

ELECTROFUSION FITTINGS – PLASSON SPECIFICATIONS

PRESSURE RATINGS (AS/NZS 4129)

Standard Range

- * PN16 (Water)
- * PN10 (Gas)

Lightfit Couplings

- * PN10 (Water)
- * PN6 (Gas)

SUITABLE PIPES

- * Suits PE Pipe made from PE63, PE80 and PE100 – AS/NZS 4130.
- * Series 1 and 2 OD metric pipes ⁽⁴⁾.

PE ELECTROFUSION FITTINGS PIPE THICKNESS/SDR SPECIFICATION

	Safe Pipe SDR ⁽¹⁾	Standard Pipe Cutter MIN Pipe SDR	Long Cutter MIN Pipe SDR ⁽³⁾
SOCKETED FITTINGS			
20 - 75	≤ 11		
90 - 500	≤ 17		
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LIGHTFIT COUPLERS			
63 - 90	≤ 26		
110 - 400	≤ 33		
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TAPPING TEES			
40 - 75	≥ 11	7	
90 - 140	≤ 17	7	
160 - 180	≤ 17	9	7
200	≤ 17	11	7
225 - 250	≤ 17	11	9
280 - 315	≤ 17	Note 2	11
355	≤ 17	Note 2	11
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BRANCH AND TRANSITION SADDLES			
63 - 75	≥ 11		
90 - 200	≤ 17		
225 - 355	≤ 17		
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BRANCH SADDLES WITH OUTLETS > 63	≤ 17		

NOTES:

- ⁽¹⁾ Minimum wall thickness of any pipe must be 3.0mm or as safe pipe SDR (1) above.
- ⁽²⁾ With sizes 280 – 355mm the long cutter is supplied as standard.
- ⁽³⁾ Long cutters are available as spares CAT 30034280 for pipes with lower SDR's.
- ⁽⁴⁾ Specialised fittings available for Series 3 IPS nominal ID pipes.

WARNING:

(1) Do not weld saddles to 40, 50 & 63 SDR11 live gas pipes where internal pressure exceeds 4 bar, as pipe damage will occur due to pipe softening.

(2) When fused to pipes of SDR less than or equal to 17.6, Plasson Electrofusion couplers meet the safety factor requirements of the International Standards with which they comply. 63mm Tapping Tees may be welded to SDR17 pipe safely, provided the internal pressure does not exceed 2 bar during welding. If pipes of SDR21 are used, the factor of safety for the fusion cycle may be less if welded in high temperature ambient conditions.

ELECTROFUSION FITTINGS – PLASSON SPECIFICATIONS**RAW MATERIALS**

* PE 80 or PE 100 in accordance with AS/NZS 4131.

QUALITY

* Plasson has incorporated a quality assurance system in accordance with ISO 9002.

* QAS StandardsMark Licence No. 2018 – AS/NZS 4129.

THREADS

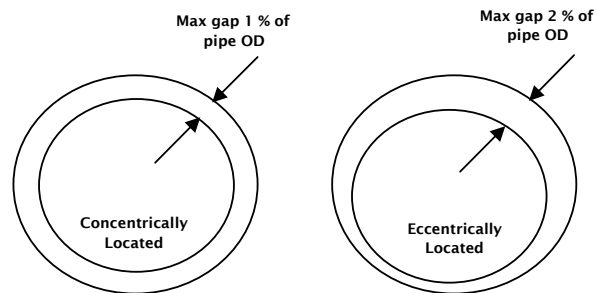
* Threads on transition fittings conform to DIN 2999.

* BS21 - 1973, AS1722 Part 1 - 1975.

OVALITY

* The pipe should be checked for ovality, if ovality causes a gap between concentrically located pipe and fitting to exceed 1% of pipe OD, then pipe must be rerounded to ensure correct welding. After rerounding, if the gap still exceeds 1% of pipe OD, then check pipe OD dimensions as it may be under specified OD.

* NOTE: The maximum gap between eccentrically located pipe and fitting (i.e. pipe touching fitting at one point) must not exceed 2% of pipe OD. Rotational scrapers can be used to reduce excessive pipe OD. See Diagram.

**AUTOMATIC WELDING**

* The Plasson – Fusamatic fittings incorporate a resistor in one of the fitting terminals (a red pin) which is specific to that fitting. The Plasson – Fusamatic Automatic control box reads the fitting resistor and automatically sets and welds for the correct weld time and avoids operator error.

* One standard weld time for temperature range -10°C to +45°C.

* Fittings are also labeled for bar code reading for welding with bar code controllers, manual set times and have rising melt indicators.

* Terminal pin diameter is 4.7mm.

MANUAL WELDING

* Plasson – Fusamatic fittings are labeled with weld and cool times and can be welded with other manufacturers 40V (non-automatic) control boxes.

DATA RECORDING

* Automatic Recording of up to 1,440 welds available.

* Data transfer to PC, printer or portable memory box available.