

AVK PENTOMECH



TECHNICAL INTRODUCTION



The **AVK PentoMech** 16 bar mechanical fittings for pressure piping applications are designed with an **innovative Balance Sealing System**. This feature offers a technical solution whereby the tightening of the nut improves the seal performance, with the extra benefit of maximum reliability in all possible conditions of use. Keeping the basic features of easy and fast assembly without any particular preparation of the pipe.

Product range:

d16-110mm PE x PE fittings.
d16x½" - 110mm x 4", PE x BSP fittings.
d25-32mm PE x copper fittings.
15-35mm OD Universal solutions range, Pg 22.
d20-32mm stops, Pg 36.

- **Innovative seal – ensures a water tight solution.**
- **Seal design – improves connections to undersize pipe, pipe showing wear and ovality.**
- **Seal design – reduces effort to insert pipe in sizes > d50mm.**
- **Dedicated fittings means dedicated seals, no long term joint stresses.**
- **All fittings are rated PN16 including stop taps.**

Main Applications

Water supply, house connections and water treatment plants.

Technical Specification - Materials

WRAS approved raw materials are used, this makes the **AVK PentoMech** fittings highly resistant and reliable over time. Suitable for drinking water and environment compatible.

- Body, nut, thrust ring: virgin Polypropylene (PP-B), higher mechanical resistance and thermal stability. For coloured nuts, top UV resistant master-batch are used (Grade 8-ASTM D2565)
- Grip ring: copolymer Polyacetal resin (POM), white colour
- Conical gasket: rubber EPDM, hardness 70sh, black colour
- Reinforcement ring: only for female threads $\geq 1\frac{1}{2}"$, stainless steel AISI 430

Standards

- Dimensions, features and functional tests: WIS 4-32-11, BS EN150 3501:2015, BS EN911:1996, BS 2782, UNI 9561, EN712, EN713, EN715, EN911, ISO3458, ISO3459, ISO3501, ISO3503, ISO14236, DIN8076.3, AS/NZS 4129, BRL K534-03
- Pipe compatibility: PE-HD (PE63-80-100), PE-LD, PEX-a: UNI10910, EN12201-1, ISO4427, DIN8072, DIN8074, AS/NZS4130, BS6572, BS6730, UNI7990
- Sealing threads (male and female): EN10226-3 (ex ISO7/1), DIN2999.1, BS21, AS/NZS1722.1
- Flange: ISO7005, DIN2501, DIN8063

Working Temperature

-10 to +45°C

Nominal Pressure (PN) and Product Approvals

AVK PentoMech fittings are designed and pressure rated to PN16; fittings are tested and certified by major international approval institutions, such as WRAS (UK) see website, DVGW (Germany), IIP (Italy), WM (Australia), Kiwa (Holland).

Working Pressure and Temperature

Temperature C°	-10 to +25 °C	+26 to +35 °C	+36 to +45 °C
PN	16	12,5	10

WRAS approved materials are used throughout and full datasheets are available through the AVK UK website. www.avkuk.co.uk



INSTALLATION INFORMATION

1. Prepare pipe and unscrew nut

Cut the pipe square and remove the burrs; Up to 63mm use a PE liner (see pg 24). For sizes $d \geq 75\text{mm}$, chamfer the pipe. Unscrew the nut to the last thread, leave it on the fitting while inserting the pipe.

2. Insert pipe up to the first pipe stop

Twist the pipe into the fitting through the grip ring to the first stop: the pipe has reached the conical gasket

The conical seal has two opposite lips that allows:

- Easier pipe insertion
- Keeps the gasket seal suitably located in the radial body of the fittings
- Keeps the gasket seal in contact with fitting body and the pipe wall (large contact pipe surface)

3. Insert pipe up to the body pipe stop

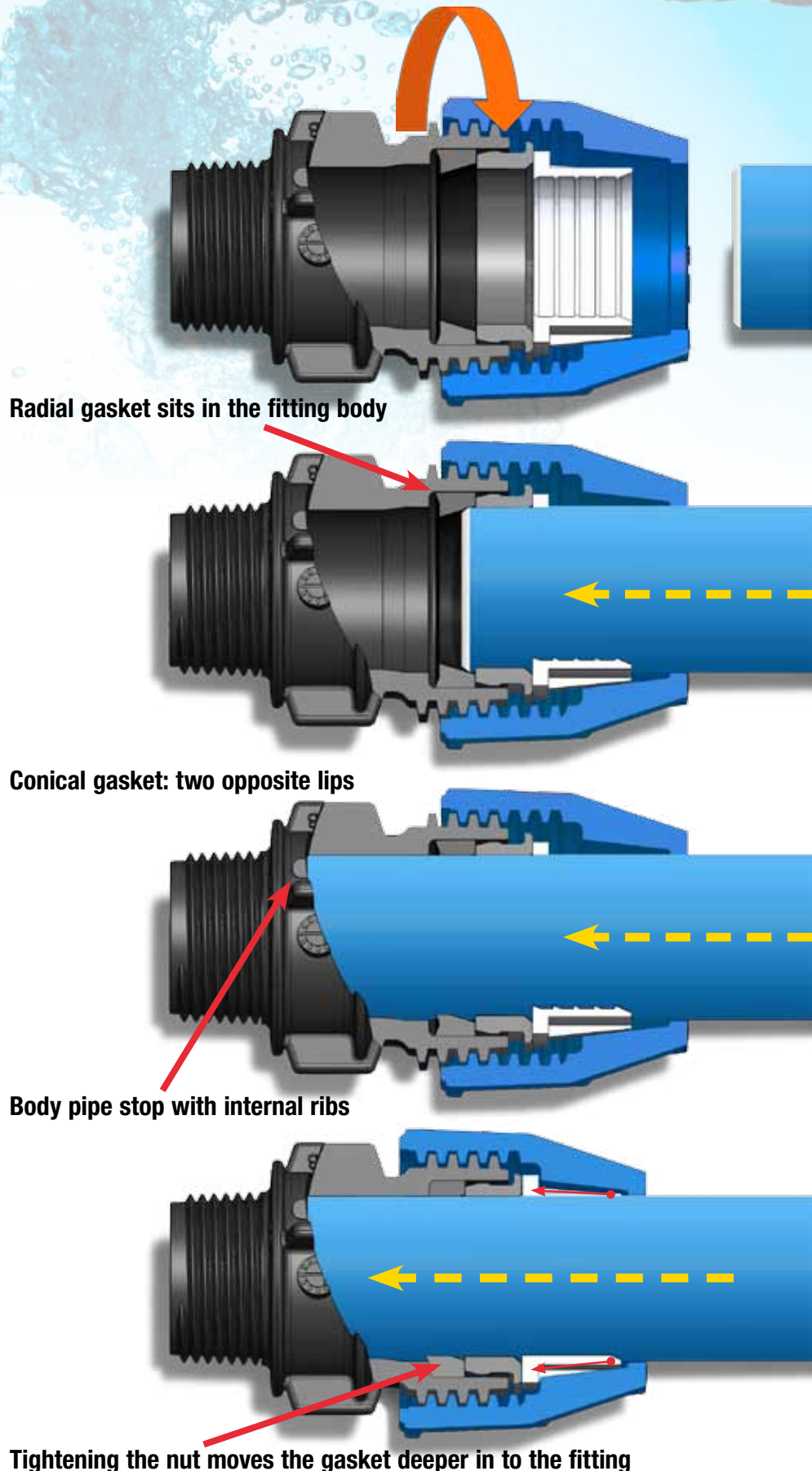
Push the pipe through the gasket to the second stop, you have reached the pipe stop, with incorporated ribs within the fitting.

When first inserted past the gasket, the pipe sits in the body of the fitting. After insertion the pipe does not reach directly the body pipe stop, it also remains a little raised from the pipe stop thanks to the internal ribs in the body.

4. Tighten the nut

Tighten the nut firmly by hand or standard tool up to 32mm. Above $d \geq 40\text{mm}$ use a standard tool or dedicated wrench.

Tightening the nut exerts pressure on the thrust ring which in turn increases pressure on the gasket seal and also moves the pipe to the second stop in the body. This action sits the gasket seal deeper into the fitting moving it radially and increasing its compression on the pipe wall. The tightening of the nut, within the constraints of the dimensions and performance standards of pipe means the balance sealing system compensates for pipe which may be under sized, scored or suffering from ovality.



Type	AVK ref. nos.	d mm	PN bar	Quantity in Bag Where Applicable	Delivery Code
Series 1110/01 Coupler Polypropylene body, nut, thrusting ring, Polyacetal grip ring EPDM Seals Mechanical operation WIS 4-32-11 WRAS approved materials PN16					
	1110-016000-01-10	16	16	30	C
	1110-020000-01-10	20	16	20	A
	1110-025000-01-10	25	16	10	A
	1110-032000-01-10	32	16	10	A
	1110-040000-01-10	40	16	0	A
	1110-050000-01-10	50	16	0	A
	1110-063000-01-10	63	16	0	A
	1110-075000-01-10	75	16	0	C
	1110-090000-01-10	90	16	0	A
	1110-110000-01-10	110	16	0	A
Series 1110/02 Repair Coupler Polypropylene body, nut, thrusting ring, Polyacetal grip ring EPDM Seals Mechanical operation WIS 4-32-11 WRAS approved materials PN16					
	1110-020000-02-10	20	16	20	A
	1110-025000-02-10	25	16	10	A
	1110-032000-02-10	32	16	10	A
	1110-040000-02-10	40	16	0	A
	1110-050000-02-10	50	16	0	A
	1110-063000-02-10	63	16	0	A
	1110-075000-02-10	75	16	0	C
	1110-090000-02-10	90	16	0	A
	1110-110000-02-10	110	16	0	A
Series 1110/03 Reducing Coupler Polypropylene body, nut, thrusting ring, Polyacetal grip ring EPDM Seals Mechanical operation WIS 4-32-11 WRAS approved materials PN16					
	1110-020016-03-10	20x16	16	20	C
	1110-025016-03-10	25x16	16	10	C
	1110-025020-03-10	25x20	16	10	A
	1110-032020-03-10	32x20	16	10	A
	1110-032025-03-10	32x25	16	10	A
	1110-040025-03-10	40x25	16	0	A
	1110-040032-03-10	40x32	16	0	A
	1110-050032-03-10	50x32	16	0	A
	1110-050040-03-10	50x40	16	0	C
	1110-063032-03-10	63x32	16	0	A
	1110-063040-03-10	63x40	16	0	C
	1110-063050-03-10	63x50	16	0	A
	1110-075050-03-10	75x50	16	0	C
	1110-075063-03-10	75x63	16	0	C
	1110-090063-03-10	90x63	16	0	A
	1110-090075-03-10	90x75	16	0	C
	1110-110063-03-10	110x63	16	0	A
	1110-110075-03-10	110x75	16	0	C
	1110-110090-03-10	110x90	16	0	C
Series 1110/04 End Cap Polypropylene body, nut, thrusting ring, Polyacetal grip ring EPDM Seals Mechanical operation WIS 4-32-11 WRAS approved materials PN16					
	1110-016000-04-10	16	16	30	C
	1110-020000-04-10	20	16	20	A
	1110-025000-04-10	25	16	10	A
	1110-032000-04-10	32	16	10	A
	1110-040000-04-10	40	16	0	A
	1110-050000-04-10	50	16	0	A
	1110-063000-04-10	63	16	0	A
	1110-075000-04-10	75	16	0	C
	1110-090000-04-10	90	16	0	A
	1110-110000-04-10	110	16	0	A
For PE joints please order the liner Series 1110/25 shown on page 24 to comply with WIS-4-32-11					

Type

Series 1110/05

Female Adaptor

Polypropylene body,
nut, thrusting ring,
Polyacetal grip ring
EPDM Seals
Mechanical operation
WIS 4-32-11
WRAS approved
materials
PN16
Threads female
parallel Rp series



AVK ref. nos.

d
mm / inch

PN
bar

Quantity in
Bag
Where Applicable

Delivery
Code

1110-016012-05-10	16x½"	16	30	C
1110-016034-05-10	16x¾"	16	30	C
1110-020012-05-10	20x½"	16	20	A
1110-020034-05-10	20x¾"	16	20	A
1110-025012-05-10	25x½"	16	10	A
1110-025034-05-10	25x¾"	16	10	A
1110-025100-05-10	25x1"	16	10	A
1110-032012-05-10	32x½"	16	10	A
1110-032034-05-10	32x¾"	16	10	A
1110-032100-05-10	32x1"	16	10	A
1110-032114-05-10	32x1¼"	16	10	A
1110-040100-05-10	40x1"	16	0	C
1110-040114-05-10	40x1¼"	16	0	C
1110-040112-05-10	40x1½"	16	0	C
1110-050114-05-10	50x1¼"	16	0	A
1110-050112-05-10	50x1½"	16	0	A
1110-050200-05-10	50x2"	16	0	A
1110-063112-05-10	63x1½"	16	0	C
1110-063200-05-10	63x2"	16	0	A
1110-063212-05-10	63x2½"	16	0	C
1110-075200-05-10	75x2"	10	0	C
1110-075212-05-10	75x2½"	10	0	C
1110-075300-05-10	75x3"	10	0	C
1110-090200-05-10	90x2"	10	0	A
1110-090212-05-10	90x2½"	10	0	C
1110-090300-05-10	90x3"	10	0	A
1110-090400-05-10	90x4"	10	0	C
1110-110200-05-10	110x2"	10	0	A
1110-110300-05-10	110x3"	10	0	A
1110-110400-05-10	110x4"	10	0	A

Series 1110/06

Male Adaptor

Polypropylene body,
nut, thrusting ring,
Polyacetal grip ring
EPDM Seals
Mechanical operation
WIS 4-32-11
WRAS approved
materials
PN16
Threads male Taper
R series



1110-016012-06-10	16x½"	16	30	C
1110-016034-06-10	16x¾"	16	30	C
1110-020012-06-10	20x½"	16	20	A
1110-020034-06-10	20x¾"	16	20	A
1110-025012-06-10	25x½"	16	10	A
1110-025034-06-10	25x¾"	16	10	A
1110-025100-06-10	25x1"	16	10	A
1110-032012-06-10	32x½"	16	10	A
1110-032034-06-10	32x¾"	16	10	A
1110-032100-06-10	32x1"	16	10	A
1110-032114-06-10	32x1¼"	16	10	C
1110-032112-06-10	32x1½"	16	10	C
1110-040100-06-10	40x1"	16	0	C
1110-040114-06-10	40x1¼"	16	0	C
1110-040112-06-10	40x1½"	16	0	C
1110-040200-06-10	40x2"	16	0	A
1110-050114-06-10	50x1¼"	16	0	A
1110-050112-06-10	50x1½"	16	0	A
1110-050200-06-10	50x2"	16	0	A
1110-063114-06-10	63x1¼"	16	0	A
1110-063112-06-10	63x1½"	16	0	A
1110-063200-06-10	63x2"	16	0	A
1110-063212-06-10	63x2½"	16	0	C
1110-075200-06-10	75x2"	16	0	C
1110-075212-06-10	75x2½"	16	0	C
1110-075300-06-10	75x3"	16	0	C
1110-090200-06-10	90x2"	16	0	A
1110-090212-06-10	90x2½"	16	0	A
1110-090300-06-10	90x3"	16	0	A
1110-090400-06-10	90x4"	16	0	C
1110-110200-06-10	110x2"	16	0	A
1110-110300-06-10	110x3"	16	0	A
1110-110400-06-10	110x4"	16	0	A

Series 1110/07

90° Tee

Polypropylene body,
nut, thrusting ring,
Polyacetal grip ring
EPDM Seals
Mechanical operation
WIS 4-32-11
WRAS approved
materials
PN16



1110-016016-07-10	16x16x16	16	30	C
1110-020020-07-10	20x20x20	16	20	A
1110-025025-07-10	25x25x25	16	10	A
1110-032032-07-10	32x32x32	16	10	A
1110-040040-07-10	40x40x40	16	0	A
1110-050050-07-10	50x50x50	16	0	A
1110-063063-07-10	63x63x63	16	0	A
1110-075075-07-10	75x75x75	10	0	C
1110-090090-07-10	90x90x90	10	0	A
1110-110110-07-10	110x110x110	10	0	A

For PE joints please order the liner
Series 1110/25 shown on page 24 to
comply with WIS-4-32-11

Type

Series 1110/08
90° Female Tee

Polypropylene body,
nut, thrusting ring,
Polyacetal grip ring
EPDM Seals
Mechanical operation
WIS 4-32-11
WRAS approved
materials
PN16
Threads female
parallel Rp series



AVK ref. nos.

d
mm / inch

PN
bar

Quantity in
Bag
Where Applicable

Delivery
Code

1110-016012-08-10	16x½"x16	16	30	C
1110-016034-08-10	16x¾"x16	16	30	C
1110-020012-08-10	20x½"x20	16	20	A
1110-020034-08-10	20x¾"x20	16	20	A
1110-025012-08-10	25x½"x25	16	10	A
1110-025034-08-10	25x¾"x25	16	10	A
1110-025100-08-10	25x1"x25	16	10	A
1110-032012-08-10	32x½"x32	16	10	A
1110-032034-08-10	32x¾"x32	16	10	A
1110-032100-08-10	32x1"x32	16	10	A
1110-032114-08-10	32x1¼"x32	16	10	A
1110-040100-08-10	40x1"x40	16	0	C
1110-040114-08-10	40x1¼"x40	16	0	C
1110-040112-08-10	40x1½"x40	16	0	C
1110-050114-08-10	50x1¼"x50	16	0	A
1110-050112-08-10	50x1½"x50	16	0	A
1110-050200-08-10	50x2"x50	16	0	A
1110-063112-08-10	63x1½"x63	16	0	A
1110-063200-08-10	63x2"x63	16	0	A
1110-063212-08-10	63x2½"x63	16	0	A
1110-075200-08-10	75x2"x75	10	0	C
1110-075212-08-10	75x2½"x75	10	0	C
1110-075300-08-10	75x3"x75	10	0	C
1110-090212-08-10	90x2½"x90	10	0	A
1110-090300-08-10	90x3"x90	10	0	A
1110-110300-08-10	110x3"x110	10	0	A
1110-110400-08-10	110x4"x110	10	0	A

Series 1110/09
90° Male Tee

Polypropylene body,
nut, thrusting ring,
Polyacetal grip ring
EPDM Seals
Mechanical operation
WIS 4-32-11
WRAS approved
materials
PN16
Threads male Taper
R series



1110-016012-09-10	16x½"x16	16	30	C
1110-016034-09-10	16x¾"x16	16	30	C
1110-020012-09-10	20x½"x20	16	20	A
1110-020034-09-10	20x¾"x20	16	20	A
1110-025012-09-10	25x½"x25	16	10	A
1110-025034-09-10	25x¾"x25	16	10	A
1110-025100-09-10	25x1"x25	16	10	A
1110-032012-09-10	32x½"x32	16	10	A
1110-032034-09-10	32x¾"x32	16	10	A
1110-032100-09-10	32x1"x32	16	10	A
1110-032114-09-10	32x1¼"x32	16	10	A
1110-040100-09-10	40x1"x40	16	0	C
1110-040114-09-10	40x1¼"x40	16	0	C
1110-040112-09-10	40x1½"x40	16	0	C
1110-050114-09-10	50x1¼"x50	16	0	A
1110-050112-09-10	50x1½"x50	16	0	A
1110-050200-09-10	50x2"x50	16	0	A
1110-063112-09-10	63x1½"x63	16	0	A
1110-063200-09-10	63x2"x63	16	0	A
1110-063212-09-10	63x2½"x63	16	0	A
1110-075212-09-10	75x2½"x75	10	0	C
1110-075300-09-10	75x3"x75	10	0	C
1110-090300-09-10	90x3"x90	10	0	A
1110-110400-09-10	110x4"x110	10	0	A

Series 1110/10
90° Reducing Tee

Polypropylene body,
nut, thrusting ring,
Polyacetal grip ring
EPDM Seals
Mechanical operation
WIS 4-32-11
WRAS approved
materials
PN16



1110-020016-10-10	20x16x20	16	20	C
1110-025020-10-10	25x20x25	16	10	A
1110-032025-10-10	32x25x32	16	10	A
1110-040032-10-10	40x32x40	16	0	C
1110-050032-10-10	50x32x50	16	0	A
1110-050040-10-10	50x40x50	16	0	C
1110-063050-10-10	63x50x63	16	0	A
1110-075063-10-10	75x63x75	16	0	C
1110-090075-10-10	90x75x90	10	0	C
1110-110063-10-10	110x63x110	10	0	A
1110-110090-10-10	110x90x110	10	0	A

Series 1110/11
90° Increased Tee

Polypropylene body,
nut, thrusting ring,
Polyacetal grip ring
EPDM Seals
Mechanical operation
WIS 4-32-11
WRAS approved
materials
PN16



1110-020025-11-10	20x25x20	16	10	C
1110-025032-11-10	25x32x25	16	10	A

For PE joints please order the liner Series 1110/25 shown on page 24 to comply with WIS-4-32-11

Type	AVK ref. nos.	d mm / inch	PN bar	Quantity in Bag Where Applicable	Delivery Code
Series 1110/12 90° Elbow Polypropylene body, nut, thrusting ring, Polyacetal grip ring EPDM Seals Mechanical operation WIS 4-32-11 WRAS approved materials PN16		1110-016000-12-10	16	30	C
		1110-020000-12-10	16	20	A
		1110-025000-12-10	16	10	A
		1110-032000-12-10	16	10	A
		1110-040000-12-10	16	0	A
		1110-050000-12-10	16	0	A
		1110-063000-12-10	16	0	A
		1110-075000-12-10	16	0	C
		1110-090000-12-10	16	0	A
		1110-110000-12-10	16	0	A
Series 1110/13 90° Female Elbow Polypropylene body, nut, thrusting ring, Polyacetal grip ring EPDM Seals Mechanical operation WIS 4-32-11 WRAS approved materials PN16 Threads female parallel Rp series		1110-016012-13-10	16x½"	30	C
		1110-016034-13-10	16x¾"	30	C
		1110-020012-13-10	20x½"	20	A
		1110-020034-13-10	20x¾"	20	A
		1110-025012-13-10	25x½"	10	A
		1110-025034-13-10	25x¾"	10	A
		1110-025100-13-10	25x1"	10	A
		1110-032012-13-10	32x½"	10	A
		1110-032034-13-10	32x¾"	10	A
		1110-032100-13-10	32x1"	10	A
		1110-032114-13-10	32x1¼"	10	A
		1110-040100-13-10	40x1"	0	C
		1110-040114-13-10	40x1¼"	0	C
		1110-040112-13-10	40x1½"	0	C
		1110-050114-13-10	50x1¼"	0	C
		1110-050112-13-10	50x1½"	0	C
		1110-050200-13-10	50x2"	0	C
		1110-063112-13-10	63x1½"	0	C
		1110-063200-13-10	63x2"	0	C
		1110-063212-13-10	63x2½"	0	C
		1110-075212-13-10	75x2½"	0	C
		1110-075300-13-10	75x3"	0	C
		1110-090300-13-10	90x3"	0	C
		1110-090400-13-10	90x4"	0	C
		1110-110400-13-10	110x4"	0	C
Series 1110/14 90° Male Elbow Polypropylene body, nut, thrusting ring, Polyacetal grip ring EPDM Seals Mechanical operation WIS 4-32-11 WRAS approved materials PN16 Threads male Taper R series		1110-016012-14-10	16x½"	30	C
		1110-016034-14-10	16x¾"	30	C
		1110-020012-14-10	20x½"	20	A
		1110-020034-14-10	20x¾"	20	A
		1110-025012-14-10	25x½"	10	A
		1110-025034-14-10	25x¾"	10	A
		1110-025100-14-10	25x1"	10	A
		1110-032012-14-10	32x½"	10	A
		1110-032034-14-10	32x¾"	10	A
		1110-032100-14-10	32x1"	10	A
		1110-032114-14-10	32x1¼"	10	A
		1110-040100-14-10	40x1"	0	C
		1110-040114-14-10	40x1¼"	0	C
		1110-040112-14-10	40x1½"	0	C
		1110-050114-14-10	50x1¼"	0	C
		1110-050112-14-10	50x1½"	0	C
		1110-050200-14-10	50x2"	0	C
		1110-063112-14-10	63x1½"	0	C
		1110-063200-14-10	63x2"	0	C
		1110-063212-14-10	63x2½"	0	C
		1110-075212-14-10	75x2½"	0	C
		1110-075300-14-10	75x3"	0	C
		1110-090300-14-10	90x3"	0	C
		1110-090400-14-10	90x4"	0	C
		1110-110400-14-10	110x4"	0	C
Series 1110/15 Flanged Joint Polypropylene body, nut, thrusting ring, Polyacetal grip ring EPDM Seals Mechanical operation WIS 4-32-11 WRAS approved materials PN16		1110-040112-15-10	d40xDN40	0	C
		1110-050112-15-10	d50xDN40	0	C
		1110-050200-15-10	d50xDN50	0	A
		1110-063200-15-10	d63xDN50	0	A
		1110-075212-15-10	d75xDN65	0	C
		1110-090300-15-10	d90xDN80	0	A
		1110-090400-15-10	d90xDN100	0	A
		1110-110400-15-10	d110xDN100	0	A

For PE joints please order the liner
Series 1110/25 shown on page 24 to
comply with WIS-4-32-11

Type

Series 1110/16
Wall Plate Elbow

Polypropylene body,
nut, thrusting ring,
Polyacetal grip ring
EPDM Seals
Mechanical operation
WIS 4-32-11
WRAS approved
materials
PN16
Threads female
parallel Rp series


Series 1110/17
90° Elbow with
Female Outlet at
90°

Polypropylene body,
nut, thrusting ring,
Polyacetal grip ring
EPDM Seals
Mechanical operation
WIS 4-32-11
WRAS approved
materials
PN16
Threads female
parallel Rp series


Series 1110/19
Coupler PE x Metric
Copper

Polypropylene body,
nut, thrusting ring,
grip ring
EPDM Seals
Mechanical operation
WIS 4-32-11
WRAS approved
materials
PN16



AVK ref. nos.

d
mm / inch

PN
bar

Quantity in
Bag
Where Applicable

Delivery
Code

1110-020012-16-10
1110-025034-16-10

20x½"
25x¾"

16
16

10
10

A
A

1110-025012-17-10
1110-032012-17-10
1110-032034-17-10

25x½"x25
32x½"x32
32x¾"x32

16
16
16

10
10
10

C
C
C

1110-020015-19-10
1110-025015-19-10
1110-025022-19-10
1110-032022-19-10

20x15
25x15
25x22
32x22

16
16
16
16

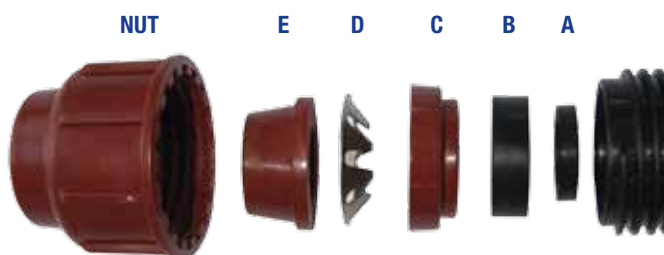
20
10
10
10

A
A
A
A

COPPER KIT ASSEMBLY INSTRUCTIONS:

Starting with a standard metric compression fitting:

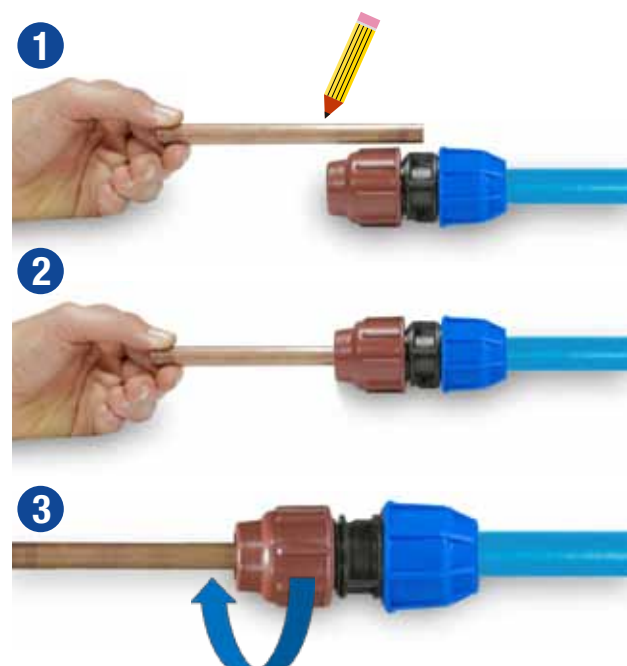
1. Remove NUT
2. Remove all internal components
3. Insert components A
4. Insert component B
5. Lubricate component B
6. Insert component C
7. Insert component D
8. Insert component E
9. Put the NUT on the body, loose
10. Insert the pipe in the final stop
11. Mechanically tighten the nut



For PE joints please order the liner Series
1110/25 shown on page 24 to comply
with WIS-4-32-11

PIPE INSTALLATION:

1. Chamfer the copper pipe end. Mark the pipe portion to be inserted into the fitting.
2. Unscrew the nut without removing it from the body and twist the copper pipe through the fitting, up to the pipe stop.
3. Tighten the nut firmly, use a wrench for final tightening



AVK PENTOMECH UNIVERSAL RANGE

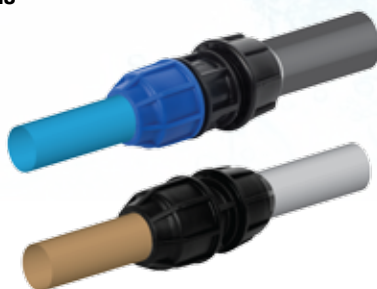
The **AVK PENTOMECH** Universal range is a must have when carrying out a repair! It allows the installer complete flexibility when connecting a pipe up to 35mm in diameter. As part of the range there is the **AVK PENTOMECH Universal coupling and elbow with a PE outlet and also a Universal x Universal coupling and elbow**. This allows you to connect on to lead, galvanised steel, copper, PVCU, imperial polyethylene and metric PE. Please note: a liner should be used when making the metric PE joint.

Examples of pipe combinations

See website for pipe size dimensions

25mm PE x ½" 7lb lead

22mm copper x ¾" galvanised steel



¾" imperial
Class C PE x
25mm PE

1" heavy guage
PE x 1" PVC

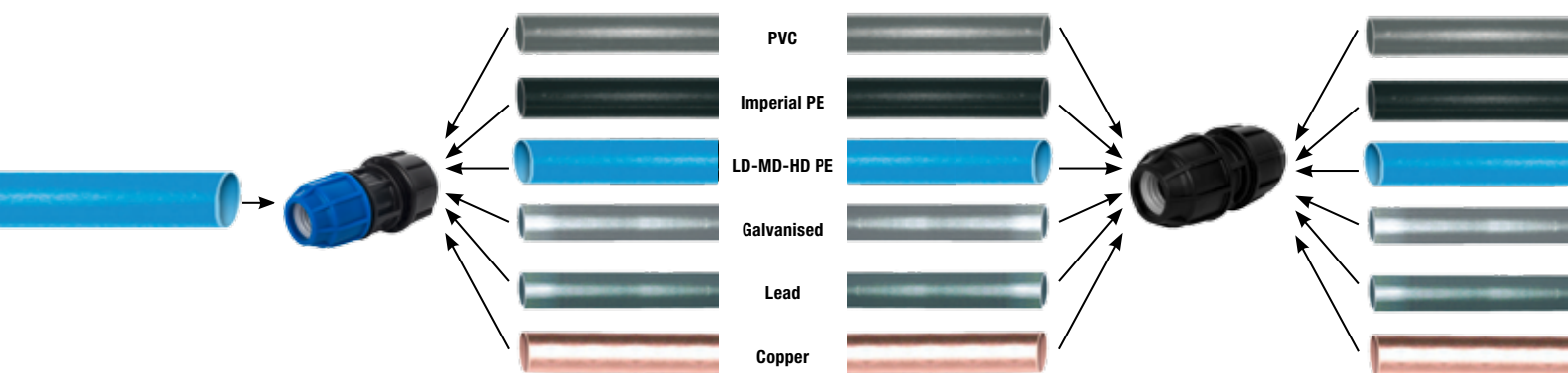


PE OUTLET

UNIVERSAL OUTLET

UNIVERSAL OUTLET

UNIVERSAL OUTLET



UNIVERSAL FITTING ASSEMBLY INSTRUCTIONS

1. Cut the pipe at 90° (square cut). When possible is it recommended to bevel the edges of the cut in order to make the insertion easier.
2. Slacken the nut without removing it from the body. In case the internal components are disassembled, please follow the assembly instructions opposite for the kit components.
3. Insert the pipe without tightening the nut. Push the fitting until the pipe reaches the stop.
4. Hand tighten the nut and then tighten further with a pipe wrench, do not screw the universal nut without pipe.



Type

Series 1110/20

Universal x PE

Coupler

Polypropylene body, nut, thrusting ring, Polyacetal grip ring with stainless steel teeth

**EPDM Seals

Mechanical operation

WIS 4-32-11

WRAS approved

materials

PN16



Series 1110/21

Universal x PE 90°

Elbow

Polypropylene body, nut, thrusting ring, Polyacetal grip ring with stainless steel teeth

**



Series 1110/22

Universal x Universal

Coupler

Polypropylene body, nut, thrusting ring, Polyacetal grip ring with stainless steel teeth

**



Series 1110/23

Universal x Universal

90° Elbow

Polypropylene body, nut, thrusting ring, Polyacetal grip ring with stainless steel teeth

**



Series 1110/24

Universal Kit * for

Use in a Pentomech

Fitting

Polyacetal grip ring with stainless steel teeth

**



*Match the kit with the outlet on the Pentomech fitting.

25x15-21	25
32x21-27	32
40x27-35	40

AVK ref. nos.

d
mm / OD
Tolerance

PN
bar

Quantity in
Bag
Where Applicable

Delivery
Code

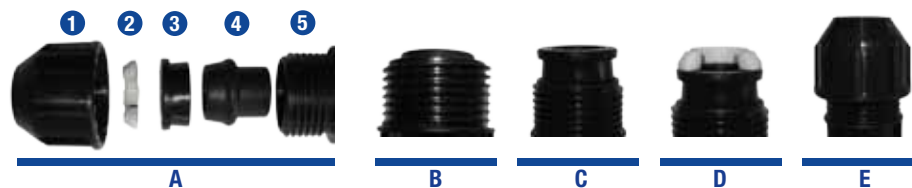
1110-201521-20-10	20x15-21	16	1	A
1110-202127-20-10	20x21-27	16	1	A
1110-202735-20-10	20x27-35	16	1	A
1110-251521-20-10	25x15-21	16	1	A
1110-252127-20-10	25x21-27	16	1	A
1110-252735-20-10	25x27-35	16	1	A
1110-322127-20-10	32x21-27	16	1	A
1110-322735-20-10	32x27-35	16	1	A

1110-251521-21-10	25x15-21	16	1	A
1110-322127-21-10	32x21-27	16	1	A

1110-015021-22-10	15-21x15-21	16	1	A
1110-152127-22-10	15-21x21-27	16	1	A
1110-021027-22-10	21-27x21-27	16	1	A
1110-212735-22-10	21-27x27-35	16	1	A
1110-027035-22-10	27-35x27-35	16	1	A

1110-015021-23-10	15-21x15-21	16	1	A
1110-021027-23-10	21-27x21-27	16	1	A
1110-027035-23-10	27-35x27-35	16	1	A

1110-152125-24-10	25x15-21	16	1	A
1110-212732-24-10	32x21-27	16	1	A
1110-273440-24-10	40x27-35	16	1	A



UNIVERSAL KIT ASSEMBLY INSTRUCTIONS

The universal kit allows you to transform any metric offtake into a universal fitting. The steps involved in the assembly are:

- Disassemble all the components of the PE metric offtake to transform: nut, grip ring, thrust ring and gasket. Prepare the components of the universal kit (1-2-3-4)
- Insert the universal sealing ring (4) into the body (5) until the upper edge is like in picture (B). Due to the existing friction, sealing ring insertion may require additional effort.
- Place the universal insert (3) so that it is positioned above the sealing ring as shown in picture (C).
- Place the universal grip ring (2) above the insert (3) as shown in picture (D).
- Place the universal nut (1) and tighten clockwise by just one screw thread, leaving it prepared for pipe insertion as shown in picture (E). Do not screw the universal nut without pipe inserted.

For PE joints please order the liner Series 1110/25 shown on page 24 to comply with WIS-4-32-11

Type	AVK ref. nos.	d mm / inch	PN bar	Quantity in Bag Where Applicable	Delivery Code
Series 1110/25 Liner for SDR11, 20-63 PE pipe 	1110-020000-25-10	20	16	1	A
	1110-025000-25-10	25	16	1	A
	1110-032000-25-10	32	16	1	A
	1110-040000-25-10	40	16	1	A
	1110-050000-25-10	50	16	1	A
	1110-063000-25-10	63	16	1	A
Series 1110/26 *Metric Copper Kit 	1110-015020-26-10	15	16	1	A
	1110-022025-26-10	22	16	1	A
*Match the kit with the outlet on the Pentomech fitting.	15mm	Copper with 20mm outlet			
	22mm	Copper with 25mm outlet			
Series 1110/28 Nut Polypropylene 	1110-016000-28-10	16	16	10	A
	1110-020000-28-10	20	16	10	A
	1110-025000-28-10	25	16	10	A
	1110-032000-28-10	32	16	10	A
	1110-040000-28-10	40	16	5	A
	1110-050000-28-10	50	16	5	A
	1110-063000-28-10	63	16	5	A
	1110-075000-28-10	75	16	1	A
	1110-090000-28-10	90	16	1	A
	1110-110000-28-10	110	16	1	A
Series 1110/29 Thrust Ring Polypropylene 	1110-016000-29-10	16	16	10	A
	1110-020000-29-10	20	16	10	A
	1110-025000-29-10	25	16	10	A
	1110-032000-29-10	32	16	10	A
	1110-040000-29-10	40	16	5	A
	1110-050000-29-10	50	16	5	A
	1110-063000-29-10	63	16	5	A
	1110-075000-29-10	75	16	1	A
	1110-090000-29-10	90	16	1	A
	1110-110000-29-10	110	16	1	A
Series 1110/30 Grip Ring Acetal 	1110-016000-30-10	16	16	10	A
	1110-020000-30-10	20	16	10	A
	1110-025000-30-10	25	16	10	A
	1110-032000-30-10	32	16	10	A
	1110-040000-30-10	40	16	5	A
	1110-050000-30-10	50	16	5	A
	1110-063000-30-10	63	16	5	A
	1110-075000-30-10	75	16	1	A
	1110-090000-30-10	90	16	1	A
	1110-110000-30-10	110	16	1	A
Series 1110/31 Conical Gasket EPDM 	1110-016000-31-10	16	16	10	A
	1110-020000-31-10	20	16	10	A
	1110-025000-31-10	25	16	10	A
	1110-032000-31-10	32	16	10	A
	1110-040000-31-10	40	16	5	A
	1110-050000-31-10	50	16	5	A
	1110-063000-31-10	63	16	5	A
	1110-075000-31-10	75	16	1	A
	1110-090000-31-10	90	16	1	A
	1110-110000-31-10	110	16	1	A

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