



Technical Catalogue



Always On.

Pipeline Technical Catalogue

Welcome! In this catalogue, you will find a complete technical overview of the latest water pipeline products we have to offer. For more information on any product in this catalogue, please contact us on: **01282 778030, info@r2mltd.co.uk or www.r2mltd.co.uk.**



AVT EZ Valve Live Insertion Valve

4" EZ Valve Live Installation

600+ properties mitigated, water supply remained live throughout
Shropshire, Severn Trent

Nova Siria DuoFit Encapsulation Collar

DN 900 DuoFit Encapsulation Collar

Installed first time with no issues, test completed with no problems

Glasgow, Scottish Water



R2M UnJammer Valve Release Key

Released seized valve in 5 minutes

Avoided replacing the valve, saving thousands of pounds in the process

Dunfermline, Scottish Water

Hawle/Özkan Butterfly Valve

12 x DN 600 Double Eccentric Valves & DN 1000 Butterfly Valves

Delivery on schedule in time for install

Mythe WTW, Severn Trent



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What we are all about at R2M

Incorporated in 2003, R2M are proud to be one of the leading suppliers of pipes, valves and fittings within the UK Water Industry. We have built an excellent reputation within the industry with our broad range of stocks and our 24/7, 365 days-a-year emergency service, working to keep the water **#AlwaysOn**. Pipes, Pipeline Connections, Fittings, Encapsulation, Repair & Maintenance and Valves; if you have a problem, R2M has your solution.

In December 2019, R2M Limited was officially acquired by the Hawle Austria Group. Internationally recognised, the Hawle Austria Group produces and distributes quality products for water supply all over the world. Since joining, we have gone from strength to strength, working closely alongside our partners: Hawle, Nova Siria, Erhard and Özkan.

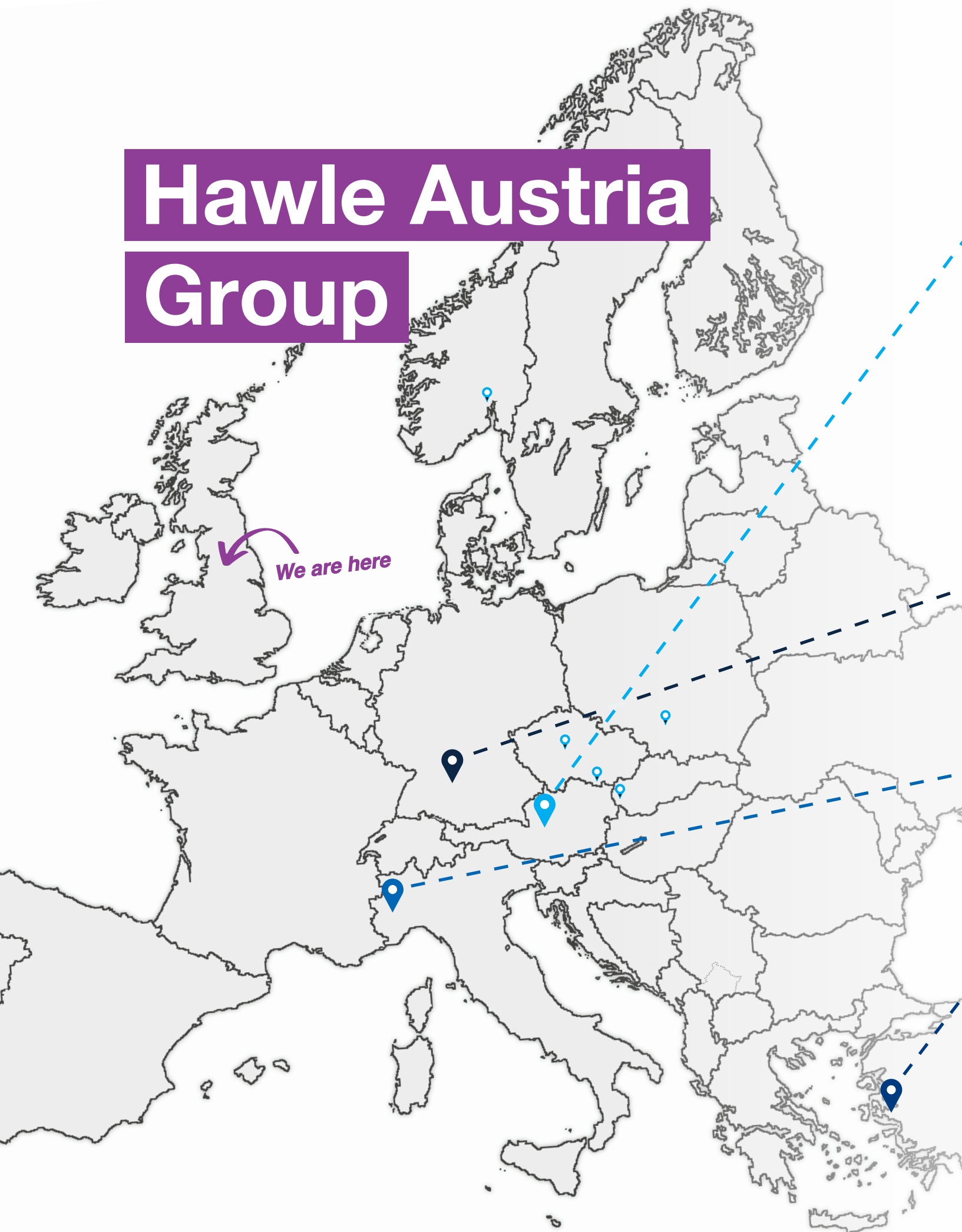
Here at R2M, we pride ourselves on our ability to work alongside UK water utility companies and contractors to innovate new products. The importance of listening to our customers cannot be understated, and we believe that working together to develop products they truly want and need is crucial to creating a strong working relationship. From the cQuick2 Encapsulation Collar to the Haldi Hydrant Clamp, we are always looking to innovate products that can offer solutions, eliminate problems or take steps in enhancing health & safety.





R2M Limited, Unit 6 Metcalf Drive, Altham Industrial Estate, Altham,
Accrington, Lancashire, BB5 5TU, UK

Hawle Austria Group





Frankenmarkt & Vocklabruck, Austria

The Hawle Austria Group is a recognised leader in the design, manufacturing, and supply of high-quality valves, fittings and pipe couplings. Founded by Engelbert Hawle in 1948, the Hawle Austria Group has cemented itself as a pioneer for innovation, reliability, and sustainability within the clean water and wastewater industry.

With a focus on providing robust and durable solutions, the Hawle Austria Group specialises in creating products that ensure the safe and efficient operation of essential infrastructure. The Group serves industrial and utility sectors around the world, offering a broad range of products that cater to clean water and wastewater applications.

 Hawle subsidiaries in Poland, Czech Republic, Slovakia, Norway, Middle East and India



Heidenheim, Germany

Erhard has been a leading supplier of standard pipework fittings for potable water and wastewater applications for 150 years. The company focuses on developing and manufacturing large valves and fittings, as well as providing customised solutions to protect water and safeguard the water supply.



Turin, Italy

The Italian fittings manufacturer has been a member of the Hawle Austria Group since 2015 and producing fittings since 1932. "What is special for others is standard for us". The availability of products, a broad product range and bespoke production is what makes Nova Siria stand out from the rest.



Izmir, Turkey

Özkan is a manufacturer of high-quality butterfly valves, non-return valves, needle valves and air valves. The specialist valve manufacturer thrives on tailor-made solutions and on-time deliveries. Founded in 1983, Özkan has been a member of the Hawle Austria Group since 2011.



cQuick2 Encapsulation Collar



UnJammer LT Valve Release Key



Haldi Hydrant Safety Clamp

Innovation – it's what we do

Leading the way in water industry innovation.

One of the core values we pride ourselves on at R2M is our continuous drive to innovate and develop products that can lead the water industry forward. This is only possible due to our ability to work alongside UK water utilities, contractors and customers, listening to their feedback and implementing into products they truly want and need.

cQuick2 Encapsulation Collar, UnJammer LT Valve Release Key, X-Shell End Restraint, Haldi Hydrant Clamp, Nozzigrip, Squeeze Off Tool, LazerBooster; just a few of the products that have been innovated by R2M.

cQuick2 Encapsulation Collar – A collar designed to encapsulate leaking socket spigot joints, AC collars, flanges, couplers or previously installed repair clamps (Page 37)

UnJammer LT Valve Release Key – A lightweight, kinetic energy valve release key for seized or stiff valves in the water network (Page 48)

Haldi Hydrant Safety Clamp – A device designed to secure faulty hydrants, where the outlet adaptor and main chamber are at risk of unscrewing during operation (Page 49)



Roadshows on your doorstep





From the peaks of the Scottish Highlands, all the way down to the sandy shores of Cornwall, our Roadshows cover every inch of the UK, bringing R2M to your doorstep.

Our Roadshows offer the perfect opportunity to showcase the entire product range we have to offer at R2M, with in-person demonstrations and training able to take place. We also have the chance to create relationships with our customers and engage in face-to-face discussions on how possible improvements can be made within the UK water supply. This sharing of information and knowledge is crucial in the role of developing and innovating new products.

If you are interested in having a R2M Roadshow of your own, be sure to get in contact with your local Business Development Manager or contact our Accrington offices on **01282 778030** or email us at **info@r2mltd.co.uk** to book yours now!

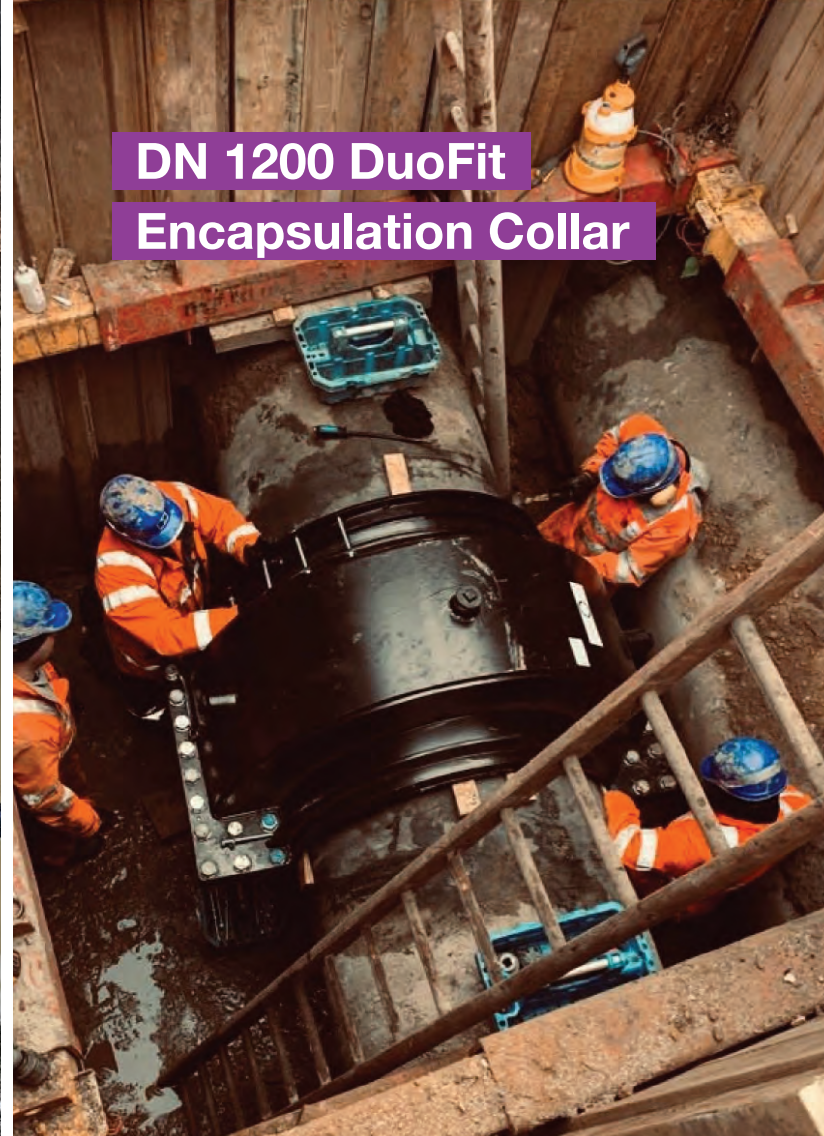
36 Roadshows during 2024...



**12" AVT EZ Valve Live
Insertion Valve**



**DN 1200 DuoFit
Encapsulation Collar**



**DN 600 Under-Pressure
Tee**



Site Measurements



Installed, by our Partners

Apart from supplying products, we also offer an install & emergency service all year round. For more than 6 years now, R2M has partnered up with R2M Site Services to provide our customers with not only installation of DuoFits or EZ valves, but also Under Pressure Tee's, line stopping and bespoke encapsulation collars.

Our true 24/7, 365 day-a-year emergency service extends to attending and measuring to manufacturing a bespoke or delivering from stock and installing for the customer if desired. Since 2019, R2M Site Services have installed over 500+ AVT EZ Valve Live Insertion Valve. R2M Site Services were also the first to install an EZ Valve to a hot water pipe, doing so for a hospital heating system.

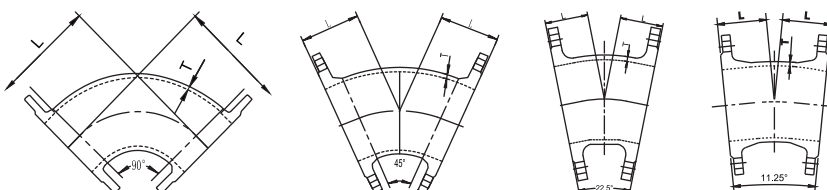
With teams across the whole UK, we can cover any area and can be on site within hours, depending on the urgency of the situation. For more information on the install & emergency services we provide, **call R2M on 01282 778030.**



Flanged Bends

FLANGED BENDS

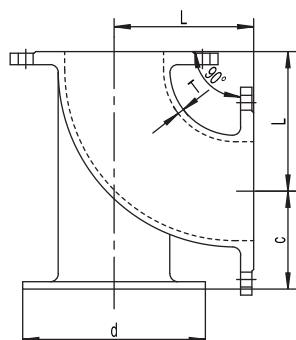
90°, 45°, 22.5°, 11.25°



Size (MM)	90° Bend		45° Bend		22.5° Bend		11.25° Bend		Weight (KG)			
	T	L	T	L	T	L	T	L	90°	45°	22.5°	11.25°
80	7	165	7	130	7	130	7	130	14.8	9.3	9.4	9.5
100	7.2	180	7.2	140	7.2	140	7.2	140	18.2	11.3	11.5	11.5
150	7.8	220	7.8	160	7.8	160	7.8	160	31.5	18.5	18.7	18.6
200	8.4	260	8.4	180	8.4	180	8.4	180	48.5	27	27.4	27.5
250	9	350	9	350	9	350	9	350	77.5	54	55.2	55
300	9.6	400	9.6	400	9.6	400	9.6	400	111	77	77.5	78
350	10.2	450	10.2	298	10.2	298	10.2	298	153	83	83.6	83.5
400	10.8	500	10.8	324	10.8	324	10.8	324	201	107	108.4	108
450	11.4	550	11.4	349	11.4	349	11.4	349	261	132	138	135
500	12	600	12	375	12	375	12	375	336	175	176	177
600	13.2	700	13.2	426	13.2	426	13.2	426	522	266	268	269
700	14.4	800	14.4	478	14.4	478	14.4	478	708	326	329	331
800	15.6	900	15.6	529	15.6	529	15.6	529	974	442	477	449
900	16.8	1000	16.8	581	16.8	581	16.8	581	1290	567	577	577
1000	18	1100	18	632	18	632	18	632	1698	751	760	764
1200	20.4	1300	20.4	750	20.4	735	20.4	735	2709	1178	1223	1189

FLANGED BENDS

90° Duckfoot



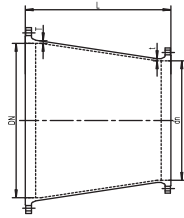
DN	L	C	D	Weight (KG)
80	165	110	180	14.8
100	180	125	200	18.2
150	220	160	250	31.5
200	260	190	300	48.5
250	350	225	350	77.5
300	400	255	400	111
350	450	290	450	153
400	500	320	500	201
450	550	350	550	261
500	600	385	600	336
600	700	450	700	522
700	800	515	800	708
800	900	580	900	974
900	1000	645	1000	1290
1000	1100	710	1100	1698
1100	1200	775	1200	2150
1200	1300	840	1300	2709

Please be aware that the designs, materials and dimensions shown are subject to change without any notice. Always check with the office prior to ordering on 01282 778 030.

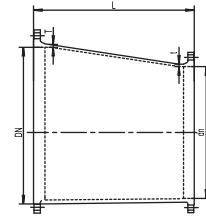
Tapers



CONCENTRIC



ECCENTRIC

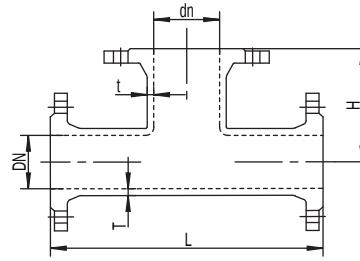


Size	L	T	T1	Weight (KG)
80x50	200	12	7	7
100x50	200	13	7	11
100x80	200	13	12	14
150x50	229	14	7	16
150x80	300	14	12	18
150x100	300	14	13	20
200x80	300	14	13	24
200x100	300	15	13	29
200x150	300	15	14	34
250x80	700	15	14	38
250x100	300	17	13	38
250x150	300	17	14	41
250x200	300	17	15	50
300x100	300	19	13	54
300x150	300	19	14	59
300x200	300	19	15	66
300x250	300	19	17	77
350x150	300	17	14	70
350x200	300	17	15	79
350x250	300	17	17	86
350x300	300	17	19	100
400x150	300	18	14	86
400x200	300	18	15	95
400x250	300	18	17	106
400x300	300	18	19	120
400x350	300	18	14	127
450x200	600	19	15	109
450x250	600	19	17	120
450x300	600	19	19	134
450x350	600	19	17	141
450x400	600	19	18	154
500x250	700	20	17	141
500x300	600	20	19	156
500x350	600	20	17	161
500x400	600	20	18	177
500x450	300	20	19	186
600x300	800	23	19	218
600x350	700	23	17	222
600x400	600	23	18	238
600x450	600	23	19	249
600x500	600	23	20	268

Size	L	T	T1	Weight (KG)
80x50	200	12	7	7
100x50	200	13	7	11
100x80	200	13	12	14
150x50	229	14	7	16
150x80	400	14	12	20
150x100	300	14	13	20
200x80	600	14	13	27
200x100	600	15	13	33
200x150	300	15	14	34
250x80	600	15	14	37
250x100	600	17	13	42
250x150	600	17	14	45
250x200	300	17	15	50
300x100	600	19	13	59
300x150	600	19	14	63
300x200	600	19	15	69
300x250	600	19	17	84
350x150	600	17	14	85
350x200	600	17	15	89
350x250	600	17	17	99
350x300	300	17	19	100
400x150	600	18	14	105
400x200	600	18	15	109
400x250	600	18	17	112
400x300	600	18	19	118
400x350	300	18	14	128
450x200	600	19	15	130
450x250	600	19	17	120
450x300	600	19	19	134
450x350	600	19	17	141
450x400	300	19	18	148
500x250	700	20	17	141
500x300	600	20	19	156
500x350	600	20	17	161
500x400	600	20	18	177
500x450	300	20	19	186
600x300	800	23	19	218
600x350	700	23	17	222
600x400	600	23	18	238
600x450	600	23	19	249
600x500	600	23	20	268

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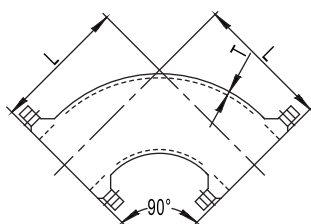
Tees



DN	dn	T	L	t	H	Weight (KG)
80	80	7	330	7	165	15.6
100	80	7.2	360	7	175	18.4
	100			7.2	180	19.4
150	80	7.8	440	7	205	28.5
	100			7.2	210	29.5
	150			7.8	220	32.5
200	80	8.4	520	7	235	41.5
	100			7.2	240	42
	150			7.8	250	45.5
	200			8.4	260	49
250	80	9	700	7	270	49.3
	100			7.2	275	67
	150			7.8	300	71
	200			8.4	325	75
300	250	9.6	800	9	350	81
	80			-	-	-
	100			7.2	300	93
	150			7.8	325	97
	200			8.4	350	101
	250			9	375	108
350	300	10.2	850	9.6	400	115
	100			7.2	325	122
	150			7.8	325	125
	200			8.4	325	128
	250			9	325	134
	300			9.6	425	138
400	350	10.8	900	10.2	425	151
	100			7.2	350	154
	150			7.8	350	156
	200			8.4	350	159
	250			9	350	161
	300			9.6	450	184
450	350	11.4	950	10.2	450	183
	400			10.8	450	191
	100			7.2	375	193
	150			7.8	375	199
	200			8.4	375	207
	250			9	375	216
	300			9.6	475	227
	350			10.2	475	240
450	400			10.8	475	254
	450			11.4	475	269

DN	dn	T	L	t	H	Weight (KG)
500	100	12	1000	7.2	400	241
	150			7.8	400	243
	200			8.4	400	245
	250			9	400	258
	300			9.6	500	255
	350			10.2	500	262
	400			10.8	500	276
	450			11.4	500	298
600	500	13.2	1100	12	500	297
	100			7.2	450	329
	150			7.8	450	340
	200			8.4	450	358
	250			9	450	360
	300			9.6	550	374
	350			10.2	550	380
	400			10.8	550	387
700	450	14.4	1200	11.4	550	417
	500			12	550	420
	600			13.2	550	434
	100			7.2	510	295
	150			7.8	515	296
	200			8.4	525	298
	250			9	530	335
	300			9.6	540	342
800	350	15.6	1350	10.2	550	375
	400			10.8	555	379
	450			11.4	565	436
	500			12	5	

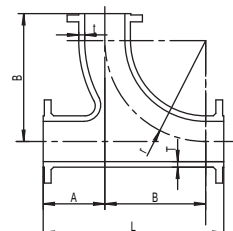
Long Rad 90°, Radial Tee, Angle Branch



**90° LONG
RADIUS BEND**

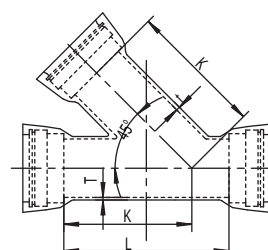
DN	T	L	Weight (KG)
80	7	380	14.5
100	7.2	400	18
150	7.8	450	30.5
200	8.4	500	46
250	9	550	66
300	9.6	600	90.5
350	10.2	650	122
400	10.8	700	158
450	11.4	750	200
500	12	800	254
600	13.2	900	379
700	14.4	1000	489
800	15.6	1100	661
900	16.8	1200	854
1000	18	1300	1117
1100	19.2	1400	1385
1200	20.4	1500	1737

RADIAL TEE



Dn x dn	T	t	L	A	B	r	Weight (KG)
80x80	8.1	8.1	545	165	380	330	23
100x100	8.4	8.4	580	180	400	340	29.5
150x150	9.1	9.1	670	220	450	385	47.9
200x200	9.8	9.8	760	250	500	430	71.6
250x250	10.5	10.5	900	350	550	475	104.8
300x300	11.2	11.2	1000	400	600	515	144.5
350x350	11.9	11.9	1100	450	650	560	203.4
400x400	12.6	12.6	1200	500	700	605	263.1
450x450	13.3	13.3	1300	550	750	650	332
500x500	14	14	1400	600	800	690	421.9
600x600	15.4	15.4	1500	700	900	780	623.7

**ANGLE
BRANCH**



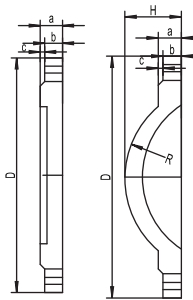
Dn x dn	T	t	L	K	Weight (KG)
80x80	8.1	8.1	500	375	21
100x100	8.4	8.4	540	405	27
150x150	9.1	9.1	640	480	46.4
200x200	9.8	9.8	735	560	70.1
250x250	10.5	10.5	830	640	103.8
300x300	11.2	11.2	930	715	145.5
350x350	11.9	11.9	880	790	167.4
400x400	12.6	12.6	970	870	204.1
450x450	13.3	13.3	1060	950	277
500x500	14	14	1140	1025	350.9
600x600	15.4	15.4	1310	1180	540.7

Please be aware that the designs, materials and dimensions shown are subject to change without any notice. Always check with the office prior to ordering on 01282 778 030.

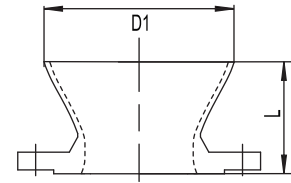
Y Pipe, Blank Flange, Bellmouth

BLANK FLANGE

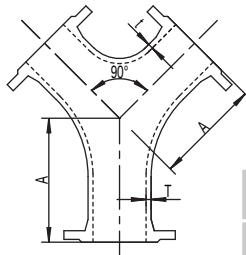
DN	Weight
80	3.9
100	4.7
150	7.9
200	11.9
250	18.3
300	25.9
350	36.9
400	49
450	69.9
500	84.7
600	133.1
700	171.6
800	239.8
900	314.6
1000	425.7
1100	569.8
1200	728.2
1400	1093.4
1500	1201.2
1600	1549.9
1800	2043.8
2000	2647.7
2200	3406.7
2400	4249.3
2600	5187.6



FLANGED BELLMOUTH



DN	D1	L	Weight (KG)
80	150	130	9
100	175	135	11
150	230	150	17
200	290	170	24
250	245	185	32
300	405	205	44
350	460	220	75
400	520	240	98
450	575	255	120
500	635	275	153
600	750	310	211
700	865	345	225
800	980	380	244
900	1095	415	284
1000	1210	450	360
1100	1325	485	454
1200	1440	520	512



Y PIPE

Dn x dn	T	A	Weight (KG)
80x80	8.1	165	15.6
100x100	8.4	180	19.3
150x150	9.1	220	31.9
200x200	9.8	260	48.1
250x250	10.5	350	79.8
300x300	11.2	400	113.5
350x350	11.9	450	165.4
400x400	12.6	500	219.1
450x450	13.3	550	280
500x500	14	600	363.9
600x600	15.4	700	562.7

Please be aware that the designs, materials and dimensions shown are subject to change without any notice. Always check with the office prior to ordering on 01282 778 030.

Fabricated Pipe



At R2M, we supply various fabricated pipes for multiple applications, across both clean water & wastewater. This includes: Flange Spigot Pipe, Flange Spigot Pipe with Puddle Flange, Double Flange Pipe, Double Flange Pipe with Puddle Flange and Flange Spigot Pipe with Tie Flange.

For all fabricated pipework, be sure to contact our office directly on 01282 778030 and a member of our sales team will find the right solution for you.

Flange Spigot Pipe



Flange Spigot Pipe with Puddle Flange



Double Flange Pipe



Double Flange Pipe with Puddle Flange



Flange Spigot Pipe with Tie Flange

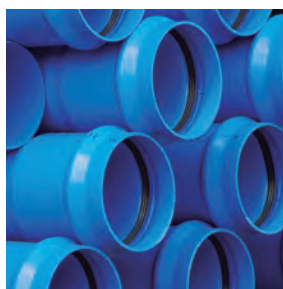


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Molecor Pipe

MoPVC Pipes

- 75% lighter than Ductile Iron and 50% lighter than PE – less need for any heavy lifting equipment and fewer back injuries
- Easy and simple push fit assembly – massive advantage in terms of installation in metres per hour – ideal for piecing in
- Completely corrosion resistant – no need for special protection or coating
- Unbeatable impact resistance – do not need to re-coat on site as with damaged ductile
- Available in bar ratings 12.5, 16, 20 & 25 – the best choice in high pressure situations
- Increased hydraulic capacity – 15-40% more hydraulic capacity than other materials with same external dimensions
- Approved under regulation 31 of the Water Supply (Water Quality) Regulations 2000



Range and Dimensions for PN 16

DN	PN	OD		ID	Wall Thickness	Pipes / Pallet	Pallet / Truck	Pipes / Truck	Pallet Weight
		min.	max.						
90	16	90.0	90.3	84.3	2.0	81	16	1296	555
110		110.0	110.4	103.1	2.4	76	12	912	775
125		125.0	125.4	117.8	2.8	60	12	720	725
140		140.0	140.5	132.3	3.1	45	12	540	655
160		160.0	160.5	151.2	3.5	33	12	396	625
200		200.0	200.6	189.0	4.4	23	12	276	680
225		225.0	225.7	212.6	5.0	14	16	224	530
250		250.0	250.8	236.3	5.5	11	12	132	515
315		315.0	316.0	297.7	6.9	13	8	104	955
355		355.0	356.1	335.5	7.8	11	6	66	1020
400		400.0	401.2	378.0	8.8	11	6	66	1290
450		450.0	451.4	425.3	9.9	5	10	50	755
500		500.0	501.5	472.5	11.0	4	8	32	740
630		630.0	631.9	595.4	13.8	3	6	18	875
710		710.0	712.0	671.0	15.4	3	6	18	1105
800		800.0	802.0	756.1	17.4	3	6	18	1400
900		900.0	902.7	850.6	19.6	2	4	8	1180
1000		1000.0	1003.0	945.1	21.7	2	4	8	1450
1100		1100.0	1103.3	1039.6	–	2	4	8	1750
1200		1200.0	1203.6	1134.1	26.2	2	4	8	2080



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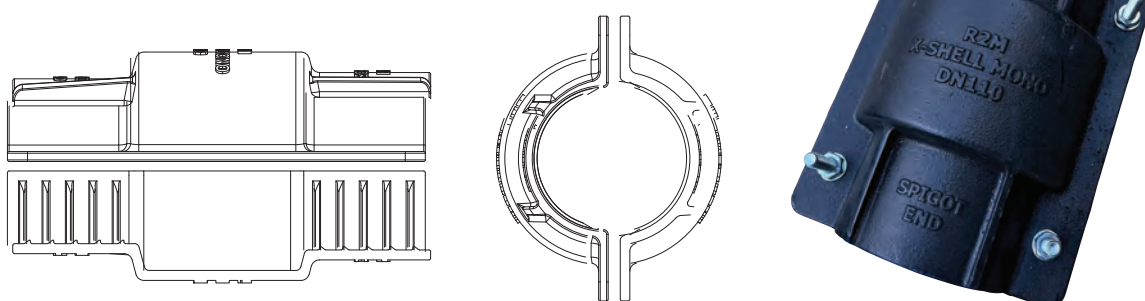
X-Shell



Molecor MoPVC End Restraint Fitting

The **R2M X-Shell** is a 2 piece end restraint system which grips Molecor MoPVC pipes together, enabling the standard Molecor socket spigot joint to become end loaded to EN12842. Changes of direction, stop ends, tees and valves can be restrained without the need for concrete thrust blocks and other expensive external thrust restraint systems.

The 'toothed shells' grip and protect the socket/spigot joint and surpass the EN12842 tests of 24,000 cycles of 0-16bar.



Size	Material	Weight	Fixings	Tightening Torque	Overall Length
90	Ductile Iron	6Kg	4 x M12 Hex	60NM	250mm
110	Ductile Iron	7Kg	4 x M12 Hex	60NM	250mm
160	Ductile Iron	10Kg	4 x M12 Hex	60NM	260mm
200	Ductile Iron	16Kg	8 x M16 Hex	70NM	300mm
250	Ductile Iron	21Kg	10 x M16 Hex	70NM	320mm
315	Ductile Iron	31.5Kg	10 x M16 Hex	70NM	380mm



2 DN 90 X-Shell Installed



A cost effective end restraint solution for Molecor MoPVC Joints, fast & efficient installation process!

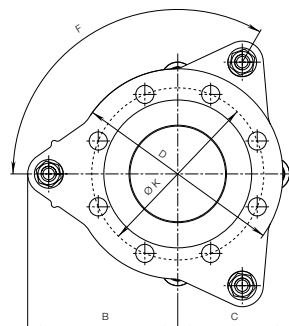
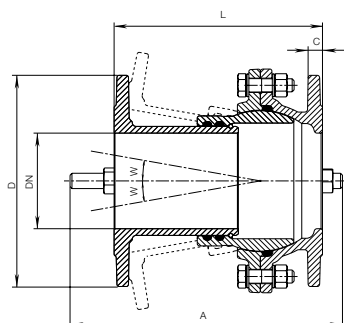
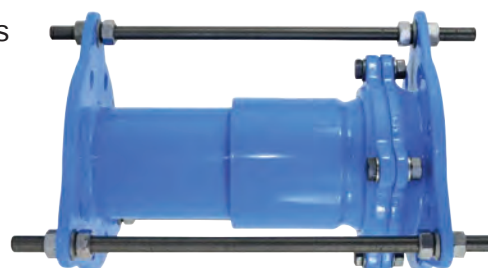
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Vario

No. 8010S, No. 8011S

- Hawle Vario is a flanged, telescopic fitting with integrated ball and socket joint, permitting bending to all sides up to an angular deflection of 10 degrees
- Flange size according to EN 1092-2 | PN 16, drilled according to EN 1092-2 | PN 10 standard; EN 1092-2 | PN16 DN 200 please specify on order - other standards on request
- Hawle Vario will be fixed in the installed position by means of a tension lock assembly
- Saves time and has numerous application possibilities

Set version	MOP (PN)	Dimensions/DN				
		50	80	100	150	200
short	16					
long						



DN	MOP (PN)	Version	Adjustment Range (L)	A	B	C	D	F	C	ØK	Angle W	Weight
50	16	short	150 – 207	285	130	87	165	3 x 120°	16	125	0 – 10°	8,90
		long	207 – 323	415	130	87	165	3 x 120°	16	125	0 – 10°	11,80
80		short	150 – 214	285	147	107	200	3 x 120°	16	160	0 – 10°	14,30
		long	214 – 344	415	147	107	200	3 x 120°	16	160	0 – 10°	16,85
100		short	150 – 216	285	157	117	220	3 x 120°	16	180	0 – 10°	16,20
		long	216 – 350	415	157	117	220	3 x 120°	16	180	0 – 10°	18,90
150		short	175 – 250	330	190	190	285	4 x 90°	18	240	0 – 10°	27,00
		long	250 – 408	480	190	190	285	4 x 90°	18	240	0 – 10°	29,30
200	10/16	short	195 – 292	360	229	229	340	4 x 90°	20	297	0 – 8°	44,80
		long	280 – 462	530	229	229	340	4 x 90°	20	297	0 – 8°	52,20



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Dismantling Joint



- Long body/short body/follower material: Ductile Iron EN1563, Grade EN-GJS-500-7
- Tie rods/flange adaptor studs/nuts/washers material: steel GEOMET COATING (alternative SS316)
- Rubber gasket: EPDM WRAS certificated
- Black powder coating, powder WRAS certificated
- Flange drilling PN10/16: EN1092-1 & ISO7005-2
- Standard longitudinal adjustment by +/-25mm based on the above Nominal length data



DN	PN	Flange OD	Flange Thickness	Nominal Length	Tie Rod Size and Quantity	Flange Adaptor Stud Size and Quantity	Weight (Kg)
50	10/16	165	18	190	M16*310*4	M12*150*4	10
65	10/16	185	18	190	M16*310*4	M12*150*4	11
80	10/16	200	19	210	M16*330*4	M12*150*4	13
100	10/16	220	19	210	M16*330*4	M12*150*4	16
125	10/16	250	19	220	M16*330*4	M12*150*4	18
150	10/16	285	19	220	M20*350*4	M12*150*4	22
200	10	340	19	220	M20*350*4	M12*150*4	30
	16	340	19	220	M20*350*4	M12*150*6	30
250	10	395	21	230	M20*370*4	M12*150*6	39
	16	405	21	230	M24*380*4	M12*150*6	40
300	10	445	23	240	M20*390*4	M12*150*6	49
	16	460	23	240	M24*410*4	M12*150*6	51
350	10	505	23	245	M20*400*4	M16*170*8	63
	16	520	23	245	M24*410*4	M16*170*8	65
400	10	565	23	260	M24*420*4	M16*170*8	76
	16	580	26	260	M27*430*4	M16*170*8	90
450	10	615	24	270	M24*440*5	M16*170*10	89
	16	640	28	270	M27*450*5	M16*170*10	109
500	10	670	25	280	M24*440*5	M16*170*10	100
	16	715	30	280	M30*460*5	M16*180*10	141
600	10	780	27	300	M27*460*5	M16*170*10	136
	16	840	33	300	M33*500*5	M16*180*10	197
700	10	895	30	300	M27*480*6	M16*180*12	188
	16	910	36	300	M33*500*6	M16*200*12	222
800	10	1015	32	320	M30*510*6	M16*180*12	237
	16	1025	38	320	M36*530*6	M16*200*12	298
900	10	1115	34	320	M30*520*7	M16*200*14	296
	16	1125	40	320	M36*530*7	M16*200*14	326
1000	10	1230	34	330	M33*550*7	M16*200*14	322
	16	1255	42	330	M39*570*7	M16*200*14	423
1200	10	1455	39	360	M36*600*8	M16*200*16	506
	16	1485	48	360	M45*620*8	M16*200*16	579



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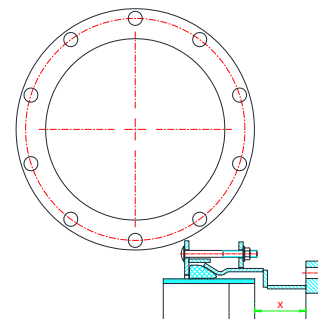
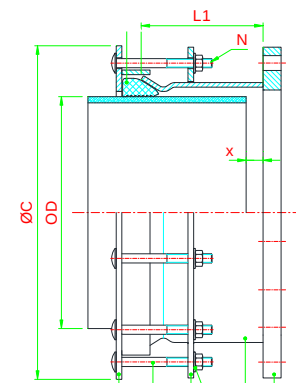
Multisize

Flange Adaptor

- From DN 350 to DN 600: 30mm tolerance range, Ductile Iron compression flanges, steel central body, Dacromet coated bolts, Rilsan anti-corrosion coating
- From DN 600 to DN 1200: 24mm tolerance range, steel central body and compression flanges, Dacromet coated bolts, Rilsan anti-corrosion coating
- Multimaterial
- EPDM (Potable Water)



Flange DN	PN	OD. Min	OD. Max	Type	L1	ØC	Bolts Qty.	Max Gap (X)	Min Gap (X)	Weight (KG)
350	10-16	340	370	A	216	546	10	160	20	62
350	10-16	365	395	A	216	571	10	160	20	64
400	10-16	390	420	A	216	596	10	160	20	73
400	10-16	410	440	A	216	616	10	160	20	75
450	10-16	438	468	A	216	644	12	160	20	88
450	10-16	465	495	A	216	671	12	160	20	90
500	10-16	490	520	A	216	696	12	160	20	110
500	10-16	518	548	A	216	724	12	160	20	112
600	10-16	590	620	A	216	796	14	160	20	150
600	10-16	620	650	A	216	826	14	160	20	152
600	10-16	652	676	A	216	819	14	160	20	154
700	10-16	680	704	A	216	847	16	160	20	156
700	10-16	700	724	A	216	867	16	160	20	158
700	10-16	726	750	A	216	893	16	160	20	161
700	10-16	754	778	B	226	921	16	170	120	165
800	10-16	792	816	A	216	959	16	160	20	172
800	10-16	806	830	A	216	973	16	160	20	173
800	10-16	824	848	A	216	991	18	160	20	175
800	10-16	856	880	B	226	1023	18	170	120	177
900	10-16	882	906	A	216	1049	18	160	20	194
900	10-16	902	926	A	216	1069	20	160	20	196
900	10-16	934	958	A	216	1101	20	160	20	198
900	10-16	960	984	B	226	1127	20	170	120	200
1000	10-16	996	1020	A	216	1163	20	160	20	235
1000	10-16	1016	1040	A	216	1183	22	160	20	237
1000	10-16	1036	1060	A	216	1203	22	160	20	239
1000	10-16	1068	1092	B	226	1235	22	170	120	241
1000	10-16	1100	1124	B	236	1267	22	180	120	244
1000	10-16	1116	1140	B	236	1283	24	180	120	245
1000	10-16	1140	1164	B	236	1307	24	180	120	247
1200	10-16	1180	1204	A	216	1347	24	160	20	308
1200	10-16	1206	1230	A	216	1373	26	160	20	310
1200	10-16	1244	1268	A	216	1411	26	160	20	313



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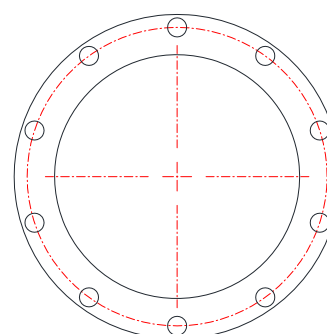
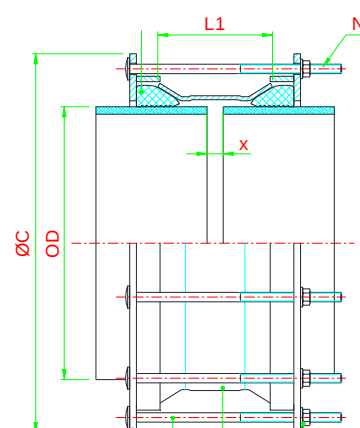
Coupling



- From DN 350 to DN 600: 30mm tolerance range, Ductile Iron compression flanges, steel central body, Dacromet coated bolts, Rilsan anti-corrosion coating
- From DN 600 to DN 1200: 24mm tolerance range, steel central body and compression flanges, Dacromet coated bolts, Rilsan anti-corrosion coating
- Multimaterial
- EPDM (Potable Water)



PN	OD. Min	OD. Max	L1	ØC	Bolts Qty.	Max Gap (X)	Min Gap (X)	Weight (KG)
6-10-16	340	370	170	546	10	60	20	35
	365	395	170	571	10	60	20	37
	390	420	170	596	10	60	20	40
	410	440	170	616	10	60	20	42
	438	468	170	644	12	60	20	45
	465	495	170	671	12	60	20	47
	490	520	170	696	12	60	20	49
	518	548	170	724	12	60	20	53
	590	620	170	796	14	60	20	58
	620	650	170	826	14	60	20	60
	652	676	170	819	14	60	20	62
	680	704	170	847	16	60	20	65
	700	724	170	867	16	60	20	67
	726	750	170	893	16	60	20	72
	754	778	170	921	16	60	20	75
	792	816	170	959	16	60	20	79
	806	830	170	973	16	60	20	82
	824	848	170	991	18	60	20	73
	856	880	170	1023	18	60	20	85
	882	906	170	1049	18	60	20	88
	902	926	170	1069	20	60	20	89
	934	958	170	1101	20	60	20	92
	960	984	170	1127	20	60	20	95
	996	1020	170	1163	20	60	20	97
	1016	1040	170	1183	22	60	20	100
	1036	1060	170	1203	22	60	20	102
	1068	1092	170	1235	22	60	20	104
	1100	1124	170	1267	22	60	20	108
	1116	1140	170	1283	24	60	20	109
	1140	1164	170	1307	24	60	20	111
	1180	1204	170	1347	24	60	20	115
	1206	1230	170	1373	26	60	20	117
	1244	1268	170	1411	26	60	20	119

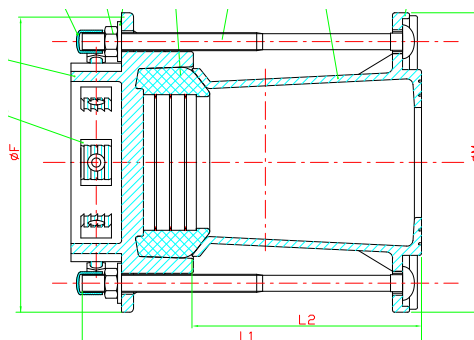


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Smart Joint

Flange Adaptor

- Bolts, nuts, washers: zinc coated Steel – alternative: grade A2 AISI 304 SS
- Body and compression flange: Ductile Iron GGG500
- Sealing rings: NBR or EPDM
- Anti-corrosion coating RILSAN NYLON 11
- End restraint grippers: tempered Steel with Dacromet coating – in alternative: martensitic stainless steel grippers



Flange DN	PN	OD. Min	OD. Max	L1	L2	ØM	N°	Flange Holes	Bolts Dimensions	N° End Restraint Grippers	ØF	Weight (KG)
50	16	58	74	170	100	165	4	a,b,c,d	M12x170	4	170	6,22
50/65		68	84	170	100	185	4	a,b,c,d	M12x170	4	183	7,20
80		84	105	170	100	200	4	a,b,c,d	M12x170	4	210	8,26
100		99	118	170	100	230	4	a,b,c,d	M12x170	4	223	8,96
100		109	133	170	100	230	4	a,b,c,d	M12x170	4	244	10,32
125/150		133	157	185	116	285	4	a,b,c,d	M12x190	4	268	13,46
150		157	182	180	110	285	4	a,b,d	M12x190	4	296	13,72
200		194	215	190	118	343	4	a,b,d	M12x190	4	322	16,88
200		218	242	190	120	343	4	a,b	M12x190	4	354	18,48
250		242	268	190	120	406	6	a,b	M12x190	6	403	/
250		266	291	190	120	406	6	a,b	M12x190	6	405	24,04
250		280	305	190	120	406	6	a,b	M12x190	6	424	27,72
300		302	327	190	120	483	6	a,b,d	M12x190	6	443	29,56

Type of Adaptable Flange Drilling

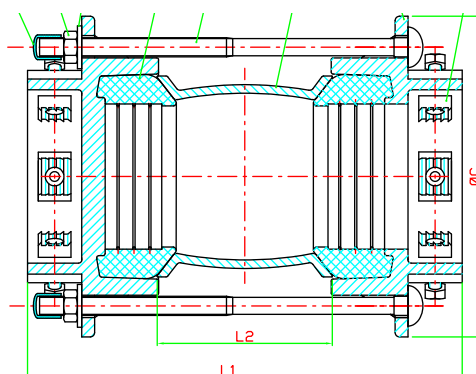
- ISO 7005-2, EN 1092-2:1997, DIN2501;
- ANSI B16. CL125;
- BS 10 TABLE D
- BS 10 TABLE E

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Coupling



- Bolts, nuts, washers: zinc coated Steel – alternative: grade A2 AISI 304 SS
- Body and compression flange: Ductile Iron GGG500
- Sealing rings: NBR or EPDM
- Anti-corrosion coating RILSAN NYLON 11
- End restraint grippers: tempered Steel with Dacromet coating – in alternative: martensitic stainless steel grippers



PN	OD. Min	OD. Max	L1	L2	ØC	N°	Bolts Dimensions	N° End Restraint Grippers	Max Pipe Insertion (mm)	Weight (KG)
16	58	74	240	102	170	4	M12x200	4	90	8,04
	68	84	240	102	190	4	M12x200	4	90	8,82
	84	105	240	102	210	4	M12x200	4	90	11,10
	99	118	240	102	223	4	M12x200	4	90	12,30
	109	133	240	102	244	4	M12x200	4	90	12,62
	133	157	240	102	265	4	M12x200	4	90	14,00
	157	182	260	118	295	4	M12x220	4	90	17,74
	177	201	260	118	315	4	M12x220	4	90	17,92
	194	215	260	118	322	4	M12x220	4	90	17,70
	218	242	280	140	354	4	M12x240	4	90	21,34
	242	268	280	140	403	6	M12x240	6	90	27,88
	266	291	300	162	405	6	M12x260	6	90	28,30
	280	305	300	162	425	6	M12x260	6	90	29,36
	302	327	300	162	440	6	M12x260	6	90	32,94

EPDM GASKETS, RILSAN COATING AND GASKET LUBRICANT ARE SUITABLE FOR CONTACT WITH DRINKING WATER ACCORDING TO WRAS TEST REPORTS AND FDA AND USDA GROUP H1 SPECIFICATIONS RESPECTIVELY.

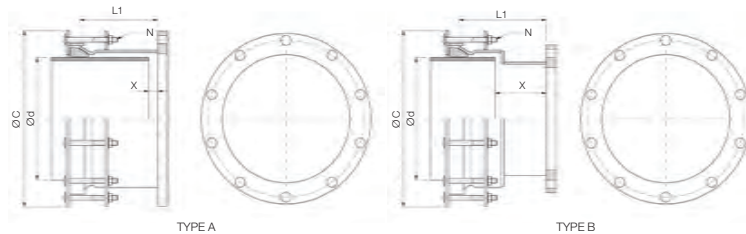


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Multigrip

Flange Adaptor

- Fully restrained as standard to 16bar – Available in 10, 25 & 40bar if required
- 30mm tolerance across the entire range
- Grips to PE, Ductile Iron, Cast Iron, Steel etc.
- DN 1400+ available on request



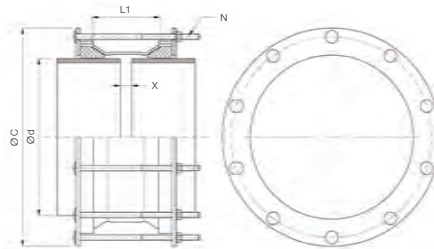
Flange DN	OD. Min	OD. Max	Flange PN	Type	L1	ØC	Compression Bolts Quantity	Max. Gap X	Min. Gap X	Weight (KG)
350	340	370	6-10-16	A	296	560	9	220	25	132
	360	390		A	296	580	9	220	25	136
400	385	415		A	296	600	9	220	25	150
	415	445		A	296	640	9	220	25	157
450	440	470		A	296	660	12	220	25	178
	465	495		A	296	680	12	220	25	183
500	490	520		A	296	720	12	220	25	208
	515	545		A	296	740	12	220	25	213
600	545	575		B	326	788	14	250	170	216
	595	625		A	296	808	15	220	25	261
700	615	645		A	296	828	15	220	25	265
	695	725		A	296	908	18	220	25	278
800	720	750		A	296	933	18	220	25	291
	785	815		A	296	998	18	220	25	330
900	795	825		A	296	1008	18	220	25	332
	825	855		A	296	1038	18	220	25	342
1000	885	915		A	296	1098	18	220	25	355
	900	930		A	296	1113	20	220	25	375
1200	930	960		A	296	1143	20	220	25	440
	985	1015		A	296	1198	22	220	25	490
1400	1000	1030		A	296	1213	22	220	25	494
	1030	1060		A	296	1243	22	220	25	510
1400	1185	1215		A	296	1398	24	220	25	/
	1205	1235		A	296	1418	24	220	25	/
1400	1240	1270		A	296	1453	24	220	25	/
	1385	1415		A	296	1598	24	220	25	/
1400	1405	1435		A	296	1618	24	220	25	/
	1445	1475		A	296	1658	30	220	25	/

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Coupling



- Fully restrained as standard to 16bar – Available in 10, 25 & 40bar if required
- 30mm tolerance across the entire range
- Grips to PE, Ductile Iron, Cast Iron, Steel etc.
- DN 1400+ available on request



DN	OD. Min	OD. Max	Flange PN	L1	ØC	Compression Bolts Quantity	Max. Gap X	Min. Gap X	Weight (KG)
350	340	370	16	355	560	9	220	25	119
	360	390		355	580	9	220	25	124
400	385	415		355	600	9	220	25	130
	415	445		355	640	9	220	25	139
450	440	470		355	660	12	220	25	153
	465	495		355	680	12	220	25	159
500	490	520		355	720	12	220	25	166
	515	545		355	740	12	220	25	173
600	545	575		355	788	14	250	170	181
	595	625		355	808	15	220	25	192
700	615	645		355	828	15	220	25	197
	695	725		355	908	18	220	25	235
800	720	750		355	933	18	220	25	245
	785	815		355	998	18	220	25	262
900	795	825		355	1008	18	220	25	265
	825	855		355	1038	18	220	25	285
1000	885	915		355	1098	18	220	25	301
	900	930		355	1113	20	220	25	305
1100	930	960		355	1143	20	220	25	345
	985	1015		355	1198	22	220	25	361
1200	1000	1030		355	1213	22	220	25	366
	1030	1060		355	1243	22	220	25	380
1400	1100	1130		355	1313	24	220	25	/
	1135	1165		355	1348	24	220	25	/
1200	1185	1215		355	1398	24	220	25	/
	1205	1235		355	1418	24	220	25	/
1400	1240	1270		355	1453	24	220	25	/
	1385	1415		355	1598	30	220	25	/
1400	1405	1435		355	1618	30	220	25	/
	1445	1475		355	1658	32	220	25	/



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System 2000

Flange for PE and PVC pipes

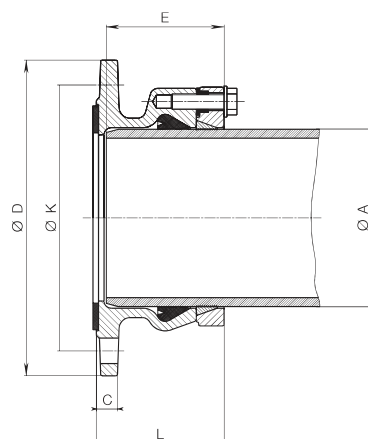
No. 0400

- With push socket for high-tensile restraint connection with PE and PVC pipes
- Flange sized according to EN 1092-2, drilled according to EN 1092-2 | PN 10 standard; EN 1092-2 | PN 16 DN 200 to DN 600, please specify on order - other standards on request
- With integrated flange seal made of elastomer



Flange DN	Ø pipe A	ØD	ØK	C	L	E	Bolts		Weight
							Qty	Thread	
50	63	165	125	19	90	80	4	M16	3,7
60	63	175	135	19	90	80	4	M16	3,8
60	75	175	138	19	92	82	4	M16	4,0
65	63	185	145	19	90	80	4	M16	4,3
65	75	185	145	19	92	82	4	M16	4,6
80	63	200	160	19	90	80	8	M16	4,7
80	75	200	160	19	92	82	8	M16	4,8
80	90	200	160	19	95	85	8	M16	5,5
100	90	220	180	19	95	85	8	M16	6,8
100	110	220	180	19	95	85	8	M16	6,3
100	125	220	180	19	97	87	8	M16	6,6
125	110	250	210	19	95	85	8	M16	7,7
125	125	250	210	19	97	87	8	M16	7,8
125	140	250	210	19	103	93	8	M16	10,3
125	160	250	210	19	145	110	8	M16	11,5
150	140	285	240	19	103	93	8	M20	11,3
150	160	285	240	19	115	105	8	M20	10,5
150	180	285	240	19	125	115	8	M20	12,5
200	200	340	295	20	135	125	8	M20	16,8
200	225	340	295	20	138	128	8	M20	18,0
200	250	340	295	20	225	145	8	M20	27,0
250	250	400	350	22	155	145	12	M20	28,4
250	280	400	350	22	158	148	12	M20	29,0
300	315	455	400	25	184	174	12	M20	43,0
300	355	455	400	25	277	237	12	M20	63,0
400	400	565	515	25	242	230	16	M24	76,5
400	450	565	515	25	302	260	16	M24	84,0
500	500	715	620	32	365	346	20	M27	144,0
500	560	715	620	32	450	372	20	M27	167,0
600	630	840	725	36	459	399	20	M27	256,0

MOP (PN)		16 (DN 50 – DN 150) 10 (DN 200 – DN 600)			
		Ø pipe A			
Dimension/DN	50	63			
	60	63	75		
	65	63	75		
	80	63	75	90	
	100	90	110	125	
	125	110	125	140	160
	150	140	160	180	
	200	200	225	250	
	250	250	280		
	300	315	355		
	400	400	450		
	500	500	560		
	600	630			

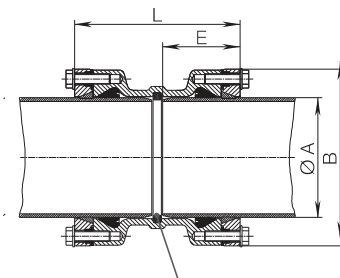


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Fittings for PE and PVC pipes



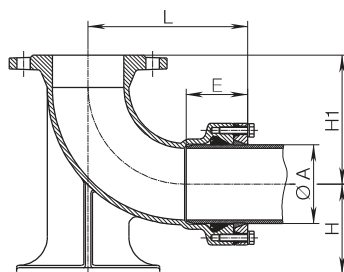
Connector No. 0430



Caution! When using as coupling valve: **remove stop ring** and steeply chamfer pipe (see assembly instructions)

Ø pipe A	L	E	B	Weight
63	171	80	124	3,6
75	175	82	138	4,3
90	181	85	152	5,8
110	181	85	172	6,5
125	185	87	193	8,2
140	197	93	210	9,0
160	221	105	236	12,0
180	241	113	258	19,0
200	261	125	284	24,0
225	265	128	314	28,0
250	300	145	347	34,0
280	306	148	376	40,5
315	358	174	422	62,5
355	464	237	472	98,0

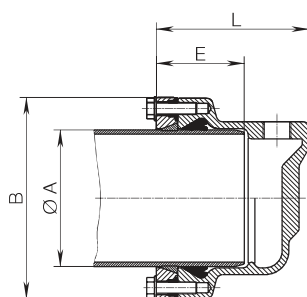
Duck foot bend No. 5045



DN	Ø pipe A	L	E	H	H1	Weight
80	90	210	85	110	165	12,7
80	110	223	85	110	165	14,2
100	110	223	85	125	180	16,0

MOP (PN)	Dimension Ø pipe A		
16	80 90	80 110	100 110

End cap No. 8075



Optionally with or without axial or radial thread outlet 1" - 2"

MOP (PN)	Dimension Ø pipe A												
16	63	75	90	110	125	140	160	180	200	225	250	280	315

Ø pipe A	L	E	B	Weight
63	106	80	124	2,7
75	138	82	138	3,2
90	141	85	152	4,6
110	159	85	172	6,4
125	162	87	193	6,1
140	169	93	210	7,7
160	180	105	236	8,6
180	192	113	258	11,7
200	203	125	284	14,5
225	207	128	314	16,5
250	225	145	347	20,5
280	228	148	376	25,0
315	254	174	422	33,5

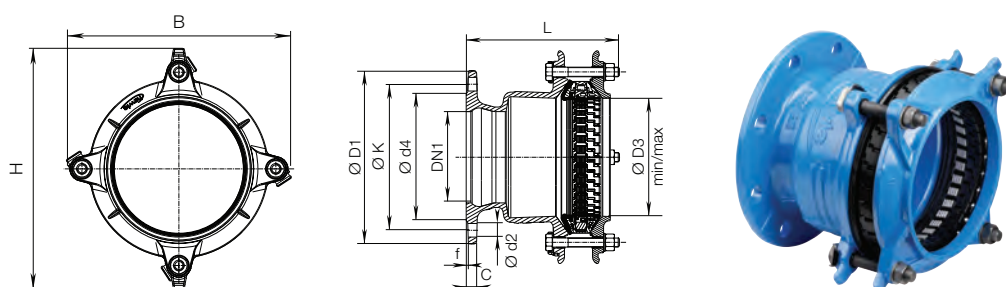


Synoflex

Flange Adaptor

No. 7994

- Hawle Synoflex socket system provides high quality restraint connections to all common water supply pipes. The patented Hawle Synoflex secures steel, DCI, PE/PVC and AC* pipes with fully corrosion protected connections
- Flange sized and drilled in accordance with EN 1092-2, PN 10 standard; EN 1092-2, PN 16 for DN 200 to DN 400. Please specify on order - other standards on request



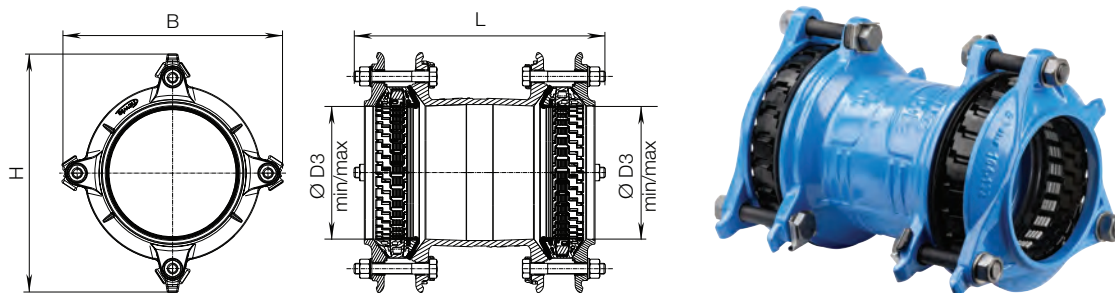
Flange DN1	Socket DN	MOP (PN)	Flange						Bolts (flange)			B	H	Ø Pipe D3 min/max	L	Bolts	Weight
			ØD1	C	ØK	Ød4	f	Qty	Thread	Ød2							
50	50	10 16	165	18	125	98	4	4	M 16	19	141	170	56 – 71	204	3 x M 12-80	5,1	
65	65	10 16	185	18	145	118	4	4	M 16	19	156	187	71 – 88	204	3 x M 12-80	6,1	
80	65	10 16	198	18	160	133	4	8	M 16	19	156	187	71 – 88	205	3 x M 12-80	6,3	
80	80	10 16	198	18	160	133	4	8	M 16	19	171	204	85 – 105	194	3 x M 12-80	7,1	
80	100	10 16	198	18	160	133	4	8	M 16	19	226	260	104 – 132	263	3 x M 16-100	10,2	
100	80	10 16	220	18	180	153	4	8	M 16	19	171	204	85 – 105	188	3 x M 12-80	7,4	
100	100	10 16	220	18	180	153	4	8	M 16	19	226	260	104 – 132	225	3 x M 16-100	10,8	
100	125	10 16	220	18	180	153	4	8	M 16	19	250	290	131 – 160	273	3 x M 16-110	13,2	
125	100	10 16	250	14	210	183	4	8	M 16	19	226	260	104 – 132	235	3 x M 16-100	11,8	
125	125	10 16	250	18	210	183	4	8	M 16	19	250	290	131 – 160	243	3 x M 16-110	13,2	
125	150	10 16	250	14	210	183	4	8	M 16	19	315	350	155 – 192	271	4 x M 16-110	19,2	
150	125	10 16	285	18	240	209	4	8	M 20	23	250	290	131 – 160	240	3 x M 16-110	14,0	
150	150	10 16	285	18	240	209	4	8	M 20	23	315	350	155 – 192	251	4 x M 16-110	16,7	
150	200	10 16	285	14	240	209	4	8	M 20	23	326	371	198 – 230	309	6 x M 16-120	25,9	
200	150	10 16	340	15	295	264	4	8 12	M 20 M 24	23 28	315	350	155 – 192	261	4 x M 16-110	22,1	
200	200	10 16	340	19	295	264	4	8 12	M 20 M 24	23 28	326	371	198 – 230	269	6 x M 16-120	24,8	
200	225	10 16	340	19	295	264	4	8 12	M 20 M 24	23 28	361	410	230 – 260	310	6 x M 20-130	31,4	
250	200	10 16	400	16	350 355	319	4	12	M 20 M 24	23 28	326	371	198 – 230	314	6 x M 16-120	30,8	
250	250	10 16	400	20	350 355	319	4	12	M 20 M 24	23 28	408	464	265 – 310	325	6 x M 20-130	40,0	
300	300	10 16	455	22	400 410	367	4	12	M 20 M 24	23 28	510	510	313 – 356	344	8 x M 20-130	53,0	
350	350	10 16	520	24	460 470	427	4	16	M 20 M 24	23 28	550	550	352 – 396	351	12 x M 20-150	67,2	
400	400	10 16	580	25	515 525	477	4	16	M 24 M 27	28 31	596	596	398 – 442	366	12 x M 20-150	77,8	
450	450	10 16	640	30	565 585	530	4	20	M 24 M 27	28 31	672	672	448 – 485	400	14 x M 20-150	132,3	
500	500	10 16	715	31,5	620 650	582	4	20	M 24 M 30	28 34	705	705	49				

Connector



No. 7974

- Hawle Synoflex socket system provides high quality restraint connections to all common water supply pipes. The patented Hawle Synoflex secures steel, DCI, PE/PVC and AC* pipes with fully corrosion protected connections



Socket 1 DN	Socket 2 DN	MOP (PN)	Socket 1				Socket 2				L	Weight
			B	H	Ø Pipe D3 min/max	Bolts	B	H	Ø Pipe D3 min/max	Bolts		
40	40	16	130	157	46 - 58	3 x M 12-80	130	157	46 - 58	3 x M 12-80	243	3,9
50	50		141	170	56 - 71	3 x M 12-80	141	170	56 - 71	3 x M 12-80	254	4,9
65	65		156	187	71 - 88	3 x M 12-80	156	187	71 - 88	3 x M 12-80	264	5,6
80	65		171	204	85 - 105	3 x M 12-80	156	187	71 - 88	3 x M 12-80	274	6,6
80	80		171	204	85 - 105	3 x M 12-80	171	204	85 - 105	3 x M 12-80	270	6,9
100	80		226	260	104 - 132	3 x M 16-100	171	204	85 - 105	3 x M 12-80	312	9,7
100	100		226	260	104 - 132	3 x M 16-100	226	260	104 - 132	3 x M 16-100	332	12,5
125	100		250	290	131 - 160	3 x M 16-110	226	260	104 - 132	3 x M 16-100	355	14,3
125	125		250	290	131 - 160	3 x M 16-110	250	290	131 - 160	3 x M 16-110	357	14,9
150	100		315	350	155 - 192	4 x M 16-110	226	260	104 - 132	3 x M 16-100	361	16,7
150	125		315	350	155 - 192	4 x M 16-110	250	290	131 - 160	3 x M 16-110	375	17,4
150	150		315	350	155 - 192	4 x M 16-110	315	350	155 - 192	4 x M 16-110	367	19,3
200	150		326	371	198 - 230	6 x M 16-120	315	350	155 - 192	4 x M 16-110	431	41,8
200	200		326	371	198 - 230	6 x M 16-120	326	371	198 - 230	6 x M 16-120	406	30,2
225	200		361	410	230 - 260	6 x M 20-130	326	371	198 - 230	6 x M 16-120	450	61,3
225	225		361	410	230 - 260	6 x M 20-130	361	410	230 - 260	6 x M 20-130	429	41,0
250	200	10	408	464	265 - 310	6 x M 20-130	326	371	198 - 230	6 x M 16-120	468	42,4
250	225		408	464	265 - 310	6 x M 20-130	361	410	230 - 260	6 x M 20-130	454	50,2
250	250		408	464	265 - 310	6 x M 20-130	408	464	265 - 310	6 x M 20-130	441	48,6
300	250		510	510	313 - 356	8 x M 20-130	408	464	265 - 310	6 x M 20-130	473	61,4
300	300		510	510	313 - 356	8 x M 20-130	510	510	313 - 356	8 x M 20-130	460	60,0
350	300		550	550	352 - 396	12 x M 20-150	510	510	313 - 356	8 x M 20-130	494	71,3
350	350		550	550	352 - 396	12 x M 20-150	550	550	352 - 396	12 x M 20-140	502	82,6
400	350		596	596	398 - 442	12 x M 20-150	550	550	352 - 396	12 x M 20-140	526	90,0
400	400		596	596	398 - 442	12 x M 20-150	596	596	398 - 442	12 x M 20-140	523	95,4
450	450		672	672	448 - 485	14 x M 20-150	672	672	448 - 485	14 x M 20-140	600	184,5
500	500	16	705	705	498 - 535	14 x M 20-150	705	705	498 - 535	14 x M 20-140	600	201,4
600	600		828	828	602 - 640	16 x M 20-150	828	828	602 - 640	16 x M 20-140	600	226,9

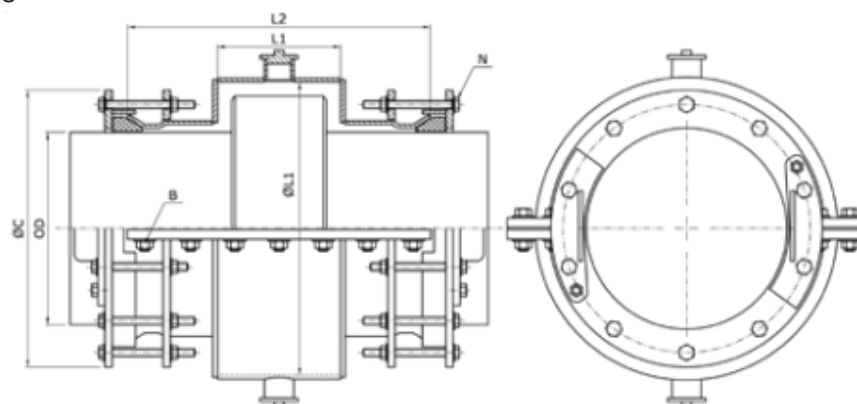


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DuoFit

Encapsulation Collar

- **D30 Shaped Version**
- Designed to encapsulate leaking socket spigot joints, AC collars, flanges, couplers or previously installed repair clamps
- Suitable for use on Steel, AC, Ductile Iron, Cast Iron, PE and PVC pipes
- Long service life and permanent repair
- Installation can be made under live conditions without the need for a shut-off
- 18/19mm tolerance



D30 for Cast Iron Pipes

DN	ØD Min.	ØD Max.	MOP (PN)	Shaping Length L1	Shaping ID ØL1	Total Length L2	Max. External Dimension ØC	No. Flange Bolts N	No. Lateral Plates Bolts B	Weight
350	360	390	6/10/16	260	500	752	553	16	22	215
400	415	445	6/10/16	260	560	752	608	20	22	232
450	465	495	6/10/16	260	600	752	658	24	22	246
500	515	545	6/10/16	260	670	752	708	24	22	266
600	615	645	6/10/16	260	780	752	808	28	22	300
700	720	750	6/10/16	300	890	792	913	32	26	343
800	825	855	6/10/16	300	1000	792	1018	36	26	379
900	930	960	6/10/16	300	1110	792	1123	40	26	410
1000	1030	1060	6/10/16	300	1220	792	1223	44	26	451
1100	1135	1165	6/10/16	300	1320	792	1328	48	26	483
1200	1240	1270	6/10/16	300	1430	792	1433	52	26	519
1400	1445	1475	6/10/16	300	1680	792	1638	60	26	610
1600	1650	1680	6/10/16	350	1890	842	1843	68	26	700
1800	1860	1890	6/10/16	350	1940	842	2053	76	26	801
2000	2065	2095	6/10/16	350	2140	842	2258	84	26	891

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D30 for Asbestos Cement Pipe 10

DN	ØD Min.	ØD Max.	MOP (PN)	Shaping Length L1	Shaping ID ØL1	Total Length L2	Max. External Dimension ØC	No. Flange Bolts N	No. Lateral Plates Bolts B	Weight
300	330	360	6/10/16	260	460	752	523	16	22	202
350	385	415	6/10/16	260	520	752	578	20	22	221
400	440	470	6/10/16	260	600	752	633	24	22	245
450	495	525	6/10/16	260	660	752	688	24	22	263
500	555	585	6/10/16	260	730	752	748	28	22	286
600	665	695	6/10/16	300	850	792	858	32	26	332
700	780	810	6/10/16	300	990	792	973	32	26	376
800	890	920	6/10/16	300	1120	792	1083	36	26	420
900	1005	1035	6/10/16	300	1240	792	1198	44	26	463
1000	1120	1150	6/10/16	300	1360	792	1313	48	26	503



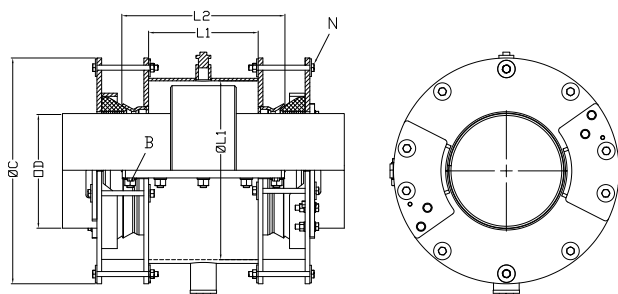
D30 for SDR 17 PE Pipes on Electrowelded Body

DN	ØD Min.	ØD Max.	MOP (PN)	Shaping Length L1	Shaping ID ØL1	Total Length L2	Max. External Dimension ØC	No. Flange Bolts N	No. Lateral Plates Bolts B	Weight
355	340	370	6/10/16	350	460	842	533	20	26	219
400	385	415	6/10/16	400	520	892	578	20	30	244
450	435	465	6/10/16	440	560	932	628	24	30	266
500	485	515	6/10/16	460	620	952	678	24	30	288
560	545	575	6/10/16	500	680	992	738	28	32	316
630	615	645	6/10/16	550	770	1042	808	28	32	356
710	695	725	6/10/16	550	870	1042	888	32	34	392
800	785	815	6/10/16	550	970	1042	978	32	36	426
900	885	915	6/10/16	570	1080	1062	1078	36	38	472
1000	985	1015	6/10/16	570	1190	1062	1178	40	40	513
1100	1085	1115	6/10/16	600	1290	1092	1278	44	44	558
1200	1185	1215	6/10/16	620	1410	1112	1378	48	48	612

DuoFit 2.0

Encapsulation Collar

- **D2.30 Shaped Version**
- Designed to encapsulate leaking socket spigot joints, AC collars, flanges, couplers or previously installed repair clamps
- Suitable for use on Steel, AC, Ductile Iron, Cast Iron, PE and PVC pipes
- A more compact design compared to the original DuoFit – 35% less space, weight reduced by 20%, 20% fewer screws
- Long service life and permanent repair
- 42mm tolerance



DN	ØD Min.	ØD Max.	MOP (PN)	Cavity ID	Cavity Length	Length L2	Max. External Dimension ØC	No. Flange Bolts N	No. Lateral Plates Bolts B	Weight
350	348	390	10/16	490	300	471	620	8	10	210
400	398	440	10/16	545	300	471	685	8	10	230
450	448	490	10/16	590	300	471	735	8	10	250
500	478	520	10/16	660	300	471	790	8	10	275
500	503	545	10/16	680	300	471	810	8	10	285
550	528	570	10/16	710	300	471	840	10	10	300
600	560	602	10/16	730	300	471	865	10	10	305
600	602	644	10/16	800	300	471	930	10	10	340
650	654	696	10/16	850	300	471	980	12	10	380
700	706	748	10/16	900	300	471	1030	12	10	400
800	762	804	10/16	1000	300	501	1130	14	10	500
800	808	850	10/16	1030	300	501	1170	16	10	600
900	870	912	10/16	1080	300	501	1220	16	10	610
900	910	952	10/16	1130	300	501	1270	16	10	650
1000	978	1020	10/16	1160	300	471	1300	16	10	580
1000	1016	1058	10/16	1240	300	501	1380	18	10	710
1100	1116	1158	10/16	1358	300	501	1500	20	10	800
1200	1194	1236	10/16	1380	300	501	1520	20	10	760
1200	1234	1276	10/16	1400	300	471	1540	22	10	700

cQuick2



Encapsulation Collar

- Designed to encapsulate leaking socket spigot joints, AC collars, flanges, couplers or previously installed repair clamps
- Suitable for use on Steel, AC, Ductile Iron, Cast Iron, PE and PVC pipes
- Long service life and permanent repair
- Installation can be made under live conditions without the need for a shut-off
- 17-18mm tolerance, PN 16



6" DN 150 cQuick2



4" DN 100 cQuick2 Mid-Install



4" DN 100 cQuick2

Size	DN	Range	Encapsulation Cavity ID	Encapsulation Cavity Length	Bolts Size	OAL (L)	Weight (KG)
3"	80	83 – 100	216	286	5 x M16	434	30
4"	100	112 – 130	246	286	5 x M16	434	33
5"	125	138 – 152	275	318	5 x M16	433	38
5"	125	145 – 158	275	318	5 x M16	433	38
6"	150	166 – 183	318	318	5 x M16	433	39
8"	200	216 – 234	361	286	5 x M16	434	49
9"	225	258 – 275	445	400	12 x M20	560	75
10"	250	273 – 291	488	450	12 x M20	621	90
12"	300	323 – 340	530	500	12 x M20	669	105

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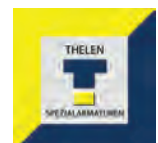
Connector Clamp

The **Thelen Connector Clamp** is a repair clamp like many others but with a cleverly designed and simple overlapping feature, which allows 2, 3 or an infinite number of clamps to be connected together.

- Connect to form a permanent seal on longitudinal splits
- Keeps the strength and integrity of the pipe once installed
- No shut-offs and no customer interruptions
- 8–16mm tolerance



Pipe DN	PN	Range (mm)	Length (mm)	Bolts	Weight (kg)
40	16	44 – 52	200	M12x60	4.3
40		54 – 61	200	M12x60	4.3
50		60 – 68	200	M12x60	4.7
60/65/70		76 – 87	200	M12x60	5.5
80		89 – 98	205	M16x90	9.8
80		95 – 108	205	M16x90	9.8
100		108 – 118	240	M16x90	12.2
100		116 – 128	240	M16x90	12.2
125		133 – 144	245	M16x90	17.6
125		142 – 153	245	M16x90	17.6
150		159 – 172	300	M16x110	25.6
150		168 – 184	300	M16x110	25.6
200		214 – 225	405	M16x110	39
250		267 – 274	406	M20x140	56
300		315 – 326	500	M20x140	83.5



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Repair Clamp



Stainless Steel

No. 0750

- The clamp with the self-centering lug system
- Fully encompassing gasket seals complete gaps and other pipe damage
- The bolts are welded to the bolt bar. Squeezing the handle makes for easy assembly onto the pipe. The nuts are fed directly to the bolts from a special nut dispenser. This eases the positioning of the lugs and bolts and avoids handling of loose parts
- Single lug (0750) repair clamps, double lug (0751) available on request
- Pipe diameter 54 – 430, length 150 – 380

Single lug

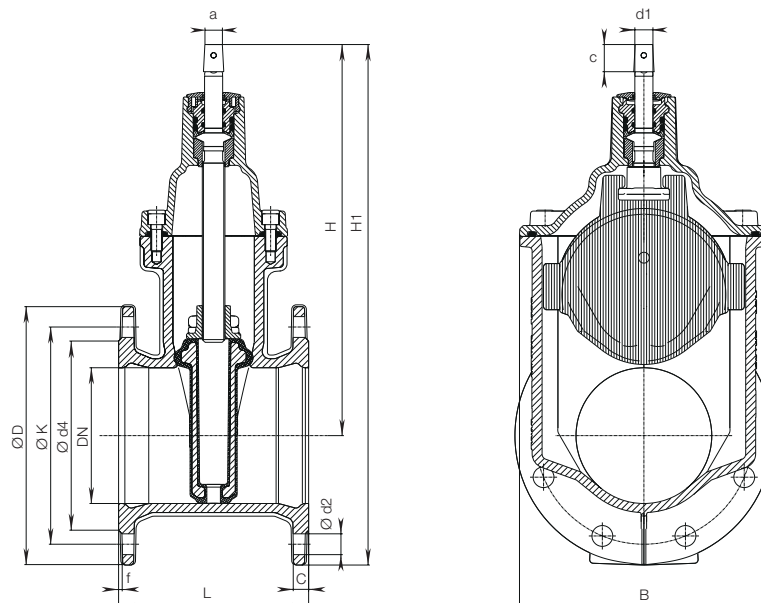
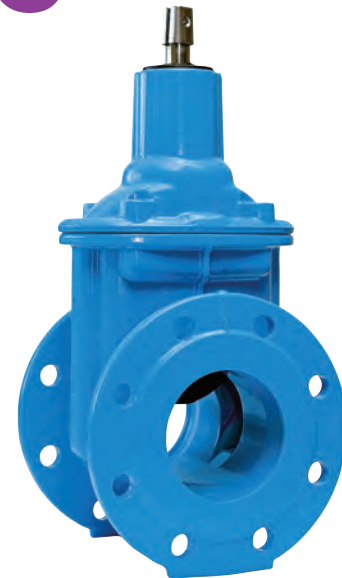
Type	Ø Pipe	Length	Suitable for pipe DN						PVC ext. Ø	Weight		
			Steel	Cast Iron	AC-PN 10		AC-PN 16					
					raw	turned	raw	turned				
K 54	54 – 58	150	50						63	1.1		
M 54		200								1.5		
K 58		150								1.1		
M 58	58 – 64	200	50						63	1.5		
K 63		150								1.2		
M 63		200								1.6		
K 68	63 – 68	150	50						63	1.2		
M 68		200								1.7		
K 75		150			50	50				1.3		
M 75	68 – 76	200	65	60	60	60			75	1.7		
K 82		150								1.3		
M 82		200								1.8		
K 95	82 – 91	150	80	65					90	1.4		
M 95		200								1.9		
K 104		150			80	80		80		1.5		
M 104	95 – 104	200	100				80	80	110	2.0		
K 112		150				100				1.5		
M 112		200				100				2.1		
K 115	104 – 112	150	100	100	100	100			125	1.5		
M 115		200								2.1		
K 120		150			100	100		100		1.7		
M 120	112 – 121	200	125						140	2.2		
K 131		150					100			3.2		
M 131		200								4.0		
K 140	120 – 130	150	125	125		125				3.2		
M 140		250								4.0		
L 140		315								5.2		
K 151	131 – 141	200	150		125			125	160	3.4		
M 151		250								4.3		
L 151		315								5.4		
K 166	140 – 150	200	150	150		150				3.5		
M 166		250								4.4		
L 166		315								5.5		
K 178	151 – 161	200				150		150	180	3.6		
M 178		250								4.5		
L 178		315								5.7		
K 190	166 – 178											

E1 Gate Valve

Short & Long Face-to-Face

No. 4000E1, No. 4700E1

- DN 50 – DN 300, PN 10 | PN 16
- Application: Potable Water
- According to EN 1074-1 and -2
- Short (**4000E1**) & Long (**4700E1**) Face-to-Face and British Standard (**4060E1**) dimensions available

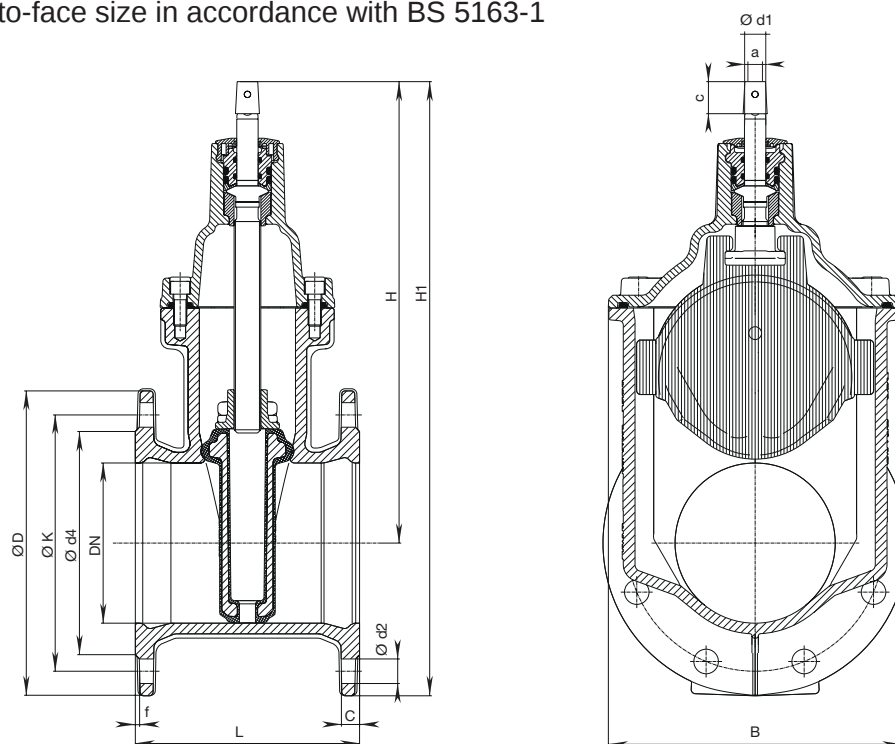


DN	MOP (PN)	Flange					Bolts		Spindle			Valve					Weight		
		ØD	C	ØK	Ød4	f	Qty	Thread	Ød2	a	c	Ød1	H	H1	L short	L long	B	Short	Long
50	10 16	165	18	125	98	5	4	M16	19	14,8	30	18	230	313	150	250	135	8,8	10,7
65	10 16	185	18	145	118	5	4	M16	19	17,3	30	20	298	390	170	270	172	13,5	16,9
80	10 16	200	18	160	133	5	8	M16	19	17,3	30	20	305	405	180	280	172	14,5	19,0
100	10 16	220	18	180	153	5	8	M16	19	19,3	30	20	339	449	190	300	203	18,5	25,2
125	10 16	250	17	210	183	4	8	M16	19	19,3	30	20	420	545	200	325	275	30,5	36,7
150	10 16	285	17	240	209	4	8	M20	23	19,3	30	20	432	575	210	350	275	34,0	42,9
200	10	340	19,5	295	264	4,5	8	M20	23	24,3	38	25	534	704	230	400	345	54,6	68,0
	16						12											53,0	
250	10	400	21,5	350	318	4,5	12	M20	23	27,3	38	32	626	826	250	/	422	80,5	/
	16							M24	28									82,0	/
300	10	455	24	400	371	5,5	12	M20	23	27,3	38	32	709	937	270	/	506	125,0	/
	16							M24	28									142,4	/

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No. 4060E1

- Resilient seated gate valve with smooth, full bore
- Flanges sized and drilled in accordance with:
EN 1092-2 | PN 10 standard;
EN 1092-2 | PN 16 for DN 200
Please specify on order – other standards on request
- Suitable for cleaning with a cleaning pig
- Face-to-face size in accordance with BS 5163-1



Clockwise Close

*To order PN10 please contact us.
*Anti-clockwise close also available.

Knife Gate Valve

ERU K1 System

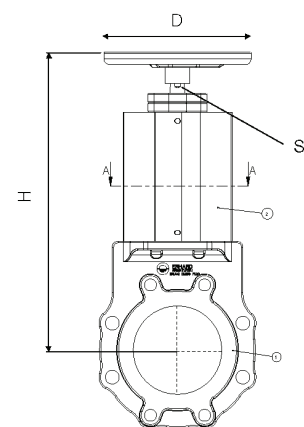
- Can be used as an intermediate flange or end slide valve
- External spindle thread that is not exposed to the medium
- A rising stem and a stem extension are optionally available for use in flooding situations
- Sealing on both sides, therefore high functional reliability in both directions
- Low actuating torques at maximum operating pressure, for the use of smaller actuators
- Patented robust seal. NBR as standard or EPDM option
- Adjustable cross seal which is replacement without removing the gate valve
- EKB coating for corrosion protection in accordance with GSK requirements
- Wide range of applications: sewage treatment plants, biogas plants, mining, power plants, industry (steel, chemicals, food)
- Modular principle with numerous options: Limit switches, control orifice, pneumatic actuators, extensions and various attachments

Standards

- Flange holes according to EN 1092-2 / PN 10, some blind holes
- Overall length in accordance with EN 558 / Series 20
- **Optional:** Contact hazard protection in accordance with EN 292/294 (for the area of the moving valve plate)
- **Optional:** Explosion protection in accordance with ATEX

DN	Flange Drilling	Working Pressure Bar	Face-to-face dimensions	Height	Handwheel	Rev. per stroke	Square	Weight
50	PN 10	10	43	323	200	12	14	10
65		10	46	348	200	16	14	11
80		10	46	378	200	20	14	13
100		10	52	416	225	25	17	17
125		10	56	456	225	31	17	20
150		10	56	509	250	30	19	26
200		10	60	600	320	40	19	39
250		10	68	713	320	50	19	64
300		10	78	832	400	60	24	93
350		10	78	935	400	70	24	135
400		4/6*	102	1016	400	80	24	165
500		4/6*	127	1265	500	84	27	255
600		4/6*	154	1442	500	100	27	370

*PN 6 on request



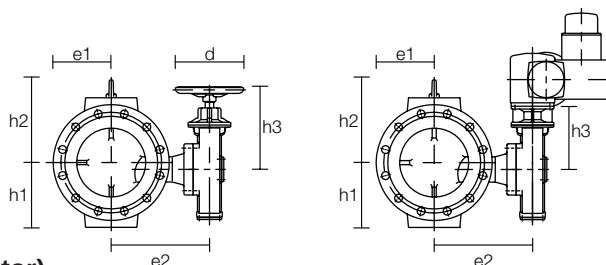
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Needle Valve



RKV Needle Valve

- Optimised Flow performance and flow guiding for practical Zeta values, minimum pressure losses when fully opened
- Control inserts for safe and reliable pressure reduction to prevent cavitation damage in every application: seat ring, vaned ring, slotted cylinder, perforated cylinder and other special inserts
- Wide range of pressure ratings, nominal sizes and designs – adapted solutions for numerous special applications
- Perfect adaptation to all installation situations with a standardised connection for all types of actuators
- SKG gearbox or Auma gears with unique slider crank mechanism optimise the linear control range and protects against water hammer by gradually slowed closing
- Proven design, reliability and experience: 100 years of experience with needle valves
- Available in PN 10 | 16 | 25 | 40
- DN 100 – 2000



**PN 16 Technical Details
(handwheel and electric actuator)**

DN	L	D	h1	h2	h3 Handwheel	h3 Electric Actuator	e1	e2	Handwheel turn no. (open/close)	Kg
100	325	220	142	187	222	154	99	214	15	60
125	325	250	142	187	222	154	99	214	15	60
150	350	285	158	203	222	144	116	231	15	75
200	400	340	195	248	244	165	152	288	20	120
250	450	400	234	296	314	233	188	365	25	190
300	500	455	266	322	314	233	224	402	25	260
350	700	520	280	342	360	292	280	420	43	450
400	800	580	310	372	365	297	310	460	42	595
450	900	640	340	411	404	331	335	510	36	826
500	1000	715	415	462	409	336	370	558	43	945
600	1200	840	500	548	517	416	440	645	43	1780
700	1400	910	535	644	566	465	510	720	57	2175
800	1600	1025	640	729	571	470	588	875	52	4475
900	1800	1125	700	828	531	430	655	860	58	4310
1000	2000	1255	830	937	531	430	513	996	60	7750
1200	2400	1485	950	1118	570	465	870	1110	78	8350



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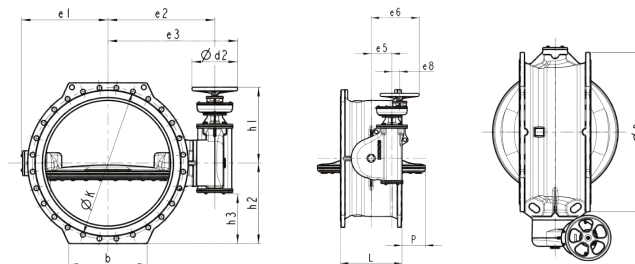
Butterfly Valve

Double Eccentric Butterfly Valve

- Highly energy efficient, with superior Zeta and Kv values
- Patented seat geometry and increased seat diameter for best hydraulic performance
- Polygon shaft with patented plug connection provides uninterrupted corrosion protection, completely free of play
- Closed disc eyes patented seat and disc geometry minimising head losses
- SKG gearbox with unique slider crank mechanism protects against water hammer by gradually slowed closing
- Proven design, reliability and experience: 70 years of experience with butterfly valves
- Available in PN 10 | 16 | 25 | 40
- DN 80 – 2000



**PN 16 Technical Details
(with handwheel)**



DN	K	D	d2	e1	e2	e3	h1	h2	h3	L	b	P	Kg
80	200	160	200	100	167	229	222	117	/	180	/	/	23
100	220	180	200	110	182	244	222	117	/	190	/	/	27
125	250	210	200	125	195	257	222	117	/	200	/	/	31
150	240	285	200	155	201	301	221	145	24	210	150	/	36
200	295	340	200	194	246	346	221	170	52	230	180	/	48
250	355	400	200	214	278	378	242	200	53	250	200	/	70
300	410	455	200	239	303	403	242	228	80	270	260	11	88
350	470	520	250	282	361	486	311	260	102	290	280	23	134
400	525	580	250	311	390	515	311	290	132	310	320	40	164
450	585	640	250	345	439	564	342	320	127	330	320	46	215
500	650	715	250	370	464	589	342	358	165	350	360	63	267
600	770	840	350	433	548	723	431	420	182	390	440	92	450
700	840	910	500	502	653	903	464	455	221	430	500	121	646
800	950	1025	500	564	719	969	464	513	279	470	580	151	837
900	1050	1125	500	547	788	1038	464	565	328	510	580	178	1044
1000	1170	1255	350	688	855	1030	637	628	351	550	640	211	1447
1100	1270	1355	350	821	995	1170	637	698	421	590	675	227	1809
1200	1390	1485	350	819	990	1165	637	743	466	630	740	268	2171
1300*	/	/	/	/	/	/	/	/	/	/	/	/	/
1400	1590	1685	350	948	1144	1319	702	843	499	710	820	322	3314
1500	1710	/	350	984	1180	1355	702	910	567	750	940	352	3913
1600	1820	1930	350	1074	1277	1452	702	965	622	790	960	379	4513
1800	2020	/	500	1355	1449	1649	766	1075	524	870	1060	446	4520
2000	2230	/	500	1398	1553	1868	894	1193	429	950	1170	505	6877

*Available on request



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Air Valve



Non-Slam Dynamic Air Release Valve

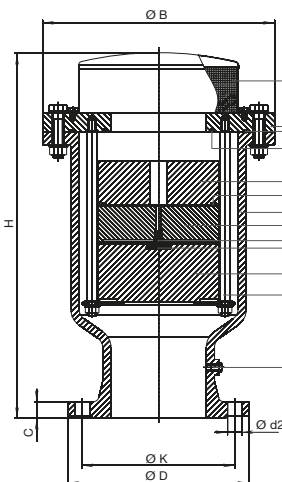
No. 9842, No. 9842K

- Automatically operated single chamber air release valve
- Small volume, low weight compact design
- Large orifice allows the discharge and removal of large air mass during filling and draining of the pipeline
- Small orifice discharges small volumes of air when the pipeline is operating under pressure
- Pulse-free closing with two-stage closing design
- High discharge capacity
- High corrosion resistance due to stainless steel internal components
- Available in PN 10 | 16 | 25 | 40
- DN 50 – 300



Recommended Air Release Valve dimensions according to pipe diameters;

Pipe Diameter (mm)	80–250	300–400	450–600	700–900	1000–1200	1400–1600	1800–2000
Air Valve DN	50	80	150	150	200	250	300



PN 16 Technical Details

DN	PN	ØD	ØK	Ød	C	f	ØLxn	ØB	H	Weight
50	16	165	125	99	19	3	19x4	200	355	20
65		185	145	99	19	3	19x4	225	404	20
80		200	160	132	19	3	19x8	240	416	26
100		220	180	156	19	3	19x8	255	420	28
150		285	240	211	19	3	23x8	365	580	80
200		340	295	266	20	3	23x12	410	678	98
250		405	355	319	22	3	28x12	540	820	170
300		460	410	370	24.5	4	28x12	650	925	300



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Non-Return Valve

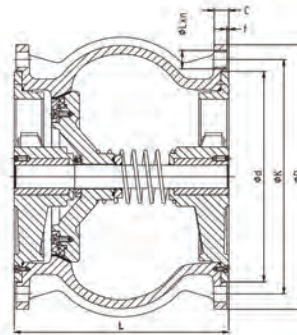
Silent Check Valves

No. 9887

Silent Check Valves have fast, shockless closing characteristics. The spring-loaded valve with short closing movement reacts instantaneously to flow changes. For this reason, pulse-free, quick closing is realised. Axial spring loaded check valves are ideal solutions for all kinds of check valve applications due to their superior design features.



- Short body, small volume and lightweight
- Because of low weight moving parts and non-eccentric design – less shock and long service life
- Suitable for high flow velocities



DN	PN	ØD	ØK	Ød	C	f	ØLxn	L	Weight
100	16	220	180	156	19	19	19x8	175	20
125		250	210	184	19	19	19x8	200	27
150		285	240	211	19	19	23x8	225	37
200		340	295	266	20	20	23x12	275	56
250		405	355	319	22	22	28x12	325	95
300		460	410	370	24.5	24.5	28x12	375	130
350		520	470	429	26.5	26.5	28x16	425	140
400		580	525	480	28	28	31x16	475	210
450		640	585	547	30	30	31x20	500	230
500		715	650	609	36.5	36.5	34x20	550	385
600		840	770	720	42	42	37x20	600	515
700		910	840	794	39.5	39.5	37x24	650	570
800		1025	950	902	43	43	41x24	700	790
900		1125	1050	1000	54	54	41x28	800	1350
1000		1255	1170	1112	50	50	44x28	900	1495
1200		1485	1390	1328	57	57	50x32	1050	2200
1400		1685	1590	1530	60	60	50x36	1190	3722



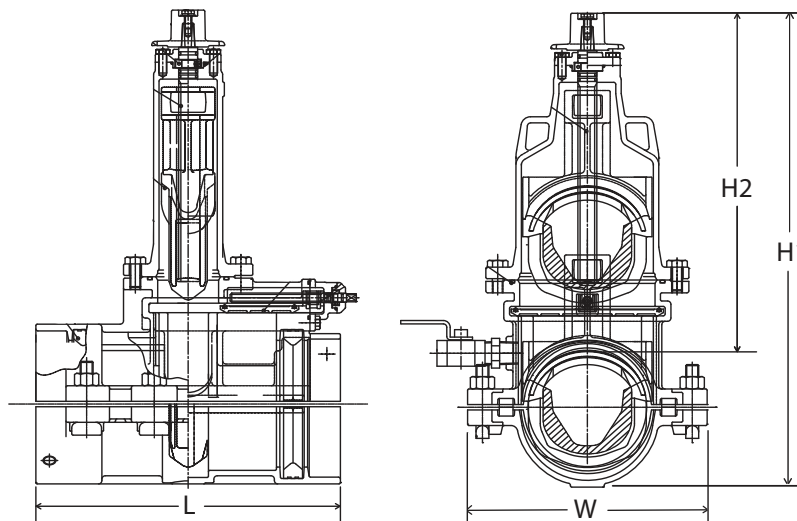
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EZ Valve



Live Insertion Valve

- Unique, patented technology
- Approved Epoxy Resin Coating
- Stainless steel fasteners for secure positioning
- Working pressure of 250 PSI, (17bar) – Tested Pressure to 375 PSI (26bar)
- EZ Valve components are WRAS Certified, meets AWWA C-509-01/C515-15 standards, UL Classified to NSF/ANSI Standard 61, Drinking Water System Components – Health Effects



Size	Diametrical Range	H1	H2	L	W	Weight
80	86.5 – 101	486	354	225	236	23.5
100	122 – 134	601.9	453.5	450.3	298	60.8
150	169 – 191	726.5	521.6	450.3	354	78.95
200	219 – 246	887.75	608.12	450.3	416.3	109.77
250	273 – 307	997.71	679.7	500.3	480.3	158.76
300	324 – 365	1112.01	735	500.3	540.5	200.95
350	376.5 – 379.5	1366	951	650	590	363



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UnJammer LT

Valve Release Key

The R2M UnJammer LT is a mechanical valve release key designed to free jammed valves with kinetic energy. It works by sending a controlled kinetic shock to the spindle, allowing stuck valves to be opened or closed. The UnJammer LT is a portable device that can be operated by water utility engineers, saving time and money especially in emergency situations.

- Builds on the success of the original UnJammer **(see below)**
– 50% lighter, 40% fewer components
- Push fit mechanism to assemble and release the handlebar with the drive shaft, eliminating the need for bolts
- Suitable for seized or stiff valves up to DN 450 and above if it has a bypass
- Supplied with 1.0m and 0.5m connectable drive shafts as well as a small to large cap top dolly adaptor
- Reduces the risk of using non-prescribed methods, such as scaffold bars, that can induce user injury



Item	Weight
Figure 8 Handlebar with Integral Mechanism	14.8
Kidney Shaped Weight 1	10
Kidney Shaped Weight 2	10
Main Case (wheeled)	2

Item	Weight
Drive Shaft 1.0mtr Small SQ Dolly	10.7
Drive Shaft 0.5mtr Small SQ Dolly	7
Connectable Small to Large Dolly Adaptor	2.5
Weight Case (x2)	3

The Original UnJammer

A heavy duty version of the UnJammer LT, the original UnJammer is perfect for large sized valves that have become stiff or seized. The larger weights on either side increases the amount of kinetic energy sent to the spindle, opening or closing the valve. After successful usage, the valve can be operated as normal.



Item	Weight
Main Figure 8 Handlebar	13
Kidney Shaped Weight 1	15
Kidney Shaped Weight 2	15
Top Cap Plate	3
Main Case inc. Liner and Spares Kit	2.2

Item	Weight
Drive Shaft 1.5mtr Small SQ Dolly	14
Drive Shaft 1.0mtr Small SQ Dolly	12
Drive Shaft 1.5mtr Large SQ Dolly	14
Drive Shaft 1.0mtr Large SQ Dolly	12
Weight Case inc. Liner and Spares Kit	1.8

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Haldi Clamp



Hydrant Safety Clamp

R2M's Haldi Hydrant Clamp is a device designed to resist the unscrewing of a Series 19 Hydrant where the outlet adapter and main chamber are at risk of unscrewing during operation and fitting of apparatus.

- Incorporates two female hex shapes which interlock with the 'at risk' chambers of the hydrant to resist either chamber from unscrewing
- Designed specifically to fit the shape and contours of the hydrant
- Hydrant can be made safe and still function without the need for excavation or interruptions to customer's water supplies
- After fitting, the hydrant can be utilised as normal

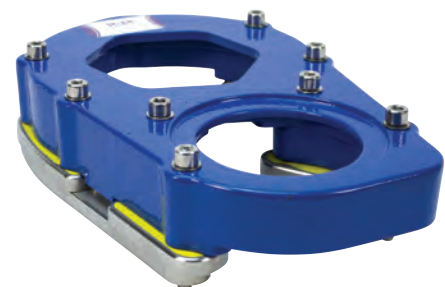


Haldi Clamp installed with Thames Water



Secure

The **Haldi Clamp** fits the hydrant and engages with the hexagons to resist any rotation or untightening of either chamber (200Nm for the main chamber and 120Nm for the outlet). Captive locking tabs secure it in place firmly.



Installation

Installation of a **Haldi Clamp** means a Series 19 Hydrant which is deemed as posing a risk, can be made safe and still function without any excavation, reinstatement etc. The Haldi Clamp can usually be installed without any excavation and always under live conditions, without the need for any shut down or interruption of customer's water supplies.

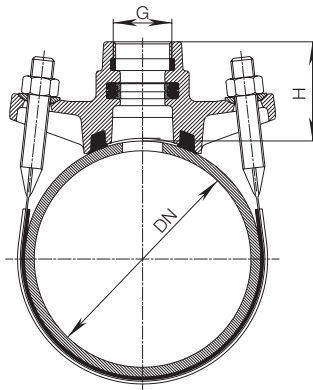
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Universal Shut-off Saddle

For Steel, Ductile Iron & Asbestos Cement Pipes

No. 3800

- For under pressure drilling
- Solid body
- Can be pressure tested from both directions
- Flexible padded wrap around strap for easy installation
- Favourable angle of contact
- Optimum force transfer of the strap screw connection through strap and cylinder disks as bolt contact area



Internal thread ISO 228	MOP (PN)	Dimension/DN													
		50	65	80	100	125	150	200	250	300	350	400	450	500	600
1"	16														
1 1/4"															
1 1/2"															
2"															

Please specify pipe material on order

Internal thread ISO 228 G		Dimension/DN													
		50	65	80	100	125	150	200	250	300	350	400	450	500	600
1"	Weight	2,10	2,10	2,10	2,70	3,10	3,20	4,00	4,60	4,70	7,00	/	/	8,00	8,60
	H	67	68	69	69	70	70	80	82	82	78	/	/	78	78
1 1/4"	Weight	2,10	2,10	2,70	2,70	2,75	3,30	4,10	4,70	4,70	/	/	/	8,00	/
	H	70	71	72	72	73	73	80	82	82	/	/	/	78	/
1 1/2"	Weight	/	/	3,00	3,00	3,60	3,70	4,30	4,90	4,90	7,00	7,40	/	8,10	9,00
	H	/	/	73	73	74	74	80	82	82	78	78	/	78	78
2"	Weight	/	/	3,10	3,10	3,00	3,80	4,60	5,30	5,40	7,70	8,00	8,30	8,60	9,00
	H	/	/	78	78	78	78	81	83	83	78	78	78	78	78

hawle

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Relining



At R2M, we supply a range of fittings and systems for lined pipes and lining systems. The products that we offer enable connections and repairs after a relining process, to create an efficient lined system with minimal excavation and disruption.

CIP Joint

Tailor made product for perfect fit with the CIPP. Well proven pipe locking system and multi-material end restraint system. Separate sealing and end restraint and resistant to corrosion. Only one restraint connection needed and different connection systems available (rotatable flange, fixed flange, spigot end etc.)

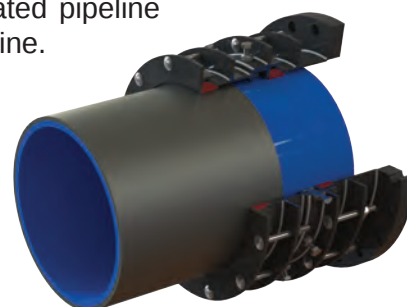
All inner and outer diameters from **DN 300 – DN 1500** available.
Special solutions for inner and outer diameters from **DN 300 – DN 1200** available.
Other dimensions on request. Fast and easy installation.



Novagrip

An innovative connection technology between rehabilitating polyethylene liner ends. When existing pipeline rehabilitation is realised with a thin-walled plastic pipe, a combination of a reinforcing liner ring and a Novagrip style set of grippers provide the best way to connect the rehabilitated pipeline and other equipment or between sections of rehabilitated pipeline.

The grippers ensure that the rehabilitating liner is restrained to avoid its movement inside the main pipe. A double gasket – one on the liner and one on the host pipe – ensure total water-tightness both inside and outside, thus preventing any fluid getting in between the host pipe and its plastic liner.



Nozzigrip

The R2M Nozzigrip is designed specifically for Thermopipe and Subcoil thin walled lining pipe systems. It uses a rigid and captive 'nozzle' to re-round, grip and seal on the inner side of the Thermopipe. The external compression system uses a soft polymer wedge to compress the Thermopipe or Subcoil onto the nozzle, creating a seal equivalent to Type 2 End Restraint System.

Size	ID of Liner Pipe – Thermopipe	ID of Liner Pipe – Subcoil	Length	Exposed Length Needed Min.	Bolt Sizes	Weight
3"	58 – 62mm	/	122	120	M12	7.2 Kg
4"	84 – 88mm	/	122	120	M12	9.4 Kg
6"	144 – 148mm	/	122	120	M12	12.8 Kg



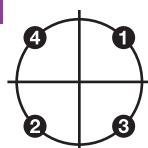
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Flanged Joint Sets

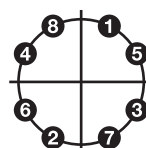
Flanged Joint Sets available in Galvanised, Rilsan and Stainless Steel

Bolt Tightening Sequence

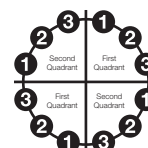
Bolts should be tightened in the sequence shown and a sufficient number of circuits undertaken to ensure that the specified bolt torques are achieved.



4 Bolts



8 Bolts



12+ Bolts

Flanged joints sets using elastomeric gaskets, some compression set of the gasket will be experienced and it should be ascertained that the bolting torques required to affect a seal at the appropriate pressure, as shown in the tables, are effective at the time of pressure testing.

Bolt Torques

The following charts indicate the approximate bolt torques required to seal flanged joints against internal pressure. The torque values are applicable for the type of gaskets specified and bolts, nuts and washers should be completely free from damage, rust etc. and must be lubricated on all mating services before assembly.

The relationship between applied torques and the actual load imparted is not precisely predictable. **The values in the chart are an approximate guide.**

PN 16 Flanged Joints

Nominal Bore DN	Approximate Bolting Torque NM			
	Seal at 10bar	Seal at 16bar	Seal at 20bar ¹	Seal at 25bar ¹
80	70	70	75	75
100	75	80	80	80
150	115	120	125	135
200	110	115	120	130
250	155	165	175	180
300	165	180	190	210
350	160	175	185	200
400	200	220	235	270
450	195	215	230	260
500	240	270	295	345
600	305	365	425	505
700	350	465	540	635
800	470	630	735	870

NP16 Bolt Sizes

Dia (mm)	No. of bolts	Ductile/Ductile Size & Length	Ductile/Steel Size & Length	Steel/Steel Size & Length	Ductile/PE (SDR17.6) Size & Length	Ductile/PE (SDR11) Size & Length	Spanner size (mm)
50	4	M16 x 65	M16 x 70	M16 x 70	M16 x 90	/	24
80	8	M16 x 65	M16 x 70	M16 x 70	M16 x 90	/	24
100	8	M16 x 65	M16 x 70	M16 x 70	M16 x 90	/	24
150	8	M20 x 70	M20 x 80	M20 x 80	M20 x 90	/	30
200	12	M20 x 70	M20 x 80	M20 x 80	M20 x 90	/	30
250	12	M24 x 85	M24 x 110	M24 x 110	M24 x 110	/	36
300	12	M24 x 85	M24 x 110	M24 x 110	M24 x 110	M24 x 120	36
350	16	M24 x 85	M24 x 110	M24 x 110	M24 x 110	M24 x 120	36
400	16	M27 x 100	M27 x 110	M27 x 120	M27 x 130	M27 x 150	41
450	20	M27 x 100	M27 x 110	M27 x 120	M27 x 150	M27 x 160	41
500	20	M30 x 110	M30 x 120	M30 x 140	M30 x 160	M30 x 180	46
600	20	M33 x 120	M33 x 140	M33 x 150	M33 x 180	M33 x 190	50
700	24	M33 x 130	M33 x 150	M33 x 170	M33 x 200	/	50
800	24	M36 x 140	M36 x 170	M36 x 190	M36 x 210	/	55
900	28	M36 x 140	M36 x 170	M36 x 200	M36 x 230	/	55
1000	28	M39 x 160	M39 x 190	M39 x 230	M39 x 280	/	60
1100	32	M39 x 160	M39 x 190	M39 x 230	/	/	60
1200	32	M45 x 180	M45 x 200	M45 x 250	/	/	70
1400	36	M45 x 180	M45 x 215	M45 x 260	/	/	70
1600	40	M52 x 200	/	/	/	/	80

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Solar Energy



Our Range of Solar Powered Pressure Boosting Solutions

LazerBooster

Provides 150-350Wh (200-650Wh available with XL version) 365 days-a-year to 12-48V DC or 240V AC equipment housed within

- Energy Dense 1.3kW Solar Array comprising 6*180w and 1*200W custom 48V Solar Panels optimised to charge cell voltages 12-48V without lossy conversion
- 2-5kW AC Inverter with ECO standby modes
- 15-60kWh Heating Lithium Polymer Cells with built in protection to operate -20°C to +40°C
- Available with Environmental Management package to achieve U values below 0.3; allowing the cabinet to maintain its own internal temperature (protecting equipment within)



Patent No. GB2302580.2

LazerTrailer

A portable and solar powered pumping trailer, enabling pressure boosting from tankers during restoration situations and for low-pressure events & re-zones during incidents

- Restoration and low-pressure sections of main (Avoiding DG2)
- 720kg total weight unbraked trailer
- 540w solar power generation system
- 28kWh silent clean battery with 10kW inverter (current 240v AC)
- 7kWh charging input for quick turn around and re-deployment
- DAB EasyTwin Pump System with max volume of 10m³/hr
- Max 8bar boosting capability, 12+hr run time per session at full pumping capacity



Sampling Kiosk

Provides 150-350Wh 365 days-a-year to 12-48V DC or 240V AC equipment housed within

- Energy Dense 1.5kW Solar array comprising 4x375W Meyer Burger Solar cells
- Integrated solar panels with Steel Framing for deployments behind fencing or Flex Panel option for open deployment
- Can maintain a positive internal temperature via its own power source in freezing conditions
- Integrated Heating and Active Ventilation to prevent equipment freezing and moisture build up
- Support for 2kW Inverter with ECO standby mode, 15-30kWh heated Lithium Polymer Cells with built in protection to operate -20°C to +40°C



Patent No. GB2302580.2

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Accessories

Hydrants

Clockwise close | Maximum operating temperature 60°C

- Number of turns | to start flow – 1, fully open – 8
- Hydrant for potable water systems BS EN 1074-6 2004
- Fully compliant to BS EN 14339, BS EN 1074-6 & BS750:2012
- Resistance to disinfection BS EN 1074-6
- Blue fusion bonded epoxy coating 250 microns to BS EN 14901
- Inlet flange suitable for connections to BS EN 1092-2 & PN10/16 & BS 10, 3" table D & E
- Stem seals & stem cap BS 750:2012



Mastic Tape

Self-supporting, low-density petrolatum mastic for moulding and filling irregular profiles

- Colour – yellow/cream with white spheres
- Specific Gravity – 0.605
- Specific Volume – 1.65 dm³/kg
- Low density
- Resistant to slumping
- Suitable for deeply filled joints and valves
- Service temperature: up to 70°C



Denso Tape

A multi-purpose, surface tolerant anti-corrosion petrolatum for steel pipes, fittings and structural steel

- Breaking Strength – 200 N/50mm minimum
- Elongation at Break – 10%
- Breakdown Voltage – 16kV minimum per double layer
- Total Thickness – 1.15 mm
- Weight – 1.44 kg/m²
- Resistant to water, water vapour and gases, mineral acids, alkali and salts,
- Service temperature: -20°C to +55°C



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Gaskets



- **Full Faced Gaskets**
- Manufactured with quality EPDM rubber
- Temperature range: -40°C to +120°C

Liners



- **Liners must be used when installing an end restraint coupling onto PE pipes**
- DN 63 – 900 (900+ available on request)

Cap Tops



- **British Standard Dimensions**
- Available with every valve as standard

Handwheels



- **Available as an option with every valve**

Bauers



- **Male & Female Bauers**
- 3" – 6" stocked (6"+ available on request)

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