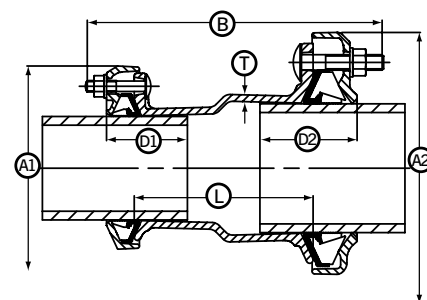


Next Generation UltraGrip Reducing Couplings

Specifications



Reducing Couplings

► Up to 8° angular deflection

Nom Size		Size Range				Insertion Depth				Dimensions					Bolts				Weight Kg
Small End	Large End	Small End		Large End		Small End (D1)		Large End (D2)		Overall			Sleeve		Small End		Large End		
		Min	Max	Min	Max	Min	Max	Min	Max	A1	A2	B	L	T	Size	Type	Size	Type	
32	40	36.0	46.0	43.5	63.5	65	95	65	95	153	168	266	150	5.0	3-M12x70	CSX	3-M12x70	CSX	5.16
80	100	85.7	107.0	107.0	133.2	65	95	90	125	212	280	325	185	7.5	3-M12x70	HRH	3-M16x93	CSX	11.42
100	125	107.0	133.2	132.2	160.2	90	125	90	115	280	305	352	190	7.5	3-M16x93	CSX	3-M16x93	CSX	14.97
100	150	107.0	133.2	158.2	192.2	90	115	90	135	280	339	375	216	7.5	3-M16x93	CSX	4-M16x93	CSX	17.94
125	150	132.2	160.2	158.2	192.2	90	115	90	135	305	339	366	207	7.5	3-M16x93	CSX	4-M16x93	CSX	18.37
150	175	158.2	192.2	192.2	226.9	90	125	125	165	339	403	393	220	7.0	4-M16x93	CSX	5-M16x93	CSX	27.25
175	200	192.2	226.9	218.1	256.0	125	155	125	165	403	432	393	220	7.0	5-M16x93	CSX	5-M16x93	CSX	34.78
200	250	218.1	256.0	266.2	310.0	125	165	125	165	432	476	479	280	7.0	5-M16x93	CSX	6-M16x120	CSX	44.59
250	300	266.2	310.0	315.0	356.0	125	165	125	200	476	522	524	300	9.0	6-M16x120	CSX	8-M16x120	CSX	58.43
400	450	398.0	442.0	448.0	492.0	125	200	135	215	623	713	575	330	7.5	10-M16x120	CDX	12-M16x150	HRH	117.82
500	500	498.0	552.0	558.0	608.0	155	215	155	215	803	860	595	330	7.5	9-M20x150	HRH	9-M20x150	HRH	167.21
600	600	604.0	648.0	676.0	726.0	195	255	195	255	900	975	595	330	7.5	10-M20x150	HRH	10-M20x150	HRH	259.03

Working Pressure & Temperature Ratings

Nominal Size	Gripping Product		Flex Product		Operating Temperature
	Gas	Water	Gas	Water	
DN40 to DN300	5bar	16bar	5bar	16bar	-20°C to +30°C
DN350 to DN400	5bar	10bar	5bar	10bar	
DN450 to DN600	N/A	10bar	N/A	10bar	

Notes:

- 1) Site Test Pressure – 1.5 times working pressure.
- 2) Factory Test Pressure – The minimum requirement in European Standards is 1.5 times working pressure plus 5bar (e.g. 29bar for 16bar working pressure), but in many cases Viking Johnson reaches substantially higher levels – up to 36bar.
- 3) All water contact components are approved for use with Potable Water.

Bolt Torque	
	Nm
M12	55 - 70
M16	95 - 120
M20	200 - 225

UltraGrip Product Notes

Gripping product suitable for

Steel/Ductile iron/Grey cast iron/ PE/PVC

Flex product suitable for

Steel/Ductile iron/Grey cast iron/ PVC/Asbestos cement

Support liners – PE and PVC pipes

A close fit support liner is required when used on:

- All PE pipes
- Thin walled PVC pipes

When used on thick walled PVC pipes a support liner is not required.

Please contact Viking Johnson for further details.

Use of restrained couplings on exposed pipework

Above ground exposed pipework is subject to both loads from the internal pressure and those from temperature changes / thermal expansion, which can be substantially higher than those from internal pressure and cannot always be safely determined. For this reason it is recommended that the use of UltraGrip be restricted to buried pipelines, valve chambers and above ground indoor applications and not exposed to direct sunlight or excessive temperature changes (e.g. pump houses).

Materials & Relevant Standards

End Rings, Sleeve

S.G. Iron to BS EN 1563 Symbol EN-GJS-450-10

Gaskets

EPDM: EPDM Compound Grade E to BS EN 681-1 WA KTW & DVGW approved

NBR: Nitrile Compound EN682 DVGW Approved

Gripper and Carrier

Acetal Copolymer Grade M25 or equivalent

Bolts/Nuts/Washers

Bolts - Stainless steel to BS EN 3506-1 Grade A2 Property Class 80 or 70

Nuts - Stainless Steel to BS EN 3506-2 Grade A4 Property Class 80 Steel to BS EN 20898-2 Property Class 8.0

Washer - Stainless steel – BS1449:PT2 Grade 304 S15

Coatings

Cast/Metal Components - Rilsan Nylon 11 (Black)

Bolts - Dry Film Lubricant

Nuts - Dacromet coated

Approvals

Rilsan Nylon 11 (Black):

WRAS approved for use with potable water

Gasket: WRAS as well as KTW, DVGW & W270 approvals

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