Vinidex
Systems & Solutions

Polyethylene Pipe & Fittings Systems

May 2018

Polyethylene Pipe Range

Metric Compression Fittings

Rural Compression Fittings

BSP Threaded Fittings

Electrofusion

Valves

Saddles

Butt Welding

HDPE Pipe & Fittings

Tools & Accessories

Philmac FRIATEC NTG PLASTIK akatherm

Vinidex

Darwin
Townsville
Toowoomba
Brisbane
Perth
Wagga Wagga
Sydney
Adelaide
Melbourne
Launceston
Manufacturing
Distribution

Our Strength.
Our Commitment.
Our Australian Footprint.

Vinidex Pty Limited is Australia's leading manufacturer and supplier of quality PVC pipe, PE pipe and PP pipe systems and solutions for the transportation of fluid, data and energy.

From humble beginnings in 1960, Vinidex has grown to become Australia's leading plastic pipes systems company. The company now has nine manufacturing plants and eleven distribution centres across Australia. Vinidex has products and systems solutions for a broad range of applications including plumbing, water supply, waste management, stormwater and drainage, mining, industrial, rural, irrigation, electrical, telecommunications and gas.

Proven long term performance and reliability of Vinidex products in major infrastructure and building projects has resulted in ongoing substitution of traditional materials such as metals, earthenware, concrete and fibre cement with better performing plastic pipes.

Vinidex is renowned for a commitment to technical advancement and product innovation. Our continuous evaluation programs examine new materials, processing technology and manufacturing equipment to ensure our continued high standard in the pipes and fittings industry.

Vinidex is recognised internationally as a major participant in the pipe industry. We are represented and participate in Australian and ISO standards committees, Australian and International pipe associations and the pipe industry generally. Our technologies and products are used in Europe, the USA and Africa. We have an ongoing presence in international developments in product and services to this industry.

As part of the world wide Aliaxis Group of companies Vinidex provides products, access to international technologies and innovative solutions that are world class. The Aliaxis Group is a leading global manufacturer and distributor of plastic pipe systems, present in over 40 countries, has more than 100 commercial entities and employs over 15,000 people.

At every level of Vinidex you will find a genuine commitment from our staff to exceed expectations and ensure that you are satisfied with the overall experience. We offer a total solutions service from supply, technical and design assistance right through to installation, testing and evaluation.

Having built an enviable reputation in Australia and supported by an emphasis on product quality and customer service, Vinidex will continue to lead the industry in the development, manufacture and delivery of plastic pipeline and conduit systems.

Vinidex adds value to our customers' businesses with:

- Broad product range
- Product quality
- Material efficient products
- Australia wide distribution services
- Technical support
- Environmental products and services in recycling
- Industry Association corporate involvement
- Leading environmental performance

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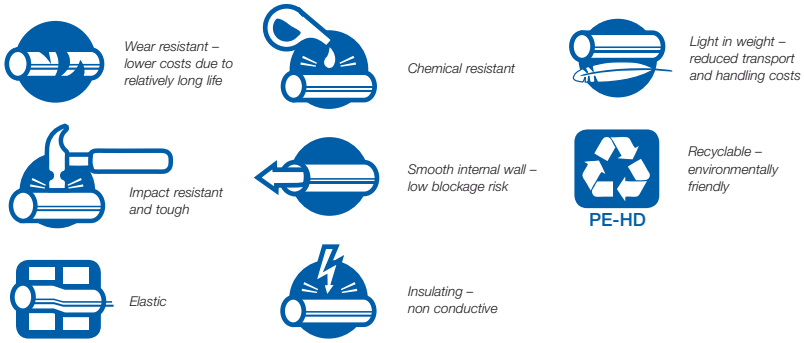
Polyethylene

The pipe material for the next generation

First used in Australia in the mid 1960's, Polyethylene (PE) pipe is the perfect choice for a wide range of demanding applications. These include potable water distribution, gas distribution, irrigation & agriculture, industrial and mining, force mains and other critical applications where a tough, ductile material is needed to assure long term performance.

Listed below are some of the benefits of PE Pipe :



Vinidex Systems & Solutions

Philmac® The connection you can trust.

FRIATEC

NTG PLASTiK

akatherm

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Polyethylene Pipe

HIGH IMPACT STRENGTH

Compared with other materials ensures a greater resistance to the rigours of pipe laying conditions.

ABRASION RESISTANCE

Excellent abrasion resistance providing long life in abrasive slurry applications. In most applications PE pipe outlasts other pipe materials such as mild steel and rubber lined steel.

CHEMICAL RESISTANCE

Outstanding resistance to a wide range of chemical reagents allows the use of polyethylene systems in applications such as: Tailings pipelines and chemical treatment applications used in mining operations.

FLEXIBILITY

PE pipes are flexible and can be bent from 12 times diameter to 65 times diameter, depending upon SDR. This flexibility is critical in applications such as submarine pipe lines, mine subsidence and earthquake prone areas. This inherent resiliency and flexibility allows the pipe to absorb surge pressures, vibration and stresses caused by soil movement.

EASE OF INSTALLATION

PE pipes are easy to install with their light weight and long lengths. Polyethylene coiled pipes are widely used in applications such as stock watering, irrigation systems, communications, gas and reticulated water mains due to rapid installation and the easy and less frequent jointing.

HIGH FLOW CAPACITY

PE pipes have lower friction factors than most non-plastics materials, such as cementitious linings and fibre reinforced cement. The surface energy characteristics of PE ensure that material deposition is inhibited and the smooth bore characteristic is maintained over the working life of the pipeline.

WEATHERING RESISTANCE

PE pipes are stabilised against ultra violet (UV) light degradation by the inclusion of carbon black in the raw material. Black PE pipes are, therefore, suitable for installations where the pipes are exposed to direct sunlight.

CO-EXTRUSIONS

PE pipe is available in a range of identification colours that may be either coextruded as stripes or “jackets” that completely surround the pipe. Such colours include yellow, blue and purple. These pipes are coloured for identification purposes and conform with AS/NZS 4130.
In addition, Vinidex produces coextruded pipes having a white jacket to minimise temperature rise when exposed to sunlight. These pipes, which are extensively used within the mining industry for example, are intended for use under exposure periods well in excess of those provided for by AS/NZS 4130.

LONG LIFE

Polyethylene pipes have a proven high reliability record across a wide range of industries and applications, now in excess of 50 years. PE also provides a long maintenance free lifetime with low whole life costs, compared to many other materials, as evidenced by the WSAA Polyethylene Pipeline Code, which predicts life well in excess of 100 years before major rehabilitation is required.

RURAL PLUS® PE100 Rural Pipe

Size	Min QTY	PN Rating	PE Rating	Description	Length (m)	Code
¾"	1	PN 9	PE100	¾" RURAL PLUS PN9 PE100 200m	200	22580
1"	1	PN 9	PE100	1" RURAL PLUS PN9 PE100 200m	200	22640
1¼"	2 - EZYNEST	PN 9	PE100	1¼" RURAL PLUS PN9 PE100 150m	150	22700
1¼"	2 - EZYNEST	PN 9	PE100	1¼" RURAL PLUS PN9 PE100 300m	300	22710
1½"	2 - EZYNEST	PN 9	PE100	1½" RURAL PLUS PN9 PE100 150m	150	22760
1½"	2 - EZYNEST	PN 9	PE100	1½" RURAL PLUS PN9 PE100 300m	300	22780
2"	2 - EZYNEST	PN 9	PE100	2" RURAL PLUS PN9 PE100 100m	100	22830
2"	1 (2 T'ville)	PN 9	PE100	2" RURAL PLUS PN9 PE100 200m	200	22840

Size	Length (m)	Comments	COIL DIMENSIONS (APPROX) ID (mm)	OD (mm)	WIDTH (mm)
¾"	200		600	940	250
1"	200		730	1180	240
1¼" - EZYNEST	150 - INNER	EZY-NEST	850	1300	270
	150 - OUTER		1330	1660	270
1¼" - EZYNEST	300 - INNER	EZY-NEST	1350	1900	270
	300 - OUTER		1940	2400	270
1½" - EZYNEST	150 - INNER	EZY-NEST	1000	1530	270
	150 - OUTER		1580	1980	270
1½" - EZYNEST	300 - INNER	EZY-NEST	1120	1830	320
	300 - OUTER		1870	2400	320
2" - EZYNEST	100 - INNER	EZY-NEST	1350	1840	270
	100 - OUTER		1870	2300	270
2"	200 - STANDARD	Made to nest	1600	2400	270
	200 - OUTER	<Townsville only:	2450	3050	270

AQUAPOL100 PE100 Rural Pipe (WA ONLY)

Size	Min QTY	PN Rating	PE Rating	Description	Length (m)	Code
1"	1	PN 10	PE100	1" Aquapol100 PN10 PE100 200m	200	22643
1¼"	1	PN 10	PE100	1 1/4" Aquapol100 PN10 PE100 150m	150	22813
1½"	1	PN 10	PE100	1 1/2" Aquapol100 PN10 PE100 150m	150	22814
1½"	1	PN 10	PE100	1 1/2" Aquapol100 PN10 PE100 300m	300	22810
2"	1	PN 10	PE100	2" Aquapol100 PN10 PE100 100m	100	22817
2"	1	PN 10	PE100	2" Aquapol100 PN10 PE100 200m	200	22818

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

PE100 AS4130 BLUE STRIPE - SDR21 PN8

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
26930	50 SDR21 PN8 PE100 Blue Stripe 150m	50	Blue Stripe	150
26931	50 SDR21 PN8 PE100 Blue Stripe 300m	50	Blue Stripe	300
26939	63 SDR21 PN8 PE100 Blue Stripe 100m	63	Blue Stripe	100
26941	63 SDR21 PN8 PE100 Blue Stripe 200m	63	Blue Stripe	200
26912	75 SDR21 PN8 PE100 Blue Stripe 200m	75	Blue Stripe	200

PE100 AS4130 BLUE STRIPE - SDR17 PN10

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
26932	50 SDR17 PN10 PE100 Blue Stripe 150m	50	Blue Stripe	150
26902	63 SDR17 PN10 PE100 Blue Stripe 100m	63	Blue Stripe	100

PE100 AS4130 BLUE STRIPE - SDR13.6 PN12.5

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
26942	20 SDR13.6 PN12.5 PE100 Blue Stripe 50m	20	Blue Stripe	50
26943	20 SDR13.6 PN12.5 PE100 Blue Stripe200m	20	Blue Stripe	200
26918	25 SDR13.6 PN12.5 PE100 Blue Stripe 25m	25	Blue Stripe	25
26919	25 SDR13.6 PN12.5 PE100 Blue Stripe 50m	25	Blue Stripe	50
26920	25 SDR13.6 PN12.5 PE100 Blue Stripe 200m	25	Blue Stripe	200
26945	32 SDR13.6 PN12.5 PE100 Blue Stripe 25m	32	Blue Stripe	25
26923	32 SDR13.6 PN12.5 PE100 Blue Stripe 50m	32	Blue Stripe	50
26924	32 SDR13.6 PN12.5 PE100 Blue Stripe 200m	32	Blue Stripe	200
26947	40 SDR13.6 PN12.5 PE100 Blue Stripe 25m	40	Blue Stripe	25
26927	40 SDR13.6 PN12.5 PE100 Blue Stripe 50m	40	Blue Stripe	50
26896	40 SDR13.6 PN12.5 PE100 Blue Stripe 150m	40	Blue Stripe	150
26934	50 SDR13.6 PN12.5 PE100 Blue Stripe 50m	50	Blue Stripe	50
26935	50 SDR13.6 PN12.5 PE100 Blue Stripe 150m	50	Blue Stripe	150
26949	63 SDR13.6 PN12.5 PE100 Blue Stripe 6m	63	Blue Stripe	6
26906	63 SDR13.6 PN12.5 PE100 Blue Stripe 50m	63	Blue Stripe	50
27323	63 SDR13.6 PN12.5 PE100 Blue Stripe 100m	63	Blue Stripe	100
26900	75 SDR13.6 PN12.5 PE100 Blue Stripe 100m	75	Blue Stripe	100
26977	90 SDR13.6 PN12.5 PE100 Blue Stripe 12m	90	Blue Stripe	12
22205	90 SDR13.6 PN12.5 PE100 Blue Stripe 100m	90	Blue Stripe	100
26980	110 SDR13.6 PN12.5 PE100 Blue Stripe 12m	110	Blue Stripe	12
22209	110 SDR13.6PN12.5 PE100 Blue Stripe 100m	110	Blue Stripe	100
26984	125 SDR13.6 PN12.5 PE100 Blue Stripe 12m	125	Blue Stripe	12
22203	125 SDR13.6PN12.5 PE100 Blue Stripe 100m	125	Blue Stripe	100
26844	180 SDR13.6 PN12.5 PE100 Blue Stripe 12m	180	Blue Stripe	12

PE100 AS4130 BLUE STRIPE - SDR11 PN16

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
27020	16 SDR11 PN16 PE100 Blue Stripe 50m	16	Blue Stripe	50
27021	16 SDR11 PN16 PE100 Blue Stripe 300m	16	Blue Stripe	300
27063	25 SDR11 PN16 PE100 Blue Stripe 6m	25	Blue Stripe	6
26921	25 SDR11 PN16 PE100 Blue Stripe 50m	25	Blue Stripe	50
22440	25 SDR11 PN16 PE100 Blue Stripe 100m	25	Blue Stripe	100
26922	25 SDR11 PN16 PE100 Blue Stripe 200m	25	Blue Stripe	200
27061	32 SDR11 PN16 PE100 Blue Stripe 6m	32	Blue Stripe	6
26925	32 SDR11 PN16 PE100 Blue Stripe 50m	32	Blue Stripe	50
26926	32 SDR11 PN16 PE100 Blue Stripe 200m	32	Blue Stripe	200
26960	40 SDR11 PN16 PE100 Blue Stripe 6m	40	Blue Stripe	6
25249	40 SDR11 PN16 PE100 Blue Stripe 50m	40	Blue Stripe	50
26929	40 SDR11 PN16 PE100 Blue Stripe 150m	40	Blue Stripe	150
27060	50 SDR11 PN16 PE100 Blue Stripe 6m	50	Blue Stripe	6
26936	50 SDR11 PN16 PE100 Blue Stripe 50m	50	Blue Stripe	50
26938	50 SDR11 PN16 PE100 Blue Stripe 150m	50	Blue Stripe	150
27062	63 SDR11 PN16 PE100 Blue Stripe 6m	63	Blue Stripe	6
27301	63 SDR11 PN16 PE100 Blue Stripe 50m	63	Blue Stripe	50
26909	63 SDR11 PN16 PE100 Blue Stripe 100m	63	Blue Stripe	100
26954	75 SDR11 PN16 PE100 Blue Stripe 6m	75	Blue Stripe	6
26955	90 SDR11 PN16 PE100 Blue Stripe 6m	90	Blue Stripe	6
22206	90 SDR11 PN16 PE100 Blue Stripe 100m	90	Blue Stripe	100
26956	110 SDR11 PN16 PE100 Blue Stripe 6m	110	Blue Stripe	6
27348	110 SDR11 PN16 PE100 Blue Stripe 12m	110	Blue Stripe	12
22210	110 SDR11 PN16 PE100 Blue Stripe 100m	110	Blue Stripe	100
26841	125 SDR11 PN16 PE100 Blue Stripe 6m	125	Blue Stripe	6
26660	125 SDR11 PN16 PE100 Blue Stripe 12m	125	Blue Stripe	12
28893	125 SDR11 PN16 PE100 Blue Stripe 100m	125	Blue Stripe	100
26661	160 SDR11 PN16 PE100 Blue Stripe 12m	160	Blue Stripe	12
26842	180 SDR11 PN16 PE100 Blue Stripe 6m	180	Blue Stripe	6
26573	180 SDR11 PN16 PE100 Blue Stripe 12m	180	Blue Stripe	12
22245	250 SDR11 PN16 PE100 Blue Stripe 12m	250	Blue Stripe	12
22231	280 SDR11 PN16 PE100 Blue Stripe 12m	280	Blue Stripe	12
25331	355 SDR11 PN16 PE100 Blue Stripe 12m	355	Blue Stripe	12

PE100 AS4130 BLACK - SDR41 PN4

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
27589	160 SDR41 PN4 PE100 Black 12m	160	Black	12
28453	200 SDR41 PN4 PE100 Black 12m	200	Black	12
26574	225 SDR41 PN4 PE100 Black 12m	225	Black	12
27014	250 SDR41 PN4 PE100 Black 12m	250	Black	12
27856	280 SDR41 PN4 PE100 Black 12m	280	Black	12
26598	315 SDR41 PN4 PE100 Black 12m	315	Black	12
26604	355 SDR41 PN4 PE100 Black 12m	355	Black	12
24498	400 SDR41 PN4 PE100 Black 12m	400	Black	12
26616	450 SDR41 PN4 PE100 Black 12m	450	Black	12
26622	500 SDR41 PN4 PE100 Black 12m	500	Black	12
26628	560 SDR41 PN4 PE100 Black 12m	560	Black	12
26633	630 SDR41 PN4 PE100 Black 12m	630	Black	12

PE100 AS4130 BLACK - SDR21 PN8

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
27079	40 SDR21 PN8 PE100 Black 150m	40	Black	150
26847	50 SDR21 PN8 PE100 Black 800m	50	Black	800
26848	63 SDR21 PN8 PE100 Black 500m	63	Black	500
26828	75 SDR21 PN8 PE100 Black 100m	75	Black	100
27389	75 SDR21 PN8 PE100 Black 200m	75	Black	200
26849	75 SDR21 PN8 PE100 Black 300m	75	Black	300
26829	90 SDR21 PN8 PE100 Black 100m	90	Black	100
26850	90 SDR21 PN8 PE100 Black 200m	90	Black	200
26124	110 SDR21 PN8 PE100 Black 100m	110	Black	100
26564	160 SDR21 PN8 PE100 Black 12m	160	Black	12
26582	225 SDR21 PN8 PE100 Black 12m	225	Black	12
26588	250 SDR21 PN8 PE100 Black 12m	250	Black	12
26600	315 SDR21 PN8 PE100 Black 12m	315	Black	12
26606	355 SDR21 PN8 PE100 Black 12m	355	Black	12

PE100 AS4130 BLACK - SDR17 PN10

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
27593	40 SDR17 PN10 PE100 Black 150m	40	Black	150
27594	50 SDR17 PN10 PE100 Black 150m	50	Black	150
27326	63 SDR17 PN10 PE100 Black 100m	63	Black	100
26833	75 SDR17 PN10 PE100 Black 100m	75	Black	100
26540	90 SDR17 PN10 PE100 Black 12m	90	Black	12
26549	90 SDR17 PN10 PE100 Black 100m	90	Black	100
26546	110 SDR17 PN10 PE100 Black 12m	110	Black	12
27548	110 SDR17 PN10 PE100 Black 100m	110	Black	100
26553	125 SDR17 PN10 PE100 Black 12m	125	Black	12
26559	140 SDR17 PN10 PE100 Black 12m	140	Black	12
26565	160 SDR17 PN10 PE100 Black 12m	160	Black	12
26571	180 SDR17 PN10 PE100 Black 12m	180	Black	12
26577	200 SDR17 PN10 PE100 Black 12m	200	Black	12
26583	225 SDR17 PN10 PE100 Black 12m	225	Black	12
26589	250 SDR17 PN10 PE100 Black 12m	250	Black	12
26595	280 SDR17 PN10 PE100 Black 12m	280	Black	12
26601	315 SDR17 PN10 PE100 Black 12m	315	Black	12
26607	355 SDR17 PN10 PE100 Black 12m	355	Black	12
26613	400 SDR17 PN10 PE100 Black 12m	400	Black	12
26619	450 SDR17 PN10 PE100 Black 12m	450	Black	13
26625	500 SDR17 PN10 PE100 Black 12m	500	Black	14
26631	560 SDR17 PN10 PE100 Black 12m	560	Black	15
26636	630 SDR17 PN10 PE100 Black 12m	630	Black	12

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

PE100 AS4130 BLACK - SDR13.6 PN12.5

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
25633	63 SDR13.6 PN12.5 PE100 Black 6m	63	Black	6
27322	63 SDR13.6 PN12.5 PE100 Black 100m	63	Black	100
26547	110 SDR13.6 PN12.5 PE100 Black12m	110	Black	12
23602	110 SDR13.6PN12.5 PE100 Black 100m	110	Black	100
26554	125 SDR13.6 PN12.5 PE100 Black 12m	125	Black	12
25555	125 SDR13.6 PN12.5 PE100 Black 100m	125	Black	100
26566	160 SDR13.6 PN12.5 PE100 Black12m	160	Black	12
26572	180 SDR13.6 PN12.5 PE100 Black12m	180	Black	12
26578	200 SDR13.6 PN12.5 PE100 Black 12m	200	Black	12
26590	250 SDR13.6 PN12.5 PE100 Black 12m	250	Black	12
26602	315 SDR13.6 PN12.5 PE100 Black 12m	315	Black	12
26614	400 SDR13.6 PN12.5 PE100 Black 12m	400	Black	12

PE100 AS4130 BLACK - SDR11 PN16

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
26892	40 SDR11 PN16 PE100 Black 150m	40	Black	150
27309	50 SDR11 PN16 PE100 Black 150m	50	Black	150
27327	63 SDR11 PN16 PE100 Black 100m	63	Black	100
27382	75 SDR11 PN16 PE100 Black 100m	75	Black	100
26542	90 SDR11 PN16 PE100 Black 12m	90	Black	12
26663	90 SDR11 PN16 PE100 Black 100m	90	Black	100
26548	110 SDR11 PN16 PE100 Black 12m	110	Black	12
27505	110 SDR11 PN16 PE100 Black 60m	110	Black	60
27556	110 SDR11 PN16 PE100 Black 100m	110	Black	100
25560	125 SDR11 PN16 PE100 Black 100m	125	Black	100
26567	160 SDR11 PN16 PE100 Black 12m	160	Black	12
25554	180 SDR11 PN16 PE100 Black 12m	180	Black	12
26579	200 SDR11 PN16 PE100 Black 12m	200	Black	12
26585	225 SDR11 PN16 PE100 Black 12m	225	Black	12
26591	250 SDR11 PN16 PE100 Black 12m	250	Black	12
26597	280 SDR11 PN16 PE100 Black 12m	280	Black	12
26603	315 SDR11 PN16 PE100 Black 12m	315	Black	12
26609	355 SDR11 PN16 PE100 Black 12m	355	Black	12
26615	400 SDR11 PN16 PE100 Black 12m	400	Black	12
26621	450 SDR11 PN16 PE100 Black 12m	450	Black	12
26627	500 SDR11 PN16 PE100 Black 12m	500	Black	12
28034	560 SDR11 PN16 PE100 Black 12m	560	Black	12
28891	630 SDR11 PN16 PE100 Black 12m	630	Black	12

PE100 AS4130 GAS (YELLOW STRIPE) - SDR17

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
22060	110 SDR17 GAS PE100 Yellow Stripe 12m	110	Yellow Stripe	12
22054	160 SDR17 GAS PE100 Yellow Stripe 12m	160	Yellow Stripe	12

PE100 AS4130 GAS (YELLOW STRIPE) - SDR11

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
22363	16 SDR11 GAS PE100 Yellow Stripe 100m	16	Yellow Stripe	100
22444	16 SDR11 GAS PE100 Yellow Stripe 400m	16	Yellow Stripe	400
22365	20 SDR11 GAS PE100 Yellow Stripe 100m	20	Yellow Stripe	100
22036	20 SDR11 GAS PE100 Yellow Stripe 200m	20	Yellow Stripe	200
21994	25 SDR11 GAS PE100 Yellow Stripe 100m	25	Yellow Stripe	100
22366	32 SDR11 GAS PE100 Yellow Stripe 50m	32	Yellow Stripe	50
22367	32 SDR11 GAS PE100 Yellow Stripe 100m	32	Yellow Stripe	100
22368	40 SDR11 GAS PE100 Yellow Stripe 100m	40	Yellow Stripe	100
21995	40 SDR11 GAS PE100 Yellow Stripe 50m	40	Yellow Stripe	50
22058	40 SDR11 GAS PE100 Yellow Stripe 150m	40	Yellow Stripe	150
22369	50 SDR11 GAS PE100 Yellow Stripe 100m	50	Yellow Stripe	100
22360	50 SDR11 GAS PE100 Yellow Stripe 7m	50	Yellow Stripe	7
22361	63 SDR11 GAS PE100 Yellow Stripe 7m	63	Yellow Stripe	7
21996	63 SDR11 GAS PE100 Yellow Stripe 50m	63	Yellow Stripe	50
22032	63 SDR11 GAS PE100 Yellow Stripe 100m	63	Yellow Stripe	100
22362	90 SDR11 GAS PE100 Yellow Stripe 7m	90	Yellow Stripe	7
22371	90 SDR11 GAS PE100 Yellow Stripe 110m	90	Yellow Stripe	110
22373	110 SDR11 GAS PE100 Yellow Stripe 6m	110	Yellow Stripe	6
22105	110 SDR11 GAS PE100 Yellow Stripe 12m	110	Yellow Stripe	12
22372	110 SDR11 GAS PE100 Yellow Stripe 110m	110	Yellow Stripe	110
22027	125 SDR11 GAS PE100 Yellow Stripe 12m	125	Yellow Stripe	12
22042	160 SDR11 GAS PE100 Yellow Stripe 12m	160	Yellow Stripe	12
22115	180 SDR11 GAS PE100 Yellow Stripe 12m	180	Yellow Stripe	12

PE100 AS4130 ATCO GAS (YELLOW STRIPE) - SDR11 (WA Only)

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
22301	20 SDR11 ATCO GAS PE100 Yellow Stripe 200m	20	Yellow Stripe	200
22302	40 SDR11 ATCO GAS PE100 Yellow Stripe 6m	40	Yellow Stripe	6
22303	40 SDR11 ATCO GAS PE100 Yellow Stripe 100m	40	Yellow Stripe	100
22304	63 SDR11 ATCO GAS PE100 Yellow Stripe 6m	63	Yellow Stripe	6
22305	63 SDR11 ATCO GAS PE100 Yellow Stripe 100m	63	Yellow Stripe	100

PE100 AS4130 GAS (YELLOW COEX) - SDR17 (WA Only)

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
22080	110 SDR17 GAS PE100 Yellow Coex 50m	110	Yellow Coex	50
28935	160 SDR17 GAS PE100 Yellow Coex 12m	160	Yellow Coex	12

PE100 AS4130 RECYCLED/RECLAIMED WATER (PURPLE COEX) - SDR13.6 PN12.5

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
22323	25 SDR13.6 PN12.5 PE100 Purple Coex 50m	25	Purple Coex	50
28409	25 SDR13.6 PN12.5 PE100 Purple Coex 200m	25	Purple Coex	200
28410	32 SDR13.6 PN12.5 PE100 Purple Coex 200m	32	Purple Coex	200
28393	40 SDR13.6 PN12.5 PE100 Purple Coex 150m	40	Purple Coex	150
28411	50 SDR13.6 PN12.5 PE100 Purple Coex 150m	50	Purple Coex	150
28412	63 SDR13.6 PN12.5 PE100 Purple Coex 100m	63	Purple Coex	100
28394	75 SDR13.6 PN12.5 PE100 Purple Coex 100m	75	Purple Coex	100
28392	90 SDR13.6 PN12.5 PE100 Purple Coex 100m	90	Purple Coex	100
28391	110 SDR13.6PN12.5 PE100 Purple Coex 100m	110	Purple Coex	100
28396	160 SDR13.6PN12.5 PE100 Purple Coex 12m	160	Purple Coex	12

PE100 AS4130 RECYCLED/RECLAIMED WATER (PURPLE COEX) - SDR11 PN16

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
28675	25 SDR11 PN16 PE100 Purple Coex 50m	25	Purple Coex	50
28676	25 SDR11 PN16 PE100 Purple Coex 200m	25	Purple Coex	200
28681	32 SDR11 PN16 PE100 Purple Coex 200m	32	Purple Coex	200

PE100 AS4130 RECYCLED/RECLAIMED WATER (PURPLE STRIPE) - SDR13.6 PN12.5

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
25297	50 SDR13.6 PN12.5 PE100 Purple Stripe 150m	50	Purple Stripe	150
25308	63 SDR13.6 PN12.5 PE100 Purple Stripe 100m	63	Purple Stripe	100
25316	75 SDR13.6 PN12.5 PE100 Purple Stripe 100m	75	Purple Stripe	100
25320	90 SDR13.6 PN12.5 PE100 Purple Stripe 100m	90	Purple Stripe	100

PE100 AS4130 RECYCLED/RECLAIMED WATER (PURPLE STRIPE) - SDR11 PN16

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
25311	63 SDR11 PN16 PE100 Purple Stripe 100m	63	Purple Stripe	100
25391	125 SDR11 PN16 PE100 Purple Stripe 12m	125	Purple Stripe	12
25328	125 SDR11 PN16 PE100 Purple Stripe 100m	125	Purple Stripe	100
25411	160 SDR11 PN16 PE100 Purple Stripe 12m	160	Purple Stripe	12
25322	180 SDR11 PN16 PE100 Purple Stripe 12m	180	Purple Stripe	12
25395	280 SDR11 PN16 PE100 Purple Stripe 12m	280	Purple Stripe	12
25431	315 SDR11 PN16 PE100 Purple Stripe 12m	315	Purple Stripe	12
25346	355 SDR11 PN16 PE100 Purple Stripe 12m	355	Purple Stripe	12

PE100 AS4130 (RED STRIPE)- SDR11 PN16

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
25287	125 SDR11 PN16 PE100 Red Stripe 6m	125	Red Stripe	6
25285	125 SDR11 PN16 PE100 Red Stripe 12m	125	Red Stripe	12
28679	180 SDR11 PN16 PE100 Red Stripe 6m	180	Red Stripe	6
28673	180 SDR11 PN16 PE100 Red Stripe 12m	180	Red Stripe	12
25428	250 SDR11 PN16 PE100 Red Stripe 12m	250	Red Stripe	12

PE100 AS4130 SEWERTECH (GREY INNER COEX AND STRIPE) - SDR21 PN8

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
25807	160 SDR21 PN8 PE100 Sewertech 6m	160	Sewertech	6
25802	160 SDR21 PN8 PE100 Sewertech 12m	160	Sewertech	12
25801	250 SDR21 PN8 PE100 Sewertech 12m	250	Sewertech	12
25800	315 SDR21 PN8 PE100 Sewertech 12m	315	Sewertech	12

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

PE100 AS4130 (CREAM STRIPE) - SDR11 PN16

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
25264	40 SDR11 PN16 PE100 Cream Stripe 150m	40	Cream Stripe	150
25280	50 SDR11 PN16 PE100 Cream Stripe 150m	50	Cream Stripe	150
25279	63 SDR11 PN16 PE100 Cream Stripe 100m	63	Cream Stripe	100
25263	75 SDR11 PN16 PE100 Cream Stripe 100m	75	Cream Stripe	100
25278	90 SDR11 PN16 PE100 Cream Stripe 100m	90	Cream Stripe	100
25248	110 SDR11 PN16 PE100 Cream Stripe 12m	110	Cream Stripe	12
25262	110 SDR11 PN16 PE100 Cream Stripe 100m	110	Cream Stripe	100
25276	125 SDR11 PN16 PE100 Cream Stripe 12m	125	Cream Stripe	12
25581	125 SDR11 PN16 PE100 Cream Stripe 100m	125	Cream Stripe	100
25299	160 SDR11 PN16 PE100 Cream Stripe 12m	160	Cream Stripe	12
28929	180 SDR11 PN16 PE100 Cream Stripe 12m	180	Cream Stripe	12
25260	280 SDR11 PN16 PE100 Cream Stripe 12m	280	Cream Stripe	12

HDPE COMMUNICATION (WHITE COEX) - SDR17 CLASS 6

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
22952	63 SDR17 COMM CL6 HDPE White Coex 140m (PSA Item)	63	White Coex	140

HDPE COMMUNICATION (WHITE COEX) - SDR13.6

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
22965	63 SDR13.6 COMM HDPE White Coex 140m	63	White Coex	140
22954	110 SDR13.6 COMM HDPE White Coex 100m	110	White Coex	100

HDPE COMMUNICATION (WHITE COEX) - SDR12 CLASS 9

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
22976	63 SDR12 COMM CL9 HDPE White Coex 140m (PSA Item)	63	White Coex	140
22987	110 SDR12 COMM CL9 HDPE White Coex 100m (PSA Item)	110	White Coex	100

HDPE ELECTRICAL (ORANGE COEX) - SDR13.6

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
23008	50 SDR13.6 Elec HDPE Orange Coex 150m	50	Orange Coex	150
23023	63 SDR13.6 ELEC HDPE Orange Coex 100m	63	Orange Coex	100
22985	110 SDR13.6 Elec HDPE Orange Coex 100m	110	Orange Coex	100
23021	125 SDR13.6 ELEC HDPE Orange Coex 100m	125	Orange Coex	100
23068	140 SDR13.6 ELEC HDPE Orange Coex 100m	140	Orange Coex	100
28952	160 SDR13.6 ELEC HDPE Orange Coex 12m	160	Orange Coex	12
28753	180 SDR13.6 ELEC HDPE Orange Coex 12m	180	Orange Coex	12

HDPE ELECTRICAL (ORANGE COEX) - SDR12 CLASS 9

Code	Description	Outside Diameter (mm)	Colour/Configuration	Length (m)
22996	50 SDR12 ELEC CL9 HDPE Orange Coex 100m	50	Orange Coex	100
22993	63 SDR12 ELEC CL9 HDPE Orange Coex 100m	63	Orange Coex	100
22999	63 SDR12 ELEC CL9 HDPE Orange Coex 100m (WA Only)	63	Orange Coex	100
23000	110 SDR12 ELEC CL9 HDPE Orange Coex 100m	110	Orange Coex	100
23016	125 SDR12 ELEC CL9 HDPE Orange Coex 12m	125	Orange Coex	12
23007	125 SDR12 ELEC CL9 HDPE Orange Coex 100m	125	Orange Coex	100
22983	160 SDR12 ELEC CL9 HDPE Orange Coex 80m	160	Orange Coex	80
22997	180 SDR12 ELEC CL9 HDPE Orange Coex 12m	180	Orange Coex	12

VINIDEX CAPABILITY & PE100 POLYETHYLENE PIPE DIMENSIONS (Based on AS/NZS 4130:2009)

Nom.	SDR 41		SDR 33		SDR 26		SDR 21		SDR 17		SDR 13.6		SDR11		SDR 9		SDR 7.4	
Size	Min. Wall	Mean	Min. Wall	Mean	Min. Wall	Mean	Min. Wall	Mean	Min. Wall	Mean	Min. Wall	Mean	Min. Wall	Mean	Min. Wall	Mean	Min. Wall	Mean
DN	Thickness	I.D.	Thickness	I.D.	Thickness	I.D.	Thickness	I.D.	Thickness	I.D.	Thickness	I.D.	Thickness	I.D.	Thickness	I.D.	Thickness	I.D.
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
16	1.6	13	1.6	13	1.6	13	1.6	13	1.6	13	1.6	13	1.6	13	1.8	12	2.2	11
20	1.6	17	1.6	17	1.6	17	1.6	17	1.6	17	1.6	17	1.9	16	2.3	15	2.8	14
25	1.6	22	1.6	22	1.6	22	1.6	22	1.6	22	1.9	21	2.3	20	2.8	19	3.5	18
32	1.6	29	1.6	29	1.6	29	1.6	29	1.9	28	2.4	27	2.9	26	3.6	24	4.4	23
40	1.6	37	1.6	37	1.6	37	1.9	36	2.4	35	3	34	3.7	32	4.5	31	5.5	28
50	1.6	47	1.6	47	2	46	2.4	45	3	44	3.7	42	4.6	40	5.6	38	6.9	35
63	1.6	60	2	59	2.4	58	3	57	3.8	55	4.7	53	5.8	51	7.1	48	8.6	45
75	1.9	71	2.3	70	2.9	69	3.6	67	4.5	66	5.5	63	6.8	61	8.4	58	10.3	53
90	2.2	86	2.8	84	3.5	83	4.3	81	5.4	78	6.6	76	8.2	73	10.1	69	12.3	65
110	2.7	105	3.4	103	4.3	101	5.3	99	6.6	96	8.1	93	10	89	12.3	84	15.1	78
125	3.1	119	3.9	117	4.8	115	6	113	7.4	110	9.2	106	11.4	101	14	96	17.1	89
140	3.5	133	4.3	131	5.4	129	6.7	126	8.3	123	10.3	118	12.7	114	15.7	108	19.2	99
160	4	152	4.9	150	6.2	148	7.7	144	9.5	140	11.8	136	14.6	130	17.9	123	21.9	114
180	4.4	171	5.5	169	6.9	166	8.6	163	10.7	158	13.3	153	16.4	145	20.1	138	24.6	128
200	4.9	190	6.2	188	7.7	184	9.6	180	11.9	175	14.7	170	18.2	162	22.4	154	27.3	143
225	5.5	215	6.9	211	8.6	207	10.8	203	13.4	198	16.6	191	20.5	183	25.1	173	30.8	161
250	6.2	238	7.7	235	9.6	230	11.9	225	14.8	219	18.4	212	22.7	203	27.9	192	34.2	179
280	6.9	267	8.6	263	10.7	258	13.4	253	16.4	246	20.6	238	25.4	228	31.3	215	38.3	200
315	7.7	300	9.7	296	12.1	290	15.0	285	18.7	278	23.2	268	28.6	256	35.2	242	43.0	226
355	8.7	338	10.9	333	13.6	328	16.9	320	21.1	311	26.1	301	32.2	289	39.6	273	48.5	255
400	9.8	380	12.3	376	15.3	370	19.1	362	23.7	351	29.4	340	36.3	326	44.7	307	54.6	287
450	11	429	13.8	422	17.2	415	21.5	406	26.7	395	33.1	382	40.9	366	50.2	347	61.5	322
500	12.3	476	15.3	470	19.1	462	23.9	452	29.6	440	36.8	424	45.4	407	55.8	385	67.6*	360
560	13.7	534	17.2	526	21.4	518	26.7	506	33.2	494	41.2	475	50.8	455	62.5	431	75.7*	403
630	15.4	600	19.3	592	24.1	582	30	570	37.3	554	46.3	535	57.2	512	70.3	485	85.1*	454
710	17.4	676	21.8	667	27.2	656	33.9	641	42.1	624	52.2	603	64.5	578	79.3	546	96.0*	512
800	19.6	762	24.5	752	30.6	739	38.1	723	47.4	704	58.8	679	72.5	651	89.3	616	-	-
900	22	858	27.6	846	34.4	831	42.9	814	53.5	791	66.2	765	81.7	732	-	-	-	-
1000	24.5	953	30.6	940	38.2	924	47.7	904	59.3	880	72.5	852	90.2	815	-	-	-	-

SDR = Standard Dimension Ratio (OD ÷ min wall) I.D. = Internal Diameter * = calculated using Appendix D AS4130

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

VINIDEX CAPABILITY & PE100 POLYETHYLENE PIPE DIMENSIONS

PRESSURE CONVERSION CHART

PN (Pressure Nominal)	SDR (Std Dim Ratio) (OD ÷ wall)	Metres Head of water m (H_2O)	Kilopascal kPa	Megapascal MPa	Foot Head of water ft (H_2O)	Pounds per square inch psi	Bar (gravity) Bar
4	**41**	41	400	0.40	134	58	4
6.3	**26**	65	630	0.63	211	92	6.3
8	**21**	82	800	0.80	268	116	8
10	**17**	102	1000	1.00	335	145	10
12.5	**13.6**	123	1250	1.25	419	182	12.5
16	**11**	163	1600	1.60	536	232	16
20	**9**	204	2000	2.00	669	290	20
25	**7.4**	255	2500	2.50	837	363	25

Note: Pressures only suitable for water at 20°C with 1.25 safety factor - gas/air require different factors

COMPARISON OF SDR & PRESSURE RATINGS (PN) FOR PE100 MATERIAL

SDR 41	SDR 26	SDR 21	SDR 17	SDR 13.6	SDR 11	SDR 9	SDR 7.4
PN 4	PN 6.3	PN 8	PN 10	PN 12.5	PN 16	PN 20	PN 25

IDENTIFICATION OF SERVICES

	Application	Stripe or Coex Colour	Notes	AS4130 Colour Definition
	Potable & Drinking Water	Blue (B41 Bluebell)	Typically used for potable water supply. Not to be used for recycled or reclaimed water	No darker than RAL5012
	General Purpose, Stormwater & Fabricated Fittings	Black	Typically used in general purpose, stormwater and for fabrication of fittings for other applications	2.25% +/- 0.25% carbon black as in AS4131
	Gas - Town, Fuel and Coal Seam Gas	Yellow	Used extensively as either a striping or coex colour for identication of gas, fuel gas and coal seam gas	No darker than RAL1018
	Recycled/Reclaimed Water	Purple	Pipe for recycled/reclaimed water applications Branded as 'RECYCLED OR RECLAIMED WATER—DO NOT DRINK' WSAA specify - Striped for mains, striped or full coex for service lines	No lighter than RAL 310 70 15 No darker than RAL 330 40 40
	Fire Service	Red	Dedicated fire-extinguishing supply mains	Not Defined
	Gravity Sewer	Light Grey	Typically used in gravity sewer applications - Vinidex Sewertech has light grey stripes and light grey inner coex for camera inspection	Not Defined
	Sewer Rising Main	Cream	Dedicated for pressurised sewer applications and specified by WSAA Branding must contain word 'SEWAGE'	No lighter than RAL 310 70 15 No darker than RAL 330 40 40
	Communications and Above Ground Mining	White	Used to identify communcation conduits and in mining to reduce heat load on above ground transfer lines	Not Defined
	Electrical	Orange	Used to identify electrical conduits and services	Not Defined
	Rainwater/Raw Water	Green	Used as a striping colour for rural water pipe. Used as a coex and with 'RAINWATER' branding for rainwater harvesting	Not Defined
	Compressed Air (coex)	Blue (B41 Bluebell)	Same colour as the potable water, used as a full outer coex Branding will have deration applied as per PIPA POP002	Not Defined
	Compressed air (solid blue)	Dark Blue	The global PE100 blue colour to be used when making solid wall blue pipes. The only ISO9080 approved blue compounds are this colour	No lighter than RAL5005

12 & 20M STRAIGHT LENGTHS

PE100 AS4130 BLACK 12m & 20m Straight Lengths (codes for reference only - check for availabilty)

Nominal OD	SDR41 PN4		SDR26 PN6.3		SDR21 PN8		SDR17 PN10		SDR13.6 PN12.5		SDR11 PN16		SDR9 PN20		SDR7.4 PN25	
(mm)	12m	20m	12m	20m	12m	20m	12m	20m	12m	20m	12m	20m	12m	20m	12m	20m
110	---	---	26544	26528	26545	27551	26546	26551	26547	27549	26548	27552	26679	28926	26780	---
125	---	---	---	---	26552	25557	26553	---	26554	---	26555	25583	27579	---	26673	---
140	---	---	26557	27581	27587	---	26559	27582	26560	---	26561	28420	27580	---	27588	---
160	27589	27585	26563	26680	26564	27584	26565	27684	26566	27685	26567	28437	28440	26681		28447
180	---	---	26569	28423	26570	28927	26571	27583	26572	28427	25554	25556	26685	28928	26783	---
200	28453	28452	26575	24464	26576	24462	26577	27734	26578	28425	26579	28438	28426	28429	26478	---
225	26574	28448	26581	26682	26582	26683	26583	28431	26584	25558	26585	28432	26687	28434	---	26586
250	27014	24497	26587	27790	26588	26666	26589	26667	26590	26668	26591	27796	26684	26688	26500	---
280	27856	27805	26593	26690	26594	26665	26595	26691	26596	26692	26597	24502	26708	27797	28892	27807
315	26598	27802	26599	27798	26600	27799	26601	27800	26602	26694	26603	26706	26698	26689	22297	22298
355	26604	27803	26605	24505	26606	26697	26607	26695	26608	26696	26609	26703	26709	28416	25598	28461
400	24498	27801	26611	27012	26612	26704	26613	26669	26614	26701	26615	28439	24499	24477	26480	22295
450	26616	24547	26617	24509	26618	24526	26619	24527	26620	27976	26621	26834	26699	26700	26481	22257
500	26622	24548	26623	26677	26624	24540	26625	24532	26626	24506	26627	24534	24503	24551	---	---
560	26628	---	26629	26747	26630	26754	26631	26648	26632	27804	28034	23603	23606	23604	---	---
630	26633	26756	26634	26789	26635	26790	26636	26744	26637	26651	28891	28895	28894	26761	28668	---
710	26638	28098	26639	---	26640	27391	26641	26650	26652	26678	26797	---	---	---	---	---
800	26215	26216	26643	---	26644	---	24549	27392	24553	---	24563	---	26219	---	---	---
900	---	---	---	---	---	---	---	24545	---	---	26245	---	---	---	---	---
1000	26645	---	26646	---	26647	26800	---	---	24486	---	---	---	---	---	---	---

PE100 AS4130 BLUE STRIPE 12m & 20m Straight Lengths (codes for reference only - check for availabilty)

Nominal OD	SDR41 PN4		SDR26 PN6.3		SDR21 PN8		SDR17 PN10		SDR13.6 PN12.5		SDR11 PN16		SDR9 PN20		SDR7.4 PN25	
(mm)	12m	20m	12m	20m	12m	20m	12m	20m	12m	20m	12m	20m	12m	20m	12m	20m
110	---	---	---	---	---	---	---	22258	26980	---	27348	22214	27456	---	---	22430
125	---	---	27730	---	---	---	---	27732	26984	---	26660		---	---	---	---
140	---	---	---	---	---	22228	26778		26777	---	---	22584	---	---	---	---
160	---	---	---	---	---	22220	---	22281	26988	26901	26661	22232	---	22221	---	22431
180	---	---	---	---	---		---		26844	22276	26573	22586	26749	---	---	---
200	---	---	---	---	---	22222	---	22251	22212	22216	22279	22259	---	---	---	---
225	---	---	---	---	---	22223	---	22282	26845	22252	22260	22261	---	22270	---	22432
250	---	---	---	---	---	22224	---	22208	25425	22253	22245	22262	---	22271	---	22433
280	---	---	---	---	---		---	22283	22230	22233	22231	22263	---	---	---	22434
315	---	---	---	---	---	22226	---	22284	26870	22219	22246	22234	---	22239	22240	22244
355	---	---	---	---	---	22229	---	22256	26770	26775	25331	25835	25392	---	---	---
400	---	---	---	---	---	22237	---	22285	26741	22217	22267	22235	---	22272	---	22435
450	---	---	---	---	---	22238	---	22286			22248	22264	---	22273	---	22436
500	---	---	---	---	---	---	---	22287	26742	22218	22225	22236	---	---	---	22437
560	---	---	---	---	---	---	---	22288	---	22254	25434	22265	---	22274	---	22438
630	---	---	---	---	---	---	---	22289	---	22255	22278	22266	---	22275	---	---
710	---	---	---	---	---	---	---	22290	---	22293	---	22296	---	---	---	---
800	---	---	---	---	---	---	---	22291	---	---	---	---	---	---	---	---
900	---	---	---	---	---	---	---	26254	---	---	---	---	---	---	---	---
1000	---	---	---	---	---	---	---	26252	---	---	---	---	---	---	---	---

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

PE100 AS4130 WHITE COEX 12m & 20m Straight Lengths (codes for reference only - check for availabilty)																
Nominal OD (mm)	SDR41 PN4		SDR26 PN6.3		SDR21 PN8		SDR17 PN10		SDR13.6 PN12.5		SDR11 PN16		SDR9 PN20		SDR7.4 PN25	
	12m	20m	12m	20m	12m	20m	12m	20m	12m	20m	12m	20m	12m	20m	12m	20m
110	---	---	---	28828	---	---	28754	28772	28763	26519	28758	28771	28685	---	---	---
125	---	---	---	---	---	28765	---	---	28384	---	28708	---	---	---	28953	---
140	---	---	---	---	---	---	---	---	28697	28733	28692	---	---	---	---	---
160	---	---	28690	27717	28691	28736	28738	28773	28807	28674	28739	28774	27721	28799	---	---
180	---	---	---	---	---	28752	---	---	28698	24495	28704	28795	27712	28937	---	---
200	---	---	28726	28750	---	28745	28741	28749	28803	28734	28740	28744	28662	28809	28820	28816
225	---	---	---	28760	28818	28813	28802	28815	28804	28817	28743	28819	---	---	---	---
250	---	---	---	28761	---	28825	28826	28827	28801	28829	28742	28831	28727	28832	28705	28833
280	---	---	26746	28835	24496	28837	28842	28839	28840	28841	24535	28843	28844	28845	28834	28731
315	---	---	---	28847	28848	28849	28850	28851	28805	28853	28854	28855	28838	28846	28323	28324
355	---	---	28852	28859	28786	28861	28862	28863	28806	28865	28785	28867	28876	28869	28821	28900
400	---	28897	28870	28871	28872	28873	28788	28875	28728	28877	28878	28879	28317	28326	28321	28322
450	---	---	---	28830	---	28824	28789	28354	28336	28337	28338	28339	28340	28341	28344	28342
500	---	---	28003	28880	28791	28343	28884	28811	28792	28798	---	28061	28062	28063	28053	28059
560	---	---	28069	28064	28071	---	28067	28066	28073	28065	---	23607	---	28072	---	---
630	---	---	28011	28925	28794	28932	28800	28810	28793	28882	28808	28814	28946	28943	28947	---
710	---	---	28010	---	---	28729	---	28812	28948	---	---	---	---	---	---	---
800	---	---	---	---	28890	28888	---	---	---	---	---	---	---	---	---	---
900	---	---	---	---	26246	26247	---	---	---	---	---	---	---	---	---	---
1000	---	---	---	---	---	28380	---	28381	---	---	---	---	---	---	---	---

PE100 Temperature Deration Table Maximum Allowable Operating Pressure - Head of Water (m)

Temperature	T_{max} values		PN4	PN6.3	PN8	PN10	PN12.5	PN16	PN20	PN25
(°C)	Tmax (years)	Assumed min σLPL (Mpa)	SDR41	SDR26	SDR21	SDR17	SDR13.6	SDR11	SDR9	SDR7.4
20	100	≥10.0	40	64	80	100	127	160	200	250
25	100	≥9.5	36	58	73	91	115	145	182	227
30	100	≥9.0	36	58	73	91	115	145	182	227
35	(≥ 50)	≥8.6	33	53	67	83	106	133	167	208
40	(≥ 50)	≥8.1	33	53	67	83	106	133	167	208
45	(≥ 35)	≥7.5	31	49	62	77	99	123	154	192
50	(≥ 22)	≥7.3	29	46	57	71	91	114	143	179
55	(≥ 15)	≥6.9	29	46	57	71	91	114	143	179
60	(≥ 7)	≥6.5	27	43	53	67	85	107	133	167
80	(≥ 1)	≥5.0	20	32	40	50	63	80	100	125

Philmac®

Metric Compression Fittings

Proudly Australian Made for Australian Conditions

The Philmac range of metric compression fittings provides the ultimate solution in connecting blue line polyethylene pipelines for the movement of water from 16mm through to 110mm.

Proudly designed and manufactured right here in Australia, the Philmac range of metric compression fittings are sold successfully all over the world. Pre-assembled, ready to use and featuring Philmac's unique Slide & Tighten Technology, Philmac metric fittings make connecting metric poly pipe easier than ever before.

AUSTRALIAN MADE FOR AUSTRALIAN CONDITIONS

FAST AND EASY INSTALLATION

SLIDE & TIGHTEN® TECHNOLOGY
Philmac Metric Fittings incorporate all the benefits of Philmac's unique Slide & Tighten® technology. No pipe preparation is needed and no force is required to push the pipe past the seal, so installation couldn't be faster or easier. Simply insert the pipe into the fitting until the stop is felt, and then tighten the nut. Assembly is so easy you can even do it under live conditions. No special tools are required, and there is no need to disassemble the fitting before use because the Philmac Metric compression fitting is supplied pre-assembled and ready to use.

COMPACT DESIGN
The size of the Philmac Metric Fittings has been kept to a minimum, making the fitting ideal to use in confined areas. In addition to making connections with minimal turns of the nut, the design and size of the fitting means that in installations taking place between two fixed points, the manipulation of the pipe into the fitting becomes easy.

EASY DISASSEMBLY
The fitting has been designed so the grip ring is released as soon as the nut is backed off, making disassembly easy.

COMPLETE SECURITY

DYNAMIC SEALING METHOD
The mechanical advantage of the nut thread compresses the seal into position.

VISUAL STOP
The flange on the body of Philmac Metric Fittings provides a visual stop to indicate when the nut is fully tightened. This removes any uncertainty from the installation process.

NO LOOSE COMPONENTS
If the nut is removed there is no danger of losing components, as the grip ring and seal are retained in the fitting. Losing components in the trench becomes a thing of the past.

DESIGNED TO MINIMISE PIPE TWIST
The fitting has been designed to minimise pipe twist as the nut is tightened. Maximum pipe twist is approximately a quarter turn compared to one and a half turns with many other fittings. Pipe twist can impact on not only the connection you have just made but also on the connection at the other end of the line.

APPROVALS
Philmac Metric Fittings are WaterMark approved and carry a WSAA appraisal.

HIGH PERFORMANCE

MADE FROM ADVANCED THERMOPLASTIC MATERIALS
Philmac Metric Fittings are manufactured from lightweight high performance thermoplastic materials with outstanding impact, UV, chemical and corrosion resistance. The material is non-toxic and taint-free.

RATED TO 1600 kPa
Philmac Metric Fittings are pressure rated to 1600 kPa (PN16) to meet the needs of high pressure systems.

50 YEAR+ DESIGN LIFE
Built to withstand the toughest conditions to ensure longevity and durability.

COMPLETE COVERAGE

WIDE RANGE
The Philmac Metric Fittings range is comprehensive: straight and reducing joiners, tees, elbows, end connectors and caps ranging from 16mm to 110mm. Philmac Metric Fittings also incorporate a range of dedicated recycled water fittings and poly to copper connections for fast and simple connection to both PE and copper pipe.

Philmac Metric Compression Fittings

METRIC JOINERS Poly x Poly

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16 x 16	10	240	70711100	69060	91000
20 x 20	10	150	70712200	69062	91001
25 x 25	10	100	70713300	69064	91002
32 x 32	5	65	70714400	69066	91003
40 x 40	1	35	70715500	69068	91004
50 x 50	1	24	70716600	69070	91005
63 x 63	1	12	70717700	-	93825

METRIC LARGE BORE JOINERS Poly x Poly

63 x 63	1	10	97817700	69072	91006
75 x 75	1	6	97818800	69074	91007
90 x 90	1	8	97819900	69076	91008
110 x 110	1	4	97810000	69078	91009

METRIC JOINER BODY

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16	1	400	70711101	84011	92088
20	1	300	99812201	84005	91010
25	1	200	99813301	84006	91011
32	1	100	99814401	84007	91012
40	1	50	99815501	84008	91013
50	1	40	99816601	84009	91014
63	1	24	97817701	71658	91015

METRIC SLIP JOINERS Poly x Poly

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
20 x 20	1	90	70701220	69501	91016
25 x 25	1	70	70701330	69527	91017
32 x 32	1	60	70701440	69528	91018
40 x 40	1	35	70701550	69503	91019
50 x 50	1	20	70701660	69504	91020
63 x 63	1	10	97801770	69496	91021

METRIC REDUCING JOINERS Poly x Poly

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
20 x 16	10	180	70712100	69082	91022
25 x 16	10	120	70713100	69084	91023
25 x 20	10	120	70713200	69086	91024
32 x 20	5	80	70714200	69088	91025
32 x 25	5	70	70714300	69090	91026
40 x 25	1	50	70715300	69092	91027
40 x 32	1	40	70715400	69094	91028
50 x 25	1	30	70716300	69096	91029
50 x 32	1	30	70716400	69098	91030
50 x 40	1	25	70716500	69100	91031
63 x 32	1	20	70717400	-	91270
63 x 40	1	20	70717500	-	91270
63 x 50	1	16	70717600	-	93824

METRIC LARGE BORE REDUCING JOINERS Poly x Poly

63 x 32	1	20	97817400	69104	91032
63 x 40	1	17	97817500	69106	91033
63 x 50	1	16	97817600	69108	91034
75 x 63	1	6	97818700	69112	91035
90 x 63	1	8	97819700	69114//61592	91036
90 x 75	1	4	97819800	69116	91037
110 x 63	1	4	97810700	71521	91038
110 x 90	1	5	97810900	69120	91039

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Philmac Metric Compression Fittings

METRIC END CONNECTORS Poly x MI BSP

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16 x ½"	10	360	70721100	68902	91053
16 x ¾"	10	360	70721200	68904	91054
20 x ½"	10	240	70722100	68906	91055
20 x ¾"	10	240	70722200	68908	91056
20 x 1"	10	220	70722300	68910	91057
25 x ½"	10	150	70723100	68912	91058
25 x ¾"	10	150	70723200	68914	91059
25 x 1"	10	150	70723300	68916	91060
32 x ¾"	5	90	70724200	68918	91061
32 x 1"	5	90	70724300	68920	91062
32 x 1¼"	5	90	70724400	68922	91063
32 x 1½"	5	85	70724500	68924	91064
40 x 1"	1	55	70725300	68926	91065
40 x 1¼"	1	55	70725400	68928	91066
40 x 1½"	1	55	70725500	68930	91067
40 x 2"	1	50	70725600	68932	91068
50 x 1"	1	35	70726300	68933	92060
50 x 1¼"	1	35	70726400	68934	92061
50 x 1½"	1	35	70726500	68936	91071
50 x 2"	1	32	70726600	68938	91072
63 x 1½"	1	24	70727500	-	93826
63 x 2"	1	22	70727600	-	93827

METRIC LARGE BORE END CONNECTORS Poly x MI BSP

63 x 1½"	1	22	97827500	68942	91073
63 x 2"	1	21	97827600	68944	91074
63 x 2½"	1	20	97827700	68946//61597	91075
75 x 2"	1	18	97828600	68948	91076
75 x 2½"	1	15	97828700	68950	92062
75 x 3"	1	9	97828800	68952	91077
90 x 2"	1	14	97829600	68954	92063
90 x 3"	1	14	97829800	68957	91078
90 x 4"	1	14	97829900	68958	92064
110 x 2"	1	4	97820600	68962	92065
110 x 3"	1	4	97820800	68964	92066
110 x 4"	1	4	97820900	68966	91079

METRIC END CONNECTORS Poly x FI BSP

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16 x ½"	10	230	70781100	68970	91080
16 x ¾"	10	230	70781200	68972	91081
20 x ½"	10	230	70782100	68974	91082
20 x ¾"	10	220	70782200	68976	91083
20 x 1"	10	180	70782300	68978	91084
25 x ½"	10	150	70783100		91085
25 x ¾"	10	150	70783200	68982	91086
25 x 1"	10	130	70783300	68984	91087
32 x ¾"	5	80	70784200	68986	91088
32 x 1"	5	80	70784300	68988	91089
32 x 1¼"	5	75	70784400	68990	91090
40 x 1"	1	50	70785300	68992	92067
40 x 1¼"	1	50	70785400	68994	91092
40 x 1½"	1	50	70785500	68996	91093
50 x 1¼"	1	35	70786400	68998	91094
50 x 1½"	1	35	70786500	69000	91095
50 x 2"	1	35	70786600	69002	91096
63 x 2"	1	20	70787600	69002	93819

METRIC LARGE BORE END CONNECTORS Poly x FI BSP

63 x 2"	1	23	97887600	69006	91097
75 x 2"	1	13	97888600	69010	91098
75 x 2½"	1	13	97888700	69012	92068
90 x 2"	1	14	97889600	69014	92069
90 x 3"	1	14	97889800	69018	91099
110 x 3"	1	8	97880800	69022	92070
110 x 4"	1	8	97880900	69024	91100

Philmac Metric Compression Fittings

METRIC TEES Poly x Poly x Poly

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16 x 16 x 16	10	130	70731100	69140	91101
20 x 20 x 20	10	90	70732200	69142	91102
25 x 25 x 25	5	50	70733300	69144	91103
32 x 32 x 32	5	30	70734400	69146	91104
40 x 40 x 40	1	18	70735500	69148	91105
50 x 50 x 50	1	12	70736600	69150	91106
63 x 63 x 63	1	8	70737700	-	93829

METRIC LARGE BORE TEES Poly x Poly x Poly

63 x 63 x 63	1	6	97837700	69152	91107
75 x 75 x 75	1	6	97838800	69154	91108
90 x 90 x 90	1	3	97839900	69156	91109
110 x110x110	1	2	97830000	69158	91110

METRIC SLIP TEES Poly x Poly x Poly

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
20 x 20 x 20	1	60	70703220	68470	91111
25 x 25 x 25	1	50	70703330	68472	91112
32 x 32 x 32	1	25	70703440	68474	91113
40 x 40 x 40	1	18	70703550	68476	91114
50 x 50 x 50	1	10	70703660	68478	91115
63 x 63 x 63	1	7	70703770	-	91272

METRIC LARGE BORE SLIP TEES Poly x Poly x Poly

63 x 63 x 63	1	6	97803770	68480	91116

METRIC REDUCING TEES Poly x Poly x Poly

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
25 x 25 x 20	5	55	70733200	69160	91117
25 x 25 x 32	5	40	70733400	69172	91118
32 x 32 x 25	5	30	70734300	69162	91119
40 x 40 x 25	1	20	70735300	69163	91120
40 x 40 x 32	1	20	70735400	69164	91121
50 x 50 x 25	1	16	70736300	62804	91122
50 x 50 x 32	1	16	70736400	62805	91123
50 x 50 x 40	1	12	70736500	69166	91124
63 x 63 x 25	1	10	70737300	-	91274
63 x 63 x 32	1	10	70737400	-	91428
63 x 63 x 50	1	9	70737600	-	91429

METRIC LARGE BORE REDUCING TEES Poly x Poly x Poly

63 x 63 x 25	1	10	97837300		91125
63 x 63 x 32	1	10	97837400	62806	91126
63 x 63 x 50	1	7	97837600	69168	91127
110 x 110 x63	1	7	97830700	71522	91128

METRIC TEES Poly x Poly x FI BSP

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16 x 16 x ½"	10	200	70741100	69202	91129
20 x 20 x ½"	10	110	70742100	69206	91130
20 x 20 x ¾"	10	110	70742200	69210	91131
25 x 25 x ½"	5	70	70743100	69212	91132
25 x 25 x ¾"	5	60	70743200	69216	91133
25 x 25 x 1"	5	60	70743300	69218	91134
32 x 32 x ¾"	5	45	70744200	69222	91135
32 x 32 x 1"	5	40	70744300	69226	91136
32 x 32 x 1¼"	5	35	70744400	69228	91137
40 x 40 x 1"	1	20	70745300	69232	91138
40 x 40 x 1¼"	1	20	70745400	69234	91139
40 x 40 x 1½"	1	20	70745500	69236	91140
50 x 50 x 1½"	1	15	70746500	69240	91141
50 x 50x 2"	1	15	70746600	69242	91142
63 x 63 x 1¼"	1	9	70747400	-	91430
63 x 63 x 1½"	1	9	70747500	-	91431
63 x 63 x 2"	1	9	70747600	-	93822

METRIC LARGE BORE TEES Poly x Poly x FI BSP

63 x 63 x 1¼"	1	9	97867500	69243	91143
63 x 63 x 1½"	1	19	97847500	69245	91144
63 x 63 x 2"	1	9	97847600	69244	91145
75 x 75 x 2"	1	8	97848600	69248	91146
75 x 75 x 3"	1	8	97848800	69252	92072
90 x 90 x 3"	1	4	97849800	69254	91147
110 x 110 x 4"	1	3	97840900	69258	91148

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Philmac Metric Compression Fittings

METRIC TEES Poly x Poly x MI BSP

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
25 x 25 x ½"	10	70	70793100	69181	91149
25 x 25 x ¾"	10	70	70793200	69182	91150

METRIC ELBOWS Poly x Poly

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16 x 16	10	240	70751100	69280	91151
20 x 20	10	140	70752200	69282	91152
25 x 20	10	100	70753200	71432	91153
25 x 25	10	90	70753300	69284	91154
32 x 32	5	50	70754400	69286	91155
40 x 40	1	30	70755500	69288	91156
50 x 50	1	18	70756600	69290	91157
63 x 63	1	10	70757700	-	93823

METRIC LARGE BORE ELBOWS Poly x Poly

63 x 63	1	10	97857700	69292	91158
75 x 75	1	6	97858800	69294	91159
90 x 90	1	3	97859900	69296	91160
110 x 110	1	4	97850000	69298	91161

METRIC ELBOW 45° Poly x Poly

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
20 x 20	10	150	70702800		91162
25 x 25	10	80	70703800		91163
32 x 32	5	45	70704800	69531	91164
40 x 40	1	25	70705800	69519	91165
50 x 50	1	24	70706800	69520	91166
63 x 63	1	10	70707800	-	91433

METRIC LARGE BORE ELBOW 45° Poly x Poly

63 x 63	1	12	97807800	69521	91167
110 x 110	1	4	97800800	69523	91168

METRIC ELBOWS Poly x FI BSP

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16 x ½"	10	230	70761100	69342	91169
20 x ½"	10	230	70762100	69344	91170
20 x ¾"	10	190	70762200	69346	91171
25 x ½"	10	150	70763100	69351	91172
25 x ¾"	10	120	70763200	69348	91173
25 x 1"	10	110	70763300	69350	91174
32 x ¾"	1	75	70764200	69352	91175
32 x 1"	5	75	70764300	69354	91176
32 x 1¼"	5	70	70764400	69356	91177
40 x 1"	1	45	70765300	69357	91178
40 x 1¼"	1	45	70765400	69358	91179
40 x 1½"	1	45	70765500	69360	91180
50 x 1½"	1	30	70766500	69364	91181
50 x 2"	1	26	70766600	69366	91182
63 x 1½"	1	18	70767500	-	91434
63 x 2"	1	18	70767600	-	93821

METRIC LARGE BORE ELBOWS Poly x FI BSP

63 x 1½"	1	19	97867500	62815	91183
63 x 2"	1	19	97867600	69368	91184
75 x 2"	1	7	97868600	69372	91185
75 x 3"	1	7	97868800	69376	92076
90 x 3"	1	9	97869800		91186
110 x 4"	1	6	97860900		91187

METRIC ELBOWS Poly x MI BSP

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
20 x ½"	10	220	70772100	69302	91188
20 x ¾"	1	200	70772200	69304	91189
25 x ½"	1	120	70773100	69305	91190
25 x ¾"	10	120	70773200	69309	91191
25 x 1"	1	100	70773300	69308	91192
32 x 1"	5	75	70774300	69310	91193
32 x 1¼	1	70	70774400	62820	91194
40 x 1"	1	30	70775300	69312	91195
40 x 1¼"	1	30	70775400	69314	91196
40 x 1½"	1	30	70775500	69316	91197
50 x 1½"	1	18	70776500	69320	91198
63 x 2"	1	18	70777600	-	91436

Large Bore Elbow Poly x MI BSP

METRIC LARGE BORE ELBOWS Poly x MI BSP

63 x 2"	1	5	97877600	69324	91199
75 x 3"	1	7	97878810	69330	91200

Philmac Metric Compression Fittings

METRIC END CAPS Poly

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16	10	360	70701900		91201
20	10	250	70702900	69263	91202
25	10	160	70703900	69264	91203
32	5	100	70704900	69266	91204
40	1	55	70705900	69268	91205
50	1	35	70706900	69270	91206
63	1	20	70707900	-	91437

METRIC LARGE BORE END CAPS

63	1	24	97807900	69272	91207
75	1	18	97808900	69274	91208
90	1	4	97809900	69276	91209
110	1	4	97800900	69278	91210

METRIC WALL PLATE ELBOWS Poly x FI BSP

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
20 x ½"	1	150	70722900	71563	91211
25 x ½"	1	100	70723800		91212
25 x ¾"	1	100	70723900	71564	91213
25 x ¾"	1	30	70724900 (Brass)		93830

METRIC NUT ASSEMBLY

Size	Min QTY	Carton QTY	Philmac Code	VX Code
¾" to 20	1	250	70770200	91215
1" to 25	1	180	70770300	91216
1¼ to 32	1	100	70770400	91217
1½" to 40	1	75	70770500	91218
2" to 50	1	50	70770600	91219

Y SPANNERS

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
20-32 Alloy	1	140	90702421	69514	91221
20-32 Plastic	1	250	90702431	69500	91222
40-63 Alloy	1		90705711	69502	91223

METRIC FLANGED ADAPTORS Poly x Flange - Plastic Face with Metal Backing Ring (AS2129 Table E)

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
50 x 2"	1	8	97876600	69036	91224
63 x 2"	1	5	97877600		91225
75 x 3"	1	5	97878800	69042	91227
90 x 3"	1	4	97879800		91228
110 x 4"	1	2	97870900	69048	91229

REDUCED COMPRESSION FLANGE 63 x (100) x 4" ISO

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
63 x 4"	1	5	97877900	69503	91230

METRIC SHOULDERED ADAPTORS

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
50 x 2"	1	25	97816620	69026	91231
63 x 2"	1	20	97817620		91232
90 x 4"	1	30	97819910	69030	91233
110 x 4"	1	4	97810910	69032	91234

METRIC SPANNERS (FOR PHILMAC METRIC FITTINGS)

Size	Min QTY	Carton QTY	Philmac Code	VX Code
20-32	1	300	90702400	91235
32-63	1	130	90704700	91236
50-110	1	15	90706000	91237

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Philmac Metric Compression Fittings

COBRA CLIPS

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16	1	1500	13434305		91238
20	1	1500	13434306		91239
25	1	1000	13434307		91240
32	1	700	13434308		91241
40	1	360	13434309		91242
50	1	340	13434310		91243
63	1	240	13434311	63507	91244
75	1	125	13434312	63508	91245
90	1	80	13434313	63509	91246
110	1	50	13434314	63510	91247

METRIC NUT ASSEMBLY WITH ACETAL GRIP RING & NBR O-RING

Size	Min QTY	Carton QTY	Philmac Code	VX Code
20	1	200	97770200	91248
25	1	180	97770300	91249
32	1	100	97770400	91250
40	1	60	97770500	91251
50	1	50	97770600	91252
63	1	30	97770700	91253
75	1	25	97770810	91254
90	1	15	97770910	91255
110	1	8	97770110	91256

METRIC NUT ASSEMBLY WITH ACETAL GRIP RING & EPDM O'RING

Size	Min QTY	Carton QTY	Philmac Code	VX Code
20	10	200	99970200	91441
25	10	180	99970300	91442
32	5	100	99970400	91443
40	5	60	99970500	91444
50	5	50	99970600	91445
63	5	30	99970700	91446
75	1	25	99970810	91447
90	1	15	99970910	91448
110	1	8	99970110	91449

METRIC NUT ASSEMBLY WITH POLYSULFONE GRIP RING & EPDM O-RING & PP SPACER

Size	Min QTY	Carton QTY	Philmac Code	VX Code
20	1	200	90712210	91459
25	1	180	90713310	91460
32	1	100	90714410	91461
40	1	60	90715510	91462
50	1	50	90716610	91463
63	1	30	90717710	91464
75	1	25	90718810	91465
90	1	15	90719910	91273
110	1	8	90710010	91466

METRIC NUT ASSEMBLY WITH ACETAL GRIP RING & VITON O-RING & PP SPACER

Size	Min QTY	Carton QTY	Philmac Code	VX Code
20	1	200	90702210	91450
25	1	180	90703310	91451
32	1	100	90704410	91452
40	1	60	90705510	91453
50	1	50	90706610	91454
63	1	30	90707710	91455
75	1	25	90708810	91456
90	1	15	90709910	91457
110	1	8	90700010	91458

NUT ASSEMBLY WITH POLYSULFONE SPLIT RING & VITON O-RING & PP SPACER

Size	Min QTY	Carton QTY	Philmac Code	VX Code
20	1	200	99902210	92089
25	1	180	99903310	92090
32	1	100	99904410	92091
40	1	60	99905510	92092
50	1	50	99906610	92093
63	1	30	99907710	92094
75	1	25	99908810	92095
90	1	15	99909910	92096
110	1	8	99900010	92097

Philmac Metric Compression Fittings

METRIC POLY TO COPPER ADAPTORS PE x Cu

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16 x ½"	1	180	70612100	71450	91275
20 x ½"	1	150	70612200	71438	91276
20x¾"	1	120	70613200	71437	91277
25 x ½"	1	120	70613100	71425	91278
25 x ¾"	1	110	70613300	71426	91279
32 x ¾"	1	70	70614300	64002	91280

POLY TO COPPER ELBOWS PE x Cu

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
20 x ½"	1	140	70652200	71441	91281
25 x ½"	1	110	70653200	71429	91282
25 x ¾"	1	90	70653300	71430	91283

POLY TO COPPER TEES PE x Cu

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
20 x ½"	1	90	70633200	71427	92087
25 x ½"	1	55	70633200	67665	91284
25 x ¾"	1	55	70633300	71428	91286

KIT PE x Cu

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
20 x ½"	1	150	70602100	71423	91287
25 x ½"	1	100	70603100		91288
25 x ¾"	1	100	70603200	71424	91289

POLY TO COPPER SS GRIP RING PE x Cu

Size	Min QTY	Philmac Code	VX Code
20 x ½"	1	70602203	91290
25 x ½"	1	70603203	91291
25 x ¾"	1	70603303	91292

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Philmac Universal Transition Fittings

METRIC JOINERS Trans x Poly PN12.5

Size	Min QTY	Carton QTY	Philmac Code	Description	VX Code
15-21 x 20	1	100	70103200	20mm x 15-21 Universal Coupler	91040
15-21 x 25	1	70	70103300	25mm x 15-21 Universal Coupler 71559	91041
21-27 x 20	1	70	70104200	20mm x 21-27 Universal Coupler	91042
21-27 x 25	1	60	70104300	25mm x 21-27 Universal Coupler 71560	91043
27-34 x 20	1	50	70105200	20mm x 27-34 Universal Coupler	91044
27-34 x 25	1	50	70105300	25mm x 27-34 Universal Coupler 71561	91045
27-34 x 32	1	40	70105400	32mm x 27-34 Universal Coupler 71562	91046
39-43 x 32	1	25	70106400	32mm x 39-43 Universal Coupler	91047
34-39 x 32	1	30	70107400	32mm x 34-39 Universal Coupler	91048
34-39 x 40	1	20	70107500	40mm x 34-39 Universal Coupler	91049
47-49 x 50	1	12	70108600	50mm x 47-49 Universal Coupler 71553	91050
47-49 x 63	1	10	70108700	63mm x 47-49 Universal Coupler	91051
59-61 x 63	1	10	70109700	63mm x 59-61 Universal Coupler	91052

METRIC ELBOWS Trans x Poly PN12.5

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
15-21 x 20	1	65	70153200		91781
15-21 x 25	1	65	70153300	71566	91782
21-27 x 25	1	55	70154300	71567	91783
21-27 x 32	1	35	70154400		91784
27-34 x 25	1	35	70155300	71568	91785
27-34 x 32	1	25	70155400		91786

DOUBLE ENDED REPAIR COUPLING Transition x Transition (Class C/Class D/Copper/GI/PVC) PN12.5

Size	Min QTY	Carton QTY	Philmac Code	VX Code
15-21 x 15-21	1	50	97113310	91787
21-27 x 21-27	1	40	97114410	91788
27-34 x 27-34	1	30	97115510	91789
39-43 x 39-43	1	20	97116610	91790
34-39 x 34-39	1	25	97117710	91791
47-49 x 47-49	1	15	97118810	91792
59-61 x 59-61	1	9	97119910	91793

REDUCING REPAIR COUPLERS Transition x Transition (Class C/Class D/Copper/GI/PVC) PN12.5

Size	Min QTY	Carton QTY	Philmac Code	VX Code
21-27 x 15-21	1	50	97114310	91794
27-34 x 21-27	1	35	97115410	91795
27-34 x 15-21	1	30	97115310	91796
34-39 x 27-34	1	25	97115010	91797
39-43 x 27-34	1	20	97116510	91798

Philmac Universal Transition Fittings

ELBOWS TRANSITION TO TRANSITION (Copper/GI/PVC) PN12.5

SIZE	Min QTY	Carton QTY	Philmac Code	VX Code
15-21 x 15-21	1	45	97053300	91799
21-27 x 21-27	1	45	97054400	91800

MI END CONNECTORS TRANSITION X MI BSP (Copper/GI/PVC) PN12.5

SIZE	Min QTY	Carton QTY	Philmac Code	VX Code
15-21 x 3/4”	1	120	97123200	91801
15-21 x 1”	1	120	97123300	91802
21-27 x 3/4”	1	90	97124200	91803
21-27 x 1”	1	90	97124300	91804
21-27 x 11/4”	1	90	97124400	91805
27-34 x 3/4”	1	50	97125200	91806
27-34 x 1”	1	50	97125300	91807
27-34 x 11/4”	1	50	97125400	91808
27-34 x 11/2”	1	45	97125500	91809

TEES TRANSITION X TRANSITION X TRANSITION (Copper/GI/PVC) PN12.5

SIZE	Min QTY	Carton QTY	Philmac Code	VX Code
15-21	1	40	97133310	91810

FEMALE TEE TRANSITION X TRANSITION X FI BSP (Copper/GI/PVC) PN12.5

SIZE	Min QTY	Carton QTY	Philmac Code	VX Code
15-21 x 3/4”	1	50	97143200	91811
15-21 x 1”	1	45	97143300	91812
21-27 x 3/4”	1	35	97144200	91813
21-27 x 1”	1	30	97144300	91814

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Philmac Recycled Water Fittings

METRIC JOINERS Poly x Poly - Purple

SIZE	Min QTY	Carton QTY	Philmac Code	VX Code
20 x 20	10	150	78712200	91815
25 x 25	10	100	78713300	91816
32 x 32	5	65	78714400	91817

METRIC END CONNECTORS Poly x MI BSP - Purple

SIZE	Min QTY	Carton QTY	Philmac Code	VX Code
20 x 3/4”	10	240	78722200	91818
25 x 3/4”	10	150	78723200	91819
25 x 1”	10	150	78723300	91820
32 x 1”	5	90	78724300	91821

METRIC END CONNECTORS Poly x FI BSP - Purple

SIZE	Min QTY	Carton QTY	Philmac Code	VX Code
20 x 3/4”	10	220	78782200	91822
25 x 3/4”	10	150	78783200	91823
25 x 1”	10	130	78783300	91824
32 x 1”	5	80	78784300	91825

METRIC TEES Poly x Poly x Poly - Purple

SIZE	Min QTY	Carton QTY	Philmac Code	VX Code
20 x 20 x 20	10	90	78732200	91826
25 x 25 x 25	5	50	78733300	91827
32 x 32 x 32	5	30	78734400	91828

METRIC ELBOWS Poly x Poly - Purple

SIZE	Min QTY	Carton QTY	Philmac Code	VX Code
20 x 20	10	140	78752200	91829
25 x 25	10	90	78753300	91830
32 x 32	5	50	78754400	91831

METRIC NUT ASSEMBLY - Purple

SIZE	Min QTY	Carton QTY	Philmac Code	VX Code
20	1	250	78770200	91832
25	1	180	78770300	91833
32	1	100	78770400	91834
40	1	75	78770500	91835
50	1	50	78770600	91836
63	1	-	78770700	91837

Philmac® Compression Fittings for Gas

PE GAS JOINER

SIZE	Min QTY	Philmac Code	VX Code
16 mm with liners included for SDR 17.6 pipe	1	96211100	91838
20 mm with liners included for SDR 17.6 pipe	1	96212200	91839
25 mm with liners included for SDR 17.6 pipe	1	96213300	91840
32 mm with dedicated liners for SDR 11 pipe	1	96214400	91841
40 mm with dedicated liners for SDR 11 pipe	1	96215500	91842
63 mm with dedicated liners for SDR 11 pipe	1	96217700	91843

SLIP COUPLER S3 GAS

Size	Carton QTY	Min QTY	Philmac Code	VX Code
1½"	18	1	96211610	93790
2"	8	1	96211710	93791

PE GAS REDUCING JOINERS

SIZE	Carton QTY	Min QTY	Philmac Code	VX Code
20-16	180	1	96212110	93792
25 mm x 16 mm with liners included for SDR 17.6 pipe		1	96213100	91844

PE GAS TEES

SIZE	Min QTY	Philmac Code	VX Code
16 mm with liners included for SDR 17.6 pipe	1	96231100	91845
20 mm with liners included for SDR 17.6 pipe	1	96232200	91846
25 mm with liners included for SDR 17.6 pipe	1	96233300	91847
32 mm with dedicated liners for SDR 11 pipe	1	96234400	91848
40 mm with dedicated liners for SDR 11 pipe	1	96235500	91849
63 mm with dedicated liners for SDR 11 pipe	1	96237700	91850

PE GAS END CAPS

SIZE	Min QTY	Philmac Code	VX Code
20 mm with liner included for SDR 17.6 pipe	1	96202910	91851
25 mm with liner included for SDR 17.6 pipe	1	96203910	91852
32 mm with dedicated liner for SDR 11 pipe	1	96204910	91853
40 mm with dedicated liner for SDR 11 pipe	1	96205910	91854
63 mm with dedicated liner for SDR 11 pipe	1	96207910	91855

PE GAS ELBOW

SIZE	Min QTY	Philmac Code	VX Code
16 mm with liners included for SDR 17.6 pipe	1	96251100	91856
20 mm with liners included for SDR 17.6 pipe	1	96252200	91857
25 mm with liners included for SDR 17.6 pipe	1	96253300	91858
32 mm with dedicated liners for SDR 11 pipe	1	96254400	91859
40 mm with dedicated liners for SDR 11 pipe	1	96255500	91860
63 mm with dedicated liners for SDR 11 pipe	1	96257700	91861

PE GAS MALE END CONNECTORS

SIZE	Min QTY	Philmac Code	VX Code
25 mm x 3/4" BSP with liner included with SDR 17.6	1	96223200	91862
32 mm x 1" BSP with dedicated liner included with SDR 11	1	96224300	91863
40 mm x 1-1/4" BSP with dedicated liner included with with SDR 11	1	96225400	91864

METRIC TO IMPERIAL GAS PE PIPE JOINERS

SIZE	Min QTY	Philmac Code	VX Code
63 mm SDR11 x 1-1/2" Imp SDR 9.9 pipe	1	96217610	91865
63 mm SDR11 x 1-1/4" Imp SDR 9.9 pipe	1	96217510	91866

REDUCER, TRANSITION, COMPRESSION : 50MM, S2, PE X 1 1/4", S3, SDR11

Size	Min QTY	Carton QTY	Philmac Code	VX Code
50-1¼"	1	20	96216510	93794
50-1½"	1	18	96216610	93796

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Philmac Compression Fittings for Gas

UTC GAS JOINER - PE X UTC

SIZE	Min QTY	Philmac Code	VX Code
20 mm PE with liner for SDR 17.6 x 21-27 UTC (18NB) 9	1	96104200	91867
20 mm PE with liner for SDR 17.6 x 27-34 UTC	1	96105200	91868
25 mm PE with liner for SDR 17.6 x 21-27 UTC (18NB)	1	96104300	91869
32 mm PE with liner for SDR 11 x 21-27 UTC (18NB)	1	96104400	91870

UTC GAS ELBOW - PE X UTC

SIZE	Min QTY	Philmac Code	VX Code
UTC Elb 20 SDR 17.6 x 15-21	1	96152300	91871

UTC GAS JOINER - UTC X UTC

SIZE	Min QTY	Philmac Code	VX Code
21-27 mm x 15-21 mm	1	96114310	91872
21-27 mm x 21-27 mm	1	96114410	91873

UTC GAS ELBOW - UTC X UTC

SIZE	Min QTY	Philmac Code	VX Code
21-27 mm x 15-21 mm	1	96154310	91874
21-27 mm x 21-27 mm	1	96154410	91875

UTC GAS END CAP

SIZE	Min QTY	PhilmacCode	VX Code
UTC End Cap 21-27	1	96104910	91876

GAS SERVICE TEES

Size	Min QTY	Philmac Code	VX Code
20mm Service Tee Plug Gas w/ liner SDR17.6	1	96181911	91877
25mm Service Tee Plug Gas w/ liner SDR17.6	1	96182111	91878
32mm Service Tee Plug Gas w/ liner SDR11	1	96180811	91879
40mm Service Tee Plug Gas w/ liner SDR11	1	96182311	91880
25mm Service Tee Cutter Gas w/ liner SDR17.6	1	96182211	91881
32mm Service Tee Cutter Gas w/ liner SDR11	1	96180911	91882
40mm Service Tee Cutter Gas w/ liner SDR11	1	96182411	91883

REDUCER, MECHANICAL: UTC, 27MM TO 34MM OD X 32MM, S2, PE100, SDR11

Size	Carton QTY	Min QTY	Philmac Code	VX Code
32x27-34	35	1	96105400	93781

TECHNICAL INFORMATION

STANDARDS

Philmac Metric Fittings are designed to comply with the requirements of the following standards:

AS/NZS4129 & ISO14236
Fittings for polyethylene pressure pipe systems.

AS/NZS 4020 Products for use in contact with water intended for human consumption with regards to their effect on the quality of water.

AS3688
Water supply - copper and copper alloy body compression and capillary fittings and threaded-end connectors.

ISO7.1 & BS21
Pipe threads where pressure joints are made on the threads.

PE Pipes - AS/NZS4130, ISO4427, EN12201 (formally BS6572 & BS6730) Polyethylene pipes for pressure applications.

Copper Pipes - AS1432
Copper tubes for plumbing, gas fitting and drainage applications.

Note: Philmac Metric Fittings are also suitable for use with pipes manufactured according to various overseas and international standards.Please consult Philmac Technical Services for information.

Product Description	Size (mm)	Maximum Operating Pressure (KPa)
Compression fittings (PE x PE/FI BSP/MI BSP)	16-110	1600 (16 bar)
Compression fittings PE x (UTC)	16-63 (15-61)	1250 (12.5 bar)
Compression fittings PE x (Copper)	16-32 ($^1/_2$", $^3/_4$")	1600 (16 bar)
Tapping saddles	32-110	1600 (16 bar)
Accessories - Spanners	20-63	

SYSTEM DESIGN CONSIDERATIONS

There are generally two types of PE pipe fittings; mechanical and thermofusion. Philmac Metric Fittings are a range of mechanical fittings that offers three distinct advantages over thermofusion fittings;

- More economical
- Quick and easy installation
- Quick and easy revision to installation

This section highlights engineering considerations when designing a PE pipe system with Philmac Metric Fittings.

Projected life of Compression fittings
Whilst Philmac Metric Fittings conform to institutionalised specifications written to have a minimum life of 50 years, Philmac compression fittings are intentionally developed to exceed the expectations of these specifications.

Head losses
The following table offers a guide in estimating head losses in PE pipe systems based on the conveyance of water.

Use the following formula to estimate this head loss;

$L = F \times D$

where F = fitting constant
D = pipe inner diameter (m)
L = head loss based on equivalent pipe length (m)

Fitting	Fitting Constant (F)
90º Elbow	30
90º Tee - Straight Through	12
90º Tee - Side Branch	60

Resistance to Impact
The thermoplastic materials used in the Philmac Metric Fittings have excellent impact properties.

Philmac Metric Fittings are suitable for the transportation of abrasive slurries and will withstand normal conditions found in urban, mining, industrial, rural water and waste water systems.

Weathering
The materials used contain pigments to provide excellent protection to degradation due to ultra-violet radiation. Continuous use of the Philmac metric fitting in systems above ground is therefore permissible without additional protection.

Electrolytic Corrosion
Philmac metric fitting is non magnetizing and does not cause electrolytic deterioration.

Thermal Insulation
Polypropylene has natural thermal insulation of 2000 times over copper and 200 times over steel.

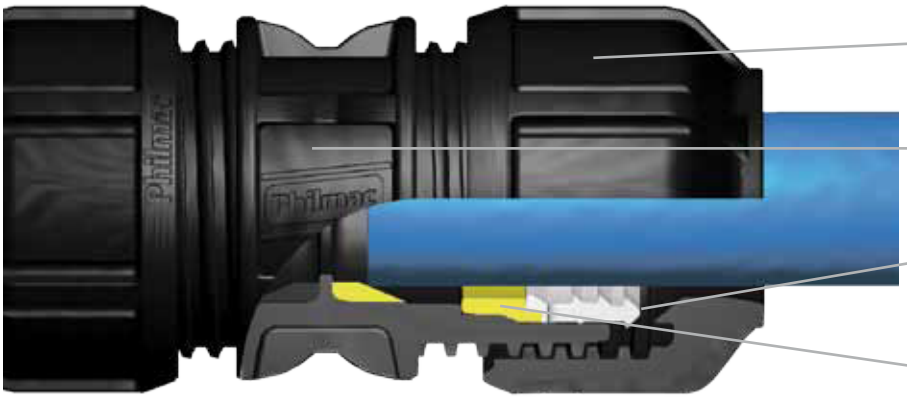
Light Transmission
The all black Philmac metric fittings do not transmit light, thus protecting the water quality in potable water pipelines from growth of micro organisms.

Effect on Water
Philmac Metric Fittings do not impart to water any odour, taste, colour, or any constituents in concentrations that could be injurious to health.

Fluids other than Water
Philmac Metric Fittings may convey a wide variety of fluids. Contact Vinidex for advice on specific applications.

MATERIALS & COMPONENTS

For sizes 16-50mm only.



NUT – Acetal

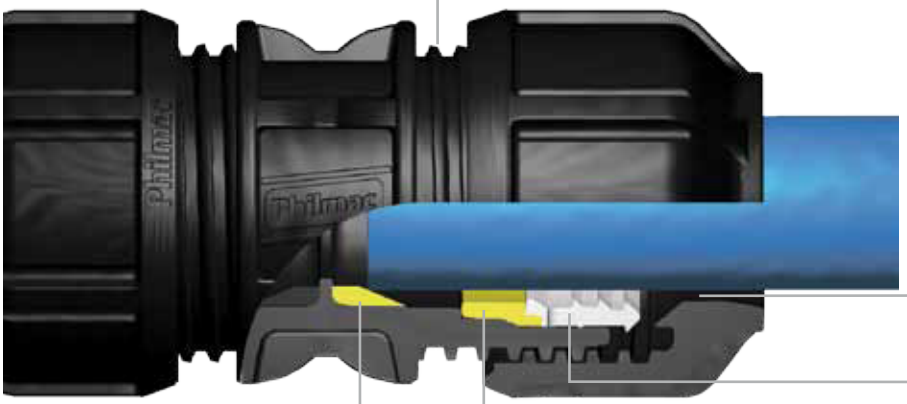
BODY – Polypropylene

COLLET – Acetal

SEAL – Nitrile Rubber

PRINCIPALS OF OPERATION

FULLY OPEN



Fitting is pre-assembled ready to use in the open position with 2 threads showing.

Clearance between the pipe and fitting allows for easy insertion of the pipe.

Collet, which is in relaxed position.

Seal, which is in relaxed position.

The pipe sits against the tapered wedges which minimises pipe rotation.

FULLY CLOSED

Collet bites into the pipe providing end load resistance.

Positive internal stop when the nut meets the flange of the body.

Seal compression is achieved by exploiting the mechanical advantage of the nut thread.

INSTALLATION INSTRUCTIONS

For sizes 16-50mm only.

1. Cut Pipe Square
Cut the pipe square. There is no need to prepare the pipe end. Chamfering or lubrication is not required.

2. Ready to Use Position
The fitting is pre-assembled and ready to use, however always ensure the nut is fully relaxed and 3 threads are showing before inserting the pipe.

3. Pipe Insertion
Insert the pipe until the stop is felt

4. Nut Tightening
The nut should be tightened by hand and then firmly with a wrench. Tighten the nut all teh way to the flange on the body of the fitting.

5. Fully Installed
Fitting is now fully installed.

6. Disassembly
To disassemble the fitting simply loosen the nut using a wrench until 2 threads are showing. Pipe will be released and can simply be pulled out of the fitting.

Note: Philmac recommends the use of PTFE tape on BSP threads to ensure apositive seal.

INSTALLATION INSTRUCTIONS - POLY TO COPPER

1. Cut PE or poly pipe square and insert until pipe stop is felt.

2. Tighten the nut by hand ensuring the nut flange is touching the fitting body, use a wrench if neccessary.

3. Cut copper pipe square.
The fittings is pre-assembled and ready to use.
Mark the depth of copper insertaion using ‘pipe stop’ marking or body flange as visual indicator. Remove any scale or burrs from the copper pipe.

4. Insert the copper pipe and push into the rubber seal up to the mark indicator.

5. Tighten the nut by hand and finish using a wrench. Remember to check that the nut is tight against the body flange.

6. Remember to replace the stainless steel grip ring if re-using the copper connection.

INSTALLATION INSTRUCTIONS – POLY TO UTC

(UTC joins PVC, Copper, Galvanised Iron, Stainless Steel, Lead, Steel and PE Pipes)

1. Cut Pipe to Length
The fitting is pre-assembled and ready to use. Cut pipe square and to length using the flange on the central body as a guide. Ensure the end of connecting pipe is undamaged and clean.

2. Ready to Use Position
To ensure adequate insertion depth, witness mark the pipe to the back of the flange. If conditions permit a marker pen can be used or alternatively use of a thumb is suitable.

3. Pipe Insertion
Insert the pipe to the correct depth. Always ensure the nut is backed off and 3 threads are showing. Pipes at the top end of the fitting tolerance may require 5 threads showing.

4. Nut Tightening
Tighten nut firmly with a wrench. Nut will not butt against the body flange when the pipe size is at the top end of the fitting tolerance.

5. Fully Installed
The fitting is fully installed when the nut cannot be tightened any further with reasonable force.

6. Disassembly
Unscrew the nut with a wrench. Pipe will be released and can be pulled out of the fitting.

Note: Installation instructions apply to the UTC® end of a 3G x UTC® fitting or the UTC® ends of a UTC® x UTC® fitting.

For further technical information refer to the Philmac Website
www.philmac.com.au

Safelok® Mining & Industrial

16mm-110mm Safelok® Range

Providing a safe workplace is the obligation of every employer, no matter the industry. There are fewer industries on the planet that are as demanding on pipelines as the mining industry, and this can make providing a safe environment so much harder. Recognising the tough conditions in the mining industry, Philmac has developed and is proud to introduce a truly unique compression fitting for the connection of polyethylene pipes – Safelok®.

Made from a special formulation of polypropylene for unrivalled strength and performance, Safelok® truly is the safest compression fitting on the planet.

SAFETY

Philmac strongly recommends that fittings should never be disconnected on a live air line. However in the event that work commences on an air line before the air supply is switched off, the use of Philmac Safelok fittings will ensure that a warning is given to the user that the line is live.

The user can then switch off the air supply and continue working on the line in a safe manner. When the nut is tightened on a Safelok fitting, not only is the end of the pipe secured, but it also fully compresses the o-ring and creates a seal. This means that if a user mistakenly works on a live air line and starts to loosen the nut on a Safelok fitting, there will be a loud release of air at the point when two threads are exposed.

Importantly, the grip will still be retained on the pipe so the user can take action – retighten the nut and switch off the air supply – preventing an extremely dangerous situation from occurring.

IMPACT RESISTANCE

Safelok® fittings are made from a high grade of polypropylene to provide significant resistance to impact. In mining conditions risk of impact is always high so the fitting must be tough and durable to provide a long life. At the same time if in the unlikely circumstances that the material should fail due to impact, it will result in a ductile rather than a brittle failure. This means that there is no risk of injury through a fitting explosion when used in a compressed air application.

FAST AND EASY INSTALLATION

SLIDE & TIGHTEN™

No pipe preparation is needed and no force is required to push the pipe past the seal, so installation couldn't be faster or easier. Simply insert the pipe into the fitting until the first point of resistance is felt and then tighten the nut until it butts against the flange of the fitting body. This means that even making a 110mm joint with pipe hanging from the tunnel roof becomes a one man job.

COMPLETE SECURITY

VISUAL STOP

The flange on the body of the Safelok® fitting provides a visual stop to indicate when the nut is fully tightened. This removes any uncertainty from the installation process.

NO LOOSE COMPONENTS

Although disassembly of the fitting is not required for installation, if the nut is removed there is no danger of losing components as they are all retained within the nut. Losing components in the dark becomes a thing of the past.

DESIGNED TO MINIMISE PIPE TWIST

The fitting has been designed to minimise pipe twist as the nut is tightened. Maximum pipe twist is approximately three quarters of a turn compared to one and a half turns with many other fittings. Pipe twist can impact on not only the connection you have just made but also on the connection at the other end of the line.

HIGH PERFORMANCE

MADE FROM ADVANCED THERMOPLASTIC MATERIALS

Safelok® is manufactured from lightweight, high performance thermoplastic materials with outstanding impact, chemical, corrosion and UV resistance.

RATED TO 1600 kPa

Safelok® fittings are pressure rated to 1600kPa (PN16) across all sizes, and are Watermark approved.

50 YEAR+ DESIGN LIFE

Built to withstand the toughest conditions to ensure longevity and durability, Safelok® fittings have a 50 year+ design life.

COMPLETE COVERAGE

FULL RANGE

The Safelok® range is comprehensive; straight and reducing couplers, tees, elbows, threaded connectors, end caps, flange adaptors and shouldered adaptors ranging from 16mm to 110mm.

Philmac Mining & Industrial Fittings

METRIC JOINERS Poly x Poly

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16 x 16	10	200	97811100	69060	91293
20 x 20	10	180	97812200	69062	91294
25 x 25	10	110	97813300	69064	91295
32 x 32	5	55	97814400	69066	91296
40 x 40	1	30	97815500	69068	91297
50 x 50	1	20	97816600	69070	91298
63 x 63	1	10	97817700	61586	91006
75 x 75	1	6	97818800	69074	91007
90 x 90	1	8	97819900	69076	91008
110 x 110	1	4	97810000	69078	91009

METRIC SLIP JOINERS Poly x Poly

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
20 x 20	1	140	97801220	69501	91299
25 x 25	1	80	97801330	69527	91300
32 x 32	1	45	97801440	69528	91301
40 x 40	1	25	97801550	69503	91302
50 x 50	1	18	97801660	69504	91303
63 x 63	1	10	97801770	61593	91021

METRIC REDUCING JOINERS Poly x Poly

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
20 x 16	10	210	97812100	69082	91304
25 x 16	10	140	97813100	69084	91305
25 x 20	10	120	97813200	69086	91306
32 x 20	5	90	97814200	69088	91307
32 x 25	5	75	97814300	69090	91308
40 x 25	1	47	97815300	69092	91309
40 x 32	1	40	97815400	69094	91310
50 x 25	1	34	97816300	69096	91311
50 x 32	1	30	97816400	69098	91312
50 x 40	1	25	97816500	69100	91313
63 x 32	1	20	97817400	61589	91032
63 x 40	1	17	97817500	61590	91033
63 x 50	1	16	97817600	61591	91034
75 x 63	1	6	97818700	69112	91035
90 x 63	1	8	97819700	69114//61592	91036
90 x 75	1	4	97819800	69116	91037
110 x 63	1	4	97810700	71521	91038
110 x 90	1	5	97810900	69120	91039

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Philmac Mining & Industrial Fittings

METRIC END CONNECTORS Poly x MI BSP

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16 x ½"	10	400	97821100	68902	91314
16 x ¾"	10	370	97821200	68904	91315
20 x ½"	10	290	97822100	68906	91316
20 x ¾"	10	280	97822200	68908	91317
20 x 1"	10	280	97822300	68910	91318
25 x ½"	10	180	97823100	68912	91319
25 x ¾"	10	180	97823200	68914	91320
25 x 1"	10	160	97823300	68916	91321
32 x ¾"	5	95	97824200	68918	91322
32 x 1"	5	95	97824300	68920	91323
32 x 1¼"	5	90	97824400	68922	91324
32 x 1½"	5	85	97824500	68924	91325
40 x 1"	1	55	97825300	68926	91326
40 x 1¼"	1	55	97825400	68928	91327
40 x 1½"	1	50	97825500	68930	91328
40 x 2"	1	50	97825600	68932	91329
50 x 1"	1	35	70726300	68933	92060
50 x 1¼"	1	37	70726400	68934	92061
50 x 1½"	1	37	97826500	68936	91330
50 x 2"	1	35	97826600	68938	91331
63 x 1½"	1	22	97827500	61595	91073
63 x 2"	1	21	97827600	61596	91074
63 x 2½"	1	20	97827700	68946//61597	91075
75 x 2"	1	18	97828600	68948	91076
75 x 2½"	1	15	97828700	68950	92062
75 x 3"	1	9	97828800	68952	91077
90 x 2"	1	20	97829600	68954	92063
90 x 3"	1	14	97829800	68957	91078
90 x 4"	1	14	97829900	68958	92064
110 x 2"	1	4	97820600	68962	92065
110 x 3"	1	4	97820800	68964	92066
110 x 4"	1	4	97820900	68966	91079

METRIC END CONNECTORS Poly x FI BSP

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16 x ½"	10	380	97881100	68970	91332
16 x ¾"	10	380	97881200	68972	91333
20 x ½"	10	280	97882100	68974	91334
20 x ¾"	10	230	97882200	68976	91335
20 x 1"	10	220	97882300	68978	91336
25 x ½"	10	180	97883100		91337
25 x ¾"	10	170	97883200	68982	91338
25 x 1"	10	150	97883300	68984	91339
32 x ¾"	5	90	97884200	68986	91340
32 x 1"	5	90	97884300	68988	91341
32 x 1¼"	5	85	97884400	68990	91342
40 x 1"	1	55	70785300	68992	92067
40 x 1¼"	1	55	97885400	68994	91343
40 x 1½"	1	55	97885500	68996	91344
50 x 1½"	1	36	97886500	69000	91345
50 x 2"	1	33	97886600	69002	91346
63 x 2"	1	23	97887600	61600	91097
75 x 2"	1	13	97888600	69010	91098
75 x 2½"	1	13	97888700	69012	92068
90 x 2"	1	14	97889600	69014	92069
90 x 3"	1	14	97889800	69018	91099
110 x 3"	1	8	97880800	69022	92070
110 x 4"	1	8	97880900	69024	91100

Philmac® Mining & Industrial Fittings

METRIC TEES Poly x Poly x Poly

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16 x 16 x 16	10	130	97831100	69140	91347
20 x 20 x 20	10	100	97832200	69142	91348
25 x 25 x 25	5	60	97833300	69144	91349
32 x 32 x 32	5	30	97834400	69146	91350
40 x 40 x 40	1	20	97835500	69148	91351
50 x 50 x 50	1	12	97836600	69150	91352
63 x 63 x 63	1	6	97837700	61609	91107
75 x 75 x 75	1	6	97838800	69154	91108
90 x 90 x 90	1	3	97839900	69156	91109
110x110x110	1	2	97830000	69158	91110

METRIC SLIP TEES Poly x Poly x Poly

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
20 x 20 x 20	1	70	97803220		91353
25 x 25 x 25	1	45	97803330		91354
32 x 32 x 32	1	25	97803440		91355
40 x 40 x 40	1	15	97803550		91356
50 x 50 x 50	1	8	97803660		91357
63 x 63 x 63	1	6	97803770	61610	91116

METRIC REDUCING TEES Poly x Poly x Poly

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
25 x 25 x 20	5	65	97833200	69160	91358
25 x 25 x 32	5	45	97833400	69172	91359
32 x 32 x 25	5	30	97834300	69162	91360
40 x 40 x 25	1	23	97835300	69163	91361
40 x 40 x 32	1	22	97835400	69164	91362
50 x 50 x 25	1	17	97836300	62804	91363
50 x 50 x 32	1	12	97836400	62805	91364
50 x 50 x 40	1	12	97836500	69166	91365
63 x 63 x 25	1	11	97837300		91125
63 x 63 x 32	1	10	97837400	61611	91126
63 x 63 x 50	1	7	97837600	61613	91127

METRIC TEES Poly x Poly x FI BSP

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16 x 16 x ½"	10	170	97841100	69202	91366
20 x 20 x ½"	10	120	97842100	69206	91367
20 x 20 x ¾"	10	120	97842200	69210	91368
25 x 25 x ½"	10	80	97843100	69212	91369
25 x 25 x ¾"	10	70	97843200	69216	91370
25 x 25 x 1"	10	70	97843300	69218	91371
32 x 32 x ¾"	5	45	97844200	69222	91372
32 x 32 x 1"	5	45	97844300	69226	91373
32 x 32 x 1¼"	5	40	97844400	69228	91374
40 x 40 x 1"	1	25	97845300	69232	92071
40 x 40 x 1¼"	1	25	97845400	69234	91375
40 x 40 x 1½"	1	23	97845500	69236	91376
50 x 50 x 1½"	1	18	97846500	69240	91377
50 x 50 x 2"	1	15	97846600	69242	91378
63 x 63 x 1¼"	1	19	97867500	69243	91143
63 x 63 x 1½"	1	9	97847500	69245	91144
63 x 63 x 2"	1	9	97847600	61616	91145
75 x 75 x 2"	1	8	97848600	69248	91146
90 x 90 x 3"	1	4	97849800	69254	91147
110 x 110 x 4"	1	3	97840900	69258	91148

METRIC TEES Poly x Poly x MI BSP

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
25 x 25 x ½"	10	70	97893100		91379
25 x 25 x ¾"	10	70	97893200		91380

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Philmac Mining & Industrial Fittings

METRIC ELBOWS Poly x Poly

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16 x 16	10	210	97851100	69541	91384
20 x 20	10	150	97852200	69543	91385
25 x 25	10	90	97853300	69540	91387
32 x 32	5	50	97854400	69542	91388
40 x 40	1	26	97855500	69544	91389
50 x 50	1	18	97856600		91390
63 x 63	1	10	97857700	61601	91158
75 x 75	1	6	97858800		91159
90 x 90	1	3	97859900		91160
110 x 110	1	4	97850000		91161

METRIC ELBOW 45º Poly x Poly

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
20 x 20	10	180	97802800		91391
25 x 25	10	100	97803800		91392
32 x 32	5	50	97804800	69531	91393
40 x 40	1	29	97805800	69519	91394
50 x 50	1	19	97806800	69520	91395
63 x 63	1	12	97807800	61602	91167
110 x 110	1	4	97800800	69523	91168

METRIC ELBOWS Poly x FI BSP

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16 x ½"	10	330	97861100	69302	91396
20 x ½"	10	270	97862100	69304	91397
20 x ¾"	10	220	97862200	69305	91398
25 x ½"	10	150	97863100	69309	91399
25 x ¾"	10	130	97863200	69308	91400
25 x 1"	10	130	97863300	69310	91401
32 x ¾"	1	80	97864200	69352	92074
32 x 1"	5	90	97864300	69312	91402
32 x 1¼"	5	80	97864400	69314	91403
40 x 1"	1	50	97865300	69357	92075
40 x 1¼"	1	50	97865400	62811	91404
40 x 1½"	1	45	97865500	69318	91405
50 x 1½"	1	30	97866500	69324	91406
50 x 2"	1	27	97866600	69366	91407
63 x 1½"	1	25	97867500	62815	91183
63 x 2"	1	19	97867600	61605	91184
75 x 2"	1	7	97868600		91185
75 x 3"	1	7	97868800	69376	92076
90 x 3"	1	9	97869800	69332	91186
110 x 4"	1	6	97860900	69336	91187

METRIC ELBOWS Poly x MI BSP

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
20 x ½"	10	220	97872100	69302	91409
20 x ¾"	1	200	97872200	69304	92077
25 x ½"	1	120	97873100	69305	92078
25 x ¾"	10	120	97873200		91410
25 x 1"	1	100	97873300	69308	92079
32 x 1"	5	75	97874300		91411
32 x 1¼	1	70	97874400	62820	92080
40 x 1"	1	30	97875300	69312	92081
40 x 1¼"	1	30	97875400	69314	92082
40 x 1½"	1	30	97875500	69316	92083
50 x 1½"	1	18	97876500	69320	92084
63 x 2"	1	5	97877600	69324	91199
75 x 3"	1	7	97878810	69330	91200

Philmac® Mining & Industrial Fittings

METRIC END CAPS Poly

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
16	10	460	97801900		91415
20	10	280	97802900	69263	91416
25	10	170	97803900	69264	91417
32	5	105	97804900	69266	91418
40	1	55	97805900	69268	91419
50	1	40	97806900	69270	91420
63	1	24	97807900	61621	91207
75	1	18	97808900	69274	91208
90	1	4	97809900	69276	91209
110	1	4	97800900	69278	91210

METRIC WALL PLATE ELBOWS Poly x FI BSP

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
20 x ½"	1	150	97822900	71563	91421
25 x ½"	1	100	97823800		91422
25 x ¾"	1	100	97823900	71564	91423
25 x ¾"	1	30	97824900 (Brass)		91424

Y SPANNERS

Size	Min QTY	Carton QTY	Philmac Code	VX Code
20-32 Alloy	1	140	97802421	91221
20-32 Plastic	1	250	97802431	91222
40-63 Alloy	1	1	97805711	91223

METRIC FLANGED ADAPTORS Poly x Flange - Plastic Face with Metal Backing Ring (AS2129 Table E)

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
50 x 2"	1	8	97896600	69036	91224
63 x 2"	1	5	97887600		91225
75 x 3"	1	5	97898800	69042	91227
90 x 3"	1	4	97899800		91228
110 x 4"	1	2	97890900	69048	91229

METRIC SHOULDERED ADAPTORS

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
50 x 2"	1	25	97816620	69026	91231
63 x 2"	1	20	97817620	61623	91232
90 x 4"	1	30	97819910	69030	91233
110 x 4"	1	4	97810910	69032	91234

METRIC SPANNERS (FOR PHILMAC METRIC FITTINGS)

Size	Min QTY	Carton QTY	Philmac Code	VX Code
20-32	1	300	90702400	91235
32-63	1	130	90704700	91236
50-110	1	15	90706000	91237

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Mining & Industrial Fittings

METRIC PIPE CLIPS

Size	Min QTY	Carton QTY	Philmac Code	VX Code
16	1	1500	13434305	91238
20	1	1500	13434306	91239
25	1	1000	13434307	91240
32	1	700	13434308	91241
40	1	360	13434309	91242
50	1	340	13434310	91243
63	1	240	13434311	91244
75	1	125	13434312	91245
90	1	80	13434313	91246
110	1	50	13434314	91247

METRIC NUT ASSEMBLY WITH ACETAL GRIP RING & NBR O-RING

Size	Min QTY	Carton QTY	Philmac Code	VX Code
20	1	200	97770200	91248
25	1	180	97770300	91249
32	1	100	97770400	91250
40	1	60	97770500	91251
50	1	50	97770600	91252
63	1	30	97770700	91253
75	1	25	97770810	91254
90	1	15	97770910	91255
110	1	8	97770110	91256

METRIC NUT ASSEMBLY WITH ACETAL GRIP RING & EPDM O'RING

Size	Min QTY	Carton QTY	Philmac Code	VX Code
20	10	200	99970200	91441
25	10	180	99970300	91442
32	5	100	99970400	91443
40	5	60	99970500	91444
50	5	50	99970600	91445
63	5	30	99970700	91446
75	1	25	99970810	91447
90	1	15	99970910	91448
110	1	8	99970110	91449

METRIC NUT ASSEMBLY WITH POLYSULFONE GRIP RING & EPDM O-RING & PP SPACER

Size	Min QTY	Carton QTY	Philmac Code	VX Code
20	1	200	90712210	91459
25	1	180	90713310	91460
32	1	100	90714410	91461
40	1	60	90715520	91462
50	1	50	90716610	91463
63	1	30	90717710	91464
75	1	25	90718810	91465
90	1	15	90719910	91273
110	1	8	90710010	91466

METRIC NUT ASSEMBLY WITH ACETAL GRIP RING & VITON O-RING & PP SPACER

Size	Min QTY	Carton QTY	Philmac Code	VX Code
20	1	200	90702210	91450
25	1	180	90703310	91451
32	1	100	90704410	91452
40	1	60	90705510	91453
50	1	50	90706610	91454
63	1	30	90707710	91455
75	1	25	90708810	91456
90	1	15	90709910	91457
110	1	8	90700010	91458

NUT ASSEMBLY WITH POLYSULFONE SPLIT RING & VITON O-RING & PP SPACER

Size	Min QTY	Carton QTY	Philmac Code	VX Code
20	1	200	99902210	92089
25	1	180	99903310	92090
32	1	100	99904410	92091
40	1	60	99905510	92092
50	1	50	99906610	92093
63	1	30	99907710	92094
75	1	25	99908810	92095
90	1	15	99909910	92096
110	1	8	99900010	92097

TECHNICAL INFORMATION

STANDARDS

Philmac Safelok® is a complete range of mechanical fittings designed to make connections simple when joining metric PE pipes.

Philmac Safelok®'s innovative and patented design comprises the following product mix;

Product Description	Size (mm)	Maximum Operating Pressure (kPa)
Compression fittings (PE x PE/FI BSP/MI BSP)	16-110	1600 (16bar)
Accessories - Spanners - Clips	75-110 75-110 75-110	

Philmac Safelok® range of compression fittings hold certificates for the following standards:

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

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

BS 6920: Products for use in contact with water intended for human consumption with regards to their effect on the quality of water.

Philmac Safelok® exceeds the requirements of:

ISO 14236: Plastics pipes and fittings -- Mechanical-joint compression fittings for use with polyethylene pressure pipes in water supply systems.

Philmac Safelok® threads and flanges comply with the requirements of the following standards:

AS 1722.1-1975: Pipe threads of Whitworth form - Sealing pipe threads (superceded by ISO7.1)

BS21: Specification for pipe threads for tubes and fittings where pressure-tight joints are made on the threads.

ISO7.1: Pipe threads where pressure joints are made on the threads.

AS 2129 Table E (Drill Pattern): Flanges for pipes, valves and fittings.

Philmac Safelok® fittings are suitable for use with pipes manufactured to the dimensions specified in the following standards:

AS/NZS 4130: Polyethylene pipes (PE) for pressure applications.

BS6730: Specification for black polyethylene pipes up to nominal size 63mm for above ground use for cold potable water.

BS 6572: Specification for blue polyethylene pipes up to nominal size 63mm for below ground use for potable water.

BS EN 12201-2:2003: Plastic piping systems for water supply. Polyethylene (PE). Pipes.

EN 12201: Plastic piping systems for water supply. Polyethylene (PE).

ISO 4427: Plastics piping systems -- Polyethylene (PE) pipes and fittings for water supply.

There are generally two types of PE pipe fittings; mechanical and thermofusion. Philmac Safelok® is a range of mechanical fittings that offers three distinct advantages over thermofusion fittings;

- More economical
- Quick and easy installation
- Quick and easy revision to installation

This section highlights engineering considerations when designing a PE pipe system with Philmac Safelok®.

SYSTEM CONSIDERATIONS

Projected life of Compression fittings
Whilst Philmac Safelok® conforms to institutionalised specifications written to have a minimum life of 50 years, its compression fittings are intentionally developed to exceed the expectations of these specifications.

Head Losses
The following table offers a guide in estimating head losses in PE pipe systems based on the conveyance of water.

Use the following formula to estimate this head loss;

L = F x D
where L = head loss based on equivalent pipe length (m)
F = fitting constant
D = pipe inner diameter(m)

Fitting	Fitting Constant (F)
90º elbow	30
90º tee - straight through	12
90º tee - side branch	60

Resistance to Impact
Philmac Safelok® polypropylene body and nut has excellent impact properties compared to other plastic materials.

Abrasion Resistance
Philmac Safelok® is suitable for the transportation of abrasive slurries and will withstand normal conditions found in urban, mining, industrial, rural water and waste water systems.

Weathering
Black polypropylene material contains pigments to provide excellent protection against degradation from ultra-violet radiation. However, long term continuous use above ground does require fittings to be protected from direct sunlight.

Electrolytic Corrosion
The metal reinforcing rings on female threads are made from stainless steel (grade 316) and provide long term resistance to corrosion.

Thermal Insulation
Polypropylene has natural thermal insulation of 2000 times over copper and 200 times over steel.

Light Transmission
The Philmac Safelok® fittings do not transmit light, thus protecting the water quality in potable water pipelines from growth of micro organisms.

Effect on Water
Philmac Safelok® does not impart to the water any odour, taste, colour, or any constituents in concentrations that could be injurious to health.

Pressure Rating
Philmac Safelok® fittings are rated for PN16 and have a maximum operating pressure of 16 Bar, 1600kPa or 230psi.

Pipe Material
Philmac Safelok® fittings maintain their full rating on PE 100 (HDPE), PE 80B (MDPE) and PE 63 (LDPE)

Temperature Derating
Philmac Safelok® performance ratings are published at 20°C, for higher temperatures apply the same derating to the Philmac Safelok® fittings as applied to the PE pipe.

SAFELOK® CHEMICAL RESISTANCE

Fluids other than Water
Many factors can affect the chemical resistance of plastics. Some of these include temperature, pressure, exposure time, continuous or cyclic expose and the type of mechanical stress applied. The fact that certain combinations of chemicals and mechanical load can induce stress cracking in many otherwise chemically resistant materials, both metallic and non-metallic, is of particular significance.

Mixtures of chemicals can result in a performance quite different than that of each individual chemical. Equally vapours and corrosive liquids can often be combinations of chemicals.

Due to the number of parameters that influence the performance of metals and plastics in the presence of chemicals the performance can differ from a laboratory test. Philmac strongly recommends that the final decision be based on the results of a trial installation evaluated under actual service conditions.

Evaluation method
To evaluate the performance of Philmac Safelok® evaluate each of the materials used in the fittings by using material chemical performance tables.

Normally only the wetted area of the fitting, ie the Body and Seal need evaluation. For immersed applications the Split Ring and Spacer also need evaluation.

Philmac Assistance
To evaluate the performance of a material in the Philmac product in the presence of chemicals please contact Philmac and supply the following five parameters.

Size. What size is the valve and pipework?

Temperature. What temperature will the chemicals be at, is the temperature constant or cycling?

Application. Where and how is the valve being used? Is the chemical on the inside or is the valve immersed in the chemical, ie on the outside of the body rather than the inside?

Media. What chemical is being used? Is it a liquid or gas, is it one chemical or are there combinations? Are there surrounding chemicals or gases in the air?

Pressure. What pressure is being applied to the valve? Does it vary?

Remember the STAMP acronym.

CHEMICAL RESISTANCE

Chemical	Satisfactory	Consult Philmac
Ammonium Hydroxide	▲	
Alcohol		▲
Acetone	▲	
Auto Transmission Fluid		▲
Antifreeze	▲	
Benzene		▲
Butane		▲
Calcium Salts	▲	
Caustic Soda (40% aqueous)	▲	
Cresol		▲
Citric Acid (10% aqueous)	▲	
Copper Salts	▲	
Ethylene Alcohol	▲	
Ethyl Glycol	▲	
Diesel		▲
Formic Acid	▲	
Gasoline		▲
Hydrochloric Acid	▲	
Kerosene		▲
Mineral Oils		▲
Methane		▲
Methylene Chloride		▲
Nitric Acid		▲
Petroleum Oils		▲
Sewerage		▲
Sodium Cyanide	▲	
Sulphuric Acid	▲	
Toluene		▲
Turpentine		▲
Transformer Oil		▲
Zinc Salt Solution	▲	
Note: Fluid Temperature = 20°c		

INSTALLATION INSTRUCTIONS - METRIC SAFELOK®

1. Cut Pipe Square
Clean the pipe end and ensure it is free from burrs. Chamfering or lubrication of pipe is not required.

2. Ready to Use Position
The fitting is pre-assembled and ready to use, however always ensure that 3 threads are showing before proceeding. Check that fitting body is lubricated - use water or CRC lubricant if required.

3. Witness Mark the Pipe
In the ready to use position lay the pipe against the fitting with the end of the pipe lined up with the flange of the body. Witness mark the section of pipe that is alongside the nut opening.

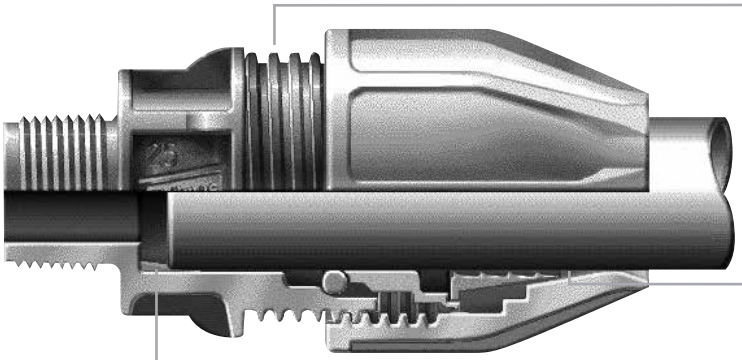
4. Pipe Insertion
Insert the pipe up to the witness mark, or if not using a witness mark until the first point of resistance is felt.

5. Nut Tightening
The nut should be tightened by hand and then firmly with a wrench. Tighten the nut all the way to the flange on the body of the fitting.

6. Fully Installed
The fitting is now fully installed.

PRINCIPALS OF OPERATION – PHILMAC SAFELOK® METRIC COMPRESSION FITTINGS

FULLY OPEN

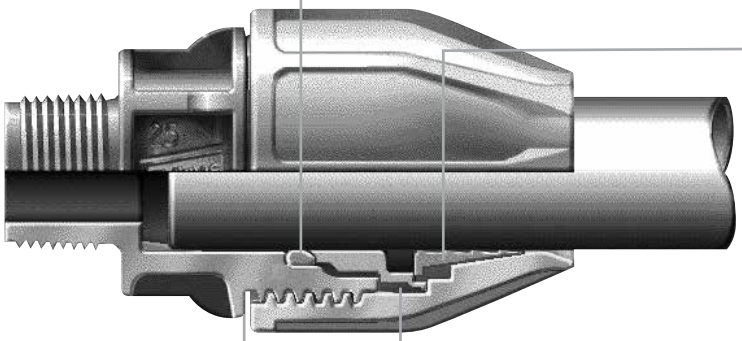


Fitting is pre-assembled and ready to use in the open position with a minimum
3 threads showing.

Clearance between pipe and fitting allows for easy insertion of the pipe.

The pipe sits against tapered wedges which minimises pipe rotation.

FULLY CLOSED



Seal compression is achieved when the nut has pushed the seal into the compression chamber.

Split ring bites into pipe.

High internal pressure or tensile load causes the split ring to bite further into the pipe.

Positive internal stop: Fitting is fully assembled when the nut butts up against the spacer and the spacer butts up against fitting.

Visual stop: Fitting is fully assembled when nut meets the flange on the body of the fitting.

For further technical information refer to the Philmac Website
www.philmac.com.au

Philmac®

Rural Compression Fittings

The Philmac Rural range of Australian-Made compression fittings is the perfect connection for Australian rural B Class poly pipe. Installation is easy with a simple to use insert assembly, and the fitting allows for straightforward disconnection and re-connection. Importantly, the Philmac Rural compression fitting range has been manufactured from high performance advanced thermoplastic materials so it is resistant to corrosion and has the strength and durability to provide a 50+ year service life.

AUSTRALIAN MADE FOR AUSTRALIAN CONDITIONS

FAST AND EASY INSTALLATION

INSERT ASSEMBLY
Because the insert is made from high performance polypropylene, once nut and split ring are on the pipe the installer can simply hammer the insert into the pipe end with a blunt tool.

PHILMAC'S RURAL INSERTS ARE ALSO SELF ALIGNING
Simply bring the insert into the body of the fitting and then tighten the nut with a wrench. As the nut tightens, it will draw the insert into the body of the fitting to create the perfect seal every time.

EASY DISASSEMBLY
The Rural compression fitting enables the joint to be easily disconnected and reconnected. Simply by loosening the nut and taking the insert out of the body of the fitting, the pipe can be freed. This is a real advantage when the pipe is connected to a pump or other piece of equipment which may require relocation or disconnection.

UNIQUE TERRACOTTA INSERT DESIGN
The flat face of the insert allows the installer to tap it into the pipe with ease. As the Philmac terracotta insert does not need to pass over a seal, there is no risk of damaging the seal during installation.

HIGH PERFORMANCE

MADE FROM ADVANCED THERMOPLASTIC MATERIALS
Rural compression fittings are manufactured from lightweight high performance thermoplastic materials which are designed to withstand the toughest outdoor conditions imaginable.

The materials are non-toxic and taint-free and also offer outstanding impact, UV and chemical resistance.

20 YEAR WARRANTY
Built to withstand the toughest conditions to ensure longevity and durability, Rural compression fittings have a market leading 20 year design life.

COMPLETE COVERAGE

WIDE RANGE
The Rural compression fitting range is comprehensive and includes straight and reducing joiners, tees, elbows, male and female adaptors, end caps, and wall plate elbows ranging from ½" to 2".

COMPATIBILITY WITH METRIC

The body on the Philmac rural fitting is 100% compatible with the Philmac metric fitting in sizes ¾" to 2".

Philmac Rural Compression Fittings

RURAL JOINERS Pol x Pol

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
½" x ½"	10	240	70711100	69060	91000
¾" x ¾"	10	170	99812200	68004	91467
1" x 1"	10	110	99813300	68008	91468
1¼" x 1¼"	5	60	99814400	68012	91469
1½" x 1½"	5	35	99815500	68016	91470
2" x 2"	1	20	99816600	68020	91471

COMPRESSION JOINER BODY RURAL Pol x Pol

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
½" x ½"	1	240	70711101	84011	91472
¾" x ¾"	1	170	99812201	84005	91010
1" x 1"	1	110	99813301	84006	91011
1¼" x 1¼"	1	60	99814401	84007	91012
1½" x 1½"	1	35	99815501	84008	91013
2" x 2"	1	20	99816601	84009	91014

COMPRESSION REDUCING JOINER RURAL Pol x Pol

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
¾" x ½"	10	170	99812100	68002	91473
1" x ¾"	10	130	99813200	68006	91474
1¼" x 1"	5	70	99814300	68010	91475
1½" x 1¼"	5	45	99815400	68014	91476
2" x 1½"	1	25	99816500	68018	91477

COMPRESSION ADAPTOR RURAL Pol X MI BSP

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
½" x ½"	10	360	70721100	68902	91053
½" x ¾"	10	360	70721200	68904	91054
¾" x ½"	10	300	99822100	68024	91478
¾" x ¾"	10	280	99822200	68026	91479
1" x ¾"	10	180	99823200	68028	91480
1" x 1"	10	170	99823300	68030	91481
1¼" x 1"	5	110	99824300	68032	91482
1¼" x 1¼"	5	100	99824400	68034	91483
1½" x1¼"	5	60	99825400	68036	91484
1½" x 1½"	5	55	99825500	68038	91485
1½" x 2"	5	55	99825600		91676
2" x 1½"	1	40	99826500	68040	91486
2" x 2"	1	35	99826600	68042	91487

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Philmac Rural Compression Fittings

COMPRESSION ADAPTOR RURAL Pol x FI BSP

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
½" x ½"	10	230	70781100	68970	91080
½" x ¾"	10	230	70781200	68972	91081
¾" x ½"	10	280	99882100	68048	91488
¾" x ¾"	10	250	99882200	68050	91489
1" x ¾"	10	180	99883200	68052	91490
1" x 1"	10	170	99883300	68054	91491
1¼" x 1"	5	105	99884300	68056	91492
1¼" x 1¼"	5	100	99884400	68058	91493
1½"x 1¼"	5	60	99885400	68060	91494
1½" x 1½"	5	55	99885500	68062	91495
2" x 1½"	1	40	99886500	68064	91496
2" x 2"	1	35	99886600	68066	91497

COMPRESSION 90° ELBOW RURAL Pol x Pol

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
½" x ½"	10	240	70751100	69280	91151
¾" x ¾"	10	150	99852200	68114	91498
1" x 1"	10	100	99853300	68116	91499
1¼" x 1¼"	5	50	99854400	68118	91500
1½" x 1½"	5	30	99855500	68120	91501
2" x 2"	1	20	99856600	68122	91502

COMPRESSION 90° ELBOW RURAL Pol x FI BSP

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
½" x ½"	10	230	70761100	69342	91169
¾" x ½"	10	240	99862100	68126	91503
¾" x ¾"	10	240	99862200	68128	91504
1" x ½"	10	180	99863100	68137	91505
1" x ¾	10	150	99863200	68132	91506
1" x 1"	10	140	99863300	68134	91507
1¼" x 1"	5	100	99864300	68136	91508
1¼" x 1¼"	5	80	99864400	68138	91509
1½"x 1¼"	5	50	99865400	68140	91510
1½" x 1½"	5	50	99865500	68142	91511
2" x 1½"	1	35	99866500	68144	91512
2" x 2"	1	28	99866600	68146	91513

Philmac Rural Compression Fittings

COMPRESSION 90° ELBOW RURAL Pol x MI BSP

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
1" x ¾"	10	150	99873200	68164	91514
1¼" x 1"	5	80	99874300	68166	91515

COMPRESSION 90° TEE RURAL Pol x Pol x Pol

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
½" x ½" x ½"	10	130	70731100	69140	91101
¾" x ¾" x ¾"	10	100	99832200	68070	91516
1" x 1" x 1"	5	60	99833300	68074	91517
1¼" x 1¼" x 1¼"	5	30	99834400	68078	91518
1½" x 1½" x 1½"	1	20	99835500	68080	91519
2" x 2" x 2"	1	14	99836600	68082	91520

COMPRESSION 90° REDUCING RURAL TEE Pol x Pol x Pol

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
1" x 1" x ¾"	5	60	99833200		91677
1" x 1" x 1¼"	5	45	99833400		91678
1¼" x 1¼" x 1"	5	35	99834300	68076	91521
1½" x 1½" x 1"	1	25	99835300	68069	91522
1½" x 1½" x 1¼"	1	22	99835400	68079	91523
2" x 2" x 1"	1	16	99836300	68085	91524
2" x 2" x 1¼"	1	16	99836400	68077	91525
2" x 2" x 1½"	1	14	99836500	68081	91526

COMPRESSION 90° TEE RURAL Pol x Pol x FI

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
½" x ½" x ½"	10	200	70741100	69202	91129
¾" x ¾" x ½"	10	140	99842100	68086	91527
¾" x ¾" x ¾"	10	120	99842200	68088	91528
1" x 1" x ½"	10	80	99843100	68090	91529
1" x 1" x ¾"	10	80	99843200	68092	91530
1" x 1" x 1"	10	80	99843300	68094	91531
1¼" x 1¼" x ¾"	5	50	99844200	68097	91532
1¼" x 1¼" x 1	5	50	99844300	68096	91533
1¼" x 1¼" x 1¼"	5	40	99844400	68098	91534
1½" x 1½"x 1¼"	5	25	99845400	68100	91535
1½" x 1½" x 1½"	5	25	99845500	68102	91536
2" x 2" x 1½"	1	17	99846500	68104	91537
2" x 2" x 2"	1	17	99846600	68106	91538

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Philmac Rural Compression Fittings

COMPRESSION 90° TEE RURAL Pol x Pol x MI

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
1" x 1" x ½"	10	70	99893100	68108	91539
1" x 1" x ¾"	10	70	99893200	68110	91540

COMPRESSION END PLUG RURAL Pol

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
½"	10	360	70701900		91201
¾"	10	300	99802900		91541
1"	10	200	99803900	62849	91542
1¼"	5	115	99804900	62850	91543
1½"	5	55	99805900	62851	91544
2"	1	40	99806900	62852	91545

CONVERSION KIT RURAL TO METRIC

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
¾" x 20	1	250	70770200	71411	91215
1" x 25	1	180	70770300	71412	91216
1¼" x 32	1	100	70770400	71413	91217
1½" x 40	1	75	70770500	71414	91218
2" x 50	1	30	70770700	71415	91220

CONVERSION KIT METRIC TO RURAL

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
20 x ¾"	1	180	99870200	71418	91546
25 x 1"	1	180	99870300	71419	91547
32 x 1¼"	1	100	99870400	71420	91548
40 x 1½"	1	75	99870500	71421	91549
50 x 2"	1	50	99870600	71422	91550

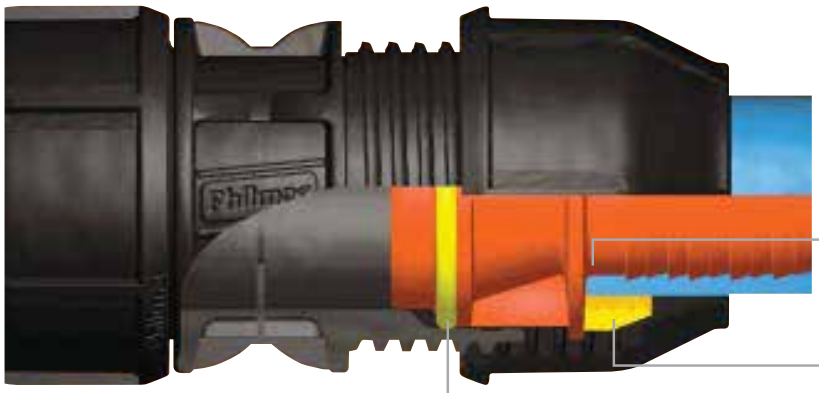
BLANKING SETS FOR RURAL & METRIC FITTINGS

Size	Min QTY	Carton QTY	Philmac Code	VX Code
¾"	10	260	97702200	91680
1"	10	180	97703300	91681
1¼"	5	100	97704400	91682
1½"	5	75	97705500	91683
2"	5	40	97706600	91684

TECHNICAL INFORMATION

HOW IT WORKS

FULLY OPEN

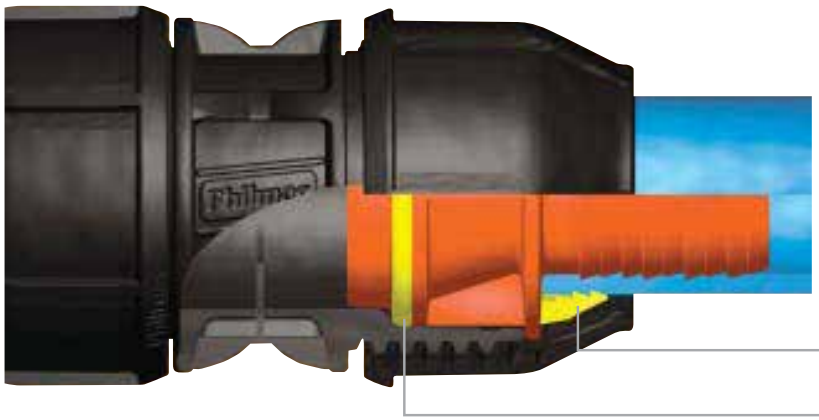


Insert fully installed into the pipe up to the shoulder of the insert.

Split ring is in the relaxed position.

Insert with seal ring attached has been pushed back into the fitting body.

FULLY CLOSED



Split ring bites into the pipe providing end load resistance.

Seal compression is achieved when nut has pushed the seal into the compression chamber.

RURAL INSTALLATION INSTRUCTIONS

1. Cut the pipe square (preference is with pipe cutters as a hacksaw can leave burrs which require removal).

2. Slide the nut and then the grip ring on to the pipe, noting correct orientation.

3. Place the insert in the pipe and knock in fully using a blunt object (a soft hammer or piece of timber is ideal) until the pipe end abuts the insert flange.

4. Position the grip ring against the flange of the insert.

5. Position the insert in to the fitting and slide the nut up to engage the thread. The nut can now be tightened by hand and then a further ¼ turn by wrench.

6. After tightening by hand please tighten nut a further ¼ turn using a wrench.

For further technical information refer to the Philmac Website
www.philmac.com.au

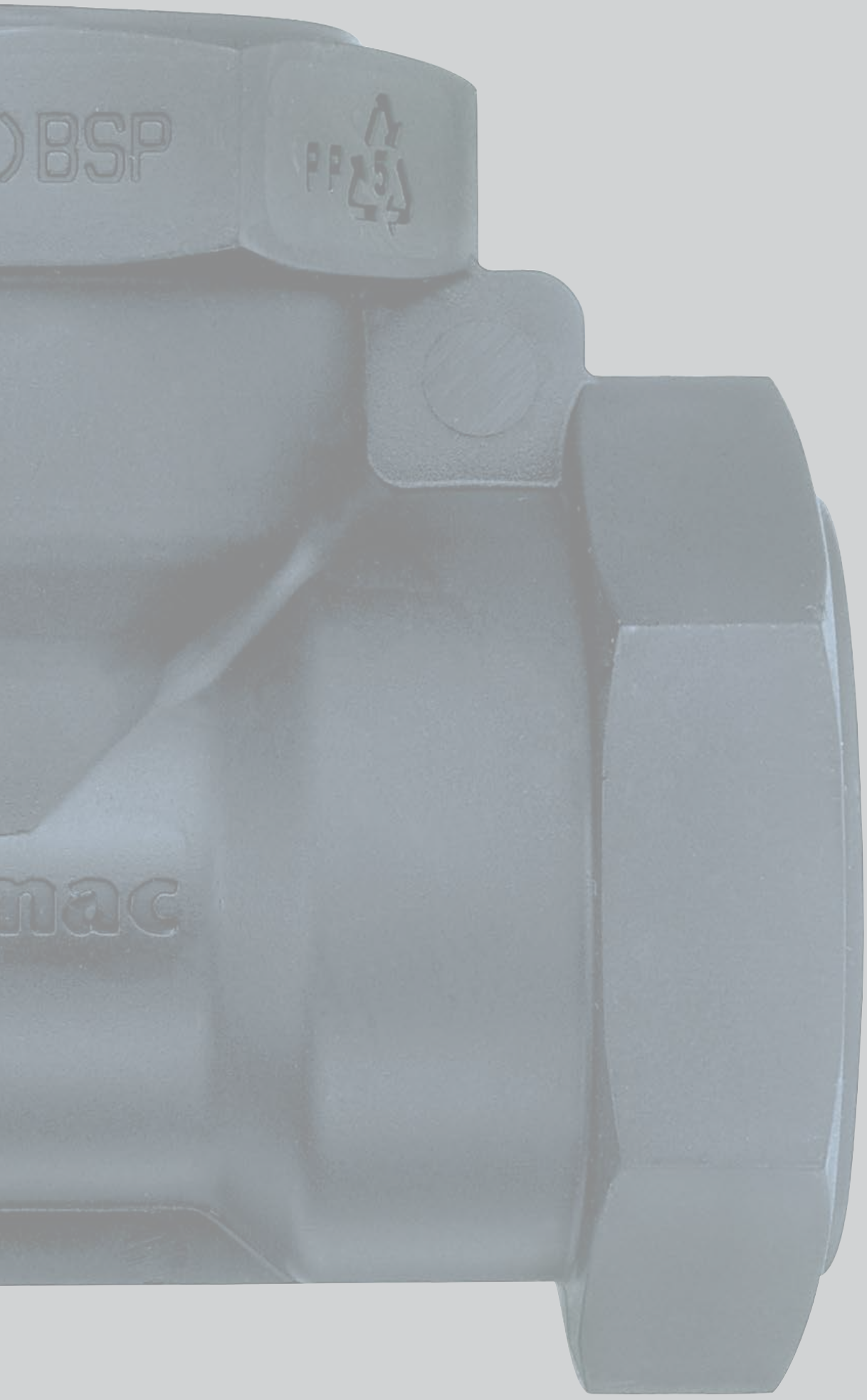
BSP Threaded Fittings

Philmac threaded fittings are manufactured from high performance, UV resistant polypropylene material that prevents moisture absorption and sustains product dimensions. The chemical and corrosion resistance provides reliable, long life connections suitable for diverse applications and is a cost effective alternative to metal fittings.

The precision BSP tapered threads have been engineered to maximise sealing performance and the hexagonal body makes them easy to install.

Philmac threaded fittings (excluding risers) are suitable for working pressures up to PN16 (1600kPa, 235psi) for sizes up to 2” and up to P10 (1000kPa, 145psi) for sizes up to 4”. The fittings are manufactured to ISO9001 quality endorsed standards and include a comprehensive range of plugs, bushes, nipples, sockets, tees, elbows and caps. Australian made for Australian conditions - don’t ask for a fitting, ask for a Philmac.

Vinidex
Systems & Solutions



Philmac BSP Threaded Fittings

BSP NIPPLE MI x MI

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
⅛ x ⅛"	10		RXHN06		91685
¼ x ¼"	10		RXHN08		91686
⅜ x ⅜"	10		RXHN10		91687
½ x ½"	20	700	90421100	68248	91551
¾ x ¾"	20	420	90422200	68252	91552
1 x 1"	20	260	90423300	68256	91553
1¼" x 1¼"	10	150	90424400	68260	91554
1½ x 1½"	10	100	90425500	68264	91555
2 x 2"	10	60	90426600	68268	91556
2½ x 2½"	1	90	90427700		91688
3 x 3	1	65	90428800		91689
4 x 4	1	35	90420000		91690

BSP THREADED REDUCING NIPPLE

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
¼ x ⅛"	10		RXRHN0806		91691
⅜ x ⅛"	10		RXRHN1006		91692
⅜ x ¼"	10		RXRHN1008		91693
½ x ¼"	10		RXRHN1508		91694
½ x ⅜"	10		RXRHN1510		91695
¾ x ½"	20	480	90422100	68250	91576
1 x ½"	20	340	90423100	68251	91577
1 x ¾"	20	260	90423200	68254	91578
1¼ x 1½"	10	180	90424100	68255	91579
1¼ x ¾"	10	170	90424200	68257	91580
1¼ x 1"	10	160	90424300	68258	91581
1½ x ½"	10	140	90425100	68261	91582
1½ x ¾"	10	140	90425200	68253	91583
1½ x 1"	10	140	90425300	68259	91584
1½ x 1¼"	10	110	90425400	68262	91585
2 x ½"	10	90	90426100	68267	91586
2 x ¾"	10	90	90426200	68269	91587
2 x 1"	10	90	90426300	68263	91588
2 x 1¼"	10	80	90426400	68265	91589
2 x 1½"	10	80	90426500	68266	91590
3 x 2"	1	70	90428600		91696
3 x 2½"	1	70	90428700		91697
4 x 3"	1	50	90420800		91698

BSP CAP FI

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
⅛"	10		RXCP06		91699
¼"	10		RXCP08		91700
⅜"	10		RXCP10		91701
½"	20	640	90490100	68286	91557
¾"	20	500	90490200	68288	91558
1"	20	320	90490300	68290	91559
1¼"	10	180	90490400	68292	91560
1½"	10	130	90490500	68294	91561
2"	10	80	90490600	68296	91562

BSP PLUG

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
⅛"	10		RXHP06		91702
¼"	10		RXHP08		91703
⅜"	10		RXHP10	62853	91704
½"	20	1100	90401100	68200	91563
¾"	20	600	90402200	68202	91564
1"	20	400	90403300	68204	91565
1¼"	10	240	90404400	68206	91566
1½"	10	180	90405500	68208	91567
2"	10	100	90406600	68210	91568

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Philmac BSP Threaded Fittings

BSP THREADED SOCKET FI

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
⅛"	10		RXHS06		91705
¼"	10		RXHS08		91706
⅜"	10		RXHS10		91707
½"	20	380	90431100	68270	91569
¾"	20	280	90432200	68272	91570
1"	20	180	90433300	68274	91572
1¼"	10	110	90434400	68276	91573
1½"	10	90	90435500	68278	91574
2"	10	50	90436600	68280	91575

BSP REDUCING SOCKET

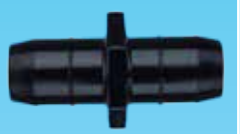
Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
¼ x ⅛"	10		RXRHS0806		91708
⅜ x ⅛"	10		RXRHS1006		91709
⅜ x ¼"	10		RXRHS1008		91710
½ x ¼"	10		RXRHS1508		91711
½ x ⅜"	10		RXRHS1510		91712
¾ x ¼"	10		RXRHS2008		91713
¾ x ½"	20	280	90432100	68282	91571
1 x ½"	20	180	90433100		91715
1 x ¾"	20	180	90433200		91716
1¼ x ¾"	10	120	90434200		91717
1¼ x 1"	10	110	90434300		91718
1½ x ¾"	10	100	90435200		91719
1½ x 1"	10	100	90435300		91720
1½ x 1¼"	10	90	90435400		91721
2 x ½"	10	70	90436100		91722
2 x ¾"	10	60	90436200		91723
2 x 1"	10	60	90436300		91724
2 x 1¼"	10	50	90436400		91725
2 x 1½"	10	50	90436500		91726

BSP REDUCING BUSH

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
¼ x ⅜"	10		RXRB0806		91727
⅜ x ⅜"	10		RXRB1006		91728
⅛" x ¼"	10		RXRB1008		91729
½ x ⅛"	10		RXRB1506		91730
½ x ¼"	10		RXRB1508		91731
½ x ⅜"	10		RXRB1510		91732
¾ x ¼"	10		RXRB2008		91733
¾ x ⅜"	10		RXRB2010		91734
¾ x ½"	20	700	90412100	68212	91591
1 x ¼"			90413000		91735
1 x 1½"	20	380	90413100	68214	91592
1 x ¾"	20	380	90413200	68216	91593
1¼ x ½"	10	240	90414100	68217	91594
1¼ x ¾"	10	240	90414200	68218	91595
1¼ x 1"	10	240	90414300	68220	91596
1½ x ½"	10	180	90415100	68221	91597
1½ x ¾"	10	180	90415200	68222	91598
1½ x 1"	10	180	90415300	68224	91599
1½ x 1¼"	10	180	90415400	68226	91600
2 x ½"	10	100	90416100	68227	91601
2 x ¾"	10	100	90416200	68228	91602
2 x 1"	10	100	90416300	68230	91603
2 x 1¼"	10	100	90416400	68232	91604
2 x 1½"	10	100	90416500	68234	91605
3 x 2"	1	100	90418600	68246	91606
3 x 2½"	1	100	90418700	68247	91607
4 x 2"	1	50	90410600	68244	91608
4 x 3"	1	50	90410800	68245	91609

BSP THREADED TEE

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
½"	10	210	90451100	68298	91610
¾"	10	120	90452200	68300	91611
1"	10	80	90453300	68302	91612
1¼"	5	40	90454400	68304	91613
1½"	5	30	90455500	68306	91614
2"	1	21	90456600	68308	91615



Philmac BSP Threaded Fittings

BSP THREADED ELBOW

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
½"	10	300	90461100	68310	91616
¾"	10	180	90462200	68312	91617
1"	10	120	90463300	68314	91618
1¼"	5	70	90464400	68316	91619
1½"	5	50	90465500	68318	91620
2"	1	30	90466600	68320	91621

BSP THREADED ELBOW FI/MI

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
½ x ½"	10	420	90469100	68311	91622
¾ x ¾"	10	220	90469200	68313	91623
1 x 1"	10	130	90469300	68315	91624
1¼ x 1¼"	5	75	90469400		91736
1½ x 1½"	5	50	90469500		91737
2 x 2"	1	30	90469600		91738

BSP THREADED ELBOW MI/MI

Size	Min QTY	Philmac Code	VX Code
⅛"	10	RXTME06	91739
¼"	10	RXTME08	91740
3/8"	10	RXTME10	91741

BARREL UNIONS

Size	Min QTY	Carton QTY	Philmac Code	VX Code
¾"	1	120	APU20	91742
1"	1	120	APU25	91743
1¼"	1	60	APU32	91744
1½"	1	60	APU40	91745
2"	1	35	APU50	91746

TANK OUTLETS

Size	Min QTY	Philmac Code	VX Code
½"	1	90103100	91747
¾"	1	90103200	91748
1"	1	90103300	91749
1¼"	1	90103400	91750
1½"	1	90103500	91751
2"	1	90103600	91752

TANK ADAPTOR (SHUTTLE)

Size	Min QTY	Philmac Code	VX Code
2"	1	51270	91753

NUT & TAILS FI BSP x BARB

Size	Min QTY	Carton QTY	Philmac Code	VX Code
¾ x ½"	10	250	90105100	91754
¾ x ¾"	10	200	90105200	91755
1 x ½"	10	200	90105300	91756
1 x ¾"	10	150	90105400	91757
1 x 1"	10	150	90105500	91758
1¼ x 1¼"	5	100	90105600	91759
1½ x 1½"	5	75	90105700	91760
2 x 2"	5	50	90105800	91761

MALE BARB CONNECTORS BARB x MI BSP

Size	Min QTY	Carton QTY	Philmac Code	VX Code
¾ x ¾"	10	250	90106110	91762
1 x ¾"	10	300	90106200	91763
1 x 1"	10	150	90106310	91764
1 x 1¼"	10	150	90106400	91765
1¼ x 1"	10	150	90106500	91766
1¼ x 1¼"	5	150	90106610	91767
1½ x 1½"	5	90	90106710	91768
2 x 2"	5	60	90106810	91769

BARB JOINERS BARB x BARB

Size	Min QTY	Carton QTY	Philmac Code	VX Code
1¼"	5	100	90108100	91778
1½"	5	100	90108200	91779
2"	5	60	90108300	91780

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Philmac BSP Threaded Fittings

MALE BARB CONNECTORS HELICAL BARB x MI BSP

Size	Min QTY	Carton QTY	Philmac Code	VX Code
¾ x ¾"	10	250	90106100	91770
1 x 1"	5	150	90106300	91771
1¼ x 1¼"	5	150	90106600	91772
1½ x 1½"	5	90	90106700	91773
2 x 2"	5	60	90106800	91774

FEMALE BARB CONNECTORS BARB x FI BSP

Size	Min QTY	Carton QTY	Philmac Code	VX Code
1 x 1"	10	150	90107100	91775
1¼ x 1¼"	5	100	90107200	91776
1½ x 1¼"	5	100	90107300	91777

PIPE RISERS MI X FI (PP/PE)

Size	Length (mm)	Min QTY	Carton QTY	Philmac Code	VX Code
¾" x ½"	150	10	170	90444200	90935
¾" x ½"	300	10	90	90444300	90936
¾" x ½"	450	10	100	90444400	90937
¾" x ½"	600	10	100	90444600	90938
¾" x ½"	750	10	100	90444700	90939
1" x ¾"	150	10	100	90445200	90940
1" x ¾"	300	10	60	90445300	90941
1" x ¾"	450	10	70	90445400	90942
1" x ¾"	600	10	70	90445600	90943
1" x ¾"	1800	1	-	90445900	90944
1" x ¾"	2400	1	-	90446000	90945

PIPE RISERS MI X MI (PP/PE)

Size	Length (mm)	Min QTY	Carton QTY	Philmac Code	VX Code
½"	150	10	240	90441200	90946
½"	300	10	140	90441300	90947
½"	450	10	160	90441400	90948
½"	600	10	150	90441600	90949
½"	900	10	150	90441800	90950
¾"	150	10	170	90442200	90951
¾"	300	10	90	90442300	90952
¾"	450	10	100	90442400	90953
¾"	600	10	100	90442600	90954
¾"	750	10	100	90442700	90955
¾"	900	10	100	90442800	90956
1"	150	10	100	90443200	90957
1"	300	10	60	90443300	90958
1"	450	10	70	90443400	90959
1"	600	10	70	90443600	90960
1"	750	10	60	90443700	90961
1"	900	10	60	90443800	90962
1"	1800	10	-	90443900	90963
1"	1200	1	-	90444000	90964
1"	2100	1	-	90443000	90965
1¼"	450	1	45	90446400	90966
1¼"	600	1	45	90446600	90967
1¼"	900	1	-	90446700	90968
1¼"	1800	1	-	90446800	90969
1¼"	2100	1	-	90446900	90970
1½"	300	1	45	90447300	90971
1½"	450	1	30	90447400	90972
1½"	600	1	30	90447600	90973
1½ "	900	1	30	90447700	90974
1½"	1800	1	-	90447800	90975
2"	300	1	20	90448300	90976
2"	450	1	20	90448400	90977
2"	600	1	20	90448600	90978
2"	900	1	-	90448700	90979
2"	1200	1	-	90448800	90980
2"	2400	1	-	90448900	90981

TEMPORARY METER SPACERS (MI BSP X MI BSP)

Size	Length (mm)	Min QTY	Carton QTY	Philmac Code	VX Code
20	240	1	-	90447000	90982
25	270	1	-	90448000	90983

Philmac®

Tapping Saddles

Philmac offer a range of both metric and rural tapping saddles to suit polyethylene pressure pipe and rural class B poly pipe respectively. Both ranges offer either zinc plated or stainless steel nuts and bolts to suit a wide range of tough applications, with a standard female BSP thread - providing a simple off-take method for your existing poly pipe system.

The Philmac rural tapping saddles are suited for Class B Rural Pipe for low pressure applications.

The Philmac metric tapping saddles are suited for metric poly pressure pipe up to PN16 pressure applications.

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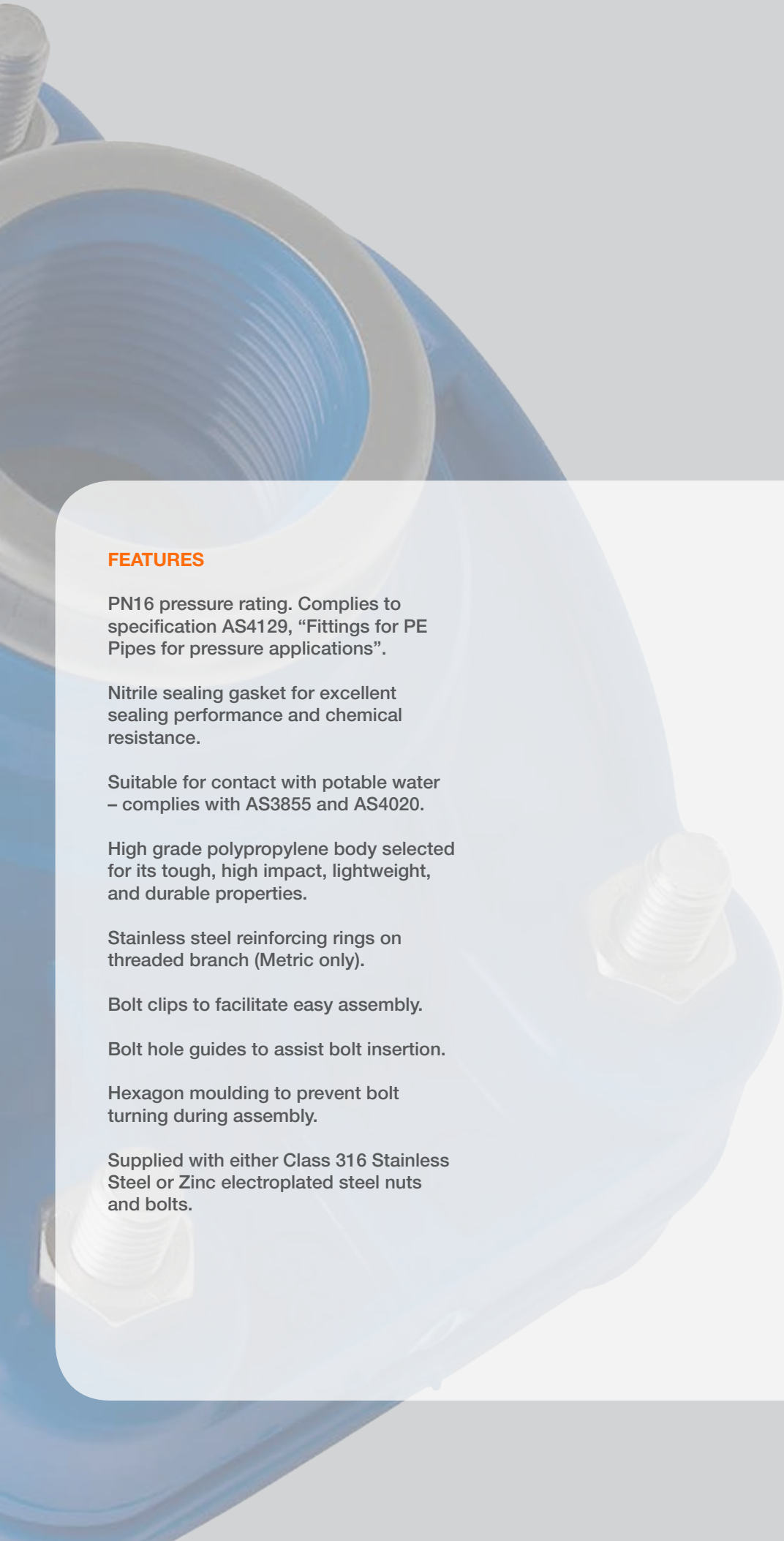


FEATURES

PN16 pressure rating. Complies to specification AS4129, “Fittings for PE Pipes for pressure applications”.

Nitrile sealing gasket for excellent sealing performance and chemical resistance.

Suitable for contact with potable water – complies with AS3855 and AS4020.

High grade polypropylene body selected for its tough, high impact, lightweight, and durable properties.

Stainless steel reinforcing rings on threaded branch (Metric only).

Bolt clips to facilitate easy assembly.

Bolt hole guides to assist bolt insertion.

Hexagon moulding to prevent bolt turning during assembly.

Supplied with either Class 316 Stainless Steel or Zinc electroplated steel nuts and bolts.

Philmac Tapping Saddles

TAPPING SADDLE RURAL ZINC BOLTS

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
1 x ¾"	1	70	90803200		91627
1¼ x ¾"	1	70	90804200		91628
1¼ x 1"	1	70	90804300		91629
1½ x ¾"	1	70	90805200		91630
1½ x 1"	1	70	90805300		91631
2 x ¾"	1	110	90806200	68156	91625
2 x 1"	1	110	90806300	68158	91626

SS 304 NUT & BOLT KIT (2)

Size	Min QTY		Philmac Code		VX Code
	1		40804600		91885

TAPPING SADDLE RURAL - POLY X FI BSP - SS NUTS & BOLTS

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
1 x ¾"	1	70	90853200	68504	91886
1¼ x ¾"	1	70	90854200	68509	91887
1¼ x 1"	1	70	90854300	68510	91888
1½ x ¾"	1	70	90855200	68514	91889
1½ x 1"	1	70	90855300	68516	91890
2 x ¾"	1	110	90856200	68156	91891
2 x 1"	1	110	90856300	68158	91892

METRIC TAPPING SADDLES PN16 (PE/PP x FI BSP – with Zinc Plated Nuts and Bolts)

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
25 x ¾"	1	150	97703200		91893
32 x ¾"	1	100	97704200		91894
32 x 1"	1	100	97704300		91895
40 x ¾"	1	75	97705200		91896
40 x 1"	1	75	97705300		91897
50 x ¾"	1	50	99006200	68520	91634
50 x 1"	1	50	99006300	68522	91635
63 x ¾"	1	40	99007200	68528	91636
63 x 1"	1	40	99007300	68530	91637
63 x 1½"	1	40	97707500	68534	91898
75 x 1"	1	25	97708300	68540	91640
75 x 1½"	1	25	97708500	68544	91641
75 x 2"	1	25	97708600	68546	91642
90 x 1"	1	20	97709300	68552	91643
90 x1½"	1	20	97709500	68556	91644
90 x 2"	1	20	97709600	68558	91645
110 x 1"	1	18	97700300	68564	91646
110 x 1½"	1	18	97700500	68568	91647
110 x 2"	1	18	97700600	68570	91648

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Philmac Tapping Saddles

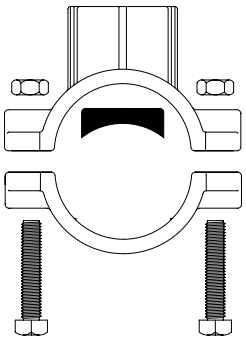
METRIC TAPPING SADDLES PN16 (PE/PP X FI BSP – with Stainless Steel Nuts and Bolts)

Size	Min QTY	Carton QTY	Philmac Code	Old Code	VX Code
25 x ¾"	1	150	97753200	68505	91649
32 x ¾"	1	100	97754200	68509	91650
32 x 1"	1	100	97754300	68511	91651
40 x ¾"	1	75	97755200	68515	91652
40 x 1"	1	75	97755300	68517	91653
50 x ¾"	1	50	99056200	68521	91654
50 x 1"	1	50	99056300	68523	91655
63 x ¾"	1	40	99057200	68529	91656
63 x 1"	1	40	99057300	68531	91657
63 x 1½"	1	40	97757500	68535	91658
75 x ¾"	1	25	97758200	68539	91659
75 x 1"	1	25	97758300	68541	91660
75 x 1½"	1	25	97758500	68545	91661
75 x 2"	1	25	97758600	68547	91662
90 x 1"	1	20	97759300	68553	91663
90 x 1½"	1	20	97759500	68557	91664
90 x 2"	1	20	97759600	68559	91665
110 x 1"	1	18	97750300	68565	91666
110 x 1½"	1	18	97750500	68589	91667
110 x 2"	1	18	97750600	68571	91668

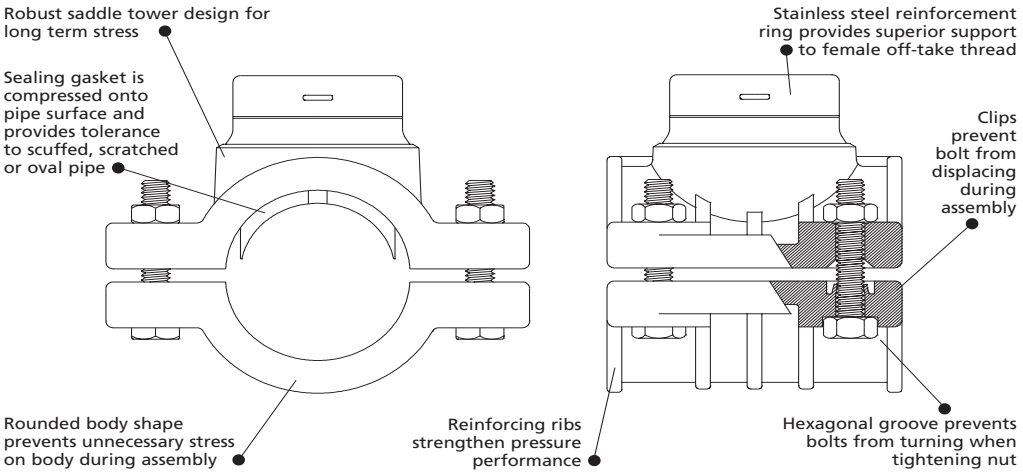
METRIC TAPPING SWIVEL TEE PN16

Size	Min QTY	Carton QTY	Old Code	VX Code
125 X 25	1	1	68685	68685
180 X 25	1	1	68715	68715

ASSEMBLY



- Insert Rubber Seal Into Saddle Top.
- Insert Bolts Into Saddle Bottom And Push Bolt Head Into Hex Recess.
- Assemble Saddle Halves In The Desired Location Around Rural Poly Pipe.
- Engage Each Nut And Then Fully Tighten Until Firm And Saddle Halves Have Met.
- Drill Hole In Pipe For Branch Outlet.
- Connect Desired Threaded Fitting To Branch Outlet, Using Ptfe Tape.



Use
Can be used to fit a wide range of pipes from PN6.3 to PN16 including MDPE, HDPE, PP or ABS that have metric external diameter dimensions.

Pre Assembly
Select branch off-take position, clean pipe, ensure easy access and mark hole. Place saddle upper body and align outlet branch with marked hole.

Assembly
Place saddle lower body over pipe. Ensure thread of bolts are clean before placing in saddle. Tighten all bolts alternately around saddle. ensure saddle off-take hole stays in alignment with marked hole. Drill suitable sized hole through orifice of saddle with boring tool. Ensure that the threads and gasket are not damaged.

Disassembly
Loosen and detach all bolts around saddle.

Note:

1. Philmac recommends the use of PTFE tape on BSP threads to ensure a positive seal.

2. Philmac uses 316 high class Stainless Steel nuts and bolts. Inherent in the nature of all Stainless Steel nuts and bolts is that they can fuse following installation. Lubrication of threads before installation may help to prevent this occurring.

For further technical information refer to the Philmac Website www.philmac.com.au

Philmac®

Valves

Valves play an integral part in the performance, management and control of water quality, flow and pressure within a pipe system. Philmac manufactures a broad range of valves, each designed to cater for an array of applications. From the iconic blue handled poly ball valve, through to precision designed float and ratio valves, Philmac valves are recognized for quality and reliability. Whether you require high flow, high shutoff, compact size, plastic or metal, tapered or parallel threads, above or below water installation – it is highly likely Philmac has a valve to suit your application.

AUSTRALIAN MADE FOR AUSTRALIAN CONDITIONS

Vinidex
Systems & Solutions

Philmac Ball Valves

Fl x Fl BSP PN16

Size Imperial	Size Metric	Min QTY	Pressure Rating (BAR)	Philmac Code	VX Code
½"	15	1	16	95500100	91669
¾"	20	1	16	95500200	91670
1"	25	1	16	95500300	91671
1¼"	32	1	16	95500400	91672
1½"	40	1	16	95500500	91673
2"	50	1	16	95500600	91674

Ml x Fl BSP PN16

Size Imperial	Size Metric	Min QTY	Pressure Rating (BAR)	Philmac Code	VX Code
½"	15	1	16	95510100	91899
¾"	20	1	16	95510200	91900
1"	25	1	16	95510300	91901
1¼"	32	1	16	95510400	91902
1½"	40	1	16	95510500	91903
2"	50	1	16	95510600	91904

Fl x Fl BSP – Purple

Size Imperial	Size Metric	Min QTY	Pressure Rating (BAR)	Philmac Code	VX Code
¾"	20	1	16	98510200	91905
1"	25	1	16	98510300	91906
1½"	40	1	16	98510500	91907
2"	50	1	16	98510600	91908

MAIN STOP (Ml DR Brass x Poly) – TESTED

Size Imperial	Min QTY	Philmac Code	VX Code
(Blue Handle) ¾" x 25	1	95544900	91909
(Blue Handle) ¾" x 32	1	95545900	91910

CURB STOP (Poly x Fl BSP with Tape & Plug) – TESTED

Size Imperial	Min QTY	Philmac Code	VX Code
(Blue Handle) 25 x ¾"	1	95540800	91911
(Blue Handle) 32 x ¾"	1	95545800	91912

MAIN STOP (Ml DR Brass x Poly) - TESTED – Purple

Size Imperial	Min QTY	Philmac Code	VX Code
(Purple Handle) ¾" x 25	1	95546900	91913
(Purple Handle) ¾" x 32	1	95547900	91914

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Philmac Ball Valves

CURB STOP (Poly x FI BSP with Tape and Plug) - TESTED – Purple

Size Imperial	Min QTY	Philmac Code	VX Code
(Purple Handle) 25 x ¾"	1	95541800	91915
(Purple Handle) 32 x ¾"	1	95544800	91916

FOOT VALVES FI BSP

Size Imperial	Size Metric	Min QTY	Pressure Rating (BAR)	Philmac Code	VX Code
¾"	20	5	14	95501200	91917
1"	25	5	14	95501300	91918
1¼"	32	5	14	95501400	91919
1½"	40	2	14	95501500	91920
2"	50	2	14	95501600	91921

FOOT VALVE FILTER

Nom Size	BSP Size	Carton QTY	Philmac Code	VX Code
20	¾"	1	40501207	93407
25	1"	1	40501307	93408
32	1¼"	1	40501407	93409
40	1½"	1	40501507	93410
50	2"	1	40501607	93411

NON RETURN VALVES FI x FI BSP

Size Imperial	Size Metric	Min QTY	Pressure Rating (BAR)	Philmac Code	VX Code
¾"	20	5	14	95502200	91922
1"	25	5	14	95502300	91923
1¼"	32	5	14	95502400	91924
1½"	40	2	14	95502500	91925
2"	50	2	14	95502600	91675

AIR RELEASE VALVE FI BSP

Size Imperial	Min QTY	Philmac Code	VX Code
1"	5	95503300	91926
1" dual action air release valve		93072	91927
2" dual action air release valve		93087	91928

Philmac Float Valves

200 SERIES BRASS HIGH FLOW FLOAT VALVE

Size	Rec. Float Size	Min QTY	Philmac Code	VX Code
1" Valve - HP 400mm lever	225	1	90322300	91929
1" Valve - HP 275mm lever	225	1	90322310	91930
1¼" Valve - HP 400mm lever	225	1	90322400	91931
1¼" Valve - HP 275mm lever	225	1	90322410	91932
1½" Valve - LP & HP 400mm lever	225	1	90322520	91933
1½" Valve - LP & HP 275mm lever	225	1	90322530	91934
2" Valve - HP 400mm lever	225	1	90322620	91935

Note valves are not supplied with a float. See Accessories table below.
Note HP refers to High Pressure and LP refers to Low Pressure.

200 SERIES BRASS HIGH FLOW FLOAT VALVE - BODY ASSEMBLIES (Inc. flapper, clevis & cotter pins)

Size	Min QTY	Philmac Code	VX Code
Body Assembly	1	40314352	91936
Body Assembly	1	40314452	91937
Body Assembly 1½" Low Pressure & High Pressure	1	40315562	91938
Body Assembly 2" Low Pressure & High Pressure	1	40316662	91939

200 SERIES BRASS HIGH FLOW FLOAT VALVE - LEVER ARM ASSEMBLIES (Inc. cam, adjusting bolt & locking nuts)

Size	Min QTY	Philmac Code	VX Code
Lever Assembly Std 400mm (1" & 1¼")	1	40341000	91940
Lever Assembly Std 400mm (1½")	1	40342000	91941
Lever Assembly Std 400mm (2")	1	40343000	91942
Lever Assembly Short 275mm (1" & 1¼")	1	40371000	91943
Lever Assembly Short 275mm (1½")	1	40372000	91944

ACCESSORIES

Size	Min QTY	Philmac Code	VX Code
Float Adaptor*	1	90330200	91945
Arm Extension*	1	90330300	91946
Stainless Steel Chain (Length) 10M	1	90330400	91947
Underwater Kit	1	90330500	91948
7" Plastic Float - Blue**	1	90499710	91949
9" Plastic Float - Blue	1	90499900	91950

* For underwater applications
** Low pressure option only

150 SERIES BRASS FLOAT VALVES (Brass Plunger, S/S Seat)

Nom Size	Code	BSP Size	Rec. Float Size	Philmac Code	VX Code
10	2/4	⅜"	80/100*	90300500	91951
15	1/6	½"	100	90300700	91952
15	3/7/15	½"	100	90301300	91953
15	3/6/15	½"	100	90301500	91954
15	3/6/14/15	½"	100	90302300	91955
15	2/6/15	½"	100	90303100	91956
20	1/7	¾"	150	90304400	91957
25	1/9	1"	150	90304600	91958
32	1/9	1¼"	175	90304800	91959
40	1/11	1 x 1½"	225	90304900	91960
50	1/13	2"	225	90305000	91961

^CODES:		
1. Tapered BSP Thread	7. Lever Length 250mm	13. Lever Length 455mm
2. Short Parallel BSP Thread	8. Lever Length 300mm	14. Stem Sleeve
3. Long Parallel BSP Thread	9. Lever Length 355mm	15. Backnut
4. Lever Length 125mm	10. Lever Length 400mm	
5. Lever Length 170mm	11. Lever Length 425mm	
6. Lever Length 200mm	12. Lever length 440mm	

* Please note that not all products on the page may be Australian made.

Note: All lever lengths are approximate.

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Philmac Float Valves

120 SERIES PLASTIC VALVE (Single action)

Nom Size	Code	BSP Size	Rec. Float Size	Min QTY	Philmac Code	VX Code
20	1/8	¾"	150	50	91470320	91962
20	3/8	¾"	150	70	91470201	91963
20	3/5	¾"	150	70	91470211	91964
25	3/8	1"	150	70	91470301	91965
25	3/5	1"	150	70	91470311	91966
32	1/10	1¼"	150 x 2	20	91470400	91967

120 SERIES PLASTIC FLOAT VALVE (Dual Action)

Nom Size	Code	BSP Size	Rec. Float Size	Min QTY	Philmac Code	VX Code
32	1/12	1 x1½"	150 x 2	20	91470410	91968

100 SERIES PLASTIC FLOAT VALVE

Nom Size	Code	BSP Size	Rec. Float Size	Carton QTY	Philmac Code	VX Code
15	3/7	1½"	100	50	90300200	91969
15	3/6	1½"	100	50	90300300	91970
15	3/4	1½"	100	50	90300400	91971

^CODES:		
1. Tapered BSP Thread	7. Lever Length 250mm	13. Lever Length 455mm
2. Short Parallel BSP Thread	8. Lever Length 300mm	14. Stem Sleeve
3. Long Parallel BSP Thread	9. Lever Length 355mm	15. Backnut
4. Lever Length 125mm	10. Lever Length 400mm	
5. Lever Length 170mm	11. Lever Length 425mm	
6. Lever Length 200mm	12. Lever length 440mm	

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Note: All lever lengths are approximate.

Philmac Float Valves

THROUGH VALVES

Nom Size	BSP Size	Carton QTY	Philmac Code	VX Code
Brass Valve with Float	¾"	15	AQ100B	91972
Brass Valve with Float	1"	15	AQ200B	91973
Brass Valve with Float	1¼"	15	AQ300B	91974
Brass Valve with Float	¾"	15	AQ400P	91975
Brass Valve with Float	1"	15	AQ500P	91976
Float & Poly Tube Only	1¼"	20	AQ600P	91977
Float & Poly Tube Only		20	AQ900	91978

STAINLESS STEEL 316 FLOAT VALVES

Nom Size	BSP Size	Rec. Float Size	Philmac Code	VX Code
15	½"	125	90399100	91979
20	¾"	125	90399200	91980
25	1"	125	90399300	91981
40	1½"	200	90399500	91982

SERVO TANK FILLING VALVES (Includes Lever)

Nom Size	BSP Size	Rec. Float Size	Philmac Code	VX Code
40	1½"	255	90381500	91983
50	2"	255	90381600	91984
80	3"	255	90381700	91985

CISTERN VALVES

Nom Size	Code	BSP Size	Rec. Float Size	Min QTY	Philmac Code	VX Code
80	2/9	3"	100	50	91152700	91986

^CODES:		
1. Tapered BSP Thread	7. Lever Length 250mm	13. Lever Length 455mm
2. Short Parallel BSP Thread	8. Lever Length 300mm	14. Stem Sleeve
3. Long Parallel BSP Thread	9. Lever Length 355mm	15. Backnut
4. Lever Length 125mm	10. Lever Length 400mm	
5. Lever Length 170mm	11. Lever Length 425mm	
6. Lever Length 200mm	12. Lever length 440mm	

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Note: All lever lengths are approximate.

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Philmac Float Valves

PLASTIC FLOATS (Cold Water Applications up to 60ºC) BLACK

Nom Size	BSP Size		Philmac Code	VX Code
80	3"	5/16" Whit.	90499300	91987
100	4"	5/16" Whit.	90499400 (Oval)	91988
150	6"	5/16" Whit.	90499600	91989
175	7"	⅜" Whit.	90499700	91990

* To connect to screwed lever valves, use adaptor No. 90 1738 00.

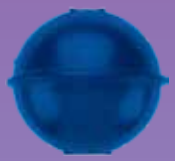
PLASTIC FLOATS (Hot Water Applications up to 95ºC) WHITE

Nom Size	BSP Size		Philmac Code	VX Code
80	3"	5/16" Whit.	90499100	91991
100	4"	5/16" Whit.	90499500 (Oval)	91992

PLASTIC FLOATS (For High Flow Float Valves) BLUE

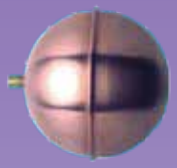
Nom Size	BSP Size	Philmac Code	VX Code
175	7"	90499710*	91949
225	9"	90499900	91950

* Low pressure option only



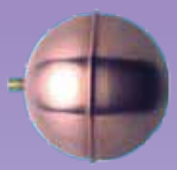
COPPER FLOATS (Hot Water Rated up to 60ºC)

Nom Size	BSP Size		Philmac Code	VX Code
80	3"	5/16" Whit.	90161400	91993
115	41/2"	5/16" Whit.	90161700	91994
125	5"	5/16" Whit.	90161500	91995
150	6"	5/16" Whit.	90161800	91996
175	7"	⅜" Whit.	90161900	91997
200	8"	⅜" Whit.	90162100	91998
255	10"	½" Whit.	90162300	91999



COPPER FLOATS (Hot Water Rated up to 95ºC)

Nom Size	BSP Size		Philmac Code	VX Code
115	41/2"	5/16" Whit.	90162800	92000
150	6"	5/16" Whit.	90162900	92001
175	7"	⅜" Whit.	90163000	92002
200	8"	⅜" Whit.	90163100	92003
255	10"	½" Whit.	90163200	92004



STAINLESS STEEL FLOATS (Cold or Hot Water Rated up to 95ºC)

Nom Size	BSP Size		Philmac Code	VX Code
125	5"	5/16" Whit.	90164500	92005
200	8"	⅜" Whit.	90164800	92006

^CODES:		
1. Tapered BSP Thread	7. Lever Length 250mm	13. Lever Length 455mm
2. Short Parallel BSP Thread	8. Lever Length 300mm	14. Stem Sleeve
3. Long Parallel BSP Thread	9. Lever Length 355mm	15. Backnut
4. Lever Length 125mm	10. Lever Length 400mm	
5. Lever Length 170mm	11. Lever Length 425mm	
6. Lever Length 200mm	12. Lever length 440mm	

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Note: All lever lengths are approximate.

Philmac® Valves

THREADED ADAPTOR (Brass)

Nom Size	BSP Size	Connection Type	Philmac Code	VX Code
125	5"	5/8"Male x 1/2"-3/8"Female	90173800	92007
200	8"	1/2"Male x 3/8"Female	90173500	92008

FLOAT ATTACHMENT CORD

	Connection Type	Philmac Code	VX Code
	5/16" Female Whit. x 5/16" Male Whit.	90171800	92009

For underwater applications to suit 1/2" (15), 3/4" (20) & 1" (25)mm Valves

SCREWED SERIES RATIO VALVES (Tested)

Nom Size	Code	BSP Size	Carton QTY	Philmac Code	VX Code
15	2:1	½"	1	90222100	92010
15	3:1	½"	1	90223100	92011
20	2:1	¾"	1	90222200	92012
20	3:1	¾"	1	90223200	92013
25	2:1	1"	1	90222300	92014
25	3:1	1"	1	90223300	92015
40	2:1	1½"	1	90222500	92016
40	3:1	1½"	1	90223500	92017
50	2:1	2"	1	90222600	92018
50	3:1	2"	1	90223600	92019

^CODES:		
1. Tapered BSP Thread	7. Lever Length 250mm	13. Lever Length 455mm
2. Short Parallel BSP Thread	8. Lever Length 300mm	14. Stem Sleeve
3. Long Parallel BSP Thread	9. Lever Length 355mm	15. Backnut
4. Lever Length 125mm	10. Lever Length 400mm	
5. Lever Length 170mm	11. Lever Length 425mm	
6. Lever Length 200mm	12. Lever length 440mm	

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Note: All lever lengths are approximate.

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Philmac Valves

FLANGED SERIES RATIO VALVES (Tested)						
Body Control Size	Ratio	Flange Sizes to AS 2129		Table Pattern	Philmac Code	VX Code
50	2:1	50	2"	D/E	90260100	92020
50	3:1	50	2"	D/E	90260200	92021
50	4:1	50	2"	D/E	90260300	92022
50	5:1	50	2"	D/E	90260400	92023
50	2:1	65	2½"	D/E	90260500	92024
50	3:1	65	2½"	D/E	90260600	92025
50	4:1	65	2½"	D/E	90260700	92026
50	5:1	65	2½"	D/E	90260800	92027
50	1.5:1	80	3"	D/E	90261700	92028
50	2:1	80	3"	D/E	90260900	92029
50	3:1	80	3"	D/E	90261000	92030
50	4:1	80	3"	D/E	90261100	92031
50	5:1	80	3"	D/E	90261200	92032
80	1.5:1	80	3"	D/E	90263900	92033
80	2:1	80	3"	D/E	90262600	92034
80	3:1	80	3"	D/E	90262700	92035
80	4:1	80	3"	D/E	90262800	92036
80	5:1	80	3"	E	90262900	92037
80	1.5:1	100	4"	E	90263400	92038
80	2:1	100	4"	E	90263000	92039
80	3:1	100	4"	E	90263100	92040
80	4:1	100	4"	E	90263200	92041
80	5:1	100	4"	E	90263300	92042
100	1.5:1	100	4"	E	90266000	92043
100	2:1	100	4"	E	90265100	92044
100	3:1	100	4"	E	90265200	92045
100	4:1	100	4"	E	90265300	92046
100	5:1	100	4"	E	90265400	92047
100	1.5:1	150	6"	E	90266500	92048
100	2:1	150	6"	E	90265500	92049
100	3:1	150	6"	E	90265600	92050
100	4.1	150	6"	E	90265700	92051
100	5.1	150	6"	E	90265800	92052
150	2:1	150	6"	E	90267600	92053
150	3:1	150	6"	E	90267700	92054
150	4:1	150	6"	E	90267800	92055
150	5:1	150	6"	E	90267900	92056

POA for Marine Grade Ratio Valves.

TECHNICAL INFORMATION - BALL VALVES

SYSTEM DESIGN CONSIDERATIONS

Threads: All threads are BSP (Whitworth form).

Maximum Operating Pressure: 1600 kPa (232psi) or 16 bar.

Sealing threads: Philmac recommends sealing threads with PTFE tape. Other approved sealants for plastic materials can be used providing the sealant does not enter the valve where it may cause damage.

Operating temperature: Connection is cold water (less than 20^{0}C) rated.

Weathering: All plastic materials used contain pigments to provide excellent protection against degradation from ultra-violet (UV) radiation. However long-term continuous exposure to UV is not recommended and plastic components should ideally be protected.

Pressure Loss (kPa)

Flow Rate (L/s)	Inlet Size					
	½" (DN15)	¾" (DN20)	1" (DN25)	1 ¼" (DN32)	1 ½" (DN40)	2" (DN50)
1	14	14	10	*	*	*
1.5	27	27	11	*	*	*
2	44	44	13	6	*	*
2.5	64	64	16	8	*	*
3	89	89	20	11	5	*
4	-	-	33	19	8	*
5	-	-	50	28	13	*
6	-	-	72	39	18	6
7	-	-	99	51	23	8
8	-	-	-	65	30	10
9	-	-	-	81	37	12
10	-	-	-	98	45	15
12	-	-	-	-	63	20
14	-	-	-	-	83	26
16	-	-	-	-	-	33
18	-	-	-	-	-	40
20	-	-	-	-	-	49
22	-	-	-	-	-	58
24	-	-	-	-	-	67
26	-	-	-	-	-	78
28	-	-	-	-	-	89

* Denotes pressure loss too small to accurately measure but can be assumed to be 5 kPa or less.

CHEMICAL RESISTANCE

Philmac's blue handled ball valves are primarily designed to convey water. However there may be occasions where the water contains chemicals and/or alternative fluids need to be controlled. The following table is provided as a guide only for the compatibility of various chemicals and alternative fluids to Philmac blue handled ball valves. The mixing together of chemicals may affect the compatibility. Philmac blue handled ball valves are NOT suited for acids.

Chemical	Compatibility
Acetic acid (10%)	N
Acetic acid (50%)	N
Alcohol (ethanol)	N
Ammonium nitrate	R
Antifreeze	R
Brine	N
Calcium carbonate	R
Calcium chloride	R
Calcium nitrate	R
Calcium sulphate	
Chlorine water	N
Citric Acid	N
Copper Sulphate >5%	N
Diesel (fuel)	N
Ethyl alcohol (ethanol)	N
Hydrochloric acid (10%)	N
Hydrochloric acid (30%)	N
Kerosene	R
Lubricating oils (not synthetic)	R
Magnesium nitrate	R
Magnesium sulphate	R
Mineral oils	R
Nitric acid (10%)	N
Nitric acid (40%)	N
Olive oil	R
Orange juice	
Petrol	R
Phosphoric acid (85%)	N
Drinking water	R
Potassium chloride	R
Potassium nitrate	R
Potassium sulphate	
Sodium bicarbonate	
Sodium hypochlorite (<10%)	N
Sulphuric acid (10%)	N
Sulphuric acid (30%)	N
Urea	R
Zinc nitrate	N
Zinc sulphate	

N = Not Recommended
R = Resistant
Empty Cell = No data available

Note recommendations based on fluids at 20^{0}C or less.

BLUE HANDLED BALL VALVES OPERATION & INSTALLATION INSTRUCTIONS

Philmac blue handled ball valves operate by using a handle to turn a ball located in a body through 90°. The ball has a hole through the centre of it which allows water to pass through when in the open position.

To turn the valve on, the blue handle needs to be turned 90° until the blue handle sits in-line with the body of the valve. To turn the valve off rotate the handle through 90° until it is at right angles to the valve body. Care should be taken when closing the valve. It should not be closed too quickly or water hammer may result.

Philmac blue handled ball valves are sold in the open position with the blue handle directly in line with the body. This protects the ball and ensures no scoring has occurred, therefore every valve arrives in excellent condition.

They have been designed for water to flow through in either direction and for this reason there is no specific inlet or outlet. In some instances it may be appropriate to mark the direction of water flow where it may not be obvious in which direction the water flows.

Ball (Female Inlet/Outlet)

1. Apply PTFE tape or approved sealant to the male thread the blue handled ball valve is to be screwed in too. Sufficient tape needs to be applied to ensure a watertight seal

2. Screw onto a male thread or screw male thread into the valve by hand until firm

3. Using a pipe wrench or multigrips on the end caps only, further screw the blue handled ball valve into the male thread until tight. Where necessary ensure the male thread is held stationary to avoid it from moving. Do not use pipe wrench or multi-grips on the body of the blue handled ball valve.

For further technical information refer to the Philmac Website
www.philmac.com.au

Electrofusion

FRIATEC was founded in 1863 in Manheim, Germany and has successfully brought to market many innovative ranges. FRIATEC patented electrofusion system is world leading and has been used in projects all around the globe. The FRIALEN range is rated to PN16 and is commonly used in the civil, mining and irrigation sectors. The FRIAFIT range of fittings is rated to PN10 and is most suited to applications with lower pressures, such as those found in irrigation and sewerage situations. FRIATEC innovative electrofusion products include many unique features, all of which are designed to improve the speed of installation and use without compromising on the quality and longevity of the connection made.

PREHEATING

In large bore couplers (280mm +) there is a special preheating barcode which, when scanned, does not fuse the coupler but rather heats it and the pipe up to 80 degrees centigrade.

Large bore pipe is often oval. This can present problems. The maximum allowable gap between the fitting and pipe outside surface is equal to 1% of the pipe outside diameter. When pipe is loaded concentrically, gaps larger than this can significantly impact on the integrity of the formed joint and fusion should not be attempted. Using the preheating function the pipe is heated up to 80 degrees centigrade, which returns the pipe to the round. This can be run a number of times and gaps of up to 3mm can be closed in this way.

DUAL FUSION ZONE

In large bore couplers (280mm + above) there are two separate fusion zones. This means when carrying out an electrofusion joint in a tight trench situation one end of the pipe can be fused above ground in easier conditions. Only one side of the joint then needs to be made in the trench.

EMBEDDED HEATING COILS

Wires are embedded in fitting surface with 1/3 being exposed. This provides the following benefits:

- Maximum efficiency of transfer between coupler and pipe. Heat does not have to travel through the wall of the fitting before hitting the pipe so there is an equal transfer of heat between the pipe and fitting as well as reduced fusion time.
- Coils are embedded therefore there is no chance of wires being dislodged.
- Ability to visually check wire integrity prior to fusion.
- Pipe gripped in fitting almost immediately fusion has commenced eliminating need for clamps (unless pipe is under an external load).

EXTERNAL REINFORCEMENT

In large bore couplers (250mm + above) the couplers have external wires wrapped around them which provides a reinforcement during fusion.

- During fusion high pressures build up inside the fitting and this is particularly so with large bore couplers. External reinforcement is required to hold the fitting onto the pipe during the fusion process. Without it there is a danger that the fitting will lift off the pipe and cause a failure. FRIATEC couplers come complete with this reinforcement so no further action is required. With other couplers a reinforcing blanket may be required to achieve the full integrity joint.

Electrofusion Fittings

COUPLER SDR 11 PE100

Size	Frialen Model	Water	Gas	SDR	Old Code	Friatec Code	VX Code
16	MB	PN16	PN10	11	71303		88400
20	MB	PN16	PN10	11	71300	612680	88401
25	MB	PN16	PN10	11	71302	612681	88402
32	MB	PN16	PN10	11	71304	612682	88403
40	MB	PN16	PN10	11	71306	612683	88404
50	MB	PN16	PN10	11	71308	612684	88405
63	MB	PN16	PN10	11	71310	612685	88406
75	MB	PN16	PN10	11	71312	612686	88407
90	MB	PN16	PN10	11	71314	612687	88408
**110	MB	PN16	PN10	11	71316	612688	88409
125	MB	PN16	PN10	11	71318	612689	88410
140	MB	PN16	PN10	11	71319	612690	88411
**160	MB	PN16	PN10	11	71320	612691	88412
180	UB	PN16	PN10	11	71321	612672	88413
200	UB	PN16	PN10	11	71324	612673	88414
225	UB	PN16	PN10	11	71323	612674	88415
250	UB	PN16	PN10	11	71326	612675	88416
280	UB	PN16	PN10	11	71327	615073	88417
315	UB	PN16	PN10	11	71328	612670	88418
355	UB	PN16	PN10	11	71329	615074	88419
†400	UB	PN16	PN10	11	71473	615075	88420
†450	UB	PN16	PN10	11	71558	615076	88421
†500	UB	PN16	PN10	11	71557	615124	88422
†560	UB	PN16	PN10	11	71488	616312	88423
†630	UB	PN16	PN10	11	71334	616269	88424
†710	UB	PN16	PN10	11	71338	616313	88425
†800	UB	PN16	PN10	11	68769	616314	88426
†900	UB	PN16	PN10	11		616440	88427

COUPLER SDR 17 PE100

Size	Frialen Model	Water	Gas	SDR	Old Code	Friatec Code	VX Code
50	MB	PN10	PN5	17			89284
90	MB	PN10	PN5	17	71569		88450
110	AM	PN10	PN5	17	71570	680001	88451
125	AM	PN10	PN5	17	71571	680013	88452
140	AM	PN10	PN5	17	71572	615001	88453
160	AM	PN10	PN5	17	71573	680002	88454
180	AM	PN10	PN5	17	71574	680003	88455
200	AM	PN10	PN5	17	71575	680004	88456
225	AM	PN10	PN5	17	71576	680005	88457
250	AM	PN10	PN5	17	71577	680006	88458
280	AM	PN10	PN5	17	68761	680007	88459
315	AM	PN10	PN5	17	68762	680008	88460
355	AM	PN10	PN5	17	68763	680009	88461
400	AM	PN10	PN5	17	71578	680010	88462
450	AM	PN10	PN5	17	71475	680011	88463
500	AM	PN10	PN5	17	71476	680012	88464
†560	UB	PN10	PN5	17	71322	615706	88465
†630	UB	PN10	PN5	17	71333	615726	88466
†710	UB	PN10	PN5	17	71335	615994	88467
†800	UB	PN10	PN5	17	68768	616290	88468
†900	UB	PN10	PN5	17		616345	88469
†1000	UB	PN10	PN5	17		616403	88470
†1200	UB	PN10	PN5	17		616416	88471

†With preheating technology
**Also suitable for SDR 21
The UB d 1000 and above can only be fused with the FRIAMAT XL.

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Electrofusion Fittings

SLIDE OVER COUPLER SDR 9 PE 100

Size	Frialen Model	Water	SDR	Old Code	Friatec Code	VX Code
400	UB	PN20	9		616441	89285
450	UB	PN20	9		616447	89286
500	UB	PN20	9		616445	89287
560	UB	PN20	9		616446	89288
630	UB	PN20	9		616439	89289

SLIDE OVER COUPLER SDR 7.4 PE 100

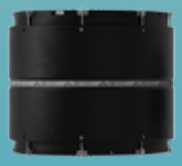
Size	Frialen Model	Water	SDR	Old Code	Friatec Code	VX Code
20	MB	PN25	7.4	71300	612680	88401
25	MB	PN25	7.4	71302	612681	88402
32	MB	PN25	7.4	71304	612682	88403
40	MB	PN25	7.4	71306	612683	88404
50	MB	PN25	7.4	71308	612684	88405
63	MB	PN25	7.4	71310	612685	88406
75	MB	PN25	7.4	71312	612686	88407
90	UB	PN25	7.4	62327	616270	88431
110	UB	PN25	7.4	62319	616271	88432
125	UB	PN25	7.4	62320	616272	88433
140	UB	PN25	7.4			89270
160	UB	PN25	7.4			89271
180	UB	PN25	7.4	62321	616282	88434
200	UB	PN25	7.4	62322	616283	88435
225	UB	PN25	7.4	62323	616284	88436
250	UB	PN25	7.4	62305	616285	88437
280	UB	PN25	7.4	62306	616286	88438
315	UB	PN25	7.4	62307	616287	88439
355	UB	PN25	7.4		616288	88440

LONG COUPLER SDR 11 PE100

Size	Frialen Model	Water	Gas	SDR	Old Code	Friatec Code	VX Code
32	FRIALONG	PN16	PN10	11	68755	615376	88442
40	FRIALONG	PN16	PN10	11	68756	615737	88443
50	FRIALONG	PN16	PN10	11	68757	615608	88444
63	FRIALONG	PN16	PN10	11	68758	615738	88445

CONICAL COUPLER SDR 17 PE 100

Size	Frialen Model	Water	Gas	SDR	Friatec Code	VX Code
630	KM-XL	PN10	PN5	17	616523	89290
1000	KM-XL	PN10	PN5	17	616434	89291
1200	KM-XL	PN10	PN5	17	616435	89292



RELINING SLIDE-OVER COUPLER SDR 17 PE 100

Size	Frialen Model	Water	Gas	SDR	Friatec Code	VX Code
110/100	REM	PN10	PN5	17	615569	89293
160/150	REM	PN10	PN5	17	615571	89294
315/300	REM	PN10	PN5	17	615576	89295
400/375	REM	PN10	PN5	17	616344	89296

NOTES

MB SDR11 coupler come complete with removeable stops.
UB SDR 7.4, SDR 9, SDR 11, SDR 17 slide over coupler no centre stops.
Coupler 400-1200mm come complete with preheat technology and dual fusion zones.
400-450mm preheat use optional.
MB coupler s 20-75mm suitable for SDR 7.4, SDR 9 and SDR 11 applications.
For the conical ring couplers a FRIAMAT XL is required.

REDUCING COUPLER SDR 11 PE 100

Size	Frialen Model	Water	Gas	SDR	Old Code	Friatec Code	VX Code
20 x 16	MR	PN16	PN10	11	60030		TBA
*25 x 20	MR	PN16	PN10	11	69085	1101410	88473
32 x 16	MR	PN16	PN10	11		616452	TBA
32 x 20	MR	PN16	PN10	11	69089	615386	88476
32 x 25	MR	PN16	PN10	11	69091	615502	88477
40 x 20	MR	PN16	PN10	11		615387	88478
40 x 32	MR	PN16	PN10	11	69093	615388	88480
50 x 20	MR	PN16	PN10	11		612069	88481
50 x 32	MR	PN16	PN10	11	69099	612070	88483
50 x 40	MR	PN16	PN10	11	69900	612071	88484
63 x 32	MR	PN16	PN10	11	69105	615389	88486
63 x 40	MR	PN16	PN10	11	69107	615390	88487
63 x 50	MR	PN16	PN10	11	69109	612072	88488
90 x 50	MR	PN16	PN10	11	68771	615391	88491
90 x 63	MR	PN16	PN10	11	69111	615392	88492
110 x 63	MR	PN16	PN10	11	69119	615393	88494
110 x 90	MR	PN16	PN10	11	69121	615693	88495
125 x 90	MR	PN16	PN10	11	69123	615694	88496
125 x 110	MR	PN16	PN10	11	69117		88497
160 x 110	MR	PN16	PN10	11	68773	615695	88499
180 x 125	MR	PN16	PN10	11	69131		88501
225 x 160	MR	PN16	PN10	11		616356	88502

Please refer to page 114 for a more comprehensive range of Spigot Reducers. *4.7mm adaptors required.

Electrofusion Fittings

90° EQUAL TEE SDR 11 PE 100

Size	Frialen Model	Water	Gas	SDR	Old Code	Friatec Code	VX Code
20 x 20 x 20		PN16	PN10	11	62090	3011020	88503
25 x 25 x 25	TA(KIT)	PN16	PN10	11	67655	616335	88504
32 x 32 x 32	TA(KIT)	PN16	PN10	11	71092	612161	88505
40 x 40 x 40	TA(KIT)	PN16	PN10	11	71093	612162	88506
50 x 50 x 50	TA(KIT)	PN16	PN10	11	71094	612163	88507
63 x 63 x 63	TA(KIT)	PN16	PN10	11	71095	612164	88508
75 x 75 x 75	T	PN16	PN10	11	71096	612165	88509
90 x 90 x 90	T	PN16	PN10	11	71097	612166	88510
110 x 110 x 110	T	PN16	PN10	11	71098	612167	88511
125 x 125 x 125	T	PN16	PN10	11	71099	612168	88512
160 x 160 x 160	T	PN16	PN10	11	71101	615277	88513
180 x 180 x 180	T	PN16	PN10	11	71102	615691	88514
200 x 200 x 200	T	PN16	PN10	11	71100	616266	88515
225 x 225 x 225	T	PN16	PN10	11	71105	615692	88516
250 x 250 x 250	T-XL	PN16	PN10	11	71113	616412	88517
280 x 280 x 280	T-XL	PN16	PN10	11		616413	89269
315 x 315 x 315	T-XL	PN16	PN10	11		616414	89297

TA-(KIT) are Spigot Tees with coupling.

90° REDUCING TEE SDR 11 PE 100

Size	Frialen Model	Water	Gas	SDR	Old Code	Friatec Code	VX Code
1 2 3							
32 x 32 x 20	TA red	PN16	PN10	11	62021	616417	88520
40 x 40 x 32	TA red	PN16	PN10	11	60002	616418	88524
50 x 50 x 32	TA red	PN16	PN10	11	62025	616419	88527
50 x 50 x 40	TA red	PN16	PN10	11	60004	616420	88528
63 x 63 x 32	TA red	PN16	PN10	11	62029	616421	88530
63 x 63 x 40	TA red	PN16	PN10	11	62182	616422	88531
63 x 63 x 50	TA red	PN16	PN10	11	62183	616423	88532
180 x 180 x 125		PN16	PN10	11	62095		89534

1 = Main 2 = Main 3 = Offtake

Please refer to page 112 for a more comprehensive range of Spigot Reducing Tees.

90° REDUCING TEE OUTLET SPIGOT PIPE SDR 11 PE 100

Size	Frialen Model	Water	Gas	SDR	Old Code	Friatec Code	VX Code
250 x 250 x 110	T red XL	PN16	PN10	11	60012	616426	88552
250 x 250 x 225	T red XL	PN16	PN10	11		616427	89298
280 x 280 x 110	T red XL	PN16	PN10	11		616428	89268
280 x 280 x 225	T red XL	PN16	PN10	11		616429	89299
315 x 315 x 110	T red XL	PN16	PN10	11		616430	89300
315 x 315 x 225	T red XL	PN16	PN10	11		616431	89301

FULL FACED BRANCH TEE (W/SS 316 BACKING RING) SDR 11 PE 100

Size	Water	SDR	Old Code	VX Code
1 2 3				
125 x 125 x 90	PN16	11	80876	88561

FULL FACED BRANCH SADDLE (W/SS 316 BACKING RING) SDR 11 PE 100

Size	Water	SDR	Old Code	VX Code
1 2 3				
125 x 125 x 90	PN16	11	80878	80870
180 x 180 x 90	PN16	11	80877	80871

1 = Main 2 = Main 3 = Offtake

Full faced flange and SS ring drilled 4 x 18 @ 46 PCD and 4 x 18 @ 178 PCD

HYDRANT FLANGE ASSEMBLY (W/SS 316 BACKING RING D) SDR 11 PE 100

Size	Water	SDR	VX Code
125 x 100 Maxi Stub	PN16	11	73458
180 x 100 Maxi Stub	PN16	11	73464

*4.7mm adaptors required

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Electrofusion Fittings

90° ELBOW SDR 11 PE 100

Size	Frialen Model	Water	Gas	SDR	Old Code	Friatec Code	VX Code
20	W90°	PN16	PN10	11	70520	3701020	88630
25	W90°	PN16	PN10	11	70522	612091	88631
32	W90°	PN16	PN10	11	70523	612093	88632
40	W90°	PN16	PN10	11	70524	612095	88633
50	W90°	PN16	PN10	11	70526	612097	88634
63	W90°	PN16	PN10	11	70527	612099	88635
75	W90°	PN16	PN10	11	62044	612101	88636
90	W90°	PN16	PN10	11	70528	612103	88637
110	W90°	PN16	PN10	11	70529	612105	88638
125	W90°	PN16	PN10	11	70515	612107	88639
160	W90°	PN16	PN10	11	70531	615276	88641
180	W90°	PN16	PN10	11	70517	615689	88642
200	W90°	PN16	PN10	11	71615	616265	88643
225	W90°	PN16	PN10	11	71616	615690	88644
250	W90° XL	PN16	PN10	11	71617	616408	88645
280	W90° XL	PN16	PN10	11		616409	88646
315	W90° XL	PN16	PN10	11		616410	88647

45° ELBOW SDR 11-16 PE 100

Size	Frialen Model	Water	Gas	SDR	Old Code	Friatec Code	VX Code
32	W45°	PN16	PN10	11	69999	612092	88614
40	W45°	PN16	PN10	11	69995	612094	88615
50	W45°	PN16	PN10	11	70003	612096	88616
63	W45°	PN16	PN10	11	70005	612098	88617
75	W45°	PN16	PN10	11	70007	612100	88618
90	W45°	PN16	PN10	11	70013	612102	88619
**110	W45°	PN16	PN10	11	69996	612104	88620
125	W45°	PN16	PN10	11	70017	612106	88621
**160	W45°	PN16	PN10	11	69997	615275	88623
180	W45°	PN16	PN10	11	70019	615687	88624
200	W45°	PN16	PN10	11	71612	616264	88625
225	W45°	PN16	PN10	11	71613	615688	88626
250	W45° XL	PN16	PN10	11	71614	616404	88627
280	W45° XL	PN16	PN10	11		616405	88628
315	W45° XL	PN16	PN10	11		616406	88629

30° ELBOW SDR 11 PE 100

Size	Frialen Model	Water	Gas	SDR		Friatec Code	VX Code
90	W30°	PN16	PN10	11		615272	88607
110	W30°	PN16	PN10	11		615273	88608
125	W30°	PN16	PN10	11		615274	88609
**160	W30°	PN16	PN10	11		615340	88610
180	W30°	PN16	PN10	11		616261	88611
200	W30°	PN16	PN10	11		616262	88612
225	W30°	PN16	PN10	11		616263	88613

11° ELBOW SDR 11 PE 100

Size	Frialen Model	Water	Gas	SDR		Friatec Code	VX Code
110	WS11°	PN16	PN10	11		616139	88597
125	WS11°	PN16	PN10	11		616140	88598
160	WS11°	PN16	PN10	11		616141	88599
180	WS11°	PN16	PN10	11		616142	88600
225	WS11°	PN16	PN10	11		616143	88601

Spigot socket arrangement.

END CAP SDR 11 PE 100

SIZE	Frialen Model	Water	Gas	SDR	Old Code	Friatec Code	VX Code
20	MV	PN16	PN10	11	71201	612025	88758
25	MV	PN16	PN10	11	71203	612026	88759
32	MV	PN16	PN10	11	68791	612027	88760
40	MV	PN16	PN10	11	68794	612028	88761
50	MV	PN16	PN10	11	68804	612029	88762
63	MV	PN16	PN10	11	68805	612030	88763
75	MV	PN16	PN10	11	71212	612031	88764
90	MV	PN16	PN10	11	71215	612032	88765
110	MV	PN16	PN10	11	71229	612033	88766
125	MV	PN16	PN10	11	71231	612034	88767
160	MV	PN16	PN10	11	71235	612035	88769
180	MV	PN16	PN10	11	71237	616183	88770
200	MV	PN16	PN10	11	71239	616184	88771
225	MV	PN16	PN10	11	71241	616185	88772

*4.7mm adaptors required

**Suitable for SDR 17-33

Electrofusion Fittings

90° DUCKFOOT ELBOW SDR 11 PE 100

Size	Frialen Model	Water	SDR	Old Code	Friatec Code	VX Code
90 x 90 x 63	WF90°	PN16	11		615989	89278
110 x 110 x 63	WF90°	PN16	11	60379	615998	89276

90° TRANSITION ELBOW - MALE BRASS BSP OUTLET SDR 11 PE 100

Size	Frialen Model	Water	SDR	Old Code	Friatec Code	VX Code
32 x 1"	WUN90°	PN16	11	62046	612120	88654
32 x 1½"	WUN90°	PN16	11	62048	612140	88656
40 x 1"	WUN90°	PN16	11	62049	612127	88657
40 x 1¼"	WUN90°	PN16	11	62050	612122	88658
40 x 1½"	WUN90°	PN16	11	62051	612121	88659
50 x 1"	WUN90°	PN16	11	62053	612119	88661
50 x 1¼"	WUN90°	PN16	11	62054	612123	88662
50 x 1½"	WUN90°	PN16	11	62055	612124	88663
50 x 2"	WUN90°	PN16	11	62056	615894-10	88664
63 x 1½"	WUN90°	PN16	11	62058	612125	88666
63 x 2"	WUN90°	PN16	11	62059	612126	88667

MALE ADAPTOR E/F LONG SPIGOT SDR 11 PE 100

Size	Water	Gas	SDR	Old Code	Supplier	VX Code
25 x ¾"	PN16	PN10	11	68863	NTG	68863
32 x 1"	PN16	PN10	11	68864	NTG	68864
40 x 1"	PN16	PN10	11	68865	NTG	68865
40 x 1¼"	PN16	PN10	11	68866	NTG	68866
40 x 1½"	PN16	PN10	11	68867	NTG	68867
*50 x 1½"	PN16	PN10	11	68868	NTG	68868
63 x 1½"	PN16	PN10	11	68869	NTG	68869
63 x 2"	PN16	PN10	11	68870	NTG	68870

FEMALE ADAPTOR E/F LONG SPIGOT SDR 11 PE 100

Size	Water	Gas	SDR	Old Code	VX Code
20 x ½"	PN16	PN10	11	90017	90017
25 x ¾"	PN16	PN10	11	90018	90018
32 x 1"	PN16	PN10	11	90019	90019
40 x 1"	PN16	PN10	11		
40 x 1¼"	PN16	PN10	11	90020	90020
50 x 1½"	PN16	PN10	11	90021	90021
63 x 2"	PN16	PN10	11	90022	90022

MALE BRASS ADAPTOR INSERT LONG SPIGOT SDR 11 PE 100

Size	Frialen Model	Water	Gas	SDR	Old Code	NTG/FRIATEC	VX Code
20 x ½"		PN16	PN10	11	61693		61693
25 x ¾"		PN16	PN10	11	61694		61694
32 x 1"	UAN	PN16	PN10	11	61697	616152	88711
32 x 1¼"	UAN	PN16	PN10	11			61698
40 x 1¼"	UAN	PN16	PN10	11	61701	616153	88712
40 x 1½"	UAN	PN16	PN10	11			61702
50 x 1"	UAN	PN16	PN10	11			61704
50 x 1½"	UAN	PN16	PN10	11	61706	616154	88713
50 x 2"	UAN	PN16	PN10	11			61707
63 x 2"	UAN	PN16	PN10	11	61710	616155	88714
75 x 2"	UAN	PN16	N/A	11			61711
75 x 2½"	UAN	PN16	N/A	11			61712
90 x 3"	UAN	PN16	N/A	11		616613	88668
110 x 4"	UAN	PN16	N/A	11		616614	88669
125 x 4"	UAN	PN16	N/A	11		616664	88670

FEMALE BRASS ADAPTOR INSERT LONG SPIGOT SDR 11 PE 100

Size	Frialen Model	Water	Gas	SDR	Old Code	NTG/FRIATEC	VX Code
20 x ½"		PN16	PN10	11	61713		61713
25 x ¾"		PN16	PN10	11	61714		61714
32 x 1"	UAM	PN16	PN10	11	61716	616156	88718
40 x 1"	UAM	PN16	PN10	11			61718
40 x 1¼"	UAM	PN16	PN10	11	61719	616157	88719
40 x 1½"	UAM	PN16	PN10	11			61720
50 x 1½"	UAM	PN16	PN10	11	61721	616158	88720
63 x 1½"	UAM	PN16	PN10	11			61723
63 x 2"	UAM	PN16	PN10	11	61724	616159	88721
75 x 2½"	UAM	PN16	N/A	11		616665	88671
90 x 3"	UAM	PN16	N/A	11		616623	88672
110 x 4"	UAM	PN16	N/A	11		616624	88673
125 x 4"	UAM	PN16	N/A	11		616666	88674

45° TRANSITION ELBOW - MALE BRASS OUTLET SDR 11 PE 100

Size	Frialen Model	Water	SDR	Old Code	Friatec Code	VX Code
32 x 1"	WUN45°	PN16	11	62068	612145	88732
40 x 1¼"	WUN45°	PN16	11	62072	612149	88728
40 x 1½"	WUN45°	PN16	11	62073	612139	88733
50 x 1½"	WUN45°	PN16	11	62077	612144	88737
63 x 1½"	WUN45°	PN16	11	62080	612147	88740
63 x 2"	WUN45°	PN16	11	62081	612146	88741

*4.7mm adaptors required

Electrofusion Fittings

TRANSITION COUPLING - MALE BRASS BSP OUTLET SDR 11 PE 100

Size	Frialen Model	Water	SDR	Old Code	Friatec Code	VX Code
20 x ½"	MUN	PN16	11	62294	612710	88792
25 x ¾"	MUN	PN16	11	62018	612711	88793
*32 x ¾"		PN16	11	68785		68785
32 x 1"	MUN	PN16	11	71330	612712	88796
32 x 1¼"	MUN	PN16	11	62019	612709	88797
32 x 1½"	MUN	PN16	11	62020	612698	88798
40 x 1"	MUN	PN16	11	71282	612721	88799
40 x 1¼"	MUN	PN16	11	71283	612713	88800
40 x 1½"	MUN	PN16	11	71284	612718	88801
40 x 2"	MUN	PN16	11	62023	612725	88802
50 x 1"	MUN	PN16	11	71287	612719	88803
50 x 1¼"	MUN	PN16	11	71289	612716	88804
50 x 1½"	MUN	PN16	11	71291	612714	88805
50 x 2"	MUN	PN16	11	62027	612706	88806
63 x 1¼"	MUN	PN16	11	62028	612722	88807
63 x 1½"	MUN	PN16	11	71292	612717	88808
63 x 2"	MUN	PN16	11	71293	612715	88809
75 x 2"	MUN	PN16	11	71294	612694	88810
75 x 2½"	MUN	PN16	11	71295	612695	88811

TRANSITION COUPLING - FEMALE GUNMETAL BSP OUTLET SDR 11 PE 100

Size	Frialen Model	Water	SDR	Old Code	Code	VX Code
*32 x ¾"		PN16	11	67658		67658
*32 x 1"	MUM	PN16	11	71341	612595	71341
40 x 1¼"	MUM	PN16	11	71342	612596	88830
50 x 1½"	MUM	PN16	11	71344	612692	88832
63 x 1½"	MUM	PN16	11	71345	612708	88834
63 x 2"	MUM	PN16	11	71340	612693	88835

TRANSITION UNION - FEMALE BRASS BSP OUTLET SDR 11 PE 100

Size	Frialen Model	Water	SDR	Old Code	Friatec Code	VX Code
25 x ¾"	MUMET	PN16	11	62797	616455	88837
25 x 1"	MUMET	PN16	11	62273	616456	88838
32 x 1"	MUMET	PN16	11	62298	616457	88839
32 x 1¼"	MUMET	PN16	11	62274	616458	88840
40 x 1½"	MUMET	PN16	11	62275	616459	88842
50 x 1"	MUMET	PN16	11	71628	616460	88843
50 x 2"	MUMET	PN16	11	62854	616461	88844
63 x 1"	MUMET	PN16	11		616462	88845

*4.7mm adaptors required

Electrofusion Fittings

SPIGOT SADDLE - WITH UNDERCLAMP SDR 11 PE 100

Size	Frialen Model	Water	Gas	SDR	Old Code	Friatec Code	VX Code
63 x 32	SA	PN16	PN10	11	62096	612757	88848
63 x 50	SA	PN16	PN10	11	62318	612759	88850
63 x 63	SA	PN16	PN10	11		40415311	88851
75 x 50	SA	PN16	PN10	11	62330	615020	88854
90 x 32	SA	PN16	PN10	11	62098	615285	88856
90 x 63	SA	PN16	PN10	11	62106	612819	88859
110 x 32	SA	PN16	PN10	11	62099	615334	88861
110 x 50	SA	PN16	PN10	11	62334	615031	88863
110 x 63	SA	PN16	PN10	11	62107	612760	88864
110 x 90	SA	PN16	PN10	11	69931	615411	88865
125 x 32	SA	PN16	PN10	11	62100	615087	88866
125 x 63	SA	PN16	PN10	11	62108	612761	88869
125 x 90	SA	PN16	PN10	11	62121	615412	88870
160 x 32	SA	PN16	PN10	11	62102	612886	88876
160 x 63	SA	PN16	PN10	11	62110	612762	88879
160 x 90	SA	PN16	PN10	11	62345	615413	88880
160 x 110	SA	PN16	PN10	11		615739	89265
160 x 125	SA	PN16	PN10	11		615585	89266
180 x 63	SA	PN16	PN10	11	62111	612763	88884
180 x 90	SA	PN16	PN10	11	62270	615414	88885
180 x 110	SA	PN16	PN10	11		615948	88886
180 x 125	SA	PN16	PN10	11		615740	88887
200 x 63	SA	PN16	PN10	11	62116	612764	88888
225 x 63	SA	PN16	PN10	11	62119	612765	88890
225 x 90	SA	PN16	PN10	11	62360	615415	88891
225 x 110	SA	PN16	PN10	11		616044	88892
225 x 125	SA	PN16	PN10	11		616045	88893
225 x 160	SA	PN16	PN10	11		616046	88894

If you require reductions please use Reducing Couplers on page 89

SHUT OFF SADDLE SDR 11 PE 100

Size	Frialen Model	Water	Gas	SDR	Old Code	Friatec Code	VX Code
63 x 1½"	SPA	PN16	PN10	11		612753	89332
90 x 2½"	SPA	PN16	PN10	11	68736	612667	88909
110 x 2½"	SPA	PN16	PN10	11	68737	612750	88910
125 x 2½"	SPA	PN16	PN10	11	68738	612751	88911
160 x 2½"	SPA	PN16	PN10	11	68739	612752	88912
180 x 2½"	SPA	PN16	PN10	11	68858	612754	88913
200 x 2½"	SPA	PN16	PN10	11	68740	612755	88914
225 x 2½"	SPA	PN16	PN10	11	68741	612756	88915

SHUT OFF SADDLE - TOP LOADING SDR 11 PE 100

Size	Frialen Model	Water	Gas	SDR	Friatec Code	VX Code
250-315 (560)	SPA-TL	PN16	PN10	11	615395	89267

FRIATOP clamping unit required

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Electrofusion Fittings

SPIGOT SADDLE - TOP LOADING SDR 11 PE 100

Size	Frialen Model	Water	Gas	SDR	Friatec Code	VX Code
250-560 x 32	SA-TL	PN16	PN10	11	615465	88899
250-560 x 63	SA-TL	PN16	PN10	11	615466	88900

UNI-SA TOP LOADING SADDLE

Size	Frialen Model	Water	Gas	SDR	Friatec Code	VX Code
250-280x90	UNI-SA	PN16	PN10	11	616553	89493
250-280x110	UNI-SA	PN16	PN10	11	616554	89494
250-280x125	UNI-SA	PN16	PN10	11	616555	89495
250-280x160	UNI-SA	PN16	PN10	11	616556	89496
315-400x90	UNI-SA	PN16	PN10	11	616557	89497
315-400x110	UNI-SA	PN16	PN10	11	616558	89498
315-400x125	UNI-SA	PN16	PN10	11	616559	89499
315-400x160	UNI-SA	PN16	PN10	11	616560	89500
450-800x90	UNI-SA	PN16	PN10	11	616561	89501
450-800x110	UNI-SA	PN16	PN10	11	616562	89502
450-800x125	UNI-SA	PN16	PN10	11	616563	89503
450-800x160	UNI-SA	PN16	PN10	11	616564	89504

SPIGOT SADDLE - VACUUM SDR 11 PE 100

Size	Frialen Model	Water	Gas	SDR	Friatec Code	VX Code
315 x 225 (*160)	SA-XL	PN16	PN10	11	616387	89368
315 x 250	SA-XL	PN16	PN10	11	616398	89369
355 x 225 (*160)	SA-XL	PN16	PN10	11	616388	88901
355 x 250	SA-XL	PN16	PN10	11	616399	89370
450 x 225 (*160)	SA-XL	PN16	PN10	11	616390	88903
450 x 250	SA-XL	PN16	PN10	11	616401	88904
500 x 160	SA-XL	PN16	PN10	11	616381	88905

SPIGOT SADDLE - VACUUM SDR 17 PE 100

Size	Frialen Model	Water	Gas	SDR	Friatec Code	VX Code
500 x 225	SA-XL	PN10	PN5	17	616391	89371
560 x 160	SA-XL	PN10	PN5	17	616373	89325
560 x 225	SA-XL	PN10	PN5	17	616392	89326
630 x 160	SA-XL	PN10	PN5	17	616374	89327
630 x 225	SA-XL	PN10	PN5	17	616393	89328
710 x 160	SA-XL	PN10	PN5	17	616375	89329
710 x 225	SA-XL	PN10	PN5	17	616394	89330
800 x 160	SA-XL	PN10	PN5	17	616376	89372
800 x 225	SA-XL	PN10	PN5	17	616395	89373
900 x 160	SA-XL	PN10	PN5	17	616377	88902
900 x 225	SA-XL	PN10	PN5	17	616396	89374
1000 x 160	SA-XL	PN10	PN5	17	616378	89375
1000 x 225	SA-XL	PN10	PN5	17	616397	89376
1200 x 160	SA-XL	PN10	PN5	17	616383	89331
1200 x 225	SA-XL	PN10	PN5	17	616384	89377

SDR 11 on request

Electrofusion Fittings

PRESSURE TAPPING VALVE - WITH UNDERCLAMP

Size	Frialen Model	Water	Gas	SDR	Old Code	Friatec Code	VX Code
50 x 32	DAV	PN16	PN10	11		615955	88917
63 x 32	DAV	PN16	PN10	11	64037	615341	88918
63 x 40	DAV	PN16	PN10	11	64038	615342	88919
75 x 32	DAV	PN16	PN10	11	90025	615956	89302
90 x 32	DAV	PN16	PN10	11	64041	615344	89303
90 x 50	DAV	PN16	PN10	11	64043	615346	89304
90 x 63	DAV	PN16	PN10	11	64044	615347	88929
110 x 32	DAV	PN16	PN10	11	64045	615348	89305
110 x 50	DAV	PN16	PN10	11	64047	615350	89306
110 x 63	DAV	PN16	PN10	11	64048	615351	89307
125 x 32	DAV	PN16	PN10	11	64049	615352	89308
125 x 50	DAV	PN16	PN10	11	63980	615354	89309
125 x 63	DAV	PN16	PN10	11	63981	615355	89310
140 x 63	DAV	PN16	PN10	11	63985	615930	89311
160 x 32	DAV	PN16	PN10	11	63986	615356	89312
160 x 50	DAV	PN16	PN10	11	63988	615358	89313
160 x 63	DAV	PN16	PN10	11	63989	615359	89314
180 x 32	DAV	PN16	PN10	11	63990	615361	89315
180 x 50	DAV	PN16	PN10	11	63992	615363	89316
180 x 63	DAV	PN16	PN10	11	63993	615364	89317
200 x 32	DAV	PN16	PN10	11	90029	615366	88950
200 x 50	DAV	PN16	PN10	11	90031	615368	89318
200 x 63	DAV	PN16	PN10	11	90032	615369	89319
225 x 32	DAV	PN16	PN10	11	90033	615374	89320
225 x 50	DAV	PN16	PN10	11	90035	615376	89321
225 x 63	DAV	PN16	PN10	11	90036	615377	89322

PRESSURE TAPPING VALVE - TOP LOADING WITH EXTRA LONG OUTLET SPIGOT SDR 11 PE 100

Size	Frialen Model	Water	Gas	SDR	Old Code	Friatec Code	VX Code
250-315 x 63	DAV-TL	PN16	PN10	11		616464	89323
355-400 x 63	DAV-TL	PN16	PN10	11	64037	616465	89324

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Electrofusion Fittings

PRESSURE TAPPING TEE - WITH UNDERCLAMP SDR 11 PE 100

Size	Frialen Model	Water	Gas	SDR	Old Code	Friatec Code	VX Code
Leak free under pressure tapping: Gas and Water							
40 x 20	DAA	PN16	PN10	11	62284	612630	88963
50 x 25	DAA	PN16	PN10	11	60020	612702	88966
50 x 32	DAA	PN16	PN10	11	62122	615080	88967
63 x 20	DAA	PN16	PN10	11	62288	612631	88968
63 x 25	DAA	PN16	PN10	11	60021	612633	88969
63 x 32	DAA	PN16	PN10	11	62123	612632	88970
63 x 40	DAA	PN16	PN10	11	62134	612623	88971
63 x 63	DAA	PN16	PN10	11	62156	616334	88973
75 x 32	DAA	PN16	PN10	11		616482	88976
90 x 32	DAA	PN16	PN10	11	62125	612634	88981
90 x 40	DAA (KIT)	PN16	PN10	11	62136	615656	88982
90 x 50	DAA	PN16	PN10	11	62147	612636	88983
90 x 63	DAA	PN16	PN10	11	62158	612701	88984
110 x 32	DAA	PN16	PN10	11	62126	612637	88986
110 x 40	DAA (KIT)	PN16	PN10	11	62137	615662	88987
110 x 50	DAA	PN16	PN10	11	62148	612638	88988
110 x 63	DAA	PN16	PN10	11	62159	612624	88989
125 x 32	DAA	PN16	PN10	11	62127	612649	88991
125 x 50	DAA	PN16	PN10	11	62149	612639	88993
125 x 63	DAA	PN16	PN10	11	62160	612309	88994
140 x 50	DAA	PN16	PN10	11	62150	615037	88998
160 x 32	DAA	PN16	PN10	11	62129	612641	89001
160 x 50	DAA	PN16	PN10	11	62151	612642	89003
160 x 63	DAA	PN16	PN10	11	62162	612650	89004
180 x 32	DAA	PN16	PN10	11	62130	612651	89006
180 x 50	DAA	PN16	PN10	11	62152	612644	89008
180 x 63	DAA	PN16	PN10	11	62163	612652	89009
200 x 32	DAA	PN16	PN10	11	62131	612654	89011
200 x 50	DAA	PN16	PN10	11	62153	612645	89013
200 x 63	DAA	PN16	PN10	11	68845	612659	89014
225 x 32	DAA	PN16	PN10	11	68844	612657	89016
225 x 50	DAA	PN16	PN10	11	62154	612646	89018
225 x 63	DAA	PN16	PN10	11	62165	612655	89019

For 40mm Saddles order activating key 89228
For 50-75mm Saddles order activating key 89229
For 90-315mm Saddles order activating key 89230

45° WASTEWATER SADDLE

Size	Old Code	VX Code
*160 -200 x 110	71585	71585
*225-315 x 110	71586	71586

*4.7mm adaptors required

Electrofusion Fittings

PRESSURE TAPPING TEE - TOP LOADING WITH EXTRA LONG OUTLET SPIGOT SDR 11 PE 100

Size	Frialen Model	Water	Gas	SDR	Friatec Code	VX Code
250-315x(400)x63mm	DAA-TL	PN16	PN10	11	615339	89024

250-315mm for pipes SDR11 and SDR17. 355 & 400 SDR17 only.

END CAP FOR TAPPING TEE

Size	Frialen Model	Water	Gas	SDR	Friatec Code	VX Code
50		PN16	PN10	11	612310	89026

REPAIR SADDLE - WITH UNDERCLAMP

Size	Frialen Model	Water	Gas	SDR	Old Code	Friatec Code	VX Code
63	RS	PN16	PN10	11	62167	612519	89028
90	VVS	PN16	PN10	11	62169	615164	89030
110	VVS	PN16	PN10	11	62170	615165	89031
125	VVS	PN16	PN10	11	62171	615166	89032
160	VVS	PN16	PN10	11	62173	615168	89034
180	VVS	PN16	PN10	11	62174	615169	89035
200	VVS	PN16	PN10	11		615170	89036
225	VVS	PN16	PN10	11		615171	89037

REPAIR SADDLE VACUUM SDR 17 PE 100

Size	Frialen Model	Water	Gas	SDR	Friatec Code	VX Code
560	RS-XL	PN16	PN5	17	616367	89333
630	RS-XL	PN16	PN5	17	616368	89334
710	RS-XL	PN16	PN5	17	616369	89335
800	RS-XL	PN16	PN5	17	616370	89336
900	RS-XL	PN16	PN5	17	616374	89428
1000	RS-XL	PN16	PN5	17	616372	89264
1200	RS-XL	PN16	PN5	17	616379	89337

REPAIR SADDLE - TOP LOADING SDR 11 PE 100

Size	Frialen Model	Water	Gas	SDR	Old Code	Friatec Code	VX Code
250 x 560	VSC-TL	PN16	PN10	11		615397	89275

TRANSITION SADDLE - WITH UNDERCLAMP GUNMETAL FEMALE THREAD

Size	Frialen Model	Water	Gas	SDR	Old Code	Friatec Code	VX Code
63 x 1½"	VAM-RG	PN16	PN10	11		612743	89039
75 x 1¼"	VAM-RG	PN16	PN10	11	68790	615213	89040
90 x 1½"	VAM-RG	PN16	PN10	11	62271	612798	89041
90 x 2"	VAM-RG	PN16	PN10	11	62178	612778	89042
110 x 1½"	VAM-RG	PN16	PN10	11	62180	612732	89044
110 x 2"	VAM-RG	PN16	PN10	11	62181	612733	89045
125 x 1½"	VAM-RG	PN16	PN10	11	62373	612734	89047
125 x 2"	VAM-RG	PN16	PN10	11	62184	612735	89048
160 x 1½"	VAM-RG	PN16	PN10	11	62375	612728	89051
160 x 2"	VAM-RG	PN16	PN10	11	62187	612729	89052
180 x 1½"	VAM-RG	PN16	PN10	11	62376	612774	89054
180 x 2"	VAM-RG	PN16	PN10	11	62190	612776	89055
225 x 2"	VAM-RG	PN16	PN10	11	62279	612827	89057

Cut hole after welding and cooling completed.
Strap underpart.

TAPPING SADDLE - PE TO NYLON WITH UNDERPART SDR 11 PE 100

Size	Old Code	VX Code
400kPa gas		
*40 x 18	71499	89091
*40 x 50	64064	89092
*63 x 18	64067	89095
*63 x 50	64068	89096
*90 x 18	64069	89097
*90 x 50	64070	89098
*110 x 18	64071	89099
*110 x 50	64072	89100
*160 x 18	64073	89101
*160 x 50	64074	89102

Cut hole after welding and cooling completed.

PE - NYLON COUPLING SYSTEM SDR 11 PE 100

Size	Water	Gas	SDR	Old Code	VX Code
400kPa gas					
*20PE(M) x 18(F) Nylon	PN16	PN10	11	71434	89107
*20PE(M) x 23(F) Nylon	PN16	PN10	11	71631	89108
*25PE(M) x 18(F) Nylon	PN16	PN10	11	86990	89109
*63PE(M) x 50(M) Nylon	PN16	PN10	11	71633	89114

*4.7mm adaptors required
NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Electrofusion Fittings

TRANSITION COUPLING - POLYETHYLENE TO STEEL SDR 11 PE 100

Size	Frialen Model	Gas	SDR	Old Code	Friatec Code	VX Code
SDR 11 PN Gas						
20 x 15	USTRS	PN10	11		616632	88675
25 x 20	USTRS				616633	88676
32 x 1"	USTRS	PN10	11	62840	612780	89115
40 x 1¼"	USTRS	PN10	11	62841	612781	89116
50 x 1½"	USTRS	PN10	11	62842	612782	89117
63 x 2"	USTRS	PN10	11	62843	612783	89118
75 x 65	USTRS	PN10	11		616638	88677
90 x 3"	USTR	PN10	11	62844	612784	89119
110 x 4"	USTR	PN10	11			89120
125 x 4"	USTR	PN10	11			89121
140 x 125"	USTRS	PN10	11		616642	88678
160 x 6"	USTR	PN10	11	62847	612787	89122
200	USTRS	PN10	11		616645	88679
225 x 200	USTRS	PN10	11		616646	88680
250	USTRS	PN10	11		616647	88681
280 x 250	USTRS	PN10	11		616648	88682
315 x 300	USTRS	PN10	11		616649	88683
355 x 300	USTRS	PN10	11		616650	88684
400	USTRS	PN10	11		616651	88685
500	USTRS	PN10	11		616652	88686
630 x 600	USTRS	PN10	11		616653	88687

Steel end for welding or threading black steel

BALL VALVES SHORT STEM, 1/4 TURN, FULL PORT SDR 11 PE100 (NO PURGE) WITHOUT GEARBOX

Size	Supplier	Water	SDR	Old Code	VX Code
20	daeyoun	PN16	11		70101
25	daeyoun	PN16	11	60611	70102
32	daeyoun	PN16	11	60612	70103
40	daeyoun	PN16	11	60613	70104
50	daeyoun	PN16	11	60614	70105
63	daeyoun	PN16	11	60615	70106
75	daeyoun	PN16	11		70107
90	daeyoun	PN16	11	60617	70108
110	daeyoun	PN16	11	60618	70109
110 (91.9ID)	daeyoun	PN16	11		70170
125	daeyoun	PN16	11	60619	70110
160	daeyoun	PN16	11		70172
180	daeyoun	PN16	11		70111
200	daeyoun	PN16	11		70113
225	daeyoun	PN16	11		70112
250	daeyoun	PN16	11		70114
315	daeyoun	PN16	11		70115
355	daeyoun	PN16	11		70116

BALL VALVES SHORT STEM, 1/4 TURN, FULL PORT SDR 11 PE100 (NO PURGE) WITH GEARBOX

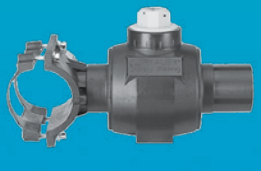
Size	Supplier	Water	SDR	VX Code
125	daeyoun	PN16	11	70117
160	daeyoun	PN16	11	70173
180	daeyoun	PN16	11	70118
200	daeyoun	PN16	11	70176
225	daeyoun	PN16	11	70119
250	daeyoun	PN16	11	70120
315	daeyoun	PN16	11	70183
355	daeyoun	PN16	11	70121
400	daeyoun	PN16	11	70178
630	daeyoun	PN16	11	70166

BALL VALVES SHORT STEM, 1/4 TURN, FULL PORT SDR 11 PE100 (BYPASS) WITH GEARBOX

Size	Supplier	Water	SDR	VX Code
125	daeyoun	PN16	11	70122
160	daeyoun	PN16	11	70175
200	daeyoun	PN16	11	70171
225	daeyoun	PN16	11	70182
250	daeyoun	PN16	11	70177
280	daeyoun	PN16	11	70167
315	daeyoun	PN16	11	70184
355	daeyoun	PN16	11	70180
400	daeyoun	PN16	11	70179

TAPPING BALL VALVES IN HD-PE, 1/4 TURN FOR SIDE TAPPING UNDER PRESSURE

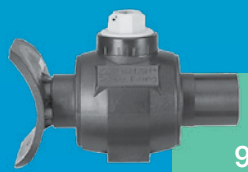
Size	Frialen Model	Water	Gas	SDR	Friatec Code	VX Code
110 x 63	AKHP	PN16	10	11	615427	89430
110 x 90	AKHP	PN16	10	11	615428	89431
125 x 90	AKHP	PN16	10	11	615431	89432
160 x 63	AKHP	PN16	10	11	615433	89433
160 x 90	AKHP	PN16	10	11	615434	89434
180 x 90	AKHP	PN16	10	11	615437	89435
225 x 63	AKHP	PN16	10	11	615439	89436
225 x 90	AKHP	PN16	10	11	615440	89437



TAPPING BALL VALVES IN HD-PE, 1/4 TURN TOP LOADING FOR SIDE TAPPING UNDER PRESSURE

Size	Frialen Model	Water	Gas	SDR	Friatec Code	VX Code
250-450 (560) x 63	AKHP-TL	PN16	10	11	615525	89438
250-450 (560) x 90	AKHP-TL	PN16	10	11	615526	89439

250-450 for pipes SDR11 and 17, 450-560 for pipes SDR17



FRIALEN®- Safety fittings: Assembly of fittings d20 - d225

Quick Guide

Please follow the specifications and processing hints contained in the FRIALEN assembly instructions www.FRIALEN.com

1. Clean pipe of rough contaminations

2. Mark the insertion depth

3. Remove the oxide layer of the pipe using a scraper tool

4. Chamfer the raw edges on the outside and inside. Remove any chips from the pipe interior

5. If required, restore the roundness of irregular/oval pipes using rounding clamps

6. Clean the pipe surface and the fitting interior with PE cleaner, let evaporate, mark insertion depth again

7. Insert the pipe up to the marking, do not jam. Ensure a tension-free assembly of the component parts

8. Contact FRIALEN®- Safety fitting with electrofusion unit, read barcode, start fusion

9. Document fusion parameters on the pipe. Allow to cool (cooling times!)

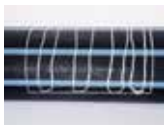
Diameter in mm	Cooling time in minutes for FRIALEN® couplers and fittings		
	CT Up to which the joint may be moved	Up to the pressurisation up to 8 bar	Up to the pressurisation > 8 bar
20 – 32	5	8	10
40 – 63	7	15	25
75 – 110	10	30	40
125 – 140	15	35	45
160 – 225	20	60	75

Safety fittings Assembly of Pressure Tapping Tees (DAA) d40 - d225

Quick Guide

1. Clean pipe of rough contaminations

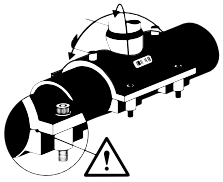
2. Mark the saddle area



3. Remove the oxide layer from the pipe surface using the scraper tool or hand scraper

4. Clean the pipe surface and the fitting fusion area with PE cleaner, let evaporate, mark fusion zone again

5. Assemble the fitting. Tighten the screws cross-wise until saddle and bottom section align. Proof for tight fit of the saddle on pipe



6. Contact FRIALEN®-Safety fitting with electrofusion unit, read barcode, start fusion

7. Document fusion parameters on the pipe

   Watch cooling time!

8. Fuse branch pipeline with FRIALEN®-Safety fitting according to assembly instruction

9. Observe cooling times before tapping

Diameter in mm	Cooling time in minutes for FRIALEN® saddle parts	
	Up to pressurisation through the outlet	CT Up to tapping
40 – 63	15	20
75 – 125	20	30
140 – 160	30	45
180 – 225	50	60

Remove blanking plug. Turn the drill down up to the lower stop using the matching FRIALEN® activating key and turn anti-clockwise up to the upper stop

10. Turn down the FRIALEN® activating key until the collar of the plug slightly touches the front face of the drill spigot. Afterwards turn back the plug half a turn to relieve the O-Ring tension. We recommend closing the tapping dome with a fusion cap K

THINGS WORTH KNOWING ABOUT FRIALEN®-SAFETY FITTINGS AND THIS PRODUCT RANGE

Quality/Certification

FRIALEN-Safety Fittings and FRIAFIT Couplers are subject to constant quality checks under stringent inspection guidelines, which are part of our comprehensive Quality Management System which is certified to EN ISO 9001:2008.

The FRIALEN/FRIAFIT-Safety Fittings range and our FRIATOOLS hardware are designed to be compatible. We reserve the right to change product details in the catalogue at any time. This is an ongoing commitment with product improvement and product line enhancements taking place continously. Our continuous quality controls cover FRIALEN/FRIAFIT Safety Fittings, our FRIATOOLS equipment and the quality of the fused joint as a result of the combination of these two components. The operation and functional safety of fusion control units devices from other manufacturers are not subject to our specifications and checks. When installing fittings please follow our installation instructions and the operating instructions for the tooling used.FRIALEN-Safety Fittings and FRIAFIT Couplers are subject to constant quality checks under stringent inspection guidelines, which are part of our comprehensive Quality Management System which is certified to EN ISO 9001:2008.

DVGW Certification/Fusability

FRIALEN Safety Fittings can be fused with SDR 17.6 pipes (s min = 3 mm) to 11 in accordance with DIN 8074, ISO 4437, ISO 4427, EN 1555 and EN 12201. Other SDR sizes on request. FRIALEN Saddle components/Fittings ≤ d 63 can only be used with pipes ≤ SDR 11.
Please also note the details on the Fitting Barcode and further mandatory markings on the product for each SDR level which can be fused.

FRIALEN Safety Fittings can be used with pipes made of PE 100, PE 80, PE 63, PE 50 in accordance with DIN 8074/75, EN 1555-2, EN 12201-2, ISO 4437 and ISO 4427, PE-Xa in accordance with DIN 16892/93, PE-LD in accordance with DIN 8072/73. A melt flow rate of MFR 190/5 in the range of 0.2 to 1.7 g/10 min applies to PE pipes. For components with MFR < 0.20 then you will need to confirm that it is suitable. We would recommend the use of pipes with a limited diameter tolerance range, tolerance class B. PE-LD pipes can be fused at an ambient temperature of > 0 °C.

Check instructions for compatibility of another SDR or seek our technical advice.

FRIALEN-Safety Fittings and FRIAFIT-Couplers are made of PE 100 and fulfil the requirements of EN 1555-3, EN 12201-3, ISO 4427-3 and ISO 4437-3, as well as DVGW test specifications. FRIALEN-Safety Fittings and FRIAFIT-Couplers can be processed with FRIAMAT fusion devices at an ambient temperatures between - 10 °C and + 45 °C.

For connections between different materials, the material or system specific standards and assembly guidelines also apply.

For case by case restrictions when installing, and working with FRIALEN/FRIAFIT Safety Fittings in general, please read our assembly instructions. Our office-based customer support staff will be glad to answer any questions you may have.

Pressure loading capacity

The pressure loading capacity of FRIALEN/FRIAFIT-Safety Fittings made of PE 100 dependent on the SDR (Standard Dimension Ratio) marking.

$$SDR = \frac{\text{Pipe outside diameter d}}{\text{Pipe wall thickness s}}$$

The contributory factors for this are the latest revised standards DIN EN 1555, DIN EN 12201, DIN 8074 and DIN 8075, taking the design factor C into account (calculation coefficient for components made of PE). This gives the following pressure stages:

Fitting material: PE 100	Water	Gas
SDR level	maximum operating pressure in bar at C = 1,25	maximum operating pressure in bar at C = 2
17	10	5
11	16	10
9	20	-
7.4	25	-

Fusion process

FRIALEN-Fittings are fuseable by Universal fusion units, e.g. FRIAMAT. The fusion parameter will be transferred automa-ti-cally from the barcode on the fitting.

39.5V processing

Most of the FRIALEN-Fittings are fusable by electrofusion units with a constant output voltage of 39.5V by manual input of the fusion time. The fusion time is stated on the barcode label. By using older electrofusion units the allowed processing range is limited to an ambient temperature between -5°C and +35°C. The stated fusion time is to be used for the complete temperature range. Please find a list with suitable fittings on our homepage www.frialen.com.

Cooling times

FRIALEN-Couplers/Elbows/T-Pieces/Transition fittings

The cooling times given on the barcode (CT), are the times after fusing for which the fused joint must not be disturbed.

Longer cooling times should be allowed before pressurisation. When doing this please read our assembly instructions.

FRIALEN-Fittings/Valves/Saddles

The cooling times given on the barcode (CT) are the times before which the fused joint should not be tapped.
A pressure test of the saddle joint/outgoing line can be carried out before the end of the cooling period for the fused joint. When doing this please read our assembly instructions.

Processing

Processing must be carried out in accordance with our assembly instructions, which may also be downloaded from www.frialen.com/www.frialen-xl.com. This webpage will also give you further information on products and processes, certificates and publications.

FRIALEN saddle parts Top-Loading

The dimension information, including the value in brackets, shows the authorized assembly and fusion size range for the saddle part. In some cases, the standard application range is limited by technical restrictions (e.g. drill length/pipe wall thickness or tap diameter/diameter of shut-off saddles). For other areas of application, suitability must be assessed.
Technical hints for processing or use may be attached to the product and must be strictly observed.

Technical Information

The technical details in this product guide are not comprehensive. You can find detailed information on our data sheets, which can also be downloaded from www.frialen.com/ www.frialen-xl.com.

Update/Technical Progress

All details are valid as at the time to print. We reserve the right to make changes which are in the interests of technical progress. We do not accept liability for any matters arising as a result of printing errors and/or omissions.

Brand Names

For easier reading, the product guide dispenses with the symbols ® and ™ in continuous text. The following trademarks are registered: FRIALEN®, FRIALOC®, FRIAFIT®, FRIATOOLS®, FRIAMAT®, Sentry GS®, BAIO®, Rilsan® as well as Gas-Stop™.

Spigot Fittings for Butt Welding

Vinidex
Systems & Solutions

Spigot Fittings for Butt & Electrofusion Welding

STUB FLANGE LONG SPIGOT - PE100 SDR11

Size	VX Code
20	62694
25	64032
32	64033
40	64034
50	62289
63	69722
75	69723
90	69769
110	69724
125	69725
140	62292
160	69726
180	69727
200	69728
225	69730
250	69731
280	69732
315	69733
355	69790
400	69792
*450	30440
*500	73420
*560	73421
*630	73433
*710	73438

* With pipe extension

STUB FLANGE LONG SPIGOT - PE 100 SDR17

Size	VX Code
63	62475
75	62486
90	62489
110	62490
125	62491
140	62493
160	62495
180	69721
200	62497
225	62499
250	62500
280	62674
315	62686
355	69791
400	69793
*450	62769
*500	69797
*560	69798
*630	69799
*710	69800
*800	69801
*900	69802
*1000	69803

* With pipe extension

STUB FLANGE SHORT SPIGOT - PE100 SDR 11

Size	VX Code
200	71184
225	71185
250	71186
280	71187
315	71188
355	71189
400	71190
450(DN450)	71191
500	73435
560	71192
630	71198
710	62361

STUB FLANGE SHORT SPIGOT - PE100 SDR 17

Size	VX Code
200	71168
225	71169
250	71305
280	71301
315	71285
355	71173
400	71174
450(DN450)	71175
500	71176
560	71193
630	62410
710	62398
800	71199
900	65414
1000	71202

Spigot Fittings for Butt & Electrofusion Welding

MAXI STUB C/W STAINLESS STEEL BACKING RING PN16 SDR11

Size	VX Code
110 x 3"	73451
140 x 4"	73452
125 x 4"	73458
180 x 4"	73464
180 x 6"	73455
200 x 6"	73459
250 x 8"	73460
315 x 10"	84351
355 x 12"	84352

90° SWEEP BEND LONG SPIGOT - PE100 SDR11

Size	VX Code
63	62558
75	62559
90	62560
110	62561
125	62562
140	62563
160	62564
180	70404
200	62565
225	62566
250	62567
280	62568
315	62569
355	62570
400	62571
450	62746
500	62717
560	62747
630	62749
710	62386
800	75172
900	62771
1000	62775

90° SWEEP BEND LONG SPIGOT - PE100 SDR17

Size	VX Code
63	62525
75	62526
90	62527
110	62528
125	62529
140	62530
160	62531
180	70382
200	62532
225	62547
250	62534
280	62535
315	62536
355	62537
400	62538
450	62391
500	62700
560	62392
630	62393
710	62394
800	62750
900	62752
1000	62754

PRICES ARE CORRECT AT 1ST MAY 2018.
NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK. WHOLESALE PRICES DO NOT INCLUDE 10% GST.

LONG SPIGOTS ARE SUITABLE FOR BUTT WELD AND ELECTROFUSION.
SHORT SPIGOTS ARE SUITABLE FOR BUTT WELDING ONLY.

Spigot Fittings for Butt & Electrofusion Welding

45º SWEEP BEND - EXTENDED PE100 SDR11	
Size	**VX Code**
63	62638
75	62639
90	62640
110	62641
125	62642
140	62643
160	62644
180	70403
200	62645
225	62646
250	62647
280	62648
315	62649
355	62650
400	62651
450	62759
500	62761
560	70513
630	70514
710	62762
800	75174

45º SWEEP BEND EXTENDED - PE100 SDR17	
Size	**VX Code**
63	62605
75	62606
90	62607
110	62608
125	62609
140	62610
160	62611
180	70383
200	62612
225	62613
250	62614
280	62615
315	62616
355	62617
400	62618
450	62763
500	62703
560	62764
630	70538
710	62512
800	62755
900	62765
1000	62766

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Spigot Fittings for Butt & Electrofusion Welding

90º ELBOW LONG SPIGOT - PE100 SDR11

Size	VX Code
20	62954
25	62955
32	62956
40	62957
50	62958
63	62959
75	62960
90	62961
110	62962
125	62963
140	62866
160	62964
180	62965
200	62966
225	62967
250	62968
280	62969
315	62970
355	62984
400	62985

90º ELBOW LONG SPIGOT - PE100 SDR17

Size	VX Code
63	62971
75	62972
90	62973
110	62974
125	62975
140	62882
160	62976
180	62977
200	62978
225	62979
250	62441
280	62981
315	62982
355	62986
400	62987

LONG SPIGOTS ARE SUITABLE FOR BUTT WELD AND ELECTROFUSION.
SHORT SPIGOTS ARE SUITABLE FOR BUTT WELDING ONLY.

Spigot Fittings for Butt & Electrofusion Welding

45º ELBOW LONG SPIGOT - PE100 SDR11

Size	VX Code
20	62990
25	62991
32	62992
40	62993
50	62994
63	62995
75	62996
90	62997
110	62998
125	62999
160	63000
140	63025
180	63001
200	63002
225	63003
250	63004
280	63005
315	63006
355	62988
400	62989

45º ELBOW LONG SPIGOT - PE100 SDR17

Size	VX Code
63	63007
75	63008
90	63009
110	63010
125	63011
140	63038
160	63012
180	63013
200	63014
225	63015
250	63016
280	63017
315	63018
355	63019
400	63023

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Spigot Fittings for Butt & Electrofusion Welding

90° TEE LONG SPIGOT - PE100 SDR11

Size	VX Code
20	63146
25	63147
32	63148
40	63149
50	63150
63	63151
75	63152
90	63153
110	63154
125	63155
140	63145
160	63156
180	63157
200	63158
225	63159
250	63160
280	63161
315	63162
355	62430
400	63112

90° TEE LONG SPIGOT - PE100 SDR17

Size	VX Code
63	63163
75	63164
90	63165
110	63166
125	63167
140	63144
160	63168
180	63169
200	63170
225	63171
250	63172
280	63173
315	63174
355	63179
400	63180

90° TEE SEGMENTED - PE100 SDR11

Size	VX Code
450	
500	
500	
560	
630	
710	
800	
900	
1000	

90° TEE SEGMENTED - PE100 SDR17

Size	VX Code
450	63293
500	
560	
630	62397
710	63297
800	
900	
1000	

LONG SPIGOTS ARE SUITABLE FOR BUTT WELD AND ELECTROFUSION.
SHORT SPIGOTS ARE SUITABLE FOR BUTT WELDING ONLY.

Spigot Fittings for Butt & Electrofusion Welding

REDUCING TEE LONG SPIGOT - PE100 SDR11

Size	VX Code
50 x 25	63229
50 x 32	63230
50 x 40	63240
63 x 32	63261
63 x 40	63269
63 x 50	63243
75 x 32	63244
75 x 40	63294
75 x 50	63245
75 x 63	63246
90 x 50	63295
90 x 63	63247
90 x 75	63248
110 x 32	63320
110 x 50	63321
110 x 63	63249
110 x 75	63250
110 x 90	63251
125 x 90	63252
125 x 110	86635
140 x 90	63322
140 x 110	63323
140 x 125	63324
160 x 63	63254
160 x 75	63255
160 x 90	63256
160 x 110	63257
160 x 125	63325
160 x 140	63326
180 x 160	63195
180 x 90	63258
180 x 110	63215
180 x 125	63259
200 x 63	63192
200 x 90	63193
200 x 110	63202
200 x 125	87742
200 x 160	63203
225 x 90	63262
225 x 110	63263
225 x 125	63264
250 x 90	63327
250 x 110	63328
250 x 125	63329
250 x 160	63335
250 x 200	63336
250 x 225	63341
280 x 250	63348
280 x 110	63344
280 x 160	63345
280 x 200	63346
280 x 225	63347
315 x 110	63351
315 x 160	63352
315 x 200	63353
315 x 225	63354
315 x 250	62411

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Spigot Fittings for Butt & Electrofusion Welding

REDUCING TEE LONG SPIGOT - PE100 SDR17

Size	VX Code
75 x 63	63270
90 x 63	63271
90 x 75	63272
110 x 63	63273
110 x 75	63274
110 x 90	63275
125 x 90	63276
125 x 110	63277
140 x 90	63355
140 x 110	63358
140 x 125	63359
160 x 63	63278
160 x 75	63279
160 x 90	63280
160 x 110	63281
160 x 125	63360
160 x 140	63361
180 x 90	63228
180 x 110	63362
180 x 125	63283
180 x 160	63260
200 x 63	63365
200 x 90	63366
200 x 110	63367
200 x 125	63368
200 x 160	63370
225 x 90	63236
225 x 110	63371
225 x 125	63238
225 x 160	63289
250 x 90	63373
250 x 110	63374
250x 125	63376
250 x 160	63383
250 x 200	63384
250 x 225	63414
280 x 110	63422
280 x 160	63423
280 x 200	63425
280 x 225	63431
280 x 250	63432
315 x 110	63433
315 x 160	63437
315 x 200	63438
315 x 225	63449
315 x 250	63450

45° EQUAL TEE- PE100 SDR11

Size	VX Code
63	63299
75	63300
90	63301
110	63302
125	63303
160	63304
180	63305
200	63306
225	63307
250	63308

45° EQUAL TEE- PE100 SDR17

Size	VX Code
63	63309
75	63310
90	63311
110	63312
125	63313
160	63314
180	63315
200	63316
225	63317
250	63319

LONG SPIGOTS ARE SUITABLE FOR BUTT WELD AND ELECTROFUSION.
SHORT SPIGOTS ARE SUITABLE FOR BUTT WELDING ONLY.

Spigot Fittings for Butt & Electrofusion Welding

STEP REDUCER SHORT SPIGOT - PE100 SDR11

Size	VX Code
450 x 315	63421
630 x 450	63454

STEP REDUCER SHORT SPIGOT - PE100 SDR17

Size	VX Code
225 x 160	63427
315 x 225	63428
450 x 315	63429
630 x 450	63430

REDUCER LONG SPIGOT - PE100 SDR11

Size	VX Code
25 x 20	62245
32 x 20	62377
32 x 25	62236
40 x 25	62217
40 x 32	62237
50 x 25	62242
50 x 32	62238
50 x 40	62796
63 x 25	62742
63 x 32	62239
63 x 40	62240
63 x 50	62241
75 x 32	62230
75 x 63	62244
75 x 40	62231
75 x 50	62243
90 x 50	62251
90 x 63	62246
90 x 75	62247
110 x 63	62248
110 x 75	62276
110 x 90	62250
125 x 63	62221
125 x 75	62283
125 x 90	62252
125 x 110	62253
140 x 75	62310
140 x 90	62313
140 x 110	62314
140 x 125	62256
160 x 90	62800
160 x 110	62257
160 x 125	62258
160 x 140	62259
180 x 110	70140
180 x 125	62260
180 x 140	62315
180 x 160	62262
200 x 110	70163
200 x 140	62263
200 x 160	62264
200 x 180	62316
225 x 110	62328
225 x 160	62795
225 x 180	62329
225 x 200	62335
250 x 160	70680
250 x 180	62337
250 x 200	70193
250 x 225	74254
280 x 200	73437
280 x 200	62343
280 x 225	62346
280 x 250	62347
315 x 225	62348
315 x 250	70212
315 x 280	62349
400 x 315	62350

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

Spigot Fittings for Butt & Electrofusion Welding

REDUCER LONG SPIGOT - PE100 SDR17

Size	VX Code
75 x 63	62770
90 x 63	62772
90 x 75	62773
110 x 63	62774
110 x 75	62374
110 x 90	62776
125 x 63	62422
125 x 75	62425
125 x 90	62778
125 x 110	62779
140 x 75	62437
140 x 90	62453
140 x 110	62456
140 x 125	62782
160 x 90	62783
160 x 110	62784
160 x 125	62785
160 x 140	62786
180 x 110	62466
180 x 125	62787
180 x 140	62467
180 x 160	62473
200 x 110	30701
200 x 140	62484
200 x 160	62791
200 x 180	62492
225 x 110	62496
225 x 160	62793
225 x 180	62540
225 x 200	62544
250 x 160	70680
250 x 180	62593
250 x 200	63490
250 x 225	62599
280 x 200	62689
280 x 225	62707
280 x 250	62708
315 x 225	62710
315 x 250	62714
315 x 280	62736
400 x 315	62737

LONG SPIGOTS ARE SUITABLE FOR BUTT WELD AND ELECTROFUSION.
SHORT SPIGOTS ARE SUITABLE FOR BUTT WELDING ONLY.

Spigot Fittings for Butt & Electrofusion Welding

END CAP LONG SPIGOT PE100 SDR11	
Size	**VX Code**
20	63385
25	63386
32	63387
40	63388
50	63389
63	63390
75	63391
90	63392
110	63393
125	63394
140	63375
160	63395
180	63396
200	63397
225	63398
250	63399
280	63400
315	63401
355	62431
400	62429

LONG SPIGOTS ARE SUITABLE FOR BUTT WELD AND ELECTROFUSION.
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Spigot Fittings for Butt & Electrofusion Welding

STEEL BACKING FLANGES AS2129: TABLE D PN10

Size	Flange Size	Galv. VX Code	S/Steel 316 VX Code
*20	15	84481	83466
*25	20	84483	
*32	25	84485	83480
*40	32	84487	83493
*50	40	84489	83495
*63	50	84491	83505
*75	65		83463
*90	80	84495	83592
110	100	84497	83597
125	100	84585	84530
125	125	84499	83499
140	125	84501	83501
160	150	84503	83593
180	150	84533	83594
200	200	84505	83595
225	200	84507	83596
250	250	84509	84532
280	250	84511	83502
315	300	84513	84590
355	350	84515	83503
400	400	84517	83599
450	450	84519	83504
500	500	84521	83589
560	550	84523	83604
630	600	84525	83606
710	700	84527	65419
800	800	84529	85452
900	900	65457	
1000	1000	84531	84538

* Please refer to to Table E Flange Prices

STEEL BACKING FLANGES A.N.S.I. 150 (A105)

Size	Flange Size	Galv. VX Code	S/Steel 316 VX Code
63	2"	84563	86857
75	2½"	84564	83462
90	3"	84565	83608
110	4"	84566	83609
125	5"	84567	83611
140	5"	84568	
160	6"	84569	84597
180	6"	84409	83612
200	8"	84570	83535
225	8"	84571	83538
250	10"	84572	83542
280	10"	84573	83537
315	12"	84574	83539
355	14"	84575	83613
400	16"	84576	83543
450	18"	84577	83544
500	20"	84578	83545
630	24"	84580	83546

Spigot Fittings for Butt & Electrofusion Welding

STEEL BACKING FLANGES AS2129: TABLE E PN16			
Size	**Flange Size**	**Galv. VX Code**	**S/Steel 316 VX Code**
20	15	84480	
25	20	84482	83464
32	25	84484	83497
40	32	84486	83465
50	40	84488	83479
63	50	84490	83478
75	65	84492	83471
90	80	84494	83472
110	100	84496	83477
125	100	85586	83598
125	125	84498	83473
140	125	84500	84591
160	150	84502	84592
180	150	84596	83481
200	200	84504	84594
225	200	84506	83482
250	250	84508	83474
280	250	84510	83483
315	300	84512	83476
355	350	84514	83475
400	400	84516	83509
450	450	84518	83484
500	500	84520	83485
560	550	84522	
630	600	84524	83486
710	700	84526	
800	800	84528	
900	900		65417
1000	1000		83487

STEEL BACKING FLANGES AS4087 FIGURE B7 PN16			
Size	**Flange Size**	**Galv. VX Code**	**S/Steel 316 VX Code**
63	50		64636
75	65		84493
90	80	84476	84474
110	100	84477	83516
125	100		83507
160	150		83517
180	150	84468	83508
200	200	84478	84475
225	225		83506
250	250	84469	84536
315	300	84479	84537
355	350	84470	

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

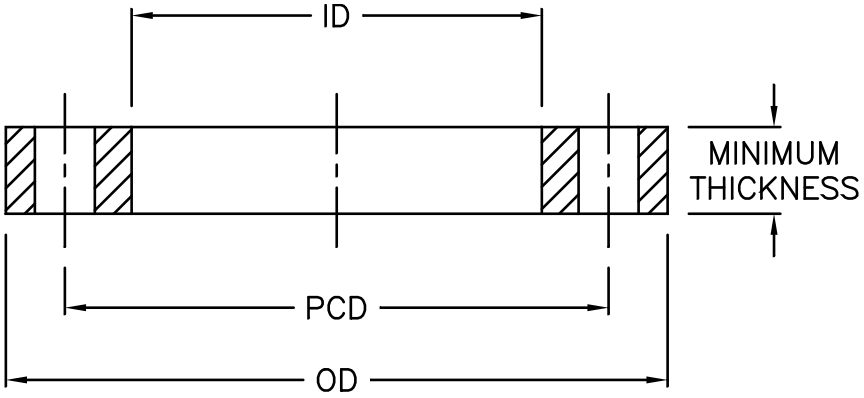


Table 1: STEEL BACKING FLANGES
AS 2129 : TABLE D

Nominal Pipe OD	Flange Size	OD	ID	Minimum Thickness	PCD	Bolt Hole No. x Dia.	Bolt Size
20	15						
25	20						
32	25						
40	32				Refer to Table 2		
50	40						
63	50						
75	65						
90	80						
110	100	215	128	10	178	4X18	M16
125	100	215	135	10	178	4X18	M16
125	125	255	140	13	210	8X18	M16
140	125	255	158	13	210	8X18	M16
160	150	280	178	13	235	8X18	M16
180	150	280	188	13	235	8X18	M16
200	200	335	235	13	292	8X18	M16
225	200	335	238	13	292	8X18	M16
250	250	405	288	16	356	8X22	M20
280	250	405	294	16	356	8X22	M20
315	300	455	338	19	406	12X22	M20
355	350	525	376	22	470	12X26	M24
400	400	580	430	22	521	12X26	M24
450	450	640	470	25	584	12X26	M24
500	500	705	533	29	641	16X26	M24
560	550	760	618	29	699	16X30	M27
630	600	825	645	32	756	16X30	M27
710	700	910	740	35	845	20X30	M27
800	800	1060	843	41	984	20X36	M33
900	900	1175	947	48	1092	24X36	M33
1000	1000	1255	1050	51	1175	24X36	M33

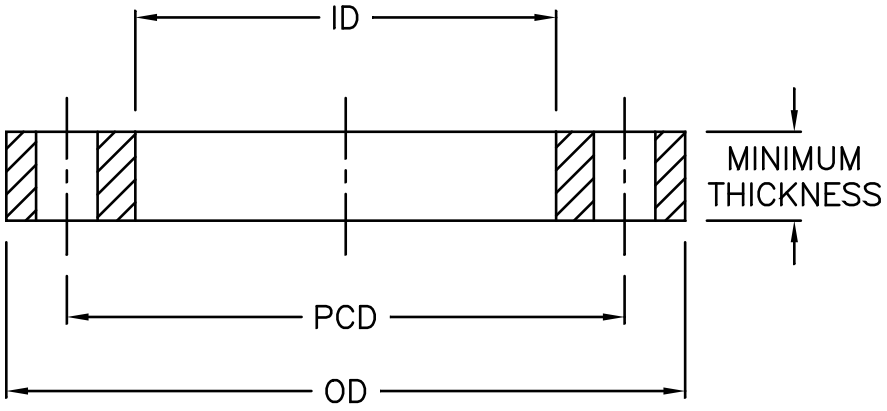


Table 2: STEEL BACKING FLANGES

AS 2129 : TABLE E

Nominal Pipe OD	Flange Size	OD	ID	Minimum Thickness	PCD	Bolt Hole No. x Dia.	Bolt Size
20	**15**	95	28	6	67	4X14	M12
25	**20**	100	34	6	73	4X14	M12
32	**25**	115	42	7	83	4X14	M12
40	**32**	120	51	8	87	4X14	M12
50	**40**	135	62	9	98	4X14	M12
63	**50**	150	78	10	114	4X18	M16
75	**65**	165	92	10	127	4X18	M16
90	**80**	185	108	11	146	4X18	M16
110	**100**	215	128	13	178	8X18	M16
125	**100**	215	135	13	178	8X18	M16
125	**125**	255	140	14	210	8X18	M16
140	**125**	255	158	14	210	8X18	M16
160	**150**	280	178	17	235	8X22	M20
180	**150**	280	188	17	235	8X22	M20
200	**200**	335	235	19	292	8X22	M20
225	**200**	335	238	19	292	8X22	M20
250	**250**	405	288	22	356	12X22	M20
280	**250**	405	294	22	356	12X22	M20
315	**300**	455	338	25	406	12X26	M24
355	**350**	525	376	29	470	12X26	M24
400	**400**	580	430	32	521	12X26	M24
450	**450**	640	470	35	584	16X26	M24
500	**500**	705	533	38	641	16X26	M24
560	**550**	760	618	44	699	16X30	M27
630	**600**	825	645	48	756	16X33	M30
710	**700**	910	740	51	845	20X33	M30
800	**800**	1060	843	54	984	20X36	M33
900	**900**	1175	947	64	1092	24X36	M33
1000	**1000**	1255	1050	67	1175	24X39	M36

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

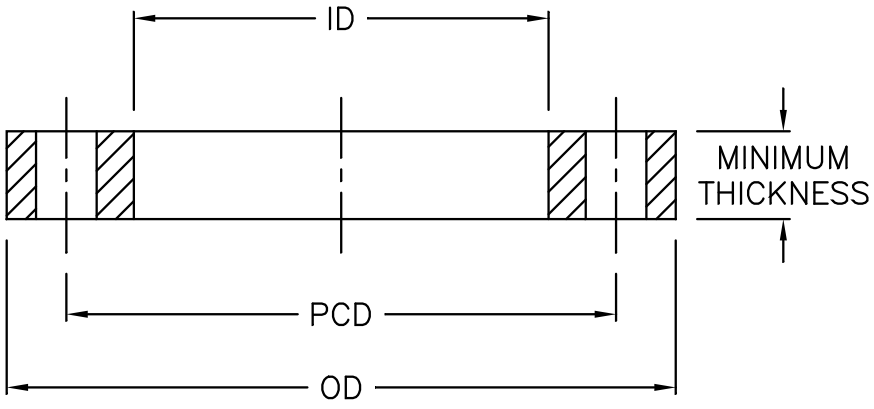


Table 3: STEEL BACKING FLANGES

A.N.S.I. 150

Nominal Pipe OD	Flange Size	OD	ID	Minimum Thickness	PCD	Bolt Hole No. x Dia.	Bolt Size
20	**½”**	90	28	11.2	60.5	4X16	M14
25	**¾”**	98	34	12.8	70	4X16	M14
32	**1”**	108	42	14.2	79.5	4X16	M14
40	**1 ¼”**	117	51	15.7	89	4X16	M14
50	**1 ½”**	127	62	17.5	98.5	4X16	M14
63	**2”**	152	78	19.0	120.5	4X20	M18
75	**2 ½”**	178	92	22.3	139.5	4X20	M18
90	**3”**	191	108	23.9	152	4X20	M18
110	**4”**	229	128	23.9	190.5	8X20	M18
125	**5”**	254	135	23.9	216	8X22	M20
140	**5”**	254	158	23.9	216	8X22	M20
160	**6”**	279	178	25.4	241	8X22	M20
180	**6”**	279	188	25.4	241	8X22	M20
200	**8”**	343	235	28.4	298.5	8X22	M20
225	**8”**	343	238	28.4	298.5	8X22	M20
250	**10”**	406	288	30.2	362	12X26	M24
280	**10”**	406	294	30.2	362	12X26	M24
315	**12”**	482	338	31.8	432	12X26	M24
355	**14”**	533	376	35.0	476	12X30	M27
400	**16”**	600	430	36.6	540	16X30	M27
450	**18”**	635	470	39.6	578	16X33	M30
500	**20”**	700	533	43.0	635	20X33	M30
630	**24”**	815	645	47.8	750	20X36	M33

As per ISO 9624: "The inside diameter of the loose backing flange shall conform to the design of the flange adaptor.
In some applications, values of the inside diameter of the loose backing flange differing from those given in the tables may be used."

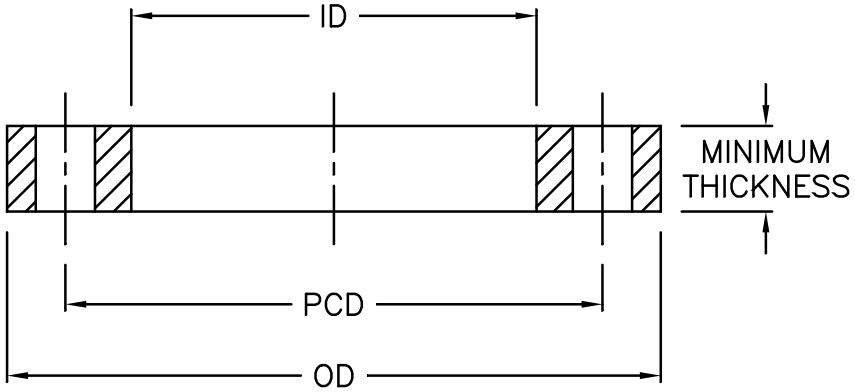


Table 6: STEEL BACKING FLANGES

AS 4087 - Figure B7 PN16

Nominal Pipe OD	Flange Size	OD	ID	Minimum Thickness	PCD	Bolt Hole No. x Dia.	Bolt Size
63	**50**	150	78	11	114	4X18	M16
75	**65**	165	92	11	127	4X18	M16
90	**80**	185	108	11	146	4X18	M16
110	**100**	215	128	13	178	4X18	M16
125	**125**	255	140	14	210	4X18	M16
160	**150**	280	178	13	235	8X18	M16
180	**150**	280	178	17	235	8X18	M16
200	**200**	335	235	19	292	8X18	M16
225	**225**	370	238	19	324	8X18	M16
250	**250**	405	288	19	356	8X22	M20
315	**300**	455	338	23	406	12X22	M20
355	**350**	525	376	30	470	12X26	M24
n/a	**375**	550	n/a	30	495	12X26	M24
400	**400**	580	430	30	521	12X26	M24
450	**450**	640	470	30	584	12X26	M24
500	**500**	705	533	38	641	16X26	M24
630	**600**	825	645	48	756	16X30	M27
710	**700**	910	740	56	845	20X30	M27
n/a	**750**	995	n/a	56	927	20X33	M30
800	**800**	1060	843	56	984	20X36	M33
900	**900**	1175	947	66	1092	24X36	M33
1000	**1000**	1255	1050	66	1175	24X36	M33

Note: This table has bolting compatibility with AS 2129 Table D flanges.

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

akatherm

HDPE Pipe & Fittings

Akatherm is a specialist manufacturer of HDPE drainage systems. With over 40 years experience Akatherm has a strong focus and dedication to innovation and quality in HDPE waste water technologies.

Based in the Netherlands, Akatherm exports products around the globe and has an extensive proven track record in the supply and manufacture of high quality HDPE drainage systems.

As a member of the Aliaxis group of companies, Akatherm has access to a worldwide presence and 15,000 employees dedicated to the development and supply of special plastic pipe and fitting products.

Akatherm has been active in the Australian market for more than a decade, and has been specified for use in some of the country's most prestigious projects, including Q1, the highest residential building in the southern hemisphere.

THE AKATHERM ADVANTAGES

RANGE
Akatherm offers a comprehensive product range that includes pipe, fittings, traps, adaptors and the innovative Akavent.This means Akatherm offers a full system to suit a range of installation requirements.

A range of pre-fabricated products are available as stock items, allowing a faster and easier installation process. Plus adaptors allow for connection to existing PVC or copper pipes.

APPROVALS
Akatherm meets the tough requirements of the AS/NZS 5065 and 4401 standards, which provides confidence when installed.

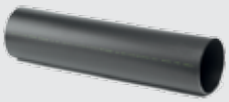
QUALITY
As an ISO9001 accredited manufacturer, Akatherm has over 40 years experience and technical knowledge dedicated to deliver the highest quality finished product.

INSTALLATION
A key benefit of HDPE is that it allows for the use of electrofusion. This ensures a fast, effective, permanent and high integrity joint between pipes and fittings, making installation easy. When required HDPE also allows for butt welding and mechanical jointing, offering versatility to meet a range of challenging installation requirements.

AKAVENT MULTI-STOREY SEWER DRAINAGE SYSTEM
The Akavent Multi-Storey Sewer Drainage System comprises 110mm and 160mm high-density HDPE plastic fittings that eliminate the relief venting requirements of traditional drainage systems.

The Akavent Multi-Storey Sewer Drainage System was launched in late 2003 and is operational in the 15 storey Flynn Apartments building in Brisbane and the 80-storey Q1 tower at Surfers Paradise on the Gold Coast, the tallest residential building in the southern hemisphere.

akatherm HDPE Drainage Pipe & Fittings



AKATHERM HDPE DRAINAGE PIPE

Size	Min QTY	Akatherm Code	VX Code
50mm/5m	1	100500	53805
56mm/5m	1	105600	53806
63mm/5m	1	100600	53807
75mm/5m	1	100700	53808
90mm/5m	1	100900	53809
110mm/5m	1	101100	53810
125mm/5m	1	101200	53811
160mm/5m	1	101600	53812
200mm/5m	1	102000	53813
250mm/5m	1	102500	53814
315mm/5m	1	103100	53815

ELECTROFUSION COUPLER

Size	Min QTY	Akatherm Code	VX Code
40mm	1	410495	53561
50mm	1	410595	53562
56mm	1	415695	53572
63mm	1	410695	53563
75mm	1	410795	53564
90mm	1	410995	53565
110mm	1	411195	53566
125mm	1	411295	53567
160mm	1	411695	53568
200mm	1	412065	53569
250mm	1	412565	53570
315mm	1	413165	53571

ELECTROFUSION EQUIPMENT

Size	Min QTY	Akatherm Code	VX Code
40-160mm	1	HSTS160	53741
40-315mm	1	HSTS315	53742

BEND 90° WITH ONE LONG SIDE (BUTT TO EF)

Size	Min QTY	Akatherm Code	VX Code
50mm	1	110592	53301
56mm	1	115692	53314
63mm	1	110692	53303
75mm	1	110792	53305
90mm	1	110992	53306
110mm	1	111192	53307
125mm	1	111292	53309

BEND 90° FOR BUTTWELDING ONLY

Size	Min QTY	Akatherm Code	VX Code
160mm	1	111691	53310
200mm	1	112091	53311
250mm	1	112591	53312
315mm	1	113191	53313

ELBOW 88.5° FOR BUTT OR EF

Size	Min QTY	Akatherm Code	VX Code
50mm	1	120588	53318
56mm	1	125688	53341
63mm	1	120688	53320
75mm	1	120788	53323
90mm	1	120988	53326
110mm	1	121188	53329
125mm	1	121288	53331
160mm	1	121688	53333
200mm*	1	122088	53335
250mm*	1	122588	53337
315mm*	1	123188	53339

*Fabricated

BENDS

Size	Min QTY	Akatherm Code	VX Code
15°/110mm*	1	181115	53406
15°/200mm	1	181615	53408
15°/250mm	1	182515	53410
15°/315mm	1	183115	53411
30°/110mm*	1	181130	53407
30°/160mm	1	181630	53409
88.5°/110mm	1	111198	53308

*Fabricated

akatherm HDPE Drainage Pipe & Fittings

ELBOW 45° FOR BUTT OR EF

Size	Min QTY	Akatherm Code	VX Code
50mm	1	120545	53317
56mm	1	125645	53340
63mm	1	120645	53319
75mm	1	120745	53321
75mm	1	120746*	53322*
90mm	1	120945	53324
90mm	1	120946*	53325*
110mm	1	121145	53327
110mm	1	121146*	53328*
125mm	1	121245	53330
160mm	1	121645	53332
200mm	1	122045	53334
250mm	1	122545	53336
315mm	1	123145	53338

* One sided extended

BEND 180º FOR BUTTWELDING

Size	Min QTY	Akatherm Code	VX Code
50mm	1	110599	53302
56mm	1	115699	53315
63mm	1	110699	53304

AERATOR SINGLE STACK / VENTILATION BRANCH

Size	Min QTY	Akatherm Code	VX Code
110mm	1	601117	53653
160mm	1	601617	53654

PRICES ARE CORRECT AT 1ST MAY 2018.
NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK. WHOLESALE PRICES DO NOT INCLUDE 10% GST.

akatherm HDPE Drainage Pipe & Fittings

DOUBLE BRANCH 45° FOR BUTT OR EF

Size	Min QTY	Akatherm Code	VX Code
Branch 45° 110/50mm x2	1	361105	53544
Double Branch 45° 110mm	1	361111	53545

Y PIECE 60°

Size	Min QTY	Akatherm Code	VX Code
110/110mm	1	331100	53538
160/110mm	1	331600	POA

Y BRANCH 45° FOR BUTT OR EF (Oblique or OB Junction)

Size	Min QTY	Akatherm Code	VX Code
50/50mm	1	300505	53482
56/50mm	1	305605	53536
56/56mm	1	305656	53537
63/50mm	1	300605	53483
63/56mm	1	300656	53485
63/63mm	1	300606	53484
75/50mm	1	300705	53487
75/56mm	1	300756	53490
75/63mm	1	300706	53488
75/75mm	1	300707	53489
90/50mm	1	300905	53491
90/56mm	1	300956	53495
90/63mm	1	300906	53492
90/75mm	1	300907	53493
90/90mm	1	300909	53494
110/50mm	1	301105	53497
110/56mm	1	301156	53502
110/63mm	1	301106	53498
110/75mm	1	301107	53499
110/90mm	1	301109	53500
110/110mm	1	301111	53501
125/50mm	1	301205	53503
125/56mm	1	301256	53509
125/63mm	1	301206	53504
125/75mm	1	301207	53505
125/90mm	1	301209	53506
125/110mm	1	301211	53507
125/125mm	1	301212	53508
160/75mm	1	301607	53512
160/90mm	1	301609	53513
160/110mm	1	301611	53514
160/125mm	1	301612	53515
160/160mm	1	301616	53516
200/75mm	1	302007	53517
200/90mm	1	302009	53518
200/110mm	1	302011	53519
200/125mm	1	302012	53520
200/160mm	1	302016	53521
200/200mm	1	302020	53522
250/110mm*	1	302511	53524
250/125mm	1	302512	53525
250/160mm	1	302516	53526
250/200mm*	1	302520	53527
250/250mm*	1	302525	53528
315/110mm*	1	303111	53529
315/125mm	1	303112	53530
315/160mm*	1	303116	53531
315/200mm*	1	303120	53532
315/250mm*	1	303125	53533
315/315mm*	1	303131	53534

*Fabricated

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akatherm HDPE Drainage Pipe & Fittings

BRANCH 88.5° FOR BUTT OR EF (square junction)

Size	Min QTY	Akatherm Code	VX Code
50/50mm	1	200505	53412
56/50mm	1	205605	53462
56/56mm	1	205656	53463
63/50mm	1	200605	53414
63/56mm	1	200656	53416
63/63mm	1	200606	53415
75/50mm	1	200705	53418
75/56mm	1	200756	53421
75/63mm	1	200706	53419
75/75mm	1	200707	53420
90/50mm	1	200905	53423
90/63mm	1	200906	53424
90/75mm	1	200907	53425
90/90mm	1	200909	53426
110/50mm	1	201105	53428
110/56mm	1	201156	53433
110/63mm	1	201106	53429
110/75mm	1	201107	53430
110/90mm	1	201109	53431
110/110mm	1	201111	53432
125/125mm	1	201212	53437
160/50mm	1	201605	53439
160/63mm	1	201606	53440
160/75mm	1	201607	53441
160/90mm	1	201609	53442
160/110mm	1	201611	53443
160/160mm	1	201616	53444
200/160mm	1	202016	53449
200/200mm*	1	202020	53450
250/110mm*	1	202511	53451
250/125mm	1	202512	53452
250/160mm	1	202516	53453
250/250mm*	1	202525	53455
315/110mm	1	203111	53456
315/125mm	1	-	53457
315/160mm	1	203116	53458
315/200mm	1	-	53459
315/250mm	1	203125	53460
315/315mm	1	203131	53461

* Fabricated

CLEAN OUT BRANCH 90° FOR BUTT OR EF (inspection opening)

Size	Min QTY	Akatherm Code	VX Code
50mm	1	230500	53464
56mm	1	235600	53473
63mm	1	230600	53465
75mm*	1	230700	53466
90mm*	1	230900	53467
110mm	1	231120	53468
160/110mm*	1	231600	53469

* Fabricated

CLEAN OUT BRANCH 45° FOR BUTT OR EF (inspection opening)

Size	Min QTY	Akatherm Code	VX Code
110/100mm	1	331100	53538
160/110mm	1	331600	POA

SWEPT JUNCTION 88.5° FOR BUTT OR EF

Size	Min QTY	Akatherm Code	VX Code
110mm	1	251111	53480

BALL BRANCH FOR BUTT OR EF

Size	Min QTY	Akatherm Code	VX Code
110/110x90°	1	241101	53474
110/110x90°*	1	441101	53604
110/110x135°	1	241102	53475
110/110x135°	1	341102	53540
110/110x180°*	1	241103	53476
125/110x90°	1	341201	53541
125/110x135°	1	241202	53478
125/110x135°	1	341202	53542
125/110x180°	1	241203	53479

*Fabricated

akatherm HDPE Drainage Pipe & Fittings

4 WAY RISER

Size	Min QTY	Akatherm Code	VX Code
110mm x 56mm	1	185656	53733
90mm x 56mm	1	189656	53734

EXPANSION SOCKET FOR EF

Size	Min QTY	Akatherm Code	VX Code
50mm	1	400520	53551
56mm	1	405620	53560
63mm	1	400620*	53710
75mm	1	420720	53735
90mm	1	420920	53747
110mm	1	421120	53582
160mm	1	421620	53584
200mm	1	402020*	53557
250mm	1	402520*	53558
315mm	1	403120*	53559

* Butt Weld only.

END CAP BUTT WELD ONLY

Size	Min QTY	Akatherm Code	VX Code
50mm	1	670507	53663
56mm	1	675607	53673
60mm	1	670607	53664
75mm	1	670707	53666
90mm	1	670907	53667
110mm	1	671107	53668
160mm	1	671609	53669
250mm	1	672509	53671

END CAP TAIL

Size	Min QTY	Akatherm Code	VX Code
56mm	1	241103	53763
110mm	1	675607	53764

SNAP SOCKET FOR BUTT WELDING ONLY

Size	Min QTY	Akatherm Code	VX Code
50mm	1	400510	53708
63mm	1	400610	53709
75mm	1	400710	53553
90mm	1	400910	53712
110mm	1	401110	53713
160mm	1	401610	53714
200mm	1	402010	53715

ADAPTOR FOR PVC & COPPER - use with snap or expansion socket FOR BUTT WELDING

Size	Min QTY	Akatherm Code	VX Code
80mm dwv PVC/ copper - 90 HDPE	1	400821	53736
100mm copper - 110 HDPE	1	401121	53737

- For 50mm dwv PVC - 56 HDPE (use standard snap/expansion socket)
- For 100mm dwv PVC - 110 HDPE (use standard snap/expansion socket)
- For 150mm dwv PVC - 160 HDPE (use standard snap/expansion socket)

PLUG IN SOCKET

Size	Min QTY	Akatherm Code	VX Code
50mm	1	420550	53578
56mm	1	425650	53585
63mm	1	420650*	53579*
75mm	1	420750	53580
90mm	1	420950*	53581*
110mm	1	421150	53583

* Butt Weld only

SCREW COUPLER SHORT

Size	Min QTY	Akatherm Code	VX Code
50mm	1	430530	53588
56mm	1	435630	53603
63mm	1	430630	53591
75mm	1	430730	53593
90mm	1	430930	53596
110mm	1	431130	53600

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

akatherm HDPE Drainage Pipe & Fittings

WASTE CONNECTOR

Size	Min QTY	Akatherm Code	VX Code
40x11/2”	1	980482	53706
50x2”	1	980583	53707

REDUCER CONCENTRIC FOR BUTT OR EF

Size	Min QTY	Akatherm Code	VX Code
50/40mm	1	150504	53349
56/40mm	1	155604	53378
56/50mm	1	155605	53379
63/50mm	1	150605	53351
63/56mm	1	150656	53352
75/50mm	1	150705	53353
75/56mm	1	150756	53355
75/63mm	1	150706	53354
90/50mm	1	150905	53357
90/56mm	1	150956	53360
90/63mm	1	150906	53358
90/75mm	1	150907	53359
110/50mm	1	151105	53361
110/56mm	1	151156	53365
110/63mm	1	151106	53362
110/75mm	1	151107	53363
110/90mm	1	151109	53364
125/50mm	1	151205	53366
125/56mm	1	151256	53370
125/75mm	1	151207	53367
125/90mm	1	151209	53368
160/110mm	1	151611	53371
160/125mm	1	151612	53372
200/160mm	1	152016	53373
250/160mm	1	152516	53374
250/200mm	1	152520	53375

REDUCER ECCENTRIC OR LEVEL INVERT TAPER (L.I.T.) FOR BUTT OR EF

Size	Min QTY	Akatherm Code	VX Code
56/50mm	1	165605	53405
63/50mm	1	160605	53381
63/56mm	1	160656	53382
75/50mm	1	160705	53383
75/56mm	1	160756	53385
75/63mm	1	160706	53384
90/50mm	1	160905	53387
90/56mm	1	160956	53390
90/63mm	1	160906	53388
90/75mm	1	160907	53389
110/50mm	1	161105	53392
110/56mm	1	161156	53396
110/63mm	1	161106	53393
110/75mm	1	161107	53394
110/90mm	1	161109	53395
125/50mm	1	161205	53397
125/75mm	1	161207	53399
125/90mm	1	161209	53400
125/110mm	1	161211	53401
160/110mm	1	161611	53402
160/125mm	1	161612	53403
200/110mm†	1	142011	53342
200/125mm†	1	142012	53343
200/160mm†	1	142016	53344
250/200mm†	1	142520	53345
315/200mm*	1	143120	53346
315/250mm†	1	143125	53347

*Fabricated †One side extended in length

FEMALE THREAD ADAPTOR SHORT FOR BUTT WELD ONLY

Size	Min QTY	Akatherm Code	VX Code
50 x 1” BSP	1	910580	53676
50 x 11/4" BSP	1	910581	53677
50 x 11/2" BSP	1	910582	53678
63 x 11/2" BSP	1	910682	53679
63 x 2” BSP	1	910683	53680

akatherm HDPE Drainage Pipe & Fittings

MALE THREAD ADAPTOR SHORT BUTT WELD ONLY

Size	Min QTY	Akatherm Code	VX Code
50 x 1" BSP	1	960580	53692
50 x 11/4 BSP	1	960581	53693
63 x 11/2 BSP	1	960682	53694
63 x 2" BSP	1	960683	53695

STUB FLANGE FOR BUTT WELDING

Size	Min QTY	Akatherm Code	VX Code
40mm	1	470402*	53605*
50mm	1	470502*	53606*
63mm	1	470602*	53607*
75mm	1	470702*	53608*
90mm	1	470902	53609
110mm	1	471102	53610
125mm	1	471202	53611
160mm	1	471602	53612
200mm	1	472002*	53613*
250mm	1	472502*	53614*
315mm	1	473102*	53615*

* Buttweld only

SILT BUCKET/TRAP (S.S. Lid & Bucket) BUTT WELDING

Size	Min QTY	Akatherm Code	VX Code
160mm x 110mm Outlet	1	183161	53732
250mm x 110mm Outlet	1	183251	53731

DISCONNECTOR TRAP (ADJUSTABLE) FOR EF

Size	Min QTY	Akatherm Code	VX Code
90mm	1	182909	53720
110mm	1	182111	53721

DISCONNECTOR TRAPS (FIXED) FOR EF

Size	Min QTY	Akatherm Code	VX Code
110mm	1	181111	53722

PALLAZI TRAP/FLOOR TRAP (FIXED)

Size	Min QTY	Akatherm Code	VX Code
90mm x 56mm	1	183956	53719
90mm x 63mm	1	183906	53717
90mm x 75mm	1	183907	53718
110mm x 75mm	1	183117	53716

"P" TYPE FIXTURE TRAP FOR E/F

Size	Min QTY	Akatherm Code	VX Code
50mm x 40mm BSP	1	180001	53728
50mm x 50mm BSP	1	180002	53729
56mm x 50mm BSP	1	180004	53730

"S" TYPE FIXTURE TRAP FOR E/F

Size	Min QTY	Akatherm Code	VX Code
50mm x 40mm BSP	1	180005	53725
50mm x 50mm BSP	1	180006	53726
56mm x 50mm BSP	1	180008	53727

MALE THREAD ADAPTOR LONG BUTT WELD OR E/F

Size	Min QTY	Akatherm Code	VX Code
50mm x 1" BSP	1	970580	53700
50mm x 11/4" BSP	1	970581	53701
50mm x 11/2" BSP	1	970582	53702
56mm x 2" BSP	1	975683	53705
63mm x 11/2" BSP	1	970682	53703
63mm x 2" BSP	1	970683	53704

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

akatherm HDPE Drainage Pipe & Fittings

FEMALE THREAD ADAPTOR LONG BUTT WELD OR E/F

Size	Min QTY	Akatherm Code	VX Code
50mm x 1" BSP	1	920580	53684
50mm x 11/4" BSP	1	920581	53685
50mm x 11/2" BSP	1	920582	53686
50mm x 2" BSP	1	920583	POA
56mm x 2" BSP	1	925683	53689
63mm x 1/12" BSP	1	920682	53687
63mm x 2" BSP	1	920683	53688
75mm x 21/2" BSP	1	920784	POA

FLANGE BUSHING FOR SCREW COUPLER

Size	Min QTY	Akatherm Code	VX Code
50mm	1	430505	53587
56mm	1	435605	53602
110mm	1	431105	53598

INSPECTION SCREW LOCK LONG

Size	Min QTY	Akatherm Code	VX Code
50mm	1	660540	53656
56mm	1	665640	53661
75mm	1	660740	53658
110mm	1	661140	53660

RUBBER SEAL FOR FLOOR-LAVATORY

Size	Min QTY	Akatherm Code	VX Code
129mm	1	501113	53620

TRAP CONNECTION SOCKET

Size	Min QTY	Akatherm Code	VX Code
40mm	1	510401	53624
50mm	1	510502	53626
56mm	1	515602	53635

PUDDLE FLANGE

Size	Min QTY	Code	VX Code
110mm	1	-	98521

INSPECTION OUTLET

Size	Min QTY	Akatherm Code	VX Code
100mm	1	-	53744
160mm	1	-	53745

LONG SIDED ELBOW

Size	Min QTY	Akatherm Code	VX Code
110mm	1	111192	53743

Tools & Accessories

FRIATEC was founded in 1863 in Manheim, Germany and has successfully brought to market many innovative ranges. FRIATEC's patented Electrofusion system is world leading and has been used in projects all around the globe. The FRIALEN range is rated to PN16 and is commonly used in the civil, mining and irrigation sectors. The FRIAFIT range of fittings is rated to PN10 and is most suited to applications with lower pressures, such as those found in irrigation and sewerage situations. FRIATEC's innovative electrofusion products include many unique features, all of which are designed to improve the speed of installation and use without compromising on the quality and longevity of the connection made.

FRIATOOLS TECHNICAL EQUIPMENT

FRIATEC is pioneer for Electrofusion of HDPE pipe systems. The innovative developments, in this area have their roots in the company. Nobody knows more about Electrofusion and Electrofusion tools and accessories than FRIATEC. As a market leader, FRIATEC influence significant development of suitable equipment and accessories for more than 30 years.

Today, under the umbrella term of FRIATOOLS, FRIATEC provide a sophisticated and complete range comprising FRIAMAT fusion units, as well as mechanical tools such as scraper tools and rounding clamps.

FRIAMAT basic — Universal fusion unit without documentation function

- As all other FRIAMAT fusion units, the FRIAMAT basic offers a perfect combination of high performance and easy and safe handling.
- This is supplemented by the unique features of the FRIAMAT series:
- Fusion of d 20 to d 900
- Extra-long fusion and mains cable
- Easy cable rewind
- Robust design made of weather- and wear-resistant materials
- Large accessories tray
- 20 languages selectable
- The FRIAMAT basic is an absolute lightweight among the fusion units and thus makes working at the construction site easy
- Primes up to 900mm

Version	Friatools Code	Vx Code
with reader wand	613104	89162
with barcode scanner	614104	89163

FRIAMAT prime — Universal fusion unit with traceability- and documentation function

- The FRIAMAT prime is literally the prime unit among the fusion units. Its large display and its clear operating menu simplify the handling and prevent operating errors. The unit also offers options for a comprehensive documentation of fusion and traceability data.
- Includes the FRIATEC Memory-Stick (USB) for easy data transfer
- Large graphical display for comfortable user guidance
- Supervisor pass for individual unit settings
- Input of GPS coordinates
- Input of information texts through barcode
- Infrared remote control as optional input device
- Up to 500 fusion processes can be directly stored
- Optional increase of the memory capacity through Memory-Card
- Primes up to 900mm

Version	Friatools Code	Vx Code
with reader wand	613103	89160
with barcode scanner	614103	89161

FRIAMAT XL — Large pipe fusion unit with traceability and documentation function

- Extra powerful electrofusion unit for the processing of the FRIALEN XL product range.
- Also Universally usable for the entire FRIALEN and FRIAFIT Range.
- Graphic maxi display for easier operator assistance.
- USB interface for data transfer via FRIATEC memory stick (included)
- Language Section
- Adjustable buzzer volume
- Manual emergency entry.
- Extra long power cable 4m with CEE connector 400v
- Extra-long fusion cable 4m
- Weight approx. 50kg

Version	Friatools Code	Vx Code
with barcode scanner	614091	89252

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

SCAN Barcode scanner

- FRIAMAT barcode scanner designed for rough use at construction sites.
- For a quick reading of fusion and traceability barcodes. With handy scanner bag for storage.
- Can be used for all current FRIAMAT electrofusion units in this product range, elderly units on request.

Friatools Code	Vx Code
623645	89247

FWLESST Reader wand

- FRIAMAT reader wand for reading of fusion- and traceability barcodes.
- Can be used for all FRIAMAT electrofusion units.

Friatools Code	Vx Code
623645	89164

MEMSTICK Memory-Stick

- Memory-Stick for the storage of fusion data in FRIATRACE database, as pdf- or csv-data.
- Transfer of fusion data from FRIAMAT electrofusion units (only documentation units) for processing to the PC.

Friatools Code	Vx Code
624023	89165

FRIATRACE Database software FRIATRACE

Software for processing of fusion data including traceability data from FRIAMAT fusion units with traceability- and documentation function. Suitable for operating systems Windows 2000/ XP / Windows 7. With database function (all fusion data in one database) for individual evaluation, copying, sorting, searching, formating, editing etc.

Available as:
- FRIATRACE database software consisting of FRIATRACE CD-Rom, connecting cable PC – fusion unit and programme description or
- FRIATRACE combi-package consisting of FRIATRACE CD-Rom, Memory-Stick and programme description.

Article description	Friatools Code	Vx Code
FRIATRACE database software	613280	89166
FRIATRACE combi-package	624026	89167

ALTK (FMT) Aluminium transport boxes

- For transport and storage of FRIAMAT fusion units of the relevant product range FRIATOOLS.
- Transport boxes for older FRIAMAT types on request.

Article description	Friatools Code	Vx Code
FRIAMAT prime / basic (from Q2/2014)	627600	89168
FRIAMAT prime / basic (to Q2/2014)	627001	89169

CONTACT4 Socket contacts 4.0 mm

- Socket contacts 4.0 mm.
- Can be used for all FRIAMAT fusion units.

Friatools Code	Vx Code
624530	89170

ADFL Adapter for flat contacts

- For sliding onto socket contacts of all FRIAMAT fusion units.

Friatools Code	Vx Code
613236	89171

ADBK Adapter for 4 - 4.7mm socket contacts

- For sliding onto socket contacts of all FRIAMAT fusion units.

Friatools Code	Vx Code
613237	89172

ADPC Adapter for 4.7 - 4mm socket contacts

- For sliding onto socket contacts of all welders 4.7mm compatible.

Friatools Code	Vx Code
613240	89248

Vinidex Welding Wipes

- Welding wipes for pipe cleaning. 120 wipes per tube.

Vx Code
99600

FWSG RA Compact scraper tool for pipes and outlets d 25 - d 63

- Dimension-bound compact scraper tool for the reliable removal of the oxide layer of HD-PE and PE-Xa pipes and at the outlets of FRIALEN safety fittings (see product range FRIALEN).
- Super long scraping length, in the diameter d 32 also for FRIALONG long couplers.
- Scraper blade made of carbide with 2 edges (twice the service life).
- Automatic compensation of pipe out-of-roundness and tolerances. Manual operation, with hand crank or cordless screwdriver.

Article description	Dimension	SDR	Friatools Code	Vx Code
FWSG RA 25	d 25	SDR 7,4 / SDR 11	613576	89253
FWSG RA 32	d 32	SDR 11	613580	89254
FWSG RA 40	d 40	SDR 11	613581	89255
FWSG RA 50	d 50	SDR 11	613582	89256
FWSG RA 63	d 63	SDR 11	613583	89257
Hand crank	all dimensions		613579	89280

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

FWSG 63 Scraper tool for pipes d 20 - d 63

- For the reliable removal of the oxide layer of HD-PE and PE-Xa pipes.
- Scraper blade made of carbide for a long life.
- Even swarf removal thanks to a spring-loaded scraper blade and automatic feed. Inclusive of a replacement scraper blade.
- The tool is delivered in a handy aluminium transport box.

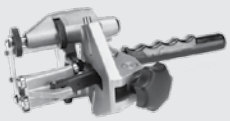
Friatools Code	Vx Code
613305	89173

FWSG 63/225 Scraper tool set for pipes d 20 - d 225

- For the reliable removal of the oxide layer of HD-PE and PE-Xa pipes.
- Scraper blade made of carbide for a long life.
- Even swarf removal thanks to a spring-loaded scraper blade and automatic feed.
- Inclusive of a replacement scraper blade for each tool and FRIATEC maintenance spray.
- The tools are delivered in a handy aluminium transport box.

Friatools Code	Vx Code
613316	89259

FWSG 225 Scraper tool for pipes d 75 - d 225



- For the reliable removal of the oxide layer of HD-PE and PE-Xa pipes.
- Scraper blade made of carbide for a long life.
- Even swarf removal thanks to a spring-loaded scraper blade and automatic feed.
- Inclusive of a replacement scraper blade and FRIATEC maintenance spray.
- The tool is delivered in a handy aluminium transport box.

Friatools Code	Vx Code
613311	89258

FWSG SE Scraper tools for pipe ends and saddle areas d 63 - d 315

- Dimension-bound scraper tool for the reliable removal of the oxide layer of HD-PE and PE-Xa pipe ends and in the saddle area.
- Scraper blade designed as turning blade with 2 blades (twice the service life).
- Easy clamping thanks to the open design of the scraper tool.
- The tool is delivered in a handy aluminium transport box.

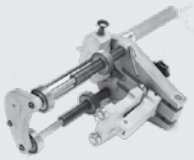
Article description	Dimension	Friatools Code	Vx Code
FWSG SE 63	d 63	613562	89175
FWSG SE 75	d 75	613563	89176
FWSG SE 90	d 90	613564	89177
FWSG SE 110	d 110	613565	89178
FWSG SE 125	d 125	613566	89179
FWSG SE 140	d 140	613567	89180
FWSG SE 160	d 160	613568	89181
FWSG SE 180	d 180	613569	89182
FWSG SE 200	d 200	613570	89183
FWSG SE 225	d 225	613571	89184
FWSG SE 250	d 250	613572	89185
FWSG SE 280	d 280	613573	89186
FWSG SE 315	d 315	613574	89187

FWSG 710 L — Scraper tool for pipes d 250 - d 710

- For the reliable removal of the oxide layer of HD-PE and PE-Xa pipes for half or entire coupler length.
- Scraper blade made of carbide for a long life. Even swarf removal thanks to a spring-loaded scraper blade and automatic feed.
- Inclusive of a replacement scraper blade and FRIATEC maintenance spray.

The tool is delivered in a handy aluminium transport box.

Friatools Code	Vx Code
613642	89174



FWSG 710 S — Scraper tool for pipes d 250 - d 710 and spigot fittings

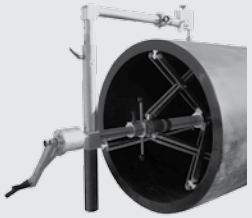
- For the reliable removal of the oxide layer on spigot fittings.
- Additionally it is also possible to scrape HD-PE and PE-Xa-pipes (maximum along half length of couplers d 710).
- Scraper blade made of carbide for a long life.
- Even swarf removal thanks to a spring-loaded scraper blade and automatic feed.
- Includes replacement blade and FRIATEC maintenance spray.
- The tool is delivered in a handy aluminium transport box.

Friatools Code	Vx Code
613639	89260

FWSG 900 L — Scraper tool for pipes d 630 - d 900

- For the reliable removal of the oxide layer of HD-PE pipes for half or entire coupler length.
- Scraper blade made of carbide for a long life.
- Even swarf removal thanks to a spring-loaded scraper blade and automatic feed.
- Includes replacement blade and FRIATEC maintenance spray
- The tool is delivered in a handy aluminium transport box.

Friatools Code	Vx Code
613644	89281



FWSG XL — Large pipe scraper tool for pipes d 800 to d 1200

- For the reliable removal of the oxide layer of large pipes made of HD-PE in the diameter range d 800 to d 1200, SDR11-SDR33.
- Modular design for easy handling and quick assembly.
- Diameter adjustment through quick setting.
- Center-supported drive via hand crank.
- Automatic compensation of pipe out-of-roundness and tolerances through spring-supported adjustable blade unit.
- Scraper blade designed as turning blade with 2 cutting edges (twice the service life).

Friatools Code	Vx Code
613645	89251

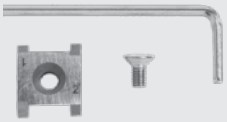
NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

FWSGE Replacement blades for scraper tools

- Replacement blades made of carbide (long storage and service life).

Article description	Unit type	Marking	Friatools Code	Vx Code
FWSGE 3	FWSG 225 / FWSG 315 / FWS-GA	coloured red	613322	89249
FWSGE 4	FWSG 63	coloured green	613323	89188
FWSGE 5	FWSG 710 L/S / FWSG 900 L	coloured blue	613324	89189

consisting of 3 x replacement blades, 1 x torx screw and 1 x torx wrench.



- Replacement blade, designed as turning blade (twice the service life).

Article description	Unit type	Friatools Code	Vx Code
FWSGE 8	for FWSG SE (all types)	613327	89190

consisting of 1 x replacement blade, 1 x hexagon socket screw and 1 hexagon socket wrench.

- Replacement blade, designed as turning blade (twice the service life).

Article description	Unit type	Friatools Code	Vx Code
FWSGE 10	FWSG RA 32 and 40	613329	89282
FWSGE 11	FWSG RA 50 and 63	613330	89283

consisting of 1 x replacement blade, 1 x torx screw and and 1 x torx wrench.

- Replacement blade and guide plate designed for large pipe processing; designed as turning blade and turning plate (twice the service life).

Article description	Unit type	Friatools Code	Vx Code
FWSGE 12	for FWSG XL	613331	89191

consisting of 1 x replacement blade, 1 x guide plate, 2 x torx screws and 1 torx wrench.

PFSP FRIATEC maintenance spray

- For cleaning and caring for scraper tools. Content: 100 ml.
- Please observe appropriate safety and application instructions on the agent container and on operating instructions included with scraper tools.

	Friatools Code	Vx Code
	613301	89192

ALTK (FWSG) Aluminium transport boxes

- For the transport and storage of scraper tools.

Unit type	Friatools Code	Vx Code
FWSG 63	613307	89193
FWSG 225 and FWSG 3/225	613309	89194
FWSG 710 S	613308	89195
FWSG 710 L	613314	89196
FWSG 900 L	613304	89197
FWSG SE	613318	89198

S Scrapers

Description	Vx Code
Harris Scraper 1 1/2' width	71034
Harris Scraper 2 1/2' width	89200
Harris Scraper Blade 1 1/2' Width (pack of 2)	71036
Harris Scraper Blade 2 1/2' (pack of 2)	89201

FWZXL Hand scraper for large pipes

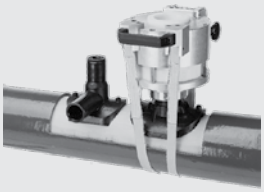
- For removing oxide layers on large HD-PE pipes which are unable to treat using appropriate scraper tools.
- Ideal for preparing surfaces for the processing of FRIALEN XL saddle fittings.
- Also suitable for deburring cut edges.

Friatools Code	Vx Code
613299	89250

FWPM FRIALEN-/FRIAFIT-Marker (silver)

- For the marking of HD-PE and PE-Xa-pipes.
- Colour silver. Sold individually.

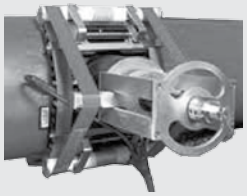
Friatools Code	Vx Code
613069	89227



FRIATOP Clamping unit (Top Loading)

- For the assembly of FRIALEN XL Top Loading saddle parts without lower clamp (see product range FRIALEN XL) for all pipe diameters in the appropriate range of dimensions with extra elastic pneumatic spring system and for the optimum build-up of jointing pressure during fusion process.

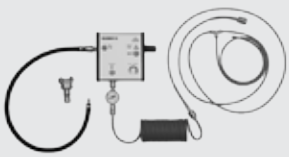
Article Description	Outlet dimension	Friatools Code	Vx Code
FRIATOP Clamp	d 32,63,90	613350	89202



UNI CLAMP

- Instead of cost-intensively integrating a T-piece, a branch or vent can be very comfortably created using the FRIALEN spigot saddle SA-UNI. The spigot outlet can be fused with FRIALEN couplers MB or UB.

Article description	Outlet dimension	Ø hole saw	Friatools Code	Vx Code
SA-UNI Clamp	d 90-250	68-187 mm	613385	89505



VACUSET XL Clamping unit (Vacuum)

- For the assembly of FRIALEN XL spigot saddles SA-XL with outlet d 160, d 225 and d 250, as well as for the assembly of FRIALEN XL repair saddles RS-XL
- Consisting of VACUBOX XL, manometer, and hose connections.
- Plug connection NW 7.2 or claw coupling for connection to a construction site compressor.
- The tool is delivered in a handy aluminium transport box.
- For the assembly of FRIALEN XL spigot saddles SA-XL plungers (PRESSKO) are required.

Friatools Code	Vx Code
613820	89203

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

PRESSKO Plunger for VACUSET XL clamping unit

- Nominal width-related plunger with stop plate and plug connection NW 7.2 for assembly on the FRIALEN XL spigot saddle SA-XL with outlet d 160, d 225 or d 250 and for the connection of the VACUSET XL.

Spigot saddle	Outlet dimension	Friatools Code	Vx Code
FRIALEN SA-XL	d 160	613821	89204
FRIALEN SA-XL	d 225	613822	89205
FRIALEN SA-XL	d 250	613823	89206
FRIAFIT ASA-VL	d 225	613823	89207

FWAB XL Drilling equipment FWAB XL

- Drilling equipment FWAB XL for drilling HD-PE pipes in unpressurised condition through the outlet spigot SA-XL.
- Drive with drilling machine. Consisting of hole saw (nominal width-related), hole saw adapter SDS max, extension for hole saw adapter, centre drill with ejector and retaining shell, and 1 x hexagon wrench.
- The tool is delivered in a handy aluminium transport box.

Article description	Outlet dimension	Ø hole saw	Friatools Code	Vx Code
FWAB-XL 90	d 90	-	613832	89506
FWAB-XL 110	d 110	-	613833	89507
FWAB-XL 125	d 125	-	613834	89508
FWAB-XL 160	d 160	123 mm	613829	89208
FWAB XL 225	d 225	172 mm	613830	89209
FWAB XL 250	d 250	187 mm	613831	89210

FWXR Manual rounding clamps for pipes d 63 - d 250

- For retrospective rounding of HD-PE and PE-Xa-pipes. Covering several dimensions due to the use of reducer spherical shells.

(Fig. shows FWXR-S1)

Article description	Basic size	Reducer spherical shells	Friatools Code	Vx Code
FWXR-S1	d 63	d 32, 40 und 50	613416	89212
FWXR-S2	d 110	d 90	613431	89213
FWXR-S3	d 160	d 125	613439	89214
FWXR-S4	d 200	d 180	613443	89215
FWXR-S5	d 250	d 225	613444	89216

FWXRH Hydraulic rounding clamps for pipes d 280 - d 900

- For the retrospective rounding of HD-PE pipes.
- These rounding clamps are also available for hire.
- Prices and availability of dimensions on request.

(Fig. shows hydraulic rounding clamp d 800)

Dimension	Friatools Code	Vx Code
d 280	613452	89233
d 315	613461	89234
d 355	613462	89235
d 400	613463	89236
d 450	613464	89237
d 500	613465	89238
d 560	613467	89239
d 630	613466	89240
d 710	613468	89241
d 800	613460	89242
d 900	613458	89243

RPS Repair set

- Repair kit for containing residual water during repair and installation work on d 90 - d 900 HD-PE water pipes.
- Consisting of a universal repair set with pump, pressure gauge, drill, connecting hose, and additionally repair balloons for each pipe dimensions.
- Optional extension set consisting of additional connection hose and pressure gauge.
- From pipe dimensions d 355 the drilling equipment FWAB XL 225 (Order-Nr. 613830) is required.
- The repair set up to d 225 requires VVS repair and reinforcing saddles
- Pipe dimensions from d 250 require VSC-TL or RS-XL repair saddles
- Prices and availability on request.

Article description	Dimension	Friatools Code	Vx Code
Repair set	universal	613701	89217
Extension set	universal	613715	89218
Repair balloon type 1	d 90 - d 180	613702	89219
Repair balloon type 2	d 200 - d 315	613703	89220
Repair balloon type 3	d 355 - d 450	613704	89221
Repair balloon type 4	d 500 - d 560	613705	89222
Repair balloon type 5	d 630	613706	89223
Repair balloon type 6	d 710	613707	89224
Repair balloon type 7	d 800	613708	89225
Repair balloon type 8	d 900	613709	89226

FWSS Activating key for pressure tapping tees

- For drill activation subject to diameter (d1) of the DAA, DAA-TL and DAA-TL/RE (see product range FRIALEN).

d_1	Size	Friatools Code	Vx Code
40	10mm	613242	89228
50-75	17mm	613248	89229
90-315	19mm	613250	89230

FIXBLOC Fixation for absorbing arial thrust and tensil forces

- The FIXBLOC is used on PE pipes for the creation of fixed point, as a pull-out protection, assembly aid or fixation to pipe bearing. Strength per fixed point up to 40 KN. Multiple applications possible around the pipe circumference. Processing is carried out with standard tensioning belts with belt width 50mm which are guided securely by two belt clips (easily removable). Minimum length approx. 3,5 x d pipe (longer for multiple applications). If the belt cannot be passed around the circumference of the pipe, the clamping device FIXBLOC-FWFB (only for hire, order no. 613380) can be used, e.g. in case of a PE-Liner, which must be anchored against the concrete wall of a manhole.

d_1	Size	Friatools Code	Vx Code	Vx Code
160	1600mm	680600	89557	89557

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

AC Alignment Clamps

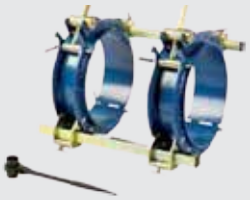
Description	Vx Code
EFRAC 16-32 Uni-Clamp	71011
EFRAC 16-63 Uni-Clamp	71012
EFRAC 180 Kit - Delux, complete with knuckled bar, standard liners and bag	71013
EFRAC 180 90d tee adaptor clamp	71014
EFAC 63mm - 180mm Alignment Clamps	71015
45/90 Adaptor Kit for EFAC 180	71016
63mm Liner, each (4 required)	71017
75mm Liner, each (4 required)	71018
90mm Liner, each (4 required)	71019
110mm Liner, each (4 required)	71020
125mm Liner, each (4 required)	71021
140mm Liner, each (4 required)	71022
160mm Liner, each (4 required)	71023
EFRAC 250 Alignment Clamp	71024
Liner 250/180 (4 required)	71025

EFRAC 16-32 Uni-Clamp

EFRAC 180 Delux Kit

MPK Manual Positioning Kit

Description	Vx Code
280mm Positioning Clamp	71026
315mm Positioning Clamp	71027
355mm Positioning Clamp	71028
400mm Positioning Clamp	71029
Hydraulic positioning kit 400mm	71030
Hydraulic positioning kit 500mm	71031
Hydraulic positioning kit 630mm	71032
Hydraulic positioning kit 710mm	71033



RT Rerounding Tools

Description	Vx Code
Hydraulic Re-rounding clamp + pump 400mm	71002
Set of Reducing shells (3pcs) 400 to 355mm	71003
Set of Reducing shells (3pcs) 400 to 315mm	71004
Hydraulic Re-rounding clamp + pump 500mm	71005
Set of Reducing shells (3pcs) 500 to 450mm	71006
Set of Reducing shells (3pcs) 500 to 400mm	71007
Hydraulic Re-rounding clamp + pump 630mm	71008
Set of Reducing shells (3pcs) 630 to 560mm	71009
Set of Reducing shells (3pcs) 630 to 500mm	71010

SOUHF Squeeze Off Unit

Description	Vx Code
SOU63HF Squeeze Off Unit 20-63mm	71038
SOU125 Squeeze Off Unit 63-125mm SDR 11 - 17.6	71039

SOU200 Squeeze Off Unit

Description	Vx Code
SOU200 Squeeze Off Unit 63-200mm SDR 11, 125-200mm SDR 17.6	71040

SEC Secateurs

Description	Vx Code
6-24mm PE Pipe cutter, ratchet action, plastic coated handles	71041
6-42mm PE Pipe cutter, HEAVY DUTY, ratchet action plasitc coated handles	71042
3-63mm PE Pipe Cutter, ratchet action	71043

NOT ALL PRODUCTS IN THIS CATALOGUE ARE AVAILABLE EX-STOCK.

FRIAMAT UNITS AT A GLANCE

Technical data*	FRIAMAT ® prime	FRIAMAT ® basic
Input voltage range	190…250Vac	190…250Vac
Frequency range	44…66 Hz	44…66 Hz
Current consumption	max. 16A ac	max. 16A ac
Power	3.5kW	3.5kW
Fuse	16A slow (external)	16A slow (external)
Housing	Type of protection IP 54 Protection class II	Type of protection IP 54 Protection class II
Main switch	Yes	Yes
Mains cable	5 m with two-pole plug	5 m with two-pole plug
Fusion cable	4 m	4 m
Weight**	13 kg	13 kg
Barcode type	Code 2/5 (interleaved) Code 128	Code 2/5 (interleaved)
Working temperature range***	-20 °C to +50 °C	-20 °C to +50 °C
Fusion current monitoring	Short-circuit and interruption	Short-circuit and interruption
Communication interfaces	USB Parallel Memory-Card slot (PCMCIA standard)	No
Service interface	Serial	Serial
Large display	Yes	No
Connectors 4.0 mm	Yes	Yes
Manual emergency programming	Yes	Yes
Remote start pass	Optional	Optional
Infrared remote control	Optional	No
Fusion pass	Optional	No
Supervisor pass	Yes	No
FRIATRACE	Optional	No
FRIATEC Memory-Stick	Yes	No
FRIATEC Memory-Card	Optional	No
Documentation of fusion and traceability data	Yes	No
Recordable fusion in unit	500	No
Data storage by Memory-Card	Yes, more than 60,000 data records	No
Languages	20	20
Quality class proof	CE mark	CE mark
Transport box	Yes	Yes

*: Technical changes reserved
**: Incl. extra-long fusion and mains cable
***: For fusion of fittings of other manufacturers, please absolutely observe the information about the working temperature range!

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