# POLYETHYLENE RESTRAINT FLANGE ADAPTOR



#### Version 1.0

Clover Polyethylene Restraint Flange Adaptors are suitable for use in pressure and non pressure water supply and sewerage applications.

## **SPECIFICATIONS**

Diameter Range: DN63 to DN315

Nominal Pressure: Up to 1600kPa (PN16)

#### **End Connections:**

- Polyethylene Pipe to AS/NZS4130
- DN50 to DN300 Flange

#### Maximum Temperature: 40°

#### Compliance:

- EN 12842 "Ductile iron fittings for PVC-U or PE piping systems Requirements and test methods"
- AS/NZS4087 "Metallic flanges for waterworks purposes"
- AS2129 "Flanges for pipes, valves and fittings"
- AS/NZS4158 "Thermal-bonded polymeric coatings on valves and fittings for water industry purposes"
- AS1646 "Elastomeric seals for waterworks purposes"
- AS/NZS4020 "Testing of products for use in contact with drinking water"

## WSA Purchase Specification:

PS245 – Ductile Iron Fittings with Restrained Flexible Joints for Polyethylene Pipe of Nominal Sizes 90 to 1000 in Pressure Applications – Water Supply and Sewerage.

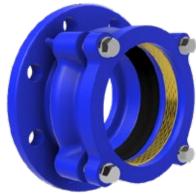
#### **Options:**

- Alternate flange drillings available
- 316 Stainless steel tensile restraint ring

## **COMPONENTS**

ITEM	PART NAME	MATERIAL	GRADE
1	Flange Adaptor Body	Ductile Iron	AS1831 500/7 Polymeric Coated AS4158
2	Gasket	Rubber	EPDM AS1646
3	Tensile Restraint Ring*	Aluminium Bronze	AS1568 C37710
4	Support Ring	Polyethylene	
5	Span Ring	Ductile Iron	AS1831 500/7 Polymeric Coated AS4158
6	Washer	Stainless Steel	316
7	Bolt	Stainless Steel	316

\* 316 Stainless Steel option available

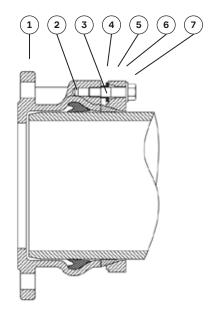


## **FEATURES**

- Provides axial thrust restraint when used on polyethylene pipe systems
- High strength and impact resistant body manufactured from ductile iron
- Simple and fast installation under all weather conditions
- No polyethylene welding required for installation
- Thermally bonded polymeric coating for long life corrosion protection
- Polyethylene restraint joint appraised by WSAA (Product Appraisal 11/21 – DN90 to DN315)

## **APPLICATIONS**

- Potable and recycled water supply
- Irrigation and raw water
- Gravity and sewer rising mains
- Mining and slurry
- Stormwater and drainage
- Pressure and non-pressure
- Buried and above ground



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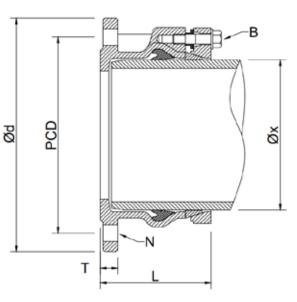
SPECIFICATIONS	SYM	UNITS	DN63	DN75	DN90	DN 110	DN 125	DN 160	DN 180
PIPE OUTSIDE DIAMETER	Øх	mm	63	75	90	110	125	160	180
FLANGE (AS4087 B5)	DN	mm	50*	65*	80	100*	100*	150	150
PRESSURE NOMINAL	PN	Nom	16	16	16	16	16	16	16
LENGTH	L	mm	90	95	100	100	100	125	132
FLANGE OUTSIDE DIAMETER	Ød	mm	150	165	185	215	215	280	280
PITCH CIRCLE DIAMETER	PCD	mm	114	127	146	178	178	235	235
FLANGE BOLT HOLES	Ν		4-Ø18	4-Ø18	4-Ø18	8-Ø22	8-Ø22	8-Ø18	8-Ø18
FLANGE THICKNESS	т	mm	17	17	18	20	20	23	23
MAXIMUM JOINT DEFLECTION	0	deg	2	2	2	2	2	2	2
RESTRAINT SYSTEM BOLTS	В	# x mm	4 × M10	4 x M10	4 x M10	4 x M10	4 x M12	4 x M12	4 x M12
WEIGHT OF UNIT	W	kg	4	5	6	7	8	11	12
PRODUCT CODE			PPSFA063	PPSFA075	PPSFA090	PPSFA110	PPSFA125	PPSFA160	PPSFA180

\* AS2129 Table E Drilling Pattern

SPECIFICATIONS	SYM	UNITS	DN 200	DN 225	DN 250	DN 250	DN 280	DN 280	DN 315
PIPE OUTSIDE DIAMETER	Øx	mm	200	225	250	250	280	280	315
FLANGE (AS4087 B5)	DN	mm	200	200	200	250	225	250	300
PRESSURE NOMINAL	PN	Nom	16	16	16	16	16	16	16
LENGTH	L	mm	138	142	225	160	225	170	190
FLANGE OUTSIDE DIAMETER	Ød	mm	335	335	335	405	370	405	455
PITCH CIRCLE DIAMETER	PCD	mm	292	292	292	356	324	356	406
FLANGE BOLT HOLES	Ν		8-Ø18	8-Ø18	8-Ø18	8-Ø22	8-Ø18	8-Ø22	12-Ø22
FLANGE THICKNESS	т	mm	23	23	23	24	24	24	30
MAXIMUM JOINT DEFLECTION	0	deg	1.7	1.7	1.7	1.7	1.7	1.7	1.7
RESTRAINT SYSTEM BOLTS	В	# x mm	4 x M12	4 x M12	6 x M12	6 x M12	6 x M12	6 x M12	6 x M12
WEIGHT OF UNIT	W	kg	18	20	27	27	33	29	46
PRODUCT CODE			PPSFA200	PPSFA225200	PPSFA250200	PPSFA250	PPSFA280225	PPSFA280250	PPSFA315

PRESSURE	SYM	UNITS	DN 63 - DN 315
ALLOWABLE OPERATING PRESSURE	AOP	MPa	1.6
MAXIMUM ALLOWABLE OPERATING PRESSURE	MAOP	MPa	1.92
ALLOWABLE SITE TEST PRESSURE	ASTP	MPa	2.00

All dimensions are quoted in millimetres.



The products shown form part of Clover's continuous improvement program and as such the product designs, specifications and materials may change without notice.

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