

Next Generation UltraGrip Flange Adaptors

Specifications

Flange Adaptors

- Full flange sealing face can be used on wafer-type butterfly valves
- Up to 4° angular deflection

Nom Size	Size Range		Flange Nom Size	Flange Drilling	Type	Insertion Depth (D)		Dimensions				Bolts		Weight Kg
	Min	Max				Min	Max	C	A	B	T	No-size	Type	
40	43.5	63.5	40	PN10,16	1	65	110	150	168	164	17.0	3-M12x70	HRH	4.4
40	43.5	63.5	50	PN10,16	1	65	110	165	168	164	17.0	3-M12x70	HRH	4.83
50	48.0	71.0	50	PN10,16	1	65	110	165	178	163	17.0	3-M12x70	CSX	4.83
65	63.0	83.7	60/65	PN10,16	1	65	110	185	189	162	17.0	3-M12x70	HRH	5.68
65	63.0	83.7	65	PN10,16	1	65	110	185	189	164	17.0	3-M12x70	HRH	5.87
80	85.7	107.0	80	PN10,16	1	65	110	200	212	164	17.0	3-M12x70	HRH	6.82
100	107.0	133.2	100	PN10,16	2	90	125	220	280	212	17.0	3-M16x90	HRH	10.17
125	132.2	160.2	125	PN10,16	1	90	135	257	305	193	17.0	3-M16x90	HRH	11.19
150	158.2	192.2	150	PN10,16	2	90	125	285	339	232	17.0	4-M16x90	HRH	14.72
175	192.2	226.9	200	PN10,16	2	125	165	340	403	263	18.0	5-M16x93	CSX	24.32
200	218.1	256.0	200	PN10,16	2	125	165	340	432	263	18.0	5-M16x93	CSX	25.75
250	266.2	310.0	250	PN10,16	2	125	165	404	476	323	20.0	6-M16x120	HRH	36.23
300	315.0	356.0	300	PN10,16	2	125	200	469	522	324	21.5	8-M16x120	HRH	44.5
350	352.2	396.0	350	PN10,16	2	125	200	520	577	333	21.5	9-M16x120	CSX	51.75
400	398.2	442.0	400	PN10,16	2	125	200	580	623	333	21.5	10-M16x120	CSX	58.46
450	448.0	492.0	400	PN10,16	2	135	200	580	713	413	24.0	12-M16 x 150	HRH	97.42
500	498.0	552.0	500	PN10,16	2	155	215	715	803	398	27.5	9-M20 x 150	HRH	115.78
500	558.0	608.0	500	PN10,16	2	155	215	715	860	448	27.5	10-M20 x 150	HRH	130.09
600	604.0	648.0	600	PN10,16	2	195	255	840	900	853	31.0	12-M20 x 150	HRH	170.97
600	676.0	726.0	600	PN10,16	2	195	255	840	975	853	31.0	14-M20 x 150	HRH	195.36

Flange Drilling - All flanges are drilled to BS EN 1092 (formerly BS 4504) 7005* with the rating as per table

* There are several parts to these standards to suit different flange materials:

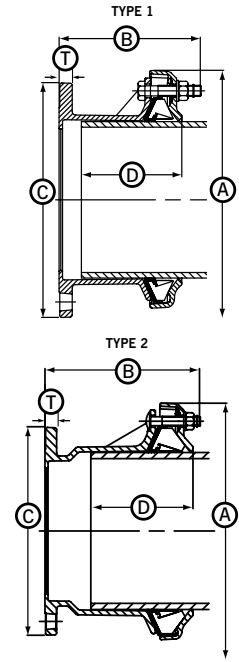
1. BS EN 1092 PT1 2. BS EN 1092 PT2 3. BS EN 1092 PT3 4. BS EN 1092 PT4 5. ISO 7005-1 6. ISO 7005-2 7. ISO 7005-3

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, Adaptor Body

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