	26.210	349	358	16.0	8.0	172



Plast/Joint® 8007 Coupling, restraint

Model:

- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- Gripping in brass
- Gaskets NBR or EPDM
- Suitable for water and gas
- For water applications on PE and PVC pipes SDR 9, SDR 11 and SDR 17 (SDR 17.6) and for bi oriented PVC pipes SDR 21, 34 and 41 insert stiffeners are not required. Note: for all gas applications and for PE pipes with SDR 21 or thinner wall thicknesses, insert stiffeners are mandatory
- For more information on the use of insert stiffeners please contact your local dealer

d [mm]	NBR / A2 Code	NBR / A4 Code	EPDM / A2 Code	EPDM / A4 Code	kg	
63	709 207 210	709 207 010	709 207 610	709 207 310	4.789	
75	709 207 212	709 207 012	709 207 612	709 207 312	5.079	
90	709 207 214	709 207 014	709 207 614	709 207 314	6.200	
110	709 207 216	709 207 016	709 207 616	709 207 316	7.900	
125	709 207 218	709 207 018	709 207 618	709 207 318	8.638	
140	709 207 220	709 207 020	709 207 620	709 207 320	9.939	
160	709 207 222	709 207 022	709 207 622	709 207 322	15.742	
180	709 207 224	709 207 024	709 207 624	709 207 324	18.030	
200	709 207 226	709 207 026	709 207 626	709 207 326	20.943	
225	709 207 228	709 207 028	709 207 628	709 207 328	23.510	
250	709 207 230	709 207 030	709 207 630	709 207 330	32.261	
280	709 207 232	709 207 032	709 207 632	709 207 332	36.719	
315	709 207 234	709 207 034	709 207 634	709 207 334	43.080	

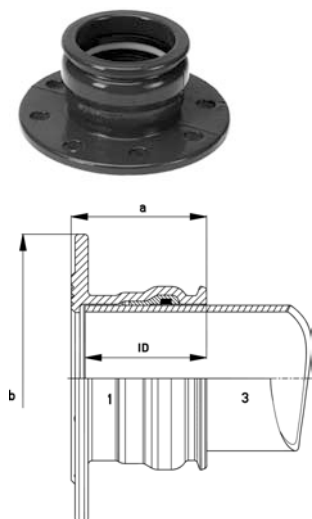
d [mm]	a [mm]	b [mm]	PN Water [bar]	PN Gas [bar]	insertion depth [mm]	
63	201	160	16.0	8.0	98	
75	201	173	16.0	8.0	98	
90	211	188	16.0	8.0	103	
110	245	206	16.0	8.0	120	
125	254	222	16.0	8.0	124	
140	258	238	16.0	8.0	126	
160	294	283	16.0	8.0	144	
180	314	303	16.0	8.0	150	
200	318	324	16.0	8.0	156	
225	321	349	16.0	8.0	158	
250	397	385	16.0	8.0	196	
280	404	416	16.0	8.0	199	
315	409	451	16.0	8.0	202	

PF 1 54 932 001

Plast/Joint® 8050 Flange Adaptor, non-restraint

Model:

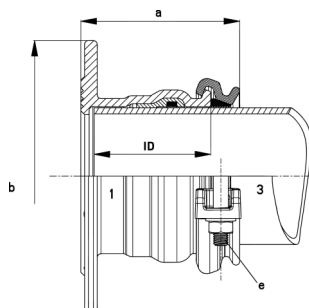
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- Gaskets NBR or EPDM
- Suitable for water and gas
- Flange drilling according to EN 1092-2
- For water applications on PE and PVC pipes SDR 9, SDR 11 and SDR 17 (SDR 17.6) and for bi oriented PVC pipes SDR 21, 34 and 41 insert stiffeners are not required. Note: for all gas applications and for PE pipes with SDR 21 or thinner wall thicknesses, insert stiffeners are mandatory
- For more information on the use of insert stiffeners please contact your local dealer



d [mm]	DN [mm]	Drilling pattern	NBR Code	EPDM Code	kg	
63	50	PN16	709 250 210	709 250 610	2.451	
75	65	PN16	709 250 212	709 250 612	2.723	
90	80	PN16	709 250 214	709 250 614	3.495	
110	100	PN16	709 250 216	709 250 616	4.457	
125	100	PN16	709 250 218	709 250 618	4.372	
140	125	PN16	709 250 220	709 250 620	5.465	
160	150	PN16	709 250 222	709 250 622	7.763	
180	150	PN16	709 250 224	709 250 624	7.716	
200	200	PN10	709 250 225	709 250 625	12.112	
200	200	PN16	709 250 226	709 250 626	12.112	
225	200	PN10	709 250 227	709 250 627	11.930	
225	200	PN16	709 250 228	709 250 628	11.930	
250	250	PN10	709 250 229	709 250 629	15.985	
250	250	PN16	709 250 230	709 250 630	15.985	
280	250	PN10	709 250 231	709 250 631	16.660	
280	250	PN16	709 250 232	709 250 632	16.660	
315	300	PN10	709 250 233	709 250 633	21.954	
315	300	PN16	709 250 234	709 250 634	21.410	

d [mm]	DN [mm]	a [mm]	b [mm]	PN Water [bar]	PN Gas [bar]	insertion depth [mm]	
63	50	84	165	16.0	8.0	74	
75	65	84	185	16.0	8.0	74	
90	80	89	200	16.0	8.0	79	
110	100	104	220	16.0	8.0	94	
125	100	108	220	16.0	8.0	98	
140	125	110	250	16.0	8.0	100	
160	150	122	285	16.0	8.0	112	
180	150	132	285	16.0	8.0	122	
200	200	135	340	16.0	8.0	125	
200	200	135	340	16.0	8.0	125	
225	200	136	340	16.0	8.0	126	
225	200	136	340	16.0	8.0	126	
250	250	164	400	16.0	8.0	154	
250	250	164	400	16.0	8.0	154	
280	250	167	400	16.0	8.0	157	
280	250	167	400	16.0	8.0	157	
315	300	171	455	16.0	8.0	159	
315	300	171	455	16.0	8.0	159	

PF 1 54 932 001



Plast/Joint® 8057 Flange Adaptor, restraint

Model:

- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- Gripping in brass
- Gaskets NBR or EPDM
- Suitable for water and gas
- Flange drilling according to EN 1092-2
- For water applications on PE and PVC pipes SDR 9, SDR 11 and SDR 17 (SDR 17.6) and for bi oriented PVC pipes SDR 21, 34 and 41 insert stiffeners are not required. Note: for all gas applications and for PE pipes with SDR 21 or thinner wall thicknesses, insert stiffeners are mandatory
- For more information on the use of insert stiffeners please contact your local dealer

d [mm]	DN [mm]	Drilling pattern	NBR / A2 Code	NBR / A4 Code	EPDM / A2 Code	EPDM / A4 Code	kg
63	50	PN16	709 257 210	709 257 010	709 257 610	709 257 310	3.647
75	65	PN16	709 257 212	709 257 012	709 257 612	709 257 312	4.017
90	80	PN16	709 257 214	709 257 014	709 257 614	709 257 314	4.906
110	100	PN16	709 257 216	709 257 016	709 257 616	709 257 316	5.998
125	100	PN16	709 257 218	709 257 018	709 257 618	709 257 318	6.024
140	125	PN16	709 257 220	709 257 020	709 257 620	709 257 320	7.236
160	150	PN16	709 257 222	709 257 022	709 257 622	709 257 322	11.165
180	150	PN16	709 257 224	709 257 024	709 257 624	709 257 324	11.380
200	200	PN10	709 257 225	709 257 025	709 257 625	709 257 325	15.902
200	200	PN16	709 257 226	709 257 026	709 257 626	709 257 326	15.902
225	200	PN10	709 257 227	709 257 027	709 257 627	709 257 327	15.830
225	200	PN16	709 257 228	709 257 028	709 257 628	709 257 328	15.830
250	250	PN10	709 257 229	709 257 029	709 257 629	709 257 329	22.678
250	250	PN16	709 257 230	709 257 030	709 257 630	709 257 330	22.678
280	250	PN10	709 257 231	709 257 031	709 257 631	709 257 331	23.877
280	250	PN16	709 257 232	709 257 032	709 257 632	709 257 332	23.877
315	300	PN10	709 257 233	709 257 033	709 257 633	709 257 333	29.734
315	300	PN16	709 257 234	709 257 034	709 257 634	709 257 334	29.734

d [mm]	DN [mm]	a [mm]	b [mm]	PN Water [bar]	PN Gas [bar]	insertion depth [mm]
63	50	102	165	16.0	8.0	92
75	65	102	185	16.0	8.0	92
90	80	107	200	16.0	8.0	97
110	100	122	220	16.0	8.0	112
125	100	126	220	16.0	8.0	116
140	125	128	250	16.0	8.0	118
160	150	144	285	16.0	8.0	134
180	150	155	285	16.0	8.0	140
200	200	157	340	16.0	8.0	147
200	200	157	340	16.0	8.0	147
225	200	158	340	16.0	8.0	148
225	200	158	340	16.0	8.0	148
250	250	194	400	16.0	8.0	184
250	250	194	400	16.0	8.0	184
280	250	197	400	16.0	8.0	187
280	250	197	400	16.0	8.0	187
315	300	201	455	16.0	8.0	189
315	300	201	455	16.0	8.0	189

PF 1 54 932 001



Accessories

Contents Accessories

	page
Insert stiffener Economy	118
Insert stiffener with wedge	119
Unifleks® ring	120
Unifiks® ring with Uni/Fiksers	120
Multi/Fikser® set	121
Poly/Fikser® set	121
Uni/Fikser® set	121
Bolt set MULTI/JOINT® 3000 / 3000 Plus - A2 quality	122
Bolt set MULTI/JOINT® 3000 / 3000 Plus - A4 quality	122
Bolt set MULTI/JOINT® XL A2 quality	122
Rubber gasket for MULTI/JOINT® XL	123
RESICOAT repair set	123
Molycote Copper paste (CU-7439)	123
Silicone spray HR260	123
Silicone paste	123
Torque key wrench set	123
Ratchet spanner	124
Adaptor set	124
Wrench key / c.w. Ratchet	124

MULTI/JOINT® Accessories

Insert stiffener Economy



Model:

- Suitable for PE and PVC pipes
- Stainless steel A2 quality (AISI 304), optional A4 quality (AISI 316)
- For pipe sizes >d355 use an insert stiffener with wedge
- Other dimensions available on request

d x e [mm]	SDR	L [mm]	Code
50 x 4,6	11.0	100	709 026 203
50 x 2,9	17.6 / 17.0	100	709 026 206
63 x 5,8	11.0	100	709 026 211
63 x 3,6	17.6 / 17.0	100	709 026 214
63 x 2,0	33	100	709 026 217
63 x 1,5	41	100	709 026 415
75 x 6,8	11.0	100	709 026 220
75 x 4,3	17.6 / 17.0	100	709 026 223
75 x 1,9	41	100	709 026 227
90 x 8,2	11.0	120	709 026 230
90 x 5,2	17.6 / 17.0	120	709 026 233
90 x 2,8	33	120	709 026 236
90 x 2,2	41	120	709 026 238
110 x 10,0	11.0	120	709 026 242
110 x 6,3	17.6 / 17.0	120	709 026 245
110 x 3,4	33	120	709 026 248
110 x 2,7	41	120	709 026 250
125 x 11,4	11.0	120	709 026 254
125 x 7,2	17.6 / 17.0	120	709 026 257
140 x 12,7	11.0	140	709 026 266
140 x 8,0	17.6 / 17.0	140	709 026 269
160 x 14,6	11.0	140	709 026 278
160 x 9,1	17.6 / 17.0	140	709 026 281
160 x 4,9	33	140	709 026 284
160 x 4,0	41	140	709 026 286
180 x 16,4	11.0	140	709 026 290
180 x 10,7	17.0	140	709 026 408
180 x 10,3	17.6	140	709 026 293
200 x 18,2	11.0	160	709 026 302
200 x 11,9	17.0	160	709 026 409
200 x 11,4	17.6	160	709 026 305
200 x 6,1	33	160	709 026 308
200 x 4,9	41	160	709 026 310
225 x 20,5	11.0	160	709 026 314
225 x 13,4	17.0	160	709 026 410
225 x 12,8	17.6	160	709 026 317
250 x 22,8	11.0	160	709 026 326
250 x 14,8	17.0	160	709 026 411
250 x 14,3	17.6	160	709 026 329
250 x 7,6	33	160	709 026 332
250 x 6,1	41	160	709 026 334
280 x 25,5	11.0	160	709 026 338
280 x 16,6	17.0	160	709 026 340
280 x 16,0	17.6	160	709 026 341
315 x 28,7	11.0	160	709 026 350
315 x 18,7	17.0	160	709 026 413
315 x 17,9	17.6	160	709 026 353
315 x 9,6	33	160	709 026 356
315 x 7,7	41	160	709 026 358
355 x 32,3	11.0	160	709 026 362
355 x 21,1	17.0	160	709 026 414
355 x 20,2	17.6	160	709 026 365

PF 1 54 323 064



Insert stiffener with wedge

Model:

- Suitable for PE and PVC pipes
- Stainless steel A2 quality (AISI 304), optional A4 quality (AISI 316)
- Other dimensions available on request

d [mm]	SDR	L [mm]	Code
63	17.6	175	709 026 012
63	11.0	175	709 026 016
63	7.5	175	709 026 018
75	17.6	175	709 026 022
75	11.0	175	709 026 026
90	17.6	175	709 026 032
90	11.0	175	709 026 036
90	7.5	175	709 026 038
110	17.6	175	709 026 042
110	11.0	175	709 026 046
110	7.5	175	709 026 048
125	17.6	175	709 026 052
125	11.0	175	709 026 056
140	17.6	175	709 026 062
140	11.0	175	709 026 066
160	33.0	200	709 026 070
160	17.6	200	709 026 072
160	11.0	200	709 026 076
180	17.6	200	709 026 082
180	11.0	200	709 026 086
200	17.6	200	709 026 092
200	11.0	200	709 026 096
225	17.6	225	709 026 102
225	11.0	225	709 026 106
250	17.6	225	709 026 115
250	11.0	225	709 026 116
280	17.6	225	709 026 127
280	11.0	225	709 026 126
315	17.6	225	709 026 125
315	11.0	225	709 026 124
355	33.0	225	709 026 132
355	17.6	225	709 026 129
355	11.0	225	709 026 128
370	11.0	225	709 026 133
400	26.0	225	709 026 140
400	17.6	225	709 026 139
400	11.0	225	709 026 138
450	17.6	225	709 026 149
450	11.0	225	709 026 148
500	17.6	225	709 026 159
500	11.0	225	709 026 158
560	17.6	225	709 026 169
560	11.0	225	709 026 168
630	17.6	225	709 026 179
630	11.0	225	709 026 178
710	17.6	225	709 026 189
710	11.0	225	709 026 188
800	17.6	225	709 026 199
800	11.0	225	709 026 198
900	17.6	225	709 026 183
900	11.0	225	709 026 182
1000	17.0	225	709 026 191
1000	11.0	225	709 026 192
1200	17.6	225	709 026 185
1200	11.0	225	709 026 184
1400	17.6	225	709 026 187
1400	17.6	225	709 026 196
1400	11.0	225	709 026 186
1600	17.6	225	709 026 195

PF 1 54 323 065



Uni/Fleks® ring

Model:

- Consists of a segmented plastic ring and Varioseal® (gasket)
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)

DN [mm]	Range [mm]	NBR Code	EPDM Code	
50	46 - 71	709 390 030	709 390 130	
65	63 - 90	709 390 032	709 390 132	
80	84 - 105	709 390 034	709 390 134	
100	104 - 132	709 390 036	709 390 136	
125	132 - 155	709 390 038	709 390 138	
150	154 - 192	709 390 040	709 390 140	
200	192 - 232	709 390 044	709 390 144	
225	230 - 268	709 390 046	709 390 146	
250	267 - 310	709 390 048	709 390 148	
300	315 - 356	709 390 052	709 390 152	

PF 1 54 323 063



Uni/Fiks® ring with Uni/Fiksers®

Model:

- Consists of a segmented plastic ring and Varioseal® (gasket) + Uni/Fiksers®
- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)
- Restraint on all pipe materials
- For AC and GRP pipes please contact us

DN [mm]	Range [mm]	NBR Code	EPDM Code	
50	46 - 71	709 597 230	709 597 630	
65	63 - 90	709 597 232	709 597 632	
80	84 - 105	709 597 234	709 597 634	
100	104 - 132	709 597 236	709 597 636	
125	132 - 155	709 597 238	709 597 638	
150	154 - 192	709 597 240	709 597 640	
200	192 - 232	709 597 244	709 597 644	
225	230 - 268	709 597 246	709 597 646	
250	267 - 310	709 597 248	709 597 648	
300	315 - 356	709 597 252	709 597 652	

PF 1 54 323 063



PF 1 54 323 063

Multi/Fikser® set MULTI/JOINT® 3000

Model:

- For each MULTI/JOINT® 3000 socket, 1 set is needed
- Stainless steel A4 quality (AISI 316) Fiksers®
- Including sticker for correct marking

DN [mm]	Range [mm]	Fiksers (qty)	Code	
50	46 - 71	4	709 597 350	
65	69 - 90	4	709 597 352	
80	84 - 105	4	709 597 354	
100	104 - 132	4	709 597 356	
125	132 - 155	4	709 597 358	
150	154 - 192	6	709 597 360	
200	192 - 232	6	709 597 364	
225	232 - 257	7	709 597 366	
250	267 - 310	8	709 597 368	
300	315 - 356	8	709 597 372	



PF 1 54 323 063

Poly/Fikser® set MULTI/JOINT® 3000

Model:

- For each MULTI/JOINT® 3000 socket, 1 set is needed
- Stainless steel A4 quality (AISI 316) Fiksers®
- Including sticker for correct marking
- DN50 and DN65: use Multi/Fikser® set

DN [mm]	Range [mm]	Fiksers (qty)	Code	
80	84 - 105	5	709 599 354	
100	104 - 132	7	709 599 356	
125	132 - 155	6	709 599 358	
150	154 - 192	7	709 599 360	
200	192 - 232	9	709 599 364	
225	230 - 267	9	709 599 366	
250	267 - 310	10	709 599 368	
300	315 - 356	10	709 599 372	



PF 1 54 323 063

Uni/Fikser® set MULTI/JOINT® 3000 Plus

Model:

- For each MULTI/JOINT® 3000 Plus socket, 1 set is needed
- Stainless steel A4 quality (AISI 316) Fiksers®

DN [mm]	Range [mm]	Fiksers (qty)	Code	
50	46 - 71	16	709 597 258	
65	63 - 90	19	709 597 259	
80	84 - 105	22	709 597 260	
100	104 - 132	15	709 597 261	
125	132 - 155	18	709 597 262	
150	154 - 192	40	709 597 263	
200	192 - 232	48	709 597 264	
225	230 - 267	45	709 597 266	
250	267 - 310	53	709 597 268	
300	315 - 356	60	709 597 272	



Bolts set MULTI/JOINT® 3000 / 3000 Plus - A2 quality

Model:

- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- Set consisting of bolts, nuts and washers
- For each MULTI/JOINT® 3000 socket, 1 set is needed

DN [mm]	DN-DN [mm]	DN-DN-DN [mm]	M	Code	
100	-	50 - 65 - 80	3xM12	700 618 940	
	-	--	3xM16	700 618 942	
200	125 - 150	--	4xM16	700 618 944	
	-	--	6xM16	700 618 946	
300	225 - 250	--	6xM20	700 618 948	
	-	--	8xM20	700 618 950	

PF 1 54 323 063



Bolts set MULTI/JOINT® 3000 / 3000 Plus - A4 quality

Model:

- Stainless steel A4 quality (AISI 316) bolts, nuts and washers (optional: A2 quality)
- Set consisting of bolts, nuts and washers
- For each MULTI/JOINT® 3000 socket, 1 set is needed

DN [mm]	DN-DN [mm]	DN-DN-DN [mm]	M	Code	
100	-	50 - 65 - 80	3xM12	700 618 910	
	-	--	3xM16	700 618 912	
200	125 - 150	--	4xM16	700 618 914	
	-	--	6xM16	700 618 918	
300	225 - 250	--	6xM20	700 618 916	
	-	--	8xM20	700 618 920	

PF 1 54 323 063



Bolts set MULTI/JOINT® XL - A2 quality

Model:

- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- Set consisting of bolts, nuts and washers
- For each MULTI/JOINT® 3000 socket, 1 set is needed

DN-DN [mm]	M	Code	
300 - 350	8xM16	700 618 970	
400 - 450	10xM16	700 618 972	
500 - 550	10xM20	700 618 974	
600 -	12xM20	700 618 976	

PF 1 54 323 063



Rubber gasket for MULTI/JOINT® XL

Model:

- NBR or EPDM gasket, NBR acc. to EN 682 (-5°C up to +50°C), EPDM acc. to EN 681-1 (0°C up to +50°C)

DN [mm]	Range [mm]	NBR Code	EPDM Code	
300	315 - 337	700 610 830	700 610 850	
350	356 - 380	700 610 832	700 610 852	
400	400 - 429	700 610 834	700 610 854	
450	450 - 482	700 610 836	700 610 856	
500	500 - 532	700 610 838	700 610 858	
550	548 - 580	700 610 840	700 610 860	
600	605 - 637	700 610 842	700 610 862	

PF 1 54 323 062



RESICOAT® repair set

Model:

- To repair the coating of the fitting

Contents	Code	
30cc	709 900 000	

PF 1 54 329 012



Molykote Copper paste (CU-7439)

Model:

- To be used in case of re-using bolts
- To lubricate the thread of the stainless steel bolts

Contents	Code	
100 g	709 900 001	

PF 1 54 329 012



Silicone spray HR260

Model:

- Suitable for potable water

Contents	Code	
300 ml	709 900 002	

PF 1 54 329 012



Silicone paste

Model:

- For lubricating the coupling gasket on the pipe side
- Especially meant to reach an optimal sealing in gas installations

Contents	Code	
15 g	709 900 003	

PF 1 54 329 012



Torque key wrench set

Model:

- 1 torque key 20-200 Nm
- 4 wrench keys sizes: 19, 22, 24 and 30
- 4 ring spanners sizes: 19, 22, 24 and 30
- robust metal case

description	Code	
basic set	200 008 083	

PF 1 54 329 012



Adaptor set

Model:

- 1 ratchet key 20-200 Nm
- 3 adaptors sizes: 19, 24 and 30
- compatible with the torque key set

description	Code	
adaptor set + ratchet key	200 008 084	

PF 1 54 329 012



Ratchet spanner

Model:

- For easy nut tightening
- M12 for MULTI/JOINT® DN50, DN65 and DN80
- M16 for MULTI/JOINT® DN100, DN125 and DN150

Description	Code	
17x19 mm / M12	700 619 010	
22x24 mm / M16	700 619 012	

PF 1 54 329 012



Wrench key / c.w. Ratchet

Model:

- the wrench keys are available in 4 different sizes

description	Code	
wrench key 19 mm	200 008 070	
wrench key 22 mm	200 008 071	
wrench key 24 mm	200 008 072	
wrench key 30 mm	200 008 073	

PF 1 54 329 012



Multi/Clamp

Contents Multi-Clamp

	pagina
Multi-Clamp Snap	128
Multi-Clamp Midi	131
Multi-Clamp Single	133
Multi-Clamp Double	139
Multi-Clamp Triple	145
Multi-Clamp Thread	148
Multi-Clamp Saddle Studs	148
Multi-Clamp Flange	151
Multi-Clamp Combi	155

Multi/Clamp

Multi/Clamp Snap length 75 mm



Model:

- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- Lugs are of ductile cast iron
- The rubber gasket is available in NBR (EPDM on request)
- The rubber gasket is clamped and partially covers the inside of the band

Range [mm]	PN Water [bar]	NBR Code	kg	
15 - 22	16.0	724 208 010	0.300	
21 - 25	16.0	724 208 019	0.300	
26 - 30	16.0	724 208 028	0.300	
33 - 37	16.0	724 208 037	0.300	
37 - 41	16.0	724 208 046	0.300	
42 - 45	16.0	724 208 055	0.400	
48 - 51	16.0	724 208 064	0.400	
50 - 54	16.0	724 208 073	0.400	
55 - 58	16.0	724 208 082	0.400	
60 - 64	16.0	724 208 091	0.400	
62 - 66	16.0	724 208 100	0.400	
65 - 69	16.0	724 208 109	0.400	
69 - 73	16.0	724 208 118	0.400	
71 - 76	16.0	724 208 127	0.400	
74 - 80	16.0	724 208 136	0.500	
87 - 93	16.0	724 208 145	0.500	
94 - 100	16.0	724 208 154	0.500	
99 - 104	16.0	724 208 163	0.500	
105 - 111	16.0	724 208 172	0.600	
112 - 117	10.0	724 208 181	0.600	
115 - 121	10.0	724 208 190	0.600	
120 - 126	10.0	724 208 199	0.600	
126 - 131	10.0	724 208 208	0.700	
131 - 136	10.0	724 208 217	0.700	
139 - 145	10.0	724 208 226	0.700	
149 - 155	10.0	724 208 235	0.800	
156 - 162	10.0	724 208 244	0.800	
167 - 173	10.0	724 208 253	0.800	
173 - 179	10.0	724 208 262	0.800	
200 - 206	10.0	724 208 271	0.900	
217 - 223	10.0	724 208 280	0.900	
223 - 229	10.0	724 208 289	1.001	
272 - 278	6.0	724 208 298	1.001	
323 - 329	6.0	724 208 307	1.200	

PF 1 54 325 010



Multi/Clamp Snap length 150 mm

Model:

- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- Lugs are of ductile cast iron
- The rubber gasket is available in NBR (EPDM on request)
- The rubber gasket is clamped and partially covers the inside of the band

Range [mm]	PN Water [bar]	NBR Code	kg	
15 - 22	16.0	724 208 011	0.500	
21 - 25	16.0	724 208 020	0.600	
26 - 30	16.0	724 208 029	0.600	
33 - 37	16.0	724 208 038	0.600	
37 - 41	16.0	724 208 047	0.600	
42 - 45	16.0	724 208 056	0.700	
48 - 51	16.0	724 208 065	0.700	
50 - 54	16.0	724 208 074	0.700	
55 - 58	16.0	724 208 083	0.700	
60 - 64	16.0	724 208 092	0.800	
62 - 66	16.0	724 208 101	0.800	
65 - 69	16.0	724 208 110	0.800	
69 - 73	16.0	724 208 119	0.800	
71 - 76	16.0	724 208 128	0.800	
74 - 80	16.0	724 208 137	0.900	
87 - 93	16.0	724 208 146	1.001	
94 - 100	16.0	724 208 155	1.001	
99 - 104	16.0	724 208 164	1.001	
105 - 111	16.0	724 208 173	1.100	
112 - 117	10.0	724 208 182	1.100	
115 - 121	10.0	724 208 191	1.100	
120 - 126	10.0	724 208 200	1.100	
126 - 131	10.0	724 208 209	1.200	
131 - 136	10.0	724 208 218	1.200	
139 - 145	10.0	724 208 227	1.200	
149 - 155	10.0	724 208 236	1.300	
156 - 162	10.0	724 208 245	1.300	
167 - 173	10.0	724 208 254	1.300	
173 - 179	10.0	724 208 263	1.300	
200 - 206	10.0	724 208 272	1.400	
217 - 223	10.0	724 208 281	1.400	
223 - 229	10.0	724 208 290	1.500	
272 - 278	6.0	724 208 299	1.500	
323 - 329	6.0	724 208 308	1.700	

PF 1 54 325 010



Multi/Clamp Snap length 225 mm

Model:

- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- Lugs are of ductile cast iron
- The rubber gasket is available in NBR (EPDM on request)
- The rubber gasket is clamped and partially covers the inside of the band

Range [mm]	PN Water [bar]	NBR Code	kg	
15 - 22	16.0	724 208 012	0.800	
21 - 25	16.0	724 208 021	0.800	
26 - 30	16.0	724 208 030	0.900	
33 - 37	16.0	724 208 039	0.900	
37 - 41	16.0	724 208 048	0.900	
42 - 45	16.0	724 208 057	1.001	
48 - 51	16.0	724 208 066	1.001	
50 - 54	16.0	724 208 075	1.001	
55 - 58	16.0	724 208 084	1.100	
60 - 64	16.0	724 208 093	1.100	
62 - 66	16.0	724 208 102	1.100	
65 - 69	16.0	724 208 111	1.200	
69 - 73	16.0	724 208 120	1.200	
71 - 76	16.0	724 208 129	1.200	
74 - 80	16.0	724 208 138	1.300	
87 - 93	16.0	724 208 147	1.400	
94 - 100	16.0	724 208 156	1.500	
99 - 104	16.0	724 208 165	1.500	
105 - 111	16.0	724 208 174	1.600	
112 - 117	10.0	724 208 183	1.600	
115 - 121	10.0	724 208 192	1.600	
120 - 126	10.0	724 208 201	1.600	
126 - 131	10.0	724 208 210	1.700	
131 - 136	10.0	724 208 219	1.700	
139 - 145	10.0	724 208 228	1.700	
149 - 155	10.0	724 208 237	1.800	
156 - 162	10.0	724 208 246	1.800	
167 - 173	10.0	724 208 255	1.800	
173 - 179	10.0	724 208 264	1.800	
200 - 206	10.0	724 208 273	1.900	
217 - 223	10.0	724 208 282	1.900	
223 - 229	10.0	724 208 291	2.000	
272 - 278	6.0	724 208 300	2.000	
323 - 329	6.0	724 208 309	2.200	

PF 1 54 325 010



Multi/Clamp Midi length 100 mm

Model:

- Single band clamp with partial gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
19 - 23	16.0	724 209 010	0.600	
25 - 29	16.0	724 209 019	0.600	
32 - 36	16.0	724 209 028	0.600	
38 - 42	16.0	724 209 037	0.600	
44 - 51	16.0	724 209 046	0.800	
48 - 55	16.0	724 209 055	1.050	
54 - 58	16.0	724 209 064	0.900	
60 - 64	16.0	724 209 073	1.050	
63 - 70	16.0	724 209 082	1.120	
67 - 74	16.0	724 209 091	1.120	
70 - 77	16.0	724 209 100	1.120	
73 - 80	16.0	724 209 109	1.120	
75 - 83	16.0	724 209 118	1.120	
82 - 90	16.0	724 209 127	1.200	
87 - 97	16.0	724 209 136	1.200	
95 - 104	16.0	724 209 145	1.200	
98 - 108	16.0	724 209 154	1.200	
102 - 112	16.0	724 209 163	1.350	
108 - 118	16.0	724 209 172	1.350	
113 - 123	16.0	724 209 181	1.350	
118 - 128	16.0	724 209 190	1.350	
120 - 131	16.0	724 209 199	1.350	

PF 1 54 325 009



Multi/Clamp Midi length 150 mm

Model:

- Single band clamp with partial gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
54 - 58	16.0	724 209 065	1.400	
60 - 64	16.0	724 209 074	1.400	
63 - 70	16.0	724 209 083	1.500	
67 - 74	16.0	724 209 092	1.500	
70 - 77	16.0	724 209 101	1.500	
73 - 80	16.0	724 209 110	1.500	
75 - 83	16.0	724 209 119	1.500	
82 - 90	16.0	724 209 128	1.600	
87 - 97	16.0	724 209 137	1.600	
95 - 104	16.0	724 209 146	1.600	
98 - 108	16.0	724 209 155	1.600	
102 - 112	16.0	724 209 164	1.800	
108 - 118	16.0	724 209 173	1.800	
113 - 123	16.0	724 209 182	1.800	
118 - 128	16.0	724 209 191	1.800	
120 - 131	16.0	724 209 200	1.800	
125 - 135	16.0	724 209 209	2.100	
133 - 144	16.0	724 209 218	2.100	
139 - 150	16.0	724 209 227	2.100	
145 - 155	16.0	724 209 236	2.100	
151 - 161	16.0	724 209 245	2.200	
159 - 170	16.0	724 209 254	2.200	
165 - 175	16.0	724 209 263	2.200	
168 - 180	16.0	724 209 272	2.200	
176 - 186	10.0	724 209 281	2.600	

PF 1 54 325 009



Multi/Clamp Midi length 200 mm

Model:

- Single band clamp with partial gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
95 - 104	16.0	724 209 147	2.000	
98 - 108	16.0	724 209 156	2.000	
102 - 112	16.0	724 209 165	2.200	
108 - 118	16.0	724 209 174	2.200	
113 - 123	16.0	724 209 183	2.200	
118 - 128	16.0	724 209 192	2.200	
120 - 131	16.0	724 209 201	2.200	
125 - 135	16.0	724 209 210	2.600	
133 - 144	16.0	724 209 219	2.600	
139 - 150	16.0	724 209 228	2.600	
145 - 155	16.0	724 209 237	2.600	
151 - 161	16.0	724 209 246	2.800	
159 - 170	16.0	724 209 255	2.800	
165 - 175	16.0	724 209 264	2.800	
168 - 180	16.0	724 209 273	2.800	
176 - 186	10.0	724 209 282	3.200	
180 - 191	10.0	724 209 291	3.200	
193 - 203	10.0	724 209 300	3.200	
200 - 210	10.0	724 209 309	3.500	
209 - 220	10.0	724 209 318	3.600	

PF 1 54 325 009



Multi/Clamp Single length 75 mm

Model:

- Single band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
19 - 23	16.0	724 211 010	0.400	
25 - 29	16.0	724 211 026	0.400	
32 - 36	16.0	724 211 042	0.400	
38 - 42	16.0	724 211 058	0.400	

PF 1 54 325 009



Multi/Clamp Single length 150 mm

Model:

- Single band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
19 - 23	16.0	724 211 011	0.800	
25 - 29	16.0	724 211 027	0.800	
32 - 36	16.0	724 211 043	0.800	
38 - 42	16.0	724 211 059	0.800	
44 - 51	16.0	724 211 075	1.400	
48 - 55	16.0	724 211 091	1.400	
52 - 59	16.0	724 211 107	1.400	
57 - 64	16.0	724 211 123	1.400	
60 - 67	16.0	724 211 139	1.400	
63 - 70	16.0	724 211 155	1.500	
67 - 74	16.0	724 211 171	1.500	
70 - 77	16.0	724 211 187	1.500	
73 - 80	16.0	724 211 203	1.500	
75 - 83	16.0	724 211 219	1.500	
82 - 90	16.0	724 211 235	1.600	
87 - 97	16.0	724 211 251	1.600	
95 - 104	16.0	724 211 267	1.600	
98 - 108	16.0	724 211 283	1.600	
102 - 112	16.0	724 211 299	1.800	
108 - 118	16.0	724 211 315	1.800	
113 - 123	16.0	724 211 331	1.800	
118 - 128	16.0	724 211 347	1.800	
120 - 131	16.0	724 211 363	1.800	
125 - 135	16.0	724 211 379	2.100	
133 - 144	16.0	724 211 395	2.100	
139 - 150	16.0	724 211 411	2.100	
145 - 155	16.0	724 211 427	2.100	
151 - 161	16.0	724 211 443	2.200	
159 - 170	16.0	724 211 459	2.200	
165 - 175	16.0	724 211 475	2.200	
168 - 180	16.0	724 211 491	2.200	

PF 1 54 325 009



Multi/Clamp Single length 200 mm

Model:

- Single band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
44 - 51	16.0	724 211 076	1.600	
48 - 55	16.0	724 211 092	1.600	
52 - 59	16.0	724 211 108	1.700	
57 - 64	16.0	724 211 124	1.700	
60 - 67	16.0	724 211 140	1.700	
63 - 70	16.0	724 211 156	1.800	
67 - 74	16.0	724 211 172	1.800	
70 - 77	16.0	724 211 188	1.800	
73 - 80	16.0	724 211 204	1.800	
75 - 83	16.0	724 211 220	1.800	
82 - 90	16.0	724 211 236	2.000	
87 - 97	16.0	724 211 252	2.000	
95 - 104	16.0	724 211 268	2.000	
98 - 108	16.0	724 211 284	2.000	
102 - 112	16.0	724 211 300	2.200	
108 - 118	16.0	724 211 316	2.200	
113 - 123	16.0	724 211 332	2.200	
118 - 128	16.0	724 211 348	2.200	
120 - 131	16.0	724 211 364	2.200	
125 - 135	16.0	724 211 380	2.600	
133 - 144	16.0	724 211 396	2.600	
139 - 150	16.0	724 211 412	2.600	
145 - 155	16.0	724 211 428	2.600	
151 - 161	16.0	724 211 444	2.800	
159 - 170	16.0	724 211 460	2.800	
165 - 175	16.0	724 211 476	2.800	
168 - 180	16.0	724 211 492	2.800	
176 - 186	10.0	724 211 508	3.200	
180 - 191	10.0	724 211 524	3.200	
193 - 203	10.0	724 211 540	3.200	
200 - 210	10.0	724 211 556	3.500	
209 - 220	10.0	724 211 572	3.500	
215 - 226	10.0	724 211 588	3.500	
219 - 230	10.0	724 211 604	3.500	
222 - 233	10.0	724 211 620	3.500	
228 - 240	10.0	724 211 636	3.800	
243 - 253	10.0	724 211 652	3.800	
252 - 262	10.0	724 211 668	3.900	
261 - 271	10.0	724 211 684	3.900	
271 - 281	10.0	724 211 700	3.900	
280 - 290	10.0	724 211 716	3.900	
294 - 304	10.0	724 211 732	3.900	
300 - 310	10.0	724 211 748	4.300	
310 - 320	10.0	724 211 764	4.300	
315 - 326	10.0	724 211 780	4.300	
320 - 330	10.0	724 211 796	4.300	
324 - 334	10.0	724 211 812	4.300	
335 - 346	10.0	724 211 828	4.300	

PF 1 54 325 009



Multi/Clamp Single length 250 mm

Model:

- Single band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
60 - 67	16.0	724 211 141	2.300	
63 - 70	16.0	724 211 157	2.500	
67 - 74	16.0	724 211 173	2.500	
70 - 77	16.0	724 211 189	2.500	
73 - 80	16.0	724 211 205	2.500	
75 - 83	16.0	724 211 221	2.500	
82 - 90	16.0	724 211 237	2.700	
87 - 97	16.0	724 211 253	2.700	
95 - 104	16.0	724 211 269	2.700	
98 - 108	16.0	724 211 285	2.700	
102 - 112	16.0	724 211 301	3.000	
108 - 118	16.0	724 211 317	3.000	
113 - 123	16.0	724 211 333	3.000	
118 - 128	16.0	724 211 349	3.000	
120 - 131	16.0	724 211 365	3.000	
125 - 135	16.0	724 211 381	3.400	
133 - 144	16.0	724 211 397	3.400	
139 - 150	16.0	724 211 413	3.400	
145 - 155	16.0	724 211 429	3.400	
151 - 161	16.0	724 211 445	3.700	
159 - 170	16.0	724 211 461	3.700	
165 - 175	16.0	724 211 477	3.700	
168 - 180	16.0	724 211 493	3.700	
176 - 186	10.0	724 211 509	4.200	
180 - 191	10.0	724 211 525	4.200	
193 - 203	10.0	724 211 541	4.200	
200 - 210	10.0	724 211 557	4.700	
209 - 220	10.0	724 211 573	4.700	
215 - 226	10.0	724 211 589	4.700	
219 - 230	10.0	724 211 605	4.700	
222 - 233	10.0	724 211 621	4.700	
228 - 240	10.0	724 211 637	4.900	
243 - 253	10.0	724 211 653	4.900	
252 - 262	10.0	724 211 669	5.200	
261 - 271	10.0	724 211 685	5.200	
271 - 281	10.0	724 211 701	5.200	
280 - 290	10.0	724 211 717	5.200	
294 - 304	10.0	724 211 733	5.200	
300 - 310	10.0	724 211 749	5.600	
310 - 320	10.0	724 211 765	5.600	
315 - 326	10.0	724 211 781	5.600	
320 - 330	10.0	724 211 797	5.600	
324 - 334	10.0	724 211 813	5.600	
335 - 346	10.0	724 211 829	5.600	

PF 1 54 325 009



Multi/Clamp Single length 300 mm

Model:

- Single band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
60 - 67	16.0	724 211 142	2.600	
63 - 70	16.0	724 211 158	2.800	
67 - 74	16.0	724 211 174	2.800	
70 - 77	16.0	724 211 190	2.800	
73 - 80	16.0	724 211 206	2.800	
75 - 83	16.0	724 211 222	2.800	
82 - 90	16.0	724 211 238	3.000	
87 - 97	16.0	724 211 254	3.000	
95 - 104	16.0	724 211 270	3.000	
98 - 108	16.0	724 211 286	3.000	
102 - 112	16.0	724 211 302	3.400	
108 - 118	16.0	724 211 318	3.400	
113 - 123	16.0	724 211 334	3.400	
118 - 128	16.0	724 211 350	3.400	
120 - 131	16.0	724 211 366	3.400	
125 - 135	16.0	724 211 382	4.000	
133 - 144	16.0	724 211 398	4.000	
139 - 150	16.0	724 211 414	4.000	
145 - 155	16.0	724 211 430	4.000	
151 - 161	16.0	724 211 446	4.300	
159 - 170	16.0	724 211 462	4.300	
165 - 175	16.0	724 211 478	4.300	
168 - 180	16.0	724 211 494	4.300	
176 - 186	10.0	724 211 510	4.900	
180 - 191	10.0	724 211 526	4.900	
193 - 203	10.0	724 211 542	4.900	
200 - 210	10.0	724 211 558	5.400	
209 - 220	10.0	724 211 574	5.400	
215 - 226	10.0	724 211 590	5.400	
219 - 230	10.0	724 211 606	5.400	
222 - 233	10.0	724 211 622	5.400	
228 - 240	10.0	724 211 638	6.100	
243 - 253	10.0	724 211 654	6.100	
252 - 262	10.0	724 211 670	6.400	
261 - 271	10.0	724 211 686	6.400	
271 - 281	10.0	724 211 702	6.400	
280 - 290	10.0	724 211 718	6.400	
294 - 304	10.0	724 211 734	6.400	
300 - 310	10.0	724 211 750	6.900	
310 - 320	10.0	724 211 766	6.900	
315 - 326	10.0	724 211 782	6.900	
320 - 330	10.0	724 211 798	6.900	
324 - 334	10.0	724 211 814	6.900	
335 - 346	10.0	724 211 830	6.900	

PF 1 54 325 009



Multi/Clamp Single length 400 mm

Model:

- Single band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
63 - 70	16.0	724 211 159	3.600	
67 - 74	16.0	724 211 175	3.600	
70 - 77	16.0	724 211 191	3.600	
73 - 80	16.0	724 211 207	3.600	
75 - 83	16.0	724 211 223	3.600	
82 - 90	16.0	724 211 239	3.900	
87 - 97	16.0	724 211 255	3.900	
95 - 104	16.0	724 211 271	3.900	
98 - 108	16.0	724 211 287	3.900	
102 - 112	16.0	724 211 303	4.500	
108 - 118	16.0	724 211 319	4.500	
113 - 123	16.0	724 211 335	4.500	
118 - 128	16.0	724 211 351	4.500	
120 - 131	16.0	724 211 367	4.500	
125 - 135	16.0	724 211 383	5.200	
133 - 144	16.0	724 211 399	5.200	
139 - 150	16.0	724 211 415	5.200	
145 - 155	16.0	724 211 431	5.200	
151 - 161	16.0	724 211 447	5.600	
159 - 170	16.0	724 211 463	5.600	
165 - 175	16.0	724 211 479	5.600	
168 - 180	16.0	724 211 495	5.600	
176 - 186	10.0	724 211 511	6.400	
180 - 191	10.0	724 211 527	6.400	
193 - 203	10.0	724 211 543	6.400	
200 - 210	10.0	724 211 559	7.100	
209 - 220	10.0	724 211 575	7.100	
215 - 226	10.0	724 211 591	7.100	
219 - 230	10.0	724 211 607	7.100	
222 - 233	10.0	724 211 623	7.100	
228 - 240	10.0	724 211 639	7.900	
243 - 253	10.0	724 211 655	7.900	
252 - 262	10.0	724 211 671	8.500	
261 - 271	10.0	724 211 687	8.500	
271 - 281	10.0	724 211 703	8.500	
280 - 290	10.0	724 211 719	8.500	
294 - 304	10.0	724 211 735	8.500	
300 - 310	10.0	724 211 751	9.000	
310 - 320	10.0	724 211 767	9.000	
315 - 326	10.0	724 211 783	9.000	
320 - 330	10.0	724 211 799	9.000	
324 - 334	10.0	724 211 815	9.000	
335 - 346	10.0	724 211 831	9.000	

PF 1 54 325 009



Multi/Clamp Single length 500 mm

Model:

- Single band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg
108 - 118	16.0	724 211 320	5.400
113 - 123	16.0	724 211 336	5.400
118 - 128	16.0	724 211 352	5.400
120 - 131	16.0	724 211 368	5.400
125 - 135	16.0	724 211 384	6.700
133 - 144	16.0	724 211 400	6.700
139 - 150	16.0	724 211 416	6.700
145 - 155	16.0	724 211 432	6.700
151 - 161	16.0	724 211 448	7.200
159 - 170	16.0	724 211 464	7.200
165 - 175	16.0	724 211 480	7.200
168 - 180	16.0	724 211 496	7.200
176 - 186	10.0	724 211 512	8.200
180 - 191	10.0	724 211 528	8.200
193 - 203	10.0	724 211 544	8.200
200 - 210	10.0	724 211 560	9.100
209 - 220	10.0	724 211 576	9.100
215 - 226	10.0	724 211 592	9.100
219 - 230	10.0	724 211 608	9.100
222 - 233	10.0	724 211 624	9.100
228 - 240	10.0	724 211 640	9.300
243 - 253	10.0	724 211 656	9.300
252 - 262	10.0	724 211 672	10.600
261 - 271	10.0	724 211 688	10.600
271 - 281	10.0	724 211 704	10.600
280 - 290	10.0	724 211 720	10.600
294 - 304	10.0	724 211 736	10.600
300 - 310	10.0	724 211 752	11.600
310 - 320	10.0	724 211 768	11.600
315 - 326	10.0	724 211 784	11.600
320 - 330	10.0	724 211 800	11.600
324 - 334	10.0	724 211 816	11.600
335 - 346	10.0	724 211 832	11.600

PF 1 54 325 009



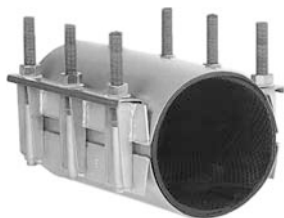
Multi/Clamp Single length 600 mm

Model:

- Single band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg
222 - 233	10.0	724 211 625	10.900
228 - 240	10.0	724 211 641	11.100
243 - 253	10.0	724 211 657	11.100
252 - 262	10.0	724 211 673	12.700
261 - 271	10.0	724 211 689	12.700
271 - 281	10.0	724 211 705	12.700
280 - 290	10.0	724 211 721	12.700
294 - 304	10.0	724 211 737	12.700
300 - 310	10.0	724 211 753	14.200
310 - 320	10.0	724 211 769	14.200
315 - 326	10.0	724 211 785	14.200
320 - 330	10.0	724 211 801	14.200
324 - 334	10.0	724 211 817	14.200
335 - 346	10.0	724 211 833	14.200

PF 1 54 325 009



Multi/Clamp Double length 200 mm

Model:

- Double band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
88 - 110	16.0	724 212 058	3.300	
108 - 128	16.0	724 212 074	3.400	
112 - 134	16.0	724 212 090	3.400	
120 - 140	16.0	724 212 106	3.400	
133 - 155	16.0	724 212 122	3.800	
138 - 160	16.0	724 212 138	3.800	
158 - 180	16.0	724 212 154	4.400	
168 - 190	16.0	724 212 170	4.400	
190 - 210	10.0	724 212 186	4.700	
195 - 217	10.0	724 212 202	4.700	
210 - 230	10.0	724 212 218	4.900	
216 - 238	10.0	724 212 234	4.900	
225 - 246	10.0	724 212 250	5.100	
238 - 260	10.0	724 212 266	5.100	
251 - 271	10.0	724 212 282	5.300	
260 - 280	10.0	724 212 298	5.300	
269 - 289	10.0	724 212 314	5.300	
273 - 293	10.0	724 212 330	5.300	
295 - 315	10.0	724 212 346	5.300	

PF 1 54 325 009



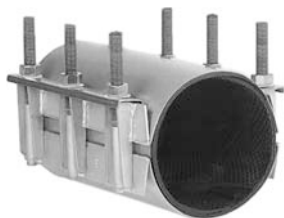
Multi/Clamp Double length 250 mm

Model:

- Double band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
88 - 110	16.0	724 212 059	4.500	
108 - 128	16.0	724 212 075	4.700	
112 - 134	16.0	724 212 091	4.700	
120 - 140	16.0	724 212 107	4.700	
133 - 155	16.0	724 212 123	5.200	
138 - 160	16.0	724 212 139	5.200	
158 - 180	16.0	724 212 155	6.000	
168 - 190	16.0	724 212 171	6.000	
190 - 210	10.0	724 212 187	6.400	
195 - 217	10.0	724 212 203	6.400	
210 - 230	10.0	724 212 219	6.600	
216 - 238	10.0	724 212 235	6.600	
225 - 246	10.0	724 212 251	6.900	
238 - 260	10.0	724 212 267	6.900	
251 - 271	10.0	724 212 283	7.200	
260 - 280	10.0	724 212 299	7.200	
269 - 289	10.0	724 212 315	7.200	
273 - 293	10.0	724 212 331	7.200	
295 - 315	10.0	724 212 347	7.200	
314 - 335	10.0	724 212 363	7.400	
322 - 344	10.0	724 212 379	7.400	
334 - 354	10.0	724 212 395	7.400	
340 - 360	10.0	724 212 411	7.400	

PF 1 54 325 009



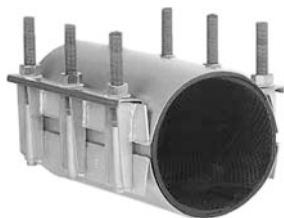
Multi/Clamp Double length 300 mm

Model:

- Double band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
88 - 110	16.0	724 212 060	5.000	
108 - 128	16.0	724 212 076	5.300	
112 - 134	16.0	724 212 092	5.300	
120 - 140	16.0	724 212 108	5.300	
133 - 155	16.0	724 212 124	5.800	
138 - 160	16.0	724 212 140	5.800	
158 - 180	16.0	724 212 156	6.700	
168 - 190	16.0	724 212 172	6.700	
190 - 210	10.0	724 212 188	7.100	
195 - 217	10.0	724 212 204	7.100	
210 - 230	10.0	724 212 220	7.500	
216 - 238	10.0	724 212 236	7.500	
225 - 246	10.0	724 212 252	7.800	
238 - 260	10.0	724 212 268	7.800	
251 - 271	10.0	724 212 284	8.900	
260 - 280	10.0	724 212 300	8.900	
269 - 289	10.0	724 212 316	8.900	
273 - 293	10.0	724 212 332	8.900	
295 - 315	10.0	724 212 348	8.900	
314 - 335	10.0	724 212 364	9.500	
322 - 344	10.0	724 212 380	9.500	
334 - 354	10.0	724 212 396	9.500	
340 - 360	10.0	724 212 412	9.500	
348 - 368	10.0	724 212 428	10.200	
365 - 385	10.0	724 212 444	10.200	
376 - 396	10.0	724 212 460	10.200	
382 - 402	10.0	724 212 476	10.200	
390 - 410	10.0	724 212 492	10.200	
404 - 424	10.0	724 212 508	11.000	
420 - 440	10.0	724 212 524	11.000	

PF 1 54 325 009



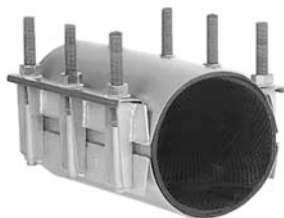
Multi/Clamp Double length 400 mm

Model:

- Double band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
88 - 110	16.0	724 212 061	6.600	
108 - 128	16.0	724 212 077	6.900	
112 - 134	16.0	724 212 093	6.900	
120 - 140	16.0	724 212 109	6.900	
133 - 155	16.0	724 212 125	7.600	
138 - 160	16.0	724 212 141	7.600	
158 - 180	16.0	724 212 157	8.800	
168 - 190	16.0	724 212 173	8.800	
190 - 210	10.0	724 212 189	9.400	
195 - 217	10.0	724 212 205	9.400	
210 - 230	10.0	724 212 221	9.800	
216 - 238	10.0	724 212 237	9.800	
225 - 246	10.0	724 212 253	10.200	
238 - 260	10.0	724 212 269	10.200	
251 - 271	10.0	724 212 285	11.500	
260 - 280	10.0	724 212 301	11.500	
269 - 289	10.0	724 212 317	11.500	
273 - 293	10.0	724 212 333	11.500	
295 - 315	10.0	724 212 349	11.500	
314 - 335	10.0	724 212 365	12.300	
322 - 344	10.0	724 212 381	12.300	
334 - 354	10.0	724 212 397	12.300	
340 - 360	10.0	724 212 413	12.300	
348 - 368	10.0	724 212 429	13.200	
365 - 385	10.0	724 212 445	13.200	
376 - 396	10.0	724 212 461	13.200	
382 - 402	10.0	724 212 477	13.200	
390 - 410	10.0	724 212 493	13.200	
404 - 424	10.0	724 212 509	14.200	
420 - 440	10.0	724 212 525	14.200	
440 - 460	10.0	724 212 541	14.200	
457 - 477	10.0	724 212 557	14.800	
468 - 488	10.0	724 212 573	14.800	
488 - 508	10.0	724 212 589	14.800	
500 - 520	10.0	724 212 605	15.900	
520 - 540	6.0	724 212 621	15.900	
527 - 547	6.0	724 212 637	15.900	
545 - 565	6.0	724 212 653	15.900	
555 - 570	6.0	724 212 669	15.900	
568 - 588	6.0	724 212 685	15.900	
586 - 606	6.0	724 212 701	15.900	
600 - 620	6.0	724 212 717	17.700	
625 - 645	6.0	724 212 733	17.700	
650 - 670	6.0	724 212 749	17.700	

PF 1 54 325 009



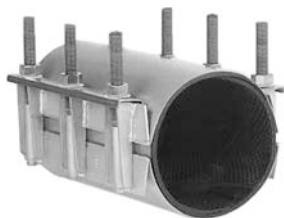
Multi/Clamp Double length 500 mm

Model:

- Double band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
88 - 110	16.0	724 212 062	8.400	
108 - 128	16.0	724 212 078	8.800	
112 - 134	16.0	724 212 094	8.800	
120 - 140	16.0	724 212 110	8.800	
133 - 155	16.0	724 212 126	9.600	
138 - 160	16.0	724 212 142	9.600	
158 - 180	16.0	724 212 158	11.200	
168 - 190	16.0	724 212 174	11.200	
190 - 210	10.0	724 212 190	12.100	
195 - 217	10.0	724 212 206	12.100	
210 - 230	10.0	724 212 222	12.500	
216 - 238	10.0	724 212 238	12.500	
225 - 246	10.0	724 212 254	13.000	
238 - 260	10.0	724 212 270	13.000	
251 - 271	10.0	724 212 286	15.200	
260 - 280	10.0	724 212 302	15.200	
269 - 289	10.0	724 212 318	15.200	
273 - 293	10.0	724 212 334	15.200	
295 - 315	10.0	724 212 350	15.200	
314 - 335	10.0	724 212 366	16.100	
322 - 344	10.0	724 212 382	16.100	
334 - 354	10.0	724 212 398	16.100	
340 - 360	10.0	724 212 414	16.100	
348 - 368	10.0	724 212 430	17.200	
365 - 385	10.0	724 212 446	17.200	
376 - 396	10.0	724 212 462	17.200	
382 - 402	10.0	724 212 478	17.200	
390 - 410	10.0	724 212 494	17.200	
404 - 424	10.0	724 212 510	18.700	
420 - 440	10.0	724 212 526	18.700	
440 - 460	10.0	724 212 542	18.700	
457 - 477	10.0	724 212 558	19.200	
468 - 488	10.0	724 212 574	19.200	
488 - 508	10.0	724 212 590	19.200	
500 - 520	10.0	724 212 606	20.700	
520 - 540	6.0	724 212 622	20.700	
527 - 547	6.0	724 212 638	20.700	
545 - 565	6.0	724 212 654	20.700	
555 - 570	6.0	724 212 670	20.700	
568 - 588	6.0	724 212 686	20.700	
586 - 606	6.0	724 212 702	20.700	
600 - 620	6.0	724 212 718	22.900	
625 - 645	6.0	724 212 734	22.900	
650 - 670	6.0	724 212 750	22.900	

PF 1 54 325 009



Multi/Clamp Double length 600 mm

Model:

- Double band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
314 - 335	10.0	724 212 367	19.000	
322 - 344	10.0	724 212 383	19.000	
334 - 354	10.0	724 212 399	19.000	
340 - 360	10.0	724 212 415	19.000	
348 - 368	10.0	724 212 431	20.500	
365 - 385	10.0	724 212 447	20.500	
376 - 396	10.0	724 212 463	20.500	
382 - 402	10.0	724 212 479	20.500	
390 - 410	10.0	724 212 495	20.500	
404 - 424	10.0	724 212 511	21.800	
420 - 440	10.0	724 212 527	21.800	
440 - 460	10.0	724 212 543	21.800	
457 - 477	10.0	724 212 559	23.000	
468 - 488	10.0	724 212 575	23.000	
488 - 508	10.0	724 212 591	23.000	
500 - 520	10.0	724 212 607	24.500	
520 - 540	6.0	724 212 623	24.500	
527 - 547	6.0	724 212 639	24.500	
545 - 565	6.0	724 212 655	24.500	
555 - 570	6.0	724 212 671	24.500	
568 - 588	6.0	724 212 687	24.500	
586 - 606	6.0	724 212 703	24.500	
600 - 620	6.0	724 212 719	27.200	
625 - 645	6.0	724 212 735	27.200	
650 - 670	6.0	724 212 751	27.200	
705 - 725	4.0	724 212 767	19.700	
730 - 750	4.0	724 212 783	29.200	
755 - 775	4.0	724 212 799	29.200	
805 - 825	3.0	724 212 815	30.500	
835 - 855	3.0	724 212 831	31.500	

PF 1 54 325 009



Multi/Clamp Double length 750 mm

Model:

- Double band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
420 - 440	10.0	724 212 528	26.300	
440 - 460	10.0	724 212 544	26.300	
457 - 477	10.0	724 212 560	28.500	
468 - 488	10.0	724 212 576	28.500	
488 - 508	10.0	724 212 592	28.500	
500 - 520	10.0	724 212 608	30.900	
520 - 540	6.0	724 212 624	30.900	
527 - 547	6.0	724 212 640	30.900	
545 - 565	6.0	724 212 656	30.900	
555 - 570	6.0	724 212 672	30.900	
568 - 588	6.0	724 212 688	30.900	
586 - 606	6.0	724 212 704	30.900	
600 - 620	6.0	724 212 720	34.500	
625 - 645	6.0	724 212 736	34.500	
650 - 670	6.0	724 212 752	34.500	
705 - 725	4.0	724 212 768	24.900	
730 - 750	4.0	724 212 784	36.500	

table continued next page

PF 1 54 325 009

Range [mm]	PN Water [bar]	NBR Code	kg	
755 - 775	4.0	724 212 800	36.500	
805 - 825	3.0	724 212 816	38.000	
835 - 855	3.0	724 212 832	39.000	



Multi/Clamp Triple length 300 mm

Model:

- Triple band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
267 - 297	10.0	724 213 060	9.000	
300 - 330	10.0	724 213 076	10.200	
323 - 353	10.0	724 213 092	10.200	
352 - 382	10.0	724 213 108	10.500	
378 - 408	10.0	724 213 124	12.000	
402 - 432	10.0	724 213 140	12.000	
429 - 459	10.0	724 213 156	12.000	
456 - 486	10.0	724 213 172	12.900	
490 - 520	10.0	724 213 188	14.100	
520 - 550	10.0	724 213 204	14.700	

PF 1 54 325 009



Multi/Clamp Triple length 400 mm

Model:

- Triple band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
267 - 297	10.0	724 213 061	11.700	
300 - 330	10.0	724 213 077	13.500	
323 - 353	10.0	724 213 093	13.500	
352 - 382	10.0	724 213 109	14.100	
378 - 408	10.0	724 213 125	15.600	
402 - 432	10.0	724 213 141	15.600	
429 - 459	10.0	724 213 157	15.600	
456 - 486	10.0	724 213 173	16.800	
490 - 520	10.0	724 213 189	17.700	
520 - 550	10.0	724 213 205	19.200	
532 - 562	6.0	724 213 221	19.200	
545 - 575	6.0	724 213 237	19.200	
570 - 600	6.0	724 213 253	19.200	

PF 1 54 325 009



Multi/Clamp Triple length 500 mm

Model:

- Triple band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg	
352 - 382	10.0	724 213 110	15.600	
378 - 408	10.0	724 213 126	20.100	
402 - 432	10.0	724 213 142	20.100	
429 - 459	10.0	724 213 158	20.100	
456 - 486	10.0	724 213 174	21.600	
490 - 520	10.0	724 213 190	23.400	
520 - 550	10.0	724 213 206	24.600	
532 - 562	6.0	724 213 222	24.600	
545 - 575	6.0	724 213 238	24.600	
570 - 600	6.0	724 213 254	24.600	
586 - 616	6.0	724 213 270	24.600	
609 - 639	6.0	724 213 286	26.000	
615 - 645	6.0	724 213 302	26.000	

table continued next page

PF 1 54 325 009

Range [mm]	PN Water [bar]	NBR Code	kg
633 - 663	4.0	724 213 318	26.000
640 - 670	4.0	724 213 334	26.000
654 - 684	4.0	724 213 350	26.000



Multi/Clamp Triple length 600 mm

Model:

- Triple band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg
456 - 486	10.0	724 213 175	25.800
490 - 520	10.0	724 213 191	27.300
520 - 550	10.0	724 213 207	30.000
532 - 562	6.0	724 213 223	30.000
545 - 575	6.0	724 213 239	30.000
570 - 600	6.0	724 213 255	30.000
586 - 616	6.0	724 213 271	30.000
609 - 639	6.0	724 213 287	32.000
615 - 645	6.0	724 213 303	32.000
633 - 663	4.0	724 213 319	32.000
640 - 670	4.0	724 213 335	32.000
654 - 684	4.0	724 213 351	32.000
670 - 700	4.0	724 213 367	32.000
702 - 732	4.0	724 213 383	35.000
711 - 741	4.0	724 213 399	35.000
729 - 759	4.0	724 213 415	35.000
747 - 777	4.0	724 213 431	35.000
780 - 815	4.0	724 213 447	38.000
800 - 830	4.0	724 213 463	38.000
813 - 843	3.0	724 213 479	38.000
830 - 860	3.0	724 213 495	38.000
852 - 882	2.0	724 213 511	38.000
864 - 894	2.0	724 213 527	38.000
900 - 930	2.0	724 213 543	40.000
925 - 955	2.0	724 213 559	40.000
945 - 975	2.0	724 213 575	40.000
970 - 1000	2.0	724 213 591	40.000

PF 1 54 325 009



Multi/Clamp Triple length 750 mm

Model:

- Triple band clamp with full circle gasket
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	kg
545 - 575	6.0	724 213 240	39.000
570 - 600	6.0	724 213 256	39.000
586 - 616	6.0	724 213 272	39.000
609 - 639	6.0	724 213 288	41.000
615 - 645	6.0	724 213 304	41.000
633 - 663	4.0	724 213 320	41.000
640 - 670	4.0	724 213 336	41.000
654 - 684	4.0	724 213 352	41.000
670 - 700	4.0	724 213 368	41.000
702 - 732	4.0	724 213 384	44.000
711 - 741	4.0	724 213 400	44.000
729 - 759	4.0	724 213 416	44.000
747 - 777	4.0	724 213 432	44.000

table continued next page

Range [mm]	PN Water [bar]	NBR Code	kg	
780 - 815	4.0	724 213 448	47.000	
800 - 730	4.0	724 213 464	47.000	
813 - 843	3.0	724 213 480	47.000	
830 - 860	3.0	724 213 496	47.000	
852 - 882	2.0	724 213 512	47.000	
864 - 894	2.0	724 213 528	47.000	
900 - 930	2.0	724 213 544	49.000	
925 - 955	2.0	724 213 560	49.000	
945 - 975	2.0	724 213 576	49.000	
970 - 1000	2.0	724 213 592	49.000	

PF 1 54 325 009

Multi/Clamp Thread (surcharge)



Model:

- The Multi/Clamp Single, Double and Triple can be equipped with a threaded outlet
- To obtain the total product price please take the surcharge for the threaded outlet and the price of the repair clamp
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- Female threaded outlet (other threads or combinations on request)

Inch	threaded outlet	Code	
½	from 45 mm	thread1/2	
¾	from 50 mm	thread3/4	
1	from 60 mm	thread1	
1 ¼	from 70 mm	thread1.1/4	
1 ½	from 76 mm	thread1.1/2	
2	from 90 mm	thread2	
2 ½	from 110 mm	thread2.1/2	
3	from 130 mm	thread3	
4	from 169 mm	thread4	

Multi/Clamp Saddle Studs threaded outlet 1/2"



Model:

- Saddle with threaded outlet
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)
- Outlet dimension up to 4" available on request
- Lower shell half is without gasket (available on request)
- Other sizes available on request

Range [mm]	PN Water [bar]	NBR Code	kg	
68 - 78	16.0	724 201 061	1.000	
88 - 110	16.0	724 201 073	1.000	
108 - 134	16.0	724 201 097	1.000	
133 - 155	16.0	724 201 133	1.000	
159 - 181	16.0	724 201 169	1.000	
168 - 190	16.0	724 201 193	1.000	
190 - 212	16.0	724 201 205	1.000	
216 - 238	16.0	724 201 217	1.000	
238 - 260	16.0	724 201 229	1.000	
267 - 289	16.0	724 201 253	1.000	

PF 1 54 327 011

Multi/Clamp Saddle Studs threaded outlet 3/4"



Model:

- Saddle with threaded outlet
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)
- Outlet dimension up to 4" available on request
- Lower shell half is without gasket (available on request)
- Other sizes available on request

Range [mm]	PN Water [bar]	NBR Code	kg	
68 - 78	16.0	724 201 062	1.000	
88 - 110	16.0	724 201 074	1.000	
108 - 134	16.0	724 201 098	1.000	
133 - 155	16.0	724 201 134	1.000	
159 - 181	16.0	724 201 170	1.000	
168 - 190	16.0	724 201 194	1.000	
190 - 212	16.0	724 201 206	1.000	
216 - 238	16.0	724 201 218	1.000	
238 - 260	16.0	724 201 230	1.000	
267 - 289	16.0	724 201 254	1.000	

PF 1 54 327 011



Multi/Clamp Saddle Studs threaded outlet 1"

Model:

- Saddle with threaded outlet
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)
- Outlet dimension up to 4" available on request
- Lower shell half is without gasket (available on request)
- Other sizes available on request

Range [mm]	PN Water [bar]	NBR Code	kg	
68 - 78	16.0	724 201 063	1.000	
88 - 110	16.0	724 201 075	1.000	
108 - 134	16.0	724 201 099	1.000	
133 - 155	16.0	724 201 135	1.000	
159 - 181	16.0	724 201 171	1.000	
168 - 190	16.0	724 201 195	1.000	
190 - 212	16.0	724 201 207	1.000	
216 - 238	16.0	724 201 219	1.000	
238 - 260	16.0	724 201 231		
267 - 289	16.0	724 201 255	1.000	

PF 1 54 327 011



Multi/Clamp Saddle Studs threaded outlet 1 1/4"

Model:

- Saddle with threaded outlet
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)
- Outlet dimension up to 4" available on request
- Lower shell half is without gasket (available on request)
- Other sizes available on request

Range [mm]	PN Water [bar]	NBR Code	kg	
88 - 110	16.0	724 201 076	1.000	
108 - 134	16.0	724 201 100	1.000	
133 - 155	16.0	724 201 136	1.000	
159 - 181	16.0	724 201 172	1.000	
168 - 190	16.0	724 201 196	1.000	
190 - 212	16.0	724 201 208	1.000	
216 - 238	16.0	724 201 220	1.000	
238 - 260	16.0	724 201 232		
267 - 289	16.0	724 201 256	1.000	

PF 1 54 327 011



Multi/Clamp Saddle Studs threaded outlet 1 1/2"

Model:

- Saddle with threaded outlet
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)
- Outlet dimension up to 4" available on request
- Lower shell half is without gasket (available on request)
- Other sizes available on request

Range [mm]	PN Water [bar]	NBR Code	kg	
108 - 134	16.0	724 201 101	1.000	
133 - 155	16.0	724 201 137	1.000	
159 - 181	16.0	724 201 173	1.000	
168 - 190	16.0	724 201 197	1.000	
190 - 212	16.0	724 201 209	1.000	

table continued next page

PF 1 54 327 011

Range [mm]	PN Water [bar]	NBR Code	kg	
216 - 238	16.0	724 201 221	1.000	
238 - 260	16.0	724 201 233		
267 - 289	16.0	724 201 257	1.000	



Multi/Clamp Saddle Studs threaded outlet 2"

Model:

- Saddle with threaded outlet
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)
- Outlet dimension up to 4" available on request
- Lower shell half is without gasket (available on request)
- Other sizes available on request

PF 1 54 327 011

Range [mm]	PN Water [bar]	NBR Code	kg	
108 - 134	16.0	724 201 102	1.000	
133 - 155	16.0	724 201 138	1.000	
159 - 181	16.0	724 201 174	1.000	
168 - 190	16.0	724 201 198	1.000	
190 - 212	16.0	724 201 210	1.000	
216 - 238	16.0	724 201 222	1.000	
238 - 260	16.0	724 201 234		
267 - 289	16.0	724 201 258	1.000	



Multi/Clamp Flange (tapping sleeve) length 200 mm

Model:

- Double band saddle with flanged outlet
- Full circle construction for optimal pipe support
- To obtain the total product price, please take the price of the tapping sleeve and add the price for the flange outlet
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	PN Water [bar]	NBR Code	
95 - 104	16.0	95-104L200N	
98 - 108	16.0	98-108L200N	
108 - 128	16.0	108-128L200N	
118 - 138	16.0	118-138L200N	
133 - 153	16.0	133-153L200N	
143 - 163	16.0	143-163L200N	
160 - 180	16.0	160-180L200N	
180 - 200	16.0	180-200L200N	
190 - 210	16.0	190-210L200N	
210 - 230	16.0	210-230L200N	
230 - 250	16.0	230-250L200N	
240 - 260	16.0	240-260L200N	
250 - 270	16.0	250-270L200N	
270 - 290	16.0	270-290L200N	
290 - 310	16.0	290-310L200N	



Multi/Clamp Flange (tapping sleeve) length 300 mm

Model:

- Double band saddle with flanged outlet
- Full circle construction for optimal pipe support
- To obtain the total product price, please take the price of the tapping sleeve and add the price for the flange outlet
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	DN [mm]	PN Water [bar]	NBR Code	
95 - 104		16.0	95-104L300N	
98 - 108		16.0	98-108L300N	
108 - 128		16.0	108-128L300N	
118 - 138		16.0	118-138L300N	
133 - 153		16.0	133-153L300N	
143 - 163		16.0	143-163L300N	
160 - 180		16.0	160-180L300N	
180 - 200		16.0	180-200L300N	
190 - 210		16.0	190-210L300N	
210 - 230		16.0	210-230L300N	
230 - 250		16.0	230-250L300N	
240 - 260		16.0	240-260L300N	
250 - 270		16.0	250-270L300N	
270 - 290		16.0	270-290L300N	
290 - 310		16.0	290-310L300N	
315 - 335		16.0	315-335L300N	
335 - 355		16.0	335-355L300N	
-	350	16.0	DN350L300N	



Multi/Clamp Flange (tapping sleeve) length 400 mm

Model:

- Double band saddle with flanged outlet
- Full circle construction for optimal pipe support
- To obtain the total product price, please take the price of the tapping sleeve and add the price for the flange outlet
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	DN [mm]	PN Water [bar]	NBR Code	
95 - 104		16.0	95-104L400N	
98 - 108		16.0	98-108L400N	
108 - 128		16.0	108-128L400N	
118 - 138		16.0	118-138L400N	
133 - 153		16.0	133-153L400N	
143 - 163		16.0	143-163L400N	
160 - 180		16.0	160-180L400N	
180 - 200		16.0	180-200L400N	
190 - 210		16.0	190-210L400N	
210 - 230		16.0	210-230L400N	
230 - 250		16.0	230-250L400N	
240 - 260		16.0	240-260L400N	
250 - 270		16.0	250-270L400N	
270 - 290		16.0	270-290L400N	
290 - 310		16.0	290-310L400N	
315 - 335		16.0	315-335L400N	
335 - 355		16.0	335-355L400N	
-	350	16.0	DN350L400N	
-	400	16.0	DN400L400N	
-	450	16.0	DN450L400N	
-	500	16.0	DN500L400N	
-	600	10.0	DN600L400N	
-	700		DN700L400N	



Multi/Clamp Flange (tapping sleeve) length 500 mm

Model:

- Double band saddle with flanged outlet
- Full circle construction for optimal pipe support
- To obtain the total product price, please take the price of the tapping sleeve and add the price for the flange outlet
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	DN [mm]	PN Water [bar]	NBR Code	
95 - 104		16.0	95-104L500N	
98 - 108		16.0	98-108L500N	
108 - 128		16.0	108-128L500N	
118 - 138		16.0	118-138L500N	
133 - 153		16.0	133-153L500N	
143 - 163		16.0	143-163L500N	
160 - 180		16.0	160-180L500N	
180 - 200		16.0	180-200L500N	
190 - 210		16.0	190-210L500N	
210 - 230		16.0	210-230L500N	
230 - 250		16.0	230-250L500N	
240 - 260		16.0	240-260L500N	
250 - 270		16.0	250-270L500N	
270 - 290		16.0	270-290L500N	
290 - 310		16.0	290-310L500N	
315 - 335		16.0	315-335L500N	
335 - 355		16.0	335-355L500N	
-	350	16.0	DN350L500N	

table continued next page

Range [mm]	DN [mm]	PN Water [bar]	NBR Code	
-	400	16.0	DN400L500N	
-	450	16.0	DN450L500N	
-	500	16.0	DN500L500N	
-	600	10.0	DN600L500N	
-	700		DN700L500N	
-	750		DN750L500N	
-	800		DN800L500N	



Multi/Clamp Flange (tapping sleeve) length 600 mm

Model:

- Double band saddle with flanged outlet
- Full circle construction for optimal pipe support
- To obtain the total product price, please take the price of the tapping sleeve and add the price for the flange outlet
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

Range [mm]	DN [mm]	PN Water [bar]	NBR Code	
315 - 335		16.0	315-335L600N	
335 - 355		16.0	335-355L600N	
-	350	16.0	DN350L600N	
-	400	16.0	DN400L600N	
-	450	16.0	DN450L600N	
-	500	16.0	DN500L600N	
-	600	10.0	DN600L600N	
-	700		DN700L600N	
-	750		DN750L600N	
-	800		DN800L600N	



Multi/Clamp Flange (tapping sleeve) length 750 mm

Model:

- Double band saddle with flanged outlet
- Full circle construction for optimal pipe support
- To obtain the total product price, please take the price of the tapping sleeve and add the price for the flange outlet
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

DN [mm]	PN Water [bar]	NBR Code	
400	16.0	DN400L750N	
450	16.0	DN450L750N	
500	16.0	DN500L750N	
600	10.0	DN600L750N	
700		DN700L750N	
750		DN750L750N	
800		DN800L750N	



Multi/Clamp Flange (flange outlet)

Model:

- To obtain the total product price please add the price of the tapping sleeve
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)

DN [mm]	Drilling pattern	required body length	Code	
50	PN 10/16	200 mm	flangeDN50	
65	PN 10/16	300 mm	flangeDN65	
80	PN 10/16	300 mm (400 mm if POD > 300)	flangeDN80	
100	PN 10/16	400 mm	flangeDN100	
125	PN 10/16	400 mm	flangeDN125	
150	PN 10/16	400 mm	flangeDN150	
200	PN 10	500 mm	flangeDN200	
250	PN 10	600 mm	flangeDN250	
300	PN 10	750 mm	flangeDN300	



Multi/Clamp Combi length 400 mm

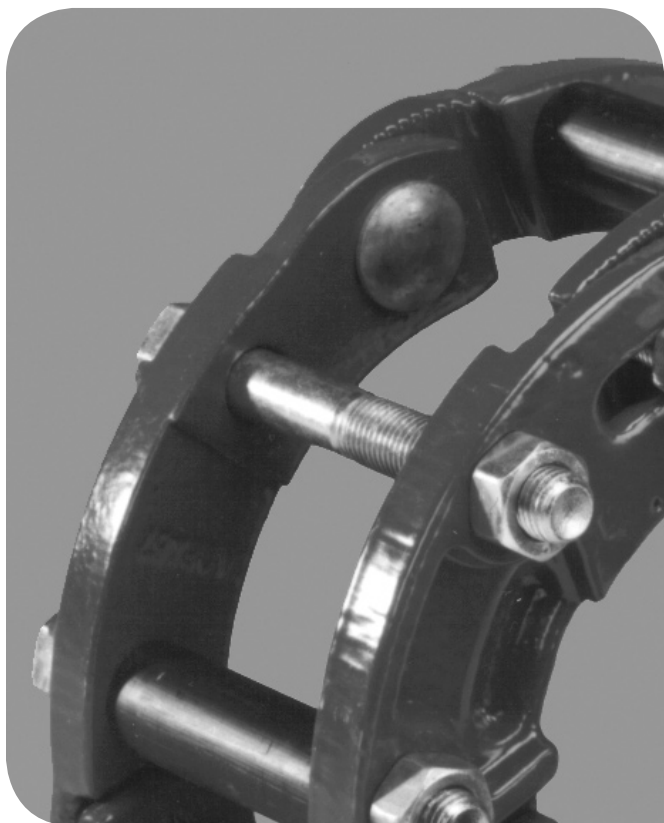
Model:

- A combination of either two or more shell sections enables you to repair pipes from 213 mm up to 1146 mm OD
- All metal parts are stainless steel, quality AISI 304 (on request AISI 316)
- The rubber gasket is available in NBR (EPDM on request)

description	NBR Code	kg
repair set complete (all shell sections + wooden box)	724 213 730	46.700
shell section A	724 213 746	5.000
shell section B	724 213 762	5.300
shell section C	724 213 778	5.700
shell section D	724 213 794	6.100
shell section E	724 213 810	6.700
wooden box separate	724 213 826	17.900

Range [mm]	description
	<u>shell sections to combine with 1 Multi/Clamp Combi box:</u>
213 - 233	A B
233 - 253	A C
253 - 273	B C
264 - 284	A D
284 - 304	B D
294 - 314	A E
304 - 324	C D
314 - 334	B E
335 - 355	C E
354 - 384	A B C
386 - 416	A B D
406 - 436	A C D
416 - 446	A B E
426 - 456	B C D
436 - 466	A C E
456 - 486	B C E
467 - 497	A D E
487 - 517	B D E
508 - 538	C D E
527 - 567	A B C D
558 - 598	A B C E
589 - 629	A B D E
609 - 649	A C D E
629 - 669	B C D E
	<u>shell sections to combine with 2 Multi/Clamp Combi boxes:</u>
720 - 770	E E B A A
761 - 811	E E C B A
832 - 882	E E D C B
853 - 903	E E D C C
934 - 994	E E D C B A
965 - 1025	E E D D B A
1026 - 1086	E E D D C C
1076 - 1146	E E D C C B A

PF 1 54 325 009



WAL/V

Contents WAL/V

	page
WAL/V Single	160
WAL/V Double	161

WAL/V

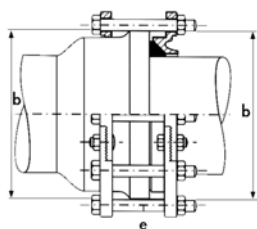
WAL/V Single

Model:

- Ductile Cast iron GGG40 body
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- Gasket: NBR
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers
- Suitable for usage in potable water or gas

Note:

Other sizes up to DN1200 on request



DN [mm]	Range [mm]	NBR Code	kg	b [mm]	e [mm]	bolt length [mm]	PN Water [bar]	PN Gas [bar]	
80	90 - 114	709 016 053	6.500	175	8xM16	140	10.0	4.0	
100	110 - 135	709 016 055	7.500	195	8xM16	140	10.0	4.0	
125	134 - 156	709 016 060	12.500	240	8xM16	140	10.0	4.0	
150	168 - 191	709 016 065	13.000	250	8xM16	140	10.0	4.0	
175	192 - 216	709 016 070	15.000	280	8xM16	140	10.0	4.0	
200	220 - 253	709 016 075	16.000	315	8xM16	140	10.0	4.0	
225	246 - 278	709 016 080	17.000	350	8xM16	140	10.0	4.0	
250	265 - 293	709 016 085	18.000	360	8xM16	140	10.0	4.0	
300	319 - 348	709 016 095	20.000	435	12xM16	140	10.0	4.0	
325	344 - 372	709 016 100	23.000	435	12xM16	140	10.0	4.0	
350	374 - 397	709 016 105	27.000	490	12xM16	140	10.0	4.0	
400	424 - 453	709 016 110	27.500	545	16xM16	140	10.0	4.0	
500	524 - 552	709 016 120	36.000	660	20xM16	140	10.0	4.0	
600	627 - 655	709 016 130	42.000	775	20xM16	140	10.0	4.0	
625	647 - 675	709 016 131	45.500	775	20xM16	140	10.0	4.0	
700	735 - 767	709 016 135	54.000	895	20xM16	140	10.0	4.0	

PF 1 54 325 008

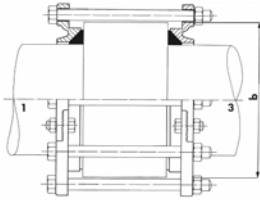
WAL/V Double

Model:

- Ductile Cast iron GGG40 body
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- Gasket: NBR
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers
- Suitable for usage in potable water or gas

Note:

Other sizes up to DN1200 on request



DN [mm]	Range [mm]	NBR Code	kg	b [mm]	e [mm]	bolt length [mm]	PN Water [bar]	PN Gas [bar]	
80	90 - 114	709 016 701	7.800	175	8xM16	240	10.0	4.0	
100	110 - 135	709 016 702	8.800	195	8xM16	240	10.0	4.0	
125	134 - 156	709 016 703	14.600	240	8xM16	240	10.0	4.0	
150	168 - 191	709 016 704	13.000	250	8xM16	240	10.0	4.0	
175	192 - 216	709 016 705	17.000	280	8xM16	240	10.0	4.0	
200	220 - 253	709 016 706	20.000	315	8xM16	240	10.0	4.0	
225	246 - 278	709 016 707	21.000	350	8xM16	240	10.0	4.0	
250	265 - 293	709 016 708	23.000	360	8xM16	240	10.0	4.0	
300	319 - 348	709 016 710	23.000	435	12xM16	240	10.0	4.0	
325	344 - 372	709 016 711	27.500	435	12xM16	240	10.0	4.0	
350	374 - 397	709 016 712	32.000	490	12xM16	240	10.0	4.0	
400	424 - 453	709 016 714	33.000	545	16xM16	240	10.0	4.0	
500	524 - 552	709 016 715	48.000	660	20xM16	240	10.0	4.0	
600	627 - 655	709 016 725	55.000	775	20xM16	240	10.0	4.0	
625	647 - 675	709 016 727	59.000	775	20xM16	240	10.0	4.0	
700	735 - 767	709 016 735		895	20xM16	240	10.0	4.0	

PF 1 54 325 008



Multi/Saddle Plus

Contents Multi/Saddle Plus

	page
Multi/Saddle Plus 301	166
Multi/Saddle Plus 201	166
Multi/Saddle Plus 200	167
Multi/Saddle Plus Straps	167
Multi/Saddle Plus Spatula	167
Multi/Saddle Plus Hot Tap Adaptors	168
Male threaded adaptors for W400 drilling device	168
Female threaded adaptors for W400 drilling device	168

Multi/Saddle Plus

Multi/Saddle Plus 301

saddle range 60-355 mm (to be combined with straps)

Model:

- With direct PE connection by means of Push-Fit
- With temporary shut-off mechanism by means of spatula (See Multi/Saddle Plus Spatula)
- Ductile Cast iron GGG40 saddle head
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- Stainless steel A2 (AISI 304) band with NBR protection (to be ordered separately)
- Rubber inlay: EPDM for water and NBR for water and gas
- Forged brass insert and nut

Note:

*Must be applied for pipes DN80 or larger

Outlet [mm]	EPDM Code	NBR Code	PN Water [bar]	PN Gas [bar]	
25	709 613 752	709 613 852	16.0	5.0	
32	709 613 754	709 613 854	16.0	5.0	
40*	709 613 756	709 613 856	16.0	5.0	
50*	709 613 758	709 613 858	16.0	5.0	

PF 1 54 327 010



Multi/Saddle Plus 201

saddle range 60-355 mm (to be combined with straps)

Model:

- With female threaded outlet
- With temporary shut-off mechanism by means of spatula (See Multi/Saddle Plus Spatula)
- Ductile Cast iron GGG40 saddle head
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- Stainless steel A2 (AISI 304) band with NBR protection (to be ordered separately)
- Rubber inlay: EPDM for water and NBR for water and gas

Note:

*Must be applied for pipes DN80 or larger

Thread outlet [inch]	EPDM Code	NBR Code	PN Water [bar]	PN Gas [bar]	
1	709 613 734	709 613 834	16.0	5.0	
1 1/4	709 613 736	709 613 836	16.0	5.0	
1 1/2*	709 613 738	709 613 838	16.0	5.0	
2*	709 613 740	709 613 840	16.0	5.0	

PF 1 54 327 010



Multi/Saddle Plus 200

saddle range 60-355 mm (to be combined with straps)

Model:

- With female threaded outlet
- Ductile Cast iron GGG40 saddle head
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- Stainless steel A2 (AISI 304) band with NBR protection (to be ordered separately)
- Rubber inlay: EPDM for water and NBR for water and gas

Note:

*Must be applied for pipes DN80 or larger

Thread outlet [inch]	EPDM Code	NBR Code	PN Water [bar]	PN Gas [bar]	
1	709 613 714	709 613 814	16.0	5.0	
1 1/4	709 613 716	709 613 816	16.0	5.0	
1 1/2*	709 613 718	709 613 818	16.0	5.0	
2*	709 613 720	709 613 820	16.0	5.0	

PF 1 54 327 010



Multi/Saddle Plus Straps

(to be combined with Multi/Saddle Plus 301, 201 and 200)

Model:

- Stainless steel A2 (AISI 304) band with NBR protection (to be ordered separately)
- The straps can be combined with all Multi/Saddle Plus types
- Weldfree design avoiding intergranular corrosion
- Range d60 - 355 mm
- Special packaging, flat labelled boxes for easy handling and identification
- Ready to install, studs and nuts in one package

Range [mm]	Code	
60 - 80	709 613 930	
70 - 90	709 613 932	
90 - 110	709 613 934	
110 - 130	709 613 936	
130 - 150	709 613 938	
145 - 165	709 613 940	
160 - 180	709 613 942	
175 - 195	709 613 944	
190 - 210	709 613 946	
205 - 225	709 613 948	
220 - 240	709 613 950	
235 - 255	709 613 952	
250 - 270	709 613 954	
270 - 290	709 613 956	
285 - 305	709 613 958	
300 - 320	709 613 960	
315 - 335	709 613 962	
335 - 355	709 613 964	

PF 1 54 327 010



Multi/Saddle Plus Spatula

Description	Code	
spatula for saddle outlet 1" / d25 + d32	709 613 903	
spatula for saddle outlet 1 1/4"	709 613 904	
spatula for saddle outlet 1 1/2" / d40 + d50	709 613 905	
spatula for saddle outlet 2"	709 613 906	

PF 1 54 327 010



PF 1 54 327 010

Multi/Saddle Plus Hot Tap Adaptors

Description	Code	
Hot Tap Adaptor Multi/Saddle Plus 301 PE d25 x 1	709 613 652	
Hot Tap Adaptor Multi/Saddle Plus 301 PE d32 x 1	709 613 654	
Hot Tap Adaptor Multi/Saddle Plus 301 PE d40 x 1 ½	709 613 656	
Hot Tap Adaptor Multi/Saddle Plus 301 PE d50 x 1 ½	709 613 658	
Hot Tap Adaptor Multi/Saddle Plus 201 1	709 613 634	
Hot Tap Adaptor Multi/Saddle Plus 201 1 ½	709 613 638	
Hot Tap Adaptor Multi/Saddle Plus 201 2	709 613 640	



PF 1 54 326 005

Male threaded adaptors for W400 drilling device

Model:

- Suitable to connect to Multi/Saddle Plus 200 and 201 saddles

Description	Code	
male threaded adaptor 3/4	709 702 257	
male threaded adaptor 1	709 702 258	
male threaded adaptor 1 1/4	709 702 259	
male threaded adaptor 1 1/2	709 702 260	
male threaded adaptor 2	709 702 261	



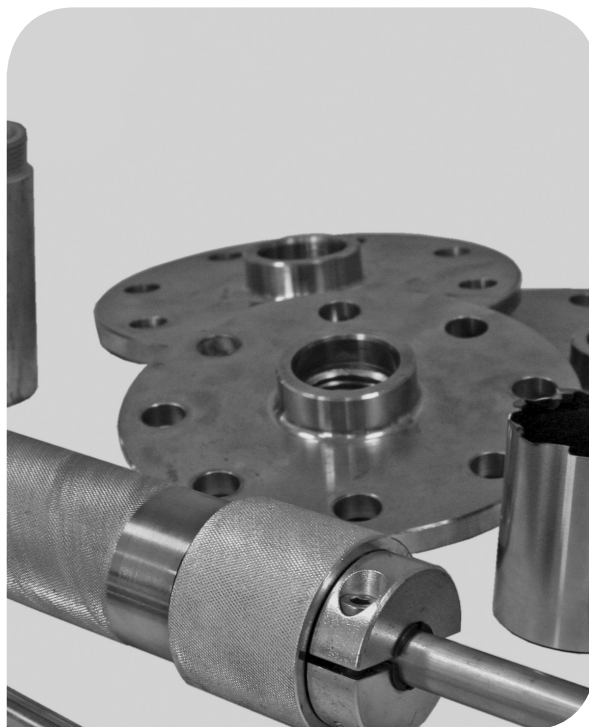
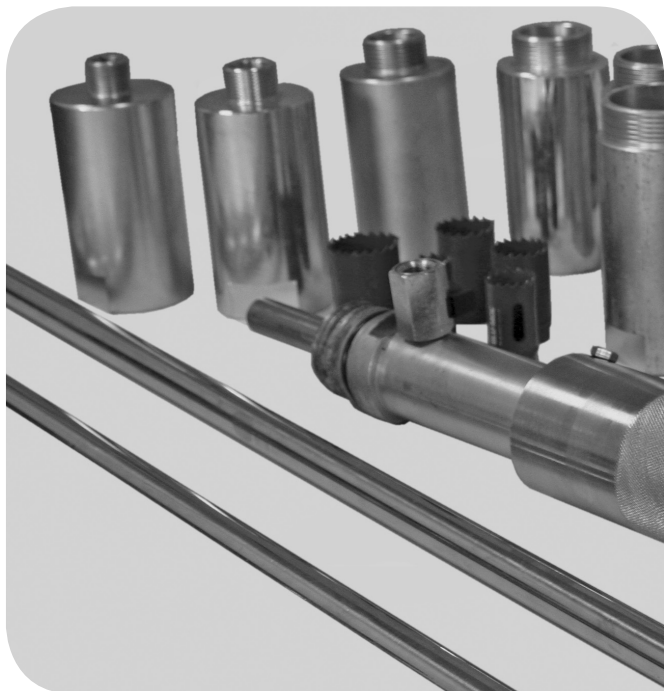
PF 1 54 326 005

Female threaded adaptors for W400 drilling device

Model:

- Suitable to connect to Multi/Saddle Plus 301 saddles

Description	Code	
female threaded adaptor d25 + d32	709 702 262	
female threaded adaptor d40 + d50	709 702 263	



W400/410 drilling device

Contents W400 /410 drilling device

	page
W400 drilling device (3/4" - 2")	
Basic drilling device	172
Male threaded adaptors for W400 drilling device	172
Female threaded adaptors for W400 drilling device	172
Mandrel combined with pilot drill	172
Pilot drill	172
Cup drill - PRO-FIT	173
Cup drill - Blu-mol HSS	173
Cup drill - Blu-mol Carbide tipped	173
Heavy duty transport case for W400 drilling device	173
W410 drilling device (3/4" - 8")	
Basic drilling device W410	174
Drill shafts	174
Flange adaptors	174
Mandrel combined with pilot drill	174
Pilot drill	174
Cup drill - PE chipless Ø63 mm and Ø84 mm	175
Plast/Joint® Flange adaptor, restraint	175
Heavy duty transport / storage box for W410 drilling device	175

W400 drilling device (3/4" - 2")



Basic Drilling Device W400

including ratchet and drill shaft (accessories to be added)

PF 1 54 326 005

Description	Code	
basic device including ratchet and drill shaft	709 700 000	



Male threaded adaptors for W400 drilling device

Model:

- Suitable to connect to Multi/Saddle Plus 200 and 201 saddles

PF 1 54 326 005

Description	Code	
male threaded adaptor 3/4	709 702 257	
male threaded adaptor 1	709 702 258	
male threaded adaptor 1 1/4	709 702 259	
male threaded adaptor 1 1/2	709 702 260	
male threaded adaptor 2	709 702 261	



Female threaded adaptors for W400 drilling device

Model:

- Suitable to connect to Multi/Saddle Plus 301 saddles

PF 1 54 326 005

Description	Code	
female threaded adaptor d25 + d32	709 702 262	
female threaded adaptor d40 + d50	709 702 263	



Mandrel combined with pilot drill

Model:

- mandrel including special pilot drill 6mm with retention wires

PF 1 54 326 005

Description	Code	
hole saw mandrel 9/16 inch - 1 3/16 inch with retain pilot drill	709 701 260	
hole saw mandrel 1 1/4 inch - 6 inch with retain pilot drill	709 701 261	



Pilot drill

Model:

- pilot drill 6 mm with dual retention wires

PF 1 54 326 005

Description	Code	
pilot drill 6 mm with dual retention wires	709 800 006	



Cup drill PRO-FIT

Model:

- Suitable for PE and PVC pipes

Inch	Description	Code	
11/16	PRO-FIT PE/PVC cutter 17,5 mm	709 810 711	
3/4	PRO-FIT PE/PVC cutter 19,1 mm	709 810 712	
7/8	PRO-FIT PE/PVC cutter 22,2 mm	709 810 714	
1	PRO-FIT PE/PVC cutter 25,4 mm	709 810 716	
1 1/4	PRO-FIT PE/PVC cutter 31,8 mm	709 810 720	
1 1/2	PRO-FIT PE/PVC cutter 38,1 mm	709 810 724	
1 3/4	PRO-FIT PE/PVC cutter 44,5 mm	709 810 728	
1 7/8	PRO-FIT PE/PVC cutter 48,2 mm	709 810 730	

PF 1 54 326 005



Cup drill Blu-mol HSS

Model:

- suitable for steel and (ductile) cast iron

Inch	Description	Code	
11/16	HSS bi-metal cutter 17,5 mm	709 810 511	
3/4	HSS bi-metal cutter 19,1 mm	709 810 512	
7/8	HSS bi-metal cutter 22,2 mm	709 810 514	
15/16	HSS bi-metal cutter 23,8 mm	709 810 515	
1	HSS bi-metal cutter 25,4 mm	709 810 516	
1 1/8	HSS bi-metal cutter 28,6 mm	709 810 518	
1 3/16	HSS bi-metal cutter 30,2 mm	709 810 519	
1 1/4	HSS bi-metal cutter 31,8 mm	709 810 520	
1 3/8	HSS bi-metal cutter 34,9 mm	709 810 522	
1 7/16	HSS bi-metal cutter 36,5 mm	709 810 523	
1 1/2	HSS bi-metal cutter 38,1 mm	709 810 524	
1 3/4	HSS bi-metal cutter 44,5 mm	709 810 528	
2	HSS bi-metal cutter 50,8 mm	709 810 532	

PF 1 54 326 005



Cup drill Blu-mol Carbide tipped

Model:

- suitable for abrasive materials such as asbestos cement and cement lined (ductile) iron pipes

Inch	Description	Code	
3/4	carbide tipped HSS bi-metal cutter 19,1 mm	709 810 612	
7/8	carbide tipped HSS bi-metal cutter 22,2 mm	709 810 614	
1	carbide tipped HSS bi-metal cutter 25,4 mm	709 810 616	
1 1/8	carbide tipped HSS bi-metal cutter 28,6 mm	709 810 618	
1 1/4	carbide tipped HSS bi-metal cutter 31,8 mm	709 810 620	
1 3/8	carbide tipped HSS bi-metal cutter 34,9 mm	709 810 622	
1 1/2	carbide tipped HSS bi-metal cutter 38,1 mm	709 810 624	
1 3/4	carbide tipped HSS bi-metal cutter 44,5 mm	709 810 628	
2	carbide tipped HSS bi-metal cutter 50,8 mm	709 810 632	

PF 1 54 326 005



Heavy duty transport / storage box for W400 drilling device

Model:

- Including: hex key 3 mm, hex key 6 mm and screwdriver
- Outside dimension transport case: 80 x 40 x 20 cm

Code	Description	
709 706 416	Heavy duty transport / storage box for W400 drilling device	

PF 1 54 326 005

W410 drilling device (3/4" - 8")



Basic Drilling Device W410 including ratchet (all accessories to be added)

PF 1 54 326 005

Description	Code	
basic device including ratchet	709 700 100	



Drill shafts

Model:

- Drill shafts to be selected depending on build up length of your configuration

PF 1 54 326 005

Description	Code	
drill shaft 620 mm	709 700 010	
drill shaft 775 mm	709 700 021	
drill shaft 920 mm	709 700 022	
drill shaft 1070 mm	709 700 023	



Flange adaptors

Model:

- Flange adaptor for W410
- Suitable for Plast/Joint® flange adaptor / connection to PE spigot
- Suitable for flange to flange connections
- Not included flange bolts / gasket

PF 1 54 326 005

Description	Code	
flange adaptor DN50	709 702 045	
flange adaptor DN65	709 702 046	
flange adaptor DN80	709 702 047	
flange adaptor DN100	709 702 048	
flange adaptor DN125	709 702 049	
flange adaptor DN150	709 702 050	
flange adaptor DN200	709 702 051	



Mandrel combined with pilot drill

Model:

- mandrel including special pilot drill 6mm with retention wires

PF 1 54 326 005

Description	Code	
hole saw mandrel 9/16 inch - 1 3/16 inch with retain pilot drill	709 701 260	
hole saw mandrel 1 1/4 inch - 6 inch with retain pilot drill	709 701 261	



Pilot drill

Model:

- pilot drill 6 mm with dual retention wires

PF 1 54 326 005

Description	Code	
pilot drill 6 mm with dual retention wires	709 800 006	



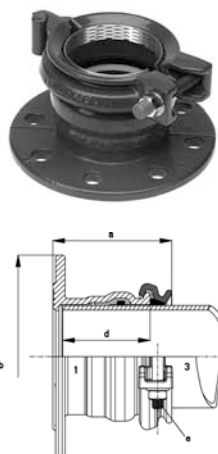
Cup drill PE chipless Ø45, Ø60, Ø63, Ø80 and Ø84 mm

Model:

- For demanding drillings on PE
- Maximum PE pipe d630 SDR11
- Suitable for under pressure drilling
- Push rod for coupon release out of the cup drill

Description	Code	
PE cup drill chipless 45 mm x 60 mm	709 810 410	
PE cup drill chipless 60 mm x 60 mm	709 810 412	
PE cup drill chipless 63 mm x 60 mm	709 810 414	
PE cup drill chipless 80 mm x 60 mm	709 810 415	
PE cup drill chipless 84 mm x 60 mm	709 810 416	
PE cup drill chipless 45 mm x 120 mm	709 810 420	
PE cup drill chipless 60 mm x 120 mm	709 810 422	
PE cup drill chipless 63 mm x 120 mm	709 810 424	
PE cup drill chipless 80 mm x 120 mm	709 810 425	
PE cup drill chipless 84 mm x 120 mm	709 810 426	
PE cup drill push rod	709 700 024	

PF 1 54 326 005



Plast/Joint® 8057 Flange Adaptor, restraint

Model:

- For connection to PE Spigot ends
- Ductile Cast iron GGG45 body and clamping ring(s), acc. to EN-GJS-450-10
- RESICOAT® epoxy powder coating, according to GSK standards and EN 14901
- Stainless steel A2 quality (AISI 304) bolts, nuts and washers (optional: A4 quality)
- Gasket: NBR
- Suitable for water and gas
- Flange drilling according to EN 1092-2
- Gripping in brass

d [mm]	DN [mm]	Drilling pattern	NBR / A2 Code	a [mm]	b [mm]	PN Water [bar]	PN Gas [bar]	
63	50	PN16	709 257 210	102	165	16.0	8.0	
75	65	PN16	709 257 212	102	185	16.0	8.0	
90	80	PN16	709 257 214	107	200	16.0	8.0	
110	100	PN16	709 257 216	122	220	16.0	8.0	
125	100	PN16	709 257 218	126	220	16.0	8.0	
160	150	PN16	709 257 222	144	285	16.0	8.0	
200	200	PN16	709 257 226	157	340	16.0	8.0	

PF 1 54 932 001



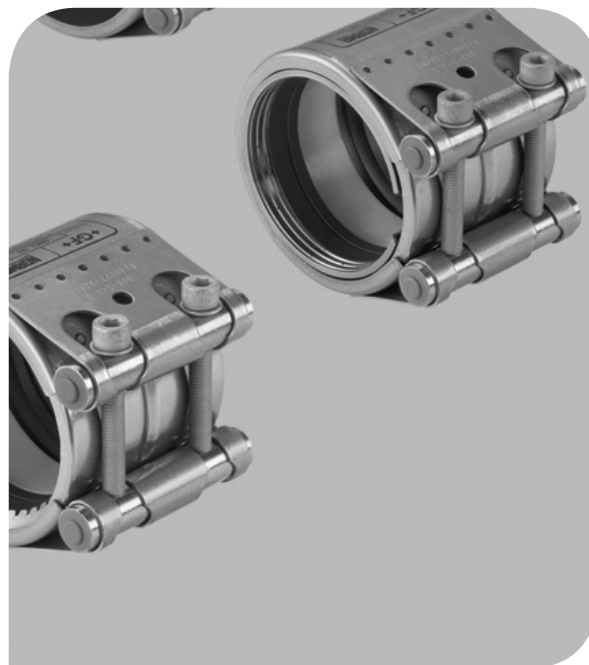
Heavy duty transport / storage box for W410 drilling device

Model:

- Including: hex key 3 mm, hex key 6 mm and screwdriver
- Outside dimension transport / warehouse box: 120 x 40 x 40 cm

Code	Description	
709 706 414	Heavy duty transport / storage box for W410 drilling device	

PF 1 54 326 005



FGR Stainless Steel Couplings

Contents FGR Stainless Steel Couplings

	page
type FLEX E	180
type FLEX	185
type FLEX U	188
type GRIP E	189
type GRIP	195
type GRIP FP E	199
type COMBI GRIP E	201
type COMBI GRIP	202
type PLAST GRIP E	204
type PLAST GRIP	205
type REP E	207

FGR - Stainless Steel Couplings

Flex E d26 up to d100

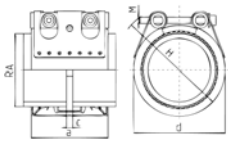
Model:

- All metal parts W2 quality: housing AISI 304, bolts AISI 4140H, lock bars AISI 12 L 14, protection ring AISI 301, steel band insert AISI 316 Ti
- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, protection ring AISI 316 Ti, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket Ø <170 mm -30°C – 125°C and Ø >180 mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	NBR W2 Code	EPDM W2 Code	NBR W5 Code
26.9	26.4 - 27.5	16.0	48.0	779 101 001	779 104 001	779 109 001
28.0	27.5 - 28.5	16.0	48.0	779 101 002	779 104 002	779 109 002
30.0	29.5 - 30.6	16.0	48.0	779 101 003	779 104 003	779 109 003
33.7	33.0 - 34.3	16.0	48.0	779 101 005	779 104 005	779 109 005
35.0	34.5 - 35.6	16.0	48.0	779 101 006	779 104 006	779 109 006
38.0	37.5 - 38.6	16.0	48.0	779 101 007	779 104 007	779 109 007
42.4	41.7 - 43.0	16.0	48.0	779 101 009	779 104 009	779 109 009
44.5	44.0 - 45.1	16.0	40.0	779 101 010	779 104 010	779 109 010
48.3	47.6 - 50.5	16.0	40.0	779 101 011	779 104 011	779 109 011
54.0	53.3 - 54.6	16.0	40.0	779 101 014	779 104 014	779 109 014
57.0	56.3 - 57.7	16.0	40.0	779 101 015	779 104 015	779 109 015
60.3	59.5 - 61.0	16.0	40.0	779 101 016	779 104 016	779 109 016
63.0	62.2 - 63.9	16.0	36.0	779 101 017	779 104 017	779 109 017
70.0	69.0 - 71.0	16.0	36.0	779 101 018	779 104 018	779 109 018
73.0	72.1 - 73.8	16.0	36.0	779 101 019	779 104 019	779 109 019
76.1	75.2 - 77.0	16.0	36.0	779 101 020	779 104 020	779 109 020
78.0	77.1 - 78.9	16.0	32.0	779 101 021	779 104 021	779 109 021
80.0	79.0 - 80.8	16.0	32.0	779 101 022	779 104 022	779 109 022
84.0	83.0 - 85.0	16.0	32.0	779 101 024	779 104 024	779 109 024
88.9	87.0 - 89.9	16.0	32.0	779 101 025	779 104 025	779 109 025
98.0	96.9 - 99.0	16.0	30.0	779 101 028	779 104 028	779 109 028

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	EPDM W5 Code	kg
26.9	26.4 - 27.5	16.0	48.0	779 112 001	0.320
28.0	27.5 - 28.5	16.0	48.0	779 112 002	0.320
30.0	29.5 - 30.6	16.0	48.0	779 112 003	0.320
33.7	33.0 - 34.3	16.0	48.0	779 112 005	0.320
35.0	34.5 - 35.6	16.0	48.0	779 112 006	0.430
38.0	37.5 - 38.6	16.0	48.0	779 112 007	0.430
42.4	41.7 - 43.0	16.0	48.0	779 112 009	0.440
44.5	44.0 - 45.1	16.0	40.0	779 112 010	0.460
48.3	47.6 - 50.5	16.0	40.0	779 112 011	0.470
54.0	53.3 - 54.6	16.0	40.0	779 112 014	0.610
57.0	56.3 - 57.7	16.0	40.0	779 112 015	0.620
60.3	59.5 - 61.0	16.0	40.0	779 112 016	0.630
63.0	62.2 - 63.9	16.0	36.0	779 112 017	1.000
70.0	69.0 - 71.0	16.0	36.0	779 112 018	1.000
73.0	72.1 - 73.8	16.0	36.0	779 112 019	1.250
76.1	75.2 - 77.0	16.0	36.0	779 112 020	1.250
78.0	77.1 - 78.9	16.0	32.0	779 112 021	1.000
80.0	79.0 - 80.8	16.0	32.0	779 112 022	1.000

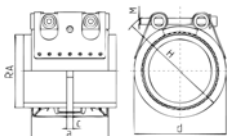
table continued next page



d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	EPDM W5 Code	kg	
84.0	83.0 - 85.0	16.0	32.0	779 112 024	1.270	
88.9	87.0 - 89.9	16.0	32.0	779 112 025	1.290	
98.0	96.9 - 99.0	16.0	30.0	779 112 028	1.450	

d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]	
26.9	47	3	50	70	
28.0	47	3	50	70	
30.0	47	3	50	70	
33.7	47	3	55	75	
35.0	63	8	55	75	
38.0	63	8	60	80	
42.4	63	8	65	85	
44.5	63	8	65	85	
48.3	63	8	70	90	
54.0	78	17	75	95	
57.0	78	17	80	100	
60.3	78	17	85	105	
63.0	78	17	85	105	
70.0	98	25	90	110	
73.0	98	25	95	115	
76.1	98	25	100	120	
78.0	98	25	100	120	
80.0	98	25	100	120	
84.0	98	25	105	125	
88.9	98	25	110	130	
98.0	98	25	120	140	

PF 1 54 500 122



Flex E d101 up to d250

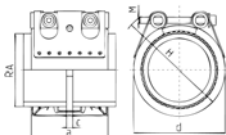
Model:

- All metal parts W2 quality: housing AISI 304, bolts AISI 4140H, lock bars AISI 12 L 14, protection ring AISI 301, steel band insert AISI 316 Ti
- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, protection ring AISI 316 Ti, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket Ø <170 mm -30°C – 125°C and Ø >180 mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	NBR W2 Code	EPDM W2 Code	NBR W5 Code	
101.6	100.4 - 102.8	16.0	30.0	779 101 029	779 104 029	779 109 029	
104.0	102.8 - 106.1	16.0	30.0	779 101 030	779 104 030	779 109 030	
108.0	106.8 - 109.2	16.0	30.0	779 101 032	779 104 032	779 109 032	
110.0	108.8 - 111.4	16.0	30.0	779 101 328	779 104 328	779 109 328	
114.3	113.0 - 115.5	16.0	30.0	779 101 033	779 104 033	779 109 033	
125.0	123.6 - 126.5	16.0	30.0	779 101 037	779 104 037	779 109 037	
129.0	127.6 - 131.1	16.0	30.0	779 101 038	779 104 038	779 109 038	
133.0	131.5 - 134.4	16.0	30.0	779 101 039	779 104 039	779 109 039	
139.7	138.1 - 141.6	16.0	30.0	779 101 040	779 104 040	779 109 040	
141.3	139.6 - 142.8	16.0	30.0	779 101 041	779 104 041	779 109 041	
154.0	152.3 - 156.1	16.0	25.0	779 101 045	779 104 045	779 109 045	
159.0	157.3 - 160.7	16.0	25.0	779 101 046	779 104 046	779 109 046	
168.3	166.5 - 170.1	16.0	25.0	779 101 050	779 104 050	779 109 050	
180.0	178.0 - 182.0	13.7	21.9	779 101 054	779 104 054	779 109 054	
206.0	202.0 - 208.0	13.7	21.9	779 101 060	779 104 060	779 109 060	
219.1	216.0 - 221.0	13.7	21.9	779 101 063	779 104 063	779 109 063	
225.0	222.0 - 227.0	12.0	19.2	779 101 065	779 104 065	779 109 065	
229.9	228.0 - 232.0	12.0	19.2	779 101 066	779 104 066	779 109 066	
244.5	242.0 - 247.0	12.0	19.2	779 101 070	779 104 070	779 109 070	

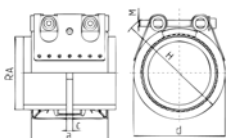
d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	EPDM W5 Code	kg	
101.6	100.4 - 102.8	16.0	30.0	779 112 029	1.450	
104.0	102.8 - 106.1	16.0	30.0	779 112 030	1.460	
108.0	106.8 - 109.2	16.0	30.0	779 112 032	1.460	
110.0	108.8 - 111.4	16.0	30.0	779 112 328	1.500	
114.3	113.0 - 115.5	16.0	30.0	779 112 033	1.500	
125.0	123.6 - 126.5	16.0	30.0	779 112 037	2.220	
129.0	127.6 - 131.1	16.0	30.0	779 112 038	2.220	
133.0	131.5 - 134.4	16.0	30.0	779 112 039	2.240	
139.7	138.1 - 141.6	16.0	30.0	779 112 040	2.260	
141.3	139.6 - 142.8	16.0	30.0	779 112 041	2.260	
154.0	152.3 - 156.1	16.0	25.0	779 112 045	2.440	
159.0	157.3 - 160.7	16.0	25.0	779 112 046	2.530	
168.3	166.5 - 170.1	16.0	25.0	779 112 050	2.580	
180.0	178.0 - 182.0	13.7	21.9	779 112 054	3.300	
206.0	202.0 - 208.0	13.7	21.9	779 112 060	3.800	
219.1	216.0 - 221.0	13.7	21.9	779 112 063	3.900	
225.0	222.0 - 227.0	12.0	19.2	779 112 065	3.900	
229.9	228.0 - 232.0	12.0	19.2	779 112 066	1.000	
244.5	242.0 - 247.0	12.0	19.2	779 112 070	4.500	

table continued next page



d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]
101.6	98	25	125	145
104.0	98	25	125	145
108.0	98	25	130	150
110.0	98	25	130	150
114.3	98	25	135	155
125.0	113	35	145	165
129.0	113	35	155	185
133.0	113	35	160	190
139.7	113	35	165	195
141.3	113	35	170	200
154.0	113	35	180	210
159.0	113	35	185	215
168.3	113	35	195	225
180.0	139	35	210	240
206.0	139	35	240	270
219.1	139	35	250	280
225.0	139	35	255	285
229.9	139	35	260	290
244.5	139	35	275	305

PF 1 54 500 125



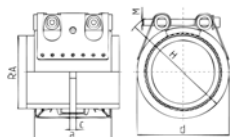
Flex E d251 up to d1016

Model:

- All metal parts W2 quality: housing AISI 304, bolts AISI 4140H, lock bars AISI 12 L 14, protection ring AISI 301, steel band insert AISI 316 Ti
- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, protection ring AISI 316 Ti, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket Ø <170 mm -30°C – 125°C and Ø >180 mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	NBR W2 Code	EPDM W2 Code	NBR W5 Code
254.0	250.0 - 256.0	12.0	19.2	779 101 073	779 104 073	779 109 073
267.0	264.0 - 269.0	12.0	19.2	779 101 076	779 104 076	779 109 076
273.0	270.0 - 275.0	12.0	19.2	779 101 078	779 104 078	779 109 078
306.0	302.0 - 308.0	9.0	14.4	779 101 085	779 104 085	779 109 085
323.9	320.0 - 327.0	9.0	14.4	779 101 091	779 104 091	779 109 091
326.0	322.0 - 329.0	9.0	14.4	779 101 092	779 104 092	779 109 092
355.6	352.0 - 359.0	9.0	14.4	779 101 102	779 104 102	779 109 102
406.4	402.0 - 410.0	7.5	12.0	779 101 116	779 104 116	779 109 116
429.0	426.0 - 431.0	5.5	8.8	779 101 124	779 104 124	779 109 124
457.2	454.0 - 459.0	5.5	8.8	779 101 131	779 104 131	779 109 131
508.0	505.0 - 510.0	5.5	8.8	779 101 145	779 104 145	779 109 145
531.0	528.0 - 534.0	5.0	8.0	779 101 152	779 104 152	779 109 152
558.8	556.0 - 562.0	5.0	8.0	779 101 159	779 104 159	779 109 159
609.6	606.0 - 613.0	3.5	5.6	779 101 172	779 104 172	779 109 172
634.0	631.0 - 637.0	3.5	5.6	779 101 179	779 104 179	779 109 179
711.2	707.0 - 715.0	3.5	5.6	779 101 197	779 104 197	779 109 197
762.0	758.0 - 766.0	3.0	4.8	779 101 210	779 104 210	779 109 210
813.0	808.0 - 817.0	3.0	4.8	779 101 223	779 104 223	779 109 223
914.4	909.0 - 919.0	2.0	3.2	779 101 245	779 104 245	779 109 245
1016.0	1013.0 - 1019.0	2.0	3.2	779 101 271	779 104 271	779 109 271

table continued next page



d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	EPDM W5 Code	kg	
254.0	250.0 - 256.0	12.0	19.2	779 112 073	4.300	
267.0	264.0 - 269.0	12.0	19.2	779 112 076	4.500	
273.0	270.0 - 275.0	12.0	19.2	779 112 078	4.600	
306.0	302.0 - 308.0	9.0	14.4	779 112 085	4.800	
323.9	320.0 - 327.0	9.0	14.4	779 112 091	5.100	
326.0	322.0 - 329.0	9.0	14.4	779 112 092	1.000	
355.6	352.0 - 359.0	9.0	14.4	779 112 102	5.200	
406.4	402.0 - 410.0	7.5	12.0	779 112 116	5.800	
429.0	426.0 - 431.0	5.5	8.8	779 112 124	6.000	
457.2	454.0 - 459.0	5.5	8.8	779 112 131	6.500	
508.0	505.0 - 510.0	5.5	8.8	779 112 145	7.200	
531.0	528.0 - 534.0	5.0	8.0	779 112 152	7.900	
558.8	556.0 - 562.0	5.0	8.0	779 112 159	7.200	
609.6	606.0 - 613.0	3.5	5.6	779 112 172	7.800	
634.0	631.0 - 637.0	3.5	5.6	779 112 179	8.000	
711.2	707.0 - 715.0	3.5	5.6	779 112 197	8.900	
762.0	758.0 - 766.0	3.0	4.8	779 112 210	1.000	
813.0	808.0 - 817.0	3.0	4.8	779 112 223	9.900	
914.4	909.0 - 919.0	2.0	3.2	779 112 245	1.000	
1016.0	1013.0 - 1019.0	2.0	3.2	779 112 271	1.000	

d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]	
254.0	139	35	285	315	
267.0	139	35	300	330	
273.0	139	35	305	335	
306.0	139	35	340	370	
323.9	139	35	355	385	
326.0	139	35	355	390	
355.6	139	35	390	420	
406.4	139	35	440	470	
429.0	139	35	460	490	
457.2	139	35	490	520	
508.0	139	35	540	570	
531.0	139	35	565	595	
558.8	139	35	590	620	
609.6	139	35	640	670	
634.0	139	35	665	695	
711.2	139	35	745	775	
762.0	139	35	795	825	
813.0	139	35	845	935	
914.4	139	35	945	1035	
1016.0	139	35	1050	1140	

PF 1 54 500 125



Flex d180 up to d406

Model:

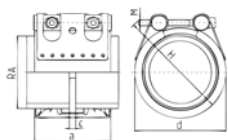
- All metal parts W2 quality: housing AISI 304, bolts AISI 4140H, lock bars AISI 12 L 14, protection ring AISI 301, steel band insert AISI 316 Ti
- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, protection ring AISI 316 Ti, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket Ø <170 mm -30°C – 125°C and Ø >180 mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	NBR W2 Code	EPDM W2 Code	NBR W5 Code
180.0	178.0 - 182.0	21.5	34.4	779 054 054	779 056 054	779 062 054
206.0	204.0 - 208.0	21.5	34.4	779 054 060	779 056 060	779 062 060
219.1	216.0 - 221.0	21.5	34.4	779 054 063	779 056 063	779 062 063
225.0	222.0 - 227.0	17.0	27.2	779 054 065	779 056 065	779 062 065
229.9	228.0 - 232.0	17.0	27.2	779 054 066	779 056 066	779 062 066
244.5	242.0 - 247.0	17.0	27.2	779 054 070	779 056 070	779 062 070
254.0	250.0 - 256.0	17.0	27.2	779 054 073	779 056 073	779 062 073
267.0	264.0 - 269.0	17.0	27.2	779 054 076	779 056 076	779 062 076
273.0	270.0 - 275.0	17.0	27.0	779 054 078	779 056 078	779 062 078
306.0	302.0 - 308.0	15.0	24.0	779 054 085	779 056 085	779 062 085
323.9	320.0 - 327.0	15.0	24.0	779 054 091	779 056 091	779 062 091
326.0	322.0 - 329.0	13.2	21.1	779 054 092	779 056 092	779 062 092
355.6	352.0 - 359.0	13.2	21.1	779 054 102	779 056 102	779 062 102
406.4	402.0 - 410.0	12.3	19.7	779 054 116	779 056 116	779 062 116

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	EPDM W5 Code	kg
180.0	178.0 - 182.0	21.5	34.4	779 064 054	4.000
206.0	204.0 - 208.0	21.5	34.4	779 064 060	5.100
219.1	216.0 - 221.0	21.5	34.4	779 064 063	5.100
225.0	222.0 - 227.0	17.0	27.2	779 064 065	1.000
229.9	228.0 - 232.0	17.0	27.2	779 064 066	1.000
244.5	242.0 - 247.0	17.0	27.2	779 064 070	6.000
254.0	250.0 - 256.0	17.0	27.2	779 064 073	1.000
267.0	264.0 - 269.0	17.0	27.2	779 064 076	6.000
273.0	270.0 - 275.0	17.0	27.0	779 064 078	6.000
306.0	302.0 - 308.0	15.0	24.0	779 064 085	6.500
323.9	320.0 - 327.0	15.0	24.0	779 064 091	6.500
326.0	322.0 - 329.0	13.2	21.1	779 064 092	1.000
355.6	352.0 - 359.0	13.2	21.1	779 064 102	7.000
406.4	402.0 - 410.0	12.3	19.7	779 064 116	7.700

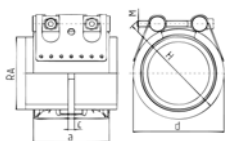
d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]
180.0	141	35	210	240
206.0	141	35	240	270
219.1	141	35	250	280
225.0	141	35	255	285
229.9	141	35	260	290
244.5	141	35	275	305
254.0	141	35	285	315
267.0	141	35	300	330
273.0	141	35	305	335
306.0	141	35	340	370

table continued next page



PF 1 54 500 112

d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]	
323.9	141	35	355	385	
326.0	141	35	360	390	
355.6	141	35	390	420	
406.4	141	35	440	470	



Flex d429 up to d1016

Model:

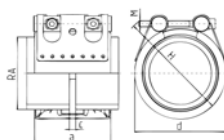
- All metal parts W2 quality: housing AISI 304, bolts AISI 4140H, lock bars AISI 12 L 14, protection ring AISI 301, steel band insert AISI 316 Ti
- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, protection ring AISI 316 Ti, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket Ø <170 mm -30°C – 125°C and Ø >180 mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	NBR W2 Code	EPDM W2 Code	NBR W5 Code	
429.0	426.0 - 431.0	7.5	12.0	779 054 124	779 056 124	779 062 124	
457.2	454.0 - 459.0	7.5	12.0	779 054 131	779 056 131	779 062 131	
508.0	505.0 - 510.0	7.5	12.0	779 054 145	779 056 145	779 062 145	
531.0	528.0 - 534.0	7.5	12.0	779 054 152	779 056 152	779 062 152	
558.8	556.0 - 562.0	7.5	12.0	779 054 159	779 056 159	779 062 159	
609.6	606.0 - 613.0	5.0	8.0	779 054 172	779 056 172	779 062 172	
634.0	631.0 - 637.0	5.0	8.0	779 054 179	779 056 179	779 062 179	
711.2	707.0 - 715.0	5.0	8.0	779 054 197	779 056 197	779 062 197	
762.0	758.0 - 766.0	4.5	7.2	779 054 210	779 056 210	779 062 210	
812.8	808.0 - 817.0	4.5	7.2	779 054 223	779 056 223	779 062 223	
914.4	909.0 - 919.0	3.3	5.3	779 054 245	779 056 245	779 062 245	
1016.0	1013.0 - 1019.0	3.3	5.3	779 054 271	779 056 271	779 062 271	

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	EPDM W5 Code	kg	
429.0	426.0 - 431.0	7.5	12.0	779 064 124	9.000	
457.2	454.0 - 459.0	7.5	12.0	779 064 131	9.000	
508.0	505.0 - 510.0	7.5	12.0	779 064 145	9.000	
531.0	528.0 - 534.0	7.5	12.0	779 064 152	10.200	
558.8	556.0 - 562.0	7.5	12.0	779 064 159	11.000	
609.6	606.0 - 613.0	5.0	8.0	779 064 172	1.000	
634.0	631.0 - 637.0	5.0	8.0	779 064 179	1.000	
711.2	707.0 - 715.0	5.0	8.0	779 064 197	1.000	
762.0	758.0 - 766.0	4.5	7.2	779 064 210	1.000	
812.8	808.0 - 817.0	4.5	7.2	779 064 223	1.000	
914.4	909.0 - 919.0	3.3	5.3	779 064 245	1.000	
1016.0	1013.0 - 1019.0	3.3	5.3	779 064 271	1.000	

d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]	
429.0	141	35	210	240	
457.2	141	35	240	270	
508.0	141	35	250	280	
531.0	141	35	255	285	
558.8	141	35	260	290	
609.6	141	35	275	305	
634.0	141	35	285	315	
711.2	141	35	300	330	
762.0	141	35	305	335	
812.8	141	35	340	370	
914.4	141	35	355	385	
1016.0	141	35	360	390	

PF 1 54 500 112



Flex U d326 up to d1016

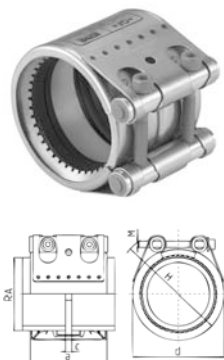
Model:

- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, protection ring AISI 316 Ti, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket Ø <170 mm -30°C – 125°C and Ø >180 mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request

d [mm]	Range [mm]	PN* [bar]	Operating pressure P max. [bar]	NBR W5 Code	EPDM W5 Code	kg	
326.0	320.0 - 329.0	16.5	21.5	779 074 092	779 076 092	1.000	
355.6	352.0 - 359.0	13.5	17.0	779 074 102	779 076 102	1.000	
406.4	402.0 - 410.0	13.5	17.0	779 074 116	779 076 116	1.000	
429.0	426.0 - 431.0	12.5	16.0	779 074 124	779 076 124	1.000	
457.2	454.0 - 459.0	12.0	15.0	779 074 131	779 076 131	1.000	
508.0	505.0 - 510.0	10.5	13.5	779 074 145	779 076 145	1.000	
531.0	499.0 - 534.0	10.0	13.0	779 074 152	779 076 152	1.000	
558.8	556.0 - 562.0	9.5	12.5	779 074 159	779 076 159	1.000	
609.6	606.0 - 613.0	9.0	11.5	779 074 172	779 076 172	1.000	
634.0	631.0 - 637.0	8.5	11.0	779 074 179	779 076 179	1.000	
711.2	707.0 - 715.0	7.5	9.5	779 074 197	779 076 197	1.000	
762.0	758.0 - 766.0	7.0	9.0	779 074 210	779 076 210	1.000	
813.0	808.0 - 817.0	6.5	8.5	779 074 223	779 076 223	1.000	
914.4	909.0 - 919.0	6.0	7.5	779 074 245	779 076 245	1.000	
1016.0	1013.0 - 1019.0	5.0	6.5	779 074 271	779 076 271	1.000	

d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]	
326.0	211	65	365	405	
355.6	211	65	395	435	
406.4	211	65	445	485	
429.0	211	65	465	505	
457.2	211	65	495	535	
508.0	211	65	545	585	
531.0	211	65	570	610	
558.8	211	65	595	635	
609.6	211	65	645	685	
634.0	211	65	670	710	
711.2	211	65	750	790	
762.0	211	65	800	840	
813.0	211	65	850	890	
914.4	211	65	950	990	
1016.0	211	65	1055	1095	

PF 1 54 500 145



Grip E d26 up to d100

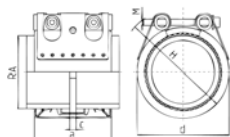
Model:

- All metal parts W2 quality: housing AISI 304, bolts AISI 4140H, lock bars AISI 12 L 14, anchoring ring for metal pipes AISI 301, steel band insert AISI 316 Ti
- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, anchoring ring for metal pipes AISI 301, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket Ø <170 mm -30°C – 125°C and Ø >180 mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	NBR W2 Code	EPDM W2 Code	NBR W5 Code	
26.9	26.4 - 27.5	16.0	64.0	779 413 001	779 416 001	779 421 001	
28.0	27.5 - 28.5	16.0	64.0	779 413 002	779 416 002	779 421 002	
30.0	29.5 - 30.6	16.0	64.0	779 413 003	779 416 003	779 421 003	
33.7	33.0 - 34.3	16.0	64.0	779 413 005	779 416 005	779 421 005	
35.0	34.5 - 35.6	16.0	40.0	779 413 006	779 416 006	779 421 006	
38.0	37.5 - 38.6	16.0	40.0	779 413 007	779 416 007	779 421 007	
42.4	41.7 - 43.0	16.0	40.0	779 413 009	779 416 009	779 421 009	
44.5	44.0 - 45.1	16.0	40.0	779 413 010	779 416 010	779 421 010	
48.3	47.6 - 50.5	16.0	40.0	779 413 011	779 416 011	779 421 011	
54.0	53.3 - 54.6	16.0	40.0	779 413 014	779 416 014	779 421 014	
57.0	56.3 - 57.7	16.0	40.0	779 413 015	779 416 015	779 421 015	
60.3	59.5 - 61.0	16.0	40.0	779 413 016	779 416 016	779 421 016	
63.0	62.2 - 63.9	16.0	36.0	779 413 017	779 416 017	779 421 017	
70.0	69.0 - 71.0	16.0	36.0	779 413 018	779 416 018	779 421 018	
73.0	72.1 - 73.8	16.0	36.0	779 413 019	779 416 019	779 421 019	
76.1	75.2 - 77.0	16.0	36.0	779 413 020	779 416 020	779 421 020	
78.0	77.1 - 78.9	16.0	36.0	779 413 021	779 416 021	779 421 021	
80.0	79.0 - 80.8	16.0	32.0	779 413 022	779 416 022	779 421 022	
84.0	83.0 - 85.0	16.0	32.0	779 413 024	779 416 024	779 421 024	
88.9	87.0 - 89.9	16.0	32.0	779 413 025	779 416 025	779 421 025	
98.0	96.9 - 99.0	16.0	30.0	779 413 028	779 416 028	779 421 028	

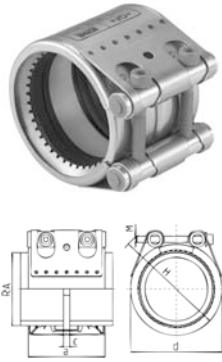
d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	EPDM W5 Code	kg	
26.9	26.4 - 27.5	16.0	64.0	779 424 001	0.320	
28.0	27.5 - 28.5	16.0	64.0	779 424 002	0.160	
30.0	29.5 - 30.6	16.0	64.0	779 424 003	0.180	
33.7	33.0 - 34.3	16.0	64.0	779 424 005	0.320	
35.0	34.5 - 35.6	16.0	40.0	779 424 006	0.430	
38.0	37.5 - 38.6	16.0	40.0	779 424 007	0.430	
42.4	41.7 - 43.0	16.0	40.0	779 424 009	0.440	
44.5	44.0 - 45.1	16.0	40.0	779 424 010	0.460	
48.3	47.6 - 50.5	16.0	40.0	779 424 011	0.470	
54.0	53.3 - 54.6	16.0	40.0	779 424 014	0.610	
57.0	56.3 - 57.7	16.0	40.0	779 424 015	0.620	
60.3	59.5 - 61.0	16.0	40.0	779 424 016	0.630	
63.0	62.2 - 63.9	16.0	36.0	779 424 017	0.800	
70.0	69.0 - 71.0	16.0	36.0	779 424 018	1.000	
73.0	72.1 - 73.8	16.0	36.0	779 424 019	1.250	
76.1	75.2 - 77.0	16.0	36.0	779 424 020	1.250	
78.0	77.1 - 78.9	16.0	36.0	779 424 021	1.250	
80.0	79.0 - 80.8	16.0	32.0	779 424 022	1.250	
84.0	83.0 - 85.0	16.0	32.0	779 424 024	1.270	
88.9	87.0 - 89.9	16.0	32.0	779 424 025	1.290	
98.0	96.9 - 99.0	16.0	30.0	779 424 028	1.450	

table continued next page



d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]	
26.9	67	3	50	70	
28.0	67	3	50	70	
30.0	67	3	50	70	
33.7	67	3	55	75	
35.0	63	8	55	75	
38.0	63	8	60	80	
42.4	63	8	65	85	
44.5	63	8	65	85	
48.3	63	8	70	90	
54.0	78	17	75	95	
57.0	78	17	80	100	
60.3	78	17	85	105	
63.0	78	17	85	105	
70.0	98	25	90	110	
73.0	98	25	95	115	
76.1	98	25	100	120	
78.0	98	25	100	120	
80.0	98	25	100	120	
84.0	98	25	105	125	
88.9	98	25	110	130	
98.0	98	25	120	140	

PF 1 54 507 125



Grip E d101 up to d250

Model:

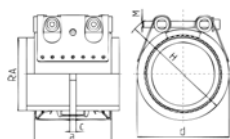
- All metal parts W2 quality: housing AISI 304, bolts AISI 4140H, lock bars AISI 12 L 14, anchoring ring for metal pipes AISI 301, steel band insert AISI 316 Ti
- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, anchoring ring for metal pipes AISI 301, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket Ø <170 mm -30°C – 125°C and Ø >180 mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	NBR W2 Code	EPDM W2 Code	NBR W5 Code
101.6	100.4 - 102.8	16.0	30.0	779 413 029	779 416 029	779 421 029
104.0	102.8 - 106.1	16.0	30.0	779 413 030	779 416 030	779 421 030
108.0	106.8 - 109.2	16.0	30.0	779 413 032	779 416 032	779 421 032
110.0	108.8 - 111.4	16.0	30.0	779 413 328	779 416 328	779 421 328
114.3	113.0 - 115.5	16.0	30.0	779 413 033	779 416 033	779 421 033
129.0	127.6 - 131.1	16.0	30.0	779 413 038	779 416 038	779 421 038
133.0	131.5 - 134.4	16.0	30.0	779 413 039	779 416 039	779 421 039
139.7	138.1 - 141.6	16.0	30.0	779 413 040	779 416 040	779 421 040
141.3	139.6 - 142.8	16.0	30.0	779 413 041	779 416 041	779 421 041
154.0	152.3 - 156.1	16.0	20.0	779 413 045	779 416 045	779 421 045
159.0	157.3 - 160.7	16.0	20.0	779 413 046	779 416 046	779 421 046
168.3	166.5 - 170.1	16.0	20.0	779 413 050	779 416 050	779 421 050
206.0	202.0 - 208.0	10.0	16.0	779 413 060	779 416 060	779 421 060
219.1	216.0 - 221.0	10.0	16.0	779 413 063	779 416 063	779 421 063
225.0	222.0 - 227.0	10.0	16.0	779 413 065	779 416 065	779 421 065
229.9	228.0 - 232.0	10.0	16.0	779 413 066	779 416 066	779 421 066
244.5	242.0 - 247.0	5.5	8.8	779 413 070	779 416 070	779 421 070

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	EPDM W5 Code	kg
101.6	100.4 - 102.8	16.0	30.0	779 424 029	1.450
104.0	102.8 - 106.1	16.0	30.0	779 424 030	1.450
108.0	106.8 - 109.2	16.0	30.0	779 424 032	1.460
110.0	108.8 - 111.4	16.0	30.0	779 424 328	1.300
114.3	113.0 - 115.5	16.0	30.0	779 424 033	1.500
129.0	127.6 - 131.1	16.0	30.0	779 424 038	2.220
133.0	131.5 - 134.4	16.0	30.0	779 424 039	2.240
139.7	138.1 - 141.6	16.0	30.0	779 424 040	2.260
141.3	139.6 - 142.8	16.0	30.0	779 424 041	2.260
154.0	152.3 - 156.1	16.0	20.0	779 424 045	2.440
159.0	157.3 - 160.7	16.0	20.0	779 424 046	2.530
168.3	166.5 - 170.1	16.0	20.0	779 424 050	2.580
206.0	202.0 - 208.0	10.0	16.0	779 424 060	4.600
219.1	216.0 - 221.0	10.0	16.0	779 424 063	5.100
225.0	222.0 - 227.0	10.0	16.0	779 424 065	1.000
229.9	228.0 - 232.0	10.0	16.0	779 424 066	1.000
244.5	242.0 - 247.0	5.5	8.8	779 424 070	4.300

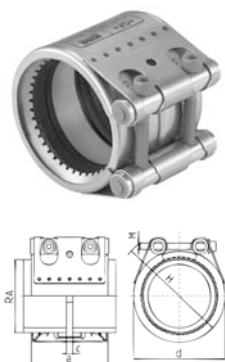
d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]
101.6	98	25	125	145
104.0	98	25	125	145
108.0	98	25	130	150
110.0	98	25	130	150
114.3	98	25	135	155

table continued next page



d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]	
129.0	115	35	155	185	
133.0	115	35	160	190	
139.7	115	35	165	195	
141.3	115	35	170	200	
154.0	115	35	180	210	
159.0	115	35	185	215	
168.3	115	35	195	225	
206.0	141	35	240	270	
219.1	141	35	250	280	
225.0	140	35	255	285	
229.9	140	35	260	290	
244.5	140	35	275	305	

PF 1 54 507 122



Grip E d251 up to d613

Model:

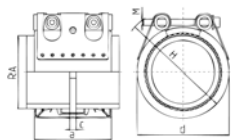
- All metal parts W2 quality: housing AISI 304, bolts AISI 4140H, lock bars AISI 12 L 14, anchoring ring for metal pipes AISI 301, steel band insert AISI 316 Ti
- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, anchoring ring for metal pipes AISI 301, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket Ø <170 mm -30°C – 125°C and Ø >180 mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	NBR W2 Code	EPDM W2 Code	NBR W5 Code
254.0	250.0 - 256.0	5.5	8.8	779 413 073	779 416 073	779 421 073
267.0	264.0 - 269.0	5.5	8.8	779 413 076	779 416 076	779 421 076
273.0	270.0 - 275.0	5.5	8.8	779 413 078	779 416 078	779 421 078
306.0	302.0 - 308.0	5.5	8.8	779 413 085	779 416 085	779 421 085
323.9	320.0 - 327.0	3.0	4.8	779 413 091	779 416 091	779 421 091
326.0	322.0 - 329.0	3.0	4.8	779 413 092	779 416 092	779 421 092
355.6	352.0 - 359.0	2.7	4.3	779 413 102	779 416 102	779 421 102
406.4	402.0 - 410.0	2.5	4.0	779 413 116	779 416 116	779 421 116
429.0	426.0 - 431.0	2.5	4.0	779 413 124	779 416 124	779 421 124
457.2	454.0 - 459.0	2.5	4.0	779 413 131	779 416 131	779 421 131
508.0	505.0 - 510.0	2.0	3.2	779 413 145	779 416 145	779 421 145
531.0	528.0 - 534.0	1.5	2.4	779 413 152	779 416 152	779 421 152
558.8	556.0 - 562.0	1.5	2.4	779 413 159	779 416 159	779 421 159
609.6	606.0 - 613.0	1.0	1.6	779 413 172	779 416 172	779 421 172

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	EPDM W5 Code	kg
254.0	250.0 - 256.0	5.5	8.8	779 424 073	5.500
267.0	264.0 - 269.0	5.5	8.8	779 424 076	5.600
273.0	270.0 - 275.0	5.5	8.8	779 424 078	5.800
306.0	302.0 - 308.0	5.5	8.8	779 424 085	16.900
323.9	320.0 - 327.0	3.0	4.8	779 424 091	6.100
326.0	322.0 - 329.0	3.0	4.8	779 424 092	1.000
355.6	352.0 - 359.0	2.7	4.3	779 424 102	6.600
406.4	402.0 - 410.0	2.5	4.0	779 424 116	7.100
429.0	426.0 - 431.0	2.5	4.0	779 424 124	1.000
457.2	454.0 - 459.0	2.5	4.0	779 424 131	8.200
508.0	505.0 - 510.0	2.0	3.2	779 424 145	8.800
531.0	528.0 - 534.0	1.5	2.4	779 424 152	1.000
558.8	556.0 - 562.0	1.5	2.4	779 424 159	1.000
609.6	606.0 - 613.0	1.0	1.6	779 424 172	10.900

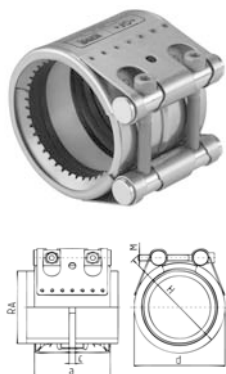
d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]
254.0	140	35	285	315
267.0	140	35	300	330
273.0	140	35	305	335
306.0	140	35	340	370
323.9	140	35	355	385
326.0	140	35	360	390
355.6	140	35	390	420
406.4	140	35	440	470
429.0	140	35	460	490
457.2	140	35	490	520

table continued next page



PF 1 54 507 125

d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]	
508.0	140	35	540	570	
531.0	140	35	565	595	
558.8	140	35	590	620	
609.6	140	35	640	670	



Grip d26 up to d100

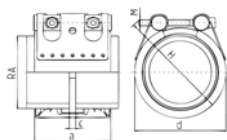
Model:

- All metal parts W2 quality: housing AISI 304, bolts AISI 4140H, lock bars AISI 12 L 14, anchoring ring for metal pipes AISI 301, steel band insert AISI 316 Ti
- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, anchoring ring for metal pipes AISI 301, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket Ø <170 mm -30°C – 125°C and Ø >180 mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	NBR W2 Code	EPDM W2 Code	NBR W5 Code	
26.9	26.5 - 27.5	16.0	64.0	779 401 001	779 404 001	779 409 001	
28.0	27.5 - 28.5	16.0	64.0	779 401 002	779 404 002	779 409 002	
30.0	29.5 - 30.6	16.0	64.0	779 401 003	779 404 003	779 409 003	
33.7	33.0 - 34.3	16.0	64.0	779 401 005	779 404 005	779 409 005	
35.0	34.5 - 35.6	16.0	40.0	779 401 006	779 404 006	779 409 006	
38.0	37.5 - 38.6	16.0	40.0	779 401 007	779 404 007	779 409 007	
42.4	41.7 - 43.0	16.0	40.0	779 401 009	779 404 009	779 409 009	
44.5	44.0 - 45.1	16.0	40.0	779 401 010	779 404 010	779 409 010	
48.3	47.6 - 50.5	16.0	40.0	779 401 011	779 404 011	779 409 011	
54.0	53.3 - 54.6	16.0	40.0	779 401 014	779 404 014	779 409 014	
57.0	56.3 - 57.7	16.0	40.0	779 401 015	779 404 015	779 409 015	
60.3	59.5 - 61.0	16.0	40.0	779 401 016	779 404 016	779 409 016	
63.0	62.2 - 63.9	16.0	36.0	779 401 017	779 404 017	779 409 017	
70.0	69.0 - 71.0	16.0	36.0	779 401 018	779 404 018	779 409 018	
73.0	72.1 - 73.8	16.0	36.0	779 401 019	779 404 019	779 409 019	
76.1	75.2 - 77.0	16.0	36.0	779 401 020	779 404 020	779 409 020	
78.0	77.1 - 78.9	16.0	36.0	779 401 021	779 404 021	779 409 021	
80.0	79.0 - 80.8	16.0	32.0	779 401 022	779 404 022	779 409 022	
84.0	83.0 - 85.0	16.0	32.0	779 401 024	779 404 024	779 409 024	
88.9	87.0 - 89.9	16.0	32.0	779 401 025	779 404 025	779 409 025	
98.0	96.9 - 99.0	16.0	30.0	779 401 028	779 404 028	779 409 028	

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	EPDM W5 Code	kg	
26.9	26.5 - 27.5	16.0	64.0	779 412 001	0.400	
28.0	27.5 - 28.5	16.0	64.0	779 412 002	0.400	
30.0	29.5 - 30.6	16.0	64.0	779 412 003	0.400	
33.7	33.0 - 34.3	16.0	64.0	779 412 005	0.400	
35.0	34.5 - 35.6	16.0	40.0	779 412 006	0.540	
38.0	37.5 - 38.6	16.0	40.0	779 412 007	0.540	
42.4	41.7 - 43.0	16.0	40.0	779 412 009	0.550	
44.5	44.0 - 45.1	16.0	40.0	779 412 010	0.560	
48.3	47.6 - 50.5	16.0	40.0	779 412 011	0.580	
54.0	53.3 - 54.6	16.0	40.0	779 412 014	0.750	
57.0	56.3 - 57.7	16.0	40.0	779 412 015	0.760	
60.3	59.5 - 61.0	16.0	40.0	779 412 016	0.770	
63.0	62.2 - 63.9	16.0	36.0	779 412 017	1.000	
70.0	69.0 - 71.0	16.0	36.0	779 412 018	1.000	
73.0	72.1 - 73.8	16.0	36.0	779 412 019	1.400	
76.1	75.2 - 77.0	16.0	36.0	779 412 020	1.400	
78.0	77.1 - 78.9	16.0	36.0	779 412 021	1.400	
80.0	79.0 - 80.8	16.0	32.0	779 412 022	1.000	
84.0	83.0 - 85.0	16.0	32.0	779 412 024	1.460	
88.9	87.0 - 89.9	16.0	32.0	779 412 025	1.480	
98.0	96.9 - 99.0	16.0	30.0	779 412 028	1.600	

table continued next page



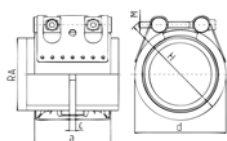
d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]
26.9	67	3	50	70
28.0	67	3	50	70
30.0	67	3	50	70
33.7	67	3	55	75
35.0	63	8	55	75
38.0	63	8	60	80
42.4	63	8	65	85
44.5	63	8	65	85
48.3	63	8	70	90
54.0	78	17	75	95
57.0	78	17	80	100
60.3	78	17	85	105
63.0				
70.0				
73.0	98	25	95	115
76.1	98	25	100	120
78.0	98	25	100	120
80.0				
84.0	98	25	105	125
88.9	98	25	110	130
98.0	98	25	120	140

PF 1 54 507 112

Grip d101 up to d250

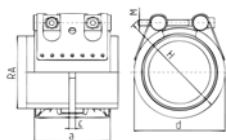
Model:

- All metal parts W2 quality: housing AISI 304, bolts AISI 4140H, lock bars AISI 12 L 14, anchoring ring for metal pipes AISI 301, steel band insert AISI 316 Ti
- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, anchoring ring for metal pipes AISI 301, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket $\varnothing < 170$ mm -30°C – 125°C and $\varnothing > 180$ mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request



d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	NBR W2 Code	EPDM W2 Code	NBR W5 Code
101.6	100.4 - 102.8	16.0	30.0	779 401 029	779 404 029	779 409 029
104.0	102.8 - 106.1	16.0	30.0	779 401 030	779 404 030	779 409 030
108.0	106.8 - 109.2	13.0	30.0	779 401 032	779 404 032	779 409 032
110.0	108.8 - 111.4	16.0	30.0	779 401 328	779 404 328	779 409 328
114.3	113.0 - 115.5	16.0	30.0	779 401 033	779 404 033	779 409 033
129.0	127.6 - 131.1	16.0	30.0	779 401 038	779 404 038	779 409 038
133.0	131.5 - 134.4	16.0	30.0	779 401 039	779 404 039	779 409 039
139.7	138.1 - 141.6	16.0	30.0	779 401 040	779 404 040	779 409 040
141.3	139.6 - 142.8	16.0	30.0	779 401 041	779 404 041	779 409 041
154.0	152.3 - 156.1	16.0	20.0	779 401 045	779 404 045	779 409 045
159.0	157.3 - 160.7	16.0	20.0	779 401 046	779 404 046	779 409 046
168.3	166.5 - 170.1	16.0	20.0	779 401 050	779 404 050	779 409 050
206.0	202.0 - 208.0	16.0	22.0	779 401 060	779 404 060	779 409 060
219.1	216.0 - 221.0	16.0	20.0	779 401 063	779 404 063	779 409 063
225.0	222.0 - 228.0	13.0	21.0	779 401 065	779 404 065	779 409 065
229.9	227.0 - 232.0	11.5	18.0	779 401 066	779 404 066	779 409 066
244.5	242.0 - 247.0	11.5	18.0	779 401 070	779 404 070	779 409 070

table continued next page



d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	EPDM W5 Code	kg	
101.6	100.4 - 102.8	16.0	30.0	779 412 029	1.600	
104.0	102.8 - 106.1	16.0	30.0	779 412 030	1.630	
108.0	106.8 - 109.2	13.0	30.0	779 412 032	1.650	
110.0	108.8 - 111.4	16.0	30.0	779 412 328	1.000	
114.3	113.0 - 115.5	16.0	30.0	779 412 033	1.700	
129.0	127.6 - 131.1	16.0	30.0	779 412 038	2.410	
133.0	131.5 - 134.4	16.0	30.0	779 412 039	2.440	
139.7	138.1 - 141.6	16.0	30.0	779 412 040	2.450	
141.3	139.6 - 142.8	16.0	30.0	779 412 041	2.450	
154.0	152.3 - 156.1	16.0	20.0	779 412 045	2.640	
159.0	157.3 - 160.7	16.0	20.0	779 412 046	2.690	
168.3	166.5 - 170.1	16.0	20.0	779 412 050	2.750	
206.0	202.0 - 208.0	16.0	22.0	779 412 060	6.500	
219.1	216.0 - 221.0	16.0	20.0	779 412 063	6.500	
225.0	222.0 - 228.0	13.0	21.0	779 412 065	1.000	
229.9	227.0 - 232.0	11.5	18.0	779 412 066	1.000	
244.5	242.0 - 247.0	11.5	18.0	779 412 070	1.000	

d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]	
101.6	98	25	125	145	
104.0	98	25	125	145	
108.0	98	25	130	150	
110.0	98	25	130	150	
114.3	98	25	135	155	
129.0	115	35	155	185	
133.0	115	35	160	190	
139.7	115	35	165	195	
141.3	115	35	170	200	
154.0	115	35	180	210	
159.0	115	35	185	215	
168.3	115	35	195	225	
206.0	142	35	240	270	
219.1	142	35	250	280	
225.0	142	35	255	285	
229.9	142	35	260	290	
244.5	142	35	275	305	

PF 1 54 507 112

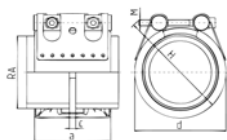
Grip d251 up to d711

Model:

- All metal parts W2 quality: housing AISI 304, bolts AISI 4140H, lock bars AISI 12 L 14, anchoring ring for metal pipes AISI 301, steel band insert AISI 316 Ti
- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, anchoring ring for metal pipes AISI 301, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket Ø <170 mm -30°C – 125°C and Ø >180 mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	NBR W2 Code	EPDM W2 Code	NBR W5 Code	
252.5	250.0 - 256.0	10.5	17.5	779 401 073	779 404 073	779 409 073	
267.0	264.0 - 269.0	10.5	17.5	779 401 076	779 404 076	779 409 076	
273.0	270.0 - 275.0	10.0	16.0	779 401 078	779 404 078	779 409 078	
306.0	302.0 - 308.0	8.0	13.0	779 401 085	779 404 085	779 409 085	
323.9	320.0 - 327.0	7.0	11.0	779 401 091	779 404 091	779 409 091	

table continued next page

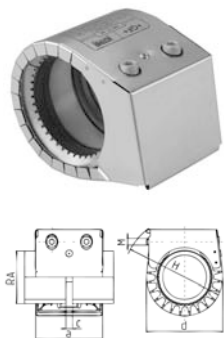


d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	NBR W2 Code	EPDM W2 Code	NBR W5 Code	
326.0	322.0 - 329.0	7.0	11.0	779 401 092	779 404 092	779 409 092	
355.6	352.0 - 359.0	5.5	9.0	779 401 102	779 404 102	779 409 102	
406.4	402.0 - 410.0	4.5	7.2	779 401 116	779 404 116	779 409 116	
429.0	426.0 - 431.0	4.5	7.2	779 401 124	779 404 124	779 409 124	
457.2	454.0 - 459.0	3.5	5.6	779 401 131	779 404 131	779 409 131	
508.0	505.0 - 510.0	3.5	5.6	779 401 145	779 404 145	779 409 145	
531.0	528.0 - 534.0	3.5	5.6	779 401 152	779 404 152	779 409 152	
558.8	556.0 - 562.0	3.0	4.8	779 401 159	779 404 159	779 409 159	
609.6	606.0 - 613.0	3.0	4.8	779 401 172	779 404 172	779 409 172	
634.0	631.0 - 637.0	3.0	4.8	779 401 179	779 404 179	779 409 179	
711.2	707.0 - 715.0	2.5	4.0	779 401 197	779 404 197	779 409 197	

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	EPDM W5 Code	kg	
252.5	250.0 - 256.0	10.5	17.5	779 412 073	1.000	
267.0	264.0 - 269.0	10.5	17.5	779 412 076	7.900	
273.0	270.0 - 275.0	10.0	16.0	779 412 078	8.000	
306.0	302.0 - 308.0	8.0	13.0	779 412 085	10.000	
323.9	320.0 - 327.0	7.0	11.0	779 412 091	9.500	
326.0	322.0 - 329.0	7.0	11.0	779 412 092	1.000	
355.6	352.0 - 359.0	5.5	9.0	779 412 102	10.800	
406.4	402.0 - 410.0	4.5	7.2	779 412 116	12.000	
429.0	426.0 - 431.0	4.5	7.2	779 412 124	12.700	
457.2	454.0 - 459.0	3.5	5.6	779 412 131	8.100	
508.0	505.0 - 510.0	3.5	5.6	779 412 145	15.000	
531.0	528.0 - 534.0	3.5	5.6	779 412 152	15.700	
558.8	556.0 - 562.0	3.0	4.8	779 412 159	1.000	
609.6	606.0 - 613.0	3.0	4.8	779 412 172	9.800	
634.0	631.0 - 637.0	3.0	4.8	779 412 179	1.000	
711.2	707.0 - 715.0	2.5	4.0	779 412 197	21.000	

d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]	
252.5	142	35	285	315	
267.0	142	35	300	330	
273.0	142	35	305	335	
306.0	142	35	340	370	
323.9	142	35	355	385	
326.0	142	35	360	390	
355.6	142	35	390	420	
406.4	142	35	440	470	
429.0	142	35	460	490	
457.2	142	35	490	520	
508.0	142	35	540	570	
531.0	142	35	565	595	
558.8	142	35	590	620	
609.6	142	35	640	670	
634.0	142	35	665	695	
711.2	142	35	745	775	

PF 1 54 507 112



Grip FP E d35 up to d168

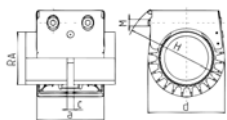
Model:

- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, anchoring ring for metal pipes AISI 301, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket Ø <170 mm -30°C – 125°C and Ø >180 mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	NBR W5 Code	EPDM W5 Code	kg
35.0	34.5 - 35.6	10.0	35.0	779 570 006	779 573 006	0.430
38.0	37.5 - 38.6	10.0	35.0	779 570 007	779 573 007	0.430
42.4	41.7 - 43.0	10.0	35.0	779 570 009	779 573 009	0.440
44.5	44.0 - 45.1	10.0	35.0	779 570 010	779 573 010	0.460
48.3	47.6 - 50.5	10.0	35.0	779 570 011	779 573 011	0.470
54.0	53.3 - 54.6	16.0	50.0	779 570 014	779 573 014	0.610
57.0	56.3 - 57.7	16.0	50.0	779 570 015	779 573 015	0.620
60.3	59.5 - 61.0	16.0	40.0	779 570 016	779 573 016	0.770
63.0	62.2 - 63.9	16.0	40.0	779 570 017	779 573 017	1.000
73.0	72.1 - 73.8	16.0	40.0	779 570 019	779 573 019	1.250
76.1	75.2 - 77.0	16.0	35.0	779 570 020	779 573 020	1.400
84.0	83.0 - 85.0	16.0	35.0	779 570 024	779 573 024	1.270
88.9	87.0 - 89.9	16.0	35.0	779 570 025	779 573 025	1.480
98.0	96.6 - 99.0	16.0	35.0	779 570 028	779 573 028	1.450
101.6	100.4 - 102.8	16.0	35.0	779 570 029	779 573 029	1.450
104.0	102.8 - 106.1	16.0	35.0	779 570 030	779 573 030	1.430
108.0	106.8 - 109.2	16.0	35.0	779 570 032	779 573 032	1.650
114.3	113.0 - 115.5	16.0	35.0	779 570 033	779 573 033	1.700
129.0	127.6 - 131.1	16.0	32.0	779 570 038	779 573 038	2.220
133.0	131.5 - 134.4	16.0	32.0	779 570 039	779 573 039	2.240
139.7	138.1 - 141.6	16.0	32.0	779 570 040	779 573 040	2.450
141.3	139.6 - 142.8	16.0	32.0	779 570 041	779 573 041	2.260
154.0	152.3 - 156.1	16.0	32.0	779 570 045	779 573 045	2.440
159.0	157.3 - 160.7	16.0	32.0	779 570 046	779 573 046	2.530
168.3	166.5 - 170.1	16.0	32.0	779 570 050	779 573 050	2.580

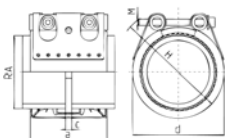
d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]
35.0	75	8	65	115
38.0	75	8	70	120
42.4	75	8	75	125
44.5	75	8	75	125
48.3	75	8	80	130
54.0	90	17	85	135
57.0	90	17	90	140
60.3	90	17	95	145
63.0	90	17	95	145
73.0	110	25	105	155
76.1	110	25	110	160
84.0	110	25	115	165
88.9	110	25	120	170
98.0	110	25	130	180
101.6	110	25	135	185
104.0	110	25	135	185
108.0	110	25	140	190
114.3	110	25	145	195
129.0	125	35	165	215
133.0	125	35	170	220

table continued next page



PF 1 54 507 185

d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]	
139.7	125	35	175	225	
141.3	125	35	180	230	
154.0	125	35	190	240	
159.0	125	35	195	245	
168.3	125	35	205	255	



Combi Grip E d40 up to d160

Model:

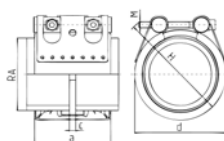
- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, anchoring ring for metal pipes AISI 301, anchoring ring for plastic pipes PA-GF brass, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket Ø <170 mm -30°C – 125°C and Ø >180 mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.
- Other dimensions available on request

d [mm]	Range plastic [mm]	d [mm]	Range metal [mm]	PN [bar]	Operating pressure P max. [bar]	NBR W5 Code	
40.0	39.0 - 40.5	38.0	37.5 - 38.6	16.0	20.0	779 537 007	
40.0	39.0 - 40.5	42.4	41.7 - 43.0	16.0	20.0	779 537 009	
50.0	49.0 - 50.5	48.3	47.6 - 50.5	16.0	20.0	779 537 011	
63.0	62.0 - 63.5	60.3	59.5 - 61.0	16.0	20.0	779 537 016	
75.0	74.0 - 76.0	76.1	75.2 - 77.0	16.0	20.0	779 537 020	
90.0	89.0 - 91.0	88.9	87.0 - 89.9	16.0	20.0	779 537 025	
110.0	108.0 - 111.0	108.0	107.0 - 109.0	16.0	20.0	779 537 032	
110.0	108.0 - 111.0	114.3	113.0 - 116.0	16.0	20.0	779 537 501	
114.3	113.0 - 115.5	114.3	113.0 - 115.5	16.0	20.0	779 537 033	
125.0	123.0 - 126.0	129.0	127.0 - 131.0	16.0	20.0	779 537 038	
140.0	138.0 - 142.0	139.7	138.0 - 141.0	16.0	20.0	779 537 040	
160.0	158.0 - 162.0	159.0	158.0 - 161.0	16.0	20.0	779 537 046	

d [mm]	Range plastic [mm]	d [mm]	Range metal [mm]	PN [bar]	Operating pressure P max. [bar]	EPDM W5 Code	kg	
40.0	39.0 - 40.5	38.0	37.5 - 38.6	16.0	20.0	779 540 007	0.480	
40.0	39.0 - 40.5	42.4	41.7 - 43.0	16.0	20.0	779 540 009	0.480	
50.0	49.0 - 50.5	48.3	47.6 - 50.5	16.0	20.0	779 540 011	0.530	
63.0	62.0 - 63.5	60.3	59.5 - 61.0	16.0	20.0	779 540 016	0.670	
75.0	74.0 - 76.0	76.1	75.2 - 77.0	16.0	20.0	779 540 020	1.300	
90.0	89.0 - 91.0	88.9	87.0 - 89.9	16.0	20.0	779 540 025	1.400	
110.0	108.0 - 111.0	108.0	107.0 - 109.0	16.0	20.0	779 540 032	1.600	
110.0	108.0 - 111.0	114.3	113.0 - 116.0	16.0	20.0	779 540 501	1.600	
114.3	113.0 - 115.5	114.3	113.0 - 115.5	16.0	20.0	779 540 033	1.000	
125.0	123.0 - 126.0	129.0	127.0 - 131.0	16.0	20.0	779 540 038	3.000	
140.0	138.0 - 142.0	139.7	138.0 - 141.0	16.0	20.0	779 540 040	3.200	
160.0	158.0 - 162.0	159.0	158.0 - 161.0	16.0	20.0	779 540 046	3.500	

d [mm]	Range plastic [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]	
40.0	39.0 - 40.5	62	8	60	80	
40.0	39.0 - 40.5	62	8	65	85	
50.0	49.0 - 50.5	62	8	70	90	
63.0	62.0 - 63.5	78	17	85	105	
75.0	74.0 - 76.0	98	25	100	120	
90.0	89.0 - 91.0	98	25	110	130	
110.0	108.0 - 111.0	98	25	130	150	
110.0	108.0 - 111.0	98	25	135	155	
114.3	113.0 - 115.5	98	25	135	155	
125.0	123.0 - 126.0	115	35	150	170	
140.0	138.0 - 142.0	115	35	160	180	
160.0	158.0 - 162.0	115	35	180	210	

PF 1 54 507 145



Combi Grip d40 up to d400

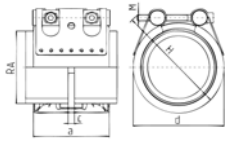
Model:

- All metal parts W2 quality: housing AISI 304, bolts AISI 4140H, lock bars AISI 12 L 14, anchoring rings for metal or plastic pipes PA-GF brass, steel band insert AISI 316 Ti
- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, anchoring ring for metal pipes AISI 301, anchoring ring for plastic pipes PA-GF brass, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket $\varnothing < 170$ mm -30°C – 125°C and $\varnothing > 180$ mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request

d [mm]	Range plastic [mm]	d [mm]	Range metal [mm]	PN [bar]	Operating pressure P max. [bar]	NBR W2 Code	EPDM W2 Code
40.0	39.0 - 40.5	39.0	37.5 - 38.6	16.0	20.0	779 513 007	779 516 007
40.0	39.0 - 40.5	42.4	41.7 - 43.0	16.0	20.0	779 513 009	779 516 009
50.0	49.0 - 50.5	48.3	47.6 - 50.5	16.0	20.0	779 513 011	779 516 011
63.0	62.0 - 63.5	60.3	59.5 - 61.0	16.0	20.0	779 513 016	779 516 016
75.0	74.0 - 76.0	76.1	75.2 - 77.0	16.0	20.0	779 513 020	779 516 020
90.0	89.0 - 91.0	88.9	87.0 - 89.9	16.0	20.0	779 513 025	779 516 025
110.0	109.0 - 111.0	108.0	106.8 - 109.2	16.0	20.0	779 513 032	779 516 032
110.0	109.0 - 111.0	114.3	113.0 - 115.5	16.0	20.0	779 513 501	779 516 501
114.3	113.0 - 115.5	114.3	113.0 - 115.5	16.0	20.0	779 513 033	779 516 033
125.0	123.0 - 126.0	129.0	127.6 - 131.1	16.0	20.0	779 513 038	779 516 038
140.0	138.0 - 142.0	139.7	138.1 - 141.6	16.0	20.0	779 513 040	779 516 040
160.0	158.0 - 162.0	159.0	157.3 - 160.7	16.0	20.0	779 513 046	779 516 046
200.0	198.0 - 202.0	204.0	202.0 - 206.0	16.0	20.0	779 513 329	779 516 329
225.0	222.0 - 227.0	219.1	216.0 - 221.0	10.0	16.0	779 513 064	779 516 064
250.0	247.0 - 253.0	254.0	250.0 - 256.0	10.0	15.0	779 513 073	779 516 073
280.0	277.0 - 283.0	273.0	270.0 - 275.0	10.0	13.0	779 513 079	779 516 079
355.0	351.0 - 359.0	355.6	352.0 - 359.0	6.0	7.0	779 513 102	779 516 102
400.0	396.0 - 404.0	406.4	402.0 - 410.0	6.0	7.0	779 513 116	779 516 116

d [mm]	Range plastic [mm]	d [mm]	Range metal [mm]	PN [bar]	Operating pressure P max. [bar]	NBR W5 Code	
40.0	39.0 - 40.5	39.0	37.5 - 38.6	16.0	20.0	779 522 007	
40.0	39.0 - 40.5	42.4	41.7 - 43.0	16.0	20.0	779 522 009	
50.0	49.0 - 50.5	48.3	47.6 - 50.5	16.0	20.0	779 522 011	
63.0	62.0 - 63.5	60.3	59.5 - 61.0	16.0	20.0	779 522 016	
75.0	74.0 - 76.0	76.1	75.2 - 77.0	16.0	20.0	779 522 020	
90.0	89.0 - 91.0	88.9	87.0 - 89.9	16.0	20.0	779 522 025	
110.0	109.0 - 111.0	108.0	106.8 - 109.2	16.0	20.0	779 522 032	
110.0	109.0 - 111.0	114.3	113.0 - 115.5	16.0	20.0	779 522 501	
114.3	113.0 - 115.5	114.3	113.0 - 115.5	16.0	20.0	779 522 033	
125.0	123.0 - 126.0	129.0	127.6 - 131.1	16.0	20.0	779 522 038	
140.0	138.0 - 142.0	139.7	138.1 - 141.6	16.0	20.0	779 522 040	
160.0	158.0 - 162.0	159.0	157.3 - 160.7	16.0	20.0	779 522 046	
200.0	198.0 - 202.0	204.0	202.0 - 206.0	16.0	20.0	779 522 329	
225.0	222.0 - 227.0	219.1	216.0 - 221.0	10.0	16.0	779 522 064	
250.0	247.0 - 253.0	254.0	250.0 - 256.0	10.0	15.0	779 522 073	
280.0	277.0 - 283.0	273.0	270.0 - 275.0	10.0	13.0	779 522 079	
355.0	351.0 - 359.0	355.6	352.0 - 359.0	6.0	7.0	779 522 102	
400.0	396.0 - 404.0	406.4	402.0 - 410.0	6.0	7.0	779 522 116	

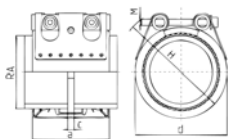
table continued next page



d [mm]	Range plastic [mm]	d [mm]	Range metal [mm]	PN [bar]	Operating pressure P max. [bar]	EPDM W5 Code	kg
40.0	39.0 - 40.5	39.0	37.5 - 38.6	16.0	20.0	779 524 007	1.000
40.0	39.0 - 40.5	42.4	41.7 - 43.0	16.0	20.0	779 524 009	1.000
50.0	49.0 - 50.5	48.3	47.6 - 50.5	16.0	20.0	779 524 011	1.000
63.0	62.0 - 63.5	60.3	59.5 - 61.0	16.0	20.0	779 524 016	1.000
75.0	74.0 - 76.0	76.1	75.2 - 77.0	16.0	20.0	779 524 020	1.000
90.0	89.0 - 91.0	88.9	87.0 - 89.9	16.0	20.0	779 524 025	1.000
110.0	109.0 - 111.0	108.0	106.8 - 109.2	16.0	20.0	779 524 032	1.000
110.0	109.0 - 111.0	114.3	113.0 - 115.5	16.0	20.0	779 524 501	1.000
114.3	113.0 - 115.5	114.3	113.0 - 115.5	16.0	20.0	779 524 033	1.000
125.0	123.0 - 126.0	129.0	127.6 - 131.1	16.0	20.0	779 524 038	1.000
140.0	138.0 - 142.0	139.7	138.1 - 141.6	16.0	20.0	779 524 040	1.000
160.0	158.0 - 162.0	159.0	157.3 - 160.7	16.0	20.0	779 524 046	1.000
200.0	198.0 - 202.0	204.0	202.0 - 206.0	16.0	20.0	779 524 329	6.300
225.0	222.0 - 227.0	219.1	216.0 - 221.0	10.0	16.0	779 524 064	6.800
250.0	247.0 - 253.0	254.0	250.0 - 256.0	10.0	15.0	779 524 073	1.000
280.0	277.0 - 283.0	273.0	270.0 - 275.0	10.0	13.0	779 524 079	8.500
355.0	351.0 - 359.0	355.6	352.0 - 359.0	6.0	7.0	779 524 102	10.800
400.0	396.0 - 404.0	406.4	402.0 - 410.0	6.0	7.0	779 524 116	1.000

d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]
40.0	62	8	60	80
40.0	62	8	60	80
50.0	62	8	70	90
63.0	77	17	85	105
75.0	98	25	95	115
90.0	98	25	110	130
110.0	98	25	130	150
110.0	98	25	135	155
114.3	98	25	135	155
125.0	115	25	150	170
140.0	115	25	160	180
160.0	115	35	180	200
200.0	142	35	235	265
225.0	142	35	255	285
250.0	142	35	285	315
280.0	142	35	310	340
355.0	142	35	390	420
400.0	142	35	440	470

PF 1 54 507 132



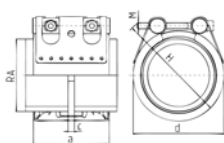
Plast Grip E d40 up to d160

Model:

- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, anchoring ring for plastic pipes PA-GF brass, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket $\varnothing < 170$ mm $-30^{\circ}\text{C} - 125^{\circ}\text{C}$ and $\varnothing > 180$ mm $-20^{\circ}\text{C} - 80^{\circ}\text{C}$; with NBR gasket $-20^{\circ}\text{C} - 80^{\circ}\text{C}$
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- For all plastic pipes, the use of an insert stiffener (see accessories) is advised or in some cases mandatory, check our technical handbook.
- Other dimensions available on request

d [mm]	Range [mm]	PN [bar]	NBR W5 Code	EPDM W5 Code	kg	a [mm]	C max. [mm]	d [mm]	H [mm]
40.0	39.0 - 40.5	16.0	779 529 008	779 532 008	0.480	62	8	60	80
50.0	49.0 - 50.5	16.0	779 529 012	779 532 012	0.530	62	8	70	90
60.3	59.5 - 61.0	16.0	779 529 016	779 532 016	0.670	78	17	85	105
63.0	62.0 - 63.5	16.0	779 529 017	779 532 017	0.670	78	17	85	105
75.0	74.0 - 76.0	16.0	779 529 020	779 532 020	1.300	98	25	100	120
90.0	89.0 - 91.0	16.0	779 529 025	779 532 025	1.400	98	25	110	130
110.0	109.0 - 111.0	16.0	779 529 032	779 532 032	1.600	98	25	130	150
114.3	113.0 - 115.5	16.0	779 529 033	779 532 033	1.000	98	25	135	155
125.0	124.0 - 126.0	16.0	779 529 037	779 532 037	3.000	115	35	150	170
140.0	139.0 - 141.0	16.0	779 529 040	779 532 040	3.200	115	35	160	180
160.0	159.0 - 162.0	16.0	779 529 046	779 532 046	3.500	115	35	180	200

PF 1 54 507 165



Plast Grip d40 up to d140

Model:

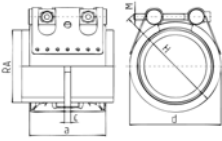
- All metal parts W2 quality: housing AISI 304, bolts AISI 4140H, lock bars AISI 12 L 14, anchoring rings for metal or plastic pipes PA-GF brass, steel band insert AISI 316 Ti
- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, anchoring ring for plastic pipes PA-GF brass, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket Ø <170 mm -30°C – 125°C and Ø >180 mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	NBR W2 Code	EPDM W2 Code	NBR W5 Code	
40.0	39.0 - 40.5	16.0	20.0	779 501 008	779 504 008	779 509 008	
50.0	49.0 - 50.5	16.0	20.0	779 501 012	779 504 012	779 509 012	
63.0	62.0 - 63.5	16.0	20.0	779 501 017	779 504 017	779 509 017	
75.0	74.0 - 76.0	16.0	20.0	779 501 020	779 504 020	779 509 020	
90.0	89.0 - 91.0	16.0	20.0	779 501 025	779 504 025	779 509 025	
110.0	109.0 - 111.0	16.0	20.0	779 501 032	779 504 032	779 509 032	
125.0	124.0 - 126.0	16.0	20.0	779 501 037	779 504 037	779 509 037	
140.0	139.0 - 141.0	16.0	20.0	779 501 040	779 504 040	779 509 040	

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	EPDM W5 Code	kg	
40.0	39.0 - 40.5	16.0	20.0	779 512 008	1.000	
50.0	49.0 - 50.5	16.0	20.0	779 512 012	1.000	
63.0	62.0 - 63.5	16.0	20.0	779 512 017	0.670	
75.0	74.0 - 76.0	16.0	20.0	779 512 020	1.000	
90.0	89.0 - 91.0	16.0	20.0	779 512 025	1.000	
110.0	109.0 - 111.0	16.0	20.0	779 512 032	1.500	
125.0	124.0 - 126.0	16.0	20.0	779 512 037	1.000	
140.0	139.0 - 141.0	16.0	20.0	779 512 040	1.000	

d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]	
40.0	62	8	60	80	
50.0	62	8	70	90	
63.0	78	17	85	105	
75.0	98	25	100	120	
90.0	98	25	110	130	
110.0	98	25	130	150	
125.0	115	35	150	170	
140.0	115	35	160	180	

PF 1 54 507 152



Plast Grip **d160 up to d400**

Model:

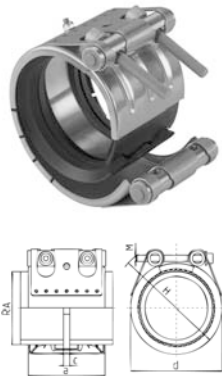
- All metal parts W2 quality: housing AISI 304, bolts AISI 4140H, lock bars AISI 12 L 14, anchoring rings for metal or plastic pipes PA-GF brass, steel band insert AISI 316 Ti
- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, anchoring ring for plastic pipes PA-GF brass, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket Ø <170 mm -30°C – 125°C and Ø >180 mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	NBR W2 Code	EPDM W2 Code	NBR W5 Code	
160.0	159.0 - 162.0	16.0	20.0	779 501 046	779 504 046	779 509 046	
180.0	178.0 - 182.0	16.0	20.0	779 501 054	779 504 054	779 509 054	
200.0	198.0 - 202.0	16.0	20.0	779 501 059	779 504 059	779 509 059	
225.0	222.0 - 227.0	10.0	16.0	779 501 065	779 504 065	779 509 065	
250.0	247.0 - 253.0	10.0	15.0	779 501 071	779 504 071	779 509 071	
280.0	277.0 - 283.0	10.0	13.0	779 501 079	779 504 079	779 509 079	
315.0	311.0 - 318.0	6.0	9.0	779 501 088	779 504 088	779 509 088	
355.0	352.0 - 359.0	6.0	7.0	779 501 102	779 504 102	779 509 102	
400.0	396.0 - 404.0	6.0	7.0	779 501 114	779 504 114	779 509 114	

d [mm]	Range [mm]	PN [bar]	Operating pressure P max. [bar]	EPDM W5 Code	kg	
160.0	159.0 - 162.0	16.0	20.0	779 512 046	1.000	
180.0	178.0 - 182.0	16.0	20.0	779 512 054	6.200	
200.0	198.0 - 202.0	16.0	20.0	779 512 059	6.600	
225.0	222.0 - 227.0	10.0	16.0	779 512 065	7.200	
250.0	247.0 - 253.0	10.0	15.0	779 512 071	7.700	
280.0	277.0 - 283.0	10.0	13.0	779 512 079	9.000	
315.0	311.0 - 318.0	6.0	9.0	779 512 088	10.000	
355.0	352.0 - 359.0	6.0	7.0	779 512 102	10.800	
400.0	396.0 - 404.0	6.0	7.0	779 512 114	11.100	

d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]	
160.0	115	35	180	200	
180.0	142	35	210	240	
200.0	142	35	230	260	
225.0	142	35	255	285	
250.0	142	35	280	310	
280.0	142	35	310	340	
315.0	142	35	345	375	
355.0	142	35	385	415	
400.0	142	35	430	460	

PF 1 54 507 152



Rep E d35 up to d110

Model:

- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket Ø <170 mm -30°C – 125°C and Ø >180 mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request

d [mm]	Range [mm]	PN* [bar]	Operating pressure P max. [bar]	NBR W5 Code	EPDM W5 Code	kg
35.0	34.5 - 35.6	16.0	48.0	779 309 006	779 312 006	0.500
38.0	37.5 - 38.6	16.0	48.0	779 309 007	779 312 007	0.430
42.4	41.7 - 43.0	16.0	48.0	779 309 009	779 312 009	0.550
44.5	44.0 - 45.1	16.0	40.0	779 309 010	779 312 010	0.460
48.3	47.6 - 50.0	16.0	40.0	779 309 011	779 312 011	0.580
54.0	53.3 - 54.6	16.0	40.0	779 309 014	779 312 014	0.750
57.0	56.3 - 57.7	16.0	40.0	779 309 015	779 312 015	0.760
60.3	59.5 - 61.0	16.0	40.0	779 309 016	779 312 016	0.770
63.0	62.2 - 63.9	16.0	36.0	779 309 017	779 312 017	1.000
70.0	69.0 - 71.0	16.0	36.0	779 309 018	779 312 018	1.000
73.0	72.1 - 73.8	16.0	36.0	779 309 019	779 312 019	1.250
76.1	75.2 - 77.0	16.0	36.0	779 309 020	779 312 020	1.400
78.0	77.1 - 78.9	16.0	32.0	779 309 021	779 312 021	1.250
80.0	79.0 - 80.8	16.0	32.0	779 309 022	779 312 022	1.000
84.0	83.0 - 85.0	16.0	32.0	779 309 024	779 312 024	1.460
88.9	87.0 - 89.9	16.0	32.0	779 309 025	779 312 025	1.480
98.0	96.9 - 99.0	16.0	30.0	779 309 028	779 312 028	1.450
101.6	100.4 - 102.8	16.0	30.0	779 309 029	779 312 029	1.450
104.0	102.8 - 106.1	16.0	30.0	779 309 030	779 312 030	1.630
108.0	106.8 - 109.2	16.0	30.0	779 309 032	779 312 032	1.650
110.0	108.8 - 111.4	16.0	30.0	779 309 328	779 312 328	1.460

d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]
35.0	63	8	55	75
38.0	63	8	60	80
42.4	63	8	65	85
44.5	63	8	65	85
48.3	63	8	70	90
54.0	78	17	75	95
57.0	78	17	80	100
60.3	78	17	85	100
63.0	78	17	85	105
70.0	98	25	90	110
73.0	98	25	95	115
76.1	98	25	100	120
78.0	98	25	100	120
80.0	98	25	100	120
84.0	98	25	105	125
88.9	98	25	110	130
98.0	98	25	120	145
101.6	98	25	125	145
104.0	98	25	125	145
108.0	98	25	130	150
110.0	98	25	130	150

PF 1 54 505 115



Rep E d114 up to d245

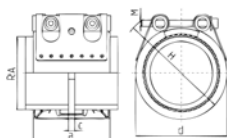
Model:

- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket Ø <170 mm -30°C – 125°C and Ø >180 mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request

d [mm]	Range [mm]	PN* [bar]	Operating pressure P max. [bar]	NBR W5 Code	EPDM W5 Code	kg	
114.3	113.0 - 115.5	16.0	30.0	779 309 033	779 312 033	1.700	
125.0	123.6 - 126.5	16.0	30.0	779 309 037	779 312 037	1.750	
129.0	127.6 - 131.1	16.0	30.0	779 309 038	779 312 038	2.410	
133.0	131.5 - 134.4	16.0	30.0	779 309 039	779 312 039	2.440	
139.7	138.1 - 141.6	16.0	30.0	779 309 040	779 312 040	2.450	
141.3	139.6 - 142.8	16.0	30.0	779 309 041	779 312 041	2.450	
154.0	152.3 - 156.1	16.0	25.0	779 309 045	779 312 045	2.640	
159.0	157.3 - 160.7	16.0	25.0	779 309 046	779 312 046	2.690	
168.3	166.5 - 170.1	16.0	25.0	779 309 050	779 312 050	2.750	
180.0	178.0 - 182.0	13.7	21.9	779 309 054	779 312 054	3.700	
206.0	202.0 - 208.0	13.7	21.9	779 309 060	779 312 060	1.000	
219.1	216.0 - 221.0	13.7	21.9	779 309 063	779 312 063	3.900	
225.0	222.0 - 227.0	12.0	19.2	779 309 065	779 312 065	4.000	
229.9	228.0 - 232.0	12.0	19.2	779 309 066	779 312 066	1.000	
244.5	242.0 - 247.0	12.0	19.2	779 309 070	779 312 070	4.300	

d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]	
114.3	98	25	135	155	
125.0	113	35	145	165	
129.0	113	35	155	185	
133.0	113	35	160	190	
139.7	113	35	165	195	
141.3	113	35	170	200	
154.0	113	35	180	210	
159.0	113	35	185	215	
168.3	113	35	195	225	
180.0	139	35	210	240	
206.0	139	35	240	270	
219.1	139	35	250	280	
225.0	139	35	255	285	
229.9	139	35	260	290	
244.5	139	35	275	305	

PF 1 54 505 115



Rep E d254 up to d1016

Model:

- All metal parts W5 quality: housing AISI 316 Ti, bolts AISI 316 L, lock bars AISI 316, steel band insert AISI 316 Ti
- Gaskets NBR or EPDM
- Temperature range: with EPDM gasket $\varnothing < 170$ mm -30°C – 125°C and $\varnothing > 180$ mm -20°C – 80°C; with NBR gasket -20°C – 80°C
- EPDM for: water, Aqueous acids, alkaline solutions, alcohols, compressed air
- NBR for: water, sea water, mineral oils, lubricants, fuels, gas, compressed air
- Nominal pressure (PN) is meant for ship building purposes; Operating pressure P max is meant for industrial purposes
- Other dimensions available on request

d [mm]	Range [mm]	PN* [bar]	Operating pressure P max. [bar]	NBR W5 Code	EPDM W5 Code	kg	
254.0	250.0 - 256.0	12.0	19.2	779 309 073	779 312 073	4.300	
267.0	264.0 - 269.0	12.0	19.2	779 309 076	779 312 076	7.900	
273.0	270.0 - 275.0	12.0	19.2	779 309 078	779 312 078	4.600	
306.0	302.0 - 308.0	9.0	14.4	779 309 085	779 312 085	4.800	
323.9	320.0 - 327.0	9.0	14.4	779 309 091	779 312 091	5.100	
326.0	322.0 - 329.0	9.0	14.4	779 309 092	779 312 092	1.000	
355.6	352.0 - 359.0	9.0	14.4	779 309 102	779 312 102	5.600	
406.4	402.0 - 410.0	7.5	12.0	779 309 116	779 312 116	4.800	
429.0	426.0 - 431.0	5.5	8.8	779 309 124	779 312 124	1.000	
457.2	454.0 - 459.0	5.5	8.8	779 309 131	779 312 131	6.500	
508.0	505.0 - 510.0	5.5	8.8	779 309 145	779 312 145	7.200	
531.0	528.0 - 534.0	5.0	8.0	779 309 152	779 312 152	5.400	
558.8	556.0 - 562.0	5.0	8.0	779 309 159	779 312 159	7.200	
609.6	606.0 - 613.0	3.5	5.6	779 309 172	779 312 172	7.800	
634.0	631.0 - 637.0	3.5	5.6	779 309 179	779 312 179	1.000	
711.2	707.0 - 715.0	3.5	5.6	779 309 197	779 312 197	8.900	
762.0	758.0 - 766.0	3.0	4.8	779 309 210	779 312 210	1.000	
813.0	808.0 - 817.0	3.0	4.8	779 309 223	779 312 223	9.900	
914.4	909.0 - 919.0	2.0	3.2	779 309 245	779 312 245	10.100	
1016.0	1013.0 - 1019.0	2.0	3.2	779 309 271	779 312 271	1.000	

d [mm]	a [mm]	C max. [mm]	d [mm]	H [mm]	
254.0	139	35	285	315	
267.0	139	35	300	330	
273.0	139	35	305	335	
306.0	139	35	340	370	
323.9	139	35	355	385	
326.0	139	35	360	390	
355.6	139	35	390	420	
406.4	139	35	440	470	
429.0	139	35	460	490	
457.2	139	35	490	520	
508.0	139	35	540	570	
531.0	139	35	565	595	
558.8	139	35	590	620	
609.6	139	35	640	670	
634.0	139	35	665	695	
711.2	139	35	745	775	
762.0	139	35	795	825	
813.0	139	35	845	875	
914.4	139	35	945	975	
1016.0	139	35	1050	1080	

PF 1 54 505 115



Plastic Street Covers

Contents Plastic Street Covers

	page
DP-140-230	214
VP-185-250	214
BP-240-340-250	215

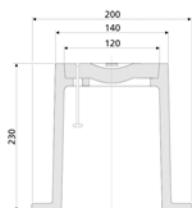
Plastic Street Covers

DP-140-230

square street cover for valves in distribution lines or house connection valves

Model:

- Material housing: Glass Reinforced Polyester
- Material lid: cast iron GJL 200 according to EN 1561
- Finish lid: black painted (40-80 micron according to ISO 8062)
- Lid contains 2 text inlays: +GF+ and 1 optional (€ 0,45 per piece)
- Max. temperature: -20°C - +180°C
- Static load: 82,5 kN / 70 hours (NEN 7057)
- Drop test: no damages after 1 meter vertical drop



PF 2 55 322 006

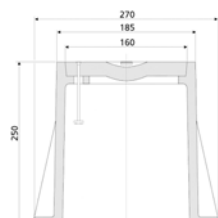
Type	Description	Code	
black street cover with black lid	with black inlay without text	200 005 047	
Type	Size		
black street cover with black lid	140 x 140 x 230 (LxWxH)		

VP-185-250

square street cover for valves in distribution and main lines

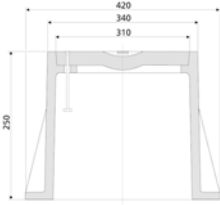
Model:

- Material housing: Glass Reinforced Polyester
- Material lid: cast iron GJL 200 according to EN 1561
- Finish lid: black painted (40-80 micron according to ISO 8062)
- Lid contains 2 text inlays: +GF+ and 1 optional (€ 0,45 per piece)
- Max. temperature: -20°C - +180°C
- Static load: 82,5 kN / 70 hours (NEN 7057)
- Drop test: no damages after 1 meter vertical drop



PF 2 55 322 006

Type	Description	Code	
black street cover with black lid BP-350-350 base plate	with black inlay without text for steady positioning	200 005 102 200 005 091	
Type	Size		
black street cover with black lid BP-350-350 base plate	185 x 185 x 250 (LxWxH) outside 350x350 mm, inside 185x185 mm		



BP 240-340-250

street cover for fire hydrants and valves in distribution and main lines

Model:

- Material housing: Glass Reinforced Polyester
- Material lid: cast iron GJL 200 according to EN 1561
- Finish lid: black painted (40-80 micron according to ISO 8062)
- Lid contains 2 text inlays: +GF+ and 1 optional (€ 0,45 per piece)
- Max. temperature: -20°C - +180°C
- Static load: 82,5 kN / 70 hours (NEN 7057)
- Drop test: no damages after 1 meter vertical drop

Type	Description	Code	
black street cover with black lid BP-350-350 base plate OR 240-340-80	with black inlay without text for steady positioning stackable mounting base	200 005 130 200 005 137 200 005 138	

Type	Size	
black street cover with black lid BP-350-350 base plate OR 240-340-80	240 x 340 x 250 (LxWxH) outside 350x350 mm, inside 185x185 mm	

PF 2 55 322 006

index

Code	Page	Code	Page	Code	Page
108-128L200N	151	335-355L300N	151	709 007 310	96
108-128L300N	151	335-355L400N	152	709 007 312	96
108-128L400N	152	335-355L500N	152	709 007 315	96
108-128L500N	152	335-355L600N	153	709 007 605	96
118-138L200N	151	700 610 830	123	709 007 607	96
118-138L300N	151	700 610 832	123	709 007 610	96
118-138L400N	152	700 610 834	123	709 007 612	96
118-138L500N	152	700 610 836	123	709 007 615	96
133-153L200N	151	700 610 838	123	709 008 050	97
133-153L300N	151	700 610 840	123	709 008 051	97
133-153L400N	152	700 610 842	123	709 008 055	95
133-153L500N	152	700 610 850	123	709 008 056	95
143-163L200N	151	700 610 852	123	709 008 060	95
143-163L300N	151	700 610 854	123	709 008 061	95
143-163L400N	152	700 610 856	123	709 008 062	97
143-163L500N	152	700 610 858	123	709 008 063	97
160-180L200N	151	700 610 860	123	709 008 064	95
160-180L300N	151	700 610 862	123	709 008 065	95
160-180L400N	152	700 618 910	122	709 008 066	97
160-180L500N	152	700 618 912	122	709 008 067	97
180-200L200N	151	700 618 914	122	709 008 070	95
180-200L300N	151	700 618 916	122	709 008 071	95
180-200L400N	152	700 618 918	122	709 008 250	97
180-200L500N	152	700 618 920	122	709 008 251	97
190-210L200N	151	700 618 940	122	709 008 255	95
190-210L300N	151	700 618 942	122	709 008 256	95
190-210L400N	152	700 618 944	122	709 008 260	95
190-210L500N	152	700 618 946	122	709 008 261	95
200 005 047	214	700 618 948	122	709 008 262	97
200 005 091	214	700 618 950	122	709 008 263	97
200 005 102	214	700 618 970	122	709 008 264	95
200 005 130	215	700 618 972	122	709 008 265	95
200 005 137	215	700 618 974	122	709 008 266	97
200 005 138	215	700 618 976	122	709 008 267	97
200 008 070	124	700 619 010	124	709 008 270	95
200 008 071	124	700 619 012	124	709 008 271	95
200 008 072	124	709 006 000	94	709 008 350	97
200 008 073	124	709 006 005	94	709 008 351	97
200 008 083	123	709 006 007	94	709 008 355	95
200 008 084	124	709 006 010	94	709 008 356	95
210-230L200N	151	709 006 015	94	709 008 360	95
210-230L300N	151	709 006 200	94	709 008 361	95
210-230L400N	152	709 006 205	94	709 008 362	97
210-230L500N	152	709 006 207	94	709 008 363	97
230-250L200N	151	709 006 210	94	709 008 364	95
230-250L300N	151	709 006 215	94	709 008 365	95
230-250L400N	152	709 006 300	94	709 008 366	97
230-250L500N	152	709 006 305	94	709 008 367	97
240-260L200N	151	709 006 307	94	709 008 370	95
240-260L300N	151	709 006 310	94	709 008 371	95
240-260L400N	152	709 006 315	94	709 008 650	97
240-260L500N	152	709 006 600	94	709 008 651	97
250-270L200N	151	709 006 605	94	709 008 655	95
250-270L300N	151	709 006 607	94	709 008 656	95
250-270L400N	152	709 006 610	94	709 008 660	95
250-270L500N	152	709 006 615	94	709 008 661	95
270-290L200N	151	709 007 005	96	709 008 662	97
270-290L300N	151	709 007 007	96	709 008 663	97
270-290L400N	152	709 007 010	96	709 008 664	95
270-290L500N	152	709 007 012	96	709 008 665	95
290-310L200N	151	709 007 015	96	709 008 666	97
290-310L300N	151	709 007 205	96	709 008 667	97
290-310L400N	152	709 007 207	96	709 008 670	95
290-310L500N	152	709 007 210	96	709 008 671	95
315-335L300N	151	709 007 212	96	709 016 053	160
315-335L400N	152	709 007 215	96	709 016 055	160
315-335L500N	152	709 007 305	96	709 016 060	160
315-335L600N	153	709 007 307	96	709 016 065	160

index

Code	Page
709 016 070	160
709 016 075	160
709 016 080	160
709 016 085	160
709 016 095	160
709 016 100	160
709 016 105	160
709 016 110	160
709 016 120	160
709 016 130	160
709 016 131	160
709 016 135	160
709 016 701	161
709 016 702	161
709 016 703	161
709 016 704	161
709 016 705	161
709 016 706	161
709 016 707	161
709 016 708	161
709 016 710	161
709 016 711	161
709 016 712	161
709 016 714	161
709 016 715	161
709 016 725	161
709 016 727	161
709 016 735	161
709 026 012	119
709 026 016	119
709 026 018	119
709 026 022	119
709 026 026	119
709 026 032	119
709 026 036	119
709 026 038	119
709 026 042	119
709 026 046	119
709 026 048	119
709 026 052	119
709 026 056	119
709 026 062	119
709 026 066	119
709 026 070	119
709 026 072	119
709 026 076	119
709 026 082	119
709 026 086	119
709 026 092	119
709 026 096	119
709 026 102	119
709 026 106	119
709 026 115	119
709 026 116	119
709 026 124	119
709 026 125	119
709 026 126	119
709 026 127	119
709 026 128	119
709 026 129	119
709 026 132	119
709 026 133	119
709 026 138	119
709 026 139	119
709 026 140	119
709 026 148	119
709 026 149	119
709 026 158	119

Code	Page
709 026 159	119
709 026 168	119
709 026 169	119
709 026 178	119
709 026 179	119
709 026 182	119
709 026 183	119
709 026 184	119
709 026 185	119
709 026 186	119
709 026 187	119
709 026 188	119
709 026 189	119
709 026 191	119
709 026 192	119
709 026 195	119
709 026 196	119
709 026 198	119
709 026 199	119
709 026 203	118
709 026 206	118
709 026 211	118
709 026 214	118
709 026 217	118
709 026 220	118
709 026 223	118
709 026 227	118
709 026 230	118
709 026 233	118
709 026 236	118
709 026 238	118
709 026 242	118
709 026 245	118
709 026 248	118
709 026 250	118
709 026 254	118
709 026 257	118
709 026 266	118
709 026 269	118
709 026 278	118
709 026 281	118
709 026 284	118
709 026 286	118
709 026 290	118
709 026 293	118
709 026 302	118
709 026 305	118
709 026 308	118
709 026 310	118
709 026 314	118
709 026 317	118
709 026 326	118
709 026 329	118
709 026 332	118
709 026 334	118
709 026 338	118
709 026 340	118
709 026 341	118
709 026 350	118
709 026 353	118
709 026 356	118
709 026 358	118
709 026 362	118
709 026 365	118
709 026 408	118
709 026 409	118
709 026 410	118
709 026 411	118

Code	Page
709 026 413	118
709 026 414	118
709 026 415	118
709 200 210	110
709 200 212	110
709 200 214	110
709 200 216	110
709 200 218	110
709 200 220	110
709 200 222	110
709 200 224	110
709 200 226	110
709 200 228	110
709 200 230	110
709 200 232	110
709 200 234	110
709 200 610	110
709 200 612	110
709 200 614	110
709 200 616	110
709 200 618	110
709 200 620	110
709 200 622	110
709 200 624	110
709 200 626	110
709 200 628	110
709 200 630	110
709 200 632	110
709 200 634	110
709 207 010	111
709 207 012	111
709 207 014	111
709 207 016	111
709 207 018	111
709 207 020	111
709 207 022	111
709 207 024	111
709 207 026	111
709 207 028	111
709 207 030	111
709 207 032	111
709 207 034	111
709 207 210	111
709 207 212	111
709 207 214	111
709 207 216	111
709 207 218	111
709 207 220	111
709 207 222	111
709 207 224	111
709 207 226	111
709 207 228	111
709 207 230	111
709 207 232	111
709 207 234	111
709 207 310	111
709 207 312	111
709 207 314	111
709 207 316	111
709 207 318	111
709 207 320	111
709 207 322	111
709 207 324	111
709 207 326	111
709 207 328	111
709 207 330	111
709 207 332	111
709 207 334	111

index

Code	Page	Code	Page	Code	Page
709 207 610	111	709 300 310	42	709 305 224	9
709 207 612	111	709 300 312	42	709 305 226	9
709 207 614	111	709 300 314	42	709 305 228	9
709 207 616	111	709 300 316	42	709 305 232	9
709 207 618	111	709 300 318	42	709 305 310	9
709 207 620	111	709 300 320	42	709 305 312	9
709 207 622	111	709 300 610	42	709 305 314	9
709 207 624	111	709 300 612	42	709 305 316	9
709 207 626	111	709 300 614	42	709 305 318	9
709 207 628	111	709 300 616	42	709 305 320	9
709 207 630	111	709 300 618	42	709 305 324	9
709 207 632	111	709 300 620	42	709 305 326	9
709 207 634	111	709 301 010	8	709 305 328	9
709 250 210	112	709 301 012	8	709 305 332	9
709 250 212	112	709 301 014	8	709 305 610	9
709 250 214	112	709 301 016	8	709 305 612	9
709 250 216	112	709 301 018	8	709 305 614	9
709 250 218	112	709 301 020	8	709 305 616	9
709 250 220	112	709 301 024	8	709 305 618	9
709 250 222	112	709 301 026	8	709 305 620	9
709 250 224	112	709 301 028	8	709 305 624	9
709 250 225	112	709 301 032	8	709 305 626	9
709 250 226	112	709 301 210	8	709 305 628	9
709 250 227	112	709 301 212	8	709 305 632	9
709 250 228	112	709 301 214	8	709 307 010	43
709 250 229	112	709 301 216	8	709 307 012	43
709 250 230	112	709 301 218	8	709 307 014	43
709 250 231	112	709 301 220	8	709 307 016	43
709 250 232	112	709 301 224	8	709 307 018	43
709 250 233	112	709 301 226	8	709 307 020	43
709 250 234	112	709 301 228	8	709 307 210	43
709 250 610	112	709 301 232	8	709 307 212	43
709 250 612	112	709 301 310	8	709 307 214	43
709 250 614	112	709 301 312	8	709 307 216	43
709 250 616	112	709 301 314	8	709 307 218	43
709 250 618	112	709 301 316	8	709 307 220	43
709 250 620	112	709 301 318	8	709 307 310	43
709 250 622	112	709 301 320	8	709 307 312	43
709 250 624	112	709 301 324	8	709 307 314	43
709 250 625	112	709 301 326	8	709 307 316	43
709 250 626	112	709 301 328	8	709 307 318	43
709 250 627	112	709 301 332	8	709 307 320	43
709 250 628	112	709 301 610	8	709 307 610	43
709 250 629	112	709 301 612	8	709 307 612	43
709 250 630	112	709 301 614	8	709 307 614	43
709 250 631	112	709 301 616	8	709 307 616	43
709 250 632	112	709 301 618	8	709 307 618	43
709 250 633	112	709 301 620	8	709 307 620	43
709 250 634	112	709 301 624	8	709 308 014	45
709 257 210	175	709 301 626	8	709 308 016	45
709 257 212	175	709 301 628	8	709 308 018	45
709 257 214	175	709 301 632	8	709 308 020	45
709 257 216	175	709 305 010	9	709 308 214	45
709 257 218	175	709 305 012	9	709 308 216	45
709 257 222	175	709 305 014	9	709 308 218	45
709 257 226	175	709 305 016	9	709 308 220	45
709 300 010	42	709 305 018	9	709 308 314	45
709 300 012	42	709 305 020	9	709 308 316	45
709 300 014	42	709 305 024	9	709 308 318	45
709 300 016	42	709 305 026	9	709 308 320	45
709 300 018	42	709 305 028	9	709 308 614	45
709 300 020	42	709 305 032	9	709 308 616	45
709 300 210	42	709 305 210	9	709 308 618	45
709 300 212	42	709 305 212	9	709 308 620	45
709 300 214	42	709 305 214	9	709 309 014	44
709 300 216	42	709 305 216	9	709 309 016	44
709 300 218	42	709 305 218	9	709 309 018	44
709 300 220	42	709 305 220	9	709 309 020	44

index

Code	Page
709 309 214	44
709 309 216	44
709 309 218	44
709 309 220	44
709 309 314	44
709 309 316	44
709 309 318	44
709 309 320	44
709 309 614	44
709 309 616	44
709 309 618	44
709 309 620	44
709 330 010	84
709 330 016	84
709 330 020	84
709 330 210	84
709 330 216	84
709 330 220	84
709 330 310	84
709 330 316	84
709 330 320	84
709 330 610	84
709 330 616	84
709 330 620	84
709 331 010	35
709 331 016	35
709 331 020	35
709 331 029	35
709 331 210	35
709 331 216	35
709 331 220	35
709 331 229	35
709 331 310	35
709 331 316	35
709 331 320	35
709 331 329	35
709 331 610	35
709 331 616	35
709 331 620	35
709 331 629	35
709 335 010	36
709 335 016	36
709 335 020	36
709 335 029	36
709 335 210	36
709 335 216	36
709 335 220	36
709 335 229	36
709 335 310	36
709 335 316	36
709 335 320	36
709 335 329	36
709 335 610	36
709 335 616	36
709 335 620	36
709 335 629	36
709 337 010	85
709 337 016	85
709 337 020	85
709 337 210	85
709 337 216	85
709 337 220	85
709 337 310	85
709 337 316	85
709 337 320	85
709 337 610	85
709 337 616	85
709 337 620	85

Code	Page
709 339 010	86
709 339 016	86
709 339 020	86
709 339 210	86
709 339 216	86
709 339 220	86
709 339 310	86
709 339 316	86
709 339 320	86
709 339 610	86
709 339 616	86
709 339 620	86
709 340 024	87
709 340 224	87
709 340 324	87
709 340 624	87
709 341 024	37
709 341 224	37
709 341 324	37
709 341 624	37
709 345 024	38
709 345 224	38
709 345 324	38
709 345 624	38
709 347 024	88
709 347 224	88
709 347 324	88
709 347 624	88
709 349 024	89
709 349 224	89
709 349 324	89
709 349 624	89
709 350 010	46
709 350 012	46
709 350 014	46
709 350 016	46
709 350 018	46
709 350 020	46
709 350 040	49
709 350 042	49
709 350 044	49
709 350 060	50
709 350 062	50
709 350 064	50
709 350 210	46
709 350 212	46
709 350 214	46
709 350 216	46
709 350 218	46
709 350 220	46
709 350 240	49
709 350 242	49
709 350 244	49
709 350 260	50
709 350 262	50
709 350 264	50
709 350 310	46
709 350 312	46
709 350 314	46
709 350 316	46
709 350 318	46
709 350 320	46
709 350 340	49
709 350 342	49
709 350 344	49
709 350 360	50
709 350 362	50
709 350 364	50

Code	Page
709 350 610	46
709 350 612	46
709 350 614	46
709 350 616	46
709 350 618	46
709 350 620	46
709 350 640	49
709 350 642	49
709 350 644	49
709 350 660	50
709 350 662	50
709 350 664	50
709 351 010	10
709 351 012	10
709 351 014	10
709 351 016	10
709 351 018	10
709 351 020	10
709 351 024	10
709 351 025	10
709 351 028	10
709 351 029	10
709 351 032	10
709 351 033	10
709 351 040	12
709 351 042	12
709 351 044	12
709 351 046	12
709 351 048	12
709 351 050	12
709 351 060	13
709 351 062	13
709 351 064	13
709 351 066	13
709 351 068	13
709 351 070	13
709 351 210	10
709 351 212	10
709 351 214	10
709 351 216	10
709 351 218	10
709 351 220	10
709 351 224	10
709 351 225	10
709 351 228	10
709 351 229	10
709 351 232	10
709 351 233	10
709 351 240	12
709 351 242	12
709 351 244	12
709 351 246	12
709 351 248	12
709 351 250	12
709 351 260	13
709 351 262	13
709 351 264	13
709 351 266	13
709 351 268	13
709 351 270	13
709 351 310	10
709 351 312	10
709 351 314	10
709 351 316	10
709 351 318	10
709 351 320	10
709 351 324	10
709 351 325	10

index

Code	Page
709 351 328	10
709 351 329	10
709 351 332	10
709 351 333	10
709 351 340	12
709 351 342	12
709 351 344	12
709 351 346	12
709 351 348	12
709 351 350	12
709 351 360	13
709 351 362	13
709 351 364	13
709 351 366	13
709 351 368	13
709 351 370	13
709 351 610	10
709 351 612	10
709 351 614	10
709 351 616	10
709 351 618	10
709 351 620	10
709 351 624	10
709 351 625	10
709 351 628	10
709 351 629	10
709 351 632	10
709 351 633	10
709 351 640	12
709 351 642	12
709 351 644	12
709 351 646	12
709 351 648	12
709 351 650	12
709 351 660	13
709 351 662	13
709 351 664	13
709 351 666	13
709 351 668	13
709 351 670	13
709 355 010	11
709 355 012	11
709 355 014	11
709 355 016	11
709 355 018	11
709 355 020	11
709 355 024	11
709 355 025	11
709 355 028	11
709 355 029	11
709 355 032	11
709 355 033	11
709 355 040	14
709 355 042	14
709 355 044	14
709 355 046	14
709 355 048	14
709 355 050	14
709 355 060	15
709 355 062	15
709 355 064	15
709 355 066	15
709 355 068	15
709 355 070	15
709 355 210	11
709 355 212	11
709 355 214	11
709 355 216	11

Code	Page
709 355 218	11
709 355 220	11
709 355 224	11
709 355 225	11
709 355 228	11
709 355 229	11
709 355 232	11
709 355 233	11
709 355 240	14
709 355 242	14
709 355 244	14
709 355 246	14
709 355 248	14
709 355 250	14
709 355 260	15
709 355 262	15
709 355 264	15
709 355 266	15
709 355 268	15
709 355 270	15
709 355 310	11
709 355 312	11
709 355 314	11
709 355 316	11
709 355 318	11
709 355 320	11
709 355 324	11
709 355 325	11
709 355 328	11
709 355 329	11
709 355 332	11
709 355 333	11
709 355 340	14
709 355 342	14
709 355 344	14
709 355 346	14
709 355 348	14
709 355 350	14
709 355 360	15
709 355 362	15
709 355 364	15
709 355 366	15
709 355 368	15
709 355 370	15
709 355 610	11
709 355 612	11
709 355 614	11
709 355 616	11
709 355 618	11
709 355 620	11
709 355 624	11
709 355 625	11
709 355 628	11
709 355 629	11
709 355 632	11
709 355 633	11
709 355 640	14
709 355 642	14
709 355 644	14
709 355 646	14
709 355 648	14
709 355 650	14
709 355 660	15
709 355 662	15
709 355 664	15
709 355 666	15
709 355 668	15
709 355 670	15

Code	Page
709 357 010	47
709 357 012	47
709 357 014	47
709 357 016	47
709 357 018	47
709 357 020	47
709 357 040	51
709 357 042	51
709 357 044	51
709 357 060	52
709 357 062	52
709 357 064	52
709 357 210	47
709 357 212	47
709 357 214	47
709 357 216	47
709 357 218	47
709 357 220	47
709 357 240	51
709 357 242	51
709 357 244	51
709 357 260	52
709 357 262	52
709 357 264	52
709 357 310	47
709 357 312	47
709 357 314	47
709 357 316	47
709 357 318	47
709 357 320	47
709 357 340	51
709 357 342	51
709 357 344	51
709 357 360	52
709 357 362	52
709 357 364	52
709 357 610	47
709 357 612	47
709 357 614	47
709 357 616	47
709 357 618	47
709 357 620	47
709 357 640	51
709 357 642	51
709 357 644	51
709 357 660	52
709 357 662	52
709 357 664	52
709 359 014	48
709 359 016	48
709 359 018	48
709 359 020	48
709 359 040	51
709 359 042	51
709 359 044	51
709 359 060	52
709 359 062	52
709 359 064	52
709 359 214	48
709 359 216	48
709 359 218	48
709 359 220	48
709 359 240	51
709 359 242	51
709 359 244	51
709 359 260	52
709 359 262	52
709 359 264	52

index

Code	Page
709 359 314	48
709 359 316	48
709 359 318	48
709 359 320	48
709 359 340	51
709 359 342	51
709 359 344	51
709 359 360	52
709 359 362	52
709 359 364	52
709 359 614	48
709 359 616	48
709 359 618	48
709 359 620	48
709 359 640	51
709 359 642	51
709 359 644	51
709 359 660	52
709 359 662	52
709 359 664	52
709 365 011	34
709 365 012	34
709 365 014	34
709 365 015	34
709 365 016	34
709 365 018	34
709 365 020	34
709 365 024	34
709 365 028	34
709 365 032	34
709 365 211	34
709 365 212	34
709 365 214	34
709 365 215	34
709 365 216	34
709 365 218	34
709 365 220	34
709 365 224	34
709 365 228	34
709 365 232	34
709 365 311	34
709 365 312	34
709 365 314	34
709 365 315	34
709 365 316	34
709 365 318	34
709 365 320	34
709 365 324	34
709 365 328	34
709 365 332	34
709 365 611	34
709 365 612	34
709 365 614	34
709 365 615	34
709 365 616	34
709 365 618	34
709 365 620	34
709 365 624	34
709 365 628	34
709 365 632	34
709 367 011	83
709 367 012	83
709 367 014	83
709 367 015	83
709 367 016	83
709 367 018	83
709 367 020	83
709 367 211	83

Code	Page
709 367 212	83
709 367 214	83
709 367 215	83
709 367 216	83
709 367 218	83
709 367 220	83
709 367 311	83
709 367 312	83
709 367 314	83
709 367 315	83
709 367 316	83
709 367 318	83
709 367 320	83
709 367 611	83
709 367 612	83
709 367 614	83
709 367 615	83
709 367 616	83
709 367 618	83
709 367 620	83
709 370 010	61
709 370 012	61
709 370 014	61
709 370 016	61
709 370 018	61
709 370 020	61
709 370 210	61
709 370 212	61
709 370 214	61
709 370 216	61
709 370 218	61
709 370 220	61
709 370 310	61
709 370 312	61
709 370 314	61
709 370 316	61
709 370 318	61
709 370 320	61
709 370 610	61
709 370 612	61
709 370 614	61
709 370 616	61
709 370 618	61
709 370 620	61
709 371 010	20
709 371 012	20
709 371 014	20
709 371 016	20
709 371 018	20
709 371 020	20
709 371 024	20
709 371 026	20
709 371 028	20
709 371 032	20
709 371 210	20
709 371 212	20
709 371 214	20
709 371 216	20
709 371 218	20
709 371 220	20
709 371 224	20
709 371 226	20
709 371 228	20
709 371 232	20
709 371 310	20
709 371 312	20
709 371 314	20
709 371 316	20

Code	Page
709 371 318	20
709 371 320	20
709 371 324	20
709 371 326	20
709 371 328	20
709 371 332	20
709 371 610	20
709 371 612	20
709 371 614	20
709 371 616	20
709 371 618	20
709 371 620	20
709 371 624	20
709 371 626	20
709 371 628	20
709 371 632	20
709 375 010	21
709 375 012	21
709 375 014	21
709 375 016	21
709 375 018	21
709 375 020	21
709 375 024	21
709 375 026	21
709 375 028	21
709 375 032	21
709 375 210	21
709 375 212	21
709 375 214	21
709 375 216	21
709 375 218	21
709 375 220	21
709 375 224	21
709 375 226	21
709 375 228	21
709 375 232	21
709 375 310	21
709 375 312	21
709 375 314	21
709 375 316	21
709 375 318	21
709 375 320	21
709 375 324	21
709 375 326	21
709 375 328	21
709 375 332	21
709 375 610	21
709 375 612	21
709 375 614	21
709 375 616	21
709 375 618	21
709 375 620	21
709 375 624	21
709 375 626	21
709 375 628	21
709 375 632	21
709 377 010	62
709 377 012	62
709 377 014	62
709 377 016	62
709 377 018	62
709 377 020	62
709 377 210	62
709 377 212	62
709 377 214	62
709 377 216	62
709 377 218	62
709 377 220	62

index

Code	Page
709 377 310	62
709 377 312	62
709 377 314	62
709 377 316	62
709 377 318	62
709 377 320	62
709 377 610	62
709 377 612	62
709 377 614	62
709 377 616	62
709 377 618	62
709 377 620	62
709 379 014	63
709 379 016	63
709 379 018	63
709 379 020	63
709 379 214	63
709 379 216	63
709 379 218	63
709 379 220	63
709 379 314	63
709 379 316	63
709 379 318	63
709 379 320	63
709 379 614	63
709 379 616	63
709 379 618	63
709 379 620	63
709 380 004	64
709 380 005	64
709 380 006	64
709 380 007	64
709 380 008	64
709 380 009	64
709 380 010	64
709 380 011	64
709 380 012	64
709 380 013	64
709 380 014	64
709 380 015	64
709 380 016	64
709 380 017	64
709 380 018	64
709 380 019	64
709 380 020	64
709 380 021	64
709 380 022	64
709 380 023	64
709 380 024	64
709 380 025	64
709 380 026	64
709 380 027	64
709 380 028	64
709 380 029	64
709 380 030	64
709 380 031	64
709 380 032	64
709 380 033	64
709 380 204	64
709 380 205	64
709 380 206	64
709 380 207	64
709 380 208	64
709 380 209	64
709 380 210	64
709 380 211	64
709 380 212	64
709 380 213	64

Code	Page
709 380 214	64
709 380 215	64
709 380 216	64
709 380 217	64
709 380 218	64
709 380 219	64
709 380 220	64
709 380 221	64
709 380 222	64
709 380 223	64
709 380 224	64
709 380 225	64
709 380 226	64
709 380 227	64
709 380 228	64
709 380 229	64
709 380 230	64
709 380 231	64
709 380 232	64
709 380 233	64
709 380 304	64
709 380 305	64
709 380 306	64
709 380 307	64
709 380 308	64
709 380 309	64
709 380 310	64
709 380 311	64
709 380 312	64
709 380 313	64
709 380 314	64
709 380 315	64
709 380 316	64
709 380 317	64
709 380 318	64
709 380 319	64
709 380 320	64
709 380 321	64
709 380 322	64
709 380 323	64
709 380 324	64
709 380 325	64
709 380 326	64
709 380 327	64
709 380 328	64
709 380 329	64
709 380 330	64
709 380 331	64
709 380 332	64
709 380 333	64
709 380 604	64
709 380 605	64
709 380 606	64
709 380 607	64
709 380 608	64
709 380 609	64
709 380 610	64
709 380 611	64
709 380 612	64
709 380 613	64
709 380 614	64
709 380 615	64
709 380 616	64
709 380 617	64
709 380 618	64
709 380 619	64
709 380 620	64
709 380 621	64

Code	Page
709 380 622	64
709 380 623	64
709 380 624	64
709 380 625	64
709 380 626	64
709 380 627	64
709 380 628	64
709 380 629	64
709 380 630	64
709 380 631	64
709 380 632	64
709 380 633	64
709 381 004	22
709 381 005	22
709 381 006	22
709 381 007	22
709 381 008	22
709 381 009	22
709 381 010	22
709 381 011	22
709 381 012	22
709 381 013	22
709 381 014	22
709 381 015	22
709 381 016	22
709 381 017	22
709 381 018	22
709 381 019	22
709 381 020	22
709 381 021	22
709 381 022	22
709 381 023	22
709 381 024	22
709 381 025	22
709 381 026	22
709 381 027	22
709 381 028	22
709 381 029	22
709 381 030	22
709 381 031	22
709 381 032	22
709 381 033	22
709 381 034	22
709 381 035	22
709 381 036	22
709 381 037	22
709 381 038	22
709 381 039	22
709 381 040	22
709 381 041	22
709 381 042	22
709 381 043	22
709 381 044	22
709 381 045	22
709 381 046	22
709 381 047	22
709 381 048	22
709 381 049	22
709 381 050	22
709 381 051	22
709 381 052	22
709 381 053	22
709 381 204	22
709 381 205	22
709 381 206	22
709 381 207	22
709 381 208	22
709 381 209	22

index

Code	Page
709 381 210	22
709 381 211	22
709 381 212	22
709 381 213	22
709 381 214	22
709 381 215	22
709 381 216	22
709 381 217	22
709 381 218	22
709 381 219	22
709 381 220	22
709 381 221	22
709 381 222	22
709 381 223	22
709 381 224	22
709 381 225	22
709 381 226	22
709 381 227	22
709 381 228	22
709 381 229	22
709 381 230	22
709 381 231	22
709 381 232	22
709 381 233	22
709 381 234	22
709 381 235	22
709 381 236	22
709 381 237	22
709 381 238	22
709 381 239	22
709 381 240	22
709 381 241	22
709 381 242	22
709 381 243	22
709 381 244	22
709 381 245	22
709 381 246	22
709 381 247	22
709 381 248	22
709 381 249	22
709 381 250	22
709 381 251	22
709 381 252	22
709 381 253	22
709 381 304	22
709 381 305	22
709 381 306	22
709 381 307	22
709 381 308	22
709 381 309	22
709 381 310	22
709 381 311	22
709 381 312	22
709 381 313	22
709 381 314	22
709 381 315	22
709 381 316	22
709 381 317	22
709 381 318	22
709 381 319	22
709 381 320	22
709 381 321	22
709 381 322	22
709 381 323	22
709 381 324	22
709 381 325	22
709 381 326	22
709 381 327	22

Code	Page
709 381 328	22
709 381 329	22
709 381 330	22
709 381 331	22
709 381 332	22
709 381 333	22
709 381 334	22
709 381 335	22
709 381 336	22
709 381 337	22
709 381 338	22
709 381 339	22
709 381 340	22
709 381 341	22
709 381 342	22
709 381 343	22
709 381 344	22
709 381 345	22
709 381 346	22
709 381 347	22
709 381 348	22
709 381 349	22
709 381 350	22
709 381 351	22
709 381 352	22
709 381 353	22
709 381 604	22
709 381 605	22
709 381 606	22
709 381 607	22
709 381 608	22
709 381 609	22
709 381 610	22
709 381 611	22
709 381 612	22
709 381 613	22
709 381 614	22
709 381 615	22
709 381 616	22
709 381 617	22
709 381 618	22
709 381 619	22
709 381 620	22
709 381 621	22
709 381 622	22
709 381 623	22
709 381 624	22
709 381 625	22
709 381 626	22
709 381 627	22
709 381 628	22
709 381 629	22
709 381 630	22
709 381 631	22
709 381 632	22
709 381 633	22
709 381 634	22
709 381 635	22
709 381 636	22
709 381 637	22
709 381 638	22
709 381 639	22
709 381 640	22
709 381 641	22
709 381 642	22
709 381 643	22
709 381 644	22
709 381 645	22

Code	Page
709 381 646	22
709 381 647	22
709 381 648	22
709 381 649	22
709 381 650	22
709 381 651	22
709 381 652	22
709 381 653	22
709 385 004	24
709 385 005	24
709 385 006	24
709 385 007	24
709 385 008	24
709 385 009	24
709 385 010	24
709 385 011	24
709 385 012	24
709 385 013	24
709 385 014	24
709 385 015	24
709 385 016	24
709 385 017	24
709 385 018	24
709 385 019	24
709 385 020	24
709 385 021	24
709 385 022	24
709 385 023	24
709 385 024	24
709 385 025	24
709 385 026	24
709 385 027	24
709 385 028	24
709 385 029	24
709 385 030	24
709 385 031	24
709 385 032	24
709 385 033	24
709 385 034	24
709 385 035	24
709 385 036	24
709 385 037	24
709 385 038	24
709 385 039	24
709 385 040	24
709 385 041	24
709 385 042	24
709 385 043	24
709 385 044	24
709 385 045	24
709 385 046	25
709 385 047	25
709 385 048	25
709 385 049	24
709 385 050	24
709 385 051	24
709 385 052	24
709 385 053	24
709 385 204	24
709 385 205	24
709 385 206	24
709 385 207	24
709 385 208	24
709 385 209	24
709 385 210	24
709 385 211	24
709 385 212	24
709 385 213	24

index

Code	Page	Code	Page	Code	Page
709 385 214	24	709 385 332	24	709 385 650	24
709 385 215	24	709 385 333	24	709 385 651	24
709 385 216	24	709 385 334	24	709 385 652	24
709 385 217	24	709 385 335	24	709 385 653	24
709 385 218	24	709 385 336	24	709 387 004	66
709 385 219	24	709 385 337	24	709 387 005	66
709 385 220	24	709 385 338	24	709 387 006	66
709 385 221	24	709 385 339	24	709 387 007	66
709 385 222	24	709 385 340	24	709 387 008	66
709 385 223	24	709 385 341	24	709 387 009	66
709 385 224	24	709 385 342	24	709 387 010	66
709 385 225	24	709 385 343	24	709 387 011	66
709 385 226	24	709 385 344	24	709 387 012	66
709 385 227	24	709 385 345	24	709 387 013	66
709 385 228	24	709 385 346	25	709 387 014	66
709 385 229	24	709 385 347	25	709 387 015	66
709 385 230	24	709 385 348	25	709 387 016	66
709 385 231	24	709 385 349	24	709 387 017	66
709 385 232	24	709 385 350	24	709 387 018	66
709 385 233	24	709 385 351	24	709 387 019	66
709 385 234	24	709 385 352	24	709 387 020	66
709 385 235	24	709 385 353	24	709 387 021	66
709 385 236	24	709 385 604	24	709 387 022	66
709 385 237	24	709 385 605	24	709 387 023	66
709 385 238	24	709 385 606	24	709 387 024	66
709 385 239	24	709 385 607	24	709 387 025	66
709 385 240	24	709 385 608	24	709 387 026	66
709 385 241	24	709 385 609	24	709 387 027	66
709 385 242	24	709 385 610	24	709 387 028	66
709 385 243	24	709 385 611	24	709 387 029	66
709 385 244	24	709 385 612	24	709 387 030	66
709 385 245	24	709 385 613	24	709 387 031	66
709 385 246	25	709 385 614	24	709 387 032	66
709 385 247	25	709 385 615	24	709 387 033	66
709 385 248	25	709 385 616	24	709 387 204	66
709 385 249	24	709 385 617	24	709 387 205	66
709 385 250	24	709 385 618	24	709 387 206	66
709 385 251	24	709 385 619	24	709 387 207	66
709 385 252	24	709 385 620	24	709 387 208	66
709 385 253	24	709 385 621	24	709 387 209	66
709 385 304	24	709 385 622	24	709 387 210	66
709 385 305	24	709 385 623	24	709 387 211	66
709 385 306	24	709 385 624	24	709 387 212	66
709 385 307	24	709 385 625	24	709 387 213	66
709 385 308	24	709 385 626	24	709 387 214	66
709 385 309	24	709 385 627	24	709 387 215	66
709 385 310	24	709 385 628	24	709 387 216	66
709 385 311	24	709 385 629	24	709 387 217	66
709 385 312	24	709 385 630	24	709 387 218	66
709 385 313	24	709 385 631	24	709 387 219	66
709 385 314	24	709 385 632	24	709 387 220	66
709 385 315	24	709 385 633	24	709 387 221	66
709 385 316	24	709 385 634	24	709 387 222	66
709 385 317	24	709 385 635	24	709 387 223	66
709 385 318	24	709 385 636	24	709 387 224	66
709 385 319	24	709 385 637	24	709 387 225	66
709 385 320	24	709 385 638	24	709 387 226	66
709 385 321	24	709 385 639	24	709 387 227	66
709 385 322	24	709 385 640	24	709 387 228	66
709 385 323	24	709 385 641	24	709 387 229	66
709 385 324	24	709 385 642	24	709 387 230	66
709 385 325	24	709 385 643	24	709 387 231	66
709 385 326	24	709 385 644	24	709 387 232	66
709 385 327	24	709 385 645	24	709 387 233	66
709 385 328	24	709 385 646	25	709 387 304	66
709 385 329	24	709 385 647	25	709 387 305	66
709 385 330	24	709 385 648	25	709 387 306	66
709 385 331	24	709 385 649	24	709 387 307	66

index

Code	Page
709 387 308	66
709 387 309	66
709 387 310	66
709 387 311	66
709 387 312	66
709 387 313	66
709 387 314	66
709 387 315	66
709 387 316	66
709 387 317	66
709 387 318	66
709 387 319	66
709 387 320	66
709 387 321	66
709 387 322	66
709 387 323	66
709 387 324	66
709 387 325	66
709 387 326	66
709 387 327	66
709 387 328	66
709 387 329	66
709 387 330	66
709 387 331	66
709 387 332	66
709 387 333	66
709 387 604	66
709 387 605	66
709 387 606	66
709 387 607	66
709 387 608	66
709 387 609	66
709 387 610	66
709 387 611	66
709 387 612	66
709 387 613	66
709 387 614	66
709 387 615	66
709 387 616	66
709 387 617	66
709 387 618	66
709 387 619	66
709 387 620	66
709 387 621	66
709 387 622	66
709 387 623	66
709 387 624	66
709 387 625	66
709 387 626	66
709 387 627	66
709 387 628	66
709 387 629	66
709 387 630	66
709 387 631	66
709 387 632	66
709 387 633	66
709 389 014	68
709 389 015	68
709 389 016	68
709 389 017	68
709 389 018	68
709 389 019	68
709 389 020	68
709 389 021	68
709 389 022	68
709 389 023	68
709 389 024	68
709 389 025	68

Code	Page
709 389 026	68
709 389 027	68
709 389 028	68
709 389 029	68
709 389 030	68
709 389 031	68
709 389 032	68
709 389 033	68
709 389 214	68
709 389 215	68
709 389 216	68
709 389 217	68
709 389 218	68
709 389 219	68
709 389 220	68
709 389 221	68
709 389 222	68
709 389 223	68
709 389 224	68
709 389 225	68
709 389 226	68
709 389 227	68
709 389 228	68
709 389 229	68
709 389 230	68
709 389 231	68
709 389 232	68
709 389 233	68
709 389 314	68
709 389 315	68
709 389 316	68
709 389 317	68
709 389 318	68
709 389 319	68
709 389 320	68
709 389 321	68
709 389 322	68
709 389 323	68
709 389 324	68
709 389 325	68
709 389 326	68
709 389 327	68
709 389 328	68
709 389 329	68
709 389 330	68
709 389 331	68
709 389 332	68
709 389 333	68
709 389 614	68
709 389 615	68
709 389 616	68
709 389 617	68
709 389 618	68
709 389 619	68
709 389 620	68
709 389 621	68
709 389 622	68
709 389 623	68
709 389 624	68
709 389 625	68
709 389 626	68
709 389 627	68
709 389 628	68
709 389 629	68
709 389 630	68
709 389 631	68
709 389 632	68
709 389 633	68

Code	Page
709 390 030	120
709 390 032	120
709 390 034	120
709 390 036	120
709 390 038	120
709 390 040	120
709 390 044	120
709 390 046	120
709 390 048	120
709 390 052	120
709 390 130	120
709 390 132	120
709 390 134	120
709 390 136	120
709 390 138	120
709 390 140	120
709 390 144	120
709 390 146	120
709 390 148	120
709 390 152	120
709 400 018	53
709 400 020	53
709 400 024	53
709 400 032	53
709 400 036	53
709 400 038	53
709 400 218	53
709 400 220	53
709 400 224	53
709 400 232	53
709 400 236	53
709 400 238	53
709 400 318	53
709 400 320	53
709 400 324	53
709 400 332	53
709 400 336	53
709 400 338	53
709 400 618	53
709 400 620	53
709 400 624	53
709 400 632	53
709 400 636	53
709 400 638	53
709 401 018	16
709 401 020	16
709 401 024	16
709 401 032	16
709 401 036	16
709 401 038	16
709 401 048	16
709 401 078	16
709 401 082	16
709 401 086	16
709 401 218	16
709 401 220	16
709 401 224	16
709 401 232	16
709 401 236	16
709 401 238	16
709 401 248	16
709 401 278	16
709 401 282	16
709 401 286	16
709 401 318	16
709 401 320	16
709 401 324	16
709 401 332	16

index

Code	Page	Code	Page	Code	Page
709 401 336	16	709 406 624	55	709 450 232	58
709 401 338	16	709 406 632	55	709 450 238	58
709 401 348	16	709 406 636	55	709 450 308	58
709 401 378	16	709 406 638	55	709 450 318	58
709 401 382	16	709 407 018	54	709 450 324	58
709 401 386	16	709 407 020	54	709 450 332	58
709 401 618	16	709 407 024	54	709 450 338	58
709 401 620	16	709 407 032	54	709 450 608	58
709 401 624	16	709 407 036	54	709 450 618	58
709 401 632	16	709 407 038	54	709 450 624	58
709 401 636	16	709 407 218	54	709 450 632	58
709 401 638	16	709 407 220	54	709 450 638	58
709 401 648	16	709 407 224	54	709 451 008	18
709 401 678	16	709 407 232	54	709 451 018	18
709 401 682	16	709 407 236	54	709 451 024	18
709 401 686	16	709 407 238	54	709 451 032	18
709 405 018	17	709 407 318	54	709 451 038	18
709 405 020	17	709 407 320	54	709 451 078	18
709 405 024	17	709 407 324	54	709 451 079	18
709 405 032	17	709 407 332	54	709 451 080	18
709 405 036	17	709 407 336	54	709 451 081	18
709 405 038	17	709 407 338	54	709 451 208	18
709 405 048	17	709 407 618	54	709 451 218	18
709 405 078	17	709 407 620	54	709 451 224	18
709 405 082	17	709 407 624	54	709 451 232	18
709 405 086	17	709 407 632	54	709 451 238	18
709 405 218	17	709 407 636	54	709 451 278	18
709 405 220	17	709 407 638	54	709 451 279	18
709 405 224	17	709 408 024	57	709 451 280	18
709 405 232	17	709 408 032	57	709 451 281	18
709 405 236	17	709 408 036	57	709 451 308	18
709 405 238	17	709 408 038	57	709 451 318	18
709 405 248	17	709 408 224	57	709 451 324	18
709 405 278	17	709 408 232	57	709 451 332	18
709 405 282	17	709 408 236	57	709 451 338	18
709 405 286	17	709 408 238	57	709 451 378	18
709 405 318	17	709 408 324	57	709 451 379	18
709 405 320	17	709 408 332	57	709 451 380	18
709 405 324	17	709 408 336	57	709 451 381	18
709 405 332	17	709 408 338	57	709 451 608	18
709 405 336	17	709 408 624	57	709 451 618	18
709 405 338	17	709 408 632	57	709 451 624	18
709 405 348	17	709 408 636	57	709 451 632	18
709 405 378	17	709 408 638	57	709 451 638	18
709 405 382	17	709 409 024	56	709 451 678	18
709 405 386	17	709 409 032	56	709 451 679	18
709 405 618	17	709 409 036	56	709 451 680	18
709 405 620	17	709 409 038	56	709 451 681	18
709 405 624	17	709 409 224	56	709 455 008	19
709 405 632	17	709 409 232	56	709 455 018	19
709 405 636	17	709 409 236	56	709 455 024	19
709 405 638	17	709 409 238	56	709 455 032	19
709 405 648	17	709 409 324	56	709 455 038	19
709 405 678	17	709 409 332	56	709 455 078	19
709 405 682	17	709 409 336	56	709 455 079	19
709 405 686	17	709 409 338	56	709 455 080	19
709 406 024	55	709 409 624	56	709 455 081	19
709 406 032	55	709 409 632	56	709 455 208	19
709 406 036	55	709 409 636	56	709 455 218	19
709 406 038	55	709 409 638	56	709 455 224	19
709 406 224	55	709 450 008	58	709 455 232	19
709 406 232	55	709 450 018	58	709 455 238	19
709 406 236	55	709 450 024	58	709 455 278	19
709 406 238	55	709 450 032	58	709 455 279	19
709 406 324	55	709 450 038	58	709 455 280	19
709 406 332	55	709 450 208	58	709 455 281	19
709 406 336	55	709 450 218	58	709 455 308	19
709 406 338	55	709 450 224	58	709 455 318	19

index

Code	Page
709 455 324	19
709 455 332	19
709 455 338	19
709 455 378	19
709 455 379	19
709 455 380	19
709 455 381	19
709 455 608	19
709 455 618	19
709 455 624	19
709 455 632	19
709 455 638	19
709 455 678	19
709 455 679	19
709 455 680	19
709 455 681	19
709 457 008	59
709 457 018	59
709 457 024	59
709 457 032	59
709 457 038	59
709 457 208	59
709 457 218	59
709 457 224	59
709 457 232	59
709 457 238	59
709 457 308	59
709 457 318	59
709 457 324	59
709 457 332	59
709 457 338	59
709 457 608	59
709 457 618	59
709 457 624	59
709 457 632	59
709 457 638	59
709 459 024	60
709 459 032	60
709 459 038	60
709 459 224	60
709 459 232	60
709 459 238	60
709 459 324	60
709 459 332	60
709 459 338	60
709 459 624	60
709 459 632	60
709 459 638	60
709 465 016	34
709 465 017	34
709 465 018	34
709 465 019	34
709 465 020	34
709 465 021	34
709 465 024	34
709 465 028	34
709 465 216	34
709 465 217	34
709 465 218	34
709 465 219	34
709 465 220	34
709 465 221	34
709 465 224	34
709 465 228	34
709 465 316	34
709 465 317	34
709 465 318	34
709 465 319	34

Code	Page
709 465 320	34
709 465 321	34
709 465 324	34
709 465 328	34
709 465 616	34
709 465 617	34
709 465 618	34
709 465 619	34
709 465 620	34
709 465 621	34
709 465 624	34
709 465 628	34
709 467 016	83
709 467 017	83
709 467 018	83
709 467 019	83
709 467 020	83
709 467 021	83
709 467 216	83
709 467 217	83
709 467 218	83
709 467 219	83
709 467 220	83
709 467 221	83
709 467 316	83
709 467 317	83
709 467 318	83
709 467 319	83
709 467 320	83
709 467 321	83
709 467 616	83
709 467 617	83
709 467 618	83
709 467 619	83
709 467 620	83
709 467 621	83
709 470 014	73
709 470 016	73
709 470 020	73
709 470 214	73
709 470 216	73
709 470 220	73
709 470 314	73
709 470 316	73
709 470 320	73
709 470 614	73
709 470 616	73
709 470 620	73
709 471 014	28
709 471 016	28
709 471 020	28
709 471 214	28
709 471 216	28
709 471 220	28
709 471 314	28
709 471 316	28
709 471 320	28
709 471 614	28
709 471 616	28
709 471 620	28
709 475 014	29
709 475 016	29
709 475 020	29
709 475 214	29
709 475 216	29
709 475 220	29
709 475 314	29
709 475 316	29

Code	Page
709 475 320	29
709 475 614	29
709 475 616	29
709 475 620	29
709 477 014	74
709 477 016	74
709 477 020	74
709 477 214	74
709 477 216	74
709 477 220	74
709 477 314	74
709 477 316	74
709 477 320	74
709 477 614	74
709 477 616	74
709 477 620	74
709 478 014	76
709 478 016	76
709 478 020	76
709 478 214	76
709 478 216	76
709 478 220	76
709 478 314	76
709 478 316	76
709 478 320	76
709 478 614	76
709 478 616	76
709 478 620	76
709 479 014	75
709 479 016	75
709 479 020	75
709 479 214	75
709 479 216	75
709 479 220	75
709 479 314	75
709 479 316	75
709 479 320	75
709 479 614	75
709 479 616	75
709 479 620	75
709 480 008	77
709 480 208	77
709 480 308	77
709 480 608	77
709 481 008	30
709 481 208	30
709 481 308	30
709 481 608	30
709 485 008	31
709 485 208	31
709 485 308	31
709 485 608	31
709 487 008	78
709 487 208	78
709 487 308	78
709 487 608	78
709 489 008	79
709 489 208	79
709 489 308	79
709 489 608	79
709 490 018	80
709 490 023	80
709 490 218	80
709 490 223	80
709 490 318	80
709 490 323	80
709 490 618	80
709 490 623	80

index

Code	Page	Code	Page	Code	Page
709 491 018	32	709 497 623	81	709 507 326	70
709 491 023	32	709 497 630	81	709 507 334	70
709 491 218	32	709 497 636	81	709 507 626	70
709 491 223	32	709 497 648	81	709 507 634	70
709 491 318	32	709 497 661	81	709 508 026	72
709 491 323	32	709 497 667	81	709 508 034	72
709 491 618	32	709 497 673	81	709 508 226	72
709 491 623	32	709 497 679	81	709 508 234	72
709 495 018	33	709 499 018	82	709 508 326	72
709 495 023	33	709 499 023	82	709 508 334	72
709 495 030	33	709 499 030	82	709 508 626	72
709 495 036	33	709 499 036	82	709 508 634	72
709 495 048	33	709 499 048	82	709 509 026	71
709 495 061	33	709 499 061	82	709 509 034	71
709 495 067	33	709 499 067	82	709 509 226	71
709 495 073	33	709 499 073	82	709 509 234	71
709 495 218	33	709 499 218	82	709 509 326	71
709 495 223	33	709 499 223	82	709 509 334	71
709 495 230	33	709 499 230	82	709 509 626	71
709 495 236	33	709 499 236	82	709 509 634	71
709 495 248	33	709 499 248	82	709 597 230	120
709 495 261	33	709 499 261	82	709 597 232	120
709 495 267	33	709 499 267	82	709 597 234	120
709 495 273	33	709 499 273	82	709 597 236	120
709 495 318	33	709 499 318	82	709 597 238	120
709 495 323	33	709 499 323	82	709 597 240	120
709 495 330	33	709 499 330	82	709 597 244	120
709 495 336	33	709 499 336	82	709 597 246	120
709 495 348	33	709 499 348	82	709 597 248	120
709 495 361	33	709 499 361	82	709 597 252	120
709 495 367	33	709 499 367	82	709 597 258	121
709 495 373	33	709 499 373	82	709 597 259	121
709 495 618	33	709 499 618	82	709 597 260	121
709 495 623	33	709 499 623	82	709 597 261	121
709 495 630	33	709 499 630	82	709 597 262	121
709 495 636	33	709 499 636	82	709 597 263	121
709 495 648	33	709 499 648	82	709 597 264	121
709 495 661	33	709 499 661	82	709 597 266	121
709 495 667	33	709 499 667	82	709 597 268	121
709 495 673	33	709 499 673	82	709 597 272	121
709 497 018	81	709 500 026	69	709 597 350	121
709 497 023	81	709 500 034	69	709 597 352	121
709 497 030	81	709 500 226	69	709 597 354	121
709 497 036	81	709 500 234	69	709 597 356	121
709 497 048	81	709 500 326	69	709 597 358	121
709 497 061	81	709 500 334	69	709 597 360	121
709 497 067	81	709 500 626	69	709 597 364	121
709 497 073	81	709 500 634	69	709 597 366	121
709 497 079	81	709 501 026	26	709 597 368	121
709 497 218	81	709 501 034	26	709 597 372	121
709 497 223	81	709 501 226	26	709 597 630	120
709 497 230	81	709 501 234	26	709 597 632	120
709 497 236	81	709 501 326	26	709 597 634	120
709 497 248	81	709 501 334	26	709 597 636	120
709 497 261	81	709 501 626	26	709 597 638	120
709 497 267	81	709 501 634	26	709 597 640	120
709 497 273	81	709 505 026	27	709 597 644	120
709 497 279	81	709 505 034	27	709 597 646	120
709 497 318	81	709 505 226	27	709 597 648	120
709 497 323	81	709 505 234	27	709 597 652	120
709 497 330	81	709 505 326	27	709 599 354	121
709 497 336	81	709 505 334	27	709 599 356	121
709 497 348	81	709 505 626	27	709 599 358	121
709 497 361	81	709 505 634	27	709 599 360	121
709 497 367	81	709 507 026	70	709 599 364	121
709 497 373	81	709 507 034	70	709 599 366	121
709 497 379	81	709 507 226	70	709 599 368	121
709 497 618	81	709 507 234	70	709 599 372	121

index

Code	Page
709 613 634	168
709 613 638	168
709 613 640	168
709 613 652	168
709 613 654	168
709 613 656	168
709 613 658	168
709 613 714	167
709 613 716	167
709 613 718	167
709 613 720	167
709 613 734	166
709 613 736	166
709 613 738	166
709 613 740	166
709 613 752	166
709 613 754	166
709 613 756	166
709 613 758	166
709 613 814	167
709 613 816	167
709 613 818	167
709 613 820	167
709 613 834	166
709 613 836	166
709 613 838	166
709 613 840	166
709 613 852	166
709 613 854	166
709 613 856	166
709 613 858	166
709 613 903	167
709 613 904	167
709 613 905	167
709 613 906	167
709 613 930	167
709 613 932	167
709 613 934	167
709 613 936	167
709 613 938	167
709 613 940	167
709 613 942	167
709 613 944	167
709 613 946	167
709 613 948	167
709 613 950	167
709 613 952	167
709 613 954	167
709 613 956	167
709 613 958	167
709 613 960	167
709 613 962	167
709 613 964	167
709 700 000	172
709 700 010	174
709 700 021	174
709 700 022	174
709 700 023	174
709 700 024	175
709 700 100	174
709 701 260	172
709 701 261	172
709 702 045	174
709 702 046	174
709 702 047	174
709 702 048	174
709 702 049	174
709 702 050	174

Code	Page
709 702 051	174
709 702 257	168
709 702 258	168
709 702 259	168
709 702 260	168
709 702 261	168
709 702 262	168
709 702 263	168
709 706 414	175
709 706 416	173
709 800 006	172
709 810 410	175
709 810 412	175
709 810 414	175
709 810 415	175
709 810 416	175
709 810 420	175
709 810 422	175
709 810 424	175
709 810 425	175
709 810 426	175
709 810 511	173
709 810 512	173
709 810 514	173
709 810 515	173
709 810 516	173
709 810 518	173
709 810 519	173
709 810 520	173
709 810 522	173
709 810 523	173
709 810 524	173
709 810 528	173
709 810 532	173
709 810 612	173
709 810 614	173
709 810 616	173
709 810 618	173
709 810 620	173
709 810 622	173
709 810 624	173
709 810 628	173
709 810 632	173
709 810 711	173
709 810 712	173
709 810 714	173
709 810 716	173
709 810 720	173
709 810 724	173
709 810 728	173
709 810 730	173
709 900 000	123
709 900 001	123
709 900 002	123
709 900 003	123
724 201 061	148
724 201 062	148
724 201 063	149
724 201 073	148
724 201 074	148
724 201 075	149
724 201 076	149
724 201 097	148
724 201 098	148
724 201 099	149
724 201 100	149
724 201 101	149
724 201 102	150

Code	Page
724 201 133	148
724 201 134	148
724 201 135	149
724 201 136	149
724 201 137	149
724 201 138	150
724 201 169	148
724 201 170	148
724 201 171	149
724 201 172	149
724 201 173	149
724 201 174	150
724 201 193	148
724 201 194	148
724 201 195	149
724 201 196	149
724 201 197	149
724 201 198	150
724 201 205	148
724 201 206	148
724 201 207	149
724 201 208	149
724 201 209	149
724 201 210	150
724 201 217	148
724 201 218	148
724 201 219	149
724 201 220	149
724 201 221	150
724 201 222	150
724 201 229	148
724 201 230	148
724 201 231	149
724 201 232	149
724 201 233	150
724 201 234	150
724 201 253	148
724 201 254	148
724 201 255	149
724 201 256	149
724 201 257	150
724 201 258	150
724 208 010	128
724 208 011	129
724 208 012	130
724 208 019	128
724 208 020	129
724 208 021	130
724 208 028	128
724 208 029	129
724 208 030	130
724 208 037	128
724 208 038	129
724 208 039	130
724 208 046	128
724 208 047	129
724 208 048	130
724 208 055	128
724 208 056	129
724 208 057	130
724 208 064	128
724 208 065	129
724 208 066	130
724 208 073	128
724 208 074	129
724 208 075	130
724 208 082	128
724 208 083	129

index

Code	Page	Code	Page	Code	Page
724 208 084	130	724 208 290	129	724 209 273	132
724 208 091	128	724 208 291	130	724 209 281	131
724 208 092	129	724 208 298	128	724 209 282	132
724 208 093	130	724 208 299	129	724 209 291	132
724 208 100	128	724 208 300	130	724 209 300	132
724 208 101	129	724 208 307	128	724 209 309	132
724 208 102	130	724 208 308	129	724 209 318	132
724 208 109	128	724 208 309	130	724 211 010	133
724 208 110	129	724 209 010	131	724 211 011	133
724 208 111	130	724 209 019	131	724 211 026	133
724 208 118	128	724 209 028	131	724 211 027	133
724 208 119	129	724 209 037	131	724 211 042	133
724 208 120	130	724 209 046	131	724 211 043	133
724 208 127	128	724 209 055	131	724 211 058	133
724 208 128	129	724 209 064	131	724 211 059	133
724 208 129	130	724 209 065	131	724 211 075	133
724 208 136	128	724 209 073	131	724 211 076	134
724 208 137	129	724 209 074	131	724 211 091	133
724 208 138	130	724 209 082	131	724 211 092	134
724 208 145	128	724 209 083	131	724 211 107	133
724 208 146	129	724 209 091	131	724 211 108	134
724 208 147	130	724 209 092	131	724 211 123	133
724 208 154	128	724 209 100	131	724 211 124	134
724 208 155	129	724 209 101	131	724 211 139	133
724 208 156	130	724 209 109	131	724 211 140	134
724 208 163	128	724 209 110	131	724 211 141	135
724 208 164	129	724 209 118	131	724 211 142	136
724 208 165	130	724 209 119	131	724 211 155	133
724 208 172	128	724 209 127	131	724 211 156	134
724 208 173	129	724 209 128	131	724 211 157	135
724 208 174	130	724 209 136	131	724 211 158	136
724 208 181	128	724 209 137	131	724 211 159	137
724 208 182	129	724 209 145	131	724 211 171	133
724 208 183	130	724 209 146	131	724 211 172	134
724 208 190	128	724 209 147	132	724 211 173	135
724 208 191	129	724 209 154	131	724 211 174	136
724 208 192	130	724 209 155	131	724 211 175	137
724 208 199	128	724 209 156	132	724 211 187	133
724 208 200	129	724 209 163	131	724 211 188	134
724 208 201	130	724 209 164	131	724 211 189	135
724 208 208	128	724 209 165	132	724 211 190	136
724 208 209	129	724 209 172	131	724 211 191	137
724 208 210	130	724 209 173	131	724 211 203	133
724 208 217	128	724 209 174	132	724 211 204	134
724 208 218	129	724 209 181	131	724 211 205	135
724 208 219	130	724 209 182	131	724 211 206	136
724 208 226	128	724 209 183	132	724 211 207	137
724 208 227	129	724 209 190	131	724 211 219	133
724 208 228	130	724 209 191	131	724 211 220	134
724 208 235	128	724 209 192	132	724 211 221	135
724 208 236	129	724 209 199	131	724 211 222	136
724 208 237	130	724 209 200	131	724 211 223	137
724 208 244	128	724 209 201	132	724 211 235	133
724 208 245	129	724 209 209	131	724 211 236	134
724 208 246	130	724 209 210	132	724 211 237	135
724 208 253	128	724 209 218	131	724 211 238	136
724 208 254	129	724 209 219	132	724 211 239	137
724 208 255	130	724 209 227	131	724 211 251	133
724 208 262	128	724 209 228	132	724 211 252	134
724 208 263	129	724 209 236	131	724 211 253	135
724 208 264	130	724 209 237	132	724 211 254	136
724 208 271	128	724 209 245	131	724 211 255	137
724 208 272	129	724 209 246	132	724 211 267	133
724 208 273	130	724 209 254	131	724 211 268	134
724 208 280	128	724 209 255	132	724 211 269	135
724 208 281	129	724 209 263	131	724 211 270	136
724 208 282	130	724 209 264	132	724 211 271	137
724 208 289	128	724 209 272	131	724 211 283	133

index

Code	Page
724 211 284	134
724 211 285	135
724 211 286	136
724 211 287	137
724 211 299	133
724 211 300	134
724 211 301	135
724 211 302	136
724 211 303	137
724 211 315	133
724 211 316	134
724 211 317	135
724 211 318	136
724 211 319	137
724 211 320	138
724 211 331	133
724 211 332	134
724 211 333	135
724 211 334	136
724 211 335	137
724 211 336	138
724 211 347	133
724 211 348	134
724 211 349	135
724 211 350	136
724 211 351	137
724 211 352	138
724 211 363	133
724 211 364	134
724 211 365	135
724 211 366	136
724 211 367	137
724 211 368	138
724 211 379	133
724 211 380	134
724 211 381	135
724 211 382	136
724 211 383	137
724 211 384	138
724 211 395	133
724 211 396	134
724 211 397	135
724 211 398	136
724 211 399	137
724 211 400	138
724 211 411	133
724 211 412	134
724 211 413	135
724 211 414	136
724 211 415	137
724 211 416	138
724 211 427	133
724 211 428	134
724 211 429	135
724 211 430	136
724 211 431	137
724 211 432	138
724 211 443	133
724 211 444	134
724 211 445	135
724 211 446	136
724 211 447	137
724 211 448	138
724 211 459	133
724 211 460	134
724 211 461	135
724 211 462	136
724 211 463	137

Code	Page
724 211 464	138
724 211 475	133
724 211 476	134
724 211 477	135
724 211 478	136
724 211 479	137
724 211 480	138
724 211 491	133
724 211 492	134
724 211 493	135
724 211 494	136
724 211 495	137
724 211 496	138
724 211 508	134
724 211 509	135
724 211 510	136
724 211 511	137
724 211 512	138
724 211 524	134
724 211 525	135
724 211 526	136
724 211 527	137
724 211 528	138
724 211 540	134
724 211 541	135
724 211 542	136
724 211 543	137
724 211 544	138
724 211 556	134
724 211 557	135
724 211 558	136
724 211 559	137
724 211 560	138
724 211 572	134
724 211 573	135
724 211 574	136
724 211 575	137
724 211 576	138
724 211 588	134
724 211 589	135
724 211 590	136
724 211 591	137
724 211 592	138
724 211 604	134
724 211 605	135
724 211 606	136
724 211 607	137
724 211 608	138
724 211 620	134
724 211 621	135
724 211 622	136
724 211 623	137
724 211 624	138
724 211 625	138
724 211 636	134
724 211 637	135
724 211 638	136
724 211 639	137
724 211 640	138
724 211 641	138
724 211 652	134
724 211 653	135
724 211 654	136
724 211 655	137
724 211 656	138
724 211 657	138
724 211 668	134
724 211 669	135

Code	Page
724 211 670	136
724 211 671	137
724 211 672	138
724 211 673	138
724 211 684	134
724 211 685	135
724 211 686	136
724 211 687	137
724 211 688	138
724 211 689	138
724 211 700	134
724 211 701	135
724 211 702	136
724 211 703	137
724 211 704	138
724 211 705	138
724 211 716	134
724 211 717	135
724 211 718	136
724 211 719	137
724 211 720	138
724 211 721	138
724 211 732	134
724 211 733	135
724 211 734	136
724 211 735	137
724 211 736	138
724 211 737	138
724 211 748	134
724 211 749	135
724 211 750	136
724 211 751	137
724 211 752	138
724 211 753	138
724 211 764	134
724 211 765	135
724 211 766	136
724 211 767	137
724 211 768	138
724 211 769	138
724 211 780	134
724 211 781	135
724 211 782	136
724 211 783	137
724 211 784	138
724 211 785	138
724 211 796	134
724 211 797	135
724 211 798	136
724 211 799	137
724 211 800	138
724 211 801	138
724 211 812	134
724 211 813	135
724 211 814	136
724 211 815	137
724 211 816	138
724 211 817	138
724 211 828	134
724 211 829	135
724 211 830	136
724 211 831	137
724 211 832	138
724 211 833	138
724 212 058	139
724 212 059	139
724 212 060	140
724 212 061	141

index

Code	Page	Code	Page	Code	Page
724 212 062	142	724 212 284	140	724 212 525	141
724 212 074	139	724 212 285	141	724 212 526	142
724 212 075	139	724 212 286	142	724 212 527	143
724 212 076	140	724 212 298	139	724 212 528	143
724 212 077	141	724 212 299	139	724 212 541	141
724 212 078	142	724 212 300	140	724 212 542	142
724 212 090	139	724 212 301	141	724 212 543	143
724 212 091	139	724 212 302	142	724 212 544	143
724 212 092	140	724 212 314	139	724 212 557	141
724 212 093	141	724 212 315	139	724 212 558	142
724 212 094	142	724 212 316	140	724 212 559	143
724 212 106	139	724 212 317	141	724 212 560	143
724 212 107	139	724 212 318	142	724 212 573	141
724 212 108	140	724 212 330	139	724 212 574	142
724 212 109	141	724 212 331	139	724 212 575	143
724 212 110	142	724 212 332	140	724 212 576	143
724 212 122	139	724 212 333	141	724 212 589	141
724 212 123	139	724 212 334	142	724 212 590	142
724 212 124	140	724 212 346	139	724 212 591	143
724 212 125	141	724 212 347	139	724 212 592	143
724 212 126	142	724 212 348	140	724 212 605	141
724 212 138	139	724 212 349	141	724 212 606	142
724 212 139	139	724 212 350	142	724 212 607	143
724 212 140	140	724 212 363	139	724 212 608	143
724 212 141	141	724 212 364	140	724 212 621	141
724 212 142	142	724 212 365	141	724 212 622	142
724 212 154	139	724 212 366	142	724 212 623	143
724 212 155	139	724 212 367	143	724 212 624	143
724 212 156	140	724 212 379	139	724 212 637	141
724 212 157	141	724 212 380	140	724 212 638	142
724 212 158	142	724 212 381	141	724 212 639	143
724 212 170	139	724 212 382	142	724 212 640	143
724 212 171	139	724 212 383	143	724 212 653	141
724 212 172	140	724 212 395	139	724 212 654	142
724 212 173	141	724 212 396	140	724 212 655	143
724 212 174	142	724 212 397	141	724 212 656	143
724 212 186	139	724 212 398	142	724 212 669	141
724 212 187	139	724 212 399	143	724 212 670	142
724 212 188	140	724 212 411	139	724 212 671	143
724 212 189	141	724 212 412	140	724 212 672	143
724 212 190	142	724 212 413	141	724 212 685	141
724 212 202	139	724 212 414	142	724 212 686	142
724 212 203	139	724 212 415	143	724 212 687	143
724 212 204	140	724 212 428	140	724 212 688	143
724 212 205	141	724 212 429	141	724 212 701	141
724 212 206	142	724 212 430	142	724 212 702	142
724 212 218	139	724 212 431	143	724 212 703	143
724 212 219	139	724 212 444	140	724 212 704	143
724 212 220	140	724 212 445	141	724 212 717	141
724 212 221	141	724 212 446	142	724 212 718	142
724 212 222	142	724 212 447	143	724 212 719	143
724 212 234	139	724 212 460	140	724 212 720	143
724 212 235	139	724 212 461	141	724 212 733	141
724 212 236	140	724 212 462	142	724 212 734	142
724 212 237	141	724 212 463	143	724 212 735	143
724 212 238	142	724 212 476	140	724 212 736	143
724 212 250	139	724 212 477	141	724 212 749	141
724 212 251	139	724 212 478	142	724 212 750	142
724 212 252	140	724 212 479	143	724 212 751	143
724 212 253	141	724 212 492	140	724 212 752	143
724 212 254	142	724 212 493	141	724 212 767	143
724 212 266	139	724 212 494	142	724 212 768	143
724 212 267	139	724 212 495	143	724 212 783	143
724 212 268	140	724 212 508	140	724 212 784	143
724 212 269	141	724 212 509	141	724 212 799	143
724 212 270	142	724 212 510	142	724 212 800	144
724 212 282	139	724 212 511	143	724 212 815	143
724 212 283	139	724 212 524	140	724 212 816	144

index

Code	Page
724 212 831	143
724 212 832	144
724 213 060	145
724 213 061	145
724 213 076	145
724 213 077	145
724 213 092	145
724 213 093	145
724 213 108	145
724 213 109	145
724 213 110	145
724 213 124	145
724 213 125	145
724 213 126	145
724 213 140	145
724 213 141	145
724 213 142	145
724 213 156	145
724 213 157	145
724 213 158	145
724 213 172	145
724 213 173	145
724 213 174	145
724 213 175	146
724 213 188	145
724 213 189	145
724 213 190	145
724 213 191	146
724 213 204	145
724 213 205	145
724 213 206	145
724 213 207	146
724 213 221	145
724 213 222	145
724 213 223	146
724 213 237	145
724 213 238	145
724 213 239	146
724 213 240	146
724 213 253	145
724 213 254	145
724 213 255	146
724 213 256	146
724 213 270	145
724 213 271	146
724 213 272	146
724 213 286	145
724 213 287	146
724 213 288	146
724 213 302	145
724 213 303	146
724 213 304	146
724 213 318	146
724 213 319	146
724 213 320	146
724 213 334	146
724 213 335	146
724 213 336	146
724 213 350	146
724 213 351	146
724 213 352	146
724 213 367	146
724 213 368	146
724 213 383	146
724 213 384	146
724 213 399	146
724 213 400	146
724 213 415	146

Code	Page
724 213 416	146
724 213 431	146
724 213 432	146
724 213 447	146
724 213 448	147
724 213 463	146
724 213 464	147
724 213 479	146
724 213 480	147
724 213 495	146
724 213 496	147
724 213 511	146
724 213 512	147
724 213 527	146
724 213 528	147
724 213 543	146
724 213 544	147
724 213 559	146
724 213 560	147
724 213 575	146
724 213 576	147
724 213 591	146
724 213 592	147
724 213 730	155
724 213 746	155
724 213 762	155
724 213 778	155
724 213 794	155
724 213 810	155
724 213 826	155
779 054 054	185
779 054 060	185
779 054 063	185
779 054 065	185
779 054 066	185
779 054 070	185
779 054 073	185
779 054 076	185
779 054 078	185
779 054 085	185
779 054 091	185
779 054 092	185
779 054 102	185
779 054 116	185
779 054 124	187
779 054 131	187
779 054 145	187
779 054 152	187
779 054 159	187
779 054 172	187
779 054 179	187
779 054 197	187
779 054 210	187
779 054 223	187
779 054 245	187
779 054 271	187
779 056 054	185
779 056 060	185
779 056 063	185
779 056 065	185
779 056 066	185
779 056 070	185
779 056 073	185
779 056 076	185
779 056 078	185
779 056 085	185
779 056 091	185
779 056 092	185

Code	Page
779 056 102	185
779 056 116	185
779 056 124	187
779 056 131	187
779 056 145	187
779 056 152	187
779 056 159	187
779 056 172	187
779 056 179	187
779 056 197	187
779 056 210	187
779 056 223	187
779 056 245	187
779 056 271	187
779 062 054	185
779 062 060	185
779 062 063	185
779 062 065	185
779 062 066	185
779 062 070	185
779 062 073	185
779 062 076	185
779 062 078	185
779 062 085	185
779 062 091	185
779 062 092	185
779 062 102	185
779 062 116	185
779 062 124	187
779 062 131	187
779 062 145	187
779 062 152	187
779 062 159	187
779 062 172	187
779 062 179	187
779 062 197	187
779 062 210	187
779 062 223	187
779 062 245	187
779 062 271	187
779 064 054	185
779 064 060	185
779 064 063	185
779 064 065	185
779 064 066	185
779 064 070	185
779 064 073	185
779 064 076	185
779 064 078	185
779 064 085	185
779 064 091	185
779 064 092	185
779 064 102	185
779 064 116	185
779 064 124	187
779 064 131	187
779 064 145	187
779 064 152	187
779 064 159	187
779 064 172	187
779 064 179	187
779 064 197	187
779 064 210	187
779 064 223	187
779 064 245	187
779 064 271	187
779 074 092	188
779 074 102	188

index

Code	Page	Code	Page	Code	Page
779 074 116	188	779 101 076	183	779 104 131	183
779 074 124	188	779 101 078	183	779 104 145	183
779 074 131	188	779 101 085	183	779 104 152	183
779 074 145	188	779 101 091	183	779 104 159	183
779 074 152	188	779 101 092	183	779 104 172	183
779 074 159	188	779 101 102	183	779 104 179	183
779 074 172	188	779 101 116	183	779 104 197	183
779 074 179	188	779 101 124	183	779 104 210	183
779 074 197	188	779 101 131	183	779 104 223	183
779 074 210	188	779 101 145	183	779 104 245	183
779 074 223	188	779 101 152	183	779 104 271	183
779 074 245	188	779 101 159	183	779 104 328	182
779 074 271	188	779 101 172	183	779 109 001	180
779 076 092	188	779 101 179	183	779 109 002	180
779 076 102	188	779 101 197	183	779 109 003	180
779 076 116	188	779 101 210	183	779 109 005	180
779 076 124	188	779 101 223	183	779 109 006	180
779 076 131	188	779 101 245	183	779 109 007	180
779 076 145	188	779 101 271	183	779 109 009	180
779 076 152	188	779 101 328	182	779 109 010	180
779 076 159	188	779 104 001	180	779 109 011	180
779 076 172	188	779 104 002	180	779 109 014	180
779 076 179	188	779 104 003	180	779 109 015	180
779 076 197	188	779 104 005	180	779 109 016	180
779 076 210	188	779 104 006	180	779 109 017	180
779 076 223	188	779 104 007	180	779 109 018	180
779 076 245	188	779 104 009	180	779 109 019	180
779 076 271	188	779 104 010	180	779 109 020	180
779 101 001	180	779 104 011	180	779 109 021	180
779 101 002	180	779 104 014	180	779 109 022	180
779 101 003	180	779 104 015	180	779 109 024	180
779 101 005	180	779 104 016	180	779 109 025	180
779 101 006	180	779 104 017	180	779 109 028	180
779 101 007	180	779 104 018	180	779 109 029	182
779 101 009	180	779 104 019	180	779 109 030	182
779 101 010	180	779 104 020	180	779 109 032	182
779 101 011	180	779 104 021	180	779 109 033	182
779 101 014	180	779 104 022	180	779 109 037	182
779 101 015	180	779 104 024	180	779 109 038	182
779 101 016	180	779 104 025	180	779 109 039	182
779 101 017	180	779 104 028	180	779 109 040	182
779 101 018	180	779 104 029	182	779 109 041	182
779 101 019	180	779 104 030	182	779 109 045	182
779 101 020	180	779 104 032	182	779 109 046	182
779 101 021	180	779 104 033	182	779 109 050	182
779 101 022	180	779 104 037	182	779 109 054	182
779 101 024	180	779 104 038	182	779 109 060	182
779 101 025	180	779 104 039	182	779 109 063	182
779 101 028	180	779 104 040	182	779 109 065	182
779 101 029	182	779 104 041	182	779 109 066	182
779 101 030	182	779 104 045	182	779 109 070	182
779 101 032	182	779 104 046	182	779 109 073	183
779 101 033	182	779 104 050	182	779 109 076	183
779 101 037	182	779 104 054	182	779 109 078	183
779 101 038	182	779 104 060	182	779 109 085	183
779 101 039	182	779 104 063	182	779 109 091	183
779 101 040	182	779 104 065	182	779 109 092	183
779 101 041	182	779 104 066	182	779 109 102	183
779 101 045	182	779 104 070	182	779 109 116	183
779 101 046	182	779 104 073	183	779 109 124	183
779 101 050	182	779 104 076	183	779 109 131	183
779 101 054	182	779 104 078	183	779 109 145	183
779 101 060	182	779 104 085	183	779 109 152	183
779 101 063	182	779 104 091	183	779 109 159	183
779 101 065	182	779 104 092	183	779 109 172	183
779 101 066	182	779 104 102	183	779 109 179	183
779 101 070	182	779 104 116	183	779 109 197	183
779 101 073	183	779 104 124	183	779 109 210	183

index

Code	Page
779 109 223	183
779 109 245	183
779 109 271	183
779 109 328	182
779 112 001	180
779 112 002	180
779 112 003	180
779 112 005	180
779 112 006	180
779 112 007	180
779 112 009	180
779 112 010	180
779 112 011	180
779 112 014	180
779 112 015	180
779 112 016	180
779 112 017	180
779 112 018	180
779 112 019	180
779 112 020	180
779 112 021	180
779 112 022	180
779 112 024	181
779 112 025	181
779 112 028	181
779 112 029	182
779 112 030	182
779 112 032	182
779 112 033	182
779 112 037	182
779 112 038	182
779 112 039	182
779 112 040	182
779 112 041	182
779 112 045	182
779 112 046	182
779 112 050	182
779 112 054	182
779 112 060	182
779 112 063	182
779 112 065	182
779 112 066	182
779 112 070	182
779 112 073	184
779 112 076	184
779 112 078	184
779 112 085	184
779 112 091	184
779 112 092	184
779 112 102	184
779 112 116	184
779 112 124	184
779 112 131	184
779 112 145	184
779 112 152	184
779 112 159	184
779 112 172	184
779 112 179	184
779 112 197	184
779 112 210	184
779 112 223	184
779 112 245	184
779 112 271	184
779 112 328	182
779 309 006	207
779 309 007	207
779 309 009	207
779 309 010	207

Code	Page
779 309 011	207
779 309 014	207
779 309 015	207
779 309 016	207
779 309 017	207
779 309 018	207
779 309 019	207
779 309 020	207
779 309 021	207
779 309 022	207
779 309 024	207
779 309 025	207
779 309 028	207
779 309 029	207
779 309 030	207
779 309 032	207
779 309 033	208
779 309 037	208
779 309 038	208
779 309 039	208
779 309 040	208
779 309 041	208
779 309 045	208
779 309 046	208
779 309 050	208
779 309 054	208
779 309 060	208
779 309 063	208
779 309 065	208
779 309 066	208
779 309 070	208
779 309 073	209
779 309 076	209
779 309 078	209
779 309 085	209
779 309 091	209
779 309 092	209
779 309 102	209
779 309 116	209
779 309 124	209
779 309 131	209
779 309 145	209
779 309 152	209
779 309 159	209
779 309 172	209
779 309 179	209
779 309 197	209
779 309 210	209
779 309 223	209
779 309 245	209
779 309 271	209
779 309 328	207
779 312 006	207
779 312 007	207
779 312 009	207
779 312 010	207
779 312 011	207
779 312 014	207
779 312 015	207
779 312 016	207
779 312 017	207
779 312 018	207
779 312 019	207
779 312 020	207
779 312 021	207
779 312 022	207
779 312 024	207
779 312 025	207

Code	Page
779 312 028	207
779 312 029	207
779 312 030	207
779 312 032	207
779 312 033	208
779 312 037	208
779 312 038	208
779 312 039	208
779 312 040	208
779 312 041	208
779 312 045	208
779 312 046	208
779 312 050	208
779 312 054	208
779 312 060	208
779 312 063	208
779 312 065	208
779 312 066	208
779 312 070	208
779 312 073	209
779 312 076	209
779 312 078	209
779 312 085	209
779 312 091	209
779 312 092	209
779 312 102	209
779 312 116	209
779 312 124	209
779 312 131	209
779 312 145	209
779 312 152	209
779 312 159	209
779 312 172	209
779 312 179	209
779 312 197	209
779 312 210	209
779 312 223	209
779 312 245	209
779 312 271	209
779 312 328	207
779 401 001	195
779 401 002	195
779 401 003	195
779 401 005	195
779 401 006	195
779 401 007	195
779 401 009	195
779 401 010	195
779 401 011	195
779 401 014	195
779 401 015	195
779 401 016	195
779 401 017	195
779 401 018	195
779 401 019	195
779 401 020	195
779 401 021	195
779 401 022	195
779 401 024	195
779 401 025	195
779 401 028	195
779 401 029	196
779 401 030	196
779 401 032	196
779 401 033	196
779 401 038	196
779 401 039	196
779 401 040	196

index

Code	Page
779 401 041	196
779 401 045	196
779 401 046	196
779 401 050	196
779 401 060	196
779 401 063	196
779 401 065	196
779 401 066	196
779 401 070	196
779 401 073	197
779 401 076	197
779 401 078	197
779 401 085	197
779 401 091	197
779 401 092	198
779 401 102	198
779 401 116	198
779 401 124	198
779 401 131	198
779 401 145	198
779 401 152	198
779 401 159	198
779 401 172	198
779 401 179	198
779 401 197	198
779 401 328	196
779 404 001	195
779 404 002	195
779 404 003	195
779 404 005	195
779 404 006	195
779 404 007	195
779 404 009	195
779 404 010	195
779 404 011	195
779 404 014	195
779 404 015	195
779 404 016	195
779 404 017	195
779 404 018	195
779 404 019	195
779 404 020	195
779 404 021	195
779 404 022	195
779 404 024	195
779 404 025	195
779 404 028	195
779 404 029	196
779 404 030	196
779 404 032	196
779 404 033	196
779 404 038	196
779 404 039	196
779 404 040	196
779 404 041	196
779 404 045	196
779 404 046	196
779 404 050	196
779 404 060	196
779 404 063	196
779 404 065	196
779 404 066	196
779 404 070	196
779 404 073	197
779 404 076	197
779 404 078	197
779 404 085	197
779 404 091	197

Code	Page
779 404 092	198
779 404 102	198
779 404 116	198
779 404 124	198
779 404 131	198
779 404 145	198
779 404 152	198
779 404 159	198
779 404 172	198
779 404 179	198
779 404 197	198
779 404 328	196
779 409 001	195
779 409 002	195
779 409 003	195
779 409 005	195
779 409 006	195
779 409 007	195
779 409 009	195
779 409 010	195
779 409 011	195
779 409 014	195
779 409 015	195
779 409 016	195
779 409 017	195
779 409 018	195
779 409 019	195
779 409 020	195
779 409 021	195
779 409 022	195
779 409 024	195
779 409 025	195
779 409 028	195
779 409 029	196
779 409 030	196
779 409 032	196
779 409 033	196
779 409 038	196
779 409 039	196
779 409 040	196
779 409 041	196
779 409 045	196
779 409 046	196
779 409 050	196
779 409 060	196
779 409 063	196
779 409 065	196
779 409 066	196
779 409 070	196
779 409 073	197
779 409 076	197
779 409 078	197
779 409 085	197
779 409 091	197
779 409 092	198
779 409 102	198
779 409 116	198
779 409 124	198
779 409 131	198
779 409 145	198
779 409 152	198
779 409 159	198
779 409 172	198
779 409 179	198
779 409 197	198
779 409 328	196
779 412 001	195
779 412 002	195

Code	Page
779 412 003	195
779 412 005	195
779 412 006	195
779 412 007	195
779 412 009	195
779 412 010	195
779 412 011	195
779 412 014	195
779 412 015	195
779 412 016	195
779 412 017	195
779 412 018	195
779 412 019	195
779 412 020	195
779 412 021	195
779 412 022	195
779 412 024	195
779 412 025	195
779 412 028	195
779 412 029	197
779 412 030	197
779 412 032	197
779 412 033	197
779 412 038	197
779 412 039	197
779 412 040	197
779 412 041	197
779 412 045	197
779 412 046	197
779 412 050	197
779 412 060	197
779 412 063	197
779 412 065	197
779 412 066	197
779 412 070	197
779 412 073	198
779 412 076	198
779 412 078	198
779 412 085	198
779 412 091	198
779 412 092	198
779 412 102	198
779 412 116	198
779 412 124	198
779 412 131	198
779 412 145	198
779 412 152	198
779 412 159	198
779 412 172	198
779 412 179	198
779 412 197	198
779 412 328	197
779 413 001	189
779 413 002	189
779 413 003	189
779 413 005	189
779 413 006	189
779 413 007	189
779 413 009	189
779 413 010	189
779 413 011	189
779 413 014	189
779 413 015	189
779 413 016	189
779 413 017	189
779 413 018	189
779 413 019	189
779 413 020	189

index

Code	Page
779 413 021	189
779 413 022	189
779 413 024	189
779 413 025	189
779 413 028	189
779 413 029	191
779 413 030	191
779 413 032	191
779 413 033	191
779 413 038	191
779 413 039	191
779 413 040	191
779 413 041	191
779 413 045	191
779 413 046	191
779 413 050	191
779 413 060	191
779 413 063	191
779 413 065	191
779 413 066	191
779 413 070	191
779 413 073	193
779 413 076	193
779 413 078	193
779 413 085	193
779 413 091	193
779 413 092	193
779 413 102	193
779 413 116	193
779 413 124	193
779 413 131	193
779 413 145	193
779 413 152	193
779 413 159	193
779 413 172	193
779 413 328	191
779 416 001	189
779 416 002	189
779 416 003	189
779 416 005	189
779 416 006	189
779 416 007	189
779 416 009	189
779 416 010	189
779 416 011	189
779 416 014	189
779 416 015	189
779 416 016	189
779 416 017	189
779 416 018	189
779 416 019	189
779 416 020	189
779 416 021	189
779 416 022	189
779 416 024	189
779 416 025	189
779 416 028	189
779 416 029	191
779 416 030	191
779 416 032	191
779 416 033	191
779 416 038	191
779 416 039	191
779 416 040	191
779 416 041	191
779 416 045	191
779 416 046	191
779 416 050	191

Code	Page
779 416 060	191
779 416 063	191
779 416 065	191
779 416 066	191
779 416 070	191
779 416 073	193
779 416 076	193
779 416 078	193
779 416 085	193
779 416 091	193
779 416 092	193
779 416 102	193
779 416 116	193
779 416 124	193
779 416 131	193
779 416 145	193
779 416 152	193
779 416 159	193
779 416 172	193
779 416 328	191
779 421 001	189
779 421 002	189
779 421 003	189
779 421 005	189
779 421 006	189
779 421 007	189
779 421 009	189
779 421 010	189
779 421 011	189
779 421 014	189
779 421 015	189
779 421 016	189
779 421 017	189
779 421 018	189
779 421 019	189
779 421 020	189
779 421 021	189
779 421 022	189
779 421 024	189
779 421 025	189
779 421 028	189
779 421 029	191
779 421 030	191
779 421 032	191
779 421 033	191
779 421 038	191
779 421 039	191
779 421 040	191
779 421 041	191
779 421 045	191
779 421 046	191
779 421 050	191
779 421 060	191
779 421 063	191
779 421 065	191
779 421 066	191
779 421 070	191
779 421 073	193
779 421 076	193
779 421 078	193
779 421 085	193
779 421 091	193
779 421 092	193
779 421 102	193
779 421 116	193
779 421 124	193
779 421 131	193
779 421 145	193

Code	Page
779 421 152	193
779 421 159	193
779 421 172	193
779 421 328	191
779 424 001	189
779 424 002	189
779 424 003	189
779 424 005	189
779 424 006	189
779 424 007	189
779 424 009	189
779 424 010	189
779 424 011	189
779 424 014	189
779 424 015	189
779 424 016	189
779 424 017	189
779 424 018	189
779 424 019	189
779 424 020	189
779 424 021	189
779 424 022	189
779 424 024	189
779 424 025	189
779 424 028	189
779 424 029	191
779 424 030	191
779 424 032	191
779 424 033	191
779 424 038	191
779 424 039	191
779 424 040	191
779 424 041	191
779 424 045	191
779 424 046	191
779 424 050	191
779 424 060	191
779 424 063	191
779 424 065	191
779 424 066	191
779 424 070	191
779 424 073	193
779 424 076	193
779 424 078	193
779 424 085	193
779 424 091	193
779 424 092	193
779 424 102	193
779 424 116	193
779 424 124	193
779 424 131	193
779 424 145	193
779 424 152	193
779 424 159	193
779 424 172	193
779 424 328	191
779 501 008	205
779 501 012	205
779 501 017	205
779 501 020	205
779 501 025	205
779 501 032	205
779 501 037	205
779 501 040	205
779 501 046	206
779 501 054	206
779 501 059	206
779 501 065	206

index

Code	Page	Code	Page	Code	Page
779 501 071	206	779 513 073	202	779 529 037	204
779 501 079	206	779 513 079	202	779 529 040	204
779 501 088	206	779 513 102	202	779 529 046	204
779 501 102	206	779 513 116	202	779 532 008	204
779 501 114	206	779 513 329	202	779 532 012	204
779 504 008	205	779 513 501	202	779 532 016	204
779 504 012	205	779 516 007	202	779 532 017	204
779 504 017	205	779 516 009	202	779 532 020	204
779 504 020	205	779 516 011	202	779 532 025	204
779 504 025	205	779 516 016	202	779 532 032	204
779 504 032	205	779 516 020	202	779 532 033	204
779 504 037	205	779 516 025	202	779 532 037	204
779 504 040	205	779 516 032	202	779 532 040	204
779 504 046	206	779 516 033	202	779 532 046	204
779 504 054	206	779 516 038	202	779 537 007	201
779 504 059	206	779 516 040	202	779 537 009	201
779 504 065	206	779 516 046	202	779 537 011	201
779 504 071	206	779 516 064	202	779 537 016	201
779 504 079	206	779 516 073	202	779 537 020	201
779 504 088	206	779 516 079	202	779 537 025	201
779 504 102	206	779 516 102	202	779 537 032	201
779 504 114	206	779 516 116	202	779 537 033	201
779 509 008	205	779 516 329	202	779 537 038	201
779 509 012	205	779 516 501	202	779 537 040	201
779 509 017	205	779 522 007	202	779 537 046	201
779 509 020	205	779 522 009	202	779 537 501	201
779 509 025	205	779 522 011	202	779 540 007	201
779 509 032	205	779 522 016	202	779 540 009	201
779 509 037	205	779 522 020	202	779 540 011	201
779 509 040	205	779 522 025	202	779 540 016	201
779 509 046	206	779 522 032	202	779 540 020	201
779 509 054	206	779 522 033	202	779 540 025	201
779 509 059	206	779 522 038	202	779 540 032	201
779 509 065	206	779 522 040	202	779 540 033	201
779 509 071	206	779 522 046	202	779 540 038	201
779 509 079	206	779 522 064	202	779 540 040	201
779 509 088	206	779 522 073	202	779 540 046	201
779 509 102	206	779 522 079	202	779 540 501	201
779 509 114	206	779 522 102	202	779 570 006	199
779 512 008	205	779 522 116	202	779 570 007	199
779 512 012	205	779 522 329	202	779 570 009	199
779 512 017	205	779 522 501	202	779 570 010	199
779 512 020	205	779 524 007	203	779 570 011	199
779 512 025	205	779 524 009	203	779 570 014	199
779 512 032	205	779 524 011	203	779 570 015	199
779 512 037	205	779 524 016	203	779 570 016	199
779 512 040	205	779 524 020	203	779 570 017	199
779 512 046	206	779 524 025	203	779 570 019	199
779 512 054	206	779 524 032	203	779 570 020	199
779 512 059	206	779 524 033	203	779 570 024	199
779 512 065	206	779 524 038	203	779 570 025	199
779 512 071	206	779 524 040	203	779 570 028	199
779 512 079	206	779 524 046	203	779 570 029	199
779 512 088	206	779 524 064	203	779 570 030	199
779 512 102	206	779 524 073	203	779 570 032	199
779 512 114	206	779 524 079	203	779 570 033	199
779 513 007	202	779 524 102	203	779 570 038	199
779 513 009	202	779 524 116	203	779 570 039	199
779 513 011	202	779 524 329	203	779 570 040	199
779 513 016	202	779 524 501	203	779 570 041	199
779 513 020	202	779 529 008	204	779 570 045	199
779 513 025	202	779 529 012	204	779 570 046	199
779 513 032	202	779 529 016	204	779 570 050	199
779 513 033	202	779 529 017	204	779 573 006	199
779 513 038	202	779 529 020	204	779 573 007	199
779 513 040	202	779 529 025	204	779 573 009	199
779 513 046	202	779 529 032	204	779 573 010	199
779 513 064	202	779 529 033	204	779 573 011	199

index

Code	Page
779 573 014	199
779 573 015	199
779 573 016	199
779 573 017	199
779 573 019	199
779 573 020	199
779 573 024	199
779 573 025	199
779 573 028	199
779 573 029	199
779 573 030	199
779 573 032	199
779 573 033	199
779 573 038	199
779 573 039	199
779 573 040	199
779 573 041	199
779 573 045	199
779 573 046	199
779 573 050	199
95-104L200N	151
95-104L300N	151
95-104L400N	152
95-104L500N	152
98-108L200N	151
98-108L300N	151
98-108L400N	152
98-108L500N	152
DN1000C-N	102
DN1000F-N	103
DN1000RC-N	104
DN1000RF-N	105
DN100C-N	102
DN100F-N	103
DN100RC-N	104
DN100RF-N	105
DN1100C-N	102
DN1100F-N	103
DN1100RC-N	104
DN1100RF-N	105
DN1200C-N	102
DN1200F-N	103
DN1200RC-N	104
DN1200RF-N	105
DN1300C-N	102
DN1300F-N	103
DN1300RC-N	104
DN1300RF-N	105
DN1400C-N	102
DN1400F-N	103
DN1400RC-N	104
DN1400RF-N	105
DN1500C-N	102
DN1500F-N	103
DN1500RC-N	104
DN1500RF-N	105
DN1600C-N	102
DN1600F-N	103
DN1600RC-N	104
DN1600RF-N	105
DN1700C-N	102
DN1700F-N	103
DN1700RC-N	104
DN1700RF-N	105
DN1800C-N	102
DN1800F-N	103
DN1800RC-N	104
DN1800RF-N	105

Code	Page
DN1900C-N	102
DN1900F-N	103
DN1900RC-N	104
DN1900RF-N	105
DN2000C-N	102
DN2000F-N	103
DN2000RC-N	104
DN2000RF-N	105
DN200C-N	102
DN200F-N	103
DN200RC-N	104
DN200RF-N	105
DN2100C-N	102
DN2100F-N	103
DN2100RC-N	104
DN2100RF-N	105
DN2200C-N	102
DN2200F-N	103
DN2200RC-N	104
DN2200RF-N	105
DN2300C-N	102
DN2300F-N	103
DN2300RC-N	104
DN2300RF-N	105
DN2400C-N	102
DN2400F-N	103
DN2400RC-N	104
DN2400RF-N	105
DN2500C-N	102
DN2500F-N	103
DN2500RC-N	104
DN2500RF-N	105
DN250C-N	102
DN250F-N	103
DN250RC-N	104
DN250RF-N	105
DN2600C-N	102
DN2600F-N	103
DN2600RC-N	104
DN2600RF-N	105
DN2700C-N	102
DN2700F-N	103
DN2700RC-N	104
DN2700RF-N	105
DN2800C-N	102
DN2800F-N	103
DN2800RC-N	104
DN2800RF-N	105
DN300C-N	102
DN300F-N	103
DN300RC-N	104
DN300RF-N	105
DN350C-N	102
DN350F-N	103
DN350L300N	151
DN350L400N	152
DN350L500N	152
DN350L600N	153
DN350RC-N	104
DN350RF-N	105
DN400C-N	102
DN400F-N	103
DN400L400N	152
DN400L500N	153
DN400L600N	153
DN400L750N	153
DN400RC-N	104
DN400RF-N	105

Code	Page
DN450C-N	102
DN450F-N	103
DN450L400N	152
DN450L500N	153
DN450L600N	153
DN450L750N	153
DN450RC-N	104
DN450RF-N	105
DN500C-N	102
DN500F-N	103
DN500L400N	152
DN500L500N	153
DN500L600N	153
DN500L750N	153
DN500RC-N	104
DN500RF-N	105
DN550C-N	102
DN550F-N	103
DN550RC-N	104
DN550RF-N	105
DN600C-N	102
DN600F-N	103
DN600L400N	152
DN600L500N	153
DN600L600N	153
DN600L750N	153
DN600RC-N	104
DN600RF-N	105
DN650C-N	102
DN650F-N	103
DN650RC-N	104
DN650RF-N	105
DN700C-N	102
DN700F-N	103
DN700L400N	152
DN700L500N	153
DN700L600N	153
DN700L750N	153
DN700RC-N	104
DN700RF-N	105
DN750L500N	153
DN750L600N	153
DN750L750N	153
DN800C-N	102
DN800F-N	103
DN800L500N	153
DN800L600N	153
DN800L750N	153
DN800RC-N	104
DN800RF-N	105
DN80C-N	102
DN80F-N	103
DN80RC-N	104
DN80RF-N	105
DN900C-N	102
DN900F-N	103
DN900RC-N	104
DN900RF-N	105
flangeDN100	154
flangeDN125	154
flangeDN150	154
flangeDN200	154
flangeDN250	154
flangeDN300	154
flangeDN50	154
flangeDN65	154
flangeDN80	154
thread1	148

index

Code	Page
thread1.1/2	148
thread1.1/4	148
thread1/2	148
thread2	148
thread2.1/2	148
thread3	148
thread3/4	148
thread4	148

GEORG FISCHER WAGA N.V. CONDITIONS OF SALE

Article I - General

- In case of any difference of opinion regarding the contents, purport and intention of any provision in these general conditions of sale, the most obvious interpretation, based on the Dutch version thereof, shall prevail.
Any reference by principal to his own general conditions in any phase of making the agreement with us is explicitly rejected. Insofar as our conditions are conflicting with principal's conditions of purchase or tender or other conditions, our conditions shall prevail, except in case that and insofar as principal's conditions have been explicitly accepted by us in writing.
- In these general conditions the following terms shall be understood to mean the following:
"Principal": any natural person or legal entity who purchases products from us or to whom we submit offers.
"We" or "us": contract which has received an order from principal or has entered into an agreement with the latter or the who refers to these general conditions in his offer.
"Products": all objects which are the subject of an agreement, including all results of services rendered by us, such as contracting work, mounting, installation, advice, etc.

Article II - Offers; creation of agreements

- All our offers or quotations are free of engagement, unless explicitly stated otherwise in writing. Each offer or quotation from us is based on the assumption that we can carry out the order in normal conditions and during regular working hours. An agreement shall only be created if and insofar as we accept an order from principal in writing or if we commence carrying out an order. The date on which the agreement is created shall be the date of despatch of our written confirmation of the order respectively the first day on which we actually commence carrying out the order.
- If at principal's request we execute a purchase order prior to the agreement being created, we shall have the right to demand payment for such performance in conformity with the rates then applied by us, unless explicitly otherwise agreed upon in writing.
- In case of acceptance by us in writing, we shall have no further obligations than those accepted by us in writing. Principal shall be deemed to be bound by his order, for as long as the order has not been refused by us.
- Stipulations in the order which are additional to or deviating from our offer or quotation shall at all times only be binding for us if and insofar as such stipulations have been explicitly accepted by us in writing.
- All specifications of figure, measurements, drawings and/or other descriptions of the products have been drawn up with due care, but we cannot guarantee that no deviations will occur. Samples, drawings or models, etc. shown or provided shall at all times only be indications of the relevant products.

Article III - Prices

- Unless explicitly otherwise agreed upon in writing, our prices shall be ex works, which means excluding transport and/or forwarding, packaging, insurance, etc. and excluding duties and taxes and other levies, if any, imposed by the public authorities as well as any costs related to objects made available by principal in the scope of the execution of the order. If delivery free domestic has been agreed upon, expenses involved in special or express transport shall nevertheless be charged to principal separately.
- In addition, we shall have the right to charge a small-order surcharge to principal in case of small deliveries.
- In case that the prices of that the products delivered are, raw materials, wages, salaries, social security contributions and levies imposed by the public authorities are increased after the date when the agreement was created in conformity with article II clause 1 and before the order has been fully executed, we shall have the right to increase our prices accordingly.
- We shall have the right to invoice additional work carried out by us separately, also when the additional work has not been ordered in writing and/or the price thereof has not been agreed upon in advance. For calculating the price for additional work, the provisions in the preceding clauses of this article shall be analogously applicable. Applicability of 7a: 164b Dutch Civil Code is explicitly excluded.
- If mounting or products delivered is explicitly included in our confirmation of the order and is therefore part of the agreement entered into with principal, the price referred to in this article shall have been calculated so as to include mounting or installation of the products and completing the products ready for operation at the location specified in the agreement. The costs and financial consequences of obligations of principal referred to separately in article VI shall not be included in this price, except if and insofar as they have been explicitly included in our confirmation of the order.

Article IV - Packaging

Unless explicitly agreed upon otherwise in writing, the products shall be provided with a type of packaging - if necessary and at our exclusive discretion - in which they are customarily sold, duly observing the provision in article III clause 1. Unless otherwise agreed upon in writing with principal, we shall not take back the packaging materials.

Article V - Documents, appliances and advice

- Cost estimates, plans, drawings, statements of measurements and weights or other documents as well as appliances such as models, moulds, stamps, dies and tools pertaining to offers or deliveries drawn up, manufactured or made available shall remain our property at all times - also if the cost of manufacturing has been charged to principal - and shall be returned to us at our first request.
- Except when we have given our consent in writing, principal undertakes that the documents, appliances and information provided by us as referred to in this article shall be kept by principal at all times and shall be made available for inspection to or put at the disposal of third parties, whether for reusing them or not. We shall have the right to demand from principal that he gives his co-operation to signing a declaration of secrecy submitted to him by us.
- Duly observing the provision in article II, clause 5 we shall only be bound by any advice, calculation, information and specification provided by us regarding capacities, results and/or performance to be expected of products to be supplied by us or operations to be carried out by us, if and insofar as such particulars have been included in our written confirmation of the order or form part of the written agreement entered into separately by us and principal.

Article VI - Mounting; installation

- Principal shall ensure that necessary facilities, provisions and conditions for the mounting or installation operations to be carried out by us have been or are complied with timely and properly. Such facilities and other activities to be conducted in this scope shall be for the account and at the risk of principal at all times.
- Principal shall ensure for his account and at the risk that our engineers are enabled to carry out their operations. He provides the appliances required, duly observing necessary safety regulations and other precautions and gives the assistance required, either personally or by other persons made available by him. Principal shall ensure that suitable accommodation and other personal facilities are available to our engineers.
- Travelling expenses shall be charged to principal separately. In deviation from the provision in article III, clause 4, we reserve the right to charge additional labour costs in case that in our opinion, in deviation from the assumption referred to in article III, clause 1, we are necessitated to carry out the operations outside regular working hours and/or in special conditions.
- The provision in article VII regarding the period of delivery is analogously applicable to the mounting or installation period agreed upon. A period during which machineries, installations, etc. are running in is not included in the mounting or installation period.
- Duly observing the provisions in this article, that which has been provided in the relevant articles of these conditions shall be applicable to price, delivery, risk and warranty in respect of mounting or installation.

Article VII - Period of delivery

- The period of delivery, which is also understood to be the period for the operations to be carried out by us, shall commence on the day stated in our written confirmation of the order. If certain details, drawings, etc. are needed or certain formalities are required for the execution of the order, the period of delivery shall commence on a later date, being the date on which all details, drawings, etc. are in our possession or the date on which the formalities required have been fulfilled. In case that an advance payment is demanded by us when the order is placed, the period of delivery shall commence on a later date than the date of the written acceptance of the order or the date of receipt of said documents, drawings, etc. later date being the date on which we receive said payment.
- Periods of delivery stated by us shall not constitute a deadline and are always free of engagement. Solely expiration thereof does not result in our being in default. We shall make every effort to observe the periods of delivery stated as exactly as possible. Except for wilfulness or gross negligence, all proceedings the period of delivery does not give principal the right to demand compensation, to refuse to take receipt of the product or to full or partial rescission of the agreement.

Article VIII - Force majeure

- Force majeure on our part shall be understood to mean: any circumstance independent from our will due to which fulfillment of our obligations to principal is fully or partly prevented or due to which fulfillment of our obligations cannot be demanded from us in reason of whether this circumstance is foreseeable at the time when the agreement was entered into. We shall notify principal of a situation constituting force majeure as soon as possible.
- In any case all situations constituting force majeure, such as war, threat of war, civil war, riot, taking of hostages, war risk, fire, damage caused by water and flooding, strike, occupation of the company, lock-out, lack of labour or raw materials, defects in machines or installations, disruption in energy supply, all and any both in the company made that of third parties from whom we have to buy all or part of the materials or raw materials, as well as during storage or transport, whether executed by ourselves or not, and furthermore due to all other causes that have arisen for which we cannot be blamed or which have arisen through no action of ours, shall relieve us from any obligation to fulfil our obligations, including the period of delivery, for as long as the situation preventing us from doing so continues to exist. Claims for compensation due to partial or total non-fulfilment shall also be excluded in the above mentioned cases.
- When the situation constituting force majeure has continued for two months, we shall have the right to rescind the agreement in part or in full. In such case principal shall not be entitled to any compensation.

Article IX - Delivery

When the relevant products have left our factory or when we have notified principal in writing that the products are ready to be despatched, they shall be deemed to have been delivered, without prejudice to the provision in article XI and irrespective of our obligation, if any, to fulfil mounting and/or installation obligations. Consequently, the place of delivery is our factory, even if delivery free domicile and/or free transport has been agreed upon by us. In case that the order is delivered in parts, the separate batches as such shall be deemed to have been delivered.

Article X - Risk

- The risk shall be transferred to principal at the time of delivery in the sense of article IX. In case of damage to products caused by destruction of the packaging, too, the provision in the preceding sentence shall be in full force and effect.
- If the products are not, timely or not properly taken by principal, principal shall be in default without any notice of default being required. We shall then have the right to store the products for the account and at the risk of principal or to sell them to a third party. The selling price, increased by the interest and all expenses, shall remain payable by principal; however, as the case may be, the net proceeds of the sale to a third party shall be deducted.
- Unless otherwise agreed upon with principal in writing, despatch and/or transport of the products, if such operations are arranged by us, shall be for the account and at the risk of principal and the products shall not be insured against transport risks by us. Even if we have given a declaration to the carrier that any damage during transport shall be for our account, transport risks shall nevertheless be for the account of principal and we are not obliged to take steps to recover any damage. If desired, we may transfer our rights in respect of the carrier to principal.
- Except in case that such has been explicitly otherwise agreed upon in writing, products which have been provided to us for treatment, mounting or installation shall be held by us at the risk of principal. We undertake to hold and treat the products provided to us by principal with due care.

Article XI - Reservation of ownership

- The ownership of the products shall only be transferred to principal when he has fulfilled all obligations ensuing from the relevant agreement or from any agreement related thereto. Obligations shall be understood to include, in addition to payment of the purchase price, the operations conducted or to be conducted in respect of the products as well as payment of all surcharges, interest rates, taxes and costs, etc. in respect thereof pursuant to its agreement.
- It shall not be permitted to principal to alienate, raise a claim or pledge the products or contribute the products to a mortgage or to transfer the products to third parties in any other manner. It shall be permitted to principal to treat, process or use the products in the scope of his normal business operations.
- Principal shall remain liable to principal, without any notice of default or legal intervention being required. Without prejudice to the other rights to which we are entitled, we are irrevocably authorised by principal now, in case the occasion arises, to dismount and take into our possession the products supplied by us and fixed to movable or immovable objects, in the event that principal does not, timely or not properly fulfil his (financial) obligations contracted to us, and insofar as we are authorised by law to do so.
- Principal shall be obliged to notify us in writing without delay of the fact that third parties (possibly) exercise rights on the products on which our reservation of ownership is resting. In the event that principal appears not to have complied with this obligation, he shall forfeit a penalty of 15% of the unpaid part of the amounts payable by him to which the reservation of ownership is applicable, without prejudice to the other rights in respect of said amounts payable by him to which we are entitled.

- Each payment we receive from principal shall in the first instance serve as payment of amounts receivable by us from principal regarding which a reservation of ownership in the sense of clause 1 of this article is not applicable (any longer).

Article XII - Credit surcharge

The invoice amount may be increased by us by a credit surcharge which is stated separately on the invoice. When the invoice amount is paid within thirty days from the invoice date, said surcharge does not have to be included in the payment.

Article XIII - Payment

- Unless otherwise agreed upon in writing, payment of the purchase price and/or the price agreed upon for operations to be carried out or carried out by us shall be made, at our discretion, either cash on delivery or within thirty days from the date of delivery in accordance with the provision in article IX. All payments shall be made without any deduction or discount or of amounts receivable from us. In case that principal holds the view that he may have any claims, in whatever form, in respect of the delivery or the execution of the order, this shall not relieve him from the obligation to pay in the manner agreed upon and he shall not have the right to defer his obligation to pay.
- Payment of additional work shall be effected as soon as we have invoiced such work to principal.
- We shall have the right, if at any time we entertain reasonable doubts about principal's creditworthiness, to demand, before proceeding with (any further) performance, full or partial prepayment of the purchase price or that principal gives adequate security, for example by means of a bank guarantee or secret pledging of products supplied by us. In such case we shall also have the right to despatch products exclusively subject to the condition cash on delivery.
- In case that we have agreed with principal that payment shall be effected through a bank or when security is given by means of documentary credit or bank guarantees, principal undertakes that such transaction shall take place through a first-class bank at all times. If we have reasonable doubts about said qualification, we shall have the right to reject the bank proposed and to designate another bank.
- Solely due to any term of payment having expired, principal shall be in default by the operation of the law. In that case all amounts payable by principal to us shall fall fully and immediately due, without prejudice to the other rights to which we are entitled.
- On all amounts which have not been paid on the last day of the term of payment at the latest, interest shall be payable by principal, without any notice of default being required, as from that day, equal to the legal interest rate then applicable in The Netherlands increased by a 2% surcharge. Every time, after expiration of a year the amount on which interest is charged is increased by the interest payable for that year. If principal has not paid the amount and interest payable after expiration of another term of payment stated in writing, principal shall be obliged to compensate us for all expenses incurred in and out of court, which are determined at 15% minimum of the outstanding amount payable and will amount to 250,- minimum excluding VAT at all times.
- We shall have the right to keep in our possession objects of principal which have been put at our disposal in connection with the order granted to us and to defer returning such objects until principal has fulfilled all his financial obligations to us.

Article XIV - Rescission

- In case that principal does not, timely or not properly fulfil any of his obligations ensuing from the agreement entered into with principal, we shall be in default and we shall have the right, without any notice of default or legal intervention being required:
 - to suspend performance of the agreement and the agreements directly related thereto until adequate security has been given for payment; and/or
 - to rescind fully or partly the agreement and the agreements directly related thereto; and
 - all and any without prejudice to the other rights to which we are entitled and without our being obliged to give any compensation.
- In case of bankruptcy or a moratorium of principal's business or his business being shut down or liquidated, all agreements with principal shall be rescinded by the operation of the law, unless we notify principal within a reasonable period that we wish (part of) the relevant agreement(s) to be performed, in which case we shall have the right, without any notice of default being required:
 - to suspend performance of the relevant agreement(s) until adequate security has been given for payment; and/or
 - to suspend all our financial obligations, if any, on whatever account to principal; and
 - all and any without prejudice to the other rights to which we are entitled and without our being obliged to give any compensation.
- If an event occurs as referred to in clause 1 or clause 2 of this article, all amounts payable by us shall fall immediately and fully due and we shall have the right to take back the products involved. In that case we shall have the right to enter the sites and buildings of principal for the purpose of taking the products into our possession. Principal shall be obliged to take the measures required for providing the opportunity to us to exercise our rights.

Article XV - Cancellation

- If principal wishes to cancel the order placed with us and we have agreed thereto in writing, principal shall be obliged - except for a written agreement reading otherwise - to take over from us the materials and raw materials bought by us, whether on the basis of a forward contract or not, whether treated or processed or not, at the price paid by us, including labour costs, and to compensate us for such losses as loss of profit by paying 15% of the price agreed upon; and all and any without prejudice to any other rights to which we are entitled. In case that we have entered into a currency exchange agreement with a bank or a third party, principal shall also be obliged to compensate us for the exchange losses ensuing from the cancellation.
- Principal shall be obliged at all times to indemnify us against claims of third parties ensuing from the cancellation of the order.

Article XVI - Inspection and complaints

- Principal shall be obliged to inspect the products or cause the products to be inspected carefully immediately after their arrival at the place of the operation or after completion of the operations carried out by us or - if it happens earlier - after receipt by himself or by a third party acting on his instructions. Any complaints about defects to the products - owing to defects in materials or manufacture, as well as deviations as regards quantity, weight, composition or quality between the products and the relevant agreements - must be submitted in writing to the competent court of the order and/or the completion of the operations, without prejudice to the provision in clause 3 of this article. However, if a test or inspection has been conducted at our factory, complaints shall be submitted during such test or inspection and defects shall be null and void.
- Any defects which in reason cannot be established within the period stipulated hereinbefore shall be notified to us in writing immediately when they have been established but within the applicable warranty period at the latest. Complaints about invoices shall exclusively be submitted in writing within fourteen days from the date of receipt of the invoices, the date of receipt of the invoices giving us the opportunity to conduct an on-site investigation into the conditions of the operations, without prejudice to the provision in clause 3 of this article. However, if a test or inspection has been conducted at our factory, complaints shall be submitted during such test or inspection and defects shall be null and void.
- Slight deviations with the customary tolerances shall not constitute any grounds for principal to complain, apply for compensation or request cancellation of the order.
- If complaints are not submitted within the periods stipulated in this article, any claim of principal pertaining to such defects shall be null and void.
- When principal discovers any defect, he shall be obliged to discontinue the application, treatment, processing or installation of the relevant products immediately and he shall give his full co-operation required by us for investigating the complaint, which includes giving us the opportunity to conduct an on-site investigation into the conditions of treatment, processing, installation and/or application or cause such investigation to be conducted.
- Principal shall not have the right to complain about products in respect of which we cannot verify the complaint. Principal shall not be free to return the products before we have agreed thereto in writing.

Article XVII - Warranty

- We grant warranty on defects in materials and manufacture for twelve months from delivery by principal to the end user, however, for eighteen months maximum from delivery in the sense of article IX. Our warranty comprises our repairing the defects at our expense or - at our exclusive discretion - taking back the relevant products fully or partly and replacing them by new products. If we replace (components of) products supplied so as to fulfil our warranty obligations, the replaced (components of) products shall become our property.
- All expenses, exceeding the obligation referred to hereinbefore in this article shall be for the account of principal, such expenses including carriage, travelling expenses and costs of dismounting and mounting. In case that we carry out repairs to products supplied to fulfil our warranty obligations, the relevant products shall fully remain at the risk of principal.
- Our warranty shall not be effective:
 - if the defects have resulted from injudicious application or from causes other than defective materials or manufacture;
 - if we deliver used materials or used products in accordance with the order;
 - if the cause of the defects cannot be clearly demonstrated;
 - if not all instructions provided for using the products and other specifically applicable warranty instructions have been complied with strictly and fully.
- If principal orders for treatment, repair, etc., warranty shall only be granted for the good quality of the execution of the treatments ordered. On components which we do not manufacture ourselves, warranty shall be restricted to the warranty granted to us by our suppliers.
- If we have undertaken to mount or install the products, our warranty obligation in respect thereof shall only be in the scope of the installation or the order for which, pursuant to these conditions, we are not liable to principal.
- We shall not be liable for violation of any patents, licences or other rights of third parties by using information which has been made available to us by or on behalf of principal for the execution of the order. If in the written agreement entered into with principal or in our communication to the order we refer to technical, safety, quality and/or other relations pertaining to the products, principal shall be deemed to be acquainted with such regulations, unless he notifies us of the contrary without delay. We shall then give him further information on said regulations. Principal undertakes to inform his customers in writing of said regulations at all times.
- Unless explicitly otherwise agreed upon, we shall be exclusively obliged to comply with the warranty obligations stipulated in this article within The Netherlands.

Article XVIII - Liability

- Our liability shall be limited to complying with the warranty obligation described in article XVII.
- Except in case of our own wilfulness or gross negligence and except for our warranty obligations, we shall at no time be liable for any damage suffered by principal, including consequential damage, emotional injury, loss of profits or damage to the environment or damage resulting from liability to third parties.
- In the event that and insofar as we are still held liable in any case by the competent court, despite the provision in clauses 1 and 2 of this article, our liability to principal on whatever account shall be limited for each event (in which a related series of events shall be considered to be one event) in all cases to the size of the relevant contract price excluding VAT.
- Principal shall be obliged to indemnify us and compensate us for all expenses, losses and interests which might have arisen for us as a direct consequence of claims of third parties on us in respect of events, acts or omissions occurring in the scope of the execution of the order for which, pursuant to these conditions, we are not liable to principal.
- We shall not be liable for violation of any patents, licences or other rights of third parties by using information which has been made available to us by or on behalf of principal for the execution of the order. If in the written agreement entered into with principal or in our communication to the order we refer to technical, safety, quality and/or other relations pertaining to the products, principal shall be deemed to be acquainted with such regulations, unless he notifies us of the contrary without delay. We shall then give him further information on said regulations. Principal undertakes to inform his customers in writing of said regulations at all times.

Article XIX - Applicable law; competent court

- Dutch law shall be applicable to all agreements entered into with us, of which these conditions are a part, either in full or in part. Parties shall be deemed to elect domicile at the place where we are established.
- Any dispute arising from agreements entered into with us or these general conditions shall be subjected, insofar as not laid down otherwise by the law, to the decision of the competent court whose jurisdiction includes the place where we are established, unless explicitly otherwise agreed upon by parties.
- The applicability of the Viennese Contract of Sale is excluded, unless parties have explicitly otherwise agreed upon.

Article XX Filing

These General Terms and Conditions are filed at the Chamber of Commerce at Zutphen dated 1st January 1994 under no. 1935.

Article XXI Registration

Georg Fischer Waga N.V. +GF+ has been registered under the Business Names Act with the Chamber of Commerce at Zutphen under no. 58/49.

Georg Fischer Waga N.V. → worldwide at home



Our solutions

MULTI/JOINT® 3000 Plus wide-range couplings restraint - non restraint DN50 - DN300 (8" - 12")				
MULTI/JOINT® XL wide-range couplings non restraint DN300 - DN600 (12" - 24")				
ST-System dedicated couplings and flange adaptors with or without reduction DN40 - DN2800 (2" - 112")				
FGR stainless steel couplings restraint - non restraint DN25 - DN2000 (1" - 80")				
Plast/Join® mechanical connection for plastic pipes restraint - non restraint d63 - d315				
Multi/Clamp stainless steel repair clamps, tapping tees and saddles DN25 - DN1000 (1" - 40")				
Multi/Saddle Plus wide-range tapping saddle with or without shut-off mechanism DN60 - DN300 (2 1/2" - 12")				
Others W400/W410 drilling device WALV leak clamp DN80 - DN1200 (3" - 48") MULTI/JOINT® PE adaptor				

Our expertise

Georg Fischer Waga N.V. is the joining technology specialist, offering a complete range of products that have been used in the water & gas market for many years. No matter how complicated your connection problem is, we can offer you a solution.

- Innovator and market leader in connection technology
- Extensive application know-how and know-why
- Decades of experience
- Long-term system solutions
- "One stop" shopping
- Local support worldwide

Adding Quality to People's Lives

The technical data are not binding and not expressly warranted characteristics of the goods. They are subject to change. Please consult our General Conditions of Supply.

Prieli 2011/0111/GB
© Georg Fischer Waga N.V.
2011, produced in the Netherlands

Local distributor

Georg Fischer Waga N.V.
Lange Veenteweg 19, 8161 PA / P.O. box 290, 8160 AG Epe,
Netherlands T +31 (0) 578 678 378 / F +31 (0) 578 620 848
waga.ps@georgfischer.com / www.waga.nl

+GF+

GEORG FISCHER
PIPING SYSTEMS