



VIKING JOHNSON

World leaders in pipe joints and repair products

MAXIFIT

Including Large Diameter MaxiFit

The Viking Johnson range of MaxiFit products - *High tolerance pipe couplings* - MAXIFIT



MaxiFit – High tolerance pipe couplings

The Viking Johnson range of MaxiFit universal pipe couplings represents the very latest in mechanical pipe coupling technology. MaxiFit products are designed to accommodate plain ended pipes with different outside diameters, thus reducing stocks. One fitting is able to connect steel, ductile iron, PVCu, cast iron and asbestos cement pipes. The MaxiFit range is designed and manufactured under quality management systems to BS EN ISO 9001 and meets the requirements of the UK Water Regulations and the American Water Works Association specification for bolted couplings C.219.

Viking Johnson is the acknowledged world leader in the field of mechanical pipe couplings. From our extensive manufacturing facilities the company employs some of the most advanced design, manufacturing and testing technologies available, such as finite element analysis and 3D real time surface modelling, to ensure that its products attain the very highest levels of product quality possible.

Through this total commitment to quality, and over seventy years of innovative design, Viking Johnson products have been successfully used around the world to such an extent that the name Viking Johnson has become synonymous with excellence in the field of mechanical pipe couplings.

- A - MaxiStep
- B - MaxiDaptor
- C - MaxiThread
- D - MaxiFit
- E - MaxiFit Xtra
- F - MaxiStop

Features and Benefits

Universal MaxiFit 40mm - 300mm

The concept of MaxiFit is to optimise stockholding and simplify installation. To achieve this, MaxiFit offers a tolerance range of up to 23.4mm, having the effect of reduction of stockholding to one size per nominal bore. This is a benefit also appreciated by the installer, as only one product per size needs to be selected to effect a repair.

Full range

The MaxiFit product range includes couplings, stepped couplings, flange adaptors and other specialised fittings such as MaxiStop, a universal end cap. The couplings, stepped couplings and flange adaptors are available from DN40 (1½") to DN300 (12") in an unmatched range of nominal sizes, making the MaxiFit the most complete coupling range available anywhere in the world. Large Diameter MaxiFit, MaxiStep and MaxiDaptor are available in nominal sizes DN350 (14") to DN600 (24") in a wide variety of straight and stepped couplings and flange adaptors. Details of the Large Diameter range are featured later in this brochure.

Speed of installation

MaxiFit products are pre-assembled allowing quick and efficient installation, even in the most difficult of conditions without the need for dismantling. All products feature a standard bolt torque of 40-50 lbf.ft (55-65 Nm).

Ease of installation

The gaskets feature a series of 'slide easy' ribs, designed to reduce installation friction on pipes at the upper tolerance range of the MaxiFit, while a unique double angle sealing profile on larger sizes aids centralisation of the sleeve on pipes towards the lower end of the tolerance range.

Guaranteed sealing

The unique 'slide easy' gasket provides maximum sealing pressure, even on scored, pitted and corroded pipe surfaces through its distinctive circumferential ribs.

Corrosion and site protection

MaxiFit components, are coated with the thermoplastic polymer, Rilsan Nylon 11 in Viking Johnson's fluidised bed dipping facilities. Rilsan Nylon 11 has met the stringent performance standards of WIS 4-52-01 (Part 1) which requires the highest adhesion, flexibility, penetration and impact resistance characteristics. Bolts are coated with Sheraplex, a compound coating of zinc sheradising and low friction polymeric coating, that meets WIS 4-52-03.

As a result, MaxiFit products are well equipped to withstand transport, storage, site and corrosion damage, eliminating the need for further protection such as on-site wrapping.

Product quality

MaxiFit products are designed and manufactured under quality management systems to BS EN ISO 9001 and have been tested by Viking Johnson's comprehensive in-house research facilities to the most exacting performance requirements of the Water Regulations Advisory Scheme (WRAS) and to WIS 4-21-02.

MaxiFit products also conform to the American Water Works Association specification AWWA/ANSI C.219 for bolted couplings.

As with all Viking Johnson products, MaxiFit is designed to outlast the pipes on which it is fitted.

Angular deflection

MaxiFit products accommodate up to 6° angularity between pipes allowing for ease of installation and for pipeline movement eg. due to ground settlement. Long radius curves can also be accommodated, dispensing with the need for special fittings.

Working pressure

All MaxiFit products have a test pressure rating of 24bar (350 psi) and are suitable for 16bar (230 psi) working pressure.

Availability

Popular MaxiFit products are available from the extensive and worldwide network of Viking Johnson distributors.

Gaskets

MaxiFit is supplied as standard with EPDM gaskets suitable for potable water. Nitrile gaskets suitable for natural gas applications are also available.

Spares

A full range of spares for all MaxiFit products is available on request.



Specification

MAXIFIT

A comprehensive range of couplings to suit the various outside diameters of pipes with nominal bores between DN40 (1½") and DN300 (12").

MaxiFit couplings cater for all popular sizes and types of cast iron, asbestos cement, steel, ductile iron and PVCu pipes.

MaxiFit couplings allow for a total angular deflection of ± 6 degrees.

Polyethylene compatibility:

A range of liners is available to enable the MaxiFit to be used to repair existing rigid pipes with a short length of polyethylene (maximum length of repair 1 metre). Sizes available are 90, 110, 125 and 180mm for most common PE wall thicknesses.



PIPE NOM	Pipe Materials	OD Range mm		Gasket Mould	Weight kg
40mm 1.5"	Duct Iron, 50mm PVCu, Imp PVCu, Steel, Cast Iron, Imp AC	47.9	59.5	1637	3.1
50mm 2"	63mm PVCu, Imp PVCu, Duct Iron, Steel, Met & Imp AC, Cast Iron	59.5	72.0	1613	2.6
65mm 2.5"	75mm PVCu, Imp PVCu, Imp AC, Steel, Cast Iron	72.2	85.0	1614	2.9
80mm 3"	Duct Iron, 90mm PVCu, Imp PVCu, Met & Imp AC, Steel, Cast Iron	88.1	102.4	1615	3.7
100mm 4"	Duct Iron, 110/125mm PVCu, Cast Iron, Steel, Met & Imp AC	107.2	127.8	1759	4.1
125mm 5"	Duct Iron, 140mm PVCu, Imp PVCu, Steel	132.2	146.0	1635	5.3
125mm 5"	Cast Iron, Imp AC, Duct Iron, 140mm PVCu, Steel, Imp PVCu	138.9	153.2	1633	5.6
150mm 6"	Duct Iron, 160/180mm PVCu, Steel, Imp PVCu, Cast Iron, Met & Imp AC	158.2	181.6	1760	6.2
175mm 7"	200mm PVCu, Imp AC, Steel, Imp PVCu, Cast Iron	192.9	209.0	1758	8.5
200mm 8"	Duct Iron, 225mm PVCu, Met AC (Class 15 & 20), Steel, Imp PVCu, Cast Iron, Imp AC	218.1	235.0	1757	9.2
200mm 8"	9" Steel, 8" Imp AC Mid Barrel, 200mm Met AC Class 15, 20 & 25	230.0	247.0	1756	15.6
225mm 9"	250mm PVCu, Met AC (Class 15 & 20), Cast Iron, Imp AC	250.0	267.0	1655	16.3
250mm 10"	Duct Iron, 280mm PVCu, Met AC (Class 15 & 20), Steel, Imp PVCu, Cast Iron, Imp AC	270.0	289.0	1656	17.5
300mm 12"	315mm PVCu, Steel, Imp PVCu, Ductile Iron	315.0	332.0	1738	20.3
300mm 12"	Duct Iron, Met AC (Class 15), Steel, Imp PVCu, Cast Iron (Class AB)	322.9	339.4	1657	20.1
300mm 12"	AC (Class 15, 20, 25), Cast Iron (Class AB & CD), Imp AC	332.0	349.0	1658	20.6

Bolt lengths up to and including 125mm N. bore M12 x 175mm

150mm N. bore M12 x 200, 175mm N. bore and above M12 x 220mm.

Spanner/wrench size 19mm A/F. Where stated MaxiFit is suitable for the turned end of AC pipe.

MAXIFIT XTRA

A range of MaxiFit couplings with 200mm (8") long sleeves that accommodate an accumulated gap between the pipe end of up to 100mm (4") which offers the following benefits:

- Ease of installation
- Greater pipe insertion depth
- Increased cutting tolerances
- Sealing beyond damaged pipe ends
- Allows for greater pipe movement

PIPE NOM	Pipe Materials	OD Range mm		Gasket Mould	Weight kg
100mm 4"	Duct Iron, 110/125mm PVCu, Cast Iron, Steel, Met & Imp AC	107.2	127.8	1759	5.3
150mm 6"	Duct Iron, 160/180mm PVCu, Steel, Imp PVCu, Cast Iron, Met & Imp AC	158.2	181.6	1760	7.5
200mm 8"	Duct Iron, 225mm PVCu, Met AC (Class 15 & 20), Steel, Imp PVCu, Cast Iron, Imp AC	218.1	235.0	1757	11.6

Bolt length M12 x 275mm. Spanner/wrench size 19mm A/F.



MAXISTEP

MaxiStep couplings are designed to provide transitions between pipes of differing nominal bores, irrespective of the materials involved. They cater for cast iron, asbestos cement, steel, ductile iron and PVCu pipes. MaxiStep couplings allow for a total angular deflection of ± 6 degrees.



T O J O I N				T O						
PIPE NOM	SMALL END Pipe Materials	OD Range mm	Gasket Mould	PIPE NOM	LARGE END Pipe Materials	OD Range mm	Gasket Mould	Bolt Size mm	Weight kg	
40mm 1.5"	Duct Iron, 50mm PVCu, Imp PVCu, Steel, Cast Iron, Imp AC	47.9 59.5	1637	65mm 2.5"	75mm PVCu, Imp PVCu, Imp AC, Steel, Cast Iron	72.2 85.0	1614	M12 x 220	3.8	
50mm 2"	63mm PVCu, Imp PVCu, Duct Iron, Steel, Met & Imp AC, Cast Iron	59.5 72.0	1613	65mm 2.5"	75mm PVCu, Imp PVCu, Imp AC, Steel, Cast Iron	72.2 85.0	1614	M12 x 200	4.0	
50mm 2"	63mm PVCu, Imp PVCu, Duct Iron, Steel, Met & Imp AC, Cast Iron	59.5 72.0	1613	80mm 3"	Duct Iron, 90mm PVCu, Imp PVCu, Met & Imp AC, Steel, Cast Iron	88.1 102.4	1615	M12 x 200	4.5	
80mm 3"	Duct Iron, 90mm PVCu, Imp PVCu, Met & Imp AC, Steel, Cast Iron	88.1 102.4	1615	80mm 3.5"	3.5" Steel, Duct Iron, Cast Iron, Met & Imp AC	95.8 108.8	1674	M12 x 200	4.6	
80mm 3"	Duct Iron, 90mm PVCu, Imp PVCu, Met & Imp AC, Steel, Cast Iron	88.1 102.4	1615	100mm 4"	Duct Iron, 110/125mm PVCu, Cast Iron, Steel, Met & Imp AC	107.2 127.8	1759	M12 x 200	5.4	
80mm 3.5"	3.5" Steel, Duct Iron, Cast Iron, Met & Imp AC	95.8 108.0	1674	100mm 4"	Duct Iron, 110/125mm PVCu, Cast Iron, Steel, Met & Imp AC	107.2 127.8	1759	M12 x 200	5.4	
100mm 4"	Duct Iron, 110/125mm PVCu, Cast Iron, Steel, Met & Imp AC	107.2 127.8	1759	100mm 4"	Duct Iron, 125mm PVCu, AC, Steel, PVCu, Cast Iron, AC	118.0 131.5	1616	M12 x 175	4.2	
100mm 4"	Duct Iron, 110/125mm PVCu, Cast Iron, Steel, Met & Imp AC	107.2 127.8	1759	125mm 5"	Duct Iron, 140mm PVCu, Imp PVCu, Steel	132.2 146.0	1635	M12 x 220	6.7	
125mm 5"	Duct Iron, 140mm PVCu, Imp PVCu, Steel	132.2 146.0	1635	125mm 5"	Cast Iron, Imp AC, Duct Iron, 140mm PVCu, Steel, Imp PVCu	138.9 153.2	1633	M12 x 175	7.4	
125mm 5"	Duct Iron, 140mm PVCu, Imp PVCu, Steel	132.2 146.0	1635	150mm 6"	Duct Iron, 160/180mm PVCu, Steel, Imp PVCu, Cast Iron, Met & Imp AC	158.2 181.6	1760	M12 x 220	10.6	
125mm 5"	Cast Iron, Imp AC, Duct Iron, 140mm PVCu, Steel, Imp PVC	138.9 153.2	1633	150mm 6"	Duct Iron, 160/180mm PVCu, Steel, Imp PVCu, Cast Iron, Met & Imp AC	158.2 181.6	1760	M12 x 220	7.8	
150mm 6"	Duct Iron, 160/180mm PVCu, Steel, Imp PVCu, Cast Iron, Met & Imp AC	158.2 181.6	1760	150mm 6"	Cast Iron, Met & Imp AC, 180mm PVCu	170.5 184.6	1617	M12 x 200	6.1	
150mm 6"	Duct Iron, 160/180mm PVCu, Steel, Imp PVCu, Cast Iron, Met & Imp AC	158.2 181.6	1760	150mm 6"	180mm PVCu, Oversize Cast Iron, Mid-barrel Met & Imp AC	171.5 193.0	6006	M12 x 220	8.3	
175mm 7"	200mm PVCu, Imp AC, Steel, Imp PVCu, Cast Iron	192.9 209.0	1758	200mm 8"	Duct Iron, 225mm PVCu, Met AC (Class 15 & 20), Steel, Imp PVCu, Cast Iron, Imp AC	218.1 235.0	1757	M12 x 260	10.1	
200mm 8"	Duct Iron, 225mm PVCu, Met AC (Class 15 & 20) Steel, Imp PVCu, Cast Iron, Imp AC	218.1 235.0	1654	200mm 8"	Steel, Imp PVCu, Oversize 8" Cast Iron, Mid-barrel 8"/200mm AC	230.0 247.0	1756	M12 x 260	16.4	
200mm 8"	Duct Iron, 225mm PVCu, Met AC (Class 15 & 20) Steel, Imp PVCu, Cast Iron, Imp AC	218.1 235.0	1654	225mm 9"	250mm PVCu, 9" Imp PVCu, 9" Steel, 9" Cast Iron (spigot end)	243.7 260.7	1793	M12 x 260	16.7	
225mm 9"	250mm PVCu, Met AC (Class 15 & 20) Cast Iron, Imp AC	250.0 267.0	1655	250mm 10"	Duct Iron, 280mm PVCu, Met AC (Class 15 & 20), Steel, Imp PVCu, Cast Iron, Imp AC	270.0 289.0	1656	M12 x 260	18.5	
250mm 10"	Duct Iron, 280mm PVCu, Met AC (Class 15 & 20) Steel, Imp PVCu, Cast Iron, Imp AC	270.0 289.0	1656	250mm 10"	Oversize Cast Iron, Mid-barrel Met & Imp AC	291.0 308.0	6007	M12 x 260	19.5	
300mm 12"	315mm PVCu, Steel, Imp PVCu, Ductile Iron	315.0 332.0	1738	300mm 12"	Duct Iron, Met AC (Class 15), Steel, Imp PVCu, Cast Iron (Class AB)	322.9 339.4	1657	M12 x 260	21.9	
300mm 12"	315mm PVCu, Steel, Imp PVCu, Ductile Iron	315.0 332.0	1738	300mm 12"	AC (Class 15, 20, 25), Cast Iron (Class AB & CD), Imp AC	332.0 349.0	1658	M12 x 260	22.3	
300mm 12"	Duct Iron, Met AC (Class 15) Steel, Imp PVCu, Cast Iron (Class AB)	322.9 339.4	1657	300mm 12"	AC (Class 15, 20, 25), Cast Iron (Class AB & CD), Imp AC	332.0 349.0	1658	M12 x 260	22.0	
300mm 12"	Duct Iron, Met AC (Class 15) Steel, Imp PVCu, Cast Iron (Class AB)	322.9 339.4	1657	300mm 12"	Oversize Class CD Cast Iron, Mid-barrel Met & Imp AC, 14" Steel & Imp PVC	348.5 365.5	6008	M12 x 260	23.0	

Spanner/wrench size 19mm A.F.

MAXIDAPTOR

Flange adaptors designed to join pipes of various materials and outside diameters to flanges of the same or different nominal bores.

MaxiDaptor flanges cover a range of flange drillings, including ISO 7005-1:1992, BS10:1962 and ANSI B16.2 & B16.5.

All MaxiDaptors with the exception of the 332-349 version are compatible with both PN10 and PN16.

MaxiDaptor caters for a total angular deflection of ± 3 degrees.

Full Flange Face Style ('S' Bore)

A limited range of MaxiDaptors is also available for connecting to wafer style valves. Available sizes: DN80, DN90, DN100 and DN150.

MaxiDaptor Plus

For convenience, all popular MaxiDaptors can be supplied as a complete package including flange connecting bolts, nuts and fitted IBC gasket as MaxiDaptor Plus. (MaxiDaptor Plus can also be supplied with IBC gasket only.)



PIPE NOM	Pipe Materials	OD Range mm	ISO 7005-1 or Equal Nom Size mm NP Table	BS:10 1962 Nom Size Table	ANSI B16.5 or 16.2 Nom Class lbs	Flange Connecting Bolts Nos Type	Gasket Mould	Weight kg
50mm 2"	63mm PVCu, Imp PVCu, Duct Iron, Steel, Met & Imp AC, Cast Iron	59.5 72.0	50 10,16	2" ADEF 2.5" ADE	2" 150	4 M16 x 60	1613	3.0
65mm 2.5"	75mm PVCu, Imp PVCu, Imp AC, Steel, Cast Iron	72.2 85.0	60, 65 10,16	2.5" ADE	2.5" 150	4 M16 x 60	1614	3.5
65mm 2.5"	75mm PVCu, Imp PVCu, Imp AC, Steel, Cast Iron	72.2 85.0	80 10,16			4 M16 x 60	1614	3.2
80mm 3"	Duct Iron, 90mm PVCu, Imp PVCu, , Met & Imp AC, Steel, Cast Iron	88.1 102.4	65,80,90 10,16 100,110	3" ADEFH 3.5" ADFH 4" ADE	3" 150 3.5" 150	8 M16 x 60	1615	4.7
100mm 4"	Duct Iron, 110/125mm PVCu, Cast Iron, Steel, Met & Imp AC	107.2 127.8	100,110 10,16	3.5" FH 4" ADEFH	3.5" 150 4" 150	8 M16 x 70	1759	4.8
125mm 5"	Duct Iron, 140mm PVCu, Imp PVCu, Steel	132.2 146.0	125,150 10,16	5" ADE 6" E	6" 150	8 M20 x 70 8 M16 x 70	1635	7.4
125mm 5"	Cast Iron, Imp AC, Duct Iron, 140mm PVCu, Steel, Imp PVCu	138.9 153.2	125,150 10,16	5" ADE 6" E	6" 150	8 M20 x 70 8 M16 x 70	1633	7.1
150mm 6"	Duct Iron, 160/180mm PVCu, Steel, Imp PVCu, Cast Iron, Met & Imp AC	158.2 181.6	150 10,16	6" E	6" 150	8 M20 x 80	1760	6.2
175mm 7"	200mm PVCu, Imp AC, Steel, Imp PVCu, Cast Iron	192.9 209.0	200 10,16		8" 150	8 M20 x 70 12 M20 x 70	1758	11.6
200mm 8"	Duct Iron, 225mm PVCu, Met AC (Class 15 & 20) Steel, Imp PVCu, Cast Iron, Imp AC	218.1 235.0	200 10,16		8" 150	8 M20 x 90 12 M20 x 90	1757	10.7
225mm 9"	250mm PVCu, Met AC (Class 15 & 20) Cast Iron, Imp AC	250.0 267.0	250 10,16		10" 150	12 M20 x 80 12 M24 x 80	1655	14.4
250mm 10"	Duct Iron, 280mm PVCu, Met AC (Class 15 & 20) Steel, Imp PVCu, Cast Iron, Imp AC	270.0 289.0	250 10,16		10" 150	12 M20 x 80 12 M24 x 80	1656	14.0
300mm 12"	315mm PVCu, Steel, Imp PVCu, Ductile Iron	315.0 332.0	300 10			12 M20 x 80	1738	18.5
300mm 12"	315mm PVCu, Steel, Imp PVCu Ductile Iron	315.0 332.0	300 16			12 M24 x 80	1738	20.5
300mm 12"	Duct Iron, Met AC (Class 15) Steel, Imp PVCu, Cast Iron (Class AB)	322.9 339.4	300 10,16		12" 150	12 M20 x 80 12 M24 x 80	1657	14.8
300mm 12"	AC (Class 15, 20, 25) Cast Iron (Class AB & CD), Imp AC	332.0 349.0	300 16			12 M24 x 80	1658	17.6

'T' bolt lengths all sizes; M12 x 115mm EXCEPT N.B. 150, 225, 250 & 300 length M12 x 125mm; 332-349 - M12 x 135; 315-332 - Studs M12 x 125mm. Spanner/wrench size 19mm A/F.

MAXISTOP

MaxiStop is a universal end cap, suitable for blanking off pipe ends or providing threaded off takes to existing pipework. MaxiStop can be drilled and tapped up to 2" BSP.



PIPE NOM	Pipe Materials	OD Range mm		Gasket Mould	Weight kg
80mm 3"	Duct Iron, 90mm PVCu, Imp PVCu, Met & Imp AC, Steel, Cast Iron	88.1	102.4	1615	3.2
100mm 4"	Duct Iron, 110/125mm PVCu, Cast Iron, Steel, Met & Imp AC	107.2	127.8	1759	3.5
125mm 5"	Duct Iron, 140mm PVCu, Imp PVCu, Steel	132.2	146.0	1635	4.5
125mm 5"	Cast Iron, Imp AC, Duct Iron, 140mm PVCu, Steel, Imp PVCu	138.9	153.2	1633	4.6
150mm 6"	Duct Iron, 160/180mm PVCu, Steel, Imp PVCu, Cast Iron, Met & Imp AC	158.2	181.6	1760	5.3
175mm 7"	200mm PVCu, Imp AC, Steel, Imp PVCu, Cast Iron	192.9	209.0	1758	5.7
200mm 8"	Duct Iron, 225mm PVCu, Met AC (Class 15 & 20) Steel, Imp PVCu, Cast Iron, Imp AC	218.1	235.0	1757	6.4

Bolt length M12 x 95mm, spanner/wrench size 19mm A/F.

MaxiStop is suitable for 16bar working pressure, but must be accompanied by thrust restraint.

MaxiStop tested and approved to BG C6 (with Grade G Gasket)

MAXITHREAD

MaxiThread couplings have been developed to enable easier jointing of plain ended pipe to threaded pipe, or polyethylene pipe through the use of Viking Johnson Juno male adaptors. The MaxiThread coupling is a MaxiFit coupling body with one standard end ring and one threaded end ring. Outlets are available with 1", 1 1/4" and 1 1/2" BSP threads.

PIPE NOM	Pipe Materials	OD Range mm		BSP Thread	Gasket Mould	Weight kg
40mm 1.5"	Duct Iron, 50mm PVCu, Imp PVCu Steel, Cast Iron, Imp AC	47.9	59.5	1	1637	3.0
40mm 1.5"	Duct Iron, 50mm PVCu, Imp PVCu Steel, Cast Iron, Imp AC	47.9	59.5	1 1/4	1637	3.0
40mm 1.5"	Duct Iron, 50mm PVCu, Imp PVCu Steel, Cast Iron, Imp AC	47.9	59.5	1 1/2	1637	3.0
50mm 2"	63mm PVCu, Imp PVCu, Duct Iron, Steel, Met & Imp AC, Cast Iron	59.5	72.2	1	1613	3.0
50mm 2"	63mm PVCu, Imp PVCu, Duct Iron, Steel, Met & Imp AC, Cast Iron	59.5	72.2	1 1/4	1613	3.0
50mm 2"	63mm PVCu, Imp PVCu, Duct Iron, Steel, Met & Imp AC, Cast Iron	59.5	72.2	1 1/2	1613	3.0

Bolt length M12 x 175, spanner/wrench 19mm A/F.



Large Diameter MaxiFit – High tolerance pipe couplings

The Large Diameter MaxiFit range of wide tolerance couplings, stepped couplings and flange adaptors represents the very latest in mechanical pipe coupling technology. Large Diameter MaxiFit products are designed to join plain ended pipes with different outside diameters and have been designed to accommodate pipe end and mid barrel tolerances.

The Large Diameter MaxiFit range is designed and manufactured under quality management systems to BS EN ISO 9001 has been tested to the Water Regulations Advisory Scheme (WRAS) and conforms to the American Water Works Association specification for bolted couplings C.219.



Features and Benefits

Large Diameter MaxiFit 350-600mm

Large Diameter MaxiFit shares many features and benefits with Universal MaxiFit. These are repeated here, as are the features and benefits that are particular to Large Diameter MaxiFit.

Wide tolerance

All Large Diameter MaxiFit products feature a pipe outside diameter tolerance of 17mm (0.66"), enabling the fitting to be used either on pipe ends or mid barrel. In many cases Large Diameter MaxiFit can be used on a number of pipe materials, which reduces stock levels and can reduce the need for expensive and time consuming trial holes.

Long sleeve

All Large Diameter MaxiFit and MaxiStep products have a 250mm (10") sleeve length as standard, Large Diameter MaxiDaptor also has a long sleeve. This is a major benefit to the installer allowing for greater cutting tolerances, greater pipe insertion depth and sealing beyond corrosion damaged pipe ends, confirming that Large Diameter MaxiFit is a true repair product.

Full range

The Large Diameter MaxiFit product range consists of Couplings, Stepped Couplings and Flange Adaptors. Sizes for all three ranges start at DN350 (14") up to DN600 (24") and have been designed to suit most common pipe sizes and combinations.

Speed of installation

All Large Diameter MaxiFit products are pre-assembled, allowing for quick and efficient installation even in the most difficult of conditions without the need for dismantling.

All products have a standard bolt torque of 40-50 lbf.ft (55-65 Nm).

Ease of installation

MaxiFit gaskets feature a series of circumferential ribs, designed to reduce installation friction on pipes at the upper tolerance range of the fitting.

Guaranteed sealing

The unique 'slide easy' gasket provides maximum sealing pressure, even on scored, pitted and corroded pipe surfaces through its distinctive circumferential ribs.

Corrosion and site protection

All metallic Large Diameter MaxiFit components are coated with the thermoplastic polymer Rilsan Nylon 11 in Viking Johnson's in-house coating facilities. Rilsan Nylon 11 has met the stringent performance requirements of WIS 4-52-01 (Part 1) which requires the highest adhesion, flexibility, penetration and impact resistance characteristics. Fasteners are coated with Sheraplex which meets WIS 4-52-03. As a result, MaxiFit products are well equipped to withstand transport, storage, site and corrosion damage, eliminating the need for further protection, such as on-site wrapping.

Product quality

Large Diameter MaxiFit products are designed and manufactured under quality management systems to BS EN ISO 9001 and have been tested by Viking Johnson's comprehensive in-house research facilities to the most exacting performance requirements of the Water Regulations Advisory Scheme (WRAS). Large Diameter MaxiFit products also conform to the American Water Works Association specification AWWA/ANSI C219-97 for bolted couplings. As with all Viking Johnson products, Large Diameter MaxiFit is designed to outlast the pipe on which it is fitted.

Angular deflection

Large Diameter MaxiFit products accommodate angularity between pipes which allows for normal pipeline movement eg. due to ground settlement. Long radius curves can also be achieved with a series of couplings, dispensing with the need for special fittings.

Large Diameter MaxiFit and MaxiStep couplings allow for a total angular deflection of 6°, Large Diameter MaxiDaptor allows for a total angular deflection of 3°.

Working pressure

Large Diameter MaxiFit and MaxiStep products have a test pressure of 24bar (350psi) and are suitable for 16bar (230psi) working pressure. Large Diameter MaxiDaptor has a pressure rating equal to that of the flange drilling.

Availability

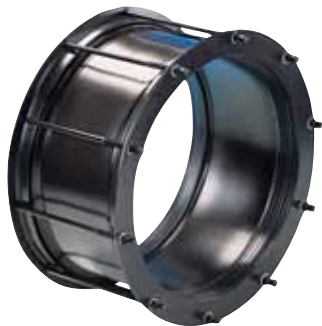
Large Diameter MaxiFit products are available from Viking Johnson's extensive worldwide network of agents and distributors.

Gaskets

Large Diameter MaxiFit is fitted with Grade E (EPDM) water quality gaskets as standard. For other gasket compounds, please ask for details.

LARGE DIAMETER MAXIFIT

A comprehensive range of wide tolerance couplings to suit the various outside diameters of pipes with nominal bores between DN350 (14") and DN600 (24").



PIPE NOM	Pipe Materials	OD Range mm	Gasket Mould	Setting Gap (mm)	Maximum Gap (mm)	MaxiFit Weight kg
350mm (14")	14" Steel, Imp PVC, DIN 2431 Cast Iron, Met AC (Class 25), Imp AC	351.0 368.0	6002	40	100	32.4
350mm (14")	350mm Ductile Iron, 14" Class AB Cast Iron	374.5 391.5	1659	40	100	34.2
350mm (14")	14" Class CD Cast Iron, 400mm PVCu, 16" Steel & Imp PVC, Met AC (Class 20), Imp AC	394.3 411.3	1766	40	100	35.6
400mm (15")	400mm Ductile Iron, 15" Class CD Cast Iron	418.2 435.2	1784	40	100	37.6
450mm (18")	450mm Ductile Iron, Met AC (Class 25), Imp AC	476.0 493.0	1770	40	100	43.0
450mm (18")	18" Class CD Cast Iron, 20" Steel & Imp PVC,	501.9 518.9	1772	40	100	44.5
500mm (20")	500mm Ductile Iron, Met AC (Class 25), Imp AC	527.0 544.0	1773	40	100	47.7
500mm (20")	20" Class CD Cast Iron, Met AC (Class 15), Imp AC, 22" Steel & Imp PVC, 560mm PVCu	555.3 572.3	1775	40	100	49.8
600mm (24")	600mm Ductile Iron	630.0 647.0	1778	40	100	56.1
600mm (24")	24" Class CD Cast Iron, Met AC (Class 20), Imp AC	662.0 679.0	1780	40	100	58.4
600mm (24")	DIN 2431 Cast Iron, Met AC (Class 25), Imp AC	675.0 692.0	6005	40	100	59.0

Note: Additional sizes are available.

LARGE DIAMETER MAXISTEP

A range of wide tolerance stepped couplings, designed to provide transitions between pipes of differing nominal bores/outside diameters.



T O J O I N				T O				Setting Gap	Max Gap	MaxiStep Weight
PIPE NOM	SMALL END Pipe Materials	OD Range mm	Gasket Mould	PIPE NOM	LARGE END Pipe Materials	OD Range mm	Gasket Mould			
350mm (14")	350mm Ductile Iron, 14" Class AB Cast Iron	374.5 391.5	1659	350mm (14")	14" Class CD Cast Iron, 400mm PVCu, 16" Steel & Imp PVC, Met AC (Class 20), Imp AC	394.3 411.3	1766	25	100	34.5
350mm (14")	14" Class CD Cast Iron, 400mm PVCu, 16" Steel & Imp PVC, Met AC (Class 20), Imp AC	394.3 411.3	1766	400mm (15")	400mm Ductile Iron, 15" Class CD Cast Iron	418.2 435.2	1784	25	100	36.5
400mm (15")	15" Class AB Cast Iron, 16" Steel & Imp PVC, Met AC (Class 25), Imp AC	404.8 421.8	1767	400mm (15")	400mm Ductile Iron, 15" Class CD Cast Iron	425.0 442.0	1662	25	100	37.5
400mm (16")	400mm Ductile Iron, 15" Class CD Cast Iron	425.0 442.0	1662	400mm (16")	16" Class AB Cast Iron, 450mm PVCu, Met AC (Class 15) Imp AC	434.4 451.4	1768	25	100	38.9
400mm (16")	400mm Ductile Iron, 15" Class CD Cast Iron	425.0 442.0	1662	400mm (16")	16" Class CD Cast Iron, 450mm PVCu, 18" Steel & Imp PVC	447.2 464.2	1769	25	100	39.1
400mm (16")	400mm Ductile Iron, 15" Class CD Cast Iron	425.0 442.0	1662	450mm (18")	18" Steel, Imp PVC, Met AC (Class 20), Imp AC	455.0 472.0	6003	25	100	39.5
450mm (18")	450mm Ductile Iron, Met AC (Class 25), Imp AC	476.0 493.0	1770	450mm (18")	18" Class AB Cast Iron, 500mm PVCu, Met AC (Class 15), Imp AC	487.3 504.3	1771	25	100	42.7
450mm (18")	450mm Ductile Iron, Met AC (Class 25), Imp AC	476.0 493.0	1770	450mm (18")	18" Class CD Cast Iron, 20" Steel & Imp PVC, Met AC (Class 20), Imp AC	501.9 518.9	1772	25	100	43.0
450mm (18")	450mm Ductile Iron, Met AC (Class 25), Imp AC	476.0 493.0	1770	450mm (18")	DIN 2431 Cast Iron, Met AC (Class 20), Imp AC	510.0 527.0	6004	25	100	43.6
500mm (20")	500mm Ductile Iron, Met AC (Class 25), Imp AC	527.0 544.0	1773	500mm (20")	20" Class AB Cast Iron	540.1 557.1	1774	25	100	47.4
500mm (20")	500mm Ductile Iron, Met AC (Class 25), Imp AC	527.0 544.0	1773	500mm (20")	20" Class CD Cast Iron, Met AC (Class 15), Imp AC, 22" Steel & Imp PVC, 560mm PVCu	555.3 572.3	1775	25	100	47.6
500mm (20")	500mm Ductile Iron, Met AC (Class 25), Imp AC	527.0 544.0	1773	500mm (21")	21" Class AB Cast Iron, Met AC (Class 15), Imp AC	566.5 583.5	1776	25	100	47.8
500mm (20")	500mm Ductile Iron, Met AC (Class 25), Imp AC	527.0 544.0	1773	500mm (21")	21" Class CD Cast Iron, 22" Class AB Cast Iron, Met AC (Class 20), Imp AC	582.2 599.2	1777	25	100	48.0
600mm (24")	600mm Ductile Iron	630.0 647.0	1778	600mm (24")	24" Class AB Cast Iron, Met AC (Class 15), Imp AC	645.2 662.2	1779	25	100	55.8
600mm (24")	600mm Ductile Iron	630.0 647.0	1778	600mm (24")	24" Class CD Cast Iron, Met AC (Class 20), Imp AC	662.0 679.0	1780	25	100	56.1
600mm (24")	600mm Ductile Iron	630.0 647.0	1778	600mm (24")	DIN 2431 Cast Iron, Met AC (Class 25), Imp AC	675.0 692.0	6005	25	100	57.0

* Viking Johnson is constantly introducing new sizes of Large Diameter MaxiFit, MaxiStep and MaxiDaptor. If the size you require is not detailed here, contact us for further information.

LARGE DIAMETER MAXIDAPTOR

A range of wide tolerance flange adaptors designed to join pipes of various materials and outside diameters to flanges of the same nominal size. Large Diameter MaxiDaptors are available with either PN16, PN10 or ANSI flanges. Large Diameter MaxiDaptors can be supplied with a full flange ('S' bore) making them suitable for wafer and butterfly type valves.

Note: MaxiDaptors with a setting gap of 140mm have stepped sleeves and therefore do not slide completely over the pipe end.

Spanner/wrench size: 19mm A/F.



PIPE NOM	Pipe Materials	OD Range mm		Flange Drilling	Gasket Mould	Setting Gap (mm)	Max Gap (mm)	MaxiDaptor Weight kg
350mm (14")	14" Steel, Imp PVC, DIN 2431 Cast Iron, Met AC (Class 25), Imp AC	351.0	368.0	350mm PN10	6002	18	38	32.7
350mm (14")	14" Steel, Imp PVC DIN 2431 Cast Iron, Met AC (Class 25), Imp AC	351.0	368.0	350mm PN16	6002	18	38	35.0
350mm (14")	350mm Ductile Iron, 14" Class AB Cast Iron	374.5	391.5	350mm PN10	1659	18	38	30.9
350mm (14")	350mm Ductile Iron, 14" Class AB Cast Iron	374.5	391.5	350mm PN16	1659	18	38	32.6
350mm (14")	400mm PVCu, 16" Steel & Imp PVC, 15" Class AB Cast Iron, Met AC (Class 20), Imp AC	394.3	411.3	350mm PN10	1766	140	180	37.9
350mm (14")	400mm PVCu, 16" Steel & Imp PVC, 15" Class AB Cast Iron, Met AC (Class 20), Imp AC	394.3	411.3	350mm PN16	1766	140	180	39.8
400mm (15")	15" Class AB Cast Iron, 16" Steel & Imp PVC, Met AC (Class 25), Imp AC	404.8	421.8	400mm PN10	1767	18	38	37.9
400mm (15")	15" Class AB Cast Iron, 16" Steel & Imp PVC, Met AC (Class 25), Imp AC	404.8	421.8	400mm PN16	1767	18	38	39.6
400mm (16")	400mm Ductile Iron, 15" Class CD Cast Iron	418.2	435.2	400mm PN10	1784	18	38	36.7
400mm (16")	400mm Ductile Iron, 15" Class CD Cast Iron	418.2	435.2	400mm PN16	1784	18	38	38.9
400mm (15")	400mm Ductile Iron, 15" Class CD Cast Iron	425.0	442.0	400mm PN10	1662	18	38	35.5
400mm (15")	400mm Ductile Iron, 15" Class CD Cast Iron	425.0	442.0	400mm PN16	1662	18	38	37.7
400mm (16")	16" Class AB Cast Iron, 450mm PVCu, Met AC (Class 15), Imp AC	434.4	451.4	400mm PN16	1768	140	180	45.7
400mm (16")	16" Class CD Cast Iron, 450mm PVCu, 18" Steel & Imp PVC	447.2	464.2	400mm PN16	1769	140	180	45.9
450mm (18")	18" Steel & Imp PVC, Met AC (Class 20), Imp AC	455.0	472.0	450mm PN10	6003	18	38	41.1
450mm (18")	18" Steel & Imp PVC, Met AC (Class 20), Imp AC	455.0	472.0	450mm PN16	6003	18	38	45.6
450mm (18")	450mm Ductile Iron, Met AC (Class 25), Imp AC	476.0	493.0	450mm PN10	1770	18	38	38.7
450mm (18")	450mm Ductile Iron, Met AC (Class 25), Imp AC	476.0	493.0	450mm PN16	1770	18	38	43.4
450mm (18")	18" Class AB Cast Iron, 500mm PVCu, Met AC (Class 15), Imp AC	487.3	504.3	450mm PN16	1771	18	38	42.2
450mm (18")	18" Class CD Cast Iron, 20" Steel & Imp PVCu, Met AC (Class 20), Imp AC	501.9	518.9	450mm PN16	1772	140	180	53.7
450mm (18")	DIN 2431 Cast Iron, Met AC (Class 20), Imp AC	510.0	527.0	450mm PN10	6004	140	180	49.0
450mm (18")	DIN 2431 Cast Iron, Met AC (Class 20), Imp AC	510.0	527.0	450mm PN16	6004	140	180	53.0
500mm (20")	500mm Ductile Iron, 18" Met AC (Class 25), Imp AC	527.0	544.0	500mm PN10	1773	18	38	42.9
500mm (20")	500mm Ductile Iron, 18" Met AC (Class 25), Imp AC	527.0	544.0	500mm PN16	1773	18	38	52.5
500mm (20")	20" Class AB Cast Iron	540.1	557.1	500mm PN16	1774	18	38	50.5
500mm (20")	20" Class CD Cast Iron, 22" Steel & Imp PVCu, 560mm PVCu	555.3	572.3	500mm PN16	1775	140	180	62.0
500mm (21")	21" Class AB Cast Iron, Met AC (Class 15), Imp AC	566.5	583.5	500mm PN16	1776	140	180	62.2
500mm (21")	21" Class CD Cast Iron, 22" Class AB Cast Iron, Met AC (Class 20), Imp AC	582.2	599.2	500mm PN10	1777	140	180	66.5
500mm (21")	21" Class CD Cast Iron, 22" Class AB Cast Iron, Met AC (Class 20), Imp AC	582.2	599.2	500mm PN16	1777	140	180	63.4
600mm (24")	600mm Ductile Iron	630.0	647.0	600mm PN10	1778	18	38	63.4
600mm (24")	600mm Ductile Iron	630.0	647.0	600mm PN16	1778	18	38	66.1
600mm (24")	24" Class AB Cast Iron, Met AC (Class 15), Imp AC	645.2	662.2	600mm PN10	1779	140	180	63.1
600mm (24")	24" Class AB Cast Iron, Met AC (Class 15), Imp AC	645.2	662.2	600mm PN16	1779	18	38	63.7
600mm (24")	24" Class CD Cast Iron, Met AC (Class 20), Imp AC	662.0	679.0	600mm PN16	1780	18	38	60.9
600mm (24")	DIN 2431 Cast Iron, Met AC (Class 25), Imp AC	675.0	692.0	600mm PN10	6005	140	180	64.4
600mm (24")	DIN 2431 Cast Iron, Met AC (Class 25), Imp AC	675.0	692.0	600mm PN16	6005	140	180	78.0

* Viking Johnson is constantly introducing new sizes of Large Diameter MaxiFit, MaxiStep and MaxiDaptor. If the size you require is not detailed here, contact us for further information.

Material Specification and Standards

All MaxiFit products are designed and manufactured under quality management systems certified to BS EN ISO 9001, have been tested to the UK Water Regulations Advisory Scheme and conform to the American Water Works Association's standard AWWA/ANSI C.219 for bolted couplings.

Centre Sleeve/End Rings*

SG Ductile Iron to BS EN 1563:1997
Grade EN-GJS-450-10U or
Malleable Cast Iron to BS EN 1562:1997
Grade EN-GJMB-350-10 or
Rolled Steel to BS EN 10025:1993 Grade S275

MaxiThread/MaxStop*

SG Ductile Iron to BS EN 1563:1997
Grade EN-GJS-450-10U or
Malleable Cast Iron to BS EN 1562:1997
Grade EN-GJMB-350-10
Thread Form (BSP) to BS 21:1985

Flange Adaptor Body*

SG Ductile Iron to BS EN 1563:1997
Grade EN-GJS-450-10U or
Malleable Cast Iron to BS EN 1562:1997
Grade EN-GJMB-350-10
Mild Steel to BS EN 10025:1993 Grade S275

Bolts

to BS EN ISO 898-1:1999 Grade 4.8

Nuts

to BS 4190:2002 Grade 4

Washers

Material to BS 970:Part 1:S304 Stainless Steel

Flange Connecting Bolts (MaxiDaptor Plus)

Hexagon bolts, c/w nut and two washers
Bolts: to BS EN ISO 898-1:1999 Grade 4.8
Nuts: BS 4190:2002:Grade 4.0
Washers: material to BS 970:Part 1:S304 Stainless Steel

Gasket

EPDM Grade 'E' to BS EN 681-1:1996 Type WA
WRAS listed, or
Nitrile Grade 'G' to BS 2494:1990:Type G

'E' temperature range: -40°C to +90°C. Suitable for water, sewage, many strong and oxidising chemicals, food applications. (Not suitable for fluctuating temperature, e.g. heating systems).
'G' temperature range: -20°C to +100°C.
Suitable for: natural gas, petroleum products, low aromatic fuels and compressed air.

Coating

Flange adaptor body, centre sleeve, end rings are coated in Rilsan Nylon 11 to WIS 4-52-01 (Part 1).
Washers galvanised to BS EN ISO 1461:1999

Bolts and 'T' Bolts and Nuts

Zinc plated to BS EN/2329:2000 followed by Rilsan Nylon 11 for double protection against corrosion, or Sheraplex to WIS 4-52-03.
Washers are Stainless Steel to BS1449:Part 2:1993 Grade 304.

* Materials of construction dependent upon size, and at the discretion of Viking Johnson.

Note

MaxiFit couplings do not resist end load - adequate restraint must be provided.

For new product availability consult your nearest distributor or agent.

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

Further data on the use of Viking Johnson couplings can be obtained from the Design Data brochure.

For further technical information please contact our Technical Support Department.

For further information on all Viking Johnson products and services contact our Marketing Department.



ISO 9001



ISO 14001



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