

FITTINGS

# KLIMAPRESS PPSU

KLIMAPRESS PPSU is a range of press fittings made of Polyphenylsulfone – PPSU, which offers one of the best performances within sulfone grade.

This polymer has excellent characteristics such as: high impact strength, high chemical resistance, excellent oxidation resistance, low weight and low roughness that deliver high durability and a long-lasting performance.

The pressing sleeves, made of stainless steel, have an inspection window to check the penetration depth of pipe before pressing. In each sleeve the production order and the diameter are marked.

The EPDM O-ring, a high-temperature and aging resistant O-ring fitted into a groove, provides sealing between the fitting insert part and inner wall of the pipe.

HELIROMA KLIMAPRESS PPSU fittings have been designed to be used with HELIKLIMA multilayer pipe and KLIMAPRESS fittings.

KLIMAPRESS PPSU fittings are supplied in black colour.

The threaded transition fittings have two types: male fittings with thread made of PPSU and female fittings with brass thread that meets to the 4MS regulations.



Fittings certification.

ADVANTAGES AND KEY FEATURES

- Highest reliability and durability;
- Highly resistant to corrosion and oxidation;
- 100% compatible with existing HELIROMA components and tools;
- High mechanical resistance;
- Very low stress crack sensitivity;
- Flow optimised design;
- Visual assurance of pipe position;
- Quick Installation;
- Eco-friendly;
- Certification.



INSTALLATION AND ASSEMBLY

CONTACT W/ SUBSTANCES CONTAINING SOLVENTS



CHEMICAL RESISTANCE:  
GENERAL

Klimapress PPSU system cannot be in contact with solvents or construction materials containing solvents, such as paints, sprays, foams, adhesives. The occasional contact between aggressive chemicals and that system may cause damage to the polymeric structure.

**Note:** during installation Klimapress PPSU do not require use of any chemical substances or additional lubrication. Chemical sealants, like liquid Teflon or adhesives, cannot be used with PPSU fittings.

Scan the QR code to access the general list or contact the technical department.

SEALING



CHEMICAL RESISTANCE:  
SULFONES AND GLUES

The assembly of a threaded connection shall be carried in accordance with DIN 30660. Heliroma advice the use of PTFE/ Teflon tape to seal the connection. The quantity of hemp shall be restricted, high quantities can result in a damage to the internal threads and cross-threading.

Scan the QR code to access the sulfones and glues list or contact the technical department.

MULTILAYER SYSTEM

Pipe Dimension (mm)	KLIMAPRESS PPSU
16x2,0	✓
20x2,0	✓
25x2,5	✓
32x3,0	✓



MULTILAYER PRODUCTS

MULTILAYER PRODUCTS

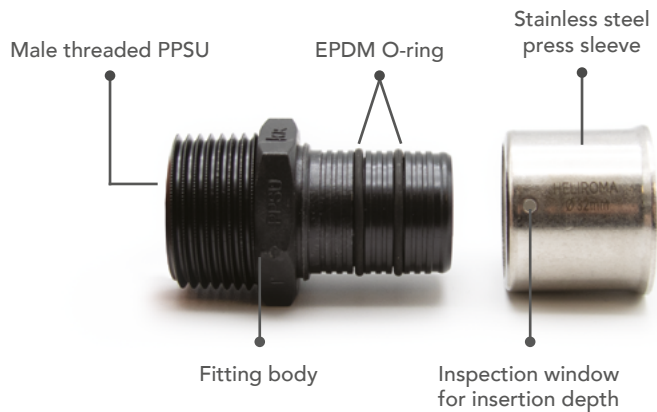
MULTILAYER PE-RT / AL / PE-RT PIPE - HELIKLIMA  
**PE-RT / AL / PE-RT + KLIMAPRESS PPSU - HELIKLIMA PPSU**  
PE-RT / AL / PE-RT + KLIMAPRESS - HELIKLIMA  
PE-RT / AL / PE-RT + FLANGED FITTINGS - HELIKLIMA  
MULTILAYER PIPE PE-RT / AL / PE-RT INSULATED - HELIKLIMA INSULATED

HELIROMA - Plásticos, S.A.

+ 351 234 523 373  
(chamada para a rede fixa nacional)  
comercial@heliroma.pt  
www.heliroma.pt  
Zona Industrial EN-1 / IC2 km 250,5  
3850-184 Albergaria-a-Velha, Portugal



FITTINGS  
KLIMAPRESS PPSU



REFERENCE	FITTINGS	DIMENSIONS (mm)	MATERIAL	COLOUR
P-K2060RD	Elbow 90°	16; 20; 25; 32	PPSU	Black
P-K2080RD	Female Elbow	16x1/2"; 20x1/2"; 20x3/4"; 25x1/2"; 25x3/4"; 32x3/4"; 32x1"	PPSU + CW617N	Black
P-K2090RD	Male Elbow	16x1/2"; 20x1/2"; 25x1/2"; 25x3/4"	PPSU	Black
P-K2080RD-L	Loose Nut Elbow	16x3/4"; 20x3/4"; 25x3/4"; 25x1"; 32x1"; 32x1 1/4"	PPSU +CW617N	Black
P-K2120RD	Wall Plate Female Elbow	16x1/2"; 20x1/2"; 25x3/4"	PPSU + CW617N	Black
P-K2300RD	Tee	16; 20; 25; 32	PPSU	Black
P-K2310RD	Reduced Tee	20x16x20; 20x16x16; 20x20x16; 25x20x20; 25x20x25; 32x20x32; 32x25x32	PPSU	Black
P-K2320RD	Female Tee	16x1/2"; 20x1/2"; 25x1/2"; 25x3/4"; 32x3/4"; 32x1"	PPSU + CW617N	Black
P-K2330RD	Male Tee	16x1/2"; 20x1/2"; 25x1/2"; 25x3/4"	PPSU	Black
P-K2000RD	Socket	16; 20; 25; 32	PPSU	Black
P-K2380RD	Reducer Union	20x16; 25x20; 32x25	PPSU	Black
P-K2340RD	Female Adaptor	16x1/2"; 20x1/2"; 20x3/4"; 25x1/2"; 25x3/4"; 32x3/4"; 32x1"	PPSU + CW617N	Black
P-K3250RD	Male Adaptor	16x1/2"; 20x1/2"; 25x1/2"; 25x3/4"; 32x3/4"; 32x1"	PPSU	Black
P-K2340RD-L	Loose Nut Adaptor	16x3/4"; 20x3/4"; 25x3/4"; 25x1"; 32x1"; 32x1 1/4"	PPSU + CW617N	Black

RD: corresponds to the diameter reference.

THREADED FITTINGS



PHYSICAL AND MECHANICAL PROPERTIES

PARAMETER	VALUE	STANDARD
DENSITY	1,3	ASTM D792
MFI	14-20 g/10min	ASTM D1238
TENSILE MODULUS	2370 MPa	ISO 527
TENSILE STRENGTH	76,4 MPa	ISO 527
FLEXURAL MODULUS	2340 MPa	ISO 178
TENSILE IMPACT STRENGTH	399 KJ/m <sup>2</sup>	ASTM D1822
THERMAL CONDUCTIVITY	0,35 W/m K	ASTM C177
ROUGHNESS	0,004 mm	ISO 5436
FIRE CLASSIFICATION	B2	DIN 4102

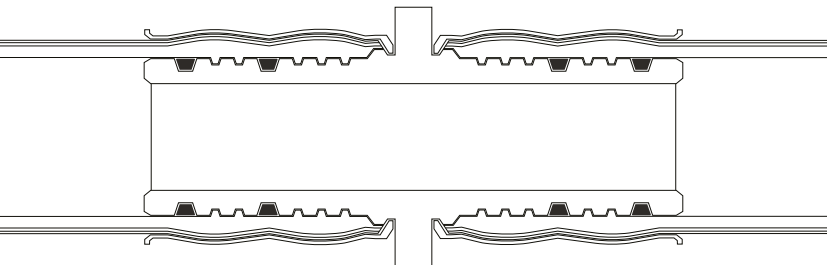
APPLICATIONS

APPLICATION	OPERATION TEMPERATURE (°C)	MAX OPERATING PRESSURE (bar)	KLIMAPRESS PPSU
Heating system – water closed circuit	0-80	10	✓
Hot and cold water	0-70	10	✓
Ultrapure water	0-40	10	✓
Cooling water system without antifreeze	0-70	10	✓
Cooling water system with antifreeze	-10-40	10	✓
Cold Water	0-20	10	✓
Water for industrial application	0-40	10	✓
Rainwater - pH>6	0-40	10	✓
Saline water	0-70	10	✓
Inert gases	40	10	✓

**Note 1:** areas of application not contained in this technical information, or water with highest requirements in terms of organic constituents, require advice from HELIROMA Technical department.

**Note 2:** in case of exceeding the maximum permanent operating temperatures, HELIROMA multilayer system can't be connected directly to this kind of systems. It has to be ensured that in every situation the maximum limits of use of the system are not exceeded.

PRESS PROFILE U



TOOLS



PRESS MACHINE



PRESS HEAD U



CALIBRATOR

STANDARDS

**EN ISO 21003**  
Multilayer piping systems for hot and cold water installations inside buildings.

**EN 10226-1**  
Pipe threads where pressure-tight joints are made on the threads; Part 1: Taper external threads and parallel internal threads – Dimensions, tolerances and designation.

**EN ISO 228-1**  
Pipe threads where pressure-tight joints are not made on the threads; Part 1: Dimensions, tolerances and designation.

**DIN 30 660**  
Sealing materials for gas and water supply as well as water heating systems - non-hardening jointing compounds and polytetrafluoroethylene (PTFE) tapes for metallic threaded joints in domestic installations.