



MIROLX B.V.

DUCTILE IRON PIPE & FITTINGS

AS / NZS 2280

Compatible with PVC
Series 1 & 2, GRP,
Ductile Iron & AC Pipelines

VERSION 1.0










The products shown form part of our continuous improvement program and as such the product designs, specifications and materials may be changed without notice.

All warranties relating to accuracy, completeness, or suitability for any particular purpose and all liability for any loss, damage or costs incurred relating to the use of this information are excluded.

© Clover Pipelines Pty Ltd. All Rights Reserved.

For further information relating to Ductile Iron Pipe & Fittings or any other Clover product contact your local Clover sales office for assistance.

	Compatible Pipelines	4
	Technical Data	5
	Product Range	
	DI Pipe & Fittings	6
	Mechanical Couplings	15
	Valves & Hydrants	17
	Service Connections	21
	Streetware	24
	Accessories	26
	Joining & Assembly	30
	Product Dimensions	32
	Reference Documents:	
	› Clover PVC Pipe and Fittings Product Guide	
	› Clover GRP Pipe and Fittings Product Guide	

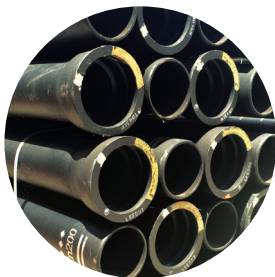
AS / NZS2280 Ductile Iron Fittings are compatible for use with the following pipeline materials:



PVC Pressure Pipe Series 1 & 2

(Refer to Clover PVC Pipe & Fittings Product Guide)

Size Range:	DN100 - DN600
Pressure Range:	PN6 - PN25
Materials:	OPVC, MPVC & UPVC
Colours:	Blue, Purple, White and Cream
Joining:	Rubber Ring (RRJ) & Solvent Cement (SCJ)
Standards:	AS / NZS4441 (oPVC), AS / NZS4765 (mPVC), AS / NZS1477 (uPVC)



Ductile Iron Pipe

Size Range:	DN80 - DN750
Pressure Range:	PN20 & PN35
Coating Options:	Standard Bitumen cement lined, Fusion / Epoxy Coating (fabricated specials),
Joining:	Rubber Ring Joint, flanged Restraint Joint rubber ring
Standards:	AS / NZS2280



GRP Pipe Systems

(Refer to Clover GRP Pipe & Fittings Product Guide)

Size Range:	DN300 – DN4000
Pressure Range:	PN1 – PN40
Stiffness:	SN1250 – SN1,000,000
Materials:	Continuous Filament Wound or Centrifugal Cast
Joining:	Integrated Rubber Ring Coupling
Compliance:	WSAA Appraisal 1419 + 1420 Part 1 & 2
Diameters:	AS / NZS2280 Compatible (DN 300 – DN 750)
Standards:	AS3571.1, AS3571.2, ISO 10467, ISO 10639

Legacy Pipelines

Existing pipelines no longer manufactured –

Grey Cast Iron:	Class B (AS1724) Class C (AS2544)
Asbestos Cement:	Class AB (AS1711) Class CD (AS1711)



Product Applications

- › Water reticulation applications
- › Potable and non-potable pressure pipelines including rising mains and pump stations
- › Fire service mains
- › Irrigation applications

Features & Benefits

- › High strength and impact resistant ductile iron
- › Thermal bonded polymeric coating provides corrosion, impact and abrasion resistance (Standard coating for fittings).
- › Range of pipes and fittings suitable for PN16 to PN35 pipelines.
- › Fittings can be supplied cement lined and bitumen coated if required.
- › Fittings are compatible with Ductile Iron pipes to AS / NZS2280 and PVC Series 2 pipes to AS / NZS1477 Series 2.
- › A Series 2-Series 1 Conversion Seal can be used in the socket fittings to provide compatibility with AS / NZS1477 Series 1 pipelines.

Ordering Information

- › All Fittings are coated with a thermal bonded polymeric coating unless shown otherwise. Fittings can be made available cement lined and bitumen coated upon request.
- › Flanged fittings are standard PN16 rating. PN35 and other high pressure flanges can be made available upon special request.
- › PVC Series 1 compatibility – Socket fittings can be fitted with a conversion seal to provide compatibility with PVC Series 1 pipe dimensions. Request “Series 1” fittings at time of ordering.
- › Seals are supplied with Socket fittings. Flange gasket sets are not included with flange fittings and are sold separately.

Technical Data

- › Ductile Iron pipes and fittings comply fully with the requirements of the following standards:
 - › AS / NZS 2280 Ductile iron pressure pipes and fittings
 - › AS4087 Metallic flanges for waterworks purposes
 - › AS4020 Products in contact with drinking water
- › Coatings comply to the following standards:
 - › AS4158 Thermal bonded polymeric coatings
 - › AS / NZS3750.4 Bitumen Paint
- › Size Range: DN80 to DN750
- › Pressure Rating: The allowable pressure for a pipeline system is limited to the lowest pressure classification of all pipes, fittings & components within the pipe system. (Refer table below)
- › Fitting Pressure Classification:
 - › Socket fittings PN35 unless shown otherwise
 - › Spigot fittings PN35 unless shown otherwise
 - › Flange fittings PN16 (Standard flanges)
PN35 (Optional high pressure flange)

Socket and Spigot fittings are also available in light weight PN16 and will be shown as such on the fitting. All Flanges must show the relevant pressure rating.

Allowable Pipeline Pressure (MPa)

Type	PN16	PN20	PN35
Allowable Operating Pressure	1.60	2.00	3.50
Max Allow Operating Pressure	1.92	2.40	4.20
Allowable Site Test Pressure	2.00	2.50	4.38

- › **Allowable Operating Pressure:** The allowable internal pressure, excluding surge, that a component can safely withstand in service.
- › **Maximum allowable operating pressure:** The maximum internal pressure, including surge, that a component can safely withstand in service. (Refer table above)
- › **Allowable site test pressure:** Maximum pressure applied on site in a newly installed pipeline, includes a safety factor and allowances for surge.

Ductile Iron Pipe – Cement Lined



Diameter	PN	Seal Coat	Calcium Aluminate
100	35	DPSC100/35	DPCA100 / 35
150	35	DPSC150/35	DPCA150 / 35
200	35	DPSC200/35	DPCA200 / 35
225	35	DPSC225/35	DPCA225 / 35
250	35	DPSC250/35	DPCA250 / 35
300	35	DPSC300/35	DPCA300 / 35
375	35	DPSC375/35	DPCA375 / 35
450	35	DPSC450/35	DPCA450 / 35
500	35	DPSC500/35	DPCA500 / 35
600	35	DPSC600/35	DPCA600 / 35
750	35	DPSC750/35	DPCA750 / 35

PN20 & flange class options also available.

Special coatings & linings including Polyurethane & Epoxy available.

Fabricated DI Pipework



AS / NZS2280 Ductile Iron Fabricated Pipe Sections
(Length, configuration & coating to suit project requirements)

Material: Ductile Iron PN35 Flange Class, K12
 Size Range: DN80 to DN750
 End Configurations: Fl / Fl, Fl / Soc, Fl / Sp, Soc / Sp
 Flange Drillings: PN16 – AS4087 (Table C, D AS2129)
 Table E – AS2129
 PN35 – AS4087 (Table F, H AS2129)
 Coatings: Bitumen Coated Cement Lined,
 Fusion / Epoxy Coating
 Options: Weep / Thrust Flange, BSP Pipe Tapping

Bend – Socket



Diameter	11 ¼ deg	22 ½ deg	45 deg	90 deg
80	DBSS0811	DBSS0822	DBSS0845	DBSS0890
100	DBSS1011	DBSS1022	DBSS1045	DBSS1090
150	DBSS1511	DBSS1522	DBSS1545	DBSS1590
200	DBSS2011	DBSS2022	DBSS2045	DBSS2090
225	DBSS2211	DBSS2222	DBSS2245	DBSS2290
250	DBSS2511	DBSS2522	DBSS2545	DBSS2590
300	DBSS3011	DBSS3022	DBSS3045	DBSS3090
375	DBSS3711	DBSS3722	DBSS3745	DBSS3790
450	DBSS4511	DBSS4522	DBSS4545	DBSS4590
500	DBSS5011	DBSS5022	DBSS5045	DBSS5090
600	DBSS6011	DBSS6022	DBSS6045	DBSS6090
750	DBSS7511	DBSS7522	DBSS7545	DBSS7590



Bend – Flange



Diameter	11 ¼ deg	22 ½ deg	45 deg	90 deg
080	DBFF0811	DBFF0822	DBFF0845	DBFF0890
100	DBFF1011	DBFF1022	DBFF1045	DBFF1090
150	DBFF1511	DBFF1522	DBFF1545	DBFF1590
200	DBFF2011	DBFF2022	DBFF2045	DBFF2090
225	DBFF2211	DBFF2222	DBFF2245	DBFF2290
250	DBFF2511	DBFF2522	DBFF2545	DBFF2590
300	DBFF3011	DBFF3022	DBFF3045	DBFF3090
375	DBFF3711	DBFF3722	DBFF3745	DBFF3790
450	DBFF4511	DBFF4522	DBFF4545	DBFF4590
500	DBFF5011	DBFF5022	DBFF5045	DBFF5090
600	DBFF6011	DBFF6022	DBFF6045	DBFF6090
750	DBFF7511	DBFF7522	DBFF7545	DBFF7590

Bend – Spigot



Diameter	11 ¼ deg	22 ½ deg	45 deg	90 deg
80	DBPP0811	DBPP0822	DBPP0845	DBPP0890
100	DBPP1011	DBPP1022	DBPP1045	DBPP1090
150	DBPP1511	DBPP1522	DBPP1545	DBPP1590
200	DBPP2011	DBPP2022	DBPP2045	DBPP2090
225	DBPP2211	DBPP2222	DBPP2245	DBPP2290
250	DBPP2511	DBPP2522	DBPP2545	DBPP2590
300	DBPP3011	DBPP3022	DBPP3045	DBPP3090
375	DBPP3711	DBPP3722	DBPP3745	DBPP3790
450	DBPP4511	DBPP4522	DBPP4545	DBPP4590
500	DBPP5011	DBPP5022	DBPP5045	DBPP5090
600	DBPP6011	DBPP6022	DBPP6045	DBPP6090
750	DBPP7511	DBPP7522	DBPP7545	DBPP7590

Bend – Hydrant / Washout



Diameter	Type	Product code
100 x 80	Hydrant Bend	DBSFH1008
150 x 80	Hydrant Bend	DBSFH1508
100 x 100	Washout Bend	DBSFW1090
150 x 100	Washout Bend	DBSFW1590

Bend – Flange Duckfoot



Diameter (100 – 250)	Product code	Diameter (300 – 600)	Product code
100	DBFFD1090	300	DBFFD3090
150	DBFFD1590	375	DBFFD3790
200	DBFFD2090	450	DBFFD4590
225	DBFFD2290	500	DBFFD5090
250	DBFFD2590	600	DBFFD6090

Bend – Socket / Flange



Diameter	11 ¼ deg	22 ½ deg	45 deg	90 deg
100	DBSF1011	DBSF1022	DBSF1045	DBSF1090
150	DBSF1511	DBSF1522	DBSF1545	DBSF1590
200	DBSF2011	DBSF2022	DBSF2045	DBSF2090
225	DBSF2211	DBSF2222	DBSF2245	DBSF2290
250	DBSF2511	DBSF2522	DBSF2545	DBSF2590
300	DBSF3011	DBSF3022	DBSF3045	DBSF3090
375	DBSF3711	DBSF3722	DBSF3745	DBSF3790
450	DBSF4511	DBSF4522	DBSF4545	DBSF4590
500	DBSF5011	DBSF5022	DBSF5045	DBSF5090
600	DBSF6011	DBSF6022	DBSF6045	DBSF6090
750	DBSF7511	DBSF7522	DBSF7545	DBSF7590

Connector



Diameter	Socket / Socket	Socket / Flange	Flange / Spigot
100	DCSS100	DCSF100	DCPF100
150	DCSS150	DCSF150	DCPF150
200	DCSS200	DCSF200	DCPF200
225	DCSS225	DCSF225	DCPF225
250	DCSS250	DCSF250	DCPF250
300	DCSS300	DCSF300	DCPF300
375	DCSS375	DCSF375	DCPF375
450	DCSS450	DCSF450	DCPF450
500	DCSS500	DCSF500	DCPF500
600	DCSS600	DCSF600	DCPF600
750	DCSS750	DCSF750	DCPF750

Pretap Connector – 2 Outlets (Dual)



Dia	Tapping	Standard	Recycled	Dia	Tapping	Standard	Recycled
100	20 BSP	DCSST1020	DCSST1020L	150	20 BSP	DCCST1520	DCCST1520L
100	25 BSP	DCSST1025	DCSST1025L	150	25 BSP	DCSST1525	DCSST1525L
100	32 BSP	DCSST1032	DCSST1032L	150	32 BSP	DCSST1532	DCSST1532L
100	40 BSP	DCSST1040	DCSST1040L	150	40 BSP	DCSST1540	DCSST1540L
100	50 BSP	DCSST1050	DCSST1050L	150	50 BSP	DCSST1550	DCSST1550L

Pretap Connector – 4 Outlets (Quad)



Diameter	Tapping	Standard	Recycled
100	20 BSP	DCSST1020Q	DCSST1020QL
100	25 BSP	DCSST1025Q	DCSST1025QL
150	20 BSP	DCSST1520Q	DCSST1520QL
150	25 BSP	DCSST1525Q	DCSST1525QL



Pretap Connector – 1 Outlet (Single)



Dia	Tapping	Standard	Recycled	Dia	Tapping	Standard	Recycled
100	25 BSP	DCSST1025S	DCSST1025SL	150	25 BSP	DCSTT1525S	DCSTT1525SL
100	32 BSP	DCSST1032S	DCSST1032SL	150	32 BSP	DCSTT1532S	DCSTT1532SL
100	40 BSP	DCSTT1040S	DCSTT1040SL	150	40 BSP	DCSTT1540S	DCSTT1540SL
100	50 BSP	DCSTT1050S	DCSTT1050SL	150	50 BSP	DCSTT1550S	DCSTT1550SL

Reducer



Diameter	Socket	Soc / Flg	Spigot	Spig / Flg	Flange	Flg Eccentric
100 x 80	DRSS1008	DRSF1008	DRPP1008	DRPF1008	DRFF1008	DRFFE1008
150 x 80	DRSS1508	DRSF1508	DRPP1508	DRPF1508	DRFF1508	DRFFE1508
150 x 100	DRSS1510	DRSF1510	DRPP1510	DRPF1510	DRFF1510	DRFFE1510
200 x 100	DRSS2010	DRSF2010	DRPP2010	DRPF2010	DRFF2010	DRFFE2010
200 x 150	DRSS2015	DRSF2015	DRPP2015	DRPF2015	DRFF2015	DRFFE2015
225 x 100	DRSS2210	DRSF2210	DRPP2210	DRPF2210	DRFF2210	DRFFE2210
225 x 150	DRSS2215	DRSF2215	DRPP2215	DRPF2215	DRFF2215	DRFFE2215
225 x 200	DRSS2220	DRSF2220	DRPP2220	DRPF2220	DRFF2220	DRFFE2220
250 x 100	DRSS2510	DRSF2510	DRPP2510	DRPF2510	DRFF2510	DRFFE2510
250 x 150	DRSS2515	DRSF2515	DRPP2515	DRPF2515	DRFF2515	DRFFE2515
250 x 200	DRSS2520	DRSF2520	DRPP2520	DRPF2520	DRFF2520	DRFFE2520
250 x 225	DRSS2522	DRSF2522	DRPP2522	DRPF2522	DRFF2522	DRFFE2522
300 x 100	DRSS3010	DRSF3010	DRPP3010	DRPF3010	DRFF3010	DRFFE3010
300 x 150	DRSS3015	DRSF3015	DRPP3015	DRPF3015	DRFF3015	DRFFE3015
300 x 200	DRSS3020	DRSF3020	DRPP3020	DRPF3020	DRFF3020	DRFFE3020
300 x 225	DRSS3022	DRSF3022	DRPP3022	DRPF3022	DRFF3022	DRFFE3022
300 x 250	DRSS3025	DRSF3025	DRPP3025	DRPF3025	DRFF3025	DRFFE3025
375 x 200	DRSS3720	DRSF3720	DRPP3720	DRPF3720	DRFF3720	DRFFE3720
450 x 250	DRSS4525	DRSF4525	DRPP4525	DRPF4525	DRFF4525	DRFFE4525
450 x 300	DRSS4530	DRSF4530	DRPP4530	DRPF4530	DRFF4530	DRFFE4530
450 x 375	DRSS4537	DRSF4537	DRPP4537	DRPF4537	DRFF4537	DRFFE4537
375 x 225	DRSS3722	DRSF3722	DRPP3722	DRPF3722	DRFF3722	DRFFE3722
375 x 250	DRSS3725	DRSF3725	DRPP3725	DRPF3725	DRFF3725	DRFFE3725
375 x 300	DRSS3730	DRSF3730	DRPP3730	DRPF3730	DRFF3730	DRFFE3730
500 x 250	DRSS5025	DRSF5025	DRPP5025	DRPF5025	DRFF5025	DRFFE5025
500 x 300	DRSS5030	DRSF5030	DRPP5030	DRPF5030	DRFF5030	DRFFE5030
500 x 375	DRSS5037	DRSF5037	DRPP5037	DRPF5037	DRFF5037	DRFFE5037
500 x 450	DRSS5045	DRSF5045	DRPP5045	DRPF5045	DRFF5045	DRFFE5045
600 x 300	DRSS6030	DRSF6030	DRPP6030	DRPF6030	DRFF6030	DRFFE6030
600 x 375	DRSS6037	DRSF6037	DRPP6037	DRPF6037	DRFF6037	DRFFE6037
600 x 450	DRSS6045	DRSF6045	DRPP6045	DRPF6045	DRFF6045	DRFFE6045
600 x 500	DRSS6050	DRSF6050	DRPP6050	DRPF6050	DRFF6050	DRFFE6050
750 x 600	DRSS7560	DRSF7560	DRPP7560	DRPF7560	DRFF7560	DRFFE7560



Tee

Diameter	Socket	Soc / Flg	Soc / Sp / Flg	Spigot	Spig / Flg	Flange
80 x 080	DTSS0808	DTSF0808		DTPP0808		DFFF0808
100 x 080		DTSF1008	DTSPF1008	DTPP1008	DTPF1008	DFFF1008
100 x 100	DTSS1010	DTSF1010	DTSPF1010	DTPP1010	DTPF1010	DFFF1010
150 x 080		DTSF1508	DTSPF1508		DTPF1508	DFFF1508
150 x 100	DTSS1510	DTSF1510	DTSPF1510	DTPP1510	DTPF1510	DFFF1510
150 x 150	DTSS1515	DTSF1515		DTPP1515	DTPF1515	DFFF1515
200 x 80		DTSF2008	DTSPF2008		DTPF2008	DFFF2008
200 x 100	DTSS2010	DTSF2010	DTSPF2010	DTPP2010	DTPF2010	DFFF2010
200 x 150	DTSS2015	DTSF2015		DTPP2015	DTPF2015	DFFF2015
200 x 200	DTSS2020	DTSF2020		DTPP2020	DTPF2020	DFFF2020
225 x 80		DTSF2208	DTSPF2208		DTPF2208	DFFF2208
225 x 100	DTSS2210	DTSF2210	DTSPF2210	DTPP2210	DTPF2210	DFFF2210
225 x 150	DTSS2215	DTSF2215		DTPP2215	DTPF2215	DFFF2215
225 x 200	DTSS2220	DTSF2220		DTPP2220	DTPF2220	DFFF2220
225 x 225	DTSS2222	DTSF2222		DTPP2222	DTPF2222	DFFF2222
250 x 80		DTSF2508	DTSPF2508		DTPF2508	DFFF2508
250 x 100	DTSS2510	DTSF2510	DTSPF2510	DTPP2510	DTPF2510	DFFF2510
250 x 150	DTSS2515	DTSF2515		DTPP2515	DTPF2515	DFFF2515
250 x 200	DTSS2520	DTSF2520		DTPP2520	DTPF2520	DFFF2520
250 x 225	DTSS2522	DTSF2522		DTPP2522	DTPF2522	DFFF2522
250 x 250	DTSS2525	DTSF2525		DTPP2525	DTPF2525	DFFF2525
300 x 080		DTSF3008	DTSPF3008		DTPF3008	DFFF3008
300 x 100	DTSS3010	DTSF3010	DTSPF3010	DTPP3010	DTPF3010	DFFF3010
300 x 150	DTSS3015	DTSF3015		DTPP3015	DTPF3015	DFFF3015
300 x 200	DTSS3020	DTSF3020		DTPP3020	DTPF3020	DFFF3020
300 x 225	DTSS3022	DTSF3022		DTPP3022	DTPF3022	DFFF3022
300 x 250	DTSS3025	DTSF3025		DTPP3025	DTPF3025	DFFF3025
300 x 300	DTSS3030	DTSF3030		DTPP3030	DTPF3030	DFFF3030
375 x 80		DTSF3708	DTSPF3708		DTPF3708	DFFF3708
375 x 100	DTSS3710	DTSF3710	DTSPF3710	DTPP3710	DTPF3710	DFFF3710
375 x 150	DTSS3715	DTSF3715		DTPP3715	DTPF3715	DFFF3715
375 x 200	DTSS3720	DTSF3720		DTPP3720	DTPF3720	DFFF3720
375 x 225	DTSS3722	DTSF3722		DTPP3722	DTPF3722	DFFF3722
375 x 250	DTSS3725	DTSF3725		DTPP3725	DTPF3725	DFFF3725
375 x 300	DTSS3730	DTSF3730		DTPP3730	DTPF3730	DFFF3730
375 x 375	DTSS3737	DTSF3737		DTPP3737	DTPF3737	DFFF3737
450 x 80		DTSF4508	DTSPF4508		DTPF4508	DFFF4508
450 x 100	DTSS4510	DTSF4510	DTSPF4510	DTPP4510	DTPF4510	DFFF4510
450 x 150	DTSS4515	DTSF4515		DTPP4515	DTPF4515	DFFF4515
450 x 200	DTSS4520	DTSF4520		DTPP4520	DTPF4520	DFFF4520
450 x 225	DTSS4522	DTSF4522		DTPP4522	DTPF4522	DFFF4522
450 x 250	DTSS4525	DTSF4525		DTPP4525	DTPF4525	DFFF4525
450 x 300	DTSS4530	DTSF4530		DTPP4530	DTPF4530	DFFF4530
450 x 375	DTSS4537	DTSF4537		DTPP4537	DTPF4537	DFFF4537
450 x 450	DTSS4545	DTSF4545		DTPP4545	DTPF4545	DFFF4545





Tee

Diameter	Socket	Soc / Flg	Soc / Sp / Flg	Spigot	Spig / Flg	Flange
500 x 80		DTSF5008	DTSPF5008		DTPF5008	DTFF5008
500 x 100	DTSS5010	DTSF5010	DTSPF5010	DTPP5010	DTPF5010	DTFF5010
500 x 150	DTSS5015	DTSF5015		DTPP5015	DTPF5015	DTFF5015
500 x 200	DTSS5020	DTSF5020		DTPP5020	DTPF5020	DTFF5020
500 x 225	DTSS5022	DTSF5022		DTPP5022	DTPF5022	DTFF5022
500 x 250	DTSS5025	DTSF5025		DTPP5025	DTPF5025	DTFF5025
500 x 300	DTSS5030	DTSF5030		DTPP5030	DTPF5030	DTFF5030
500 x 450	DTSS5045	DTSF5045		DTPP5045	DTPF5045	DTFF5045
500 x 500	DTSS5050	DTSF5050		DTPP5050	DTPF5050	DTFF5050
600 x 80		DTSF6008	DTSPF6008		DTPF6008	DTFF6008
600 x 100	DTSS6010	DTSF6010	DTSPF6010	DTPP6010	DTPF6010	DTFF6010
600 x 150	DTSS6015	DTSF6015		DTPP6015	DTPF6015	DTFF6015
600 x 200	DTSS6020	DTSF6020		DTPP6020	DTPF6020	DTFF6020
600 x 225	DTSS6022	DTSF6022		DTPP6022	DTPF6022	DTFF6022
600 x 250	DTSS6025	DTSF6025		DTPP6025	DTPF6025	DTFF6025
600 x 300	DTSS6030	DTSF6030		DTPP6030	DTPF6030	DTFF6030
600 x 375	DTSS6037	DTSF6037		DTPP6037	DTPF6037	DTFF6037
600 x 450	DTSS6045	DTSF6045		DTPP6045	DTPF6045	DTFF6045
600 x 500	DTSS6050	DTSF6050		DTPP6050	DTPF6050	DTFF6050
600 x 600	DTSS6060	DTSF6060		DTPP6060	DTPF6060	DTFF6060
750 x 80		DTSF7508	DTSPF7508		DTPF7508	DTFF7510
750 x 100	DTSS7510	DTSF7510	DTSPF7510	DTPP7510	DTPF7510	DTFF7510
750 x 600	DTSS7560	DTSF7560		DTPP7560	DTPF7560	DTFF7560
750 x 750	DTSS7575	DTSF7575		DTPP7575	DTPF7575	DTFF7575



Scour Tee

Diameter	Socket / Flange	Soc / Sp / Flg	Flange / Flange
100 x 80	DTSFS1008	DTSPFS1008	DTFFS1008
150 x 80	DTSFS1508	DTSPFS1508	DTFFS1508
200 x 80	DTSFS2008	DTSPFS2008	DTFFS2008
200 x 100	DTSFS2010	DTSPFS2010	DTFFS2010
225 x 100	DTSFS2210	DTSPFS2210	DTFFS2210
250 x 100	DTSFS2510	DTSPFS2510	DTFFS2510
300 x 100	DTSFS3010	DTSPFS3010	DTFFS3010
375 x 150	DTSFS3715	DTSPFS3715	DTFFS3715
450 x 100	DTSFS4510	DTSPFS4510	DTFFS4510
450 x 150	DTSFS4515	DTSPFS4515	DTFFS4515
500 x 150	DTSFS5015	DTSPFS5015	DTFFS5010
600 x 150	DTSFS6015	DTSPFS6015	DTFFS6015
750 x 200	DTSFS7520	DTSPFS7520	DTFFS7520



Alternate outlet sizes available.

Hydrant Riser – 80 Diameter



Diameter	Length	Product code
80	100	DHR080100
80	150	DHR080150
80	225	DHR080225
80	300	DHR080300
80	375	DHR080375
80	450	DHR080450
80	600	DHR080600

Hydrant Riser – 100 Diameter



Diameter	Length	Product code
100	100	DHR100100
100	150	DHR100150
100	225	DHR100225
100	300	DHR100300
100	375	DHR100375
100	450	DHR100450
100	600	DHR100600
100	900	DHR100900
100	1000	DHR101000

Hydrant Riser – 150 Diameter



Diameter	Length	Product code
150	150	DHR150150
150	300	DHR150300
150	375	DHR150375
150	450	DHR150450
150	600	DHR150600
150	1000	DHR151000
150	1200	DHR151200

Hydrant Riser – 200 Diameter



Diameter	Length	Product code
200	150	DHR200150
200	300	DHR200300
200	375	DHR200375
200	450	DHR200450
200	600	DHR200600
200	1000	DHR201000



Thrust Connector – Flange / Socket Pipe & Weep



Diameter	600mm Long	900mm Long
100	DCSFL100600W	DCSFL100900W
150	DCSFL150600W	DCSFL150900W
200	DCSFL200600W	DCSFL200900W
225	DCSFL225600W	DCSFL225900W
250	DCSFL250600W	DCSFL250900W
300	DCSFL300600W	DCSFL300900W

Cross



Diameter	Socket	Spigot	Flange
100 x 100	DTSSC1010	DTPPC1010	DTFFC1010
150 x 100	DTSSC1510	DTPPC1510	DTFFC1510
150 x 150	DTSSC1515	DTPPC1515	DTFFC1515

Other sizes & configurations available on request.

Wyee



Diameter	Socket	Spigot	Flange
100 x 100	DTY1010S	DTY1010P	DTY1010F
150 x 150	DTY1515S	DTY1515P	DTY1515F
200 x 200	DTY2020S	DTY2020P	DTY2020F
225 x 225	DTY2222S	DTY2222P	DTY2222F
250 x 250	DTY2525S	DTY2525P	DTY2525F
300 x 300	DTY3030S	DTY3030P	DTY3030F

Other sizes & configurations available on request.

Bellmouth



Diameter	Product code
80	DFBM080
100	DFBM600
150	DFBM150
200	DFBM200
225	DFBM225
250	DFBM250
300	DFBM300
375	DFBM375
450	DFBM450
600	DFBM600
750	DFBM750

End Cap



Diameter	Product code
80	DCS080
100	DCS100
150	DCS150
200	DCS200
225	DCS225
250	DCS250
300	DCS300
375	DCS375
450	DCS450
500	DCS500
600	DCS600
750	DCS750

Blank Flange



Diameter	Product code	20BSP Tapping	25BSP Tapping	50BSP Tapping
80	DFB080	DFBT080020	DFBT080025	DFBT080050
100	DFB100	DFBT100020	DFBT100025	DFBT100050
150	DFB150	DFBT150020	DFBT150025	DFBT150050
200	DFB200	DFBT200020	DFBT200025	DFBT200050
225	DFB225	DFBT225020	DFBT225025	DFBT225050
250	DFB250	DFBT250020	DFBT250025	DFBT250050
300	DFB300	DFBT300020	DFBT300025	DFBT300050
375	DFB375	DFBT375020	DFBT375025	DFBT375050
450	DFB450	DFBT450020	DFBT450025	DFBT450050
500	DFB500	DFBT500020	DFBT500025	DFBT500050
600	DFB600	DFBT600020	DFBT600025	DFBT600050
750	DFB750	DFBT750020	DFBT750025	DFBT750050

Other size tapings available.

Uni-Flange (SS Bolts)



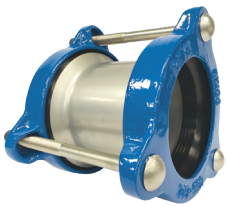
Diameter	Product code
80	DFU080
100	DFU100
150	DFU150
200	DFU200
225	DFU225
250	DFU250
300	DFU300
375	DFU375
450	DFU450
500	DFU500
600	DFU600
750	DFU750

Mechanical Coupling – Long Sleeve



Diameter	Range	Bolts	Sleeve length	Compatible pressure pipe materials			Prod code
				PVC S2, DI, GRP & AC	PVC S1, ABS S1, GAL	STEEL AS1579	
080	88 - 103	3 x M16	176	80	80	80	DGCS080
100	108 - 132	3 x M16	176	100	100	100	DGCS100
150	158 - 182	3 x M16	176	150	150	150	DGCS150
200	214 - 238	5 x M16	176	200	200	200	DGCS200
225	242 - 269	5 x M16	176	225	225		DGCS225
250	270 - 295	6 x M16	176	250	250	250	DGCS250
300	330 - 356	6 x M16	176	300	300	300	DGCS300
375	400 - 429	8 x M16	216	375	375	400	DGCS375
450	488 - 512	10 x M16	216	450		500	DGCS450
500	540 - 565	12 x M16	216	500	500		DGCS500
600	656 - 680	14 x M16	216	600		600	DGCS600
750	810 - 834	14 x M16	216	750		750	DGCS750

Mechanical Coupling – Standard Sleeve



Diameter	Range	Bolts	Sleeve length	Compatible pressure pipe materials			Prod code
080	88 - 103	3 x M16	101	80	80	80	DGCS080SB
100	108 - 132	3 x M16	121	100	100	100	DGCS100SB
150	158 - 182	3 x M16	136	150	150	150	DGCS150SB

Mechanical Coupling (Restraint)



Diameter	Range	PN	Prod code
50	46 - 71	16	PPWC050
65	63 - 90	16	PPWC065
80	84 - 105	16	PPWC080
100	104 - 132	16	PPWC100
125	132 - 155	16	PPWC125
150	154 - 192	16	PPWC150
200	192 - 232	16	PPWC200
225	230 - 268	16	PPWC225
250	267 - 310	16	PPWC250
300	315 - 356v	16	PPWC300
350	352 - 393	10	PPWC350
400	392 - 433	10	PPWC400

Mechanical Coupling - Stepped (Restraint)



Diameter	Range 1	Range 2	PN	Product code
50 - 65	46 - 71	63-90	16	PPWCR065050
65 - 80	63 - 90	84 - 105	16	PPWCR080065
80 - 100	84 - 105	104 - 132	16	PPWCR100080
100 - 125	105 - 132	132 - 155	16	PPWCR125100
100 - 150	104 - 132	154 - 192	16	PPWCR150100
125 - 150	132 - 155	154 - 192	16	PPWCR150125
150 - 200	154 - 192	192 - 232	16	PPWCR200150
200 - 225	192 - 232	230 - 232	16	PPWCR225200
225 - 250	230 - 268	267 - 310	16	PPWCR250225
250 - 300	267 - 310	315 - 356	10	PPWCR300250
300 - 350	315 - 356	352 - 393	10	PPWCR350300
350 - 400	352 - 393	392 - 433	10	PPWCR400350

Mechanical Flange Adaptor (Restraint)



Diameter	Range	PN	Holes	Product code
50	46 - 71	16	4	PPWF050
65	63 - 90	16	4	PPWF065
80	84 - 105	16	8	PPWF080
100	104 - 132	16	8	PPWF100
150	154 - 192	16	8	PPWF150
200	192 - 232	16	8	PPWF200
250	267 - 310	16	8	PPWF250
300	315 - 356	16	12	PPWF300

Mechanical End Cap (Restraint)



Diameter	Range	PN	Product code
50	46 - 71	16	PPWE050
65	63 - 90	16	PPWE065
80	84 - 105	16	PPWE080
100	104 - 132	16	PPWE100
125	132 - 155	16	PPWE125
150	154 - 192	16	PPWE150
200	192 - 232	16	PPWE200
225	230 - 268	16	PPWE225
250	267 - 310	16	PPWE250
300	315 - 356	16	PPWE300
400	392 - 433	10	PPWE400



Hydrant Bend 80 Outlet (Restraint)



Diameter	Range	PN	Product code
50	46 - 72	16	PPWH050
65	63 - 90	16	PPWH065
80	84 - 105	16	PPWH080
100	104 - 136	16	PPWH100
125	132 - 155	16	PPWH125
150	154 - 192	16	PPWH150

Gate Valves

Gate Valve Resilient Seat – Flanged PN16



Diameter	Anti-clockwise close	Clockwise close
50	VGFF050	VGFF050C
65	VGFF065	VGFF065C
80	VGFF080	VGFF080C
100	VGFF100	VGFF100C
150	VGFF150	VGFF150C
200	VGFF200	VGFF200C
225	VGFF225	VGFF225C
250	VGFF250	VGFF250C
300	VGFF300	VGFF300C
375	VGFF375	VGFF375C
450	VGFF450	VGFF450C
500	VGFF500	VGFF500C
600	VGFF600	VGFF600C
750	VGFF750	VGFF750C

Gearboxes and Actuators available to suit all valves. Integral bypass valves also available.

Gate Valve Metal Seat – Flange PN35



Diameter	Anti-clockwise close	Clockwise close
80	VGFF080F35	VGFF080F35C
100	VGFF100F35	VGFF100F35C
150	VGFF150F35	VGFF150F35C
200	VGFF200F35	VGFF200F35C
225	VGFF225F35	VGFF225F35C
250	VGFF250F35	VGFF250F35C
300	VGFF300F35	VGFF300F35C
375	VGFF375F35	VGFF375F35C
450	VGFF450F35	VGFF450F35C
500	VGFF500F35	VGFF500F35C
600	VGFF600F35	VGFF600F35C
750	VGFF750F35	VGFF750F35C

AS4087 PN16 and AS2129 T / E models also available, Integral Bypass models available. Larger diameter valves also available.



Valve Resilient Seat – Socket PN16



Diameter	Anti-clockwise close	Clockwise close
80	VGSS080	VGSS080C
100	VGSS100	VGSS100C
150	VGSS150	VGSS150C
200	VGSS200	VGSS200C
225	VGSS225	VGSS225C
250	VGSS250	VGSS250C
300	VGSS300	VGSS300C
375	VGSS375	VGSS375C



Valve Resilient Seat – Spigot PN16

Diameter	Anti-clockwise close	Clockwise close
100	VGPP100	VGPP100C
150	VGPP150	VGPP150C
200	VGPP200	VGPP200C



Gate Valve Resilient Seat – Socket / Flange PN16

Diameter	Anti-clockwise close	Clockwise close
80	VGSF080	VGSF080C
100	VGSF100	VGSF100C
150	VGSF150	VGSF150C



Gate Valve Resilient Seat – Flange PN25

Diameter	Anti-clockwise close	Clockwise close
80	VGFF080F25	VGFF080F25C
100	VGFF100F25	VGFF100F25C
150	VGFF150F25	VGFF150F25C



Gate Valve Resilient Seat – Restrained PN16

Diameter	Anti-clockwise close	Clockwise close
125	VGGG125	VGGG125C
180	VGGG180	VGGG180C



Valve Extension Spindle



Diameter	Gal	Cast	316SS
100	VAES0100	VAESC0100	VAESS0100
150	VAES0150	VAESC0150	VAESS0150
225	VAES0225	VAESC0225	VAESS0225
300	VAES0300	VAESC0300	VAESS0300
375	VAES0375	VAESC0375	VAESS0375
450	VAES0450	VAESC0450	VAESS0450
600	VAES0600	VAESC0600	VAESS0600
750	VAES0750	VAESC0750	VAESS0750
900	VAES0900	VAESC0900	VAESS0900
1000	VAES1000	VAESC1000	VAESS1000
1200	VAES1200	VAESC1200	VAESS1200
1500	VAES1500	VAESC1500	VAESS1500

Longer and custom length spindles and wall brackets are available.

Valve / Fitting Restraint Strap – 316SS



Diameter	Product code
80	VRS080
100	VRS100
150	VRS150
200	VRS200
225	VRS225
250	VRS250
300	VRS300
375	VRS375
450	VRS450
500	VRS500
600	VRS600

Check out our commonly used accessories starting on page 24.





Swing Check Valve



Diameter	Free Acting PN16	Free Acting PN35
80	VCFF080	VCFF080F35
100	VCFF100	VCFF100F35
150	VCFF150	VCFF150F35
200	VCFF200	VCFF200F35
225	VCFF225	VCFF225F35
250	VCFF250	VCFF250F35
300	VCFF300	VCFF300F35
375	VCFF375	VCFF375F35
450	VCFF450	VCFF450F35
500	VCFF500	VCFF500F35
600	VCFF600	VCFF600F35
750	VCFF750	

Larger diameter valves are also available. Valves are available with Lever Arm & Counterweight, Position Indicators & Guards. Valves can be manufactured to suit client requirements including modified flange drilling to ANSI, BSEN1092 & others.

Hydrants

Spring Hydrant



Diameter	Type	Standard	Recycled
80	Spring	VH080	VH080L
80	Swab	VH080S	VH080SL
100	Spring	VH100	VH100L
100	Swab	VH100S	VH100SL
100	Slotted 80 –100	VH0810	VH0810P

Swab hydrants feature removable internal components that provide full bore access for scouring swabs.

Hydrant / Air Valve Isolator



Diameter	ACC	CC
80	VHC080	VHC080C
100	VHC100	VHC100C



Tapping Band Blue – PN16 (Suit PVC S2, DI & AC)



Diameter	20	25	32	40	50
100	TCN210020B	TCN210025B	TCN210032B	TCN210040B	TCN210050B
150	TCN215020B	TCN215025B	TCN215032B	TCN215040B	TCN215050B
200	TCN220020B	TCN220025B	TCN220032B	TCN220040B	TCN220050B
225	TCN222520B	TCN222525B	TCN222532B	TCN222540B	TCN222550B
250	TCN225020B	TCN225025B	TCN225032B	TCN225040B	TCN225050B
300	TCN230020B	TCN230025B	TCN230032B	TCN230040B	TCN230050B

Tapping Band Lilac – PN16 (Suit PVC S2, DI & AC)



Diameter	20	25	32	40	50
100	TCN210020L	TCN210025L	TCN210032L	TCN210040L	TCN210050L
150	TCN215020L	TCN215025L	TCN215032L	TCN215040L	TCN215050L
200	TCN220020L	TCN220025L	TCN220032L	TCN220040L	TCN220050L
225	TCN222520L	TCN222525L	TCN222532L	TCN222540L	TCN222550L
250	TCN225020L	TCN225025L	TCN225032L	TCN225040L	TCN225050L
300	TCN230020L	TCN230025L	TCN230032L	TCN230040L	TCN230050L

Tapping Band White – PN16 (Suit PVC S1)



Diameter	20	25	32	40	50
40	TCN104020	TCN104025			
50	TCN105020	TCN105025			
80	TCN108020	TCN108025	TCN108032	TCN108040	TCN108050
100	TCN110020	TCN110025	TCN110032	TCN110040	TCN110050
150	TCN115020	TCN115025	TCN115032	TCN115040	TCN115050
200	TCN120020	TCN120025	TCN120032	TCN120040	TCN120050

Tapping Band Gunmetal PN16 (Suit PVC S2, DI & AC)



Diameter	20	25	32	40	50
100	TCBAC10020	TCBAC10025	TCBAC10032	TCBAC10040	TCBAC10050
150	TCBAC15020	TCBAC15025	TCBAC15032	TCBAC15040	TCBAC15050
200	TCBAC20020	TCBAC25025	TCBAC32032	TCBAC40040	TCBAC50050
225	TCBAC22520	TCBAC22525	TCBAC22532	TCBAC22540	TCBAC22550
250	TCBAC25020	TCBAC25025	TCBAC25032	TCBAC25040	TCBAC25050
300	TCBAC30020	TCBAC30025	TCBAC30032	TCBAC30040	TCBAC30050
375	TCBAC37520	TCBAC37525	TCBAC37532	TCBAC37540	TCBAC37550
450	TCBAC45020	TCBAC45025	TCBAC45032	TCBAC45040	TCBAC45050



Cast Iron Cover Box

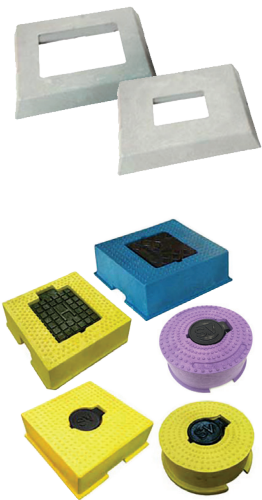
Product	Hydrant	Stop Valve	Hydrant Recycled	Stop Valve Recycled	Primary Market
Asphalt – Hinged	ACCHHDA	ACCSHDA	ACCHHDAR	ACCSHDAR	NSW
Concrete – Drop In	ACCHHDC	ACCSHDC	ACCHHDCR	ACCSHDCR	NSW
Standarded – Hinged	ACCHNSW	ACCSVB			NSW

Product	Product Code	Primary Market
Hydrant Cover & Lid	ACCHYDCI	VIC
Valve Cover & Lid	ACCVALVE	VIC
Path Box c/w Hinged Lid	ACCFITZ	VIC

Product	Product Code	Primary Market
Sv Lid Drop In	ACCSVLID	QLD
Fh Lid Drop In	ACCFHLID	QLD
W Lid Drop In	ACCWLID	QLD
Valve Box	ACCVLVBOXQ	QLD
Sv Lid Drop In	ACCSVLID	QLD
Meter Box & Lid	AXPMBQ	QLD

Surround

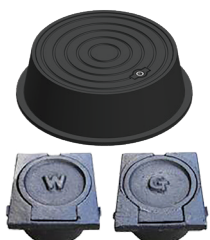
Type	Hydrant	Valve
Recycled Plastic	AXHSSG	AXYSSG
Concrete	AXHSND	AXVSND



Recycled Plastic Cover Boxes

Type	Yellow	Grey	Lilac	White	Blue
Hydrant Hinged Square	ACPHSY	ACPHSG	ACPHSL	ACPHSW	ACPHSB
Stop Valve Hinged Round	ACPSRY	ACPSRG	ACPSRL	ACPSRW	ACPSRB
Stop Valve Hinged Square	ACPSY	ACPSG	ACSSL	ACSSW	ACSSB

Type	Product Code	Primary Market
Lamp Hole Cover & Frame	ACCLHC	NSW
Lamp Hole Cover Surround Concrete	ACCLHCS	NSW
Water Box Hinged Lid	ACCWB	NSW
Gas Box Hinged Lid	ACCGB	NSW
Subsoil Box Hinged Lid	ACSSB	NSW

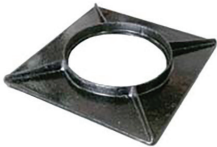




Type	Product Code	Primary Market
Valve Cover Square (Grey)	AZVSGREY	VIC
L Type Hydrant Potable	ACLTYPE	VIC
L Type Hydrant Recycled	ACLTYPEL	VIC
L Type Concrete Hydrant Surround	AXLSND	VIC
Latch Pin – (L Type)	AXLP	VIC
L Type Hydrant Key	ACLTYPEK	VIC



Type	Product Code	Primary Market
Sv/Hyd Box Grey Drop In Lid	ACCSURPGRY	QLD
Sv/Hyd Box Blue Drop In Lid	ACCSURPBLU	QLD
Sv/Hyd Box White Drop In Lid	ACCSURPWHT	QLD
Sv/Hyd Box Yellow Drop In Lid	ACCSURPYEL	QLD
Sv/Hyd Box Ci Drop In Lid	ACCHYDBOXQ	QLD



Base Plate / Top Flange

Product Code: ACCBASE



PVC Shroud 225 x 300

Product Code: ACPSHROUD



Shroud Pipe Joiner

Product Code: ACCJOINER



Centralising Disc

Product Code: ACCDISC



Meter Box

Type	Overall Top Size	Height	Product Code
Cast Iron	430 x 300	90	ACCCHB



Flushing Point Cover

Type	Product Code	Primary Market
Flushing Point Assembly Cover	AXPFMB	VIC
Flushing Point Assembly Cover Recycled (Purple)	AXPFML	VIC



Plastic Cover – Hydrant / Valve

Type	Product Code	Primary Market
Hydrant Cover	AXPHWCI	VIC

Other lid options available upon request.

Technical Data Sheets

At Clover we're committed to quality products and services. Our online technical data sheets provide insight into the features and applications of a range of Clover products, so you can get a better understanding of the best in the business.



Gate Valve Resilient Seat

Clover resilient seated gate valves comply with the standard AS 2638.2, for use in above and below ground potable, non-potable and wastewater applications.

- › Full bore design eliminates potential debris build up
- › Stainless steel spindle for excellent corrosion resistance
- › Isolated stainless steel fasteners
- › View the product page for more technical information



Drainflex™ Subsoil Pipe

Clover Drainflex™ subsoil pipe is manufactured to AS2439.1 from premium quality HDPE material, for a wide range of commercial and domestic below-ground drainage applications.

- › Durable, flexible, strong and corrosion resistant
- › High flow capacity
- › Available slotted or unslotted
- › View the product page for more technical information



Spring Hydrant

Clover spring hydrants comply with the standard AS/NZS 3952, making them ideal for use in above and below ground potable and non-potable water applications.

- › High strength and impact resistant body
- › Isolated stainless steel fasteners for corrosion protection
- › Thermally bonded polymeric coating
- › View the product page for more technical information

For more information on other MiroXtec products, or to view and download product data sheets,

M : +32474050255

Generaal Lemanstraat 55/2 2019 Antwerpen Belgium
info@miroxtec.com

www.miroxtec.com





Full Face Gasket Kit

Diameter	PN16		PN16 PE to DI	PN35	
	316SS	Gal	316SS	316SS	Gal
80	AGK080S	AGK080G	AGKP080S	AGKF080S	AGKF080G
100	AGK100S	AGK100G	AGKP100S	AGKF100S	AGKF100G
150	AGK150S	AGK150G	AGKP150S	AGKF150S	AGKF150G
200	AGK200S	AGK200G	AGKP200S	AGKF200S	AGKF200G
225	AGK225S	AGK225G	AGKP225S	AGKF225S	AGKF225G
250	AGK250S	AGK250G	AGKP250S	AGKF250S	AGKF250G
300	AGK300S	AGK300G	AGKP300S	AGKF300S	AGKF300G
375	AGK375S	AGK375G	AGKP375S	AGKF375S	AGKF375G
450	AGK450S	AGK450G	AGKP450S	AGKF450S	AGKF450G
500	AGK500S	AGK500G	AGKP500S	AGKF500S	AGKF500G
600	AGK600S	AGK600G	AGKP600S	AGKF600S	AGKF600G
750	AGK750S	AGK750G	AGKP750S	AGKF750S	AGKF750G

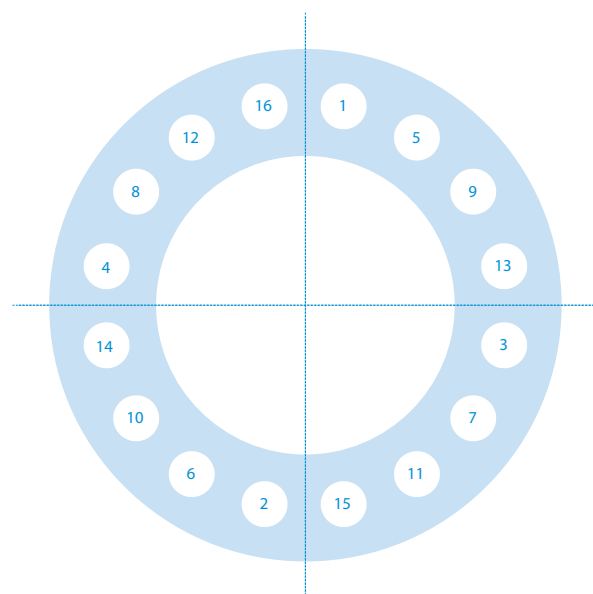
Ductile Iron Pipe

(Refer to WSAA WSA 109 for further details)

1. Ensure flanges and bolts are clean and in good working condition.
2. Apply lubricant to bolts and nut load bearing face (eg. molybdenum disulphide)
3. Insert bolts 1 to 4 into one flange and position gasket on bolts.
4. Align flanges and support as required.
5. Offer the adjoining flange to bolts and hand tighten nuts.
6. Insert remaining bolts and hand tighten nuts.
7. Determine required Bolt Tension and Tightening Torque using PN16 or PN35 table below.
8. Using star pattern sequence shown, tighten nuts as follows:
 - › Tighten Nuts to 30% of estimated torque then,
 - › Tighten Nuts to 60% of estimated torque then,
 - › Tighten Nuts to 100% of estimated torque
9. Final pass – tighten all nuts to 100% of estimated torque in a clockwise direction.

Estimated Torque Values

- › The estimated torque values apply to AS / NZS2280 ductile iron flanges drilled to AS4087 PN16 Fig B5 and PN35 Fig B6 only.
- › “Lightly Oiled” refers to the application of a good quality lubricating oil. This is the usual as-received condition.
- › “Well Lubricated” refers to the application of molybdenum disulphide grease or equivalent anti-seize compound.
- › The estimated torque values are based on the coefficients of friction (μ) indicated. When other coefficients apply, alternative torque values need to be calculated.
- › Star Pattern Tightening sequence (Diagram 01).



(Diagram 01)

PN16 AS4087 – Estimated Torque

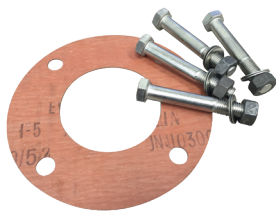


Diameter	Bolt Size	Bolt Tension (kN)	Estimated Torque (Nm)	
			Lightly Oiled $\mu = 0.22$	Well Lubricated $\mu = 0.15$
80	M16	16	60	40
100	M16	22	80	55
150	M16	17	60	40
200	M16	22	80	55
225	M16	24	85	60
250	M20	35	155	105
300	M20	28	125	85
375	M24	42	220	150
450	M24	53	280	190
500	M24	52	275	185
600	M27	67	400	270
750	M30	80	530	360

Applies:

- › PN 16 AS4087 Flanges Fig B5
- › Galv Gr 4.6 or SS Gr 316 Class 50 Bolts
- › EPDM Rubber Gasket 3mm

PN35 AS4087 – Estimated Torque



Diameter	Bolt Size	Bolt Tension (kN)	Estimated Torque (Nm)	
			Lightly Oiled $\mu = 0.22$	Well Lubricated $\mu = 0.15$
80	M16	41	140	100
100	M16	52	180	130
150	M20	66	290	200
200	M20	93	410	280
225	M24	108	570	390
250	M24	118	620	430
300	M24	110	580	400
375	M27	141	840	570
450	M30	150	990	680
500	M30	156	1030	700
600	M33	195	1420	970
750	M33	230	1670	1140

Applies:

- › PN 35 AS4087 Flanges Fig B6
- › Galv Gr 8.8 or SS Gr 316 Class 80 Studs
- › Fibre Gasket Non-Asbestos 1.5mm



Pipe Outside Diameters

Pipe Material	Std	Nominal Size (DN)																							
		80	90	100	125	150	175	200	225	250	300	350	375	400	450	500	525	550	575	600	675	700	750	800	900
oPVC Series 2	AS4441			122		177		232	259	286	345		426		507	560				667					
mPVC Series 2	AS4765			122		177		232	259	286	345		426		507	560				667					
uPVC Series 2	AS1477			122		177		232	259	286	345		426		507	560				667					
GRP	AS3571											345	399	426	453	507	560	587		667	747		826		924
Ductile Iron	AS2280	96		122		177		232	259	286	345		426		507	560				667			826		
Cast Iron Cl B	AS1724			122		177		232	259	286	334		413		492	545				650					
Cast Iron Cl C	AS2544	96		122	149	177	203	232	259	286	345		426		507	560				667			826		
AC Class CD	AS1711	96		122		177		232	259	286	345		426		507		587			667	747		826		
AC Class AB	AS1711	96		122		177		232	259	286	334		413		492		572			650					
mPVC Series 1	AS4765			114	140	160	200	225	250	280	315		400		500	560				630					
uPVC Series 1	AS1477	89		114	140	160	200	225	250	280	315	355	400	450	500	560				630					
Mild Steel	AS1579			114		168		219		273	324	356		406	457	508				610		711	762	813	914
SS Sch 10-160		89		114	141	168		219		273	324	356		406	457	508		559		610			762		
Gal Steel	AS1074	89		114	140	168														630					
ABS Series 1	AS3518	89		114	140	168		225	250		315	355	400	450	500	560									
SS Tube	AS1528	76		102	127	152		203																	
Copper	AS1432	76		102	127	152		203	229																
Reinf Concrete	AS4058					197			279		362		445		533		616			699	787		870		
Poly PE80 / 100	AS4130	90		110	125/140	160/180		200/225		250/280	315	355		400	450	500		560		630		710		800	900
Ductile Iron ISO	EN545	98		118	114	170		222		274	326	378		429	480	532				635		738		842	945

Non-Pressure Pipes		80	90	100	125	150	175	200	225	250	300	350	375	400	450	500	525	550	575	600	675	700	750	800	900
PVC DWV	AS1260	82	90	110		160			250		315		400												
PVC Stormwater	AS1254	75	90	110		160			250		315		400												
VC	AS1741				138	194			280		370		450	485	535		635			710					
FRC Class X					124	179			261		345		426		510		594			664					
AC Class 35	AS1712				120	177			230	257	283	336		419		497		576			657				
AC Class 50	AS1712				122	183			236	262	289	344		425		505		585			664				
Cast Iron SWV	AS1631	85		114	140	165			244		323														
Cast Iron SWV	EN877	83		110	135	160			210		274	326			429		532			635					



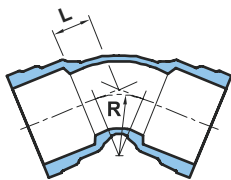
Pipe & Flange Dimensions

Pipe		Flanges: PN16 AS4087 (Table C,D)						Flanges: AS2129 (Table E)						Flanges: PN35 AS4087 (Table F,H)					
Dia.	Pipe OD	Flange OD	PCD	No Holes	Hole Dia.	Bolt Size	Flange Thick	Flange OD	PCD	No Holes	Hole Dia.	Bolt Size	Flange Thick	Flange OD	PCD	No Holes	Hole Dia.	Bolt Size	Flange Thick
80	96	185	146	4	18	M16	18	Same as PN16						205	165	8	18	M16	22
100	122	215	178	4	18	M16	20	215	178	8	18	M16	22	230	191	8	18	M16	22
150	177	280	235	8	18	M16	23	280	235	8	22	M20	22	305	260	12	22	M20	27
200	232	335	292	8	18	M16	23	335	292	8	22	M20	25	370	324	12	22	M20	31
225	259	370	324	8	18	M16	24	370	324	12	22	M20	25	405	356	12	26	M24	34
250	286	405	356	8	22	M20	24	405	356	12	22	M20	25	430	381	12	26	M24	34
300	345	455	406	12	22	M20	30	455	406	12	26	M24	29	490	438	16	26	M24	38
375	426	550	495	12	26	M24	33	Same as PN16						580	521	16	30	M27	42
450	507	640	584	12	26	M24	33	640	584	16	26	M24	35	675	610	20	33	M30	46
500	560	705	641	16	26	M24	35	705	641	16	26	M24	38	735	673	24	33	M30	49
525	587	735	673	16	26	M24	38	735	673	16	30	M27	38	760	699	24	33	M30	60
600	667	825	756	16	30	M27	42	825	756	16	33	M30	41	850	781	24	36	M33	54
750	826	995	927	20	33	M30	47	995	927	20	36	M33	48	1015	940	28	36	M33	59

Ductile Iron Fitting Dimensions

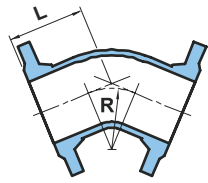
Bend – Socket

Diameter	Radius	Dimension L (mm)			
		11 ¼ deg	22 ½ deg	45 deg	90 deg
100	152	30	45	80	165
150	190	35	55	95	205
200	203	35	55	100	220
225	229	45	65	115	250
250	254	45	70	125	275
300	305	50	80	145	325
375	381	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

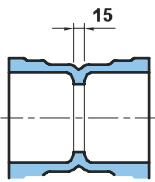


Socket / Socket

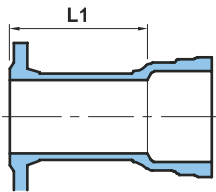
Bend – Flanged



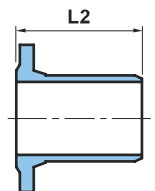
Flange / Flange



Socket / Socket



Flange / Socket



Flange / Spigot

Diameter	Radius	Dimension L (mm)			
		11 ¼ deg	22 ½ deg	45 deg	90 deg
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

Connectors

Diameter	Flange / Socket L1 (mm)	Flange / Spigot L2 (mm)
100	110	205
150	135	205
200	135	230
225	155	230
250	155	230
300	170	255
375	190	280
450	200	280
500	215	305
600	230	330
750	250	370

Tee – Socket & Flanged

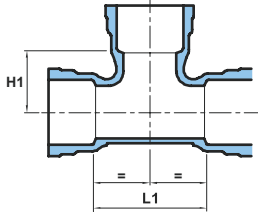
Diameter	Body	Branch	Socket / Socket		Flange / Flange	
			L1 (mm)	H1 (mm)	L2 (mm)	H2 (mm)
100	100	100	230	115	356	178
150	100	100	230	145	406	203
150	150	150	290	145	406	203
200	100	100	230	170	484	241
200	150	150	290	170	484	241
200	200	200	340	170	484	241
225	100	100	240	185	508	254
225	150	150	300	185	508	254
225	200	200	350	185	508	254
225	225	225	380	190	508	254

More sizes on the next page.

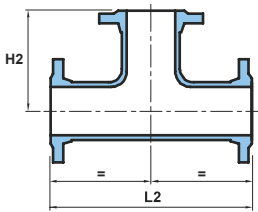


Tee – Socket & Flanged

Diameter		Socket / Socket		Flange / Flange	
Body	Branch	L1 (mm)	H1 (mm)	L2 (mm)	H2 (mm)
250	100	240	200	534	267
250	150	300	200	534	267
250	200	350	200	534	267
250	225	380	205	534	267
250	250	410	205	534	267
300	100	240	230	610	305
300	150	300	230	610	305
300	200	350	230	610	305
300	225	380	235	610	305
300	250	410	235	610	305
300	300	490	245	610	305
375	200	360	270	738	356
375	225	390	275	738	356
375	250	420	275	738	356
375	300	500	285	738	356
375	375	610	305	738	368
450	250	420	315	814	394
450	300	500	325	814	394
450	375	610	345	814	406
450	450	690	345	814	406
500	250	420	340	890	432
500	300	500	355	890	432
500	375	610	370	890	444
500	450	690	370	890	444
500	500	770	385	890	444
600	300	500	405	1016	483
600	375	610	425	1016	495
600	450	690	425	1016	495
600	500	770	435	1016	495
600	600	870	435	1016	508
750	300	510	485	890	615
750	375	620	505	1000	645
750	450	700	505	1080	655
750	500	780	515	1160	680
750	600	880	515	1260	695
750	750	1070	535	1450	725



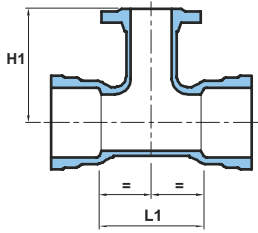
Socket / Socket



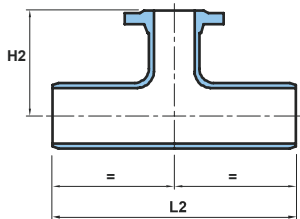
Flange / Flange

Tee – Socket / Flange & Spigot / Flange

Diameter		Socket / Flange		Spigot / Flange	
Body	Branch	L1 (mm)	H1 (mm)	L2 (mm)	H2 (mm)
100	80	210	195	432	178
100	100	230	195	432	178
150	80	210	225	432	203
150	100	230	225	432	203
150	150	290	250	432	203
200	80	210	250	457	241
200	100	230	250	457	241
200	150	290	275	482	241
200	200	340	275	534	241
225	80	220	265	457	254
225	100	240	265	457	254
225	150	300	290	508	254
225	200	350	290	534	254
225	225	380	305	558	254
250	80	220	280	457	267
250	100	240	280	457	267
250	150	300	305	534	267
250	200	350	305	558	267
250	225	380	320	558	267
250	250	410	320	610	267
300	80	220	310	457	305
300	100	240	310	457	305
300	150	300	335	610	305
300	200	350	335	636	305
300	225	380	350	636	305
300	250	410	350	636	305
300	300	490	375	660	305
375	80	230	350	559	305
375	100	250	350	559	305
375	200	360	375	736	356
375	225	390	390	736	356
375	250	420	390	736	356
375	300	500	415	736	356
375	375	610	445	812	368
450	80	230	390	559	343
450	100	250	390	559	343
450	250	420	430	812	394
450	300	500	455	812	394
450	375	610	485	864	406
450	450	690	495	888	406



Socket / Flange



Spigot / Flange

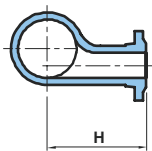
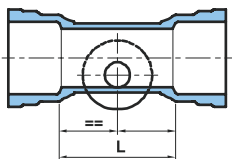
More sizes on the next page.



Tee – Socket / Flange & Spigot / Flange

Diameter		Socket / Flange		Spigot / Flange	
Body	Branch	L1 (mm)	H1 (mm)	L2 (mm)	H2 (mm)
500	80	230	415	584	381
500	100	250	415	584	381
500	250	420	455	888	432
500	300	500	485	888	432
500	375	610	510	940	444
500	450	690	520	940	444
500	500	770	550	940	444
600	80	230	470	584	432
600	100	250	470	584	432
600	300	500	535	990	483
600	375	610	565	1042	495
600	450	690	575	1042	495
600	500	770	600	1042	495
600	600	870	615	1066	508
750	100	260	550	570	550
750	300	510	615	830	615
750	375	620	645	920	645
750	450	700	655	1015	655
750	500	780	680	1075	680
750	600	880	695	1190	695
750	750	1070	725	1355	725
750	750	1070	535	1450	725

Scour Tee

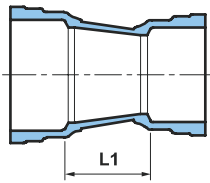


Socket / Flange

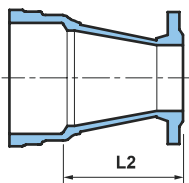
Diameter		Socket / Flange	
Body	Branch	L (mm)	H (mm)
100	80	210	195
150	80	210	225
150	100	230	195
200	80	210	250
200	100	230	250
225	100	240	265
250	100	240	280
300	100	240	310
375	150	310	375
450	150	310	415
500	150	310	440
600	150	310	495
750	200	370	575



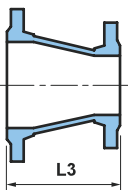
Tee – Socket / Flange & Spigot / Flange



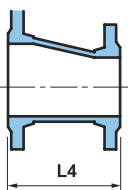
Socket / Socket



Socket / Flange



Flange / Flange



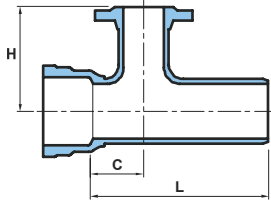
Flange /
Flange Eccentric

Diameter		Socket	Socket / Flange	Flange	Flange Ecc
Body	Branch	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)
100	80	105	125	165	165
150	80	230	250	298	298
150	100	170	190	235	235
200	100	295	315	368	368
200	150	170	200	248	248
225	100	365	385	432	432
225	150	235	270	311	311
225	200	110	155	190	190
250	100	425	445	495	495
250	150	300	330	375	375
250	200	175	215	254	254
250	225	115	160	190	190
300	100	555	575	629	629
300	150	425	460	508	508
300	200	300	345	387	387
300	225	240	290	324	324
300	250	180	225	260	260
375	200	495	540	584	584
375	225	435	485	521	521
375	250	375	420	457	457
375	300	245	305	337	337
450	250	565	610	660	660
450	300	435	495	540	540
450	375	250	310	356	356
500	250	690	740	787	787
500	300	565	620	667	667
500	375	380	440	483	483
500	450	190	255	305	305
600	300	820	875	934	934
600	375	635	690	749	749
600	450	440	510	572	572
600	500	315	400	444	444
750	375	1020	1080	1180	1180
750	450	830	895	1000	1000
750	500	700	785	885	885
750	600	445	540	645	645



Tee – Socket / Spigot / Flange Hydrant

Diameter		Spigot / Spigot / Flange		
Body	Branch	L (mm)	C (mm)	H (mm)
100	80	310	105	195
100	100	335	115	195
150	80	310	105	225
150	100	335	115	225
200	80	325	105	250
200	100	345	115	250
225	80	330	110	265
225	100	350	120	265
250	80	330	110	280
250	100	350	120	280
300	80	330	110	310
300	100	350	120	310
375	80	360	115	350
375	100	380	125	350
450	80	360	115	390
450	100	380	125	390
500	80	360	115	415
500	100	380	125	415
600	80	360	115	470
600	100	380	125	470
750	100	415	130	550



Socket / Spigot / Flange

Some products comply with the requirements of AS / NZS2280 however the dimensions may vary by manufacturer:

- › Bends – Washout, Hydrant, Pedestal, Duckfoot, Spigot / Flange and Socket / Flange
- › PN16 Socket Fittings
- › Spigot Fittings – All styles
- › Bellmouths, Pre-tap Connectors, Y-Junctions and Crosses
- › Socket depths

Contact Clover for dimensional details regarding these products.

Mirolex B.V.

Address : Generaal Lemanstraat 55/2
2019 Antwerpen Belgium

Phone : +32474050255
Email : info@mirolxtec.com
www.mirolxtec.com

