PLASSON AUSTRALIA

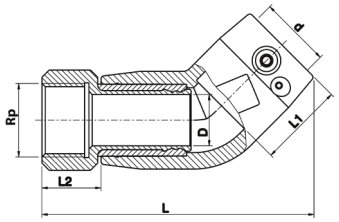
FEMALE FREE NUT TRANSITION 45° ELBOW 4946

Plasson Electrofusion fittings are globally recognised as best in class. The Plasson SmartFuse electrofusion female free nut transition 45° elbow joins PE pipe to a female BSP thread with a fully welded connection and a 45° change of direction. The free rotating brass nut allows the threaded joint to be made or broken without rotating the welded PE pipe, providing a simple union style transition from PE to valves, metal pipework and threaded fixtures. 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 32 to 63mm with female threads from 1" 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 BSP female nut
- Union style connection – connect or disconnect the thread without rotating the pipe
- 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
4946201	32 x 1"	131	39	36	19	43	70	164	16	11	7.4-11
4946202	32 x 1 1/4"	129	39	34	23	47	56	400	16	11	7.4-11
4946203	40 x 1 1/2"	146	44	38	29	47	48	469	16	11	7.4-17.6
4946204	50 x 2"	166	49	41	38	51	30	740	16	11	7.4-17.6
4946205	63 x 2"	189	57	41	38	59	24	164	16	11	7.4-17.6
4946206	63 x 2 1/2"	197	57	44	48	59	16	1184	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
- **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 thread section can still rotate 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.