



Innovation in polyethylene pipe systems for water, gas and other applications

Product /Price Guide

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Introduction

GPS PE Pipe Systems is a member of the international Aliaxis Group of Companies who manufacture and sell pipe systems and related products for residential and commercial construction, industrial and public utilities.

We specialise in the research, development and manufacture of polyethylene and multi-layer pipe systems including fittings for gas and water transportation in the utilities, offshore and industrial markets.

Resulting from the amalgamation of two market leading companies, GPS PE Pipe Systems brings together over one hundred years of experience and knowledge in plastic pipe systems.

The Environment

We actively and consistently strive to reduce our impact on the environment. We have measured our performance against various environmental indicators since 1997 and operated an environmental management system accredited to ISO 14001 since 1999. We are currently working towards an independent verification of our carbon footprint under the Certified Emissions Measurement And Reduction Scheme (CEMARS).

Market Oriented

GPS PE Pipe Systems products have a broad range of applications in the industrial and utilities markets on a worldwide basis. The utilities of water and gas distribution are important sectors for high integrity products where the maintenance of water quality and the safe transport of gaseous fuels are of paramount importance.

Industrial applications include: alternative energy installations in landfill gas systems; effluent transportation and mineral slurries.

Many of the brands in the GPS portfolio have a long record of innovation in meeting the needs of the water and gas utilities. One of the foremost pioneers in polyethylene pipe systems, GPS is continually improving and updating its offering to meet the ever growing needs of the distribution engineer, ensuring they stay at the forefront of world gas and water distribution/treatment systems.

Manufactured in the UK, our products are sold to more than 60 countries worldwide.

Customer Focus

The key to our success lies in the commitment we pledge to provide the highest quality service and support to our customers and industry end-users. We are a team of highly motivated and experienced individuals who are dedicated to helping our customers achieve their goals.

We place the utmost importance in meeting the needs of our customers, constantly evolving our extensive product portfolio to meet the ever changing demands of the water and gas utilities, industrial and offshore markets.

Quality

Designed, manufactured and supplied under a BS EN ISO 9001:2008 accredited Quality Management System, GPS products comply with relevant national, European and international product standards to ensure peace of mind for our customers.



World leaders in the design, manufacture, marketing and sales of high performance, high integrity plastic and composite piping systems.

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Approvals

The GPS range of polyethylene pipes, Frialen electrofusion fittings and long spigot fittings are approved for use in many countries. Examples of where second/third party certification has been achieved are given below:

UK	National Grid BSI Kitemark Water Regulations Advisory Scheme (WRAS) Approved by the Secretary of State
Argentina	Argentinian Gas Institute
Austria	ÖVGW/ÖN/ÖFI/TGM
Australia	WSAA SAI
Belgium	Becetel Eandis
Czech Republic	TSU
Denmark	DS
France	GDF
Germany	DVGW
Greece	DEPA
Hungary	Hungarian Mining Office
Italy	IIP-UNI (Excel(PE100)) AEM
Malaysia	Sijil Barabgan Piawai Yang Terjadual Perbadanan Air Melaka Perakuan Kelulusan Gregason Gas Perkakas Gas Kelengapem Gas
Moldova	Centrul de Expertiza Technica
Poland	IGNIG
Romania	Central Laboratory
Russia	Hygiene Approval
Spain	Gas Natural
Sweden	Tumab
Switzerland	SVGW (Excel(PE100), Push-Fast)
Ukraine	UKSEPRO

Materials

GPS manufactures polyethylene systems in both PE80 and Excel (PE100). The numbers relate to the MRS (Minimum Required Strength) values of the material.

PE80 – This is the term used to denote the polyethylene material which has been widely used for gas, water and industrial applications for many years. The terms MDPE and HDPE were commonly used to describe this material, although MDPE PE80, as historically supplied by GPS, has a much higher long term stress crack resistance than traditional HDPE PE80.

PE100 – This is a term used to denote high performance polyethylene, and PE100 pipes are sold by GPS under the brand name of Excel. PE100 is a higher performance material than PE80 and demonstrates exceptional resistance to rapid crack propagation as well as to long-term stress cracking.

Moreover, the higher strength of PE100 permits thinner pipe walls than PE80 for the same operating pressure. PE100 uses less polymer and provides for a larger bore and increased flow capacity for a given nominal pipe size. This can result in significant cost savings at certain sizes and pressure ratings.

PE80 and Excel(PE100) are not recommended for continuous pressure operation at temperatures above 60°C for liquids, including sewerage and industrial effluents, or 30°C for gaseous fluids. Excel (PE100) has advantages over PE80 at low temperatures, since it is extremely crack resistant down to -30°C. When considering applications which exceed the limits stated above, please contact our Technical Support Department for further information.

GPS polyethylene range is designed to comply with the requirements of one or more of the standards listed overleaf.

Maximum Continuous Operating Pressures at 20°C for Standard PE Pipes

Pipe Size/OD	SDR11				SDR13.6		SDR17.6(GAS) / SDR17 (WATER)		SDR17		SDR21		SDR26	
	PE80		Excel (PE100)		PE80		PE80		Excel (PE100)		Excel (PE100)		Excel (PE100)	
	GAS	WATER	GAS	WATER	GAS	GAS	WATER	WATER	GAS	WATER	GAS	WATER	GAS	WATER
20mm	5.5	12.5												
25mm	5.5	12.5												
32mm	5.5	12.5												
50mm	5.5	12.5												
63mm	5.5	12.5	7.0	16.0	4.0		8.0							
75mm	5.5				4.0									
90mm	5.5	12.5	7.0	16.0		3.0	8.0	10.0						
110mm		12.5		16.0		3.0	8.0	10.0						
125mm	5.5	12.5	7.0	16.0		3.0	8.0	10.0						
140mm	5.5					3.0								
160mm	5.1	12.5		16.0		3.0	8.0	10.0			8.0		6.0	
180mm	4.7	12.5	7.0	16.0		3.0	8.0	10.0			8.0		6.0	
225mm		12.5		16.0		3.0	8.0	10.0			8.0		6.0	
250mm	4.0	12.5	7.0	16.0		3.0	8.0	10.0		2.0	8.0		6.0	
280mm	3.8	12.5		16.0		2.9	8.0	10.0		2.0	8.0		6.0	
315mm	3.4	12.5	7.0	16.0		2.7	8.0	10.0		2.0	8.0		6.0	
355mm	3.1	12.5	7.0	16.0		2.5	8.0	10.0		2.0	8.0		6.0	
400mm	2.9	12.5	7.0	16.0		2.3	8.0	10.0		2.0	8.0		6.0	
450mm	2.7	12.5	7.0	16.0		2.2	8.0	10.0		2.0	8.0		6.0	
500mm	2.5	12.5	7.0	16.0		2.0	8.0	10.0		2.0	8.0		6.0	
560mm			7.0	16.0		2.0		10.0		2.0	8.0		6.0	
630mm			7.0	16.0		1.8		10.0		2.0	8.0		6.0	
710mm				16.0				10.0			8.0		6.0	
800mm – 1200mm								10.0			8.0		6.0	

- GPS can usually offer SDRs other than those shown in the table, e.g. for close fit lining applications.
- UK gas operating pressures have historically been limited to 7bar for PE100 pipe – this is the result of the UK rating system for charges on pipelines at higher pressure.
- In line with UK water industry recommendations, GPS de-rate large mitred bends by 0.8 x the rating of the pipe from which it was made – please contact our Technical Support department for further information.
- PE80 (MDPE) gas pipe pressures must be further de-rated for temperatures below 0°C.
- The values in the above table do not address any other safety-related issues associated with pipeline design.

General Standards

Standard	Title	Applicable to GPS Products
ISO 161-1:1996	Thermoplastic pipes – nominal outside diameters and nominal pressures	All pipes and fittings
ISO 4065:1996	Thermoplastic pipes – universal wall thickness tables	All pipes
BS ISO 11922-1:1997	Thermoplastic pipes for the conveyance of fluids dimensions and tolerances metric series	All pipes
BS EN 1092-1:2007	Flanges and their joints – Circular flanges for pipes, valves, fittings and accessories, PN designated	All flange backing ring drillings, PN16 and PN10

Water Standards

Standard/Approval	Title	Applicable
Regulation 31/27/30	The Water Supply (Water Quality) Regulations 2000/2001/2007 (England/Scotland/NI)	All drinking water pipes
The (Water) Regulators Specification & The Water Supply (Water Fittings) Regulations 1999	The (Water) Regulators Specification & The Water Supply (Water Fittings) Regulations 1999	All pipe materials. All fitting materials. All PE100 fittings and matching pipes. All Protecta-Line fittings and matching Protecta-Line pipes
BS 6920 Part 1:2000	Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on water – Part 1: Specification	All pipe materials. All fitting materials. All PE100 fittings and matching pipes. All Protecta-Line fittings and matching Protecta-Line pipes All pipe materials. All fitting materials.
BS 6920 Part 2:2000/2008	Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on water – Part 2: Methods of test	All PE100 fittings and matching pipes. All Protecta-Line fittings and matching Protecta-Line pipes. All pipes
BS 6920 Part 4:2001	Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on water – Part 4: Method for the GCMS identification of water leachable organic substances	All pipes
BS EN 12201:2011/2012	Plastics piping systems water supply, and for drainage and sewerage under pressure – Polyethylene (PE)	Blue and black PE80 and PE100 pipes and fittings in sizes up to 1200mm
WIS 4-32-19:2011	Polyethylene pressure pipe systems with an aluminium barrier layer for potable water supply in contaminated land sizes	25mm to 630mm – Protecta-Line pipe and fittings
ISO 4427:2007	PE pipes for water supply	Blue and black PE80 and PE100 pipes and fittings
BS EN 15494:2003	Specifications for polyethylene components and systems	Blue and black PE80 and PE100 pipes and fittings up to 1200mm
BS EN 805:2000	Water supply – requirements for systems and components outside buildings	External water supply installations
BS EN 681-2:2000	Elastomeric seals. Material requirements for pipe joint seals used in water and drainage applications. Thermoplastic elastomers.	Seals and flange gaskets
BS 5306:1990 – Part 2	Fire extinguishing installations and equipment on premises	Blue and black PE80 and PE100 for external buried fire mains
WIS 4-22-02:1991	Specification for ferrules and ferrule straps for underground use	Protecta-Line ferrules
WIS 4-24-01:1998	Specification for mechanical fittings and joints including flanges for polyethylene pipes for the conveyance of cold potable water for the size range 90 to 1000mm including those made of metal or plastics or a combination of both	Stub flanges, Slimflange and Protecta-Line Mechanical Fittings
WIS 4-32-08:2002	Specification for the fusion jointing of polyethylene pressure pipeline systems using PE80 and PE100 materials	Butt fusion and electrofusion jointing of blue and black PE80 and PE100 pipes and fittings
DIN 8074:2011	Pipes of high density polyethylene (HDPE) type 2 – dimensions	Black PE80 and PE100 pipes in sizes up to and including 1200mm
DIN 8075:2011	Pipes of high density polyethylene (HDPE) type 2 – testing	Black PE80 and PE100 pipes in sizes up to and including 1200mm
DIN 16963:2011	Part 1 – High density polyethylene (HDPE) fittings dimensions, type 2	Black PE80 and PE100 spigot and electrofusion fittings up to and including 1200mm

Gas Standards

Standard/Approval	Title	Applicable to GPS Products
GIS/PL2	Specification for polyethylene pipe and fittings for natural gas and suitable manufactured gas	
Part 1:2008	General and polyethylene compounds for use in polyethylene pipe and fittings	Raw materials
Part 2:2008	Pipes for use at pressures up to 5.5 bar	Yellow PE80, Yellow/Black Coextruded PE80 and Yellow/Black Coextruded PE100 up to 800mm
Part 4:2012	Fusion fittings with integral heating elements	Yellow PE80 and black PE100 electrofusion fittings black PE100 electrofusion fittings
Part 6:2009	Spigot end fittings for electrofusion and/or butt fusion purposes	Yellow PE80, Black PE100, Yellow/Black PE100 and Orange/Black PE100 spigot fittings
Part 8:2009	Spigot end fittings for electrofusion and/or butt fusion purposes	Orange/Black PE100 pipes up to 630mm
GIS/PL3:2006	Specification for self anchoring mechanical fittings/joints for polyethylene(PE) pipe for natural gas and suitable manufactured gas	Stub flanges and Slimflange
ISO 4437:2007	PE pipes for water supply	Blue and black PE80 and PE100 pipes and fittings
BS ISO 8085-1	Specifications for polyethylene components and systems	Blue and black PE80 and PE100 pipes and fittings up to 800mm
BS ISO 8085-2	Water supply – requirements for systems and components outside buildings	Purge saddles
BS ISO 8085-3	Elastomeric seals. Material requirements for pipe joint seals used in water and drainage applications. Thermoplastic elastomers.	Seals and flange gaskets
BS EN 682:2002	Elastomeric seals – materials for seals used in pipes and fittings carrying gas and hydrocarbon fluids	Seals and flange gaskets
BS EN 1555:2010	Plastic piping systems for supply of gaseous fuels – Polyethylene (PE)	All yellow PE80 and black PE100 pipes and fittings up to and including 630mm
GIS/F2	Mains sealing plugs and service connection fittings for use at pressures not greater than 2 bar	Purge saddles

Product Codes

GPS product codes are generally generated by three elements – range code (determines material and colour), shape code (determines product type) and size code which are set out in red in our product pricing tables.

For example:

	Range code	Shape code	Size code
40 512 318 =	40	512	318
Meaning	PE100 Black	6 metre SDR11 pipe	180mm

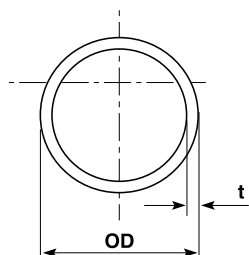
Frialen Safety Fittings, prefixed FL, FF or PF do not follow this pattern and the item detail can not be deduced from the code.

Minimum Order Values and Returns Policy

GPS accept orders based on a minimum order value which varies across our product ranges. Please contact the Sales Office for further information.

GPS operate a policy where no products shall be returned without written permission from GPS. Where any such written permission is granted a restocking charge may be applied.

Pipe Dimensions – Water Applications (BS EN 12201-2)



*SDR9 only. Wall thickness increased to give a lower SDR and more resistance to damage.

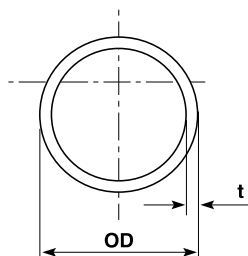
GPS pipes, manufactured to BS EN 12201-2 standard, are capable of withstanding transient surge pressures of up to twice the rated pressure of the pipe.

Nom OD (mm)	Max OD (mm)	SDR11				SDR17			
		Min t (mm)	Max t (mm)	Mean Weight (kg/m)	Mean Bore (mm)	Min t (mm)	Max t (mm)	Mean Weight (kg/m)	Mean Bore (mm)
20*	20.3	2.3	2.7	0.1	15.2	—	—	—	—
25	25.3	2.3	2.7	0.2	20.2	—	—	—	—
32	32.3	3.0	3.4	0.3	25.8	—	—	—	—
40	40.4	3.7	4.2	0.4	32.3	—	—	—	—
50	50.4	4.6	5.2	0.7	40.4	—	—	—	—
63	63.4	5.8	6.5	1.0	50.9	—	—	—	—
75	75.5	6.8	7.6	1.5	60.9	4.5	5.1	1.0	65.7
90	90.6	8.2	9.2	2.1	72.9	5.4	6.1	1.5	78.8
110	110.7	10.0	11.1	3.2	89.3	6.6	7.4	2.2	96.4
125	125.8	11.4	12.7	4.1	101.3	7.4	8.3	2.8	109.7
160	161.0	14.6	16.2	6.7	129.7	9.5	10.6	4.6	140.4
180	181.1	16.4	18.2	8.5	146.0	10.7	11.9	5.8	158.0
200	201.2	18.2	20.2	10.5	162.2	11.9	13.2	7.1	175.5
225	226.4	20.5	22.7	13.3	182.5	13.4	14.9	9.0	197.4
250	251.5	22.7	25.1	16.3	203.0	14.8	16.4	11.1	219.6
280	281.7	25.4	28.1	20.5	227.4	16.6	18.4	13.9	245.9
315	316.9	28.6	31.6	25.9	255.8	18.7	20.7	17.6	276.6
355	357.2	32.2	35.6	32.9	288.3	21.1	23.4	22.4	311.6
400	402.4	36.3	40.1	41.8	324.8	23.7	26.2	28.3	351.3
450	452.7	40.9	45.1	52.9	365.4	26.7	29.5	35.9	395.2
500	503.0	45.4	50.1	65.2	406.0	29.7	32.8	44.3	439.0
560	563.4	50.8	56.0	81.7	454.9	33.2	36.7	55.5	491.8
630	633.8	57.2	63.1	103.6	511.6	37.4	41.3	70.3	553.2
710	716.4	64.5	71.1	131.5	577.6	42.1	46.5	89.1	624.6
800	807.2	72.6	80.0	167.1	651.0	47.4	52.3	113.1	703.9
900	908.1	—	—	—	—	53.3	58.8	142.9	792.0
1000	1009.0	—	—	—	—	59.3	65.4	176.5	879.8
1200	1210.8	—	—	—	—	71.1	78.4	254.5	1055.9

Nom OD (mm)	Max OD (mm)	SDR21				SDR26			
		Min t (mm)	Max t (mm)	Mean Weight (kg/m)	Mean Bore (mm)	Min t (mm)	Max t (mm)	Mean Weight (kg/m)	Mean Bore (mm)
75	75.5	3.6	4.1	0.8	67.6	—	—	—	—
90	90.6	4.3	4.9	1.2	81.1	3.5	4.0	1.0	82.8
110	110.7	5.3	6.0	1.8	99.1	4.2	4.8	1.4	101.4
125	125.8	6.0	6.7	2.3	112.7	4.8	5.4	1.9	115.2
160	161.0	7.7	8.6	3.7	144.2	6.2	7.0	3.1	147.3
180	181.1	8.6	9.6	4.7	162.4	6.9	7.7	3.8	166.0
200	201.2	9.6	10.7	5.8	180.3	7.7	8.6	4.7	184.3
225	226.4	10.8	12.0	7.4	202.9	8.6	9.6	5.9	207.5
250	251.5	11.9	13.2	9.0	225.7	9.6	10.7	7.4	230.5
280	281.7	13.4	14.9	11.4	252.6	10.7	11.9	9.2	258.3
315	316.9	15.0	16.6	14.3	284.4	12.1	13.5	11.7	290.4
355	357.2	16.9	18.7	18.2	320.5	13.6	15.1	14.8	327.4
400	402.4	19.1	21.2	23.2	360.9	15.3	17.0	18.7	368.9
450	452.7	21.5	23.8	29.3	406.1	17.2	19.1	23.7	415.1
500	503.0	23.9	26.4	36.1	451.2	19.1	21.2	29.2	461.2
560	563.4	26.7	29.5	45.2	505.5	21.4	23.7	36.6	516.6
630	633.8	30.0	33.1	57.1	568.8	24.1	26.7	46.4	581.1
710	716.4	33.9	37.4	72.6	641.9	27.2	30.1	58.9	655.9
800	807.2	38.1	42.1	92.1	723.4	30.6	33.8	74.7	739.2
900	908.1	42.9	47.3	116.4	813.9	34.4	38.3	94.8	831.4
1000	1009.0	47.7	52.6	143.8	904.2	38.2	42.2	116.5	924.1
1200	1210.8	57.2	63.1	207.4	1085.1	45.9	50.6	167.8	1108.9

Pipe Dimensions – Gas Applications (GIS/PL2-2)

Nom OD (mm)	Max OD (mm)	SDR11				SDR13.6				SDR17.6			
		Min t (mm)	Max t (mm)	Mean Weight (kg/m)	Mean Bore (mm)	Min t (mm)	Max t (mm)	Mean Weight (kg/m)	Mean Bore (mm)	Min t (mm)	Max t (mm)	Mean Weight (kg/m)	Mean Bore (mm)
20*	20.3	2.3	2.7	0.1	15.2	—	—	—	—	—	—	—	—
25	25.3	2.3	2.7	0.2	20.2	—	—	—	—	—	—	—	—
32	32.3	3.0	3.4	0.3	25.8	—	—	—	—	—	—	—	—
40	40.4	3.7	4.2	0.4	32.3	—	—	—	—	—	—	—	—
50	50.4	4.6	5.2	0.7	40.4	—	—	—	—	—	—	—	—
63	63.4	5.8	6.5	1.0	50.9	4.7	5.3	0.9	53.2	—	—	—	—
75	75.5	6.8	7.6	1.4	60.9	5.6	6.3	1.2	63.35	—	—	—	—
90	90.6	8.2	9.2	2.1	72.9	—	—	—	—	5.2	5.9	1.4	79.2
110	110.7	10.0	11.1	3.1	89.3	—	—	—	—	6.3	7.1	2.0	97.0
125	125.8	11.4	12.7	4.0	101.3	—	—	—	—	7.1	8.0	2.6	110.3
140	140.9	12.7	14.1	5.0	113.7	—	—	—	—	8.0	8.9	3.2	123.6
160	161.0	14.6	16.3	6.5	129.6	—	—	—	—	9.1	10.1	4.2	141.3
180	181.1	16.4	18.2	8.2	146.0	—	—	—	—	10.3	11.5	5.4	158.8
250	251.5	22.7	25.1	15.8	203.0	—	—	—	—	14.2	15.8	10.3	220.8
280	281.7	25.4	28.1	19.8	227.4	—	—	—	—	15.9	17.6	12.9	247.4
315	316.9	28.6	31.6	25.0	255.8	—	—	—	—	17.9	19.8	16.3	278.3
355	357.2	32.3	35.7	31.9	288.1	—	—	—	—	20.2	22.4	20.7	313.5
400	402.4	36.4	40.2	40.5	324.6	—	—	—	—	22.8	25.2	26.3	353.2
450	452.7	40.9	45.1	51.1	365.4	—	—	—	—	25.6	28.3	33.3	397.5
500	503.0	45.5	50.2	63.2	405.8	—	—	—	—	28.4	31.4	41.0	441.7
560	563.4	50.9	56.1	79.1	454.7	—	—	—	—	31.9	35.2	51.5	494.6
630	633.8	57.3	63.2	100.2	511.4	—	—	—	—	35.8	39.5	65.1	556.6



Nom OD (mm)	Max OD (mm)	SDR21				SDR26			
		Min t (mm)	Max t (mm)	Mean Weight (kg/m)	Mean Bore (mm)	Min t (mm)	Max t (mm)	Mean Weight (kg/m)	Mean Bore (mm)
63	63.4	—	—	—	—	—	—	—	—
75	75.5	—	—	—	—	—	—	—	—
90	90.6	—	—	—	—	—	—	—	—
110	110.7	—	—	—	—	—	—	—	—
125	125.8	—	—	—	—	—	—	—	—
140	140.9	—	—	—	—	—	—	—	—
160	161.0	—	—	—	—	—	—	—	—
180	181.1	—	—	—	—	—	—	—	—
250	251.5	11.9	13.2	9.0	225.7	9.6	10.7	7.4	230.5
280	281.7	13.3	14.8	11.3	252.8	10.7	11.9	9.2	258.3
315	316.9	15.0	16.6	14.3	284.4	12.1	13.5	11.7	290.4
355	357.2	16.9	18.7	18.2	320.5	13.7	15.2	14.8	327.2
400	402.4	19.0	21.0	23.1	361.2	15.4	17.1	18.7	368.7
450	452.7	21.4	23.7	29.3	406.3	17.3	19.2	23.7	414.9
500	503.0	23.8	26.3	36.1	451.4	19.2	21.3	29.2	461.0
560	563.4	26.7	29.5	45.2	505.5	21.5	23.9	36.6	516.3
630	633.8	30.0	33.1	57.1	568.8	24.2	26.8	46.4	581.1
710	714.0	33.8	37.3	72.5	649.1	27.3	30.2	58.9	654.3
800	804.0	38.1	42.1	91.9	721.8	30.8	34.0	74.6	737.2

*SDR9 only. Wall thickness increased to give a lower SDR and more resistance to damage.

Straight Lengths – SDR11



Size/OD (mm)	Black 6M Code	Black 12M Code	Blue 6M Code	Blue 12M Code	Price per Metre
75	40 512 312	40 527 312	21 512 312	21 527 312	£16.35
90	40 512 313	40 527 313	21 512 313	21 527 313	£23.50
110	40 512 314	40 527 314	21 512 314	21 527 314	£36.35
125	40 512 315	40 527 315	21 512 315	21 527 315	£47.35
160	40 512 317	40 527 317	21 512 317	21 527 317	£77.90
180	40 512 318	40 527 318	21 512 318	21 527 318	£97.00
200	40 512 319	40 527 319	21 512 319	21 527 319	£116.50
225	40 512 320	40 527 320	21 512 320	21 527 320	£146.60
250	40 512 321	40 527 321	21 512 321	21 527 321	£180.20
280	40 512 322	40 527 322	21 512 322	21 527 322	£231.90
315	40 512 323	40 527 323	21 512 323	21 527 323	£285.90
355	40 512 324	40 527 324	21 512 324	21 527 324	£363.10
400	40 512 325	40 527 325	21 512 325	21 527 325	£475.70
450	40 512 326	40 527 326	21 512 326	21 527 326	£603.50
500	40 512 327	40 527 327	21 512 327	21 527 327	£744.20
560	40 512 328	40 527 328	21 512 328	21 527 328	£930.60
630	40 512 329	40 527 329	21 512 329	21 527 329	£1,178.00
710	40 512 330	40 527 330	21 512 330	21 527 330	£1,498.90

Straight Lengths – SDR17



Size/OD (mm)	Black 6M Code	Black 12M Code	Blue 6M Code	Blue 12M Code	Price per Metre
75	40 506 312	40 507 312	21 506 312	21 507 312	£10.85
90	40 506 313	40 507 313	21 506 313	21 507 313	£15.80
110	40 506 314	40 507 314	21 506 314	21 507 314	£23.70
125	40 506 315	40 507 315	21 506 315	21 507 315	£30.75
160	40 506 317	40 507 317	21 506 317	21 507 317	£49.65
180	40 506 318	40 507 318	21 506 318	21 507 318	£62.80
200	40 506 319	40 507 319	21 506 319	21 507 319	£78.40
225	40 506 320	40 507 320	21 506 320	21 507 320	£98.30
250	40 506 321	40 507 321	21 506 321	21 507 321	£121.00
280	40 506 322	40 507 322	21 506 322	21 507 322	£157.90
315	40 506 323	40 507 323	21 506 323	21 507 323	£191.90
355	40 506 324	40 507 324	21 506 324	21 507 324	£245.00
400	40 506 325	40 507 325	21 506 325	21 507 325	£321.70
450	40 506 326	40 507 326	21 506 326	21 507 326	£407.60
500	40 506 327	40 507 327	21 506 327	21 507 327	£502.60
560	40 506 328	40 507 328	21 506 328	21 507 328	£631.00
630	40 506 329	40 507 329	21 506 329	21 507 329	£799.60
710	40 506 330	40 507 330	21 506 330	21 507 330	£1,003.80
800	40 506 332	40 507 332	21 506 332	21 507 332	£1,273.90
900	40 506 333	40 507 333	21 506 333	21 507 333	£1,611.90
1000	40 506 334	40 507 334	21 506 334	21 507 334	£1,989.70
1200	40 506 335	40 507 335	21 506 335	21 507 335	£2,872.30

Other diameters, SDRs and lengths can be made to order subject to a minimum order value – please contact our Sales Office for further information.

GPS pipes manufactured to EN12201-2 are capable of withstanding repeated transient surge pressures of up to twice the rated pressure of the pipe.

EXCEL (PE100) PIPE

FOR PRESSURISED WATER SUPPLY AND SEWAGE DUTIES

Straight Lengths – SDR21



Size/OD (mm)	Black 6M Code	Black 12M Code	Blue 6M Code	Blue 12M Code	Price per Metre
160	40 519 317	40 539 317	21 519 317	21 539 317	£40.80
180	40 519 318	40 539 318	21 519 318	21 539 318	£51.00
225	40 519 320	40 539 320	21 519 320	21 539 320	£78.90
250	40 519 321	40 539 321	21 519 321	21 539 321	£98.90
280	40 519 322	40 539 322	21 519 322	21 539 322	£129.00
315	40 519 323	40 539 323	21 519 323	21 539 323	£156.40
355	40 519 324	40 539 324	21 519 324	21 539 324	£199.00
400	40 519 325	40 539 325	21 519 325	21 539 325	£262.70
450	40 519 326	40 539 326	21 519 326	21 539 326	£332.30
500	40 519 327	40 539 327	21 519 327	21 539 327	£410.10
560	40 519 328	40 539 328	21 519 328	21 539 328	£514.00
630	40 519 329	40 539 329	21 519 329	21 539 329	£650.40
710	40 519 330	40 539 330	21 519 330	21 539 330	£824.80
800	40 519 332	40 539 332	21 519 332	21 539 332	£1,044.80
900	40 519 333	40 539 333	21 519 333	21 539 333	£1,321.70
1000	40 519 334	40 539 334	21 519 334	21 539 334	£1,631.40
1200	40 519 335	40 539 335	21 519 335	21 539 335	£2,352.00

Straight Lengths – SDR26



Size/OD (mm)	Black 6M Code	Black 12M Code	Blue 6M Code	Blue 12M Code	Price per Metre
160	40 518 317	40 528 317	21 518 317	21 528 317	£33.00
180	40 518 318	40 528 318	21 518 318	21 528 318	£41.70
225	40 518 320	40 528 320	21 518 320	21 528 320	£64.50
250	40 518 321	40 528 321	21 518 321	21 528 321	£80.60
280	40 518 322	40 528 322	21 518 322	21 528 322	£105.50
315	40 518 323	40 528 323	21 518 323	21 528 323	£128.00
355	40 518 324	40 528 324	21 518 324	21 528 324	£161.60
400	40 518 325	40 528 325	21 518 325	21 528 325	£214.80
450	40 518 326	40 528 326	21 518 326	21 528 326	£271.40
500	40 518 327	40 528 327	21 518 327	21 528 327	£334.80
560	40 518 328	40 528 328	21 518 328	21 528 328	£419.90
630	40 518 329	40 528 329	21 518 329	21 528 329	£531.10
710	40 518 330	40 528 330	21 518 330	21 528 330	£672.00
800	40 518 332	40 528 332	21 518 332	21 528 332	£852.80
900	40 518 333	40 528 333	21 518 333	21 528 333	£1,079.00
1000	40 518 334	40 528 334	21 518 334	21 528 334	£1,331.90
1200	40 518 335	40 528 335	21 518 335	21 528 335	£1,929.90

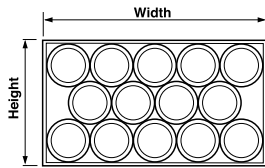
SDR26 pipe can be suitable for low or zero pressure applications in favourable ground conditions. Please contact our Technical Support Department for further information.

Other diameters, SDRs and lengths can be made to order subject to a minimum order value – please contact our Sales Office for further information.

GPS pipes manufactured to EN12201-2 are capable of withstanding repeated transient surge pressures of up to twice the rated pressure of the pipe.

Black pipe for electric cable ducting applications and pipe manufactured to DIN 8074/8075 standards are available to order. Please contact our Sales Office for further information.

Lengths & Bundles



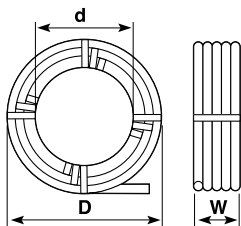
Size/OD (mm)	Length (m)	No / Bundle	Width (mm)	Height (mm)	Approx Weight			
					SDR11 (kg)	SDR17 (kg)	SDR21 (kg)	SDR26 (kg)
90	6	100	1188	795	1306	901	-	-
	12	100	1188	795	2604	1795	-	-
110	6	67	1238	795	1302	896	-	-
	12	67	1238	795	2597	1782	-	-
125	6	50	1238	750	1256	854	716	-
	12	50	1238	750	2504	1697	1410	-
160	6	33	1238	795	1360	925	-	630
	12	33	1238	795	2712	1843	-	1251
180	6	22	1188	730	1144	782	634	524
	12	22	1188	730	2281	1556	1276	1041
200	6	18	1238	845	1156	797	-	-
	12	18	1238	845	2305	1586	-	-
225	6	18	1238	897	1462	999	811	669
	12	18	1238	897	2868	1989	1631	1331
250	6	11	1112	770	1099	748	614	505
	12	11	1112	770	2191	1490	1234	1003
280	6	11	1238	845	1375	940	774	632
	12	11	1238	845	2741	1872	1540	1255
315	6	8	1060	947	1264	862	706	580
	12	8	1060	947	-	1718	1386	1153
	12	3	945	440	889	-	-	-
355	6	8	1188	1049	1608	1099	896	734
	12	8	1188	1049	-	2152	1797	1460
	12	3	1065	480	1171	-	-	-
400	6	3	1200	510	763	519	424	347
	12	3	1200	510	1521	1032	843	863
450	6	3	1350	560	965	655	534	436
	12	3	1350	560	1926	1306	1065	917
500	6	2	1000	610	793	539	440	359
	12	2	1000	610	1584	1075	1096	892
560	6	2	1120	670	990	655	549	449
	12	2	1120	670	1977	1307	1096	894
630	6	2	1260	740	1245	840	695	565
	12	2	1260	740	2487	1678	1733	1127
710	6	2	1420	820	-	1064	880	716
	12	2	1420	820	-	2124	1757	1434
800	6	1	800	800	-	670	549	447
	12	1	800	800	-	1339	1104	894
900	6	1	900	900	-	846	699	572
	12	1	900	900	-	1692	1398	1143
1000	6	1	1000	1000	-	1063	863	704
	12	1	1000	1000	-	2125	1726	1408
1200	6	1	1200	1200	-	-	1225	993
	12	1	1200	1200	-	-	2451	1986

Note: due to continuous development, bundle sizes and weights may vary from that shown.

EXCEL (PE100) PIPE

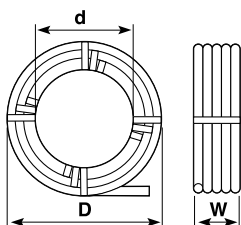
FOR PRESSURISED WATER SUPPLY AND SEWAGE DUTIES

Coils – SDR11



Size/OD (mm)	Length (m)	Black Code	Blue Code	Price per Metre	d (mm)	D (mm)	W (mm)	Approx Weight (kg)
75	50	40 559 312	21 559 312	£16.35	1500	1900	310	73.0
	100	40 560 312	21 560 312			2300	310	145.0
90	50	40 559 313	21 559 313	£23.50	1800	2360	360	106.0
	100	40 560 313	21 560 313			2540	450	212.0
110	50	40 559 314	21 559 314	£36.35	2500	2700	450	160.0
	100	40 560 314	21 560 314			2900	570	318.0
125	50	40 559 315	21 559 315	£47.35	2500	3000	500	204.0
	100	40 560 315	21 560 315			3250	560	408.0
160	50	40 559 317	21 559 317	£77.90	3000	3900	490	337.0
	100	40 560 317	21 560 317				650	670.0
180	50	40 559 318	21 559 318	£97.00	3000	3720	550	422.5
	100	40 560 318	21 560 318				900	845.0

Coils – SDR17

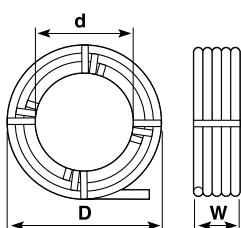


Size/OD (mm)	Length (m)	Black Code	Blue Code	Price per Metre	d (mm)	D (mm)	W (mm)	Approx Weight (kg)
75	50	40 548 312	21 548 312	£10.85	1500	2200	390	51.0
	100	40 549 312	21 549 312			2500	390	102.0
90	50	40 548 313	21 548 313	£15.80	1800	3100	270	69.5
	100	40 549 313	21 549 313			3300	360	139.0
110	50	40 548 314	21 548 314	£23.70	2500	2800	450	104.0
	100	40 549 314	21 549 314			3100	570	206.0
125	50	40 548 315	21 548 315	£30.75	2500	3500	400	133.0
	100	40 549 315	21 549 315			3750	500	266.0
160	50	40 548 317	21 548 317	£49.65	3000	3900	490	220.0
	100	40 549 317	21 549 317			3900	650	438.0
180	50	40 548 318	21 548 318	£62.80	3000	3720	550	274.5
	100	40 549 318	21 549 318			3720	900	549.0

GPS pipes, manufactured to BS EN 12201-2 standard, are capable of withstanding transient surge pressures of up to twice the rated pressure of the pipe.

Other diameters, SDRs and lengths can be made to order subject to a minimum order value – please contact our Sales Office for further information.

Geothermal Coils – SDR11



Size/OD (mm)	Length (m)	Black Code	Price per Metre	d (mm)	D (mm)	W (mm)	Approx Weight (kg)
32	50	GE 559 308	P.O.A.	700	1020	150	13.8
	100	GE 560 308	P.O.A.	700	1090	220	27.5
	150	GE 561 308	P.O.A.	700	1090	310	41.0
	200	GE 567 308	P.O.A.	700	1090	400	55.0
40	50	GE 559 309	P.O.A.	1300	1500	220	21.5
	100	GE 560 309	P.O.A.	1300	1700	220	43.0
	150	GE 561 309	P.O.A.	1300	1800	300	64.5

Available to order – for further information, please contact our Sales Office.

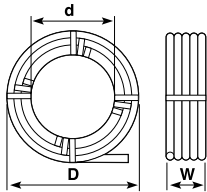
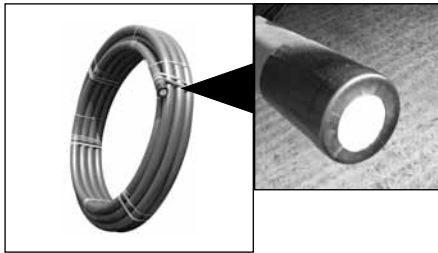
P.O.A. – Price on Application.

GPS pipes manufactured to EN12201-2 are capable of withstanding repeated transient surge pressures of up to twice the rated pressure of the pipe.

Other diameters, SDRs and lengths can be made to order, subject to a minimum order value - please contact our Sales Office for further information.

CLEAN, CAPPED COILS FOR INSTALLATION WITHOUT PRE-CHLORINATION

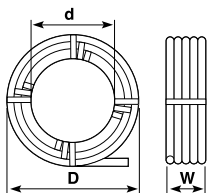
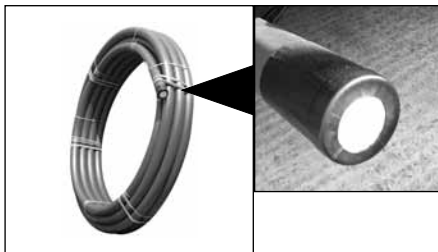
Excel 3^c – SDR11



Size/OD (mm)	Length (m)	Blue Code	Price per Metre	d (mm)	D (mm)	W (mm)	Approx Weight (kg)
90	50	21 845 313	£28.85	1800	2360	360	106.0
	75	21 862 313			2420	380	157.0
	100	21 860 313			2540	450	212.0
110	50	21 845 314	£41.05	2500	2700	450	160.0
	75	21 862 314			2900	450	235.0
	100	21 860 314			2900	570	318.0
125	50	21 845 315	£51.50	2500	3000	500	204.0
	75	21 862 315			3200	450	302.0
	100	21 860 315			3250	560	408.0
160	50	21 845 317	£80.50	3000	3900	490	337.0
	75	21 862 317			3900	600	497.0
	100	21 860 317			3900	650	679.0
180	50	21 845 318	£98.50	3000	3720	550	423.0
	75	21 862 318			3700	790	626.0
	100	21 860 318			3720	900	845.0

Excel 3^c is a factory clean, capped and coiled pipe solution to negate the need for the lengthy pre-chlorination process prior to installation of potable water pipes. The DWI recognised methodology allows post-installation sterilisation for 30 minutes contact only.

Excel 3^c – SDR17



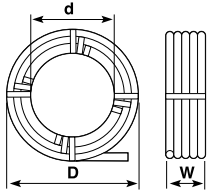
Size/OD (mm)	Length (m)	Blue Code	Price per Metre	d (mm)	D (mm)	W (mm)	Approx Weight (kg)
90	50	21 846 313	£21.20	1800	3100	270	69.5
	75	21 847 313			3080	380	108.0
	100	21 849 313			3300	360	139.0
110	50	21 846 314	£28.45	2500	2800	450	104.0
	75	21 847 314			3200	500	162.0
	100	21 849 314			3100	570	206.0
125	50	21 846 315	£34.90	2500	3500	400	133.0
	75	21 847 315			3200	450	204.0
	100	21 849 315			3750	500	266.0
160	50	21 846 317	£52.20	3000	3900	490	220.0
	75	21 847 317			3900	600	337.0
	100	21 849 317			3900	650	438.0
180	50	21 846 318	£64.30	3000	3720	550	275.0
	75	21 847 318			3700	790	423.0
	100	21 849 318			3720	900	549.0

Excel 3^c is a factory clean, capped and coiled pipe solution to negate the need for the lengthy pre-chlorination process prior to installation of potable water pipes. The DWI recognised methodology allows post-installation sterilisation for 30 minutes contact only.

EXCEL (PE100) PIPE

CLEAN, CAPPED COILS WITH INTEGRAL TOWING HEAD FOR INSTALLATION WITHOUT PRE-CHLORINATION

Excel 3^{CTH} – SDR11

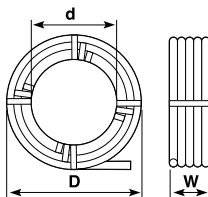


Size/OD (mm)	Length (m)	Blue Code	Price per Metre	d (mm)	D (mm)	W (mm)	Approx Weight (kg)
90	50	21 850 313	£34.00	1800	2360	360	106.0
	75	21 851 313			2420	380	157.0
	100	21 852 313			2540	450	212.0
110	50	21 850 314	£47.30	2500	2700	450	160.0
	75	21 851 314			2900	450	235.0
	100	21 852 314			2900	570	318.0
125	50	21 850 315	£58.80	2500	3000	500	204.0
	75	21 851 315			3200	450	302.0
	100	21 852 315			3250	560	408.0
160	50	21 850 317	£90.40	3000	3900	490	337.0
	75	21 851 317			3900	600	497.0
	100	21 852 317			3900	650	679.0
180	50	21 850 318	£110.20	3000	3720	550	423.0
	75	21 851 318			3700	790	626.0
	100	21 852 318			3720	900	845.0

Excel 3^{CTH} is supplied with a factory fitted Towing Head, ready to be attached to a towing shackle for immediate installation.

Overall pipe dimensions are offered as a guide only and do not include Towing Head dimensions.

Excel 3^{CTH} – SDR17



Size/OD (mm)	Length (m)	Blue Code	Price per Metre	d (mm)	D (mm)	W (mm)	Approx Weight (kg)
90	50	21 853 313	£26.10	1800	3100	270	69.5
	75	21 854 313			3080	380	108.0
	100	21 855 313			3300	360	139.0
110	50	21 853 314	£34.30	2500	2800	450	104.0
	75	21 854 314			3200	500	162.0
	100	21 855 314			3100	570	206.0
125	50	21 853 315	£41.70	2500	3500	400	133.0
	75	21 854 315			3200	450	204.0
	100	21 855 315			3750	500	266.0
160	50	21 853 317	£61.40	3000	3900	490	220.0
	75	21 854 317			3900	600	337.0
	100	21 855 317			3900	650	438.0
180	50	21 853 318	£75.10	3000	3720	550	275.0
	75	21 854 318			3700	790	423.0
	100	21 855 318			3720	900	549.0

Excel 3^{CTH} is supplied with a factory fitted towing head, ready to be attached to a towing shackle for immediate installation.

GPS pipes manufactured to EN12201-2 are capable of withstanding repeated transient surge pressures of up to twice the rated pressure of the pipe.

FOR PRESSURISED GAS SUPPLY (and water or sewage duties at 63mm size only)

Straight Lengths – SDR11



Size/OD (mm)	Black 6M Code	Blue 6M Code	Price per Metre	Yellow 6M Code	Yellow 12M Code	Price per Metre
63	50 513 311	51 513 311	£10.55	52 512 311	-	£14.20
90	-	-	-	25 512 313	25 527 313	£27.55
125	-	-	-	25 512 315	25 527 315	£50.60
180	-	-	-	25 512 318	25 527 318	£104.60

Straight lengths up to 18m may be available to order – please contact our Sales Office for further information.

* Yellow PE80 pipe up to 63mm are solid yellow PE80 (codes starting '52'), from 75mm to 225mm pipes are coextruded yellow PE80 over black PE80 (codes starting '25').

It is not peelable and must be scraped as normal prior to electrofusion jointing. It does NOT require scraping back to the black core.

Straight Lengths – SDR13.6 (available in Yellow only)



Size/OD (mm)	Yellow 6M Code	Price per Metre
63	52 576 311	£12.80
75	25 576 312	£13.20

* Yellow PE80 pipe up to 63mm are solid yellow PE80 (codes starting '52'), from 75mm to 225mm pipes are coextruded yellow PE80 over black PE80 (codes starting '25').

It is not peelable and must be scraped as normal prior to electrofusion jointing. It does NOT require scraping back to the black core.

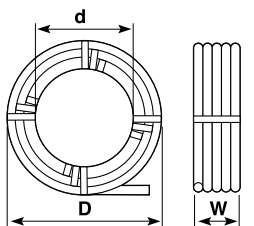
Straight Lengths – SDR17.6 (available in Yellow only)



Size/OD (mm)	Yellow 6M Code	Yellow 12M Code	Price per Metre
90	25 511 313	25 526 313	£17.90
125	25 511 315	25 526 315	£34.55
140	25 511 316	25 526 316	£43.20
180	25 511 318	25 526 318	£71.10

From 75mm to 225mm, yellow pipes are coextruded yellow PE80 over black PE80. It is not peelable and must be scraped as normal prior to electrofusion jointing. It does NOT require scraping back to the black core.

Coils – SDR11

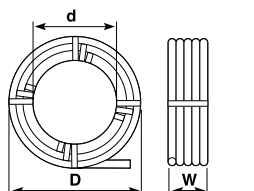
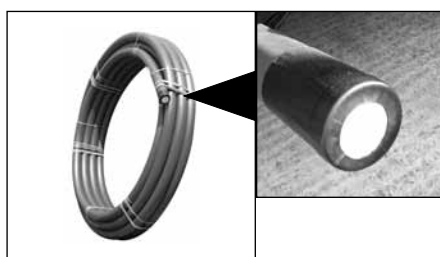


Size/OD (mm)	Length (m)	Black Code	Blue Code	Price per Metre	Yellow Code	Price per Metre	d (mm)	D (mm)	W (mm)	Approx Weight (kg)
20*	25	50 558 306	51 558 306	£1.42	-	-	600	750	120	3.3
	50	50 559 306	51 559 306	£1.42	52 559 306	£1.73	600	790	140	6.5
	100	50 560 306	51 560 306	£1.42	52 560 306	£1.73	600	860	180	13.0
	150	50 561 306	51 561 306	£1.42	-	-	600	860	250	19.5
25	25	50 558 307	51 558 307	£1.66	-	-	600	830	90	4.3
	50	50 559 307	51 559 307	£1.66	52 559 307	£2.26	600	820	170	8.4
	100	50 560 307	51 560 307	£1.66	52 560 307	£2.26	600	890	200	16.7
	150	50 561 307	51 561 307	£1.66	-	-	600	890	290	25.1
32	25	50 558 308	51 558 308	£2.78	-	-	700	960	100	6.8
	50	50 559 308	51 559 308	£2.78	52 559 308	£3.76	700	1020	150	13.9
	100	50 560 308	51 560 308	£2.78	52 560 308	£3.76	700	1090	220	27.8
	150	50 561 308	51 561 308	£2.78	52 561 308	£3.76	700	1090	310	41.7
50	25	50 558 310	51 558 310	£9.94	-	-	1300	1500	150	16.2
	50	50 559 310	51 559 310	£9.94	-	-	1300	1410	150	32.5
	100	50 560 310	51 560 310	£9.94	-	-	1300	1560	220	66.6
	150	50 561 310	51 561 310	£9.94	-	-	1300	1690	220	99.9
63	25	50 558 311	51 558 311	£10.55	-	-	1300	1600	190	25.8
	50	50 559 311	51 559 311	£10.55	52 559 311	£14.20	1300	1780	190	52.7
	100	50 560 311	51 560 311	£10.55	52 560 311	£14.20	1300	1960	280	105.3
	150	50 561 311	51 561 311	£10.55	-	-	1300	2130	280	158.0
90	50	-	-	-	25 559 313	£27.55	1800	2360	360	105.0
	100	-	-	-	25 560 313	£27.55	1800	2540	450	210.0
125	50	-	-	-	25 559 315	£50.60	2500	3000	500	201.0
	100	-	-	-	25 560 315	£50.60	2500	3250	560	403.0
180	50	-	-	-	25 559 318	£104.60	3000	3720	540	417.0
	100	-	-	-	25 560 318	£104.60	3000	3720	900	834.0

* Yellow PE80 pipe up to 63mm are solid yellow PE80 (codes starting '52'), from 75mm to 225mm pipes are coextruded yellow PE80 over black PE80 (codes starting '25'). It is not peelable and must be scraped as normal prior to electrofusion jointing. It does NOT require scraping back to the black core.

** SDR 9 only

3^c Coils - SDR11



Size/OD (mm)	Length (m)	Blue Code	Price per Metre	d (mm)	D (mm)	W (mm)	Approx Weight (kg)
32	50	51 845 308	£6.86	700	1020	150	14.0
	100	51 860 308			1090	220	27.9
63	50	51 845 311	£25.95	1300	1780	190	53.0
	100	51 860 311			1960	280	105.5

3^c is a factory clean, capped and coiled pipe solution to negate the need for the lengthy pre-chlorination process prior to installation of potable water pipes. The DWI recognised methodology allows post-installation sterilisation for 30 minutes contact only.

Service Coil Dispenser Bags

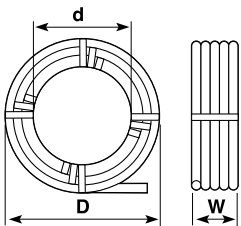


Code	Price each	Weight (kg)
53 590 100	£20.00	0.5

Suitable for 25mm and 32mm pipe coils.

FOR PRESSURISED GAS SUPPLY (and water or sewage duties in service sizes only)

Coils – SDR13.6 (available in Yellow only)

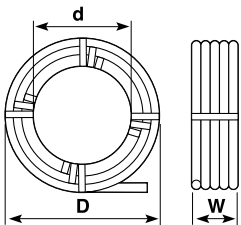


Size/OD (mm)	Length (m)	Yellow Code	Price per Metre	d (mm)	D (mm)	W (mm)	Approx Weight (kg)
63	50	52 577 311	£12.80	1400	1765	230	42.4
	100	52 578 311			1940	330	84.7
	150	52 579 311			2075	400	127.1
75	50	25 577 312	£13.20	1520	1800	410	60.0
	100	25 578 312			2050	410	120.0

* Yellow PE80 pipe up to 63mm are solid yellow PE80 (codes starting '52'), from 75mm to 225mm pipes are coextruded yellow PE80 over black PE80 (codes starting '25').

It is not peelable and must be scraped as normal prior to electrofusion jointing. It does NOT require scraping back to the black core.

Coils – SDR17.6 (available in Yellow only)

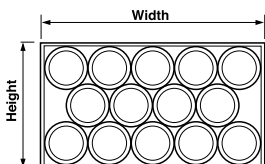


Size/OD (mm)	Length (m)	Yellow Code	Price per Metre	d (mm)	D (mm)	W (mm)	Approx Weight (kg)
90	50	25 569 313	£17.90	2500	2960	270	71.0
	150	25 570 313			3040	360	142.0
125	50	25 569 315	£34.55	3000	3500	375	136.0
	150	25 570 315			3700	500	272.0
140	50	25 569 316	£43.20	3000	3300	500	162.0
	150	25 570 316			3300	550	324.0
180	50	25 569 318	£71.10	3000	3720	540	281.0
	100	25 570 318			3720	900	563.0

* Yellow PE80 pipe up to 63mm are solid yellow PE80 (codes starting '52'), from 75mm to 225mm pipes are coextruded yellow PE80 over black PE80 (codes starting '25').

From 75mm to 225mm, yellow pipes are coextruded yellow PE80 over black PE80. It is not peelable and must be scraped as normal prior to electrofusion jointing. It does NOT require scraping back to the black core.

Lengths & Bundles



Size/OD (mm)	Length (m)	No / Bundle	Width (mm)	Height (mm)	Approx Weight		
					SDR11 (kg)	SDR13.6 (kg)	SDR17/17.6 * (kg)
63	6	210	1238	750	1334	1099	-
	12	210	1238	750	2659	-	-
75	6	160	959	750	-	1221	-
	12	-	-	-	-	-	-
90	6	100	1188	795	1290	-	848
	12	100	1188	795	2571	-	1688
125	6	50	1238	750	1251	-	811
	12	50	1238	750	2493	-	1613
140	6	45	1238	717	-	-	890
	12	45	1238	717	-	-	1755
180	6	22	1188	730	1130	-	741
	12	22	1188	730	2253	-	1476

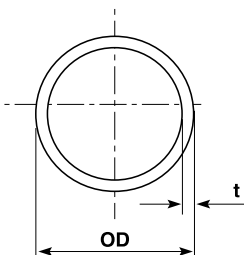
Straight Lengths – SDR21



Available in sizes from 250mm and upwards, Excel NY (New Yellow) gas pipe is coextruded yellow PE80 over PE100RC. It is not peelable and must be scraped as normal prior to electrofusion jointing. It does NOT require scraping back to the black core.

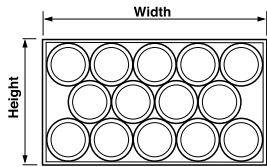
Size/OD (mm)	Yellow 6M Code	Yellow 12M Code	Price per Metre
250	29 519 321	29 539 321	£119.80
280	29 519 322	29 539 322	£156.40
315	29 519 323	29 539 323	£190.00
355	29 519 324	29 539 324	£240.00
400	29 519 325	29 539 325	£305.60
450	29 519 326	29 539 326	£387.20
500	29 519 327	29 539 327	£477.50
560	29 519 328	29 539 328	£561.40
630	29 519 329	29 539 329	£711.60
710	29 519 330	29 539 330	P.O.A.
800	29 519 332	29 539 332	P.O.A.

Pipe Dimensions



Size * (mm)	Min OD (mm)	Max OD (mm)	Mean Bore (mm)	Min t (mm)	Max t (mm)	Mean Weight (kg/m)
250	250	251.5	225.0	11.9	13.3	9.0
280	280	281.7	252.0	13.3	14.8	11.3
315	315	316.9	284.0	15.0	16.7	14.3
355	355	357.2	320.0	16.9	18.8	18.2
400	400	402.4	361.0	19.1	21.3	23.1
450	450	452.7	406.0	21.5	23.9	29.3
500	500	503.0	451.0	23.9	26.5	36.1
560	560	563.4	505.0	26.7	29.6	45.2
630	630	633.8	569.0	30.0	33.2	57.1
710	710	714.0	649.1	33.8	37.3	72.5
800	800	804.0	721.8	38.1	42.1	91.9

Lengths & Bundles – SDR21



Size (mm)	Length (m)	No / Bundle	Width (mm)	Height (mm)	Weight (Kg)
250	6	4	1000	360	243
	12	4	1000	360	482
280	6	4	1120	390	307
	12	4	1120	390	610
315	6	3	945	425	282
	12	3	945	425	560
355	6	3	1065	465	356
	12	3	1065	465	707
400	6	3	1200	510	445
	12	3	1200	510	886
450	6	3	1350	560	559
	12	3	1350	560	1114
500	6	2	1000	610	457
	12	2	1000	610	911
560	6	2	1120	670	567
	12	2	1120	670	1130
630	6	2	1260	740	709
	12	2	1260	740	1416
710	6	2	1420	820	894
	12	2	1420	820	1785
800	6	1	800	910	564
	12	1	800	910	1126

Note: due to continuous development, bundle sizes and weights may vary from that shown.

EXCEL (PE100) ORANGE PIPE

FOR 7 BAR PRESSURISED GAS SUPPLY

Straight Lengths – SDR11

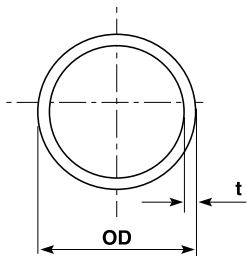


GPS 7 bar gas pipe is coextruded Orange and Black PE100RC.

It is not peelable and must be scraped as normal prior to electrofusion jointing.
It does NOT require scraping back to the black core.

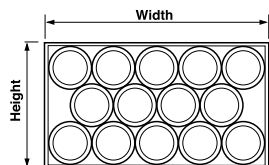
Size/OD (mm)	Orange 6M Code	Orange 12M Code	Price per Metre
75	48 512 312	48 527 312	P.O.A.
90	48 512 313	48 527 313	P.O.A.
125	48 512 315	48 527 315	P.O.A.
180	48 512 318	48 527 318	P.O.A.
250	48 512 321	48 527 321	P.O.A.
315	48 512 323	48 527 323	P.O.A.
355	48 512 324	48 527 324	P.O.A.
400	48 512 325	48 527 325	P.O.A.
450	48 512 326	48 527 326	P.O.A.
500	48 512 327	48 527 327	P.O.A.
560	48 512 328	48 527 328	P.O.A.
630	48 512 329	48 527 329	P.O.A.

Pipe Dimensions



Size * (mm)	Max OD (mm)	Mean Bore (mm)	Min t (mm)	Max t (mm)	Mean Weight (kg/m)
75	75.5	-	6.8	7.6	1.5
90	90.6	73.0	8.2	9.2	3.0
125	125.8	101.0	11.4	12.7	4.0
180	181.1	146.0	16.4	18.2	9.0
250	251.5	203.0	22.7	25.1	16.0
315	316.9	256.0	28.6	31.7	26.0
355	357.2	288.1	32.3	35.7	33.0
400	402.4	325.0	36.4	40.2	41.0
450	452.7	365.0	41.0	45.3	52.0
500	503.0	406.0	45.5	50.3	64.0
560	563.4	455.0	50.8	56.1	81.0
630	633.8	521.0	57.2	63.1	102.0

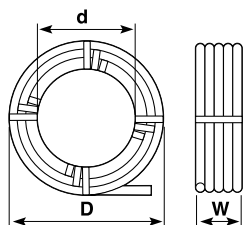
Lengths & Bundles – SDR11



Size (mm)	Length (m)	No / Bundle	Width (mm)	Height (mm)	Weight (Kg)
75	6	160	1238	750	1404
	12	160	1238	750	2808
90	6	100	1188	795	1306
	12	100	1188	795	2604
125	6	50	1238	750	1256
	12	50	1238	750	2504
180	6	22	1188	730	1144
	12	22	1188	730	2281
250	6	11	1112	770	1099
	12	11	1112	770	2191
315	6	8	1060	947	1264
	12	3	945	440	889
355	6	8	1188	1049	1608
	12	3	1065	480	1171
400	6	3	1200	510	763
	12	3	1200	510	1521
450	6	3	1350	560	965
	12	3	1350	560	1926
500	6	2	1000	610	793
	12	2	1000	610	1584
560	6	2	1120	670	990
	12	2	1120	670	1977
630	6	2	1260	740	1245
	12	2	1260	740	2487

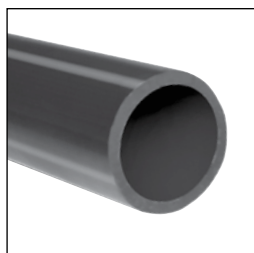
Note: due to continuous development, bundle sizes and weights may vary from that shown.

Coils – SDR11



Size/OD (mm)	Length (m)	Orange Code	Price per Metre	d (mm)	D (mm)	W (mm)	Approx Weight (kg)
75	50	48 559 312	P.O.A.	1500	1900	310	73.0
	100	48 560 312	P.O.A.	1500	2300	310	145.0
90	50	48 559 313	P.O.A.	1800	2360	360	106.0
	100	49 560 313	P.O.A.	1800	2540	450	212.0
125	50	48 559 315	P.O.A.	2500	3000	500	204.0
	100	49 560 315	P.O.A.	2500	3250	560	408.0
180	50	48 559 318	P.O.A.	3000	3720	540	423.0
	100	49 560 318	P.O.A.	3000	3720	900	845.0

Straight Lengths



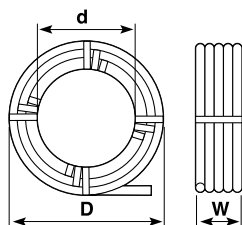
Enviro-Line is black with four green stripes, manufactured in accordance with WRAS IGN 9-02-05.

Manufactured in PE80 up to 63mm and PE100 from 90mm.

Manufactured in accordance with BS EN 12201-2, see pages 5 and 9 for pipe and bundle dimensions.

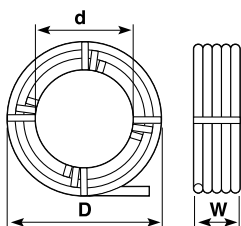
Size (mm)	Length (m)	SDR11 Code	Price per Metre	SDR17 Code	Price per Metre
63	6	23 512 311	£12.15	-	-
	12	23 527 311	£12.15	-	-
90	6	23 512 313	£27.05	23 506 313	£18.20
	12	23 527 313	£27.05	23 507 313	£18.20
110	6	23 512 314	£41.80	23 506 314	£27.25
	12	23 527 314	£41.80	23 507 314	£27.25
125	6	23 512 315	£54.50	23 506 315	£35.35
	12	23 527 315	£54.50	23 507 315	£35.35
160	6	23 512 317	£89.60	23 506 317	£57.10
	12	23 527 317	£89.60	23 507 317	£57.10
180	6	23 512 318	£111.50	23 506 318	£72.30
	12	23 527 318	£111.50	23 507 318	£72.30
200	6	23 512 319	£124.90	23 506 319	£90.20
	12	23 527 319	£124.90	23 507 319	£90.20
225	6	23 512 320	£168.60	23 506 320	£113.00
	12	23 527 320	£168.60	23 507 320	£113.00
250	6	23 512 321	£207.20	23 506 321	£139.10
	12	23 527 321	£207.20	23 507 321	£139.10
280	6	23 512 322	£266.70	23 506 322	£181.60
	12	23 527 322	£266.70	23 507 322	£181.60
315	6	23 512 323	£328.80	23 506 323	£220.70
	12	23 527 323	£328.80	23 507 323	£220.70
355	6	23 512 324	£417.60	23 506 324	£278.80
	12	23 527 324	£417.60	23 507 324	£278.80

Coils – SDR11



Size (mm)	Length (m)	SDR11 Code	Price per Metre	d (mm)	D (mm)	W (mm)	Approx Weight (kg)
25	50	23 559 307	£1.92	600	820	170	8.4
	100	23 560 307	£1.92		890	200	16.7
32	50	23 559 308	£3.20	700	1020	150	13.9
	100	23 560 308	£3.20		1090	220	27.8
40	50	23 559 309	£7.38	1300	1500	220	21.5
	100	23 560 309	£7.38		1700	220	43.0
50	50	23 559 310	£11.45	1300	1410	150	32.5
	100	23 560 310	£11.45		1560	220	66.6
63	50	23 559 311	£12.15	1300	1780	190	52.7
	100	23 560 311	£12.15		1960	280	105.3
90	50	23 559 313	£27.05	1800	2360	360	106.0
	100	23 560 313	£27.05		2540	450	212.0
110	50	23 559 314	£41.80	2500	2700	450	160.0
	100	23 560 314	£41.80		2900	570	318.0
125	50	23 559 315	£54.50	2500	3000	500	204.0
	100	23 560 315	£54.50		3250	560	408.0
160	50	23 559 317	£89.60	3000	3900	490	337.0
	100	23 560 317	£89.60		3900	650	670.0
180	50	23 559 318	£111.50	3000	3720	550	422.5
	100	23 560 318	£111.50		3720	900	845.0

Coils – SDR17



Size (mm)	Length (m)	SDR17 Code	Price per Metre	d (mm)	D (mm)	W (mm)	Approx Weight (kg)
90	50	23 548 313	£18.20	2500	3100	270	69.5
	100	23 549 313	£18.20		3300	360	139.0
110	50	23 548 314	£27.25	2500	2800	450	104.0
	100	23 549 314	£27.25		3100	570	206.0
125	50	23 548 315	£35.35	2500	3500	400	133.0
	100	23 549 315	£35.35		3750	500	266.0
160	50	23 548 317	£57.10	3000	3900	490	220.0
	100	23 549 317	£57.10		3900	650	438.0
180	50	23 548 318	£72.30	3000	3720	550	274.5
	100	23 549 318	£72.30		3720	900	549.0

Straight Lengths



Size* (mm)	SDR	Pressure Rating (bar)	Material	Blue 6M Code	Blue 12M Code	Price per Metre
63	11	12.5	PE80 (MDPE)	44 512 311	-	£27.95
90	11	16	PE100 (Excel)	44 512 313	44 527 313	£34.10
	17	10	PE100 (Excel)	44 653 313	44 654 313	£29.40
110	11	16	PE100 (Excel)	44 512 314	44 527 314	£46.90
	17	10	PE100 (Excel)	44 653 314	44 654 314	£39.05
125	11	16	PE100 (Excel)	44 512 315	44 652 315	£58.50
	17	10	PE100 (Excel)	44 653 315	44 654 315	£44.10
160	11	16	PE100 (Excel)	44 512 317	44 652 317	£73.80
	17	10	PE100 (Excel)	44 653 317	44 654 317	£53.90
180	11	16	PE100 (Excel)	44 512 318	44 652 318	£78.10
	17	10	PE100 (Excel)	44 653 318	44 654 318	£58.80
225	11	16	PE100 (Excel)	44 512 320	44 652 320	£102.10
	17	10	PE100 (Excel)	44 653 320	44 654 320	£70.90
250	11	16	PE100 (Excel)	44 512 321	44 652 321	£108.70
	17	10	PE100 (Excel)	44 653 321	44 654 321	£87.20
280	11	16	PE100 (Excel)	44 512 322	44 652 322	£130.50
	17	10	PE100 (Excel)	44 653 322	44 654 322	£101.90
315	11	16	PE100 (Excel)	44 512 323	44 652 323	£155.40
	17	10	PE100 (Excel)	44 653 323	44 654 323	£115.40
355	11	16	PE100 (Excel)	44 512 324	44 527 324	£174.30
	17	10	PE100 (Excel)	44 653 324	44 654 324	£127.90
400	11	16	PE100 (Excel)	44 512 325	44 527 325	£191.70
	17	10	PE100 (Excel)	44 506 325	44 507 325	£154.90
450	11	16	PE100 (Excel)	44 512 326	44 527 326	£236.00
	17	10	PE100 (Excel)	44 506 326	44 507 326	£188.60
500	11	16	PE100 (Excel)	44 512 327	44 527 327	£285.20
	17	10	PE100 (Excel)	44 506 327	44 507 327	£231.80
560	11	16	PE100 (Excel)	44 512 328	44 527 328	£350.50
	17	10	PE100 (Excel)	44 506 328	44 507 328	£279.80
630	11	16	PE100 (Excel)	44 512 329	44 527 329	£440.70
	17	10	PE100 (Excel)	44 506 329	44 507 329	£347.20

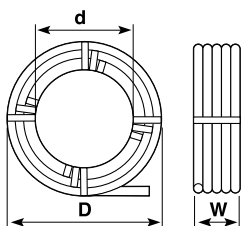
Only Protecta-Line fittings shall be used with Protecta-Line pipe. The use of alternative fittings will have the following effects on your Protecta-Line system:

- Invalidation of WRAS approval and manufacturer's system performance warranty.
- Compromised permeation resistance (causing non-compliance with WIS 4-32-19 and possible risks to health).
- Danger of pipe-layer delamination, compromising system performance integrity and risking pipe bursts.
- It is illegal to install fittings non-compliant with the Water Fittings Regulations (or Byelaws in Scotland).



WIS 4-32-19
Km 514626

Coils

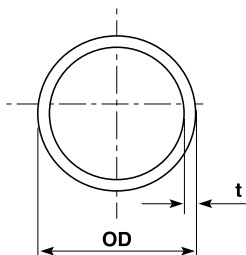


Size* (mm)	SDR	Pressure Rating (bar)	Material	Blue 25M Code	50M Code	100M Code	Price per Metre
25	11	12.5	PE80 (MDPE)	44 658 307	44 659 307	-	£7.91
32	11	12.5	PE80 (MDPE)	44 658 308	44 659 308	-	£10.20
63	11	12.5	PE80 (MDPE)	44 658 311	44 659 311	44 660 311	£27.95
90	11	16	PE100 (Excel)	-	44 659 313	44 660 313	£34.10
	17	10	PE100 (Excel)	-	44 655 313	44 656 313	£29.40
110	11	16	PE100 (Excel)	-	44 659 314	44 660 314	£46.90
	17	10	PE100 (Excel)	-	44 655 314	44 656 314	£39.05
125	11	16	PE100 (Excel)	-	44 659 315	44 660 315	£58.50
	17	10	PE100 (Excel)	-	44 655 315	44 656 315	£44.10
160	11	16	PE100 (Excel)	-	44 659 317	44 660 317	£73.80
	17	10	PE100 (Excel)	-	44 655 317	44 656 317	£53.90
180	11	16	PE100 (Excel)	-	44 659 318	44 660 318	£78.10
	17	10	PE100 (Excel)	-	44 655 318	44 656 318	£58.80

* The size is the nominal core pipe outside diameter.

Other diameters, SDRs and lengths can be made to order subject to a minimum order value.

Pipe Dimensions

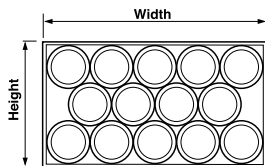


Size * (mm)	SDR	Min OD (mm)	Max OD (mm)	Mean Bore (mm)	Min Wall Thickness (mm)	Max Wall Thickness (mm)	Approx Weight (kg/m)
25	11	26.2	27.4	20.0	3.0	3.7	0.3
32	11	33.3	34.5	26.0	3.7	4.4	0.4
63	11	64.3	65.6	50.9	6.5	7.6	1.3
90	11	92.2	93.5	72.9	9.3	10.7	2.6
	17	92.2	93.5	78.8	6.5	7.5	1.9
110	11	112.2	113.5	89.2	11.1	12.7	3.7
	17	112.2	113.5	96.3	7.7	8.8	2.7
125	11	127.2	128.5	101.2	12.5	14.2	4.7
	17	127.2	128.5	109.6	8.5	9.8	3.4
160	11	163.2	165.1	130.4	15.8	17.9	7.6
	17	163.2	165.1	141.1	10.7	12.4	5.4
180	11	183.3	185.4	146.8	17.6	20.0	9.5
	17	183.3	185.4	158.8	11.9	13.7	6.8
225	11	227.3	229.5	182.5	21.7	24.4	14.5
	17	227.3	229.5	197.4	14.6	16.6	10.3
250	11	252.3	254.9	203.0	23.9	26.8	17.7
	17	252.3	254.9	219.6	16.0	18.3	12.4
280	11	282.3	285.1	227.4	26.6	29.8	22.0
	17	282.3	285.1	245.9	17.8	20.1	15.4
315	11	317.3	320.2	255.7	29.8	33.3	27.6
	17	317.3	320.2	276.6	19.9	22.4	19.3
355	11	357.3	360.6	288.3	33.4	37.3	34.8
	17	357.3	360.6	311.6	22.3	25.1	24.3
400	11	402.3	405.8	324.8	37.5	41.8	43.9
	17	402.3	405.8	351.3	24.9	27.9	30.4
450	11	452.3	456.1	365.4	42.1	46.8	55.3
	17	452.3	456.1	395.2	27.9	31.2	38.2
500	11	502.3	506.4	406.0	46.6	51.8	67.9
	17	502.3	506.4	439.0	30.9	34.5	46.9
560	11	562.3	566.8	454.9	52.0	57.7	84.7
	17	562.3	566.8	491.8	34.4	38.4	58.4
630	11	632.3	637.2	511.6	58.4	64.8	106.9
	17	632.3	637.2	553.2	38.6	43.0	73.6

* The size is the nominal core pipe outside diameter

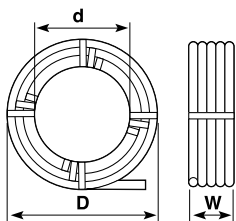
Other diameters, SDRs and lengths can be made to order subject to a minimum order value.

Lengths & Bundles



Size (mm)	Length (m)	No/Bundle	Width (mm)	Height (mm)	Weight SDR11 (Kg)	Weight SDR17 (Kg)
63	6	210	1238	750	1616	-
90	6/12	100	1188	795	1558/3116	1139/2278
110	6/12	67	1238	795	1488/2979	1088/2179
125	6/12	50	1238	750	1427/2839	1032/2054
160	6/12	33	1238	795	1455/2895	1040/2069
180	6/12	22	1188	730	1226/2553	870/1812
225	6/12	5	1125	335	436/872	310/620
250	6/12	4	1000	360	429/858	301/602
280	6/12	4	1120	390	529/1058	369/738
315	6/12	3	945	425	501/1002	350/700
355	6/12	3	1065	465	631/1261	440/880
400	6/12	3	1200	510	793/1586	550/1103
450	6/12	3	1350	560	998/1996	691/1385
500	6/12	2	1000	610	818/1635	566/1137
560	6/12	2	1120	670	1019/2038	704/1412
630	6/12	2	1260	740	1286/2571	886/1777

Coil Dimensions

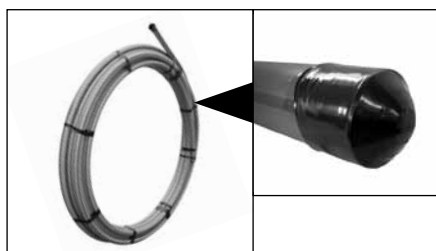


Size (mm)	Coil Length (m)	d (mm)	D (mm)	W (mm)	Approx Weight (Kg)
25	25	1000	1200	200	7.5
	50				15
32	25	1000	1200	200	10
	50				20
63	25	1900	2200	200	32
	50		2300	200	63
	100		2400	300	126
90	50	2500	3100	300	122
	100		3300	400	244
110	50	2500	2900	500	178
	100		3200	600	355
125	50	2500	3000	500	162
	100		3200	700	323
160	50	3000	3900	500	256
	100		3900	700	512
180	50	3000	4000	600	320
	100		4000	700	640

* The nominal size is the nominal core pipe outside diameter.

Due to continuous development, bundle sizes and weights may vary from that shown.

Protecta-Line 3^C

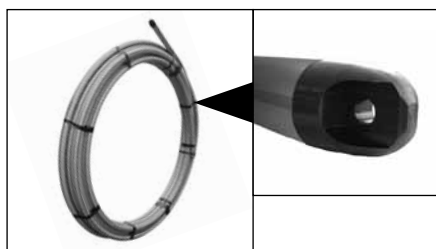


NEW PRODUCT

Size* (mm)	SDR	Pressure Rating (bar)	Blue 50M Code	Blue 75M Code	Blue 100M Code	Price per Metre
90	11	16	44 845 313	44 862 313	44 860 313	P.O.A
110	11	16	44 845 314	44 862 314	44 860 314	P.O.A
125	11	16	44 845 315	44 862 315	44 860 315	P.O.A
	17	10	44 846 315	44 847 315	44 849 315	P.O.A
160	17	10	44 846 317	44 847 317	44 849 317	P.O.A
180	11	16	44 845 318	44 862 318	44 860 318	P.O.A
	17	10	44 846 318	44 847 318	44 849 318	P.O.A

Protecta-Line 3^C is a factory clean, capped and coiled pipe solution to negate the need for the lengthy pre-chlorination process prior to installation of potable water pipes. The DWI recognised methodology allows post-installation sterilization for 30 minutes contact only.

Protecta-Line 3^{CTH}



NEW PRODUCT

Size* (mm)	SDR	Pressure Rating (bar)	Blue 50M Code	Blue 75M Code	Blue 100M Code	Price per Metre
90	11	16	44 850 313	44 851 313	44 852 313	P.O.A
110	11	16	44 850 314	44 851 314	44 852 314	P.O.A
125	11	16	44 850 315	44 851 315	44 852 315	P.O.A
	17	10	44 853 315	44 854 315	44 855 315	P.O.A
160	17	10	44 853 317	44 854 317	44 855 317	P.O.A
180	11	16	44 850 318	44 851 318	44 852 318	P.O.A
	17	10	44 853 318	44 854 318	44 855 318	P.O.A

* The nominal size is the nominal core pipe outside diameter.

Protecta-Line 3^{CTH} is supplied with a factory fitted towing head, ready to be attached to a towing shackle. It is a factory clean, capped and coiled pipe solution to negate the need for the lengthy pre-chlorination process prior to installation of potable water pipes. The DWI recognised methodology allows post-installation sterilization for 30 minutes contact only.

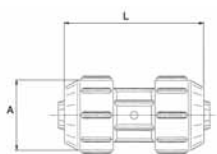
Only Protecta-Line fittings shall be used with Protecta-Line pipe. The use of alternative fittings will have the following effects on your Protecta-Line system:

- Invalidity of WRAS approval and manufacturer's system performance warranty.
- Compromised permeation resistance (causing non-compliance with WIS 4-32-19 and possible risks to health).
- Danger of pipe-layer delamination, compromising system performance integrity and risking pipe bursts.
- It is illegal to install fittings non-compliant with the Water Fittings Regulations (or Byelaws in Scotland).



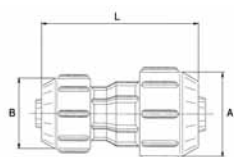
FOR USE ON PROTECTA-LINE PIPES FOR CONNECTING TO STANDARD PE PIPE

PE to PE Couplers



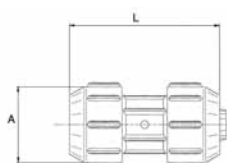
Size (mm)	Black Code	Price Each	A (mm)	L (mm)	Weight (kg)
25 x 25	44 100 307	£9.82	51	93	0.1
32 x 32	44 100 308	£11.85	60	99	0.2
63 x 63	44 100 311	£42.25	105	155	0.7

PE to PE Reducing Couplers



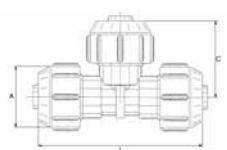
Size (mm)	Black Code	Price Each	A (mm)	B (mm)	L (mm)	Weight (kg)
32 x 25	44 114 409	£15.15	60	51	100	0.2
63 x 25	44 114 412	£49.10	105	81	155	0.6
63 x 32	44 114 415	£49.10	105	105	155	0.8

PE to Copper Couplers



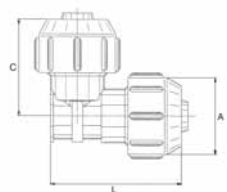
Size (mm)	Black Code	Price Each	A (mm)	L (mm)	Weight (kg)
25 x 15	44 996 005	£10.70	51	93	0.1
25 x 22	44 996 006	£11.20	51	93	0.1
32 x 28	44 996 007	£15.30	60	93	0.2

Equal Tees



Size (mm)	Black Code	Price Each	A (mm)	C (mm)	L (mm)	Weight (kg)
25 x 25	44 122 307	£13.50	51	64	134	0.2
32 x 32	44 122 308	£17.10	60	68	146	0.3
63 x 63	44 122 311	£59.30	105	100	216	1.3

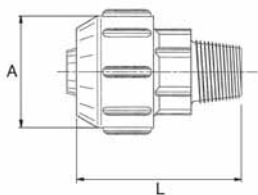
90° Elbows



Size (mm)	Black Code	Price Each	A (mm)	C (mm)	L (mm)	Weight (kg)
25	44 115 307	£9.44	51	68	93	0.1
32	44 115 308	£13.50	60	71	97	0.2
63	44 115 311	£41.90	105	105	158	0.9

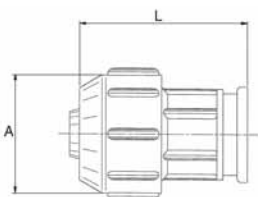
FOR USE ON PROTECTA-LINE PIPES FOR CONNECTING TO STANDARD PE PIPE

End Connectors – PE x Male Iron BSP Tapered



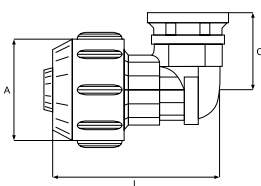
Size (mm x inch)	Black Code	Price Each	A (mm)	L (mm)	Weight (kg)
25 x ¾	44 151 608	£5.52	51	64	0.1
32 x ¾	44 151 611	£7.87	60	74	0.1
32 x 1	44 151 612	£8.01	60	77	0.1
63 x 1½	44 151 628	£26.85	105	100	0.4
63 x 2	44 151 629	£26.85	105	105	0.4

End Connectors – PE x Female Iron BSP Tapered



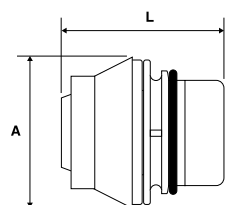
Size (mm x inch)	Black Code	Price Each	A (mm)	L (mm)	Weight (kg)
25 x ¾	44 101 608	£6.30	51	67	0.1
32 x 1	44 101 612	£7.61	60	75	0.1
63 x 2	44 101 629	£31.65	105	100	0.4

90° Elbows – PE x Female Iron BSP Tapered



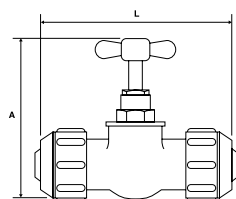
Size (mm x inch)	Black Code	Price Each	A (mm)	C (mm)	L (mm)	Weight (kg)
25 x ¾	44 396 608	£8.50	51	35	73	0.1
32 x 1	44 396 612	£14.15	60	39	80	0.2
63 x 2	44 396 629	£35.35	105	62	145	0.6

Reducing Sets – to allow easy Protecta-Line diameter changes



Size (mm x inch)	Black Code	Price Each	A (mm)	L (mm)	Weight (kg)
32 x 25	44 105 409	£4.59	44	42	0.1
63 x 32	44 105 415	£14.10	80	51	0.2

Stop Cocks – BS 5433 Type



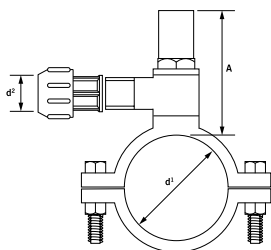
Size (mm x inch)	Black Code	Price Each	A (mm)	L (mm)	Weight (kg)
25*	44 142 307	£67.90	140	135	0.9
32**	44 142 308	£121.00	165	170	1.7

* Includes 22mm copper Type A insert

** Includes 28mm copper Type A insert

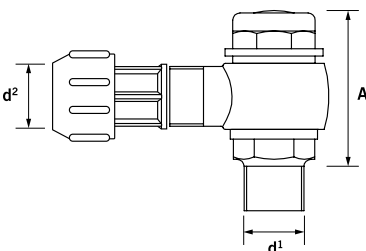
FOR USE ON PROTECTA-LINE PIPES

25mm and 32mm Self-Tapping Ferrule Off-Takes (for 63mm to 355mm Protecta-Line mains)



Size d1 x d2 (mm)	Blue Code	Price Each	A (mm)	Weight (kg)
63 x 25	44 762 412	£93.60	95	0.9
90 x 25	44 762 393	£96.10	95	1.1
110 x 25	44 762 394	£98.00	95	1.1
125 x 25	44 762 395	£102.30	95	1.2
160 x 25	44 762 397	£106.40	95	1.3
180 SDR17 x 25	44 762 398	£110.00	95	1.4
180 SDR11 x 25	44 996 030	£132.10	95	1.4
225 x 25	44 762 400	£219.70	95	1.9
250 x 25	44 762 401	£243.10	95	2.3
280 x 25	44 762 402	£258.30	95	2.5
315 x 25	44 762 403	£271.10	95	3.2
355 x 25	44 762 404	£289.90	95	3.3
63 x 32	44 762 415	£108.50	100	1.2
90 x 32	44 762 417	£112.50	100	1.3
110 x 32	44 762 418	£114.00	100	1.4
125 x 32	44 762 419	£115.40	100	1.4
160 x 32	44 762 421	£117.70	100	1.5
180 SDR17 x 32	44 762 422	£120.80	100	1.6
180 SDR11 x 32	44 996 031	£143.90	100	1.6
225 x 32	44 762 424	£245.40	100	2.1
250 x 32	44 762 425	£273.50	100	2.5
280 x 32	44 762 426	£287.50	100	2.7
315 x 32	44 762 427	£301.50	100	3.4
355 x 32	44 762 428	£334.30	100	3.5

Ductile Iron Ferrule



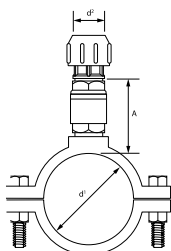
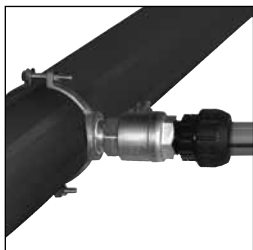
Size d1 x d2 (mm)	Blue Code	Price Each	A (mm)	Weight (kg)
25mm x 3/4 MI	44 762 407	£39.80	60	0.5

Only Protecta-Line fittings shall be used with Protecta-Line pipe. The use of alternative fittings will have the following effects on your Protecta-Line system:

- Invalidation of WRAS approval and manufacturer's system performance warranty.
- Compromised permeation resistance (causing non-compliance with WIS 4-32-19 and possible risks to health).
- Danger of pipe-layer delamination, compromising system performance integrity and risking pipe bursts.
- It is illegal to install fittings non-compliant with the Water Fittings Regulations (or Byelaws in Scotland).



FOR USE ON PROTECTA-LINE PIPES

63mm Off-Takes (for 90mm to 355mm Protecta-Line mains)

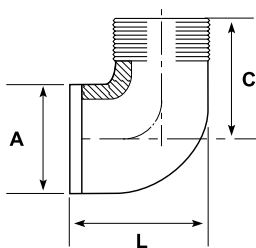
Size (mm) d1 x d2	Blue Code	Price Each	A (mm)	Weight (kg)
90 x 63	44 762 459	£326.10	155	3.4
110 x 63	44 762 460	£330.80	155	3.8
125 x 63	44 762 461	£351.80	155	3.8
160 x 63	44 762 463	£361.20	155	3.9
180 x 63	44 762 464	£371.70	155	3.9
225 x 63	44 762 466	£400.90	155	5.0
250 x 63	44 762 467	£413.70	155	5.1
280 x 63	44 762 468	£427.80	155	5.3
315 x 63	44 762 469	£447.60	155	5.5
355 x 63	44 762 470	£462.80	155	6.1

Fitting includes 1 x 63mm PE x Male Iron BSP Tapered End Connector.

Drill and Liner Tool Heads (for use with 63mm Off-Takes)

Size (mm) d1 x d2	Blue Code	Price Each
Protecta-Line 2" Drill Head	44 794 003	£136.50
Protecta-Line 2" Liner Head	44 794 004	£136.50
Protecta-Line Drill/Liner Head O-Ring Kit	44 996 062	£2.11

* O-Ring Kit enables user to service one Drill Head or one Liner Head.

90° Gunmetal Elbows (optional for use with 63mm Off-Takes)

Size (mm)	Blue Code	Price Each	A (mm)	C (mm)	L (mm)	Weight (kg)
2" MI x 2" FI	44 996 050	£80.00	72	70	90	0.9

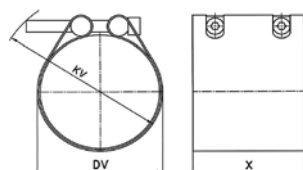
Only Protecta-Line fittings shall be used with Protecta-Line pipe. The use of alternative fittings will have the following effects on your Protecta-Line system:

- Invalidation of WRAS approval and manufacturer's system performance warranty.
- Compromised permeation resistance (causing non-compliance with WIS 4-32-19 and possible risks to health).
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FOR USE ON PROTECTA-LINE PIPES

Outer Shells



full sized shell

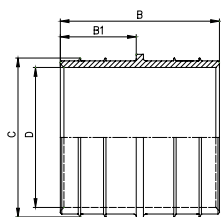


half sized shell

Size (mm)	DV (mm)	KV (mm)	X (mm)	Y (mm)	Hex Size (mm)	Bolts	Torque (NM)
63	64	94	95	48	10	M12	50
90	94	120	95	48	10	M12	60
110	113	139	110	55	10	M12	60
125	129	155	110	55	10	M12	60
160	165	188	110	55	14	M16	150
180	184	216	110	55	14	M16	160

Protecta-Line Mechanical Fittings are supplied as a full set of liner insert and outer shell(s). Flange bolts and gaskets are not included. Weights shown are for the complete product. Information given for flange bolt torque values is for metal to metal connections. Drilled to BS EN 1092-1:2007 Table 13.

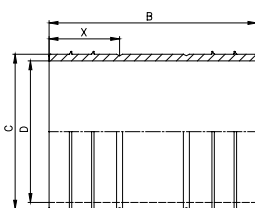
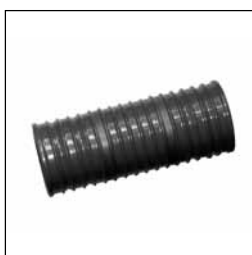
Couplers



Size (mm)	SDR	Blue Code	Price Each	B (mm)	B1 (mm)	C (mm)	D (mm)	Weight (kg)
63	11	PM 110 311	£74.80	95	45	50	41	1.5
90	11	PM 100 313	£104.70	95	45	71	62	2.0
	17	PM 109 313	£102.70	95	45	tbc	tbc	tbc
110	11	PM 100 314	£154.00	110	53	88	76	2.6
	17	PM 109 314	£151.00	110	53	tbc	tbc	tbc
125	11	PM 100 315	£239.20	110	53	100	87	3.1
	17	PM 109 315	£234.50	110	53	108	95	3.0
160	11	PM 100 317	£320.30	110	53	128	114	4.4
	17	PM 109 317	£314.00	110	53	139	125	4.3
180	11	PM 100 318	£334.80	110	53	144	127	4.5
	17	PM 109 318	£328.20	110	53	156	139	4.8

Supplied as a set with 1 full shell.

Repair Couplers

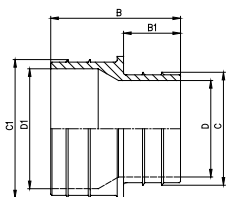


Size (mm)	SDR	Blue Code	Price Each	B (mm)	X (mm)	C (mm)	D (mm)	Weight (kg)
63	11	PM 246 311	£180.40	195	48	50	40	1.0
90	11	PM 246 313	£203.10	195	48	71	61	2.4
	17	PM 245 313	£199.10	195	55	tbc	tbc	tbc
110	11	PM 246 314	£263.80	210	55	88	75	3.0
	17	PM 245 314	£258.70	210	55	tbc	tbc	tbc
125	11	PM 246 315	£322.90	210	55	100	86	4.0
	17	PM 245 315	£313.20	210	55	108	94	4.4
160	11	PM 246 317	£548.00	210	55	128	114	5.7
	17	PM 245 317	£537.20	210	55	139	124	6.0
180	11	PM 246 318	£705.30	210	55	144	127	6.6
	17	PM 245 318	£691.40	210	55	156	140	7.0

Supplied as a set with 2 half shells.

Other repair liner lengths may be available on request.

Reducers

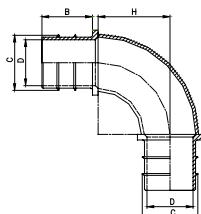


Size (mm)	SDR	Blue Code	Price Each	B (mm)	B1 (mm)	C (mm)	C1 (mm)	D (mm)	D1 (mm)	Weight (kg)
90 x 63	11	PM 441 459	£205.10	95	45	50	71	41	62	2.0
110 x 90	11	PM 441 483	£258.10	103	53/45	71	88	62	76	2.5
	17	PM 440 483	£253.00	103	53/45	tbc	tbc	tbc	tbc	2.5
125 x 110	11	PM 441 493	£314.40	110	53	88	114	76	87	3.2
	17	PM 440 493	£314.40	110	53	88	100	tbc	tbc	3.2
160 x 125	11	PM 441 504	£525.50	110	53	100	128	88	114	4.8
	17	PM 440 504	£515.20	110	53	108	139	95	125	4.8
180 x 125	17	PM 440 505	£650.50	110	53	108	156	95	139	6.0

* 125mm SDR17 x 110mm SDR11.

Supplied as a set with 2 half shells.

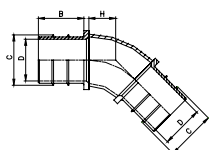
90° Elbows



Size (mm)	SDR	Blue Code	Price Each	B (mm)	C (mm)	D (mm)	H (mm)	Weight (kg)
63	11	PM 209 311	£160.10	45	50	41	69	2.1
90	11	PM 210 313	£262.60	45	71	62	97	3.4
	17	PM 208 313	£257.40	45	tbc	tbc	tbc	3.4
110	11	PM 210 314	£287.10	53	88	76	122	4.4
	17	PM 208 314	£281.50	53	tbc	tbc	tbc	4.4
125	11	PM 210 315	£373.70	53	100	87	138	6.1
	17	PM 208 315	£366.40	53	108	95	147	5.8
160	11	PM 210 317	£549.20	53	128	114	180	9.3
	17	PM 208 317	£538.40	53	139	125	195	10.1
180	11	PM 210 318	£699.00	53	144	127	200	10.6
	17	PM 208 318	£685.30	53	156	139	226	11.5

Supplied as a set with 2 half shells.

45° Elbows

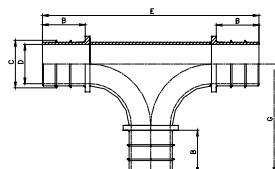


Size (mm)	SDR	Blue Code	Price Each	B (mm)	C (mm)	D (mm)	H (mm)	Weight (kg)
63	11	PM 215 311	£153.80	45	50	41	32	1.8
90	11	PM 216 313	£260.50	45	71	62	43	2.6
	17	PM 214 313	£255.50	45	tbc	tbc	tbc	2.6
110	11	PM 216 314	£285.90	53	88	76	53	3.6
	17	PM 214 314	£280.30	53	tbc	tbc	tbc	3.6
125	11	PM 216 315	£363.90	53	100	87	60	4.9
	17	PM 214 315	£356.70	53	108	95	64	4.9
160	11	PM 216 317	£581.60	53	128	114	78	7.4
	17	PM 214 317	£570.20	53	139	125	84	7.7
180	11	PM 216 318	£673.90	53	144	127	89	8.1
	17	PM 214 318	£661.00	53	156	139	94	8.2

Supplied as a set with 2 half shells.

FOR USE ON PROTECTA-LINE PIPES

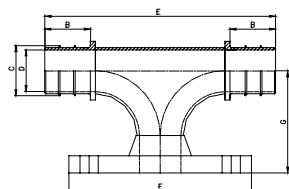
Equal Tees



Size (mm)	SDR	Blue Code	Price Each	B (mm)	C (mm)	D (mm)	E (mm)	G (mm)	Weight (kg)
63	11	PM 221 311	£248.70	45	50	41	214	62	3.0
90	11	PM 222 313	£319.80	45	71	62	252	81	5.3
	17	PM 220 313	£313.50	45	tbc	tbc	tbc	tbc	5.3
110	11	PM 222 314	£428.80	53	88	76	287	91	7.4
	17	PM 220 314	£420.50	53	tbc	tbc	tbc	tbc	7.4
125	11	PM 222 315	£584.90	53	100	87	315	105	7.5
	17	PM 220 315	£573.30	53	108	95	325	110	8.9
160	11	PM 222 317	£896.60	53	128	114	355	125	11.6
	17	PM 220 317	£878.90	53	139	125	363	129	11.6
180	11	PM 222 318	£1,081.70	53	144	127	363	129	12.6
	17	PM 220 318	£1,060.40	53	156	139	401	148	12.6

Supplied as a set with 3 half shells.

Flanged Branch Tees



Size (mm x PN)	SDR	Blue Code	Price Each	Bolts, Qty	Flange Torque (NM ± 10%)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	Weight (kg)
90 x DN80 PN16	11	PM 351 313	£415.40	8 x M16	70	45	71	62	252	200	176	8.9
	17	PM 363 313	£415.40	8 x M16	70	45	tbc	tbc	tbc	200	tbc	8.9
110 x DN80 PN16	11	PM 351 314	£558.40	8 x M16	70	53	88	76	287	200	136	9.5
	17	PM 363 314	£547.30	8 x M16	70	53	tbc	tbc	tbc	200	tbc	9.5
125 x DN80 PN16	17	PM 363 315	£646.80	8 x M16	70	53	108	95	287	200	136	12.0
160 x DN80 PN16	17	PM 363 317	£796.10	8 x M16	70	53	139	125	287	200	161	16.2
180 x DN80 PN16	17	PM 363 318	£879.20	8 x M16	70	53	156	139	325	200	174	19.6
90 x DN100 PN16	11	PM 352 313	£333.80	8 x M16	80	45	71	62	252	220	178	9.1
	17	PM 364 313	£333.80	8 x M16	80	45	tbc	tbc	tbc	220	tbc	9.1
110 x DN100 PN16	11	PM 352 314	£582.10	8 x M16	80	53	88	76	287	220	188	9.7
	17	PM 364 314	£570.50	8 x M16	80	53	tbc	tbc	tbc	220	tbc	9.7
125 x DN100 PN16	17	PM 364 315	£646.80	8 x M16	80	53	108	95	325	220	157	12.2
160 x DN100 PN16	17	PM 364 317	£818.80	8 x M16	80	53	139	125	325	220	169	16.9
180 x DN100 PN16	17	PM 364 318	£1,067.40	8 x M16	80	53	156	139	325	220	182	20.0
160 x DN150 PN16	17	PM 365 317	£857.40	8 x M20	120	53	139	125	363	285	229	20.4
180 x DN150 PN16	17	PM 365 318	£1,091.70	8 x M20	120	53	156	139	401	285	198	23.4

Supplied as a set with 2 half shells (shown on page 30).

Only Protecta-Line fittings shall be used with Protecta-Line pipe. The use of alternative fittings will have the following effects on your Protecta-Line system:

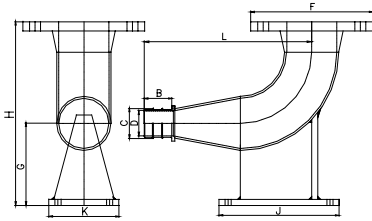
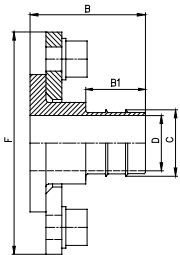
- Invalidity of WRAS approval and manufacturer's system performance warranty.
- Compromised permeation resistance (causing non-compliance with WIS 4-32-19 and possible risks to health).
- Danger of pipe-layer delamination, compromising system performance integrity and risking pipe bursts.
- It is illegal to install fittings non-compliant with the Water Fittings Regulations (or Byelaws in Scotland).



Duck Foot Bends

Size (mm x PN)	SDR	Blue Code	Price Each	Bolts, Qty	Flange Torque (NM ± 10%)	B (mm)	C (mm)	D (mm)	F (mm)	G (mm)	H (mm)	J (mm)	K (mm)	L (mm)	Weight (kg)
63 x DN80 PN16	11	PM 384 459	£284.20	M16 x 8	70	45	50	41	200	135	302	152	90	275	6.8
90 x DN80 PN16	11	PM 384 313	£292.00	M16 x 8	70	45	71	62	200	135	302	152	115	235	7.3
110 x DN80 PN16	11	PM 384 483	£327.90	M16 x 8	70	53	88	76	200	135	302	152	130	231	8.0
125 x DN80 PN16	17	PM 385 484	£350.90	M16 x 8	70	53	108	95	200	135	302	152	150	243	8.7
160 x DN80 PN16	17	PM 385 486	£459.50	M16 x 8	70	53	139	125	200	135	302	152	180	310	10.0
180 x DN80 PN16	17	PM 385 487	£536.30	M16 x 8	70	53	156	140	200	135	302	152	200	347	10.9

Supplied as a set with 1 half shell.

**Stub Flange Adaptors**

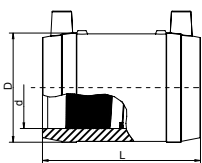
Size (mm x PN)	SDR	Blue Code	Price Each	Flange Bolts Needed	Flange Torque (NM ± 10%)	B (mm)	C (mm)	D (mm)	B1 (mm)	F (mm)	Weight (kg)
63 x DN50 PN16	11	PM 227 311	£115.60	M16 X 4	60	83	50	41	45	165	3.1
63 x DN80 PN16	11	PM 228 311	£149.30	M16 X 8	60	85	50	41	45	200	3.4
90 x DN80 PN16	11	PM 228 313	£152.20	M16 X 8	70	85	71	62	45	200	6.0
	17	PM 226 313	£149.10	M16 X 8	70	85	tbc	tbc	45	200	6.0
110 x DN100 PN16	11	PM 228 314	£169.00	M16 X 8	80	93	88	76	53	220	8.9
	17	PM 226 314	£165.70	M16 X 8	80	93	tbc	tbc	53	220	8.9
125 x DN100 PN16	11	PM 228 315	£248.60	M16 X 8	80	93	100	87	53	220	10.9
	17	PM 226 315	£236.70	M16 X 8	80	93	108	95	53	220	10.9
160 x DN150 PN16	11	PM 228 317	£301.80	M20 X 8	120	105	128	114	53	285	17.9
	17	PM 226 317	£295.90	M20 X 8	120	105	139	125	53	285	17.9
180 x DN150 PN16	11	PM 228 318	£366.40	M20 X 8	120	105	144	127	53	285	21.9
	17	PM 226 318	£359.20	M20 X 8	120	105	156	139	53	285	21.9

Supplied as a set with 1 half shell (shown on page 30).

Protecta-Line Mechanical Fittings are supplied as a full set of liner insert and outer shell(s). Flange bolts and gaskets are not included. Weights shown are for the complete product. Information given for flange bolt torque values is for metal to metal connections. Drilled to BS EN 1092-1:2007 Table 13.

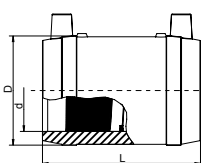
FOR USE ON PROTECTA-LINE PIPES

Couplers - Removable Centre Stop (MB)



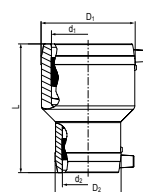
Size (mm)	SDR	Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)	Old Black Code
90	11	PF 612 687	£25.15	119	127	0.4	65	10	PL 100 313
110	11	PF 612 688	£40.45	141.5	135	0.7	120	10	PL 100 314
125	11	PF 612 689	£45.65	158.5	147	1.0	225	15	PL 100 315
160	11	PF 612 691	£72.60	198	164	1.8	360	20	PL 100 317

Couplers - Slideover (UB)



Size (mm)	SDR	Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)	Old Black Code
180	11	PF 612 672	£85.30	220	210	2.1	480	20	PL 100 318
225	11	PF 612 674	£136.20	277	236	4.0	550	20	PL 100 320
250	11	PF 612 675	£199.50	315	246	5.8	620	30	PL 100 321
280	11	PF 615 073	£310.00	347	285	7.7	barcode read	30	PL 100 322
315	11	PF 612 670	£329.00	390	300	10.0	1250	30	PL 100 323
355	11	PF 615 074	£568.60	445	300	16.7	barcode read	30	PL 100 324

Reducers (MR)



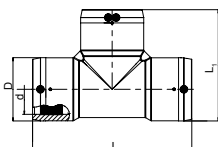
Size (mm) d x d ₁	Black Code	Price Each	D ₁ (mm)	D ₂ (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)	Old Black Code
110 x 90	PF 615 693	£48.25	140	115	180	0.9	180	10	PL 402 483
125 x 90	PF 615 694	£70.20	155	115	200	1.0	240	15	PL 402 484
125 x 110	PL 402 493	£77.20	156	142	201	1.3	240	14	
160 x 110	PF 615 695	£118.70	201	140	230	2.0	300	20	PL 402 495
180 x 125	PL 402 505	£129.00	214	156	276	2.6	300	16	

Equal Tees (T)



Size (mm)	Black Code	Price Each	D ₁ (mm)	L (mm)	L ₁ (mm)	Weight (kg)	Fusion Time (main)* (Sec)	Fusion Time (branch)* (Sec)	Cooling Time (mins)	Old Black Code
90	PF 612 166	£177.00	117	305	211	1.1	90	90	10	PL 408 313
110	PF 612 167	£223.80	142	355	248	2.2	140	160	10	PL 408 314
125	PF 612 168	£257.90	160	384	272	2.7	180	200	15	PL 408 315
160	PF 615 277	£355.50	200	430	315	4.9	400	400	20	PL 408 317
180	PF 615 691	£370.40	228	480	354	7.8	440	440	20	PL 408 318

Supplied factory-wrapped to ensure complete barrier performance.



* Manual fusion times are based on 39.5 volt fusion boxes
4.0mm Terminal Pins

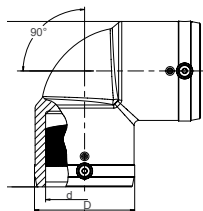
Only Protecta-Line fittings shall be used with Protecta-Line pipe. The use of alternative fittings will have the following effects on your Protecta-Line system:

- Invalidation of WRAS approval and manufacturer's system performance warranty.
- Compromised permeation resistance (causing non-compliance with WIS 4-32-19 and possible risks to health).
- Danger of pipe-layer delamination, compromising system performance integrity and risking pipe bursts.
- It is illegal to install fittings non-compliant with the Water Fittings Regulations (or Byelaws in Scotland).



WIS 4-32-19
Km 514626

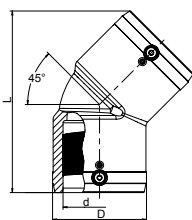
90° Elbows (W90°)



Size (mm)	Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)	Old Black Code
90	PF 612 103	£67.60	115	202	1.0	90	10	PL 104 313
110	PF 612 105	£99.20	138	234	1.6	140	10	PL 104 314
125	PF 612 107	£110.80	157	254	2.0	180	15	PL 104 315
160	PF 615 276	£205.30	207	329	4.9	360	20	PL 104 317
180	PF 615 689	£251.80	228	354	5.8	440	20	PL 104 318

* Manual fusion times are based on 39.5 volt fusion boxes. 4.0mm Terminal Pins.
Some items may only be available to order

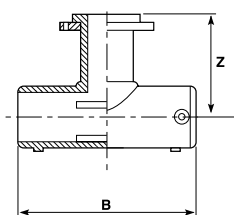
45° Elbows (W45°)



Size (mm)	Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)	Old Black Code
90	PF 612 102	£67.70	115	232	0.8	90	10	PL 105 313
110	PF 612 104	£99.20	138	265	1.3	140	10	PL 105 314
125	PF 612 106	£110.80	157	279	1.8	180	15	PL 105 315
160	PF 615 275	£205.30	207	377	4.4	360	20	PL 105 317
180	PF 615 687	£251.80	228	382	4.6	440	20	PL 105 318

* Manual fusion times are based on 39.5 volt fusion boxes. 4.0mm Terminal Pins.
Some items may only be available to order

Flanged Tees – 39.5 Volt



Supplied factory-wrapped to ensure complete barrier performance.
Dimension Z is an approximate value, based on the dimensions of the component parts. The nature of the fabrication process is such that the final dimension may be slightly less than the Z value quoted.
Drilled to BS EN 1092-1:2007 Table 13.

Size (mm)	Black Code	Price Each	B (mm)	Z (mm)	Weight (kg)	Fusion Time (Sec)	Cooling Time (mins)	Old Black Code
90 x 80 PN16	PF 301 313	£262.70	211	296	2.60	120	10	PL 301 313
110 x 80 PN16	PF 301 314	£401.60	240	515	3.90	160	10	PL 301 314
125 x 80 PN16	PF 301 315	£435.70	280	532	4.70	240	12	PL 301 315
160 x 80 PN16	PF 301 317	£573.70	314	615	6.70	260	14	PL 301 317
180 x 80 PN16	PF 301 318	£687.90	365	834	7.90	440	20	PL 301 318
90 x 100 PN16	PF 302 313	£377.60	211	534	3.20	100	10	PL 302 313
110 x 100 PN16	PF 302 314	£327.20	240	310	3.90	160	10	PL 302 314
125 x 100 PN16	PF 302 315	£370.90	280	301	4.30	240	12	PL 302 315
160 x 100 PN16	PF 302 317	£607.40	314	650	7.60	260	14	PL 302 317
180 x 100 PN16	PF 302 318	£645.60	365	671	9.20	440	20	PL 302 318
160 x 150 PN16	PF 303 317	£540.50	314	410	8.50	260	14	PL 303 317
180 x 150 PN16	PF 303 318	£600.10	365	415	5.20	440	20	PL 303 318

Flange Adaptor Kits



Adaptor Kit comprises of:-

1 x Stub Flange

1 x Gasket

1 X Coupler

1 x Backing Ring

Size (mm)	SDR	Black Code	Price Each	Old Black Code	Size (mm)	SDR	Black Code	Price Each	Old Black Code
90 x 80	11	PF 251 313	£196.20	PL 251 313	250 x 250	17	PF 250 321	£1,314.00	PL 250 321
110 x 100	11	PF 251 314	£210.40	PL 251 314	280 x 250	17	PF 250 322	£1,397.50	PL 250 322
125 x 100	17	PF 250 315	£247.80	PL 250 315	315 x 250	17	PF 250 543	£1,408.00	PL 250 543
160 x 150	17	PF 250 317	£384.60	PL 250 317	315 x 300	17	PF 250 323	£1,468.00	PL 250 323
180 x 150	17	PF 250 318	£440.30	PL 250 318	355 x 300	17	PF 250 547	£1,986.00	PL 250 547
225 x 200	17	PF 250 320	£614.00	PL 250 320	355 x 350	17	PF 250 324	£2,305.00	PL 250 324
250 x 200	17	PF 250 534	£735.20	PL 250 534					

Drilled to BS EN 1092-1:2007 Table 13.

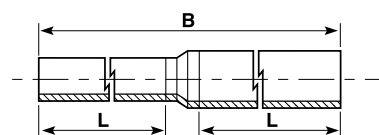
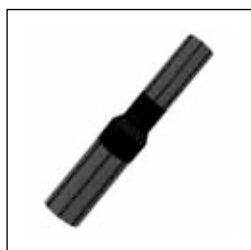
Note: Sizes 250 and 315mm have sections of pipe butt-fused to the moulding.

Protecta-Line Aluminium Wrapping Foil

Description	Black Code	Price Each	Weight (kg)
Al Foil: 50mm x 45m	44 996 008	£21.50	0.5

FOR USE ON PROTECTA-LINE PIPES

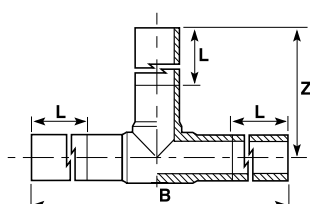
Reducers



Size (mm)	Blue Code SDR11	Price Each	Blue Code SDR17	Price Each	B (mm)	L (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
110 x 90	44 323 483	£76.70	44 322 483	£72.40	1190	500	3.7	2.7
125 x 90	44 323 484	£103.20	44 322 484	£97.05	1200	500	4.4	3.2
160 x 90	44 323 486	£123.70	44 322 486	£117.60	1240	500	6.2	4.6
160 x 110	44 323 495	£189.20	44 322 495	£178.90	1240	500	7.0	5.0
160 x 125	44 323 504	£195.50	44 322 504	£186.40	1230	500	7.5	5.4
180 x 90	44 323 487	£240.90	44 322 487	£225.80	1440	500	7.0	5.0
180 x 125	44 323 505	£192.40	44 322 505	£181.80	1240	500	8.9	6.3
225 x 160	-	-	44 322 507	£201.90	1298	500	-	10.0
250 x 125	44 323 508	£319.40	44 322 508	£302.80	1530	500	13.5	10.4
250 x 180	44 323 529	£448.10	44 322 529	£423.80	1290	500	16.0	12.8
315 x 180	44 323 531	£458.70	44 322 531	£433.80	1620	500	30.1	24.6
315 x 250	44 323 543	£495.00	44 322 543	£448.10	1330	500	29.7	21.7
355 x 180	44 323 532	£1,177.40	44 322 532	£1,000.80	1420	500	28.9	21.6
355 x 250	44 323 544	£1,855.00	44 322 544	£1,625.40	1245	500	30.5	22.8
355 x 315	44 323 547	£1,751.50	44 322 547	£1,463.50	1245	500	34.7	25.5

Features a black shaped component pupped with Protecta-Line pipe. The black component is factory-wrapped to ensure complete barrier performance.

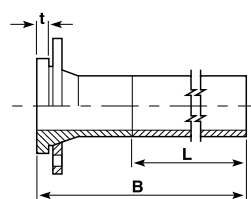
Equal Tees



Size (mm)	Blue Code SDR11	Price Each	Blue Code SDR17	Price Each	L (mm)	B (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	44 321 313	£168.70	44 320 313	£139.10	500	1310	656	4.9	3.9
110	44 321 314	£233.80	44 320 314	£142.80	500	1326	670	7.3	5.5
125	44 321 315	£310.60	44 320 315	£255.70	500	1372	687	9.5	7.1
160	44 321 317	£468.00	44 320 317	£456.00	500	1419	708	15.5	11.2
180	44 321 318	£581.30	44 320 318	£486.40	500	1509	765	20.8	15.3
225	-	-	44 320 320	£1,197.30	500	1550	775	32.7	24.5
250	44 321 321	£1,508.40	44 320 321	£1,454.30	500	1540	840	37.0	26.5
280	-	-	44 320 322	£1,970.90	500	1680	840	50.4	34.4
315	44 321 323	£2,452.80	44 320 323	£2,190.20	500	1820	910	63.1	43.5
355	44 321 324	£2,986.10	44 320 324	£2,863.80	500	1690	845	84.4	58.2

Features a black shaped component pupped with Protecta-Line pipe. The black component is factory-wrapped to ensure complete barrier performance.

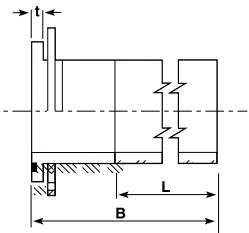
Stub Flange Assemblies PN16



Size (mm)	Blue Code SDR11	Price Each	Blue Code SDR17	Price Each	B (mm)	t (mm) SDR11	t (mm) SDR17	SDR11 Weight (kg)	SDR17 Weight (kg)
90 x DN80	44 327 313	£121.30	44 326 313	£118.60	630	17	17	3.0	2.0
110 x DN100	44 327 314	£139.40	44 326 314	£137.70	630	18	18	4.0	2.9
125 x DN100	44 327 315	£156.40	44 326 315	£154.60	675	25	25	4.9	3.5
160 x DN150	44 327 317	£276.90	44 326 317	£219.40	675	25	25	7.4	6.0
180 x DN150	44 327 318	£317.90	44 326 318	£281.50	675	30	30	9.4	6.8
225 x DN200	-	-	44 326 320	£414.80	675	32	32	12.2	9.7
250 x DN250	44 327 321	£673.90	44 326 321	£582.60	675	35	35	17.7	13.8
280 x DN250	-	-	44 326 322	£720.30	602	35	29	19.8	15.0
315 x DN300	44 327 323	£862.90	44 326 323	£765.30	575	35	35	24.5	19.0
355 x DN350	44 327 324	£1,355.40	44 326 324	£1,201.30	610	41	30	31.5	27.7

Features a black shaped component pupped with Protecta-Line pipe. The black component is factory-wrapped to ensure complete barrier performance.

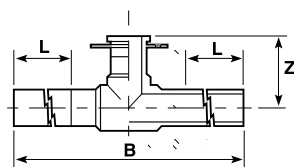
SlimFlange Assemblies



Size (mm)	Blue Code SDR11	Price Each	Blue Code SDR17	Price Each	L (mm)	B (mm)	t (mm) SDR11	t (mm) SDR17	SDR11 Weight (kg)	SDR17 Weight (kg)
250 x DN200	44 453 321	£513.50	44 452 321	£458.70	500	610	31	27	9.8	8.8
315 x DN250	44 453 323	£723.80	44 452 323	£648.60	500	610	35	30	16.0	13.0
355 x DN300	44 453 324	£1,129.80	44 452 324	£1,067.80	500	610	40	35	21.1	20.1

Features a black shaped component pupped with Protecta-Line pipe.

Flanged Short Branch Tees



Size (mm)	Blue Code SDR11	Price Each	Blue Code SDR17	Price Each	L (mm)	B (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90 x DN80	44 341 313	£232.80	44 310 313	£202.40	500	1310	165	5.2	3.9
110 x DN80	44 341 314	£292.80	44 310 314	£241.20	500	1326	259	5.7	4.3
125 x DN80	44 341 315	£334.70	44 310 315	£280.20	500	1372	260	9.1	6.3
160 x DN80	44 341 317	£656.00	44 310 317	£484.00	500	1419	330	10.1	7.1
180 x DN80	44 341 318	£555.20	44 310 318	£458.30	500	1509	335	18.9	12.8
225 x DN80	-	-	44 310 320	£732.10	500	1550	492	-	15.8
250 x DN80	44 341 321	£2,358.20	44 310 321	£1,932.70	500	1430	580	33.5	22.1
280 x DN80	-	-	44 310 322	£2,291.40	500	1692	1140	-	31.7
315 x DN80	44 341 323	P.O.A.	44 310 323	P.O.A.	500	1530	740	55.9	36.4
355 x DN80	44 341 324	P.O.A.	44 310 324	P.O.A.	500	1955	770	59.0	38.7
90 x DN100	44 342 313	£241.20	44 311 313	£231.30	500	1310	240	6.0	3.8
110 x DN100	44 342 314	£292.80	44 311 314	£275.90	500	1326	175	5.7	4.4
125 x DN100	44 342 315	£368.70	44 311 315	£309.90	500	1372	215	9.1	6.4
160 x DN100	44 342 317	£501.00	44 311 317	£410.90	500	1419	332	11.7	8.3
180 x DN100	44 342 318	£761.60	44 311 318	£553.60	500	1509	290	19.0	12.0
225 x DN100	-	-	44 311 320	£708.40	500	1550	494	-	16.0
250 x DN100	44 342 321	£1,012.30	44 311 321	£763.40	500	1430	520	33.5	22.2
280 x DN100	-	-	44 311 322	£2,291.50	500	1692	1142	-	32.7
315 x DN100	44 342 323	£2,203.80	44 311 323	£1,814.90	500	1530	680	66.4	39.6
355 x DN100	44 342 324	£3,053.40	44 311 324	£2,863.70	500	1955	1515	75.2	45.2
160 x DN150	44 343 317	£566.80	44 312 317	£528.20	500	1310	340	13.7	10.0
180 x DN150	44 343 318	£645.20	44 312 318	£529.80	500	1326	230	19.8	13.8
225 x DN150	-	-	44 312 320	£729.60	500	1372	363	-	17.6
250 x DN150	44 343 321	£1,048.90	44 312 321	£856.50	500	1419	410	34.4	23.3
280 x DN150	-	-	44 312 322	P.O.A.	500	1509	430	-	34.0
315 x DN150	44 343 323	£2,241.70	44 312 323	£1,841.10	500	1550	570	66.9	40.7
355 x DN150	44 343 324	£3,053.40	44 312 324	£2,863.70	500	1955	1058	76.2	46.2

Features a black shaped component pupped with Protecta-Line pipe. The black component is factory-wrapped to ensure complete barrier performance.

When made in accordance with GPS PE Pipe Systems' recommended procedures, butt-fusion and electrofusion joints of the Protecta-Line system have been independently shown to meet the requirements of WIS 4-32-19 without any need for subsequent wrapping. This does not exempt installers from local regulations and the local Water Company preferences must be adhered to.

Only Protecta-Line fittings shall be used with Protecta-Line pipe. The use of alternative fittings will have the following effects on your Protecta-Line system:

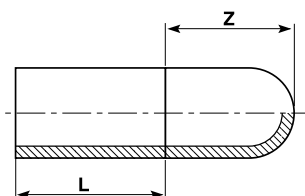
- Invalidation of WRAS approval and manufacturer's system performance warranty.
- Compromised permeation resistance (causing non-compliance with WIS 4-32-19 and possible risks to health).
- Danger of pipe-layer delamination, compromising system performance integrity and risking pipe bursts.
- It is illegal to install fittings non-compliant with the Water Fittings Regulations (or Byelaws in Scotland).



WIS 4-32-19
Km 514626

FOR USE ON PROTECTA-LINE PIPES

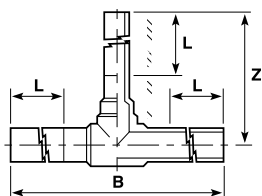
End Caps



Size (mm)	Blue Code SDR11	Price Each	Blue Code SDR17	Price Each	L (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	44 332 313	£44.65	44 331 313	£40.90	500	124	2.2	1.9
110	44 332 314	£76.80	44 331 314	£69.75	500	138	2.7	2.4
125	44 332 315	£89.60	44 331 315	£81.75	500	155	5.1	3.5
160	44 332 317		44 331 317	£123.60	500	179	5.2	3.6
180	44 332 318	£147.40	44 331 318	£134.00	500	200	10.5	7.3
225	-	-	44 331 320	£183.04	500	180	-	9.1
250	44 332 321	£252.80	44 331 321	£230.30	500	330	20.8	14.2
280	-	-	44 331 322	P.O.A.	500	117	-	11.0
315	44 332 323	£505.40	44 331 323	£460.10	500	358	34.0	23.0
355	44 332 324	£600.90	44 331 324	£546.30	500	120	44.1	30.1

Features a black shaped component pupped with Protecta-Line pipe.

Reduced Branch Tees



Size (mm)		Blue Code SDR11	Price Each	Blue Code SDR17	Price Each	L (mm)	B (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90mm branch	110	44 347 314	£239.60	44 356 314	£188.30	500	1326	850	11.4	5.4
	125	44 347 315	£239.60	44 356 315	£234.80	500	1372	875	9	6.5
	160	44 347 317	£427.00	44 356 317	£411.30	500	1419	1120	9.4	6.6
	180	44 347 318	£467.20	44 356 318	£455.70	500	1509	1180	19.4	13.9
	225	-	-	44 356 320	£808.50	500	1550	1550	-	15.3
	250	44 347 321	£1,562.30	44 356 321	£1,422.20	500	1440	1440	35.4	23.5
	280	-	-	44 356 322	£2,042.10	500	980	980	-	40
	315	44 347 323	£2,622.60	44 356 323	£2,384.60	500	1820	1820	64.5	46
125mm branch	355	44 347 324	P.O.A.	44 356 324	£4,402.50	500	1910	1910	78.4	51.9
	180	44 348 318	£579.40	44 357 318	£465.60	500	1509	990	19.9	14.2
	225	-	-	44 357 320	£921.80	500	1450	1270	-	23.1
	250	44 348 321	£1,510.00	44 357 321	£1,352.10	500	1430	1240	35.8	25.7
	280	-	-	44 357 322	£2,042.10	500	1600	1680	-	41.2
	315	44 348 323	£2,405.00	44 357 323	£2,314.70	500	1530	1620	64.9	46.3
180mm branch	355	44 348 324	P.O.A.	44 357 324	£4,569.20	500	1690	1290	54.2	52.2
	225	-	-	44 358 320	£921.80	500	1550	960	-	25.1
	250	44 349 321	£1,485.80	44 358 321	£1,352.20	500	1430	1000	36.6	26.3
	280	-	-	44 358 322	£2,042.10	500	1600	1170	-	41.8
	315	44 349 323	£2,357.90	44 358 323	£2,184.80	500	1530	1380	65.6	46.9
250mm branch	355	44 349 324	£2,851.80	44 358 324	£2,750.60	500	1790	1160	68.4	52.8
	315	44 335 323	£1,827.00	44 336 323	£1,568.60	500	1530	1200	65.8	47.3
	355	44 335 324	£3,810.60	44 336 324	£3,433.70	500	1690	975	86.6	53.3

Features a black shaped component pupped with Protecta-Line pipe. The black component is factory-wrapped to ensure complete barrier performance.

* SDR17 versions reduce down to 90mm SDR11 branch.

When made in accordance with GPS PE Pipe Systems' recommended procedures, butt-fusion and electrofusion joints of the Protecta-Line system have been independently shown to meet the requirements of WIS 4-32-19 without any need for subsequent wrapping. This does not exempt installers from local regulations and the local Water Company preferences must be adhered to.

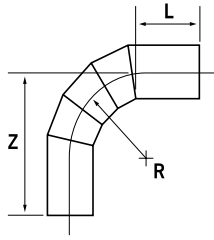
Only Protecta-Line fittings shall be used with Protecta-Line pipe. The use of alternative fittings will have the following effects on your Protecta-Line system:

- Invalidity of WRAS approval and manufacturer's system performance warranty.
- Compromised permeation resistance (causing non-compliance with WIS 4-32-19 and possible risks to health).
- Danger of pipe-layer delamination, compromising system performance integrity and risking pipe bursts.
- It is illegal to install fittings non-compliant with the Water Fittings Regulations (or Byelaws in Scotland).



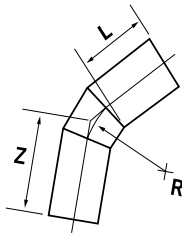
WIS 4-32-19
Km 514626

90° Mitred Elbows



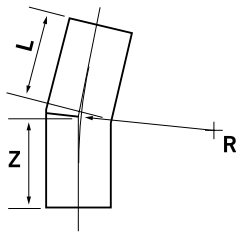
Size (mm)	Blue Code SDR11	Price Each	Blue Code SDR17	Price Each	L (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	44 244 313	£103.60	44 243 313	£83.00	500	617	3.6	2.6
110	44 244 314	£128.70	44 243 314	£95.90	500	643	5.3	3.9
125	44 244 315	£159.30	44 243 315	£135.50	500	663	6.9	5.0
160	44 244 317	£250.40	44 243 317	£237.50	500	708	11.6	8.2
180	44 244 318	£450.10	44 243 318	£367.00	500	734	14.9	10.7
225	44 244 320	£502.70	44 243 320	£438.70	500	793	-	17.1
250	44 244 321	£623.40	44 243 321	£463.40	500	825	30.2	21.2
280	44 244 322	£939.80	44 243 322	£782.90	500	864	-	27.2
315	44 244 323	£1,276.00	44 243 323	£1,040.40	500	907	50.6	35.4
355	44 244 324	£1,406.10	44 243 324	£1,166.90	500	962	66.7	46.6

45° Mitred Elbows



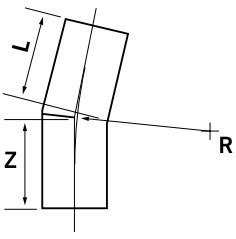
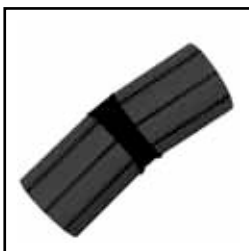
Size (mm)	Blue Code SDR11	Price Each	Blue Code SDR17	Price Each	L (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	44 242 313	£95.10	44 241 313	£86.60	500	538	3.1	2.2
110	44 242 314	£112.00	44 241 314	£105.40	500	546	4.4	3.2
125	44 242 315	£142.40	44 241 315	£128.10	500	553	5.7	4.1
160	44 242 317	£241.50	44 241 317	£229.40	500	568	9.4	6.7
180	44 242 318	£324.20	44 241 318	£307.40	500	576	11.9	8.5
225	44 242 320	£410.40	44 241 320	£394.40	500	596	-	13.3
250	44 242 321	£488.80	44 241 321	£463.40	500	606	23.2	16.2
280	44 242 322	£741.10	44 241 322	£635.60	500	618	-	20.5
315	44 242 323	£856.40	44 241 323	£834.30	500	632	37.5	26.2
355	44 242 324	£1,342.20	44 241 324	£1,072.40	500	650	48.4	33.8

22.5° Mitred Elbows



Size (mm)	Blue Code SDR11	Price Each	Blue Code SDR17	Price Each	L (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	44 317 313	£68.35	44 316 313	£64.10	500	509	2.8	2.0
110	44 317 314	£95.10	44 316 314	£83.00	500	511	4.0	2.9
125	44 317 315	£104.50	44 316 315	£99.35	500	513	5.1	3.7
160	44 317 317	£213.30	44 316 317	£168.30	500	516	8.3	5.9
180	44 317 318	£265.70	44 316 318	£251.90	500	518	10.4	7.5
225	44 317 320	£377.90	44 316 320	£288.30	500	523	-	11.4
250	44 317 321	£382.80	44 316 321	£360.70	500	525	19.6	13.8
280	44 317 322	£519.90	44 316 322	£390.90	500	528	-	17.2
315	44 317 323	£671.70	44 316 323	£635.60	500	531	31.0	21.7
355	44 317 324	£939.80	44 316 324	£818.40	500	536	39.3	27.5

11.25° Mitred Elbows



Size (mm)	Blue Code SDR11	Price Each	Blue Code SDR17	Price Each	L (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	44 298 313	£68.35	44 297 313	£64.10	500	505	2.8	2.1
110	44 298 314	£95.10	44 297 314	£83.00	500	506	4.0	2.9
125	44 298 315	£104.50	44 297 315	£99.35	500	506	5.0	3.6
160	44 298 317	£213.30	44 297 317	£168.30	500	508	8.2	5.8
180	44 298 318	£265.70	44 297 318	£251.90	500	509	10.2	7.3
225	44 298 320	£377.90	44 297 320	£288.30	500	511	-	11.1
250	44 298 321	£382.80	44 297 321	£360.70	500	512	19.2	13.4
280	44 298 322	£519.90	44 297 322	£390.90	500	514	-	16.7
315	44 298 323	£671.70	44 297 323	£635.60	500	516	30.1	21.1
355	44 298 324	£939.80	44 297 324	£818.40	500	518	38.1	26.6

The joints are factory wrapped to ensure complete barrier performance.

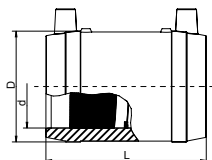
SUMMARY – NEW EQUIVALENTS TO THE DURAFUSE RANGE

Type	Size	Old Black40 Code	New BlackFL Code
Couplers – 39.5 Volt	20	40100306	FL612680
	25	40100307	FL612681
	32	40100308	FL612682
	40	40100309	FL612683
	50	40100310	FL612684
	63	40100311	FL612685
	75	40100312	FL612686
	90	40100313	FL612687
	110	40100314	FL612688
	125	40100315	FL612689
	140	40100316	FL612690
	160	40100317	FL612691
	180	40100318	FL612672
	200	40100319	FL612673
	225	40100320	FL612674
	250	40100321	FL612675
	280	40100322	FL615073
	315	40100323	FL612670
	355	40100324	FL615074
	400	40100325	FL615075
Couplers – 79 Volt	355	40101324	FL615074
	400	40101325	FL615075
	450	40101326	FL615076
	500	40101327	FL615124
Reducers – 39.5 Volt	25 x 20	40402404	tbc
	32 x 20	40402405	FL615386
	32 x 25	40402409	FL615502
	40 x 32	40402413	FL615388
	63 x 32	40402415	FL615389
	63 x 40	40402430	FL615390
	63 x 50	40402444	FL612072
	90 x 63	40402459	FL615392
	110 x 90	40402483	FL615693
	125 x 63	40402461	tbc
	125 x 90	40402484	FL615694
	125 x 110	40402493	tbc
	160 x 110	40402495	FL615695
	180 x 125	40402505	tbc
32mm Top Loading Tapping Tees – 39.5 Volt		No code change	
63mm Top Loading Tapping Tees – 39.5 Volt	90 x 63	50404459	FL612701
	110 x 63	50404460	FL612624
	125 x 63	50404461	FL612309
	160 x 63	50404463	FL612650
	180 x 63	50404464	FL612652
	200 x 63	50404465	FL612659
	225 x 63	50404466	FL612655
	250 x 63	50404467	FL615339
Under Clamp Branch Saddles – 39.5 Volt	315 x 63	50404469	FL615339
	63 x 32	40416415	FL612757
	75 x 50	40416445	FL615020
	90 x 32	40416417	FL615285
	90 x 63	40416459	FL612819
	110 x 32	40416418	FL615334
	110 x 50	40416447	FL615031
	110 x 63	40416460	FL612760
	125 x 32	40416419	FL615087
	125 x 63	40416461	FL612761
	160 x 32	40416421	FL612886
	160 x 63	40416463	FL612762
	180 x 63	40416464	FL612763
	200 x 63	40416465	FL612764
Equal Tees – 39.5 Volt	25	40408307	FL616338
	32	40408308	FL615719
	40	40408309	FL615720

SUMMARY – NEW EQUIVALENTS TO THE DURAFUSE RANGE

Type	Size	Old Black40 Code	New BlackFL Code
Equal Tees – 39.5 Volt	50	40408310	FL615721
	63	40408311	FL615722
	75	40408312	FL612165
	90	40408313	FL612166
	110	40408314	FL612167
	125	40408315	FL612168
	160	40408317	FL615277
Flanged Branch Tees – 39.5 Volt	180	40408318	FL615691
		Replace '40' with 'FL'	
	25	40104307	FL612091
	32	40104308	FL612093
	40	40104309	FL612095
	50	40104310	FL612097
	63	40104311	FL612099
90° Elbows – 39.5 Volt	75	40104312	FL612101
	90	40104313	FL612103
	110	40104314	FL612105
	125	40104315	FL612107
	160	40104317	FL615276
	180	40104318	FL615689
	32	40105308	FL612092
	40	40105309	FL612094
	50	40105310	FL612096
45° Elbows – 39.5 Volt	63	40105311	FL612098
	75	40105312	FL612100
	90	40105313	FL612102
	110	40105314	FL612104
	125	40105315	FL612106
	160	40105317	FL615275
	180	40105318	FL615687
	25	40403307	FL612026
	32	40403308	FL612027
End Caps – 39.5 Volt	50	40403310	FL612029
	63	40403311	FL612030
	90	40403313	FL612032
	125	40403315	FL612034
	160	40403317	FL612035
	180	40403318	FL616183
		Replace '40' with 'FL'	
Duck Foot Bends	25 x ¾"	40394307	tbc
	32 x 1"	40394308	FL612595
	40 x 1¼"	40394309	FL612596
	50 x 1½"	40394310	FL612692
	63 x 1½"	40394628	FL612708
	63 x 2"	40394311	FL612693
Transition Couplers PE/Brass Female – 39.5 Volt	25 x ¾"	40395307	FL612711
	32 x 1"	40395308	FL612712
	40 x 1¼"	40395309	FL612713
	50 x 1½"	40395310	FL612714
	63 x 1½"	40395628	FL612717
	63 x 2"	40395311	FL612715
Transition Couplers PE/Brass Male – 39.5 Volt	25 x ¾"	40397307	tbc
	32 x 1"	40397308	FL612120
	40 x 1¼"	40397309	FL612122
	50 x 1½"	40397310	FL612124
	63 x 1½"	40397628	FL612125
	63 x 2"	40397311	FL612126
90° Transition Elbows PE/Brass Male – 39.5 Volt	25 x ¾"	40399307	tbc
	32 x 1"	40399308	FL612145
	40 x 1¼"	40399309	FL612149
	50 x 1½"	40399310	FL612144
	63 x 1½"	40399628	FL612147
	63 x 2"	40399311	FL612146

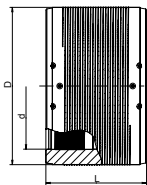
Couplers – Removable Centre Stop (MB)



Size (mm)	SDR	Black Code	Price Each	B (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)	Old Black Code
20	11	FL 612 680	£9.21	30	61	0.1	barcode read	5	40 100 306
25	11	FL 612 681	£9.21	37	78	0.1	26	5	40 100 307
32	11	FL 612 682	£9.21	44	81	0.1	31	5	40 100 308
40	11	FL 612 683	£13.65	52.6	88	0.1	barcode read	7	40 100 309
50	11	FL 616 522	£13.15	65.3	98	0.2	42	7	40 100 310
63	11	FL 612 685	£17.15	81.5	110	0.2	36	7	40 100 311
75	11	FL 612 686	£25.90	95.5	118	0.3	barcode read	10	40 100 312
90	11	FL 612 687	£25.15	119	127	0.4	65	10	40 100 313
110	11	FL 612 688	£40.45	141.5	135	0.7	120	10	40 100 314
125	11	FL 612 689	£45.65	158.5	147	1.0	225	15	40 100 315
140	11	FL 612 690	£66.40	175	154	1.3	280	15	40 100 316
160	11	FL 612 691	£72.60	198	164	1.8	360	20	40 100 317

Maximum Continuous Operating Pressure SDR11 - 16 bar water (EN 12201-3), 7 bar gas (GIS/PL2) and 10 bar gas (EN 1555-3)

Couplers – Slideover (UB)



Size (mm)	SDR	Black Code	Price Each	B (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)	Old Black Code
180	11	FL 612 672	£85.30	220	210	2.1	480	20	40 100 318
200	11	FL 612 673	£120.20	247	220	2.8	550	20	40 100 319
225	11	FL 612 674	£136.20	277	236	4.0	550	20	40 100 320
250	11	FL 612 675	£199.50	315	246	5.8	620	30	40 100 321
280	11	FL 615 073	£310.00	347	285	7.7	barcode read	30	40 100 322
315	11	FL 612 670	£329.00	390	300	10.0	1250	30	40 100 323
355	11	FL 615 074	£568.60	445	300	16.7	barcode read	30	40 100 324
400	11	FL 615 075	£667.10	500	320	20.8	750	40	40 100 325
450	11	FL 615 076	£1,651.10	560	340	30.0	barcode read	40	40 101 326
500	11	FL 615 124	£1,799.90	630	360	39.8	barcode read	40	40 101 327
560	11	FL 613 312	£4,110.00	715	380	56.4	barcode read	40	
	17	FL 615 706	£2,174.10	630	380	24.8	barcode read	40	
630	11	FL 616 269	£4,421.40	810	420	80.6	barcode read	40	
	17	FL 615 726	£2,534.60	710	420	36.8	barcode read	40	
710	11	FL 616 313	P.O.A.	900	420	101.0	barcode read	40	
	17	FL 615 994	P.O.A.	800	460	48.6	barcode read	40	
800	11	FL 616 314	P.O.A.	1000	500	138.8	barcode read	90	
	17	FL 616 290	P.O.A.	900	500	65.9	barcode read	90	
900	11	FL 616 440	P.O.A.	1130	600	210.3	barcode read	90	
	17	FL 616 345	P.O.A.	1024	500	91.5	barcode read	90	
1000**	17	FL 616 403	P.O.A.	1130	610	121.0	barcode read	90	
1200**	17	FL 616 416	P.O.A.	1356	670	205.0	barcode read	90	

Maximum Continuous Operating Pressure SDR11 - 16 bar water (EN 12201-3), 7 bar gas (GIS/PL2) and 10 bar gas (EN 1555-3)

Maximum Continuous Operating Pressure SDR17 - 10 bar water (EN 12201-3), 4 bar gas (GIS/PL2) and 5 bar gas (EN 1555-3)

** 1000 and 1200mm couplers can only be installed using the FRIAMAT control box

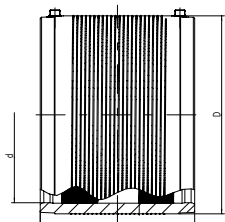
Couplers from 400mm upwards are bifilament (with separate fusion zones).

Couplers from 355mm upwards have external reinforcement.

Large Frialen fittings are also available fully installed by a GPS installation partner.

Where there are no manual welding times, a barcode-capable control box must be used. All Frialen electrofusion fittings have 4.0mm terminal pins. 4.0 to 4.7mm adaptors are available from your usual equipment supplier or may be available from GPS (order codes 53EW0002 or C0101102).

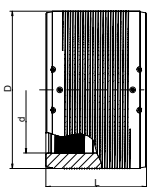
Friafit Couplers – Slideover (AM)



Size (mm)	SDR	Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
110	17	FF 680 001	P.O.A.	130	160	0.6	barcode read	
125	17	FF 680 013	P.O.A.	146	160	0.7	barcode read	
160	17	FF 680 002	P.O.A.	184	180	1.1	barcode read	
180	17	FF 680 003	P.O.A.	207	180	1.5	barcode read	
200	17	FF 680 004	P.O.A.	236	180	2.1	barcode read	
225	17	FF 680 005	P.O.A.	263	200	2.7	barcode read	
250	17	FF 680 006	P.O.A.	282	220	2.2	barcode read	
280	17	FF 680 007	P.O.A.	316	220	3.8	barcode read	
315	17	FF 680 008	P.O.A.	355	220	4.8	barcode read	
355	17	FF 680 009	P.O.A.	400	220	5.9	barcode read	
400	17	FF 680 010	P.O.A.	450	220	7.3	barcode read	
450	17	FF 680 011	P.O.A.	506	270	11.2	barcode read	
500	17	FF 680 012	P.O.A.	562	270	14.5	barcode read	

Maximum Continuous Operating Pressure SDR17 – 10 bar water (EN 12201-3)

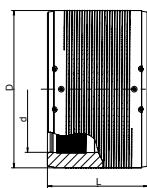
Couplers – Slideover, SDR 7.4 (UB SDR 7.4)



Size (mm)	SDR	Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
90	7.4	FL 616 270	P.O.A.	117	138	0.53	barcode read	
110	7.4	FL 616 271	P.O.A.	142	159	0.87	barcode read	
125	7.4	FL 616 272	P.O.A.	160	172	1.23	barcode read	
140	7.4	FL 616 273	P.O.A.	181	184	1.64	barcode read	
160	7.4	FL 616 274	P.O.A.	206	203	2.36	barcode read	
180	7.4	FL 616 282	P.O.A.	225	210	2.7	barcode read	
200	7.4	FL 616 283	P.O.A.	250	224	3.61	barcode read	
225	7.4	FL 616 284	P.O.A.	280	240	4.9	barcode read	
250	7.4	FL 616 285	P.O.A.	315	246	6.7	barcode read	
280	7.4	FL 616 286	P.O.A.	355	268	9.3	barcode read	
315	7.4	FL 616 287	P.O.A.	400	285	12.1	barcode read	
355	7.4	FL 616 288	P.O.A.	450	300	16.7	barcode read	

Maximum Continuous Operating Pressure SDR7.4 – 25 bar water (EN 12201-3)

Couplers – Slideover, SDR 9 (UB SDR 9)

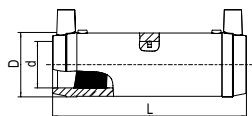


Size (mm)	SDR	Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
400	9	FL 616 441	P.O.A.	500	320	20.8	barcode read	
450	9	FL 616 447	P.O.A.	560	340	30.0	barcode read	
500	9	FL 616 445	P.O.A.	630	360	40.0	barcode read	
560	9	FL 616 446	P.O.A.	715	380	55.0	barcode read	
630	9	FL 616 439	P.O.A.	810	420	79.6	barcode read	

Maximum Continuous Operating Pressure SDR9 – 20 bar water (EN 12201-3) and 10 bar gas (EN 1555-3)

* Manual fusion times are based on 39.5 volt fusion boxes
4.0mm Terminal Pins

Long Couplers – Removable Centre Stop (FRIALONG)



Size (mm)	SDR	Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
32	11	FL 615 736	P.O.A.	45	136	0.1	barcode read	5
40	11	FL 615 737	P.O.A.	54	146	0.1	barcode read	7
50	11	FL 615 608	P.O.A.	68	175	0.3	barcode read	7
63	11	FL 615 738	P.O.A.	82	197	0.4	barcode read	7

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3), 7 bar gas (GIS/PL2) and 10 bar gas (EN 1555-3)

Conical Ring Couplers (KM-XL)



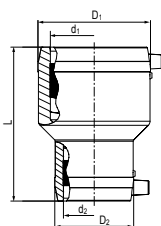
Size (mm)	SDR	Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
1000	17	FL 616 434	P.O.A.	1245	1125	350	barcode read	
1200	17	FL 616 435	P.O.A.	1450	1250	500	barcode read	

Maximum Continuous Operating Pressure SDR17 – 10 bar water (EN 12201-3) and 5 bar gas (EN 1555-3)

Large electrofusion fittings are available fully fitted by a GPS installation partner

Can only be installed using the FRIAMAT XL control unit

Reducers (MR)

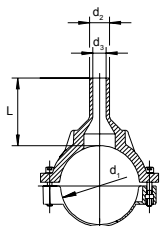


Size (mm) d x d ₁	SDR11 Black Code	Price Each	D ₁ (mm)	D ₂ (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)	Old Black Code
25 x 20	-	-					barcode read	5	40 402 404
32 x 16	FL 616 452	£9.21	45	28	90	0.1	barcode read	5	
32 x 20	FL 615 386	£9.21	45	32	88	0.1	30	5	40 402 405
32 x 25	FL 615 502	£9.21	45	38	88	0.1	30	5	40 402 409
40 x 20	FL 615 387	£25.05	54	32	98	0.1	30	7	
40 x 32	FL 615 388	£18.90	54	45	98	0.1	30	7	40 402 413
50 x 20	FL 612 069	£27.00	68	32	110	0.1	30	7	
50 x 32	FL 612 070	£27.30	68	45	110	0.1	34	7	
50 x 40	FL 612 071	£31.20	68	54	110	0.1	40	7	
63 x 32	FL 615 389	£23.70	82	45	125	0.2	32	7	40 402 415
63 x 40	FL 615 390	£23.70	82	54	125	0.2	42	7	40 402 430
63 x 50	FL 612 072	£27.75	82	68	125	0.2	46	7	40 402 444
90 x 50	FL 615 391	£52.90	117	68	160	0.5	55	10	
90 x 63	FL 615 392	£35.05	117	82	160	0.5	60	10	40 402 459
110 x 63	FL 615 393	£84.80	142	82	160	0.7	90	10	
110 x 90	FL 615 693	£48.25	140	115	180	0.9	180	10	40 402 483
125 x 63	-	-					barcode read	15	40 402 461
125 x 90	FL 615 694	£70.20	155	115	200	1.0	240	15	40 402 484
125 x 110	-	-					barcode read	15	40 402 493
160 x 110	FL 615 695	£118.70	201	140	230	2.0	300	20	40 402 495
180 x 125	-	-					barcode read	20	40 402 505
225 x 160	FL 616 356	P.O.A.	282	203	270	4.9	barcode read	20	

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3), 7 bar gas (GIS/PL2) and 10 bar gas (EN 1555-3)

* Manual fusion times are based on 39.5 volt fusion boxes
4.0mm Terminal Pins

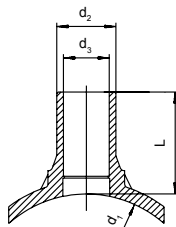
Under Clamp Spigot Saddles (SA)



Size (mm) d ₁ x d ₂	SDR11 Black Code	Price Each	L (mm)	Drilling (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)	Old Black Code
63 x 32	FL 612 757	£101.30	100	20	0.3	barcode read	15	40 416 415
63 x 50	FL 612 759	£101.30	113	36	0.4	barcode read	15	
75 x 50	FL 615 020	£101.30	82	36	0.4	barcode read	20	50 416 445
90 x 32	FL 615 285	£101.30	103	20	0.7	barcode read	20	40 416 417
90 x 63	FL 612 819	£101.30	103	46	0.7	barcode read	20	40 416 459
110 x 32	FL 615 334	£101.30	125	20	0.8	barcode read	20	40 416 418
110 x 50	FL 615 031	£101.30	132	36	0.8	barcode read	20	40 416 447
110 x 63	FL 612 760	£101.30	150	46	0.9	barcode read	20	40 416 460
110 x 90	FL 615 411	£160.10	115	65	1.0	barcode read	20	
125 x 32	FL 615 087	£101.30	109	20	0.9	barcode read	20	40 416 419
125 x 63	FL 612 761	£101.30	109	46	1.0	barcode read	20	40 416 461
125 x 90	FL 615 412	£202.40	116	65	1.1	barcode read	20	
125 x 110	FL 615 584	£202.40	116	84	1.2	barcode read	20	
160 x 32	FL 612 886	£101.30	126	20	1.4	barcode read	30	40 416 421
160 x 63	FL 612 762	£101.30	140	46	1.5	barcode read	30	40 416 463
160 x 90	FL 615 413	£227.20	140	65	1.6	barcode read	30	
160 x 110	FL 615 739	£420.50	140	84	1.8	barcode read	30	
160 x 125	FL 615 585	£352.10	140	95	1.9	barcode read	30	
180 x 63	FL 612 763	£101.30	109	46	1.2	barcode read	50	40 416 464
180 x 90	FL 615 414	£238.70	116	65	1.8	barcode read	50	
180 x 110	FL 615 948	£448.20	136	84	2.0	barcode read	50	
180 x 125	FL 615 740	£363.70	141	95	2.1	barcode read	50	
200 x 63	FL 612 764	£101.30	109	46	1.3	barcode read	50	40 416 465
225 x 63	FL 612 765	£260.70	109	46	1.2	barcode read	50	
225 x 90	FL 615 415	£265.00	130	65	2.0	barcode read	50	
225 x 110	FL 616 044	£525.00	140	84	2.0	barcode read	50	
225 x 125	FL 616 045	£385.10	146	95	2.2	barcode read	50	
225 x 160	FL 616 046	£419.00	157	123	2.6	barcode read	50	

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3), 7 bar gas (GIS/PL2) and 10 bar gas (EN 1555-3)

Top Loading Spigot Saddles (SA-TL)



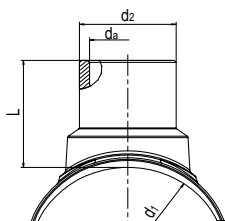
Size (mm) D x D ₁	SDR11 Black Code	Price Each	B (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
250-560(630) x 32	FL 615 465	£493.20	109	0.6	barcode read	50
250-560(630) x 63	FL 615 466	£493.20	109	0.7	barcode read	50
250-560(630) x 90	FL 615 850	£493.20	111	0.8	barcode read	50

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3), 7 bar gas (GIS/PL2) and 10 bar gas (EN 1555-3)

NOTE: These fittings require special instructions when used at 630mm – please contact our Technical Support Department.

* Manual fusion times are based on 39.5 volt fusion boxes
4.0mm Terminal Pins

Large Spigot Saddles (SA-XL)



Size (mm) d ₁ x d ₂	Black Code	Price Each	Drilling Ø da (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
315 x 225 (*160)	FL 616 387	P.O.A.	172	233	9.9	barcode read	60
315 x 250	FL 616 398	P.O.A.	187	233	9.7	barcode read	60
355 x 225 (*160)	FL 616 388	P.O.A.	172	235	9.9	barcode read	60
355 x 250	FL 616 399	P.O.A.	187	235	9.3	barcode read	60
450 x 225 (*160)	FL 616 390	P.O.A.	172	272	10.2	barcode read	60
450 x 250	FL 616 401	P.O.A.	187	272	10.0	barcode read	60
500 x 160	FL 616 381	P.O.A.	123	300	13.6	barcode read	60

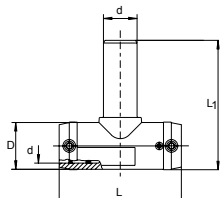
Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3) and 10 bar gas (EN 1555-3)

500 x 225	FL 616 391	P.O.A.	172	300	13.6	barcode read	60
560 x 160	FL 616 373	P.O.A.	123	300	15.3	barcode read	60
560 x 225	FL 616 392	P.O.A.	172	300	16.2	barcode read	60
630 x 160	FL 616 374	P.O.A.	123	300	16.0	barcode read	60
630 x 225	FL 616 393	P.O.A.	172	300	17.0	barcode read	60
710 x 160	FL 616 375	P.O.A.	123	300	19.9	barcode read	60
710 x 225	FL 616 394	P.O.A.	172	300	20.8	barcode read	60
800 x 160	FL 616 376	P.O.A.	123	300	16.8	barcode read	60
800 x 225	FL 616 395	P.O.A.	172	300	17.7	barcode read	60
900 x 160	FL 616 377	P.O.A.	123	300	18.7	barcode read	60
900 x 225	FL 616 396	P.O.A.	172	300	19.5	barcode read	60
1000 x 160	FL 616 378	P.O.A.	123	300	17.4	barcode read	60
1000 x 225	FL 616 397	P.O.A.	172	300	18.2	barcode read	60
1200 x 160	FL 616 383	P.O.A.	123	300	17.2	barcode read	60
1200 x 225	FL 616 384	P.O.A.	172	300	18.1	barcode read	60

Maximum Continuous Operating Pressure SDR17 – 10 bar water (EN 12201-3) and 5 bar gas (EN 1555-3)

Only for use with the Friatec VACUSET XL Clamping Equipment – please contact our Technical Support Department for further information

Equal Tees (TA)

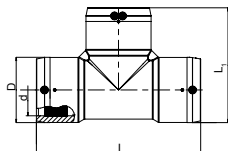


Size (mm)	SDR11 Black Code	Price Each	D (mm)	L (mm)	L ₁ (mm)	Weight (kg)	Fusion Time (main) (Sec)	Fusion Time (branch) (Sec)	Cooling Time (mins)	Old Black Code
25	FL 616 338	£18.25	36	108	110	0.1	30	-	5	40 408 307
32	FL 615 719	£18.25	44	116	131	0.2	barcode read	-	5	40 408 308
40	FL 615 720	£30.35	53	146	151	0.3	barcode read	-	7	40 408 309
50	FL 615 721	£39.50	67	175	186	0.5	34	-	7	40 408 310
63	FL 615 722	£43.15	81	197	203	0.8	42	-	7	40 408 311

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3), 7 bar gas (GIS/PL2) and 10 bar gas (EN 1555-3)

* Manual fusion times are based on 39.5 volt fusion boxes
4.0mm Terminal Pins

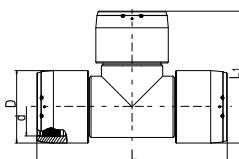
Equal Tees (T)



Size (mm)	SDR11 Black Code	Price Each	D (mm)	L (mm)	L ₁ (mm)	Weight (kg)	Fusion Time (main) (Sec)	Fusion Time (branch) (Sec)	Cooling Time (mins)	Old Black Code
75	FL 612 165	£65.30	96	278	187	0.8	72	80	10	40 408 312
90	FL 612 166	£78.70	117	305	211	1.1	90	90	10	40 408 313
110	FL 612 167	£117.30	142	355	248	2.2	140	160	10	40 408 314
125	FL 612 168	£151.50	160	384	272	2.7	180	200	15	40 408 315
160	FL 615 277	£248.90	200	430	315	4.9	400	400	20	40 408 317
180	FL 615 691	£254.70	228	480	354	7.8	440	440	20	40 408 318
200	FL 616 266	P.O.A.	251	550	400	11.1	barcode read	-	20	
225	FL 615 692	£669.50	280	580	430	13.9	540	540	20	

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3), 7 bar gas (GIS/PL2) and 10 bar gas (EN 1555-3)
 These tees also have an EF socket on the branch (separate fusion zone).

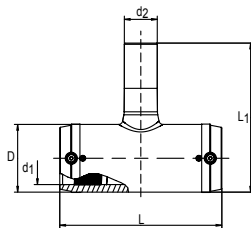
Large Diameter Equal Tees (T-XL)



Size (mm)	SDR11 Black Code	Price Each	D (mm)	L (mm)	L ₁ (mm)	Weight (kg)	Fusion Time (main) (Sec)	Fusion Time (branch) (Sec)	Cooling Time (mins)
250	FL 616 412	P.O.A.	310	770	540	27.4	550	-	30
280	FL 616 413	P.O.A.	350	905	630	42.2	550	-	30
315	FL 616 414	P.O.A.	396	940	670	55.9	550	-	30

* Manual fusion times are based on 39.5 volt fusion boxes
 4.0mm Terminal Pins

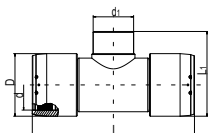
Reduced Branch Tees (TA red)



Size (mm)	SDR11 Black Code	Price Each	D (mm)	L (mm)	L ₁ (mm)	Weight (kg)	Fusion Time (main) (Sec)	Cooling Time (mins)
32 x 20	FL 616 417	P.O.A.	45	116	117	0.1	barcode read	5
40 x 32	FL 616 418	P.O.A.	54	146	148	0.2	barcode read	7
50 x 32	FL 616 419	P.O.A.	69	175	158	0.3	34	7
50 x 40	FL 616 420	P.O.A.	69	175	167	0.3	34	7
63 x 32	FL 616 421	P.O.A.	83	197	173	0.4	42	7
63 x 40	FL 616 422	P.O.A.	83	197	182	0.5	42	7
63 x 50	FL 616 423	P.O.A.	83	197	197	0.5	42	7

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3) and 10 bar gas (EN 1555-3)

Large Reduced Branch Tees (T red-XL)

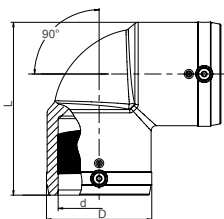


Size (mm)	SDR11 Black Code	Price Each	D (mm)	L (mm)	L ₁ (mm)	Weight (kg)	Fusion Time (main) (Sec)	Cooling Time (mins)
250 x 110	FL 616 426	P.O.A.	310	770	405	22.1	550	30
250 x 225	FL 616 427	P.O.A.	310	770	440	23.5	550	30
280 x 110	FL 616 428	P.O.A.	350	905	440	34.1	550	30
280 x 225	FL 616 429	P.O.A.	350	905	475	35.5	550	30
315 x 110	FL 616 430	P.O.A.	396	940	485	42.4	550	30
315 x 225	FL 616 431	P.O.A.	396	940	525	43.5	550	30

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3) and 10 bar gas (EN 1555-3)

* Manual fusion times are based on 39.5 volt fusion boxes
4.0mm Terminal Pins

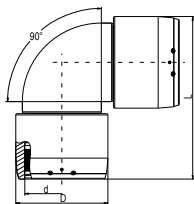
90° Elbows (W90°)



Size (mm)	SDR11 Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)	Old Black Code
25	FL 612 091	£20.25	37	73	0.1	32	5	40 104 307
32	FL 612 093	£20.25	43	82	0.1	24	5	40 104 308
40	FL 612 095	£30.00	53	96	0.1	30	7	40 104 309
50	FL 612 097	£40.45	66	113	0.2	34	7	40 104 310
63	FL 612 099	£44.00	83	136	0.3	44	7	40 104 311
75	FL 612 101	£67.60	96	170	0.6	70	10	40 104 312
90	FL 612 103	£67.60	115	202	1.0	90	10	40 104 313
110	FL 612 105	£99.20	138	234	1.6	140	10	40 104 314
125	FL 612 107	£110.80	157	254	2.0	180	15	40 104 315
160	FL 615 276	£205.30	207	329	4.9	360	20	40 104 317
180	FL 615 689	£251.80	228	354	5.8	440	20	40 104 318
200	FL 616 265	P.O.A.	254	392	8.6	450	20	
225	FL 615 690	£571.80	280	430	10.2	barcode read	20	

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3), 7 bar gas (GIS/PL2) and 10 bar gas (EN 1555-3)

Large Diameter 90° Elbows (W90° XL)

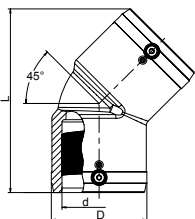


Size (mm)	SDR11 Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
250	FL 616 408	P.O.A.	310	534	19.1	barcode read	30
280	FL 616 409	P.O.A.	350	621	27.5	barcode read	30
315	FL 616 410	P.O.A.	396	677	40.0	barcode read	30

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3) and 10 bar gas (EN 1555-3)

* Manual fusion times are based on 39.5 volt fusion boxes
4.0mm Terminal Pins

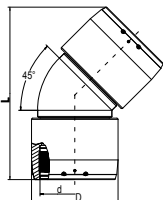
45° Elbows (W45°)



Size (mm)	SDR11 Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)	Old Black Code
32	FL 612 092	£20.25	43	102	0.1	24	5	40 105 308
40	FL 612 094	£30.00	54	120	0.1	30	7	40 105 309
50	FL 612 096	£36.10	66	136	0.2	34	7	40 105 310
63	FL 612 098	£43.70	82	158	0.3	44	7	40 105 311
75	FL 612 100	£59.30	96	198	0.5	70	10	40 105 312
90	FL 612 102	£67.70	115	232	0.8	90	10	40 105 313
110	FL 612 104	£99.20	138	265	1.3	140	10	40 105 314
125	FL 612 106	£110.80	157	279	1.8	180	15	40 105 315
160	FL 615 275	£205.30	207	377	4.4	360	20	40 105 317
180	FL 615 687	£251.80	228	382	4.6	440	20	40 105 318
200	FL 616 264	£826.90	254	415	6.8	450	20	
225	FL 615 688	P.O.A.	280	450	8.3	barcode read	20	

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3), 7 bar gas (GIS/PL2) and 10 bar gas (EN 1555-3)

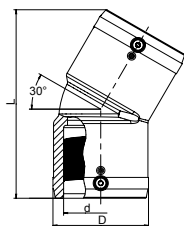
Large Diameter 45° Elbows (W45° XL)



Size (mm)	SDR11 Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
250	FL 616 404	P.O.A.	310	621	17.3	barcode read	30
280	FL 616 405	P.O.A.	350	702	25.6	barcode read	30
315	FL 616 406	P.O.A.	396	755	36.0	barcode read	30

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3) and 10 bar gas (EN 1555-3)

30° Elbows (W30°)

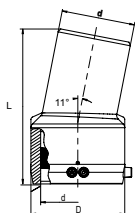


Size (mm)	SDR11 Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
90	FL 615 272	£83.30	115	224	0.8	90	10
110	FL 615 273	£122.40	142	252	1.3	140	10
125	FL 615 274	£166.10	158	270	1.6	180	15
160	FL 615 340	£318.70	199	350	3.9	360	20
180	FL 616 261	P.O.A.	229	390	5.0	440	20
200	FL 616 262	P.O.A.	254	412	6.4	450	20
225	FL 616 263	P.O.A.	281	456	8.2	barcode read	20

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3), 7 bar gas (GIS/PL2) and 10 bar gas (EN 1555-3)

* Manual fusion times are based on 39.5 volt fusion boxes
4.0mm Terminal Pins

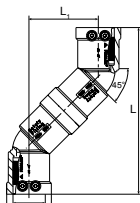
11° Spigot-Socket Elbows (WS11°)



Size (mm)	SDR11 Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
110	FL 616 139	£120.40	141	235	0.9	barcode read	10
125	FL 616 140	£169.90	160	250	1.3	barcode read	15
160	FL 616 141	£325.50	200	295	2.3	barcode read	20
180	FL 616 142	£417.50	226	310	3.1	barcode read	20
225	FL 616 143	£531.00	280	350	5.3	barcode read	20

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3), 7 bar gas (GIS/PL2) and 10 bar gas (EN 1555-3)

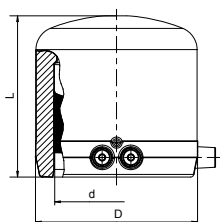
Swan Neck Bends (WET)



Size (mm)	SDR11 Black Code	Price Each	D (mm)	L (mm)	L ₁ (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
32	FL 616 051	P.O.A.	49	177	74	0.2	barcode read	5
40	FL 616 052	P.O.A.	58	215	89	0.3	barcode read	7
50	FL 616 053	P.O.A.	70	242	101	0.5	barcode read	7
63	FL 616 054	P.O.A.	84	256	106	0.7	barcode read	7

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3) and 10 bar gas (EN 1555-3)

End Caps (MV)

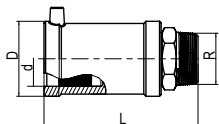


Size (mm)	SDR11 Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)	Old Black Code
20	FL 612 025	£17.55	31	62	0.1	barcode read	5	-
25	FL 612 026	£17.55	35	65	0.1	28	5	40 403 307
32	FL 612 027	£18.60	44	70	0.1	26	5	40 403 308
40	FL 612 028	£21.60	55	75	0.1	34	7	
50	FL 612 029	£27.10	67	80	0.1	56	7	40 403 310
63	FL 612 030	£31.10	84	88	0.2	52	7	40 403 311
75	FL 612 031	£42.00	99	99	0.3	86	10	
90	FL 612 032	£51.30	117	155	0.5	90	10	40 403 313
110	FL 612 033	£72.50	143	125	0.9	170	10	
125	FL 612 034	£82.40	158	186	1.4	235	15	40 403 315
160	FL 612 035	£94.10	206	262	2.4	460	20	40 403 317
180	FL 616 183	£157.30	225	195	2.8	440	20	40 403 318
200	FL 616 184	P.O.A.	250	210	3.7	barcode read	20	-
225	FL 616 185	P.O.A.	280	230	5.0	550	20	-

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3), 7 bar gas (GIS/PL2) and 10 bar gas (EN 1555-3)

* Manual fusion times are based on 39.5 volt fusion boxes
4.0mm Terminal Pins

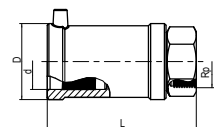
Transition Couplers PE100/Brass Male Thread (MUN)



Size (mm x inch)	SDR11 Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)	Old Black Code
20 x 1/2	FL 612 710	P.O.A.	35	91	0.2	barcode read	5	
25 x 3/4	FL 612 711	£38.75	40	99	0.2	barcode read	5	40 395 307
32 x 1	FL 612 712	£47.60	47	112	0.3	barcode read	5	40 395 308
32 x 1 1/4	FL 612 709	P.O.A.	47	120	0.4	barcode read	5	
32 x 1 1/2	FL 612 698	P.O.A.	47	121	0.5	barcode read	5	
40 x 1	FL 612 721	P.O.A.	58	123	0.5	barcode read	7	
40 x 1 1/4	FL 612 713	P.O.A.	58	126	0.5	barcode read	7	40 395 309
40 x 1 1/2	FL 612 718	P.O.A.	58	127	0.5	barcode read	7	
40 x 2	FL 612 725	P.O.A.	58	132	0.7	barcode read	7	
50 x 1	FL 612 719	P.O.A.	70	134	0.6	barcode read	7	
50 x 1 1/4	FL 612 716	P.O.A.	70	136	0.6	barcode read	7	
50 x 1 1/2	FL 612 714	£62.60	70	137	0.6	barcode read	7	40 395 310
50 x 2	FL 612 706	P.O.A.	70	147	0.8	barcode read	7	
63 x 1 1/4	FL 612 722	P.O.A.	84	138	0.9	barcode read	7	
63 x 1 1/2	FL 612 717	£88.10	84	137	0.9	barcode read	7	40 395 628
63 x 2	FL 612 715	£91.80	84	142	0.9	barcode read	7	40 395 311

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3)

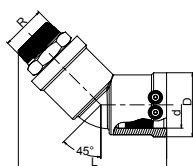
Transition Couplers PE100/Gunmetal Female Thread (MUM)



Size (mm x inch)	SDR11 Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)	Old Black Code
32 x 1	FL 612 595	£57.90	47	112	0.4	barcode read	5	40 394 308
40 x 1 1/4	FL 612 596	£61.50	58	121	0.5	barcode read	7	40 394 309
50 x 1 1/2	FL 612 692	£62.60	70	136	0.7	barcode read	7	40 394 310
63 x 1 1/2	FL 612 708	£92.70	84	141	1.2	barcode read	7	40 394 628
63 x 2	FL 612 693	£102.00	84	141	1.1	barcode read	7	40 394 311

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3)

45° Transition Elbows PE100/Brass Male Thread (WUN 45°)

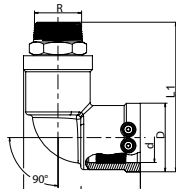


Size (mm x inch)	SDR11 Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)	Old Black Code
32 x 1	FL 612 145	£40.00	47	126	0.3	barcode read	5	40 399 308
40 x 1 1/4	FL 612 149	£67.20	58	140	0.5	barcode read	7	40 399 309
40 x 1 1/2	FL 612 139	P.O.A.	58	142	0.5	barcode read	7	
50 x 1 1/2	FL 612 144	£76.70	70	163	0.7	barcode read	7	40 399 310
63 x 1 1/2	FL 612 147	£94.70	84	176	1.0	barcode read	7	40 399 628
63 x 2	FL 612 146	£96.90	84	178	1.0	barcode read	7	40 399 311

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3)

* Manual fusion times are based on 39.5 volt fusion boxes
4.0mm Terminal Pins

90° Transition Elbows PE100/Brass Male Thread (WUN 90°)



Size (mm x inch)	SDR11 Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)	Old Black Code
32 x 1	FL 612 120	£51.70	47	85	0.3	barcode read	5	40 397 308
32 x 1½	FL 612 140	P.O.A.	47	94	0.5	barcode read	5	
40 x 1	FL 612 127	P.O.A.	58	102	0.5	barcode read	7	
40 x 1¼	FL 612 122	£70.40	58	102	0.5	barcode read	7	40 397 309
40 x 1½	FL 612 121	P.O.A.	58	102	0.6	barcode read	7	
50 x 1	FL 612 119	P.O.A.	70	118	0.7	barcode read	7	
50 x 1¼	FL 612 123	P.O.A.	70	118	0.7	barcode read	7	
50 x 1½	FL 612 124	£73.80	70	118	0.7	barcode read	7	40 397 310
63 x 1½	FL 612 125	£94.10	84	128	1.0	barcode read	7	40 397 628
63 x 2	FL 612 126	£100.60	84	128	1.0	barcode read	7	40 397 311
63 x 2	FL 612 146	£95.90	84	178	1.0	barcode read	7	40 399 311

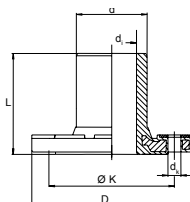
Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3)

* Manual fusion times are based on 39.5 volt fusion boxes

4.0mm Terminal Pins

Some items may only be available to order

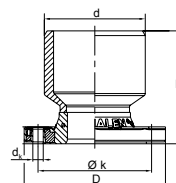
Full Faced Flanges (EFL) – Long Spigot Fittings



Size d (mm)	SDR11 Black Code	Price Each	D (mm)	d ₁ (mm)	d _k (mm)	L (mm)	Weight (kg)
63/50 PN10/16	FL 615 417	£147.20	169	51	16.5	105	1.5
90/80 PN10/16	FL 615 418	£193.60	204	72	16.5	130	2.5
110/100 PN10/16	FL 615 419	£382.70	224	87	16.5	150	3.2
125/100 PN10/16	FL 615 605	£392.90	224	101	16.5	160	3.3
160/150 PN10/16	FL 615 421	£535.30	288	127	20.5	190	6.1
180/150 PN10/16	FL 615 927	£752.50	288	123	20.5	200	6.7
225/200 PN10	FL 615 607	P.O.A.	343	180	20.5	225	9.1

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3), 7 bar gas (GIS/PL2) and 10 bar gas (EN 1555-3)

Full Faced Reduced Flanges (FLR) – Long Spigot Fittings



Size d (mm)	SDR11 Black Code	Price Each	D (mm)	d _k (mm)	L (mm)	Ø k (mm)	Weight (kg)
110/80 PN10/16	FL 616 065	P.O.A.	204	16.5	161	160	3.5
160/100 PN10/16	FL 616 241	P.O.A.	224	16.5	180	180	4.1
225/100 PN10/16	FL 616 242	P.O.A.	224	16.5	270	180	5.4

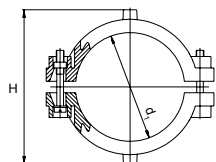
Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3)

Drilled to EN 1092-1:2007 Table 13

Note: Loose Backing Ring not required for these items

Additional washers are necessary

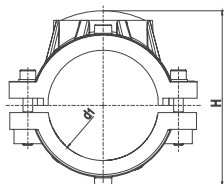
Reinforcing Saddles (RS)



Size d ₁ (mm)	SDR11 Black Code	Price Each	H (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
63	FL 612 519	£148.60	106	0.3	barcode read	15

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3) and 10 bar gas (EN 1555-3)

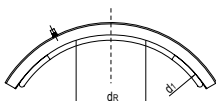
Repair & Reinforcing Saddles (VVS)



Size d ₁ (mm)	SDR11 Black Code	Price Each	H (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
90	FL 615 164	£212.70	148	0.9	barcode read	20
110	FL 615 165	£221.30	168	1.2	barcode read	20
125	FL 615 166	£234.40	183	1.4	barcode read	20
160	FL 615 168	£267.80	218	1.7	barcode read	30
180	FL 615 169	£272.20	238	1.8	barcode read	50
200	FL 615 170	£382.70	258	1.8	barcode read	20
225	FL 615 171	£407.20	283	1.9	barcode read	20

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3) and 10 bar gas (EN 1555-3)

Repair Saddles (RS-XL)



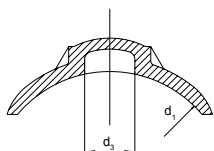
Size d ₁ (mm)	SDR17 Black Code	Price Each	Repair diameter, d _R (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
560	FL 616 367	P.O.A.	230	14.3	barcode read	
630	FL 616 368	P.O.A.	230	15.0	barcode read	
710	FL 616 369	P.O.A.	230	18.9	barcode read	
800	FL 616 370	P.O.A.	230	15.8	barcode read	
900	FL 616 371	P.O.A.	230	17.6	barcode read	
1000	FL 616 372	P.O.A.	230	16.4	barcode read	
1200	FL 616 379	P.O.A.	230	16.3	barcode read	

Maximum Continuous Operating Pressure SDR17 – 10 bar water (EN 12201-3) and 5 bar gas (EN 1555-3)

Only for use with the Friatec VACUSET XL Clamping Equipment – please contact our Technical Support Department for further information

* Manual fusion times are based on 39.5 volt fusion boxes
4.0mm Terminal Pins

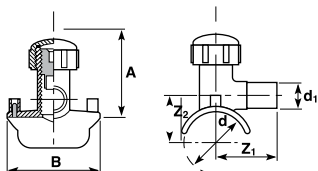
Top Loading Repair Saddle (VSC-TL)



Size d ₁ (mm)	SDR11 Black Code	Price Each	d ₃ (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
250-560	FL 615 397	£407.20	50	0.6	barcode read	

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3) and 10 bar gas (EN 1555-3)

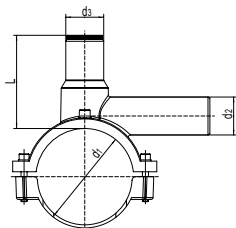
32mm Top Loading Tapping Tees



Size (mm) d x d ₁	SDR11 Black Code	Price Each	A (mm)	B (mm)	Z ₁ (mm)	Z ₂ (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
63 x 32	40 411 415	£41.85	98	109	79	60	0.3	70	4
75 x 32	40 411 416	£41.85	98	109	79	66	0.3	70	4
90 x 32	40 411 417	£41.85	98	109	79	72	0.3	70	4
110 x 32	40 411 418	£41.85	98	109	79	84	0.3	70	4
125 x 32	40 411 419	£41.85	98	109	79	91	0.3	70	4
140 x 32	40 411 420	£41.85	98	109	79	99	0.3	70	4
160 x 32	40 411 421	£41.85	98	109	79	109	0.3	70	4
180 x 32	40 411 422	£41.85	98	109	79	119	0.3	70	4
200 x 32	40 411 423	£41.85	138	109	94	129	0.5	102	10
225-315 x 32	40 411 427	£41.85	138	109	94	141-186	0.5	125	10

Product supplied may vary in design to that shown above. Supplied complete with 12mm hexagon drive cutter.

Under Clamped Pressure Tapping Tees (DAA)



Size (mm) d ₁ x d ₂	SDR11 Black Code	Price Each	L (mm)	d ₃ (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)	Old Black Code
90 x 63	FL 612 701	£99.90	125	50	1.3	barcode read	20	50 404 459
110 x 63	FL 612 624	£99.90	121	50	1.3	barcode read	20	50 404 460
125 x 63	FL 612 309	£99.90	122	50	1.3	barcode read	20	50 404 461
160 x 63	FL 612 650	£99.90	165	50	1.3	barcode read	30	50 404 463
180 x 63	FL 612 652	£99.90	165	50	1.3	barcode read	50	50 404 464
200 x 63	FL 612 659	£99.90	165	50	1.3	barcode read	50	50 404 465
225 x 63	FL 612 655	£99.90	165	50	1.3	barcode read	50	50 404 466

Maximum Continuous Operating Pressure SDR11 - 16 bar water (EN 12201-3) and 10 bar gas (EN 1555-3)

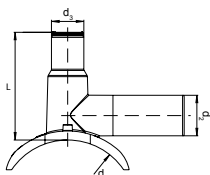
90mm x 63mm (**FL 610 701**), 125mm x 63mm (**FL 610 309**) and 180mm x 63mm (**FL 610 652**) are also available as kits with a Cap for Pressure Tapping Tees (K).

Contact Sales Office for further information.

Utilize a 19mm hexagonal drive cutter. If actuator key required, order item **FE 613 250**.

* Manual fusion times are based on 39.5 volt fusion boxes
4.0mm Terminal Pins

Top Loading Pressure Tapping Tee (DAA-TL)



Size (mm) D ₁ x D ₂	SDR11 Black Code	Price Each	L (mm)	d ₃ (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
250-315(400) x 63	FL 615 339	£374.00	167	50	1.5	barcode read	50

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3), 7 bar gas (GIS/PL2) and 10 bar gas (EN 1555-3) – for mains sizes up to 315mm.

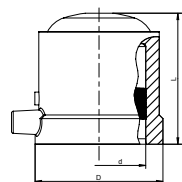
Maximum Continuous Operating Pressure SDR17 – 10 bar water (EN 12201-3), 4 bar gas (GIS/PL2) and 5 bar gas (EN 1555-3) – for mains 355mm and 400mm.

Also available as a kit with Cap for Pressure Tapping Tees (K). Order code **FL 610 339**. Contact Sales Office for further information.

Cutter long enough for SDR17 pipe at sizes 355 and 400mm.

Utilize a 19mm hexagonal drive cutter. If actuator key required, order item **FE 613 250**.

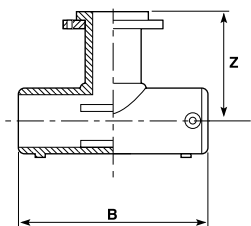
Cap for Pressure Tapping Tees (K)



Size (mm)	SDR11 Black Code	Price Each	D (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
50	FL 612 310	£29.75	69	72	0.1	barcode read	7

4.0mm Terminal Pins

Flanged Branch Tees



Size (mm)	SDR11 Black Code	Price Each	B (mm)	Z (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
90 x 80 PN16	FL 301 313	£179.20	219	296	2.6	120	10
125 x 80 PN16	FL 301 315	£341.80	264	532	4.7	240	12
180 x 80 PN16	FL 301 318	£453.90	383	834	7.9	440	20
90 x 100 PN16	FL 302 313	£232.80	219	534	3.2	100	10
125 x 100 PN16	FL 302 315	£329.00	264	301	4.3	240	12
180 x 100 PN16	FL 302 318	£453.90	383	671	9.2	440	20
180 x 150 PN16	FL 303 318	£445.80	383	415	5.2	440	20

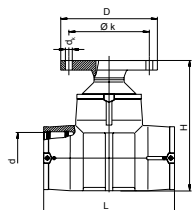
Dimension Z is an approximate value, based on the dimensions of the component parts.

The nature of the fabrication process is such that the final dimension may be slightly less than the Z value quoted.

Drilled to BS EN 1092-1:2007 Table 13.

* Manual fusion times are based on 39.5 volt fusion boxes

Full Faced Flanged Branch Tees (FLT)



Size (mm)	SDR11 Black Code	Price Each	D (mm)	d _k (mm)	H (mm)	L (mm)	Ø k (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
110 x 80 PN16	FL 615 590	P.O.A.	204	16.5	316	355	160	4.9	barcode read	10
125 x 80 PN16	FL 615 591	P.O.A.	204	16.5	343	384	160	5.5	barcode read	15
160 x 80 PN16	FL 615 592	P.O.A.	204	16.5	390	430	160	8.1	barcode read	20
180 x 80 PN16	FL 615 910	P.O.A.	204	16.5	416	480	160	10.0	barcode read	20

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3)

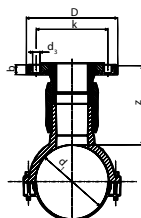
225 x 80 PN16	FL 616 031	P.O.A.	204	16.5	465	580	160	15.4	barcode read	20
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Maximum Continuous Operating Pressure SDR17 – 10 bar water (EN 12201-3)

Drilled to BS EN 1092-1:2007 Table 13.

Additional washers are necessary for the flange

Full Faced Flanged Branch Saddles (SAFL)



Size (mm)	SDR11 Black Code	Price Each	D (mm)	d _k (mm)	Drilling Ø da (mm)	Ø k (mm)	Z (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
110 x 80 PN16	FL 616 016	P.O.A.	204	16.5	65	160	180	3.7	barcode read	10
125 x 80 PN16	FL 616 017	P.O.A.	204	16.5	65	160	180	3.9	barcode read	15
160 x 80 PN16	FL 616 018	P.O.A.	204	16.5	65	160	180	4.3	barcode read	20
180 x 80 PN16	FL 616 019	P.O.A.	204	16.5	65	160	180	4.6	barcode read	20
225 x 80 PN16	FL 616 020	P.O.A.	204	16.5	65	160	180	4.7	barcode read	20
125 x 100 PN16	FL 616 021	P.O.A.	224	16.5	84	180	180	4.8	barcode read	15
160 x 100 PN16	FL 616 022	P.O.A.	224	16.5	84	180	180	5.3	barcode read	20
180 x 100 PN16	FL 616 023	P.O.A.	224	16.5	84	180	180	5.5	barcode read	20
225 x 100 PN16	FL 616 024	P.O.A.	224	16.5	84	180	180	5.6	barcode read	20

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3), 7 bar gas (GIS/PL2) and 10 bar gas (EN 1555-3)

Drilled to BS EN 1092-1:2007 Table 13.

Additional washers are required for the flange

Duck Foot Bends



Size (mm)	SDR11 Black Code	Price Each	A (mm)	B (mm)	C x C1 (mm)	D x D1 (mm)	SDR11 Weight (kg)
63 x 80 PN16	FL 384 459	£376.90	230	270	200 x 230	160 x 180	4.1
90 x 80 PN16	FL 384 313	£379.70	200	270	200 x 230	160 x 180	4.0
125 x 80 PN16	FL 384 484	£382.70	250	270	200 x 230	160 x 180	4.7
180 x 80 PN16	FL 384 487	£530.90	490	270	200 x 230	160 x 180	8.1

Kit comprises of:

1 x base

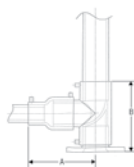
1 x electrofusion tee

1 x pupped full faced stub flange assembly
(0.5m pep approximately)

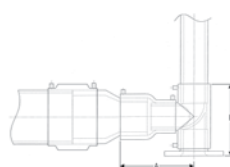
1 x reducer/expander to suit input size

Bolts NOT included. Other sizes made to order upon request subject to minimum order values/quantities. Available in kit form only.

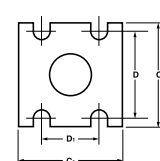
Example of 63 x 80 PN16



Example of 180 x 80 PN16



Base dimensions



* Manual fusion times are based on 39.5 volt fusion boxes

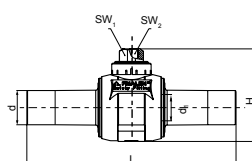
Electrofusion Wipes



Item	Code	£ Per Tub
Electrofusion iso-propyl Alcohol Wipes 100% (100 per tub)	53 996 603	Accessories

Complies with WIS 4-32-08. Safety data sheet available upon request.

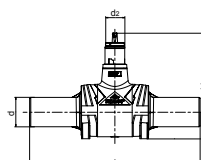
Reduced Port Ball Valves (KHP)



Size D (mm)	SDR11 Black Code	Price Each	H (mm)	L (mm)	Weight (kg)
32	FL 612 490	£340.50	129	310	0.5
63	FL 612 494	£712.80	195	417	2.3
90	FL 612 495	£1,865.20	245	545	4.7
125	FL 612 496	£1,865.20	245	545	5.2
180	FL 615 309	£4,720.50	329	544	14.2

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3) and 10 bar gas (EN 1555-3)

Frialoc – PE Shut-off valves

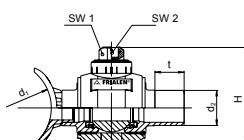


Size D (mm)	SDR11 Black Code	Price Each	H (mm)	L (mm)	Weight (kg)
90	FL 616 293	£1,912.90	450	720	13.9
110	FL 616 294	£2,249.10	450	720	14.2
125	FL 616 295	£2,828.00	450	720	14.5
160	FL 616 296	£3,616.20	608	1010	37.9
180	FL 616 297	£4,618.50	608	1030	39.0
200*	FL 616 453	P.O.A.	608	1030	44.6
225*	FL 616 298	P.O.A.	608	1030	45.5
250*	FL 616 438	P.O.A.	608	1030	46.0

Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3)

* Some restriction in bore

Top Loading Tapping Ball Valve (AKHP-TL)



Size d ₁ x d ₂ (mm)	SDR11 Black Code	Price Each	H (mm)	L (mm)	Weight (kg)	Fusion Time* (Sec)	Cooling Time (mins)
250-450(560) x 63	FL 615 525	£2,178.60	180	330	2.8	barcode read	
250-450(560) x 90	FL 615 526	£2,638.40	240	335	4.5	barcode read	

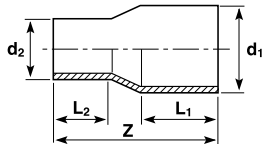
Maximum Continuous Operating Pressure SDR11 – 16 bar water (EN 12201-3) and 10 bar gas (EN 1555-3)

- for mains sizes up to 450mm

Maximum Continuous Operating Pressure SDR17 – 10 bar water (EN 12201-3) and 5 bar gas (EN 1555-3)

- for mains 500mm and 560mm

Reducers



** Replace XX with material/colour required:

40 = PE100 Black

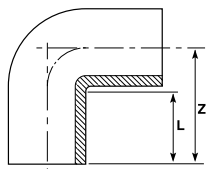
58 = PE80 Yellow

SDR17.6 is available in Yellow only.

Size (mm) d ₁ x d ₂	SDR 11** Code	Price Each 40 Black	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 58 Yellow	L1 (mm)	L2 (mm)	Z (mm)	SDR11 Weight (kg)	SDR17/17.6 Weight (kg)
32 x 25	40 441 409	£8.60	-	-	-	-	50	45	97	0.1	-
40 x 25	40 441 410	£9.73	-	-	-	-	49	41	115	0.1	-
40 x 32	40 441 413	£9.73	-	-	-	-	50	45	117	0.1	-
50 x 25	40 441 411	£11.10	-	-	-	-	56	42	130	0.1	-
50 x 32	40 441 414	£11.10	-	-	-	-	55	47	110	0.1	-
50 x 40	40 441 429	£11.10	-	-	-	-	55	50	110	0.1	-
63 x 25	40 441 395	£13.85	-	-	-	-	64	42	137	0.1	-
63 x 32	XX 441 415	£13.85	£17.25	-	-	-	63	51	141	0.1	-
63 x 40	40 441 430	£13.85	-	-	-	-	63	55	145	0.1	-
63 x 50	XX 441 444	£13.85	£13.85	-	-	-	65	55	149	0.1	-
75 x 32	40 441 416	£20.90	-	-	-	-	74	50	150	0.2	-
75 x 40	40 441 431	£20.90	-	-	-	-	74	50	142	0.2	-
75 x 50	40 441 445	£20.90	-	-	-	-	74	55	145	0.3	-
75 x 63	XX 441 458	£20.90	£14.70	40 440 445	£17.85	-	70	63	165	0.2	0.2
90 x 50	40 441 446	£35.50	-	40 440 446	£30.10	-	83	55	157	0.3	0.2
90 x 63	XX 441 459	£35.50	£29.75	40 440 459	£30.10	-	84	63	170	0.3	0.2
90 x 75	XX 441 471	£35.50	£29.75	40 440 471	£30.10	-	84	75	192	0.4	0.2
110 x 50	40 441 447	£55.60	-	40 440 447	£47.15	-	90	55	178	0.4	0.3
110 x 63	40 441 460	£55.60	-	40 440 460	£47.15	-	94	68	207	0.5	0.3
110 x 75	40 441 472	£55.60	-	40 440 472	£47.15	-	90	73	187	0.5	0.4
110 x 90	40 441 483	£55.60	-	40 440 483	£47.15	-	89	83	202	0.6	0.4
125 x 63	40 441 461	£55.60	-	40 440 461	£47.15	-	102	70	230	0.6	0.4
125 x 75	XX 441 473	£55.60	£49.25	40 440 473	£47.15	-	90	75	188	0.7	0.4
125 x 90	XX 441 484	£55.60	£55.60	XX 440 484	£47.15	£47.85	94	82	206	0.8	0.5
125 x 110	40 441 493	£55.60	-	40 440 493	£47.15	-	102	83	217	0.8	0.5
140 x 90	40 441 485	£62.10	-	40 440 485	£52.90	-	95	84	207	0.9	0.7
140 x 110	40 441 494	£62.10	-	40 440 494	£52.90	-	95	90	207	0.9	0.7
140 x 125	40 441 503	£62.10	-	40 440 503	£52.90	-	98	95	207	1.0	0.8
160 x 90	40 441 486	£88.20	-	40 440 486	£75.20	-	108	95	248	1.1	0.9
160 x 110	40 441 495	£88.20	-	40 440 495	£75.20	-	102	92	250	1.3	0.9
160 x 125	40 441 504	£88.20	-	40 440 504	£75.20	-	111	96	240	1.3	1.0
160 x 140	40 441 512	£88.20	-	40 440 512	£75.20	-	105	95	220	1.6	1.1
180 x 125	XX 441 505	£121.30	£114.40	XX 440 505	£104.80	£104.80	112	94	251	1.6	1.1
180 x 140	40 441 513	£121.30	-	40 440 513	£104.80	-	100	83	218	2.0	1.3
180 x 160	40 441 520	£121.30	-	40 440 520	£104.80	-	105	103	220	2.1	1.5
200 x 140	40 441 514	£122.80	-	40 440 514	£104.80	-	110	100	240	2.3	2.1
200 x 160	40 441 521	£122.80	-	40 440 521	£104.80	-	110	93	246	2.2	1.7
200 x 180	40 441 527	£122.80	-	40 440 527	£104.80	-	140	125	277	2.6	1.8
225 x 160	40 441 522	£202.40	-	40 440 522	£172.20	-	135	118	308	3.2	2.2
225 x 180	40 441 528	£202.40	-	40 440 528	£172.20	-	120	118	263	3.3	2.2
225 x 200	40 441 533	£202.40	-	40 440 533	£172.20	-	116	116	397	5.0	2.5
250 x 180	XX 441 529	£155.60	£139.20	XX 440 529	£172.20	£139.20	130	111	303	3.7	3.1
250 x 200	40 441 534	£180.30	-	40 440 534	£482.50	-	138	130	300	3.3	3.5
250 x 225	40 441 538	£180.30	-	40 440 538	£169.40	-	138	135	288	4.9	3.7
280 x 200	40 441 535	£379.80	-	40 440 535	£323.40	-	140	112	333	5.9	3.8
280 x 225	40 441 539	£379.80	-	40 440 539	£323.40	-	140	120	335	6.1	4.1
280 x 250	40 441 542	£379.80	-	40 440 542	£323.40	-	140	130	340	6.5	4.7
315 x 225	40 441 540	£289.00	-	40 440 540	£271.20	-	150	120	356	7.9	5.3
315 x 250	XX 441 543	£179.00	£155.60	XX 440 543	£271.20	£145.30	150	125	340	7.0	5.5
355 x 250	40 441 544	£315.20	-	-	-	-	165	130	390	9.1	-
355 x 280	40 441 546	£315.20	-	-	-	-	165	139	390	9.5	-
355 x 315	40 441 547	£315.20	-	-	-	-	165	150	390	9.9	-
400 x 280	40 441 564	£417.90	-	-	-	-	180	139	415	10.4	-
400 x 315	40 441 565	£417.90	-	-	-	-	180	150	415	11.1	-
400 x 355	40 441 566	£417.90	-	-	-	-	180	165	420	11.6	-



90° Elbows



Size (mm)	SDR 11** Code	Price Each 40 Black	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 58 Yellow	L (mm)	Z (mm)	SDR11 Weight (kg)	SDR17/17.6 Weight (kg)
25	XX 209 307	£6.20	£8.01	-	-	-	48	65	0.1	-
32	XX 209 308	£6.58	£8.34	-	-	-	51	65	0.1	-
50	40 209 310	£13.75	-	-	-	-	55	95	0.1	-
63	XX 209 311	£19.15	£18.00	-	-	-	63	100	0.3	-
75	40 210 312	£27.40	-	-	-	-	69	111	0.3	-
90	XX 210 313	£32.10	£30.20	XX 208 313	£27.45	£27.45	80	135	0.6	0.6
110	40 210 314	£39.20	-	40 208 314	£34.15	-	110	166	1.1	0.8
125	XX 210 315	£45.60	£42.85	XX 208 315	£39.10	£39.10	92	160	1.5	1.0
140	40 210 316	£104.80	-	40 208 316	£98.60	-	95	195	1.9	1.4
160	40 210 317	£109.70	-	40 208 317	£96.50	-	120	220	2.9	2.3
180	XX 210 318	£133.00	£126.10	XX 208 318	£113.60	£113.60	120	220	3.6	2.5
200	40 210 319	£172.20	-	40 208 319	£125.40	-	122	242	5.0	3.8
225	40 210 320	£202.40	-	40 208 320	£173.50	-	130	268	6.4	5.0
250	XX 210 321	£338.60	£320.60	XX 208 321	£298.60	£298.60	150	400	11.5	8.0
280	40 210 322	£499.40	-	40 208 322	£450.00	-	140	340	15.7	9.0
315	XX 210 323	£664.40	£627.40	XX 208 323	£584.60	£584.60	150	420	19.0	12.5

** Replace XX with material/colour required:

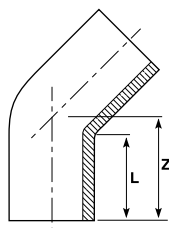
40 = PE100 Black

58 = PE80 Yellow

SDR17.6 is available in Yellow only. Note: 250 and 315mm sizes have sections of pipe butt-fused to the moulding. On these sizes L = minimum length of pipe added.

Note: 250 and 315mm sizes have sections of pipe butt-fused to the moulding. On these sizes L = minimum length of pipe added.

45° Elbows



Size (mm)	SDR 11** Code	Price Each 40 Black	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 58 Yellow	L (mm)	Z (mm)	SDR11 Weight (kg)	SDR17/17.6 Weight (kg)
25	XX 215 307	£7.58	£7.58	-	-	-	35	41	0.1	-
32	XX 215 308	£7.58	£7.58	-	-	-	57	75	0.1	-
50	40 215 310	£13.75	-	-	-	-	65	75	0.1	-
63	XX 215 311	£18.10	£18.10	-	-	-	63	84	0.2	-
90	XX 216 313	£25.60	£25.60	XX 214 313	£21.80	£21.80	79	95	0.5	0.3
110	40 216 314	£34.55	-	40 214 314	£30.20	-	87	107	0.9	0.6
125	XX 216 315	£41.75	£41.75	XX 214 315	£35.95	£35.95	94	116	1.2	0.9
140	40 216 316	£82.60	-	40 214 316	£75.20	-	98	190	1.6	1.1
160	40 216 317	£102.80	-	40 214 317	£87.60	-	103	135	2.3	1.6
180	XX 216 318	£116.50	£116.50	XX 214 318	£99.20	£99.20	120	157	2.6	2.0
200	40 216 319	£141.90	-	40 214 319	£120.90	-	122	172	3.7	2.4
225	40 216 320	£183.10	-	40 214 320	£159.80	-	130	185	5.1	4.1
250	XX 216 321	£221.50	£221.50	XX 214 321	£192.80	£192.80	130	246	9.7	6.3
280	40 216 322	£499.20	-	40 214 322	£450.00	-	140	246	10.6	8.1
315	XX 216 323	£386.50	£363.30	XX 214 323	£333.10	£333.10	150	293	16.5	12.5

** Replace XX with material/colour required:

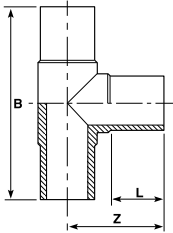
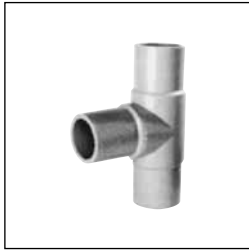
40 = PE100 Black

58 = PE80 Yellow

SDR17.6 is available in Yellow only. Note: 250 and 315mm sizes have sections of pipe butt-fused to the moulding. On these sizes L = minimum length of pipe added.

Note: 250 and 315mm sizes have sections of pipe butt-fused to the moulding. On these sizes L = minimum length of pipe added.

90° Equal Tees



Size (mm)	SDR 11** Code	Price Each 40 Black	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 58 Yellow	L (mm)	B (mm)	Z (mm)	SDR11 Weight (kg)	SDR17/17.6 Weight (kg)
63	XX 221 311	£19.25	£18.20	-	-	-	67	240	123	0.4	-
75	40 222 312	£60.20	-	-	-	-	70	260	143	0.7	-
90	XX 222 313	£43.70	£41.05	XX 220 313	£37.35	£37.45	79	310	165	1.2	1.0
110	40 222 314	£60.20	-	40 220 314	£51.90	-	87	326	175	1.7	1.4
125	XX 222 315	£88.20	£82.60	XX 220 315	£75.20	£75.20	92	375	197	2.4	2.0
140	40 222 316	£133.00	-	40 220 316	£123.90	-	90	390	193	3.2	2.1
160	40 222 317	£148.80	-	40 220 317	£129.50	-	103	419	208	4.5	3.0
180	XX 222 318	£210.60	£198.30	XX 220 318	£183.10	£183.10	120	509	270	7.1	5.5
200	40 222 319	£229.80	-	40 220 319	£214.80	-	122	500	270	8.0	6.4
225	40 222 320	£297.20	-	40 220 320	£275.20	-	130	550	275	11.1	9.0
250	XX 222 321	£410.00	£386.50	XX 220 321	£356.50	£356.50	130	687	344	18.7	12.2
280	40 222 322	£1,012.40	-	40 220 322	£946.90	-	140	692	346	18.7	12.7
315	XX 222 323	£1,022.10	£966.50	-	-	-	150	830	413	37.6	-

** Replace XX with material/colour required:

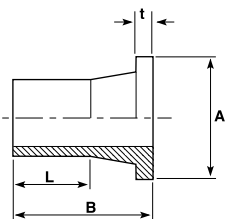
40 = PE100 Black

58 = PE80 Yellow

SDR17.6 is available in Yellow only. Note: 250 and 315mm sizes have sections of pipe butt-fused to the moulding. On these sizes L = minimum length of pipe added.

Note: 250 and 315mm sizes have sections of pipe butt-fused to the moulding. On these sizes L = minimum length of pipe added.

Stub Flanges



Size (mm)	SDR 11** Code	Price Each 40 Black	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 58 Yellow	L (mm)	B (mm)	Z (mm)	t (mm)	SDR11 Weight (kg)	SDR17/17.6 Weight (kg)
32	40 227 308	£9.49	-	-	-	-	32	88	60	10	0.1	-
40	40 227 309	£11.10	-	-	-	-	78	100	60	12	0.1	-
50	40 227 310	£13.55	-	-	-	-	87	100	65	13	0.1	-
63	XX 227 311	£21.05	£20.75	-	-	-	102	117	63	14	0.2	-
75	40 228 312	£25.50	-	40 226 312	£21.60	-	122	127	85	16	0.3	0.2
90	XX 228 313	£29.15	£28.80	XX 226 313	£26.70	£26.60	138	136	79	17	0.5	0.4
110	40 228 314	£36.15	-	40 226 314	£32.95	-	158	136	82	18	0.7	0.5
125	XX 228 315	£45.20	£44.40	XX 226 315	£41.15	£41.15	158	179	92	25	1.0	0.7
140	40 228 316	£54.30	-	40 226 316	£46.15	-	188	288	103	25	1.5	1.2
160	40 228 317	£64.50	-	40 226 317	£58.90	-	212	179	98	25	1.6	1.3
180	XX 228 318	£104.00	£102.00	XX 226 318	£94.50	£94.50	212	175	106	30	1.8	1.4
200	40 228 319	£147.50	-	40 226 319	£135.00	-	268	179	115	32	2.5	2.1
225	40 228 320	£165.20	-	40 226 320	£150.20	-	268	179	125	32	2.8	2.1
250	40 228 321	£285.00	-	XX 226 321	£258.80	£150.20	320	284	180	32	3.7	4.4
280	40 228 322	£315.20	-	40 226 322	£285.00	-	320	245	156	35	8.4	6.0
315	40 228 323	£353.60	-	XX 226 323	£322.00	£253.30	370	270	185	35	8.5	6.0
355	40 228 324	£427.90	-	40 226 324	£363.30	-	430	272	194	30	10.5	7.4
400	40 228 325	£466.50	-	XX 226 325	£397.70	£586.80	482	304	219	33	9.6	6.8

** Replace XX with material/colour required:

40 = PE100 Black

58 = PE80 Yellow

SDR17.6 is available in Yellow only. Note: 250 and 315mm sizes have sections of pipe butt-fused to the moulding. On these sizes L = minimum length of pipe added.



Stub Flange Assemblies



Size (mm) d ₁ x d ₂	SDR 11** Code	Price Each 40 Black	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 58 Yellow	SDR11 Black Weight (kg)	SDR11 Yellow Weight (kg)	SDR17/17.6 Black Weight (kg)	SDR17/17.6 Yellow Weight (kg)
63 x 50	XX 329 311	£52.30	£51.30	-	-	-	1.70	1.20	-	-
90 x 80	XX 329 313	£62.70	£62.40	XX 328 313	£59.20	£59.80	2.90	1.70	1.4	1.6
110 x 100	40 329 314	£76.00	-	40 328 314	£71.00	-	3.40	-	2.1	-
125 x 100	XX 329 315	£85.80	£85.80	XX 328 315	£80.10	£82.90	3.70	2.50	2.3	2.2
160 x 150	40 329 317	£146.00	-	40 328 317	£123.40	-	7.30	-	4.2	-
180 x 150	XX 329 318	£195.50	£194.00	XX 328 318	£160.00	£185.50	7.20	4.60	4.2	4.2
225 x 200	40 329 320	£247.80	-	40 328 320	£162.90	-	9.60	-	5.7	-
250 x 250	XX 329 321	£519.30	£509.40	XX 328 321	£452.80	£459.80	15.20	10.70	10.9	11.4
315 x 300	XX 329 323	£645.30	£636.90	XX 328 323	£530.60	£575.90	23.40	17.50	16.6	15.0

A range of SlimFlange fittings are also available as pupped fittings only – see pupped section on page 86.

** Replace XX with material/colour required:

40 = PE100 Black

58 = PE80 Yellow

Stub Flange Assemblies include the appropriate backing ring and gasket. Bolt set not supplied. Drilled to BS EN 1092-1:2007 Table 13.

Stub Flange Adaptor Kits SDR 17/17.6



Adaptor Kit comprises of:-

1 x Stub Flange

1 X Coupler

1 x Gasket (representation)

1 x backing Ring

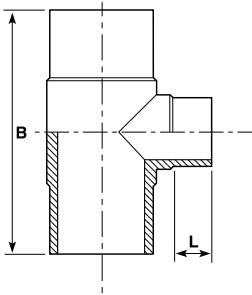
1 x Bolt set (for gas flange adaptor kits only)

Size (mm) d ₁ x d ₂	SDR17 Black Code	Price Each 40 Black	SDR17.6 Yellow Code	Price Each 58 Yellow
63 x 50	FL 251 311	£136.10	58 250 311	£137.30
90 x 80	FL 250 313	£196.20	58 250 313	£231.00
125 x 100	FL 250 315	£247.80	58 250 315	£219.40
90 x 100	-	-	58 250 484	£209.00
160 x 150	FL 250 317	£384.60	-	-
180 x 150	FL 250 318	£440.30	58 250 318	£494.50
250 x 250	FL 250 321	£998.00	58 250 321	£1,314.00
250 x 200	FL 250 534	£975.00	58 250 534	£975.00
315 x 300	FL 250 323	£1,468.00	58 250 323	£1,468.00

Drilled to BS EN 1092-1:2007 Table 13.

Note: Sizes 250 and 315mm have sections of pipe butt-fused to the moulding.

Reduced Branch Tees

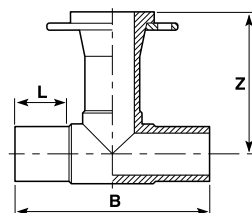


Size (mm) d ₁ x d ₂	SDR11 Black Code	Price Each Yellow	SDR17 Black Code	Price Each Yellow	B (mm)	L (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
63 x 32	40 378 415	£23.80	40 377 415	£19.40	228	46	0.3	0.2
63 x 50	40 378 444		40 377 444		215	56	0.3	0.2
75 x 32	40 378 416	£42.10	40 377 416	£35.75	260	50	0.5	0.4
75 x 50	40 378 372		40 377 372		260	55	0.5	0.4
75 x 63	40 378 445		40 377 445		255	63	0.8	0.4
90 x 50	40 378 446	£51.60	40 377 446	£43.80	303	60	0.6	0.6
90 x 63	40 378 459		40 377 459		303	65	0.9	0.7
90 x 75	40 378 471		40 377 471		272	68	0.8	1.0
110 x 63	40 378 460	£69.00	40 377 460	£64.40	316	62	1.5	1.1
110 x 75	40 378 472		40 377 472		309	70	1.2	0.9
110 x 90	40 378 483		40 377 483		320	78	1.5	1.1
125 x 90	40 378 484	£104.80	40 377 484	£97.90	320	82	1.6	1.1
125 x 110	40 378 493		40 377 493		341	83	1.8	1.2
140 x 63	40 378 462	£153.20	40 377 462	£153.20	386	77	1.9	1.3
140 x 75	40 378 474		40 377 474		386	78	1.3	1.3
140 x 90	40 378 485		40 377 485		388	87	1.9	1.4
140 x 110	40 378 494		40 377 494		388	95	2.2	2.2
160 x 63	40 378 463	£194.10	40 377 463	£181.70	424	72	3.3	2.0
160 x 75	40 378 475		40 377 475		424	73	2.7	1.9
160 x 90	40 378 486		40 377 486		424	84	2.9	2.6
160 x 110	40 378 495		40 377 495		425	93	2.9	2.7
180 x 90	40 378 487	£260.30	40 377 487	£243.70	460	85	3.5	2.5
180 x 110	40 378 496		40 377 496		460	95	3.3	2.5
180 x 125	40 378 505		40 377 505		430	100	3.4	2.5
180 x 140	40 378 513		40 377 513		460	104	3.6	2.6
180 x 160	40 378 520	£382.60	40 377 520	£357.80	460	110	6.1	3.1
200 x 63	40 378 465		40 377 465		500	70	4.7	2.8
200 x 90	40 378 488		40 377 488		500	82	6.5	2.9
200 x 110	40 378 497		40 377 497		500	91	6.5	3.3
200 x 125	40 378 506		40 377 506		500	100	6.6	3.4
200 x 160	40 378 521		40 377 521		500	104	4.9	3.6
225 x 75	40 378 478	£460.90	40 377 478	£430.70	555	70	8.5	4.6
225 x 90	40 378 489		40 377 489		535	82	8.5	6.5
225 x 110	40 378 498		40 377 498		522	92	8.3	6.5
225 x 125	40 378 507		40 377 507		522	93	6.6	4.5
225 x 140	40 378 515		40 377 515		535	105	7.9	4.6
225 x 160	40 378 522		40 377 522		522	109	6.9	7.3
225 x 180	40 378 528		40 377 528		560	105	8.0	7.2
250 x 110	40 378 499	£752.40	40 377 499	£705.00	600	91	8.0	6.1
250 x 160	40 378 523		40 377 523		600	104	7.9	6.4
250 x 180	40 378 529		40 377 529		600	105	18.2	11.9
315 x 90	40 378 492	£1,194.50	40 377 492	£1,118.20	700	82	8.6	5.7
315 x 110	40 378 501		40 377 501		700	90	8.6	5.7
315 x 160	40 378 525		40 377 525		700	106	12.4	10.0
315 x 180	40 378 531		40 377 531		700	107	14.5	7.9
315 x 200	40 378 536		40 377 536		700	120	15.5	8.3
315 x 225	40 378 540		40 377 540		700	120	16.9	8.7
315 x 250	40 378 543		40 377 543		695	130	18.3	9.9

Note: some fittings will be produced from short spigots and pupped.



Flanged Branch Tees

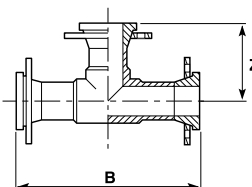


Size (mm) $d_1 \times d_2$	SDR11 Black Code	Price Each Yellow	SDR17 Black Code	Price Each Yellow	B (mm)	L (mm)	L (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
63 x 50 PN16	40 350 311	£63.00	-	-	240	67	200	1.5	-
63 x 80 PN16	-	-	40 363 311	£98.60	240	67	240	-	2.4
90 x 80 PN16	40 351 313	£154.50	40 363 313	£134.00	310	79	165	1.7	1.2
110 x 80 PN16	40 351 314	£278.90	40 363 314	£232.20	326	87	289	3.0	2.1
125 x 80 PN16	40 351 315	£318.40	40 363 315	£270.30	375	92	260	2.4	1.7
160 x 80 PN16	40 351 317	£342.40	40 363 317	£297.30	419	103	330	4.9	3.4
180 x 80 PN16	40 351 318	£380.70	40 363 318	£324.10	509	120	335	9.6	6.7
225 x 80 PN16	40 351 320	£982.10	40 363 320	£972.80	550	130	492	13.8	9.7
250 x 80 PN16	40 351 321	£966.80	40 363 321	£823.90	687	130	580	20.7	14.5
315 x 80 PN16	40 351 323	£1,938.30	40 363 323	£1,654.20	870	150	740	37.1	26.0
90 x 100 PN16	40 352 313	£224.50	40 364 313	£194.00	310	79	240	1.7	1.2
110 x 100 PN16	40 352 314	£266.20	40 364 314	£243.90	326	87	175	3.0	2.1
125 x 100 PN16	40 352 315	£301.30	40 364 315	£256.20	372	92	215	3.9	1.7
160 x 100 PN16	40 352 317	£359.50	40 364 317	£348.20	419	103	332	6.5	4.6
180 x 100 PN16	40 352 318	£377.00	40 364 318	£324.10	509	110	290	9.6	6.7
225 x 100 PN16	40 352 320	£723.10	40 364 320	£616.50	550	130	494	14.0	9.7
250 x 100 PN16	40 352 321	£906.80	40 364 321	£772.20	687	130	520	20.7	14.5
315 x 100 PN16	40 352 323	£1,814.10	40 364 323	£1,532.70	830	150	680	42.1	29.5
180 x 150 PN16	40 353 318	£375.60	40 365 318	£324.10	509	110	230	9.6	6.7
225 x 150 PN16	40 353 320	£666.70	40 365 320	£565.90	550	130	363	15.8	11.1
250 x 150 PN16	40 353 321	£852.50	40 365 321	£724.00	687	130	410	21.7	15.2
315 x 150 PN16	40 353 323	£1,847.40	40 365 323	£1,559.80	870	150	570	43.1	30.2

Drilled to BS EN 1092-1:2007 Table 13.

Note: Sizes 250 and 315mm have sections of pipe butt-fused to the moulding.

All Flanged PE100 Equal Tees

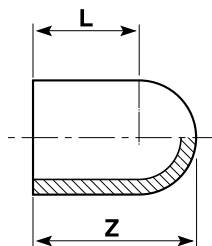


Size (mm) $d_1 \times d_2$	SDR11 Black Code	Price Each Yellow	SDR17 Black Code	Price Each Yellow	B* (mm)	L* (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
63 x 50 PN16	40 354 311	£161.40	-	-	474	240	4.0	-
90 x 80 PN16	40 354 313	£203.50	-	-	582	301	6.2	5.9
110 x 100 PN16	40 354 314	£290.20	-	-	598	311	8.1	7.5
125 x 100 PN16	40 354 315	£284.60	-	-	733	376	9.7	8.6
180 x 150 PN16	40 354 318	£510.20	-	-	859	445	19.7	17.3
250 x 250 PN16	40 354 321	£2,053.80	40 368 321	£2,073.60	1255	628	48.7	36.0
315 x 300 PN16	40 354 323	£2,191.80	-	-	1370	683	94.3	-

* Dimension Z, and dimension B are approximate and are calculated by adding together the lengths of the component parts. The nature of the fabrication process is such that the final dimension may be slightly less than the sum of the individual component parts.

Drilled to BS EN 1092-1:2007 Table 13.

End Caps



Size (mm)	SDR 11** Code	Price Each 40 Black	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 58 Yellow	L (mm)	Z (mm)	SDR111 Weight (kg)	SDR17/17.6 Yellow Weight (kg)
20	XX 233 306	£5.57	£5.17	-	-	-	57	58	0.1	-
25	XX 233 307	£5.57	£4.82	-	-	-	45	65	0.1	-
32	40 233 308	£8.98	-	-	-	-	50	55	0.1	-
40	40 233 309	£7.84	-	-	-	-	60	76	0.1	-
50	40 233 310	£12.80	-	-	-	-	65	90	0.1	-
63	XX 233 311	£13.85	£13.20	-	-	-	64	85	0.1	-
75	40 234 312	£17.60	-	-	-	-	80	86	0.2	0.1
90	XX 234 313	£23.70	£25.00	40 232 313	£19.90	-	72	124	0.3	0.2
110	40 234 314	£31.45	-	40 232 314	£25.30	-	82	138	0.3	0.3
125	XX 234 315	£37.10	£34.75	40 232 315	£28.80	-	92	155	0.7	0.6
140	40 234 316	£58.80	-	40 232 316	£52.60	-	100	116	0.7	0.5
160	40 234 317	£61.70	-	40 232 317	£49.35	-	108	179	1.3	0.8
180	XX 234 318	£73.30	£69.70	XX 232 318	£55.90	£75.20	120	200	1.8	1.7
250	XX 234 321	£179.00	£170.80	XX 232 321	£139.00	£123.90	195	330	5.0	4.5
280	40 234 322	£192.80	-	40 232 322	£181.70	-	112	117	5.0	3.4
315	XX 234 323	£338.60	£320.60	XX 232 323	£258.80	£261.50	195	358	8.7	6.5
355	40 234 324	£452.70	-	40 232 324	£386.60	-	115	120	9.8	6.5
400	40 234 325	£655.20	-	40 232 325	£586.80	-	290	310	13.4	9.3

** Replace XX with material/colour required:

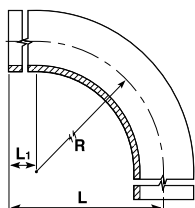
40 = PE100 Black

58 = PE80 Yellow

SDR 17.6 is available in Yellow only.



90° Formed Bends



** Replace XX with material/colour required:

40 = PE100 Black

58 = PE80 Yellow

Size (D) (mm)	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow
90	XX 371 313	£125.70	£125.70	£138.00	XX 370 313	£109.60	£109.60	£120.40
110	XX 371 314	£174.20	£174.20	-	XX 370 314	£152.70	£152.70	-
125	XX 371 315	£217.30	£217.30	£238.80	XX 370 315	£184.90	£184.90	£203.40
160	XX 371 317	£385.00	£385.00	-	XX 370 317	£312.60	£312.60	-
180	XX 371 318	£471.20	£471.20	£517.30	XX 370 318	£440.40	£440.40	£483.50
200	XX 371 319	£569.70	£569.70	-	XX 370 319	£469.60	£469.60	-
225	XX 371 320	£753.50	£753.50	-	XX 370 320	£586.80	£586.80	-
250	XX 371 321	£885.50	£885.50	£974.60	XX 370 321	£716.50	£716.50	£788.30
280	XX 371 322	£1,144.80	£1,144.80	-	XX 370 322	£899.30	£899.30	-
315	XX 371 323	£1,404.00	£1,404.00	£1,545.20	XX 370 323	£1,128.60	£1,128.60	£1,243.10
355	XX 371 324	£1,590.30	£1,590.30	£1,747.70	XX 370 324	£1,384.30	£1,384.30	£1,520.80
400	XX 371 325	£2,128.50	£2,128.50	£2,341.40	XX 370 325	£1,798.60	£1,798.60	£1,975.60
450	XX 371 326	£2,853.80	£2,853.80	£3,138.80	XX 370 326	£2,247.70	£2,247.70	£2,471.00
500	XX 371 327	£3,365.60	£3,365.60	£3,700.40	XX 370 327	£2,808.90	£2,808.90	£3,089.10
560	XX 371 328	P.O.A.	P.O.A.	P.O.A.	XX 370 328	P.O.A.	P.O.A.	P.O.A.
630	XX 371 329	P.O.A.	P.O.A.	P.O.A.	XX 370 329	P.O.A.	P.O.A.	P.O.A.
710	40 877 330	P.O.A.	-	-	40 876 330	P.O.A.	-	-
800	40 877 332	P.O.A.	-	-	40 876 332	P.O.A.	-	-
900	40 877 333	P.O.A.	-	-	40 876 333	P.O.A.	-	-
1000	40 877 334	P.O.A.	-	-	40 876 334	P.O.A.	-	-

Note: the pressure rating of SDR 17/17.6 bends above 250mm may be reduced from that of the standard pipe

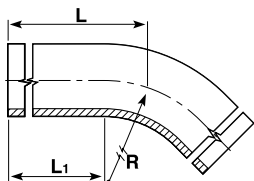
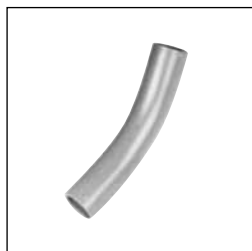
Note: the pressure rating of SDR 11 bends above 140mm may be reduced from that of the standard pipe

For gas use, we may be able to supply orange PE100 bends for 7 bar and also large black bends to EN1555

SDR 17.6 is available in Yellow only.

Size (D) (mm)	Min L (mm)	Min L1 (mm)	R/D	SDR11 Weight (kg)	SDR17/17.6 Weight (kg)
90	705	300	4.5	2.6	1.7
110	795	300	4.5	4.4	2.9
125	862	300	4.5	6.1	4
160	1120	400	4.5	12.8	7
180	1210	400	4.5	17.4	11.3
200	1310	400	4.5	23.9	15.6
225	1412	400	4.5	33.7	21.8
250	1625	500	4.5	47.3	30.8
280	1760	500	4.5	63	43.9
315	1918	500	4.5	88.1	57.4
355	2148	550	4.5	125.2	81.5
400	2400	600	4.5	177.4	115.4
450	2675	650	4.5	250	162.6
500	2950	700	4.5	340	221.2
560			4.5		
630			4.5		
710			1.5		
800			1.5		
900			1.5		
1000			1.5		

45° Formed Bends



** Replace XX with material/colour required:

40 = PE100 Black

58 = PE80 Yellow

Size (D) (mm)	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow
90	XX 376 313	£110.30	£110.30	£122.70	XX 375 313	£96.60	£96.60	£94.50
110	XX 376 314	£152.70	£152.70	-	XX 375 314	£133.40	£133.40	-
125	XX 376 315	£180.30	£180.30	£198.90	XX 375 315	£155.70	£155.70	£154.20
160	XX 376 317	£323.40	£323.40	-	XX 375 317	£266.50	£266.50	-
180	XX 376 318	£383.50	£383.50	£422.10	XX 375 318	£371.10	£371.10	£364.70
200	XX 376 319	£482.00	£482.00	-	XX 375 319	£406.60	£406.60	-
225	XX 376 320	£605.40	£605.40	-	XX 375 320	£508.10	£508.10	-
250	XX 376 321	£725.80	£725.80	£799.80	XX 375 321	£610.00	£610.00	£670.20
280	XX 376 322	£939.90	£939.90	-	XX 375 322	£767.50	£767.50	-
315	XX 376 323	£1,141.30	£1,141.30	£1,254.60	XX 375 323	£959.60	£959.60	£944.60
355	XX 376 324	£1,267.40	£1,267.40	£1,394.70	XX 375 324	£1,080.00	£1,080.00	£1,061.40
400	XX 376 325	£1,691.00	£1,691.00	£1,859.90	XX 375 325	£1,393.50	£1,393.50	£1,533.60
450	XX 376 326	£2,142.30	£2,142.30	£2,355.20	XX 375 326	£1,776.60	£1,776.60	£1,953.70
500	XX 376 327	£2,539.30	£2,539.30	£2,792.80	XX 375 327	£2,210.60	£2,210.60	£2,430.40
560	XX 376 328	£4,144.40	£4,144.40	£4,554.20	XX 375 328	£3,698.90	£3,698.90	£4,066.90
630	XX 376 329	£6,261.20	£6,261.20	£6,887.30	XX 375 329	£5,204.50	£5,204.50	£5,723.10
710	40 881 330	P.O.A.	-	-	40 880 330	P.O.A.	-	-
800	40 881 332	P.O.A.	-	-	40 880 332	P.O.A.	-	-
900	40 881 333	P.O.A.	-	-	40 880 333	P.O.A.	-	-
1000	40 881 334	P.O.A.	-	-	40 880 334	P.O.A.	-	-

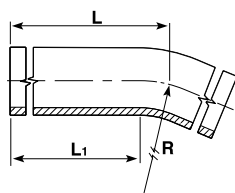
Note: the pressure rating of SDR 17/17.6 bends above 250mm may be reduced from that of the standard pipe

Note: the pressure rating of SDR 11 bends above 140mm may be reduced from that of the standard pipe

For gas use, we may be able to supply orange PE100 bends for 7 bar and also large black bends to EN1555

SDR 17.6 is available in Yellow only.

Size (D) (mm)	Min L (mm)	Min L ₁ (mm)	R/D	SDR11 Weight (kg)	SDR17/17.6 Weight (kg)
90	455	300	4.5	1.9	1.3
110	489	300	4.5	3.1	2.1
125	515	300	4.5	4.3	2.8
160	676	400	4.5	9.1	5.9
180	710	400	4.5	12	7.8
200	750	400	4.5	16.3	10.6
225	787	400	4.5	22.2	14.4
250	831	500	4.5	31.7	20.7
280	982	500	4.5	42.5	27.7
315	1042	500	4.5	56.9	37.1
355	1161	550	4.5	80.4	52.3
400	1289	600	4.5	113.6	73.9
450	1425	650	4.5	158.8	103.3
500	1561	700	4.5	214.7	137.5
560	1664	700	4.5	292.7	192.8
630	1885	800	4.5	418.2	282.9
710			1.5		
800			1.5		
900			1.5		
1000			1.5		

**22½° Formed Bends**

** Replace XX with material/colour required:

40 = PE100 Black

58 = PE80 Yellow

Size (D) (mm)	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow
90	XX 381 313	£99.60	£99.60	£108.80	XX 380 313	£86.50	£86.50	£95.60
110	XX 381 314	£135.90	£135.90	-	XX 380 314	£118.70	£118.70	-
125	XX 381 315	£158.80	£158.80	£175.70	XX 380 315	£137.20	£137.20	£151.20
160	XX 381 317	£281.90	£281.90	-	XX 380 317	£246.40	£246.40	-
180	XX 381 318	£338.80	£338.80	£371.10	XX 380 318	£335.80	£335.80	£370.40
200	XX 381 319	£403.50	£403.50	-	XX 380 319	£358.70	£358.70	-
225	XX 381 320	£540.30	£540.30	-	XX 380 320	£443.50	£443.50	-
250	XX 381 321	£650.60	£650.60	£716.50	XX 380 321	£532.70	£532.70	£586.80
280	XX 381 322	£814.90	£814.90	-	XX 380 322	£655.20	£655.20	-
315	XX 381 323	£990.90	£990.90	£1,089.10	XX 380 323	£842.70	£842.70	£926.00
355	XX 381 324	£1,144.80	£1,144.80	£1,144.80	XX 380 324	£935.20	£935.20	£1,029.00
400	XX 381 325	£1,449.10	£1,449.10	£1,593.70	XX 380 325	£1,163.30	£1,163.30	£1,277.80
450	XX 381 326	£1,803.20	£1,803.20	£1,982.70	XX 380 326	£1,443.30	£1,443.30	£1,588.00
500	XX 381 327	£2,084.40	£2,084.40	£2,295.10	XX 380 327	£1,750.10	£1,750.10	£1,924.80
560	XX 381 328	£3,585.40	£3,585.40	£3,943.10	XX 380 328	£3,091.30	£3,091.30	£3,362.20
630	XX 381 329	£5,107.80	£5,107.80	£5,620.10	XX 380 329	£4,297.30	£4,297.30	£4,726.50
710	40 885 330	P.O.A.	-	-	40 884 330	P.O.A.	-	-
800	40 885 332	P.O.A.	-	-	40 884 332	P.O.A.	-	-
900	40 885 333	P.O.A.	-	-	40 884 333	P.O.A.	-	-
1000	40 885 334	P.O.A.	-	-	40 884 334	P.O.A.	-	-

Note: the pressure rating of SDR 17/17.6 bends above 250mm may be reduced from that of the standard pipe

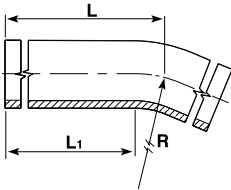
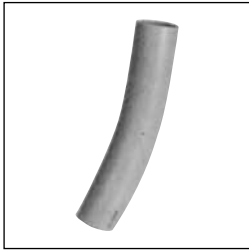
Note: the pressure rating of SDR 11 bends above 140mm may be reduced from that of the standard pipe

For gas use, we may be able to supply orange PE100 bends for 7 bar and also large black bends to EN1555

SDR 17.6 is available in Yellow only.

Size (D) (mm)	Min L (mm)	Min L1 (mm)	R/D	SDR11 Weight (kg)	SDR17/17.6 Weight (kg)
90	381	300	4.5	1.6	1.1
110	398	300	4.5	2.5	1.7
125	412	300	4.5	3.4	2.2
160	543	400	4.5	7.2	4.7
180	561	400	4.5	9.4	6.1
200	580	400	4.5	12.5	8.2
225	601	400	4.5	16.9	11
250	724	500	4.5	24	15.6
280	751	500	4.5	32.6	21.2
315	782	500	4.5	41.1	26.8
355	868	550	4.5	58.1	37.8
400	958	600	4.5	81.5	53
450	1053	650	4.5	113.5	73.9
500	1148	700	4.5	152.3	99.1
560	1201	700	4.5	202.4	133
630	1364	800	4.5	290.8	196.9
710			1.5		
800			1.5		
900			1.5		
1000			1.5		

11¼° Formed Bends



** Replace XX with material/colour required:

40 = PE100 Black

58 = PE80 Yellow

Size (D) (mm)	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow
90	XX 373 313	£95.60	£95.60	£105.70	XX 372 313	£84.20	£84.20	£91.80
110	XX 373 314	£131.80	£131.80	-	XX 372 314	£116.50	£116.50	-
125	XX 373 315	£152.70	£152.70	£168.10	XX 372 315	£133.40	£133.40	£146.40
160	XX 373 317	£281.50	£281.50	-	XX 372 317	£237.30	£237.30	-
180	XX 373 318	£338.80	£338.80	£371.10	XX 372 318	£335.80	£335.80	£369.60
200	XX 373 319	£403.50	£403.50	-	XX 372 319	£358.70	£358.70	-
225	XX 373 320	£544.80	£544.80	-	XX 372 320	£443.50	£443.50	-
250	XX 373 321	£650.60	£650.60	£716.50	XX 372 321	£532.70	£532.70	£586.80
280	XX 373 322	£814.90	£814.90	-	XX 372 322	£655.20	£655.20	-
315	XX 373 323	£990.90	£990.90	£1,089.10	XX 372 323	£842.70	£842.70	£926.00
355	XX 373 324	£1,144.80	£1,144.80	£1,258.10	XX 372 324	£935.20	£935.20	£1,029.00
400	XX 373 325	£1,449.10	£1,449.10	£1,593.70	XX 372 325	£1,163.30	£1,163.30	£1,277.80
450	XX 373 326	£1,803.20	£1,803.20	£1,982.70	XX 372 326	£1,443.30	£1,443.30	£1,588.00
500	XX 373 327	£2,084.40	£2,084.40	£2,295.10	XX 372 327	£1,750.10	£1,750.10	£1,924.80
560	XX 373 328	£3,540.40	£3,540.40	£3,894.50	XX 372 328	£3,055.40	£3,055.40	£3,362.20
630	XX 373 329	£5,022.80	£5,022.80	£5,525.20	XX 372 329	£3,817.00	£3,817.00	£4,197.70
710	40 887 330	P.O.A.	-	-	40 886 330	P.O.A.	-	-
800	40 887 332	P.O.A.	-	-	40 886 332	P.O.A.	-	-
900	40 887 333	P.O.A.	-	-	40 886 333	P.O.A.	-	-
1000	40 887 334	P.O.A.	-	-	40 886 334	P.O.A.	-	-

Note: the pressure rating of SDR 17/17.6 bends above 250mm may be reduced from that of the standard pipe

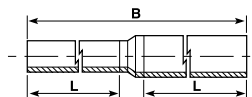
Note: the pressure rating of SDR 11 bends above 140mm may be reduced from that of the standard pipe

For gas use, we may be able to supply orange PE100 bends for 7 bar and also large black bends to EN1555

SDR 17.6 is available in Yellow only.

Size (D) (mm)	Min L (mm)	Min L1 (mm)	R/D	SDR11 Weight (kg)	SDR17/17.6 Weight (kg)
90	340	300	4.5	1.4	0.9
110	349	300	4.5	2.2	1.4
125	356	300	4.5	2.9	1.9
160	471	400	4.5	6.2	4.1
180	480	400	4.5	8	5.2
200	490	400	4.5	10.6	6.9
225	500	400	4.5	13.9	9.1
250	611	500	4.5	20.1	13.1
280	624	500	4.5	26.7	17.4
315	640	500	4.5	35.8	23.3
355	707	550	4.5	47	30.6
400	777	600	4.5	65.4	42.6
450	849	650	4.5	90.6	59
500	922	700	4.5	121.5	79
560	948	700	4.5	158	103.9
630	1079	800	4.5	227.5	154.1
710			1.5		
800			1.5		
900			1.5		
1000			1.5		

Reducers



Size (mm) d ₁ x d ₂	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 21** Code	Price Each 29 Yellow
90 x 63	XX 323 459	£61.90	£61.90	£57.10	XX 322 459	£59.80	£59.80	£54.10	-	-
110 x 90	XX 323 483	£69.70	£69.70	-	XX 322 483	£65.80	£65.80	-	-	-
125 x 63	XX 323 461	£91.70	£91.70	£82.10	XX 322 461	£89.00	£89.00	£79.30	-	-
125 x 90	XX 323 484	£93.80	£93.80	£82.10	XX 322 484	£88.20	£88.20	£79.30	-	-
160 x 90	XX 323 486	£112.40	£112.40	-	XX 322 486	£106.90	£106.90	-	-	-
160 x 110	XX 323 495	£172.00	£172.00	-	XX 322 495	£162.60	£162.60	-	-	-
160 x 125	XX 323 504	£177.70	£177.70	-	XX 322 504	£169.40	£169.40	-	-	-
180 x 90	XX 323 487	£219.00	£219.00	£185.90	XX 322 487	£205.20	£205.20	£180.30	-	-
180 x 125	XX 323 505	£174.90	£174.90	£147.50	XX 322 505	£165.20	£165.20	£144.70	-	-
200 x 160	XX 323 506	£168.80	£168.80	£165.60	XX 322 506	£155.20	£155.20	£151.40	-	-
225 x 160	XX 323 507	£195.20	£195.20	£191.00	XX 322 507	£183.50	£183.50	£179.00	-	-
250 x 125	XX 323 508	£290.30	£290.30	-	XX 322 508	£275.20	£275.20	-	29 740 508	P.O.A.
250 x 180	XX 323 529	£407.30	£407.30	-	XX 322 529	£385.20	£385.20	-	29 740 529	£427.00
315 x 250	XX 323 543	£450.00	£450.00	-	XX 322 543	£407.30	£407.30	-	29 740 543	£616.60
315 x 280	XX 323 545	£700.40	£700.40	-	XX 322 545	£557.00	£557.00	-	29 740 545	P.O.A.
355 x 125	XX 323 571	P.O.A.	P.O.A.	-	XX 322 571	P.O.A.	P.O.A.	-	29 740 571	P.O.A.
355 x 180	XX 323 532	£1,070.30	£1,070.30	-	XX 322 532	£909.80	£909.80	-	29 740 532	P.O.A.
355 x 225	XX 323 541	£1,727.40	£1,727.40	-	XX 322 541	£1,518.70	£1,518.70	-	29 740 541	P.O.A.
355 x 250	XX 323 544	£1,686.30	£1,686.30	-	XX 322 544	£1,477.60	£1,477.60	-	29 740 544	P.O.A.
355 x 280	XX 323 546	£1,657.80	£1,657.80	-	XX 322 546	£1,413.70	£1,413.70	-	29 740 546	P.O.A.
355 x 315	XX 323 547	£1,592.20	£1,592.20	-	XX 322 547	£1,330.40	£1,330.40	-	29 740 547	P.O.A.
400 x 180	XX 323 560	P.O.A.	P.O.A.	-	XX 322 560	£707.20	£707.20	-	29 740 560	P.O.A.
400 x 250	XX 323 563	£2,404.10	£2,404.10	-	XX 322 563	£2,329.90	£2,329.90	-	29 740 563	P.O.A.
400 x 280	XX 323 564	£2,476.90	£2,476.90	-	XX 322 564	£2,390.40	£2,390.40	-	29 740 564	P.O.A.
400 x 315	XX 323 565	£2,383.90	£2,383.90	-	XX 322 565	£1,932.90	£1,932.90	-	29 740 565	P.O.A.
400 x 355	XX 323 566	£1,889.60	£1,889.60	-	XX 322 566	£1,553.30	£1,553.30	-	29 740 566	P.O.A.
450 x 250	XX 323 573	P.O.A.	P.O.A.	-	XX 322 573	P.O.A.	P.O.A.	-	29 740 573	P.O.A.
450 x 280	XX 323 584	£2,748.50	£2,748.50	-	XX 322 584	£2,433.60	£2,433.60	-	29 740 584	P.O.A.
450 x 315	XX 323 574	£2,522.40	£2,522.40	-	XX 322 574	£2,341.70	£2,341.70	-	29 740 574	P.O.A.
450 x 355	XX 323 575	£2,562.40	£2,562.40	-	XX 322 575	£2,188.20	£2,188.20	-	29 740 575	P.O.A.
450 x 400	XX 323 576	£2,417.40	£2,417.40	-	XX 322 576	£2,060.50	£2,060.50	-	29 740 576	P.O.A.
500 x 355	XX 323 579	£3,494.80	£3,494.80	-	XX 322 579	£3,207.00	£3,207.00	-	29 740 579	P.O.A.
500 x 400	XX 323 580	£3,251.40	£3,251.40	-	XX 322 580	£2,793.90	£2,793.90	-	29 740 580	£2,804.70
500 x 450	XX 323 581	£2,859.80	£2,859.80	-	XX 322 581	£2,324.40	£2,324.40	-	29 740 581	P.O.A.
560 x 450	XX 323 586	£4,123.10	£4,123.10	-	XX 322 586	£2,949.60	£2,949.60	-	29 740 586	P.O.A.
560 x 500	XX 323 594	£3,197.30	£3,197.30	-	XX 322 594	£2,670.60	£2,670.60	-	29 740 594	P.O.A.
630 x 500	XX 323 599	£5,034.90	£5,034.90	-	XX 322 599	£3,605.10	£3,605.10	-	29 740 599	P.O.A.
630 x 560	XX 323 595	£4,612.00	£4,612.00	-	XX 322 595	£3,297.90	£3,297.90	-	29 740 595	P.O.A.
710 x 630	XX 323 597	P.O.A.	P.O.A.	-	XX 322 597	£2,338.40	£2,338.40	-	-	-

SDR 17.6 is available in Yellow only.

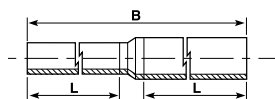
** Replace XX with material/colour required: 40 = PE100 Black 41 = PE100 Blue 58 = PE80 Yellow 29 = PE80 Yellow/PE100RC Black

Dimensions of pupped fittings should be used subject to a +/- 5mm tolerance due to the nature of the fabrication process.

Standard pup leg lengths: 0.5m in sizes up to 400mm; 1.0m in sizes 450mm to 1200mm

Additional bespoke large diameter fabricated fittings are available to order – please contact our Sales Office for further information.

Reducers



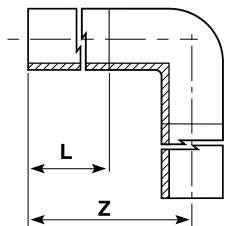
Size (mm)	B (mm)	L (mm)	SDR11 Weight (kg)	SDR17/17.6 Weight (kg)
90 x 63	1160	500	1.9	1.3
110 x 90	1190	500	3.1	2.1
125 x 63	1220	500	3.2	2.2
125 x 90	1200	500	3.8	2.6
160 x 90	1240	500	5.5	3.9
160 x 110	1240	500	6.2	4.2
160 x 125	1230	500	6.7	4.6
180 x 90	1440	500	6.1	4.2
180 x 125	1240	500	7.9	5.4
200 x 160	1235	500	10.8	7.4
225 x 160	1298	500	13.0	8.9
250 x 125	1530	500	13.5	9.3
250 x 180	1290	500	16.0	11.5
315 x 250	1330	500	28.0	20.0
315 x 280	1222	500	28.2	19.1
355 x 125	1563	500	25.9	19.2
355 x 180	1420	500	27.2	19.9
355 x 225	1245	500	27.4	20.2
355 x 250	1245	500	28.6	20.9
355 x 280	1245	500	30	21.9
355 x 315	1245	500	33	23.4
400 x 180	1435	500	34	22.8
400 x 250	1260	500	35	23.8
400 x 280	1260	500	37	25.1
400 x 315	1260	500	39	26.1
400 x 355	1260	500	41	28.2
450 x 250	2460	1000	81	55
450 x 280	2230	1000	81	55
450 x 315	2230	1000	85	58
450 x 355	2230	1000	92	62
450 x 400	2230	1000	100	67
500 x 355	2230	1000	107	73
500 x 400	2230	1000	115	78
500 x 450	2200	1000	124	84
560 x 450	2200	1000	145	98
560 x 500	2200	1000	156	105
630 x 500	2200	1000	183	124
630 x 560	2200	1000	197	133
710 x 630	2230	1000	tbc	170

Dimensions of pupped fittings should be used subject to a +/- 5mm tolerance due to the nature of the fabrication process.

Standard pup leg lengths: 0.5m in sizes up to 400mm; 1.0m in sizes 450mm to 1200mm

Additional bespoke large diameter fabricated fittings are available to order – please contact our Sales Office for further information.

90° Elbows



Size (mm)	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 21** Code	Price Each 29 Yellow
90	XX 309 313	£82.10	£82.10	£82.10	XX 308 313	£67.10	£67.10	£67.10	-	-
110	XX 309 314	£95.20	£95.20	-	XX 308 314	£77.90	£77.90	-	-	-
125	XX 309 315	£135.00	£135.00	£135.00	XX 308 315	£110.20	£110.20	£110.20	-	-
160	XX 309 317	£135.00	£135.00	-	XX 308 317	£192.80	£192.80	-	-	-
180	XX 309 318	£363.30	£363.30	£363.30	XX 308 318	£297.20	£297.20	£297.20	-	-
200	XX 309 319	£363.30	£363.30	-	XX 308 319	£319.10	£319.10	-	-	-
225	XX 309 320	£452.70	£452.70	-	XX 308 320	£375.60	£375.60	-	-	-
250	XX 309 321	£532.30	£532.30	-	XX 308 321	£439.00	£439.00	-	29 743 321	P.O.A.
280	XX 309 322	£696.00	£696.00	-	XX 308 322	£603.00	£603.00	-	29 743 322	P.O.A.
315	XX 309 323	£1,089.10	£1,089.10	-	XX 308 323	£890.20	£890.20	-	29 743 323	P.O.A.
355	XX 309 324	£2,015.00	£2,015.00	-	XX 308 324	£1,306.80	£1,306.80	-	29 743 324	P.O.A.

SDR 17.6 is available in Yellow only.

** Replace XX with material/colour required: 40 = PE100 Black 41 = PE100 Blue 58 = PE80 Yellow 29 = PE80 Yellow/PE100RC Black

Size (mm)	L (mm)	Z (mm)	SDR11 Weight (kg)	SDR17/17.6 Weight (kg)
90	500	629	2.6	1.9
110	500	670	4.3	2.9
125	500	660	5.4	3.8
160	500	720	9.2	6.5
180	500	720	12.1	8.2
200	500	741	15.4	10.5
225	500	768	19.4	14
250	500	900	22.4	15.6
280	500	840	30.3	20.2
315	500	920	39.2	25.9
355	500	880	53.5	35

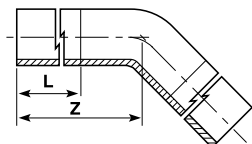
Dimensions of pupped fittings should be used subject to a +/- 5mm tolerance due to the nature of the fabrication process.

Standard pup leg lengths: 0.5m in sizes up to 400mm; 1.0m in sizes 450mm to 1200mm

Additional bespoke large diameter fabricated fittings are available to order – please contact our Sales Office for further information.

ELONGATED SPIGOT FITTINGS FOR BUTT FUSION OR ELECTROFUSION JOINTING

45° Elbows



Size (mm)	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 21** Code	Price Each 29 Yellow
90	XX 315 313	£80.00	£80.00	£80.00	XX 314 313	£64.10	£64.10	£64.10	-	-
110	XX 315 314	£104.00	£104.00	-	XX 314 314	£82.10	£82.10	-	-	-
125	XX 315 315	£115.10	£115.10	£115.10	XX 314 315	£98.60	£98.60	£98.60	-	-
160	XX 315 317	£196.80	£196.80	-	XX 314 317	£172.20	£172.20	-	-	-
180	XX 315 318	£262.90	£262.90	£262.90	XX 314 318	£228.50	£228.50	£228.50	-	-
200	XX 315 319	£298.60	£298.60	-	XX 314 319	£262.90	£262.90	-	-	-
225	XX 315 320	£339.90	£339.90	-	XX 314 320	£295.80	£295.80	-	-	-
250	XX 315 321	£419.70	£419.70	-	XX 314 321	£363.30	£363.30	-	29 744 321	P.O.A.
280	XX 315 322	£632.80	£632.80	-	XX 314 322	£625.20	£496.60	-	29 744 322	P.O.A.
315	XX 315 323	£627.40	£627.40	-	XX 314 323	£655.20	£655.20	-	29 744 323	P.O.A.
355	XX 315 324	£1,437.20	£1,437.20	-	XX 314 324	£840.40	£840.40	-	29 744 324	P.O.A.

SDR 17.6 is available in Yellow only.

** Replace XX with material/colour required: 40 = PE100 Black 41 = PE100 Blue 58 = PE80 Yellow 29 = PE80 Yellow/PE100RC Black

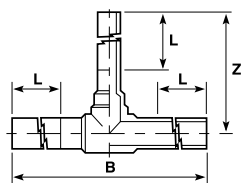
Size (mm)	L (mm)	Z (mm)	SDR11 Weight (kg)	SDR17/17.6 Weight (kg)
90	500	595	2.5	1.7
110	500	607	3.9	2.7
125	500	616	5.1	3.7
160	500	635	8.6	6
180	500	660	11.1	7.7
200	500	672	13.8	9.3
225	500	685	17.8	12.1
250	500	750	24.3	16.8
280	500	750	31.6	22.1
315	500	795	39.1	28.2
355	500	620	105.1	69.6

Dimensions of pupped fittings should be used subject to a +/- 5mm tolerance due to the nature of the fabrication process.

Standard pup leg lengths: 0.5m in sizes up to 400mm; 1.0m in sizes 450mm to 1200mm

Additional bespoke large diameter fabricated fittings are available to order – please contact our Sales Office for further information.

Equal Tees



Size (mm)	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 21** Code	Price Each 29 Yellow
90	XX 321 313	£105.40	£105.40	£102.70	XX 320 313	£86.90	£86.90	£89.70	-	-
110	XX 321 314	£146.10	£146.10	-	XX 320 314	£119.00	£119.00	-	-	-
125	XX 321 315	£194.10	£194.10	£169.40	XX 320 315	£159.80	£159.80	£159.80	-	-
160	XX 321 317	£293.10	£293.10	-	XX 320 317	£285.00	£285.00	-	-	-
180	XX 321 318	£363.30	£363.30	£309.70	XX 320 318	£304.00	£304.00	£305.40	-	-
200	XX 321 319	£708.40	£708.40	-	XX 320 319	£690.00	£690.00	-	-	-
225	XX 321 320	£1,055.60	£1,055.60	-	XX 320 320	£997.70	£997.70	-	-	-
250	XX 321 321	£1,257.00	£1,257.00	-	XX 320 321	£1,211.90	£1,211.90	-	29 741 321	P.O.A.
280	XX 321 322	£1,723.40	£1,723.40	-	XX 320 322	£1,642.40	£1,642.40	-	29 741 322	P.O.A.
315	XX 321 323	£2,044.00	£2,044.00	-	XX 320 323	£1,825.10	£1,825.10	-	29 741 323	£1,321.80
355	XX 321 324	£2,488.40	£2,488.40	-	XX 320 324	£2,386.50	£2,386.50	-	29 741 324	£2,010.80
400	XX 321 325	£2,876.10	£2,876.10	-	XX 320 325	£2,726.80	£2,726.80	-	29 741 325	£4,000.90

SDR 17.6 is available in Yellow only.

** Replace XX with material/colour required: 40 = PE100 Black 41 = PE100 Blue 58 = PE80 Yellow 29 = PE80 Yellow/PE100RC Black

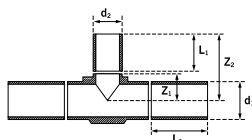
Size (mm)	L (mm)	B (mm)	Z (mm)	SDR11 Weight (kg)	SDR17/17.6 Weight (kg)
90	500	1310	656	4.1	3
110	500	1326	670	6.4	4.6
125	500	1372	687	8.4	6.2
160	500	1419	708	14.1	9.8
180	500	1509	765	19	13.6
200	500	1500	750	24.2	17
225	500	1550	775	30.7	22.5
250	500	1540	840	34.7	24.2
280	500	1680	840	47.8	31.8
315	500	1820	910	60.2	40.6
355	500	1690	845	81.1	54.9
400	500	1722	860	101.6	69.7

Dimensions of pupped fittings should be used subject to a +/- 5mm tolerance due to the nature of the fabrication process.

Standard pup leg lengths: 0.5m in sizes up to 400mm; 1.0m in sizes 450mm to 1200mm

Additional bespoke large diameter fabricated fittings are available to order – please contact our Sales Office for further information.

Large Diameter Equal Tee



Size (mm)	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 21** Code	Price Each 29 Yellow
450	XX 321 326	P.O.A	P.O.A	-	XX 320 326	P.O.A	P.O.A	-	29 741 326	P.O.A.
500	XX 321 327	P.O.A	P.O.A	-	XX 320 327	P.O.A	P.O.A	-	29 741 327	£4,774.30
560	XX 321 328	£12,647.50	£12,647.50	-	XX 320 328	P.O.A	P.O.A	-	29 741 328	P.O.A.
630	XX 321 329	P.O.A	P.O.A	-	XX 320 329	£15,316.10	£15,316.10	-	29 741 329	P.O.A.
710	XX 321 330	P.O.A	P.O.A	-	XX 320 330	P.O.A	P.O.A	-	29 741 330	P.O.A.
800	-	-	-	-	XX 320 332	P.O.A	P.O.A	-	29 741 331	P.O.A.
900	-	-	-	-	XX 320 333	P.O.A	P.O.A	-	-	-
1000	-	-	-	-	XX 320 334	P.O.A	P.O.A	-	-	-
1200	-	-	-	-	XX 320 335	P.O.A	P.O.A	-	-	-

Larger sizes and different SDRs and other configurations including flanged branches are available, please contact our Sales Office for further information. Dimensions are approximate and given as a guide only.

SDR 17.6 is available in Yellow only.

** Replace XX with material/colour required: 40 = PE100 Black 41 = PE100 Blue 58 = PE80 Yellow 29 = PE80 Yellow/PE100RC Black

Size (mm)	Z1 (mm)	Z2 (mm)	L1 (mm)	SDR11 Weight (kg)	SDR17/17.6 Weight (kg)
450	450	1450	1000	289	237
500	475	1475	1000	369	306
560	505	1505	1000	465	389
630	540	1540	1000	629	527
710	*	*	1000	*	*
800	*	*	1000	-	*
900	*	*	1000	-	*
1000	*	*	1000	-	*
1200	*	*	1000	-	*

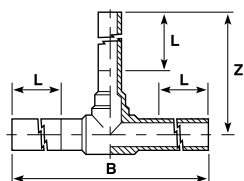
* Bespoke fabrication, dimensions by agreement

Dimensions of pupped fittings should be used subject to a +/- 5mm tolerance due to the nature of the fabrication process.

Standard pup leg lengths: 0.5m in sizes up to 400mm; 1.0m in sizes 450mm to 1200mm

Additional bespoke large diameter fabricated fittings are available to order – please contact our Sales Office for further information.

Reduced Branch Tees



	Size (mm)	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 21** Code	Price Each 29 Yellow
90mm Branch	110	XX 347 314	£199.60	£199.60	-	XX 356 314	£156.90	£156.90	-	29 797 314	-
	125	XX 347 315	£199.60	£199.60	£243.70	XX 356 315	£195.60	£195.60	£194.10	29 797 315	-
	160	XX 347 317	£355.80	£355.80	-	XX 356 317	£342.70	£342.70	-	29 797 317	-
	180	XX 347 318	£389.30	£389.30	£421.00	XX 356 318	£379.80	£379.80	£379.80	29 797 318	-
	200	XX 347 319	P.O.A.	P.O.A.	-	XX 356 319	£473.50	£473.50	-	29 797 319	-
	225	-	-	-	-	XX 356 320	£735.00	£735.00	-	29 797 320	-
	250	XX 347 321	£1,420.20	£1,420.20	-	XX 356 321	£1,292.90	£1,292.90	-	29 797 321	P.O.A.
	280	XX 347 322	£1,936.40	£1,936.40	-	XX 356 322	£1,856.40	£1,856.40	-	29 797 322	P.O.A.
	315	XX 347 323	£2,384.10	£2,384.10	-	XX 356 323	£2,167.80	£2,167.80	-	29 797 323	P.O.A.
	355	XX 347 324	P.O.A.	P.O.A.	-	XX 356 324	£4,002.20	£4,002.20	-	29 797 324	P.O.A.
125mm Branch	400	XX 347 325	£4,896.40	£4,896.40	-	XX 356 325	P.O.A.	P.O.A.	-	29 797 325	P.O.A.
	180	XX 348 318	£482.80	£482.80	£482.80	XX 357 318	£388.00	£388.00	£388.00	29 798 318	-
	200	XX 348 319	P.O.A.	P.O.A.	-	XX 357 319	£796.20	£796.20	-	29 798 319	-
	225	-	-	-	-	XX 357 320	£838.00	£838.00	-	29 798 320	-
	250	XX 348 321	£1,372.70	£1,372.70	-	XX 357 321	£1,229.20	£1,229.20	-	29 798 321	P.O.A.
	280	XX 348 322	£1,936.40	£1,936.40	-	XX 357 322	£1,856.40	£1,856.40	-	29 798 322	P.O.A.
	315	XX 348 323	£2,186.30	£2,186.30	-	XX 357 323	£2,104.20	£2,104.20	-	29 798 323	P.O.A.
	355	XX 348 324	P.O.A.	P.O.A.	-	XX 357 324	£4,153.80	£4,153.80	-	29 798 324	P.O.A.
180mm Branch	400	XX 348 325	P.O.A.	P.O.A.	-	XX 357 325	P.O.A.	P.O.A.	-	29 798 325	P.O.A.
	225	-	-	-	-	XX 358 320	£838.00	£838.00	-	29 799 320	-
	250	XX 349 321	£1,350.70	£1,350.70	-	XX 358 321	£1,229.20	£1,229.20	-	29 799 321	P.O.A.
	280	XX 349 322	£1,861.90	£1,861.90	-	XX 358 322	£1,856.40	£1,856.40	-	29 799 322	P.O.A.
	315	XX 349 323	£2,143.50	£2,143.50	-	XX 358 323	£1,986.10	£1,986.10	-	29 799 323	£1,292.60
250mm Branch	355	XX 349 324	£2,592.50	£2,592.50	-	XX 358 324	£2,500.50	£2,500.50	-	29 799 324	P.O.A.
	400	XX 349 325	P.O.A.	P.O.A.	-	XX 358 325	P.O.A.	P.O.A.	-	29 799 325	P.O.A.
	315	XX 335 323	£1,660.90	£1,660.90	-	XX 336 323	£1,426.00	£1,426.00	-	29 796 323	P.O.A.
	355	XX 335 324	£3,464.10	£3,464.10	-	XX 336 324	£3,121.50	£3,121.50	-	29 796 324	£3,550.80
	400	XX 335 325	P.O.A.	P.O.A.	-	XX 336 325	P.O.A.	P.O.A.	-	29 796 325	P.O.A.

SDR 17.6 is available in Yellow only.

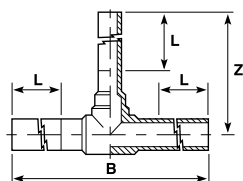
** Replace XX with material/colour required: 40 = PE100 Black 41 = PE100 Blue 58 = PE80 Yellow 29 = PE80 Yellow/PE100RC Black

Dimensions of pupped fittings should be used subject to a +/- 5mm tolerance due to the nature of the fabrication process.

Standard pup leg lengths: 0.5m in sizes up to 400mm; 1.0m in sizes 450mm to 1200mm

Additional bespoke large diameter fabricated fittings are available to order – please contact our Sales Office for further information.

Reduced Branch Tees



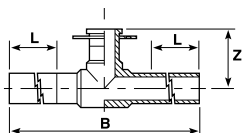
	Size (mm)	L (mm)	B (mm)	Z (mm)	SDR11 Weight (kg)	SDR17/17.6 Weight (kg)
90mm Branch	110	500	1326	850	10.5	4.7
	125	500	1372	875	8	5.6
	160	500	1419	1120	8.3	5.4
	180	500	1509	1180	17.9	12.5
	200	500	1480	1232	16.7	22.6
	225	500	1550	1550	21.2	13.7
	250	500	1430	1440	33.8	21.7
	280	500	1600	980	58.7	38
	315	500	1530	1820	62.5	43.8
	355	500	1690	1910	76.3	49.4
125mm Branch	400	500	1895	2165	104	77.8
	180	500	1509	990	18.3	12.8
	200	500	1480	1262	17.7	24.5
	225	500	1450	1270	33.0	21.5
	250	500	1430	1240	34.1	23.9
	280	500	1600	1680	60.6	39.2
	315	500	1530	1620	62.9	44.1
	355	500	1690	1290	52.0	49.7
180mm Branch	400	500	1895	2195	106.0	79
	225	500	1550	960	35.9	23.2
	250	500	1430	1000	34.7	24.2
	280	500	1600	1170	61.0	39.5
	315	500	1530	1380	63.4	44.4
	355	500	1690	1160	66.0	50
250mm Branch	400	500	1895	1941	105.0	78
	315	500	1530	1200	63.4	44.6
	355	500	1690	975	84.0	50.3
	400	500	1895	1680	109.0	81

Dimensions of pupped fittings should be used subject to a ± 5 mm tolerance due to the nature of the fabrication process.

Standard pup leg lengths: 0.5m in sizes up to 400mm; 1.0m in sizes 450mm to 1200mm

Additional bespoke large diameter fabricated fittings are available to order – please contact our Sales Office for further information.

Flanged Short Branch Tees



Size (mm) d ₁ x d ₂	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 21** Code	Price Each 29 Yellow
90 x 80	XX 341 313	£194.00	£194.00	£164.20	XX 310 313	£168.60	£168.60	£158.50	-	-
110 x 80	XX 341 314	£244.00	£244.00	-	XX 310 314	£201.00	£201.00	-	-	-
125 x 80	XX 341 315	£278.90	£278.90	£301.20	XX 310 315	£233.50	£233.50	£298.50	-	-
160 x 80	XX 341 317	£546.60	£546.60	-	XX 310 317	£403.30	£403.30	-	-	-
180 x 80	XX 341 318	£462.60	£462.60	£498.90	XX 310 318	£381.90	£381.90	£479.70	-	-
200 x 80	XX 341 319	£844.60	£844.60	-	XX 310 319	£829.80	£829.80	-	-	-
225 x 80	XX 341 320	£896.40	£896.40	-	XX 310 320	£665.50	£665.50	-	-	-
250 x 80	XX 341 321	£2,143.80	£2,143.80	-	XX 310 321	£1,757.00	£1,757.00	-	29 802 321	£1,673.60
280 x 80	XX 341 322	£2,254.70	£2,254.70	-	XX 310 322	£2,083.10	£2,083.10	-	29 802 322	P.O.A.
315 x 80	XX 341 323	P.O.A.	P.O.A.	-	XX 310 323	P.O.A.	P.O.A.	-	29 802 323	£2,353.40
90 x 100	XX 342 313	£201.00	£201.00	-	XX 311 313	£192.70	£192.70	-	-	-
110 x 100	XX 342 314	£244.00	£244.00	-	XX 311 314	£229.90	£229.90	-	-	-
125 x 100	XX 342 315	£307.20	£307.20	£260.80	XX 311 315	£258.20	£258.20	£253.40	-	-
160 x 100	XX 342 317	£417.50	£417.50	-	XX 311 317	£342.40	£342.40	-	-	-
180 x 100	XX 342 318	£634.60	£634.60	£521.20	XX 311 318	£461.30	£461.30	£348.20	-	-
200 x 100	XX 342 319	£686.40	£686.40	-	XX 311 319	£648.00	£648.00	-	-	-
225 x 100	XX 342 320	£731.00	£731.00	-	XX 311 320	£644.00	£644.00	-	-	-
250 x 100	XX 342 321	£920.20	£920.20	-	XX 311 321	£694.00	£694.00	-	29 803 321	£988.20
280 x 100	XX 342 322	£2,149.30	£2,149.30	-	XX 311 322	£2,083.10	£2,083.10	-	29 803 322	P.O.A.
315 x 100	XX 342 323	£2,003.40	£2,003.40	-	XX 311 323	£1,649.90	£1,649.90	-	29 803 323	£2,255.70
355 x 100	XX 342 324	£2,775.80	£2,775.80	-	XX 311 324	£2,603.30	£2,603.30	-	29 803 324	P.O.A.
160 x 150	XX 343 317	£472.30	£472.30	-	XX 312 317	£440.10	£440.10	-	-	-
180 x 150	XX 343 318	£537.60	£537.60	£502.30	XX 312 318	£441.50	£441.50	£452.70	-	-
200 x 150	XX 343 319	£755.90	£755.90	-	XX 312 319	£623.70	£623.70	-	-	-
225 x 150	XX 343 320	£805.00	£805.00	-	XX 312 320	£663.20	£663.20	-	-	-
250 x 150	XX 343 321	£953.50	£953.50	-	XX 312 321	£778.60	£778.60	-	29 804 321	£1,014.30
315 x 150	XX 343 323	£2,037.90	£2,037.90	-	XX 312 323	£1,673.70	£1,673.70	-	29 804 323	£2,236.80
355 x 150	XX 343 324	£2,775.80	£2,775.80	-	XX 312 324	£2,603.30	£2,603.30	-	29 804 324	P.O.A.

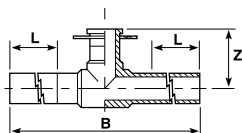
Flanged Branch PN16. SDR 17.6 is available in Yellow only. Drilled to BS EN 1092-1:2007 Table 13.

Dimensions of pupped fittings should be used subject to a +/- 5mm tolerance due to the nature of the fabrication process.

Standard pup leg lengths: 0.5m in sizes up to 400mm; 1.0m in sizes 450mm to 1200mm

Additional bespoke large diameter fabricated fittings are available to order – please contact our Sales Office for further information.

Flanged Short Branch Tees – dimensions



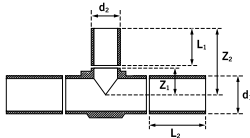
Size (mm) $d_1 \times d_2$	B (mm)	Z (mm)	SDR11 Weight (kg)	SDR17/17.6 Weight (kg)
90 x 80	1310	165	4.70	3.40
110 x 80	1326	289	5.10	3.70
125 x 80	1372	260	8.40	5.70
160 x 80	1419	330	9.20	6.20
180 x 80	1509	335	17.80	11.70
200 x 80	1480	858	24.5	18.70
225 x 80	1550	492	22.30	14.50
250 x 80	1430	580	32.00	20.60
280 x 80	1692	1140	47.00	30.00
315 x 80	1530	740	54.00	34.50
90 x 100	1310	240	5.50	3.30
110 x 100	1326	175	5.10	3.80
125 x 100	1372	215	8.40	5.80
160 x 100	1419	332	10.80	7.40
180 x 100	1509	290	17.80	11.80
200 x 100	1480	941	26.1	19.6
225 x 100	1550	494	22.50	14.70
250 x 100	1430	520	32.00	20.70
280 x 100	1692	1142	48.00	31.00
315 x 100	1530	680	64.50	37.70
355 x 100	1955	1515	73.00	43.00
160 x 150	1419	340	12.80	9.10
180 x 150	1509	230	18.60	12.70
200 x 150	1480	703	28.00	21.90
225 x 150	1550	363	24.30	16.30
250 x 150	1430	410	33.00	21.80
315 x 150	1530	570	65.00	38.80
355 x 150	1955	1058	74.00	44.00

Dimensions of pupped fittings should be used subject to a ± 5 mm tolerance due to the nature of the fabrication process.

Standard pup leg lengths: 0.5m in sizes up to 400mm; 1.0m in sizes 450mm to 1200mm

Additional bespoke large diameter fabricated fittings are available to order – please contact our Sales Office for further information.

Large Diameter Reduced Branch Tees



Size (mm) d ₁ x d ₂	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	SDR 17/17.6** Code	Price Each 40 Black	Price Each 41 Blue	SDR 21** Code	Price Each 29 Yellow
450 x 180	XX 349 326	P.O.A.	P.O.A.	XX 358 326	P.O.A.	P.O.A.	29 799 326	P.O.A.
450 x 250	XX 335 326	P.O.A.	P.O.A.	XX 336 326	P.O.A.	P.O.A.	29 796 326	P.O.A.
450 x 315	XX 809 326	P.O.A.	P.O.A.	XX 285 326	P.O.A.	P.O.A.	29 795 326	P.O.A.
500 x 180	XX 349 327	P.O.A.	P.O.A.	XX 358 327	P.O.A.	P.O.A.	29 799 327	P.O.A.
500 x 250	XX 335 327	P.O.A.	P.O.A.	XX 336 327	P.O.A.	P.O.A.	29 796 327	P.O.A.
500 x 315	XX 809 327	P.O.A.	P.O.A.	XX 285 327	P.O.A.	P.O.A.	29 795 327	P.O.A.
630 x 180	XX 349 329	P.O.A.	P.O.A.	XX 358 329	P.O.A.	P.O.A.	29 799 329	P.O.A.
630 x 250	XX 335 329	P.O.A.	P.O.A.	XX 336 329	P.O.A.	P.O.A.	29 796 329	P.O.A.
630 x 315	XX 809 329	P.O.A.	P.O.A.	XX 285 329	P.O.A.	P.O.A.	29 795 329	P.O.A.

Larger sizes and different SDRs and other configurations including flanged branches are available, please contact our Sales Office for further information.

Dimensions are approximate and given as a guide only.

** Replace XX with material/colour required: 40 = PE100 Black 41 = PE100 Blue 58 = PE80 Yellow 29 = PE80 Yellow/PE100RC Black

Size (mm) d ₁ x d ₂	Z1 (mm)	Z2 (mm)	L1 (mm)	SDR11 Weight (kg)	SDR17/17.6 Weight (kg)
450 x 180	450	950	500	149	113
450 x 250	450	950	500	170	133
450 x 315	450	950	500	197	158
500 x 180	475	975	500	180	136
500 x 250	475	975	500	201	156
500 x 315	475	975	500	229	183
630 x 180	540	1040	500	275	206
630 x 250	540	1040	500	300	230
630 x 315	540	1040	500	331	260

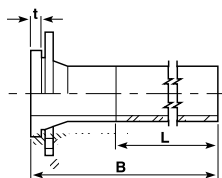
Dimensions of pupped fittings should be used subject to a +/- 5mm tolerance due to the nature of the fabrication process.

Standard pup leg lengths: 0.5m in sizes up to 400mm; 1.0m in sizes 450mm to 1200mm

Additional bespoke large diameter fabricated fittings are available to order – please contact our Sales Office for further information.

ELONGATED SPIGOT FITTINGS FOR BUTT FUSION OR ELECTROFUSION JOINTING

Stub Flange Assemblies



Size (mm) d ₁ x d ₂	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 21** Code	Price Each 29 Yellow
*63 x 50	XX 327 311	£90.20	£90.20	£90.20	-	-	-	-	-	-
*63 x 80	51 327 459	-	£87.60	-	-	-	-	-	-	-
90 x 80	XX 327 313	£99.20	£99.20	£105.70	XX 326 313	£97.20	£97.20	£102.10	-	-
110 x 100	XX 327 314	£114.20	£114.20	-	XX 326 314	£112.80	£112.80	-	-	-
125 x 100	XX 327 315	£128.20	£128.20	£138.20	XX 326 315	£126.70	£126.70	£128.20	-	-
125 x 150	58 327 505	-	-	£334.10	-	-	-	-	-	-
160 x 150	XX 327 317	£226.90	£226.90	-	XX 326 317	£179.90	£179.90	-	-	-
180 x 150	XX 327 318	£260.50	£260.50	£295.90	XX 326 318	£230.70	£230.70	£260.50	-	-
200 x 200	XX 327 319	£329.70	£329.70	-	XX 326 319	£300.00	£300.00	-	-	-
225 x 200	XX 327 320	£389.20	£389.20	-	XX 326 320	£373.70	£373.70	-	-	-
250 x 250	XX 327 321	£607.10	£607.10	-	XX 326 321	£524.80	£524.80	-	29 742 321	£553.20
280 x 250	XX 327 322	£725.00	£725.00	-	XX 326 322	£648.90	£648.90	-	29 742 322	P.O.A.
315 x 300	XX 327 323	£777.30	£777.30	-	XX 326 323	£689.40	£689.40	-	29 742 323	£769.10
355 x 350	XX 327 324	£1,221.00	£1,221.40	-	XX 326 324	£1,082.20	£1,082.20	-	29 742 324	£891.70
400 x 400	XX 327 325	£1,844.80	£1,844.80	-	XX 326 325	£1,411.80	£1,411.80	-	29 742 325	£1,052.30
450 x 450	XX 327 326	£1,804.10	£1,804.10	-	XX 326 326	£1,608.20	£1,608.20	-	29 742 326	P.O.A.
500 x 500	XX 327 327	£2,328.20	£2,328.20	-	XX 326 327	£1,757.00	£1,757.00	-	29 742 327	P.O.A.
560 x 600	XX 327 328	£2,934.00	£2,934.00	-	XX 326 328	£2,064.10	£2,064.10	-	29 742 328	P.O.A.
630 x 600	XX 327 329	£3,232.80	£3,232.80	-	XX 326 329	£2,754.50	£2,754.50	-	29 742 329	£2,755.60
710 x 700	XX 327 330	P.O.A.	P.O.A.	-	XX 326 330	£3,283.00	£3,283.00	-	29 742 330	P.O.A.
800 x 800	XX 327 332	-	-	-	XX 326 332	£4,666.50	£4,666.50	-	29 742 332	P.O.A.
900 x 900	XX 327 333	-	-	-	XX 326 333	£5,914.50	£5,914.50	-	-	-
1000 x 1000	XX 327 334	-	-	-	XX 326 334	£8,110.00	£8,110.00	-	-	-
1200 x 1200	XX 327 335	-	-	-	XX 326 335	P.O.A.	P.O.A.	-	-	-

Size (mm) d ₁ x d ₂	B (mm)	t SDR11 (mm)	t SDR17/17.6 (mm)	SDR11 Weight (kg)	SDR17/17.6 Weight (kg)
63 x 50	575	14	-	1.4	-
63 x 80	575	14	-	1.4	-
90 x 80	630	17	17	2.7	1.9
110 x 100	630	18	18	3.7	2.6
125 x 100	675	25	25	4.5	3.2
125 x 150	675	25	25	6.5	3.4
160 x 150	675	25	25	7.9	5.5
180 x 150	675	30	30	8.8	6.2
200 x 200	675	32	32	11.4	8
225 x 200	675	32	32	12.9	9
250 x 250	675	35	35	18.5	13
280 x 250	602	35	29	20.7	14.1
315 x 300	575	35	35	25.5	18
355 x 350	610	41	30	32.6	26.6
400 x 400	610	47	34	41	34.2
450 x 450	1110	52	47	87.5	69.9
500 x 500	1110	61	47	105.6	84.7
560 x 600	1110	60	51	131.7	109.9
630 x 600	1110	61	51	144	129
710 x 700	1110	tbc	50	tbc	139
800 x 800	1110	tbc	52	tbc	182
900 x 900	1110	tbc	55	tbc	222
1000 x 1000	1130	tbc	60	tbc	280
1200 x 1200	1180	tbc	90	tbc	428

With backing ring drilled to BS EN 1092-1:2007 Table 13.

SDR 17.6 is available in Yellow only.

All sizes of (58) Yellow supplied with a nitrile gasket.

Other lengths (B) available – please contact our Sales office for further information.

** Replace XX with material/colour required:

40 = PE100 Black

41 = PE100 Blue

58 = PE80 Yellow

29 = PE80 Yellow/PE100RC Black

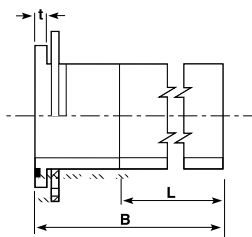
* PE80 only

Dimensions of pupped fittings should be used subject to a +/- 5mm tolerance due to the nature of the fabrication process.

Standard pup leg lengths: 0.5m in sizes up to 400mm; 1.0m in sizes 450mm to 1200mm

Additional bespoke large diameter fabricated fittings are available to order – please contact our Sales Office for further information.

SlimFlange Assemblies



Size (mm) d ₁ x d ₂	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	SDR 17** Code	Price Each 40 Black	Price Each 41 Blue	SDR 21** Code	Price Each 29 Yellow
250 x 200	XX 453 321	£462.60	£462.60	XX 452 321	£413.20	£413.20	29 487 321	£413.20
315 x 250	XX 453 323	£652.00	£652.00	XX 452 323	£584.30	£584.30	29 487 323	£584.30
355 x 300	XX 453 324	£1,017.80	£1,017.80	XX 452 324	£961.90	£961.90	29 487 324	£961.90
400 x 350	XX 453 325	£1,350.00	£1,350.00	XX 452 325	£1,291.60	£1,291.60	29 487 325	£1,291.60
450 x 400	XX 453 326	£1,880.80	£1,880.80	XX 452 326	£1,734.50	£1,734.50	29 487 326	£1,734.50
500 x 450	XX 453 327	£2,036.70	£2,036.70	XX 452 327	£1,922.50	£1,922.50	29 487 327	£1,922.50
560 x 500	XX 453 328	£2,543.80	£2,543.80	XX 452 328	£2,462.90	£2,462.90	29 487 328	P.O.A.
630 x 500	XX 453 329	-	-	XX 452 329	£3,616.60	£3,616.60	29 487 329	P.O.A.

Size (mm) d ₁ x d ₂	L (mm)	B (mm)	t SDR11 (kg)	t SDR17/17.6 (kg)	SDR11 Weight (kg)	SDR17 Weight (kg)	SDR21 Weight (kg)
250 x 200	500	610	31	27	9.0	8.0	7.0
315 x 250	500	610	35	30		12.0	10.0
355 x 300	500	610	40	35	21.0	19.0	17.0
400 x 350	500	610	44	38	31.0	29.0	26.0
450 x 400	1000	1110	49	42	38.0	35.0	31.0
500 x 450	1000	1110	53	45	47.0	43.0	37.0
560 x 500	1000	1110	59	50	58.0	53.0	46.0
630 x 500	1000	1270	-	70	-	87.0	78.0

The SlimFlange is a unique product and allows size-for-size connection of a PE pipeline to a metal flange without loss of nominal bore. It is only sold as a complete assembly.

Bolt kits are not supplied in the assembly. However, it is recommended that, to achieve the best performance, bolt kits with in the assembly. However, it is recommended that, to achieve the best performance, bolt kits with washers of type form A (normal range) as per BS4320 are used.

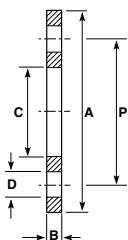
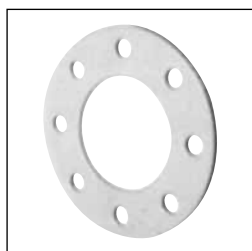
* The first size refers to the outside diameter of the PE pipe and the second to the nominal bore of the ductile iron pipe or fitting/valve.

SlimFlange Assemblies comprise of SlimFlange, galvanised mild steel backing ring and full faced gasket.

For other SDRs and drillings please contact our Sales Office for further information.

** Replace XX with material/colour required: 40 = PE100 Black 41 = PE100 Blue 58 = PE80 Yellow 29 = PE80 Yellow/PE100RC Black

* 630mm x 500mm Slimflange incorporates a reducer.



SlimFlange Backing Ring (For dimensional purpose only – not for sale individually)

Size* (mm)	SDR	A (mm)	B (mm)	C (mm)	D (mm)	PCD P (mm)	No of Holes	Weight (kg)
250 x 200	17.6/17/11	340	13	252	23	295	12	3.5
*315 x 250	17.6/17/11	405	15	317	22	359	12	5.2
355 x 300	17.6/17/11	460	20	358	27	410	12	9.0
400 x 350	17.6/17/11	520	25	403	27	470	16	14.6
450 x 400	17.6/17/11	580	25	453	30	525	16	17.1
500 x 450	17.6/17/11	640	25	504	30	585	20	20.2
560 x 500	17.6/17/11	715	25	564	33	650	20	25.1
630 x 500	17.6/17/11	715	25	564	33	650	20	25.1

The 315 x 250PN16 SlimFlange requires 20mm diameter bolts rather than the standard 24mm

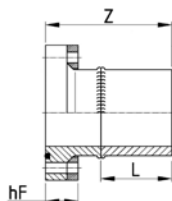
Drilled to BS EN 1092-1:2007 Table 13.

Dimensions of pupped fittings should be used subject to a +/- 5mm tolerance due to the nature of the fabrication process.

Standard pup leg lengths: 0.5m in sizes up to 400mm; 1.0m in sizes 450mm to 1200mm

Additional bespoke large diameter fabricated fittings are available to order – please contact our Sales Office for further information.

Special Flange Assemblies PN16

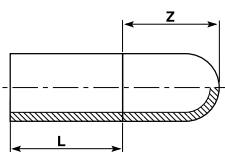


Size (mm) d ₁ x d ₂	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	SDR 17** Code	Price Each 40 Black	Price Each 41 Blue
630 x 500	XX 456 329	P.O.A.	P.O.A.	XX 455 329	P.O.A.	P.O.A.
710 x 600	XX 456 330	P.O.A.	P.O.A.	XX 455 330	£5,732.00	£5,732.00
800 x 700	-	-	-	XX 455 332	£6,442.80	£6,442.80
900 x 800	-	-	-	XX 455 333	P.O.A.	P.O.A.
1000 x 900	-	-	-	XX 455 334	P.O.A.	P.O.A.
1200 x 1000	-	-	-	XX 455 335	P.O.A.	P.O.A.

1 The first size refers to the outside diameter of the PE pipe and the second to the nominal bore of the ductile iron pipe or fitting. Drilled to BS EN 1092-1:2007 Table 13.

Size (mm) d ₁ x d ₂	L (mm)	B (mm)	t (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
630 x 500	1000	1560	108	608	164
710 x 600	1000	1350	120	758	268
800 x 700	1000	1390	135	-	335
900 x 800	1000	1390	149	-	432
1000 x 900	1000	1400	164	-	519
1200 x 1000	1000	1440	180	-	666

End Caps



Size (mm)	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 17/17.6** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 21** Code	Price Each 29 Yellow
90	XX 332 313	£37.20	£37.20	£37.20	XX 331 313	£34.05	£34.05	£34.05	-	-
125	XX 332 315	£74.60	£74.60	£74.60	XX 331 315	£68.10	£68.10	£68.10	-	-
180	XX 332 318	£122.80	£122.80	£122.80	XX 331 318	£111.60	£111.60	£111.60	-	-
250	XX 332 321	£229.80	£229.80	-	XX 331 321	£209.30	£209.30	-	29 748 321	£209.30
280	XX 332 322	P.O.A.	P.O.A.	-	XX 331 322	P.O.A.	P.O.A.	-	29 748 322	P.O.A.
315	XX 332 323	£459.40	£459.40	-	XX 331 323	£418.20	£418.20	-	29 748 323	£418.20
355	XX 332 324	£546.20	£546.20	-	XX 331 324	£496.60	£496.60	-	29 748 324	£496.60
400	XX 332 325	P.O.A.	P.O.A.	-	XX 331 325	P.O.A.	P.O.A.	-	29 748 325	P.O.A.
450	XX 332 326	P.O.A.	P.O.A.	-	XX 331 326	P.O.A.	P.O.A.	-	29 748 326	P.O.A.
500	XX 332 327	P.O.A.	P.O.A.	-	XX 331 327	P.O.A.	P.O.A.	-	29 748 327	P.O.A.

SDR17.6 available in Yellow only.

Size (mm)	L (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)	SDR21 Weight (kg)
90	110	2.4	1.6	-
125	130	4.7	3.2	-
180	160	9.9	6.7	-
250	200	20	13.4	10
280	117	-	-	10
315	260	33	22	14
355	290	43	29	16
400	310	-	-	21
450	80	-	-	47
500	85	-	-	59

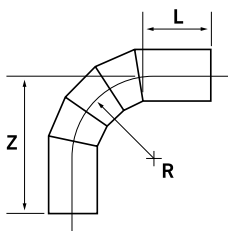
Dimensions of pupped fittings should be used subject to a +/- 5mm tolerance due to the nature of the fabrication process.

Standard pup leg lengths: 0.5m in sizes up to 400mm; 1.0m in sizes 450mm to 1200mm

Additional bespoke large diameter fabricated fittings are available to order – please contact our Sales Office for further information.

ELONGATED SPIGOT FITTINGS FOR BUTT FUSION OR ELECTROFUSION JOINTING

90° Mitred Elbows



Size (D) (mm)	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 17** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 21** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 29 Yellow
90	XX 244 313	£92.50	£92.50	£97.05	XX 243 313	£74.10	£74.10	£77.70	-	-	-	-
110	XX 244 314	£114.90	£114.90	-	XX 243 314	£85.60	£85.60	-	-	-	-	-
125	XX 244 315	£142.20	£142.20	£155.30	XX 243 315	£120.90	£120.90	£126.80	-	-	-	-
160	XX 244 317	£223.50	£223.50	-	XX 243 317	£212.00	£212.00	-	XX 248 317	£177.40	£177.40	-
180	XX 244 318	£401.80	£401.80	£422.10	XX 243 318	£327.60	£327.60	£343.90	XX 248 318	£249.00	£249.00	-
200	XX 244 319	£445.30	£445.30	-	XX 243 319	£379.40	£379.40	-	XX 248 319	£295.40	£295.40	-
225	XX 244 320	£474.20	£474.20	-	XX 243 320	£413.80	£413.80	-	XX 248 320	£326.20	£326.20	-
250	XX 244 321	£588.10	£588.10	-	XX 243 321	£483.50	£483.50	-	XX 248 321	£378.00	£378.00	£507.80
280	XX 244 322	£886.60	£886.60	-	XX 243 322	£738.60	£738.60	-	XX 248 322	£566.10	£566.10	£775.50
315	XX 244 323	£1,203.70	£1,203.70	-	XX 243 323	£981.50	£981.50	-	XX 248 323	£742.30	£742.30	£1,030.10
355	XX 244 324	£1,326.50	£1,326.50	-	XX 243 324	£1,100.80	£1,100.80	-	XX 248 324	£853.60	£853.60	£1,156.30
400	XX 244 325	£1,525.50	£1,525.50	-	XX 243 325	£1,326.50	£1,326.50	-	XX 248 325	£1,052.50	£1,052.50	£1,392.40
450	XX 244 326	£1,701.40	£1,701.40	-	XX 243 326	£1,479.10	£1,479.10	-	XX 248 326	£1,121.20	£1,121.20	£1,553.30
500	XX 244 327	£2,012.80	£2,012.80	-	XX 243 327	£1,750.10	£1,750.10	-	XX 248 327	£1,463.50	£1,463.50	£1,836.80
560	XX 244 328	£2,193.30	£2,193.30	-	XX 243 328	£1,906.20	£1,906.20	-	XX 248 328	£1,800.90	£1,800.90	P.O.A.
630	XX 244 329	£2,538.20	£2,538.20	-	XX 243 329	£2,207.10	£2,207.10	-	XX 248 329	£1,922.10	£1,922.10	P.O.A.
710	XX 244 330	P.O.A.	P.O.A.	-	XX 243 330	£2,541.60	£2,541.60	-	XX 248 330	£2,370.90	£2,370.90	P.O.A.
800	-	-	-	-	XX 243 332	P.O.A.	P.O.A.	-	XX 248 332	P.O.A.	P.O.A.	P.O.A.
900	-	-	-	-	XX 243 333	P.O.A.	P.O.A.	-	XX 248 333	P.O.A.	P.O.A.	-
1000	-	-	-	-	XX 243 334	P.O.A.	P.O.A.	-	XX 248 334	P.O.A.	P.O.A.	-
1200	-	-	-	-	XX 243 335	P.O.A.	P.O.A.	-	XX 248 335	P.O.A.	P.O.A.	-

We can supply longer legs for some butt-fusion machines or shorter (long spigot) for electrofusion.

R = Radius of curvature = approx 1.5 x D (the pipe size)

For water applications, from 355mm and above, GPS recommend to de-rate the pressure rating of 22.5°, 45° and 90° mitred bends to 0.8 x the pipe rating from which it was made.

** Replace XX with material/colour required: 40 = PE100 Black 41 = PE100 Blue 58 = PE80 Yellow 29 = PE80 Yellow/PE100RC Black

90° Gas mitres only contain four segments

Size (D) (mm)	Blue/Black		Yellow*		SDR11 Weight (kg)	SDR17/17.6 Weight (kg)	SDR21 Weight (kg)
	L	Z	L	Z			
90	500	617	500	617	2.4	1.6	-
110	500	643	-	-	3.9	2.7	-
125	500	663	500	663	5	4	-
160	500	708	-	-	9	6	5
180	500	734	500	734	12	8	7
200	500	760	-	-	18	12	10
225	500	793	500	776	20	14	11
250	500	825	500	803	26	17	14
280	500	864	500	845	32	22	17
315	500	907	500	888	42	29	23
355	500	962	500	938	56	38	30
400	500	1020	500	993	75	51	39
450	1000	1585	500	1055	153	103	81
500	1000	1650	500	1116	195	132	102
560	1000	1729	1000	1690	255	170	131
630	1000	1820	1000	1776	335	230	177
710	1000	1929	1000	1883	450	305	259
800	1000	2041	1000	1985	-	405	344
900	1000	2171	-	-	-	568	462
1000	1000	2301	-	-	-	731	595
1200	1000	tbc	-	-	-	1152	940

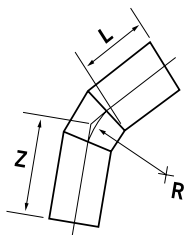
Dimensions of pupped fittings should be used subject to a +/- 5mm tolerance due to the nature of the fabrication process.

Standard pup leg lengths: 0.5m in sizes up to 400mm; 1.0m in sizes 450mm to 1200mm

Additional bespoke large diameter fabricated fittings are available to order – please contact our Sales Office for further information.

ELONGATED SPIGOT FITTINGS FOR BUTT FUSION OR ELECTROFUSION JOINTING

45° Mitred Elbows



Size (D) (mm)	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 17** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 21** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 29 Yellow
90	XX 242 313	£84.90	£84.90	£88.95	XX 241 313	£77.30	£77.30	£81.35	-	-	-	-
110	XX 242 314	£100.00	£100.00	-	XX 241 314	£94.10	£94.10	-	-	-	-	-
125	XX 242 315	£127.10	£127.10	£133.50	XX 241 315	£114.30	£114.30	£120.00	-	-	-	-
160	XX 242 317	£215.60	£215.60	-	XX 241 317	£204.80	£204.80	-	XX 247 317	£180.30	£180.30	-
180	XX 242 318	£289.40	£289.40	£304.00	XX 241 318	£274.40	£274.40	£288.50	XX 247 318	£219.50	£219.50	-
200	XX 242 319	£339.80	£339.80	-	XX 241 319	£322.80	£322.80	-	XX 247 319	£264.50	£264.50	-
225	XX 242 320	£373.40	£373.40	-	XX 241 320	£355.00	£355.00	-	XX 247 320	£294.50	£294.50	-
250	XX 242 321	£461.10	£461.10	-	XX 241 321	£437.20	£437.20	-	XX 247 321	£356.00	£356.00	£459.00
280	XX 242 322	£699.10	£699.10	-	XX 241 322	£599.60	£599.60	-	XX 247 322	£503.80	£503.80	£629.70
315	XX 242 323	£807.90	£807.90	-	XX 241 323	£787.10	£787.10	-	XX 247 323	£640.80	£640.80	£826.40
355	XX 242 324	£1,266.20	£1,266.20	-	XX 241 324	£1,011.70	£1,011.70	-	XX 247 324	£813.70	£813.70	£1,061.40
400	XX 242 325	£1,406.30	£1,406.30	-	XX 241 325	£1,229.20	£1,229.20	-	XX 247 325	£1,014.70	£1,014.70	£1,290.60
450	XX 242 326	£1,574.10	£1,574.10	-	XX 241 326	£1,404.00	£1,404.00	-	XX 247 326	£1,235.50	£1,235.50	£1,474.50
500	XX 242 327	£1,750.10	£1,750.10	-	XX 241 327	£1,659.70	£1,659.70	-	XX 247 327	£1,371.60	£1,371.60	£1,743.10
560	XX 242 328	£1,906.20	£1,906.20	-	XX 241 328	£1,807.90	£1,807.90	-	XX 247 328	£1,570.60	£1,570.60	P.O.A.
630	XX 242 329	£2,207.10	£2,207.10	-	XX 241 329	£2,091.40	£2,091.40	-	XX 247 329	£1,862.60	£1,862.60	P.O.A.
710	XX 242 330	P.O.A.	P.O.A.	-	XX 241 330	£2,708.20	£2,708.20	-	XX 247 330	£2,236.90	£2,236.90	P.O.A.
800	-	-	-	-	XX 241 332	£3,548.10	£3,548.10	-	XX 247 332	P.O.A.	P.O.A.	P.O.A.
900	-	-	-	-	XX 241 333	£4,461.60	£4,461.60	-	XX 247 333	£3,832.40	£3,832.40	-
1000	-	-	-	-	XX 241 334	£4,971.20	£4,971.20	-	XX 247 334	P.O.A.	P.O.A.	-
1200	-	-	-	-	XX 241 335	P.O.A.	P.O.A.	-	XX 247 335	P.O.A.	P.O.A.	-

We can supply longer legs for some butt-fusion machines or shorter (long spigot) for electrofusion.

R = Radius of curvature = approx 1.5 x D (the pipe size)

For water applications, from 355mm and above, GPS recommend to de-rate the pressure rating of 22.5°, 45° and 90° mitred bends to 0.8 x the pipe rating from which it was made.

** Replace XX with material/colour required: 40 = PE100 Black 41 = PE100 Blue 58 = PE80 Yellow 29 = PE80 Yellow/PE100RC Black

Size (D) (mm)	Blue/Black		Yellow*		SDR11 Weight (kg)	SDR17/17.6 Weight (kg)	SDR21 Weight (kg)
	L	Z	L	Z			
90	500	538	500	538	2.3	1.6	-
110	500	546	500	546	3.5	2.4	-
125	500	553	500	553	5	3	-
160	500	568	500	568	8	6	5
180	500	576	500	576	10	7	6
200	500	584	500	584	13	9	7
225	500	595	500	595	17	12	9
250	500	606	500	606	20	14	12
280	500	618	500	618	25	17	15
315	500	632	500	632	33	22	19
355	500	650	500	650	42	29	25
400	500	669	500	669	55	37	33
450	1000	1191	500	691	124	84	42
500	1000	1211	500	711	156	106	89
560	1000	1237	1000	1237	200	131	114
630	1000	1266	1000	1266	260	175	147
710	1000	1300	1000	1300	340	230	191
800	1000	1339	1000	1339	-	300	249
900	1000	1380	-	-	-	400	325
1000	1000	1422	-	-	-	506	412
1200	1000	1507	-	-	-	769	628

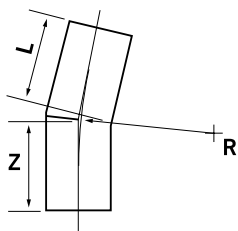
Dimensions of pupped fittings should be used subject to a +/- 5mm tolerance due to the nature of the fabrication process.

Standard pup leg lengths: 0.5m in sizes up to 400mm; 1.0m in sizes 450mm to 1200mm

Additional bespoke large diameter fabricated fittings are available to order – please contact our Sales Office for further information.

ELONGATED SPIGOT FITTINGS FOR BUTT FUSION OR ELECTROFUSION JOINTING

22½° Mitred Elbows



Size (D) (mm)	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 17** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 21** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 29 Yellow
90	XX 317 313	£61.00	£61.00	£64.00	XX 316 313	£57.20	£57.20	£60.10	-	-	-	-
110	XX 317 314	£84.90	£84.90	-	XX 316 314	£74.10	£74.10	-	-	-	-	-
125	XX 317 315	£93.30	£93.30	£98.00	XX 316 315	£88.70	£88.70	£93.10	-	-	-	-
160	XX 317 317	£190.40	£190.40	-	XX 316 317	£150.20	£150.20	-	XX 246 317	£125.50	£125.50	-
180	XX 317 318	£237.20	£237.20	£249.10	XX 316 318	£224.90	£224.90	£236.10	XX 246 318	£180.00	£180.00	-
200	XX 317 319	£308.80	£308.80	-	XX 316 319	£253.10	£253.10	-	XX 246 319	£204.60	£204.60	-
225	XX 317 320	£356.50	£356.50	-	XX 316 320	£271.90	£271.90	-	XX 246 320	£220.90	£220.90	-
250	XX 317 321	£361.10	£361.10	-	XX 316 321	£340.20	£340.20	-	XX 246 321	£281.00	£281.00	£357.00
280	XX 317 322	£490.40	£490.40	-	XX 316 322	£368.70	£368.70	-	XX 246 322	£300.20	£300.20	£387.30
315	XX 317 323	£633.60	£633.60	-	XX 316 323	£599.60	£599.60	-	XX 246 323	£480.40	£480.40	£629.70
355	XX 317 324	£886.60	£886.60	-	XX 316 324	£772.00	£772.00	-	XX 246 324	£706.10	£706.10	£810.20
400	XX 317 325	£1,137.80	£1,137.80	-	XX 316 325	£989.60	£989.60	-	XX 246 325	£818.80	£818.80	£1,039.40
450	XX 317 326	£1,346.10	£1,346.10	-	XX 316 326	£1,171.40	£1,171.40	-	XX 246 326	£1,030.80	£1,030.80	£1,229.20
500	XX 317 327	£1,591.50	£1,591.50	-	XX 316 327	£1,384.30	£1,384.30	-	XX 246 327	£1,143.30	£1,143.30	£1,453.80
560	XX 317 328	£1,733.80	£1,733.80	-	XX 316 328	£1,507.00	£1,507.00	-	XX 246 328	£1,270.90	£1,270.90	P.O.A.
630	XX 317 329	£2,006.90	£2,006.90	-	XX 316 329	£1,745.40	£1,745.40	-	XX 246 329	£1,583.60	£1,583.60	P.O.A.
710	XX 317 330	P.O.A.	P.O.A.	-	XX 316 330	£2,180.50	£2,180.50	-	XX 246 330	£2,059.50	£2,059.50	P.O.A.
800	-	-	-	-	XX 316 332	£2,752.70	£2,752.70	-	XX 246 332	P.O.A.	P.O.A.	P.O.A.
900	-	-	-	-	XX 316 333	£3,356.10	£3,356.10	-	XX 246 333	£2,639.60	£2,639.60	-
1000	-	-	-	-	XX 316 334	P.O.A.	P.O.A.	-	XX 246 334	P.O.A.	P.O.A.	-
1200	-	-	-	-	XX 316 335	P.O.A.	P.O.A.	-	XX 246 335	P.O.A.	P.O.A.	-

We can supply longer legs for some butt-fusion machines or shorter (long spigot) for electrofusion.

R = Radius of curvature = approx 1.5 x D (the pipe size)

For water applications, from 355mm and above, GPS recommend to de-rate the pressure rating of 22.5°, 45° and 90° mitred bends to 0.8 x the pipe rating from which it was made.

** Replace XX with material/colour required: 40 = PE100 Black 41 = PE100 Blue 58 = PE80 Yellow 29 = PE80 Yellow/PE100RC Black

Size (D) (mm)	Blue/Black		Yellow*		SDR11 Weight (kg)	SDR17/17.6 Weight (kg)	SDR21 Weight (kg)
	L	Z	L	Z			
90	500	509	500	509	2.2	1.5	-
110	500	511	500	511	3.2	2.2	-
125	500	513	500	513	4.2	2.8	-
160	500	516	500	516	7	5	4
180	500	518	500	518	9	6	5
200	500	520	500	520	12	8	6
225	500	523	500	523	15	10	8
250	500	525	500	525	18	12	10
280	500	528	500	528	28	19	12
315	500	531	500	531	29	20	16
355	500	536	500	536	35	30	20
400	500	540	500	540	45	31	26
450	1000	1045	500	545	110	75	62
500	1000	1050	500	550	136	92	77
560	1000	1055	1000	1055	172	113	97
630	1000	1063	1000	1063	220	150	123
710	1000	1068	1000	1068	285	190	157
800	1000	1080	1000	1080	-	245	201
900	1000	1090	-	-	-	316	257
1000	1000	1099	-	-	-	393	320
1200	1000	1119	-	-	-	576	470

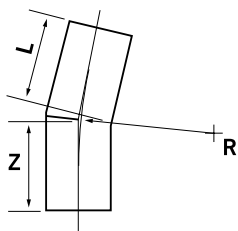
Dimensions of pupped fittings should be used subject to a +/- 5mm tolerance due to the nature of the fabrication process.

Standard pup leg lengths: 0.5m in sizes up to 400mm; 1.0m in sizes 450mm to 1200mm

Additional bespoke large diameter fabricated fittings are available to order – please contact our Sales Office for further information.

ELONGATED SPIGOT FITTINGS FOR BUTT FUSION OR ELECTROFUSION JOINTING

11¼° Mitred Elbows



Size (D) (mm)	SDR 11** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 17** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 58 Yellow	SDR 21** Code	Price Each 40 Black	Price Each 41 Blue	Price Each 29 Yellow
90	XX 298 313	£61.00	£61.00	£64.00	XX 297 313	£57.20	£57.20	£60.10	-	-	-	-
110	XX 298 314	£84.90	£84.90	-	XX 297 314	£74.10	£74.10	-	-	-	-	-
125	XX 298 315	£93.30	£93.30	£98.00	XX 297 315	£88.70	£88.70	£93.10	-	-	-	-
160	XX 298 317	£190.40	£190.40	-	XX 297 317	£150.20	£150.20	-	XX 245 317	£125.50	£125.50	-
180	XX 298 318	£237.20	£237.20	£249.10	XX 297 318	£224.40	£224.40	£236.10	XX 245 318	£180.00	£180.00	-
200	XX 298 319	£308.80	£308.80	-	XX 297 319	£253.10	£253.10	-	XX 245 319	£204.60	£204.60	-
225	XX 298 320	£356.50	£356.50	-	XX 297 320	£271.60	£271.60	-	XX 245 320	£220.90	£220.90	-
250	XX 298 321	£361.10	£361.10	-	XX 297 321	£340.00	£340.00	-	XX 245 321	£281.00	£281.00	£357.00
280	XX 298 322	£490.40	£490.40	-	XX 297 322	£368.70	£368.70	-	XX 245 322	£300.20	£300.20	£387.30
315	XX 298 323	£634.30	£634.30	-	XX 297 323	£599.60	£599.60	-	XX 245 323	£480.40	£480.40	£629.70
355	XX 298 324	£886.60	£886.60	-	XX 297 324	£771.00	£771.00	-	XX 245 324	£706.10	£706.10	£810.20
400	XX 298 325	£1,137.80	£1,137.80	-	XX 297 325	£989.60	£989.60	-	XX 245 325	£818.80	£818.80	£1,039.40
450	XX 298 326	£1,346.10	£1,346.10	-	XX 297 326	£1,171.40	£1,171.40	-	XX 245 326	£1,030.80	£1,030.80	£1,229.20
500	XX 298 327	£1,591.50	£1,591.50	-	XX 297 327	£1,384.30	£1,384.30	-	XX 245 327	£1,143.30	£1,143.30	£1,453.80
560	XX 298 328	£1,733.80	£1,733.80	-	XX 297 328	£1,507.00	£1,507.00	-	XX 245 328	£1,270.90	£1,270.90	P.O.A.
630	XX 298 329	£2,006.90	£2,006.90	-	XX 297 329	£1,745.40	£1,745.40	-	XX 245 329	£1,583.60	£1,583.60	P.O.A.
710	XX 298 330	P.O.A.	P.O.A.	-	XX 297 330	£2,180.50	£2,180.50	-	XX 245 330	£2,059.50	£2,059.50	P.O.A.
800	-	-	-	-	XX 297 332	£2,752.70	£2,752.70	-	XX 245 332	P.O.A.	P.O.A.	P.O.A.
900	-	-	-	-	XX 297 333	£3,356.10	£3,356.10	-	XX 245 333	£2,639.60	£2,639.60	-
1000	-	-	-	-	XX 297 334	P.O.A.	P.O.A.	-	XX 245 334	P.O.A.	P.O.A.	-
1200	-	-	-	-	XX 297 335	P.O.A.	P.O.A.	-	XX 245 335	P.O.A.	P.O.A.	-

We can supply longer legs for some butt-fusion machines or shorter (long spigot) for electrofusion.

R = Radius of curvature = approx 1.5 x D (the pipe size)

For water applications, from 355mm and above, GPS recommend to de-rate the pressure rating of 22.5°, 45° and 90° mitred bends to 0.8 x the pipe rating from which it was made.

** Replace XX with material/colour required: 40 = PE100 Black 41 = PE100 Blue 58 = PE80 Yellow 29 = PE80 Yellow/PE100RC Black

Size (D) (mm)	Blue/Black		Yellow*		SDR11 Weight (kg)	SDR17/17.6 Weight (kg)	SDR21 Weight (kg)
	L	Z	L	Z			
90	500	505	500	505	2.1	1.5	-
110	500	506	500	506	3.2	2.2	-
125	500	506	500	506	4.1	2.8	-
160	500	508	500	508	7	5	4
180	500	509	500	509	9	6	5
200	500	510	500	510	11	8	6
225	500	511	500	511	14	10	8
250	500	512	500	512	17	12	10
280	500	514	500	514	21	15	12
315	500	516	500	516	21	15	16
355	500	518	500	518	34	29	20
400	500	520	500	520	44	30	25
450	1000	1022	500	522	110	75	61
500	1000	1025	500	525	133	90	75
560	1000	1026	1000	1026	168	110	94
630	1000	1031	1000	1031	215	145	120
710	1000	1035	1000	1035	275	185	152
800	1000	1040	1000	1040	-	235	194
900	1000	1044	-	-	-	316	245
1000	1000	1049	-	-	-	393	308
1200	1000	1059	-	-	-	576	445

Dimensions of pupped fittings should be used subject to a +/- 5mm tolerance due to the nature of the fabrication process.

Standard pup leg lengths: 0.5m in sizes up to 400mm; 1.0m in sizes 450mm to 1200mm

Additional bespoke large diameter fabricated fittings are available to order – please contact our Sales Office for further information.

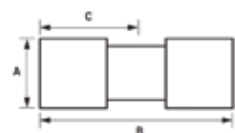
Pipes – Spigot & Socket



Size (mm)	SDR11 Code	Price Each	SDR17 Code	Price Each	A (mm)	B (mm)	C (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	XX 900 313	£176.30	XX 902 313	£139.70	127	6200	200	13.5	9.3
110	XX 900 314	£264.20	XX 902 314	£204.80	163	6180	180	20.5	14.1
125	XX 900 315	£321.70	XX 902 315	£245.10	175	6180	180	25.8	17.7
160	XX 900 317	£545.70	XX 902 317	£423.00	228	6260	260	43.7	30.3
180	XX 900 318	£656.60	XX 902 318	£501.10	245	6265	265	54.2	37.5
225	-	-	XX 902 320	£921.60	319	6315	315	-	62.7
250	-	-	XX 902 321	£1,062.00	330	6340	340	-	74.8

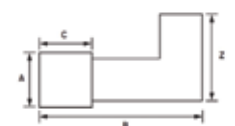
*Available with either Blue (41) or Black (40) Pipe

Couplers – Double Socket



Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	B (mm)	C (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	40 922 313	£92.90	40 969 313	£91.90	127	400	200	1.6	1.6
110	40 922 314	£129.80	40 969 314	£129.80	163	360	180	2.6	2.6
125	40 922 315	£133.80	40 969 315	£132.10	175	360	180	2.9	2.9
160	40 922 317	£262.60	40 969 317	£257.40	228	520	260	7.3	7.3
180	40 922 318	£266.50	40 969 318	£261.10	245	530	265	7.9	7.9
225	-	-	40 969 320	£458.40	319	630	315	-	13.0
250	-	-	40 969 321	£539.30	330	680	340	-	16.5

90° Elbows – Spigot & Socket



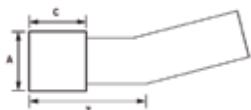
Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	B (mm)	C (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	40 910 313	£75.50	40 970 313	£73.40	127	335	200	135	1.8	1.6
110	40 910 314	£101.00	40 970 314	£97.50	163	346	180	166	2.9	2.6
125	40 910 315	£106.40	40 970 315	£103.40	175	340	180	160	3.6	3.0
160	40 910 317	£215.10	40 970 317	£210.40	228	480	260	220	8.1	6.7
180	40 910 318	£235.00	40 970 318	£226.30	245	485	265	220	9.3	7.9
225	-	-	40 970 320	£394.50	319	583	315	268	-	17.3
250	-	-	40 970 321	£476.90	330	740	340	400	-	18.4

90° Elbows – Double Socket



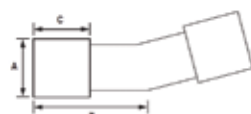
Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	B (mm)	C (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	40 911 313	£130.30	40 971 313	£127.20	127	335	200	135	2.2	2.1
110	40 911 314	£175.40	40 971 314	£171.80	163	346	180	166	3.6	2.6
125	40 911 315	£194.70	40 971 315	£181.90	175	340	180	160	4.1	4.0
160	40 911 317	£355.20	40 971 317	£353.30	228	480	260	220	9.6	5.3
180	40 911 318	£378.80	40 971 318	£373.10	245	485	265	220	20.0	11.4
225	-	-	40 971 320	£641.40	319	583	315	268	-	25.0
250	-	-	40 971 321	£682.50	330	740	340	400	-	25.7

45° Elbows – Spigot & Socket



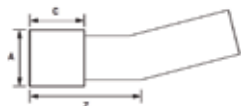
Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	C (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	40 912 313	£71.50	40 972 313	£69.80	127	200	295	1.9	1.7
110	40 912 314	£97.80	40 972 314	£94.90	163	180	287	3.2	2.9
125	40 912 315	£103.90	40 972 315	£101.20	175	180	296	3.6	3.3
160	40 912 317	£210.40	40 972 317	£204.20	228	260	395	8.4	7.7
180	40 912 318	£223.70	40 972 318	£216.20	245	265	422	8.9	8.3
225	-	-	40 972 320	£382.80	319	315	500	-	16.0
250	-	-	40 972 321	£485.50	330	340	586	-	18.2

45° Elbows – Double Socket



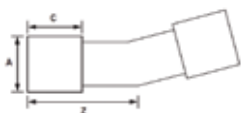
Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	C (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	40 913 313	£126.60	40 973 313	£126.10	127	200	295	2.3	2.1
110	40 913 314	£172.10	40 973 314	£169.10	163	180	287	3.7	3.4
125	40 913 315	£179.30	40 973 315	£177.70	175	180	296	4.2	3.9
160	40 913 317	£350.50	40 973 317	£347.10	228	260	395	11.2	10.5
180	40 913 318	£375.10	40 973 318	£367.50	245	265	422	11.2	10.6
225	-	-	40 973 320	£629.70	319	315	500	-	17.0
250	-	-	40 973 321	£673.00	330	340	586	-	22.0

22.5° Mitred Elbows – Spigot & Socket



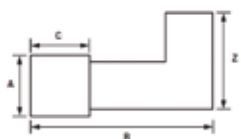
Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	C (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	40 940 313	£91.60	40 974 313	£87.90	127	200	262	1.9	1.6
110	40 940 314	£122.50	40 974 314	£113.90	163	180	329	2.9	2.4
125	40 940 315	£130.90	40 974 315	£122.60	175	180	335	3.5	2.9
160	40 940 317	£224.50	40 974 317	£209.00	228	260	448	7.7	6.4
180	40 940 318	£246.10	40 974 318	£226.70	245	265	535	8.4	7.0
225	-	-	40 974 320	£381.60	319	315	587	-	12.5
250	-	-	40 974 321	£442.00	330	340	715	-	16.0

22.5° Mitred Elbows – Double Socket



Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	C (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	40 941 313	£146.30	40 975 313	£137.20	127	200	262	2.6	2.2
110	40 941 314	£197.00	40 975 314	£188.20	163	180	329	4.6	3.8
125	40 941 315	£206.40	40 975 315	£157.30	175	180	335	4.9	4.1
160	40 941 317	£364.60	40 975 317	£351.90	228	260	448	12.4	10.3
180	40 941 318	£389.90	40 975 318	£344.80	245	265	535	13.1	10.9
225	-	-	40 975 320	£598.40	319	315	587	-	14.7
250	-	-	40 975 321	£641.40	330	340	715	-	22.1

90° Formed Bends – Spigot & Socket



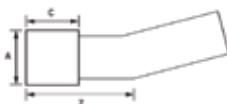
Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	B (mm)	C (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	40 914 313	£162.20	40 976 313	£149.90	127	905	200	705	4.3	3.4
110	40 914 314	£246.30	40 976 314	£212.30	163	975	180	795	8.7	7.2
125	40 914 315	£271.30	40 976 315	£261.30	175	1042	180	862	9.6	7.5
160	40 914 317	£522.50	40 976 317	£428.20	228	1380	260	1120	26.6	20.8
180	40 914 318	£604.20	40 976 318	£597.10	245	1475	265	1210	27.5	21.4
225	-	-	40 976 320	£918.40	319	1727	315	1412	-	31.6
250	-	-	40 976 321	£1,075.20	330	1965	340	1625	-	40.6

90° Formed Bends – Double Socket



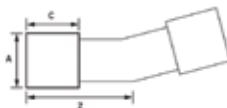
Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	B (mm)	C (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	40 915 313	£217.00	40 977 313	£205.40	127	905	200	5.1	4.2
110	40 915 314	£320.70	40 977 314	£286.60	163	975	180	10.2	8.7
125	40 915 315	£346.80	40 977 315	£337.80	175	1042	180	11.1	9.0
160	40 915 317	£662.50	40 977 317	£571.10	228	1380	260	30.6	24.8
180	40 915 318	£748.10	40 977 318	£743.90	245	1475	265	31.5	25.4
225	-	-	40 977 320	£1,165.30	319	1727	315	-	35.6
250	-	-	40 977 321	£1,361.90	330	1965	340	-	44.6

45° Formed Bends – Spigot & Socket



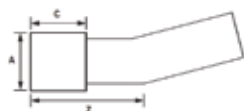
Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	C (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	40 916 313	£139.20	40 978 313	£129.20	127	200	655	3.3	2.7
110	40 916 314	£221.40	40 978 314	£182.50	163	180	669	6.4	5.4
125	40 916 315	£275.20	40 978 315	£207.30	175	180	695	7.2	5.7
160	40 916 317	£457.50	40 978 317	£382.80	228	260	936	18.6	15.4
180	40 916 318	£499.40	40 978 318	£453.00	245	265	975	20.2	16.0
225	-	-	40 978 320	£823.50	319	315	1102	-	26.8
250	-	-	40 978 321	£949.20	330	340	1171	-	35.8

45° Formed Bends – Double Socket



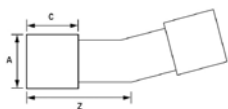
Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	C (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	40 917 313	£194.00	40 979 313	£184.60	127	200	655	4.1	3.5
110	40 917 314	£295.70	40 979 314	£256.80	163	180	669	7.9	6.9
125	40 917 315	£350.60	40 979 315	£283.70	175	180	695	8.7	7.2
160	40 917 317	£597.50	40 979 317	£525.70	228	260	936	22.6	19.4
180	40 917 318	£643.30	40 979 318	£599.80	245	265	975	24.2	20
225	-	-	40 979 320	£1,070.30	319	315	1102	-	30.2
250	-	-	40 979 321	£1,236.00	330	340	1171	-	35.8

22.5° Formed Bends – Spigot & Socket



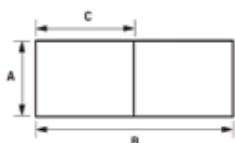
Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	C (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	40 918 313	£146.20	40 980 313	£121.00	127	200	581	2.9	2.4
110	40 918 314	£204.60	40 980 314	£169.80	163	180	578	5.3	4.5
125	40 918 315	£225.40	40 980 315	£190.20	175	180	592	6	4.8
160	40 918 317	£360.00	40 980 317	£336.70	228	260	803	15.2	12.7
180	40 918 318	£447.60	40 980 318	£418.50	245	265	826	16.6	13.3
225	-	-	40 980 320	£748.10	319	315	916	-	23.5
250	-	-	40 980 321	£863.20	330	340	1064	-	32.5

22.5° Formed Bends – Double Socket



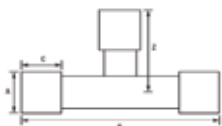
Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	C (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	40 919 313	£201.00	40 981 313	£176.50	127	200	581	3.7	3.2
110	40 919 314	£278.90	40 981 314	£244.20	163	180	578	6.8	6
125	40 919 315	£300.90	40 981 315	£266.70	175	180	592	7.5	6.3
160	40 919 317	£500.00	40 981 317	£479.70	228	260	803	19.2	16.7
180	40 919 318	£591.40	40 981 318	£565.30	245	265	826	20.6	17.3
225	-	-	40 981 320	£995.00	319	315	916	-	27.5
250	-	-	40 981 321	£1,150.00	330	340	1064	-	36.5

Repair Slip Coupler



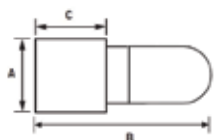
Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	C (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	40 921 313	£92.90	40 968 313	£91.90	127	600	200	1.6	1.6
110	40 921 314	£129.80	40 968 314	£129.80	163	520	180	2.6	2.6
125	40 921 315	£133.80	40 968 315	£132.10	175	520	180	2.9	2.9
160	40 921 317	£262.60	40 968 317	£257.40	228	840	260	7.3	7.3
180	40 921 318	£266.50	40 968 318	£261.10	245	860	265	7.9	7.9
225	-	-	40 968 320	£458.40	319	1060	315	-	13.0
250	-	-	40 968 321	£539.30	330	1160	340	-	16.5

Equal Tees – Triple Socket



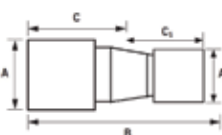
Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	B (mm)	C (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	40 920 313	£192.50	40 986 313	£190.80	127	710	200	365	3.5	3.3
110	40 920 314	£263.80	40 986 314	£258.30	163	686	180	355	6.3	6
125	40 920 315	£303.40	40 986 315	£286.40	175	735	180	377	6.9	6.5
160	40 920 317	£522.10	40 986 317	£519.40	228	939	260	468	17.5	16
180	40 920 318	£578.70	40 986 318	£575.90	245	1039	265	535	19.6	18
225	-	-	40 986 320	£974.80	319	1180	315	590	-	29
250	-	-	40 986 321	£1,195.60	330	1367	340	684	-	37.2

End Caps



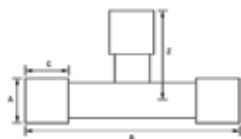
Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	B (mm)	C (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90	40 943 313	£70.10	40 966 313	£68.50	127	272	200	1.1	1.0
110	40 943 314	£95.70	40 966 314	£91.60	163	262	180	1.6	1.6
125	40 943 315	£100.70	40 966 315	£96.30	175	272	180	2.2	2.1
160	40 943 317	£182.30	40 966 317	£177.40	228	368	260	5.0	4.5
180	40 943 318	£193.90	40 966 318	£185.90	245	385	265	5.8	5.6
225	-	-	40 966 320	£351.80	319	510	315	-	11.0
250	-	-	40 966 321	£397.80	330	535	340	-	12.8

Reducers – Double Socket



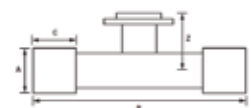
Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	C (mm)	A ₁ (mm)	C ₁ (mm)	B (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
110 x 90	40 926 483	£169.80	40 965 483	£151.30	163	180	127	200	582	2.7	2.5
125 x 90	40 926 484	£170.90	40 965 484	£167.40	175	180	127	200	586	3.1	2.8
125 x 110	40 926 493	£187.50	40 965 493	£184.30	175	180	163	180	577	3.6	3.3
160 x 90	40 926 486	£278.20	40 965 486	£276.60	228	260	127	200	708	5.6	5.4
160 x 110	40 926 495	£275.30	40 965 495	£271.90	228	260	163	180	690	6.3	5.9
160 x 125	40 926 504	£281.90	40 965 504	£273.00	228	260	175	180	680	6.4	6.1
180 x 90	40 926 487	£342.00	40 965 487	£331.60	245	265	127	200	865	10.0	9.2
180 x 110	40 926 496	£358.80	40 965 496	£348.70	245	265	163	180	795	7.7	6.9
180 x 125	40 926 505	£302.90	40 965 505	£297.60	245	265	175	180	696	7.0	6.5
180 x 160	40 926 520	£365.80	40 965 520	£363.00	245	265	228	260	745	8.0	7.4
225 x 125	-	-	40 965 507	£609.80	319	315	175	180	845	-	11.2
225 x 160	-	-	40 965 522	£567.30	319	315	228	260	883	-	12.4
225 x 180	-	-	40 965 528	£572.00	319	315	245	265	843	-	12.7
250 x 125	-	-	40 965 508	£627.00	330	340	175	180	920	-	13.9
250 x 160	-	-	40 965 523	£701.70	330	340	228	260	1000	-	16.5
250 x 180	-	-	40 965 529	£591.60	330	340	245	265	908	-	15.3

Reduced Branch Tees – Triple Socket



Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	C (mm)	A ₁ (mm)	C ₁ (mm)	B (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
110 x 90	40 927 483	£303.80	40 967 483	£279.80	163	180	127	200	680	550	13.9	8.1
125 x 90	40 927 484	£325.20	40 967 484	£314.90	175	180	127	200	680	575	11.7	9.3
125 x 110	40 927 493	£341.80	40 967 493	£331.70	175	180	163	180	701	555	12.2	9.8
160 x 90	40 927 486	£523.40	40 967 486	£534.90	228	260	127	200	944	820	16.4	13.5
160 x 110	40 927 495	£540.10	40 967 495	£528.60	228	260	163	180	945	800	16.9	14.0
180 x 90	40 927 487	£656.80	40 967 487	£633.70	245	265	127	200	990	880	26.6	21.2
180 x 110	40 927 496	£673.50	40 967 496	£650.80	245	265	163	180	990	670	27.1	21.7
180 x 125	40 927 505	£617.70	40 967 505	£599.60	245	265	175	180	960	670	27.7	22.2
180 x 160	40 927 520	£680.60	40 967 520	£665.00	245	265	228	260	990	750	29.9	24.4
225 x 90	-	-	40 967 489	£1,038.80	319	315	127	200	1165	1250	-	27.5
225 x 110	-	-	40 967 498	£1,059.60	319	315	163	180	1152	950	-	35.8
225 x 125	-	-	40 967 507	£1,090.90	319	315	175	180	1152	950	-	36.0
225 x 160	-	-	40 967 522	£1,076.70	319	315	228	260	1152	720	-	39.9
225 x 180	-	-	40 967 528	£1,086.10	319	315	245	265	1190	725	-	40.2
250 x 110	-	-	40 967 499	£1,289.00	330	340	163	180	1280	920	-	41.7
250 x 125	-	-	40 967 508	£1,249.00	330	340	175	180	1280	920	-	41.9
250 x 160	-	-	40 967 523	£1,323.70	330	340	228	260	1280	760	-	44.4
250 x 180	-	-	40 967 529	£1,244.60	330	340	245	265	1280	765	-	44.7

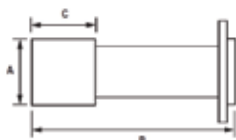
Flanged Branch Tees – Double Socket



Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	B (mm)	C (mm)	Z (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90 x 80	40 937 313	£215.40	40 982 313	£202.50	127	710	200	165	4.0	3.3
110 x 80	40 937 314	£317.10	40 982 314	£299.23	163	686	180	289	6.5	5.4
125 x 80	40 937 315	£338.30	40 982 315	£291.45	175	735	180	260	6.7	5.6
160 x 80	40 937 317	£599.20	40 982 317	£577.50	228	939	260	330	15.6	13.0
180 x 80	40 937 318	£670.20	40 982 318	£542.60	245	1039	265	335	16.3	13.6
225 x 80	-	-	40 982 320	£1,090.80	319	1180	315	492	-	26.0
250 x 80	-	-	40 982 321	£1,414.40	330	1367	340	580	-	31.4
110 x 100	40 938 314	£265.70	40 983 314	£246.30	163	686	180	175	6.5	5.4
125 x 100	40 938 315	£294.80	40 983 315	£291.50	175	735	180	215	6.7	5.6
160 x 100	40 938 317	£555.20	40 983 317	£505.50	228	939	260	332	15.6	13.0
180 x 100	40 938 318	£626.20	40 983 318	£618.20	245	1039	265	290	16.3	13.6
225 x 100	-	-	40 983 320	£1,033.50	319	1180	315	494	-	26.0
250 x 100	-	-	40 983 321	£1,056.10	330	1367	340	520	-	31.4
160 x 150	40 939 317	£520.20	40 984 317	£471.50	228	939	260	340	15.6	13.0
180 x 150	40 939 318	£574.60	40 984 318	£537.80	245	1039	265	230	16.3	13.6
225 x 150	-	-	40 984 320	£1,003.70	319	1180	315	363	-	26.0
250 x 150	-	-	40 984 321	£976.90	330	1367	340	410	-	31.4

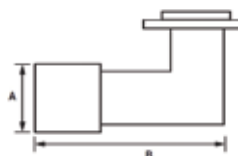
A SPIGOT AND SOCKET JOINTING SYSTEM WITH PROVEN END LOAD PERFORMANCE

Flanged Sockets



Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	B (mm)	C (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90 x 80	40 936 313	£101.70	40 991 313	£98.70	127	279	200	3.0	2.5
110 x 100	40 936 314	£131.70	40 991 314	£117.70	163	262	180	4.0	3.3
125 x 100	40 936 315	£140.50	40 991 315	£134.90	175	272	180	4.7	3.9
160 x 150	40 936 317	£255.40	40 991 317	£214.80	228	358	260	9.4	7.8
180 x 150	40 936 318	£259.90	40 991 318	£227.60	245	371	265	10.2	8.5
225 x 200	-	-	40 991 320	£434.00	319	440	315	20.1	16.8
250 x 250	-	-	40 991 321	£523.80	330	520	340	22.4	18.7

Flanged 90° Elbows

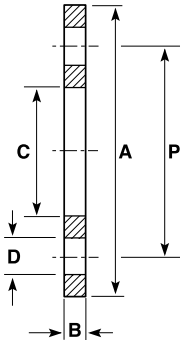
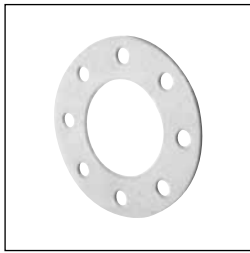


Size (mm)	SDR11 Black Code	Price Each	SDR17 Black Code	Price Each	A (mm)	B (mm)	C (mm)	SDR11 Weight (kg)	SDR17 Weight (kg)
90 x 80	40 933 313	£140.40	40 987 313	£127.60	127	905	200	3.6	3.0
110 x 100	40 933 314	£177.30	40 987 314	£159.70	163	975	180	6.0	5.0
125 x 100	40 933 315	£190.30	40 987 315	£171.20	175	1042	180	6.4	5.3
160 x 150	40 933 317	£353.30	40 987 317	£305.40	228	1380	260	10.2	8.5
180 x 150	40 933 318	£377.50	40 987 318	£355.40	245	1475	265	11.9	9.9
225 x 200	-	-	40 987 320	£617.10	319	1965	315	-	17.6
250 x 250	-	-	40 987 321	£745.60	330	1980	340	-	19.5

Lubricant

Lubricant	Code	Price Each
400ml Spray	53 945 100	£13.85
500ml Gel	53 946 100	£15.60

Blue Rilsan Backing Rings for Water for use with PE80 SDR17/11 & PE100 SDR17



Size* (mm)	Blue Code	Price Each	A (mm)	B (mm)	C (mm)	D (mm)	PCD P (mm)	No of Holes	Weight (kg)
50 x 40 PN10/16	53 475 310	£15.15	150	6**	62	18	110	4	0.6
63 x 50 PN10/16	53 475 311	£21.85	165	8	77	18	125	4	1.0
75 x 65 PN10/16	53 475 312	£26.25	185	8	91	18	145	4	1.2
90 x 80 PN10/16	53 475 313	£29.65	200	8	107	18	160	8	1.3
110 x 100 PN10/16	53 475 314	£33.80	220	8	127	18	180	8	1.5
125 x 100 PN10/16	53 475 315	£31.80	220	9	134	18	180	8	1.5
160 x 150 PN10/16	53 475 317	£48.20	285	10	177	22	240	8	2.8
180 x 150 PN10/16	53 475 318	£48.20	285	10	185	22	240	8	2.7
200 x 200 PN16	53 473 320	£92.30	340	10	237	22	295	12	4.0
225 x 200 PN10	53 475 320	£94.50	340	10	237	22	295	8	4.0
225 x 200 PN16	53 473 320	£92.30	340	10	237	22	295	12	3.4
250 x 250 PN10	53 475 321	£114.60	395	15	287	22	350	12	6.8
250 x 250 PN16	53 473 321	£114.60	405	15	294	26	355	12	7.0
280 x 250 PN16	53 473 322	£141.90	405	20	294	26	355	12	12.0
315 x 300 PN10	53 475 323	£152.80	445	20	329	22	400	12	12.0
315 x 300 PN16	53 473 323	£152.80	460	20	329	26	410	12	12.0

* The first size refers to the outside diameter of the PE pipe and the second to the nominal bore of the ductile pipe or fitting/valve.

** 6mm backing rings are rated at 12.5 bar.

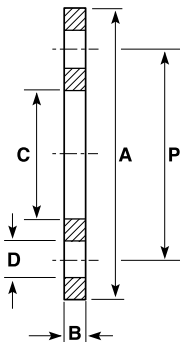
Blue Rilsan coated backing rings are for use with the following systems:

Black/Blue PE80 – MDPE SDR17 & SDR 11 – up to 63mm

Black/Blue PE100 (Excel) SDR17 – from 75mm upwards

Drilled to BS EN 1092-1:2007 Table 13

Black Rilsan Backing Rings for Water for use with PE100 SDR11



Size* (mm)	Black Code	Price Each	A (mm)	B (mm)	C (mm)	D (mm)	PCD P (mm)	No of Holes	Weight (kg)
75 x 65 PN10/16	58 475 312	£29.10	185	12.5	91	18	145	4	1.9
90 x 80 PN10/16	58 475 313	£30.15	200	15	107	18	160	8	2.4
110 x 100 PN10/16	58 475 314	£36.30	220	15	127	18	180	8	2.7
125 x 100 PN10/16	58 475 315	£36.30	220	15	134	18	180	8	2.6
160 x 150 PN10/16	58 475 317	£80.10	285	20	177	22	240	8	5.7
180 x 150 PN10/16	58 475 318	£80.10	285	20	185	22	240	8	5.3
225 x 200 PN16	58 473 320	£135.90	340	20	237	22	295	12	6.6
250 x 250 PN16	58 473 321	£204.30	405	25	287	26	355	12	11.3
280 x 250 PN16	58 473 322	£222.20	405	25	294	26	355	12	11.0
315 x 300 PN16	58 473 323	£256.10	460	25	329	26	410	12	14.7

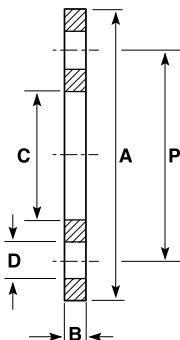
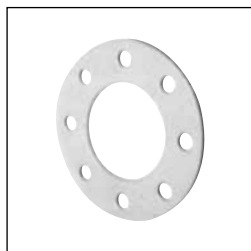
* The first size refers to the outside diameter of the PE pipe and the second to the nominal bore of the ductile pipe or fitting/valve.

Black Rilsan coated backing rings are for use with the following systems:

Blue PE100 (Excel) SDR11 – from 75mm upwards

Drilled to BS EN 1092-1:2007 Table 13

Galvanised Backing Rings for Water for use with PE80 SDR17/11 and PE100 SDR17 (Not PE100 SDR11)



Size* (mm)	Black Code	Price Each	A (mm)	B (mm)	C (mm)	D (mm)	PCD P (mm)	No of Holes	Weight (kg)
355 x 350 PN16	53 474 324	£380.10	520	20	376	26	470	16	14.6
400 x 400 PN16	53 474 325	£519.80	580	25	430	30	525	16	21.1
450 x 450 PN16	53 474 326	£739.40	640	25	465	30	585	20	27.0
500 x 500 PN16	24 996 118	£922.40	715	30	533	33	650	20	38.0
560 x 600 PN16	53 474 328	£1,444.70	840	42	618	36	770	20	77.1
630 x 600 PN16	53 996 605	£1,629.00	840	44	645	36	770	20	71.5
710 x 700 PN16	53 996 621	£2,425.20	910	50	740	36	840	24	76.9

* The first size refers to the outside diameter of the PE pipe and the second to the nominal bore of the ductile pipe or fitting/valve.

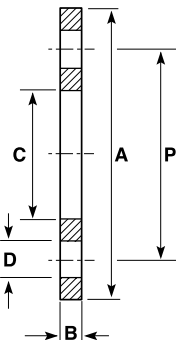
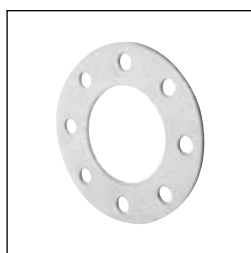
Galvanised Mild Steel backing rings are for use with the following systems:

Black/Blue PE80 – MDPE SDR17, SDR 17.6 & SDR11

Black/Blue PE100 (Excel) SDR17 & SDR17.6

Drilled to BS EN 1092-1:2007 Table 13

Galvanised Backing Rings for Gas for use with PE80 SDR17.6 or Excel NY SDR21/26



Size* (mm)	Yellow Code	Price Each	A (mm)	B (mm)	C (mm)	D (mm)	PCD P (mm)	No of Holes	Weight (kg)
63 x 50 PN10/16	53 457 311	£28.45	165	12	77	18	125	4	1.0
90 x 80 PN10/16	53 457 313	£30.15	200	12	107	18	160	8	1.2
90 x 100 PN10/16	53 457 484	£30.45	220	10	107	18	180	8	1.0
125 x 100 PN10/16	53 457 315	£36.30	220	12	134	18	180	8	1.4
180 x 150 PN10/16	53 457 318	£80.10	285	12	185	22	240	8	2.7
250 x 250 PN10	53 457 321	£106.80	395	15	287	22	350	12	6.8
315 x 300 PN10	53 457 323	£142.80	445	15	329	22	400	12	8.8
225 x 200 PN16	53 457 320	£87.40	340	12	237	22	295	12	3.4
250 x 250 PN16	53 458 321	£114.60	405	15	287	26	355	12	6.8
280 x 250 PN16	53 457 322	£122.50	405	15	294	26	355	12	6.7
315 x 300 PN16	53 458 323	£152.80	460	15	338	26	410	12	8.8
355 x 350 PN16	53 458 324	£374.50	520	25	376	26	470	16	15.0
400 x 400 PN16	53 458 325	£517.10	580	30	430	30	525	16	39.0
450 x 450 PN16	53 458 326	£723.60	640	35	465	30	585	20	47.0
500 x 500 PN16	53 458 327	£1,206.00	715	36	533	33	650	20	68.0

* The first size refers to the outside diameter of the PE pipe and the second to the nominal bore of the ductile pipe or fitting/valve.

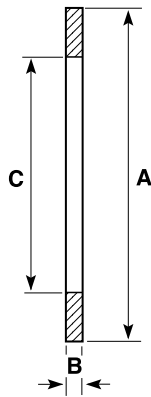
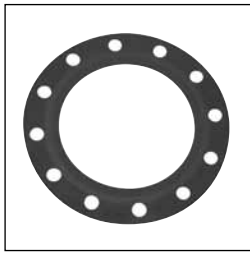
Galvanised Mild Steel backing rings are for use with the following systems:

Yellow PE80 MDPE SDR17.6 and SDR21

Excel NY PE100 SDR21/26

Drilled to BS EN 1092-1:2007 Table 13

Gaskets



Size* (mm)	Blue Code	Yellow Code	Price Each	A (mm)	B (mm)	C (mm)	Weight (kg)
63 x 50 PN16	53 488 311	53 490 311	£1.46	102	4	53	0.01
75 x 65 PN16	53 488 312	-	£1.86	122	4	60	0.02
90 x 80 PN16	53 488 313	53 490 313	£1.97	138	4	75	0.03
110 x 100 PN16	53 488 314	-	£2.38	158	4	98	0.04
125 x 100 PN16	53 488 315	53 490 315	£2.77	158	4	104	0.05
160 x 150 PN16	53 488 317	-	£5.78	212	4	160	0.07
180 x 150 PN16	53 488 318	53 490 318	£6.16	212	4	160	0.08
200 x 200 PN16	53 488 319	-	£8.41	268	4	205	0.12
225 x 200 PN16	53 488 320	-	£9.18	268	4	205	0.17
250 x 250 PN16	53 488 321	53 490 321	£12.75	320	4	206	0.19
315 x 300 PN16	53 488 323	53 490 323	£15.10	370	4	275	0.21

EPDM for Water or Nitrile for Gas.

* The first size refers to the outside diameter of the PE pipe and the second to the nominal bore of the ductile pipe or fitting/valve.

In some sizes, gaskets may be supplied as inside bolt circle rather than full faced.

TERMS & CONDITIONS OF SALE

1. DEFINITIONS:

"Seller" shall mean Glynwed Pipe Systems Limited, Registered in England under number 1698059. "Buyer" shall mean any company, organisation or individual to whom a quotation is offered, or whose order is accepted by the Seller.

2. CONDITIONS:

All offers, quotations, estimates, acceptances and contracts are subject to these Conditions of Business and any terms or conditions which any other person shall seek to impose or make part of any contract shall, so far as is inconsistent with these Conditions of Business, not apply unless expressly agreed by the Seller in writing. The headings in these conditions are for convenience only and shall not affect their interpretation.

3. QUOTATIONS AND PRICE VARIATION:

- a) Any quotation given by the Seller is an invitation to the Buyer to make an offer only and no order of the Buyer placed with the Seller in pursuance of a quotation or otherwise shall be binding on the Seller unless and until it is accepted in writing by the Seller.
- b) Unless stated otherwise, all quotations and published price lists are ex works, exclusive of VAT and shall remain valid for 30 days or such a period as may be quoted but nevertheless the Seller may amend or withdraw any quotation by written or oral notice. Quotations may be varied if the Buyer makes variations in his specifications.

4. STATEMENTS OR REPRESENTATIONS TO THE BUYER:

If any statement or representation has been made to the Buyer upon which the Buyer relies other than in the documents enclosed with the Seller's quotation, the Buyer must set out that statement or representation in a document to be attached to or endorsed on the order in which case the Seller may submit a new quotation.

5. DELIVERY – TIME:

- a) Any period for delivery given at any time and in any manner by the Seller is an estimate only and is not binding on the Seller. Delivery periods are normally calculated from the later of:
 - i) acceptance of order; or
 - ii) where applicable, the receipt by the Seller of a detailed specification or drawings.
- b) Time shall not be deemed to be of the essence of the contract. Failure by the Seller to meet any quoted delivery period for any part or the whole of the order shall not entitle the Buyer to rescind the contract or to claim damages of any nature.
- c) The Seller will endeavour to comply with reasonable requests by the Buyer for postponement of delivery but shall be under no obligation to do so. Where delivery is postponed otherwise than due to default by the Seller the Buyer shall pay all costs and expenses including a reasonable charge for storage and transportation occasioned thereby and an extra charge for split delivery if applicable.
- d) Cost incurred by the Seller arising from the Buyer's refusal to accept consignments within the agreed hours shall be borne by the Buyer.

6. DELIVERY AND RISK:

- a) Except where stated to the contrary in the contract, delivery shall be made as follows:
 - i) where the Buyer provides the transport, delivery shall be made ex the Seller's works;
 - ii) where the Seller provides the transport, delivery shall be made to the premises of the Buyer, or the premises of the Buyer's customer or works site if the Buyer has requested delivery to be so made but where the Buyer has made such a request the Seller will make a first delivery to the Buyer's customer or works site as so much of the goods as is available for that delivery but subsequent deliveries will be made to the premises of the Buyer.
- b) The Seller may at its discretion make partial delivery of orders and invoice the same.
- c) Risk in the goods shall pass on delivery.
- d) Where goods are sent FOB the Seller's responsibility shall cease when the goods are placed on board ship or aircraft without the need for the Seller to give notice to the Buyer and the provisions of Section 32(3) of the Sale of Goods Act 1979 shall not apply.

7. OWNERSHIP OF GOODS:

- a) The goods shall remain the sole and absolute property of the Seller as legal and equitable owner until such time as the Buyer shall have paid to the Seller the contract price together with the full price of any other goods the subject of any contract between the Seller and the Buyer.
- b) The Buyer acknowledges that until such time as the property in the goods passes to the Buyer he is in possession of the goods as a bailee and fiduciary agent for the Seller and the Purchaser shall store the goods in such a manner that they are clearly identifiable as the property of the Seller.
- c) Until payment due under all contracts between the Buyer and the Seller had been made in full, in the event of sale of the goods by the Buyer:
 - i) the Seller shall be entitled to trace all proceeds of sale received by the Buyer through any bank or other account maintained by the Buyer; and
 - ii) the Buyer shall if requested by the Seller in writing to so assign its rights to recover the selling price of the goods from the third parties concerned. Such monies to be held separately by the Buyer as agent on behalf of the Seller.
- d) The Seller may for the purpose of recovery of its goods enter upon any premises where they are stored or where they are reasonably thought to be stored and may repossess the same.

8. TERMS OF PAYMENT:

In the event of default in payment according to the agreed payment terms between the Seller and the Buyer – ie: by the end of the month following the month of despatch of the goods the Seller shall be entitled without prejudice to any other right or remedy to suspend all further deliveries and to charge interest on any amount outstanding at the rate of 2% per month until payment in full is made (a part of a month being treated as a full month for the purpose of calculating interest).

9. SHORTAGES AND DEFECTS APPARENT ON DELIVERY:

- a) It shall be the responsibility of the Buyer to inspect or arrange for an inspection of the goods on delivery whether the goods are delivered to the Buyer's premises or to the premises of the Buyer's customer or to a works site. If no such inspection is made the Buyer shall be deemed to have accepted the goods.
- b) The Buyer shall have no claim for shortages or defects apparent on inspection unless:
 - i) a written complaint is made to the Seller within three days of receipt of the goods specifying the shortage or defect; and
 - ii) the Seller is within seven days of receipt of the complaint given an opportunity to inspect the goods and investigate the complaint before any use is made of the goods.
- c) If a complaint is not made to the Seller as herein provided then in respect of such shortages or defects the goods shall be deemed to be in all respects in accordance with the contract and the Buyer shall be bound to pay for the same accordingly.

10. CLAIMS FOR DEFECTS NOT APPARENT ON INSPECTION:

- a) The Buyer shall have no claim for defects not apparent on inspection unless the Seller is notified of defective workmanship or materials within twelve months from delivery of the goods. Provided that the goods have been installed and applied in accordance with any relevant recommendations made by the Seller, the Seller will at its option replace the goods or refund the net invoiced price in respect of the goods which have been shown to be defective. If the Seller does so supply substitute goods the Buyer shall be bound to accept such substituted goods in full satisfaction of the obligations of the Seller under the contract.
- b) The Buyer shall in any event have no claim or set-off in respect of defects unless a written complaint is sent to the Seller as soon as the defect is noticed and no use is made of the goods thereafter or alteration made thereto by the Buyer before the Seller is given an opportunity to inspect the goods.
- c) The Buyer is responsible for ensuring that the goods are fit for any particular purpose, and no warranty or condition of fitness for any particular purpose is to be implied into the contract.

11. LIABILITY:

Save as stated in Conditions 9 and 10 (and save in respect of death or personal injury resulting from the negligence of the Seller its servants or agents) the Seller shall not be liable for any claim or claims for direct or indirect consequential or incidental injury loss or damage made by the Buyer against the Seller whether in contract or in tort (including negligence on the part of the Seller its servants or agents) arising out of or in connection with any defect in the goods or their fitness or otherwise for any particular purpose or any act omission neglect or default of the Seller its servants or agents in the performance of the contract.

12. FORCE MAJEURE:

Notwithstanding anything herein contained neither the Buyer nor the Seller is to be held liable for any delay or failure to carry out the contract due wholly or in part to an act of God action by any Government whether British or foreign civil war strikes and/or lockouts wheresoever occurring fire trade disputes floods or unfavourable weather or any material becoming unavailable or irreplaceable (whether at all or at commercially acceptable prices) or any other circumstances beyond the control of the Seller.

13. SUB-CONTRACTING:

The Seller reserves the right to sub-contract the fulfilment of any order or any part thereof.

14. INSOLVENCY AND BREACH OF CONTRACT:

In the event that:

- a) the Buyer commits any breach of the contract and fails to remedy such breach (if capable of remedy) within a period of thirty days from receipt of a notice in writing from the Seller requesting such remedy; or
- b) any distress or execution is levied upon any of the goods or property of the Buyer; or
- c) the Buyer offers to make any arrangements with or for the benefit of its creditors or (if an individual) becomes subject to a petition for a bankruptcy order or (being a limited company) has a receiver appointed of the whole or any part of its undertaking property or assets; or
- d) an order is made or a resolution is passed or analogous proceedings are taken for the winding up of the Buyer (save for the purpose of reconstruction or amalgamation with insolvency and previously approved in writing by the Seller) the Seller shall thereupon be entitled without prejudice to its other rights hereunder forthwith to suspend all further deliveries until the default has been made good or to determine the contract and any unfulfilled part thereof or at the Seller's option to make partial deliveries. Notwithstanding any such termination the Buyer shall pay to the Seller at the contract rate for all the goods delivered up to and including the date of termination.

15. INDUSTRIAL PROPERTY RIGHTS:

If goods supplied by the Seller to the Buyer's design or specifications infringe or are alleged to infringe any patent or registered design right or copyright the Buyer will indemnify the Seller against all damages, costs and expenses incurred by the Seller as a result of the infringement or allegation. The Buyer will give the Seller all possible help in meeting any infringement claim brought against the Seller.

16. BUYER'S ERROR IN ORDERING:

In the event the Buyer orders incorrectly the Seller will be under no obligation to the Buyer to rectify or assist in rectifying the error.

17. LAW AND JURISDICTION:

The contract shall be subject in all respects to English Law and to the jurisdiction of the English Courts.



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