

# DECLARATION OF CONFORMITY FOR VALVES & FITTINGS MANUFACTURED BY AQUARAM VALVES & FITTINGS, S.L.

### **PVC-U CHARACTERISTICS**

The raw material used for the manufacture of the fittings and components is PVC Unplasticied, stabilized at tin and food quality. For this reason, all our valves & fittings can be used in contact with food products due to the fact that all its components are included in the positive lists and inside the authorised limits.

The physical and mechanical characteristics of PVC are following:

CHARACTERISTICS	MEASUREMENT METHOD	<b>OBTAINED VALUE</b>
Density (g/cm <sup>3</sup> )	UNE-EN ISO 1183	1,420
Hardness Shore "D"	UNE-EN ISO 868	82
Temperature VICAT (°C) 5 kg.	UNE-EN ISO 306/B	≥ 74
Resistance To the Flexion (MPa)	UNE-EN ISO/178	75
Tensile yield stress (MPa)	UNE-EN ISO/R 527	49
Tensile stress at break (MPa)	UNE-EN ISO/R 527	41
Tensile modulus of elasticity (MPa)	UNE-EN ISO/R 527	3180
Flexural modulus (MPa)	UNE-EN ISO 178	2850
Impact Charpy test (kJ/m <sup>2</sup> )	UNE-EN ISO 179	7
Melt Flow Index MFI (g/10 min.)	UNE-EN ISO 1133	14
Thermal stability at 200° C (min.)	UNE 53110	30
Fire classification	UL94	Type V0

The connections solvent cement fittings, threaded and with flanges carry out the following norms:

#### SOLVENT CEMENT DIMENSIONS

The dimensions to glue of the entrance of the entrance of our valves & fittings are adjusted to the following norms: UNE-EN ISO 1452-3:2011 and ISO 727-1:2002.

The cement application will be made with tubes carrying out the norms: UNE-EN ISO1452-2:2010, ISO 161-1:1996 and ISO 11922-1:1997.

#### **THREADED CONNECTIONS BPS**

The dimensions to thread of the entrance of our valves and fittings are adjusted to the following norms: UNE-EN ISO 228-1:2003. The internal threads are according the norms ISO 7-1:1994 and DIN EN 10226-1:2004-10.

#### **CONNECTIONS WITH BACK RINGS OR FOXED FLANGES**

With exception of the flanges with codes numbers 7122125 & 7123125 the rest carry out the norms UNE-EN ISO 1452-3:2011 up ø 160 mm measure included. Others measures with the norm UNE-EN 1092-1:2008 and ISO 9624:1997.

Other norms witch carry out:

## LIMITS OF THE ASSEMBLY FOR THE FITTINGS

They carry out the norms UNE-EN ISO 1452-3:2011

#### CHEMICAL RESISTANCE OF PVC

It corresponds to the boards indicated at the norm UNE-53389:2001 IN & ISO 4433-3:1997.



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#### HEAT BEHAVIOUR TRIAL

The heat behaviour trial of our fittings & components were satisfactory taking in care the norm UNE-EN ISO 580:2005.

Final tests and trials:

#### HYDRAULIC TESTS OF VALVES AND FITTINGS

The hydraulic tests for the valves are made according to the norm UNE-EN-917:1997.

The hydraulic tests for the fittings are made according to the norm UNE-EN ISO 1452-3:2011.

In both cases the tests of our valves and fittings either with water or air at pressure were satisfactory.

We certify that all products manufactured by **AQUARAM VALVES & FITTINGS, S.L.** with CH brand, have been manufactured in the CEE, and at the same time, have been controlled and recognised with conformity to the previous mentioned norms.

RICARDO RUIZ MASCARELL TECHNICAL DEPARTMENT MANAGER Granollers, 14 May 2018