

## FlexLock Couplings

Pipe Nom	Pipe O.D. mm	Pipe material	Bolt size No x Dia x Length	Overall Length (L)	End Ring O.D. (A)	Sleeve Length x Thickness (mm) (S)	Setting Gap		Working Pressure bar	Gasket mould	Coupling weight kg
							min	max			
DN50/2"	60.3	steel	2-M12 x 145	157	135	80 x 5.5	15	30	16	1375	2.7
DN65/2.5"	76.1/77	steel	2-M12 x 160	170	152	100 x 6.0	20	40	16	1394	3.2
DN80/3"	88.9	steel	4-M12 x 160	170	163	100 x 6.0	20	40	16	1382	4.2
DN80/3"	98.0	ductile iron	4-M12 x 195	203	181	115 x 6.4	20	40	16	1630	5.2
DN100/4"	114.3	steel	4-M12 x 170	188	195	100 x 6.0	20	40	16	1367	6.1
DN100/4"	118	ductile iron	4-M12 x 195	203	200	115 x 6.4	20	40	16	1618	5.6
DN150/6"	165.1	steel	6-M12 x 170	188	254	100 x 7.2	20	40	16	1369	9.2
DN150/6"	168.3	steel	6-M12 x 170	188	256	100 x 7.2	20	40	16	1369	9.3
DN150/6"	170	ductile iron	6-M12 x 170	178	256	100 x 7.2	20	40	16	1369	9.2
DN200/8"	219.1	steel	8-M12 x 170	188	310	100 x 7.2	20	40	16	1370	11.9
DN200/8"	222	ductile iron	6-M16 x 195	206	316	115 x 6.4	20	40	16	1631	12.0
DN250/10"	273.0	steel	12-M16 x 275	286	376	178 x 8.5	20	40	10	1737	32.2
DN250/10"	274	ductile iron	12-M16 x 275	286	376	178 x 8.5	20	40	10	1737	32.2
DN300/12"	323	steel	12-M16x275	286	436	178 x 6.0	20	40	10	7667/8	33.7
DN300/12"	326	ductile iron	12-M16x275	286	436	178 x 6.0	20	40	10	7667/8	33.7

FlexLock bolt torques: M12 = 55-65Nm M16 = 95-120Nm



46-48 WILBURY WAY  
HITCHIN, HERTFORDSHIRE  
SG4 0UD. UNITED KINGDOM

TELEPHONE: +44 (0)1462 443322  
FAX: +44 (0)1462 443311  
EMAIL: info@vikingjohnson.com

[www.vikingjohnson.com](http://www.vikingjohnson.com)

### Material Specification

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All FlexLock products are designed and manufactured under quality management systems to BS EN ISO 9001. They have been tested in accordance with the requirements of WRc Water Bye-laws Scheme and conform to the American Water Works Associations standard AWWA/ANSI C.219 for bolted couplings.

#### Centre Sleeve/End Rings

SG. Iron to BS 1563:1997:Symbol EN-GJS-450-10  
or Rolled Steel to: BS EN 10025:2004:Grade S275.

#### Flange Adaptor Body

Ductile Iron to BS EN 1563 EN-GJS-450-10.  
or Mild Steel to: BS EN 10025:2004:Grade S275.

#### Bolts

Cold Forged Steel Fasteners to:  
BS EN ISO898-1:1999 Property Class 8.8

#### Nuts

Steel BS EN 20898-2:1994 Property Class 8

#### Washers

BS 4320 Form B Stainless Steel BS 1449:PT2:1983  
Grade 304 S15

#### Gaskets

EPDM compound Grade 'E' to BS EN 681-1 WRAS listed.  
Suitable for: water, sewage, many strong and oxidising  
chemicals and food applications.

Nitrile compound Grade 'G' to BS EN 682-1.  
Suitable for: natural gas, petroleum products, low aromatic fuels,  
compressed air, sewage and drainage.

#### Stainless Steel teeth in gaskets

BS 3146:1975:Part 2 Grade ANC2.

#### Coating

Flange Adaptor Body, Centre Sleeve, End Rings are coated  
in Rilsan Nylon 11 to WIS 4-52-01 Part 1.

Bolts, studs and nuts are Sheraplex coated to WIS 4-52-03.

Viking Johnson reserves the right to modify the details in this publication as products and specifications are updated and improved.

#### Note:

Standard Viking Johnson products cannot be fitted with FlexLock gaskets to provide pull-out resistant coupling/flange adaptor. FlexLock couplings and flange adaptors are suitable for Steel or Ductile Iron pipes only, according to size. They are not suitable for use on Spun or Grey Cast Iron and should not be used to provide an end load resistant connection on this material.

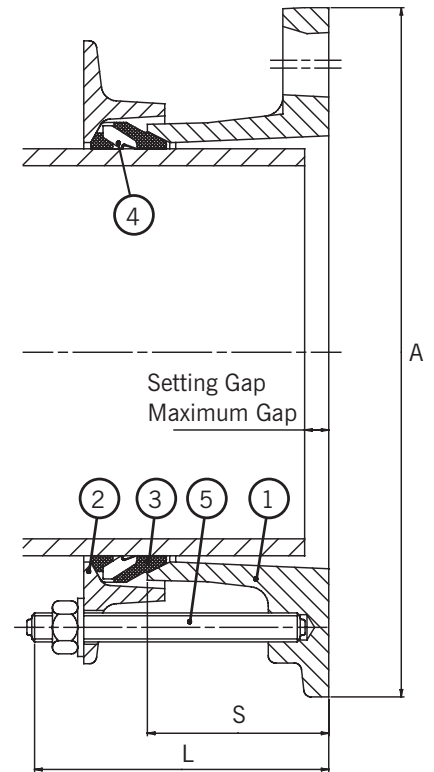
FlexLock is only guaranteed to provide full end-load resistant joints up to the stated working pressures if all bolts/studs are tightened to the recommended torques during assembly. The use of a calibrated torque wrench to confirm bolt torque is essential.



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- 1) Flange Adaptor
- 2) End Ring
- 3) Gasket
- 4) Gripper Teeth
- 5) Stud

### FlexLock Flange Adaptors

Pipe Nom	Pipe O.D. mm	Pipe material	Bolt size No x Dia x Length	Flange O.D. (A)	Overall Length (L)	Flange Thickness (mm) (F)	Sleeve Length (mm) (S)	Flange Nominal Drilling BS4504	Working Pressure bar	Setting Gap		Gasket mould	FA Weight kg
										min	max		
DN50/2"	60.3	steel	2-M12 x 115	160	123	16	75	50 PN10/16	16	10	30	1375	2.3
DN65/2.5"	76.1	steel	2-M12 x 115	180	123	16	75	60/65 PN10/16	16	10	30	1394	2.6
DN80/3"	88.9	steel	4-M12 x 115	195	123	16	75	80 PN10/16 90 PN6	16	10	30	1382	3.4
DN80/3"	98	ductile iron	4-M12 x 115	195	123	16	75	80 PN10/16 90 PN6	16	10	30	1630	4.0
DN100/4"	114.3	steel	4-M12 x 115	215	123	16	75	100 PN10/16 110 PN6	16	10	30	1367	4.5
DN100/4"	118	ductile iron	4-M12 x 115	215	123	16	75	100 PN10/16	16	10	30	1618	4.4
DN150/6"	165.1	steel	8-M12 x 115	285	127	25	75	150 PN10/16 6"E 6"ANSI	16	10	30	1369	9.3
DN150/6"	168.3	steel	8-M12 x 115	286	123	19	75	150 PN10/16	16	10	30	1369	8.0
DN150/6"	170	ductile iron	8-M12 x 115	286	123	19	75	150 PN10/16	16	10	30	1369	8.0
DN200/8"	219.1	steel	8-M12 x 115	341	123	19	75	200 PN10	10	10	30	1370	9.7
DN200/8"	219.1	steel	8-M12 x 115	340	127	25	73	200 PN16	16	10	30	1370	15.2
DN200/8"	222	ductile iron	6-M16 x 125	341	137	19	75	200 PN16	16	10	30	1631	10.6
DN200/8"	222	ductile iron	8-M16 x 125	340	137	25	75	200 PN10 8"E	10	10	30	1631	13.9
DN250/10"	273.0	steel	12-M16 x 125	405	137	19	90	250 PN10/16*	10	10	30	1737	16.4
DN250/10"	274	ductile iron	12-M16 x 125	405	137	19	90	250 PN10/16*	10	10	30	1737	16.4
DN300/12"	323.9	steel	12-M16 x 125	467	137	19	90	300 PN10/16*	10	10	30	7667/8	22.7
DN300/12"	326	ductile iron	12-M16 x 125	467	137	19	90	300 PN10/16*	10	10	30	7667/8	22.7

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\* Working pressure rating is less than flange rating.



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#### Flange Adaptor Body

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#### Studs/Bolts

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#### Nuts

Steel BS EN 20898-2:1994 Property Class 8

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#### Coating

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