



## INFRASTRUCTURE PRODUCT SPECIALISTS



- MANHOLE COVERS
- GRATES
- SURFACE BOXES
- PIPE
- VALVES

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## INFRASTRUCTURE PRODUCT SPECIALISTS

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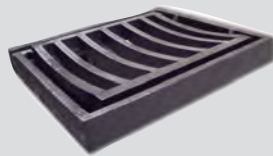
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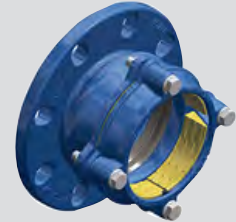
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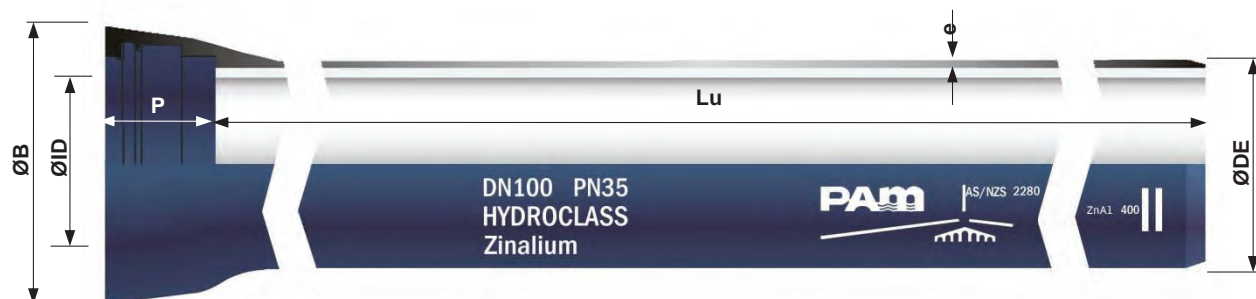
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- AS/NZS 2280 HYDROCLASS ZINALIUM® Pipe with TYTON® TYPE Joint
- DN100-750 PN35



CODE	DN	Lu	PN	e	ØDE	ØID	P	ØB	Mass
	mm			mm					
DIP35100ZN	100	5.75	PN35	4.9	122	124.7	89	162.7	17.5
DIP35150ZN	150	5.75	PN35	5.0	177	179.7	89	218.3	26.1
DIP35200ZN	200	5.75	PN35	5.0	232	235.2	102	278.2	34.8
DIP35225ZN	225	5.75	PN35	5.0	259	262.1	102	303.4	39.2
DIP35250ZN	250	5.75	PN35	5.2	286	289.0	102	329.5	44.6
DIP35300ZN	300	5.75	PN35	5.9	345	348.2	102	391.4	59.0
DIP35375ZN	375	5.75	PN35	7.0	426	430.5	127	487.3	84.4
DIP35450ZN	450	5.75	PN35	8.1	507	511.2	127	570.7	112.7
DIP35500ZN	500	5.75	PN35	8.8	560	564.3	127	626.0	133.0
DIP35600ZN	600	5.75	PN35	10.2	667	671.2	135	751.4	178.9
DIP35750ZN	750	5.75	PN35	12.3	826	830.2	157	912.7	268.2

Note: Dimensions and mass are given as nominal value  
Higher pressure is available for Flange Class

## Legend

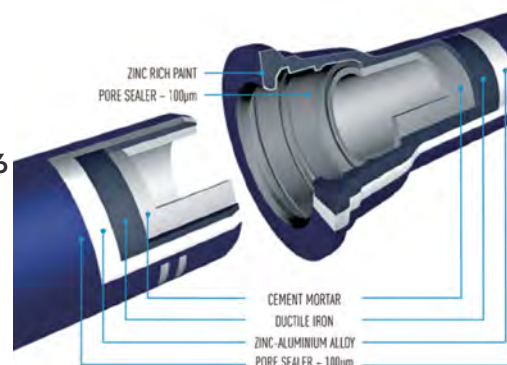
- DN : nominal diameter
- Lu : laying length, in m
- PN : pressure rating according to AS/NZS 2280:2014
- e: nominal thickness according to AS/NZS 2280:2014, in mm
- ØDE : external nominal diameter of the barrel according to AS/NZS 2280:2014, in mm
- ØDI : internal nominal diameter of the socket, in mm
- P : nominal depth of the socket, in mm
- ØB : nominal external diameter of the socket, in mm
- Mass : mean total mass per meter

## FIELD OF USE:

- For drinking water networks and raw and recycled water.
- Pressure Watermain

## MAIN CHARACTERISTICS:

- **AS TYT joint in EPDM (preferably supplied by Hultec) to AS1646**
- **External coating:**
  - ZINALIUM<sup>®</sup> alloy Zn85Al15 (400 g/m<sup>2</sup>)
  - **Blue cobalt synthetic pore sealer minimum 100 microns to AS3750.19**
- **Internal coating:**
  - Blast Furnace Slag Cement mortar (BFSC) to AS3972 type GB
  - If required can seal coated with Endolac 245.10 to ISO 16132 In conformance to AS/NZS 2280:2014
  - Water contact areas tested to AS/NZS 4020



HYDROCLASS ZINALIUM <sup>®</sup>	
Available Diameter Range	DN100, 150, 200, 225, 250, 300, 375, 450, 500, 600, 750
Pressure Rating	PN20 – Green mark on socket face PN35 – Red mark on socket face Flange Class – Blue mark on socket face
Joints	Automatic push in Tyton type rubber ring joint - DN100 to 600
Deflection	DN100-250: 3.5° DN300-750: 1°
External Coating	ZINALIUM <sup>®</sup> alloy Zn85Al15 (400 g/m <sup>2</sup> ) with a Blue cobalt synthetic pore sealer top coat. Ductile iron pipes with ZINALIUM <sup>®</sup> can be buried in direct contact with soil (No LPS) except in the following situations: <ul style="list-style-type: none"> <li>• Soils with a resistivity lower than 500 Ω.cm</li> <li>• Peaty and acid soils</li> <li>• Soils containing acidic industrial effluents, ashes or slag</li> </ul>
Internal Coating	Blast Furnace Cement Mortar (BFSC)
Length	DN100 to DN750: L=5.75m



- AS/NZS PAM INTEGRAL ZINALIUM<sup>®</sup> Pipe with Tyton Type Joint DN100-750
- DN100-750 PN 35



CODE	DN	Lu	PN	e	ØDE	ØID	P	ØB	Mass
	mm	m		mm	mm	mm	mm	mm	kg/m
DIP35100INT	100	5.75	PN35	4.9	122	124.7	89	162.7	17.5
DIP35150INT	150	5.75	PN35	5.0	177	179.7	89	218.3	26.1
DIP35200INT	200	5.75	PN35	5.0	232	235.2	102	278.2	34.8
DIP35250INT	250	5.75	PN35	5.2	286	289.0	102	329.5	44.6
DIP35300INT	300	5.75	PN35	5.9	345	348.2	102	391.4	59.0
DIP35375INT	375	5.75	PN35	7.0	426	430.5	127	487.3	84.4
DIP35450INT	450	5.75	PN35	8.1	507	511.2	127	570.7	112.7
DIP35500INT	500	5.75	PN35	8.8	560	564.3	127	626.0	133.0
DIP35600INT	600	5.75	PN35	10.2	667	671.2	135	751.4	178.9
DIP35750INT	750	5.75	PN35	12.3	826	830.2	157	912.7	268.2

Note: Dimensions and mass are given as nominal value Higher pressure is available for Flange Class

## Legend

- DN : nominal diameter
- Lu : laying length, in m
- PN : pressure rating according to AS/NZS 2280:2014
- e : nominal thickness according to AS/NZS 2280:2014, in mm
- ØDE : external nominal diameter of the barrel according to AS/NZS 2280:2014, in mm
- ØDI : internal nominal diameter of the socket, in mm
- P : nominal depth of the socket, in mm
- ØB : nominal external diameter of the socket, in mm
- Mass : mean total mass per meter

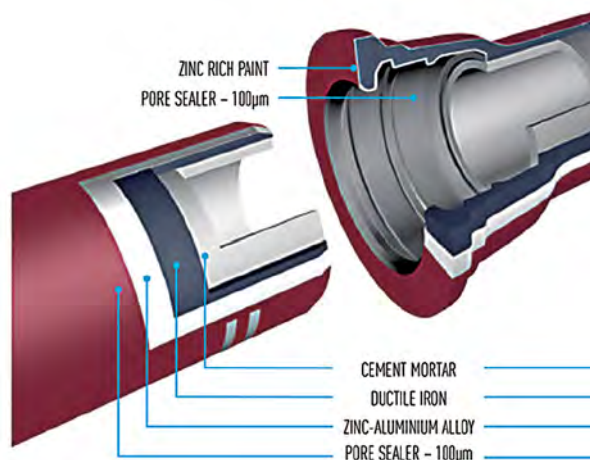


## FIELD OF USE:

- For gravity sewer and pressure or pumped sewer networks
- Domestic waste water
- Very hard raw water and irrigation
- For effluents between pH4 and pH12

## MAIN CHARACTERISTICS:

- AS Tyton type joint in NBR (supplied by Hultec) to AS1646
- **External coating:**
  - ZINALIUM<sup>®</sup> alloy Zn85Al15 (400 g/m<sup>2</sup>)
  - Red synthetic pore sealer minimum 100 microns to AS3750.19
- **Internal coating**
  - High Alumina Cement (HAC) to AS3972 type GB
- In conformance to AS/NZS 2280:2014



HYDROCLASS ZINALIUM <sup>®</sup>	
Available Diameter Range	DN100, 150, 200, 225, 250, 300, 375, 450, 500, 600, 750
Pressure Rating	PN20 – Green mark on socket face PN35 – Red mark on socket face Flange Class – Blue mark on socket face
Joints	Automatic push in Tyton type rubber ring joint - DN100 to 300
Deflection	DN100-250: 3.5° DN300-600: 2.5° DN750: 1.0°
External Coating	The external & socket area is coated with a 'red' synthetic coating
Internal Coating	High Alumina Cement (HAC)
Length	DN100 to DN750: L=5.75m

# DI PIPE ACCESSORIES

## PIPE SOCKET RINGS EPDM

DIPRR100	DN100 Ductile Pipe Socket Seal Ring
DIPRR150	DN150 Ductile Pipe Socket Seal Ring
DIPRR200	DN200 Ductile Pipe Socket Seal Ring
DIPRR250	DN250 Ductile Pipe Socket Seal Ring
DIPRR300	DN300 Ductile Pipe Socket Seal Ring
DIPRR375	DN375 Ductile Pipe Socket Seal Ring
DIPRR450	DN450 Ductile Pipe Socket Seal Ring
DIPRR500	DN500 Ductile Pipe Socket Seal Ring
DIPRR600	DN600 Ductile Pipe Socket Seal Ring
DIPRR750	DN750 Ductile Pipe Socket Seal Ring



## NITRILE RINGS

DIPRR100N	DN100 Ductile Pipe Socket Seal Ring NITRILE
DIPRR150N	DN150 Ductile Pipe Socket Seal Ring NITRILE
DIPRR200N	DN200 Ductile Pipe Socket Seal Ring NITRILE
DIPRR250N	DN250 Ductile Pipe Socket Seal Ring NITRILE
DIPRR300N	DN300 Ductile Pipe Socket Seal Ring NITRILE

## PIPE SOCKET RESTRAINT RINGS EPDM

DIPRRTL100	DN100 Ductile Pipe Restraint Socket Seal Ring
DIPRRTL150	DN150 Ductile Pipe Restraint Socket Seal Ring
DIPRRTL200	DN200 Ductile Pipe Restraint Socket Seal Ring
DIPRRTL250	DN250 Ductile Pipe Restraint Socket Seal Ring
DIPRRTL300	DN300 Ductile Pipe Restraint Socket Seal Ring

## PE PIPE SLEEVE

DIPSS100	DN100 Blue Polyethylene Pipe Sleeve - 1 Sleeve
DIPSS150	DN150 Blue Polyethylene Pipe Sleeve - 1 Sleeve
DIPSS200	DN200 Blue Polyethylene Pipe Sleeve - 1 Sleeve
DIPSS225/250	225/250 Blue Polyethylene Pipe Sleeve - 1 Sleeve
DIPSS300	DN300 Blue Polyethylene Pipe Sleeve - 1 Sleeve
DIPSS375	DN375 Blue Polyethylene Pipe Sleeve - 1 Sleeve
DIPSS600	DN600 Blue Polyethylene Pipe Sleeve - 1 Sleeve
DIPSS750	DN750 Blue Polyethylene Pipe Sleeve - 1 Sleeve

# HYDRANTS

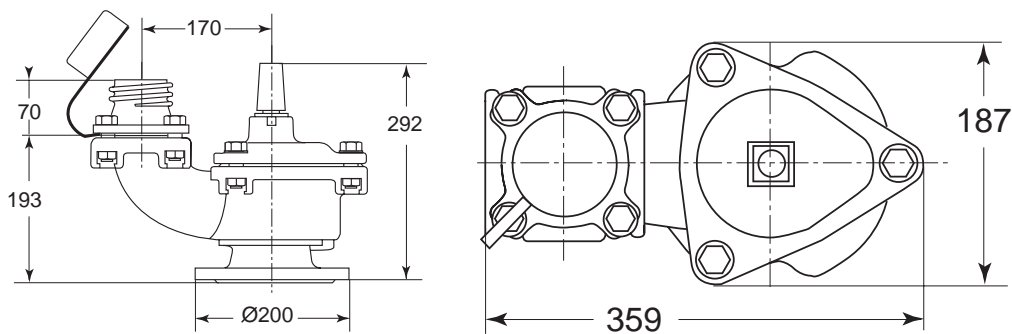
## SAINT GOBAIN BS750 SQUAT FIRE HYDRANT

- DN80 PN16
- Fully compliant to BS750, EN14339, EN1074-6
- Maximum operating temperature 60 °C
- Flange conform to AS 2129 Table D slotted 80/90mm
- Stainless steel outlet Conform to BS 336
- Operating cap top 35 x 35mm
- Close direction CC (clockwise)
- MOT: 105N.m



FH2 80 BS750 Underground Fire Hydrant Squatt c/w frost plug

BS750 TALL option available - CODE FH2 80 TALL



Code	Diameter	Flange Dimension			Outlet Dimension
		PCD	Hole Size	Hole Quantity	
FH2 80	80mm	146mm-165mm	80/90mm	4	Conforms to BS 336

# DUCTILE IRON FITTINGS

- All Fittings AS/NZS2280.2012 Certified
- Flanged Fittings AS4087 (Table D) PN16 ( All Other patterns Available on Request)
- Coatings to AS/NZS4158
- All Fittings 400mm and above available on request
- Alternative Configurations as to those listed also available on request
- All Socketed Fittings Dual Seal to Suit Series 1 & Series 2 PVC Pipe



# DUCTILE IRON FITTINGS

## HYDRANT FLANGED TEES -SEE TABLE PAGE 72 FOR DIMENSIONS

DITFFF8080	DI Tee Flanged Hydrant DN80 x DN80
DITFFF10080	DI Tee Flanged Hydrant DN100 x DN80
DITFFF15080	DI Tee Flanged Hydrant DN150 x DN80
DITFFF20080	DI Tee Flanged Hydrant DN200 x DN80
DITFFF25080	DI Tee Flanged Hydrant DN250 x DN80
DITFFF30080	DI Tee Flanged Hydrant DN300 x DN80



## HYDRANT SOCKETED TEES

DITSOSOF10080	DI Tee Socket/Socket/Flanged Hydrant DN100 x DN80
DITSOSOF15080	DI Tee Socket/Socket/Flanged Hydrant DN150 x DN80
DITSOSOF20080	DI Tee Socket/Socket/Flanged Hydrant DN200 x DN80
DITSOSOF25080	DI Tee Socket/Socket/Flanged Hydrant DN250 x DN80
DITSOSOF30080	DI Tee Socket/Socket/Flanged Hydrant DN300 x DN80
DITSOSOF37580	DI Tee Socket/Socket/Flanged Hydrant DN375 x DN80
DITSOSOF45080	DI Tee Socket/Socket/Flanged Hydrant DN450 x DN80



## FLANGED TEES - SEE TABLE PAGE 72 FOR DIMENSIONS

DITFFF10050	DI Tee Flanged DN100 x DN50
DITFFF100100	DI Tee Flanged DN100 x DN100
DITFFF150100	DI Tee Flanged DN150 x DN100
DITFFF150150	DI Tee Flanged DN150 x DN150
DITFFF200100	DI Tee Flanged DN200 x DN100
DITFFF200150	DI Tee Flanged DN200 x DN150
DITFFF200200	DI Tee Flanged DN200 x DN200
DITFFF250100	DI Tee Flanged DN250 x DN100
DITFFF250150	DI Tee Flanged DN250 x DN150
DITFFF250250	DI Tee Flanged DN250 x DN250
DITFFF300100	DI Tee Flanged DN300 x DN100
DITFFF300150	DI Tee Flanged DN300 x DN150
DITFFF300300	DI Tee Flanged DN300 x DN300
DITFFF375100	DI Tee Flanged DN375 x DN100
DITFFF375150	DI Tee Flanged DN375 x DN150
DITFFF375300	DI Tee Flanged DN375 x DN300
DITFFF375375	DI Tee Flanged DN375 x DN375



# DUCTILE IRON FITTINGS

## FLANGED SCOUR TEES

DITSCFFF10080	DI Tee Flanged Scour Tee DN100 x DN80
DITSCFFF15080	DI Tee Flanged Scour Tee DN150 x DN80
DITSCFFF150100	DI Tee Flanged Scour Tee DN150 x DN100
DITSCFFF20080	DI Tee Flanged Scour Tee DN200 x DN80
DITSCFFF200100	DI Tee Flanged Scour Tee DN200 x DN100
DITSCFFF250100	DI Tee Flanged Scour Tee DN250 x DN100
DITSCFFF250150	DI Tee Flanged Scour Tee DN250 x DN150
DITSCFFF300100	DI Tee Flanged Scour Tee DN300 x DN100
DITSCFFF300150	DI Tee Flanged Scour Tee DN300 x DN150
DITSCFFF375100	DI Tee Flanged Scour Tee DN375 x DN100
DITSCFFF375150	DI Tee Flanged Scour Tee DN375 x DN150

## FLANGED TEES- TABLE E - SEE TABLE PAGE 72 FOR DIMENSIONS

DITFFF10080E	DI Tee Flanged DN100 x DN80 Table E
DITFFF100100E	DI Tee Flanged DN100 x DN100 Table E
DITFFF15080E	DI Tee Flanged DN150 x DN80 Table E
DITFFF150100E	DI Tee Flanged DN150 x DN100 Table E



## SOCKET / FLANGED TEES

DITSOSOF100100	DI Tee Socket/Socket/Flanged DN100 x DN100
DITSOSOF150100	DI Tee Socket/Socket/Flanged DN150 x DN100
DITSOSOF150150	DI Tee Socket/Socket/Flanged DN150 x DN150
DITSOSOF200100	DI Tee Socket/Socket/Flanged DN200 x DN100
DITSOSOF200150	DI Tee Socket/Socket/Flanged DN200 x DN150
DITSOSOF200200	DI Tee Socket/Socket/Flanged DN200 x DN200
DITSOSOF250100	DI Tee Socket/Socket/Flanged DN250 x DN100
DITSOSOF250150	DI Tee Socket/Socket/Flanged DN250 x DN150
DITSOSOF250200	DI Tee Socket/Socket/Flanged DN250 x DN200
DITSOSOF250250	DI Tee Socket/Socket/Flanged DN250 x DN250
DITSOSOF300100	DI Tee Socket/Socket/Flanged DN300 x DN100
DITSOSOF300150	DI Tee Socket/Socket/Flanged DN300 x DN150
DITSOSOF300200	DI Tee Socket/Socket/Flanged DN300 x DN200
DITSOSOF300250	DI Tee Socket/Socket/Flanged DN300 x DN250
DITSOSOF300300	DI Tee Socket/Socket/Flanged DN300 x DN300
DITSOSOF375100	DI Tee Socket/Socket/Flanged DN375 x DN100
DITSOSOF375150	DI Tee Socket/Socket/Flanged DN375 x DN150





# DUCTILE IRON FITTINGS

DITSOSOF450100	DI Tee Socket/Socket/Flanged DN450 x DN100
DITSOSOF450150	DI Tee Socket/Socket/Flanged DN450 x DN150

## SOCKETED TEES

DITSOSOSO100100	DI Tee Socket/Socket/Socket DN100 x DN100
DITSOSOSO150100	DI Tee Socket/Socket/Socket DN150 x DN100
DITSOSOSO150150	DI Tee Socket/Socket/Socket DN150 x DN150
DITSOSOSO200100	DI Tee Socket/Socket/Socket DN200 x DN100
DITSOSOSO200150	DI Tee Socket/Socket/Socket DN200 x DN150
DITSOSOSO200200	DI Tee Socket/Socket/Socket DN200 x DN200
DITSOSOSO250100	DI Tee Socket/Socket/Socket DN250 x DN100
DITSOSOSO250150	DI Tee Socket/Socket/Socket DN250 x DN150
DITSOSOSO250200	DI Tee Socket/Socket/Socket DN250 x DN200
DITSOSOSO250250	DI Tee Socket/Socket/Socket DN250 x DN250
DITSOSOSO300100	DI Tee Socket/Socket/Socket DN300 x DN100
DITSOSOSO300150	DI Tee Socket/Socket/Socket DN300 x DN150
DITSOSOSO300200	DI Tee Socket/Socket/Socket DN300 x DN200
DITSOSOSO300250	DI Tee Socket/Socket/Socket DN300 x DN250
DITSOSOSO300300	DI Tee Socket/Socket/Socket DN300 x DN300



## SOCKET/ SOCKET/ FLANGE SCOUR TEES

DITSCSOSOF10080	DI Socket/Socket/Flange Scour Tee DN100 x DN80
DITSCSOSOF15080	DI Socket/Socket/Flange Scour Tee DN150 x DN80
DITSCSOSOF150100	DI Socket/Socket/Flange Scour Tee DN150 x DN100
DITSCSOSOF20080	DI Socket/Socket/Flange Scour Tee DN200 x DN80
DITSCSOSOF25080	DI Socket/Socket/Flange Scour Tee DN250 x DN80
DITSCSOSOF375200	DI Socket/Socket/Flange Scour Tee DN375 x DN200



## FLANGED BENDS - SEE TABLE PAGE 73 FOR DIMENSIONS

DIBFF8011	DI Bend Flanged DN80 x 11.25°
DIBFF8022	DI Bend Flanged DN80 x 22.5°
DIBFF8045	DI Bend Flanged DN80 x 45°
DIBFF8090	DI Bend Flanged DN80 x 90°
DIBFF10011	DI Bend Flanged DN100 x 11.25°
DIBFF10022	DI Bend Flanged DN100 x 22.5°
DIBFF10045	DI Bend Flanged DN100 x 45°
DIBFF10090	DI Bend Flanged DN100 x 90°
DIBFF15011	DI Bend Flanged DN150 x 11.25°
DIBFF15022	DI Bend Flanged DN150 x 22.5°
DIBFF15045	DI Bend Flanged DN150 x 45°
DIBFF15090	DI Bend Flanged DN150 x 90°
DIBFF20011	DI Bend Flanged DN200 x 11.25°
DIBFF20022	DI Bend Flanged DN200 x 22.5°





# DUCTILE IRON FITTINGS

DIBFF20045	DI Bend Flanged DN200 x 45°
DIBFF20090	DI Bend Flanged DN200 x 90°
DIBFF25011	DI Bend Flanged DN250 x 11.25°
DIBFF25022	DI Bend Flanged DN250 x 22.5°
DIBFF25045	DI Bend Flanged DN250 x 45°
DIBFF25090	DI Bend Flanged DN250 x 90°
DIBFF30011	DI Bend Flanged DN300 x 11.25°
DIBFF30022	DI Bend Flanged DN300 x 22.5°
DIBFF30045	DI Bend Flanged DN300 x 45°
DIBFF30090	DI Bend Flanged DN300 x 90°
DIBFF37511	DI Bend Flanged DN375 x 11.25°
DIBFF37522	DI Bend Flanged DN375 x 22.5°
DIBFF37545	DI Bend Flanged DN375 x 45°
DIBFF37590	DI Bend Flanged DN375 x 90°
DIBFF45011	DI Bend Flanged DN450 x 11.25°
DIBFF45022	DI Bend Flanged DN450 x 22.5°
DIBFF45045	DI Bend Flanged DN450 x 45°
DIBFF45090	DI Bend Flanged DN450 x 90°

## DUCKFOOT BENDS

DIBFFDF8090	DI Bend Duckfoot Flanged DN80 x 90°
DIBFFDF10090	DI Bend Duckfoot Flanged DN100 x 90°
DIBFFDF15090	DI Bend Duckfoot Flanged DN150 x 90°
DIBFFDF20090	DI Bend Duckfoot Flanged DN200 x 90°



## SOCKET BENDS

DIBSOSO10011	DI Bend Socketed DN100 x 11.25°
DIBSOSO10022	DI Bend Socketed DN100 x 22.5°
DIBSOSO10045	DI Bend Socketed DN100 x 45°
DIBSOSO10090	DI Bend Socketed DN100 x 90°
DIBSOSO15011	DI Bend Socketed DN150 x 11.25°
DIBSOSO15022	DI Bend Socketed DN150 x 22.5°
DIBSOSO15045	DI Bend Socketed DN150 x 45°
DIBSOSO15090	DI Bend Socketed DN150 x 90°
DIBSOSO20011	DI Bend Socketed DN200 x 11.25°
DIBSOSO20022	DI Bend Socketed DN200 x 22.5°
DIBSOSO20045	DI Bend Socketed DN200 x 45°
DIBSOSO20090	DI Bend Socketed DN200 x 90°



# DUCTILE IRON FITTINGS

DIBSOSO25011	DI Bend Socketed DN250 x 11.25°
DIBSOSO25022	DI Bend Socketed DN250 x 22.5°
DIBSOSO25045	DI Bend Socketed DN250 x 45°
DIBSOSO25090	DI Bend Socketed DN250 x 90°
DIBSOSO30011	DI Bend Socketed DN300 x 11.25°
DIBSOSO30022	DI Bend Socketed DN300 x 22.5°
DIBSOSO30045	DI Bend Socketed DN300 x 45°
DIBSOSO30090	DI Bend Socketed DN300 x 90°
DIBSOSO37511	DI Bend Socketed DN375 x 11.25°
DIBSOSO37522	DI Bend Socketed DN375 x 22.5°
DIBSOSO37545	DI Bend Socketed DN375 x 45°
DIBSOSO37590	DI Bend Socketed DN375 x 90°
DIBSOSO45011	DI Bend Socketed DN450 x 11.25°
DIBSOSO45022	DI Bend Socketed DN450 x 22.5°
DIBSOSO45045	DI Bend Socketed DN450 x 45°
DIBSOSO45090	DI Bend Socketed DN450 x 90°

## HYDRANT RISERS

DIPS80100	DI Hydrant Riser DN80 x 100mm
DIPS80150	DI Hydrant Riser DN80 x 150mm
DIPS80225	DI Hydrant Riser DN80 x 225mm
DIPS80300	DI Hydrant Riser DN80 x 300mm
DIPS80450	DI Hydrant Riser DN80 x 450mm
DIPS80600	DI Hydrant Riser DN80 x 600mm



# DUCTILE IRON FITTINGS

## PIPE SPOOLS

### 100mm

DIPS100100	DI Pipe Spool DN100 x 100mm
DIPS100150	DI Pipe Spool DN100 x 150mm
DIPS100300	DI Pipe Spool DN100 x 300mm
DIPS100300T2	DI Pipe Spool DN100 x 300mm Tapped 50mm
DIPS100500	DI Pipe Spool DN100 x 500mm
DIPS100225	DI Pipe Spool DN100 x 225mm
DIPS100375	DI Pipe Spool DN100 x 375mm
DIPS100450	DI Pipe Spool DN100 x 450mm
DIPS100600	DI Pipe Spool DN100 x 600mm
DIPS100750	DI Pipe Spool DN100 x 750mm
DIPS100900	DI Pipe Spool DN100 x 900mm
DIPS1001000	DI Pipe Spool DN100 x 1000mm
DIPS1001200	DI Pipe Spool DN100 x 1200mm

### 150mm

DIPS150100	DI Pipe Spool DN150 x 100mm
DIPS150150	DI Pipe Spool DN150 x 150mm
DIPS150225	DI Pipe Spool DN150 x 225mm
DIPS150300	DI Pipe Spool DN150 x 300mm
DIPS150300T2	DI Pipe Spool DN150 x 300mm Tapped 50mm
DIPS150375	DI Pipe Spool DN150 x 375mm
DIPS150450	DI Pipe Spool DN150 x 450mm
DIPS150500	DI Pipe Spool DN150 x 500mm
DIPS150600	DI Pipe Spool DN150 x 600mm
DIPS150750	DI Pipe Spool DN150 x 750mm
DIPS150800	DI Pipe Spool DN150 x 800mm
DIPS150900	DI Pipe Spool DN150 x 900mm
DIPS1501000	DI Pipe Spool DN150 x 1000mm
DIPS1501200	DI Pipe Spool DN150 x 1200mm

### 200mm

DIPS200300	DI Pipe Spool DN200 x 300mm
DIPS200300T2	DI Pipe Spool DN200 x 300mm Tapped 50mm
DIPS200500	DI Pipe Spool DN200 x 500mm
DIPS2001000	DI Pipe Spool DN200 x 1000mm

### 300mm

DIPS300500	DI Pipe Spool DN300 x 500mm
DIPS3001000	DI Pipe Spool DN300 x 1000mm



# DUCTILE IRON FITTINGS

## FLANGED REDUCERS

DIRFF10080	DI Reducer Flanged DN100 x DN80mm
DIRFF150100	DI Reducer Flanged DN150 x DN100mm
DIRFF200100	DI Reducer Flanged DN200 x DN100mm
DIRFF200150	DI Reducer Flanged DN200 x DN150mm
DIRFF250100	DI Reducer Flanged DN250 x DN100mm
DIRFF250150	DI Reducer Flanged DN250 x DN150mm
DIRFF250200	DI Reducer Flanged DN250 x DN200mm
DIRFF300100	DI Reducer Flanged DN300 x DN100mm
DIRFF300150	DI Reducer Flanged DN300 x DN150mm
DIRFF300250	DI Reducer Flanged DN300 x DN250mm
DIRFF375200	DI Reducer Flanged DN375 x DN200mm
DIRFF375300	DI Reducer Flanged DN375 x DN300mm



## BLANK FLANGES

DIBF80	DI Blank Flange DN80
DIBF100	DI Blank Flange DN100
DIBF100E	DI Blank Flange DN100 Table E
DIBF150	DI Blank Flange DN150
DIBF150E	DI Blank Flange DN150 Table E
DIBF200	DI Blank Flange DN200
DIBF200E	DI Blank Flange DN200 Table E
DIBF225	DI Blank Flange DN225
DIBF250	DI Blank Flange DN250
DIBF300	DI Blank Flange DN300
DIBF375	DI Blank Flange DN375
DIBF450	DI Blank Flange DN450
DIBF500	DI Blank Flange DN500



## BLANK FLANGES - TAPPED 50MM

DIBF80T2	DI Blank Flange DN80 Tapped 50mm
DIBF100T2	DI Blank Flange DN100 Tapped 50mm
DIBF100T2E	DI Blank Flange DN100 Tapped 50mm Table E
DIBF150T2	DI Blank Flange DN150 Tapped 50mm
DIBF150T2E	DI Blank Flange DN150 Tapped 50mm Table E
DIBF200T2	DI Blank Flange DN200 Tapped 50mm
DIBF250T2	DI Blank Flange DN250 Tapped 50mm
DIBF300T2	DI Blank Flange DN300 Tapped 50mm
DIBF375T2	DI Blank Flange DN375 Tapped 50mm

# DUCTILE IRON FITTINGS

## FLANGED SOCKET ADAPTORS

DIAFSO100	DI Adaptor Flange/Socket DN100
DIAFSO100E	DI Adaptor Flange/Socket DN100 Table E
DIAFSO150	DI Adaptor Flange/Socket DN150
DIAFSO150E	DI Adaptor Flange/Socket DN150 Table E
DIAFSO200	DI Adaptor Flange/Socket DN200
DIAFSO250	DI Adaptor Flange/Socket DN250
DIAFSO300	DI Adaptor Flange/Socket DN300
DIAFSO375	DI Adaptor Flange/Socket DN500
DIAFSO450	DI Adaptor Flange/Socket DN600



## FLANGED SPIGOT ADAPTORS

DIAFSP50	DI Adaptor Flanged/Spigot DN50
DIAFSP80	DI Adaptor Flanged/Spigot DN80
DIAFSP100	DI Adaptor Flanged/Spigot DN100
DIAFSP150	DI Adaptor Flanged/Spigot DN150
DIAFSP200	DI Adaptor Flanged/Spigot DN200
DIAFSP225	DI Adaptor Flanged/Spigot DN225
DIAFSP250	DI Adaptor Flanged/Spigot DN250
DIAFSP300	DI Adaptor Flanged/Spigot DN300
DIAFSP375	DI Adaptor Flanged/Spigot DN375
DIAFSP450	DI Adaptor Flanged/Spigot DN450
DIAFSP500	DI Adaptor Flanged/Spigot DN500
DIAFSP600	DI Adaptor Flanged/Spigot DN600



# DRESSING SETS

## GASKET RUBBER INSERTION

DSGASK50	Gasket Rubber Insertion 3.2mm Width
DSGASK80	Gasket Rubber Insertion 3.2mm Width
DSGASK100	Gasket Rubber Insertion 3.2mm Width
DSGASK150	Gasket Rubber Insertion 3.2mm Width
DSGASK200	Gasket Rubber Insertion 3.2mm Width
DSGASK250	Gasket Rubber Insertion 3.2mm Width
DSGASK300	Gasket Rubber Insertion 3.2mm Width
DSGASKHYD	Gasket Rubber Insertion 3.2mm Width ( Hydrant )



## 316 STAINLESS STEEL

DSSS50	Gasket Set 50 S/Steel M16x75mm Bolts,Nuts, Washers
DSSS80	Gasket Set 80 S/Steel M16x75mm Bolts,Nuts, Washers
DSSS100	Gasket Set 100 S/Steel M16x90mm Bolts,Nuts, Washers
DSSS150	Gasket Set 150 S/Steel M16x90mm Bolts,Nuts, Washers
DSSS200	Gasket Set 200 S/Steel M16x90mm Bolts,Nuts, Washers
DSSS250	Gasket Set 250 S/Steel M20x90mm Bolts,Nuts, Washers
DSSS300	Gasket Set 300 S/Steel M20x100mm Bolts,Nuts, Washers

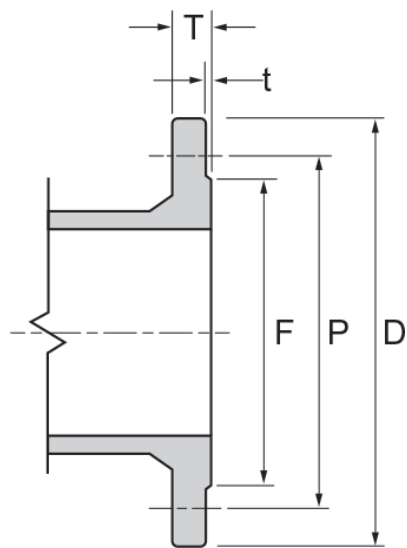


## GALVANISED STEEL

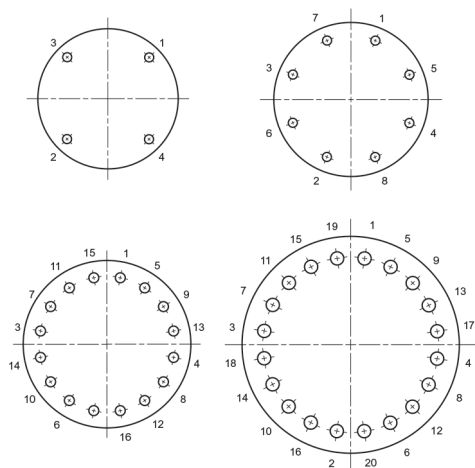
DS50	Gasket Set Galvanised Steel c/w M16x65mm Bolts,Nuts, Washers
DS80	Gasket Set Galvanised Steel c/w M16x65mm Bolts,Nuts, Washers
DS100	Gasket Set Galvanised Steel c/w M16x75mm Bolts,Nuts, Washers
DS150	Gasket Set Galvanised Steel c/w M16x75mm Bolts,Nuts, Washers
DS200	Gasket Set Galvanised Steel c/w M16x75mm Bolts,Nuts, Washers
DS250	Gasket Set Galvanised Steel c/w M20x75mm Bolts,Nuts, Washers
DS300	Gasket Set Galvanised Steel c/w M20x90mm Bolts,Nuts, Washers



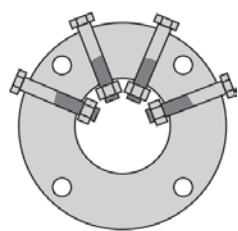
# DI FLANGE DETAILS



TYPICAL TIGHTENING SEQUENCES



Also refer to AS4087 for other flange details



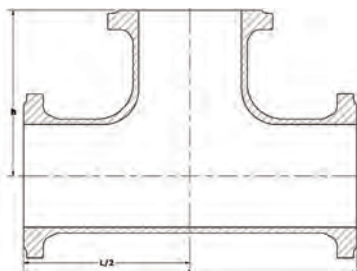
FULL FACE KIT

DN	PN	OD Of Flange (mm) D	Flange Thick (mm) TR	Pitch Circle Dia (mm) P	No of Bolts	Bolt Size (mm)	Bolt Hole Dia. (mm)	Suggested Bolt Length	Diameter of Raised Face	Raised face Height (mm) t
80	16	185	18	146	4	M16	18	65	122	3
	35	205	22	165	8	M16	18	75	141	3
	T/E	185		146	4	M16	18	65	122	3
100	16	215	20	178	4	M16	18	75	154	3
	35	230	22	191	8	M16	18	90	167	3
	T/E	215		178	8	M16	18	75	154	3
150	16	280	23	235	8	M16	18	75	211	3
	35	305	27	260	12	M20	22	90	232	3
	T/E	280		235	8	M20	22	75	211	3
200	16	335	23	292	8	M16	18	90	268	3
	35	370	31	324	12	M20	22	100	296	3
	T/E	335		292	8	M20	22	90	268	3
225	16	370	24	324	8	M16	18	90	300	3
	35	405	35	356	12	M24	26	120	324	3
	T/E	370		324	12	M20	22	90	300	3
250	16	405	24	356	8	M20	22	90	328	3
	35	430	34	381	12	M24	26	120	349	3
	T/E	405		356	12	M20	22	90	328	3
300	16	455	30	406	12	M20	22	100	378	4
	35	490	38	438	16	M24	26	120	406	4
	T/E	455		406	12	M24	26	100	378	4
375	16	550	33	495	12	M24	26	100	463	4
	35	580	42	521	16	M27	30	130	485	4
	T/E	550		495	12	M24	26	100	463	4
450	16	640	33	584	12	M24	26	120	552	4
	35	675	46	610	20	M30	33	150	571	4
	T/E	640		584	16	M24	26	120	552	4
500	16	705	35	641	16	M24	26	120	609	4
	35	735	49	673	24	M30	33	150	634	4
	T/E	705		641	16	M24	26	120	609	4
600	16	825	42	756	16	M27	30	130	720	5
	35	850	54	781	24	M33	36	180	739	5
	T/E	825		756	16	M30	33	130	720	5
750	16	995	47	927	20	M30	33	130	888	5
	35	1015	59	940	28	M33	36	180	898	5
	T/E	995		927	20	M33	36	130	888	5



# DUCTILE IRON FITTINGS

## FLANGED TEES DIMENSIONS: AS PER AS/NZS 2280



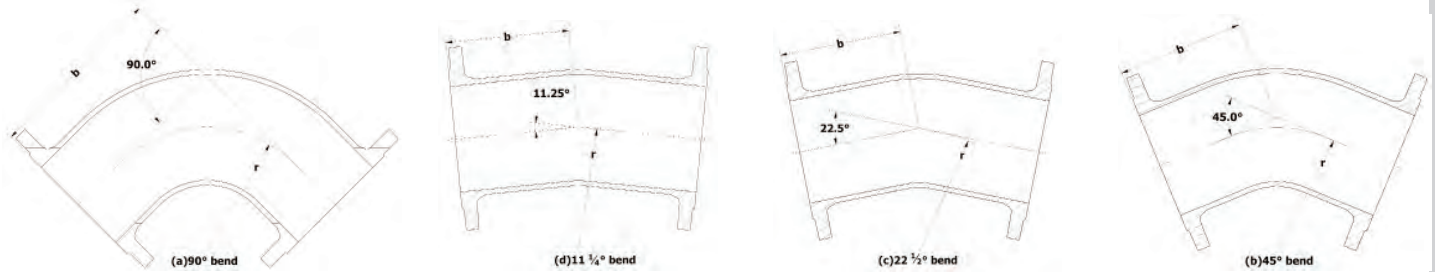
Code For PN 16	Nominal Size		PN 35 Wall Thickness mm	PN 35 Throat Thickness mm	h mm	L mm
	DN	dn				
DITFFF100080	100	80	8	8	178	356
DITFFF100100	100	100	8	8	178	356
DITFFF150080	150	80	9	8	203	406
DITFFF150100	150	100	9	8	203	406
DITFFF150150	150	150	9	9	203	406
DITFFF200080	200	80	10	8	241	484
DITFFF200100	200	100	10	8	241	484
DITFFF200150	200	150	10	9	241	484
DITFFF200200	200	200	10	10	241	484
DITFFF225080	225	80	10	8	254	508
DITFFF225100	225	100	10	8	254	508
DITFFF225150	225	150	10	9	254	508
DITFFF225200	225	200	10	10	254	508
DITFFF225225	225	225	10	10	254	508
DITFFF250080	250	80	10	8	267	534
DITFFF250100	250	100	10	8	267	534
DITFFF250150	250	150	10	9	267	534
DITFFF250200	250	200	10	10	267	534
DITFFF250225	250	225	10	10	267	534
DITFFF250250	250	250	10	10	267	534
DITFFF300080	300	80	11	8	305	610
DITFFF300100	300	100	11	8	305	610
DITFFF300150	300	150	11	9	305	610
DITFFF300200	300	200	11	10	305	610
DITFFF300225	300	225	11	10	305	610
DITFFF300250	300	250	11	10	305	610
DITFFF300300	300	300	11	11	305	610

Note: h and L dimensions are the same for PN16

Flanged Fittings are able to be shortened with approval from purchaser (Excluding Pumping stations). Flanged Tees Dimensions to AS/NZS 2280-2014

# DUCTILE IRON FITTINGS

## FLANGED BEND DIMENSIONS: AS PER AS/NZS 2280



Code For PN16	Nominal Size DN	PN 35 Wall Thickness mm	r mm	b, mm			
				Angle of bend, degrees			
				90	45	22 1/2	11 1/4
DIBFF10011	100	8	152	241	152	152	152
DIBFF10022	100	8	152	241	152	152	152
DIBFF10045	100	8	152	241	152	152	152
DIBFF10090	100	8	152	241	152	152	152
DIBFF15011	150	9	190	279	190	190	190
DIBFF15022	150	9	190	279	190	190	190
DIBFF15045	150	9	190	279	190	190	190
DIBFF15090	150	9	190	279	190	190	190
DIBFF20011	200	10	203	305	203	203	203
DIBFF20022	200	10	203	305	203	203	203
DIBFF20045	200	10	203	305	203	203	203
DIBFF20090	200	10	203	305	203	203	203
DIBFF22511	225	10	229	330	229	229	229
DIBFF22522	225	10	229	330	229	229	229
DIBFF22545	225	10	229	330	229	229	229
DIBFF22590	225	10	229	330	229	229	229
DIBFF25011	250	10	254	356	254	254	254
DIBFF25022	250	10	254	356	254	254	254
DIBFF25045	250	10	254	356	254	254	254
DIBFF25090	250	10	254	356	254	254	254
DIBFF30011	300	11	305	406	305	305	305
DIBFF30022	300	11	305	406	305	305	305
DIBFF30045	300	11	305	406	305	305	305
DIBFF30090	300	11	305	406	305	305	305

Minimum wall thickness for other pressure classifications shall comply with clause 1.6.3 of AS/NZS 2280.  
For Details of flanges refer to AS 4087. Flanged Tees Dimensions to AS/NZS 2280-2014

# DUCTILE IRON FITTINGS

## ULTRA NG -WIDE RANGE COUPLINGS AND FLANGE ADAPTORS

DN50 – 300, PN16

Couplings (ULTRALINK NG) and flange adaptors (ULTRAQUICK NG) with wide tolerance range to suit different pipe OD.

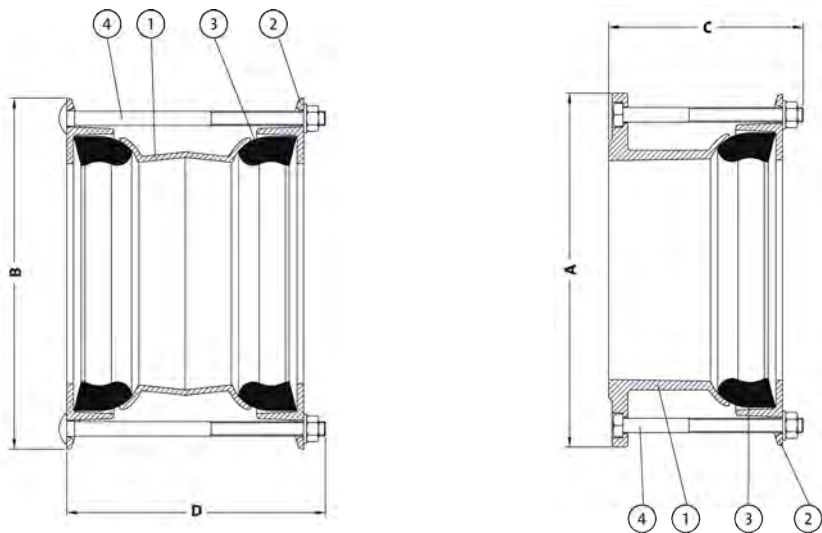
- Pre-assembled for quick and easy installation
- Unique dynamic radial compression gasket sealing process eliminates post installation retightening
- Tolerance range of up to 30mm reduces stockholding to one size for a given nominal diameter
- Full compliance to BS EN 14525
- Maximum deflection 6° per joint
- Rated to 16 Bar working pressure(including products compatible with PN25 flanges)
- Suitable for ductile and cast iron, steel, and PVC pipes. Not suitable for PE or GRP pipes
- Flange adaptor with universal flange to suit PN10, PN16 and certain other drillings, dependent on size

### TECHNICAL INFORMATION

- Bolt torques 60 – 70 Nm
- Maximum service temperature: 40°C

### Materials and Coatings

Description	Material	Coating/specification
1 Body	Ductile iron	Epoxy 250 mic. (WRAS approved)
2 End ring	Ductile iron	Epoxy 250 mic. (WRAS approved)
3 Gasket	EPDM	EN 681-1 (WRAS approved)
4 Bolting	SS316	Stainless Steel , Nuts PTFE Coated



# DUCTILE IRON FITTINGS

## ULTRA NG –WIDE RANGE COUPLINGS AND FLANGE ADAPTORS

### COUPLING

SAP Code	Size	Range (mm)	B (mm)	D (mm)	Mass (kg)
UC50	A	49-71	176	182	3.9
UC65	B	62-84	190	182	4.5
UC80	C	80-102	208	182	5.4
UC100	D	97-127	240	232	7.6
UC125	E	123-153	267	232	9.8
UC150	F	151-181	295	232	11.6
UC200	H	211-241	357	262	15
UC225	I	235-265	381	262	17.5
UC250	J	260-290	407	292	19.1
UC300S1	K	306-336	455	292	27
UC300S2	L	318-348	467	292	26.6



### FLANGE ADAPTOR

SAP	Size	Range	A	C	Mass						
Code		(mm)	(mm)	(mm)	(kg)						
						DN		Imperial		ANSI	
						PN10/16	PN25	A to E	F	125	250
UFA50	A	49-71	178	142	4.1	50, 60 50-80 65, 80		2, 2.5	2	122	2
UFA100	D	97-127	242	142	6.3	100		4			
UFA150	F	151-181	297	142	9.3	150		6E Only	5	6	5
UFA200	H	211-241	363	172	12.1	200					
UFA250	J	260-290	409	172	16.1	250		10E Only			
UFA300S1	K	306-336	459	173	20.5	300		12D, E Only			
UFA300S2	L	318-348	469	173	20.6	300		12D, E Only			

# FERNCO NON RETURN VALVE

Fernco's Non-return valves allow sewer or surface water materials to freely flow in the direction of the systems mains but block backflow of those materials in the opposite direction in instances, such as, flooding.

- Unobtrusive to natural flow
- A proven flood prevention method
- Helps to protect homes, properties, commercial buildings, roads etc
- Also suitable as rodent deterrents with rat block features
- Maintenance free

This range of retrofit Non-Return Valves (NRV's) can be installed directly into existing manholes by simply pushing the NRV into the desired pipe inlet. The product prevents foul water flowing back from the blocked sewerage systems to flood the property from the inside via toilets, plug holes and waste pipes.

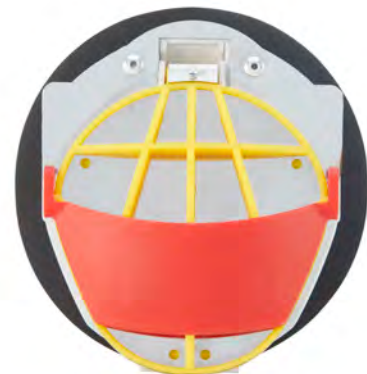
The Retrofit NRV's can be fitted in minutes and do not require any specialist expertise or equipment

Users also benefit from protection against rodent infestation. The stainless steel reinforced flap helps to block rats and other rodents and insects from traveling up pipes and into homes and commercial buildings.

Material  
Polypropylene/430 Stainless Steel /TPE

Temperature Range  
-50°C to 80°C constant, 100°C intermittent

Standards  
WRc Approved™ BS EN 681-1:1996 BS EN 1852-1:2018 BS EN 10088:1995 BS EN 13564-1:2002 BS EN 13564-2:2002



Code	Nominal Diameter mm	Size (mm)	Description
FNRV100	100mm	97 - 106	Non Return Valve to fit DN100 pipe inlets.
FNRV150	150mm	148 - 153	Non Return Valve to fit DN150 pipe inlets.

# FERNCO HDPE FLAP VALVES

Fernco have designed and developed a range of high quality Flap Valves made from HDPE (High Density Polyethylene). The Flap Valve acts as a Non-Return Valve for the prevention of backflow associated with rivers, estuaries, seawater outfalls etc. The lightweight product is easy to install and corrosion resistant.

- Lightweight range of flap valves
- Available – wall, spigot or flange mounted
- Low cracking heads
- Easy and quick installation – no need for grout between frame and wall
- Robust and rigid construction
- UV stable
- Fully recyclable
- Materials are corrosion resistant
- Little to no maintenance required

## Materials

HDPE Backplate and Flap

EPDM integrated seal (meeting requirements of BS EN 681-1)

Stainless Steel (304) hinge and structural steel weight encased in HDPE

## Standards

Fernco Flap Valves satisfy the requirements of EN681-1, DIN19569-4, ISO 9001:2015

## ISO PN 10

Wall/Flange Mounted Flap Valve



Wall/Flange Mounted	Spigot Mounted	Application
FV100	FVS100	DN100 pipe
FV150	FVS150	DN150 pipe
FV200	FVS200	DN200 pipe
FV250	FVS250	DN250 pipe
FV300	FVS300	DN300 pipe
FV350	FVS350	DN350 pipe
FV400	FVS400	DN400 pipe
FV450	FVS450	DN450 pipe
FV500	FVS500	DN500 pipe
FV600	FVS600	DN600 pipe

# FERNCO HDPE FLAP VALVES

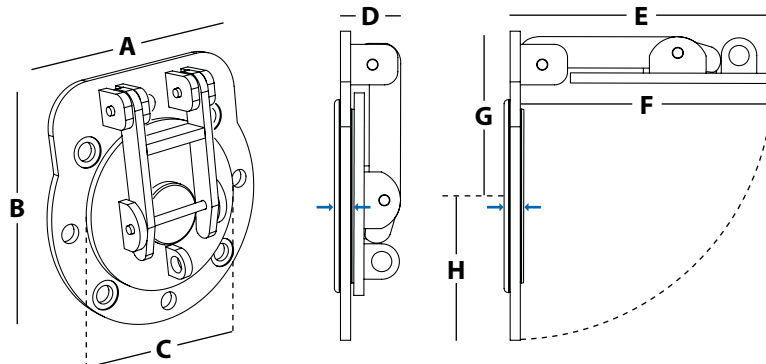
Wall/ Flange Mounted	DN	Mounting Set	Bolts (qty)	Chemical Anchor Capsules (qty)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	Pressure (mwc)	Weight (Kg)
FV100	100	WMK-01	4	4	220	270	145	59	229	219	160	110	5	0.75
FV150	150	WMK-01	4	4	285	305	200	59	262	252	163	142	5	1.1
FV200	200	WMK-01	4	4	340	380	236	74	330	315	210	170	5	2.3
FV250	250	WMK-01	4	4	395	450	285	74	397	382	253	198	5	2.9
FV300	300	WMK-01	4	4	445	496	350	89	455	435	273	223	5	4.8
FV350	350	WMK-02	6	6	505	558	387	89	505	485	305	253	5	5.2
FV400	400	WMK-02	6	6	565	628	431	89	567	547	345	283	5	6.9
FV450	450	WMK-02	6	6	615	673	480	109	625	600	365	308	5	10.2
FV500	500	WMK-02	6	6	670	745	533	109	697	672	410	335	5	14
FV600	600	WMK-02	6	6	780	850	655	109	808	783	460	390	5	17.6

Fernco Flap Valves are intended for end-of-pipe installation and can be mounted...

- On a vertical or inclined wall (mounting set available)
- On a standard ISO PN10 pipe flange

Mounting Set includes...

- M8 capsules & fixings for DN100-300 sizes
- M12 capsules & fixings for DN350 sizes and larger
- Chemical resin capsules
- Stainless Steel 1.4401 (316) anchor fixings



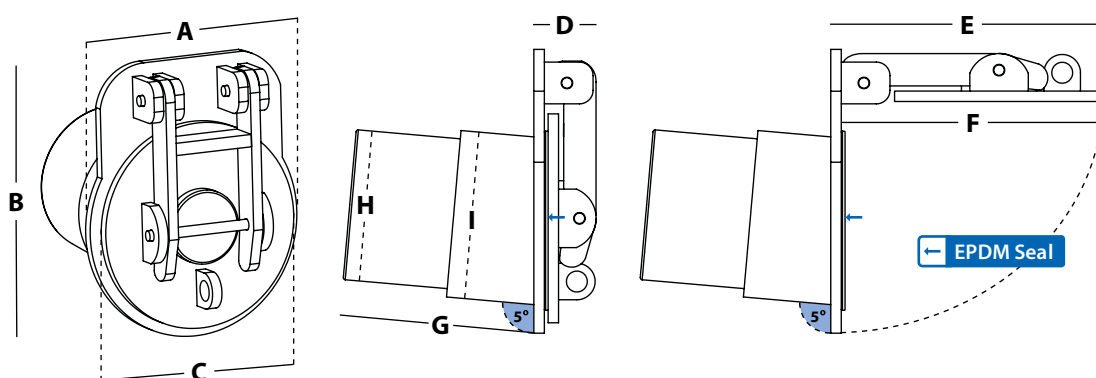
## HDPE Benefits

- Lighter weight than traditional cast iron flap valves, leading to easier installation and lower installation costs
- High strength HDPE will withstand being struck by rocks and other debris, present in marine and river environments, which could shatter lighter weight plastics
- Completely waterproof and maintenance free material
- Not at risk from theft as no inherent scrap value
- Stainless steel hinges and structural steel weights require no maintenance as they have a HDPE covering
- All models (DN100-DN600) can withstand a constant pressure of 5 mwc as standard
- 25 year minimum life expectancy
- Manufactured to DIN 19569-4
- Our flap valves are supplied in accordance with ISO 9001:2015 requirements



# FERNCO HDPE FLAP VALVES

Spigot Mounted Flap Valve	DN	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)	Pressure (mwc)	Weight (Kg)
FVS100	100	140	230	140	59	226.5	216.5	109	90	110	5	0.82
FVS150	150	220	272	200	59	261	251	184	144	160	5	1.8
FVS200	200	236	308	236	74	310	295	205	181	200	5	3.3
FVS250	250	295	348	285	74	344	329	252	228	250	5	4.8
FVS300	300	360	403	350	89	405	385	258	289	315	5	8.2
FVS350	350	392	451	387	89	455	435	282	336	355	5	8.7
FVS400	400	440	505	431	89	507	487	285	367	400	5	13
FVS450	450	490	550	480	109	565	544	300	444	450	5	15.4
FVS500	500	545	623	533	109	637	612	324	457	500	5	24
FVS600	600	670	735	655	109	740	715	500	579	630	5	30



All spigot mounted Flap Valves are supplied with a self adhesive strip of EPDM, pre-cut to the correct size. The EPDM strip should be applied to the Flap Valve spigot to create a seal against the internal surface of the host pipe.

Nominal Diameter	Opening Pressure (Cracking Head) Above Water* (mm)	Inclination (°)	Opening Pressure (Cracking Head) Above Water* (mm)	Inclination (°)
100	5	0	30	5
150	8	0	57.5	5
200	9	0	62.5	5
250	10	0	67.5	5
300	12.5	0	84	5
350	15	0	91	5
400	17.5	0	97.5	5
450	18.5	0	106	5
500	20	0	115	5
600	25	0	135	5

# HDPE PENSTOCKS

HDPE Penstocks from Flexseal provide a high strength, easy to install solution to control the flow of water and wastewater.

Penstocks, in their basic form, are permanent water gates that control the flow of water from one area to the next, which can be manually adjusted depending on the desired flow. They are often used on Waterways, Power Plants, Industrial Effluent Plants, Hydro Power, Sewerage/Wastewater Treatment Plants, Drainage and Flood Control.

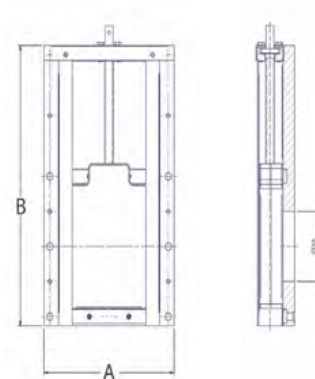
- Lightweight range of wall mounted penstocks
- Easy and quick installation – no need for grout between frame and wall
- Corrosion resistant
- Robust and rigid construction
- UV stable
- Little to no maintenance required
- Manufactured to DIN. 19569-4 class 5

The range is considerably lighter than alternatives, resulting in easier installation with no grout required between frame and wall.

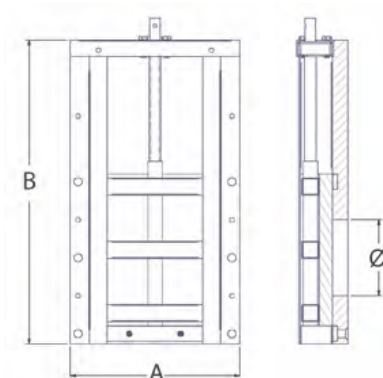
The product requires little lubrication between the frame and the door resulting in a longer life product. The range has leakage rates that are better than those required in both BS 7775 and DIN. 19569-4 class 5. Flexseal Penstocks, unlike valves, are fitted onto the civil structure form work or over an aperture in a wall. All Flexseal Penstocks come with a BS Cap supplied.



Product Code	Diameter (Ø)	A Total Width (mm)	B Total Height (mm)	Pressure (mwc)	Weight (kg)	Mounting Set
FPS100	100	242	437	6	10.4	PSMS-01
FPS150	150	294	537	6	16	PSMS-01
FPS200	200	342	637	6	22	PSMS-01
FPS250	250	394	737	6	26	PSMS-01
FPS300	300	442	837	6	31	PSMS-01



Product Code	Diameter (Ø)	A Total Width (mm)	B Total Height (mm)	Pressure (mwc)	Weight (kg)	Mounting Set
FPS400	400	670	1150	6	55	PSMS-02
FPS500	500	770	1350	6	75	PSMS-02
FPS600	600	870	1550	6	90	PSMS-02



# VALVES

## DZR HEAVY DUTY BALL VALVES

- Forged Body and Ball – Brass CW602N DR
- Temperature Range -20°C to + 120°C
- For Inground Water Meter Installations

### FEMALE WITH FEMALE SWIVEL NUT

BG5201.1520	15mm x 20mm	580 psi
BG5201.2020	20mm x 20mm	580 psi
BG5201.2025	20mm x 25mm	580 psi
BG5201.2525	25mm x 25mm	580 psi



### OUTLET FEMALE WITH FEMALE SWIVEL NUT AND NON RETURN

BG5206.1520	15mm x 20mm	232 psi
BG5206.2020	20mm x 20mm	232 psi
BG5206.2025	20mm x 25mm	232 psi
BG5206.2525	25mm x 25mm	232 psi



### FEMALE WITH MDPE PIPE CONNECTION AND FEMALE SWIVEL NUT

BG5241.2520	25mm x 20mm	435 psi
BG5241.2525	25mm x 25mm	435 psi
BG5241.3220	32mm x 20mm	435 psi
BG5241.3225	32mm x 25mm	435 psi



### OUTLET FEMALE WITH MDPE PIPE CONNECTION FEMALE SWIVEL NUT AND NON RETURN

BG5246.2520	25mm x 20mm	232 psi
BG5246.2525	25mm x 25mm	232 psi
BG5246.3220	32mm x 20mm	232 psi
BG5246.3225	32mm x 25mm	232 psi



### INLET FEMALE WITH MDPE PIPE CONNECTION FEMALE SWIVEL NUT AND NON RETURN

BG5246H.2520	25mm x 20mm	232 psi
BG5246H.2525	25mm x 25mm	232 psi
BG5246H.3220	32mm x 20mm	232 psi
BG5246H.3225	32mm x 25mm	232 psi



### ANGLE FEMALE WITH FEMALE SWIVEL NUT

BG5301.1520	15mm x 20mm	580 psi
BG5301.2020	20mm x 20mm	580 psi
BG5301.2025	20mm x 25mm	580 psi
BG5301.2525	25mm x 25mm	580 psi

# VALVES

## OUTLET ANGLE FEMALE WITH FEMALE SWIVEL NUT AND NON RETURN

BG5306.1520	15mm x 20mm	232 psi
BG5306.2020	20mm x 20mm	232 psi
BG5306.2025	20mm x 25mm	232 psi
BG5306.2525	25mm x 25mm	232 psi



## ANGLE FEMALE WITH MDPE PIPE CONNECTION AND FEMALE SWIVEL NUT

BG5341.2520	25mm x 20mm	435 psi
BG5341.2525	25mm x 25mm	435 psi
BG5341.3220	32mm x 20mm	435 psi
BG5341.3225	32mm x 25mm	435 psi



## OUTLET ANGLE FEMALE WITH MDPE PIPE CONNECTION FEMALE SWIVEL NUT AND NON RETURN

BG5346.2520	25mm x 20mm	232 psi
BG5346.2525	25mm x 25mm	232 psi
BG5346.3220	32mm x 20mm	232 psi
BG5346.3225	32mm x 25mm	232 psi



## INLET ANGLE FEMALE WITH MDPE PIPE CONNECTION FEMALE SWIVEL NUT AND NON RETURN

BG5346H.2520	25mm x 20mm	232 psi
BG5346H.2525	25mm x 25mm	232 psi
BG5346H.3220	32mm x 20mm	232 psi
BG5346H.3225	32mm x 25mm	232 psi



## INLET BALL VALVE DZR ANGLE MDPE END X SWIVEL NUT "RED" HANDLE

BG5346H.2520RH	25 x 20mm	232psi
BG5346H.2525RH	25 x 25mm	232psi



## INLET FEMALE WITH FEMALE SWIVEL NUT AND FILTER

BG5501.1520	15mm x 20mm	290 psi
BG5501.2020	20mm x 20mm	290 psi
BG5501.2025	20mm x 25mm	290 psi
BG5501.2525	25mm x 25mm	290 psi



## OUTLET FEMALE WITH FEMALE SWIVEL NUT AND FILTER

BG5501/1.1520	15mm x 20mm	290 psi
BG5501/1.2020	20mm x 20mm	290 psi
BG5501/1.2025	20mm x 25mm	290 psi
BG5501/1.2525	25mm x 25mm	290 psi



# VALVES

## OUTLET FEMALE WITH MDPE PIPE

### CONNECTION FEMALE SWIVEL NUT NON RETURN AND FILTER

BG5546/1.2520	25mm x 20mm	290 psi
BG5546/1.2525	25mm x 25mm	290 psi
BG5546/1.3220	32mm x 20mm	290 psi
BG5546/1.3225	32mm x 25mm	290 psi



## FEMALE SLIDE EXTENSION WITH FEMALE SWIVEL NUT

BG5601Z.1520	15mm x 20mm	580 psi
BG5601Z.2020	20mm x 20mm	580 psi
BG5601Z.2025	20mm x 25mm	580 psi



## INLET FEMALE SLIDE EXTENSION WITH FEMALE SWIVEL NUT AND NON RETURN

BG5606HZ.1520	15mm x 20mm	580 psi
BG5606HZ.2020	20mm x 20mm	580 psi
BG5606HZ.2025	20mm x 25mm	580 psi



## FEMALE WITH MDPE PIPE CONNECT & FEMALE/MALE SWIVEL NUT

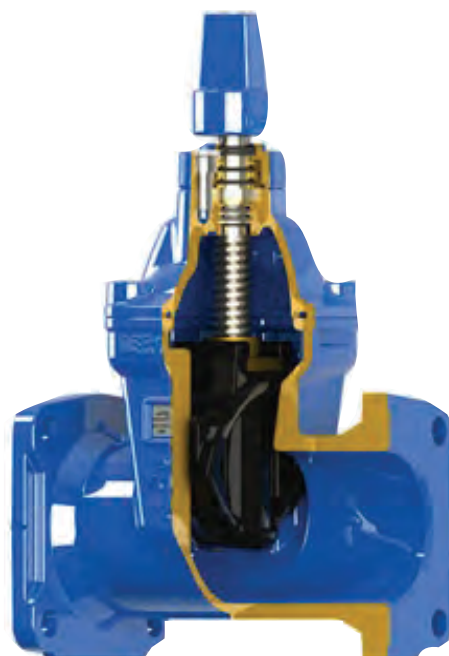
BG5242.2520	25mm x 20mm
BG5242.2525	25mm x 25mm



# VALVES

## RESILIENT SEATED GATE VALVE

- Manufactured to AS/NZS 2638.2.
  - Ductile Iron body and bonnet to AS 1831.
  - Wedge is Ductile Iron AS 1831, fully encapsulated (Vulcanized) EPDM Rubber to AS1646 and AS681.1.
  - Forged Stem: 431 Stainless Steel to ASTM A276, providing excellent corrosion and strength, reducing moving parts.
  - Bolts are all 316 Stainless Steel to ASTM A276, hot melt encapsulated for superior corrosion resistance in harsh environments.
  - Fusion Bonded Epoxy coated to AS/NZS 4158 provides the valve excellent corrosion protection.
  - Valves are available in both Anticlockwise and Clockwise configuration. Valves are supplied with Key Cap as standard, Hand Wheel is optional.
  - The wedge is designed with abrasion resistant nylon guides which reduce the required opening and closing torque through smooth operation.
  - For use in Potable Water, Waste Water, Fire, Irrigation, Water Circulation and Heating and Cooling applications and are suitable for both above and below ground installation.
- 
- Size range: DN 80-DN 600(DN50 and DN65 also available not to AS/NZS2638.2)
  - Allowable Operating Pressure:1600 kPa; 1.6 Mpa
  - Maximum Test Pressure: 2400 kPa, 2.4 Mpa
  - Maximum Temperature: 40 Deg C
  - End Connection: Flanged to AS 4087 (Table E drilling also available for DN 150 and above) Socketed, Spigoted and Roll Grooved
  - Certification: SAI Global Watermark Lic. No. 25890 Standards Mark Lic. No. 25890WSAA Appraisal No. PA1511DERWENTINTERNATIONAL



# VALVES

RSV50

RSV80AS-FL

RSV100AS-FL

RSV100AS-SO

RSV150AS-FL

RSV150AS-SO

RSV200AS-FL

RSV200AS-SO

RSV250AS-FL

RSV300AS-FL

RSV375AS-FL

RSV400AS-FL

RSV450AS-FL

RSV500AS-FL

RSV600AS-FL

RSVHW

Resilient Seat Gate Valve 50mm - Flanged

Resilient Seat Gate Valve 80mm Aust Standard - Flanged

Resilient Seat Gate Valve 100mm Aust Standard - Flanged

Resilient Seat Gate Valve 100mm Aust Standard - Socketed

Resilient Seat Gate Valve 150mm Aust Standard - Flanged

Resilient Seat Gate Valve 150mm Aust Standard - Socketed

Resilient Seat Gate Valve 200mm Aust Standard - Flanged

Resilient Seat Gate Valve 200mm Aust Standard - Socketed

Resilient Seat Gate Valve 250mm Aust Standard - Flanged

Resilient Seat Gate Valve 300mm Aust Standard - Flanged

Resilient Seat Gate Valve 375mm Aust Standard - Flanged

Resilient Seat Gate Valve 400mm Aust Standard - Flanged

Resilient Seat Gate Valve 450mm Aust Standard - Flanged

Resilient Seat Gate Valve 500mm Aust Standard - Flanged

Resilient Seat Gate Valve 600mm Aust Standard - Flanged

Hand Wheel to suit 100-300mm Sluice Valves



Blue Cap - White plug  
Water ACC Close



Red Cap - Red Plug -  
Water CC Close



Lilac Cap - White plug  
Recycled Water  
ACC Close



Lilac Cap - Red Plug  
Recycled Water  
CC Close



# VALVES

## DZR BRASS FEMALE GATE VALVE WITH HANDWHEEL

For use in a wide variety of sectors: heating, air conditioning, water, sanitary systems, oil pipelines, gasoline networks, saturated steam and generally with any non corrosive liquid.

Made in compliance with the quality management requirements of standard ISO 9001:2008.

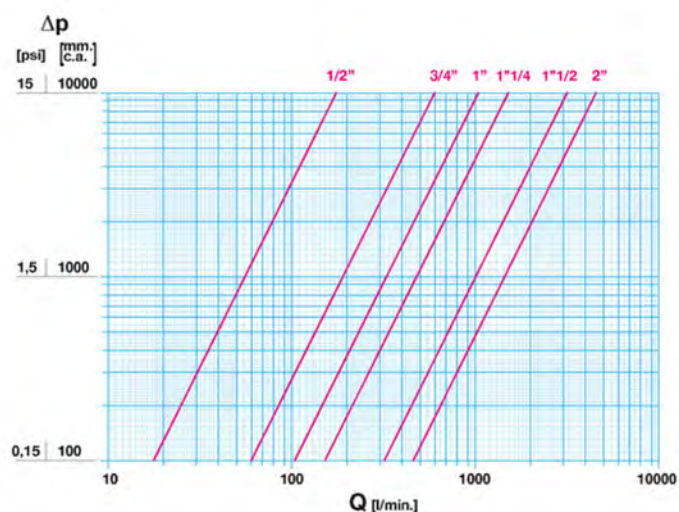
All articles are tested according to the standard EN 12266-1:2003.

Brass Alloy complies with standard EN 12165-CW602N-M.

- Nominal Pressure PN20
- Operating temperature -10°C to + 180°C
- AS1628 approved
- AS4020 potable water



FLOW AND PRESSURE DROP



Notes:

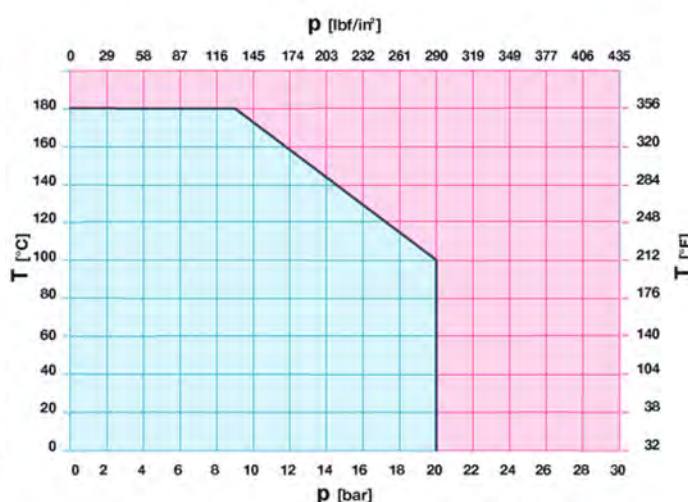
1 l/min = 0,06 m<sup>3</sup>/h

1 m<sup>3</sup>/h = 16,67 l/min

1 bar = 10.000 mm w.c.

1 psi = 690 mm w.c.

PRESSURE TEMPERATURE RATINGS



Notes:

1 bar = 14,5 psi

1 bar = 14,5 lbf/in<sup>2</sup>

°C = 5/9 x (°F-32)

°F = 32 + (9/5 x °C)

GVDZR15	Gate Valve DR Brass Aust Std 15mm Fem/Fem
GVDZR20	Gate Valve DR Brass Aust Std 20mm Fem/Fem
GVDZR25	Gate Valve DR Brass Aust Std 25mm Fem/Fem
GVDZR32	Gate Valve DR Brass Aust Std 32mm Fem/Fem
GVDZR40	Gate Valve DR Brass Aust Std 40mm Fem/Fem
GVDZR50	Gate Valve DR Brass Aust Std 50mm Fem/Fem



- Ductile Iron
- EN124 Class D (400kN)
- Hinged
- Springbar locking mechanism
- Ventilated and non ventilated options



Reference	Description		Mass (in kg)		Dimensions mm		
	Type	Frame	Total	Cover	Clear Opening	Height	Frame Size
CDKO60EF	Non ventilated	Round	62	38	606	104	841
CDKO60EFX15*	Non ventilated	Round	62	38	606	104	841
CDKO60EF-ST (stormwater)	Non ventilated	Round	62	38	606	104	841
CDKO60EF-SW (sewer)	Non ventilated	Round	62	38	606	104	841
CDKO60EF-SWFISH (stormwater fish)	Non ventilated	Round	62	38	606	104	841
CDKO60EF-WW (waste water)	Non ventilated	Round	62	38	606	104	841
CDKO60FF-WW (waste water)	Ventilated	Round	62	38	606	104	841

\* Includes D50 Lock



#### Ductile iron anti-theft spline

Prevents the cover from being extracted and stolen. It can be installed after the cover is installed

Note: accessories are painted yellow for illustration purposes only.



#### Anti-intrusion lock :

The lock D50, features a ductile cast iron bar, with high resistance to prevent unauthorised entry.

KORUM Accessories	
CDKO60BF-J	KORUM Blue Elastomer Ring
C38	KORUM Anti Theft Spline
C46	KORUM Opening Key for D50 Lock
C47	KORUM Lock
SGKORUM-IMP	KORUM Safety Grill 1000kg Load Tested
CDKO600SCP	KORUM Stainless Steel Catchpan to suit Ventilated

# PAMREX 600

## SAFETY

- Ductile Iron
- EN124 Class D (400kN)
- AS3996 Class E
- Hinged
- Ventilated and non-ventilated options
- Elastomer ring
- Sealed handling box
- Optional anti-theft cover lock
- Lifting rings integral with the frame
- Opens to 130°, blocks at 90° when closing for sewage pipeworks



Reference	Description		Mass (in kg)		Dimensions mm		
	Type	Frame	Total	Cover	Clear Opening	Height	Frame Size (OD)
CDPA60EFX27*	Non-ventilated	Round	97	55	610	100	850
CDPA60FF	Ventilated	Round	87	54	610	100	850

PAMREX 600 Accessories	
SGPAMREX600-IMP	PAMREX 600 Stainless Steel Safety Grill-1000KG Load Tested
C18	PAMREX Opening Key for SCS Lock
C1	PAMREX 600 Galvanised Mudpan
C6	PAMREX 600/700 Penta Lock
C8	PAMREX 600/700 SCS Lock
C17	PAMREX Key for Penta Lock
C45	PAMREX Elastomer Ring
PLUG	PAMREX Hinge Plug

NOTE: The PAMREX grating is interchangeable with any cover of PAMREX 600 series

# PAMREX 700

SAFETY



- Ductile Iron
- EN124 Class D (400kN)
- AS3996 Class E
- Hinged
- Ventilated and non-ventilated options
- Clear opening: 700 mm
- Elastomer ring
- Sealed handling box
- Optional anti-theft cover lock
- Lifting rings integral with frame



Reference	Description		Mass (in kg)		Dimensions mm		
	Type	Frame	Total	Cover	Clear Opening	Height	Frame Size (OD)
CDPA70EF	Non-ventilated	Round	108	71	700	100	900
CDPA70FF	Ventilated	Round	108	71	700	100	900

PAMREX 700 Accessories	
SGPAMREX700-IMP	PAMREX 700 Stainless Steel Safety Grill
C18	PAMREX Opening Key for SCS Lock
C2	PAMREX 700 Galvanised Mudpan
C6	PAMREX 600/700 Penta Lock
C8	PAMREX 600/700 SCS Lock
C17	PAMREX Key for Penta Lock
PLUG	PAMREX Hinge Plug

# PAMREX 800

SAFETY



- Ductile Iron
- EN124 Class D (400kN)
- AS3996 Class E
- Hinged
- Ventilated and non-ventilated options
- Clear opening: 800 mm
- Elastomer ring
- Opening and closing assisted with gas arm



Reference	Description		Mass (in kg)		Dimensions mm		
	Type	Frame	Total	Cover	Clear Opening	Height	Frame Size (OD)
CDPA80EFX37	Non-ventilated	Round	121	73	800	125	1000
CDPA80FFX37	Ventilated	Round	121	73	800	125	1000

PAMREX 800 Accessories	
SGPAMREX800-IMP	PAMREX 800 Stainless Steel Safety Grill
C18	PAMREX Opening Key for SCS Lock
C3	PAMREX 800 Galvanised Mudpan
C14	PAMREX 800 Penta Lock
C16	PAMREX 800 SCS Lock
C17	PAMREX Key for Penta Lock
PLUG	PAMREX Hinge Plug

# PAMREX 900

SAFETY WITH GAS STRUT ASSISTANCE



- Ductile Iron
- EN124 Class D (400kN)
- AS3996 Class E
- Clear opening
- Dual hinged
- Non - ventilated
- 90° blocking system to prevent accidental closure
- Certified to ISO9000:2000
- Includes hinge infiltration plugs & gas strut to aid opening and closure
- SCS Lock and Key



Reference	Description		Mass (in kg)		Dimensions mm		
	Type	Frame					
			Total	Cover	Clear Opening	Height	Frame Size (OD)
CDPA90EHX43	Non-ventilated	Round	178	93	900	150	1200

PAMREX 900 Accessories	
SGPAMREX900-IMP	PAMREX 900 Stainless Steel Safety Grill
C18	PAMREX Opening Key for SCS Lock
PLUG	PAMREX Hinge Plug

- Ductile Iron
- EN124 Class F (900kN)
- AS3996 Class G
- Ventilated and non-ventilated options
- Unhinged
- Elastomer ring
- Push-in central pad
- Sealed handling box
- Designed for heavy duty loading situations e.g. airports.



Reference	Description		Mass (in kg)		Dimensions mm		
	Type	Frame	Total	Cover	Clear Opening	Height	Frame Size (OD)
CFUR60AF	Non-ventilated	Round	93	63	600	100	850
CFUR60BF	Ventilated	Round	88	61.5	600	100	850

## STRENGTH

URBAMAX, class F 900, has a high tensile strength

## STABILITY

The weight of the cover (63 kg in the non-ventilated version) and the addition of an elastomer ring and a double skirt dampens vibrations caused by traffic, ensuring total stability.

## OPERATION

A handling box allows URBAMAX to be handled with traditional site tools : such as a pointed or flat end pick-axe, or crowbar. The cover is specially designed to ease closing.



- Ductile Iron
- EN124 Class D (400kN)
- AS3996 Class E
- Unhinged
- Non-ventilated
- Two rings : EPDM seating ring - O-Ring sealing ring
- Fastened by 6 bolts and clamping claws
- Sealed handling box
- Sealed to prevent ingress of water to a 1 bar positive or negative pressure rating,



Reference	Description		Mass (in kg)		Dimensions mm		
	Type	Frame					
			Total	Cover	Clear Opening	Height	Frame Size (OD)
CDPE60AF	Non-ventilated	Round	102	52,5	610	100	850

PAMTIGHT Accessories	
C49	Pack of 6 Stainless Steel Bolts and Clamping Lugs
CDPE60AF-L	O-Ring Sealing Ring
CDPA60EF-L	EPDM Seating Ring

# SHIELD

## 600MM HINGED COVER AND FRAME

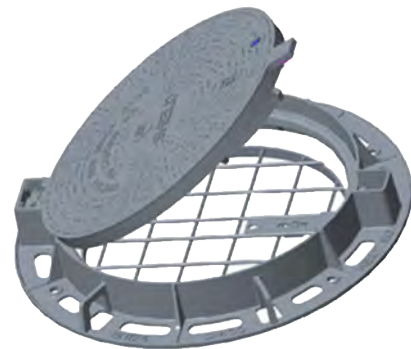
The SHIELD 600mm is a high performance, hinged cover and frame with greater watertightness. The prime feature of this cover and frame is the integrated Safety Grill that is tested to 10kN. Unlike other manhole covers the stainless-steel Safety Grill does not sit on the rubber gasket therefore enhancing watertightness and eliminating noise from metal-to-metal contact.

### Application

- All stormwater applications and wastewater applications
- High traffic environments
- Where water sealing is a priority

### Design Features

- Integrated Safety Grill independently tested by WSP Auckland to 10kN
- Cover and frame testing verified by SGS
- Manufactured to EN124 Class D, equivalent to AS3996:2006 Class E and exceeds HN-HO-72 load requirement
- EPDM Gasket that limits water ingress and provides stability
- Secured to frame with two flexible front and rear torsion spring bars
- Able to be secured with a cam lock locking device.
- Three equally appropriately spaced lifting handles for safe lifting
- Able to be personalised e.g. local council logo



Reference	Description	Type	Mass (in kg)	Dimensions mm		
			Total	Clear Opening	Height	Frame Size (OD)
MHCFDI60SHSGSW	SHIELD TCC MH Cover Stormwater, Frame with Safety Grill Hinged Sealed 600mm D400	Non-ventilated	66	600	100	845
MHCFDI60SHSGWW	SHIELD TCC MH Cover Wastewater, Frame with Safety Grill Hinged Sealed 600mm D400	Non-ventilated	66	600	100	845

- Ductile Iron
- EN124 Class B (125kN)
- AS3996 Class B
- Hinged
- Spring bar locking mechanism
- Polyethylene ring
- Light Traffic



Reference	Description		Mass (in kg)		Dimensions mm		
	Type	Frame	Total	Cover	Clear Opening	Height	Frame Size (OD)
CBTE6OEU	Non-ventilated	Round	45	26	600	90	785

TEK Accessories	
C18	Penta Lock

## STRENGTH

Intended for use on roads with light traffic loadings

## STABILITY

Tek is safety hinged with spring bar lock technology and polyethylene sealing ring

## OPERATION

Handling efforts are reduced thanks to the light weight cover

- Ductile Iron
- EN124 Class C (250kN)
- AS3996 Class D
- Hinged
- Non-ventilated
- Polyethylene ring
- Sealed handling box
- The PAYSAGE C 250 manhole cover can be installed in parking areas, at roadsides, in kerbside channels or on pedestrian footways.



Reference	Description		Mass (in kg)		Dimensions mm		
	Type	Frame	Total	Cover	Clear Opening	Height	Frame Size (OD)
CCPG60AF	Non-Ventilated	Round	53	35	600	75	850

- Ductile Iron
- EN124 Class C (250kN)
- AS3996 Class D
- Unhinged
- Non-ventilated



Reference	Description		Mass (in kg)		Dimensions mm		
	Type	Frame					
			Total	Cover	Clear Opening	Height	Frame Size
CBPK40HF	Non-ventilated	Square	23.4	15.6	300 x 300	56	430
CBPK50HF	Non-ventilated	Square	32	21.5	400 x 400	56	530
CBPK60HF	Non-ventilated	Square	39	31	500 x 500	56	630
CBPK70HF	Non-ventilated	Square	54	45.4	600 x 600	56	730

Identification of underground networks: four different caps are provided, each marked with a symbol representing an underground network, are available as an option.

PARXESS 600 Accessories	
C42	PARXESS Identification Cap
C41	PARXESS Penta Lock
C17	PARXESS Key for Penta Lock

- Ductile Iron
- EN124 Class B (125kN)
- AS3996 Class B
- Unhinged
- Non-ventilated
- Hydraulic manhole cover
- New black varnish coating



Reference	Description		Mass (in kg)	Dimensions mm		
	Type	Frame		Clear Opening	Height	Frame Size
			Total			
CBAK30HF	Non-ventilated	Square	8.2	220 x 220	37	310
CBAK40HF	Non-ventilated	Square	12.8	300 x 300	37	410
CBAK45HF	Non-ventilated	Square	15.3	350 x 350	38	460
CBAK50HF	Non-ventilated	Square	18.2	400 x 400	38	510
CBAK55HF	Non-ventilated	Square	22.0	450 x 450	38	580
CBAK75HF	Non-ventilated	Rectangular	32.0	450 x 600	38	580 x 710
CBAK60HF	Non-ventilated	Square	29.4	500 x 500	38	610
CBAK70HF	Non-ventilated	Square	38.8	600 x 600	38	710
CBAK80HF	Non-ventilated	Square	52.7	700 x 700	41	820

- Ductile Iron
- EN124 Class B (125kN)
- AS3996 Class B
- Unhinged
- Non-ventilated
- Hydraulic manhole cover
- New black varnish coating



Reference	Description		Mass (in kg)	Dimensions mm		
	Type	Frame		Clear Opening	Height	Frame Size
			Total			
CBAK30HFX16	Non-ventilated	Square	8.2	220 x 220	37	310
CBAK40HFX16	Non-ventilated	Square	12.8	300 x 300	37	410
CBAK45HFX16	Non-ventilated	Square	15.3	350 x 350	38	460
CBAK50HFX16	Non-ventilated	Square	18.2	400 x 400	38	510
CBAK55HFX16	Non-ventilated	Square	22.0	450 x 450	38	580
CBAK75HFX16	Non-ventilated	Rectangular	32.0	450 x 600	38	580 x 710
CBAK60HFX16	Non-ventilated	Square	29.4	500 x 500	38	610
CBAK70HFX16	Non-ventilated	Square	38.8	600 x 600	38	710
CBAK80HFX16	Non-ventilated	Square	52.7	700 x 700	41	820

The AKSESS caps symbolise four of the most common services for which manholes are used:

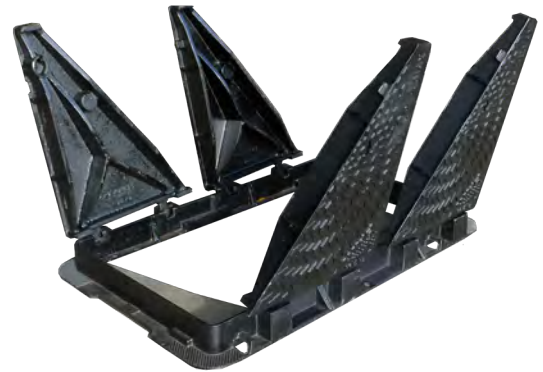
- Wastewater
- Storm water
- Water meters
- Lighting/Traffic lights

Each locked Akseess manhole cover is supplied with four identification caps.



# OPT-EMAX D400

- Ductile Iron
- EN124 Class D (400kN)
- AS3996 Class E
- Non-ventilated
- Advanced hinge design
- Easy access and installation
- Highest standards of safety and performance
- Maximum durability in arduous conditions
- Anti-theft, anti-vandal design with optional locking kits



Reference	Description		Heaviest Cover (Kg)	Dimensions mm		
	Type	Frame		Clear Opening	Depth	Overbase (mm)
NORMAL TRAFFIC						
BA02 1	Non-ventilated	Rectangular	22.3	600 x 450	100	806 x 650
BA06 1	Non-ventilated	Square	26.2	600 x 600	100	800 x 800
BA22 1	Non-ventilated	Square	40	675 x 675	100	875 x 875
H524 1	Non-ventilated	Rectangular	39	750 x 600	100	940 x 745
H510 1	Non-ventilated	Square	43.3	750 x 750	100	905 x 940
BA54 1	Non-ventilated	Rectangular	40.7	900 x 600	100	1100 x 800
H530 1	Non-ventilated	Rectangular	51.4	1060 x 700	100	1210 x 850
BA78 1	Non-ventilated	Rectangular	38	1220 x 685	100	1380 x 885
H564 1	Non-ventilated	Rectangular	39	1200 x 750	100	1350 x 945
H571 1	Non-ventilated	Rectangular	43	1500 x 750	100	1660 x 940
H584 1	Non-ventilated	Rectangular	39	1800 x 750	100	1955 x 940

OPT-EMAX Accessories	
187096	Opt-Emax Lock M12 Hex Head SS + Instruction
190664	Opt-Emax Key M12

# PAMREX GRATING



- Ductile Iron
- EN124 Class D (400kN)
- AS3996 Class E
- Hinged
- Frame and grate
- Elastomer ring
- Optional anti-theft grate locking



Reference	Description		Mass (in kg)		Dimensions mm		
	Type	Frame			Clear Opening	Height	Frame Size (OD)
			Total	Cover			
EDPA60AF	Frame and Grate	Round	91	58	610	100	850

PAMREX GRATING Accessories	
C6	PAMREX 600/700 Penta Lock
C17	PAMREX Key for Penta Lock

- Ductile Iron
- EN124 Class D (400kN)
- AS3996 Class E
- Hinged
- Frame and grate
- Springbar locking mechanism
- Optional anti-theft grate locking



Reference	Description		Mass (in kg)		Dimensions mm		
	Type	Frame					
			Total	Cover	Clear Opening	Height	Frame Size (OD)
EDRX60BF	Frame and Grate	Round	57	32	600	100	850

Identification of underground networks: four different caps are provided, each marked with a symbol representing an underground network, are available as an option.

REXEL GRATING Accessories	
C6	PENTA 600 lock
C17	PENTA key

# SELECTA MAXI GULLY UNITS

LEVEL ADJUSTMENT AND MAXIMUM CAPACITY



- Ductile Iron
- EN124 Class C (250kN)
- AS3996 Class D
- Hinged
- Kerb frame and grating
- Optional debris bar



Reference	Description	Frame	Mass (in kg)		Dimensions mm		
	Kerb Profile		Total	Grating	Effective Opening	Height	Frame Size
WITH RAISED SELECTOR BAR GRATING							
ECSE75UFX11	Kerb Frame and Grate T profile	Rectangular	94	26	540 x 450	225/90 H/h	750 x 640
ECSE75SFX11	Kerb Frame and Grate A profile	Rectangular	86	25	540 x 450	155/90	750 x 640
WITH FLAT GRATING							
ECSE75UFX16	Kerb Frameand Grate T Profile	Rectangular	90	21.3	540 x 450	225/90	750 x 640



ECSE75SFX11  
A-Profile with  
raised selector bar grating.



ECSE75UFX11  
T-Profile with raised selector  
grating



ECSE75UFX16  
T-Profile with flat grating

# SELECTA 500 GULLY UNITS

COMPACT AND HIGH-CAPACITY



- Ductile Iron
- EN124 Class C (250kN)
- AS3996 Class D
- Hinged
- Kerb frame and grating
- Optional debris bar



6. GRATES

Reference	Description	Frame	Mass (in kg)			Dimensions mm		
	Kerb Profile		Total	Grating	Cover	Clear Opening	Height H/h	Frame Size (OD)
WITH RAISED DEBRIS BAR GRATING								
ECSE61TF	Kerb Frame and Grate T profile	Rectangular	54.5	16.5	14	385	205/90	610 x 570
ECSE61SF	Kerb Frame and Grate A profile	Rectangular	51	16.5	13	385	125/90	610 x 570
WITH FLAT GRATING								
ECSE61UF	Kerb Frame and Grate T profile	Rectangular	53	15	14	385	205/90	610 x 570



ECSE61TF  
SELECTA 500, T-Profile with  
raised selector bar grating



ECSE61SF  
SELECTA 500, A-profile with  
raised  
selector bar grating



ECSE61UF  
SELECTA 500  
with T-profile flat grating

# PAMELLA GRATING

GENERATION 3



- Manufactured Class D to AS3996:2019 Standard
- Each gate has the image of a fish to remind people that this grate "Drains to the sea"
- Frame with flange on 3 sides, allowing installation along kerb.
- Double hinged-grating system. Design with internal hinge, for easiest bedding, and asphalt compaction around frame.
- Automatic locking with ductile iron spring bar, preventing to dislodgment by traffic among other things.
- Opening slots orientation suitable for cyclist traffic.
- Slots and anti-skid relief designed for absorption optimization.
- Easy opening, with gap between frame and grating allowing crowbar use.
- Public awareness to environmental protection.



The Pamella Grate and Frame is a high performance, quality and cycle friendly catchpit grate. Developed in conjunction with Auckland Transport and Auckland Council the Pamella Grate and Frame offers improved impact resistance from the use of Ductile Iron and an automatic locking mechanism with Spring Bar technology.

Reference	Description				Dimensions mm		
	Type	Frame					
			Total Weight	Cover	Clear Opening	Height	Frame Size
ECPS16EK-NZ3	Frame and Grate	Rectangular	76.8	56	675 × 450	70	830 × 590

# SQUADRA FLAT

- Ductile Iron
- EN124 Class C (250kN)
- AS3996 Class D
- Unhinged
- Frame and grate
- Springbar locking mechanism



Reference	Description		Mass (in kg)		Dimensions mm		
	Type	Frame					
			Total	Cover	Clear Opening	Height	Frame Size (OD)
ECSQ35PF	Frame and grate	Square	15.3	10	250 x 250	39	350 x 350
ECSQ40PF	Frame and grate	Square	20.1	13.6	300 x 300	39	410 x 410
ECSQ50PF	Frame and grate	Square	26.5	19	400 x 400	39	510 x 510
ECSQ60PF	Frame and grate	Square	42	25.7	500 x 500	39	620 x 620
ECSQ70PF	Frame and grate	Square	60	47	600 x 600	39	720 x 720
ECSQ80PF	Frame and grate	Square	77	63	700 x 700	39	820 x 820
SQUADRA 500 FLAT GRATING WITH HIGH FRAME							
ECSQ50LF	Frame and grate	Square	35.5	19	350 x 350	100	510 x 510

For paved areas and pavements, can be fitted with mudpan



# SQUADRA CONCAVE

- Ductile Iron
- EN124 Class C (250kN)
- AS3996 Class D
- Unhinged
- Frame and grate
- Springbar locking mechanism



Reference	Description		Mass (in kg)		Dimensions mm		
	Type	Frame					
			Total	Cover	Clear Opening	Height	Frame Size
ECSQ40CF	Frame and grate	Square	22.7	14.5	300 x 300	58/40	410 x 410
ECSQ50CF	Frame and grate	Square	30.4	19.5	400 x 400	63/40	510 x 510
ECSQ60CF	Frame and grate	Square	44.8	31.5	500 x 500	68/40	620 x 620
ECSQ70CF	Frame and grate	Square	63.7	48	600 x 600	73/40	720 x 720
ECSQ80CF	Frame and grate	Square	86.6	65.5	700 x 700	78/40	820 x 820

# DEDRA GRATINGS

## FLAT AND HINGED

- Ductile Iron
- EN124 Class D (400kN)
- AS3996 Class E
- Hinged
- Frame and grate
- Flat square gratings with 4 side-flange frames (street setting) and 3 side-flange frames (kerb setting)
- Concave gratings with 4 side-flange frames



Reference	Description		Mass (in kg)		Dimensions mm		
	Type	Frame					
			Total	Cover	Clear Opening	Height	Frame Size (OD)
EDDE40RFX14	Kerb setting	3 Sides	51.1	28.7	400	102	600 x 550
EDDE40DFX14	Street setting	4 sides	52.4	28.7	400	102	600 x 600
EDDE60DFX14	Street setting	4 Sides	88.2	50.6	600	100	800 x 800
EDDE60RFX14	Kerb setting	3 Sides	85	50.6	600	100	800 x 714

# WARRIOR SURFACE BOXES

## WARRIOR WIDE FLANGE FH & WW

- Heavy Duty - BS750
- Fast Access
- Non-rock
- Single Piece Cover
- Wide Flange
- Markings in the range.
- FH / WW / WM / SV / AV / CE



For use in city trunk roads carrying heavy traffic

Standard - BS5834

## WARRIOR SV & WW

- Heavy Duty
- Fast Access
- Non-rock
- Single Piece Cover
- Wide Flange
- Markings in the range.
- SV / WW / WATER



For use in city trunk roads carrying heavy traffic

Standard - BS5834

## WARRIOR SV TALL/CONICAL

- Heavy Duty
- Fast Access
- Non-rock
- Single Piece Cover
- Wide Flange



For use in city trunk roads carrying heavy traffic

Standard - BS5834

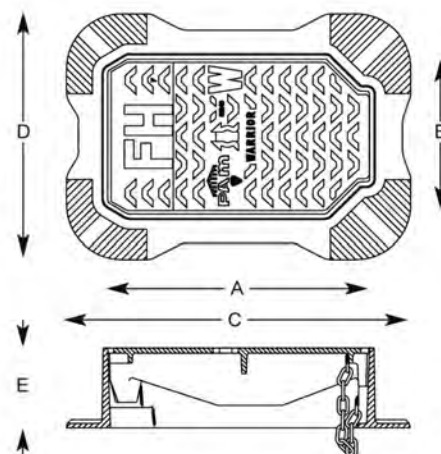
## WARRIOR HYDRANT BOX DUCTILE IRON - WIDE FLANGE FH & AV

- EN124 C250
- AS3996 Class D

Recommended for use in heavy duty, fast access surface box for use in city trunk roads carrying heavy traffic.

### Features

- Wider flange to prevent lateral movement
- Non Rock
- Single piece cover
- Badging option



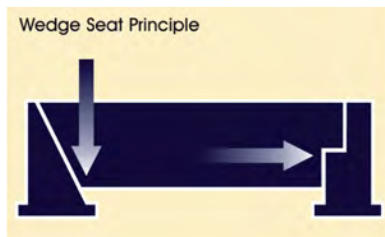
HB36 1FH	WARRIOR Grade A 380x230x125 Single Piece Cover & Frame (Fire Hydrant) FH Branded	EA
HB36 1WW	WARRIOR Grade A 380x230x125 Single Piece Cover & Frame (Waste Water) WW Branded	EA
HB36 1WM	Warrior Grade A 380x230x125 Single Piece Cover and Frame WM (Water Meter)	EA
HB36 1CE	Warrior Grade A (CE) 380x230x125 Single Piece Cover & Frame (Black Coated)	EA
HB36 1SV	Warrior Grade A (SV) 380x230x125 Single Piece Cover & Frame (Black Coated)	EA
HB36 1AV	Warrior Grade A 380x230x125 Single Piece Cover & Frame AV (Air Valve)	EA



# WARRIOR SURFACE BOXES

The Warrior surface box has been specifically designed to offer fast and easy access to emergency and below-ground services.

Manufactured from ductile iron and incorporating the large wedge seating principle, the warrior surface box offers long-term stability and performance.



The Warrior Wedge seating operates in two directions and has seats to ensure the security and location of the cover within the frame.

## CONFORMITY

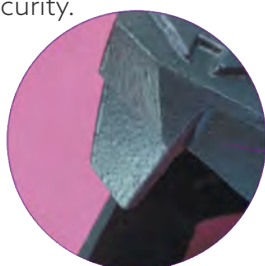
The Warrior surface box fully meets the requirements of BS 5834 Part 3, 1985 and the performance requirements of BS 750 1984. Certified with the BSI Kitemark for quality.

## BADGING

SV & FH standard badges are available. Contact us for other individual badge requirements.

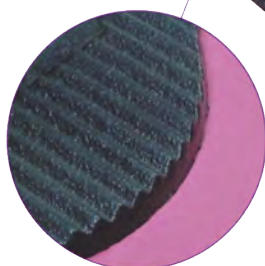
## SECURITY

Safety chains can be fitted for added security.



## LARGE WEDGE SEATINGS

Offer non-rock performance and greater stability under heavy traffic loading.



## POSITIVE REGISTER

A register is designed into the wedge seat for positive locating each time the cover is closed.

## BONDING RIBS

To increase the adhesion between casting and bedding mortar. High performance polyester resin mortar is recommended for installation of this unit.

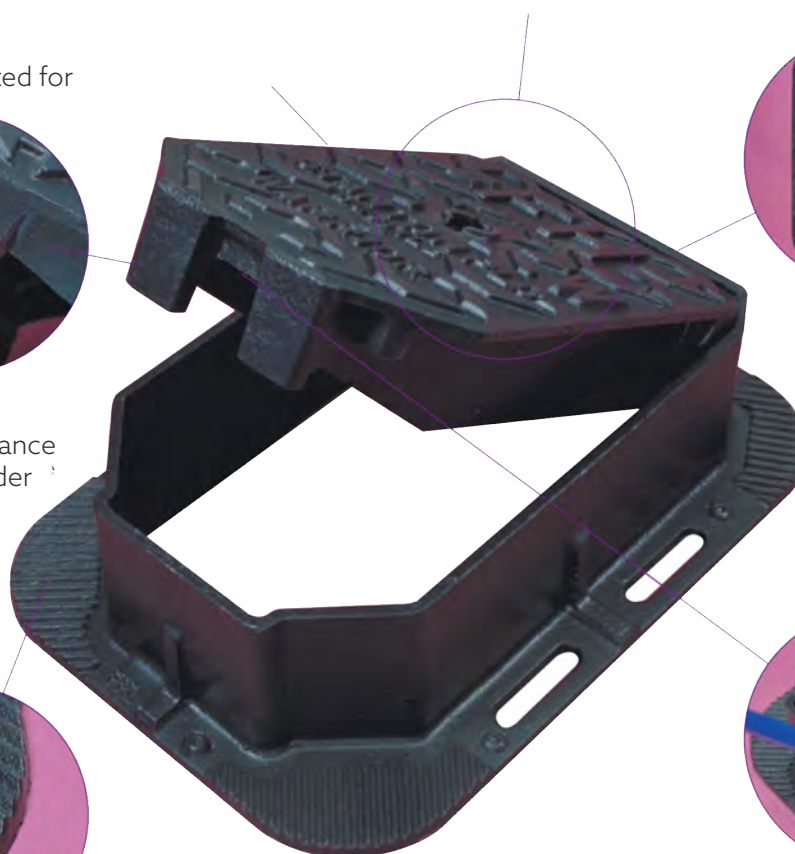
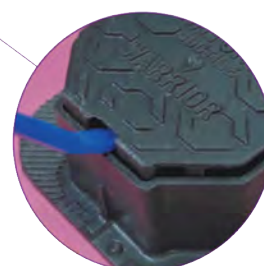
## PRISING SLOTS

Located at both front and rear of unit for easy opening and fast access to services.



## UNIQUE SINGLE-PIECE

Non-rock, heavy duty design.



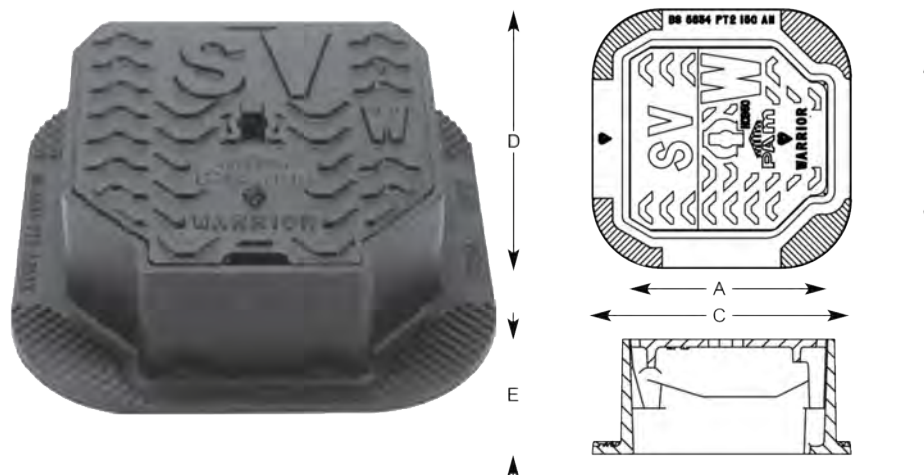
# WARRIOR SURFACE BOXES

## WARRIOR SV, V, WW AND WATER

Recommended for use in heavy duty, fast access surface box for use in city trunk roads carrying heavy traffic.

### Features

- Non Rock
- Single piece cover
- Badging option
- EN124 C250
- AS3996 Class D



HB50 1	WARRIOR Grade A 150x150x100 Single Piece Cover & Frame (SV) Branded	EA
HB54 1	WARRIOR Grade A 225x225x100 Single Piece Cover & Frame (SV) Branded	EA
HB54-1WW	WARRIOR Grade A 225x225x100 Single Piece Cover & Frame (WW) Branded	EA
HB54 1WATER	Warrior Grade A (WATER) 225x225x100 Single Piece Cover & Frame	EA
HB58 1	WARRIOR Grade A 300x300x100 Single Piece Cover & Frame (SV) Branded	EA
HB80 1	WARRIOR Grade A 150x150x225 Single Piece Cover & Frame (SV) Branded	EA



Code	BS 5834	Clear Opening	Over Base	Depth	Total
Standard	Grade	A x B	C x D	E	Mass
Unit		mm	mm	mm	Kg
HB50 1	A	150 x 150	225 x 225	100	8.5
HB80 1	A	150 x 150	225 x 225	225	14
HB54 1	A	225 x 225	325 x 325	100	13.5
HB58 1	A	300 x 300	400 x 400	100	20



# HEIGHT ADJUSTABLE

## INSPECTION COVERS

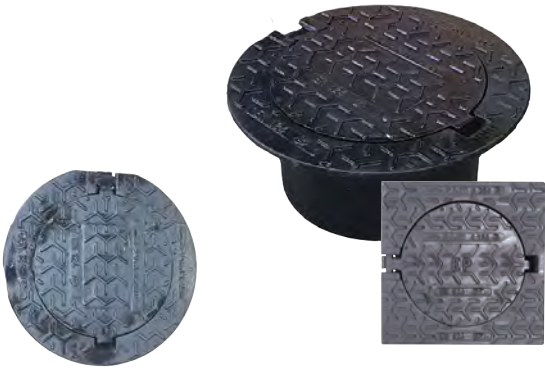
These manhole covers are fitted on DN 400, DN 300 and DN 250 extensions installed on DN 300 and DN 250 inspection chambers.

The hinged cover is tamperproof once bedded.

Height adjustment up to 95 mm by sliding the frame.

Units are fitted with earth-tight rings compliant with PVC / ductile iron extensions

Ductile iron, Class C 250, EN 124



Reference	Pipe Extension DN		Frame Dimension	Shape		Mass in Kg		Dimension mm	
	Size	Material		Frame	Cover	Total	Cover	Clear opening	Adjustability
CCBR25BF	250	PVC	318	Square	Round	15.5	4.5	181	95
CCBR30BF-B	300	PVC	360	Square	Round	20	6	225	95
CCBR30BFX29	300	PVC	360	Square	Round	20	6	225	95
CCBR30SFX27	300	PVC	380	Round	Round	19	6	225	95



# PLASTIC SURFACE BOXES

- Robust yet lightweight design for easy installation
- Designed to withstand light vehicular loads and pressures created by compacted backfill
- The lid is secured to the body by a galvanised chain combined with 316 stainless steel nuts and bolts
- All boxes are made from uv resistant, high impact, high density polyethylene
- An aluminium pin is attached to the underside of the lid for location purposes
- Large clear opening for easy access

## STANDARD LOW PROFILE SURFACE BOX - DRA10

Suitable for use with manifold and inline water meters

Top: 290 mm x 445 mm

Bottom: 220mm x 380 mm

Height: 230 mm

WMB	Low Profile Meter Box BLACK Lid	EA
WMBB	Low Profile Meter Box BLUE Lid	EA



## STANDARD TALL PROFILE SURFACE BOX - DRA20

Suitable for use with manifold and inline water meters

Top: 290 mm x 445 mm

Bottom: 220mm x 380 mm

Height: 320 mm

DRA20/1	Standard Meter Box BLACK Lid	EA
DRA20/2	Standard Meter Box BLUE Lid	EA
DRA20/3	Standard Meter Box GREEN Lid	EA
DRA20/5	Standard Meter Box CAST IRON Lid	EA



## REVERSED TAPER LOW PROFILE SURFACE BOX - DRA30

Suitable for use with bulk water meters, fire hydrants, irrigation equipment and any other product requiring protection from surface traffic.

Top: 290mm x 445 mm

Bottom: 350 mm x 510 mm

Height: 230 mm

DRA30/1	Reverse Taper Low Profile Meter Box BLACK Lid	EA
DRA30/2	Reverse Taper Low Profile Meter Box BLUE Lid	EA
DRA30/3	Reverse Taper Low Profile Meter Box GREEN Lid	EA





# PLASTIC SURFACE BOXES

## REVERSED TAPER TALL PROFILE SURFACE BOX - DRA40

Suitable for use with bulk water meters, fire hydrants, irrigation equipment and any other product requiring protection from surface traffic.

Top: 290 mm x 445 mm

Bottom: 350 mm x 510 mm

Height: 280 mm

DRA40/1	Reverse Taper Tall Meter Box BLACK Lid
DRA40/2	Reverse Taper Tall Meter Box BLUE Lid
DRA40/3	Reverse Taper Tall Meter Box Green Lid

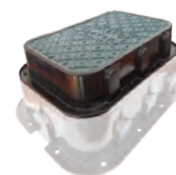


## EXTENSION RISER

DRA100	Extension Riser 158mm (to fit DRA30, 40, 200 & 300)
DRA200/1	Extension Height 150mm (to fit DRA100)
DRA200/2	Extension Height 150mm (to fit DRA100) BLUE Lid



DRA300/1	Extension Height 100mm (to fit DRA100) BLACK Lid
DRA300/2	Extension Height 100mm (to fit DRA100) BLUE Lid
DRA300/3	Extension Height 100mm (to fit DRA100) GREEN Lid



## COVER ONLY OPTIONS

DRA1	Meter Box Lid Standard BLACK
DRA2	Meter Box Lid Standard BLUE
DRA3	Meter Box Lid Standard GREEN
DRA5	Meter Box Lid Standard CAST IRON
DRA9	Meter Box Lid Standard FH YELLOW
DRA10	Meter Box Lid Standard GREEN Irrigation

## UNIVERSAL SMALL BOX - DRA50

Suitable for: Control Valves, Sluice Valves, Peat Valves, Gas Valves

Top: 230 mm x 260 mm

Bottom: 325 mm x 285 mm

Height: 145 mm

DRA50/11	Universal Valve Box WHITE "V" Lid
DRA50/12	Universal Valve Box BLUE "SV" Lid
DRA50/13	Universal Valve Box Blue "PV" Lid
DRA50/19	Universal Valve Box Red "SS" Lid
DRA50/1USS	Universal Valve Box Black "SS" Lid
DRA50/8	Universal Valve Box Yellow "GAS" Lid



# PLASTIC SURFACE BOXES

## UNIVERSAL BOX LARGE - DRA60

Suitable for use with manifold and inline water meters and control valves

Top: 230 mm x 260 mm

Bottom: 300 mm x 400mm

Height: 260 mm

DRA60/1	Universal Meter Box with BLACK Lid "Water"
DRA60/2	Universal Meter Box BLUE Lid
DRA60/3	Universal Meter Box Green Lid "Water"



## UNIVERSAL EXTRA TALL SURFACE BOX - DRA70

Suitable for Manifold and Inline Water Meters, Control Valves, Sluice Valves, Peat Valves, Gas, Electricity and Irrigation Equipment.

Top: 230 mm x 260 mm

Bottom: 400 mm x 300 mm

Height: 345 mm

DRA70/2	Universal Meter Box Extra Tall Manifold BLUE Lid
DRA70/3	Universal Manifold Green LID Only to Suit DRA70



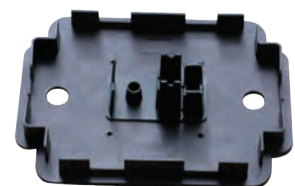
## COVER OPTIONS ONLY

DRA8	Yellow "GAS" Lid Only to suit DRA50/60/70
DRA11	Meter Box Lid Universal WHITE
DRA12	Meter Box Lid Universal BLUE

## BASES

DRA75	Manifold Base with Insert (to fit DRA60 & 70)
DRA76	Reverse Taper Base (to fit DRA30 & 40)
DRA77	Extension Base (to fit DRA100)

DRA78	Base for Standard Meter box to suit DRA10/DRA20
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# PLASTIC SURFACE BOXES

## SURFACE ROUND VALVE BOX - DRA80

A cost effective lightweight and permanent product to fulfil your surface box requirements. 150mm diameter valve boxes (to fit over 150mm diameter or 200mm diameter rigid pvc pipe)

DRA80/2	Round Valve Box 150mm BLUE Lid
DRA80/3	Round Valve Box 150mm GREEN Lid
DRA80/3LID	Round 150mm Valve Box Green Lid Only



# P & I STREETWARE

## MANHOLE COVERS/ACCESS COVERS

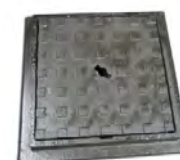
CHM101	Non Rock Manhole Ductile Iron 540mm (C/O) x 94mm
CHM101P1	Non Rock Manhole Cover Only
CHM101P2	Non Rock Manhole Frame Only
CHM101S	Non Rock Manhole "S" for Stormwater
CHM101F	Non Rock Manhole "F" for Foul



CHG116	Solid Cover & Frame - 300mm x 300mm x 55mm
CHG116P1	Solid Cover Only 300mm
CHG116P2	Frame Only 300mm



CHG114	Solid Cover & Frame - 375mm x 375mm x 70mm
CHG114P1	Solid Cover Only 375x375mm
CHG114P2	Frame Only 375x375mm



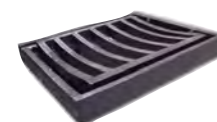
CHM105	Cover & Spigot Frame Class D (C/O) 540mm
CHM105F	Cover & Spigot Frame Class D (C/O) 540mm - (F)
CHM105S	Cover & Spigot Frame Class D (C/O) 540mm - (S)

CHG117	Bubble Up Cover & Frame - 255mm x 155mm x 25mm
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## DUCTILE IRON GRATES & FRAMES

CHG111	CHCH Channel Grate & Frame - 520mm x 465mm x 65mm
CHG111P1	CHCH Channel Grate Only
CHG111P2	CHCH Channel Frame Only
CHSB151P1	Support Bar Standard 580mm



# P & I STREETWARE

CHG112	CHCH Curved Channel Grate & Frame - 525mm x 465mm x 62mm
CHG112P1	CHCH Curved Channel Grate Only
CHG112P2	CHCH Curved Frame Only



CHSB151P1	Support Bar Standard 580mm
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CHG113	<b>Frame and Grate</b> - 375mm x 375mm x 70mm
CHG113P1	Mesh Grate Only 375mm
CHG113P2	Frame Only 375mm



CHG115	<b>Frame and Grate</b> - 300mm x 300mm x 55mm
CHG115P1	Mesh Grate Only 300 x 30mm
CHG115P2	Frame Only 300 x 300mm



DN103	DCC No2 Frame & Grate with Crossbars
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## CAST IRON SURFACE BOXES HYDRANTS/SV/AV/SEWER/METER

CHF121	BS750 Fire Hydrant Cover & Frame - 410 x 260 x 150mm Marked FH
CHF123	410 x 260 x 150mm Lid & Frame Marked SV
CHF124	410 x 260 x 150mm Lid & Frame Marked AV
CHF125	410 x 260 x 150mm Lid & Frame Marked SEWER
CHF126	410 x 260 x 150mm Lid & Frame Marked METER



# P & I STREETWARE

## IO COVERS (RODDING EYE COVERS)

DN100	Circular Cleaning Eye 190mm diameter Cover (Dunedin) - To cover 100mm PVC
DN101	Circular Cleaning Eye 215mm diameter Cover (Dunedin) - To cover 150mm PVC



## ALUMINIUM SURFACE BOXES

CHAL161	400 x 250 x 110mm Lid & Frame Marked 'Water Meter '
CHAL162	340 x 200 x 200mm Hinged Steel Galvanised Lid Non Marked (Inspection Box)



# P & I STREETWARE

CHAL163

150 Round x 80mm Hinged Toby Box c/w Steel Lid - suits 150mm PVC



CHAL163A

150 Round x 80mm Hinged Toby Box c/w Alloy Lid - suits 150mm PVC



## ALUMINIUM LIDS & GRATES

CHAL168

100mm Round Grate "Slotted"

CHAL169

125mm Round Grate "Slotted"

CHAL170

150mm Round Grate "Slotted"

CHAL180

185mm Round Grate "Slotted"

CHAL171

200mm Round Grate "Holes"

CHAL172

250mm Round Grate "Holes"

CHAL164

315mm Round Grate "Holes"

CHAL166

400mm Round Grate "Holes"

CHAL178

500mm Round Grate "Holes"

CHAL173

200mm Round Aluminium Lid

CHAL174

250mm Round Aluminium Lid

CHAL165

315mm Round Aluminium Lid

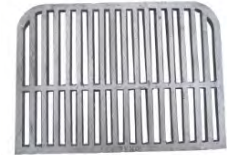




# P & I STREETWARE

CHAL167 400mm Round Aluminium Lid  
CHAL179 500mm Round Aluminium Lid

CHAL177 Slotted Aluminium No2 Grate 301 x 217mm  
CHAL177S Slotted Aluminium No2 Grate (Small) 295 x 215mm



## ACCESSORIES

MLLB Manhole Lid Lifter Bar  
CHSL512P1 Steel Lid for Meter Box CHAL162  
CHW154P1 Wooden Wedge



MLLF Manhole Lid Lifter Folding  
MLLHD Manhole Lid Lifter Heavy Duty  
MLLK600 Manhole Lid Lifter Key 600



CHAL171 - 200mm



CHAL172 - 250mm



CHAL164 - 315mm (showing underside)



CHAL166 - 400mm (showing underside)



CHAL178 - 500mm (showing underside)

# P & I STREETWARE



CHAL173 - 200mm



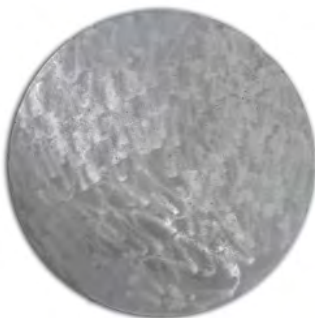
CHAL174 - 250mm



CHAL165 - 315mm



CHAL167 - 400mm (showing underside)



CHAL179 - 500mm (showing underside)

# TAPPING BANDS

## GUN METAL TAPPING BANDS

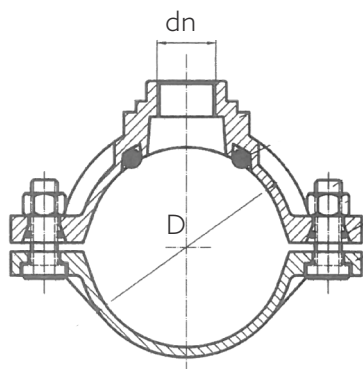
- AS/NZS 4793:2009
- AS/NZS 4020:2005
- PN16
- SS316 nuts and bolts with anti-seizing treatment
- Comes complete with O ring

### TAPPING BANDS FOR SERIES 2 PVC, AC & DI

Code	Size	Description	dn	OD
TBA10020	100 x 20	Tapping Band Gunmetal AC/S2	20	122
TBA10025	100 x 25	Tapping Band Gunmetal AC/S2	25	122
TBA10050	100 x 50	Tapping Band Gunmetal AC/S2	50	122
TBA15020	150 x 20	Tapping Band Gunmetal AC/S2	20	177
TBA15025	150 x 25	Tapping Band Gunmetal AC/S2	25	177
TBA15050	150 x 50	Tapping Band Gunmetal AC/S2	50	177
TBA20020	200 x 20	Tapping Band Gunmetal AC/S2	20	232
TBA20025	200 x 25	Tapping Band Gunmetal AC/S2	25	232
TBA20050	200 x 50	Tapping Band Gunmetal AC/S2	50	232
TBA25020	250 x 20	Tapping Band Gunmetal AC/S2	20	286
TBA25025	250 x 25	Tapping Band Gunmetal AC/S2	25	286
TBA25050	250 x 50	Tapping Band Gunmetal AC/S2	50	286
TBA30020	300 x 20	Tapping Band Gunmetal AC/S2	20	345
TBA30050	300 x 50	Tapping Band Gunmetal AC/S2	50	345
TBA37550	375 x 50	Tapping Band Gunmetal AC/S2	50	426
TBA45050	450 x 50	Tapping Band Gunmetal AC/S2	50	507

### TAPPING BANDS FOR PE

Code	Size	Description	dn	OD
TBM6320	63 x 20	Tapping Band Gunmetal PE	20	63
TBM6325	63 x 25	Tapping Band Gunmetal PE	25	63



# TAPPING BANDS

## GUN METAL TAPPING BANDS CONTINUED

Tapping Bands for Series 1 PVC				
Code	Size	Description	dn	OD
TBP5020	50 x 20	Tapping Band Gunmetal S1 PVC	20	60
TBP5025	50 x 25	Tapping Band Gunmetal S1 PVC	25	60
TBP8020	80 x 20	Tapping Band Gunmetal S1 PVC	20	89
TBP8025	80 x 25	Tapping Band Gunmetal S1 PVC	25	89
TBP8050	80 x 50	Tapping Band Gunmetal S1 PVC	50	89
TBP10020	100 x 20	Tapping Band Gunmetal S1 PVC	20	114
TBP10025	100 x 25	Tapping Band Gunmetal S1 PVC	25	114
TBP10050	100 x 50	Tapping Band Gunmetal S1 PVC	50	114
TBP15020	150 x 20	Tapping Band Gunmetal S1 PVC	20	160
TBP15025	150 x 25	Tapping Band Gunmetal S1 PVC	25	160
TBP15050	150 x 50	Tapping Band Gunmetal S1 PVC	50	160
TBP20020	200 x 20	Tapping Band Gunmetal S1 PVC	20	225
TBP20025	200 x 25	Tapping Band Gunmetal S1 PVC	25	225
TBP20050	200 x 50	Tapping Band Gunmetal S1 PVC	50	225
TBP25020	250 x 20	Tapping Band Gunmetal S1 PVC	20	280
TBP25025	250 x 25	Tapping Band Gunmetal S1 PVC	25	280
TBP25050	250 x 50	Tapping Band Gunmetal S1 PVC	50	280
TBP30020	300 x 20	Tapping Band Gunmetal S1 PVC	20	315
TBP30025	300 x 25	Tapping Band Gunmetal S1 PVC	25	315
TBP30050	300 x 50	Tapping Band Gunmetal S1 PVC	50	315

# PE RESTRAINED FITTINGS

## FLANGE ADAPTER QUICK MECHANICAL ANCHORED FOR PE

Flange adapter PN10/16 for PE from OD63 to OD315. Mechanical anchoring is made with a ring and tightening of bolts. The flange adapter for PE can be installed in the PE networks with a PFA of 16 bar. Hydraulic sealing tests and mechanical resistance tests are according to EN 12842.

### Field of use

Flange adapter for PE pipes:

Polyethylene: PE80 PN16 and PN12,5

Polyethylene: PE100 PN16 and PN10

### Features

Easy installation

Pre-assembly in the network is possible thanks to the flange and counter flange.

Final block stop to ensure the position of the pipe

Separation of the sealing function (gasket in elastomer) and the anchoring function (metallic ring)

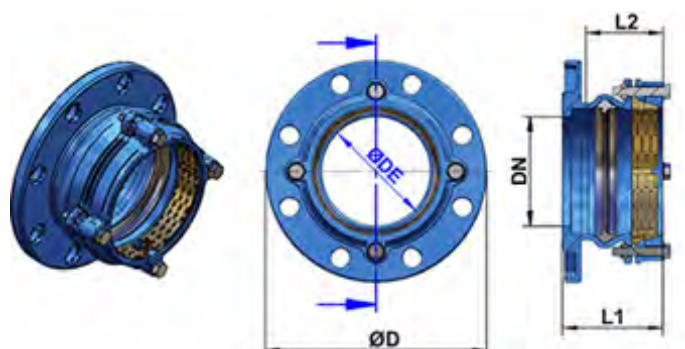
Mechanical locking by screws to avoid any axial displacement of the plastic tube

Drill pattern to AS4087 PN16



### Dimensions

DN mm	PFA bar	DN/OD mm	Ø D mm	L1 mm	L2 mm	Mass kg
80	16	90	200	114	85	4.78
100	16	110	224	119	85	5.68
100	16	125	254	119	95	7.00
125	16	125	254	119	95	7.00
125	16	140	254	124	100	7.50
150	16	160	285	139	115	9.00
150	16	180	285	139	115	10.10
200	16	200	340	162	140	15.92
200	16	225	340	172	150	17.50
250	16	250	405	184	150	21.40
250	16	280	405	177	150	21.70
300	10	315	472	207	185	27.50



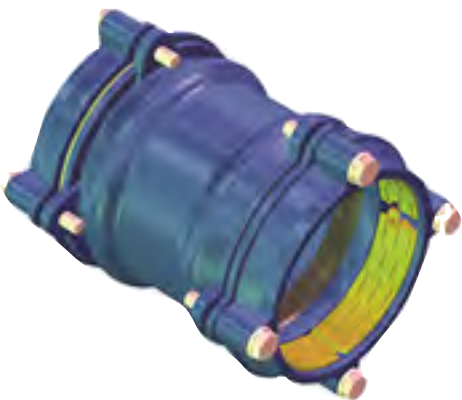
# PE RESTRAINED FITTINGS

## MECHANICAL ANCHORED COUPLING FOR PE

Coupler for PE from OD63 to OD315. Mechanical anchoring is achieved through the use of a ring and tightened bolts. The coupler for PE can be installed in a PE network with a PFA of 16 bar. Hydraulic sealing tests and mechanical resistance tests are according to EN 12842.

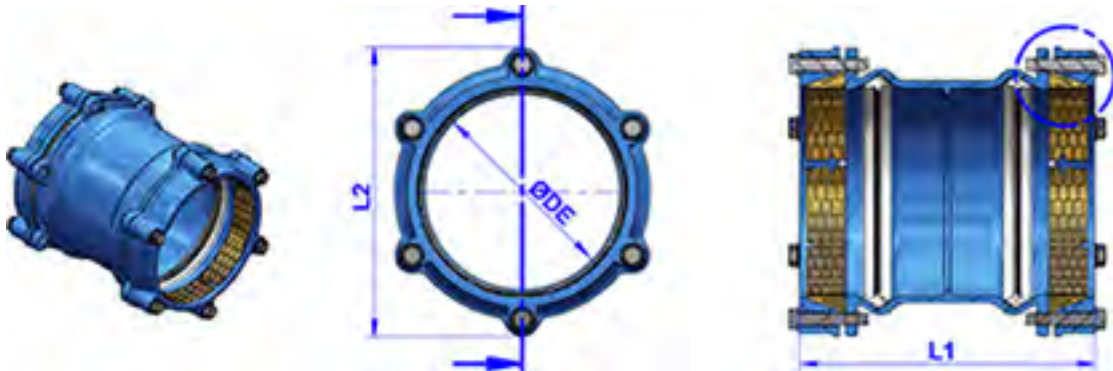
Field of use  
Coupling for PE pipes:  
Polyethylene: PE80 PN16 and PN12.5  
Polyethylene: PE100 PN16 and PN10

Features  
Easy installation  
Pre-assembly in the network is possible due to the flange and counter flange.  
Final block stop to ensure the position of the pipe  
Separation of the sealing function (elastomer gasket) and the anchoring function (metallic ring)  
Mechanical locking by bolts to avoid any axial displacement of the PE pipe.



### DIMENSIONS

OD	PFA	L1	L2	MASS
MM	BAR	MM	MM	KG
63	16	191	133	3.54
75	16	191	146	4.64
90	16	201	161	5.86
110	16	205	181	6.70
125	16	211	196	7.92
140	16	211	212	8.88
160	16	232	235	10.72
180	16	232	255	12.70
200	16	290	284	19.94
250	16	320	335	25.54
315	10	360	400	33.00



# PE RESTRAINED FITTINGS

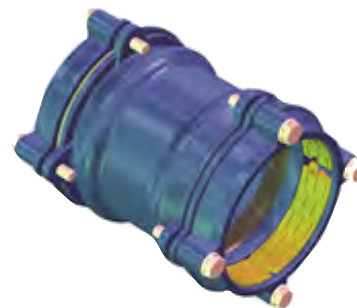
## FLANGE ADAPTER QUICK MECHANICAL ANCHORED FOR PE

CODE	DESCRIPTION
MAL90UFCH	Restrained Flanged Adaptors for PE DN80/90
MAM11UFCH	Restrained Flanged Adaptors for PE DN100/110
MAM12UFCH	Restrained Flanged Adaptors for PE DN100/125
MAN16UFCH	Restrained Flanged Adaptors for PE DN150/160
MAN18UFCH	Restrained Flanged Adaptors for PE DN150/180
MAM20UFCH	Restrained Flanged Adaptors for PE DN200
MAM22UFCH	Restrained Flanged Adaptors for PE DN200/225
MAM28UFCH	Restrained Flanged Adaptors for PE DN250/280
MAM31UFCH	Restrained Flanged Adaptors for PE DN300/315



## MECHANICAL ANCHORED COUPLING FOR PE

CODE	DESCRIPTION
MCL90UBAH	Restrained Couplers for PE DN90
MCM11UBAH	Restrained Couplers for PE DN110
MCM12UBAH	Restrained Couplers for PE DN125
MCM16UBAH	Restrained Couplers for PE DN160
MCM18UBAH	Restrained Couplers for PE DN180
MCM20UBAH	Restrained Couplers for PE DN200
MCM25UBAH	Restrained Couplers for PE DN250





# TEST EQUIPMENT

## ALUMINIUM - BYPASS

ATP75	Aluminium Test Plug 75mm
ATP100	Aluminium Test Plug 100mm
ATP125	Aluminium Test Plug 125mm
ATP200	Aluminium Test Plug 200mm
ATP225	Aluminium Test Plug 225mm
ATP250	Aluminium Test Plug 250mm
ATP300	Aluminium Test Plug 300mm
ATP375	Aluminium Test Plug 375mm
ATP450	Aluminium Test Plug 450mm
ATP500	Aluminium Test Plug 500mm
ATP600	Aluminium Test Plug 600mm

ATPR100	Aluminium Test Plug Rubber Only 100mm
ATPR150	Aluminium Test Plug Rubber Only 150mm
ATPR225	Aluminium Test Plug Rubber Only 225mm
ATPR300	Aluminium Test Plug Rubber Only 300mm

PTPAIR	Commercial Air Pump with 690kpa Guage
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## INFLATABLE - STANDARD

PTPB75	Pneumatic Test Plug Blocker 75mm
PTPB100	Pneumatic Test Plug Blocker 100mm
PTPB150	Pneumatic Test Plug Blocker 150mm
PTPB200	Pneumatic Test Plug Blocker 200mm
PTPB300	Pneumatic Test Plug Blocker 300mm
PTPB375	Pneumatic Test Plug Blocker 375mm



## INFLATABLE - MULTI

PTPBM3250	Pneumatic Test Plug Blocker Multi Size 32-50mm
PTPBM75100	Pneumatic Test Plug Blocker Multi Size 75-100mm
PTPBM100150	Pneumatic Test Plug Blocker Multi Size 100-150mm
PTPBM125200	Pneumatic Test Plug Blocker Multi Size 125-200mm
PTPBM150250	Pneumatic Test Plug Blocker Multi Size 150-250mm
PTPBM250300	Pneumatic Blocker Multi Size 250-300mm c/w Air Guage + Ext Hose



# TEST EQUIPMENT

## INFLATABLE - BYPASS

PTPBP75	Pneumatic Test Plug Bypass 75mm
PTPBP100	Pneumatic Test Plug Bypass 100mm
PTPBP150	Pneumatic Test Plug Bypass 150mm
PTPBP200	Pneumatic Test Plug Bypass 200mm
PTPBP300	Pneumatic Test Plug Bypass 300mm
PTPBP375	Pneumatic Test Plug Bypass 375mm



## INFLATABLE - MULTI - BYPASS

PTPBPM100200	Pneumatic Test Plug Bypass Multi Size 100-200mm
PTPBPM150250	Pneumatic Test Plug Bypass Multi Size 150-250mm
PTPBPM200300	Pneumatic Test Plug Bypass Multi Size 200-300mm



## MISCELLANEOUS

PTPHOSE10	Pneumatic Test Plug 10 Foot Hose
PTPHOSE2	Pneumatic Test Plug 2 Foot Hose
PTPHOSE4	Pneumatic Test Plug 4 Foot Hose

## STAINLESS STEEL REPAIR CLAMPS AND FITTINGS

### PLAST GRIP PE RESTRAINT COUPLER

NPG63	PLAST GRIP-63mm PE Restraint Coupler (support sleeve must be used)
NPG110	PLAST GRIP-110mm PE Restraint Coupler (support sleeve must be used)
NPG125	PLAST GRIP -125mm PE Restraint Coupler (sup- port Sleeve must be used)
NPG160	PLAST GRIP-160mm PE Restraint Coupler (support sleeve must be used)
NPG180	PLAST GRIP-180mm PE Restraint Coupler (support sleeve must be used)
NPG225	PLAST GRIP-225mm PE Restraint Coupler (support sleeve must be used)
NPG250	PLAST GRIP-250mm PE Restraint Coupler (support sleeve must be used)
NPG315	PLAST GRIP-315mm PE Restraint Coupler (support sleeve must be used)
NPG355	PLAST GRIP-355mm PE Restraint Coupler (support sleeve must be used)
NCGE60	Combi Grip - 60mm PE Restraint- Metal Coupler
NCGE63	Combi Grip - 63mm PE Restraint- Metal Coupler
NCGE88	Combi Grip - 88mm PE Restraint- Metal Coupler
NCGE114	Combi Grip - 114mm PE Restraint- Metal Coupler



### SUPPORT SLEEVE -To SUIT PLAST GRIP PE RESTRAINT COUPLER

NSS63	"SUPPORT SLEEVE -To Suit 63mm PLAST GRIP PE Restraint Coupler"
NSS110	"SUPPORT SLEEVE-To Suit 110mm PLAST GRIP PE Restraint Coupler"
NSS125	"SUPPORT SLEEVE-To Suit 125mm PLAST GRIP PE Restraint Coupler"
NSS160	"SUPPORT SLEEVE-To Suit 160mm PLAST GRIP PE Restraint Coupler"
NSS180	"SUPPORT SLEEVE-To Suit 180mm PLAST GRIP PE Restraint Coupler"
NSS250	"SUPPORT SLEEVE-To Suit 250mm PLAST GRIP PE Restraint Coupler"
NSS315	"SUPPORT SLEEVE-To Suit 315mm PLAST GRIP PE Restraint Coupler"
NSS355	"SUPPORT SLEEVE-To Suit 355mm PLAST GRIP PE Restraint Coupler"



**VARIO UNIVERSAL GRAVITY PIPE COUPLER**

NVP100	Vario 100-Universal Gravity Pipe Coupler - To Suit OD Range 105-131mm
NVP150	Vario 150-Universal Gravity Pipe Coupler - To Suit OD Range 160-192mm
NVPG200	Vario 200-Universal Gravity pipe Coupler - To Suit OD Range 200-261mm
NVP250	Vario 250-Universal Gravity Pipe Coupler - To Suit OD Range 250-322mm
NVP300	Vario 300-Universal Gravity Pipe Coupler - To Suit OD Range 313 - 382mm

**REPAIR CLAMP**

KCR-102B-085	Repair Clamp, OD Range 85-95mm, 1 piece, 200mm Long
KCR-102B-095	Repair Clamp, OD Range 95-105mm, 1 piece, 200mm Long
KCR-102B-100	Repair Clamp, OD Range 100-110mm, 1 piece, 200mm Long
KCR-102B-110	Repair Clamp, OD Range 110-120mm, 1 piece, 200mm Long
KCR-102B-114	Repair Clamp, OD Range 114-124mm, 1 piece, 200mm Long
KCR-102B-120	Repair Clamp, OD Range 120-130mm, 1 piece, 200mm Long
KCR-102B-130	Repair Clamp, OD Range 130-140mm, 1 piece, 200mm Long
KCR-102B-140	Repair Clamp, OD Range 140-150mm, 1 piece, 200mm Long
KCR-102B-150	Repair Clamp, OD Range 150-160mm, 1 piece, 200mm Long
KCR-102B-160	Repair Clamp, OD Range 160-170mm, 1 piece, 200mm Long
KCR-102B-175	Repair Clamp, OD Range 175-185mm, 1 piece, 200mm Long
KCR-102B-190	Repair Clamp, OD Range 190-200mm, 1 piece, 200mm Long
KCR-102B-200	Repair Clamp, OD Range 200-210mm, 1 piece, 200mm Long
KCR-102B-210	Repair Clamp, OD Range 210-220mm, 1 piece, 200mm Long
KCR-102B-215	Repair Clamp, OD Range 215-225mm, 1 piece, 200mm Long
KCR-102B-220	Repair Clamp, OD Range 220-230mm, 1 piece, 200mm Long
KCR-102B-230	Repair Clamp, OD Range 230-240mm, 1 piece, 200mm Long
KCR-103D-250	Repair Clamp, OD Range, 250-260mm, 1 piece, 300mm Long
KCR-103D-255	Repair Clamp, OD Range, 255-265mm, 1 piece, 300mm Long
KCR-104D-250	Repair Clamp, OD Range, 250-260mm, 1 piece, 300mm Long
KCR-104D-255	Repair Clamp, OD Range, 255-265mm, 1 piece, 300mm Long
KCR-104D-270	Repair Clamp, OD Range, 270-280mm, 1 piece, 300mm Long
KCR-104D-275	Repair Clamp, OD Range, 275-285mm, 1 piece, 300mm Long
KCR-104D-285	Repair Clamp, OD Range, 285-295mm, 1 piece, 300mm Long
KCR-104D-310	Repair Clamp, OD Range, 310-320mm, 1 piece, 300mm Long
KCR-104D-320	Repair Clamp, OD Range, 320-330mm, 1 piece, 300mm Long
KCR-104D-330	Repair Clamp, OD Range, 330-340mm, 1 piece, 300mm Long
KCR-104D-340	Repair Clamp, OD Range, 340-350mm, 1 piece, 300mm Long



**REPAIR CLAMP**

KCR-210F-380	Repair Clamp, OD Range 380-400mm, 1 piece, 375mm Long
KCR-210F-390	Repair Clamp, OD Range 390-410mm, 1 piece, 375mm Long
KCR-210F-400	Repair Clamp, OD Range 400-420mm, 1 piece, 375mm Long
KCR-210F-410	Repair Clamp, OD Range 410-430mm, 1 piece, 375mm Long
KCR-210F-420	Repair Clamp, OD Range 420-440mm, 1 piece, 375mm Long
KCR-210F-440	Repair Clamp, OD Range 440-460mm, 1 piece, 375mm Long
KCR-210F-450	Repair Clamp, OD Range 450-470mm, 1 piece, 450mm Long
KCR-210F-490	Repair Clamp, OD Range 490-510mm, 1 piece 450mm Long
KCR-210F-500	Repair Clamp, OD Range 500-520mm, 1 piece 450mm Long
KCR-315F-500	Repair Clamp, OD Range 500-530mm, 1 piece, 450mm Long

# DRAINAGE FITTINGS

## FLEXIBLE BOSS JUNCTION

A fast and cost effective way to connect a stormwater pipe into a new or existing line

- Manufactured from a specially formulated flexible PVC membrane.
- Rigid, yet flexible enough for one saddle to fit 150mm or larger stormwater mains.
- Includes special "slip-lock" quick-adjust stainless steel clamps allowing fast and simple installations into stormwater mains
- Larger apron with locating ring provides a positive and effective seal.
- Suitable for most stormwater pipe diameters, over 150mm.
- Leak-proof, resistant to chemicals, ultraviolet rays, fungal growth and normal sewer gases.

FTSW-4              100mm 45° Flexible Boss Junction

FTSW-6              150mm 45° Flexible Boss Junction



## QWIKSEAL

- Meets ASTM C 923
- When tested in Concrete Manholes:
- Creates a compression seal that is water tight up to 10 psi
- Can handle up to 7 degrees of deflection
- Easy color identification - Grey = Sch 40, Green = SDR-35
- Not dependant on the host pipe size, type or material
- Reduced complexity: 1 QwikSeal = Many Solutions
- Less inventory = More turns

FQS-4                      Fernco Qwik Seal 100mm

FQS-6                      Fernco Qwik Seal 150mm

FQS-8                      Fernco Qwik Seal 200mm



# CORROSION PROTECTION

## PETROLATUM PRIMER

UPP-1	UCC Petrolatum Primer 1 kg
UPP-4	UCC Petrolatum Primer 4 kg



## PETROLATUM MASTIC

UPM-3ST	UCC Petrolatum Mastic ST 3kg
UPM-3UL	UCC Petrolatum Mastic Ultra Light 3ltr
UPM-20UL	UCC Petrolatum Mastic Ultra Light 20ltr



## PETROLATUM TAPE

UPT-50ST	UCC Petrolatum Tape ST x 50mm x 10mtr
UPT-75ST	UCC Petrolatum Tape ST x 75mm x 10mtr
UPT-100ST	UCC Petrolatum Tape ST x 100mm x 10mtr
UPT-150ST	UCC Petrolatum Tape ST x 150mm x 10mtr



## UCC PVC OVERWRAP TAPE

PVCT50B	UCC PVC Overwrap Tape x 50mm x 30mtr
PVCT100B	UCC PVC Overwrap Tape x 100mm x 30mtr
PVCT150B	UCC PVC Overwrap Tape x 150mm x 30mtr



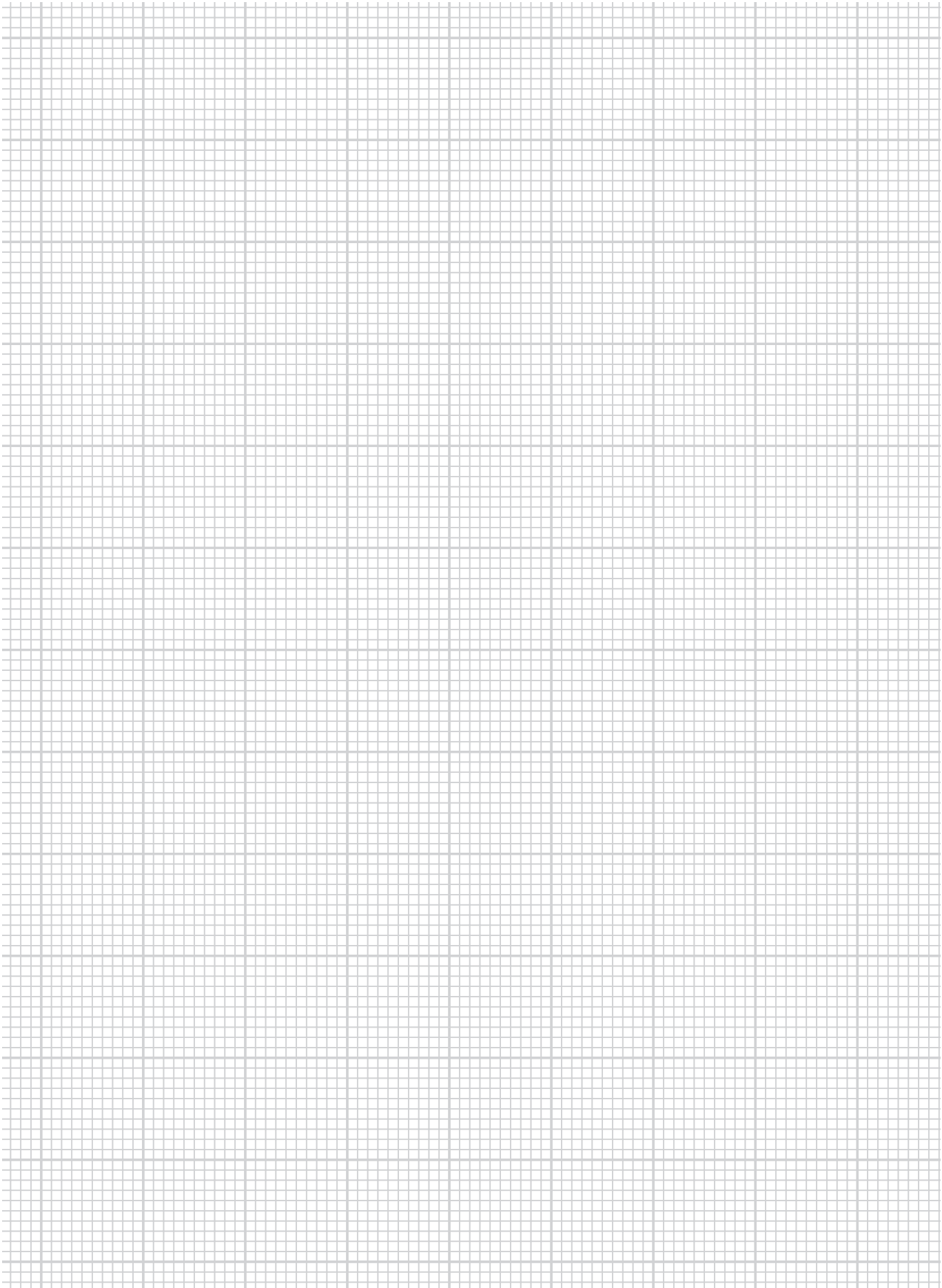
## BUTYL MASTIC JOINT SEAL

BM-17-3.6	UCC Butyl Mastic Joint Seal 17mm x 3.6m
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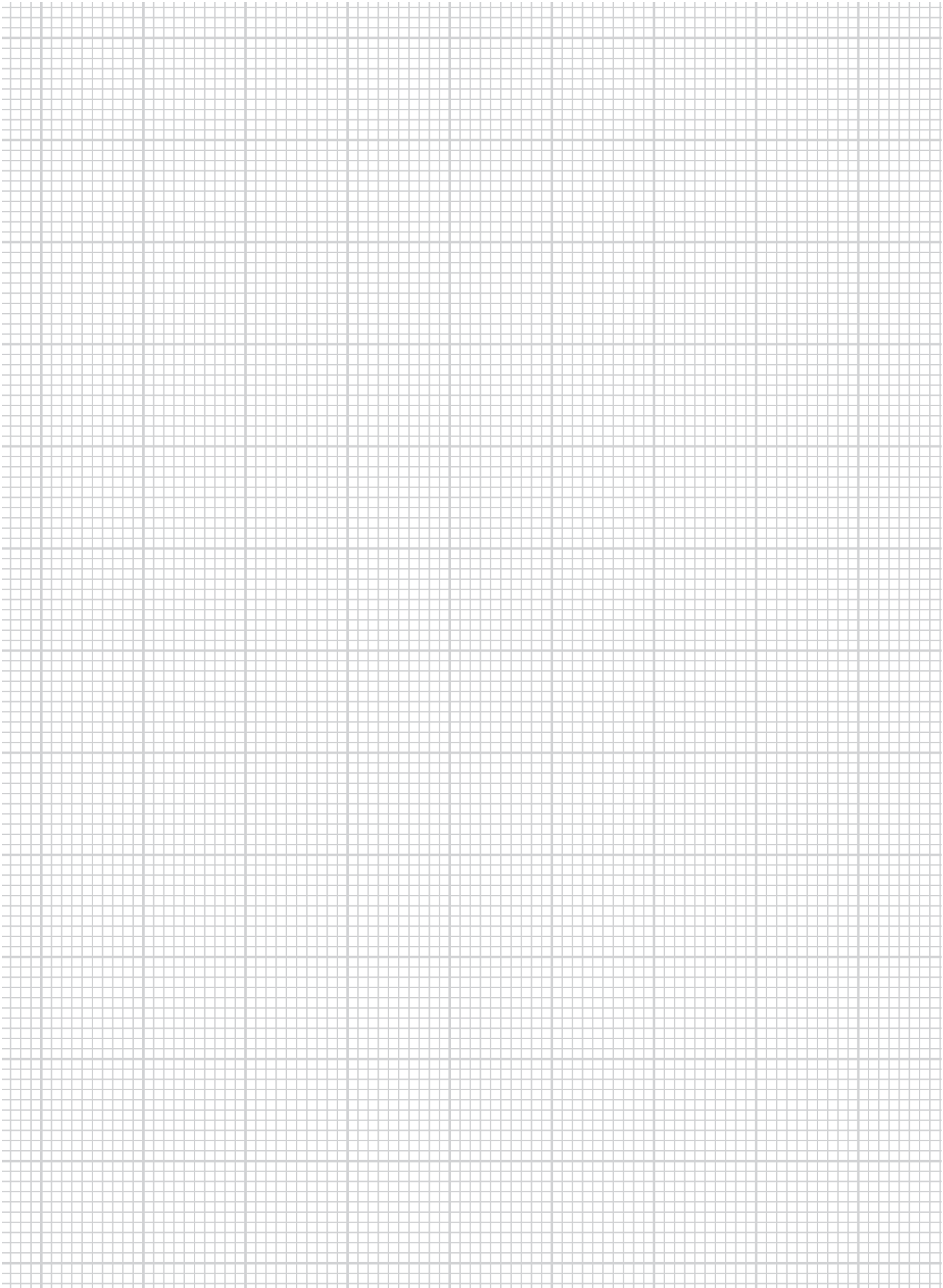




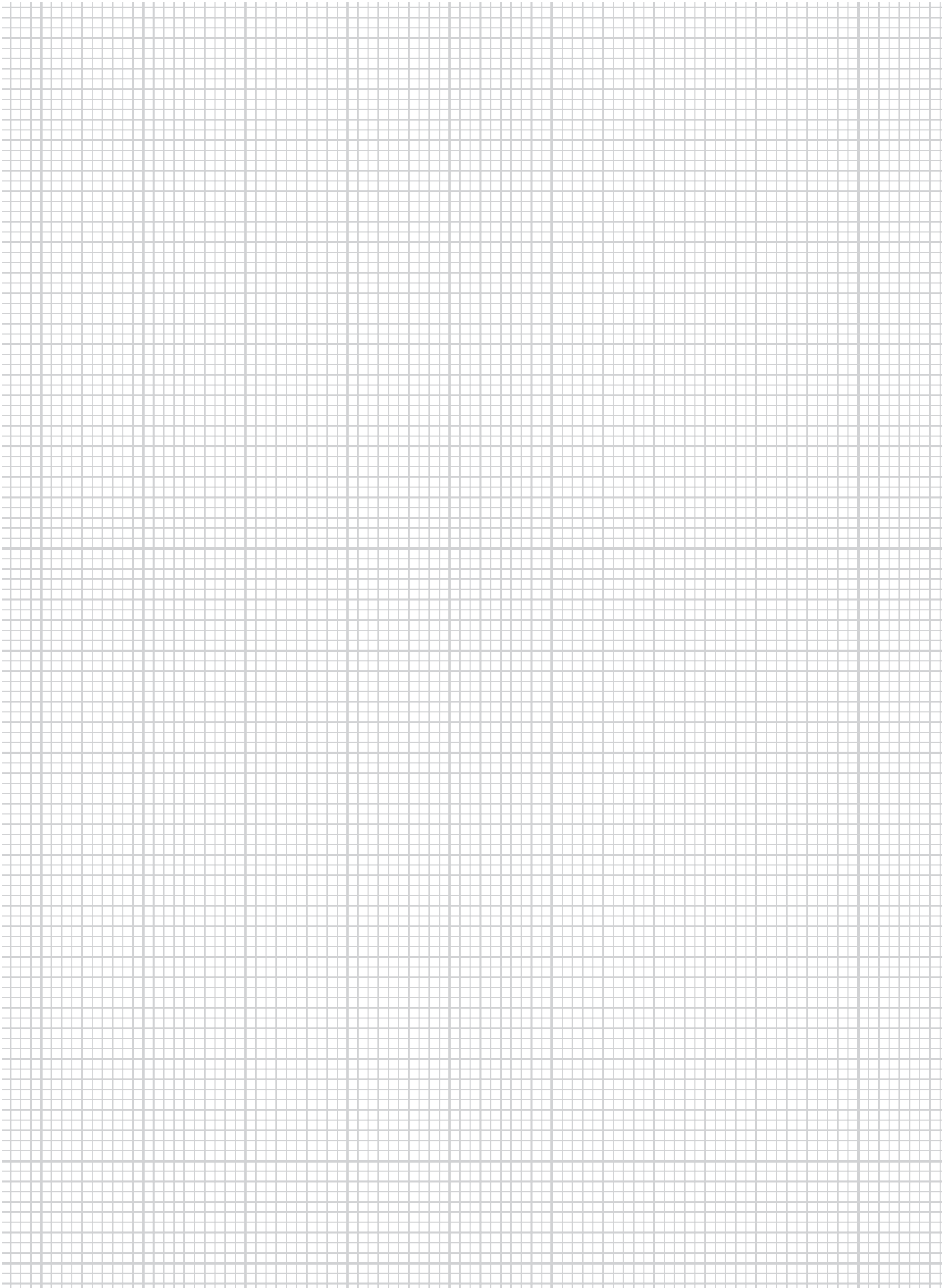
# NOTES



# NOTES



# NOTES





## INFRASTRUCTURE PRODUCT SPECIALISTS



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