PLASSON®

SPECIFICATIONS

SPECIFICATIONS FOR PLASSON COMPRESSION FITTINGS AND SADDLES

MATERIALS

Compression Fittings, Tapping & Compression Saddles

BODY	Polypropylene, high grade copolymer.
NUT	Polypropylene, high grade copolymer.
SPLIT RING	Acetal (POM) CPVC available.
O-RING	Nitrile rubber (NBR). EPDM and FRM O-rings available. (Approximately 70 Shore A.)
REINFORCING RING	Stainless steel on all female offtakes from 1.1/4" up to 4". All Tapping Saddles have stainless steel reinforced female offtakes.
NUTS & BOLTS	Galvanised steel (Stainless steel available). (Zinc plated with chromate passivator - yellow colour, shiny).

"TAPPER®" Saddles

BODY/COMPRESSION FITTING	Polypropylene
BOLT AND NUT	Stainless steel to SS316
CUTTER	Brass to BS 2874-CZ122
O-RING	NBR
SADDLE SEAL	EPDM
SPLIT RING	Polyacetal

OPERATING PRESSURE

Plasson Compression Fittings

Comply with requirements of AS/NZS 4129. StandardsMark License No. 2018. Operating pressure at 20°C:

PN16 (WATER) - 16mm to 125mm diameter

PN10 - 160mm diameter

All female threads from 1.1/4" to 4" have stainless steel reinforcing rings and are rated as above, except that 4" is suitable for PN 6.3 only.

Plasson Tapping Saddles and Compression Saddles

Comply with specification 0.25 – "Tapping Bands" of Australian Standard SAA MP52. See details in Price List.

Tapper

WIS 4-22-02/WRC Standards – PN 12.5 or 16 depending on size – refer pricelist. WSAA approved – 98/46 – 1999.

BSP Threaded Fittings

1.0 Mpa for male fittings and 1.0 Mpa for SS reinforced female fittings. Polypropylene Female outlets ≥1.1/4" available with SS reinforcing. Female fittings and bushings 1/2" - 1" 1.0 Mpa ≥ 1.1/4" 0.63 Mpa.

SUITABLE PIPES

Plasson Compression Fittings

For pipes 16mm to 160mm outside diameter. Metric OD systems for use with Polyethylene pipe manufactured to:

AS1159 – 1988 – Polyethylene Pipes for Pressure Applications

AS4130 – PE Pipes for Pressure Applications

PE Pipes with outside dimensions to ISO OD series system.

Plasson Rural Fittings

For Class Rural Polyethylene Pipe manufactured to:

AS2698.2 (ID Series) - Class 6

OPERATING TEMPERATURE

The compression saddles and valves are not for use with hot water although they withstand the same temperature as most polyethylene pipes. The fittings and valves will withstand sub-zero temperatures.

SPECIFICATIONS FOR PLASSON COMPRESSION FITTINGS AND SADDLES

FLANGES

Flange dimensions in accordance with AS/NZS 4331.1-1995. Drilled to suit PN16 flanges in accordance with 4331.1. Metal backing rings to be used with all flanges.

THREADS

Internal parallel thread up to 2 ½". Internal taper thread 3" and up. External taper thread all sizes. All threads conform to ISO-7/1; BS21-1973; DIN2999; Nen3258; AS1722 Part 1 – 1975.

CHEMICAL RESISTANCE

Plasson polypropylene fittings are supplied, as standard, with Nitrile (NBR) rings and acetal split rings, which are suitable for water supply and many chemical handling applications. For many chemicals however, NBR and acetal are unsuitable and Plasson spare rings of either EPDM or VITON (FPM) should be used to replace acetal. Generally nitrile is good in oily applications.

A brief indicator of chemical resistance at 20°C follows:

	O-Rings			Plasson Nut & Body	Split Rings	
	NBR [1]	EPDM [2]	FPM [3]	PP	Acetal [1]	CPVC [2]
Benzene	Φ	X	√	Φ	√	X
Brine	√	√	√	√	√	√
Slaked Lime	√	√	√	√	√	
Compressed Air Cont. Oil	√	X	√	√	√	√
Caustic Soda	√	√	Φ	√	√	√
Fuel Oil	√	X	√	√	√	Φ
Hydrochloric Acid	X	√	√	√	X	√
Nitric Acid Dilute	X	√	√	√	X	√
Carbolic Acid	X	√	√	√		
Lube Oils	X	X	√	√	√	√
Phosporic Acid	Φ	√	√	√	√	√
Sulphuric Acid Dilute	X	√	√	√	X	√

√ Suitable Φ Medium Resistance X Unsuitable

[1] Supplied as standard component in Plasson fittings
[2] & [3] Available as Plasson spare parts

NBR O-Rings - CAT 7002
EPDM O-Rings - CAT 7910
FPM O-Rings - CAT 7920
CPVC Split Rings - CAT 7008

FPM although the most resistant is expensive – EPDM is usually the economical solution. Generally, if EPDM or FPM O-Rings are required, then CPVC split rings should be used in place of standard acetal split rings. This is intended as a guide only.

Tapping Saddles used in **chemical applications or permanently buried** situations may require stainless steel bolts and nuts. In many sizes the NBR ring can be replaced with EPDM or FPM.

APPROVALS

Plasson fittings have been tested and approved by major standard institutions such as WRC (GB), Staatliche Materialprufungsanstalt Darmstadt (analogous to DIN8078 Part 1) (D); KIWA (NL); Standards Institution of Israel (IL); Australian Authorities (AUS); Statens Provningsansalt Stockholm (S); Statens Planmerk (S); SGWA (CH); Byggestyrelsen (DK);SKZ GmbH (analgous to DIN8076 Part 3-12/87) (D). QAS Standards Australia – StandardsMark Licence.

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SPECIFICATIONS

SPECIFICATIONS FOR PLASSON POLYPROPYLENE VALVES

MATERIALS

BODY Polypropylene, high grade copolymer.

O-RING NBR, EPDM or FPM depending on valve.

SPRING (items 3067, 3039) Stainless Steel.

OPERATING PRESSURE AT 20°C - PN10 or PN12.5 see Price List

SPECIFICATIONS FOR PLASSON PVC VALVES

MATERIALS

PVC In accordance with requirements for injection moulded PVC fittings withstanding PN 16 pressures in accordance with UNI standards.

GASKETS PTFE

O-RING EDPM

OPERATING PRESSURE AT 20°C - PN16 up to 63mm (2") diameter
PN10 ≥ 75mm (2.1/2") diameter

PIPE SUITABILITY

Plasson Metric OD System for use with polyethylene pipe manufactured to:
AS 1159 - 1988 – Polyethylene Pipes for Pressure Applications
AS/NZS 4130 - 2002 – PE Pipes for Pressure Applications

Plasson Rural ends: AS 2698.2

OPERATING TEMPERATURE

Permissible working pressures in accordance with DIN 8062:

Temperature	Factor
20°	1
30°	0.8
40°	0.66
50°	0.4
60°	0.25

THREADS

Female threads – cylindrical

Male threads - conical

In accordance with ISO 7, UNI 339, DIN 2999, BS 21.

CHEMICAL RESISTANCE

PVC Valves - as for PVC.

See gaskets and O-Rings above. Refer chemical resistance for these products.