

PRODUCT RANGE GUIDE

VOLUME 1

FERROUS SYSTEMS

VALVES

CLAMPS & COUPLINGS

ANCILLARIES

viadux

WATER NETWORK SOLUTIONS



As one of Australia's most qualified suppliers of Water Network Solutions, Viadux sources a complete range of products from carefully selected manufacturers. Through our deep industry knowledge, we make sure that every item in this catalogue meets the strictest quality control standards.



SEARCH

To help you find what you need, each product page in this guide has a coloured edge. Just match the colours for each category listed on the Contents page. Or you can search by industries, which are detailed in the Industry Reference Guide.



SELECT

As part of our service, our nation-wide team of water experts understands the drawings for any project design. In many cases, we'll even suggest new options that can help you solve the problem faster and with more security and reliability.



SOLUTION

With our wide supply networks, Viadux offers fast delivery and dedicated customer care. For larger projects, we'll manage the scheduling for you — making sure that the right products are delivered to the right place at the right time, every time.

CONTENTS

FERROUS SYSTEMS /1.05

VALVES /2.02

CLAMPS & COUPLINGS /3.03

ANCILLARIES /4.03

FERROUS SYSTEMS / 1 VALVES / 2

Ductile Iron Pipe Systems (Specifications, Peripherals)	1.05	Sureflow Gate Valves (Resilient, Metal)	2.02
TYTON Ductile Iron Pipe	1.41	Check Valves	2.23
TYTON Joint Ductile Iron Fittings	1.51	Butterfly Valves	2.33
Flanged Ductile Iron Pipe & Fittings	1.63	Hydrant Valves	2.47
Ductile Iron Ancillary	1.75	Knife Gate Valves	2.55
		Air Valves	2.57
		Valve Ancillary	2.65

CLAMPS & COUPLINGS / 3 ANCILLARIES / 4

Offtake Clamps	3.03	Gasket Kits	4.03
Repair Clamps	3.07	Streetware	4.09
Tapping Bands	3.15	Consumables	4.19
Stainless Steel Couplings	3.23	Flange Dimensions	4.27
Mild Steel Couplings	3.35		
Other Clamps & Couplings	3.37		





WE ARE WATER PEOPLE

At Viadux we are driven by a purpose to help Australians access the water they need for progress. We have a proud history in the water industry and along with our parent company, Reece Group, support the civil, industrial and irrigation sectors with an innovative and comprehensive range of specialised products.



FERROUS SYSTEMS



Ductile Iron Pipeline Systems (Specifications, Peripherals)	1.05
TYTON Ductile Iron Pipe	1.41
TYTON Joint Ductile Iron Fittings	1.51
Flanged Ductile Iron Pipe & Fittings	1.63
Ductile Iron Ancillary	1.75

DUCTILE IRON PIPE SYSTEMS

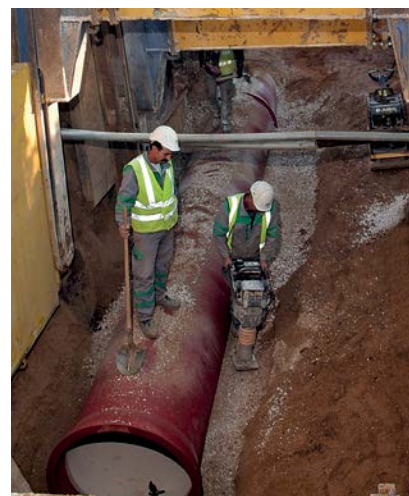
DIMAX TYTON XCEL

Applications	Potable water, pressure sewage, raw water, irrigation, effluent, bore water, sea water, slurries in above or below ground situations	
Pressure Class	PN 25/30, PN 35 or Flange Class Other pressure classes by agreement	
Lining	Cement mortar lined using sulphate resisting cement. SEALCOAT is available by request for applications where aggressive water with extended residence times may increase water pH. See pages 19-21	
Coating	200g/m ² hot applied metallic zinc and 100µm average black Two Part Epoxy Paint	
Protection in aggressive soils	POLYBOSS™ loose polyethylene sleeving	
Joining	Spigot and socket TYTON push-in rubber ring joint	
Identification	PN 25/30	Green socket face flash
	PN 35	Red socket face flash
	FLCL	Blue socket face flash



DIMAX TYTON XTREME

Applications	Gravity sewage and aggressive conveyants from pH4 to pH12	
Pressure Class	PN 25/30, PN 35 or Flange Class	
Lining	Cement mortar lined using Calcium Aluminate Cement. See pages 19-21	
Coating	200g/m ² hot applied metallic zinc and 100µm average red oxide Two Part Epoxy Paint	
Protection at joints	Red oxide epoxy coating applied to internal of socket and to spigot	
Protection in aggressive soils	POLYBOSS™ loose polyethylene sleeving	
Joining	Spigot and socket TYTON push-in rubber ring joint	
Identification	Red oxide external coating	
	PN 25/30	Green socket face flash
	PN 35	Red socket face flash
	FLCL	Blue socket face flash



DIMAX FLANGED PIPE

Applications	Above ground applications—pump stations and treatment plants	
Pressure Class	Fabricated from Flange Class TYTONXCEL with flanges rated to PN 16 or PN 35	
Lining	Cement mortar lined using sulfate resisting cement. See pages 19-21	
Coating	100µm average black Two Part Epoxy Paint	
Alternative coating	Fusion coated polymeric (up to 2.6m long) coating and lining	
End types available	Flange-flange, flange-spigot, spigot-spigot, flange-socket	



DUCTILE IRON PIPE SYSTEMS



DIMAX TYTON XCEL Z+

Applications	Potable water, pressure sewage, raw water, irrigation, effluent, bore water, sea water, slurries in above or below ground situations
Pressure Class	PN 25/30, PN 35 or Flange Class Other pressure classes by agreement
Lining	Cement mortar lined using sulphate resisting cement. SEALCOAT is available by request for applications where aggressive water with extended residence times may increase water pH. See pages 19-21
Coating	400g/m ² hot applied metallic zinc, aluminium & rare earth alloy and 100µm average blue Two Part Epoxy Paint
Protection in aggressive soils	DIMAX Z+ ZnAlRE alloy—eliminates the need for PE sleeving
Joining	Spigot and socket TYTON push-in rubber ring joint
Identification	PN 25/30 Green socket face flash PN 35 Red socket face flash FLCL Blue socket face flash



DIMAX TYTON XTREME Z+

Applications	Gravity sewage and aggressive conveyants from pH4 to pH12
Pressure Class	PN 25/30, PN 35 or Flange Class
Lining	Cement mortar lined using Calcium Aluminate Cement. See pages 19-21
Coating	400g/m ² hot applied metallic zinc, aluminium & rare earth alloy and 100µm average red oxide Two Part Epoxy Paint
Protection at joints	Red oxide epoxy coating applied to internal of socket and to spigot
Protection	DIMAX Z+ ZnAlRE alloy—eliminates the need for PE sleeving
Joining	Spigot and socket TYTON push-in rubber ring joint
Identification	Red oxide external coating PN 25/30 Green socket face flash PN 35 Red socket face flash FLCL Blue socket face flash



DIMAX TYTON XCEED Z+

Applications	Highly Reactive conveyants from pH1 to pH13
Pressure Class	PN 25/30, PN 35 or Flange Class
Lining	Polyurethane Internal Lining
Coating	400g/m ² hot applied metallic zinc, aluminium & rare earth alloy and 100µm Average black oxide Two Part Epoxy Paint
Protection	DIMAX Z+ ZnAlRE alloy—eliminates the need for PE sleeving
Joining	Spigot and socket TYTON push-in rubber ring joint
Identification	Black oxide external coating PN 20 Green socket face flash PN 35 Red socket face flash FLCL Blue socket face flash

DUCTILE IRON PIPE SPECIFICATIONS

DUCTILE IRON PIPE SYSTEMS

DUCTILE IRON FITTINGS

Types	Bends, tees, connectors, tapers and specials
Pressure Class	PN 16 or PN 35
Lining	Fusion coated polymeric, cement mortar lining
Coating	Fusion coated polymeric, bitumen
Jointing	TYTON® socket, spigot, flanged
AUSLITE®	An innovative limited range of lightweight ductile iron fittings

DUCTILE IRON VALVES AND HYDRANTS

Types	Gate valves, check valves, air valves, hydrants
Pressure Class	PN 16 or PN 35
Coating	Fusion coated polymeric
Jointing	Flanged, TYTON socket
AUSLITE®	An innovative limited range of lightweight ductile iron valves and hydrants

ANCILLARY PRODUCTS

Couplings, pre-tapped connectors, tapping bands, repair clamps, dismantling joints.

CENTURY PLUS®

A certified product familiarisation and installation training program tailored to the needs of construction personnel.

PIPELINE INSTALLATION QUALITY SYSTEM

This Pipeline Installation Quality System (PIQS) is a suite of documents to assist in ensuring that pipeline installation conforms to the necessary quality requirements.

QUALITY ASSURANCE

Viadux sources all products from Quality Endorsed Companies, licensed to ISO 9001.

In addition, components of the Ductile Iron Pipeline System are Product Certified and regular auditing is conducted by JAS-ANZ accredited Certification Bodies.

STANDARDS

TYTON Ductile Iron Pipeline System components are manufactured to Australian Standards

The major reference standards for the design or specification of ductile iron pipes in Australia are listed below. Other associated Standards are referred to in this publication in the relevant sections of the text.

AS 1646	Elastomeric seals for waterworks purposes
AS 1831	Ductile cast iron
AS/NZS 2280	Ductile iron pressure pipes and fittings
AS 2638	Gate valves for waterworks purposes
AS 3578	Cast iron non-return valves for general purposes
AS 3680	Polyethylene sleeving for ductile iron pipelines
AS 3681	Guidelines for the application of polyethylene sleeving to ductile iron pipelines and fittings
AS 3972	Portland and blended cements
AS 3952	Water supply – Spring hydrant valve for waterworks purposes
AS 4087	Metallic flanges for waterworks purposes
AS/NZS 4158	Thermal-bonded polymeric coatings on valves and fittings for water industry purposes
AS/NZS ISO 9001	Quality management systems
ISO 14001	Environmental Management Systems

The external diameters of spun ductile iron pressure pipe manufactured to AS/NZS 2280 are a 'soft metric' conversion of the former imperial dimensions of grey cast iron pipe to ensure total compatibility. The resulting external diameters vary from those manufactured to other Standards.

PN30/25 DI PIPE SPECIFICATIONS

FOR ABOVE AND BELOW GROUND SITUATIONS

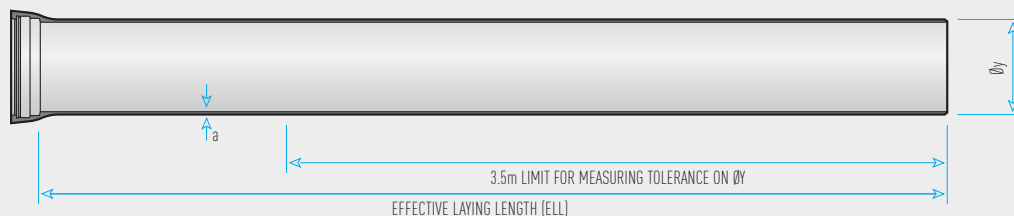
RRJ PIPE – PN30 DN375-600, PN25 DN750

Allowable Operating Pressure (AOP) – 3.00 MPa and 2.50MPa

Maximum Allowable Operating Pressure (MAOP) – 3.60 MPa and 3.00 MPa

Allowable Site Test Pressure (ASTP) – 3.80MPa and 3.10MPa

Nom. Size	Mean External Diameter	Effective Laying Length	Unlined Pipe			SOCKET MASS	DI Wall Thickness		Cement Mortar Lined Pipe				
			Mean Internal Diameter	Pipe Barrel Mass Per Metre	Pipe Mass Including Socket		Nominal	Minimum	Mean Internal Diameter	Nominal CML Thickness	Minimum CML Thickness	Pipe Barrel Mass Per Metre	Pipe Mass Including Socket and CML
DN	Ø _y MM	L _e M	DI MM	m _u KG/M	M _u KG	S KG	t MM	a MM	DC MM	tc _{nom} MM	tc _{min} MM	m _L KG/M	M _L KG
375	426	5.70	413	58.6	367	32.7	6.3	4.6	406	5	3.5	72.4	446
450	507	5.70	493	79.7	492	37.8	7.2	5.4	484	5	3.5	96.3	587
500	560	5.70	544	95.4	586	42.6	7.8	6.0	535	5	3.5	113.7	691
600	667	5.70	649	131.2	799	51.2	9.0	7.1	640	5	3.5	153.0	924
750	826	5.70	807	171.8	1,048	68.5	9.5	7.4	796	6	4.5	205.0	1,237



PN30/25 DI PIPE SPECIFICATIONS

FOR ABOVE AND BELOW GROUND SITUATIONS

RRJ PIPE – PN30 DN375-600, PN25 DN750
 Allowable Operating Pressure (AOP) – 3.00 MPa and 2.50MPa
 Maximum Allowable Operating Pressure (MAOP) – 3.60 MPa and 3.00 MPa
 Allowable Site Test Pressure (ASTP) – 3.80MPa and 3.10MPa

Nom. Size	Theoretical Rated Pressures				Structural & Hydraulic Properties			
	Allowable Operating Pressure	Maximum Allowable Operating Pressure	Allowable Site Test Pressure	Burst Pressure	Transform Wall Thickness	Celerity of Mean CML Bore	Barrel Ring Stiffness	Buckling Pressure
DN	AOP MPa	MAOP MPa	ASTP MPa	BURST MPa	t _t MM	c M/S	S _D N/M/M	P KPA
375	3.06	3.67	3.82	9	5.80	1,048	37	392
450	3.01	3.01	3.77	9	6.65	1,038	33	350
500	3.03	3.64	3.79	9	7.25	1,034	32	337
600	3.01	3.62	3.77	9	8.40	1,026	29	310
750	2.53	3.04	3.16	8	8.90	985	18	193

NOMINAL RATED PRESSURES

Allowable Operating Pressure (AOP) – the allowable internal pressure, excluding surge, that a component can safely withstand in service.

$$AOP = \frac{2Ra}{K_A(y-a)}$$

MAXIMUM ALLOWABLE OPERATING PRESSURE (MAOP)

The maximum internal pressure, including surge, that a component can safely withstand in service.

$$MAOP = 1.20 \times AOP$$

ALLOWABLE SITE TEST PRESSURE (ASTP)

The maximum pressure applied on site in a newly installed pipeline. ASTP = 1.25 x AOP

NOTES

- 1 PN 20 is not available in pipe sizes DN 100, DN 150 and DN 200
- 2 PN 20 pipe should NOT be used with TYTON-LOK gaskets
- 3 Minimum wall thickness and minimum cement mortar lining thicknesses are local minima only
- 4 Celerity is calculated using mean bore and transformed wall thickness.
 ρ = density of water: 1,000. kg/m³
 K = liquid bulk modulus: 2.05E + 10⁹. Pa

- 5 Masses shown in the above table are based on mean dimensions. For lifting, handling and installation masses, consult the TYTON Ductile Iron Pipes Design Manual or the TYTON Ductile Iron Pipes Handling and Installation Manual

- 6 The 'Mean Internal Diameter' shown in the tables above are based on mean external diameters and nominal wall thicknesses. The wall thicknesses may be greater than the nominal shown in local areas due to minor process variation. As per AS/NZS 2280 there are no upper tolerances on wall thickness. If pipe bore is critical to hydraulic performance, additional process controls can be applied. Please consult the Viadux Project Office

- 7 Due to pipe profile transition from pipe barrel to socket, the tolerances on pipe barrel mean outside diameter apply only to the barrel length measured up to 4.0m from the spigot end of a standard length pipe. If jointing is to be carried out beyond this limit, the barrel mean outside diameter should be measured and compatibility with the jointing system confirmed. Pipes may require machining, dressing or finishing with a belt sander for satisfactory jointing

- 8 Ring bending stiffness is calculated using

$$S_D = \left(\frac{E_{DI}}{12} \right) \left(\frac{t_t}{y-t_t} \right)^3$$

where

E_{DI} = Young's Modulus: 170,000. MPa

t_t = transformed pipe wall thickness
 $= \frac{(t+a)}{2} + 0.1t_c$ m

t = nominal DI pipe wall thickness. m

a = minimum DI pipe wall thickness. m

t_c = minimum thickness of cement mortar lining. m

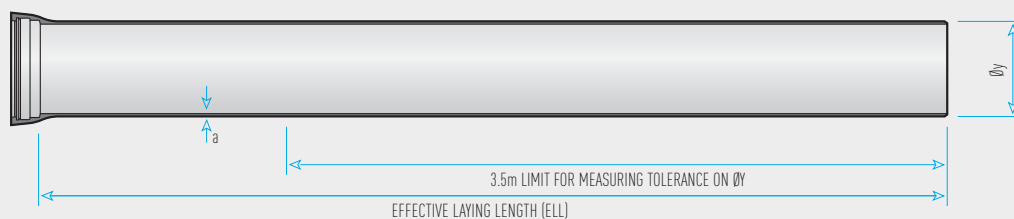
y = mean outside diameter of pipe. m

PN35 DI PIPE SPECIFICATIONS

FOR ABOVE AND BELOW GROUND SITUATIONS

RRJ PIPE—PN 35 AOP = 3.50MPa • MAOP = 4.20MPa • ASTP = 4.38MPa

Nom. Size	Mean External Diameter	Effective Laying Length	Unlined Pipe			SOCKET MASS	DI Wall Thickness		Cement Mortar Lined Pipe				
			Mean Internal Diameter	Pipe Barrel Mass Per Metre	Pipe Mass Including Socket		Nominal	Minimum	Mean Internal Diameter	Nominal CML Thickness	Minimum CML Thickness	Pipe Barrel Mass Per Metre	Pipe Mass Including Socket and CML
DN	Ø _y MM	L _e M	DI MM	m _u KG/M	M _u KG	S KG	t MM	a MM	DC MM	tc _{nom} MM	tc _{min} MM	m _L KG/M	M _L KG
100	122	5.70	112	12.7	77	4.9	4.9	3.5	103	5	3.5	16.4	98
150	177	5.70	167	19.0	115	6.7	5.0	3.5	158	5	3.5	24.6	147
200	232	5.70	222	25.1	155	12.0	5.0	3.5	213	5	3.5	32.5	197
225	259	5.70	249	28.1	173	13.0	5.0	3.5	240	5	3.5	36.4	221
250	286	5.70	276	32.3	199	15.0	5.2	3.6	267	5	3.5	41.5	252
300	345	5.70	333	44.3	271	18.8	5.9	4.3	324	5	3.5	55.5	335
375	426	5.70	412	65.0	403	32.7	7.0	5.3	403	5	3.5	78.8	482
450	507	5.70	491	89.5	548	37.8	8.1	6.3	482	5	3.5	106.0	642
500	560	5.70	542	107.4	655	42.6	8.8	7.0	533	5	3.5	125.7	759
600	667	5.70	647	148.4	897	51.2	10.2	8.3	638	5	3.5	170.2	1,021
750	826	5.70	801	221.7	1,332	68.5	12.3	10.2	790	6	4.5	254.7	1,520



PN35 DI PIPE SPECIFICATIONS

FOR ABOVE AND BELOW GROUND SITUATIONS

RRJ PIPE—PN 35 AOP = 3.50MPa • MAOP = 4.20MPa • ASTP = 4.38MPa

Nom. Size	Theoretical Rated Pressures				Structural & Hydraulic Properties			
	Allowable Operating Pressure	Maximum Allowable Operating Pressure	Allowable Site Test Pressure	Burst Pressure	Transform Wall Thickness	Celerity of Mean CML Bore	Barrel Ring Stiffness	Buckling Pressure
DN	AOP MPa	MAOP MPa	ASTP MPa	BURST MPa	t_t MM	c M/S	S_D N/M/M	P KPA
100	8.27	9.92	10.34	25	4.55	1,265	816	8,612
150	5.65	6.78	7.06	17	4.60	1,199	267	2,822
200	4.29	5.15	5.36	13	4.60	1,141	117	1,231
225	3.84	4.60	4.79	12	4.60	1,115	83	880
250	3.57	4.28	4.46	11	4.75	1,099	68	717
300	3.53	4.24	4.42	11	5.45	1,086	58	616
375	3.53	4.23	4.41	11	6.50	1,076	53	555
450	3.52	4.23	4.40	11	7.55	1,069	49	515
500	3.54	4.25	4.43	11	8.25	1,066	47	499
600	3.53	4.23	4.41	11	9.60	1,060	44	465
750	3.50	4.20	4.38	11	11.70	1,056	42	443

NOMINAL RATED PRESSURES

Allowable Operating Pressure (AOP)
– the allowable internal pressure, excluding surge, that a component can safely withstand in service.

$$AOP = \frac{2Ra}{K_A(y-a)}$$

MAXIMUM ALLOWABLE OPERATING PRESSURE (MAOP)

The maximum internal pressure, including surge, that a component can safely withstand in service.

$$MAOP = 1.20 \times AOP$$

ALLOWABLE SITE TEST PRESSURE (ASTP)

The maximum pressure applied on site in a newly installed pipeline. $ASTP = 1.25 \times AOP$

NOTES

- PN 35 is available in pipe sizes DN 100 to DN 750
- Minimum wall thickness and minimum cement mortar lining thicknesses are local minima only
- Celerity is calculated using mean bore and transformed wall thickness.
 ρ = density of water: 1,000. kg/m³
 K = liquid bulk modulus: $2.05E + 10^9$. Pa

- Masses shown in the above table are based on mean dimensions. For lifting, handling and installation masses consult the TYTON Ductile Iron Pipelines Design Componentry Installation Manual or the TYTON Ductile Iron Pipelines Handling and Installation Manual

- The 'Mean Internal Diameter' shown in the tables above are based on mean external diameters and nominal wall thicknesses. The wall thicknesses may be greater than the nominal shown in local areas due to minor process variation. As per AS/NZS 2280 there are no upper tolerances on wall thickness. If pipe bore is critical to hydraulic performance, additional process controls can be applied. Please consult the Viadux Project Office

- Due to pipe profile transition from pipe barrel to socket, the tolerances on pipe barrel mean outside diameter apply only to the barrel length measured up to 4.0m from the spigot end of a standard length pipe. If jointing is to be carried out beyond this limit, the barrel mean outside diameter should be measured and compatibility with the jointing system confirmed. Pipes may require machining, dressing or finishing with a belt sander for satisfactory jointing

- Ring bending stiffness is calculated using

$$S_D = \left(\frac{E_{DI}}{12} \right) \left(\frac{t_t}{y-t_t} \right)^3$$

where

E_{DI} = Young's Modulus: 170,000. MPa

t_t = transformed pipe wall thickness
 $= \frac{(t+a) + 0.1t_c}{2}$ m

t = nominal DI pipe wall thickness. m

a = minimum DI pipe wall thickness. m

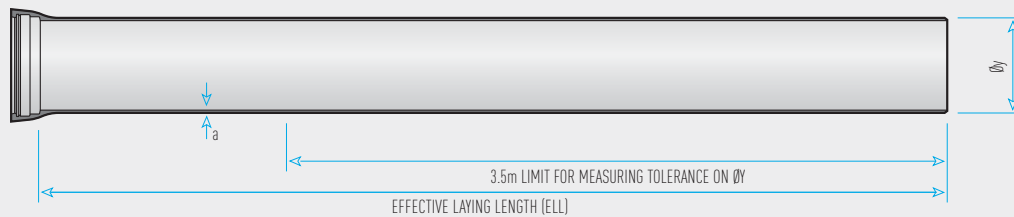
t_c = minimum thickness of cement mortar lining. m

y = mean outside diameter of pipe. m

FLANGE CLASS DI PIPE SPECIFICATIONS

RRJ PIPE

Nom. Size	Mean External Diameter	Effective Laying Length	Unlined Pipe			SOCKET MASS	DI Wall Thickness		Cement Mortar Lined Pipe				
			Mean Internal Diameter	Pipe Barrel Mass Per Metre	Pipe Mass Including Socket		Nominal	Minimum	Mean Internal Diameter	Nominal CML Thickness	Minimum CML Thickness	Pipe Barrel Mass Per Metre	Pipe Mass Including Socket and CML
DN	Ø _y MM	L _e M	DI MM	m _u KG/M	M _u KG	S KG	t MM	a MM	DC MM	tc _{nom} MM	tc _{min} MM	m _L KG/M	M _L KG
100	122	5.70	107	18.8	107	4.3	7.4	6.0	98	5	3.5	22.3	131
150	177	5.70	162	28.2	178	5.9	7.5	6.0	153	5	3.5	33.5	197
200	232	5.70	215	42.1	237	8.6	8.5	7.0	206	5	3.5	49.2	289
225	259	5.70	242	47.2	297	10.4	8.5	7.0	233	5	3.5	55.2	325
250	286	5.70	267	58.8	329	11.3	9.6	8.0	258	5	3.5	67.7	397
300	345	5.70	326	71.3	440	13.4	9.6	8.0	317	5	3.5	82.2	482
375	426	5.70	405	98.4	553	23.7	10.7	9.0	396	5	3.5	112.0	662
450	507	5.70	483	129.4	723	27.7	11.8	10.0	474	5	3.5	145.7	858
500	560	5.70	536	143.3	868	30.3	11.8	10.0	527	5	3.5	161.3	950
600	667	5.70	641	186.9	1,165	35.6	12.9	11.0	632	5	3.5	208.5	1,224
750	826	5.70	796	271.2	1,607	60.8	15.1	13.0	785	6	4.5	304.0	1,793



FLANGE CLASS DI PIPE SPECIFICATIONS

RRJ PIPE AOP, MAOP AND ASTP AS PER TABLE BELOW

Nom. Size	Theoretical Rated Pressures				Structural & Hydraulic Properties			
	Allowable Operating Pressure	Maximum Allowable Operating Pressure	Allowable Site Test Pressure	Burst Pressure	Transform Wall Thickness	Celerity of Mean CML Bore	Barrel Ring Stiffness	Buckling Pressure
	AOP MPA	MAOP MPA	ASTP MPA	BURST MPA	t_t MM	c M/S	S_D N/M/M	P KPA
DN								
100	14.48	17.38	18.10	43	7.05	1,322	3,239	34,165
150	9.82	11.79	12.28	29	7.10	1,272	1,027	10,840
200	8.71	10.45	10.89	26	8.10	1,248	668	7,043
225	7.78	9.33	9.72	23	8.10	1,229	475	5,008
250	8.06	9.67	10.07	24	9.15	1,232	510	5,375
300	6.65	7.98	8.31	20	9.15	1,197	286	3,013
375	6.04	7.25	7.55	18	10.20	1,176	209	2,201
450	5.63	6.76	7.04	17	11.25	1,160	165	1,743
500	5.09	6.11	6.36	15	11.25	1,138	122	1,285
600	4.70	5.63	5.87	14	12.30	1,119	94	989
750	4.48	5.37	5.60	13	14.50	1,107	81	851

NOMINAL RATED PRESSURES

Allowable Operating Pressure (AOP) – the allowable internal pressure, excluding surge, that a component can safely withstand in service.

$$AOP = \frac{2Ra}{K_A(y-a)}$$

MAXIMUM ALLOWABLE OPERATING PRESSURE (MAOP)

The maximum internal pressure, including surge, that a component can safely withstand in service.

$$MAOP = 1.20 \times AOP$$

ALLOWABLE SITE TEST PRESSURE (ASTP)

The maximum pressure applied on site in a newly installed pipeline. $ASTP = 1.25 \times AOP$

NOTES

- 1 Flange Class pipe is heavy wall TYTON rubber ring joint pipe suitable for conversion to flanged pipe
- 2 Minimum wall thickness and minimum cement mortar lining thicknesses are local minima only
- 3 Celerity is calculated using mean bore and transformed wall thickness.
 ρ = density of water: 1,000. kg/m³
 K = liquid bulk modulus: $2.05E + 10^9$. Pa

- 4 Masses shown in the above table are based on mean dimensions. For lifting, handling and installation masses, consult the TYTON Ductile Iron Pipelines Design Componentry Installation Manual or the TYTON Ductile Iron Pipelines Handling and Installation Manual

- 5 The 'Mean Internal Diameter' shown in the tables above are based on mean external diameters and nominal wall thicknesses. The wall thicknesses may be greater than the nominal shown in local areas due to minor process variation. As per AS/NZS 2280 there are no upper tolerances on wall thickness. If pipe bore is critical to hydraulic performance, additional process controls can be applied. Please consult the Viadux Project Office

- 6 Due to pipe profile transition from pipe barrel to socket, the tolerances on pipe barrel mean outside diameter apply only to the barrel length measured up to 4.0m from the spigot end of a standard length pipe. If jointing is to be carried out beyond this limit, the barrel mean outside diameter should be measured and compatibility with the jointing system confirmed. Pipes may require machining, dressing or finishing with a belt sander for satisfactory jointing

- 7 Ring bending stiffness is calculated using

$$S_D = \left(\frac{E_{DI}}{12} \right) \left(\frac{t_t}{y-t_t} \right)^3$$

where

$$E_{DI} = \text{Young's Modulus: } 170,000. \text{ MPa}$$

$$t_t = \text{transformed pipe wall thickness} \\ = \frac{(t+a) + 0.1t_c}{2} \text{ m}$$

$$t = \text{nominal DI pipe wall thickness. m}$$

$$a = \text{minimum DI pipe wall thickness. m}$$

$$t_c = \text{minimum thickness of cement mortar lining. m}$$

$$y = \text{mean outside diameter of pipe. m}$$

DI PIPE SPECIFICATIONS

PRESSURE

PIPE BURSTING PRESSURE

The pipe burst pressures listed below are based on theoretical calculations using minimum wall thickness, mean internal diameter and the minimum ultimate tensile strength (UTS) of 420 MPa.

$$P_b = \frac{2Ra}{(y-a)}$$

P_b = burst pressure. MPa

R = UTS = 420. MPa

a = minimum wall thickness of ductile iron. mm

y = mean outside diameter of the pipe. mm

Nom. Size	PN 20	PN 35	Flange Class
DN	MPa	MPa	MPa
100	–	24.8	43.4
150	–	16.9	29.5
200	–	12.9	26.1
225	9.8	11.5	23.3
250	8.9	10.7	24.2
300	7.4	10.6	19.9
375	6.2	10.6	18.1
450	6.0	10.6	16.9
500	6.0	10.6	15.3
600	6.1	10.6	14.1
750	6.0	10.5	13.4

PIPE BUCKLING PRESSURE

The maximum allowable pipe buckling pressure calculations below are based on theoretical calculations using the following formula.

$$P = \frac{24S_D \times 10^{-3}}{F_s(1 - U^2)}$$

$$S_D = \left(\frac{E_{DI}}{12} \right) \left(\frac{t_i}{y - t_i} \right)^3$$

F_s = 2.5

U = 0.30

Nom. Size	PN 20	PN 35	Flange Class
DN	KPa	KPa	KPa
100	–	8,612	34,165
150	–	2,822	10,840
200	–	1,231	7,043
225	619	880	5,008
250	475	717	5,375
300	269	616	3,013
375	158	555	2,201
450	134	515	1,743
500	126	499	1,285
600	117	465	989
750	110	443	851

TYTON Pipe

TYTON Series ductile iron pipes are classified by a PN number on the basis of the allowable operating pressure where $PN/10 = AOP$ (allowable operating pressure) in MPa. Standard pressure classifications are PN 20 and PN 35. The minimum wall thickness for pipes is determined from the following equation:

$$a = \frac{P_A K_A y}{2R + P_A K_A}$$

where

a = minimum pipe wall thickness. mm limited to 3mm minimum

P_A = allowable operating pressure, excluding surge. MPa

K_A = safety factor for allowable operating pressure = 3

y = mean outside diameter of pipe. mm

R = minimum ultimate tensile strength of material. 420 MPa for ductile iron pipes

The equation above is derived from Barlow's equation, i.e.,

$$\delta = \frac{PD}{2a}$$

where

δ = hoop stress (= R/K_A). MPa

P = pressure of the conveyant (= P_A). MPa

D = diameter of neutral axis of pipe wall (= $y - a$). mm

a = minimum pipe wall thickness. mm

Flange Class Pipe

Flange Class pipe is a special class pipe with wall thicknesses designed to allow machining and threading for attachment of flanges. It is equivalent in ductile iron wall thickness to the superseded K12 class.

DI PIPE SPECIFICATIONS

PRESSURE

MASS OF TYTON JOINT® PIPE PER METRE OF BARREL

Pipe masses given on the previous pages are calculated from mean and nominal dimensions.

This table is provided to enable masses of non-standard pipe lengths to be calculated.

Pipe masses for lifting, loading and handling are given in the TYTON Ductile Iron Pipes Design Manual or the TYTON Ductile Iron Pipes Handling and Installation Manual.

Note: Due to pipe profile transition from pipe barrel to socket, the tolerances on pipe barrel mean outside diameter apply only to the barrel length measured up to 3.5m from the spigot end of a standard length pipe.

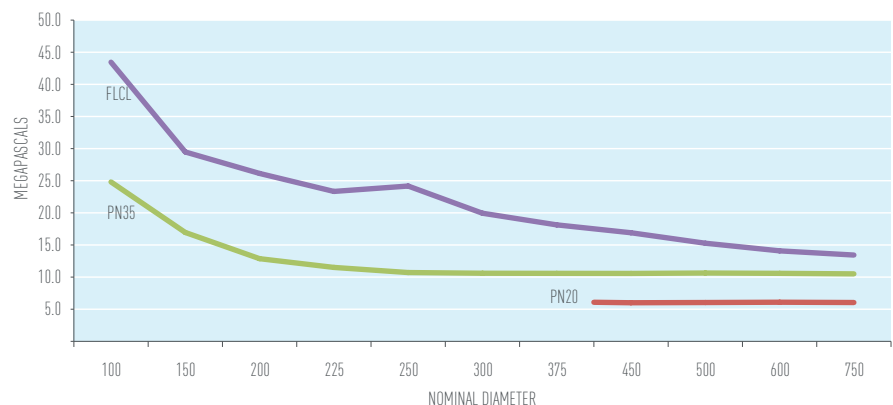
For diameters DN100 - DN 300 the above applies to all pipes.

For diameters DN375 - DN750 pipes the above applies to pipes marked 'SUITABLE FOR CUTTING'.

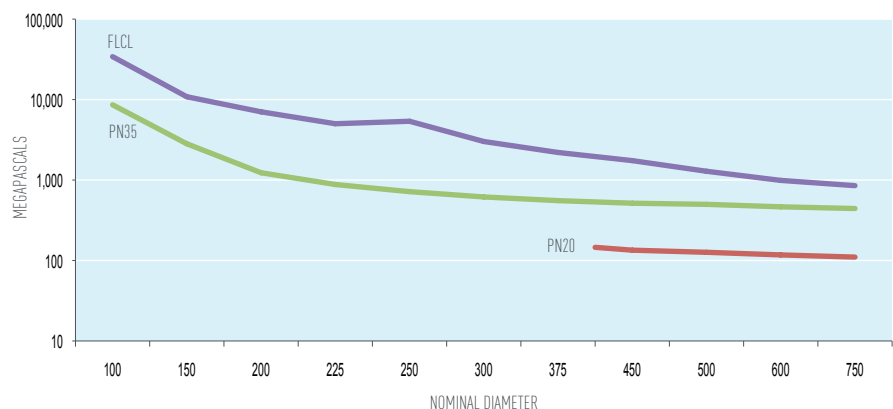
If jointing is to be carried out beyond this limit or on pipes DN375 - DN 750 not marked 'SUITABLE FOR CUTTING', the barrel mean outside diameter should be measured and compatibility with the jointing system confirmed. Pipes may require machining, dressing or finishing with a belt sander for satisfactory jointing.

Nom. Size DN	SOCKET MASS KG	PN 20		PN 35		Flange Class	
		Unlined KG	Lined KG	Unlined KG	Lined KG	Unlined KG	Lined KG
100	6.5	–	–	12.7	16.7	18.8	22.6
150	5.3	–	–	19.0	25.2	28.2	34.1
200	8.9	–	–	25.1	33.3	42.1	50.0
225	17.9	25.4	34.6	28.1	37.3	47.2	56.1
250	25.5	28.7	38.9	32.3	42.5	58.8	68.6
300	31.0	34.7	47.2	44.3	56.7	71.3	83.4
375	40.1	44.8	60.3	65.0	80.3	98.4	113.5
450	41.8	60.0	78.5	89.5	107.8	129.4	147.5
500	45.7	71.2	91.7	107.4	127.7	143.3	163.3
600	47.9	98.0	122.4	148.4	172.6	186.9	210.9
750	55.5	144.9	181.3	221.7	257.7	271.2	306.9

BURSTING PRESSURE - PIPES



BUCKLING PRESSURE - PIPES



DI PIPE

WHY CHOOSE DUCTILE IRON?

HIGH STRENGTH AND STIFFNESS

Ductile iron is suitable for installation in open fields or high traffic load areas and can be laid at a variety of depths. The high material strength minimises the need for imported bedding and surround, hence minimising the impact on the environment.

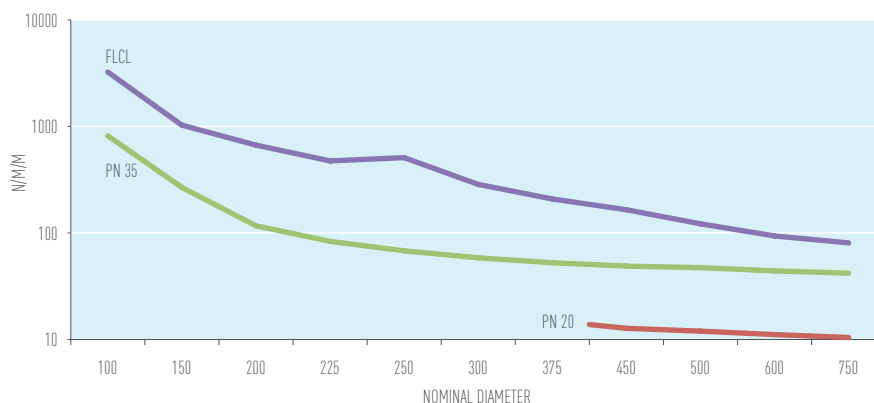
- Can be laid in narrow and/or shallow trenches
- Can be laid at a wide range of depths with no detrimental effect on the performance of the pipe
- Minimises risk due to unforeseen site hazards, such as second-come damage

REDUCING FAILURE RATES: DUCTILE IRON ASSURED LONG TERM RELIABILITY

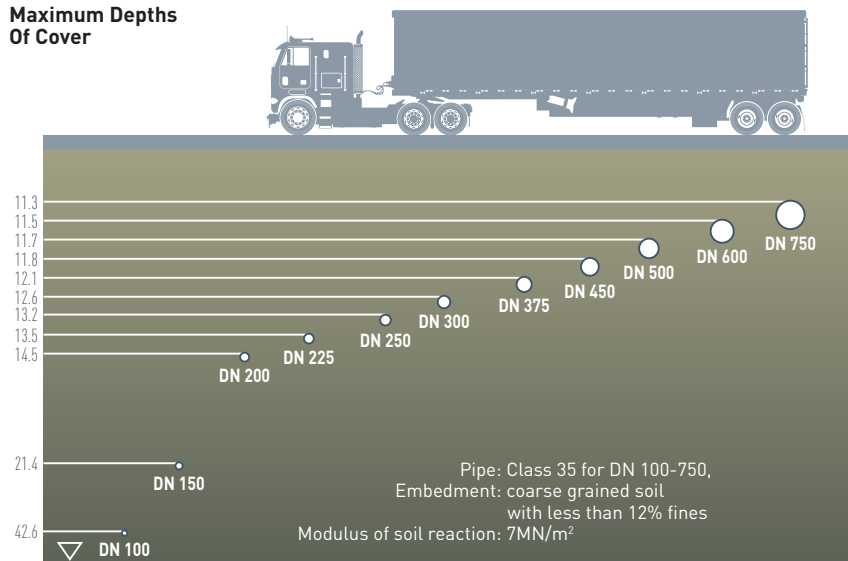
Through a continual programme of developments and innovations the failure rates of ductile iron systems consistently reduce compared to alternative materials.

- Reliable long term solution
- Can adapt to future changes in external load.

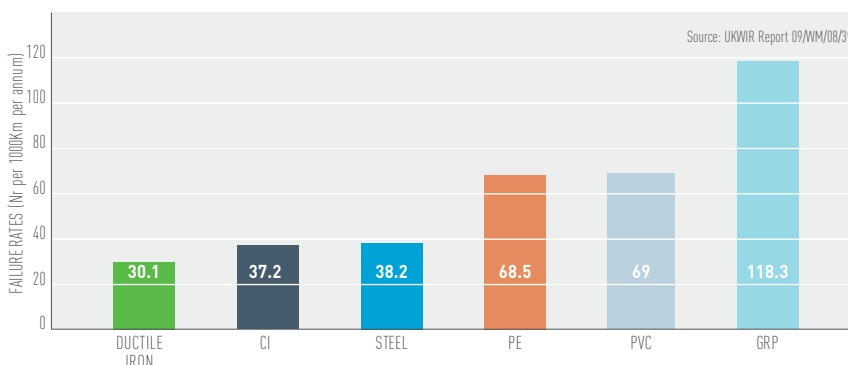
Ring Stiffness



Maximum Depths Of Cover



Trunk Mains Failure Rate Averages By Material Type



DI PIPE SPECIFICATIONS

TOLERANCE

DIMENSIONAL TOLERANCES

Pipe outside diameter

The tolerance on the mean outside diameter, y is:

Nom. Size	Tolerance. MM
100 – 300	+1/-2
375 – 750	+2/-2

The tolerance is limited to a distance of 3.5m from the spigot end of a standard full length pipe.

Pipe Nominal Wall Thickness

Nominal pipe wall thickness t is as follows:

$$t = a + 2.0. \text{ mm}$$

No limit has been set for the maximum pipe wall thickness.

Pipe Minimum Wall Thickness

Minimum wall thickness is determined by the Barlow formula and limited to a minimum of 3.0mm as defined previously.

Pipe Length – TYTON JOINT Pipe

The standard manufacturing length of a spigot and socket pipe provides an effective length of 5.7 metres for DN 100 to DN 750 when laid. The tolerance is ± 30 mm. All pipes from which test bars have been cut are accepted by the purchaser as complete lengths. Such pipes are not shorter than the standard length by more than 100mm and do not number more than 10% of the total number of pipes in one order.

Pipe Length – Flanged Joint Pipe

Pipe flanged at both ends is available up to a maximum length of 5.5m. The tolerance on pipe flanged at both ends is ± 1.5 mm. The tolerance of pipe flanged at one end is ± 6 mm.

Straightness

The permitted deviation from the straight when pipes are tested with a straight edge is not to exceed 1.5mm in any 1 metre length of pipe and the total deviation over a full length of pipe is not to exceed 8.5mm

Cement Mortar Lining Thickness

The thickness of cement mortar lining for all classes of pipe and fittings is as follows:

Nom. Size DN	Lining Thickness Size	
	Nominal MM	Minimum MM
100 – 600 Pipes	5	3.5
750 Pipes	6	4.5
100 – 300 Fittings	6	4
375 – 750 Fittings	9	7

ALLOWABLE PIPELINE PRESSURES

Allowable pipeline pressures are defined as follows:

1. Allowable operating pressure (AOP) = (PN number)/10. MPa
2. Maximum allowable operating pressure (MAOP) = 1.20 x AOP. MPa
3. Allowable site test pressure (ASTP) = 1.25 x AOP. MPa

where:

AOP = allowable operating pressure, excluding surge that a component can safely withstand in service

MAOP = maximum allowable operating pressure, including surge that a component can safely withstand in service

ASTP = allowable site test pressure or the maximum pressure applied on site in a newly installed pipeline

AOP, MAOP and ASTP are given in tables for PN 25/30, PN 35 and FLCL pipe on pages 6-11.

The hydrostatic test for TYTON JOINT pipes and fittings is carried out prior to lining or coating. The test pressure is maintained for 15 seconds to test for leaks or sweats. Ductile iron pipes are tested up to the maximum pressure defined below. This table also defines the production hydrostatic test pressure for fittings and pipes with flanges.

Nom. Size DN	For Centrifugally Cast Ductile Iron Pipe. MPA
80 – 300	Lesser of AOP or 5.0
375 – 600	Lesser of AOP or 4.0
750	Lesser of AOP or 3.2

FOR DI FITTINGS

Nom. Size DN	Standard Pressure MPA	High Pressure MPA
80 – 300	Lesser of AOP or 2.5	Lesser of AOP or 2.5
375 – 600	1.6	1.6
750	1.0	1.0

Note: Product certification and demonstrated process control provide independent assurance of the hydrostatic integrity of fittings and flanged pipe to the test pressures nominated in the table above.

DI PIPE SPECIFICATIONS

QUALITY

MECHANICAL PROPERTIES

The tensile test is in accordance with the requirements of AS 1391 using a test bar as detailed in AS/NZS 2280.

Pipes Centrifugally Cast In Metal Moulds

Nom. Size	Minimum Tensile Strength	Minimum 0.2% Proof Stress	Minimum Breaking Elongation
DN	MPA	MPA	%
100 – 750	420	300	10

Pipes & Fittings Cast In Sand Moulds

Nom. Size	Minimum Tensile Strength	Minimum 0.2% Proof Stress	Minimum Breaking Elongation
DN	MPA	MPA	%
80 – 750	400	300	12

The proof stress is only measured when specially agreed between the purchaser and manufacturer and is carried out under the conditions specified by the purchaser at the time of enquiry and order.

Hardness

When tested in accordance with AS 1816 Part 1, the Brinell hardness of the outside surface of the pipe is not to exceed 230 and the Brinell hardness of the outside of fittings is not to exceed 250.

INSPECTION

Pipes, fittings and rubber gaskets are manufactured under licence with quality assurance systems regularly audited by independent licencing bodies.

If the purchaser wishes to inspect the materials, such an inspection is undertaken at the works of the manufacturer. The equipment and labour necessary to carry out the inspection is provided by the manufacturer.

The inspector may witness the sampling, preparation and testing of the test pieces, checking of dimensions and weights and hydrostatic testing.

Should the purchaser or his representative not be present for the implementation of these operations at the time agreed, the manufacturer is entitled to proceed with the inspection without the purchaser or his representative being present.

QUALITY ASSURANCE

All Viadux ductile iron pipelines and components are manufactured at facilities which are quality endorsed by independent companies to AS/NZS ISO 9001 - Quality management systems.

In addition to the above quality systems accreditation, the following pipeline components are product certified:

AS/NZS 2280	Ductile iron pipe
AS/NZS 2280	Ductile iron fittings
AS 2638	Gate valves
AS 3952	Spring hydrants
AS 1646	TYTON gaskets

These quality licensing systems provide the assurance that Viadux ductile iron pipeline systems deliver the stringent quality requirements demanded by the water industry for its strategic products.



COATINGS LININGS AND INSTALLATION

DUCTILE IRON PIPE LININGS

LININGS

CEMENT MORTAR LININGS

Ferrous potable water pipelines can corrode internally if not protected. The predominant lining used for potable water and sewage rising mains is sulphate resisting cement mortar. However this lining is not suitable for sewage pipelines that are septic and produce acute concentrations of sulfuric acid. Pipe with alternative linings, such as calcium aluminate cement mortar, provide suitable protection against acid attack. Note that pipelines can be designed to minimise the generation of sulfuric acid.

Other common CML applications include bore field collectors and ground water transmission lines. For high saline applications or for aggressive water conveyance, customers should contact Viadux for specific recommendations.

Mechanism of Protection

Cement mortar linings provide active protection of the ductile iron pipe by creating a high pH environment, typically pH12, at the iron-mortar interface. At pH values above approximately 9, a stable hydroxide film is formed on the inside iron surface. While this passive film remains intact no corrosion occurs.

History

Cement mortar has been used to line pipe since the 1840's when it was introduced in France and the USA. The techniques for application took some time to develop and it was not until the 1920's that the process of centrifugal spinning came into being. This process allowed the rapid application of linings to the entire pipe surface by placing a mixture of sand, cement and water into the pipe and rotating it at high speed.

The centrifugal forces distribute the lining around the pipe circumference and compact it densely against the pipe wall. At the same time excess water in the mixture migrates to the surface of the lining. After spinning, this excess water is removed leaving a very smooth surfaced mortar with a water to cement ratio of 0.25 to 0.40.

The high density, low void content and low water content results in a strong, low permeability cement mortar lining.

Current Practice

The centrifugally spun process remains the preferred lining method today as it produces the highest quality lining. Cement mortar linings provide long-term protection at a low cost and consequently remain the standard lining for potable water mains.



Centrifugally spun cement mortar linings produce a dense, impermeable, smooth lining, maximising service life.

DUCTILE IRON PIPE LININGS

LININGS

CEMENT MORTAR LINING

A centrifugally cast cement mortar lining is made up of sulphate resisting cement in accordance with AS 3972 and well graded aggregate (sand) in a ratio not exceeding 2:1, aggregate to cement. The water to cement ratio is the least that will produce a workable mortar mix depending upon the mix proportions and the diameter of the pipe to be lined. Pipes are spun with high radial acceleration and are simultaneously vibrated, producing a very dense smooth lining of extremely low permeability. Cement mortar lining is the standard lining for TYTON XCEL and TYTON XCEL Z+.

CEMENT MORTAR LINING PLUS SEALCOAT

High pH can develop in water, especially in small diameter cement mortar lined pipelines, where the water is aggressive and the flow rate is low, resulting in a long residence time. To overcome this potential problem seal coatings have been developed to restrict leaching from the cement mortar lining. Pipes can be supplied with cement mortar lining and SEALCOAT if required. This must be specified at time of quotation.

CALCIUM ALUMINATE CEMENT

CAC is a centrifugally cast lining which uses special calcium aluminate cement. It is used to line TYTON XTREME and TYTON XTREME Z+ pipes for aggressive water, wastewater and effluent applications. It is not intended for potable water applications.

Calcium Aluminate Cement (CAC) (as specified in AS/NZS 2280 is recommended for:

- sulfate levels up to saturation
- continuous pH levels down to 4.0
- hydrogen sulfide levels up to 10mg/L.

LINING APPEARANCE

When leaving the pipe manufacturing facility the linings may contain superficial hairline cracks. If the pipes are stored for extended periods, say more than two months, especially in hot weather, drying shrinkage can lead to the formation of larger cracks. For potable water pipelines cracks up to 2.0mm wide should not be repaired as they will close and heal when immersed in water. It should be noted that cracks in ductile iron pipe cement mortar linings do not normally exceed 0.8mm. When the pipes are placed into service, the mortar typically absorbs up to 8% moisture and expands, reducing crack widths by around 50%. Further hydration closes the cracks in a process sometimes referred to as autogenous healing. The mechanism of high pH providing protection and the ability of cement mortar to continue to hydrate and cure during service means that minor cracks in the lining can be tolerated.

Calcium aluminate cement can exhibit eggshell cracking at the surface. This is a superficial aesthetic effect only and will not affect service performance. It is deemed acceptable in accordance with AS/NZS 2280 - Ductile iron pipes and fittings.

HANDLING, STORING AND LAYING

Cement mortar lined pipes should be handled with due care. Mistreatment, poor handling and unloading practice can result in lining damage.

Details of repair are given in the Ductile Iron Pipeline Systems Handling and Installation Manual.

CEMENT MORTAR LINING PERFORMANCE

The dense mortar produced by the centrifugal lining process offers good chemical resistance to potable waters and can also be used in saline and wastewater applications. Cement mortar lining using sulfate resisting and calcium aluminate cements are resistant to the water chemistries shown below. Note that CAC should NOT be used for potable water pipelines. When the water chemistry is outside these limits, please contact Viadux for advice.

Chemical Species	Tolerable concentration	
	SR cement mg/L	CA cement mg/L
Sulfate SO ₄ ²⁻	6 000 max	No limit
Magnesium Mg ²⁺	300 max	No limit
Free Aggressive Carbon Dioxide CO ₂	30 max	No limit
pH	6.0 min	4.0 min
Ammonium NH ₄ ⁺	30 max	No limit
Calcium Ca ²⁺	1.0 min	No limit
Hydrogen Sulfide	0.5ppm max	10ppm max

POLYURETHANE

Polyurethane linings are the next technological step in ductile iron pipe applications. Ductile iron pipes that are manufactured with a factory applied internal lining of Polyurethane have several key advantages. The biggest of which being a corrosion free design. The thin internal layer protects the internal walls of the pipe against the transport of almost any type of water from Ph1 up to Ph13. Allowing for a superior range in applications and environments where it is suitable to use. From Potable and Recycled water, to Sewer and Industrial; this non-reactive internal lining will insure the quality of it's medium and the lifespan of the piping system.

DUCTILE IRON PIPE SLEEVING

SLEEVING

LOOSE POLYETHYLENE SLEEVING (LPS) - POLYBOSS™ BLUE, CREAM AND LILAC

Polyboss Application

The need for LPS depends on the type of soil and the required service life of the pipeline.

Ductile Iron pipes are now available with Zn (Zinc) or ZnAl (Zinc Aluminum) metallic coatings enabling installation in most soils without sleeving.

In soils that are assessed as extremely aggressive, or where time for assessment is prohibitive, LPS is a quick and effective answer, giving peace of mind and assurance of long-term performance. LPS has been successfully used worldwide for over 70 years.

Viadux has adopted the Werner Resistivity Test. This is a cost effective and accurate method of ascertaining the natural intrinsic corrosivity of a soil.

A soil resistance measurement is taken and converted to a soil resistivity result. The corrosiveness of the soil, pipe characteristics and pipeline design life are then used to ascertain the if LPS is required.

Recent enhancements in polymer catalyst technologies have paved the way for improved linear low density polyethylene performance. Viadux has taken advantage of these technologies and introduced a new metallocene enhanced, linear low density polyethylene (LLDPE) sleeving.

Metallocene is an organometallic catalyst used to control cross-linking of the polymer chains to enhance the mechanical properties of the polymer.

Other Colours

Loose polyethylene sleeving is also available in cream – signifying sewage and lilac – signifying re-use water.

POLYBOSS™ REQUIREMENTS

NOM. SIZE	DN	80	100	150	200	225	250	300	375	450	500	600	750
Lay Flat Width	MM	350	350	425	525	635	635	725	875	1,100	1,100	1,270	1,500
5.7 metre Effective Laying Length Of Pipe													
Pipes per Roll	#	30	30	25	20	16	16	14	12	9	9	8	6
Pipeline per Roll	M	172.5	172.5	143.8	115.0	92.0	92.0	80.5	69.0	51.8	51.8	48.0	36.0
Weight per Roll	KG	24.6	24.6	24.9	24.6	23.8	23.8	23.8	24.6	23.2	23.2	24.8	21.9



DUCTILE IRON PIPE COATINGS

Z+ ACTIVE CORROSION PROTECTION – FACTORY APPLIED ZINC ALUMINIUM ALLOY COATING SYSTEM

A UNIQUE ZNAl ALLOY APPLIED AT TWICE THE DENSITY OF STANDARD ZINC COATINGS.

Dimax's exclusive Z+ coating system further improves on this traditional formula to bring you the most advanced

corrosion protection system available. The Dimax Z+ ZnAl Alloy has been engineered with a small percentage

of rare earth (RE) metals to withstand Australian soil conditions. This unique Zinc-Aluminium-Rare Earth Alloy (ZnAlRE) refines the grain structure of the alloy which ultimately enhances the galvanic effect that the standard ZnAl creates to actively protect the pipe.

The Z+ layer is hot sprayed directly onto the preheated ductile iron pipe, at a density of 400g per m², then finished with a layer of Epoxy to an average thickness of 100µm. Z+ maximises the life of your pipeline while eliminating the need for the manual application of polyethylene sleeving that can add significant time and labour costs at the point of installation.

METALLIC ZINC/ALUMINIUM ALLOY

The entire outer surface of the ductile iron pipe is coated in an 80% zinc and 15% aluminium alloy at a density of 400g per m². This hot metal spray is applied directly onto the ductile iron providing active galvanic protection.

TWO PART EPOXY COATING

The outer blue coating is a Two Part Epoxy Coating applied at an average thickness of 100µm, the particles 'agglomerated' in a way to form a uniform, stable and adhesive protective film, resistant to atmospheric conditions (stockyards) and to the soil.

Its mechanical and chemical properties are compatible with the increased resistance of the ZnAlRE alloy.

DUCTILE IRON

The Ductile Iron shell is manufactured to AS 2280 giving complete compatibility with current water industry standards and requirements.



DUCTILE IRON PIPE COATINGS

Z+ ACTIVE CORROSION PROTECTION – FACTORY APPLIED ZINC ALUMINIUM ALLOY COATING SYSTEM

Dimax Z+ Delivers Savings In Installation Time And Overall Cost.

FASTER, EASIER INSTALLATION

Extensive research in the installation of loose polyethylene sleeving reveals that it takes up to 15 minutes per length of pipe to install. This accumulated time can account for up to 5% of the cost of a pipeline, tying up personnel and machinery.

By eliminating the need for sleeving, the installation of Ductile Iron Pipe becomes a simple one step push fit operation.

ALUMINIUM, WORKING WITH ZINC

The perfect combination of aluminium and zinc in the ZnAlRE alloy considerably increases the strength of the protective properties of the outer layer.

The high quality zinc hydroxide layer can only form when the zinc transforms at an

appropriate rate. In our Z+ Coating, this change is optimised by two factors:

- the porous paint layer is applied at an optimum thickness to allow both the formation of zinc hydroxides and the ongoing galvanic effect;
- the presence of aluminium slows the transformation effect to allow the creation of a more stable protective layer compared to zinc alone, whilst allowing the sacrificial galvanic healing process to take place.

REDUCED COST

Not only will contractors find a typical ~5% cost saving in time, but also further saving in the cost of the sleeving itself which makes up to 2% of the cost of Ductile Iron Pipe as a complete system.

The end result is a cost effective solution which will increase installation efficiency and asset life.

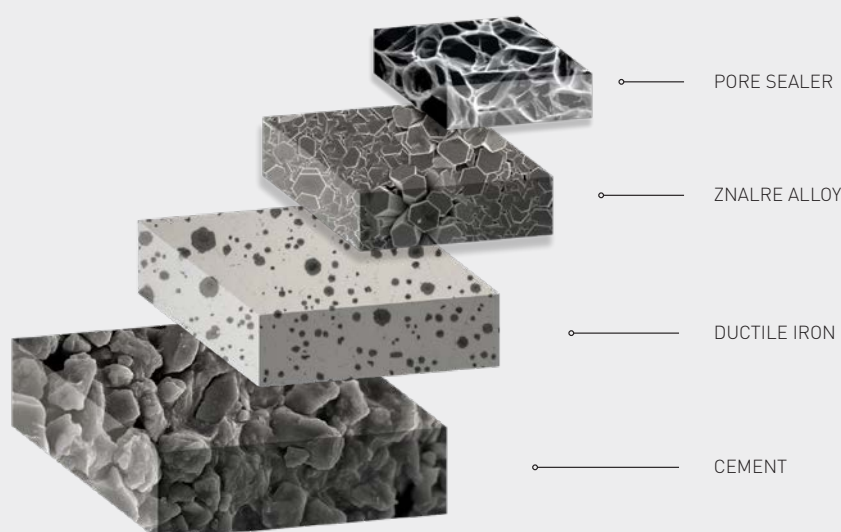
THE ACTIVE PROPERTIES OF ZINC

The Z+ coating system benefits from the 'active' properties of the Zinc-Aluminium alloy when in contact with the soil in that it:

- provides a long term barrier by forming a stable all-round protective layer (zinc hydroxides) covering the entire surface of the buried pipe;
- restores the protective layer at points where it has been slightly damaged (impacts during transportation, scrapes when backfilling) through the galvanic effect between the exposed iron and the zinc around the damage.

Pipes coated in our unique Z+ Zinc-Aluminium-Rare Earth Alloy may be buried in contact with the majority of soils, except:

- Highly acidic soils;
- Soils with a resistivity lower than 5000·cm.



DUCTILE IRON PIPE JOINING

TYTON GASKETS (DN 100 – DN 750) – MANUFACTURED TO AS 1646

The TYTON gasket is normally manufactured from EPDM rubber which provides improved performance characteristics over traditional natural rubber compounds. EPDM offers superior ozone resistance, operates at higher temperatures and exhibits increased resistance to copper, manganese, chloramines and other chemicals often found in aggressive water and sewerage conveyants. It also provides better resistance to ultra violet light, abrasion, acids and alkalis.

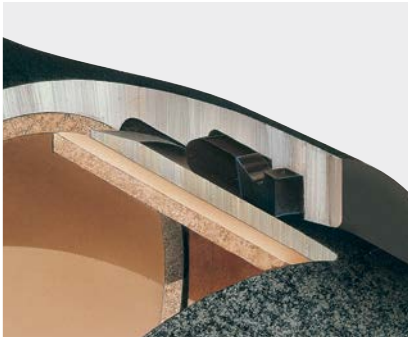
- Extremely strong and efficient flexible joint
- Suitable for 'in ground' or 'above ground' applications
- Manufactured from EPDM rubber providing improved performance over traditional natural rubber
- High resistance to water, ozone, heat, sewerage, chloramines, UV, and abrasion
- Joints can be deflected and permit axial movement to compensate for.

APPLICATION

TYTON gaskets are suitable for use in TYTON JOINT® pipeline fittings and valves. They provide an extremely reliable flexible joint.

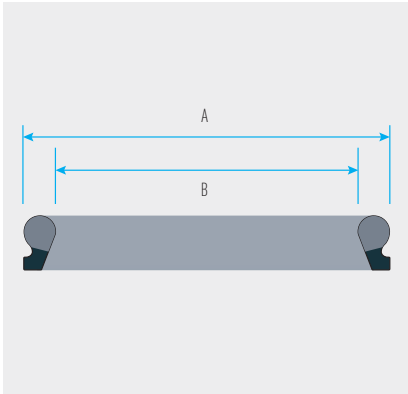
TECHNICAL DATA

- Size Range**
DN 100 – DN 750
- Allowable Operating Pressure**
3500kPa
- Maximum Temperature**
70°C
- Standards**
AS 1646 – Elastomeric seals for waterworks purposes
- Certification**
Standards Mark Licence No. 2258
Certified to AS 4020 – Suitable for contact with drinking water.



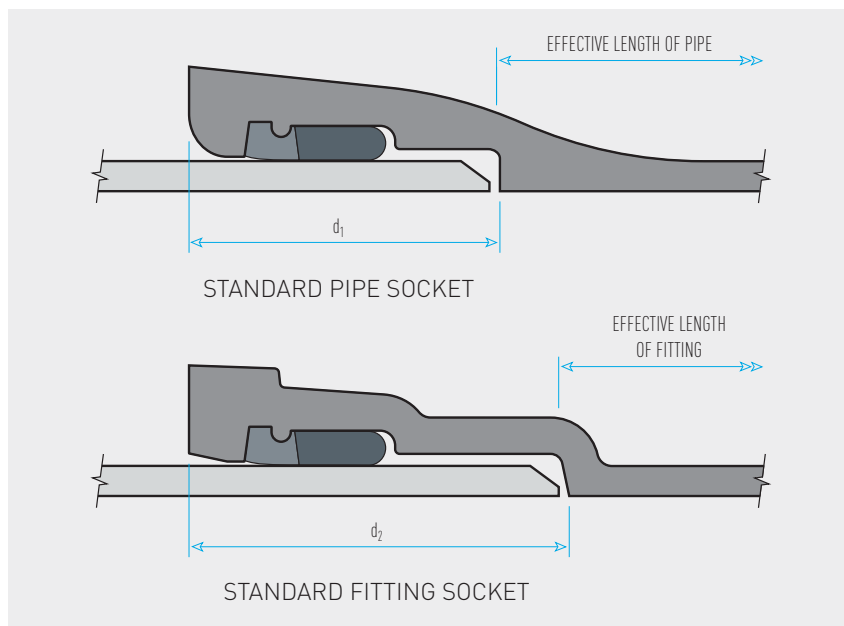
DIMENSIONS

Nom. Size DN	Dimensions		Suits Pipe OD MM	Maximum Deflection	
	A MM	B MM		Pipe	Fittings
100	145	117	122	3.5°	5°
150	200	173	177	3.5°	5°
200	258	227	227	3.5°	5°
225	285	254	254	3.5°	5°
250	311	282	282	3.5°	5°
300	371	342	342	3.5°	5°
375	463	421	421	2.5°	4°
450	544	493	493	2.5°	3°
500	597	546	546	2.5°	3°
600	704	653	653	2.5°	3°
750	890	829	829	1.0°	3°



DUCTILE IRON PIPE JOINING

RUBBER RING JOINT SPECIFICATIONS



TYTON SOCKET DIMENSIONS

Nom. Size DN	Pipe D1	PN 35 Fitting, D2	
		AS 2280	Deep Entry
100	89	89	110
150	89	89	120
200	102	113	140
225	102	117	145
250	102	123	150
300	102	123	160
375	127	170	170
450	127	127	170
500	127	127	175
600	135	127	185
750	157	157	157

The dimensions shown above are for guidance only. They are subject to proprietary +/- tolerances and may change at the discretion of Viadux.

MAXIMUM ALLOWABLE JOINT DEFLECTIONS

5.7 METRE ELL TYTON PIPE

Nom. Size DN	Allowable Joint Deflection	Lateral Offset Per Metre Of Pipe Barrel MM	Offset Per Length MM	Radius Lengths M
100 - 250	3.5°	61	348	94
300 - 600	2.5°	44	249	131
750	1.0°	17	99	327

SUREFLOW® FITTINGS

Nom. Size DN	Allowable Joint Deflection
80 - 300	5°
375	4°
450 - 750	3°

COMPOUND ANGLE LIMITATIONS FOR TYTON® PIPES AND SUREFLOW® FITTINGS

Compound angle limitations can be derived from: $a \geq \sqrt{x^2 + y^2}$

where

x = is the projected angle of deflection between the axes of adjoining components in the horizontal x plane

y = is the projected angle of deflection between the axes of adjoining components in the vertical y plane.

TYTON GASKETS APPLICATION

Application	Max. Service Temperature °C	Min. Service Temperature °C	Bulb Elastomer	Elastomer Designation
Potable Water	70	0	Ethylene Propylene Rubber	EPDM [†]
Sewage	70	0	Ethylene Propylene Rubber	EPDM [†]
Oils / Solvents*	50	-	Nitrile Rubber	NBR

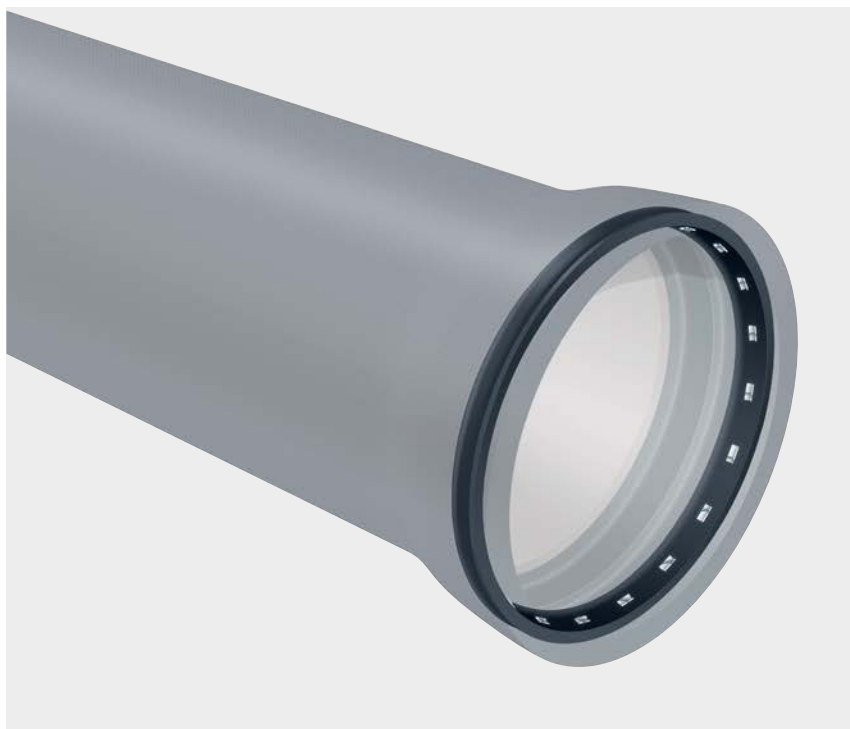
*Specialist advice required.

[†]Maximum service temperature of 90°C available on special request.



DUCTILE IRON PIPE JOINTS

TYTONLOK® REFRAINED RUBBER RING JOINTS



Dispenses with the traditional concrete thrust blocks. Provides additional thrust restraint in poor soil conditions.

Provides additional security for strategic pipelines. Suitable for 'in ground' applications only. Maximum allowable joint deflection up to 3.5 degrees.

APPLICATIONS

The TYTON-LOK system should be used only with TYTON® Ductile Iron Pipe with a minimum wall thickness of PN 35 or greater or TYTON Flange Class Pipe.

The Allowable Operating Pressure should not exceed 1.6 MPa.

Installers should ensure that pipeline design has been verified by a competent and qualified engineer and that TYTON-LOK gaskets are used only in genuine TYTON brand pipes, fittings and valves. Failure to do so may void warranties.

Incorrect installation and application of TYTON-LOK joints may result in serious injury.

GENERAL APPLICATION

TYTON-LOK Gaskets are suitable for use in TYTON JOINT® pipeline fittings and valves to provide self restrained rubber ring joints.

LIMITATIONS

The TYTON-LOK system is not suitable for above ground applications. TYTON-LOK joints are not suitable for use with PN 20 pipe. Use only with PN 35, flange class, K9 or K12 pipes. A combination of TYTON-LOK joints and thrust blocks where both contribute to the overall restraint of the system is not recommended.

TYTON-LOK gaskets should only be used with genuine TYTON® brand pipes, fittings or valves. Do not use with other DI sockets.

Do not use TYTON-LOK gaskets with pipe materials other than Ductile Iron. TYTON-LOK is not suitable for use on fusion coated pipes, fittings and spigots. A marker tape is to be used to identify pipeline joints which are restrained with TYTON-LOK gaskets.

TECHNICAL DATA

Size Range

DN 100 - DN 375

Allowable Operating Pressure

1600kPa

Maximum Temperature

70°C

Standards

AS 1646 - Elastomeric seals for waterworks purposes

Certification

Certified to AS/NZS 4020 - Suitable for contact with drinking water.

DUCTILE IRON JOINING

TYTONLOK® DN 100 - DN 375. GASKETS UTILISE UNIQUE STAINLESS STEEL LOCKING SEGMENTS FOR A SELF RESTRAINING JOINT

INSERTION OF GASKET

Before inserting the gasket, thoroughly clean the socket mouth, particularly the sealing chamber, ensuring there is no dirt particles or foreign matter, protrusions or coating build-up in anchor groove or sealing chamber. Use a scraper or wiper brush to remove any irregularities.

The gasket seat should be thoroughly inspected to be certain it is clean. Failure to do this may cause a leak under the gasket. Occasionally there may be some excess paint, remnant core sand or metal. If this cannot be removed easily, to ensure clean seating of the gasket contact the Viadux Water Networks Solutions Project Office. The gasket must be wiped clean with a clean cloth, flexed, and then placed in the socket with the bulb leading, so that the gasket is seated evenly around the inside of the socket with the heel of the gasket fitting snugly in the retaining groove.

ASSEMBLY OF TYTON-LOK GASKET JOINTING SYSTEM

A film of TYTON JOINT® lubricant should be applied with a brush to the exposed surface of the gasket which will come into contact with the entering pipe spigot. Lubricant should NOT be applied by hand, as the TYTON-LOK teeth are sharp and injury may result.

1. Thoroughly clean the leading 150mm of the spigot and apply lubricant to cover the chamfer and 25mm of the pipe barrel. Note. Only the lubricant supplied by Viadux Water Network Solutions should be used. This lubricant does not attack the gasket and does not affect water quality.

2. The spigot end of the pipe should be aligned and carefully inserted into the socket until it just makes contact with the gasket. Note where the witness marks are located. Pipes and fittings should always be jointed initially in a straight line.

DO NOT walk the pipe or fitting when jointing. Misalignment may cause premature locking of the joint.

3. Joint assembly should then be completed by forcing the spigot end of the pipe past the gasket until the second witness mark aligns with the face of the socket. At this point, deflection of the joint can be set. The pipe should then be backed off approximately 3mm to lock the joint.

GENERAL

Pipelines utilising TYTON-LOK gaskets should be bled completely of air before application of the field test pressure. Pressure should be introduced at the low points in the pipeline only.

IDENTIFICATION

To indicate identification of a buried TYTON-LOK restraining joint, Viadux recommends the use of identification tape, placed along the top of the restrained pipeline. This will alert operators as to the need to maintain the integrity of the restrained length of pipeline.

COMPUTER SOFTWARE

The length of pipeline to be restrained is a function of the pipe diameter, fitting type, embedment, trench conditions and operating pressure.

An easy to use software program is available to help calculate the number of joints that need to be restrained. Contact the Viadux Project Office or Customer Centre for further details.

GASKET REQUIREMENTS FOR RESTRAINED JOINTS

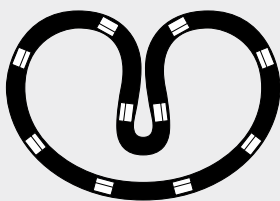
The following tables provide a conservative estimate of the number of TYTON-LOK gaskets required for installation of specific fittings.

The number indicated includes all gaskets required to lock full length pipes installed either side of the fitting together with those used in the fitting.

The estimates have been calculated using the Viadux Water Networks Solutions Thrust Restraint Calculator with the following installation variables – good sand, Trench Type 3, depth 0.6m, pressure 1.6MPa, Safety Factor 1.5, pipe sleeved.

Where installation variables are different to those described OR fittings other than those shown in these tables are used; configurations other than those shown in these tables are used; pipe lengths other than standard are used on either side of the fitting; fittings are in such proximity that the estimated number of gaskets for each fitting encroach or overlap; refer to the Viadux Water Networks Solutions Thrust Restraint Calculator, seek a pipeline designer's advice or contact the Viadux Water Networks Solutions Project Office for assistance.

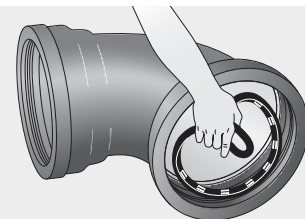
TYTON-LOK GASKET INSERTION INSTRUCTIONS



Loop the gasket to facilitate insertion. The inner loop should be positioned between locking segments.



Position the inner loop between the locking segments



Seat the gasket evenly around the inside of the socket with the heel of the gasket fitted snugly in the retaining groove.

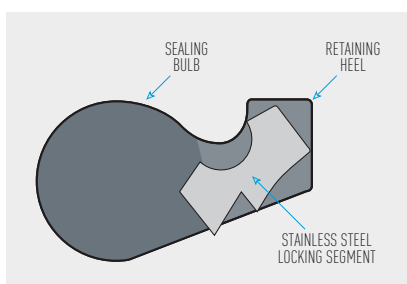
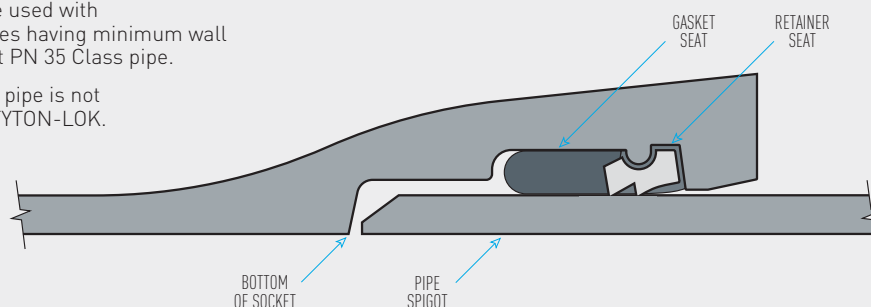
Note. It is important to do this, otherwise damage to the TYTON-LOK® gasket may result.

DUCTILE IRON JOINING

TYTONLOK® SPECIFICATIONS FOR PN 35 DI PIPE

TYTON-LOK should be used with ductile iron pipe classes having minimum wall thicknesses of at least PN 35 Class pipe.

TYTONXCEL PN 25/30 pipe is not suitable for use with TYTON-LOK.



SIZES AVAILABLE

DN 100 to DN 375.

BENEFITS

1. Eliminates thrust blocks –
 - a. Valuable in congested service trenches.
 - b. Eliminates waiting for concrete to cure.
 - c. Convenient where concrete supply difficult.
2. Useful in low bearing strength soils.
3. Alternative to use of flanged pipe in buried applications.

LIMITATIONS

1. The TYTON-LOK system must not be used for above ground applications.
2. The TYTON-LOK system is not suitable for PN 25/30 pipe. Use only with class PN 35, Flange Class and superseded K9 or K12 pipes.

3. Combining TYTON-LOK joints and thrust blocks.
4. TYTON-LOK joints must not be used on fusion coated spigots (including fusion coated fittings).

ALLOWABLE JOINT DEFLECTIONS

The maximum recommended joint deflection for the TYTON-LOK restrained joint system is as per the standard TYTON JOINT pipe and fitting sockets.

ALLOWABLE PRESSURES

Allowable Operating Pressure (AOP) is 1.6MPa.

Maximum Allowable Operating Pressure (MAOP) is 1.92MPa.

Allowable Site Test Pressure (ASTP) is 2.00MPa.

If pressures outside this range are contemplated, assistance should be sought from your regional Viadux Water Network Systems Project Office.

ALLOWABLE TEMPERATURES

TYTON-LOK gaskets comprise stainless steel teeth embedded in an EPDM rubber ring. They are suitable for potable water and sewage over an operating temperature range of 0°C to 70°C.

INTERACTIVE WEB BASED DESIGN

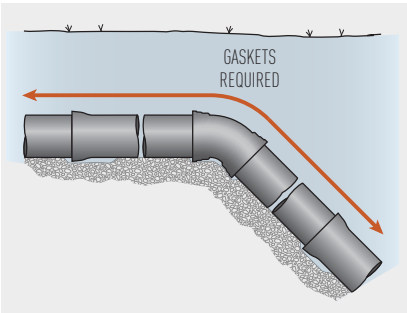
An easy-to-use software program is available to help calculate the number of joints to be restrained, available on the Viadux Website.

IMPORTANT NOTES ON USE

1. TYTON-LOK gaskets should only be used with genuine TYTON® brand ductile iron pipes, fittings or valves. Do not use with other manufacturers' sockets or other pipe materials.
2. The restraint required is the number of TYTON-LOK gaskets that must be used to lock full length (5.7m) pipes either side of the fitting, including the fitting.
3. Flushing bends should be treated as dead ends.
4. Marking tape must be used for identification of restrained sections. Marking tape to be pink coloured polyethylene tape approximately 100mm wide, with the inscription: 'WARNING – RESTRAINED PIPELINE – USE RESTRAINED FITTINGS ONLY'.
5. Incorrect installation or application of TYTON-LOK joints can result in serious injury.

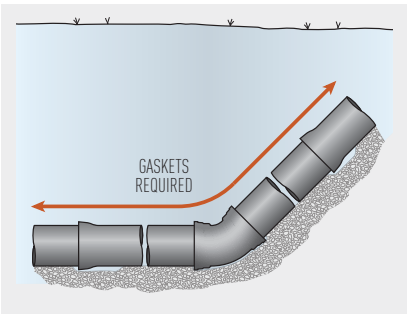
DUCTILE IRON

TYTONLOK® SPECIFICATIONS DN 100 - DN 375



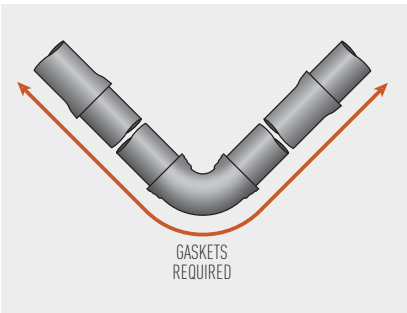
DOWNWARD BENDS

Nom. Size DN	Angle of Bend		
	11¼°	22½°	45°
100	2	4	6
150	2	4	8
200	2	4	8
225	4	6	10
250	4	6	10
300	4	6	12
375	4	8	14



UPWARD BENDS

Nom. Size DN	Angle of Bend		
	11¼°	22½°	45°
100	2	2	2
150	2	2	4
200	2	2	4
225	2	2	4
250	2	2	4
300	2	4	6
375	2	4	6

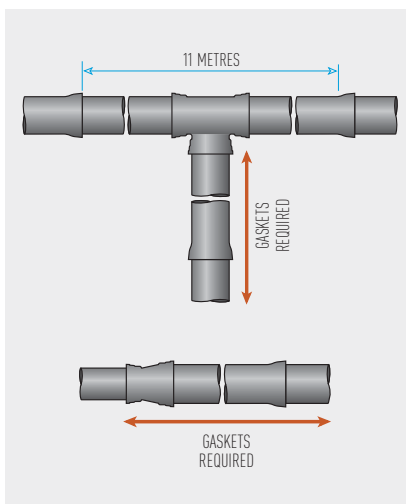


HORIZONTAL BENDS

Nom. Size DN	Angle of Bend			
	11¼°	22½°	45°	90°
100	2	2	2	6
150	2	2	4	6
200	2	2	4	8
225	2	2	4	10
250	2	2	4	10
300	2	4	6	12
375	2	4	6	14

DUCTILE IRON

TYTONLOK® SPECIFICATIONS FOR PN 35 DI PIPE



DEAD ENDS & HYDRANT TEES

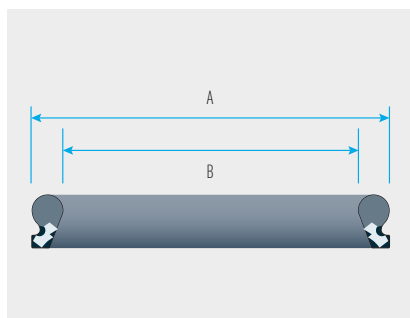
Nom. Size	
DN	
100	6
150	8
200	10
225	11
250	12
300	14
375	16

TEES AND TAPERS

Nom. Size	Branch Size	Tee Branch Only	Taper Larger
DN	DN		DN
100	100	3	–
150	100	1	4
	150	5	–
200	100	1	7
	150	4	4
	200	7	–
225	100	1	8
	150	3	6
	200	6	3
	225	8	–
250	100	1	10
	150	2	7
	200	6	4
	225	7	3
	250	9	–
300	100	1	12
	150	1	10
	200	5	8
	225	6	6
	250	8	5
	300	11	–
375	100	1	15
	150	1	14
	200	3	12
	225	5	10
	250	6	9
	300	9	6
	375	13	–

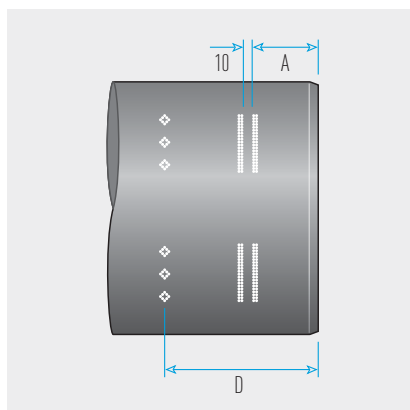
DUCTILE IRON

TYTONLOK® GASKET SPECIFICATIONS DN 100 - DN 375



TYTON-LOK GASKET SPECIFICATIONS

Nom. Size DN	A	B	Suits Pipe	Maximum Allowable Joint Deflection
100	145	117	122	3.5
150	200	173	177	3.5
200	258	227	232	3.5
225	285	254	259	3.5
250	311	282	286	3.5
300	371	342	345	2.5
375	463	421	426	2.5



FIELD CUT PIPE

When pipes are cut in the field, the cut must be prepared so that it can be used to make up the next joint. The outside of the cut end should be chamfered for about 12mm at an angle of approximately 20 degrees and the leading edge 10 A rounded. To ensure that the field cut joint is properly assembled, so that the maximum deflection may be obtained, mark the prepared cut end in accordance with the dimensions shown below.

Nom. Size DN	Location of Witness Mark A	Location of LPS Limit D
100 - 150	75	194
200 - 250	88	194
300	88	218
375	113	218

TYTON® GASKET LUBRICANT

Only lubricant supplied by Viadux Water Networks Solutions should be used. This lubricant has the required lubricity, does not attack the gasket and does not affect water quality.

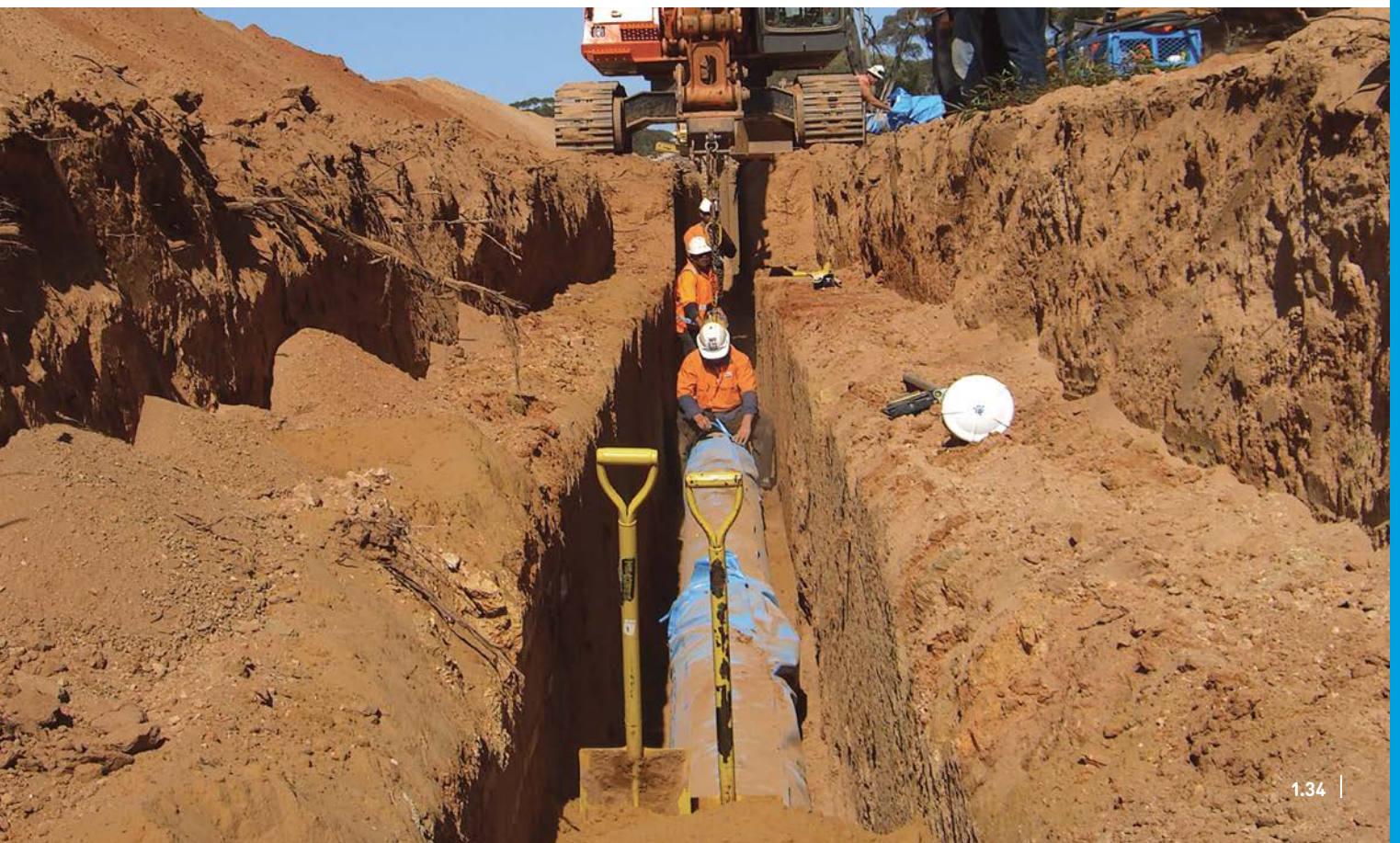
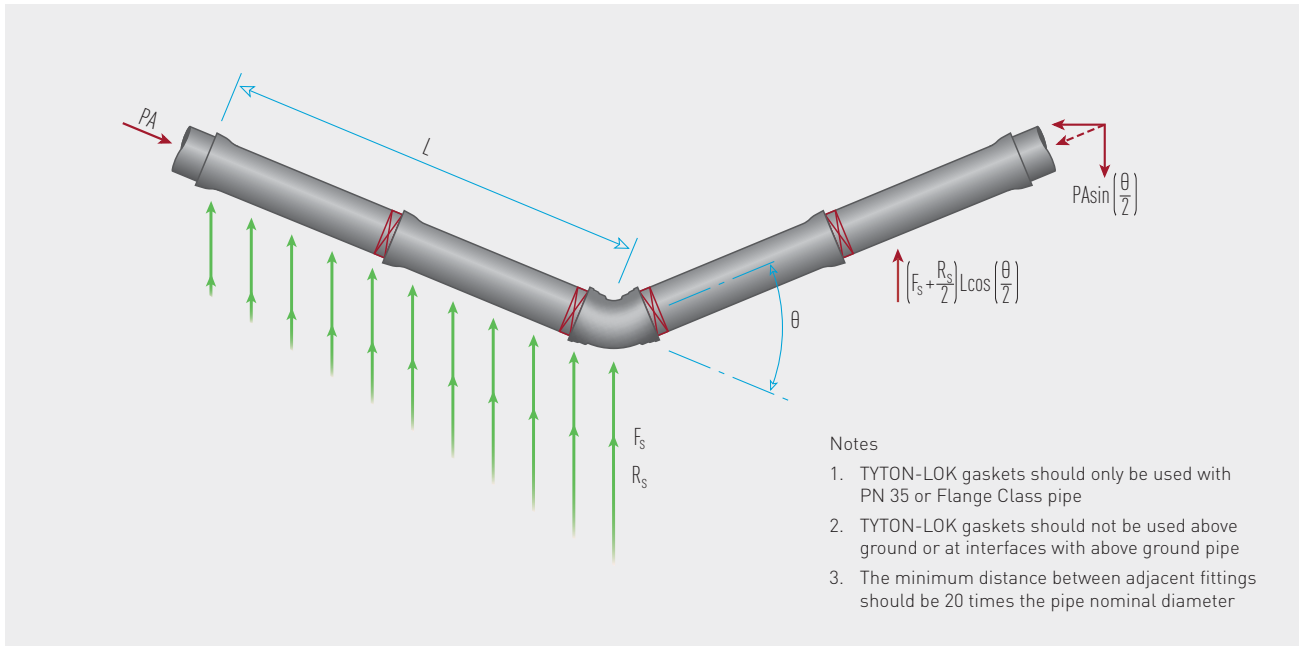
Do not use oil or grease as these will attack the gasket.

RECOMMENDED QUANTITIES FOR TYTON JOINT® LUBRICANT ISSUE

Nom. Size DN	Container Size GMS	Joints per Container	Number of Joints													
			10	25	50	75	100	200	300	400	500	600	700	800	900	1000
100	500	29	1	1	2	3	4	7	10	14	17	21	24	27	31	34
	1250	71	0	0	0	1	2	3	5	6	7	9	10	12	13	15
150	500	23	1	1	2	4	5	9	13	18	22	27	31	35	40	44
	1250	55	0	0	1	2	2	4	6	8	9	11	13	15	17	19
200	500	14	1	2	4	6	8	15	22	30	37	45	52	59	67	74
	1250	32	0	1	2	3	3	6	10	18	16	19	22	25	28	31
225	500	13	1	2	4	6	8	15	23	31	38	46	53	61	69	76
	1250	32	0	1	2	3	4	7	10	13	16	19	22	26	29	32
250	5000	10	1	2	5	7	10	19	29	39	48	58	67	77	87	96
	1250	25	0	1	2	3	4	8	12	16	20	24	28	32	36	40
300	500	9	1	3	6	8	11	22	33	43	54	65	76	87	97	108
	1250	22	0	1	3	4	5	9	14	18	23	27	32	36	41	45
375	500	6	2	5	9	13	17	34	51	68	85	102	119	136	153	170
	1250	14	1	2	4	6	7	14	22	29	36	43	50	57	64	71

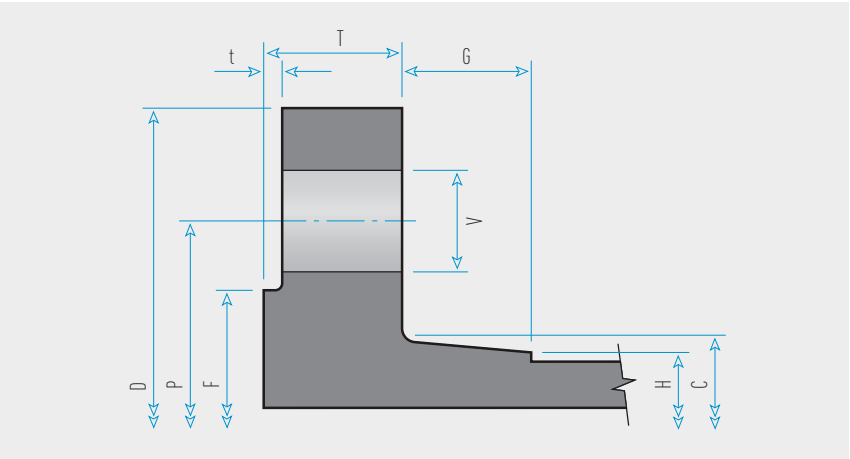
DUCTILE IRON

TYTONLOK® SPECIFICATIONS DN 100 - DN 375



DUCTILE IRON

INTEGRAL FLANGED JOINTS



Flanged joints are completely rigid and should not be used for applications where movement of the pipeline is expected, unless special provision is made to accommodate it by, for example, the inclusion of expansion joints.

INTEGRAL FLANGES—CLASS 16

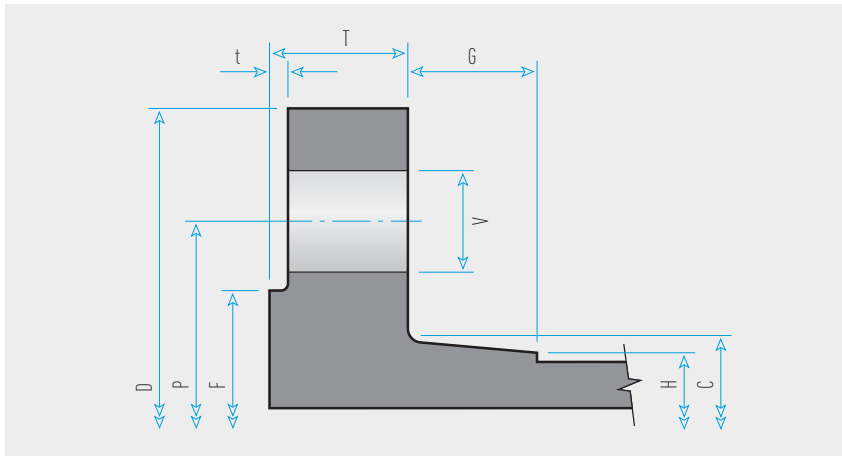
Nom. Size	Flange Dimensions					Bolting Details (to AS 4087)			Neck Dimensions		
	Diameter	Thickness	Diameter of Raised Face	Height of Raised Face	Pitch Circle Diameter	Number of Holes	Diameter of Holes	Fastener Size and Thread	Diameter of Large End	Diameter of Small End	Min Length of Taper
DN	D	T	F	t	P	N	V		C	H	G
80	185	18	122	3	146	4	18	M16	106	100	8
100	215	20	154	3	178	4	18	M16	136	126	11
150	280	23	209	3	235	8	18	M16	188	181	11
200	335	23	264	3	292	8	18	M16	243	236	12
225	370	24	296	3	324	8	18	M16	275	263	19
250	405	24	328	3	356	8	22	M20	307	290	26
300	455	30	376	4	406	12	22	M20	354	349	28
375	550	33	463	4	495	12	26	M24	439	430	30
450	640	33	552	4	584	12	26	M24	528	511	33
500	705	35	609	4	641	16	26	M24	581	564	34
600	825	42	717	5	756	16	30	M27	689	671	38
750	995	47	885	5	927	20	33	M30	855	830	53

RECOMMENDED GASKET COMPOSITION FOR TRANSPORTATION OF GENERAL DOMESTIC LIQUIDS INCLUDING BRINE AND SEWAGE

Allowable Operating Pressure MPA	Maximum Temperature °C	Gasket Composition
1.6	50	EPDM Rubber 3mm thick (Sureflow Seal-16)
3.5	80	Composite Fibre 1.5mm thick (TEADIT NA1000)

DUCTILE IRON

INTEGRAL FLANGED JOINTS

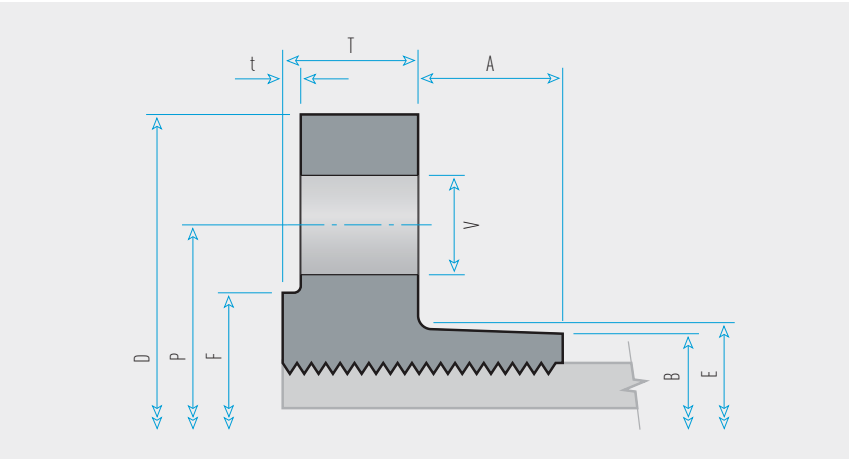


INTEGRAL FLANGES—CLASS 35

Nom. Size	Flange Dimensions					Bolting Details (to AS 4087)			Neck Dimensions		
	Diameter	Thickness	Diameter of Raised Face	Height of Raised Face	Pitch Circle Diameter	Number of Holes	Diameter of Holes	Fastener Size and Thread	Diameter of Large End	Diameter of Small End	Min Length of Taper
DN	D	T	F	t	P	N	V		C	H	G
80	205	22	141	3	165	8	18	M16	110	100	11
100	230	22	167	3	191	8	18	M16	137	126	13
150	305	27	232	3	260	12	22	M20	198	181	20
200	370	31	296	3	324	12	22	M20	257	236	27
225	405	34	324	3	356	12	26	M24	290	263	33
250	430	34	349	3	381	12	26	M24	315	290	33
300	490	38	406	4	438	16	26	M24	376	349	38
375	580	42	485	4	521	16	30	M27	459	430	42
450	675	46	571	4	610	20	33	M30	542	511	48
500	735	49	634	4	673	24	33	M30	602	564	60
600	850	54	739	5	781	24	36	M33	710	671	66
750	1015	59	898	5	940	28	36	M33	870	830	73

DUCTILE IRON

SCREW-ON FLANGED JOINTS



SCREW-ON FLANGES—CLASS 16

Nom. Size	Flange Dimensions					Bolting Details (to AS 4087)			Neck Dimensions		
	Diameter	Thickness	Diameter of Raised Face	Height of Raised Face	Pitch Circle Diameter	Number of Holes	Diameter of Holes	Fastener Size and Thread	Diameter of Large End	Diameter of Small End	Min Length of Taper
DN	D	T	F	t	P	N	V		C	H	G
80	185	18	122	3	146	4	18	M16	110	108	18
100	215	20	154	3	178	4	18	M16	140	138	23
150	280	23	209	3	235	8	18	M16	194	192	24
200	335	23	264	3	292	8	18	M16	250	248	32
225	370	24	296	3	324	8	18	M16	279	277	33
250	405	24	328	3	356	8	22	M20	308	306	38
300	455	30	376	4	406	12	22	M20	360	358	32
375	550	33	463	4	495	12	26	M24	446	444	42
450	640	33	552	4	584	12	26	M24	530	528	45
500	705	35	609	4	641	16	26	M24	585	583	48
600	825	42	717	5	756	16	30	M27	693	691	48
750	995	47	885	5	927	20	33	M30	858	856	50

DUCTILE IRON

SCREW-ON FLANGED JOINTS

The screw-on flanged joint should not be subjected to a moment of force. A typical situation may include where a valve or fitting is installed onto a flanged pipe, without supporting the weight of the valve or fitting. In such cases adequate support or anchorage must be provided.

The joint is used mainly for above-ground applications, e.g. pumping stations, water and sewage treatment plants and for industrial pipe-work.

It is also used to facilitate the installation and removal of valves in spigot and socket pipelines and for valve by-pass arrangements.

Particular attention should be paid to pipelines where flanged joint pipe and fittings are to be combined with TYTON JOINT® pipe and fittings. In this case, thrust blocks should not be omitted from flanged bends, tees and blank ends before ensuring that there is a sufficient anchoring length of flanged pipe in the

ground to prevent the flanged joint and push-in joint sections separating at the change-over points due to the effects of internal pressure.

Flanges are attached to pipes by screwing the pipe and flange with mating threads. The threads are filled with an epoxy resin before tightening.

Flanges on fittings are integrally cast in sand moulds onto the body of the fitting.

SCREW-ON FLANGES—CLASS 35

Nom. Size	Flange Dimensions					Bolting Details (to AS 4087)			Neck Dimensions		
	Diameter	Thickness	Diameter of Raised Face	Height of Raised Face	Pitch Circle Diameter	Number of Holes	Diameter of Holes	Fastener Size and Thread	Diameter of Large End	Diameter of Small End	Min Length of Taper
DN	D	T	F	t	P	N	V		C	H	G
80	205	22	141	3	165	8	18	M16	110	108	18
100	230	22	167	3	191	8	18	M16	140	138	23
150	305	27	232	3	260	12	22	M20	194	192	24
200	370	31	296	3	324	12	22	M20	250	248	32
225	405	34	324	3	356	12	26	M24	279	277	33
250	430	34	349	3	381	12	26	M24	308	306	38
300	490	38	406	4	438	16	26	M24	360	358	32
375	580	42	485	4	521	16	30	M27	446	444	42
450	675	46	571	4	610	20	33	M30	530	528	45
500	735	49	634	4	673	24	33	M30	585	583	48
600	850	54	739	5	781	24	36	M33	693	691	48
750	1015	59	898	5	940	28	36	M33	858	856	50



DUCTILE IRON PIPE SPECIFICATIONS

FOR ABOVE AND BELOW GROUND SITUATIONS

PRODUCT MARKING

Pipes

TYTON Series pipes have the following marks legibly cast, stamped or painted on

1. TYTON® or DIMAX Identification
2. Nominal size
3. Classification
4. The number of the Standard AS/NZS 2280
5. Product Certification mark

TYTON & TYTON-LOK gaskets

1. TYTON® Identification
2. DN
3. Manufacturer
4. AS/NZS 1646

Loose Polyethylene Sleeving

1. POLYBOSS™ or DIMAX Identification
2. Ductile Iron Pipelines
3. Special Protection In Aggressive Soils
4. Repair Any Damage
5. FOR xxx*mm PIPE (*or pipe size/range applicable)
6. POLYBOSS™ (blue, cream or lilac sleeve as applicable)
7. Week / Year of manufacture, e.g. '266' - 26th week of 2006

LOOSE POLYETHYLENE SLEEVING SPECIFICATION

Sleeving complies with requirements of AS 3680 - Polyethylene sleeving for ductile iron pipelines.



TYTON[®]
DUCTILE
IRON PIPE

TYTON® DUCTILE IRON PIPE

TYTONXCEL SULPHATE RESISTING CEMENT LINED



TYTONXCEL PN35 CEMENT LINED

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281690	DICL PIPE D100 x 5.7 PN35	98	100
1281691	DICL PIPE D150 x 5.7 PN35	147	150
1281692	DICL PIPE D200 x 5.7 PN35	197	200
1281693	DICL PIPE D225 x 5.7 PN35	221	225
1281694	DICL PIPE D250 x 5.7 PN35	252	250
1281695	DICL PIPE D300 x 5.7 PN35	335	300
1281696	DICL PIPE D375 x 5.7 PN35	482	375
1281697	DICL PIPE D450 x 5.7 PN35	642	450
1281698	DICL PIPE D500 x 5.7 PN35	759	500
1281699	DICL PIPE D600 x 5.7 PN35	1021	600
1281700	DICL PIPE D750 x 5.7 PN35	1520	750



TYTONXCEL PN30/25 CEMENT LINED

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281701	DICL PIPE D375 x 5.7 PN30	446	375
1281702	DICL PIPE D450 x 5.7 PN30	587	450
1281703	DICL PIPE D500 x 5.7 PN30	691	500
1281704	DICL PIPE D600 x 5.7 PN30	924	600
1281705	DICL PIPE D750 x 5.7 PN25	1237	750



TYTONXCEL FLCL CEMENT LINED

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281707	DICL PIPE D100 x 5.7 FLCL	131	100
1281708	DICL PIPE D150 x 5.7 FLCL	197	150
1281709	DICL PIPE D200 x 5.7 FLCL	289	200
1281710	DICL PIPE D225 x 5.7 FLCL	325	225
1281711	DICL PIPE D250 x 5.7 FLCL	397	250
1281712	DICL PIPE D300 x 5.7 FLCL	482	300
1281713	DICL PIPE D375 x 5.7 FLCL	662	375
1281714	DICL PIPE D450 x 5.7 FLCL	858	450
1281715	DICL PIPE D500 x 5.7 FLCL	950	500
1281716	DICL PIPE D600 x 5.7 FLCL	1224	600
1281717	DICL PIPE D750 x 5.7 FLCL	1793	750

TYTON DUCTILE IRON PIPE

TYTONXCEL SULPHATE RESISTING CEMENT LINED & SEAL COATED



TYTONXCEL PN35 CEMENT LINED + SEAL COAT

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281718	DI CSC PIPE D100 x 5.7 PN35	98	100
1281719	DI CSC PIPE D150 x 5.7 PN35	147	150
1281720	DI CSC PIPE D200 x 5.7 PN35	197	200
1281721	DI CSC PIPE D225 x 5.7 PN35	221	225
1281722	DI CSC PIPE D250 x 5.7 PN35	252	250
1281723	DI CSC PIPE D300 x 5.7 PN35	335	300
1281724	DI CSC PIPE D375 x 5.7 PN35	482	375
1281725	DI CSC PIPE D450 x 5.7 PN35	642	450
1281726	DI CSC PIPE D500 x 5.7 PN35	759	500
1281727	DI CSC PIPE D600 x 5.7 PN35	1021	600
1281728	DI CSC PIPE D750 x 5.7 PN35	1520	750



TYTONXCEL PN30/25 CEMENT LINED + SEAL COAT

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281729	DI CSC PIPE D375 x 5.7 PN30	446	375
1281730	DI CSC PIPE D450 x 5.7 PN30	587	450
1281731	DI CSC PIPE D500 x 5.7 PN30	691	500
1281732	DI CSC PIPE D600 x 5.7 PN30	924	600
1281733	DI CSC PIPE D750 x 5.7 PN25	1237	750

TYTON DUCTILE IRON PIPE

TYTONXTREME CALCIUM ALUMINATE CEMENT LINED



TYTONXTREME PN35 CALCIUM ALUMINATE CEMENT LINED

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281734	DI CA PIPE D100 x 5.7 PN35	98	100
1281735	DI CA PIPE D150 x 5.7 PN35	147	150
1281736	DI CA PIPE D200 x 5.7 PN35	197	200
1281737	DI CA PIPE D225 x 5.7 PN35	221	225
1281738	DI CA PIPE D250 x 5.7 PN35	252	250
1281739	DI CA PIPE D300 x 5.7 PN35	335	300
1281740	DI CA PIPE D375 x 5.7 PN35	482	375
1281741	DI CA PIPE D450 x 5.7 PN35	642	450
1281742	DI CA PIPE D500 x 5.7 PN35	759	500
1281743	DI CA PIPE D600 x 5.7 PN35	1021	600
1281744	DI CA PIPE D750 x 5.7 PN35	1520	750



TYTONXTREME PN30/25 CALCIUM ALUMINATE CEMENT LINED

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281745	DI CA PIPE D375 x 5.7 PN30	446	375
1281746	DI CA PIPE D450 x 5.7 PN30	587	450
1281747	DI CA PIPE D500 x 5.7 PN30	691	500
1281748	DI CA PIPE D600 x 5.7 PN30	924	600
1281749	DI CA PIPE D750 x 5.7 PN25	1237	750



TYTONXTREME FLCL CALCIUM ALUMINATE CEMENT LINED

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281750	DI CA PIPE D100 x 5.7 FLCL	131	100
1281751	DI CA PIPE D150 x 5.7 FLCL	197	150
1281752	DI CA PIPE D200 x 5.7 FLCL	289	200
1281753	DI CA PIPE D225 x 5.7 FLCL	325	225
1281754	DI CA PIPE D250 x 5.7 FLCL	397	250
1281755	DI CA PIPE D300 x 5.7 FLCL	482	300
1281756	DI CA PIPE D375 x 5.7 FLCL	662	375
1281757	DI CA PIPE D450 x 5.7 FLCL	858	450
1281758	DI CA PIPE D500 x 5.7 FLCL	950	500
1281759	DI CA PIPE D600 x 5.7 FLCL	1224	600
1281760	DI CA PIPE D750 x 5.7 FLCL	1793	750

TYTON DUCTILE IRON PIPE

TYTONXCEL FLANGE CLASS UNLINED



TYTONXCEL FLANGE CLASS UNLINED

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281762	DI UNLINED D100x5.7 FLCL	112	100
1281763	DI UNLINED D150x5.7 FLCL	168	150
1281764	DI UNLINED D200x5.7 FLCL	252	200
1281765	DI UNLINED D225x5.7 FLCL	282	225
1281766	DI UNLINED D250x5.7 FLCL	350	250
1281767	DI UNLINED D300x5.7 FLCL	425	300
1281768	DI UNLINED D375x5.7 FLCL	593	375
1281769	DI UNLINED D400x5.7 FLCL	776	400
1281770	DI UNLINED D500x5.7 FLCL	859	500
1281771	DI UNLINED D600x5.7 FLCL	1117	600
1281772	DI UNLINED D750x5.7 FLCL	1614	700

TYTON DUCTILE IRON PIPE

TYTONXCEL Z+ SULPHATE RESISTING CEMENT LINED



TYTONXCEL Z+ PN35 CEMENT LINED

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281773	DICL PIPE D100 x 5.7 PN35 Z+	98	100
1281774	DICL PIPE D150 x 5.7 PN35 Z+	147	150
1281775	DICL PIPE D200 x 5.7 PN35 Z+	197	200
1281776	DICL PIPE D225 x 5.7 PN35 Z+	221	225
1281777	DICL PIPE D250 x 5.7 PN35 Z+	252	250
1281778	DICL PIPE D300 x 5.7 PN35 Z+	335	300
1281779	DICL PIPE D375 x 5.7 PN35 Z+	482	375
1281780	DICL PIPE D450 x 5.7 PN35 Z+	642	450
1281781	DICL PIPE D500 x 5.7 PN35 Z+	759	500
1281782	DICL PIPE D600 x 5.7 PN35 Z+	1021	600
1281783	DICL PIPE D750 x 5.7 PN35 Z+	1520	750



TYTONXCEL Z+ PN30/25 CEMENT LINED

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281784	DICL PIPE D375 x 5.7 PN30 Z+	446	375
1281785	DICL PIPE D450 x 5.7 PN30 Z+	587	450
1281786	DICL PIPE D500 x 5.7 PN30 Z+	691	500
1281787	DICL PIPE D600 x 5.7 PN30 Z+	924	600
1281788	DICL PIPE D750 x 5.7 PN30 Z+	1237	750



TYTONXCEL Z+ FLCL CEMENT LINED

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281789	DICL PIPE D100 x 5.7 FLCL Z+	131	100
1281790	DICL PIPE D150 x 5.7 FLCL Z+	197	150
1281791	DICL PIPE D200 x 5.7 FLCL Z+	289	200
1281792	DICL PIPE D225 x 5.7 FLCL Z+	325	225
1281793	DICL PIPE D250 x 5.7 FLCL Z+	397	250
1281794	DICL PIPE D300 x 5.7 FLCL Z+	482	300
1281795	DICL PIPE D375 x 5.7 FLCL Z+	662	375
1281796	DICL PIPE D450 x 5.7 FLCL Z+	858	450
1281797	DICL PIPE D500 x 5.7 FLCL Z+	950	500
1281798	DICL PIPE D600 x 5.7 FLCL Z+	1224	600
1281799	DICL PIPE D750 x 5.7 FLCL Z+	1793	750

TYTON DUCTILE IRON PIPE

TYTONXCEL Z+ SULPHATE RESISTING CEMENT LINED & SEAL COATED



TYTONXCEL Z+ PN35 CEMENT LINED + SEAL COAT

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281800	DI CSC PIPE D100x5.7 PN35 Z+	98	100
1281801	DI CSC PIPE D150x5.7 PN35 Z+	147	150
1281802	DI CSC PIPE D200x5.7 PN35 Z+	197	200
1281803	DI CSC PIPE D225x5.7 PN35 Z+	221	225
1281804	DI CSC PIPE D250x5.7 PN35 Z+	252	250
1281805	DI CSC PIPE D300x5.7 PN35 Z+	335	300
1281806	DI CSC PIPE D375x5.7 PN35 Z+	482	375
1281807	DI CSC PIPE D450x5.7 PN35 Z+	642	450
1281808	DI CSC PIPE D500x5.7 PN35 Z+	759	500
1281809	DI CSC PIPE D600x5.7 PN35 Z+	1021	600
1281810	DI CSC PIPE D750x5.7 PN35 Z+	1520	750

TYTONXCEL Z+ PN30/25 CEMENT LINED + SEAL COAT

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281811	DI CSC PIPE D375x5.7 PN30 Z+	446	375
1281812	DI CSC PIPE D450x5.7 PN30 Z+	587	450
1281813	DI CSC PIPE D500x5.7 PN30 Z+	691	500
1281814	DI CSC PIPE D600x5.7 PN30 Z+	924	600
1281815	DI CSC PIPE D750x5.7 PN25 Z+	1237	750

TYTON DUCTILE IRON PIPE

TYTONXTREME Z+ CALCIUM ALUMINATE CEMENT LINED



TYTONXTREME Z+ PN35 CALCIUM ALUMINATE CEMENT LINED

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281816	DI CA PIPE D100x5.7 PN35 Z+	98	100
1281817	DI CA PIPE D150x5.7 PN35 Z+	147	150
1281818	DI CA PIPE D200x5.7 PN35 Z+	197	200
1281819	DI CA PIPE D225x5.7 PN35 Z+	221	225
1281820	DI CA PIPE D250x5.7 PN35 Z+	252	250
1281821	DI CA PIPE D300x5.7 PN35 Z+	335	300
1281822	DI CA PIPE D375x5.7 PN35 Z+	482	375
1281823	DI CA PIPE D450x5.7 PN35 Z+	642	450
1281824	DI CA PIPE D500x5.7 PN35 Z+	759	500
1281825	DI CA PIPE D600x5.7 PN35 Z+	1021	600
1281826	DI CA PIPE D750x5.7 PN35 Z+	1520	750



TYTONXTREME Z+ PN30/25 CALCIUM ALUMINATE CEMENT LINED

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281827	DI CA PIPE D375x5.7 PN30 Z+	446	375
1281828	DI CA PIPE D450x5.7 PN30 Z+	587	450
1281829	DI CA PIPE D500x5.7 PN30 Z+	691	500
1281830	DDI CA PIPE D600x5.7 PN30 Z+	924	600
1281831	DI CA PIPE D750x5.7 PN25 Z+	1237	750



TYTONXTREME Z+ FLCL CALCIUM ALUMINATE CEMENT LINED

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281832	DI CA PIPE D100x5.7 FLCL Z+	131	100
1281833	DI CA PIPE D150x5.7 FLCL Z+	197	150
1281834	DI CA PIPE D200x5.7 FLCL Z+	289	200
1281835	DI CA PIPE D225x5.7 FLCL Z+	325	225
1281836	DI CA PIPE D250x5.7 FLCL Z+	397	250
1281837	DI CA PIPE D300x5.7 FLCL Z+	482	300
1281838	DI CA PIPE D375x5.7 FLCL Z+	662	375
1281839	DI CA PIPE D450x5.7 FLCL Z+	858	450
1281840	DI CA PIPE D500x5.7 FLCL Z+	950	500
1281841	DI CA PIPE D600x5.7 FLCL Z+	1224	600
1281842	DI CA PIPE D750x5.7 FLCL Z+	1793	750

TYTON DUCTILE IRON PIPE

TYTONXCEL Z+ FLANGE CLASS UNLINED



TYTONXCEL Z+ FLANGE CLASS UNLINED

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281762	DI UNLINED D100x5.7 FLCL Z+	132	100
1281763	DI UNLINED D150x5.7 FLCL Z+	199	150
1281764	DI UNLINED D200x5.7 FLCL Z+	294	200
1281765	DI UNLINED D225x5.7 FLCL Z+	329	225
1281766	DI UNLINED D250x5.7 FLCL Z+	401	250
1281767	DI UNLINED D300x5.7 FLCL Z+	488	300
1281768	DI UNLINED D375x5.7 FLCL Z+	672	375
1281769	DI UNLINED D400x5.7 FLCL Z+	870	400
1281770	DI UNLINED D500x5.7 FLCL Z+	964	500
1281771	DI UNLINED D600x5.7 FLCL Z+	1242	600
1281772	DI UNLINED D750x5.7 FLCL Z+	1801	700

TYTON DUCTILE IRON PIPE

TYTONXCEED Z+ POLYURETHANE LINED



TYTON XCEED Z+ PN35 POLYURATHANE LINED

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281854	DI PUR PIPE D100x5.7 PN35 Z+	77	100
1281855	DI PUR PIPE D150x5.7 PN35 Z+	115	150
1281856	DI PUR PIPE D200x5.7 PN35 Z+	155	200
1281857	DI PUR PIPE D225x5.7 PN35 Z+	173	225
1281858	DI PUR PIPE D250x5.7 PN35 Z+	199	250
1281859	DI PUR PIPE D300x5.7 PN35 Z+	271	300
1281860	DI PUR PIPE D375x5.7 PN35 Z+	403	375
1281861	DI PUR PIPE D450x5.7 PN35 Z+	548	450
1281862	DI PUR PIPE D500x5.7 PN35 Z+	655	500
1281863	DI PUR PIPE D600x5.7 PN35 Z+	897	600
1281864	DI PUR PIPE D750x5.7 PN35 Z+	1332	750



TYTON XCEED Z+ PN30/25 POLYURATHANE LINED

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281865	DI PUR PIPE D375x5.7 PN30 Z+	367	375
1281866	DI PUR PIPE D450x5.7 PN30 Z+	492	450
1281867	DI PUR PIPE D500x5.7 PN30 Z+	586	500
1281868	DI PUR PIPE D600x5.7 PN30 Z+	799	600
1281869	DI PUR PIPE D750x5.7 PN25 Z+	1048	750



TYTON XCEED Z+ FLCL POLYURATHANE LINED

CODE	DESCRIPTION	WEIGHT (KG)	DIAMETER (MM)
1281870	DI PUR PIPE D100x5.7 FLCL Z+	111	100
1281871	DI PUR PIPE D150x5.7 FLCL Z+	166	150
1281872	DI PUR PIPE D200x5.7 FLCL Z+	248	200
1281873	DI PUR PIPE D225x5.7 FLCL Z+	279	225
1281874	DI PUR PIPE D250x5.7 FLCL Z+	346	250
1281875	DI PUR PIPE D300x5.7 FLCL Z+	420	300
1281876	DI PUR PIPE D375x5.7 FLCL Z+	585	375
1281877	DI PUR PIPE D450x5.7 FLCL Z+	765	450
1281878	DI PUR PIPE D500x5.7 FLCL Z+	847	500
1281879	DI PUR PIPE D600x5.7 FLCL Z+	1101	600
1281880	DI PUR PIPE D750x5.7 FLCL Z+	1607	750

TYTON JOINT[®]
DUCTILE IRON
FITTINGS

TYTON JOINT® DUCTILE IRON FITTINGS

DN 80 - DN 750. MANUFACTURED TO AS/NZS 2280



The TYTON® socket profile provides the flexibility of using TYTON gaskets for ductile iron OD compatible pipes, PLASTYT gaskets for series 1 PVC pipes or TYTON-LOK® gaskets for restrained joints. Joints can be deflected and permits axial movement to compensate for thermal expansion and contraction.

DESCRIPTION

SUREFLOW® TYTON JOINT fittings are manufactured to AS/NZS 2280

Flange dimensions comply with AS 4087

DN 80 - DN 750

GENERAL APPLICATION

SUREFLOW TYTON JOINT pipeline fittings are used in the construction of new pipelines

Note, Some fittings have been superseded by the AUSLITE range.

TECHNICAL DATA

Size Range

DN 80 - DN 750

Allowable Operating Pressure

1600 or 3500kPa

Maximum Temperature

70°C

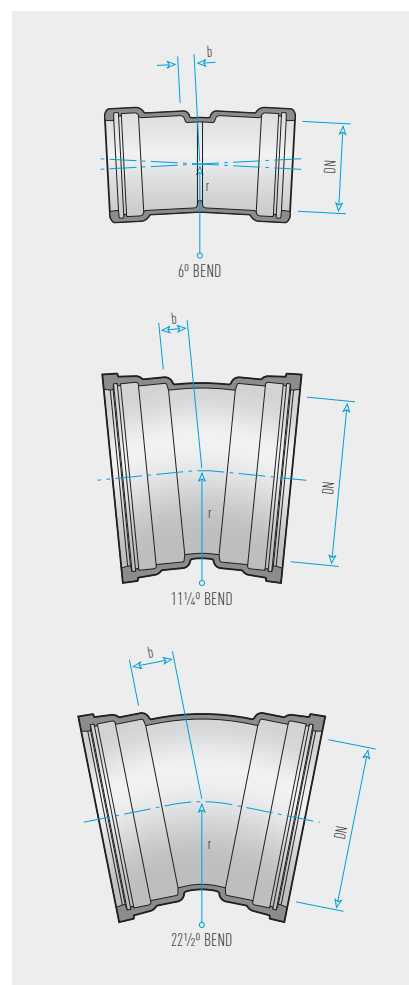
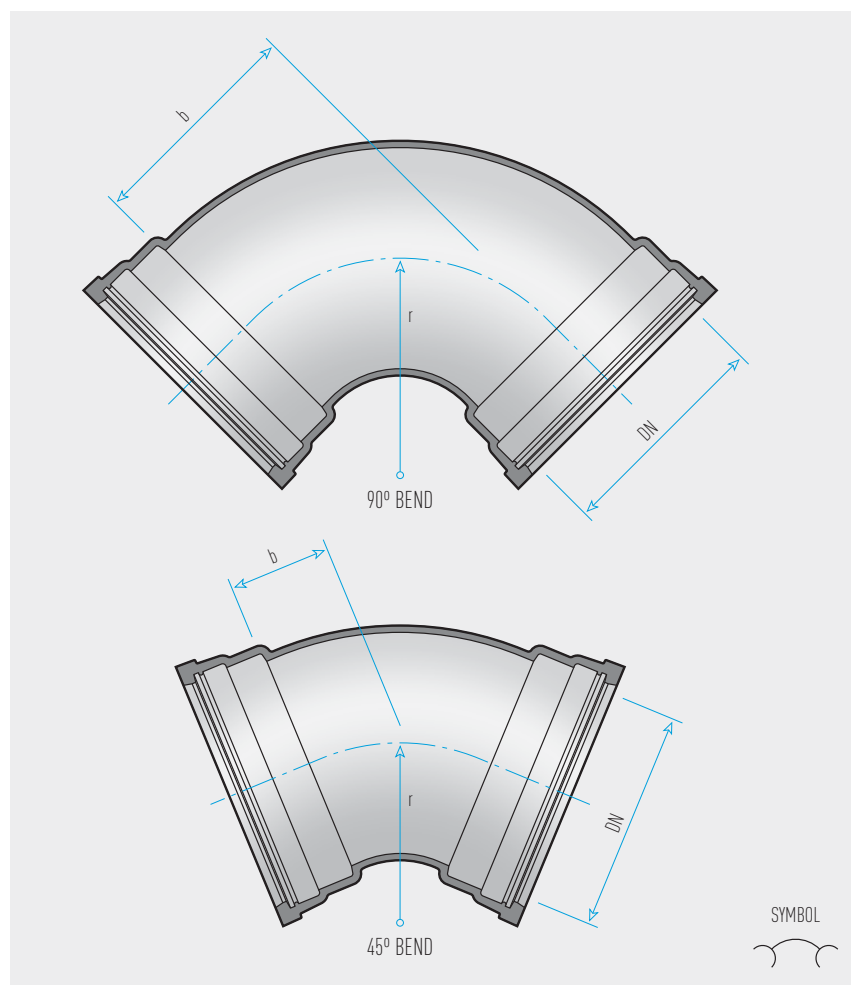
Certification

ISO 9001 AS/NZS 2280 Certified Product

AS/NZS 4020 Testing of products for use in contact with drinking water.

TYTON JOINT® DUCTILE IRON FITTINGS

SOCKET-SOCKET BENDS



Nom. Size	R	Dimensions B				
		6°	11¼°	22½°	45°	90°
100	75	20	20	25	45	90
150	120	20	20	35	60	130
200	203	35	35	55	100	220
225	229	-	45	65	115	250
250	254	-	45	70	125	275
300	305	50	50	80	145	325
375	381	65	65	100	185	405
450	457	-	70	115	215	480
500	508	-	75	125	235	535
600	610	-	85	145	280	635
750	765	-	105	180	345	795

Nom. Size	Dimensions B				
	6°	11¼°	22½°	45°	90°
100	BAATT10067	BAATT10117	BAATT10227	BAATT10457	BAATT10907
150	BAATT15067	BAATT15117	BAATT15227	BAATT15457	BAATT15907
200	BABTT20067	BABTT20117	BABTT20227	BABTT20457	BABTT20907
225	-	BABTT22117	BABTT22227	BABTT22457	BABTT22907
250	-	BABTT25117	BABTT25227	BABTT25457	BABTT25907
300	-	BABTT30117	BABTT30227	BABTT30457	BABTT30907
375	-	BAATT37117	BAATT37227	BAATT37457	BAATT37907
450	-	BABTT45117	BABTT45227	BABTT45457	BABTT45907
500	-	BABTT50117	BABTT50227	BABTT50457	BABTT50907
600	-	BABTT60117	BABTT60227	BABTT60457	BABTT60907
750	-	BABTT75117	BABTT75227	BABTT75457	BABTT75907

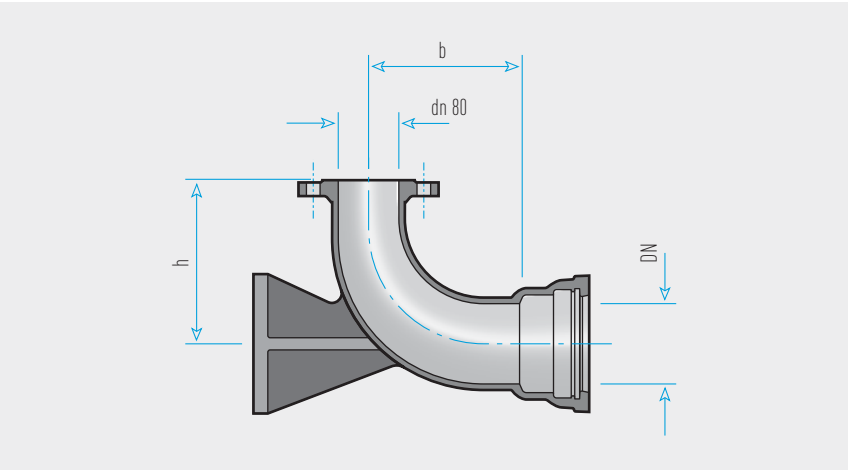
1. Thrust pads supplied on DN 100 and DN 150 for 90°, 45° and 22½° bends
2. Jointing lugs supplied on DN 100 to DN 750 for 90° and 45° bends

For alternative sizes, please contact your local Viadux representative.

AUSLITE® fittings are highlighted in light blue

TYTON JOINT® DUCTILE IRON FITTINGS

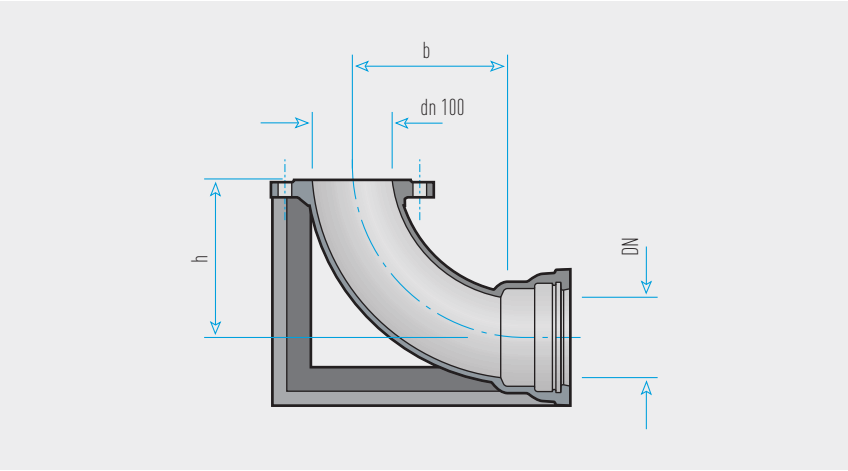
HYDRANT AND WASHOUT BENDS



HYDRANT BENDS

Nom. Size	Dimensions			
DN	dn	b	H	PN16 Code
100	80	205	215	BHATC10087
150	80	280	245	BHATC15087

For alternative sizes and pressure ratings, please contact your local Viadux representative.



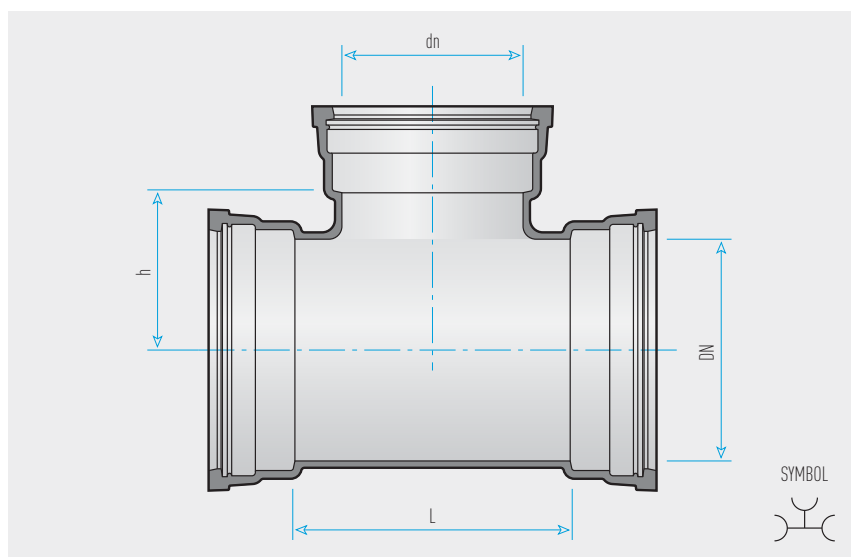
WASHOUT BENDS

Nom. Size	Dimensions			
DN	dn	b	H	PN16 Code
100	100	195	200	BFATC10107
150	100	160	200	BFATC15107

For alternative sizes and pressure ratings, please contact your local Viadux representative.

TYTON JOINT® DUCTILE IRON FITTINGS

SOCKET-SOCKET X SOCKET TEES



Nom. Size		Dimensions		
Body	Branch			
DN	dn	H	L	Code
100	100	75	150	TGATT10107
150	100	100	150	TGATT15107
150	150	100	150	TGATT15157
200	100	170	230	TGBTT20107
200	150	170	290	TGBTT20157
200	200	170	340	TGBTT20207
225	100	185	240	TGBTT22107
225	150	185	300	TGBTT22157
225	200	185	350	TGBTT22207
225	225	190	380	TGBTT22227
250	100	200	240	TGBTT25107
250	150	200	300	TGBTT25157
250	200	200	350	TGBTT25207
250	225	205	380	TGBTT25227
250	250	205	410	TGBTT25257

Nom. Size		Dimensions		
Body	Branch			
DN	dn	H	L	Code
300	100	230	240	TGBTT30107
300	150	230	300	TGBTT30157
300	200	230	350	TGBTT30207
300	225	235	380	TGBTT30227
300	250	235	410	TGBTT30257
300	300	245	490	TGBTT30307
375	200	270	360	TGBTT37207
375	225	275	390	TGBTT37227
375	250	275	420	TGBTT37257
375	300	285	500	TGBTT37307
375	375	305	610	TGBTT37377
450	250	315	420	TGBTT45257
450	300	325	500	TGBTT45307
450	375	345	610	TGBTT45377
450	450	345	690	TGBTT45457

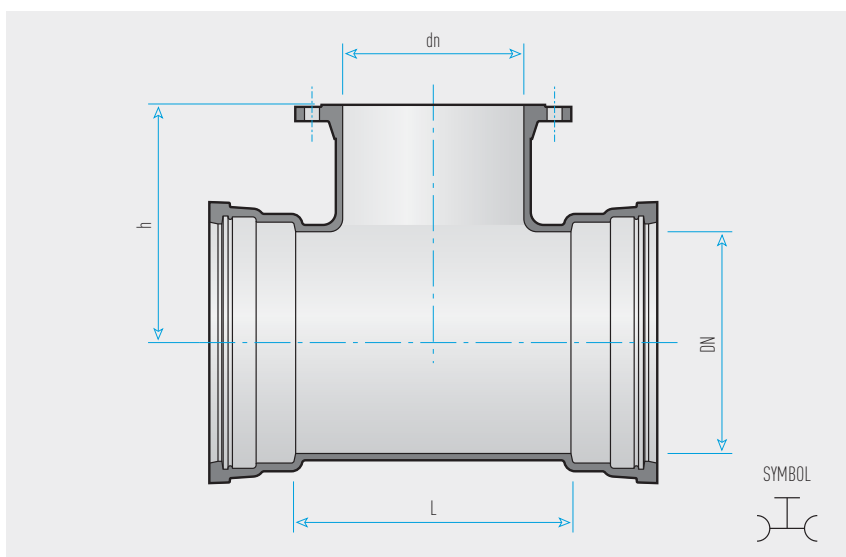
Nom. Size		Dimensions		
Body	Branch			
DN	dn	H	L	Code
500	250	340	420	TGBTT50257
500	300	355	500	TGBTT50307
500	375	370	610	TGBTT50377
500	450	370	690	TGBTT50457
500	500	385	770	TGBTT50507
600	300	405	500	TGBTT60307
600	375	425	610	TGBTT60377
600	450	425	690	TGBTT60457
600	500	435	770	TGBTT60507
600	600	435	870	TGBTT60607
750	300	485	510	TGBTT75307
750	375	505	620	TGBTT75377
750	450	505	700	TGBTT75457
750	500	515	780	TGBTT75507
750	600	515	880	TGBTT75607
750	750	535	1070	TGBTT75757

AUSLITE® fittings are highlighted in light blue

For alternative sizes, please contact your local Viadux representative.

TYTON JOINT® DUCTILE IRON FITTINGS

SOCKET-SOCKET X FLANGE TEES



Nom. Size		Dimensions		
Body	Branch	h	L	PN16 Code
DN	dn			
100	80	180	150	TGATC10087
100	100	180	150	TGATC10107
150	80	185	150	TGATC15087
150	100	190	150	TGATC15107
150	150	210	150	TGATC15157
200	80	250	210	TGBTC20087
200	100	250	230	TGBTC20107
200	150	275	290	TGBTC20157
200	200	275	340	TGBTC20207
225	80	265	220	TGBTC22087
225	100	265	240	TGBTC22107
225	150	290	300	TGBTC22157
225	200	290	350	TGBTC22207
225	225	305	380	TGBTC22227
250	80	280	220	TGBTC25087
250	100	280	240	TGBTC25107
250	150	305	300	TGBTC25157
250	200	305	350	TGBTC25207
250	225	320	380	TGBTC25227
250	250	320	410	TGBTC25257

Nom. Size		Dimensions		
Body	Branch	h	L	PN16 Code
DN	dn			
300	80	310	220	TGBTC30087
300	100	310	240	TGBTC30107
300	150	335	300	TGBTC30157
300	200	335	350	TGBTC30207
300	225	350	380	TGBTC30227
300	250	350	410	TGBTC30257
300	300	375	490	TGBTC30307
375	80	350	230	TGATC37087
375	100	350	250	TGATC37107
375	200	375	360	TGBTC37207
375	225	390	390	TGBTC37227
375	250	390	420	TGBTC37257
375	300	415	500	TGBTC37307
375	375	415	610	TGBTC37377
450	80	390	230	TGBTC45087
450	100	390	250	TGBTC45107
450	250	430	420	TGBTC45257
450	300	455	500	TGBTC45307
450	375	485	610	TGBTC45377
450	450	495	690	TGBTC45457

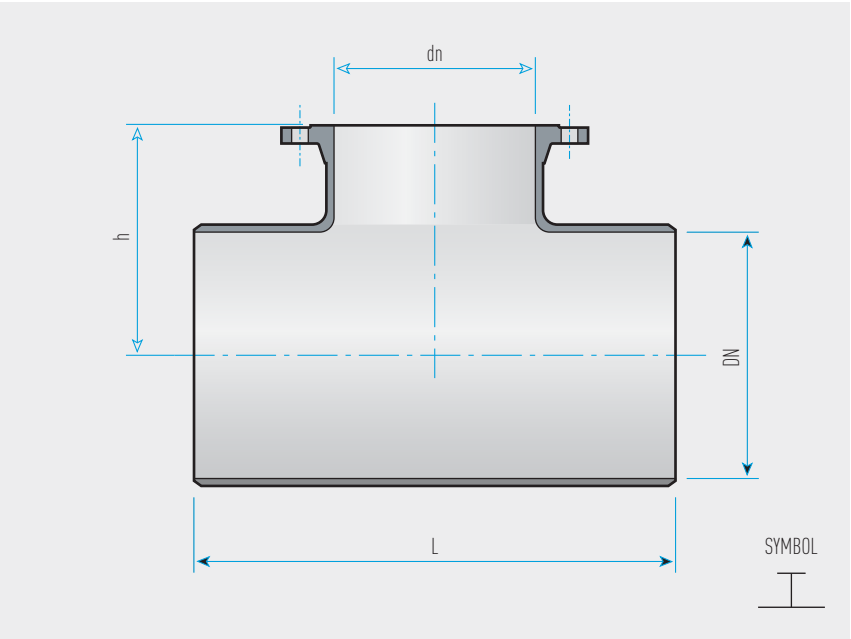
Nom. Size		Dimensions		
Body	Branch	h	L	PN16 Code
DN	dn			
500	80	415	230	TGBTC50087
500	100	415	250	TGBTC50107
500	250	455	420	TGBTC50257
500	300	485	500	TGBTC50307
500	375	510	610	TGBTC50377
500	450	520	690	TGBTC50457
500	500	550	770	TGBTC50507
600	80	470	230	TGBTC60087
600	100	470	250	TGBTC60107
600	300	535	500	TGBTC60307
600	375	565	610	TGBTC60377
600	450	575	690	TGBTC60457
600	500	600	770	TGBTC60507
600	600	615	870	TGBTC60607
750	100	550	260	TGBTC75107
750	300	615	510	TGBTC75307
750	375	645	620	TGBTC75377
750	450	655	700	TGBTC75457
750	500	680	780	TGBTC75507
750	600	695	880	TGBTC75607
750	750	725	1070	TGBTC75757

AUSLITE® fittings are highlighted in light blue

For alternative sizes and pressure ratings, please contact your local Viadux representative.

TYTON JOINT® DUCTILE IRON FITTINGS

SPIGOT-SPIGOT X FLANGE TEES



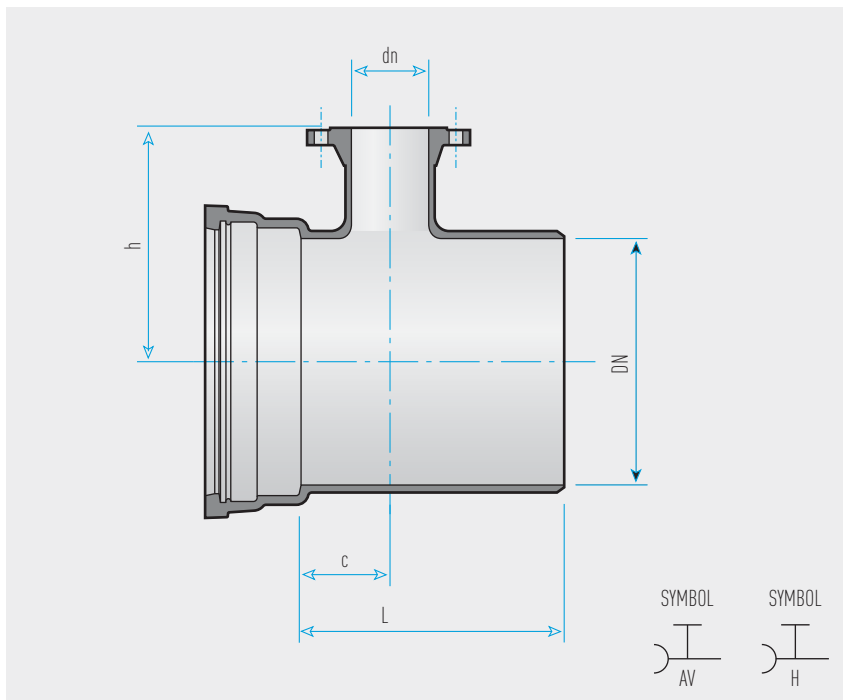
Nom. Size		Dimensions		
Body	Branch			
DN	dn	h	L	PN16 Code
100	80	178	432	TGASC10087
100	100	178	432	TGASC10107
150	80	203	432	TGASC15087
150	100	203	432	TGASC15107
150	150	203	432	TGASC15157
200	80	241	457	TGBSC20087
200	100	241	457	TGBSC20107
200	150	241	482	TGBSC20157
200	200	241	534	TGBSC20207
225	80	254	457	TGBSC22087
225	100	254	457	TGBSC22107
225	150	254	508	TGBSC22157
225	200	254	534	TGBSC22207
225	225	254	558	TGBSC22227
250	80	267	457	TGBSC25087
250	100	267	457	TGBSC25107
250	150	267	534	TGBSC25157
250	200	267	558	TGBSC25207
250	225	267	558	TGBSC25227
250	250	267	610	TGBSC25257
300	80	305	457	TGBSC30087
300	100	305	457	TGBSC30107
300	150	305	610	TGBSC30157
300	200	305	636	TGBSC30207
300	225	305	636	TGBSC30227
300	250	305	636	TGBSC30257
300	300	305	660	TGBSC30307

AUSLITE® fittings are highlighted in light blue

For alternative sizes and pressure ratings, please contact your local Viadux representative.

TYTON JOINT® DUCTILE IRON FITTINGS

SOCKET-SPIGOT X FLANGE TEES / AIR VALVE & HYDRANT



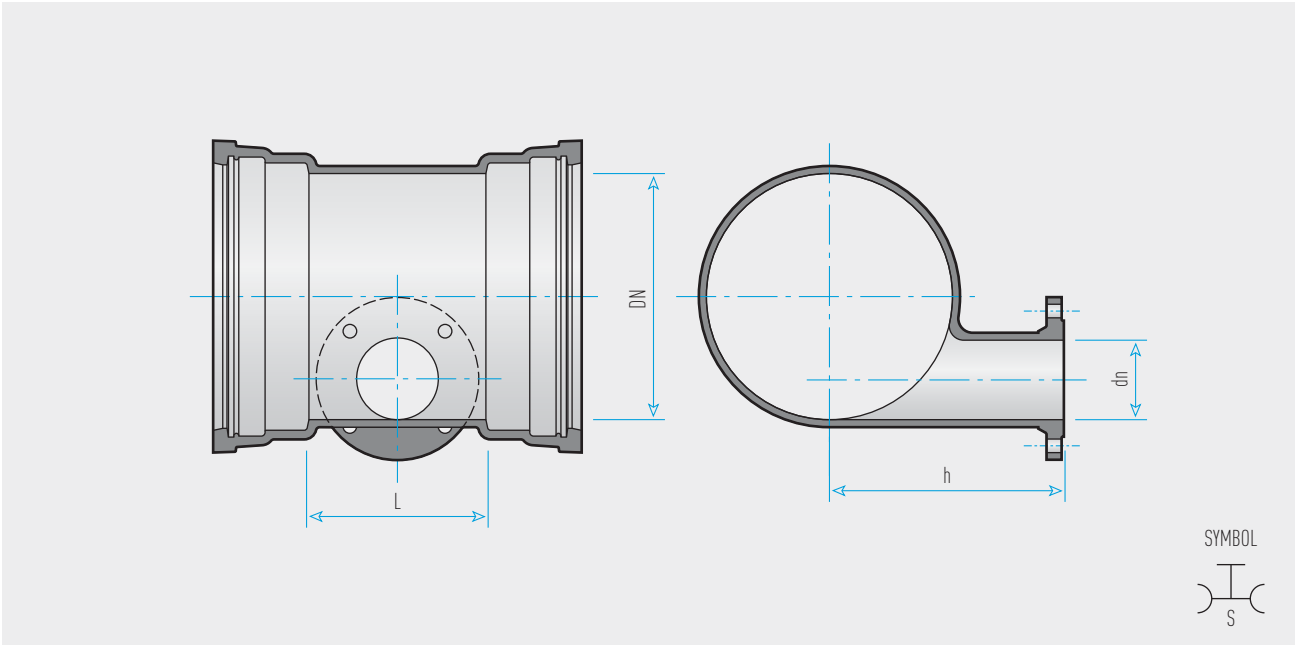
Nom. Size		Dimensions			
Body	Branch				
DN	dn	C	h	L	PN16 Code
100	80	105	195	310	THAOC10087
100	100	115	195	335	THBOC10107
150	80	105	225	310	THAOC15087
150	100	115	225	335	THBOC15107
200	80	105	250	325	THBOC20087
200	100	115	250	345	THBOC20107
225	80	110	265	330	THBOC22087
225	100	120	265	350	THBOC22107
250	80	110	280	330	THBOC25087
250	100	120	280	350	THBOC25107
300	80	110	310	330	THBOC30087
300	100	120	310	350	THBOC30107
375	80	115	350	360	THAOC37087
375	100	125	350	380	THAOC37107
450	80	115	390	360	THBOC45087
450	100	125	390	380	THBOC45107
500	80	115	415	360	THBOC50087
500	100	125	415	380	THBOC50107
600	80	115	470	360	THBOC60087
600	100	125	470	380	THBOC60107
750	100	130	550	415	THBOC75107

AUSLITE® fittings are highlighted in light blue

For alternative sizes and pressure ratings, please contact your local Viadux representative.

TYTON JOINT® DUCTILE IRON FITTINGS

INVERT SCOUR TEES: SOCKET-SOCKET X FLANGE

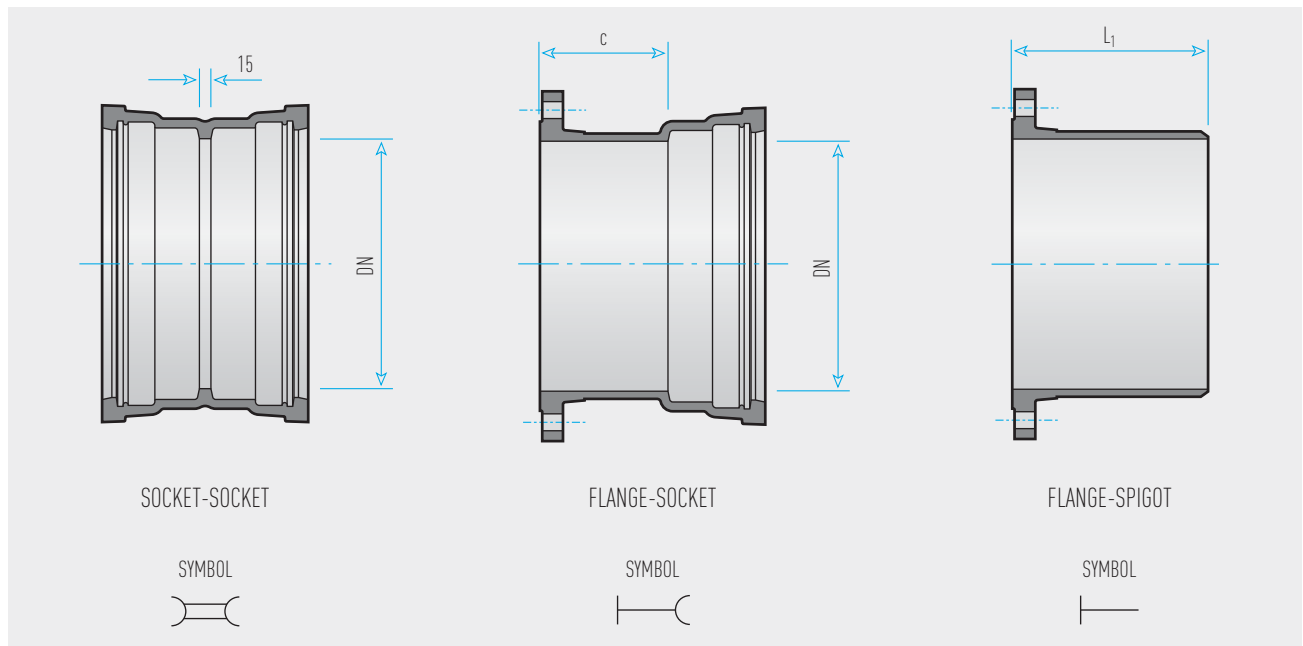


Nom. Size		Dimensions		
Body	Branch			
DN	DN	H	L	PN16 Code
150	80	225	210	TIBTC15087
200	80	250	210	TIBTC20087
225	100	265	240	TIBTC22107
250	100	280	240	TIBTC25107
300	100	310	240	TIBTC30107
375	150	375	310	TIBTC37157
450	150	415	310	TIBTC45157
500	150	440	310	TIBTC50157
600	150	495	310	TIBTC60157
750	200	575	370	TIBTC75207

For alternative sizes and pressure ratings, please contact your local Viadux representative.

TYTON JOINT® DUCTILE IRON FITTINGS

CONNECTORS



SOCKET - SOCKET

Nom. Size	
DN	Code
100	CNBTT10007
150	CNBTT15007
200	CNBTT20007
225	CNBTT22007
250	CNBTT25007
300	CNBTT30007
375	CNBTT37007
450	CNBTT45007
500	CNBTT50007
600	CNBTT60007
750	CNBTT75007

FLANGE - SOCKET

Nom. Size	Dimensions	
DN	c	PN16 Code
100	110	CNACT10007
150	135	CNACT15007
200	135	CNBCT20007
225	155	CNBCT22007
250	155	CNBCT25007
300	170	CNBCT30007
375	190	CNBCT37007
450	200	CNBCT45007
500	215	CNBCT50007
600	230	CNBCT60007
750	250	CNBCT75007

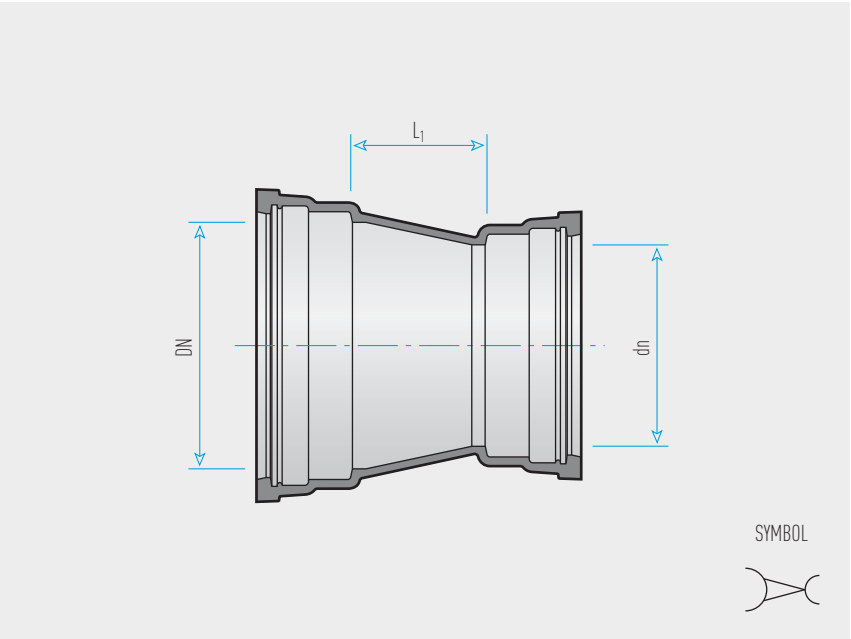
FLANGE - SPIGOT

Nom. Size	Dimensions	
DN	L ₁	Code
100	205	CNACS10007
150	205	CNACS15007
200	230	CNBCS20007
225	230	CNBCS22007
250	230	CNBCS25007
300	255	CNBCS30007
375	280	CNBCS37007
450	280	CNBCS45007
500	305	CNBCS50007
600	330	CNBCS60007
750	370	CNBCS75007

AUSLITE® fittings are highlighted in light blue. For alternative sizes, please contact your local Viadux representative.

TYTON JOINT® DUCTILE IRON FITTINGS

TAPERS - SOCKET-SOCKET



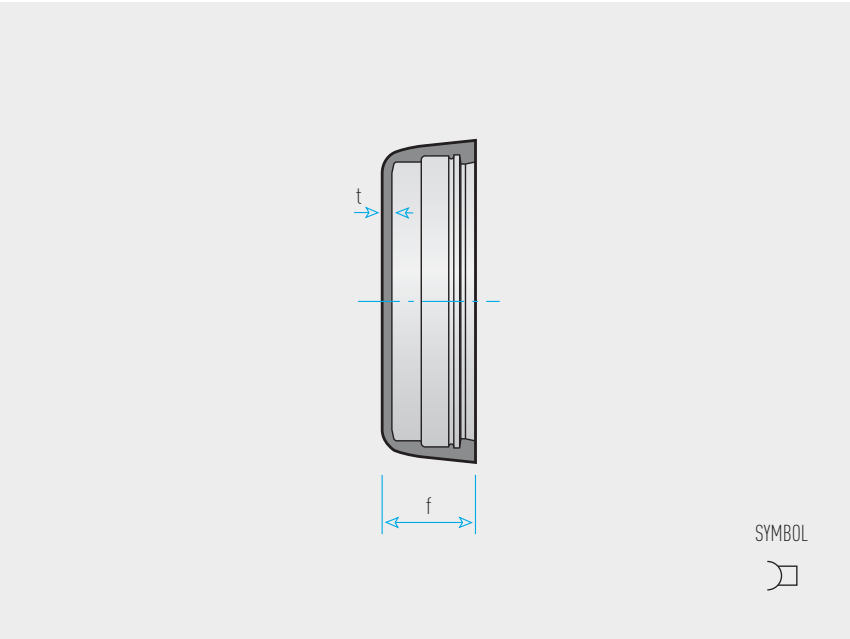
Nom. Size	Dimensions		
	DN	L ₁	Code
150	100	170	TCATT15107
200	100	295	TCBTT20107
200	150	170	TCBTT20157
225	100	365	TCBTT22107
225	150	235	TCBTT22157
225	200	110	TCBTT22207
250	100	425	TCBTT25107
250	150	300	TCBTT25157
250	200	175	TCBTT25207
250	225	115	TCBTT25227
300	100	555	TCBTT30107
300	150	425	TCBTT30157
300	200	300	TCBTT30207
300	225	240	TCBTT30227
300	250	180	TCBTT30257
375	200	495	TCBTT37207
375	225	435	TCBTT37227
375	250	375	TCBTT37257
375	300	245	TCBTT37307
450	250	565	TCBTT45257
450	300	435	TCBTT45307
450	375	250	TCBTT45377
500	250	690	TCBTT50257
500	300	565	TCBTT50307
500	375	380	TCBTT50377
500	450	190	TCBTT50457
600	300	820	TCBTT60307
600	375	635	TCBTT60377
600	450	440	TCBTT60457
600	500	315	TCBTT60507
750	375	1020	TCBTT75377
750	450	830	TCBTT75457
750	500	700	TCBTT75507
750	600	445	TCBTT75607

AUSLITE® fittings are highlighted in light blue.

For alternative sizes, please contact your local Viadux representative.

TYTON JOINT® DUCTILE IRON FITTINGS

CAPS



Nom. Size DN	Dimensions		
	F	T	Code
100	89	18	PCBT010007
150	89	18	PCBT015007
200	102	18	PCBT020007
225	102	19	PCBT022007
250	102	20	PCBT025007
300	102	23	PCBT030007
375	127	25	PCBT037007
450	127	26	PCBT045007
500	127	27	PCBT050007
600	127	30	PCBT060007
750	157	33	PCBT075007

FLANGED
DUCTILE IRON
PIPE AND
FITTINGS

SUREFLOW®

FLANGED DUCTILE IRON PIPE

DN 80 - DN 750. MANUFACTURED TO AS/NZS 2280. FLANGED DIMENSIONS TO AS 4087

PIPE BARRELS

Ductile iron pipe barrels are manufactured to AS/NZS 2280 Flange Class

FLANGES

Pipe flanges are manufactured to AS 4087 PN 16 or PN 35

EPOXY RESIN

The epoxy resin is unaffected by water, sewage, and aqueous industrial waste. It cures to a hard corrosion resistant and corrosion protective solid, is resistant to water absorption and will not impart colour, odour, taste or toxic constituents to potable water.

THREAD FORM

SUREFLOW employs taper to taper thread forms for leak tight assurance.

CONFIGURATIONS

Pipe may be specified as flange - flange, flange - spigot, spigot - spigot or flange - socket

AVAILABLE LENGTHS

Minimum lengths available are:

DN 80 to DN 250	150mm
DN 300 to DN 450	200mm
DN 500 to DN 600	250mm
DN 750	300mm

Maximum lengths available are:

DN 100 to DN 750	5.5m
------------------	------

for all end joint combinations

LIMITATIONS

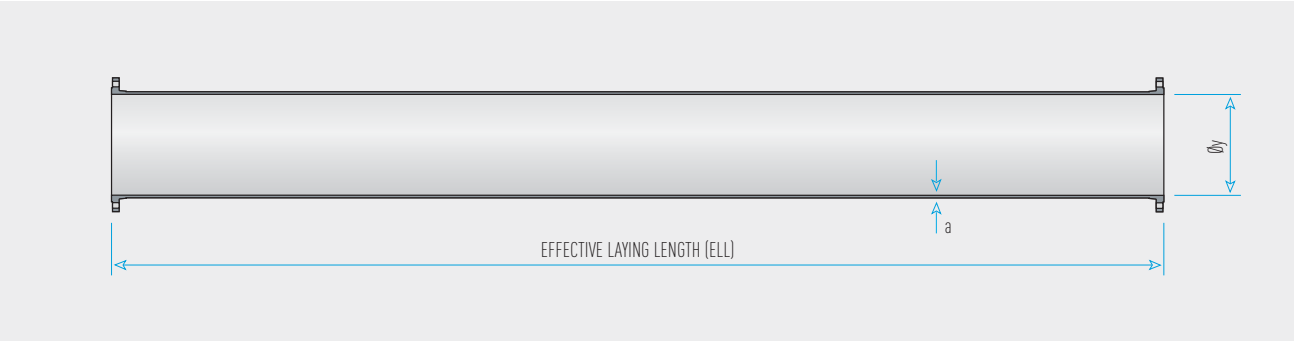
A screw-on flanged joint should not be subjected to a moment. Typical situations may include where a valve or fitting is installed onto a flanged pipe, without supporting the weight of the valve or fitting, or where a combination of flanged joints and TYTON joints are used in an arrangement without adequate support or restraint of the screw-on joint.

FLANGED DUCTILE IRON PIPE

FLANGED JOINT SPECIFICATIONS

FLANGED PIPE

Nom. Size	Mean External Diameter Ø	Unlined Pipe		Cement Mortar Lined Pipe		Nominal Wall Thickness a
		Mean Internal Diameter	Mass per Metre	Mean Internal Diameter	Mass per Metre	
DN	MM	MM	KG	MM	KG	MM
80	98	84	14.1	76	16.5	7
100	122	108	17.8	98	21.7	7
150	177	161	29.9	151	35.8	8
200	232	216	39.7	206	47.6	8
225	259	241	49.8	231	58.7	9
250	286	268	55.2	258	65.1	9
300	345	325	74.2	315	86.3	10
375	426	406	92.1	396	107.3	10
450	507	485	120.8	475	138.9	11
500	560	536	145.6	526	165.7	12
600	667	641	188.3	631	212.3	13
750	826	796	269.4	784	305.2	15



FLANGED DUCTILE IRON PIPE

FLANGED JOINT SPECIFICATIONS

FLANGED PIPE OPERATING/TEST PRESSURES

Nom. Size DN	Standard Pressure Class 16 Screw-on Flanges			High Pressure Class 35 Screw-on Flanges		
	Allowable Operating Pressure	Allowable Maximum Operating Pressure	Allowable Site Test Pressure	Allowable Operating Pressure	Allowable Maximum Operating Pressure	Allowable Test Pressure
DN	MPA	MPA	MPA	MPA	MPA	MPA
80	1.60	1.92	2.00	3.50	4.20	4.38
100	1.60	1.92	2.00	3.50	4.20	4.38
150	1.60	1.92	2.00	3.50	4.20	4.38
200	1.60	1.92	2.00	3.50	4.20	4.38
225	1.60	1.92	2.00	3.50	4.20	4.38
250	1.60	1.92	2.00	3.50	4.20	4.38
300	1.60	1.92	2.00	3.50	4.20	4.38
375	1.60	1.92	2.00	3.50	4.20	4.38
450	1.60	1.92	2.00	3.50	4.20	4.38
500	1.60	1.92	2.00	3.50	4.20	4.38
600	1.60	1.92	2.00	3.50	4.20	4.38
750	1.60	1.92	2.00	3.50	4.20	4.38

TABLE KEY

Configuration options

C = Flange, T = Socket, S = Spigot

Size options

Per normal DI pipe from DN80 - DN750
e.g. DN450 would be 45, 80 would be 08 etc

Lengths

00, 01, 02, 03, 04, etc. in 100mm increments

Coatings

6 for FB Epoxy options

7 for FB Nylon

9 for bitumen and cement lining

X = Liquid Applied Epoxy

W = Weep Flange

FLANGED PIPE PRODUCT CODE GENERATOR

SPECIFYING A DN 150 FLANGE TO FLANGE PIPE AT 150 TO 199 IN LENGTH, FUSION COATED

EXAMPLE DFB	CC	15	01	7
Flange Class Pipe DFB				
End Configuration CC, CT, TS, SS				
Pipe Diameter 05 to 75				
Pipe Length 00, 01, 02, 03, 04 etc.				
Coating 6, 7, 9				

SPECIFYING A DN 350 SOCKET TO SPIGOT PIPE AT 350 TO 399 IN LENGTH, EPOXY COATED

EXAMPLE DFB	TS	35	03	6
Flange Class Pipe DFB				
End Configuration CC, CT, TS, SS				
Pipe Diameter 05 to 75				
Pipe Length 00, 01, 02, 03, 04 etc.				
Coating 6, 7, 9				

FLANGED DUCTILE IRON FITTINGS

DN 80 - DN 750. MANUFACTURED TO AS/NZS 2280. FLANGE DIMENSIONS TO AS 4087



Ductile Iron fittings provide high strength and impact resistance. Suitable for 'in ground' or 'above ground' applications.

All fittings are supplied with a thermally bonded polymeric coating for long life corrosion protection. Cement lined/bitumen coated fittings available upon request to suit local utility requirements.

Self anchoring joints. No need for external anchorages. Integrally cast flanges on fittings. All flange dimensions comply with AS 4087.

Alternate flange dimensions available on request.

DESCRIPTION

SUREFLOW® high strength Ductile Iron Flanged Fittings are available in a comprehensive range of sizes and configurations for pipeline construction in both above and below ground applications.

GENERAL APPLICATION

SUREFLOW® Flanged Fittings provide restrained non-flexible joints in pipelines or within pipework arrangements and are commonly used in above ground applications such as pump stations and treatment plants.

TECHNICAL DATA

Size Range

DN 80 - DN 750

Allowable Operating Pressure

1600 or 3500kPa

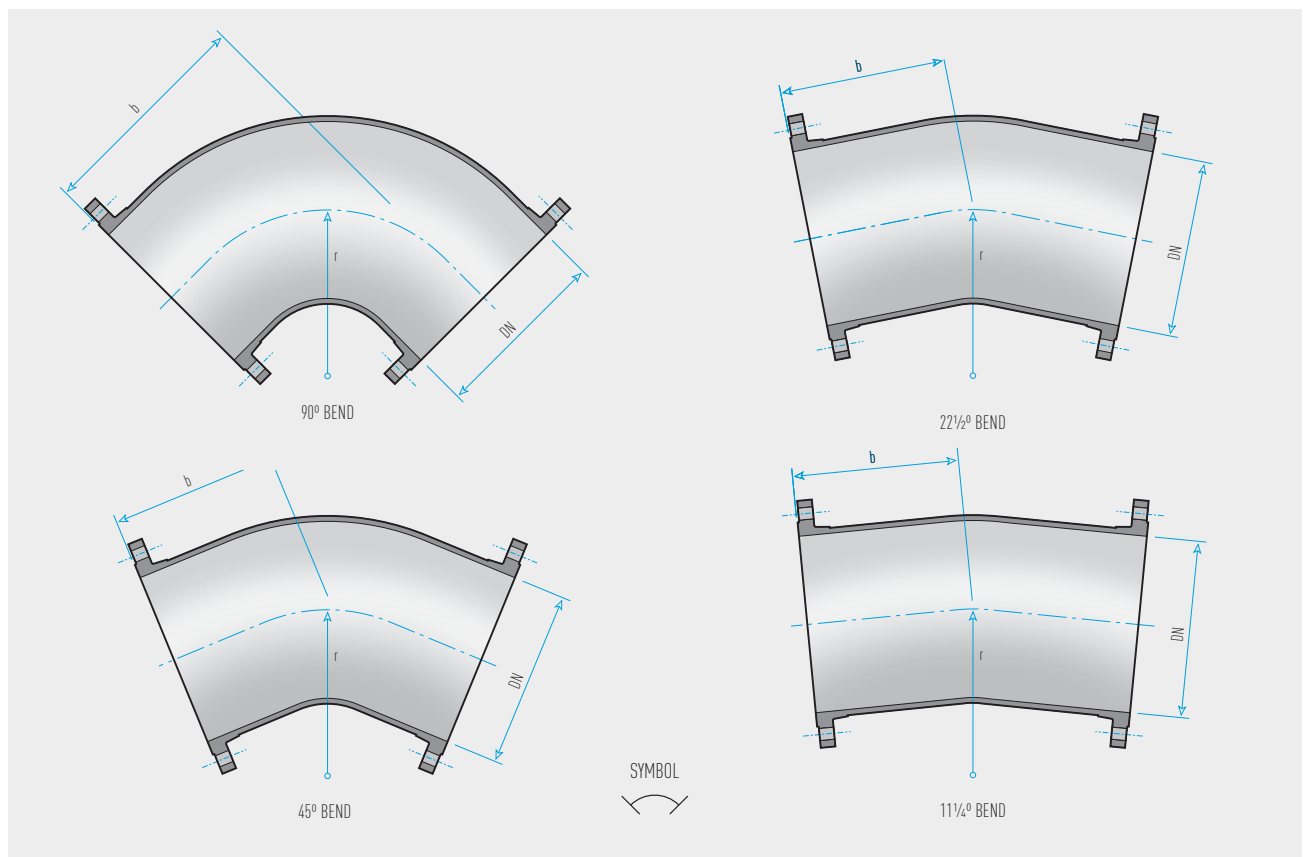
Certifications

ISO 9001 AS/NZS 2280 Certified Product

AS/NZS 4020 Testing of products for use in contact with drinking water.

FLANGED DUCTILE IRON FITTINGS

FLANGED BENDS



Nom. Size DN	R	Dimensions B			
		11¼°	22½°	45°	90°
80	140	125	140	140	229
100	152	152	152	152	241
150	190	190	190	190	279
200	203	203	203	203	305
225	229	229	229	229	330
250	254	254	254	254	356
300	305	305	305	305	406
375	381	381	381	381	495
450	457	457	457	457	572
500	508	508	508	508	622
600	610	610	610	610	737
750	765	230	295	460	905

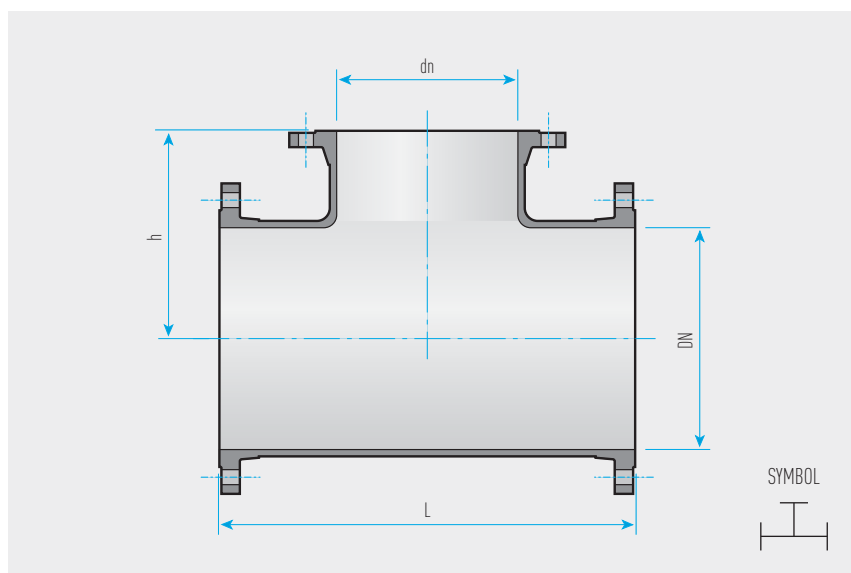
Nom. Size DN	PN	Dimensions B			
		11¼°	22½°	45°	90°
80	16	BABCC08117	BABCC08227	BABCC08457	BAACC08907
100	16	BAACC10117	BAACC10227	BAACC10457	BAACC10907
150	16	BAACC15117	BAACC15227	BAACC15457	BAACC15907
200	16	BABCC20117	BABCC20227	BABCC20457	BABCC20907
225	16	BABCC22117	BABCC22227	BABCC22457	BABCC22907
250	16	BABCC25117	BABCC25227	BABCC25457	BABCC25907
300	16	BABCC30117	BABCC30227	BABCC30457	BABCC30907
375	16	BABCC37117	BABCC37227	BABCC37457	BABCC37907
450	16	BABCC45117	BABCC45227	BABCC45457	BABCC45907
500	16	BABCC50117	BABCC50227	BABCC50457	BABCC50907
600	16	BABCC60117	BABCC60227	BABCC60457	BABCC60907
750	16	BABCC75117	BABCC75227	BABCC75457	BABCC75907

AUSLITE® fittings are highlighted in light blue.

For alternative sizes and pressure ratings, please contact your local Viadux representative.

FLANGED DUCTILE IRON FITTINGS

FLANGED TEES



Nom. Size		Dimensions		
Body	Branch	H	L	PN35 Code
DN	dn			
80	80	137	353	TGBFF08087
100	80	178	356	TGBFF10087
100	100	178	356	TGBFF10107
150	100	203	406	TGBFF15107
150	150	203	406	TGBFF15157
200	100	241	484	TGBFF20107
200	150	241	484	TGBFF20157
200	200	241	484	TGBFF20207
225	100	254	508	TGBFF22107
225	150	254	508	TGBFF22157
225	200	254	508	TGBFF22207
225	225	254	508	TGBFF22227

Nom. Size		Dimensions		
Body	Branch	H	L	PN16 Code
DN	dn			
80	80	137	353	TGACC08087
100	80	178	356	TGACC10087
100	100	178	356	TGACC10107
150	100	203	406	TGACC15107
150	150	203	406	TGACC15157
200	100	241	484	TGBCC20107
200	150	241	484	TGBCC20157
200	200	241	484	TGBCC20207
225	100	254	508	TGBCC22107
225	150	254	508	TGBCC22157
225	200	254	508	TGBCC22207
225	225	254	508	TGBCC22227

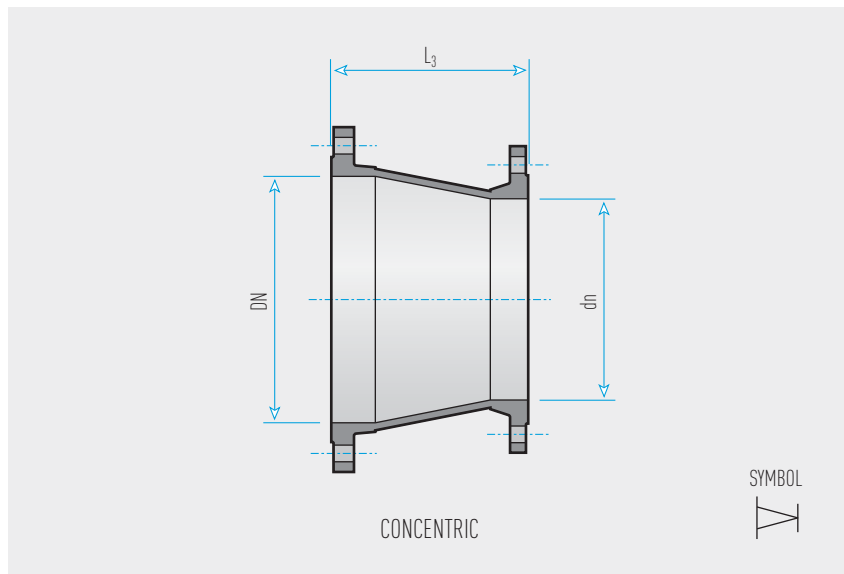
AUSLITE® fittings are highlighted in light blue

For alternative sizes and pressure ratings, please contact your local Viadux representative.

Nom. Size		Dimensions		
Body	Branch	H	L	PN16 Code
DN	DN			
225	225	254	508	TGBCC22227
250	100	267	534	TGBCC25107
250	150	267	534	TGBCC25157
250	200	267	534	TGBCC25207
250	225	267	534	TGBCC25227
250	250	267	534	TGBCC25257
300	100	305	610	TGBCC30107
300	150	305	610	TGBCC30157
300	200	305	610	TGBCC30207
300	225	305	610	TGBCC30227
300	250	305	610	TGBCC30257
300	300	305	610	TGBCC30307
375	200	356	738	TGBCC37207
375	225	356	738	TGBCC37227
375	250	356	738	TGBCC37257
375	300	356	738	TGBCC37307
375	375	368	738	TGBCC37377
450	250	394	814	TGBCC45257
450	300	394	814	TGBCC45307
450	375	406	814	TGBCC45377
450	450	406	814	TGBCC45457
500	250	432	890	TGBCC50257
500	300	432	890	TGBCC50307
500	375	444	890	TGBCC50377
500	450	444	890	TGBCC50457
500	500	444	890	TGBCC50507
600	300	483	1016	TGBCC60307
600	375	495	1016	TGBCC60377
600	450	495	1016	TGBCC60457
600	500	495	1016	TGBCC60507
600	600	508	1016	TGBCC60607
750	300	615	890	TGBCC75307
750	375	645	1000	TGBCC75377
750	450	655	1080	TGBCC75457
750	500	680	1160	TGBCC75507
750	600	695	1260	TGBCC75607
750	750	725	1450	TGBCC75757

FLANGED DUCTILE IRON FITTINGS

FLANGED TAPERS CONCENTRIC



Nom. Size	Dimensions		
DN	DN	L ₃	PN16 Code
100	80	165	TCACC10087
150	80	298	TCBCC15087
150	100	235	TCACC15107
200	100	368	TCBCC20107
200	150	248	TCBCC20157
225	100	432	TCBCC22107
225	150	311	TCBCC22157
225	200	190	TCBCC22207
250	100	495	TCBCC25107
250	150	375	TCBCC25157
250	200	254	TCBCC25207
250	225	190	TCBCC25227

Nom. Size	Dimensions		
DN	dn	L ₃	PN16 Code
300	100	629	TCBCC30107
300	150	508	TCBCC30157
300	200	387	TCBCC30207
300	225	324	TCBCC30227
300	250	260	TCBCC30257
375	200	584	TCBCC37207
375	225	521	TCBCC37227
375	250	457	TCBCC37257
375	300	337	TCBCC37307
450	250	660	TCBCC45257
450	300	540	TCBCC45307
450	375	356	TCBCC45377

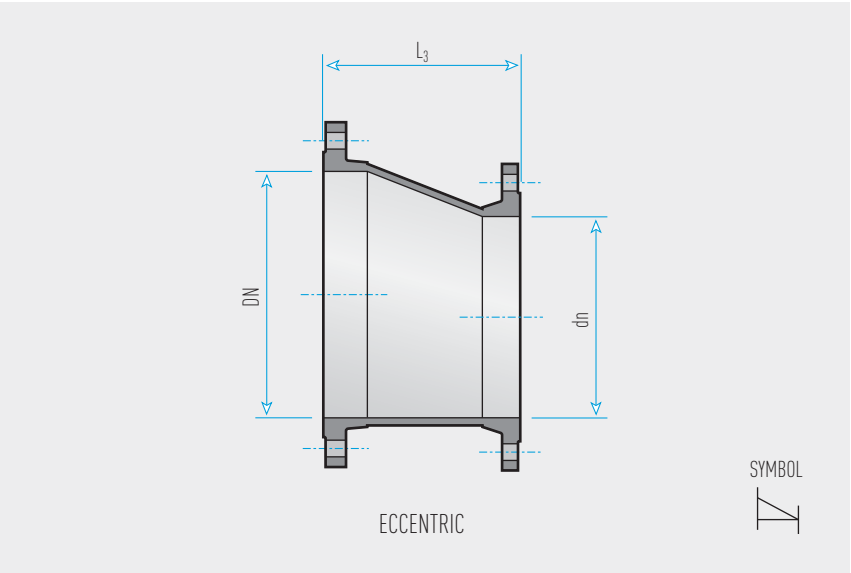
Nom. Size	Dimensions		
DN	dn	L ₃	PN16 Code
500	250	787	TCBCC50257
500	300	667	TCBCC50307
500	375	483	TCBCC50377
500	450	305	TCBCC50457
600	300	934	TCBCC60307
600	375	749	TCBCC60377
600	450	572	TCBCC60457
600	500	444	TCBCC60507
750	375	1180	TCBCC75377
750	450	1000	TCBCC75457
750	500	885	TCBCC75507
750	600	645	TCBCC75607

AUSLITE® fittings are highlighted in light blue.

For alternative sizes and pressure ratings, please contact your local Viadux representative.

FLANGED DUCTILE IRON FITTINGS

FLANGED TAPERS ECCENTRIC



Nom. Size		Dimensions	
DN	dn	L ₃	PN16 Code
100	80	165	TABCC10087
150	80	298	TABCC15087
150	100	235	TABCC15107
200	100	368	TABCC20107
200	150	248	TABCC20157
225	100	432	TABCC22107
225	150	311	TABCC22157
225	200	190	TABCC22207
250	100	495	TABCC25107
250	150	375	TABCC25157
250	200	254	TABCC25207
250	225	190	TABCC25227

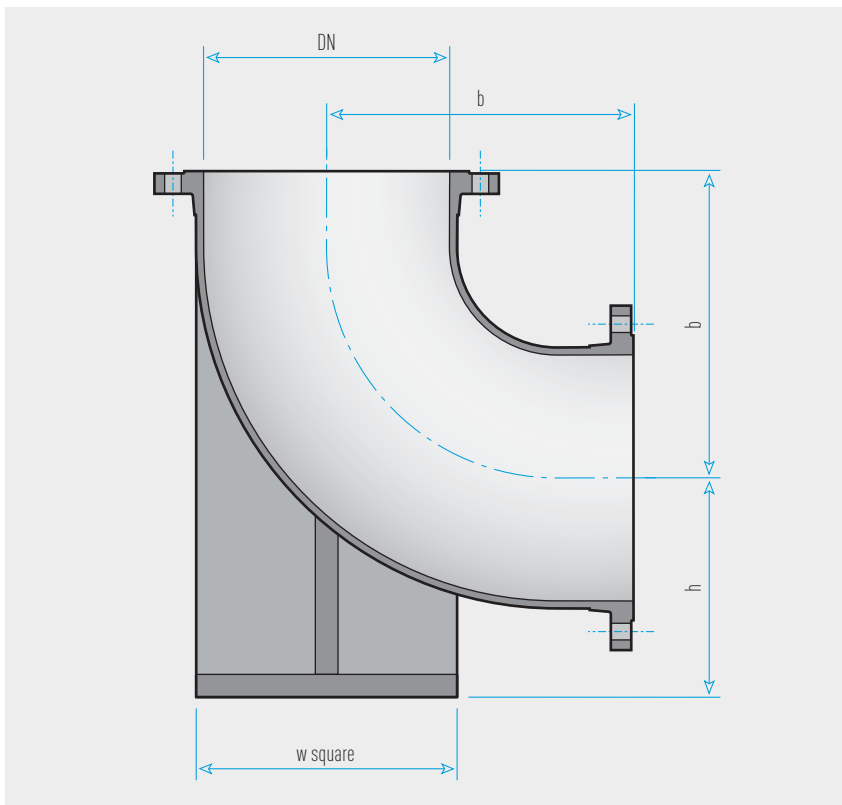
Nom. Size		Dimensions	
DN	dn	L ₃	PN16 Code
300	100	629	TABCC30107
300	150	508	TABCC30157
300	200	387	TABCC30207
300	225	324	TABCC30227
300	250	260	TABCC30257
375	200	584	TABCC37207
375	225	521	TABCC37227
375	250	457	TABCC37257
375	300	337	TABCC37307
450	250	660	TABCC45257
450	300	540	TABCC45307
450	375	356	TABCC45377

Nom. Size		Dimensions	
DN	dn	L ₃	PN16 Code
500	250	787	TABCC50257
500	300	667	TABCC50307
500	375	483	TABCC50377
500	450	305	TABCC50457
600	300	934	TABCC60307
600	375	749	TABCC60377
600	450	572	TABCC60457
600	500	444	TABCC60507
750	600	645	TABCC75607

For alternative sizes and pressure ratings, please contact your local Viadux representative.

FLANGED DUCTILE IRON FITTINGS

DUCKFOOT BENDS AND FLANGED BELLMOUTHS

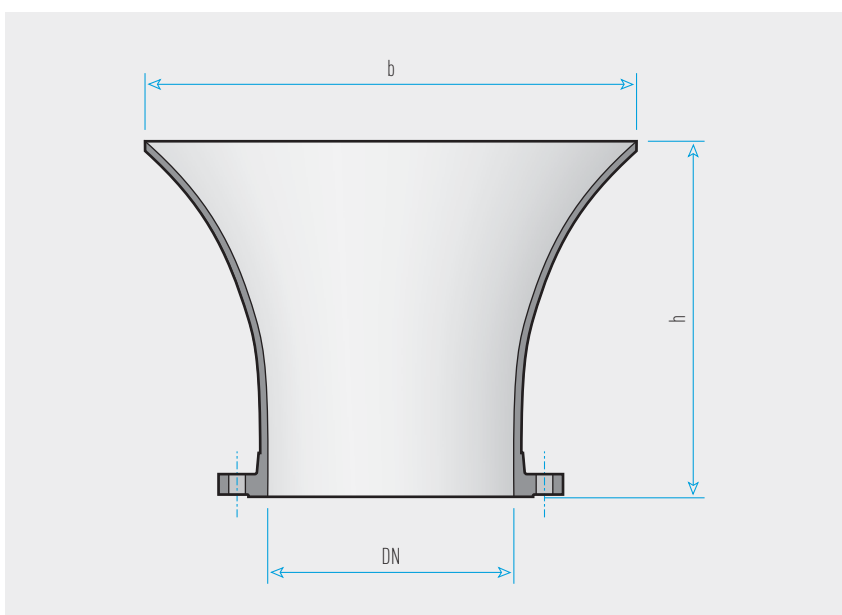


DUCKFOOT BENDS

Nom. Size DN	Dimensions			
	B	W	H	PN16 Code
80	229	165	114	BDBCC08907
100	241	185	133	BDACC10907
150	279	190	165	BDBCC15907
200	305	235	197	BDBCC20907
225	330	260	216	BDBCC22907
250	356	290	229	BDBCC25907
300	406	345	260	BDBCC30907
375	495	425	311	BDBCC37907
450	572	500	356	BDBCC45907
500	622	560	394	BDBCC50907
600	737	665	457	BDBCC60907

AUSLITE® fittings are highlighted in light blue

For alternative sizes and pressure ratings, please contact your local Viadux representative.



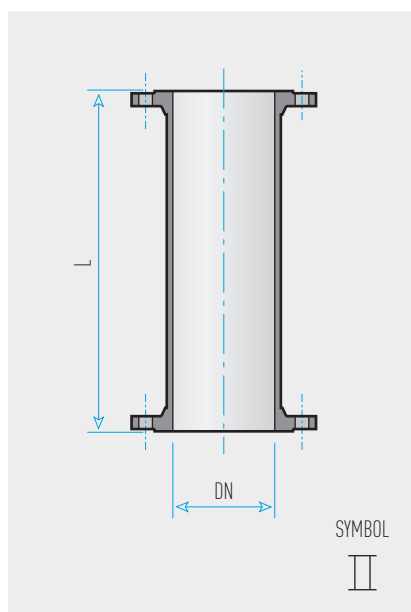
FLANGED BELLMOUTHS

Nom. Size DN	Dimensions		
	B	H	PN16 Code
100	200	152	BMBC010157
150	245	152	BMBC015157
200	374	305	BMBC020307
225	425	305	BMBC022307
250	445	380	BMBC025387
300	650	470	BMBC030477
375	755	525	BMBC037527
450	765	590	BMBC045597
500	770	650	BMBC050657
600	840	725	BMBC060727
750	1250	845	BMBC075847

For alternative sizes and pressure ratings, please contact your local Viadux representative.

FLANGED DUCTILE IRON FITTINGS

HYDRANT RISERS AND THRUST FLANGES



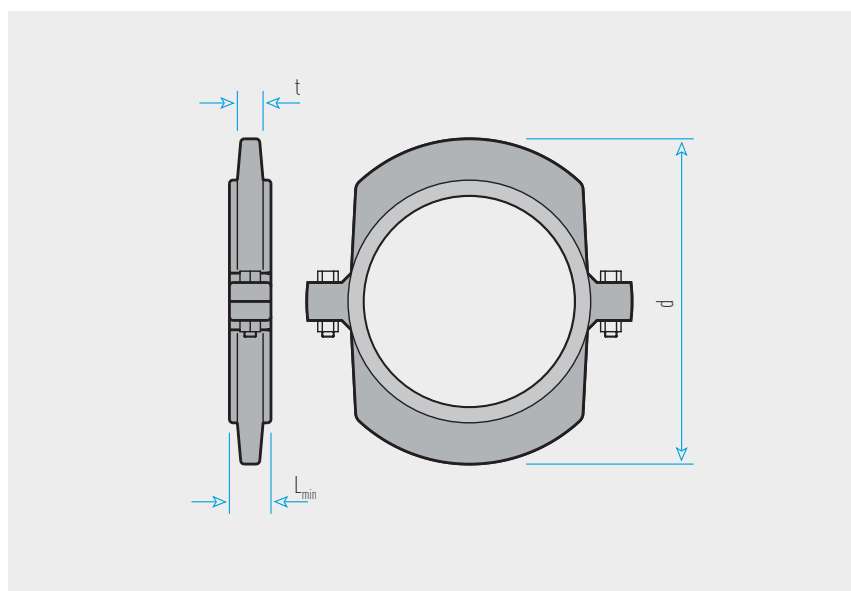
HYDRANT RISERS

DN 80	
L	PN16 Code
100	HRACC08107
150	HRACC08157
225	HRACC08227
300	HRACC08307
375	HRACC08377
450	HRACC08457
600	HRACC08607

AUSLITE® Hydrant Risers

HYDRANT RISERS

DN 100	
L	PN16 Code
100	HRACC10107
150	HRACC10157
225	HRACC10227
300	HRACC10307
375	HRACC10377
450	HRACC10457
500	HRACC10507
600	HRACC10607



THRUST FLANGES

Nom. Size	Dimensions			Ultimate Shear Force	
	DN	D	T	L _{min}	KN Code
	100	230	25	55	116 FUD0010008
	150	305	27	55	171 FUD0015008
	200	370	31	55	226 FUD0020008
	225	405	34	55	253 FUD0022008
	250	430	34	55	280 FUD0025008
	300	485	32	65	481 FUD0030008
	375	575	32	65	891 FUD0037008
	450	660	32	65	1061 FUD0045008
	500	730	35	70	1172 FUD0050008
	600	845	35	70	1397 FUD0060008
	750	1010	39	75	2881 FUD0075008

* The ultimate shear force is a theoretical value which assumes the mode of failure to be caused by shear of the circumferential pipe wall groove. The flange is assumed to remain bolted together and the shear area is calculated over a 45° circumferential plane with its root at the base of the pipe groove. Mating dimensions from AS/NZS 2280 are adopted.

Notes

1 It is recommended that puddle flanges are factory fitted onto pipes. AS/NZS 2280 calls for a machine groove to be cut into the outside surface of the pipe and the puddle flange machined accordingly to provide a nominal interference fit. An epoxy resin is utilised to prevent seepage along the outside surface of the pipe.

2 Lifting hole on DN 450 to DN 750 only.



DUCTILE IRON ANCILLARY

ACCOMMODATING AGGRESSIVE GROUND CONDITIONS



The behaviour of unprotected ductile iron pipe varies considerably depending on ground and soil conditions, and in almost all circumstances failure will not eventuate unless pitting has penetrated the full thickness of the pipe wall.

Aggressive ground conditions are defined as those which would lead to corrosion failure within a specified period of time after installation of the pipeline – say 50 years. It should be appreciated however that even in corrosive soil conditions, the majority of pipes will continue to perform satisfactorily for periods well in excess of 50 years (see 'Intelligent Pigging in the Water Industry' by P. H. Ferguson, ACA Annual Conference 1999).

In aggressive ground conditions pipe protection measures, such as the use of loose polyethylene sleeving or advanced factory applied coatings, such as zinc/aluminium alloy coatings, polyurethane coatings or extruded polyethylene coatings can prevent failures over the design life of pipelines.

DUCTILE IRON ANCILLARY

ACCOMMODATING AGGRESSIVE GROUND CONDITIONS

ASSESSMENT SYSTEMS

The resistance of buried ductile iron pipe to aggressive environments depends on a combination of the microbiological activity, chemistry, and presence of groundwater or moisture in the soil. What may be termed a benign soil is typically a sandy free draining soil of low salt content, in which all unprotected ductile iron pipes can be expected to perform well in excess of 100 years. By contrast, soils which are saturated with water for lengthy periods of time and are rich in organic material are considered aggressive, and can lead to the failure of some pipes in a period less than 50 years. Unlike grey cast iron pipe, however, failure in aggressive soils will not eventuate until pitting has penetrated the full thickness of the pipe wall.

As a guide, the following environments would normally require application of some form of external protection to a ductile iron pipeline in order to achieve satisfactory long term performance:

- Areas of water logged soil such as swamps and inter-tidal salt marshes
- Highly alkaline soils such as found in Australian deserts
- Cinder fill
- Areas of decaying vegetation
- Presence of stray electric direct currents

In addition to these environments, attention should be paid to the connection of copper service pipes to ductile iron pipes buried in moist coastal soils. In this situation, some form of insulation is required between the copper service pipe and ductile iron pipe to prevent galvanic action.

The Viadux Project Office is able to provide further information and can assist with detailed soil/site evaluation.

Over the years several systems have been developed for the assessment of soil corrosivity, based on empirical and theoretical conditions.



DUCTILE IRON ANCILLARY

ACCOMMODATING AGGRESSIVE GROUND CONDITIONS

'WERNER' SOIL RESISTIVITY TESTING

The Werner Resistivity Test is a cost effective and accurate method of ascertaining the natural intrinsic corrosivity of a soil.

To conduct the Werner test, four probes are placed in the ground along the pipeline route spaced at the depth of the pipeline. A soil resistance measurement is taken and converted to a soil resistivity result. The corrosiveness of the soil and suitability of various pipe coatings is then assessed.

Soil is essentially a mixture of minerals, water and air and acts as an electrolyte through which an electrical current can flow. When a pipe is buried in soil, the pipe surface is connected electrically by the soil. The strength of this electrical connection is greatly affected by the resistivity of the soil

– the lower the resistivity the easier is the current flow. Therefore the soil resistivity is directly related to its corrosiveness and is a comprehensive measure taking into consideration soil chemistry, water content and temperature in one quick and easy to measure parameter.

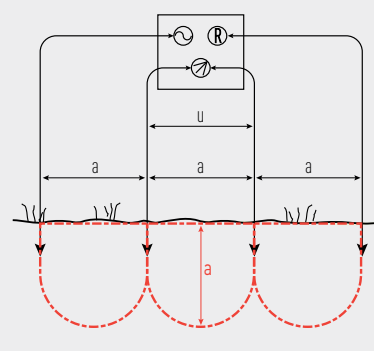
As a general guide, a soil with a resistivity of: 4000Ω.cm is high resistivity and low corrosiveness

200Ω.cm is low resistivity and highly corrosive

For comparison, sea water in sand has a resistivity of 100Ω.cm.

For coated DI Pipe products, a quick way of assessing soil suitability is to measure the resistivity of the soil which gives a good indication as to the aggressiveness.

LPR ELECTRODE AND CIRCUIT ARRANGEMENT



To perform the soil resistivity test, the four metal electrodes are placed in a straight line in the soil, spaced at equal intervals

a. The distance **a** corresponds to the depth you want to measure the soil resistivity. As a general rule the depth to be measured is at the base of the trench where the bottom of the pipe will be located.

A current is then passed through the electrodes and the resistivity is measured as the potential difference recorded between the two centre electrodes, **u**.

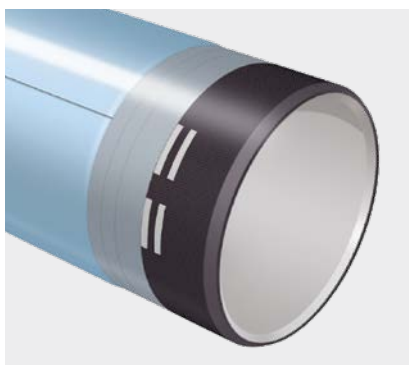
EXPOSURE CLASSIFICATION FOR ZNAL400 COATED DUCTILE IRON PIPES

Exposure conditions – resistivity Ohm.cm	Exposure classification (corrosivity) – soil conditions
> 2500	Non-corrosive
1500 – 2500	Mild
500 – 1500	Moderate
< 500	Severe



DUCTILE IRON ANCILLARY

POLYBOSS™ LOOSE POLYETHYLENE SLEEVING



POLYBOSS performance exceeds AS 3680 requirements to maximise performance of all system elements.

Application in accordance with AS 3681 assures consistent optimum configuration.

Training, assessment, accreditation and feedback provided by the CENTURY PLUS® Program for pipe layers maximises correctness of installations.

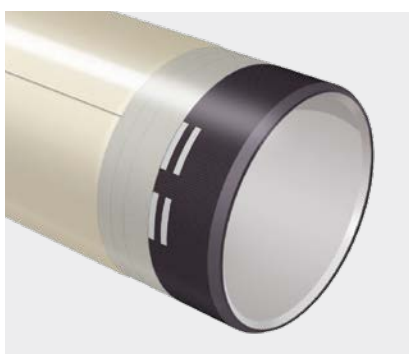
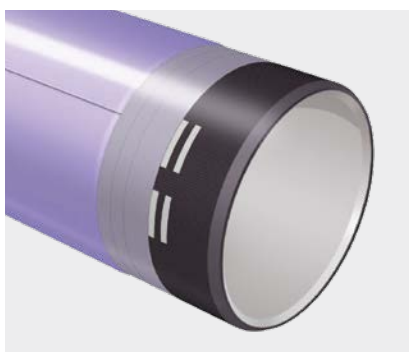
Fitness for purpose and assurance of performance with PIQS (Pipeline Installation Quality System) QA system of installation.

Proven, reliable protection system provides confidence in installations with over 30,000km applied in the last 30 years across Australia.

With extensive experiences here and overseas, it is expected that the effective service life of these systems will exceed 100 years.

DESCRIPTION

Loose polyethylene sleeving is used as an alternate means of providing external protection for ductile iron pipelines in aggressive soils, both in Australia and overseas. The technique was developed in the United States of America in the 1950's and has been used in Australia since 1966.



GENERAL APPLICATION

The need for POLYBOSS depends on the type of soil, class and diameter of ductile iron pipe, and the required service life of a pipeline.

In soils that are aggressive and where either the time or the cost of soil assessment is prohibitive, POLYBOSS is the quick and cost effective answer, giving peace of mind and an assurance of long-term performance.

The Werner Soil Resistivity Test is a cost effective and accurate method of ascertaining the natural intrinsic corrosivity of a soil. Resistance measurements are taken then converted to soil resistivity values.

TECHNICAL DATA

Colours

Blue - Water intended for human consumption
Lilac - Re-use water
Cream - Sewage

Nominal Thickness

Minimum 200um

Ultimate Tensile Strength

Minimum 50N on weathered film

Elongation

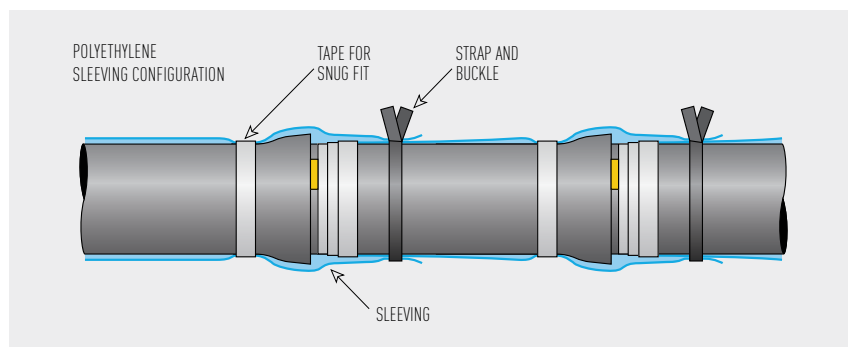
Minimum 100% on weathered film

Impact Resistance

Greater than 900g on weathered film

Tear Resistance

Greater than 25N on weathered film.



DUCTILE IRON ANCILLARY

POLYBOSS™ LOOSE POLYETHYLENE SLEEVING

POLYBOSS REQUIREMENTS

Ductile Iron Pipelines are strong and tough. Properly applied sleeving makes sure this strength and toughness is not reduced by corrosion and increases the likelihood that the pipeline will be still carrying water in 100 years and more.

FOR 5.7 METRE EFFECTIVE LAYING LENGTH OF PIPE

Nom. Size	Lay Flat Width	Pipes Per Roll	Pipeline Per Roll	Weight Per Roll	Tape* Required Per Pipe	Strap Length Required Per Joint	Tape* Required Per Fitting Average M
DN	MM		M	KG	M	M	
80	350	30	172.5	24.6	3.6	1.0	3
100	350	30	172.5	24.6	3.6	1.0	3
150	425	25	143.8	24.9	5.0	1.1	5
200	525	20	115.0	24.6	6.6	1.4	6
225	635	16	92.0	23.8	7.5	1.5	6
250	635	16	92.0	23.8	8.3	1.6	7
300	725	14	80.5	23.8	9.9	1.7	8
375	875	12	69.0	24.6	11.6	2.1	10
450	1100	9	51.8	23.2	13.8	2.2	12
500	1100	9	51.8	23.2	14.9	2.4	13
600	1270	8	48.0	24.8	17.6	2.8	15
750	1500	6	36.0	21.9	21.4	3.3	18

*Metres per roll of PVC packaging tape = 75m

POLYBOSS BLUE SLEEVING (ROLL)

Code	Description	Sleeves
ZPBSM10EL575	100 PB BLUE	30
ZPBSM15EL575	150 PB BLUE	25
ZPBSM20EL575	200 PB BLUE	20
ZPBSM22EL575	225/250 PB BLUE	16
ZPBSM30EL575	300 PB BLUE	14
ZPBSM37EL575	375 PB BLUE	12
ZPBSM45EL575	450/500 PB BLUE	9
ZPBSM60EL600	600 PB BLUE	8
ZPBSM75EL600	750 PB BLUE	6

POLYBOSS LILAC SLEEVING (ROLL)

Code	Description	Sleeves
ZPBSML10EL575	100 PB LILAC	30
ZPBSML15EL575	150 PB LILAC	25
ZPBSML20EL575	200 PB LILAC	20
ZPBSML22EL575	225/250 PB LILAC	16
ZPBSML30EL575	300 PB LILAC	14
ZPBSML37EL575	375 PB LILAC	12
ZPBSML45EL575	450/500 PB LILAC	9
ZPBSML60EL600	600 PB LILAC	8
ZPBSML75EL600	750 PB LILAC	6

POLYBOSS CREAM SLEEVING (ROLL)

Code	Description	Sleeves
ZPBSMC10EL575	100 PB CREAM	30
ZPBSMC15EL575	150 PB CREAM	25
ZPBSMC20EL575	200 PB CREAM	20
ZPBSMC22EL575	225/250 PB CREAM	16
ZPBSMC30EL575	300 PB CREAM	14
ZPBSMC37EL575	375 PB CREAM	12
ZPBSMC45EL575	450/500 PB CREAM	9
ZPBSMC60EL600	600 PB CREAM	8
ZPBSMC75EL600	750 PB CREAM	6

DUCTILE IRON ANCILLARY

CENTURY PLUS DI INSTALLATION TRAINING FOR THE AUSTRALIAN WATER INDUSTRY

OVERVIEW

This training package supports the attainment of skills and knowledge required for field and operational staff with responsibility for ensuring that water distribution assets are constructed and installed in a safe and timely manner.

Viadux delivers this training package in all states & territories of Australia.

The course has been developed to provide the correct information for pipe layers to correctly install Ductile Iron pipelines used for water, sewage and irrigation across Australia.

Viadux delivers a practical program where participants are required to demonstrate competency in handling and laying of DI pipelines to accepted industry standards.

DELIVERY

Courses are either delivered at main venues operated by Viadux or Reece or alternatively at remote locations for major pipeline projects.

PRE-REQUISITES

There are no pre-requisites for entry to this course.

OBJECTIVE

To provide pipelayers with a sound basis of efficient and competent methods of installation and reinstatement of pipeline coatings and linings to relevant manufacturers and industry standards.

OUTCOMES

1. Plan and prepare for construction & installation
2. Construct and install distribution assets, pipes and associated fittings
3. Confirm work quality
4. Finalise work

Successful completion of the training workshop and assessment tasks will result in Certification in competency to "Construct and Install Ductile Iron Pipeline Systems".

WHO SHOULD ATTEND

Personnel involved in the construction and pipeline industry. The program is designed for general pipelayers, leading hands and supervisors, as well as for engineering personnel in order to gain general pipeline construction & installation knowledge.

COURSE LENGTH

One full day (8am – 4pm) of facilitated training including a theoretical and a practical assessment.

Please be on site at 7:45am for a 8am start.

COST

Please note a minimum of 10 people are required for a full course to run. Cost includes all program handouts/manuals.

No. Of Attendees	Cost Per Attendee
1 or 2	\$490
3+	\$420
Full Course	Contact Us

All prices are in Australian Dollars and are exclusive of GST.

Attendees must be from the same organisation to qualify for the multiple attendee discount.

ADDITIONAL COSTS

Re-assessments and refresher training (metro): AUD\$120.00 plus GST per person. For non-metro reassessments or refresher training, please contact Viadux.

Reissue of certificates and/or registration cards: AUD\$80.00 plus GST.

OFF-SITE FACILITY REQUIREMENTS

For all off-site training, a whiteboard, chairs & tables and electricity need to be supplied by the venue. Please advise us if you cannot supply these items by contacting the Training Manager on 0429 926 488.

COMPETENCY BASED TRAINING & ASSESSMENT

Competency-based training (CBT) is an approach to vocational education and training that places emphasis on what a person can do in the workplace as a result of a combination of hands-on experience and completing a structured training program.

A student is competent when they are able to apply their knowledge and skills to successfully complete specific work activities in a range of situations and working environments.

ASSESSMENTS

Assessment is the process of collecting evidence and making a judgement on whether competency has been achieved.

The purpose of assessment is to confirm that a student can perform to the standard expected in the workplace, as expressed in the relevant endorsed industry or enterprise competency standards.

For this workshop, competency is assessed through:

- Successful completion of a theoretical assessment exercise using the Ductile Iron Pipe Handling & Installation Manual; and
- Successful demonstration of practical understanding and application of handling and laying particular pipe materials; and
- Evidence from learning activities.

On successful completion of the unit, a student will be assessed as either Competent and will gain certification; else if not successful - Not-Competent.

DUCTILE IRON ANCILLARY

CENTURY PLUS DI INSTALLATION TRAINING FOR THE AUSTRALIAN WATER INDUSTRY

ASSESSMENT POLICY

Students have the right to appeal against an assessment if they are deemed not competent.

All students have access to reassessment on appeal. Please refer to the Complaints & Appeals Policy further in this document on how to appeal.

A re-assessment charge of AUD\$100.00 plus GST (metro) per person applies. For non-metro areas, please contact the Training Manager.

REFRESHER TRAINING

It is recommended but not mandatory, that students undertake a refresher training course, in Construct and Install Ductile Iron Pipeline Systems, on a 5 yearly basis. Refresher training consists of attendance of a full workshop and undertake the theoretical and practical assessment as conducted per the full course.

A reassessment charge of AUD\$120.00 plus GST (metro) per person applies.

For non-metro areas, please contact the Training Manager.

SPECIAL NEEDS (ACCESS & EQUITY)

Viadux recognises that there will be students with special needs, a range of levels of education and diverse learning backgrounds.

Viadux is committed to providing an inclusive learning environment.

Viadux shall ensure all students have an equal opportunity to learn and better themselves. As such, aid will be provided to those who require additional help in these areas, so as to maximize their ability to undertake their training effectively. [e.g. In case of literacy & numeracy issues, the trainer will organise a verbal questioning of the theoretical assessment as a one-on-one session on the day, if time permits, or alternatively by means of a one-on-one session the following day.]

Students seeking assistance are required to contact the Training Manager prior to the course, on 0429 926 488.

PRIVACY PRINCIPLES & POLICY

In accordance with our Privacy Policy, Viadux is committed to protecting the privacy and personal information of all our students. A copy of the privacy policy is available by contacting the Training Manager on 0429 926 488.

PURPOSE

Viadux only collects necessary student information for the purpose of managing training records and issuing refresher reminders.

USE AND DISCLOSURE

Except as required under Australian law, student information will not be disclosed to a third party without the consent, by means of a written request, from the student or their employer only.

SECURITY

Viadux ensures that student's personal information is maintained by keeping student records and personal information secure.

Student records are maintained in secure electronic files which are password protected and only accessible by authorised staff. Paper based documents are stored in locked cabinets.

RESOLVING PRIVACY ISSUES

If a student or individual wishes to raise or discuss any issues relating to privacy issues, these can be done in a number of ways:

- Contact the Training Manager (contact details provided in this form)
- Contact the Viadux Human Resources Manager (contact details available upon request)

COMPLAINTS & APPEALS POLICY

Viadux Training strives to ensure that each student is satisfied with their learning experience and outcome. In the event that this is not the case, students have access to the Viadux Training Department complaints and appeals process. The Client Appeals & Complaints Procedure ensures that fair and equitable processes are implemented for any complaints or

appeals against the Training Department. Students have the right to appeal against an assessment. The Client Appeals & Complaints procedure and Complaints form are available by contacting the Training Manager on 0429 926 488.

STUDENTS RIGHTS & OBLIGATIONS

As a student of Training Department you have the following rights and obligations/responsibilities:

- Be treated fairly and with respect by other course members and staff;
- Learn in an environment free of discrimination and harassment;
- Learn in a supportive and safe environment which includes assistance with any language, literacy or numeracy concerns you may have. Extra assistance will be provided to you if required. Students seeking assistance are required to contact the Training Coordinator prior to the course, or alternatively the Training Administrator – Tel: 07 3712 3601. Refer to Special Needs section.
- Study a program which meets current industry standards and assessment requirements;
- Have your work assessed as promptly as possible and to receive feedback;
- Have personal records kept private and made available only to authorised users; Refer to Privacy Principles.
- Appeal results and access the review process in accordance with principles; Refer to Complaints & Appeals Policy.
- Ensure all course participants receive equal opportunities and gain the maximum from their time with us, these rules apply to all people that attend any of our sessions. Any person(s) whom displays dysfunctional or disruptive behaviour may be asked to leave the session and / or the course.



DUCTILE IRON ANCILLARY

SUREFLOW READYTAP® CONNECTOR – PRE-TAPPED CONNECTOR FOR HOUSE SERVICE CONNECTIONS



Allows for complete installation of household services at the time of pipeline construction

Avoids the need for future disturbances of the main and its environment therefore eliminating the risk of pipeline damage

Avoids inefficient and costly excavation of pipeline to connect household services after installation

Avoids the undesirable practice of drilling holes in new pipes

Pre-tapped outlets eliminates the need for drilling and tapping on-site

No nuts and bolts to slow down construction

Single outlet or four outlet options

Unused outlets are fitted with removable DR brass plugs to allow use of 1, 2, 3 or 4 ports

Ductile Iron fitting for high strength and impact resistance

Thermal bonded polymeric coating to AS/NZS 4158

Utilises TYTON® or TYTON-LOK® jointing system.



GENERAL APPLICATION

The READYTAP system provides for complete installation of house services at the time of pipeline construction minimising the need for future drilling and tapping.

TECHNICAL DATA

Size Range

DN 100 – DN 300

Allowable Operating Pressure

1600 kPa

Maximum Temperature

40°C

End Connections

TYTON Socket

Standards

AS/NZS 2280 Ductile iron pipes and fittings

AS/NZS 4020 Testing of products for use in contact with drinking water

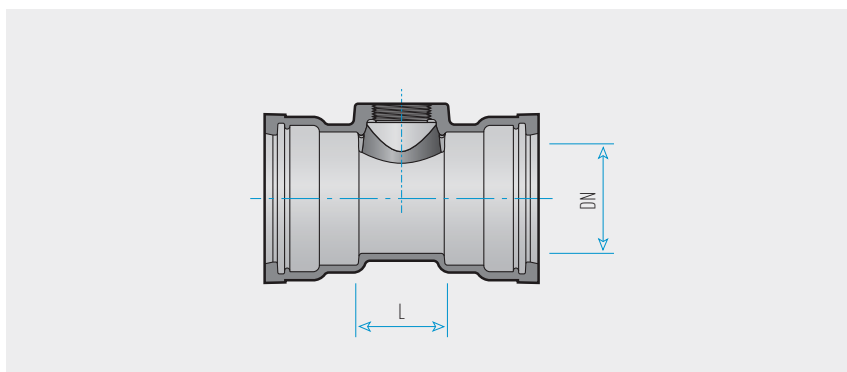
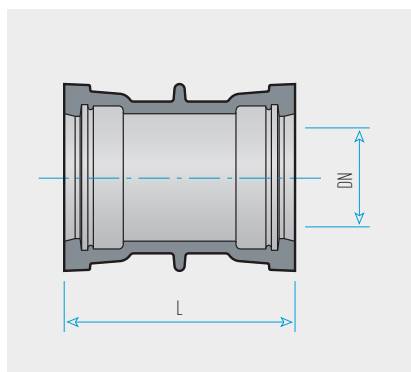
Certifications

ISC ISO 9001 Certified
Registration No. QAC/R61/0412

ISC AS 2280 Certified Product
Licence No. PRD/R61/0412.

DUCTILE IRON ANCILLARY

SUREFLOW TAPPED CONNECTORS AND COLLARS



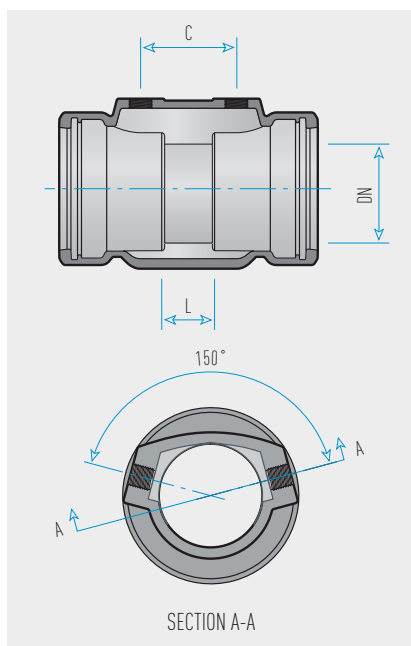
SLIPTYT® COLLARS

Nom. Size	Dimensions		
DN	L	PN	Code
100	230	35	CNBTT10007
150	230	35	CNBTT15007

Normal application: Boltless coupling.

SOCKET-SOCKET TAPPED CONNECTOR

Nom. Size	Dimensions				
DN	L	Outlet Size	No. of Outlets	Code	Description
100	88	1¼"	1	CNBTT10007032	100X1 1/4" SC READYTAP 1/TAP FC
100	88	1½"	1	CNBTT10007040	100X1 1/2" SC READYTAP 1/TAP FC
100	88	2"	1	CNBTT10007050	100X2" SC READYTAP 1/TAP FC / PN16 AS2280
150	88	1¼"	1	CNBTT15007032	150X1 1/4" SC READYTAP 1/TAP FC / PN16 AS2280
150	88	1½"	1	CNBTT15007040	150X1 1/2" SC READYTAP 1/TAP FC
150	88	2"	1	CNBTT15007050	150X2" SC READYTAP 1/TAP FC / PN16 AS2280
200	88	2"	1	CNBTT20007050	200X2" SC READYTAP 1/TAP FC
225	88	2"	1	CNBTT22007050	225X2" SC READYTAP 1/TAP FC
250	88	2"	1	CNBTT25007050	250X2" SC READYTAP 1/TAP FC
300	88	2"	1	CNBTT30007050	300X2" SC READYTAP 1/TAP FC / PN16 AS2280



READYTAP SOCKET-SOCKET

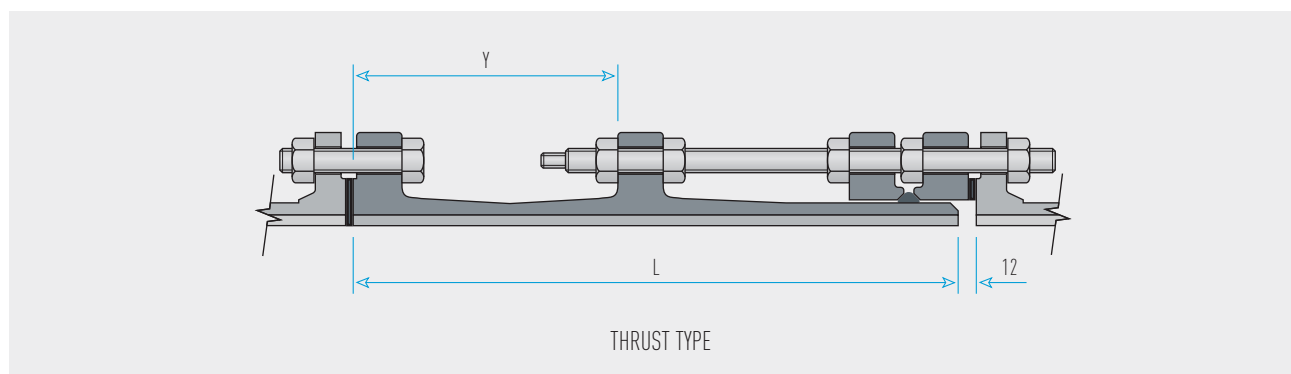
Nom. Size	Dimensions					
DN	L	C	Outlet Size	No. of Outlets	Code	Description
100	50	100	¾"	4	CNATT10007020	100X3/4" AUSLITE READYTAP FC 4 / PN16 AS2280
100	50	100	1"	2	CNATT10027025	100X1" AUSLITE READYTAP FC 2 TAP
150	50	100	¾"	4	CNATT15007020	150X3/4" AUSLITE READYTAP FC 4 TAP / PN16 AS2280
150	50	100	1"	2	CNATT15027025	150X1" AUSLITE READYTAP FC 2 TAP

Normal application: Allows direct tapping into a pipeline at time of construction

AUSLITE® fittings are highlighted in light blue

DUCTILE IRON ANCILLARY

SUREFLOW DISMANTLING JOINTS THRUST TYPE



THRUST TYPE PN16

Nom. Size DN	Dimensions		
	L	Y	Code
100	400	175	JBDC010S7
150	400	175	JBDC015S7
200	400	175	JBDC020S7
225	400	175	JBDC022S7
250	400	175	JBDC025S7
300	400	175	JBDC030S7
375	600	260	JBDC037S7
450	600	260	JBDC045S7
500	600	260	JBDC050S7
600	600	260	JBDC060S7
750	600	260	JBDC075S7

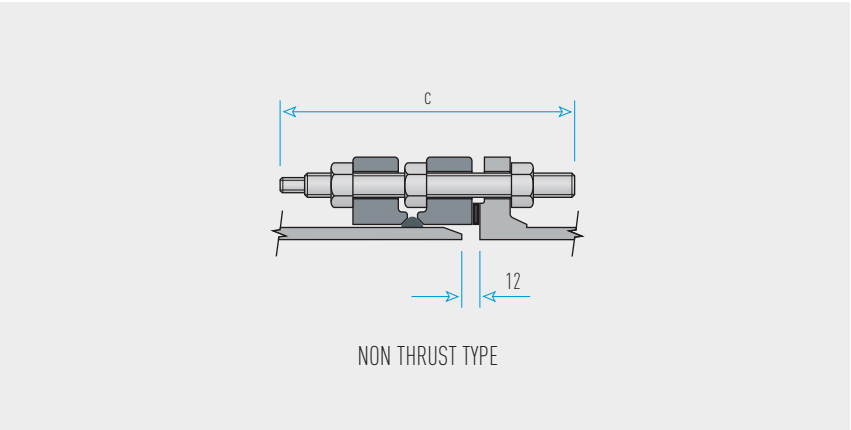
THRUST TYPE PN35

Nom. Size DN	Dimensions		
	L	Y	Code
100	400	175	JBDF010S7
150	400	175	JBDF015S7
200	400	175	JBDF020S7
225	500	220	JBDF022S7
250	500	220	JBDF025S7
300	500	220	JBDF030S7
375	600	260	JBDF037S7
450	600	260	JBDF045S7
500	600	260	JBDF050S7
600	700	300	JBDF060S7
750	700	300	JBDF075S7

Normal application: Enables removal of flanged valves, etc, after initial installation.

DUCTILE IRON ANCILLARY

SUREFLOW DISMANTLING JOINTS NON THRUST TYPE



NON THRUST TYPE PN16

Nom. Size		
DN	c	Code
100	195	JDDC010S7
150	195	JDDC015S7
200	195	JDDC020S7
225	195	JDDC022S7
250	195	JDDC025S7
300	195	JDDC030S7
375	275	JDDC037S7
450	275	JDDC045S7
500	275	JDDC050S7
600	275	JDDC060S7
750	275	JDDC075S7

NON THRUST TYPE PN35

Nom. Size		
DN	c	Code
100	195	JDDF010S7
150	195	JDDF015S7
200	195	JDDF020S7
225	275	JDDF022S7
250	275	JDDF025S7
300	275	JDDF030S7
375	275	JDDF037S7
450	275	JDDF045S7
500	275	JDDF050S7
600	330	JDDF060S7

Notes

1. Pipes should be axially aligned to ensure zero bending moment in the dismantling joint and uniform circumferential assembly gaps and tolerances.
2. The groove housing the sealing rubber ring should have a uniform circumferential gap and the rubber ring should be visible.
3. The flange compressing the rubber ring should be tightened to close the gap leaving a space of 3-5mm between flanges without 'pinching' the rubber ring.
4. The flanges should not be tightened such that they touch.
5. The dismantling joint and pipes should remain axially aligned after installation to ensure leak tight performance.
6. To satisfy 5 it is recommended that, where dismantling joint's are used for buried installations, they be inspected under pressure conditions prior to backfill.
7. When high pressure non thrust dismantling joints are used on non-machined pipe spigots the allowable operating pressure is reduced to 2100kPa.



DUCTILE IRON ANCILLARY

QUALITY ASSURANCE

Viadux regards quality as essential to the success of its business. From detailed metallurgical analysis of the molten metal to tight control of coating and lining applications, procedures have been developed to ensure consistent high quality of each individual pipe and fitting. Additionally, every pipe and fitting is pressure tested in accordance with AS/NZS 2280.

The “quality-is-key” principle applies to every stage of the manufacturing process and includes:

- Validation of suppliers and/or their materials
- Continuous assessment of quality systems
- On-going monitoring of product quality
- Technical support prior to and after sales
- On-time delivery of products and supporting information.



COMPLIANCE WITH STANDARDS

Viadux products comply with and are tested according to relevant Australian, British, European and International Standards. All pipes and fittings are manufactured under the quality management system ISO 9001, 2000.

All Viadux TYTON ductile iron pipes and fittings for water and waste-water applications conform to the latest version of AS/NZS 2280. Development of pipes and fittings can take place across Viadux and our suppliers. As such, third party accreditation is always achieved with the relevant auditing body e.g., BSI in the UK, Bureau Veritas (BV) in France, MPA-NRW in Germany and SAI Global in Australia. All of these certification bodies are also independently accredited, for example BSI is accredited by UKAS.

In addition, all materials in contact with potable water used by Viadux Water Network Solutions comply with AS/NZS 4020 and Watermark Certification.

POSITIVELY APPRAISED: WSAA RECOMMENDED

The Water Services Association of Australia National Product Appraisals program is a voluntary scheme introduced by the WSAA to provide a single coordinated appraisal of a product's conformity to the needs of the urban water businesses.

The program is designed for manufacturers, suppliers, importers, distributors or agents who have a product that may be suitable for use by the water industry and is a process of assessment and review of the design, performance and suitability of a product for use in water and wastewater infrastructure at a nominated performance level.

Included is a review of the quality management system under which the product is manufactured and supplied. Applicants are provided with a report and recommendations resulting from the assessment and review. Final authorisation, approval or acceptance for use of the product lies with the individual water businesses.

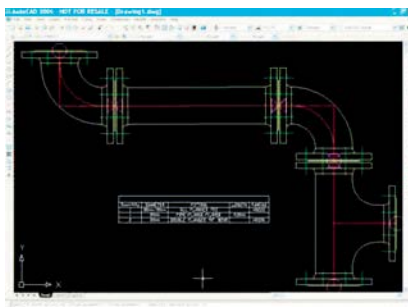
Ductile iron pipes are covered by WSAA PA 1920.

Ductile iron fittings are covered by WSAA PA 10/16 Part 2.



DUCTILE IRON ANCILLARY

TECHNICAL SERVICES



FULL PROJECT LIFE SUPPORT

To ensure cost effective solutions Viadux offers full project life support from early design advice, soil surveys and drawing take-offs to on-site support and installation certification for contractors and engineers.

PIPE SPEC DESIGN SOFTWARE

DI Design Tools have been developed by Viadux to assist engineers in the design and specification of pipeline schemes. The web based software features five analytical tools that can be utilised throughout the planning and design stages of the project:

- Allowable Make Up Volume for Field Hydro Test
- Pipe Spanning Supports
- Economic Pipeline Sizing
- Water Hammer
- TYTON-LOK Restrained Joint Pipeline System
- Buried Pipeline Structural Design
- Flow Calculator
- TYTON AS2280 PIPE DATA Generator

To find the on-line design tools head to www.viadux.com.au

TYTONCAD FILES

To assist our clients in drafting high performance TYTON® Series ductile iron pipeline systems, Viadux has developed a family of '.dwg' files which can be used by a range of Computer Aided Drafting software packages. These files comprise fittings dimensioned to the requirements of AS/NZS 2280 ductile iron pipes and fittings. CAD files increase quality, turnaround, security and reliability and have proven themselves invaluable over the years. A family of 3D fittings is in development together with a suite of valve files dimensioned to AS/NZS 2638 Gate valves for waterworks purposes.

To obtain a copy of TYTONCAD files, free of charge, contact the Viadux Project Office.

DRAWING TAKE-OFF SERVICE

A team of experienced civil estimators is available to carry out drawing take-offs, providing a detailed list of products required. The service includes optimisation of design to ensure that the most cost-effective solution is achieved.

Viadux has the facility to accept drawings in electronic format. Please consider the following instructions for use of this facility:

- All drawings to be compatible with AutoCAD2002/2004
- All drawings sent to relate only to pipework for off-take
- All drawings to be 'clean', i.e., drawings to fill the whole screen in a reasonable and printable size

To avoid delays in dealing with requests, please ensure that the relevant sections of the specification are sent at the same time as the drawings, either by mail or e-mail.



VALVES



Gate Valves (Resilient, Metal)	2.02
Check Valves	2.23
Butterfly Valves	2.33
Hydrant Valves	2.47
Knife Gate Valves	2.55
Air Valves	2.57
Valve Ancillary	2.65

GATE VALVES

GATE VALVES OVERVIEW

ON-OFF GATE VALVES DESIGNED FOR THE PRIMARY FUNCTION OF FLOW ISOLATION

Gate valves feature a sliding partition that can be closed to block flow or opened fully for maximum flow.

Gate valves are used to isolate sections of pipelines, branch off-takes and pieces of equipment. They are on-off valves designed for the primary function of flow isolation and should only be operated in the fully closed or fully open positions. The sliding motion of the gate is effected by a rotating screw, known as a spindle or stem.

Sluice valves are gate valves and prior to the introduction of fusion bonded coatings they were of a heavier construction to endure buried service applications, whereas gate valves were associated with above ground applications. Today's modern coating systems remove the need for distinction between buried and above ground applications and therefore no need for sluice valve and gate valve distinction.



There is a growing industry trend to use gate valves in flow regulating and scour applications. When gate valves are used in these applications it is essential that they are operated in the fully opened position and any regulation of flow controlled by other means, such as orifice plates.

Orifice plates choke the flow and reduce head loss across the gate valve thus preventing valve damage.

Gate valves should not be used for throttling or adjusting flow as associated turbulence and high velocity can lead to vibration, chattering and fretting wear, as well as cavitation damage of the valve and downstream pipeline.

When used as a control or modulating valve this can also lead to these problems, the installation of a secondary valve for isolation purposes is recommended.

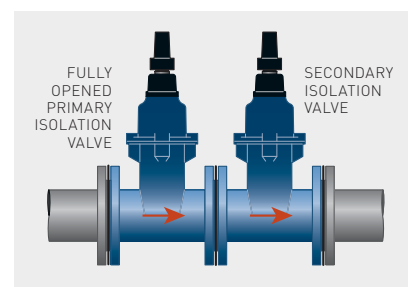
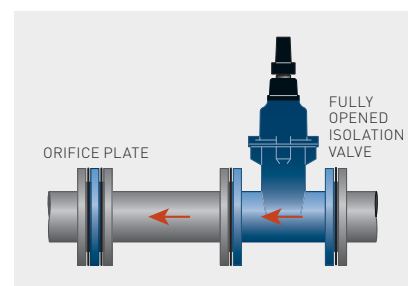
Secondary isolation valve used for control or modulating purposes. Primary isolation valve used for isolation purposes only.

When throttling is necessary, globe or butterfly valves should be used.

THROTTLING

When gate valves are fully opened their head loss coefficient K_L is in order of 0.12.

Note. The flow through the valve is not directly proportional to the number of turns of the valve spindle.



CERTIFICATIONS

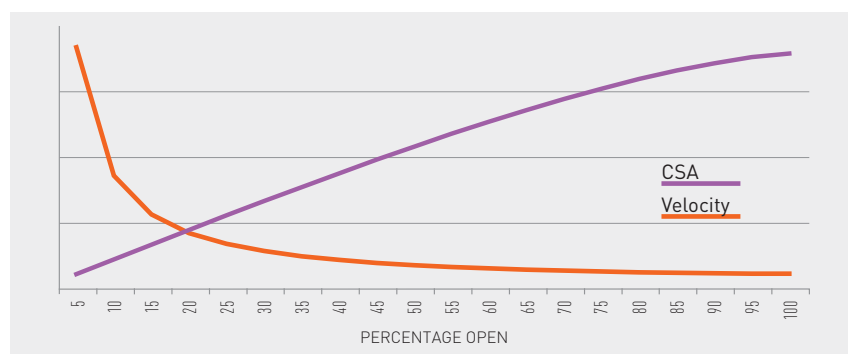
AS2638.1 - Metal Seated Gate Valves
AS2638.2 - Resilient Seated Gate Valves

Certified Product - AS2638.1/AS2638.2

WaterMark Level 1 Certification



CSA - Velocity VS Percentage Open





GATE VALVES OVERVIEW

DESIGN OPTIONS – METAL SEATED OR RESILIENT SEATED

There are two design options for Gate Valves, Metal Seated and Resilient Seated. These two options can also be split into two categories Non-Rising Spindle (Inside Screw) and Rising Spindle (Outside Screw).

Non-Rising Spindle Gate valves are suitable for above ground and underground installations but are used predominately in underground installations because spindle movement is rotational only and additional cover is not required to accommodate the opened valve.

Rising Spindle Gate valves are predominately used for above ground and valve pit installations. They are commonly used in fire service applications where a positive indication of the open or closed position is necessary.

The SUREFLOW® range of Gate Valves employs an articulated gate design where the wedge nut is located separately within a housing in the gate. This articulated gate design has key advantages over systems where the stem nut is integral with the gate. It overcomes the risk of damage through direct pressure on the stem, stem nut or other components during operation or transitional throttling.

The use of gate valves for end of line isolation is not recommended. If the valves are to be fitted to the end of a line we recommend the use of a blank flange or plug to ensure isolation of the line.



METAL SEATED GATE VALVES

Metal seated gate valves comprise a metal gate, typically wedge shaped and made of gunmetal for valves up to and including 200mm and ductile iron with gunmetal sealing rings for larger sizes.

The gate and body are fitted with metal sealing rings by threading or plastic deformation to prevent loosening in service. A continuous seal is provided behind the rings to prevent corrosion.

The valve is closed by appropriate rotation of the spindle which drives the gate down between the sealing rings. Sealing is effected by the mating of the sealing rings. Sometimes the sealing surfaces can become damaged from the impact of foreign debris or from foreign debris being lodged between the sealing faces.

Throttling of a metal seated gate valve is the most common cause of damage to the sealing faces. Repair of the sealing surfaces is not a simple operation and a factory refit is normally necessary.

In metal seated gate valves, maximum torque on the spindle is associated with initial opening or 'cracking' of the valve. Properly operated and closed, these valves can effect a drop tight seal but leakage rates of 2-10 ml/min are acceptable under AS 2638.1.



RESILIENT SEATED GATE VALVES

Resilient seated gate valves contain an EPDM rubber encapsulated ductile iron gate. The valve is closed by appropriate rotation of the spindle which drives the gate against the cast internal sealing surfaces of the valve body. These surfaces are normally coated with fusion bonded polymers such as epoxy or nylon.

Sealing is achieved by the compression of the EPDM rubber coating on the gate against the valve body. In resilient seated gate valves, maximum torque of the spindle is associated with closing the valve to overcome the effects of friction and compression of the EPDM rubber coating. Properly operated and closed, these valves can effect a drop tight seal.

The gate is body guided throughout the major portion of its closure and secondary guides become effective near the end of its travel to ensure correct seat alignment.

RESILIENT SEATED VALVES

RESILIENT SEATED VALVES

RESILIENT SEATED FLANGED



SUREFLOW FLANGED PN16 - DN80-DN600

Code	Size (MM)	Closing	H1	H2	L1	W- Width	Weight (kg)
3703784	80	ACC	324	397	203	190	13
3703787		CC					
3703795	100	ACC	347	430	229	218	16
3703791		CC					
3703798	150	ACC	429	572	267	285	34
3703789		CC					
3703713	200	ACC	563	726	292	332	52
3703788		CC					
3703714	225	ACC	643	828	305	370	87
3703717		CC					
3703782	250	ACC	656	858	330	405	93
3703786		CC					
3703793	300	ACC	739	967	356	455	126
3703796		CC					
3703800	375	ACC	917	1192	381	550	227
3703801		CC					
3703802	400	ACC	930	1220	406	580	237
3703803		CC					
1014781	450	ACC	1147	1467	432	860	480
1014780		CC					
1014797	500	ACC	1175	1527	457	860	510
1014796		CC					
1014805	600	ACC	1314	1726	508	969	720
1014804		CC					

FLANGED PN25 - DN80-DN600

Code	Size (MM)	Closing	H1	L1	W- Width	Weight (kg)
3703819	80	ACC	350	203	200	22
1008671		CC				
3703821	100	ACC	380	229	235	30
3703822		CC				
3703823	150	ACC	485	267	300	52
3703824		CC				
1008672	200	ACC	595	292	360	80
1008673		CC				
1008674	250	ACC	680	330	425	132
1008675		CC				
3704068	300	ACC	755	356	485	180
3704069		CC				

RESILIENT SEATED GATE VALVE

RESILIENT SEATED SOCKET, SPIGOT AND FLANGED-SOCKET



SUREFLOW SOCKETED PN16 - DN80-DN300

Code	Size (MM)	Closing	H1	H2	L2	W- Width	Weight (kg)
3704080	80	ACC	324	393	94	174	14
1008676		CC					
3703881	100	ACC	347	465	102	195	18
3703882		CC					
3703883	150	ACC	429	574	123	275	32
3703884		CC					
3704041	200	ACC	563	707	153	335	54
3704042		CC					
3704043	225	ACC	643	801	186	422	84
3704044		CC					
3704045	250	ACC	656	828	186	422	88
3704046		CC					
3704047	300	ACC	739	942	207	452	118
3704048		CC					
3704049	375	ACC	917	1166	230	564	224
3704051		CC					

SUREFLOW SPIGOTED PN16 - DN80-DN300

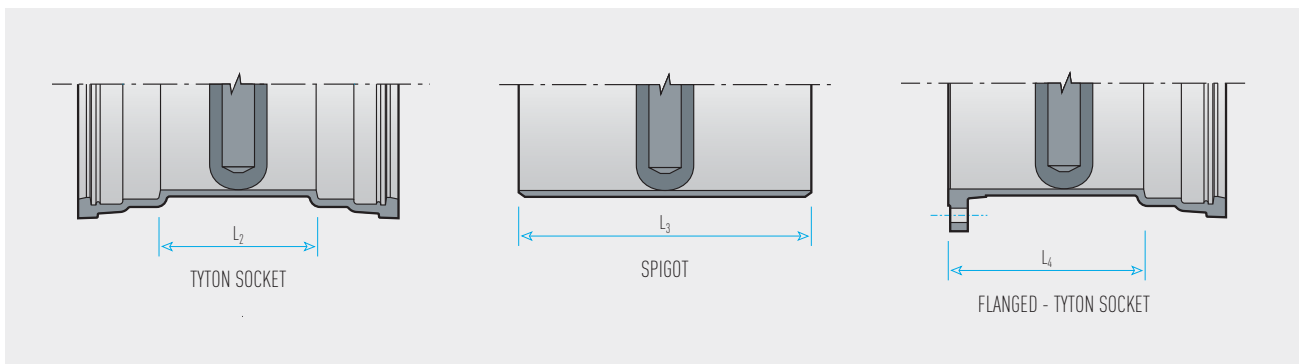
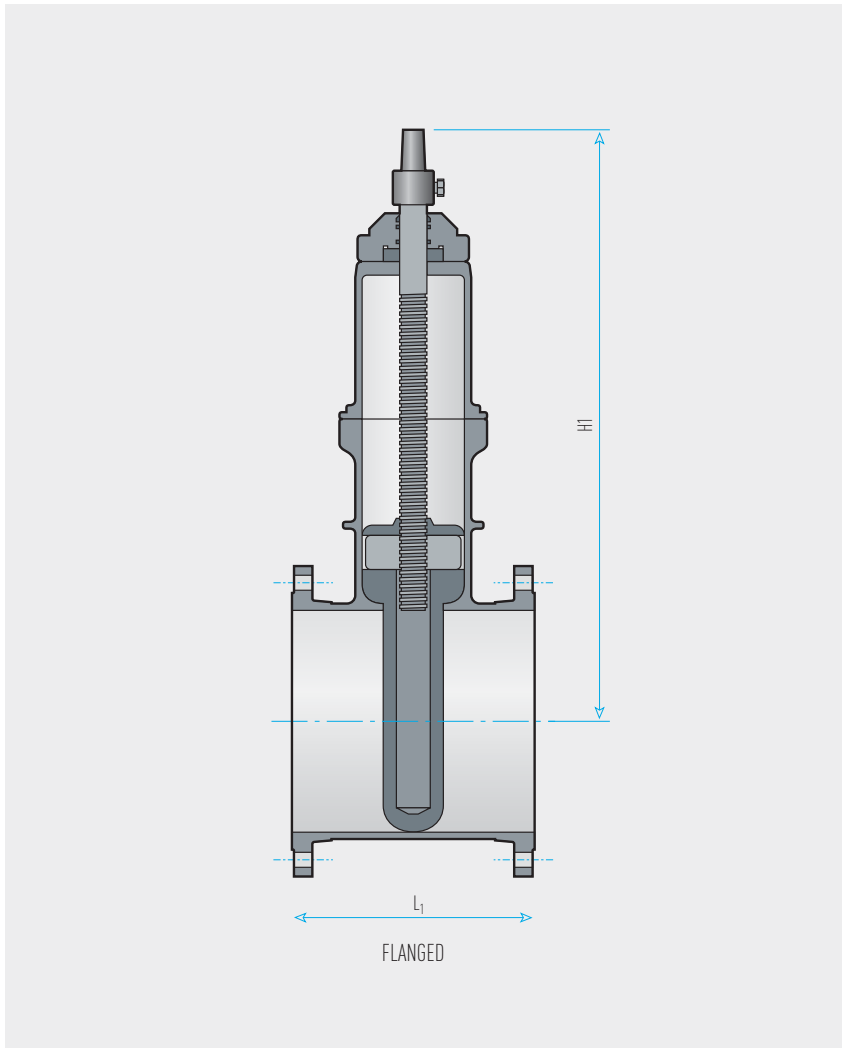
Code	Size (MM)	Closing	H1	H2	L3	W- Width	Weight (kg)
3704071	80	ACC	324	378	280	174	13
3704073		CC					
3704074	100	ACC	347	417	320	195	16
3704076		CC					
3704078	150	ACC	429	526	360	275	34
3704079		CC					
3704034	200	ACC	563	686	420	335	55
3704036		CC					
3704038	225	ACC	643	791	448	422	88
3704039		CC					
3704040	250	ACC	656	808	448	422	92
3704029		CC					
3704031	300	ACC	739	930	460	452	123
3704053		CC					

SUREFLOW FLANGE-SOCKET PN16 - DN100-DN150

Code	Size (MM)	Closing	H1	H2	L4	W- Width	Weight (kg)
3703804	100	ACC	347	432	207	174	16
3703806		CC					
3703807	150	ACC	429	563	233	195	32
3703808		CC					

RESILIENT SEATED GATE VALVE

RESILIENT SEATED SOCKET, SPIGOT AND FLANGED-SOCKET



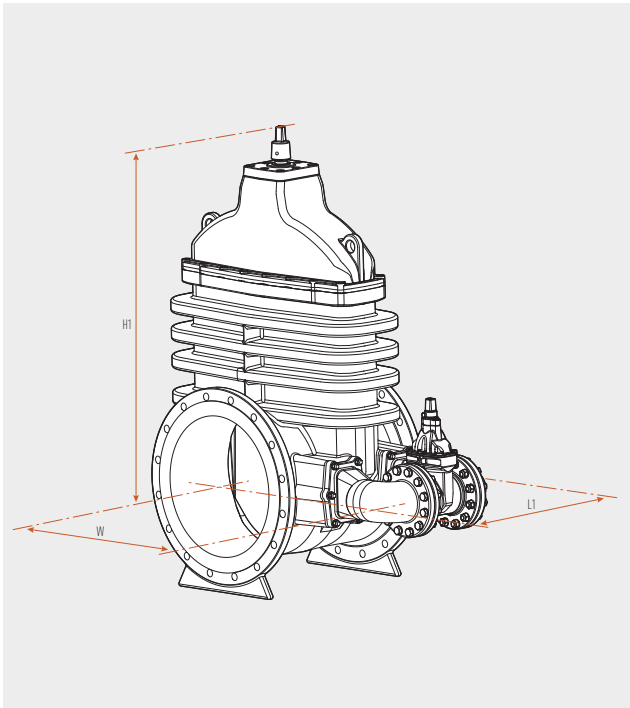
RESILIENT SEATED GATE VALVE

RESILIENT SEATED INTEGRAL BYPASS



SUREFLOW INTEGRAL BYPASS PN16 - DN450-DN600

Code	Size	Bypass Size	Closing	H1	H2	L1	W- Width	Weight (kg)
1014785	450	100	ACC	1147	1467	660	1130	565
1014784			CC					
1014789	450	150	ACC	1147	1467	660	1170	582
1014788			CC					
1014799	500	100	ACC	1175	1527	710	1130	605
1014798			CC					
1014801	500	150	ACC	1175	1527	710	1170	622
1014800			CC					
1014809	600	100	ACC	1314	1726	785	1250	830
1014808			CC					
1014813	600	150	ACC	1314	1726	785	1290	847
1014812			CC					



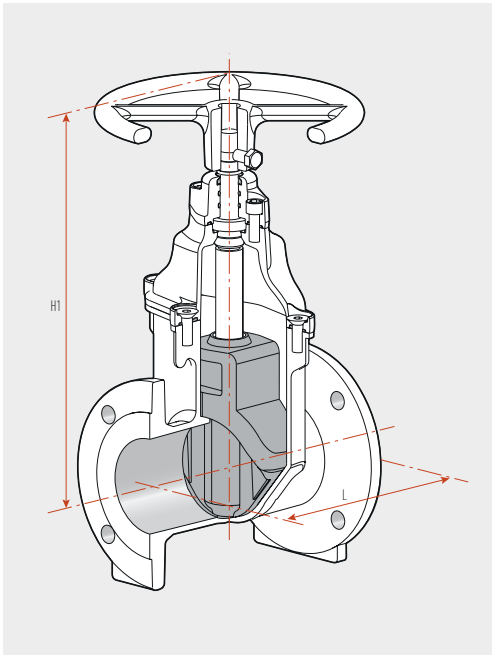
RESILIENT SEATED GATE VALVE

RESILIENT SEATED FLANGED HANDWHEEL FOR ABOVE GROUND USE



SUREFLOW HANDWHEEL - FLANGED PN16 - DN80-DN300

Code	Size (MM)	Closing	H1	H2	L1	W- Width	Weight (kg)
1008677	80	ACC	317	390	203	190	15
1008678		CC					
1008679	100	ACC	340	423	229	218	18
1008680		CC					
1008681	150	ACC	423	565	267	285	34
1008682		CC					
1008683	200	ACC	517	682	292	332	56
1008684		CC					
1008685	225	ACC	604	789	305	370	94
1008686		CC					
1008687	250	ACC	617	819	330	405	100
1008688		CC					
1008689	300	ACC	700	927	356	455	133
1008690		CC					



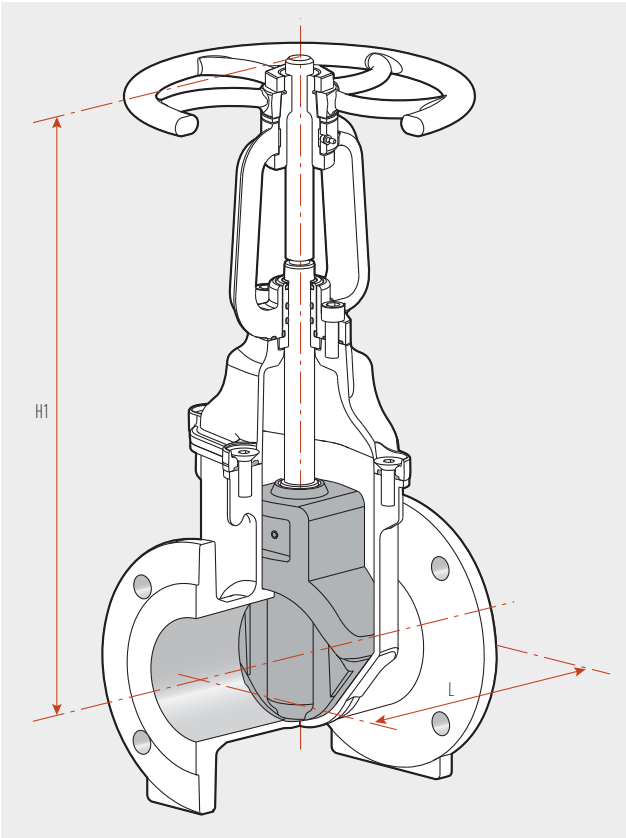
RESILIENT SEATED GATE VALVE

RESILIENT SEATED FLANGED OS&Y FOR ABOVE GROUND USE



SUREFLOW RISING SPINDLE (OS&Y) - FLANGED TABLE E PN16 - DN80-DN300

Code	Size (MM)	Closing	H1	H2	L1	W- Width	Weight (kg)
1005610	80	CC	454	527	203	174	19
1005615	100	CC	473	556	229	195	22
1005620	150	CC	671	813	267	275	46
1005625	200	CC	761	925	292	335	64
1008670	225	CC	957	1141	305	422	112
1005630	250	CC	970	1171	330	422	118
1002420	300	CC	1052	1279	356	452	150





METAL SEATED GATE VALVES

METAL SEATED GATE VALVES

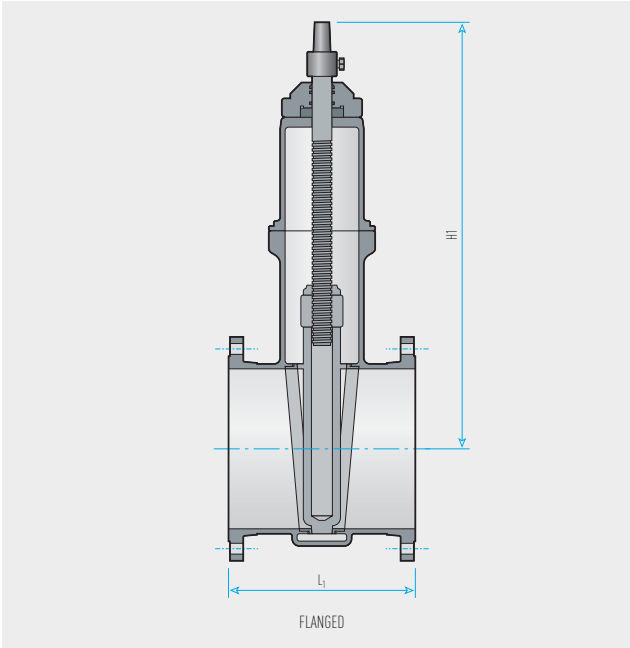
METAL SEATED FLANGED



SUREFLOW FLANGED PN35 - DN80-DN600

Code	Size (MM)	Closing	H1	H2	L1	W-Width	Weight (kg)
3703479	80	ACC	367	470	280	209	18
3703482		CC					
3703488	100	ACC	402	517	305	231	30
3703492		CC					
3703493	150	ACC	502	655	330	321	50
3703494		CC					
3703495	200	ACC	610	795	380	393	130
3703496		CC					
3703497	225	ACC	649	852	405	429	160
3707744		CC					
3703420	250	ACC	723	938	420	461	180
3703422		CC					
3703423	300	ACC	810	1055	430	560	250
3703424		CC					
3703425	375	ACC	960	1250	610	685	450
3703431		CC					
3703438	450	ACC	1145	1483	660	855	750
3703444		CC					
3703447	500	ACC	1290	1658	710	970	1000
3707749		CC					
3707751	600	ACC	1467	1892	785	1160	1400
3707753		CC					

Note: Sizes above DN600 available upon request, subject to customer requirements.



METAL SEATED GATE VALVES

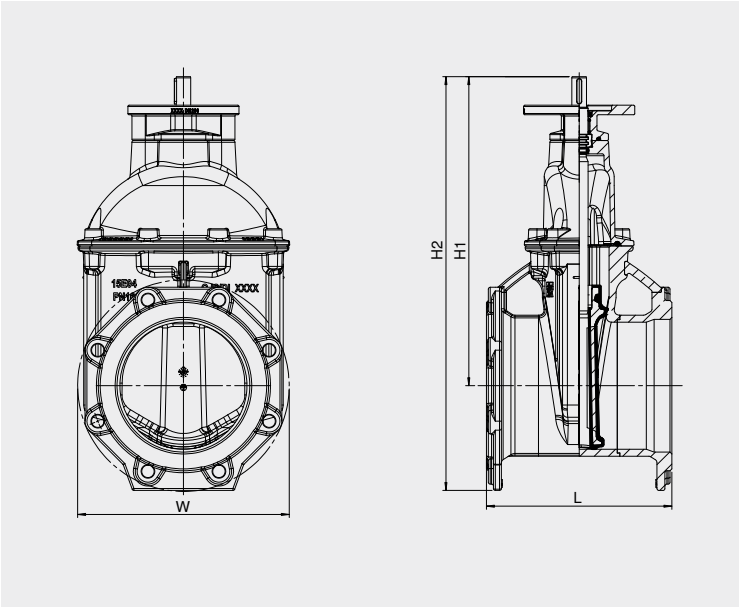
METAL SEATED FLANGED ISO MOUNT



SUREFLOW ISO FLANGED PN16 - DN80-DN600

Code	Size	Closing	H1	H2	L1	W-Width	Weight (kg)
3707947	80	ACC	304	404	203	185	19
3707946		CC					
3707949	100	ACC	336	446	229	215	26
3707948		100					
3707951	150	ACC	415	558	267	280	45
3707950		150					
3707953	200	ACC	517	687	292	335	77
3707952		200					
3707955	225	ACC	575	760	305	370	99
3707954		100					
3707957	250	ACC	588	790	330	405	107
3707956		100					
3707959	300	ACC	670	897	356	455	149
3707958		100					
3707881	375	ACC	983	1283	381	608	288
3707880		100					
3707893	400	ACC	983	1283	381	608	288
3707892		100					
3707911	450	ACC	1113	1438	432	674	375
3707910		100					
3707923	500	ACC	1186	1551	457	734	472
3707922		100					
3707935	600	ACC	1347	1787	508	836	629
3707934		100					

Note: Shoe and Channel Variants also available upon request



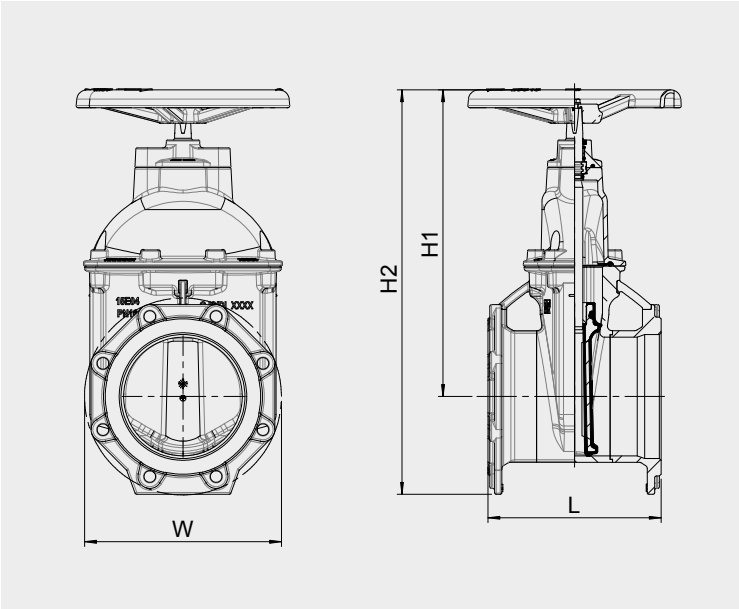
METAL SEATED GATE VALVES

METAL SEATED FLANGED HANDWHEEL



SUREFLOW HANDWHEEL FLANGED PN16 - DN80-DN600

Code	Size	Closing	H1	H2	L1	W-Width	Weight (kg)
3707961	80	ACC	338	438	203	280	21
3707960		CC					
3707963	100	ACC	371	481	229	320	29
3707962		100					
3707965	150	ACC	460	602	267	360	50
3707964		150					
3707967	200	ACC	555	725	292	500	84
3707966		200					
3707969	225	ACC	618	803	305	500	106
3707968		100					
3707971	250	ACC	631	833	330	500	114
3707970		100					
3707973	300	ACC	708	936	356	500	156
3707972		100					
3707883	375	ACC	983	1283	381	608	288
3707882		100					
3707895	400	ACC	983	1283	381	608	288
3707894		100					
3707913	450	ACC	1113	1438	432	674	375
3707912		100					
3707925	500	ACC	1186	1551	457	734	472
3707924		100					
3707937	600	ACC	1347	1787	508	836	629
3707936		100					



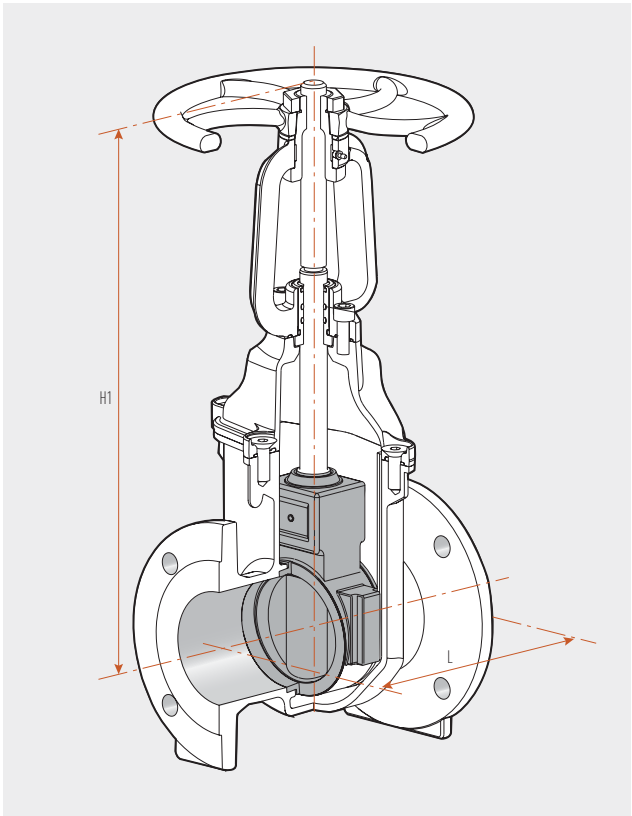
METAL SEATED GATE VALVES

METAL SEATED FLANGED FIGURE 601



SUREFLOW FLANGED PN16 - FIG 601 DN80-DN300

Code	Size (MM)	Closing	H1	H2	L1	W-Width	Weight (kg)
VGDEE08600C	80	CC	425	518	203	290	20
VGDEE10600C	100	CC	483	591	229	231	27
VGDEE15600C	150	CC	630	770	267	321	48
VGDEE20600C	200	CC	722	890	292	393	83
VGDEE25600C	250	CC	940	1143	330	461	122
VGDEE30600C	300	CC	1080	1308	356	560	178



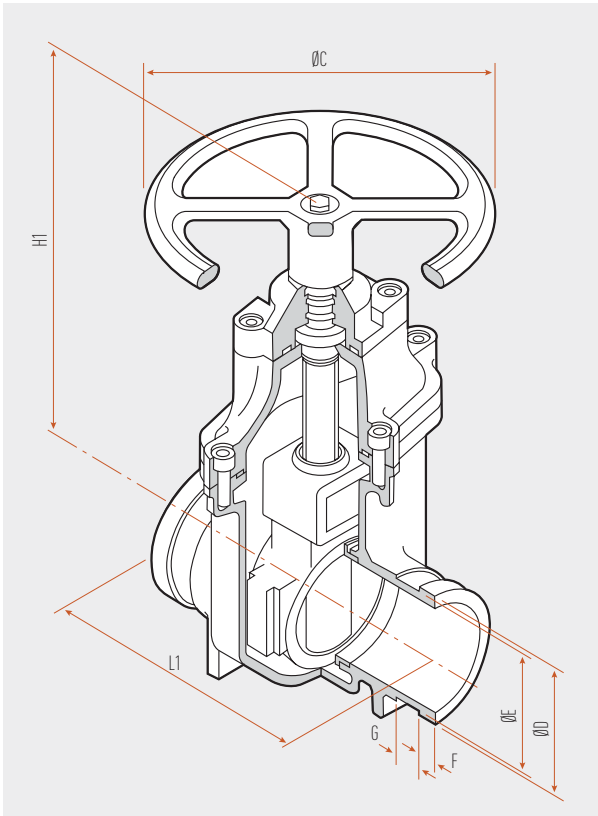
METAL SEATED GATE VALVES

METAL SEATED SHOULDERED END



SUREFLOW FLANGED PN35 - SHOULDERED END DN100-DN150

Code	Size (MM)	Closing	H1	H2	L1	W-Width	Weight (kg)
3703418	100	CC	375	470	229	280	27
3703419	150	CC	465	585	267	280	47



DIMENSIONS

DN	Height H1	Length L1	Handwheel ØC	ØD	ØE	F	G
100	400	230	275	122.2	114.3	17.5	24.5
150	490	270	275	175.1	166.1	17.5	38.5

SUREFLOW® METAL SEATED GATE VALVE

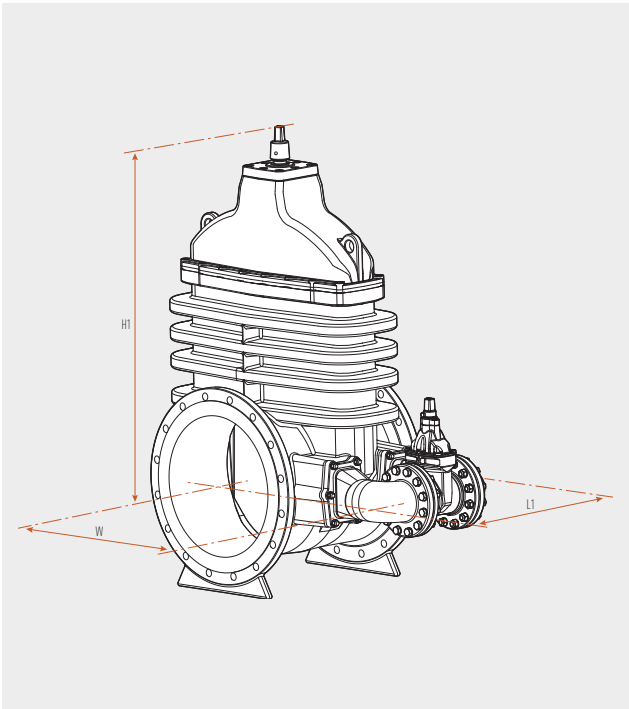
METAL SEATED INTEGRAL BYPASS



SUREFLOW INTEGRAL BYPASS PN35 - DN375-DN600

Code	Size (MM)	Bypass Size	Closing	H1	H2	L1	W-Width	Weight (kg)
3707745	375	80	ACC	1070	1360	610	995	650
3707746			CC					
3707747	450	100	ACC	1145	1495	660	1200	740
3703446			CC					
3707748	500	150	ACC	1280	1680	710	1421	1200
3707750			CC					
3707752	600	150	ACC	1470	1920	785	1590	1700
3707754			CC					

Note: Sizes above DN600 available upon request, subject to customer requirements.





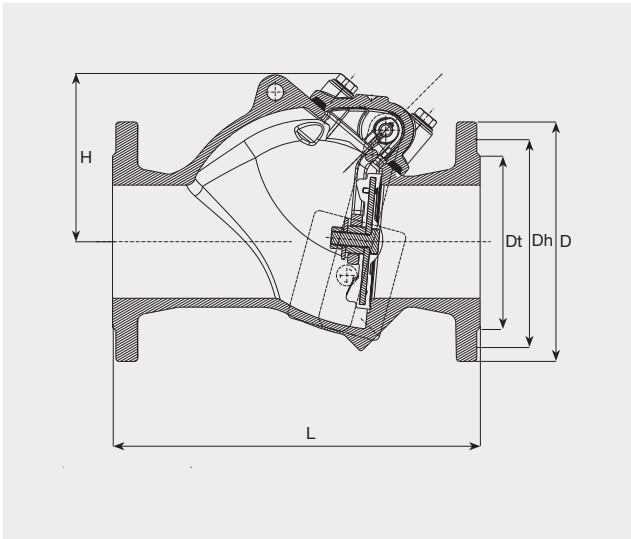
CHECK VALVES

SWING CHECK VALVES

RESILIENT SEATED FREE ACTING & COUNTERWEIGHT

FEATURES

Swing Check Valves are suitable for water and wastewater applications. Used to prevent backflow within a pipeline.



TECHNICAL DATA

- Size Range**
DN 100 and DN 150
- Allowable Operating Pressures**
1600kPa
- Maximum Temperature**
40°C
- Minimum Flow**
Disc fully open–1.4m/s
- End Connections**
Flanged to AS 4087 Fig B5
- Standards**
AS 4794 Non-return valves
– Swing check and tilting disc
- Certifications**
AS/NZS 4020 Testing of products for use
in contact with drinking water

SUREFLOW FREE ACTING CHECK VALVES - DN80-DN300

Code	Size	H1	H2	L1	Weight (kg)
1007699	80	140	233	260	16
1007715	100	150	258	330	23
1007717	150	195	335	410	49
1007719	200	230	398	540	80
1007776	250	270	473	640	200
1007778	300	300	528	700	249

SUREFLOW FREE ACTING CHECK VALVES - DN80-DN300

Code	Size	H1	H2	L1	Weight (kg)
1007714	80	140	233	260	16
1007929	100	150	258	330	23
1007873	150	195	335	410	49
1007775	200	230	398	540	80
1007777	250	270	473	640	200
1007779	300	300	528	700	249

RSSC SWING CHECK VALVES

RESILIENT SEATED SWING CHECK VALVE ACCORDING TO AS4794

FEATURES

- Idea for use on water and sewerage.
- Designed to prevent backflow in horizontal or vertical pipelines.
- Angled disc seat holds the disc open avoiding fluctuations.
- Designed and tested in accordance with AS4794.
- Body and bonnet are made of high grade ductile iron to AS1831.
- Fusion Bonded Epoxy coating to AS4158 internally and externally providing longer life and excellent corrosion resistance.
- Full bore design gives non-clogging performance and reduces head loss.
- The NBR encapsulated disc prevents corrosion and provides drip tight closure with long life.
- Extended shaft design allows installation of limit switches and counterweight.
- Bonnet allows for easy access for cleaning and maintenance without having to remove valve from pipeline.
- Lifting lugs and support feet for easy handling.
- Applicable to water & waste water applications - desalination, pumping, industrial processing, irrigation and general industries.

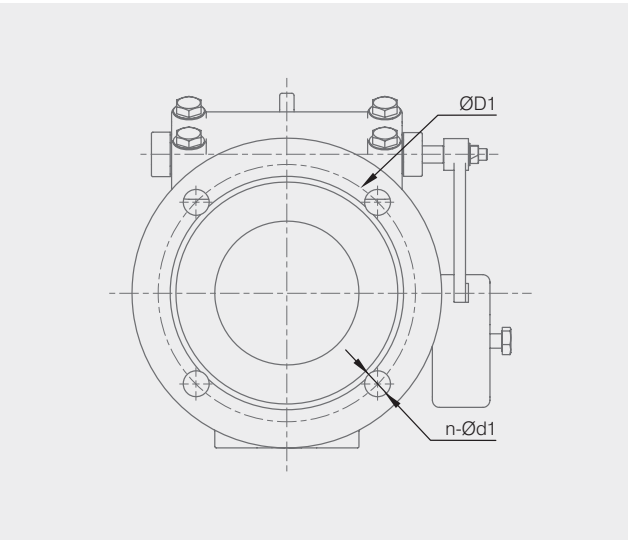
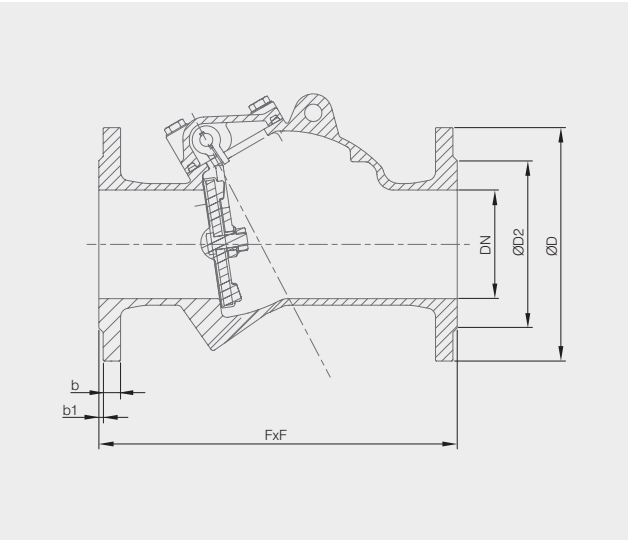
TECHNICAL DATA

- Size Range**
DN80 - DN375
- Pressure Classes**
PN16
- Face to Face**
According to AS4794
- Temperature Range**
0°C to 60°C
- Flange Connection**
AS4087 B5 (Table D)
- Coating**
AS4158
- Certifications**
Approved: According to: AS4794
- Options**
 - Alternative flange connections available on request.
 - With or without lever & weight.
 - Open/closed mechanical switches
 - No flow proximity sensors



RSSC SWING CHECK VALVES

RESILIENT SEATED SWING CHECK VALVE ACCORDING TO AS4794



DIMENSIONS (MM)

RSSC DN 80 – DN 375								Weight (KG)
DN	Fx F	B	B1	ØD	ØD1	ØD2	N-ØD1	
80	260	18	3	185	146	122	4-18	20
100	330	20	3	215	178	154	4-18	28
150	410	23	3	280	235	211	8-18	56
200	540	23	3	335	292	268	8-18	92
250	640	24	3	405	356	328	8-22	164
300	700	30	4	455	406	378	12-22	242
375	820	34	4	550	495	463	12-26	410

Conforms to AS4794

RSFC SWING CHECK VALVES

NON SLAM RESILIENT SEATED CHECK VALVE ACCORDING TO AS 4794

FEATURES

- Non slam.
- 100% sealing.
- Non clogging.
- Lower power consumption due to lower headloss.
- Will not flutter like traditional swing check valves.
- One moulded part (no maintenance).
- No counterweight needed.
- Meets AS4794 (material & dimensional standards).

Certifications

Approved: AS4020 According to: AS4794



TECHNICAL DATA

Size Range

DN80-DN600

Pressure Classes

PN16

Face to Face

According to AS4794 (excluding 500mm)

Temperature Range

1°C to +80° (higher on request)

Flange Connection

AS4087, Class 16

Pressure Testing

To AS4794

Coating

AS4020 approved epoxy.

FLANGED - PN16 - DN80 - DN600

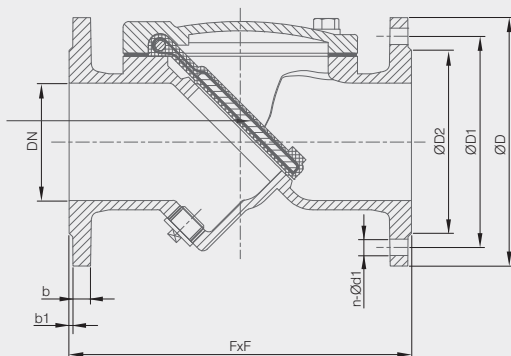
Code	Size (MM)	Description
VCAVF080FA	80	80MM PN16 F/A REFLUX VALVE
VCAVF100FA	100	100MM PN16 F/A REFLUX VALVE
VCAVF150FA	150	150MM PN16 F/A REFLUX VALVE
VCAVF200FA	200	200MM PN16 F/A REFLUX VALVE
VCAVF225FA	225	225MM PN16 F/A REFLUX VALVE
VCAVF250FA	250	250MM PN16 F/A REFLUX VALVE
VCAVF300FA	300	300MM PN16 F/A REFLUX VALVE
VCAVF375FA	375	375MM PN16 F/A REFLUX VALVE
VCAVF400FA	400	400MM PN16 F/A REFLUX VALVE
VCAVF450FA	450	450MM PN16 F/A REFLUX VALVE
VCAVF500FA	500	500MM PN16 F/A REFLUX VALVE
VCAVF600FA	600	600MM PN16 F/A REFLUX VALVE

DIMENSIONS (MM)

RSFC DN 50 - DN 600

DN	FxF	B	B1	ØD	ØD1	ØD2	N-ØD1	Weight (KG)
80	260	18	3	185	146	122	4-18	15
100	330	20	3	215	178	154	4-18	21
150	410	23	3	280	235	211	8-18	40
200	540	23	3	335	292	268	8-18	76
225	610	24	3	370	324	300	8-18	93
250	640	24	3	405	356	328	8-22	122
300	700	30	4	455	406	378	12-22	218
375	820	33	4	550	495	463	12-26	247
400	914	33	4	580	521	489	12-26	311
450	970	33	4	640	584	552	12-26	416
500	978	35	4	705	641	609	16-26	520
600	1220	42	5	825	756	720	16-30	790

Conforms to AS4794



ACB-100 SERIES BALL CHECK VALVES

DN 32 – DN 500 BALL CHECK VALVE DUCTILE IRON PN 16 SUITABLE FOR DUCTILE IRON BODY

TECHNICAL DATA

Size RangeDN50-DN500 (Flanged)
DN32-DN65 (Threaded)**Pressure Classes**

PN16

Face to Face

EN-558-1 series 48 (DIN3202 F6)

Temperature Range

10°C to +80°C

Threaded Connection:

BSP

TECHNICAL DATA

Flange Drilling

AS4087 CL16

Leakage Tests

EN12266

Coating

Fusion Bonded Epoxy

Minimum Backpressure

0.3-0.5bar



Flanged Connection



Threaded Connection (BSP)

FLANGED - PN16 – DN80 - DN500

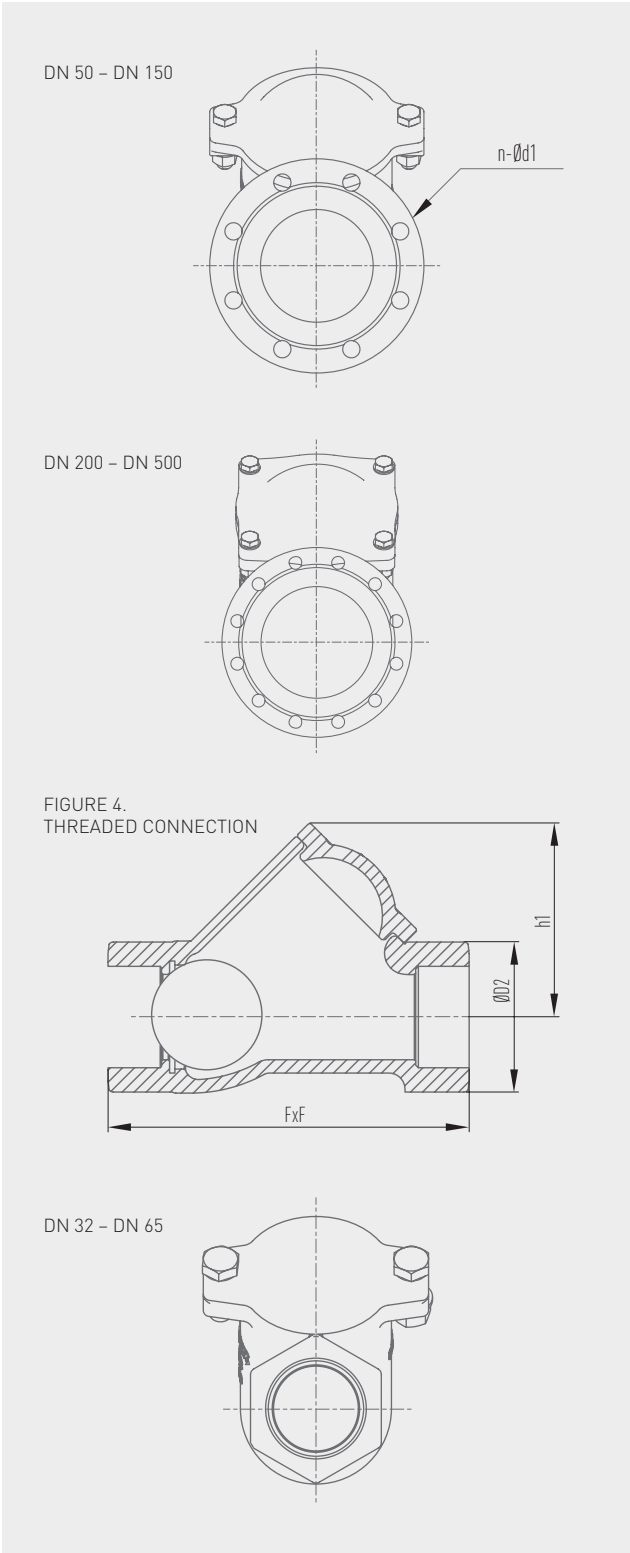
Code	Size (MM)	Description
VCBAVF050	50	50 BALL CHECK FL B5 DI FC
VCBAVF065	65	65 BALL CHECK FL B5 DI FC
VCBAVF080	80	80 BALL CHECK FL B5 DI FC
VCBAVF100	100	100 BALL CHECK FL B5 DI FC
VCBAVF125	125	125 BALL CHECK FL B5 DI FC
VCBAVF150	150	150 BALL CHECK FL B5 DI FC
VCBAVF200	200	200 BALL CHECK FL B5 DI FC
VCBAVF250	250	250 BALL CHECK FL B5 DI FC
VCBAVF300	300	300 BALL CHECK FL B5 DI FC
VCBAVF350	350	350 BALL CHECK FL B5 DI FC
VCBAVF400	400	400 BALL CHECK FL B5 DI FC
VCBAVF500	500	500 BALL CHECK FL B5 DI FC

THREADED - PN16 – DN32 - DN65

Code	Size (MM)	Description
VCBAVF032-BSP	32	32 BALL CHECK BSP DI FC
VCBAVF040-BSP	40	40 BALL CHECK BSP DI FC
VCBAVF050-BSP	50	50 BALL CHECK BSP DI FC
VCBAVF065-BSP	65	65 BALL CHECK BSP DI FC

ACB-100 SERIES BALL CHECK VALVES

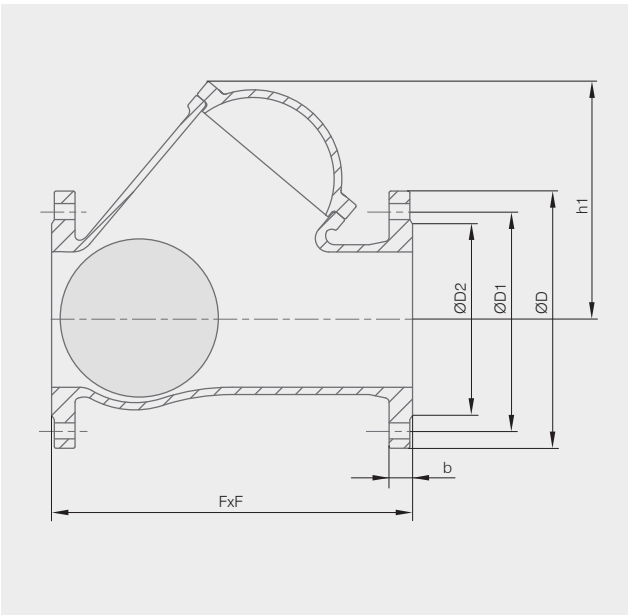
DN 32 – DN 500 BALL CHECK VALVE DUCTILE IRON PN 16 SUITABLE FOR DUCTILE IRON BODY



DIMENSIONS (MM)

ACB-100 SERIES FLANGED CONNECTION								
DN	FxF	b	h1	ØD	ØD1	ØD2	n-Ød1	Weight (KG)
50	200	19	100	165	114	90	4-18	6.5
65	240	19	125	185	127	103	4-18	11
80	260	19	136	200	146	122	4-18	14.35
100	300	20	185	220	178	154	4-18	19.98
125	350	20	196	250	210	186	8-18	30.4
150	400	23	265	285	235	207	8-18	42.3
200	500	23	340	340	292	264	8-18	73.5
250	600	24	420	405	356	328	8-22	128
300	700	30	480	460	406	374	12-22	180
350	800	33	580	505	470	438	12-26	290
400	900	33	730	580	521	490	12-26	420
500	1100	33	900	705	641	609	16-26	580

ACB-100 SERIES THREADED CONNECTION				
DN	FxF	h1	ØD	Weight (KG)
32	135	72	50	2
40	145	85	60	2
50	175	100	70	3
65	200	125	90	5



AC10 DUO CHECK WAFER VALVE

DN 50 – DN 1000

FEATURES

Body (optional carbon steel, ductile iron or duplex).

Disc (optional carbon steel, ductile iron or duplex).

Upper and lower PTFE thrust bearings.

Standard EPDM Sealing O-Ring (optional NBR or Viton).

Dual springs for quicker activation long life and even distribution of force over both plates.

Fusion bonded epoxy coated body (internal & external).

Long leaf springs (prevent rubbing of disc on seat).

TECHNICAL DATA

Size Range

DN40-DN1000

Pressure Classes PN10, PN16, PN25

Face to Face

DIN3202-K3

Temperature Range

-20°C to +100°C (standard EPDM seat)

-20°C to +80°C (optional NBR seat)

-20°C to +150°C (optional Viton seat)

Pressure Testing

AP1598

Coating

Fusion Bonded Epoxy

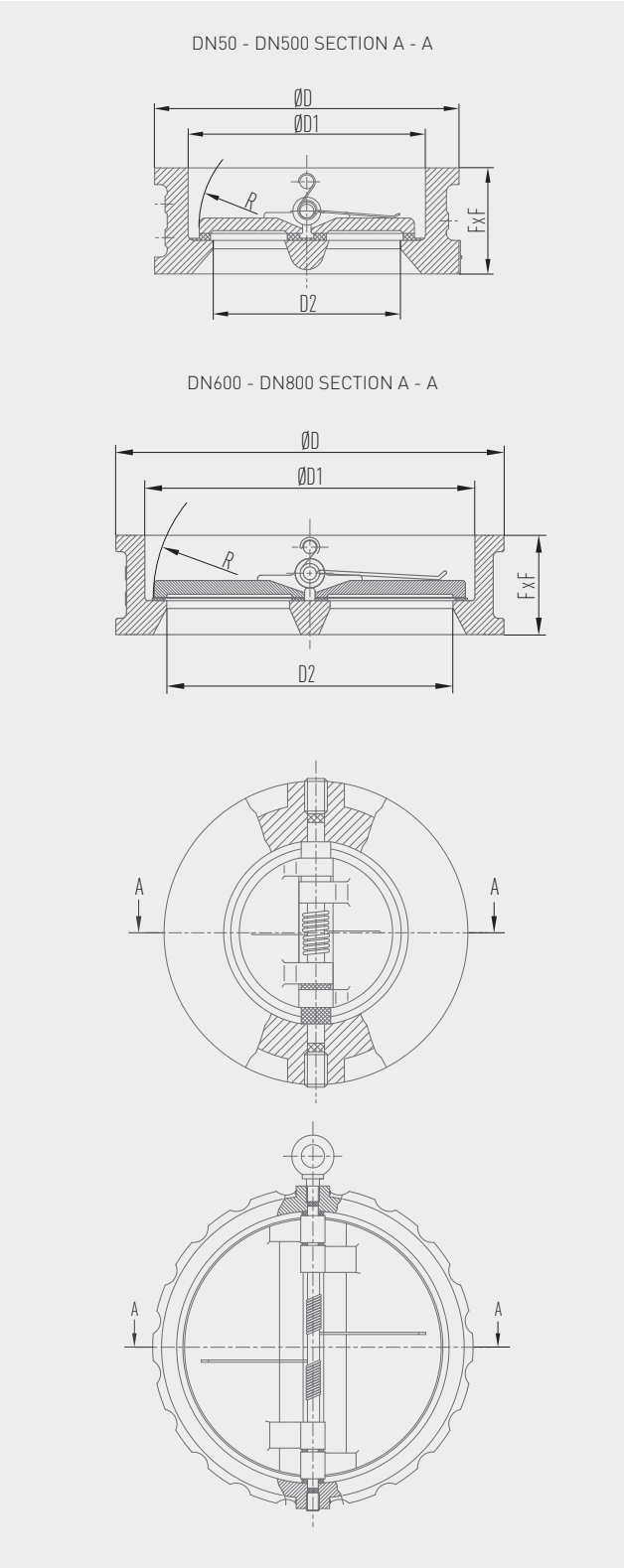


PN16 – DN50 - DN800

Code	Size (MM)	Description
VCWDAVF050	50	50 DUO CHECK CI FC
VCWDAVF065	65	65 DUO CHECK CI FC
VCWDAVF080	80	80 DUO CHECK CI FC
VCWDAVF100	100	100 DUO CHECK CI FC
VCWDAVF125	125	125 DUO CHECK CI FC
VCWDAVF150	150	150 DUO CHECK CI FC
VCWDAVF200	200	200 DUO CHECK CI FC
VCWDAVF250	250	250 DUO CHECK CI FC
VCWDAVF300	300	300 DUO CHECK CI FC
VCWDAVF350	350	350 DUO CHECK CI FC
VCWDAVF400	400	400 DUO CHECK CI FC
VCWDAVF450	450	450 DUO CHECK CI FC
VCWDAVF500	500	500 DUO CHECK CI FC
VCWDAVF600	600	600 DUO CHECK CI FC
VCWDAVF700	700	700 DUO CHECK CI FC
VCWDAVF800	800	800 DUO CHECK CI FC

AC10 DUO CHECK WAFER VALVE

DN 50 – DN 1000

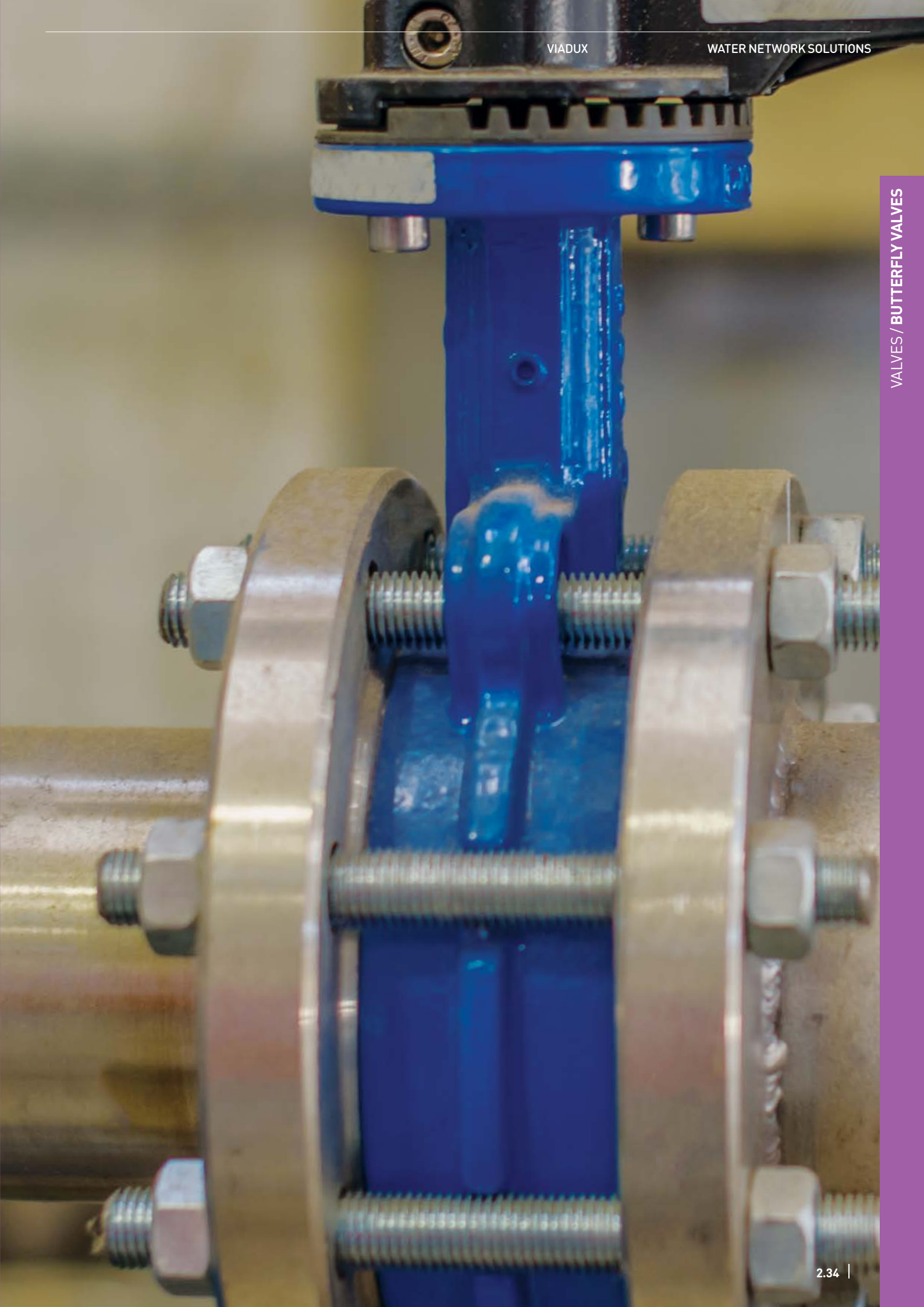


DIMENSIONS (MM)

AB10 DN 50 – DN 800						
DN	Fx F	ØD	ØD1	ØD2	R	Weight (KG)
50	43	96	65	40	27	1.3
65	46	110	80	60	35	2.1
80	64	128	94	70	42	2.9
100	64	156	117	88	50	4.3
125	70	187	145	115	64	6.4
150	76	213	171	134	77	9.1
200	89	267	224	182	102.5	15.2
250	114	328	265	220	125	26.5
300	114	375	310	260	146	37
350	127	444	360	298	170	55
400	140	495	410	350	195	80
450	152	558	450	385	215	101
500	152	615	505	438	238	114
600	178	723	624.5	573	292	172
700	229	812	720	680	350	258
800	241	948	825	770	400	322



BUTTERFLY VALVES



AB SERIES BUTTERFLY VALVES

DN 50 & DN 1200 AVFI'S AB SERIES BUTTERFLY VALVES ARE SUITABLE FOR MOST GENERAL PURPOSE APPLICATIONS



LEVER OPERATED – PN16 – DN50 - DN300

Code	Size (MM)	Description
VBWAVF050L	50	50 WAFER BFLY VLV T/D&E LEVER
VBWAVF065L	65	65 WAFER BFLY VLV T/D&E LEVER
VBWAVF080L	80	80 WAFER BFLY VLV T/D&E LEVER
VBWAVF100L	100	100 WAFER BFLY VLV T/D&E LEVER
VBWAVF125L	125	125 WAFER BFLY VLV T/D&E LEVER
VBWAVF150L	150	150 WAFER BFLY VLV T/D&E LEVER
VBWAVF200L	200	200 WAFER BFLY VLV T/D&E LEVER
VBWAVF250L	250	250 WAFER BFLY VLV T/D&E LEVER
VBWAVF300L	300	300 WAFER BFLY VLV T/D&E LEVER

GEARBOX OPERATED – PN16 – DN50 - DN300

Code	Size (MM)	Description
VBWAVF080GB	80	80 WAFER BFLY VLV T/E GBX
VBWAVF100GB	100	100 WAFER BFLY VLV T/E GBX
VBWAVF150GB	150	150 WAFER BFLY VLV T/E GBX
VBWAVF200GB	200	200 WAFER BFLY VLV T/E GBX
VBWAVF250GB	250	250 WAFER BFLY VLV T/E GBX
VBWAVF300GB	300	300 WAFER BFLY VLV T/E GBX

FEATURES

Designed and manufactured to AS4795
Phenolically backed replaceable liner.

Rated to 1600kpa from 50mm up to 600mm
and 1000kpa from 700mm up to 1200mm.

Stainless steel fasteners.

Bi-directional bubble-tight sealing, with no
leakage under pressure.

ISO top mounting flange for easy actuation.

Gearbox fitted as standard on all sizes
350mm and above.

Certifications

According to: AS4795, API609, MSS SP67,
ISO5752, EN1092

Approved to WaterMark approval for AB30W
& AB30L only (Refer pages 3.78 & 3.81)

TECHNICAL DATA

Size Range

DN50-DN1200

Pressure Classes

PN10, PN16, PN21 & PN25

Face to Face

According to AS4795

Top Flange

According to ISO 5211

Temperature Range

-20°C to +150°C (depending on material)

Leakage Tests:

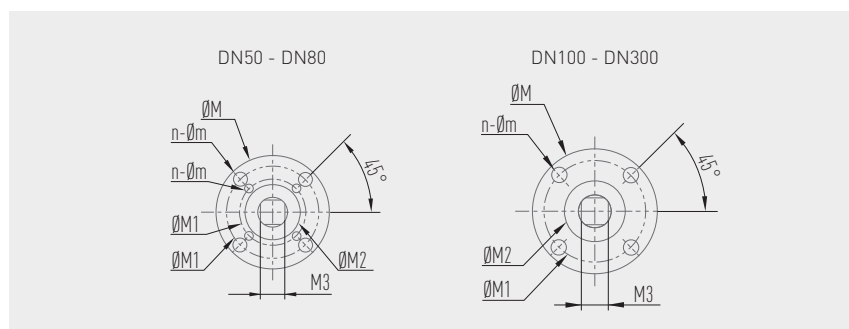
According to AS4795

Coating

Fusion Bonded Epoxy (for all cast and
ductile iron bodied valves)

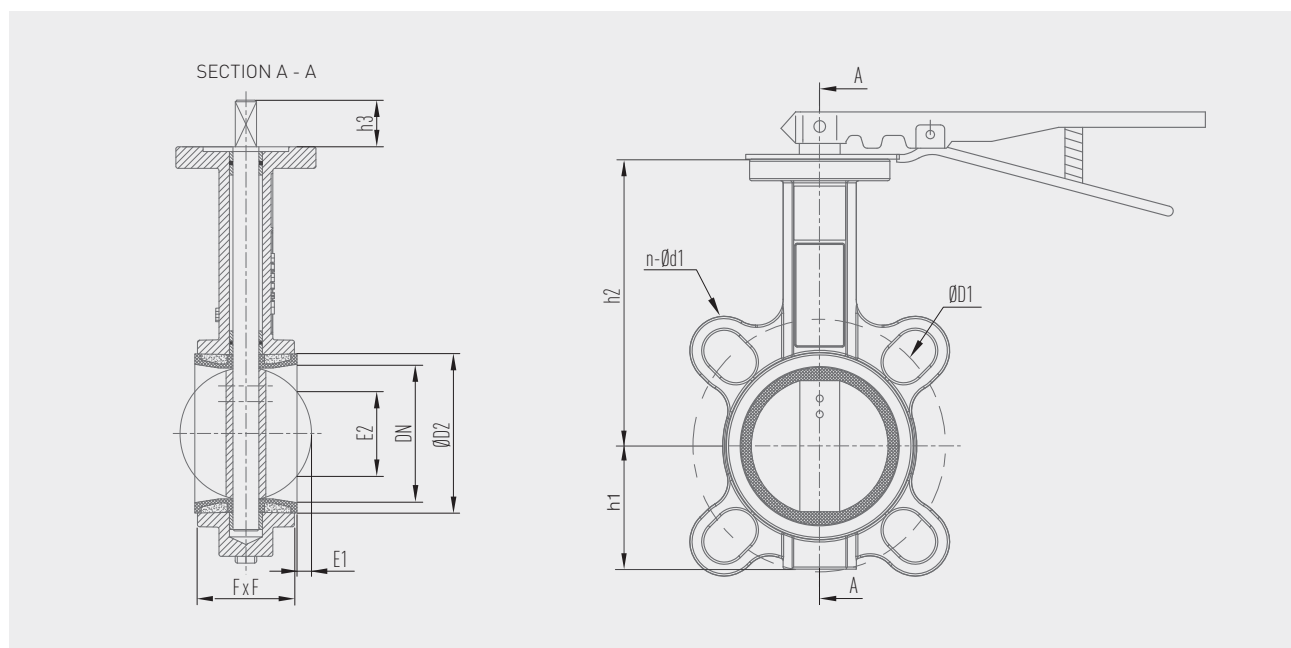
AB30W WAFER TYPE BUTTERFLY VALVE

BUTTERFLY VALVE FOR DN 50 – DN 300



Nominal Pressure		PN16
Test:	Strength Test	24 Bar
Pressure:	Sealing Test	17.6 Bar
Max Working Temperature:		-25° to +100°C
Suitable Media		W.O.G etc

Note: PN21 & PN25, dimensions available on request. Designed and manufactured to AS4795.



DIMENSIONS (MM)

WAFER TYPE BFLY DN 50 – DN 300								AS2129 T/D AS2129 T/E	AS2129 T/D	AS2129 T/E	ANSI150 MM		ISO 5211 TOP FLANGE								Weight (KG)
DN	FxF	h1	h2	h3	E1	E2	ØD2	ØD1	n-ØD1	n-ØD1	ØD1	n-ØD1	Flange No.	ØM	n-Øm	ØM1	ØM2	M3			
50	43	57	143	29	3.2	25.1	77	114	4-18	4-18	120.6	4-19	F05/F07	90	4-8/4-10	50/70	35.5	11x11	3.66		
65	46	68	155	29	7.6	41.1	89	127	4-18	4-18	139.7	4-19	F05/F07	90	4-8/4-10	50/70	35.5	11x11	4.28		
80	46	82	160	29	14.9	61.8	104	146	4-18	4-18	152.4	4-19	F05/F07	90	4-8/4-10	50/70	35.5	11x11	4.6		
100	52	100	181	29	25.1	89.1	135	178	4-18	8-18	190.5	8-19	F07	90	4-10	70	55.5	11x11	5.8		
125	56	112	194	29	32.6	108.7	159	210	8-18	8-18	215.9	8-22.4	F07	90	4-10	70	55.5	14x14	8		
150	56	126	202	29	48.9	144.6	189	235	8-18	8-22	241.3	8-22.4	F07	90	4-10	70	55.5	14x14	9.5		
200	60	162	240	35	70	192.5	239	292	8-18	8-22	298.4	8-22.4	F10	125	4-12	102	70.5	17x17	16		
250	68	193	272	35	90.3	240.5	293	356	8-22	12-22	361.9	12-25.4	F10	125	4-12	102	70.5	22x22	21		
300	78	236.5	318	35	111	290.8	345	406	12-22	12-26	431.8	12-25.4	F10	125	4-12	102	70.5	22x22	35		

AB10W WAFER TYPE BUTTERFLY VALVE

DN 350 – DN 600 SUITABLE FOR PN 10 OR PN 16



GEARBOX OPERATED – PN10 – DN350 - DN600

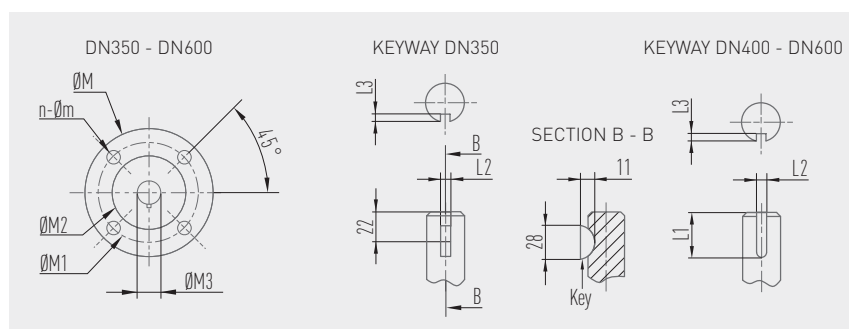
Code	Size (MM)	Description
VBWAVF350GBPN10	350	350 WAFER BFLY VLV PN10 T/D&E/ANSI GBX
VBWAVF400GBPN10	400	400 WAFER BFLY VLV PN10 T/D&E/ANSI GBX
VBWAVF450GBPN10	450	450 WAFER BFLY VLV PN10 T/D&E/ANSI GBX
VBWAVF500GBPN10	500	500 WAFER BFLY VLV PN10 T/D&E/ANSI GBX
VBWAVF600GBPN10	600	600 WAFER BFLY VLV PN10 T/D&E GBX

GEARBOX OPERATED – PN16 – DN350 - DN600

Code	Size (MM)	Description
VBWAVF350GB	350	350 WAFER BFLY VLV PN16 T/D&E/ANSI GBX
VBWAVF400GB	400	400 WAFER BFLY VLV PN16 T/D&E/ANSI GBX
VBWAVF450GB	450	450 WAFER BFLY VLV PN16 T/D&E/ANSI GBX
VBWAVF500GB	500	500 WAFER BFLY VLV PN16 T/D&E/ANSI GBX
VBWAVF600GB	600	600 WAFER BFLY VLV PN16 T/D&E GBX

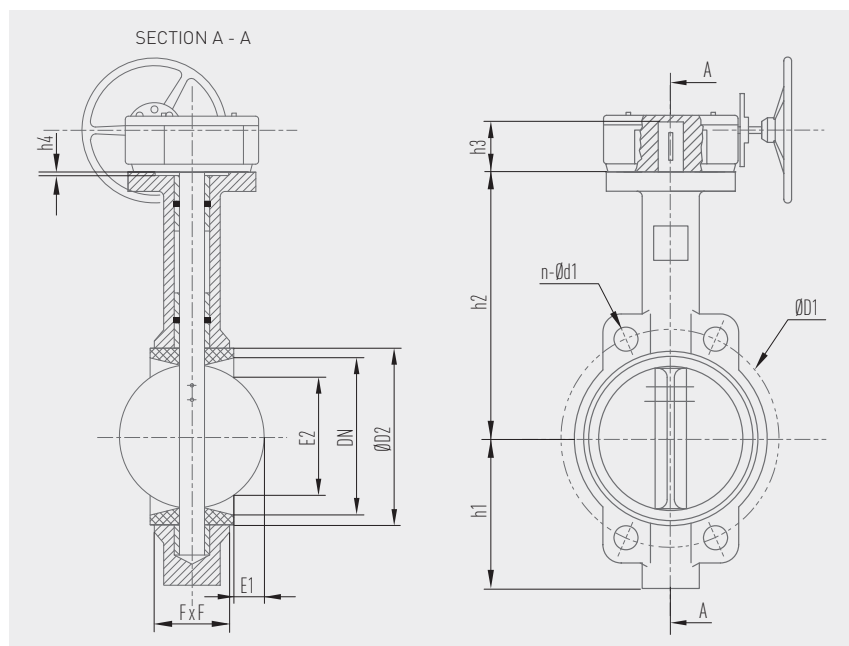
AB10W WAFER TYPE BUTTERFLY VALVE

DN 350 – DN 600 SUITABLE FOR PN 10 OR PN 16



Nominal Pressure		PN10	PN16
Test:	Strength Test	15 Bar	24 Bar
Pressure:	Sealing Test	11 Bar	17.6 Bar
Max Working Temperature:		-20° to +100°C	
Suitable Media		W.O.G etc	

Note: PN21 & PN25, dimensions available on request. Designed and manufactured to AS4795.



KEYWAY			
DN	L1	L2	L3
350	22	8	8
400	45	10	5
450	45	10	5
500	56	10	5
600	58	16	6

DIMENSIONS (MM)

WAFLER TYPE BFLY DN 350 – DN 600								AS2129 T/D AS2129 T/E	AS2129 T/D	AS2129 T/E	ANSI150 MM	ISO 5211 TOP FLANGE										Weight (KG)
DN	Fx F	h1	h2	h3	E1	E2	ØD2	ØD1	n-Ød1	n-Ød1	ØD1	n-Ød1	Flange No.	ØM	n-Øm	ØM1	ØM2	ØM3	h4			
350	78	267	368	45	126.9	323.7	376	470	12-26	12-26	476.2	12-28.4	F10	125	4-12	102	70.5	31.6	3.5			58
400	102	299	400	51.2	149.7	378.8	440	521	12-26	12-26	539.7	16-28.4	F14	175	4-18	140	100.5	33.15	4.5			107
450	114	318	422	51.2	166	427.3	491	584	12-26	16-26	577.8	16-31.8	F14	175	4-18	140	100.5	38	4.5			122
500	127	355	480	64.2	178.4	472.8	536	641	16-26	16-26	635	20-31.8	F14	175	4-18	140	100.5	41.15	4.5			160
600	154	444	562	70.2	218.4	571.9	655	756	16-30	16-33	749.3	20-35.1	F16	210	4-22	165	130.5	50.65	5.5			260

AB30L LUGGED TYPE BUTTERFLY VALVE

DN 50 – DN 300 WATERMARK APPROVED TABLE E LUGGED TYPE BUTTERFLY VALVE



LEVER OPERATED – PN16 – DN50 - DN300

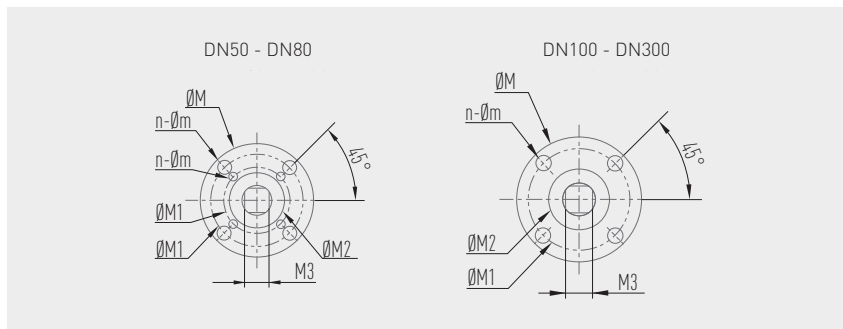
Code	Size (MM)	Description
VBLAVF050L	50	50 LUGGED BFLY VLV T/D&E LEVER
VBLAVF065L	65	65 LUGGED BFLY VLV T/D&E LEVER
VBLAVF080L	80	80 LUGGED BFLY VLV T/D&E LEVER
VBLAVF100L	100	100 LUGGED BFLY VLV T/D LEVER
VBLAVF125L	125	125 LUGGED BFLY VLV T/D&E LEVER
VBLAVF150L	150	150 LUGGED BFLY VLV T/D LEVER
VBLAVF200L	200	200 LUGGED BFLY VLV T/D LEVER
VBLAVF250L	250	250 LUGGED BFLY VLV T/D LEVER
VBLAVF300L	300	300 LUGGED BFLY VLV T/D LEVER

GEARBOX OPERATED – PN16 – DN80 - DN300

Code	Size (MM)	Description
VBLAVF080GB	80	80 LUGGED BFLY VLV T/D&E GBX
VBLAVF100GB	100	100 LUGGED BFLY VLV T/D GBX
VBLAVF150GB	150	150 LUGGED BFLY VLV T/D GBX
VBLAVF200GB	200	200 LUGGED BFLY VLV T/D GBX
VBLAVF250GB	250	250 LUGGED BFLY VLV T/D GBX
VBLAVF300GB	300	300 LUGGED BFLY VLV T/D GBX

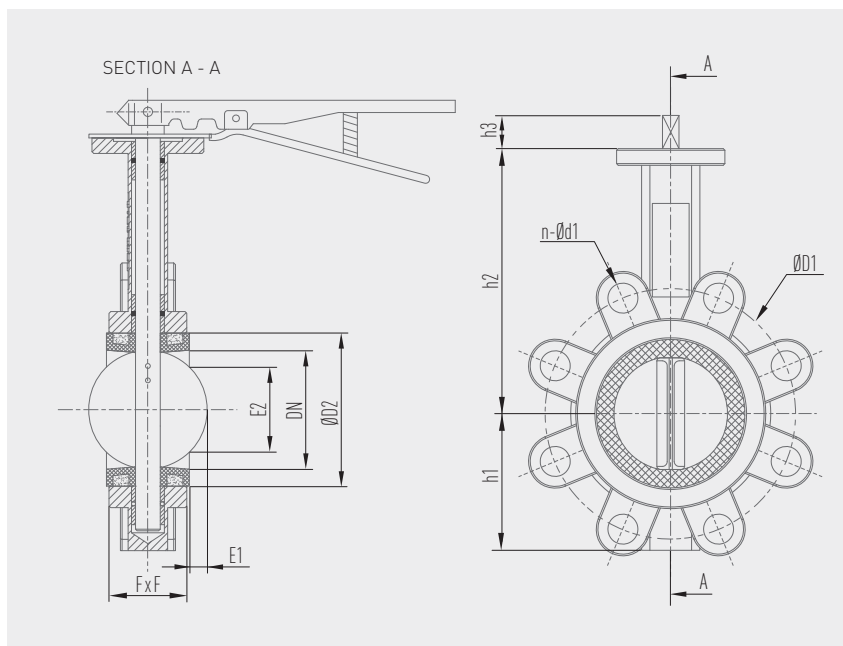
AB30L LUGGED TYPE BUTTERFLY VALVE

DN 350 – DN 600 SUITABLE FOR PN 10 OR PN 16



Nominal Pressure		PN16
Test:	Strength Test	24 Bar
Pressure:	Sealing Test	17.6 Bar
Max Working Temperature:		-20° to +100°C
Suitable Media		W.O.G etc

Note: PN21 & PN25, dimensions available on request. Designed and manufactured to AS4795.



DIMENSIONS (MM)

LUGGED TYPE BFLY DN 50 – DN 300								AS2129 TABLE D/E (MM)		ISO 5211 TOP FLANGE						Weight (KG)
DN	FxF	h1	h2	h3	E1	E2	ØD2	ØD1	n-ØD1	Flange No.	ØM	n-Øm	ØM1	ØM2	M3	
50	43	57	143	29	3.2	25.1	77	114	4-M16	F05/F07	90	4-8/4-10	50/70	35.5	11x11	4.5
65	46	68	155	29	7.6	41.4	89	127	4-M16	F05/F07	90	4-8/4-10	50/70	35.5	11x11	5
80	46	82	160	29	14.9	61.8	104	146	4-M16	F05/F07	90	4-8/4-10	50/70	35.5	11x11	6.2
100	52	100	181	29	25.1	89.1	135	178	8-M16	F07	90	4-10	70	55.5	11x11	9.2
125	56	112	194	29	32.6	108.7	159	210	8-M16	F07	90	4-10	70	55.5	14x14	11.6
150	56	126	202	29	48.9	144.6	189	235	8-M20	F07	90	4-10	70	55.5	14x14	13.2
200	60	162	240	35	70	192.5	239	292	8-M20	F10	125	4-12	102	70.5	17x17	21
250	68	193	272	35	90.3	240.5	293	356	12-M20	F10	125	4-12	102	70.5	22x22	31
300	78	236.5	318	35	111	290.8	345	406	12-M24	F10	125	4-12	102	70.5	22x22	46.4

AB10L LUGGED TYPE BUTTERFLY VALVE

DN 350 – DN 600 TABLE E LUGGED TYPE BUTTERFLY VALVE SUITABLE FOR PN 10 OR PN 16



GEARBOX OPERATED – PN10 – DN350 - DN600

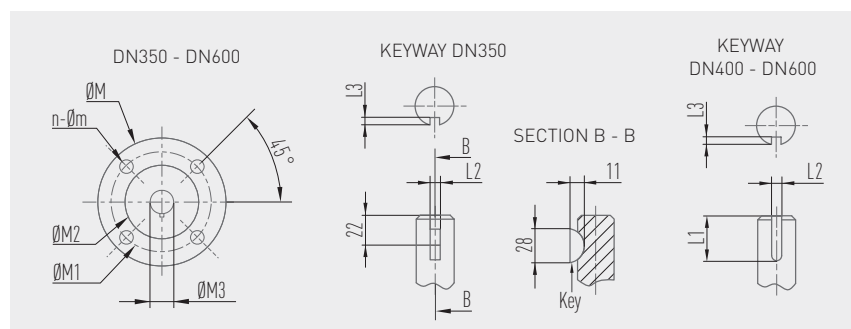
Code	Size (MM)	Description
VBLAVF350GBPN10	350	350 LUGGED BFLY VLV PN10 T/D&E GBX
VBLAVF400GBPN10	400	400 LUGGED BFLY VLV PN10 T/D&E GBX
VBLAVF450GBPN10	450	450 LUGGED BFLY VLV PN10 T/D GBX
VBLAVF500GBPN10	500	500 LUGGED BFLY VLV PN10 T/D&E GBX
VBLAVF600GBPN10	600	600 LUGGED BFLY VLV PN10 T/D GBX

GEARBOX OPERATED – PN16 – DN350 - DN600

Code	Size (MM)	Description
VBLAVF350GB	350	350 LUGGED BFLY VLV PN16 T/D&E GBX
VBLAVF400GB	400	400 LUGGED BFLY VLV PN16 T/D&E GBX
VBLAVF450GB	450	450 LUGGED BFLY VLV PN16 T/D GBX
VBLAVF500GB	500	500 LUGGED BFLY VLV PN16 T/D&E GBX
VBLAVF600GB	600	600 LUGGED BFLY VLV PN16 T/D GBX

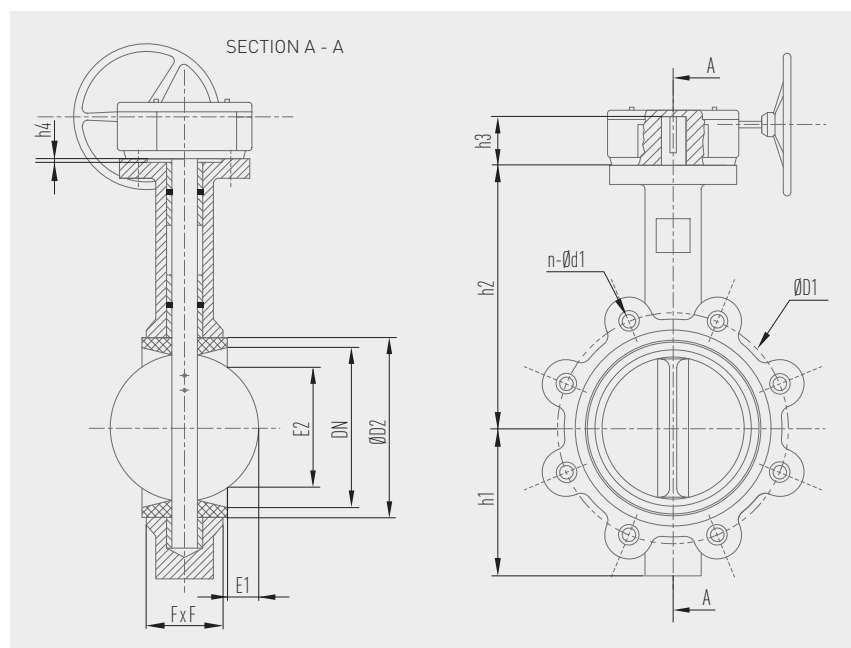
AB10L LUGGED TYPE BUTTERFLY VALVE

DN 350 – DN 600 TABLE E LUGGED TYPE BUTTERFLY VALVE SUITABLE FOR PN 10 OR PN 16



Nominal Pressure		PN10	PN16
Test:	Strength Test	15 Bar	24 Bar
Pressure:	Sealing Test	11 Bar	17.6 Bar
Max Working Temperature:		-20° to +100°C	
Suitable Media		W.O.G etc	

Note: PN21 & PN25, dimensions available on request. Designed and manufactured to AS4795.



DIMENSIONS (MM)

LUGGED TYPE BFLY DN 350 – DN 600								AS2129 TABLE D/E (MM)		ISO 5211 TOP FLANGE										KEYWAY		
DN	FxF	h1	h2	h3	E1	E2	ØD2	ØD1	n-Ød1	Flange No.	ØM	n-Øm	ØM1	ØM2	ØM3	h4	Weight (KG)	L1	L2	L3		
350	78	267	368	45	126.9	323.7	376	470	12-M24	F10	125	4-12	102	70.5	31.6	3.5	81	22	8	8		
400	102	299	400	51.2	149.7	378.8	440	521	12-M24	F14	175	4-18	140	100.5	33.15	4.5	140	45	10	5		
450	114	318	422	51.2	166	427.3	491	584	16-M24	F14	175	4-18	140	100.5	38	4.5	176	45	10	5		
500	127	348	480	64.2	178.4	472.8	536	641	16-M26	F14	175	4-18	140	100.5	41.15	4.5	226	56	10	5		
600	154	444	562	70.2	218.4	571.9	655	756	16-M30	F16	210	4-22	165	130.5	50.65	5.5	336	58	16	6		

AB13F DOUBLE FLANGED BUTTERFLY VALVES

DN 50 – DN 2000



Lever Operated

LEVER OPERATED – PN16 – DN80 - DN300

Code	Size (MM)	Description
VBFLAVF080L	80	80 DOUBLE FLANGED BFLY LEVER
VBFLAVF100L	100	100 DOUBLE FLANGED BFLY LEVER
VBFLAVF125L	125	125 DOUBLE FLANGED BFLY LEVER
VBFLAVF150L	150	150 DOUBLE FLANGED BFLY LEVER
VBFLAVF200L	200	200 DOUBLE FLANGED BFLY LEVER
VBFLAVF250L	250	250 DOUBLE FLANGED BFLY LEVER
VBFLAVF300L	300	300 DOUBLE FLANGED BFLY LEVER

FEATURES

- Designed and manufactured to AS4795.
- Vulcanized liner resists deformation.
- Rated to 1600kpa from 50mm up to 600mm and 1000kpa from 700mm up to 1200mm.
- 316 Stainless steel fasteners.
- Bi-directional bubble-tight sealing, with no leakage under pressure.
- ISO top mounting flange for easy actuation.
- Gearbox fitted as standard on all sizes 200mm and above.

Certifications

According to: AS4795, API609, MSS SP67, ISO5752, EN1092

TECHNICAL DATA

Size Range

DN50-DN2000

Pressure Classes

PN10, PN16

Face to Face

According to AS4795

Top Flange

According to ISO 5211

Flange Drilling

AS4087

Temperature Range

-10°C to +90°C (EPDM standard)

Leakage Tests:

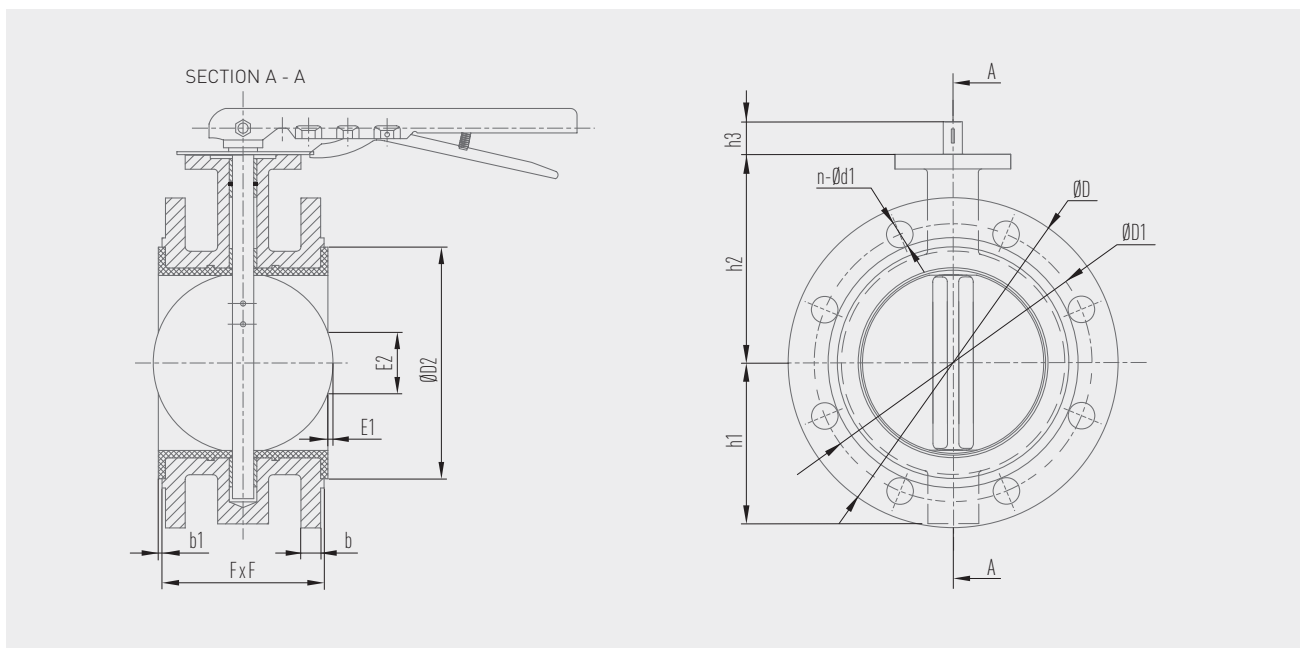
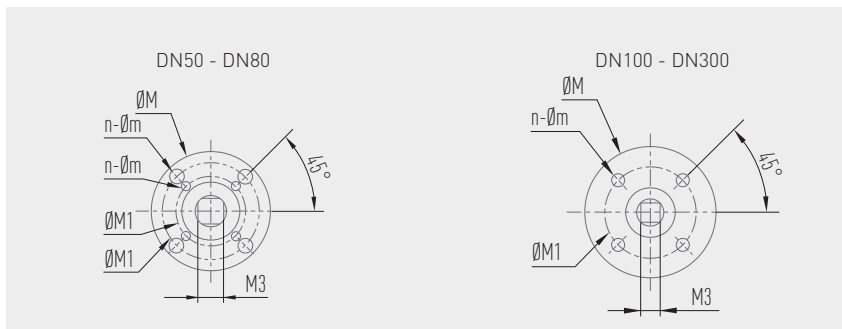
According to AS4795

Coating

Fusion Bonded Epoxy (AS4020 approved)

AB13F DOUBLE FLANGED BUTTERFLY VALVES

DN 50 – DN 2000



DIMENSIONS (MM)

AB13F DN 50 – DN 300									AS4087 CL16 MM				ISO 5211 TOP FLANGE						
DN	FxF	b	b1	h1	h2	h3	E1	E2	ØD	ØD1	ØD2	n-Ød1	Flange No.	ØM	n-Øm	ØM1	M3	Weight (KG)	
50	108	17	3	80	110	29	-	-	168.5	114	95	4-18	F05/F07	65/90	4-8	50/70	11x11	4.9	
65	112	17	3	80	134	29	-	-	188.5	127	114	4-18	F05/F07	65/90	4-8	50/70	11x11	8.2	
80	114	17	3	95	131	29	-	-	214	146	128	4-18	F05/F07	65/90	4-8	50/70	11x11	10.1	
100	127	17	3	114	150	29	-	-	224	178	150	4-18	F07	90	4-10	70	11x11	13.4	
125	140	17.8	3	113	170	29	-	-	250	210	180	8-18	F07	90	4-10	70	14x14	17.8	
150	140	19	3	139	180	29	8.2	69.7	280	235	200	8-18	F07	90	4-10	70	14x14	21.5	

Designed and manufactured to AS4795.

AB13F DOUBLE FLANGED BUTTERFLY VALVES

DN 50 – DN 2000



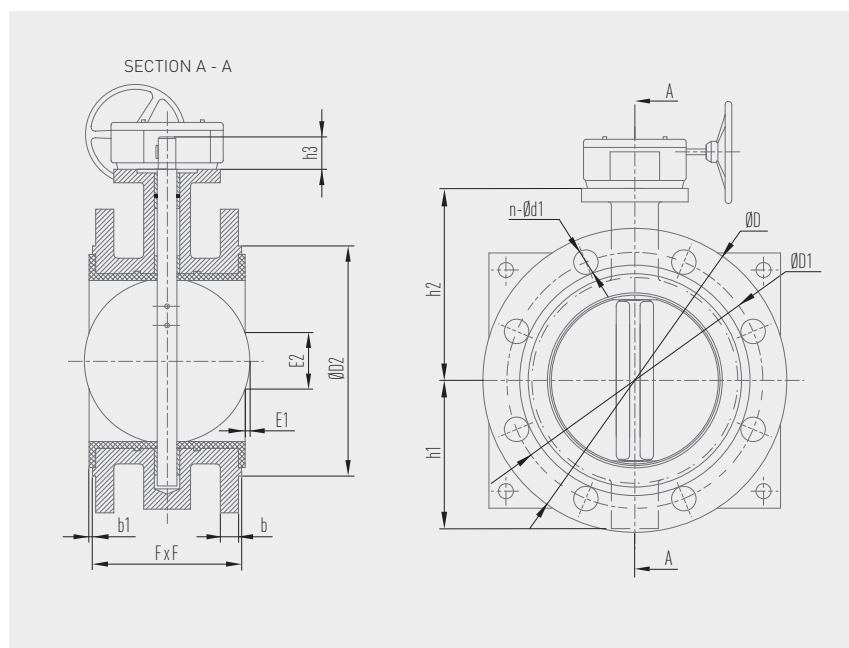
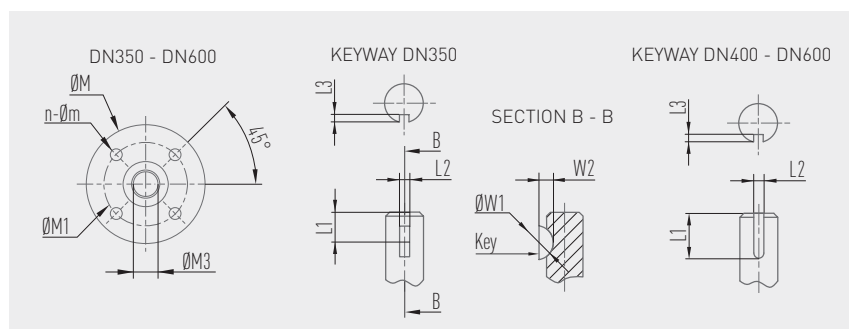
Gearbox Operated

GEARBOX OPERATED – PN16 – DN80 - DN600

Code	Size (MM)	Description
VBFLAVF080GB	80	80 DOUBLE FLANGED BFLY GBX
VBFLAVF100GB	100	100 DOUBLE FLANGED BFLY GBX
VBFLAVF125GB	125	125 DOUBLE FLANGED BFLY GBX
VBFLAVF150GB	150	150 DOUBLE FLANGED BFLY GBX
VBFLAVF200GB	200	200 DOUBLE FLANGED BFLY GBX
VBFLAVF250GB	250	250 DOUBLE FLANGED BFLY GBX
VBFLAVF300GB	300	300 DOUBLE FLANGED BFLY GBX
VBFLAVF350GB	350	350 DOUBLE FLANGED BFLY GBX
VBFLAVF375GB	375	375 DOUBLE FLANGED BFLY GBX
VBFLAVF400GB	400	400 DOUBLE FLANGED BFLY GBX
VBFLAVF450GB	450	450 DOUBLE FLANGED BFLY GBX
VBFLAVF500GB	500	500 DOUBLE FLANGED BFLY GBX
VBFLAVF600GB	600	600 DOUBLE FLANGED BFLY GBX

AB13F DOUBLE FLANGED BUTTERFLY VALVES

DN 50 – DN 2000



KEYWAY

L1	L1	L1	ØW1	W2
12.7	5	5.5	19	7.5
18	8	8	28	11
22	8	8	28	11
22	8	8	28	11
45	10	5	-	-
45	10	5	-	-
45	10	5	-	-
56	10	5	-	-
58	16	6	-	-

DIMENSIONS (MM)

AB13F DN 200 – DN 600									AS4087 CL16 MM				ISO 5211 TOP FLANGE							Weight (KG)
DN	FxF	b	b1	h1	h2	h3	E1	E2	ØD	ØD1	ØD2	n-Ød1	Flange No.	ØM	n-Øm	ØM1	ØM3			
200	152	20	3	175	210	35	25.5	134.4	340	292	262	8-18	F10	125	4-12	102	22.1	41		
250	165	22	3	203	245	35	43.3	189.8	415	356	310	8-22	F10	125	4-12	102	28.5	53.5		
300	178	23	4	242	276	35	61.8	243.4	457	406	364	12-22	F10	125	4-12	102	31.6	66.4		
350	190	25	4	250	328	45	72	274.6	512	470	422	12-26	F10	125	4-12	102	31.6	84.8		
375	190	29	4	265	350	51.2	82.5	305.3	550	495	450	12-26	F14	175	4-18	140	33.2	121.8		
400	216	28	4	277.4	376	51.2	87.1	325	570	521	470	12-26	F14	175	4-18	140	33.2	121.8		
450	222	30	4	295.2	406.6	51.2	109.6	381.3	620	584	520/538	12-26	F14	175	4-18	140	38	197.8		
500	229	31.5	4	330	448	64.2	131.5	435.3	655	641	572/599	16-26	F14	175	4-18	140	41.2	279		
600	267	36	4	418	518	70.2	163	529.5	790	756	672/710	16-30	F16	210	4-22	165	50.7	376.8		

Designed and manufactured to AS4795.

HYDRANT VALVES



SUREFLOW® SPRING HYDRANT VALVES

DN 80 & DN 100



FEATURES

SUREFLOW Spring Hydrant Valves provide direct access to water pipelines for fire fighting purposes. Access is gained by the attachment of a standpipe to the hydrant lugs.

The hydrant valve can also be used as a scouring or flushing point.

TECHNICAL DATA

Allowable Operating

Pressure 1600 kPa

Seat Infiltration Resistance

55 kPa (vacuum)

Maximum Temperature 60°C

End Connections

Flanged to AS 4087 Fig B5,

DN 80 and DN 100

Certification

ISC AS 3952:2002 Certified Product
Licence No. PRD/R61/0412

AS/NZS 4020

Testing of products for use in
contact with drinking water.

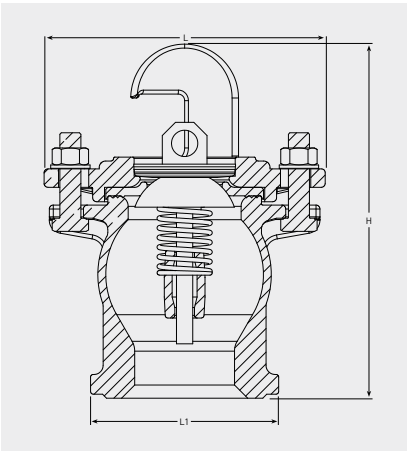
STANDARD HYDRANT VALVES – SUREFLOW SPRING

Code	Size (MM)	Weight (KG)	Description
SHAC008S7K	80	8.5	80 SUREFLOW SPRING HYDRANT B5
SHAC010S7K	100	9.5	100 SUREFLOW SPRING HYDRANT B5

STANDARD HYDRANT VALVES – SUREFLOW LILAC SPRING

Code	Size (MM)	Weight (KG)	Description
SHAC008S7KL	80	8.5	80 SUREFLOW LILAC SPRING HYDRANT B5
SHAC010S7KL	100	9.5	100 SUREFLOW LILAC SPRING HYDRANT B5

Designed and manufactured to AS3952.

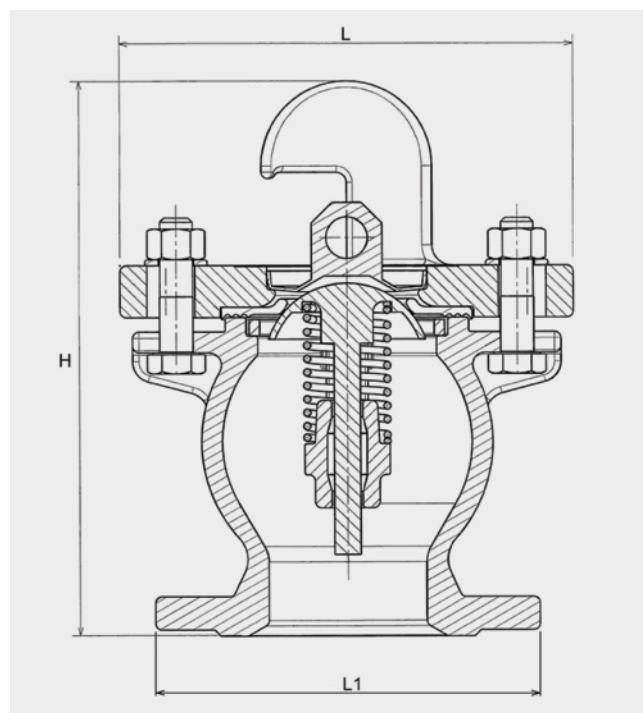


DIMENSIONS (MM)

DN	H	L	L1	Weight (KG)
80	268	214	154	9.2
100	268	214	166	10.3

SUREFLOW® SPRING SWAB HYDRANT VALVES

DN 80 & DN 100



SWAB HYDRANT VALVES – SUREFLOW SPRING

Code	Size (MM)	Weight (KG)	Description
SHAC008S7KSWAB	80	8.5	80 SUREFLOW SWAB SPRING HYDRANT B5
SHAC010S7KSWAB	100	9.5	100 SUREFLOW SWAB SPRING HYDRANT B5

DIMENSIONS (MM)

DN	H	L	L1	Weight (KG)
80	268	218	185	12.45
100	268	218	215	14.25

SWAB HYDRANT VALVES – SUREFLOW LILAC SPRING

Code	Size (MM)	Weight (KG)	Description
SHAC008S7KSWABL	80	8.5	80 SUREFLOW SWAB LILAC SPRING HYDRANT B5
SHAC010S7KSWABL	100	9.5	100 SUREFLOW SWAB LILAC SPRING HYDRANT B5

Designed and manufactured to AS3952.

HYDRANT & AIR VALVE ISOLATORS

DN 80 & DN 100 PROVIDING ISOLATION OF ATTACHED APPURTENANCE FOR MAINTENANCE



FEATURES

Hydrant and Air Valve Isolators can be used in conjunction with spring hydrants, air valves or screwed outlets to provide isolation of the appurtenance for maintenance purposes.

- Available outlet option include:
- Screwed Outlet
 - Spring Hydrant
 - Air Valve

TECHNICAL DATA

Size Range

DN 80 and DN 100

Allowable Operating Pressures

1600kPa or 3500kPa

Maximum Temperature

50°C

End Connections

Flanged to AS 4087 Fig B5 or B6

Certifications

AS/NZS 4020

Testing of products for use in contact with drinking water.

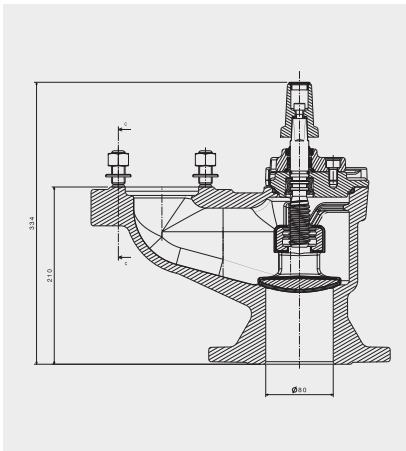
DN80 & DN100 – PN16

Code	Size (MM)	Description
VHDCC080S7	80	80 B5/80 B5 CC H&AV ISOLATOR FC
VHDCC080S7ACC	80	80 B5/80 B5 ACC H&AV ISOLATOR FC
VHDCC1010S7	100	100 B5/100 B5 CC H&AV ISOLATOR FC
VHDCC1010S7ACC	100	100 B5/100 B5 ACC H&AV ISOLATOR FC

DN80 & DN100 – PN35

Code	Size (MM)	Description
VHDF080S7	80	80 B6/80 B6 CC H&AV ISOLATOR FC
VHDF1010S7	100	100 B6/100 B6 CC H&AV ISOLATOR FC

Designed and manufactured to AS3952.



HYDRANT & AIR VALVE ISOLATORS

BS750 UNDERGROUND FIRE HYDRANT – NORTHERN TERRITORY



FEATURES

- NT Underground Fire Hydrants provide direct access to water pipelines for fire fighting purposes. Access is gained with the attachment of a BS750 – 2 ½" x 2 TPI threaded attachment.
- Jumper valve for back flow prevention.
- Slotted mounting holes to match Dn80 AS4087 FIG B5 and Dn90 AS2129 Table D flanges.
- Grade 316 stainless steel fasteners for long life application.
- Insulation essential for installations subject to temperatures of 0°C and lower.

TECHNICAL DATA

Allowable Operating Pressures

- Seat: 16 bar
- Body: 24 bar

Maximum Temperature

- Valve designed for use up to 70°C Where applicable; for AS 4020 compliance, max temp 50°C
- Note: Always observe pipe material recommended operating temperatures

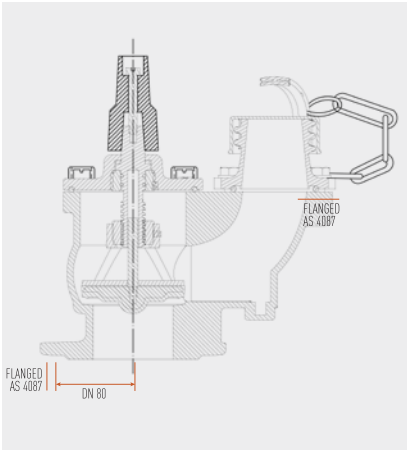
End Connections

- Universally drilled AS 4087 Dn80
- FIG B5/AS 2129 Dn90 Table D slotted holes

DN80 - PN16

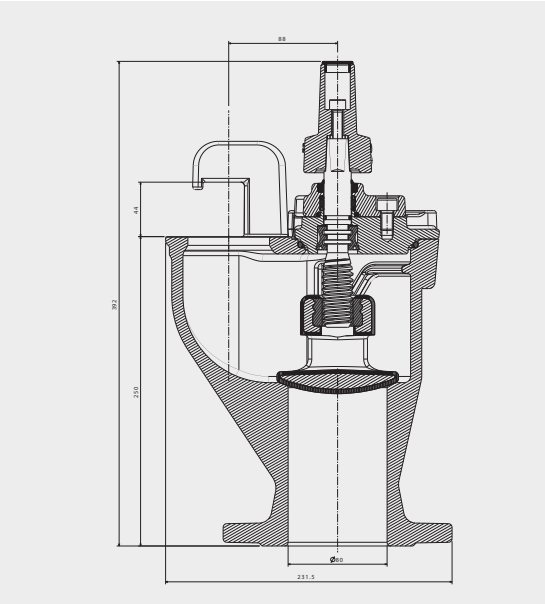
Code	Size (MM)	Description
VHDCN0808S7P	80	80 B5 HYD ISOLATOR NT BS750 SCREW DOWN

Conforms to power and water corporation specification w02-s5 – screw down hydrant



HYDRANT & AIR VALVE ISOLATORS

DN 80 FIRE HYDRANT ISOLATOR – SOUTH AUSTRALIA



FEATURES

SA Fireplugs provide direct access to water pipelines for fire fighting purposes. Access is gained with the attachment of a standpipe to the hydrant lugs and opening of the valve.

Grade 316 stainless steel fasteners for long life application.

Special SA Water spindle cap.

TECHNICAL DATA

Allowable Operating Pressures

1600kPa or 3500kPa

Maximum Temperature

50°C

End Connections

DN 80 flanged to AS 4087

Specifications

SA Water No. SAW 2001

Certifications

AS/NZS 4020

Testing of products for use in contact with drinking water.

DN80 – PN16

Code	Size (MM)	Description
VHAC008S7	80	80 B5 AUSLITE SA FIREPLUG

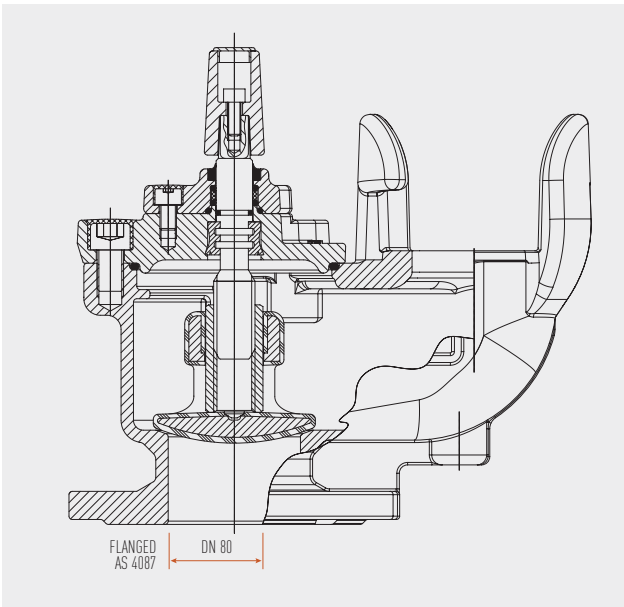
DN80 – PN35

Code	Size (MM)	Description
VHDF008S7	80	80 B6 HYD ISOLATOR-SA FIREPLUG

Conforms to South Australia water specification SAW2001.

HYDRANT & AIR VALVE ISOLATORS

DN80 FIRE HYDRANT ISOLATOR – WESTERN AUSTRALIA



DN100 – PN16

Code	Size (MM)	Description
VHDC010S7	100	100 B5 WA HYD ISOLATOR WA FC

Conforms to Western Australia water corporation specification SPS292.

FEATURES

- The WA Fire Hydrant is designed and manufactured to SPS 292.
- Jumper valve for back flow prevention.
- Slotted mounting holes to match existing Dn90 flanged risers.
- WA Fire Hydrant Isolators provide direct access to water pipelines for fire protection services, water and neutral liquid applications. Access is gained with the attachment of a standpipe to the hydrant lugs.
- Insulation essential for installations subject to temperatures of 0°C and lower.

TECHNICAL DATA

- Allowable Operating Pressures-1600kpa**
Hydraulic test to SPS 292:
Seat: 16 bar
Body: 24 bar
- Maximum Temperature**
Valve designed for use up to 70°C Where applicable; for AS 4020 compliance, max temp 40°C

Note: Always observe pipe material recommended operating temperatures
- End Connections**
Universally drilled AS 2129 Table D, DN90/ DN100, slotted holes
- Certifications**
AS/NZS 4020 Testing of products for use in contact with drinking water

KNIFE GATE VALVES

XDV-UDH KNIFE GATE VALVES

FLANGE DN50 – DN600 LUGGED



FEATURES

- Special L shaped replaceable seat.
- Roller bearings in SS housing on all sizes.
- Fully lugged to suit AS4087 CL16.
- Stainless steel stem protection tube included.
- Gearbox included on DN450 and above.
- Stainless steel safety guards included on all sizes.
- Special adjustable gate guide ensures no leakage.
- Viton seat as standard.
- Temperature range up to 200°C (depending on seat).

OPTIONS

- ISO mount type.
- WCB or Duplex body.
- Wafer type body.
- EPDM, NBR, PTFE or metal seat.
- Electric or pneumatic actuator.
- Non-rising stem.
- Limit switches.
- Chain wheel.
- Anti-clockwise close.
- Extensions.

TECHNICAL DATA

Size Range

DN50–DN1200

Pressure Class

Max PN10 dependant on valve size

Face to Face

MSS SP-81

Maximum Temperature Rating: (at nil pressure)

200°C Viton (standard)
120°C EPDM (optional)
90°C NBR (optional)
200°C PTFE (optional)
200°C Metal (optional)

Lugged to suit

AS4087, Class 16. (others on request)

Code	Size (MM)	Description
VKGLAVF050HW	50	50 KNIFE GATE VLV ST/ST LUGGED HW
VKGLAVF065HW	65	65 KNIFE GATE VLV ST/ST LUGGED HW
VKGLAVF080HW	80	80 KNIFE GATE VLV ST/ST LUGGED HW
VKGLAVF100HW	100	100 KNIFE GATE VLV ST/ST LUGGED HW
VKGLAVF125HW	125	125 KNIFE GATE VLV ST/ST LUGGED HW
VKGLAVF150HW	150	150 KNIFE GATE VLV ST/ST LUGGED HW
VKGLAVF200HW	200	200 KNIFE GATE VLV ST/ST LUGGED HW
VKGLAVF225HW	225	225 KNIFE GATE VLV ST/ST LUGGED HW
VKGLAVF250HW	250	250 KNIFE GATE VLV ST/ST LUGGED HW
VKGLAVF300HW	300	300 KNIFE GATE VLV ST/ST LUGGED HW
VKGLAVF350HW	350	350 KNIFE GATE VLV ST/ST LUGGED HW
VKGLAVF375HW	375	375 KNIFE GATE VLV ST/ST LUGGED HW
VKGLAVF400HW	400	400 KNIFE GATE VLV ST/ST LUGGED HW
VKGLAVF450HW	450	450 KNIFE GATE VLV ST/ST LUGGED HW
VKGLAVF500HW	500	500 KNIFE GATE VLV ST/ST LUGGED HW
VKGLAVF600HW	600	600 KNIFE GATE VLV ST/ST LUGGED HW

AIR VALVES

ODOUR TECH VS-4 SMART VALVE

TWIN CHAMBER COMBINATION AIR RELEASE VALVE FOR ALL SEWERAGE AND POTABLE MAINS



VS-4 SMART VALVE

Code	Style	Height	Width	Weight
3707133	Standard	501	445	23
3707765	Low Profile	460	445	23
3707766	High Flow	501	445	24

Odour Technologies have looked at the problems experienced by wastewater operators with air release valves. Over a period of 5 years we have designed and tested our double chamber valve that overcomes previously experienced faults found in single chamber valves.

FEATURES

- Dual Chamber Design
- Self ejection of contaminants
- Anti-hammer and shock control
- 316 Stainless Steel construction
- Multiple valve ports to a single upstand
- Table D 100mm (4 hole)
- Pressure Rating: PN16

APPLICATIONS

The VS-4 is the ideal valve of choice for waste line applications, where single chamber valves are likely to fail. Thanks to the dual chamber design, contaminates do not accumulate in the valve. Rather they are self ejected back into the line, vastly improving time between maintenance and overall life.

BENEFITS

- Floats and seals protected from solids
- Seals at atmospheric pressure
- Easily serviced on-site
- Guaranteed anti-hammer air chamber
- Extra long service intervals

BERMAD® A30 AUTOMATIC AIR VALVE

SINGLE ORIFICE, AIR ACCUMULATION PREVENTION, LOW PRESSURE SEALING



BERMAD® A30 AUTOMATIC AIR VALVE

INLET 1" MALE BSP

Code	Size (MM)	Description
VAIR1A10	25	1" M BSP Small Orifice AV PN10 GRP Grey
VAWW1A30	25	1" M BSP Small Orifice AV PN16 GRP BLACK

Single orifice, air accumulation prevention, low pressure sealing

BERMAD A30 is a high quality automatic air release valve that allows efficient release of air pockets from pressurized pipes.

With its advanced design, this valve provides excellent protection against air accumulation with improved sealing in low pressure conditions.

FEATURES

Large diameter automatic orifice.

Compact, simple and reliable structure.

Fully corrosion-resistant parts.

APPLICATIONS

Pipelines – Protection against air accumulation in horizontal or low slope lines and road / river crossings.

In proximity to control valves and water meters – Prevention of biased readings and inaccurate pressure regulation due to air flow through these devices.

Industrial and residential networks – Protection against air accumulation.

BENEFITS

High air flow rates.

Low pressure sealing (0.1bar).

Lower maintenance and increased life span.

BERMAD® C30 AUTOMATIC AIR VALVE

DOUBLE ORIFICE, AIR ACCUMULATION AND VACUUM PREVENTION, LOW PRESSURE SEALING



BERMAD C30 is a high quality combination air valve for a variety of water networks and operating conditions. It evacuates air during pipeline filling, allows efficient release of air pockets from pressurized pipes, and enables large air volume intake in the event of network draining.

With its advanced aerodynamic design, this double orifice valve provides excellent protection against air accumulation and prevents vacuum formation with improved sealing in low pressure conditions.

BENEFITS

Higher than usual air flow rates.

Low pressure sealing (0.1bar).

Lower maintenance and increased life span
Pressure gauge connection, check point or test drain for air valve function.

FEATURES

Straight flow body with large diameter automatic orifice.

Aerodynamic full-body kinetic shield.

Compact, simple and reliable structure.

Fully corrosion-resistant parts.

Surge Protection (optional).

Inflow Prevention (optional).

Service Ports fitted (optional).

Threaded Side outlet (Optional for DN50/2").

BERMAD® C30 AUTOMATIC AIR VALVE

INLET 1"-2" MALE BSP OR DN80 FLANGED

Code	Size (MM)	Description
VAIR2C10	50	2" M BSP Comb AV PN12 GRP Grey/RED
VAIR3C10	80	3" flanged Comb AV PN12 GRP Grey/RED
VAWW1C30	25	1" M BSP Comb AV PN16 GRP
VAWW2C30	50	2" M BSP Comb AV PN16 GRP
VAWW3C30	80	3" flanged Comb AV PN16 GRP

Double orifice, air accumulation and vacuum prevention, low pressure sealing

APPLICATIONS

Pipelines – Protection against air accumulation and vacuum formation at elevations, slope change points and road/ river crossings.

Water networks – Protection against air accumulation and vacuum formation. In proximity to control valves and water meters – Prevention of biased readings and inaccurate pressure regulation due to air flow through these devices.

Industrial and residential networks – Protection against air accumulation.

BERMAD® C50 COMBINATION AIR VALVE

SEWAGE & WASTEWATER COMBINATION AIR VALVE – DOUBLE ORIFICE WITH SURGE PROTECTION, AIR ACCUMULATION & VACUUM PREVENTION, LOW PRESSURE SEALING AND EASY MAINTENANCE



BERMAD® C50 COMBINATION AIR VALVE

INLET 2" FEMALE BSP OR DN50-DN80 FLANGED

Code	Size (MM)	Description
VAWW2BPC50SP	50	2" F BSP COMB SAV SP PN10 GRP
VAWW2BDC50SP	50	2" FL COMB SAV SP TD PN10 GRP
VAWW3BDC50SP	80	80mm FL COMB SAV SP TD PN10 GRP

Sewage & wastewater combination air valve – double orifice with surge protection, air accumulation & vacuum prevention, low pressure sealing and easy maintenance

BERMAD C50 is a high quality combination air valve for a variety of sewage and wastewater networks and operating conditions. It evacuates air during pipeline filling, allows efficient release of air and gas pockets from pressurized pipes, and enables large volume air intake in the event of network draining.

With its advanced aerodynamic design and double orifice, this valve provides excellent protection against air and gas accumulation and vacuum formation with improved sealing under low pressure conditions.

BENEFITS

- Higher than usual air flow rates.
- Low pressure sealing (0.05 bar).
- Vortex back washing.
- Lower and easier maintenance.
- Increased life span.

FEATURES

- Straight flow body with large diameter automatic orifice.
- Aerodynamic full-body kinetic shield.
- Elongated body design with non-stick coating.
- Valve is opened from the top.
- 2 service ports.
- Compact, simple, robust and reliable structure.
- Fully corrosion-resistant parts.
- Surge Protection (optional).
- Inflow Prevention (optional).
- Drainage valve (optional).

APPLICATIONS

- Sewage and wastewater pumping stations
 - Air relief and vacuum prevention.
- Sewage and wastewater pipelines
 - Protection against air and gas accumulation and vacuum formation at elevations, slope change points and at road /river crossings.
- Municipal and industrial wastewater treatment plants
 - Protection against air and gas accumulation and vacuum formation.

BERMAD® C60 / C65 COMBINATION AIR VALVE

SEWAGE & WASTEWATER COMBINATION AIR VALVE – DOUBLE ORIFICE WITH SURGE PROTECTION, AIR ACCUMULATION & VACUUM PREVENTION, LOW PRESSURE SEALING AND EASIER MAINTENANCE



BERMAD® C60 / C65 COMBINATION AIR VALVE

INLET 2" FEMALE BSP OR DN50-DN100 FLANGED

Code	Size (MM)	Description
VAWW2BPC60SP	50	2" F BSP COMB SAV SP PN16 DI
VAWW2BDC60SP	50	2" FL COMB SAV SP TD PN16 DI
VAWW3BDC60SP	80	80mm FL COMB SAV SP TD PN16 DI
VAWW4BDC60SP	100	100mm FL COMB SAV SP TD PN16 DI

Sewage & wastewater combination air valve – double orifice with surge protection, air accumulation & vacuum prevention, low pressure sealing and easier maintenance

BERMAD C65 is a high quality combination air valve for a variety of sewage and wastewater networks and operating conditions. It evacuates air during pipeline filling, allows efficient release of air and gas pockets from pressurized pipes, and enables large volume air intake in the event of network draining.

With its advanced aerodynamic design, double orifice and anti-slam / slow closing device, this valve provides excellent protection against air and gas accumulation, surge and water hammers with improved sealing under low pressure conditions.

BENEFITS

Higher than usual air flow rates.

Low pressure sealing (0.1bar).

Vortex back washing.

Lower and easier maintenance.

Increased life span.

FEATURES

Straight flow body.

Aerodynamic full-body kinetic shield.

Elongated body design with non-stick coating.

Valve is opened from the top.

2 service ports.

Compact, simple, robust and reliable structure.

Fully corrosion-resistant parts.

Surge Protection (optional).

Inflow Prevention (optional).

Drainage valve (optional).

APPLICATIONS

Sewage and wastewater pumping stations
– Air relief, vacuum prevention and surge protection.

Sewage and wastewater pipelines
– Protection against air and gas accumulation and vacuum formation at elevations, slope change points and at road/river crossings.

Protection against vacuum formation, surge and water hammer at points likely to experience water column separation.

Municipal and industrial wastewater treatment plants – Protection against air and gas accumulation and vacuum formation.

BERMAD® C70 COMBINATION AIR VALVE

DOUBLE ORIFICE WITH SURGE PROTECTION, 2-STEP FUNCTION AUTOMATIC ORIFICE, AIR ACCUMULATION & VACUUM PREVENTION AND LOW PRESSURE SEALING



BERMAD® C70 COMBINATION AIR VALVE

INLET 2" FEMALE BSP OR DN50-DN150 FLANGED

Code	Size (MM)	Description
VAWW2BPC70SP	50	2"F BSP COMB AV SP PN16 DI
VAWW2HPC70SP	50	2"F BSP COMB AV SP PN35 DI
VAWW2BDC70SP	50	2"FL COMB AV SP TD PN16 DI
VAWW2BHC70SP	50	2"FL COMB AV SP TD PN35 DI
VAWW3BDC70SP	80	80MM FL COMB AV SP PN16 DI
VAWW3BHC70SP	80	80MM FL COMB AV SP PN35 DI
VAWW4BDC70SP	100	100MM FL COMB AV SP PN16 DI
VAWW4BHC70SP	100	100MM FL COMB AV SP PN35 DI
VAWW6BDC70SP	100	150MM FL COMB AV SP PN16 DI
VAWW6BHC70SP	150	150MM FL COMB AV SP PN35 DI
VAWW8BDC70SP	150	150MM FL COMB AV SP PN16 DI
VAWW8BHC70SP	150	150MM FL COMB AV SP PN35 DI

Double orifice with surge protection, 2-step function automatic orifice, air accumulation & vacuum prevention and low pressure sealing

BERMAD C70 is a high quality combination air valve for a variety of water networks and operating conditions. It evacuates air during pipeline filling, allows efficient release of air pockets from pressurized pipes, and enables large volume air intake in the event of network draining.

With its advanced aerodynamic design, double orifice and anti-slam / slow closing device, this valve provides excellent protection against air accumulation, vacuum formation and pressure surges, with improved sealing in low pressure conditions. The valve minimizes water spraying during air release.

APPLICATIONS

Pumping stations and deep well pumps
– Air relief, surge protection and vacuum prevention.

Pipelines
– Protection against air accumulation and vacuum formation at elevations, slope change points and at road / river crossings.

Water networks
– Protection against vacuum formation, surge and water hammers at points likely to experience water column separation.

BENEFITS

Higher than usual air flow rates.

Low pressure sealing (0.1bar).

Minimizes water spraying during air release.

Lower maintenance and increased life span.

Australian Standards - AS4956 approved (Licence No SMK25537 SAI Global) and AS/NZS 4020 approved.

FEATURES

Straight flow body with nominal (equal) inlet and outlet size.

Aerodynamic full-body kinetic shield.

Innovative 2-step function, automatic orifice.

Optional outlets.

2 service ports.

Drainage valve.

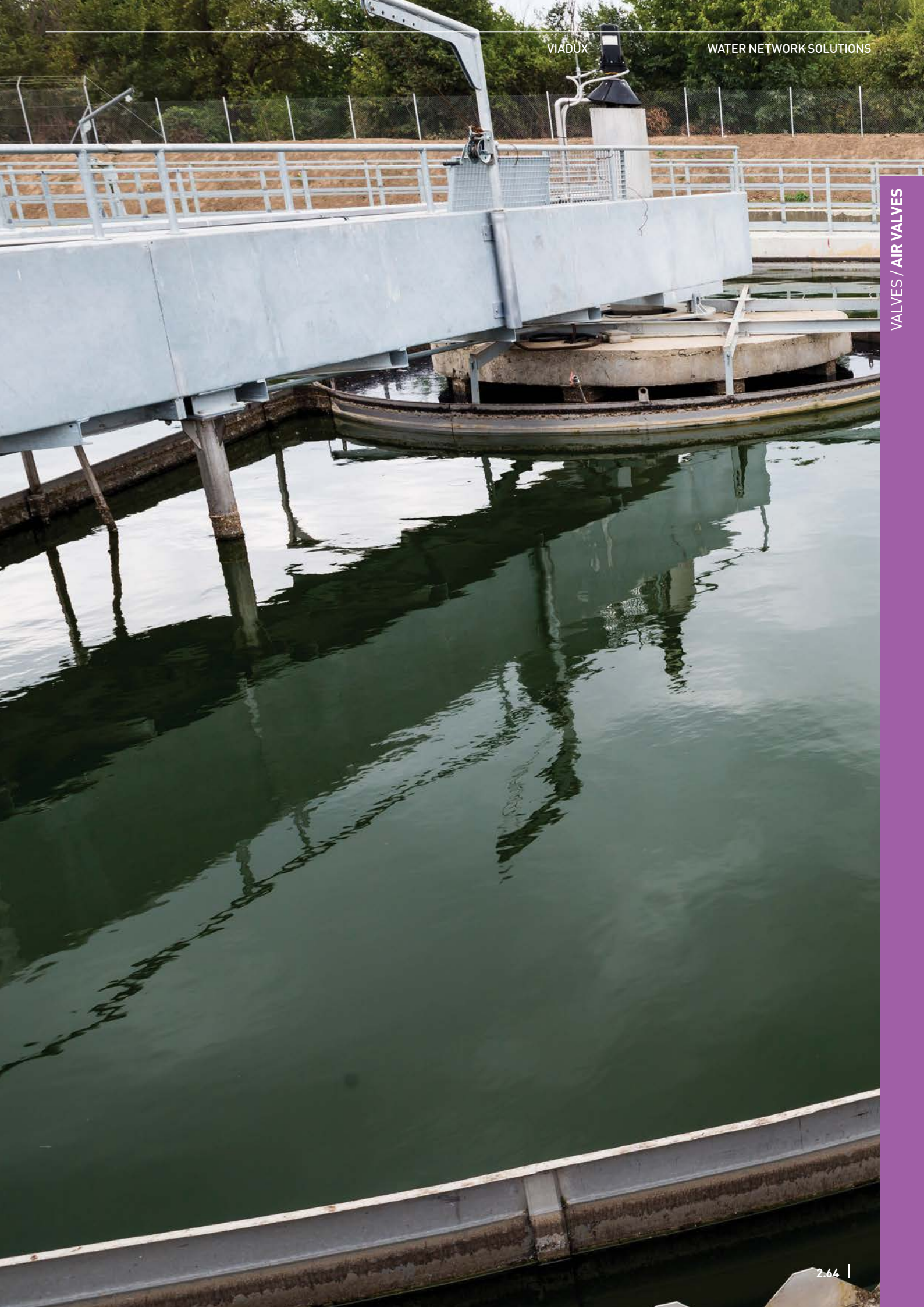
Compact, simple, robust and reliable structure.

Fully corrosion-resistant parts.

Surge Protection (optional).

Inflow Prevention (optional).

Insect Screen (optional).

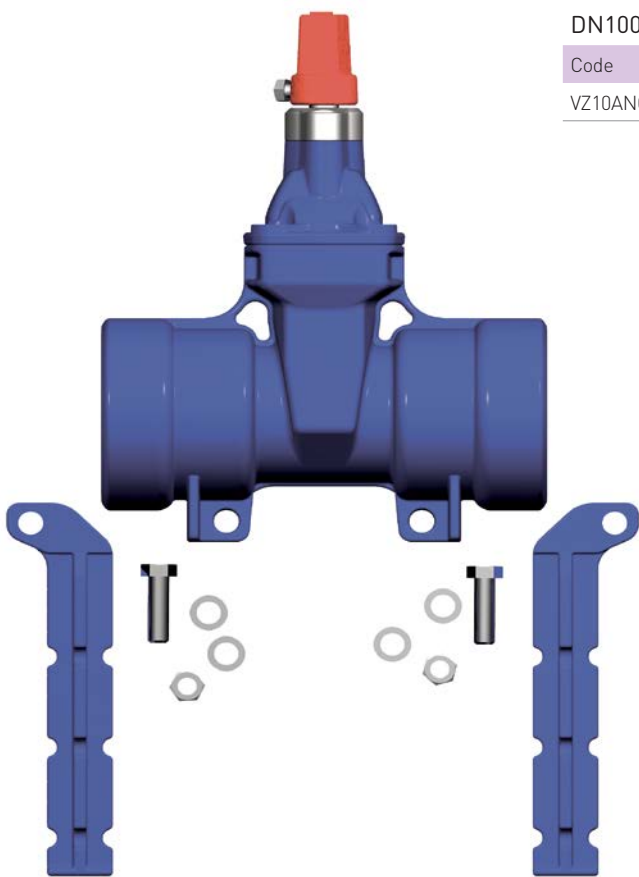


VALVE
ANCILLARY

SUREFLOW®

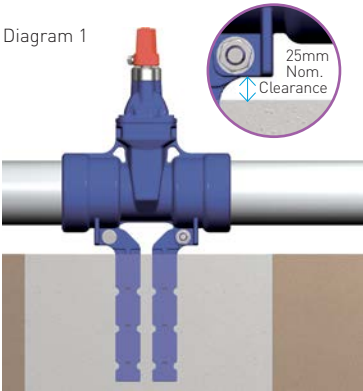
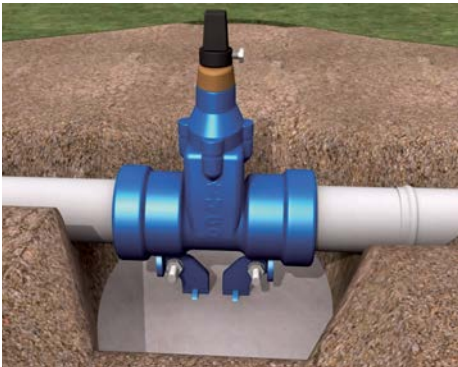
VALVE ANCHOR KIT

VALVE THRUST RESTRAINT SYSTEM – DN 100 & DN 150 SOCKET GATE VALVES



DN100 & DN150 SOCKET GATE VALVES

Code	Size (MM)	Description
VZ10ANCHORKIT	100-150	100-150 VALVE ANCHOR KIT



VALVE SPINDLE EXTENSION

FACILITATE THE REMOTE OPERATING OF GATE VALVES WITH DUCTILE IRON PIPE SYSTEMS



GENERAL APPLICATION

SUREFLOW® Valve Spindle Extensions facilitate the opening and closing of gate valves where the valves are located below ground, or in pits, at an extended distance from the operating level

TECHNICAL DATA

Length

Minimum 250mm
Maximum 7500mm

Note: longer lengths available upon request

Standards

AS 2638 Gate valves for waterworks purposes.

SET LENGTH 150 – 600MM

Code	Length (MM)	Description
VZDXA0150S	150	VLV SPDLE EXT 150EL AS & SCREW
VZDXA0300S	300	VLV SPDLE EXT 300EL AS & SCREW
VZDXA0375S	375	VLV SPDLE EXT 375EL AS & SCREW
VZDXA0450S	450	VLV SPDLE EXT 450EL AS & SCREW
VZDXA0525S	525	VLV SPDLE EXT 525EL AS & SCREW
VZDXA0600S	600	VLV SPDLE EXT 600EL AS & SCREW

VARIABLE LENGTH EXTENSION SPINDLE

Code	Description
VZDEA0500VAR	301-500 EL VALVE SPINDLE EXTENSION FAB
VZDEA0700VAR	501-700 EL VALVE SPINDLE EXTENSION FAB
VZDEA0900VAR	701-900 EL VALVE SPINDLE EXTENSION FAB
VZDEA1100VAR	901-1100 EL VALVE SPINDLE EXTENSION FAB
VZDEA1300VAR	1101-1300 EL VALVE SPINDLE EXTENSION FAB
VZDEA1500VAR	1301-1500 EL VALVE SPINDLE EXTENSION FAB
VZDEA1700VAR	1501-1700 EL VALVE SPINDLE EXTENSION FAB
VZDEA1900VAR	1701-1900 EL VALVE SPINDLE EXTENSION FAB
VZDEA2100VAR	1901-2100 EL VALVE SPINDLE EXTENSION FAB
VZDEA2300VAR	2201-2300 EL VALVE SPINDLE EXTENSION FAB
VZDEA2500VAR	2301-2500 EL VALVE SPINDLE EXTENSION FAB
VZDEA2700VAR	2501-2700 EL VALVE SPINDLE EXTENSION FAB
VZDEA2900VAR	2701-2900 EL VALVE SPINDLE EXTENSION FAB
VZDEA3100VAR	2901-3100 EL VALVE SPINDLE EXTENSION FAB
VZDEA3300VAR	3101-3300 EL VALVE SPINDLE EXTENSION FAB
VZDEA3500VAR	3301-3500 EL VALVE SPINDLE EXTENSION FAB
VZDEA3700VAR	3501-3700 EL VALVE SPINDLE EXTENSION FAB
VZDEA3900VAR	3701-3900 EL VALVE SPINDLE EXTENSION FAB
VZDEA4100VAR	3901-4100 EL VALVE SPINDLE EXTENSION FAB
VZDEA4300VAR	4101-4300 EL VALVE SPINDLE EXTENSION FAB
VZDEA4500VAR	4301-4500 EL VALVE SPINDLE EXTENSION FAB
VZDEA4700VAR	4501-4700 EL VALVE SPINDLE EXTENSION FAB
VZDEA4900VAR	4701-4900 EL VALVE SPINDLE EXTENSION FAB
VZDEA5100VAR	4901-5100 EL VALVE SPINDLE EXTENSION FAB
VZDEA5300VAR	5101-5300 EL VALVE SPINDLE EXTENSION FAB
VZDEA5500VAR	5301-5500 EL VALVE SPINDLE EXTENSION FAB
VZDEA5700VAR	5501-5700 EL VALVE SPINDLE EXTENSION FAB
VZDEA5900VAR	5701-5900 EL VALVE SPINDLE EXTENSION FAB
VZDEA6100VAR	5901-6100 EL VALVE SPINDLE EXTENSION FAB
VZDEA6300VAR	6101-6300 EL VALVE SPINDLE EXTENSION FAB
VZDEA6500VAR	6301-6500 EL VALVE SPINDLE EXTENSION FAB
VZDEA6700VAR	6501-6700 EL VALVE SPINDLE EXTENSION FAB
VZDEA6900VAR	6701-6900 EL VALVE SPINDLE EXTENSION FAB
VZDEA7100VAR	6901-7100 EL VALVE SPINDLE EXTENSION FAB
VZDEA7300VAR	7101-7300 EL VALVE SPINDLE EXTENSION FAB
VZDEA7500VAR	7301-7500 EL VALVE SPINDLE EXTENSION FAB

VALVE HANDWHEEL

FOR USE ON DUCTILE IRON GATE VALVES



HANDWHEEL AUSLITE III CC

Code	Description
3703402	80-150 Handwheel Auslite III CC FC
3704085	200 Handwheel Auslite III CC FC
3704089	225-300 Handwheel Auslite III CC FC
3704099	375-400 H'wheel Auslite III CC FC

HANDWHEEL AUSLITE III ACC

Code	Description
3703398	80-150 Handwheel Auslite III ACC FC
3704082	200 Handwheel Auslite III ACC FC
3704087	225-300 Handwheel Auslite III ACC FC
3704096	375-400 Handwheel Auslite III ACC FC



CLAMPS & COUPLINGS



Offtake Clamps	3.03
Repair Clamps	3.07
Tapping Bands	3.15
Stainless Steel Couplings	3.23
Mild Steel Couplings	3.35
Other Clamps & Couplings	3.37

OFFTAKE CLAMPS

DN 40 – DN 600 STAINLESS STEEL CLAMPS



FEATURES

Manufactured from grade 316 stainless steel for superior corrosion protection.

Nitrile rubber gaskets provide a potable water contact approved seal.

Fully passivated stainless steel underscores the quality and longevity of the product.

Dry film anti-galling coating employed to minimise galling of the stainless steel fasteners.

Design features compensate for differential expansion and contraction of HDPE pipe with temperature variation.

Trench friendly mechanical application negates the need for tedious conventional electro fusion processes associated with repair and tapping HDPE pipe.

Rigid clamp body supports and augments the HDPE pipe in tapping applications.

Dispatched with detailed installation instructions.

Manufacturing facility certified to ISO 9001 Quality Assured Standard.

TECHNICAL DATA

Size Range

OD 110 – OD 600

Maximum Operating Pressure

1,600 kPa

Temperature Range

-10°C to 60°C

Product Certification

AS 4181 Lic. No SMK1785

Offtakes

Threaded BSP in 20mm to 100mm

Flanged 80mm to 200mm in PN 16 to AS 4087 with Table C, D compatible drilling [AS 2129]

Offtake sizes are subject to a design criteria and cannot exceed $\frac{1}{3}$ the parent pipe OD

Other offtake specifications are available upon request.

OFFTAKE CLAMPS

DN 40 – DN 600 STAINLESS STEEL CLAMPS

FLANGE OFFSET
DIMENSION "A"

Flange Size DN	Offset "A" MM
80 - 150	90
200 - 225	105

WANG HDPE CLAMP (REPAIR & TAPPING) - PN16 OPERATING PRESSURE

Nom. Pipe Size DN	Repair Clamps		Bsp Tapped Clamps		Flanged Offtake Clamps	
	Product Code	Clamp Length MM	Product Code	Available Offtake Sizes (??) DN	Product Code	Available Flange Sizes (???) DN
40	KP2-040AB	200	NA	NA	NA	NA
50	KP2-050AB	200	NA	NA	NA	NA
63	KP2-063AB	200	KP2-063T020AB	20	NA	NA
75	KP2-075AB	200	KP2-075T020AB	20	NA	NA
90	KP2-090AB	200	KP2-090T0??AB	20, 25	NA	NA
110	KP2-110AB	200	KP2-110T0??AB	20, 25, 32	NA	NA
125	KP2-125AB	200	KP2-125T0??AB	20, 25, 32, 40	NA	NA
160	KP3-160AC	300	KP3-160T0??AC	20, 25, 32, 40, 50	NA	NA
180	KP3-180AC	300	KP3-180T0??AC	20, 25, 32, 40, 50	NA	NA
200	KP3-200AC	300	KP3-200T0??AC	20, 25, 32, 40, 50	NA	NA
225	KP5-225AD	400	KP5-225T0??AD	20, 25, 32, 40, 50	NA	NA
250	KP5-250AD	400	KP5-250T0??AD	20, 25, 32, 40, 50	KP8-250F080BDC	80
280	KP7-280AF	600	KP7-280T0??AF	20, 25, 32, 40, 50	KP8-280F080BDC	80
315	KP7-315AF	600	KP7-315T0??AF	20, 25, 32, 40, 50	KP14-315F???BFC	80, 100
355	KP14-355BF	600	KP14-355T0??BF	20, 25, 32, 40, 50	KP14-355F???BFC	80, 100
400	KP14-400BF	600	KP14-400T0??BF	20, 25, 32, 40, 50	KP14-400F???BFC	80, 100
450	KP20-450BH	800	KP20-450T0??BH	20, 25, 32, 40, 50	KP20-450F???BHC	80, 100, 150
500	KP20-500BH	800	KP20-500T0??BH	20, 25, 32, 40, 50	KP20-500F???BHC	80, 100, 150
500+	Price and availability upon request, subject to customer's requirements					



TAPPED OFFTAKE REPAIR CLAMPS

DN 50 – DN 1200 STAINLESS STEEL FOR TAPPING INTO OLD, UNSTABLE OR DAMAGED PIPE



FEATURES

Tapped Offtake Repair Clamps provide rehabilitation to damaged and unstable pipes that require a tapping installation.

Offtake is a stainless steel female BSP threaded socket from DN 20 - DN 100 for the connection of threaded valves and fittings.

Clamp body provides pipe reinforcement once the pipe is tapped.

Each clamp fits a range of pipe diameters.

Passivated 316 stainless steel construction maximises corrosion protection and performance life.

Full-circle nitrile rubber gasket insulates against galvanic pipe corrosion.

Supplied with plastic thread protectors.

All sharp surfaces finished to avoid harm to the installer.

Dispatched with installation instructions

Dry film anti-galling coating employed to minimise galling of the stainless steel fasteners.

Manufacturing facility certified to ISO 9001 Quality Assured Standard.

TECHNICAL DATA

Size Range

DN 50 – DN 1200

Offtake Sizes

DN 20 – DN 100*

(Depending on host pipe size)

Maximum Operating Pressure

1600 kPa (up to and including DN 400).

Limited to offtake sizes up to and including DN 50

Temperature Range

-10°C to 60°C

Relevant Standards

AS 4181

*NOTE: Standard offtake specification is BSP thread. Alternative thread specifications e.g., NPT, can be supplied upon request.

TAPPED OFFTAKE REPAIR CLAMPS

Nom. Size	Min Clamp Length	Pipe OD Range	Product Code	Available BSP Offtake Sizes (??)
DN	MM	MM		DN
40	150	47-52	K2-047T0??AA	20, 25
50	150	59-64	K2-059T0??AA	20, 25, 32, 40
		63-68	K2-063T0??AA	20, 25, 32, 40
		69-74	K2-069T0??AA	20, 25, 32, 40
80	150	75-80	K2-075T0??AA	20, 25, 32, 40, 50
		76-83	K2-076T0??AA	20, 25, 32, 40, 50
80	200	85-92	K2-085T0??AB	20, 25, 32, 40, 50
		88-95	K2-088T0??AB	20, 25, 32, 40, 50
		95-105	K2-095T0??AB	20, 25, 32, 40, 50
80	300	85-92	K3-085T0??AC	20, 25, 32, 40, 50
		88-95	K3-088T0??AC	20, 25, 32, 40, 50
		95-105	K3-095T0??AC	20, 25, 32, 40, 50
100-125	200	100-110	K2-100T0??AB	20, 25, 32, 40, 50
		110-120	K2-110T0??AB	20, 25, 32, 40, 50
		114-124	K2-114T0??AB	20, 25, 32, 40, 50
		120-130	K2-120T0??AB	20, 25, 32, 40, 50
		130-140	K2-130T0??AB	20, 25, 32, 40, 50
		140-150	K2-140T0??AB	20, 25, 32, 40, 50
		145-155	K2-145T0??AB	20, 25, 32, 40, 50
100-125	300	100-105	K3-100T0??AC	20, 25, 32, 40, 50, 65
		110-120	K3-110T0??AC	20, 25, 32, 40, 50, 65, 80
		114-124	K3-114T0??AC	20, 25, 32, 40, 50, 65, 80

TAPPED OFFTAKE REPAIR CLAMPS

DN 50 – DN 1200 STAINLESS STEEL FOR TAPPING INTO OLD, UNSTABLE OR DAMAGED PIPE

TAPPED OFFTAKE REPAIR CLAMPS

Nom. Size	Min Clamp Length	Pipe OD Range	Product Code	Available BSP Offtake Sizes [??]
DN	MM	MM		DN
		120-130	K3-120T0??AC	20, 25, 32, 40, 50, 65, 80
		130-140	K3-130T0??AC	20, 25, 32, 40, 50, 65, 80
		140-150	K3-140T0??AC	20, 25, 32, 40, 50, 65, 80
		145-155	K3-145T0??AC	20, 25, 32, 40, 50, 65, 80
150	200	150-160	K2-150T0??AB	20, 25, 32, 40, 50
		160-170	K2-160T0??AB	20, 25, 32, 40, 50
		168-178	K2-168T0??AB	20, 25, 32, 40, 50
		175-185	K2-175T0??AB	20, 25, 32, 40, 50
		185-195	K2-185T0??AB	20, 25, 32, 40, 50
		190-200	K2-190T0??AB	20, 25, 32, 40, 50
150	300	150-160	K3-150T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		160-170	K3-160T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		168-178	K3-168T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		175-185	K3-175T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		185-195	K3-185T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		190-200	K3-190T0??AC	20, 25, 32, 40, 50, 65, 80, 100
200	200	200-210	K2-200T0??AB	20, 25, 32, 40, 50
		210-220	K2-210T0??AB	20, 25, 32, 40, 50
		215-225	K2-215T0??AB	20, 25, 32, 40, 50
		225-235	K2-225T0??AB	20, 25, 32, 40, 50
		230-240	K2-230T0??AB	20, 25, 32, 40, 50
		240-250	K2-240T0??AB	20, 25, 32, 40, 50
200	300	200-210	K3-200T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		205-215	K3-205T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		215-225	K3-215T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		225-235	K3-225T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		230-240	K3-230T0??AC	20, 25, 32, 40, 50, 65, 80, 100
225	200	250-260	K2-250T0??AB	20, 25, 32, 40, 50
225	300	250-260	K3-250T0??AC	20, 25, 32, 40, 50, 65, 80, 100
225-250	300	250-260	K4-250T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		255-265	K4-255T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		260-270	K4-260T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		265-275	K4-265T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		270-280	K4-270T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		275-285	K4-275T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		285-295	K4-285T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		290-300	K4-290T0??AC	20, 25, 32, 40, 50, 65, 80, 100
300	300	300-310	K4-300T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		310-320	K4-310T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		315-325	K4-315T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		320-330	K4-320T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		330-340	K4-330T0??AC	20, 25, 32, 40, 50, 65, 80, 100
		340-350	K4-340T0??AC	20, 25, 32, 40, 50, 65, 80, 100

TAPPED OFFTAKE REPAIR CLAMPS

DN 50 – DN 1200 STAINLESS STEEL FOR TAPPING INTO OLD, UNSTABLE OR DAMAGED PIPE

TAPPED OFFTAKE REPAIR CLAMPS

Nom. Size	Min Clamp Length	Pipe OD Range	Product Code	Available BSP Offtake Sizes (??)
DN	MM	MM		DN
300	400	310-320	K4-310T0??AD	20, 25, 32, 40, 50, 65, 80, 100
		315-325	K4-315T0??AD	20, 25, 32, 40, 50, 65, 80, 100
		330-340	K4-330T0??AD	20, 25, 32, 40, 50, 65, 80, 100
		340-350	K4-340T0??AD	20, 25, 32, 40, 50, 65, 80, 100
300-400	400	320-340	K10-320T0??BD	20, 25, 32, 40, 50, 65, 80, 100
		330-350	K10-330T0??BD	20, 25, 32, 40, 50, 65, 80, 100
		350-370	K10-350T0??BD	20, 25, 32, 40, 50, 65, 80, 100
		360-380	K10-360T0??BD	20, 25, 32, 40, 50, 65, 80, 100
		370-390	K10-370T0??BD	20, 25, 32, 40, 50, 65, 80, 100
375	400	390-410	K10-390T0??BD	20, 25, 32, 40, 50, 65, 80, 100
		400-420	K10-400T0??BD	20, 25, 32, 40, 50, 65, 80, 100
		410-430	K10-410T0??BD	20, 25, 32, 40, 50, 65, 80, 100
400	400	440-460	K10-440T0??BD	20, 25, 32, 40, 50, 65, 80, 100
450	400	450-470	K10-450T0??BD	20, 25, 32, 40, 50, 65, 80, 100
		470-490	K10-470T0??BD	20, 25, 32, 40, 50, 65, 80, 100
		490-510	K10-490T0??BD	20, 25, 32, 40, 50, 65, 80, 100
450+	Price and availability upon request, subject to customer's requirements			

KWIK REPAIR CLAMPS

DN 15 – DN 50 QUICK INSTALLATION REPAIR CLAMPS



FEATURES

Full circle repair clamps for galvanised steel, PVC and copper pipelines.

Full circle seal provides complete damage containment.

Available in 75mm or 150mm lengths.

316 stainless steel skin.

Galvanised steel or 316 stainless steel fasteners available.

Manufactured in accordance with ISO 9001 quality standards.

TECHNICAL DATA

Size Range:

DN 15 DN 50

Maximum Operating Pressure:

1600 kPa

Temperature Range:

-10°C to 60°C

Note: Wang KWIK clamps do not provide axial pipe restraint.

PIPE SUITABILITY - COPPER PIPE

Nom. Pipe Size DN	Pipe OD	STAINLESS STEEL FASTENERS				GALVANISED FASTENERS			
		1 Bolt - M10		2 Bolt - M10		1 Bolt - M10		2 Bolt - M10	
		LENGTH MM	Code	LENGTH MM	Code	LENGTH MM	Code	LENGTH MM	Code
15	15	75	KKFCOP1-015S	150	KKFCOP2-015S	75	KKFCOP1-015G	150	KKFCOP2-015G
20	20	75	KKFCOP1-020S	150	KKFCOP2-020S	75	KKFCOP1-020G	150	KKFCOP2-020G
25	25	75	KKFCOP1-025S	150	KKFCOP2-025S	75	KKFCOP1-025G	150	KKFCOP2-025G
32	32	75	KKFCOP1-032S	150	KKFCOP2-032S	75	KKFCOP1-032G	150	KKFCOP2-032G
40	40	75	KKFCOP1-040S	150	KKFCOP2-040S	75	KKFCOP1-040G	150	KKFCOP2-040G
50	50	75	KKFCOP1-050S	150	KKFCOP2-050S	75	KKFCOP1-050G	150	KKFCOP2-050G

PIPE SUITABILITY - GALVANISED STEEL & PVC

Nom. Pipe Size DN	Pipe OD	STAINLESS STEEL FASTENERS				GALVANISED FASTENERS			
		1 Bolt - M10		2 Bolt - M10		1 Bolt - M10		2 Bolt - M10	
		LENGTH MM	Code	LENGTH MM	Code	LENGTH MM	Code	LENGTH MM	Code
15	21	75	KKFGAL1-015S	150	KKFGAL2-015S	75	KKFGAL1-015G	150	KKFGAL2-015G
20	27	75	KKFGAL1-020S	150	KKFGAL2-020S	75	KKFGAL1-020G	150	KKFGAL2-020G
25	33	75	KKFGAL1-025S	150	KKFGAL2-025S	75	KKFGAL1-025G	150	KKFGAL2-025G
32	42	75	KKFGAL1-032S	150	KKFGAL2-032S	75	KKFGAL1-032G	150	KKFGAL2-032G
40	48	75	KKFGAL1-040S	150	KKFGAL2-040S	75	KKFGAL1-040G	150	KKFGAL2-040G
50	60	75	KKFGAL1-050S	150	KKFGAL2-050S	75	KKFGAL1-050G	150	KKFGAL2-050G

STAINLESS STEEL REPAIR CLAMPS

DN 40 – DN 1200 FOR FAST, PERMANENT REPAIR & REINFORCEMENT SOLUTION FOR MOST PIPE TYPES AND SIZES

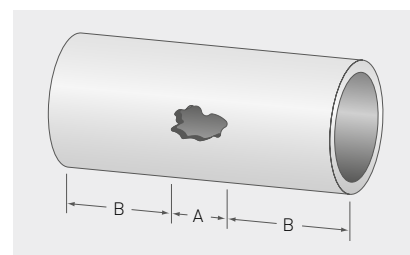


CALCULATING THE MINIMUM RECOMMENDED CLAMP LENGTH

When repairing a damaged pipe, it is important to select a clamp of the right length relative to the length of the damage being repaired. For effective sealing, there should be sufficient gasket in contact with the pipe between the edge of the damage and the end of the clamp on each side.

The diagram and table below provide a method of ensuring that the selected clamp is no less than the minimum recommended length for an effective seal.

Minimum recommended clamp length = $A + 2B$



FEATURES

Manufactured from grade 316 stainless steel for superior corrosion protection.

Nitrile rubber gaskets provide a potable water contact approved seal and insulates against galvanic corrosion.

Fully passivated stainless steel underscores the quality and longevity of the product.

Clamp design permits the installation of a single clamp on a range of pipe diameters.

All sharp surfaces finished to avoid injury to the installer.

Product supplied with detailed installation instructions.

Dry film anti-galling coating employed to minimise galling of the stainless steel fasteners.

Manufacturing facility certified to the ISO 9001 quality assured standard.

TECHNICAL DATA

Size Range:

DN 40 - DN 1200

Maximum Operating Pressure:

Up to 690mm OD: 1600 kPa

Temperature Range:

-10°C to 60°C

Product Certification:

AS 4181 Lic. No SMK1785

Note: Wang Repair Clamps should not be used to join pipe and DO NOT provide axial pipe restraint.

The use of a Vari-Gib Pipe Coupling is recommended for pipe joining applications.

EXAMPLE: CALCULATING MINIMUM CLAMP LENGTH

You require a clamp to repair a DN 300 Sr.2 PVC pipe with a 100mm wide hole

1. Determine the minimum required clamp length with formula $(A+2B)$.
 A = Damage dimension
 $= 100\text{mm}$
 B = Seal length
(extract from table below)
 $= 100\text{mm}$
Therefore MINIMUM clamp length
 $= (100 + [2 \times 100]) = 300\text{mm}$.
2. Standard clamp length from table below for a DN 300 pipe = 300mm.
Therefore a standard clamp from the selection chart (page 3 & 4) can be used.
3. However if the damage had been more than 100mm in length, a standard clamp (300mm long in this example) would be too short.
4. Contact Viadux Water in such an instance for assistance with the next available option in clamp length.

STAINLESS STEEL REPAIR CLAMPS

DN 40 – DN 1200 FOR FAST, PERMANENT REPAIR & REINFORCEMENT SOLUTION FOR MOST PIPE TYPES AND SIZES

Nom. Pipe Size	DICL	Steel		CICL		AC		
DN	AS/NZS 2280	MSCL AS 1579	GWl AS 1074	B AS 1724	C AS 2544	AB AS 1711	CD AS 1711	
40			K2-047AA 48mm					
50			K2-059AA 60mm			K2-069AA 69mm		
65			K2-076AA 76mm			K2-076AA 79mm		
80	K2-095AB 96mm		K2-085AB 89mm	K2-095AB 96mm	K2-095AB 96mm	K2-095AB 96mm	K2-095AB 96mm	
100	K2-120AB 122mm	K2-114AB 114mm	K2-114AB 114mm	K2-120AB 122mm	K2-120AB 122mm	K2-120AB 122mm	K2-120AB 122mm	
125		K2-140AB 140mm	K2-140AB 140mm		K2-140AB 149mm			
150	K2-175AB 177mm	K2-160AB 168mm	K2-160AB 168mm	K2-175AB 177mm	K2-175AB 177mm	K2-175AB 177mm	K2-175AB 177mm	
175					K2-200AB 203mm			
200	K2-230AB 232mm	K2-215AB 218mm		K2-230AB 232mm	K2-230AB 232mm	K2-230AB 232mm	K2-230AB 232mm	
225	K4-250AC 259mm			K4-250AC 259mm	K4-250AC 259mm	K4-250AC 259mm	K4-250AC 259mm	
250	K4-285AC 286mm	K4-270AC 273mm		K4-285AC 286mm	K4-285AC 286mm	K4-285AC 286mm	K4-285AC 286mm	
300	K4-340AC 345mm	K4-320AC 324mm		K4-330AC 334mm	K4-340AC 345mm	K4-330AC 334mm	K4-340AC 345mm	
350		K10-350BD 355mm						
375	K10-410BD 426mm	K10-400BD 406mm		K10-410BD 413mm	K10-410BD 426mm	K10-410BD 413mm	K10-410BD 426mm	
400		K10-450BD 457mm						
450	K10-490BD 507mm	K10-490BD 508mm		K10-490BD 492mm	K10-490BD 507mm	K10-490BD 492mm	K10-490BD 507mm	
500	K15-560CD 560mm	K15-530CD 559mm		K15-530CD 545mm	K15-560CD 560mm			
525						K15-570CD 572mm	K15-570CD 587mm	
600	K15-650CD 667mm	K15-600CD 610mm		K15-650CD 650mm	K15-650CD 667mm	K15-650CD 650mm	K15-650CD 667mm	

MINIMUM REQUIRED SEAL LENGTH 'B'

Nom. Pipe Dia. DN	Min. Seal Length 'B' MM	Standard Clamp Length MM
40 - 80	50	150
100 - 200	65	200

Nom. Pipe Dia. DN	Min. Seal Length 'B' MM	Standard Clamp Length MM
225 - 300	100	300
350 - 600	150	400



	ABS*1	GRP*2	RC	Copper	PVC-U/M*3	
	Series 1	Series 1 – B5			Series 1 (U) AS/NZS 1477 (M) AS/NZS 4765	Series 2 (U) AS/NZS 1477 (M) AS/NZS 4765
	AS 3518	AS 3571	AS 4058	AS 1432		
	K2-047AA 48mm			N/A 38mm	K2-047AA 48mm	
	K2-059AA 60mm			K2-047AA 51mm	K2-059AA 60mm	
	K2-075AA 75mm			K2-063AA 64mm	K2-075AA 75mm	
	K2-085AB 89mm			K2-076AA 76mm	K2-085AB 89mm	
	K2-114AB 114mm	K2-120AB 122mm		K2-095AB 101mm	K2-114AB 114mm	K2-120AB 122mm
	K2-140AB 140mm			K2-120AB 127mm	K2-140AB 140mm	
	K2-160AB 168mm	K2-175AB 177mm	K2-190AB 197mm	K2-150AB 152mm	K2-160AB 160mm	K2-175AB 177mm
					K2-200AB 200mm	
	K2-215AB 225mm	K2-230AB 232mm		K2-200AB 203mm	K2-215AB 225mm	K2-230AB 232mm
	K4-250AC 250mm	K4-250AC 259mm	K4-275AC 279mm	K2-225AB 229mm	K4-250AC 250mm	K4-250AC 259mm
		K4-285AC 286mm		K4-275AC 280mm	K4-285AC 286mm	
	K4-310AC 315mm	K4-340AC 345mm	K10-350BD 362mm		K4-310AC 315mm	K4-340AC 345mm
	K10-350BD 355mm	K10-390BD 399mm			K10-350BD 355mm	
	K10-400BD 400mm	K10-410BD 426mm	K10-440BD 445mm	K10-400BD 400mm	K10-410BD 426mm	
	K10-450BD 450mm	K10-450BD 453mm			K10-450BD 450mm	
	K10-490BD 500mm	K10-490BD 507mm	K15-530CD 533mm		K10-490BD 500mm	K10-490BD 507mm
	K15-560CD 560mm	K15-560CD 560mm			K15-560CD 560mm	K15-560CD 560mm
		K15-570CD 587mm	K15-610CD 616mm			
	K15-620CD 630mm	K15-650CD 667mm	K15-690CD 699mm		K15-620CD 630mm	K15-650CD 667mm

EXAMPLE:

Product Code	Pipe OD
K4-270AC	273mm

Note: The WANG Repair Clamp range extends beyond DN 600. For sizes and configurations not listed above, please contact Viadux Water for assistance

*1 Min. required pipe rating for clamp application: PN 9

*2 Min. required pipe rating for clamp application: SN 10,000

*3 Min. required pipe rating for clamp application: U = PN 9 / M = PN 12 / O = PN 16.

TAPPING BANDS

MULTI TAP SADDLE

DN 100 & DN 150 MULTI RANGE ADAPTABLE TAPPING SOLUTION FOR QUICK APPLICATION



MULTI TAP SADDLE

Nom. Pipe Size	Product Code	Available BSP Offtake Sizes (??)
DN		DN
100	KTNDM100??	20, 25, 32, 40, 50
150	KTNDM150??	20, 25, 32, 40, 50

FEATURES

- The Multi-Tap tapping band adapts to DI, CI, AC, Series 1 & 2 PVC pipes of the same DN size.
- The unique wrap around and hook-on design simplifies adjustment at time of installation.
- Fully passivated 316 stainless steel back strap and fastening mechanism underscores the quality of the product.
- Dry film coating employed to minimize galling of the stainless steel fastener.
- Nitrile rubber back strap gasket employed to isolate against galvanic corrosion between pipe and saddle.
- EPDM centre ring seal ensures a water tight tapping with AS/NZS 4020 potable water compliance.

TECHNICAL DATA

- Size Range:**
DN 100 and DN 150
- Offtake Sizes:**
DN 20 to DN 50
- Maximum Operating Pressure:**
1600 kPa
- Temperature Range:**
-10° to 60°C
- Relevant Standards:**
AS/NZS 4020 suitable for potable water application.

RIGI-TAP TAPPING CLAMPS

DN 40 – DN 450 FAST, PERMANENT TAPPING SOLUTION FOR RIGID PIPE TYPES



FEATURES

Saddle bodies are manufactured from either 316 stainless steel or Ductile Iron Fusion Bonded Epoxy coated (depending on saddle type) with 316 stainless steel fasteners.

Nitrile rubber gaskets provide a potable water approved seal in all saddle types. Larger diameter Rigi-Tap saddles (DN 200 and larger) employ an EPDM back mat, insulating against galvanic corrosion.

Fully passivated 316 stainless steel underscore the quality of the product.

Dry film coating employed to minimise galling of the stainless steel fasteners.

All sharp surfaces finished to avoid injury to the installer.

Supplied with detailed installation instructions and pipe type compatibility information.

Manufacturing facility certified to the ISO 9001 Quality Assured Standard.

TECHNICAL DATA

Size range:

DN 40 - DN 450

Depending on saddle type. See selection chart inside

Maximum Operating Pressure:

1600 kPa

Temperature Range:

-10°C to 60°C

Relevant Standards:

AS/NZS 4793

Lic. No. SMK00278

RIGI-TAP TAPPING CLAMPS

Nom. Pipe Size	Min. Clamp Length	PIPE OD Range	Product Code	Available BSP Offtake Sizes (??)
DN	MM	MM		DN
40	125	47-52	KT1-047T0??	20, 25
50	125	59-64	KT1-059T0??	20, 25
		63-68	KT1-063T0??	20, 25
		69-74	KT1-069T0??	20, 25
75	125	75-80	KT1-075T0??	20, 25
80	125	88-98	KT1-088T0??	20, 25, 32, 40, 50
100	125	101-111	KT1-101T0??	20, 25, 32, 40, 50
		114-124	KT1-114T0??	20, 25, 32, 40, 50
		120-130	KT1-120T0??	20, 25, 32, 40, 50
		130-140	KT1-130T0??	20, 25, 32, 40, 50
125	125	140-150	KT1-140T0??	20, 25, 32, 40, 50
		450-155	KT1-145T0??	20, 25, 32, 40, 50
150	125	152-162	KT1-152T0??	20, 25, 32, 40, 50
		160-170	KT1-160T0??	20, 25, 32, 40, 50
		168-178	KT1-168T0??	20, 25, 32, 40, 50
		175-185	KT1-175T0??	20, 25, 32, 40, 50
175	125	182-192	KT1-182T0??	20, 25, 32, 40, 50
		190-200	KT1-190T0??	20, 25, 32, 40, 50
200	125	200-220	KT4-200T0??	20, 25, 32, 40, 50
		215-235	KT4-215T0??	20, 25, 32, 40, 50
		225-245	KT4-225T0??	20, 25, 32, 40, 50

Nom. Pipe Size	Min. Clamp Length	PIPE OD Range	Product Code	Available BSP Offtake Sizes (??)
DN	MM	MM		DN
225	125	240-260	KT4-240T0??	20, 25, 32, 40, 50
		250-270	KT4-250T0??	20, 25, 32, 40, 50
250	125	270-290	KT4-270T0??	20, 25, 32, 40, 50
		290-310	KT4-290T0??	20, 25, 32, 40, 50
300	125	300-320	KT4-300T0??	20, 25, 32, 40, 50
		315-335	KT4-315T0??	20, 25, 32, 40, 50
		330-350	KT4-330T0??	20, 25, 32, 40, 50
		355-375	KT4-355T0??	20, 25, 32, 40, 50
		360-380	KT4-360T0??	20, 25, 32, 40, 50
		370-390	KT4-370T0??	20, 25, 32, 40, 50
375	125	390-410	KT4-390T0??	20, 25, 32, 40, 50
		410-430	KT4-410T0??	20, 25, 32, 40, 50
		430-450	KT4-430T0??	20, 25, 32, 40, 50
400	125	440-460	KT4-440T0??	20, 25, 32, 40, 50
450	125	460-490	KT4-460T0??	20, 25, 32, 40, 50
		470-490	KT4-470T0??	20, 25, 32, 40, 50
		490-510	KT4-490T0??	20, 25, 32, 40, 50

VARI-TAP TAPPING CLAMPS

DN 40 – DN 450 FAST, PERMANENT TAPPING SOLUTION FOR BOTH RIGID AND FLEXIBLE PIPE TYPES



VARI-TAP TAPPING SADDLES

Nom. Pipe Size	Product Code	Available BSP Offtake Sizes [??]
DN		DN
100	KTFD-122T0??	20, 25
150	KTFD-177T0??	20, 25

TAPPING SADDLES

PN 16 OPERATING PRESSURE – RIGID AND FLEXIBLE PRESSURE PIPE

Nominal Pipe Size	Rigid Pipe							
	DN		Steel		CICL		AC	
	AS/NZS 2281	MSCL AS 1579	GWI AS 1074	B AS 1724	C AS 2544	AB AS 1711	CD AS 1711	
40			KT1-047T0??					
			48MM					
50			KT1-059T0??					
			60MM					
65			KT1-075T0??					
			76MM					
80	KT1-088T0??		KT1-088T0??			KT1-088T0??	KT1-088T0??	
	96MM		89MM			96MM	96MM	
100	KT1-114T0??	KT1-114T0??	KT1-114T0??	KT1-114T0??	KT1-114T0??	KT1-114T0??	KT1-114T0??	
	KTFD-122T0??	KTFD-122T0??	KTFD-122T0??	KTFD-122T0??	KTFD-122T0??	KTFD-122T0??	KTFD-122T0??	
	122MM	114MM	114MM	122MM	122MM	122MM	122MM	
125		KT1-140T0??	KT1-140T0??		KT1-140T0??			
		140MM	140MM		149MM			
150	KT1-168T0??	KT1-168T0??	KT1-160T0??	KT1-168T0??	KT1-168T0??	KT1-168T0??	KT1-168T0??	
	KTFD-177T0??	KTFD-177T0??		KTFD-177T0??	KTFD-177T0??	KTFD-177T0??	KTFD-177T0??	
	177MM	168MM	165MM	177MM	177MM	177MM	177MM	
175								
200	KT4-215T0??	KT4-215T0??		KT4-215T0??	KT4-215T0??	KT4-215T0??	KT4-215T0??	
	232MM	219MM		232MM	232MM	232MM	232MM	
225	KT4-250T0??			KT4-250T0??	KT4-250T0??	KT4-250T0??	KT4-250T0??	
	259MM			259MM	259MM	259MM	259MM	
250	KT4-270T0??	KT4-270T0??		KT4-270T0??	KT4-270T0??	KT4-270T0??	KT4-270T0??	
	286MM	273MM		286MM	286MM	286MM	286MM	
300	KT4-330T0??	KT4-315T0??		KT4-330T0??	KT4-330T0??	KT4-330T0??	KT4-330T0??	
	345MM	324MM		334MM	345MM	334MM	345MM	
350		KT4-355T0??						
		355MM						
375	KT4-410T0??	KT4-390T0??		KT4-410T0??	KT4-410T0??	KT4-410T0??	KT4-410T0??	
	426MM	406MM		413MM	426MM	413MM	426MM	
400		KT4-440T0??						
		457MM						
450	KT4-490T0??	KT4-490T0??		KT4-490T0??	KT4-490T0??	KT4-490T0??	KT4-490T0??	
	507MM	508MM		492MM	507MM	492MM	507MM	

EXAMPLE:

Product Code	Pipe OD
KTFD-122T0??	122mm

TAPPING SADDLES

PN 16 OPERATING PRESSURE – RIGID AND FLEXIBLE PRESSURE PIPE

	RIGI-TAP Saddle
	VARI-TAP Saddle

				Flexible Pipe	
	ABS*1 Series 1 AS 3518	GRP*2 Series 1 – B5 AS 3571	RC AS 4058	PVC Series 2 (U) AS/NZS 1477 (M) AS/NZS 4765 (O) AS/NZS 4441	HDPE AS/NZS 4130
	KT1-047T0??				
	48MM				
	KT1-059T0??	KT1-059T0??			
	60MM	64MM			
	KT1-075T0??				
	75MM				
	KT1-088T0??	KT1-101T0??			
	89MM	101MM			
	KT1-114T0??	KT1-114T0??			
	KTFD-122T0??	KTFD-122T0??		KTFD-122T0??	
	114MM	122MM		122MM	
	KT1-140T0??				KTFD-122T0??
	140MM				125MM
	KT1-168T0??	KT1-175T0??	KT1-190T0??		
	KTFD-177T0??	KTFD-177T0??		KTFD-177T0??	
	168MM	177MM	197MM	177MM	
					KTFD-177T0??
					180MM
	KT4-215T0??	KT4-215T0??			
	225MM	232MM			
	KT4-250T0??		KT4-270T0??		
	250MM		279MM		
		KT4-270T0??			
		286MM			
	KT4-315T0??	KT4-330T0??	KT4-355T0??		
	315MM	345MM	362MM		
	KT4-355T0??	KT4-390T0??			
	355MM	399MM			
	KT4-390T0??		KT4-440T0??		
	400MM		445MM		
	KT4-440T0??	KT4-440T0??			
	450MM	453MM			
	KT4-490T0??	KT4-490T0??			
	500MM	507MM			

*1 Min. required pipe rating for saddle application: PN 9

*2 Min. required pipe rating for saddle application: SN 10,000.

4N TAPPING BANDS

DN 40 – DN 450 FAST, PERMANENT TAPPING SOLUTION FOR BOTH RIGID AND FLEXIBLE PIPE TYPES



FEATURES

4N Tapping Bands are suitable for a multitude of pipes with numerous benefits

- Colour coded to match pipe types for easy field identification.
- The nuts are coated with a specially formulated anti galling compound.
- The E-Lip seal requires low bolt torque to be effective, therefore reduces point loading on the pipe.
- Easy to install.
- 4N Tapping Bands are available to suit pipes from 40 to 300mm.

SPECIFICATIONS

Sizes: Butt They are suitable for all diameter pipes and pipe surfaces and are available with; 20, 25, 32, 40 & 50 BSP threaded off.

Approvals: 4N Tapping Bands have Water Service Association of Australia (WSAA) approval / appraisal No PA1018 (AS/NZS 4793) and PA1019 (AS/NZS 4129).

4N TAPPING BANDS PVC - SERIES 1

Product Code	Size	Description
ZZ4NS1TB10020	100	100x20 TAPPING BAND PVC S1 4N
ZZ4NS1TB10025	100	100x25 TAPPING BAND S1 4N
ZZ4NS1TB10032	100	100x32 TAPPING BAND S1 4N
ZZ4NS1TB10040	100	100x40 TAPPING BAND S1 4N
ZZ4NS1TB10050	100	100x50 TAPPING BAND S1 4N
ZZ4NS1TB15020	150	150x20 TAPPING BAND S1 4N
ZZ4NS1TB15025	150	150x25 TAPPING BAND S1 4N
ZZ4NS1TB15032	150	150x32 TAPPING BAND S1 4N
ZZ4NS1TB15040	150	150x40 TAPPING BAND S1 4N
ZZ4NS1TB15050	150	150x50 TAPPING BAND S1 4N
ZZ4NS1TB15525	155	155x25 TAPPING BAND S1 4N
ZZ4NS1TB15550	155	155x50 TAPPING BAND S1 4N
ZZ4NS1TB19525	195	195x25 TAPPING BAND S1 4N
ZZ4NS1TB19550	195	195x50 TAPPING BAND S1 4N
ZZ4NS1TB20020	200	200x20 TAPPING BAND S1 4N
ZZ4NS1TB20025	200	200x25 TAPPING BAND S1 4N
ZZ4NS1TB20032	200	200x32 TAPPING BAND S1 4N

Product Code	Size	Description
ZZ4NS1TB20040	200	200x40 TAPPING BAND S1 4N
ZZ4NS1TB20050	200	200x50 TAPPING BAND S1 4N
ZZ4NS1TB30020	300	300x20 TAPPING BAND S1 4N
ZZ4NS1TB30025	300	300x25 TAPPING BAND S1 4N
ZZ4NS1TB30032	300	300x32 TAPPING BAND S1 4N
ZZ4NS1TB30040	300	300x40 TAPPING BAND S1 4N
ZZ4NS1TB30050	300	300x50 TAPPING BAND S1 4N
ZZ4NS1TB4020	40	40x20 TAPPING BAND S1 4N
ZZ4NS1TB4025	40	40x25 TAPPING BAND S1 4N
ZZ4NS1TB5020	50	50x20BSP S1 TAPPLING SADDLE ABS/PVC
ZZ4NS1TB5025	50	50x25 TAPPING BAND S1 4N
ZZ4NS1TB8020	80	80x20BSP S1 TAPPLING SADDLE ABS/PVC
ZZ4NS1TB8025	80	80x25 TAPPING BAND S1 4N
ZZ4NS1TB8032	80	80x32 TAPPING BAND S1 4N
ZZ4NS1TB8040	80	80x40 TAPPING BAND S1 4N
ZZ4NS1TB8050	80	80x50 TAPPING BAND S1 4N

4N TAPPING BANDS PVC - SERIES 2

Product Code	Size	Description
ZZ4NS2TB10020	100	100X20 TAPPING BAND PVC S2 4N
ZZ4NS2TB10020L	100	100X20 TAPPING BAND PVC S2 LILAC 4N
ZZ4NS2TB10025	100	100X25 PVC/S2 TAPPING SADDLE
ZZ4NS2TB10025L	100	100x25 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB10032	100	100X32 TAPPING BAND PVC/S2 4N
ZZ4NS2TB10032L	100	100x32 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB10040	100	100X40 TAPPING BAND PVC/S2 4N
ZZ4NS2TB10040L	100	100x40 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB10050	100	100X50 TAPPING BAND PVC/S2 4N
ZZ4NS2TB10050L	100	100x50 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB15020	150	150X20 TAPPING BAND PVC/S2 4N
ZZ4NS2TB15020L	150	150X20 TAPPING BAND PVC S2 LILAC 4N
ZZ4NS2TB15025	150	150X25 TAPPING BAND PVC/S2 4N
ZZ4NS2TB15025L	150	150x25 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB15032	150	150X32 TAPPING BAND PVC/S2 4N
ZZ4NS2TB15032L	150	150x32 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB15040	150	150X40 TAPPING BAND PVC/S2 4N
ZZ4NS2TB15040L	150	150x40 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB15050	150	150X50 TAPPING BAND PVC/S2 4N
ZZ4NS2TB15050L	150	150x50 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB20020	200	200X20 TAPPING BAND PVC/S2 4N
ZZ4NS2TB20020L	200	200x20 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB20025	200	200X25 TAPPING BAND PVC/S2 4N
ZZ4NS2TB20025L	200	200x25 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB20032	200	200X32 TAPPING BAND PVC/S2 4N
ZZ4NS2TB20032L	200	200x32 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB20040	200	200X40 TAPPING BAND PVC/S2 4N
ZZ4NS2TB20040L	200	200x40 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB20050	200	200X50 TAPPING BAND PVC/S2 4N
ZZ4NS2TB20050L	200	200x50 TAPPING BAND S2PVC/DI 4N LILAC

4N TAPPING BANDS PE - METRIC

Product Code	Size	Description
ZZ4NTBPE11020	110	110x20 TAPPING BAND PE 4N
ZZ4NTBPE11025	110	110x25 TAPPING BAND PE 4N
ZZ4NTBPE11032	110	110x32 TAPPING BAND PE 4N
ZZ4NTBPE11040	110	110x40 TAPPING BAND PE 4N
ZZ4NTBPE11050	110	110x50 TAPPING BAND PE 4N
ZZ4NTBPE12520	125	125x20 TAPPING BAND PE 4N
ZZ4NTBPE12525	125	125x25 TAPPING BAND PE 4N
ZZ4NTBPE12532	125	125x32 TAPPING BAND PE 4N
ZZ4NTBPE12540	125	125x40 TAPPING BAND PE 4N
ZZ4NTBPE12550	125	125x50 TAPPING BAND PE 4N
ZZ4NTBPE16020	160	160x20 TAPPING BAND PE 4N
ZZ4NTBPE16025	160	160x25 TAPPING BAND PE 4N
ZZ4NTBPE16032	160	160x32 TAPPING BAND PE 4N
ZZ4NTBPE16040	160	160x40 TAPPING BAND PE 4N
ZZ4NTBPE16050	160	160x50 TAPPING BAND PE 4N
ZZ4NTBPE18020	180	180x20 TAPPING BAND PE 4N
ZZ4NTBPE18025	180	180x25 TAPPING BAND PE 4N
ZZ4NTBPE18032	180	180x32 TAPPING BAND PE 4N
ZZ4NTBPE18040	180	180x40 TAPPING BAND PE 4N
ZZ4NTBPE18050	180	180x50 TAPPING BAND PE 4N

Product Code	Size	Description
ZZ4NS2TB22520	225	225X20 TAPPING BAND PVC S2 4N
ZZ4NS2TB22520L	225	225X20 TAPPING BAND PVC S2 LILAC 4N
ZZ4NS2TB22525	225	225X25 TAPPING BAND PVC/S2 4N
ZZ4NS2TB22525L	225	225x25 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB22532	225	225X32 TAPPING BAND PVC/S2 4N
ZZ4NS2TB22532L	225	225x32 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB22540	225	225X40 TAPPING BAND PVC/S2 4N
ZZ4NS2TB22540L	225	225x40 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB22550	225	225X50 TAPPING BAND PVC/S2 4N
ZZ4NS2TB22550L	225	225x50 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB25020	250	250X20 TAPPING BAND PVC/S2 4N
ZZ4NS2TB25020L	250	250x20 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB25025	250	250x25 TAPPING BAND S2PVC/DI 4N
ZZ4NS2TB25025L	250	250x25 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB25032	250	250x32 TAPPING BAND S2PVC/DI 4N
ZZ4NS2TB25032L	250	250x32 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB25040	250	250x40 TAPPING BAND S2PVC/DI 4N
ZZ4NS2TB25040L	250	250x40 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB25050	250	250x50 TAPPING BAND S2PVC/DI 4N
ZZ4NS2TB25050L	250	250x50 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB30020	300	300X20 TAPPING BAND PVC S2 4N
ZZ4NS2TB30020L	300	300X20 TAPPING BAND PVC S2 LILAC 4N
ZZ4NS2TB30025	300	300x25 TAPPING BAND S2PVC/DI 4N
ZZ4NS2TB30025L	300	300x25 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB30032	300	300x32 TAPPING BAND S2PVC/DI 4N
ZZ4NS2TB30032L	300	300x32 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB30040	300	300x40 TAPPING BAND S2PVC/DI 4N
ZZ4NS2TB30040L	300	300x40 TAPPING BAND S2PVC/DI 4N LILAC
ZZ4NS2TB30050	300	300x50 TAPPING BAND S2PVC/DI 4N
ZZ4NS2TB30050L	300	300x40 TAPPING BAND S2PVC/DI 4N LILAC

Product Code	Size	Description
ZZ4NTBPE22520	225	225x20 TAPPING BAND PE 4N
ZZ4NTBPE22525	225	225x25 TAPPING BAND PE 4N
ZZ4NTBPE22532	225	225x32 TAPPING BAND PE 4N
ZZ4NTBPE22540	225	225x40 TAPPING BAND PE 4N
ZZ4NTBPE22550	225	225x50 TAPPING BAND PE 4N
ZZ4NTBPE31520	315	315x20 TAPPING BAND PE 4N
ZZ4NTBPE31525	315	315x25 TAPPING BAND PE 4N
ZZ4NTBPE31532	315	315x32 TAPPING BAND PE 4N
ZZ4NTBPE31540	315	315x40 TAPPING BAND PE 4N
ZZ4NTBPE31550	315	315x50 TAPPING BAND PE 4N
ZZ4NTBPE6320	63	63x20 TAPPING BAND PE 4N
ZZ4NTBPE6325	63	63x25 TAPPING BAND PE 4N
ZZ4NTBPE9020	90	90x20 TAPPING BAND PE 4N
ZZ4NTBPE9025	90	90x25 TAPPING BAND PE 4N
ZZ4NTBPE9032	90	90x32 TAPPING BAND PE 4N
ZZ4NTBPE9040	90	90x40 TAPPING BAND PE 4N
ZZ4NTBPE9050	90	90x50 TAPPING BAND PE 4N
	315+	Price and availability upon request, subject to customer's requirements

WANG

POLY-GIB COUPLINGS

DN 90 – DN 180 RESTRAINED MECHANICAL COUPLING FOR CONNECTING TO HDPE PIPE



FEATURES

The Poly-Gib range comes in a variety of configuration. Straight couplings, stepped couplings, flange adaptors and blank ends.

The Poly-Gib range of restrained couplings can be installed without the need to disassemble—significantly improving speed and ease of installation.

No internal stiffener require in application on HDPE pipe of SDR 11 or less.

Nitrile rubber seals suitable for potable water, waste water and oil/gas applications.

Fasteners feature a captive head configuration enabling single spanner installation.

Stainless steel components made from 316SS, that has been fully pickled and passivated.

Three bolt design is used in sizes up to DN 180 to improve installation in the field.

Components are pre-lubricated during assembly to assist installation.

Tapping pads on the blank end products permit a drain, flush or sampling point to be added to the system.

Manufacturing facility certified to ISO 9001 Quality Assured Standard.

TECHNICAL DATA

Size Range

DN 90 - DN 180

Maximum Operating Pressure

1600 kPa

Temperature Range

-10°C to 60°C

Relevant Standards

AS/NZS 4129:2000 - Fittings for polyethylene (PE) pipes for pressure applications

Standards: Mark Licence
Certificate No SMK40080

Not applicable to Stepped Couplings.

POLY-GIB COUPLINGS

DN 90 - DN 180 RESTRAINED MECHANICAL COUPLING FOR CONNECTING TO HDPE PIPE



STRAIGHT POLY-GIB COUPLINGS

Nom. Size	Product Code	Flange OD	Bolt Detail		Barrel Length	Bolt Length	Pipe Gap		Barrel Material	Weight Approx.
DN		A	Qty	Size	B	C	D Minimum	D Maximum		KG
90	KR0090DCS	238	3	M16	176	300	15	50	DI	7.4
110	KR0110ACS	265	3	M16	176	300	15	50	SS	8.4
125	KR0125ACS	265	3	M16	176	300	15	50	SS	8.7
160	KR0160ACS	315	3	M16	176	300	15	50	SS	10.4
180	KR0180ACS	315	3	M16	176	300	15	50	SS	10.3



STEPPED POLY-GIB COUPLINGS

Nom. Size	Product Code	Flange OD		Bolt detail		Barrel Length	Bolt Length	Pipe Gap		Barrel Material	Weight Approx.
DN		A Small	A Large	Qty	Size	B	C	D Min.	D Max.		KG
90 / 110	KRS00900110DCS	238	265	3	M16	176	300	15	50	DI	9.4
90 / 125	KRS00900125DCS	238	265	3	M16	176	300	15	50	DI	9.5
110 / 125	KRS01100125ACS	265	265	3	M16	176	300	15	50	SS	8.5
110 / 160	KRS01100160ACS	265	315	3	M16	216	350	15	50	DI	13.1
110 / 180	KRS01100180ACS	265	315	3	M16	216	350	15	50	DI	13.1
125 / 160	KRS01250160ACS	265	315	3	M16	216	350	15	50	DI	13.3
125 / 180	KRS01250180ACS	265	315	3	M16	216	350	15	50	DI	13.2
160 / 180	KRS01600180ACS	315	315	3	M16	176	300	15	50	SS	10.4

POLY-GIB COUPLINGS

DN 90 - DN 180 RESTRAINED MECHANICAL COUPLING FOR CONNECTING TO HDPE PIPE



POLY-GIB FLANGED ADAPTER

Nom. Size DN	Product Code	Flange OD A	Bolt detail		Barrel Length B	Bolt Length C	Pipe Gap		Barrel Material	Weight Approx. KG
			QTY	Size			D Min.	D Max.		
110	KRFA0110F100DCS	265	3	M16	150	200	15	50	DI	10.4
125	KRFA0125F100DCS	265	3	M16	150	200	15	50	DI	10.5
160	KRFA0160F150DCS	315	3	M16	150	200	15	50	DI	13.9
180	KRFA0180F150DCS	315	3	M16	150	200	15	50	DI	13.8



POLY-GIB BLANK END

Nom. Size DN	Product Code	Flange OD A	Bolt Detail		Barrel Length B	Bolt Length C	Pipe Gap		Barrel Material	Weight Approx. KG
			Qty	Size			D Min.	D Max.		
90	KRB0090DCS	238	3	M16	107	125	15	50	DI	6.3
110	KRB0110DCS	265	3	M16	107	125	15	50	DI	9.4
125	KRB0125DCS	265	3	M16	107	125	15	50	DI	9.5
160	KRB0160DCS	315	3	M16	107	125	15	50	DI	12.5
180	KRB0180DCS	315	3	M16	107	125	15	50	DI	12.4

VARI-FLANGED COUPLINGS

DN 80 – DN 600 ADAPT A STUB ENDED PIPE OR VALVE TO A FITTING OR PIPE WITH A FLANGED FACE



VARI-FLANGED COUPLINGS

Nom. Pipe Size	Pipe OD Range	Flange Size	Product Code
DN	MM	MM	
100	109-133	100	KVFA0109F100DSC
150	158-182	150	KVFA0158F150DSC
200	214-236	200	KVFA0214F200ASC
225	240-264	225	KVFA0240F225ASC
250	272-296	250	KVFA0272F250ASC
300	330-354	300	KVFA0330F300ASC
350	370-394	350	KVFA0370F350CSC
	396-420	250	KVFA0396F250CSC
375	410-434	375	KVFA0410F375CSC
	436-460	375	KVFA0436F375CSC
450	488-512	450	KVFA0488F450CSC
500	552-576	500	KVFA0552F500CSC
	560-584	375	KVFA0560F375CSC
	574-598	500	KVFA0574F500CSC
	602-626	500	KVFA0602F500CSC
600	620-644	500	KVFA0620F500CSC
	658-682	600	KVFA0658F600CSC

FEATURES

Vari-Flanged Couplings are utilised to enable a connection between a stub ended pipe and a valve, fitting or pipe with a flanged face. Manufactured in accordance with AS/NZS 4998.

Manufactured from grade 316 stainless steel and/or fusion bonded epoxy coated ductile iron, depending on size.

Non-standard mating flanges are available to cater for customers individual requirements (a standard flange is considered to be to AS 4087—PN 16).

A specially designed wedge shaped nitrile rubber gasket provides a potable water approved seal at the coupling end.

A 24mm OD range at the coupling end enables the product to adapt to most pipe diameters within a nominal size.

Fasteners have a captive head design to facilitate easy in field assembly.

Dry film, anti-galling coating employed on stainless steel fasteners to minimise galling.

Manufacturing facility certified to the ISO 9001 Quality Assured Standard.

TECHNICAL DATA

Size Range

DN 80 - DN 600

Maximum Operating Pressure

1600 kPa (up to and including DN 600)

Temperature Range

-10°C to 60°C

Relevant Standards

AS/NZS 4998 – Bolted unrestrained mechanical couplings for waterworks purposes)

AS 4020 Potable water approval.

VARI-GIB COUPLINGS

DIN 40 – DN 1200 NON-RESTRAINED MECHANICAL COUPLINGS FOR CONNECTING PIPES WITH EQUAL OR UNEQUAL DIAMETERS



FEATURES

One coupling fits a wide range of pipe OD's (up to 24mm variation), significantly reducing stockholding requirements.

Specially designed wedge shaped nitrile rubber gaskets are suitable for use with water, wastewater and gas mediums.

Compatible with most pipe types.

Vari-Gib Couplings can be installed without the need to disassemble, significantly improving speed and ease of installation.

Fasteners have a captive head configuration to enable single spanner operation, facilitating ease of field assembly.

Fasteners are 316 stainless steel for long life operation. Galvanised mild steel is available in sizes up to DN 300.

Components are pre-lubricated during assembly to assist installation.

A three bolt design is used in sizes up to DN 150 for ease of installation.

An extended range of stepped couplings are now available.

TECHNICAL DATA

Size Range:

DN 40 - DN 1200

Please contact Viadux Water for information on additional sizes not detailed in this brochure (most sizes to DN 1200 available).

Maximum Operating Pressure

1600 kPa (up to and including DN 600).

Temperature Range:

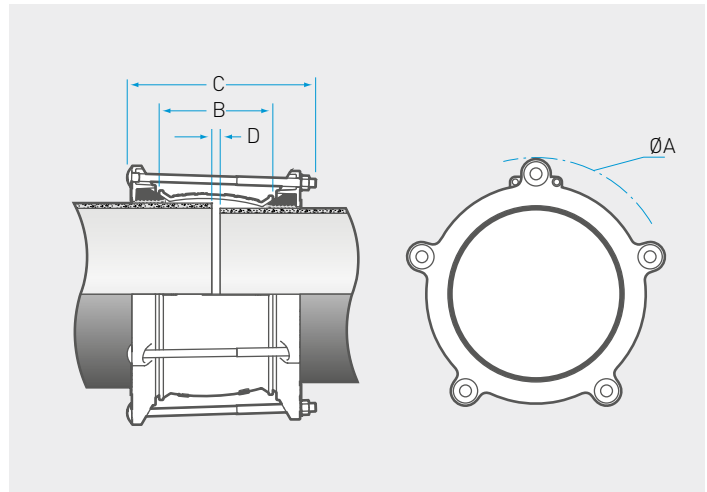
-10°C to 60°C

Product Certification:

AS/NZS 4998 Lic. No. SMK25236
– applicable up to DN 600

VARI-GIB STEPPED COUPLINGS

SPECIFICATIONS



DIMENSIONS

Nom. Size	Smaller End		Larger End		Bolt		Total Angular Deflection	Barrel Length	Bolt Length	Max. Pipe Gap	Min. Pipe Gap	Approx. Weight
DN	OD Range	Flange OD A	OD Range	Flange OD A	Qty	Size		B	C	D	D	KG
80 / 100	88-103	238	109-133	263	3	M16	6°	176	300	15	12	7.5
100 / 150	109-133	263	158-182	312	3	M16	6°	216	350	80	15	12
125 / 150	123-147	277	158-182	312	3	M16	6°	216	350	80	15	12.5
200 / 225	214-238	371	240-264	399	5	M16	6°	216	350	80	15	21
225 / 250	240-264	399	272-296	431	6	M16	6°	216	350	80	15	24
300 / 300	310-334	490	330-354	510	6	M16	6°	216	350	80	15	33
300+	Fabricated 316 stainless steel stepped couplings available above DN 300. Price available upon request.											

All dimensions in millimetres unless stated otherwise.

MATERIAL OPTIONS

Nom. Size	Barrel Ductile Iron FC Blue	Flanges Ductile Iron FC Blue	Fasteners		Gasket
DN	AS/NZS 4158	AS/NZS 4158	316 Stainless Steel	Galvanised Mild Steel	Nitrile Rubber
80 / 100	✓	✓	✓	✓	✓
100 / 150	✓	✓	✓	✓	✓
125 / 150	✓	✓	✓	✓	✓
200 / 225	✓	✓	✓	✓	✓
225 / 250	✓	✓	✓	✓	✓
300 / 300	✓	✓	✓	✓	✓

All dimensions in millimetres.

VARI-GIB STEPPED COUPLINGS

RESTRAINED MECHANICAL STRAIGHT AND STEPPED COUPLINGS

STEPPED VARI-GIB COUPLINGS - DN80-DN300

Nom. Pipe Size DN	Small End PIPE OD Range MM	Small End PIPE OD Range MM	Min. Clamp Length MM	Product Code - Galvanised Fasteners	Product Code - Stainless Steel Fasteners
80-80	88-108	88-108	176	KVS00880093DCG	KVS00880093DCS
80-100	88-103	109-133	176	KVS00880109DCG	KVS00880109DCS
100-150	109-133	158-182	216	KVS01090158DDG	KVS01090158DDS
125-150	123-147	158-182	216	KVS01230158DDG	KVS01230158DDS
200-225	214-238	240-264	216	KVS02140240DDG	KVS02140240DDS
225-250	240-264	272-296	216	KVS02400272DDG	KVS02400272DDS
300-300	310-334	330-354	216	KVS03100330DDG	KVS03100330DDS

STEPPED VARI-GIB COUPLINGS - DN300+ - STAINLESS STEEL

Nom. Pipe Size DN	Small End PIPE OD Range MM	Small End PIPE OD Range MM	Min. Clamp Length MM	Product Code - Stainless Steel Fasteners
300	342-366	360-384	216	KVS03420360CDS
	342-366	370-394	216	KVS03420370CDS
350	370-394	396-420	216	KVS03700396CDS
	370-394	410-434	216	KVS03700410CES
375	380-404	410-434	216	KVS03800410CDS
	396-420	426-450	216	KVS03960426CDS
	410-434	436-460	216	KVS04100436CDS
400	422-446	452-476	216	KVS04220452CDS
	444-468	498-522	216	KVS04440498CES
	447-471	620-644	216	KVS04470620CES
	447-471	648-672	216	KVS04470648CES
450	466-490	488-512	216	KVS04660488CDS
	498-522	510-534	216	KVS04980510CDS
	498-522	522-546	216	KVS04980522CDS
500	510-534	542-566	216	KVS05100542CDS
	530-554	552-576	216	KVS05300552CDS
	552-576	574-598	216	KVS05520574CDS
	552-576	580-604	216	KVS05520580CDS
	552-576	596-620	216	KVS05520596CES
525	574-598	596-620	216	KVS05740596CDS
	574-598	658-682	216	KVS05740658CES
	596-620	620-644	216	KVS05960620CDS
	596-620	648-672	216	KVS05960648CES
600	620-644	648-672	216	KVS06200648CDS
	640-664	648-672	216	KVS06400648CDS
	658-682	700-724	216	KVS06580700CES
	660-684	690-714	216	KVS06600690CDS
675	714-738	741-765	216	KVS07140741CDS
750	790-814	810-834	216	KVS07900810CDS
	790-814	850-874	216	KVS07900850CES
800	820-844	850-874	216	KVS08200850CDS
900	920-944	945-969	216	KVS09200945CDS

VARI-GIB STRAIGHT COUPLINGS

DN 40 – DN 1200 NON-RESTRAINED MECHANICAL COUPLINGS
FOR CONNECTING PIPES WITH EQUAL OR UNEQUAL DIAMETERS

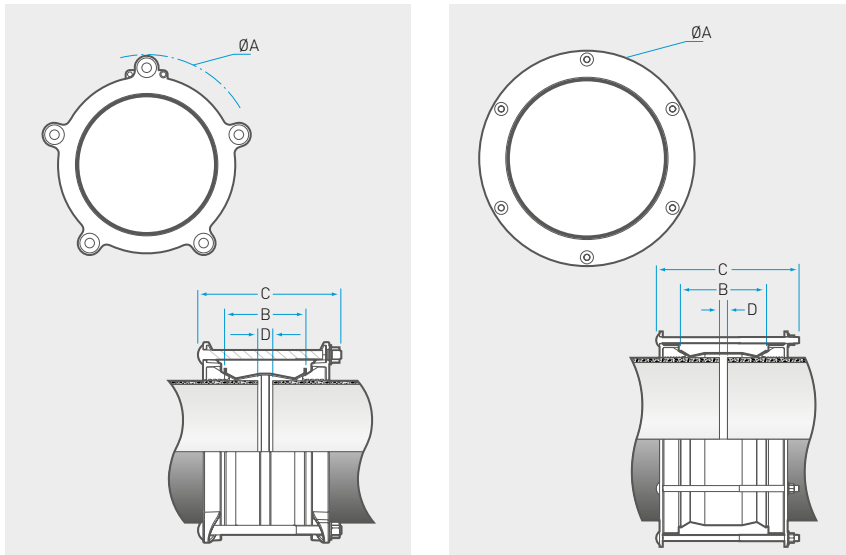


MATERIAL OPTIONS

OD Range		Barrel		Flanges		Fasteners		Gasket
Start	End	Ductile Iron FC Blue AS/NZS 4158	316 Stainless Steel	Ductile Iron FC Blue AS/NZS 4158	316 Stainless Steel	316 Stainless Steel	Galvanised Mild Steel	Nitrile Rubber
47	59	✓		✓		✓	✓	✓
59	71	✓		✓		✓	✓	✓
72	84	✓		✓		✓	✓	✓
88	103	✓		✓		✓	✓	✓
109	133		✓	✓		✓	✓	✓
123	147	✓		✓		✓	✓	✓
158	182		✓	✓		✓	✓	✓
170	194	✓		✓		✓	✓	✓
178	202	✓		✓		✓	✓	✓
214	238		✓	✓		✓	✓	✓
240	264		✓	✓		✓	✓	✓
272	296		✓	✓		✓	✓	✓
310	334		✓	✓		✓	✓	✓
330	354		✓	✓		✓	✓	✓
346	370		✓		✓	✓		✓
396	420		✓		✓	✓		✓
410	434		✓		✓	✓		✓
436	460		✓		✓	✓		✓
444	468		✓		✓	✓		✓
488	512		✓		✓	✓		✓
498	522		✓		✓	✓		✓
522	546		✓		✓	✓		✓
530	554		✓		✓	✓		✓
542	566		✓		✓	✓		✓
552	576		✓		✓	✓		✓
560	584		✓		✓	✓		✓
574	598		✓		✓	✓		✓
596	620		✓		✓	✓		✓
620	644		✓		✓	✓		✓
630	654		✓		✓	✓		✓
648	672		✓		✓	✓		✓
658	682		✓		✓	✓		✓

VARI-GIB STRAIGHT COUPLINGS

SPECIFICATIONS



DIMENSIONS

OD Range		Flange OD	Bolt		Total Angular Deflection	Barrel Length B		Bolt Length C		Max Pipe Gap D		Min. Pipe Gap D		Approx. Weight KG
Start	End	A	Qty	Size		Short	Long	Short	Long	Short	Long	Short	Long	
47	59	191	3	M12	6°	110		200		15		12		4
59	71	198	3	M12	6°	110		200		15		12		4.5
72	84	213	3	M12	6°	110		200		15		12		5
88	103	238	3	M16	6°	110	176	240	300	15	50	12	12	5.5
109	133	263	3	M16	6°	110	176	240	300	15	50	12	12	6.5
123	147	277	3	M16	6°	110		240		15		12		8
158	182	312	3	M16	6°	110	176	240	300	15	50	12	12	7.5
170	194	324	3	M16	6°	110		240		15		12		8.5
178	202	332	4	M16	6°	110		240		15		12		10
214	238	371	5	M16	6°	136	176	240	300	30	50	15	15	11
240	264	399	5	M16	6°	136	176	240	300	30	50	15	15	13
272	296	431	6	M16	6°		176		300		50		15	14
310	334	490	6	M16	6°		216		350		80		15	24
330	354	510	6	M16	6°		216		350		80		15	26
346	370	504	8	M16	6°		216		350		80		15	30
396	420	554	8	M16	5°		216		350		80		15	37
410	434	568	8	M16	5°		216		350		80		15	38
436	460	594	8	M16	4°		216		350		80		15	42
444	468	602	8	M16	4°		216		350		80		15	45
488	512	646	10	M16	4°		216		350		80		15	49.5
498	522	656	10	M16	4°		216		350		80		15	51
522	546	679	12	M16	4°		216		350		80		15	56
530	554	688	12	M16	4°		216		350		80		15	57
542	566	700	12	M16	4°		216		350		80		25	58
552	576	710	12	M16	4°		216		350		80		25	59
560	584	717	12	M16	4°		216		350		80		25	60
574	598	732	12	M16	4°		216		350		80		25	61
596	620	754	14	M16	4°		216		350		80		25	65
620	644	777	14	M16	3°		216		350		80		25	69
630	654	788	14	M16	3°		216		350		80		25	70
648	672	806	14	M16	3°		216		350		80		25	71.5
658	682	816	14	M16	3°		216		350		80		25	72

VARI-GIB STRAIGHT COUPLINGS

SELECTION CHART FOR PN 16 OPERATING PRESSURE

VARI-GIB COUPLING

Nom. Pipe Size	PIPE OD Range	Min. Clamp Length	Product Code - Galvanised Fasteners	Product Code - Stainless Steel Fasteners
DN	MM	MM		
40	47-59	110	KV0047DAG	KV0047DAS
50	59-71	110	KV0059DAG	KV0059DAS
65	72-84	110	KV0072DAG	KV0072DAS
80	88-103	110	KV0088DAG	KV0088DAS
	88-103	176	KV0088DCG	KV0088DCS
100	109-133	110	KV0109AAG	KV0109AAS
	109-133	176	KV0109ACG	KV0109ACS
125	123-147	110	KV0123DAG	KV0123DAS
150	158-182	110	KV0158AAG	KV0158AAS
	158-182	176	KV0158ACG	KV0158ACS
	170-194	110	KV0170DAG	KV0170DAS
175	178-202	110	KV0178DAG	KV0178DAS
200	214-238	136	KV0214ABG	KV0214ABS
	214-238	176	KV0214ACG	KV0214ACS
225	240-264	136	KV0240ABG	KV0240ABS
	240-264	176	KV0240ACG	KV0240ACS
250	272-296	176	KV0272ACG	KV0272ACS
300	310-334	176	KV0310ACG	KV0310ACS
	310-334	216	KV0310ADG	KV0310ADS
	330-354	176	KV0330ACG	KV0330ACS
	330-354	216	KV0330ADG	KV0330ADS
	342-366	216	-	KV0342CDS
	346-370	216	-	KV0346CDS
	360-384	216	-	KV0360CDS
350	370-394	216	-	KV0370CDS
375	380-404	216	-	KV0380CDS
	396-420	216	-	KV0396CDS
	402-426	216	-	KV0402CDS
	410-434	216	-	KV0410CDS
	422-446	216	-	KV0422CDS
	426-450	216	-	KV0426CDS
400	436-460	216	-	KV0436CDS
	444-478	216	-	KV0444CDS
	447-471	216	-	KV0447CDS
450	466-490	216	-	KV0466CDS
	488-512	216	-	KV0488CDS
	498-522	216	-	KV0498CDS

VARI-GIB COUPLING

Nom. Pipe Size	PIPE OD Range	Min. Clamp Length	Product Code - Galvanised Fasteners	Product Code - Stainless Steel Fasteners
DN	MM	MM		
500	510-534	216	-	KV0510CDS
	522-546	216	-	KV0522CDS
	530-554	216	-	KV0530CDS
	542-566	216	-	KV0542CDS
	552-576	216	-	KV0552CDS
525	560-584	216	-	KV0560CDS
	565-589	216	-	KV0565CDS
	574-598	216	-	KV0574CDS
	580-604	216	-	KV0580CDS
	596-620	216	-	KV0596CDS
600	602-626	216	-	KV0602CDS
	608-632	216	-	KV0608CDS
	620-644	216	-	KV0620CDS
	630-654	216	-	KV0630CDS
	640-664	216	-	KV0640CDS
	648-672	216	-	KV0648CDS
	654-678	216	-	KV0654CDS
	658-682	216	-	KV0658CDS
	670-694	216	-	KV0670CDS
	690-714	216	-	KV0690CDS
	700-724	216	-	KV0700CDS
675	714-738	216	-	KV0714CDS
700	736-760	216	-	KV0736CDS
	741-765	216	-	KV0741CDS
750	750-774	216	-	KV0750CDS
	770-794	216	-	KV0770CDS
	780-804	216	-	KV0780CDS
	790-814	216	-	KV0790CDS
	799-823	216	-	KV0799CDS
	805-829	216	-	KV0805CDS
	810-834	216	-	KV0810CDS
	820-844	216	-	KV0820CDS
	830-854	216	-	KV0830CDS
	850-874	216	-	KV0850CDS
	860-884	216	-	KV0860CDS
	870-894	216	-	KV0870CDS
750+	Price and availability upon request, subject to customer's requirements			

HIGH PRESSURE COUPLINGS

DN 150 – DN 2000 CONNECTION OF PIPES OF EQUAL OR UNEQUAL DIAMETERS IN A HIGH PRESSURE ENVIRONMENT

HIGH PRESSURE COUPLINGS

Outside Diameter			
Norm. Pipe Size	MSCL - AS1579	DICL - AS/NZS2280	Product Code
DN	MM	MM	
100		122	KD0122DS
150	168		KD0168DS
		177	KD0177DS
200	219		KD0219DS
		232	KD0232DS
225		259	KD0259DS
250	273		KD0273DS
		286	KD0286DS
300	324		KD0324DS
		345	KD0345DS
	356		KD0356DS
375	406		KD0406DS
	419		KD0419DS
		426	KD0426DS
400	445		KD0445DS
	457		KD0457DS
450	502		KD0502DS
		507	KD0507DS
	508		KD0508DS
500	559		KD0559DS
		560	KD0560DS
525	610		KD0610DS
	648		KD0648DS
600	660		KD0660DS
		667	KD0667DS
700	711		KD0711DS
	762		KD0762DS
750	800		KD0800DS
	813		KD0813DS
		826	KD0826DS
750+	Price and availability upon request, subject to customer's requirements		



FEATURES

High pressure capability. PN 35 for indicated sizes within.

Available for similar as well as stepped OD connections.

Available for most pipe types and sizes.

Mild steel construction with fusion bonded epoxy coating to 350 micron thickness.

Supplied with corrosion resistant high grade 316 stainless steel bolts.

Flanges have a captive bolt head receptor for easy field installation.

Supplied with nitrile rubber gaskets approved for potable water application.

TECHNICAL DATA

Size Range:

DN 150 to DN 2000
(for both similar and stepped OD sizes)

Pressure Rating:

PN 35 (For sizes indicated within the selection table overleaf)

Sleeve length:

254mm

Maximum Coupling Length:

365mm (bolt length)

Temperature Range:

-10°C to 60°C

Pipe OD Tolerance:

±3.0 mm (see 'Ovality Check' in the 'Typical installation instructions')

Relevant Standards:

FBE coating complies with AS/NZS 4020 for potable water use

NOTE: The pipe chart at left is NOT reflective of the full range of coupling sizes available but is intended to provide a selection of High Pressure Couplings for some of the common sizes of DICL and MS pipe. Please contact Viadux if your size requirements are not displayed on the selection chart. In most instances, we will be able to supply you with a High Pressure Coupling for both straight and stepped OD connections. We can cater for your requirements in sizes that are both larger and smaller than the adjacent selection range displayed.

SEWER OB JUNCTION CLAMPS

DN 100 – DN 700 FOR FAST, PERMANENT BRANCH CONNECTIONS ON NON-PRESSURE SEWER PIPELINES



FEATURES

Simple and permanent installation.

Quickly repairs and reconnects broken sewer junctions.

Expedient means of replacing property branches on renewed/relined pipes.

45° and 90° junctions available.

uPVC access coupling fixed to off-take (as standard) for convenient solvent weld connections to PVC property drains.

Fully constructed from 316 stainless steel for high corrosion protection.

Full circle nitrile rubber gasket.

Fully passivated.

All sharp surfaces finished to avoid injury.

Plastic thread protectors.

Dry film anti-galling coating employed to minimise galling of the stainless steel fasteners.

Off-take does not interfere with CCTV camera inspections.

Clamp design provides rehabilitation to old or damaged pipes.

Manufacturing facility certified to ISO 9001 quality assured standard.

TECHNICAL DATA

Size Range:

DN 100 – DN 450

Offtake Sizes:

DN 100, DN 150, DN 225
(Depending on host pipe size)

Maximum Operating Pressure:

100 kPa

Temperature Range:

-10° to 60°C

SEWER OB JUNCTION CLAMPS

Nom. Pipe Size	Start of OD Range	Nominal Offtake Size	No of Bolts	Min Clamp Length	Product Code - 45 Deg	Product Code - 90 Deg
DN	MM	MM		MM		
100	120	110	6	300	K6-120W110BCA	K6-120W110BCC
	135	110	6	300	K6-135W110BCA	-
150	150	110	6	300	K6-150W110BCA	K6-150W110BCC
	160	110	6	300	K6-160W110BCA	K6-160W110BCC
		160	8	400	K8-160W160BDA	K8-160W160BDC
	175	110	6	300	K6-175W110BCA	-
200		160	8	400	K8-175W160BDA	-
	190	110	6	300	K6-190W110BCA	K6-190W110BCC
		160	8	400	K8-190W160BDA	K8-190W160BDC
	225	110	6	300	K6-225W110BCA	-
		160	8	400	K8-225W160BDA	K8-225W160BDC

SEWER OB JUNCTION CLAMPS

DN 100 – DN 700 FOR FAST, PERMANENT BRANCH CONNECTIONS ON NON-PRESSURE SEWER PIPELINES

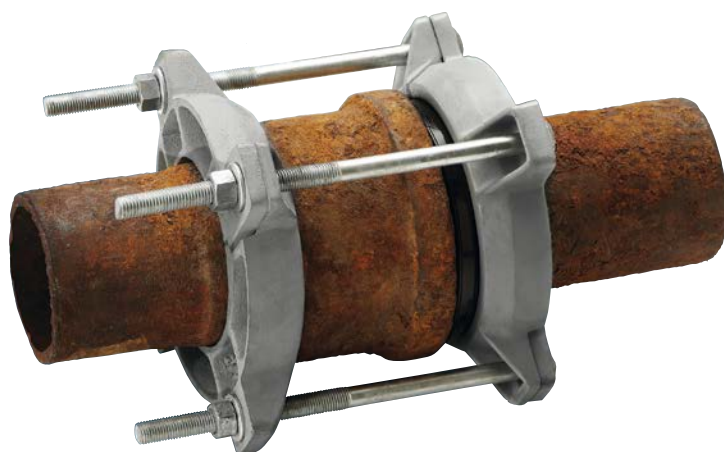
SEWER OB JUNCTION CLAMPS

Nom. Pipe Size	Start of OD Range	Nominal Offtake Size	No of Bolts	Min Clamp Length	Product Code - 45 Deg	Product Code - 90 Deg
DN	MM	MM		MM		
225	240	160	8	400	K8-240W160BDA	K8-240W160BDC
	245	110	6	300	K6-245W110BCA	-
		160	8	400	K8-245W160BDA	K8-245W160BDC
	255	110	6	300	K6-255W110BCA	K6-255W110BCC
		160	8	400	K8-255W160BDA	-
	270	160	8	400	K8-270W160BDA	-
	275	110	6	300	K6-275W110BCA	-
		160	8	400	K8-275W160BDA	K8-275W160BDC
		225	14	600	K14-275W250BFA	K14-275W250BFC
250	285	110	6	300	K6-285W110BCA	-
300		160	8	400	K8-285W160BDA	-
	310	110	6	300	K6-310W110BCA	-
		160	8	400	K8-310W160BDA	K8-310W160BDC
	320	160	8	400	K8-320W160BDA	-
	330	110	6	300	K6-330W110BCA	-
		160	8	400	K8-330W160BDA	-
	340	225	14	600	K14-340W250BFA	K14-340W250BFC
	345	160	8	400	K8-345W160BDA	K8-345W160BDC
	350	110	6	300	K6-350W110BCA	-
		160	8	400	K8-350W160BDA	-
	360	110	6	300	K6-360W110BCA	K6-360W110BCC
		160	8	400	K8-360W160BDA	-
		225	14	600	K14-360W250BFA	K14-360W250BFC
	370	110	6	300	K6-370W110BCA	-
		160	8	400	K8-370W160BDA	K8-370W160BDC
		225	14	600	K14-370W250BFA	-
375	400	110	6	300	K6-400W110BCA	K6-400W110BCC
		160	8	400	K8-400W160BDA	K8-400W160BDC
	420	110	6	300	K6-420W110BCA	-
		160	8	400	K8-420W160BDA	-
		225	14	600	K14-420W250BFA	-
	440	110	6	300	K6-440W110BCA	-
		160	8	400	K8-440W160BDA	-
450	450	110	6	300	K6-450W110BCA	-
	480	160	8	400	K8-480W160BDA	-
		225	14	600	K14-480W250BFA	-
	500	110	6	300	K6-500W110BCA	-
		160	8	400	K8-500W160BDA	-
	530	110	6	300	K6-530W110BCA	-
		160	8	400	K8-530W160BDA	-
600	610	110	6	300	K6-610W110BCA	-
	660	110	6	300	K6-660W110BCA	-
700	710	110	6	300	K6-710W110BCA	-

All dimensions in millimetres unless stated otherwise.

SOCKET LEAK CLAMPS

DN 80 – DN 120 ENDS LEAKS AT THE SOCKET-SPIGOT JOINT OR COLLARS



Can be installed on a pipe under working pressure.

Eliminates the need to cut out an affected socket-spigot joint and replace with a section of pipe.

The interlock gasket system eliminates the need for on-site cutting and glueing, stapling or taping of the gasket.

Lightweight self locking segments allow for easy, one person installation.

Available with galvanised steel or 316 stainless steel fasteners.

FEATURES

Available for DICL, CICL and AC pipes from DN 80 to DN 1200 (suit only DI pipe manufactured before 2003).

Ductile iron construction.

Nitrile interlock gasket supplied to fit pipe outside diameter.

TECHNICAL DATA

Size Range:
DN 80 – DN 1200

Maximum Operating Pressure:
1 kPa

Temperature Range:
-1° to 0°C

SOCKET LEAK CLAMPS

Nom. Pipe Size	Pipe Od Range	Product Code - Galvanised Fasteners	Product Code - Stainless Steel Fasteners
DN	MM		
80	96-100	KSC-096G	KSC-096S
100	122-127	KSC-122G	KSC-122S
150	175-180	KSC-175G	KSC-175S
200	230-236	KSC-230G	KSC-230S
225	256-262	KSC-256G	KSC-256S
250	282-289	KSC-282G	KSC-282S
300	345-355	KSC-345G	KSC-345S
350	360-370	KSC-360G	KSC-360S
	380-390	KSC-380G	-
375	425-430	KSC-425G	KSC-425S
	440-450	KSC-440G	KSC-440S
400	450-460	KSC-450G	KSC-450S
450	500-510	KSC-500G	KSC-500S
500	552-562	KSC-552G	KSC-552S
525	590-604	KSC-590G	KSC-590S
600	616-630	KSC-616G	KSC-616S
	645-655	-	KSC-645S
	660-670	KSC-660G	KSC-660S
675	720-730	KSC-720G	KSC-720S
700	760-770	KSC-760G	-
750	820-830	KSC-820G	-
900	960-990	-	KSC-960S
1200	1290-1325	-	KSC-1290S

SOCKET LEAK CLAMPS - DOUBLE COLLAR SEAL

Nom. Pipe Size	Pipe Od Range	Product Code - Galvanised Fasteners	Product Code - Stainless Steel Fasteners
DN	MM		
80	96-100	KSC-096GD	KSC-096SD
100	122-127	KSC-122GD	KSC-122SD
150	175-180	KSC-175GD	KSC-175SD
200	230-236	KSC-230GD	KSC-230SD
225	256-262	KSC-256GD	KSC-256SD
250	282-289	-	KSC-282SD
300	345-355	KSC-345GD	KSC-345SD
375	425-430	KSC-425GD	KSC-425SD
400	450-460	KSC-450GD	KSC-450SD
450	500-510	KSC-500GD	KSC-500SD
525	590-604	KSC-590GD	-
600	616-630	-	KSC-616SD
	645-655	KSC-645GD	-
	660-670	KSC-660GD	KSC-660SD
675	720-730	KSC-720GD	-

BLANK END VARI-GIB COUPLING

DN 80 – DN 600 NON-RESTRAINED MECHANICAL COUPLING BLANK FOR SEALING OFF PIPE ENDS



BLANK END VARI-GIB COUPLINGS

Nom. Pipe Size DN	PIPE OD Range MM	Product Code
80	88-103	KVB0088DS
100	109-133	KVB0109DS
150	158-182	KVB0158DS
200	214-238	KVB0214DS
225	240-264	KVB0240DS
250	272-296	KVB0272DS
300	310-334	KVB0310DS
	330-354	KVB0330DS
350	370-394	KVB0370DS
375	380-404	KVB0380CS
	396-420	KVB0396CS
	410-434	KVB0410CS
400	436-460	KVB0436CS
450	466-490	KVB0466CS
	488-512	KVB0488CS
	498-522	KVB0498CS
500	510-534	KVB0510CS
600	630-654	KVB0630CS
	648-672	KVB0648CS

FEATURES

The variable OD range of each coupling often enables application on more than one pipe type and size, thereby significantly reducing stockholding requirements.

Compatible with most pipe types.

Specially designed wedge shaped nitrile rubber gasket is suitable for use with water, wastewater and gas mediums.

Fasteners have a captive head configuration to enable single spanner operation, facilitating ease of field assembly.

Fasteners are 316 stainless steel for extended longevity.

A three bolt design is used in sizes up to DN 150 for ease of installation.

A 'Tapping Pad' on the blank end permits a drain flush or sampling point to be added to the system.

Manufacturing facility certified to the ISO 9001 Quality Assured Standard.

TECHNICAL DATA

Size Range:

DN 80 – DN 250 (see reverse)

Maximum Operating Pressure:

1600 kPa

Temperature Range:

-10° to 60°C

Relevant Standards:

AS/NZS 4998

Lic. No SMK25236

Notes:

1. Product not recommended for use on HDPE pipe.
2. Vari-Gib blank ends are a non-restrained mechanical coupling and adequate shoring will be required at the fitting to prevent axial dislodgement under pressure.





ANCILLARIES



Gasket Kits	4.03
Streetware	4.09
Consumables	4.19
Flange Dimensions	4.27

GASKET
KITS

GASKET KITS

AS4087 FIG B5 - PN16 GASKET KITS



GALVANISED FASTENERS

CODE	DESCRIPTION	SIZE
ZSBRC0830KIT	80X3 B5 F/F FL KIT GAL BN&W / 4XM16X75 BOLTS 4.6, 3MM EPDM	80 X 3
ZSBRC1030KIT	100X3 B5 F/F FL KIT GAL BN&W / 4XM16X85 BOLTS 4.6, 3MM EPDM	100 X 3
ZSBRC1530KIT	150X3 B5 F/F FL KIT GAL BN&W / 8XM16X85 BOLTS 4.6, 3MM EPDM	150 X 3
ZSBRC2030KIT	200X3 B5 F/F FL KIT GAL BN&W / 8XM16X85 BOLTS 4.6, 3MM EPDM	200 X 3
ZSBRC2230KIT	225X3 B5 F/F FL KIT GAL BN&W / 8XM16X85 BOLTS 4.6, 3MM EPDM	225 X 3
ZSBRC2530KIT	250X3 B5 F/F FL KIT GAL BN&W / 8XM20X90 BOLT 4.6, 3MM EPDM	250 X 3
ZSBRC3030KIT	300X3 B5 F/F FL KIT GAL BN&W / 12XM20X100 BOLTS 4.6, 3MM EPDM	300 X 3
ZSBRC3730KIT	375X3 B5 F/F FL KIT GAL BN&W / 12XM24X120 BOLTS 4.6, 3MM EPDM	375 X 3
ZSBRC4530KIT	450X3 B5 F/F FL KIT GAL BN&W / 12XM24X120 BOLTS 4.6, 3MM EPDM	450 X 3
ZSBRC5030KIT	500X3 B5 F/F FL KIT GAL BN&W / 16XM24X120 BOLTS 4.6, 3MM EPDM	500 X 3
ZSBRC6030KIT	600X3 B5 F/F FL KIT GAL BN&W / 16XM27X140 BOLTS 4.6, 3MM EPDM	600 X 3
ZSBRC7530KIT	750X3 B5 F/F FL KIT GAL BN&W / 20XM30X150 BOLT 4.6, 3MM EPDM	750 X 3

GASKET KITS

AS4087 FIG B5 - PN16 GASKET KITS



316 STAINLESS STEEL FASTENERS

CODE	DESCRIPTION	SIZE
ZSERC0830KIT	80 B5 F/F FL KIT 316SS BmbN&W/ 4XM16X65 BOLTS 50, 3MM EPDM	80
ZSERC1030KIT	100 B5 F/F FL KIT 316SS BmbN&W DI-110PE,DI-ABS/4XM16X75 BOLTS 50, 3MM EPDM	100
ZSERC1530KIT	150 B5 F/F FL KIT 316SS BmbN&W / 8XM16X85 BOLTS 50, 3MM EPDM	150
ZSERC2030KIT	200 B5 F/F FL KIT 316SS BmbN&W / 8XM16X85 BOLTS 50, 3MM EPDM	200
ZSERC2230KIT	225 B5 F/F FL KIT 316SS BmbN&W / 8XM16X85 BOLTS 50, 3MM EPDM	225
ZSERC2530KIT	250 B5 F/F FL KIT 316SS BN&W / 8XM20X90 BOLTS 50, 3MM EPDM	250
ZSERC3030KIT	300 B5 F/F FL KIT 316SS BN&W / 12XM20X100 BOLTS 50, 3MM EPDM	300
ZSERC3730KIT	375 B5 F/F FL KIT 316SS BN&W / 12XM24X120 BOLTS 50, 3MM EPDM	375
ZSERC4530KIT	450 B5 F/F FL KIT 316SS BN&W / 12XM24X120 BOLTS 50, 3MM EPDM	450
ZSERC5030KIT	500 B5 F/F FL KIT 316SS BN&W / 16XM24X120 BOLTS 50, 3MM EPDM	500
ZSERC6030KIT	600 B5 F/F FL KIT 316SS BN&W / 16XM27X130 BOLTS 50, 3MM EPDM	600
ZSERC7530KIT	750 B5 F/F FL KIT 316SS BN&W / 20XM30X140 BOLTS 50, 3MM EPDM	750

GASKET KITS

AS4087 FIG B6 - PN35 GASKET KITS



GALVANISED FASTENERS

CODE	DESCRIPTION	SIZE
ZSDFF0815KIT	80X1.5 B6 F/F FL KIT GAL SN&W / 8XM16X110 STUD 8.8, 1.5MM NA1000	80 X 1.5
ZSDFF1015KIT	100X1.5 B6 F/F FL KIT GAL SN&W / 8X16X110 STUD 8.8, 1.5MM NA1000	100 X 1.5
ZSDFF1515KIT	150X1.5 B6 F/F FL KIT GAL SN&W / 12X20X130 STUD 8.8, 1.5MM NA1000	150 X 1.5
ZSDFF2015KIT	200X1.5 B6 F/F FL KIT GAL SN&W / 12X20X130 STUD 8.8, 1.5MM NA1000	200 X 1.5
ZSDFF2515KIT	250X1.5 B6 F/F FL KIT GAL SN&W / 12X24X150 STUD 8.8, 1.5MM NA1000	250 X 1.5
ZSDFF3015KIT	300X1.5 B6 F/F FL KIT GAL SN&W / 16X24X150 STUD 8.8, 1.5MM NA1000	300 X 1.5
ZSDFF3715KIT	375X1.5 B6 F/F FL KIT GAL SN&W / 16XM27X170 STD 8.8, 1.5MM NA1000	375 X 1.5
ZSDFF4515KIT	450X1.5 B6 F/F FL KIT GAL SN&W / 20X30X190 STUD 8.8, 1.5MM NA1000	450 X 1.5
ZSDFF5015KIT	500X1.5 B6 F/F FL KIT GAL SN&W / 24X30X190 STUD 8.8, 1.5MM NA1000	500 X 1.5
ZSDFF6015KIT	600X1.5 B6 F/F FL KIT GAL SN&W / 24X33X210 STUD 8.8, 1.5MM NA1000	600 X 1.5

GASKET KITS

AS4087 FIG B6 - PN35 GASKET KITS



316 STAINLESS STEEL FASTENERS

CODE	DESCRIPTION	SIZE
ZSFFF0815KIT	80X1.5 B6 F/F FL KIT 316SS SmbN&W / 8XM16X110 STUD 70, 1.5MM NA1000	80 X 1.5
ZSFFF1015KIT	100X1.5 B6 FF FL KIT 316SS SmbN&W / 8XM16X110 STUD 70, 1.5MM NA1000	100 X 1.5
ZSFFF1515KIT	150X1.5 B6 F/F FL KIT 316SS SN&W / 12X20X130 STUD 70, 1.5MM NA1000	150 X 1.5
ZSFFF2015KIT	200X1.5 B6 F/F FL KIT 316SS SN&W / 12X20X130 STUD 70, 1.5MM NA1000	200 X 1.5
ZSFFF2515KIT	250X1.5 B6 F/F FL KIT 316SS SN&W / 12X24X150 STUD 70, 1.5MM NA1000	250 X 1.5
ZSFFF3015KIT	300X1.5 B6 F/F FL KIT 316SS SN&W / 16X24X150 STUD 70, 1.5MM NA1000	300 X 1.5
ZSFFF3715KIT	375X1.5 B6 F/F FL KIT 316SS SN&W / 16XM27X170 STUD 70, 1.5MM NA1000	375 X 1.5
ZSFFF4515KIT	450X1.5 B6 F/F FL KIT 316SS SN&W / 20X30X190 STUD 70, 1.5MM NA1000	450 X 1.5
ZSFFF5015KIT	500X1.5 B6 F/F FL KIT 316SS SN&W / 24X30X190 STUD 70, 1.5MM NA1000	500 X 1.5
ZSFFF6015KIT	600X1.5 B6 F/F FL KIT 316SS SN&W / 24X33X210 STUD 70, 1.5MM NA1000	600 X 1.5
ZSFFF7515KIT	750X1.5 B6 F/F FL KIT 316SS SN&W / 28X33X210 STUD 70, 1.5MM NA1000	750 X 1.5

GASKET KITS

DI-PE - PN16 GASKET KITS



GALVANISED FASTENERS

CODE	DESCRIPTION	SIZE
ZSBRCPE0830KIT	80 DI-PE B5 FL KIT GAL BNW / 4XM16X75 BOLTS, 3MM EPDM	80
ZSBRCPE1030KITL	100 DI-125PE B5 FL KIT GAL BNW / 4XM16X90 BOLTS, 3MM EPDM	100
ZSBRCPE1530KIT	150 DI-PE B5 FL KIT GAL BNW / 8XM16X100 BOLTS, 3MM EPDM	150
ZSBRCPE2030KIT	200 DI-PE B5 FL KIT GAL BNW / 8XM16X100 BOLTS, 3MM EPDM	200
ZSBRCPE2230KIT	225 DI-PE B5 FL KIT GAL BNW / 8XM16X100 BOLTS, 3MM EPDM	225
ZSBRCPE2530KIT	250 DI-PE B5 FL KIT GAL BNW / 8XM20X110 BOLTS, 3MM EPDM	250
ZSBRCPE3030KIT	300 DI-PE B5 FL KIT GAL BNW / 12XM20X130 BOLTS, 3MM EPDM	300
ZSBRCPE3730KIT	375 DI-PE B5 FL KIT GAL BNW / 12XM24X140 BOLTS, 3MM EPDM	375
ZSBRCPE4030KIT	400 DI-PE B5 FL KIT GAL BNW / 12XM24X160 BOLTS, 3MM EPDM	400
ZSBRCPE4530KIT	450 DI-PE B5 FL KIT GAL BNW / 12XM24X160 BOLTS, 3MM EPDM	450
ZSBRCPE5030KIT	500 DI-PE B5 FL KIT GAL BNW / 16XM24X160 BOLTS, 3MM EPDM	500
ZSBRCPE6030KIT	600 DI-PE B5 FL KIT GAL BNW / 16XM27X180 BOLTS, 3MM EPDM	600

316 STAINLESS STEEL FASTENERS

CODE	DESCRIPTION	SIZE
ZSERCPE0830KIT	80 DI-PE B5 FL KIT 316SS BmbNW / 4XM16X75 BOLTS, 3MM EPDM	80
ZSERCPE1030KITL	100 DI-125PE B5 FL KIT 316SS BmbNW / 4XM16X90 BOLTS, 3MM EPDM 316SS	100
ZSERCPE1530KIT	150 B5 FL KIT SS BmbNW DI-PE,DI-ABS / 8XM16X100 BOLTS, 3MM EPDM 316SS	150
ZSERCPE2030KIT	200 DI-PE B5 FL KIT 316SS BmbNW / 8XM16X100 BOLTS, 3MM EPDM	200
ZSERCPE2230KIT	225 DI-PE B5 FL KIT 316SS BmbN / 8XM16X100 BOLTS, 3MM EPDM	225
ZSERCPE2530KIT	250 DI-PE B5 FL KIT 316SS BNW / 8XM20X110 BOLTS, 3MM EPDM	250
ZSERCPE3030KIT	300 DI-PE B5 FL KIT 316SS BNW / 12XM20X130 BOLTS, 3MM EPDM	300
ZSERCPE3730KIT	375 DI-PE B5 FL KIT 316SS BNW / 12XM24X140 BOLTS, 3MM EPDM	375
ZSERCPE4030KIT	400 DI-PE B5 FL KIT 316SS BNW	400
ZSERCPE4530KIT	450 DI-PE B5 FL KIT 316SS BNW / 12XM24X160 BOLTS, 3MM EPDM	450
ZSERCPE5030KIT	500 DI-PE B5 FL KIT 316SS BNW / 16XM24X160 BOLTS, 3MM EPDM	500
ZSERCPE6030KIT	600 DI-PE B5 FL KIT 316SS BNW / 16XM27X180 BOLTS, 3MM EPDM	600

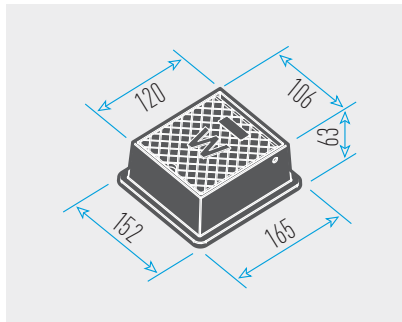
STREETWARE

DUCTILE IRON VALVE BOXES

NEW SOUTH VALVES VALVE BOXES

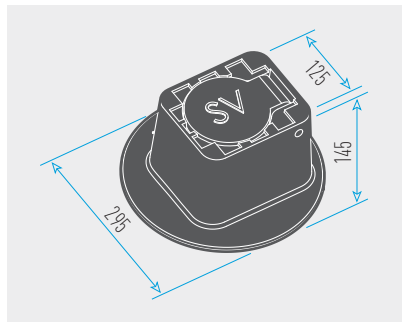
FOOTPATH BOX & W LID - SQUARE

701242



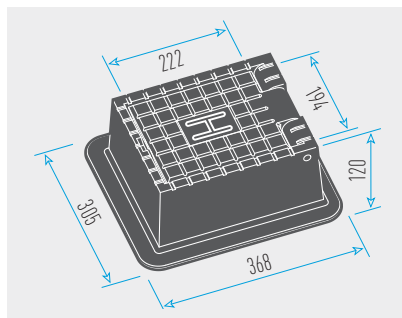
NSW SV VALVE BOX & LID - SQUARE

701251



NSW HYDRANT BOX & H LID - SQUARE

1013415



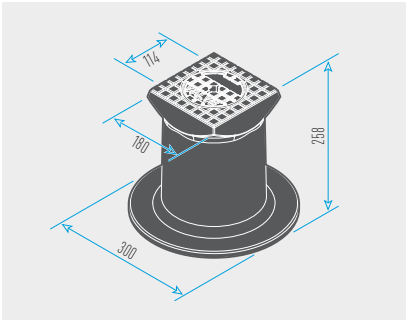
DUCTILE IRON VALVE BOXES

VICTORIAN VALVE BOXES

VIC VALVE COVER & LID
1006605



VIC VALVE COVER & LID LILAC
1014434



LARGE SYPHON COVER BOX & LID
701459



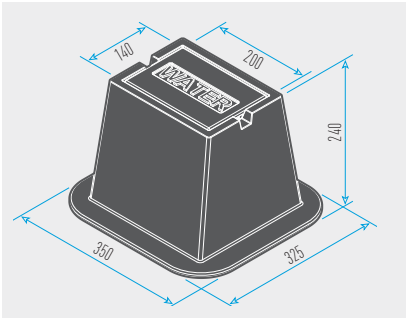
SMALL SYPHON COVER BOX & LID
701462



VIC FIREPLUG COVER & LID
1012147



VIC FIREPLUG COVER & LID LILAC
1014438

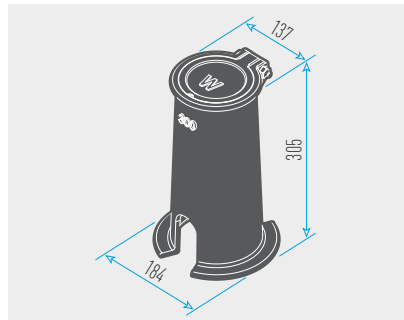


DUCTILE IRON VALVE BOXES

QUEENSLAND VALVES BOXES

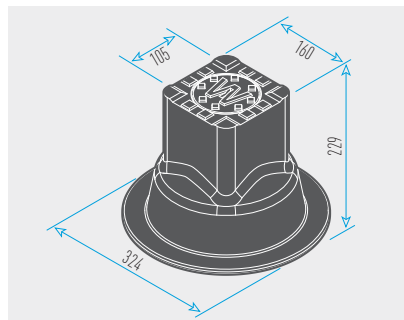
305 FOOTPATH BOX & W LID

701241



QLD VALVE BOX & W LID - ROUND

701252

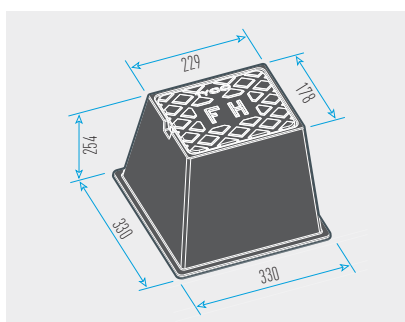


DUCTILE IRON VALVE BOXES

QUEENSLAND HYDRANT BOXES

QLD HYDRANT BOX ONLY - RECTANGULAR

1013691



QLD HYDRANT V LID - RECTANGULAR

701269



QLD HYDRANT FH LID - RECTANGULAR

1013692



QLD HYDRANT SV LID - RECTANGULAR

1013693



COMPOSITE VALVE BOXES

HYDRANT BOXES

YELLOW HYDRANT BOX/H LID PLASTIC - LARGE ROUND

1013424



LILAC HYDRANT BOX & H LID PLASTIC - LARGE ROUND

1013438



GREY HYDRANT BOX & H LID PLASTIC - SQUARE

770133



GREY VALVE/HYDRANT BOX ONLY PLASTIC - SQUARE

701221



COMPOSITE VALVE BOXES

VALVE BOXES

YELLOW VALVE BOX & SV LID PLASTIC - SMALL ROUND

1013647



LILAC VALVE BOX & SV LD PLASTIC - SMALL ROUND

1013412



GREY VALVE BOX & SV LID PLASTIC - SMALL ROUND

1013404



GREY VALVE BOX & SV LID PLASTIC - SQUARE

701257



COMPOSITE VALVE BOXES

PLASTIC ACCESSORIES

HYDRANT COVER COLLARED PLASTIC COMPLETE

3705815



NSW HYDRANT & SV SPACER

701224



PROTECTION COVER - TERMITE VALVE - 3KG

3707488



LILAC PROTECTION COVER-TERMITE VALVE

3707489



COMPOSITE VALVE BOXES

DUCTILE IRON ACCESSORIES

COLLAR FOR SV & H BOXES

701271



TOP FLANGE FOR H-BOX HEAVY DUTY

1013816



TOP FLANGE FOR H-BOX DOUBLE SIDED

701674





CONSUMABLES

MARKERS



PIPE MARKERS

Code	Product	Application	Pack Qty	Size (mm)
1021774	PIPE MARKER	FIRE ALARM	10	400 X 25
1021771	PIPE MARKER	FIRE ALARM	10	400 X 50
1021886	PIPE MARKER	FIRE HOSE REELS	10	400 X 25
1021971	PIPE MARKER	FIRE HOSE REELS	10	400 X 50
1021882	PIPE MARKER	FIRE HYDRANT	10	400 X 25
1021972	PIPE MARKER	FIRE HYDRANT	10	400 X 50
1021878	PIPE MARKER	FIRE SERVICE	10	400 X 25
1021973	PIPE MARKER	FIRE SERVICE	10	400 X 50
1021888	PIPE MARKER	FIRE SPRINKLERS	10	400 X 25
1021974	PIPE MARKER	FIRE SPRINKLERS	10	400 X 50
1021723	PIPE MARKER	FRESH WATER	10	375 X 10
1021704	PIPE MARKER	FRESH WATER	10	400 X 25
1021679	PIPE MARKER	FRESH WATER	10	400 X 50
1021717	PIPE MARKER	NON-POTABLE WATER	10	400 X 25
1021962	PIPE MARKER	NON-POTABLE WATER	10	400 X 50
1021715	PIPE MARKER	POTABLE WATER	10	400 X 25
1021963	PIPE MARKER	POTABLE WATER	10	400 X 50
1022096	PIPE MARKER	RAINWATER	10	400 X 27
1022136	PIPE MARKER	RAINWATER	10	400 X 50
1905525	PIPE MARKER	RAINWATER	10	400 X 50
1021708	PIPE MARKER	RAW WATER	10	400 X 25
1021683	PIPE MARKER	RAW WATER	10	400 X 50
1022092	PIPE MARKER	RECYCLED WATER	10	400 X 27
1021969	PIPE MARKER	RECYCLED WATER	10	400 X 50
1022114	PIPE MARKER	RECYCLED WATER – DO NOT DRINK	10	400 X 27
1021990	PIPE MARKER	RECYCLED WATER – DO NOT DRINK	10	400 X 50
1021758	PIPE MARKER	SEWERAGE	10	400 X 25
1021794	PIPE MARKER	SEWERAGE	10	400 X 50
1021710	PIPE MARKER	STORMWATER	10	400 X 25
1021964	PIPE MARKER	STORMWATER	10	400 X 50
1021761	PIPE MARKER	WASTE	10	400 X 25
1021755	PIPE MARKER	WASTE	10	400 X 50
1021712	PIPE MARKER	WASTE WATER	10	400 X 25
1021687	PIPE MARKER	WASTE WATER	10	400 X 50
1021713	PIPE MARKER	WATER	10	400 X 25
1905383	SAFETY MARKER	COMMUNICATION	150	250
1905173	SAFETY MARKER	ELECTRICAL MAIN ORANGE BURIED	150	250
1905171	SAFETY MARKER	FIREFIGHTING MAIN RED	150	250
1905170	SAFETY MARKER	GAS MAIN BURIED YELLOW	150	250
1905380	SAFETY MARKER	HIGH PRESSURE GAS	150	250
1905178	SAFETY MARKER	IRRIGATION MAIN BLUE	150	250
1905381	SAFETY MARKER	RECYCLED WATER PURPLE	150	250
1905180	SAFETY MARKER	TAPE – RED + WHITE	80	100
1905177	SAFETY MARKER	STORMWATER MAIN BLUE	250	
1905175	SAFETY MARKER	SEWER MAIN BEIGE	250	
1905174	SAFETY MARKER	WATER MAIN GREEN	250	

TAPE



DETECTABLE TAPE

Code	Label	Length (m)	Size (mm)
1905630	Water Main Blue	250	100
1905650	Water Main Green	250	100
1905631	Rainwater	250	100
1905632	Sewer Main	250	100
1905633	Gas Below	250	100
1905634	Fire Line	250	100
1905635	Recycled Water	250	100
1905636	Stormwater	250	100
1905637	Electricity	250	100
1905638	Communication	250	100
1905639	Irrigation	250	100



NON-DETECTABLE TAPE

Code	Label	Length (m)	Size (mm)
1905640	Water Wain Blue	100	150
1905651	Water Main Green	100	150
1905641	Rainwater	100	150
1905642	Sewer Main	100	150
1905643	Gas Below	100	150
1905644	Fire Line	100	150
1905645	Recycled Water	100	150
1905646	Stormwater	100	150
1905647	Electricity	100	150
1905648	Communication	100	150
1905649	Irrigation	100	150

CONSUMABLES



FERROPRE

Code	Product	Size (ltr)
1903625	FERROPRE/DEKS 2 PART EPOXY KIT	1
1903626	FERROPRE/DEKS 2 PART EPOXY KIT	4
1903628	FERROPRE/DEKS 2 PART EPOXY KIT	8
1903629	FERROPRE/DEKS 2 PART EPOXY KIT	20



LUBRICANTS

Code	Product	Size (kg)
1003046	PVC BACTERICIDAL LUBRICANT (WATER)	0.5
1407151	PVC BACTERICIDAL LUBRICANT (WATER)	1
1407170	PVC BACTERICIDAL LUBRICANT (WATER)	4



MASTIC & TAPES

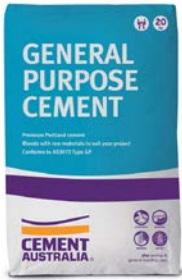
Code	Product	Length (m)	Size (mm)
9507246	BRIDGLAND MP PRIMER	2.5kg	
9507248	BRIDGLAND MASTIC	3kg	
9507249	BRIDGLAND PETROLATUM TAPE	10	100
9507250	BRIDGLAND PETROLATUM TAPE	10	150
9507251	BRIDGLAND OVERWRAP TAPE	30	100
9507252	BRIDGLAND OVERWRAP TAPE	30	150
1903714	MASTIC	2.2	
1903713	MASTIC	3.6	



GAP FILLING EPOXY

Code	Product	Size (ltr)
902379	CONCRETE G/TRAP MEGAPOXY P1 ADHESIVE	20
902284	CONCRETE G/TRAP MEGAPOXY P1 ADHESIVE	4
4902450	MEGAPOXY PM GAP FILLER KIT	2

CONSUMABLES



CEMENT

Code	Product	Area	Size (kg)
3300228	GENERAL PURPOSE CEMENT	METRO	20
3300220	GENERAL PURPOSE CEMENT	COUNTRY	20



CONCRETE

Code	Product	Area	Size (kg)
3300275	CONCRETE MIX	METRO	20
3300276	CONCRETE MIX	COUNTRY	20
3300467	RAPID SET CONCRETE	METRO	20
3300468	RAPID SET CONCRETE	COUNTRY	20



SAND & CEMENT

Code	Product	Area	Size (kg)
3300385	SAND & CEMENT	METRO	20
3300386	SAND & CEMENT	COUNTRY	20



MORTAR

Code	Product	Area	Size (kg)
3300326	MORTAR MIX	COUNTRY	20
3300325	MORTAR MIX	METRO	20
3300500	FLASHCRETE MORTAR		8

CONSUMABLES



BITUMEN & ASPHALT

Code	Product	Size (kg)
3300740	BITUMEN COLD MIX BAG ASPHALT	20
3018016	EZ STREET COLD ASPHALT	20



CLEANING & PRIMING FLUIDS / SOLVENT CEMENT

Code	Product	Size
1903754	SODAL PRIMING FLUID ABS GREY	250ML
1903755	SODAL PRIMING FLUID ABS GREY	1LTR
1903592	SODAL PRIMING FLUID CLEAR	4LTR
1903591	SODAL PRIMING FLUID CLEAR	500ML
1903588	SODAL PRIMING FLUID RED	1LTR
1903589	SODAL PRIMING FLUID RED	4LTR
1903586	SODAL PRIMING FLUID RED	250ML
1903587	SODAL PRIMING FLUID RED	500ML
1903756	SODAL SOLVENT CEMENT ABS GREY	250ML
1903757	SODAL SOLVENT CEMENT ABS GREY	1LTR
1903596	SODAL SOLVENT CEMENT TYPE N BLUE	1LTR
1903597	SODAL SOLVENT CEMENT TYPE N BLUE	4LTR
1903593	SODAL SOLVENT CEMENT TYPE N BLUE	125ML
1903594	SODAL SOLVENT CEMENT TYPE N BLUE	250ML
1903595	SODAL SOLVENT CEMENT TYPE N BLUE	500ML
1903603	SODAL SOLVENT CEMENT TYPE N CLEAR	4LTR
1903601	SODAL SOLVENT CEMENT TYPE N CLEAR	250ML
1903602	SODAL SOLVENT CEMENT TYPE N CLEAR	500ML
1903617	SODAL SOLVENT CEMENT TYPE P CLEAR	4LTR
1903616	SODAL SOLVENT CEMENT TYPE P CLEAR	500ML
1903614	SODAL SOLVENT CEMENT TYPE P GREEN	4LTR
1903611	SODAL SOLVENT CEMENT TYPE P GREEN	125ML
1903612	SODAL SOLVENT CEMENT TYPE P GREEN	250ML
1903613	SODAL SOLVENT CEMENT TYPE P GREEN	500ML

CONSUMABLES



SPOT DY MARK / SPOT SPRAY MARKING / SPOT SPRAY & MARK

Code	Type	Colour	Size (gm)
3405050	Spot Spray Marking	White	350
3405051	Spot Spray Marking	Fluorescent Yellow	350
3405052	Spot Spray Marking	Fluorescent Pink	350
3405053	Spot Spray Marking	Fluorescent Orange	350
3405054	Spot Spray Marking	Black	350
3405055	Spot Spray Marking	Red	350
3405056	Spot Spray Marking	Blue	350
3405057	Spot Spray Marking	Green	350
3405058	Spot Spray Marking	Yellow	350
3405061	Spot Spray Marking	Orange	350
3405062	Spot Spray Marking	Fluorescent Red	350
3405063	Spot Spray Marking	Fluorescent Blue	350
3405065	Spot Spray Marking	Fluorescent Green	350
3405067	Spot Spray Marking	Fluorescent VIOLET	350
3405097	SPOT SPRAY MARKING	VIOLET	350
3405098	SPOT SPRAY MARKING	GREY	350



MARKER POSTS / MARKER POSTS PLATES & STICKERS

Code	Type	Type	Colour
1022011	MARKER POST	SLUICE VALVE / FIRE HYDRANT	WHITE
1012082	MARKER POST	TRI LILAC COMPLETE	RED TOP
1012073	MARKER POST	TRI VALVE COMPLETE	BLACK TOP
1012075	MARKER POST	TRI VALVE COMPLETE	BLUE TOP
1012072	MARKER POST	VALVE	GREEN TOP
1022010	MARKER POST	AV/SCV	WHITE



PAVEMENT MARKERS

Code	Product
1022448	PAVEMENT MARKER 2 WAY BLUE - 80AB

CONSUMABLES

FENCE STAR POSTS

Code	Product	Size (mm)
3600276	FENCE STAR POST - BLACK	450
3600270	FENCE STAR POST - BLACK	600
3600278	FENCE STAR POST - BLACK	900
3600280	FENCE STAR POST - BLACK	1350
3600285	FENCE STAR POST - BLACK	1650
3600290	FENCE STAR POST - BLACK	1800
3600260	STAR POST SAFETY BAR GUARD - YELLOW	
3601191	BARRIER SAFETY MESH ORANGE L/W	1M X 50M
3601192	BARRIER SAFETY MESH ORANGE M/W	1M X 50M

FOAM SWABS

Code	Product	Size (mm)
750160	FOAM SWAB	100
750161	FOAM SWAB	150
750162	FOAM SWAB	225
750163	FOAM SWAB	300
750247	FOAM SWAB	200
750248	FOAM SWAB	375
750249	FOAM SWAB	450

MANHOLE FOAM

Code	Product	Size (mm)
750135	FOAM STRAIGHT	100 X 1200
750136	FOAM STRAIGHT	150 X 1200
750137	FOAM STRAIGHT	225 X 1200
750143	FOAM STRAIGHT	300 X 1200
750392	FOAM STRAIGHT	375 X 1200
750126	FOAM BEND 180 DEG	100
750127	FOAM BEND 180 DEG	150
750128	FOAM BEND 180 DEG	225
750144	FOAM BEND 180 DEG	300
750129	FOAM BEND L/H	100
750130	FOAM BEND L/H	150
750131	FOAM BEND L/H	225
750206	FOAM BEND L/H	300
750132	FOAM BEND R/H	100
750133	FOAM BEND R/H	150
750134	FOAM BEND R/H	225
750207	FOAM BEND R/H	300

FLANGE DIMENSIONS

PIPE OUTSIDE DIAMETERS

PRESSURE PIPE

Pipe Material	Abbreviation	Standard	Designation	50	65	80	100	125	150	175	200	225	250
Ductile Iron	DICL	AS/NZS 2280	K9, K12, PN20, PN35, FLCL	-	-	96	122	-	177	-	232	259	286
		ISO 2531/EN 545	K9, K12, C25, C30, C40	-	-	98	118	-	170	-	222	-	274
Steel	MSCL	AS 1579	6mm wall thickness	-	-	-	114	-	168	-	219	257	273
	GWI	AS 1074		60	76	89	114	140	165	-	-	-	-
Polyvinyl Chloride (PVC)	UPVC	AS/NZS 1477	SERIES 1 (white)	60	-	89	114	140	160	200	225	250	280
	MPVC	AS/NZS 4765	SERIES 1 & 2										
	OPVC	AS/NZS 4441	SERIES 2 (blue)	-	-	-	122	-	177	-	232	259	286
	Sched 80 & 40 UPVC Sched 80 CPVC	ASTM STD D1785, NSF 61	Varies subject to size- Refer to Viadux	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3'	4'	5"
				21	26	33	42	48	60	73	88	114	141
Polyethylene (HDPE)	PE 80B or PE100	AS/NZS 4130	PN4, 6-3, 8, 10, 12-5, 16, 20	HDPE pipe DN = OD. Viadux supplies from DN20- DN1200, including the following standard sizes; 50, 63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630, 710.									
Glass Reinforced Plastic	GRP	AS 3571	SN5000 or SN10000	-	-	-	-	-	-	-	-	-	-
		ISO 10467	Series B2	-	-	-	115	141	167	-	220	-	272
Copper	CU	AS 1432	TYPE A OR B	51	64	76	102	127	152	-	203	229	-
Acrylonitrile - Butadiene - Styrene	ABS	AS/NZS 3518	PN9, PN15	60	75	88	114	140	168	-	225	250	-

PRESSURE PIPE

Pipe Material	Abbreviation	Standard	Designation	300	350	375	400	450	500	575	600	675	750
Ductile Iron	DICL	AS/NZS 2280	K9, K12, PN20, PN35, FLCL	345	-	426	-	507	560	-	667	-	826
		ISO 2531/EN 545	K9, K12, C25, C30, C40	326	378	-	429	480	532	-	635	-	-
Steel	MSCL	AS 1579	6mm wall thickness	324	356	406	457	508	559	-	660	-	813
	GWI	AS 1074		-	-	-	-	-	-	-	-	-	-
Polyvinyl Chloride (PVC)	UPVC	AS/NZS 1477	SERIES 1 (white)	315	-	400	-	500	560	630	-	-	-
	MPVC	AS/NZS 4765	SERIES 1 & 2										
	OPVC	AS/NZS 4441	SERIES 2 (blue)	345	-	426	-	507	560	-	667	-	-
	Sched 80 & 40 UPVC Sched 80 CPVC	ASTM STD D1785, NSF 61	Varies subject to size- Refer to Viadux	6"	8"	10"	12"	14"	16"	18"	20"	24"	-
				168	219	273	323	355	406	457	508	610	-
Polyethylene (HDPE)	PE 80B or PE100	AS/NZS 4130	PN4, 6-3, 8, 10, 12-5, 16, 20	HDPE pipe DN = OD. Viadux supplies from DN20- DN1200, including the following standard sizes; 50, 63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630, 710.									
Glass Reinforced Plastic	GRP	AS 3571	SN5000 or SN10000	345	-	426	-	507	-	-	667	747	826
		ISO 10467	Series B2	324	376	-	427	478	530	-	633	-	-
Copper	CU	AS 1432	TYPE A OR B	-	-	-	-	-	-	-	-	-	-
Acrylonitrile - Butadiene - Styrene	ABS	AS/NZS 3518	PN9, PN15	315	355	400	450	500	560	630	-	-	-

PIPE OUTSIDE DIAMETERS

NON PRESSURE PIPE

Pipe Material	Abbreviation	Standard	Designation	50	65	80	100	125	150	175	200	225	250
Grey Cast Iron	CICL	AS 1724	Class B	-	-	-	122	-	177	-	232	259	286
		AS 2544	Class C	-	-	96	122	-	177	-	232	259	286
Asbestos Cement	AC	AS 1711	Class AB	-	-	96	122	-	177	-	232	259	286
			Class CD	-	-	96	122	-	177	-	232	259	286
Reinforced Concrete	RC	AS 4058	Class 2, 3 OR 4	-	-	-	-	-	197	-	-	279	-
Grey Cast Iron	Soil Pipe	AS 1631		-	-	86	112	140	165	-	-	244	-
		EN 877		-	-	83	110	135	160	-	210	-	274
Polyvinyl Chloride (PVC)	DWW/SWV	AS/NZS 1260	SN2 to SN10	56	69	83	110	-	160	-	-	250	-
Vitrified Clay	VC	AS 1741		-	-	-	138	-	194	-	-	280	-
Fibre Reinforced Cement	FRC		Class X	-	-	-	124	-	179	-	261	-	-
Asbestos Cement	AC	AS1712	Class 35	-	-	-	120	-	177	-	230	257	283
			Class 50	-	-	-	122	-	183	-	236	262	289

NOTE: All plastic piping systems should be derated subject to fluid temp / operating pressure

NON PRESSURE PIPE

Pipe Material	Abbreviation	Standard	Designation	300	350	375	400	450	500	575	600	675	750
Grey Cast Iron	CICL	AS 1724	Class B	334	-	413	-	492	545	-	650	-	-
		AS 2544	Class C	345	-	426	-	507	560	-	667	-	-
Asbestos Cement	AC	AS 1711	Class AB	334	-	413	-	492	-	-	650	-	-
			Class CD	345	-	426	-	507	-	-	667	747	826
Reinforced Concrete	RC	AS 4058	Class 2, 3 OR 4	362	-	445	-	533	-	-	699	787	870
Grey Cast Iron	Soil Pipe	AS 1631		325	-	-	-	-	-	-	-	-	-
		EN 877		326	-	-	431	-	534	-	637	-	-
Polyvinyl Chloride (PVC)	DWW/SWV	AS/NZS 1260	SN2 to SN10	315	-	400	-	-	-	-	-	-	-
Vitrified Clay	VC	AS 1741		370	-	450	485	535	-	-	710	-	-
Fibre Reinforced Cement	FRC		Class X	345	-	426	-	510	-	-	679	-	-
Asbestos Cement	AC	AS1712	Class 35	336	-	419	-	497	-	-	657	-	-
			Class 50	344	-	425	-	505	-	-	664	-	-

NOTE: All plastic piping systems should be derated subject to fluid temp / operating pressure

FLANGE DIMENSIONS

AS STANDARD PRESSURE – AS 4087

			50	65	80	100	125	150	175	200	225	250	300	350	375	400	450	500	600	700	750
Drilling compatible with: AS2129 Table C AS2129 Table D	Outside Diameter		150	165	185	215	255	280	-	335	370	405	455	525	550	580	640	705	825	910	995
	Pitch Circle Diameter		114	127	146	178	210	235	-	292	324	356	406	470	495	521	584	641	756	845	927
	No.of Holes		4	4	4	4	8	8	-	8	8	8	12	12	12	12	12	16	16	20	20
	Diameter of Holes		18	18	18	18	18	18	-	18	18	22	22	26	26	26	26	26	30	30	33
	Bolt Diameter		16	16	16	16	16	16	-	16	16	20	20	24	24	24	24	24	27	27	30
PN	Fig No.	Thickness																			
16	B5	-Ductile Iron	-	-	18	20	-	23	-	23	24	24	30	-	33	-	33	35	42	-	47
16	B7	-Steel	11	11	11	11	13	15	-	19	19	19	23	30	30	30	30	38	48	-	48

AS HIGH PRESSURE – AS 4087

			50	65	80	100	125	150	175	200	225	250	300	350	375	400	450	500	600	700	750
Drilling compatible with: AS2129 Table F AS2129 Table H	Outside Diameter		165	185	205	230	-	305	-	370	405	430	490	550	580	610	675	735	850	-	1015
	Pitch Circle Diameter		127	146	165	191	-	260	-	324	356	381	438	495	521	552	610	673	781	-	940
	No.of Holes		4	8	8	8	-	12	-	12	12	12	16	16	16	20	20	24	24	-	28
	Diameter of Holes		18	18	18	18	-	22	-	22	26	26	26	30	30	30	33	33	36	-	36
	Bolt Diameter		16	16	16	16	-	20	-	20	24	24	24	27	27	27	30	30	33	-	33
PN	Fig No.	Thickness																			
35	B6	-Ductile Iron	-	-	22	22	-	27	-	31	34	34	38	-	42	-	46	49	54	-	59
21	B8	-Steel	15	15	15	19	-	24	-	24	30	30	30	30	38	38	38	48	58	-	58
35	B9	-Steel	19	19	24	24	-	31	-	31	38	38	38	48	48	48	58	58	68	-	-

FLANGE DIMENSIONS

TABLE E – AS 2129

			50	65	80	100	125	150	175	200	225	250	300	350	375	400	450	500	600	700	750
		Outside Diameter	150	165	185	215	255	280	-	335	370	405	455	525	550	580	640	705	825	910	995
		Pitch Circle Diameter	114	127	146	178	210	235	-	292	324	356	406	470	495	521	584	641	756	845	927
		No.of Holes	4	4	4	8	8	8	-	8	12	12	12	12	12	12	16	16	16	20	20
		Diameter of Holes	18	18	18	18	18	22	-	22	22	22	26	26	26	26	26	26	33	33	36
		Bolt Diameter	16	16	16	16	16	20	-	20	20	20	24	24	24	24	24	24	30	30	33
PN	Table	Thickness																			
14	E	-Cast Iron	19	19	19	22	22	22	-	25	25	25	29	32	32	32	35	38	41	44	48

ISO – EN1092 PN16

			50	65	80	100	125	150	175	200	225	250	300	350	375	400	450	500	600	700	750	
Drilling compatible with: BS 4504 PN16 DIN 2533 PN16 ISO 7005 PN16			Outside Diameter	165	185	200	220	250	285	-	340	-	405	460	520	-	580	640	715	840	910	-
			Pitch Circle Diameter	125	145	160	180	210	240	-	295	-	355	410	470	-	525	585	650	770	840	-
			No.of Holes	4	4	8	8	8	8	-	12	-	12	12	16	-	16	20	20	20	24	-
			Diameter of Holes	18	18	18	18	18	22	-	22	-	27	27	27	-	30	30	33	36	36	-
			Bolt Diameter	16	16	16	16	16	20	-	20	-	24	24	24	-	27	27	30	33	33	-
PN	Table	Thickness																				
16	11	-Ductile Iron	19	19	19	19	19	19	-	20	-	22	25	27	-	28	30	32	36	40	-	

ANSI – B16.1 125 LB

		50	65	80	100	125	150	175	200	225	250	300	350	375	400	450	500	600	700	750
Drilling compatible with: ANSI B16.1 150 lb	Outside Diameter	152	178	191	229	255	280	-	343	-	405	483	533	-	597	635	699	813	-	984
	Pitch Circle Diameter	121	140	152	191	216	241	-	298	-	362	432	476	-	540	578	635	749	-	914
	No.of Holes	4	4	4	8	8	8	-	8	-	12	12	12	-	16	16	20	20	-	28
	Diameter of Holes	19	19	19	19	22	22	-	22	-	25	25	29	-	29	32	32	35	-	35
	Bolt Diameter	16	16	16	16	20	20	-	20	-	22	22	25	-	25	29	29	32	-	32
PN	Thickness																			
17	-Cast Iron	16	18	20	24	24	25	-	29	-	26	32	35	-	37	40	48	48	-	54



NOTES

NOTES

If you have any questions
about the perfect solution
for your project, just call
or email the customer
centre closest to you and
we'll be happy to help.

VIADUX WATER NETWORK SOLUTIONS

VIADUX.COM.AU

PHONE 1300 VIADUX (842 389)

All Viadux trademarks and logos are owned by Viadux Pty Ltd. The words TYTON®, TYTON-LOK® and TYTON JOINT® are United States Pipe and Foundry Co. Inc. trademarks and are registered as such in the United States Patent Office and some 45 other countries. Viadux is an exclusively authorised and licensed user of these trademarks within Australia and New Zealand. All other brand or product names are trademarks or registered marks of their respective owners. Because we are continuously improving our products and services, Viadux reserves the right to change specifications without prior notice.

