

## DATA SHEET

30/09/2016

### UNIVERSAL PRESS FITTING MADE IN PPSU

#### MATERIAL SPECIFICATION

PART	MATERIAL
Fitting Body	PPSU
O-Ring internal	EPDM rubber Peroxido70
Sleeve	INOX 304
Insert Brass ( male )	CW617N
Insert Brass ( Female )	CW617N



#### Manufactured in conformity with the following international standards:

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

ISO 15875. Plastic piping systems for hot and cold water installations – cross linked polyethylene (PE-X).

ISO 22391. Plastics piping systems for hot and cold water installations — Polyethylene of raised temperature resistance (PE-RT)

UNIVERSAL Press Fitting.

Compatible with PEX and MULTILAYER pipes

Compatible with "U" - "RF" - "TH" profiles tools

Maximum temperature	140° C
Minimum temperature	- 40° C
Maximum pressure at 95° C	- 10 bar
Maximum pressure at 23° C	- 100 bar

#### FIELDS OF APPLICATION

Plumbing  
Heating  
Air Compressor

Table 2 — Derivation of test pressure,  $p_T$

	Application class			
	Class 1	Class 2	Class 4	Class 5
Maximum design temperature, $T_{max}$ (°C)	80	80	70	90
Design pressure of the pipe construction, $p_{CD}$ (MPa)	b	b	b	b
Test temperature, $T_{test}$ (°C) <sup>a</sup>	95	95	80	95
Test duration, $t$ (h)	1 000	1 000	1 000	1 000
Hydrostatic pressure of the pipe construction, $p_C$ (MPa)	b	b	b	b
Test pressure, $p_T$ (bar)				
for a design pressure, $p_D$ , of: 4 bar	b	b	b	b
6 bar	b	b	b	b
8 bar	b	b	b	b
10 bar	b	b	b	b
Number of test pieces	3	3	3	3
NOTE 1 bar = 0,1 MPa.				
<sup>a</sup> Generally, the highest test temperature is taken to be $(T_{max} + 10)$ °C, with an upper limit of 95 °C. However, to suit existing test facilities, the highest test temperature for classes 1 and 2 is also specified as 95 °C. The hydrostatic stresses given correspond to the given test temperatures.				
<sup>b</sup> The values of $p_{CD}$ , $p_C$ and $p_T$ result from the long-term strength data for the individual construction.				

Table 5 — Test parameters for thermal cycling

	Application class			
	Class 1	Class 2	Class 4	Class 5
Maximum design temperature, $T_{max}$ (°C)	80	80	70	90
Highest test temperature (°C)	90	90	80	95
Lowest test temperature (°C)	20	20	20	20
Test pressure (bar) <sup>a</sup>	$p_D$	$p_D$	$p_D$	$p_D$
Number of cycles for $D \leq 63$ mm <sup>b</sup>	5 000	5 000	5 000	5 000
Number of cycles for $D > 63$ mm <sup>c</sup>	2 500	2 500	2 500	2 500
Number of test pieces	One set of fittings with the configuration shown in EN 12283			
NOTE 1 bar = 0,1 MPa.				

<sup>a</sup>  $p_D$  is the design pressure of 4 bar, 6 bar, 8 bar or 10 bar, as applicable.

<sup>b</sup> Each cycle shall comprise 15 min at the highest test temperature and 15 min at the lowest (i.e. the duration of one cycle is 30 min).

<sup>c</sup> Each cycle shall comprise 30 min at the highest test temperature and 30 min at the lowest (i.e. the duration of one cycle is 60 min).

Table A.1 — List of reference product standards

Material	Reference product standard
PB	ISO 15876-1, ISO 15876-2, ISO 15876-3, ISO 15876-5
PE-RT	ISO 22391-1, ISO 22391-2, ISO 22391-3, ISO 22391-5
PE-X	ISO 15875-1, ISO 15875-2, ISO 15875-3, ISO 15875-5
PP	ISO 15874-1, ISO 15874-2, ISO 15874-3, ISO 15874-5
PVC-C	ISO 15877-1, ISO 15877-2, ISO 15877-3, ISO 15877-5

Table 7 — Test parameters for leaktightness under vacuum

Test temperature	23 °C
Number of test pieces	3
Test pressure	- 0,8 bar
Test duration	1 h
NOTE 1 bar = 0,1 MPa.	

Table 6 — Test parameters for pressure cycling

Test temperature	23 °C	
Number of test pieces	3	
Frequency of pressure cycling	(30 ± 5) cycles per minute	
Number of cycles	10 000	
Test pressure limits for a design pressure of:	Upper limit	Lower limit
4 bar	6,0 bar	0,5 bar
6 bar	9,0 bar	0,5 bar
8 bar	12,0 bar	0,5 bar
10 bar	15,0 bar	0,5 bar
NOTE 1 bar = 0,1 MPa.		