PLASSON AUSTRALIA

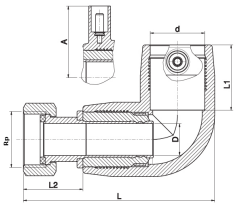
FEMALE FREE NUT TRANSITION 90° ELBOW 4945

Plasson Electrofusion fittings are globally recognised as best in class. The Plasson SmartFuse electrofusion female free nut transition 90° elbow joins PE pipe to a male BSP thread with a fully welded connection and a 90° change of direction. The free rotating brass nut works as a union, allowing the fitting to be connected to fixed threaded fixtures such as valves, meters and metal pipework without rotating the pipe or the fitting body. Integrated resistors enable automatic weld time recognition when used with a Plasson electrofusion machine, with a single weld time between -10°C and +45°C. Available in 20 to 63mm with female threads from 3/4" to 2 1/2", the range is rated PN16 for water and is suitable for water, recycled water, compressed air and other industrial applications.

FEATURES AND BENEFITS

- High quality PE100-RC resins
- Free rotating lead-free DZR brass nut with BSP female thread
- Union style connection – no need to rotate the pipe or fitting to make up the thread
- Designed for seamless transition between PE pipe and other pipe materials, valves and fittings
- Reduces installation time and labour costs on both new and existing pipelines
- Large welding and cooling zones for joint integrity
- SmartFuse automatic weld time recognition eliminates manual input errors





Product Code	Size d x Rp	L	L1	L2	D	A	Carton	W	PN Water	SDR Gas	Pipe SDR Suitability
4945201	20 x 3/4"	96	35	30	14	38	140	164	16	11	7.4-11
4945202	25 x 3/4"	96	37	30	14	38	140	164	16	11	7.4-11
4945203	25 x 1"	99	37	33	19	38	105	164	16	11	7.4-11
4945204	32 x 1"	119	40	36	19	43	70	164	16	11	7.4-11
4945205	32 x 1 1/4"	119	40	36	23	43	70	324	16	11	7.4-11
4945206	40 x 1 1/2"	132	44	40	29	47	48	490	16	11	7.4-17.6
4945207	50 x 2"	149	48	41	38	52	30	779	16	11	7.4-17.6
4945209	63 x 2"	175	57	44	41	59	16	1024	16	11	7.4-17.6
4945210	63 x 2 1/2"	180	57	49	48	59	16	1245	16	11	7.4-17.6

Dimensions in mm. W = weight in grams. Carton = units per pack. PN Water = pressure rating on water. SDR Gas = SDR rating of the fitting. Pipe SDR Suitability = SDR range of pipe the fitting can be welded to.

MATERIALS

- **Body:** PE100-RC (crack resistant) resin, black
- **Heating coil:** Coated, embedded in the fitting body
- **Threaded insert:** Lead-free DZR (dezincification resistant) brass free nut
- **Seal:** NBR flat seal

INSTALLATION

Plasson Australia no longer publish generic how to perform electrofusion instructions. Plasson Australia recommend installation as per POP001 – Electrofusion Jointing of PE Pipe and Fittings for Pressure Applications as published by Plastics Industry Pipe Association of Australia (PIPA). This is free to download from https://pipa.com.au

OPERATING TEMPERATURES

Refer to the PIPA POP013 guidelines.
Link: https://pipa.com.au/technical/pop-guidelines/

CHEMICAL RESISTANCE

Plasson electrofusion fittings are made from high quality PE100-RC (crack resistant) resins. For chemical purposes they are considered as being made from HDPE, high density polyethylene.

WELDING

- Integrated resistors for automatic weld time recognition (SmartFuse) when used with a Plasson electrofusion machine.
- Single weld time between -10°C and +45°C.
- ISO 13950 compliant barcode system.
- The brass free nut rotates freely before and after welding is complete.

THREADS

- Female threads are parallel (BSPP), referred to as Rp.
- Threads to AS ISO 7.1
- The free nut seals on the NBR flat seal against the face of the mating male fitting.

QUALITY CERTIFICATES

Plasson fittings are tested and approved according to AS/NZS 4129:2020. These fittings are included in schedules for WaterMark, ISO Type 5 Certificate of Conformity and have been WSAA appraised.
Electrofusion fittings are batch controlled. Record the batch number on the fitting label and contact Plasson Australia for a copy of the EN 10204 3.1 Inspection Certificate.