

HANDBOOK
VALVES FOR REFRIGERATING SYSTEMS



APPLICATIONS

The hermetic valves, shown in this chapter, are classified “Pressure accessories” in the sense of the Pressure Equipment Directive 97/23/EC, Article 1, Section 2.1.4 and are subject of Article 3, Section 1.3 of the same Directive. They are designed for installation on commercial refrigerating systems and on civil and industrial conditioning plants, which use the following refrigerant fluids: R22, R134a, R404A, R407C, R410A; R507 proper to the Group II (as defined in Article 9, Section 2.2 of Directive 97/23/EC and referred to in Directive 67/548/EEC). For specific applications with refrigerant fluids not listed above, always proper to the Group II, please contact Castel Technical Department.

CONSTRUCTION

These valves are available in the following two types:

- Two-ways shut-off valves types 6010/2 and 6012/22
- Three-ways valves; two main connections plus a third one for charging types:
 - 6065, with right access connection
 - 6075, with left access connection

N.B. : the third way must be equipped with a valve core (for example type 8394/A or other similar ones) to be ordered separately.

The main parts of the hermetic valves are made with the following materials:

- Hot forged brass EN 12420 – CW 617N for body
- Steel, with proper surface protection, or brass for the spindle
- Chloroprene rubber (CR) and aramidic fibers for gland seal
- Glass reinforced PBT for cap that covers the spindle

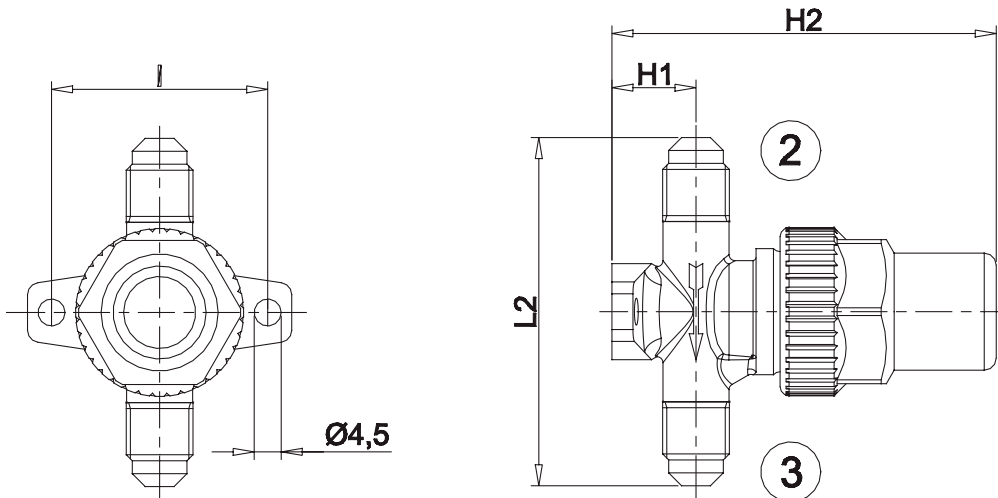
TABLE 1: General Characteristics

Catalogue Number	Connections					Kv Factor [m ³ /h]	TS [°C]		PS [bar]	Risk Category	
	SAE Flare			ODS			min.	max.			
	(1)	(2)	(3)	Ø [in.]	Ø [mm]						
6010/2	-	1/4"	1/4"	-	-	0,27	-40	+130	45	Art. 3.3	
6012/22		1/4"	-	1/4"							
6020/222	1/4"	1/4"	1/4"	-	-	0,39	-40	+110	45	Art. 3.3	
6020/233		3/8"	3/8"			1,20					
6020/244		1/2"	1/2"			2,20					
6020/255		5/8"	5/8"			2,80					
6062/22M6		1/4"	-			6					0,46
6062/23M10		3/8"				10					1,38
6072/22M6		1/4"				6					0,46
6072/23M8		3/8"				8					1,29
6072/23M10		3/8"				10					1,38
6072/24M12		1/2"				12					2,55
6072/25M16		5/8"				16					3,40

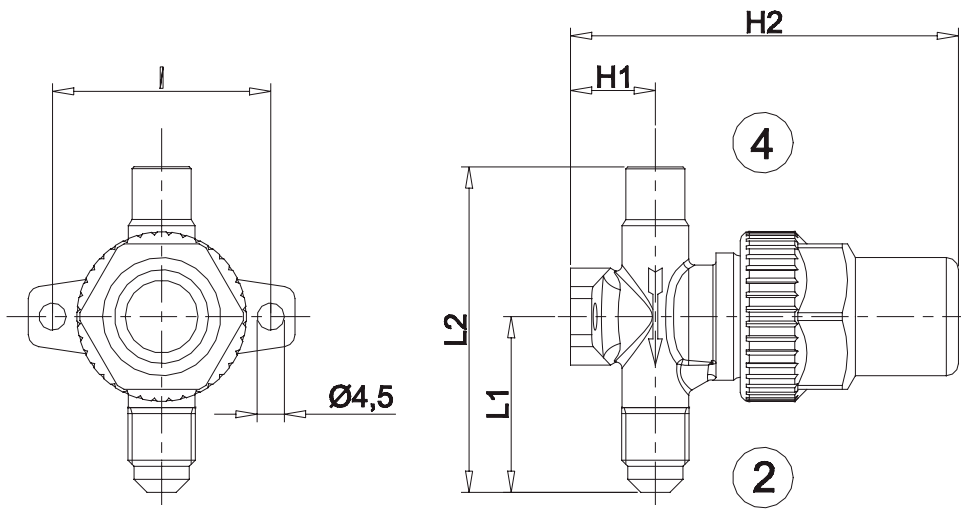
TABLE 2: Dimensions and Weights

Catalogue Number	Dimensions [mm]									Weight [g]
	H ₁	H ₂	H ₃	H ₄	H ₅	l	L ₁	L ₂	P ₁	
6010/2	14	66	-	-	-	36	-	58	-	160
6012/22			29	56			145			
6020/222	25	51	61	115	-	-	62	-	-	360
6020/233			60				67			370
6020/244	27	52	68	127	-	-	77	-	-	520
6020/255							79			530
6062/22M6	26	31	57	-	1	-	25	72	31	205
6062/23M10		33	59							200
6072/22M6		31	57							205
6072/23M8		33	59							210
6072/23M10		33	59							220
6072/24M12		30	39							68
6072/25M16	40		69	320						

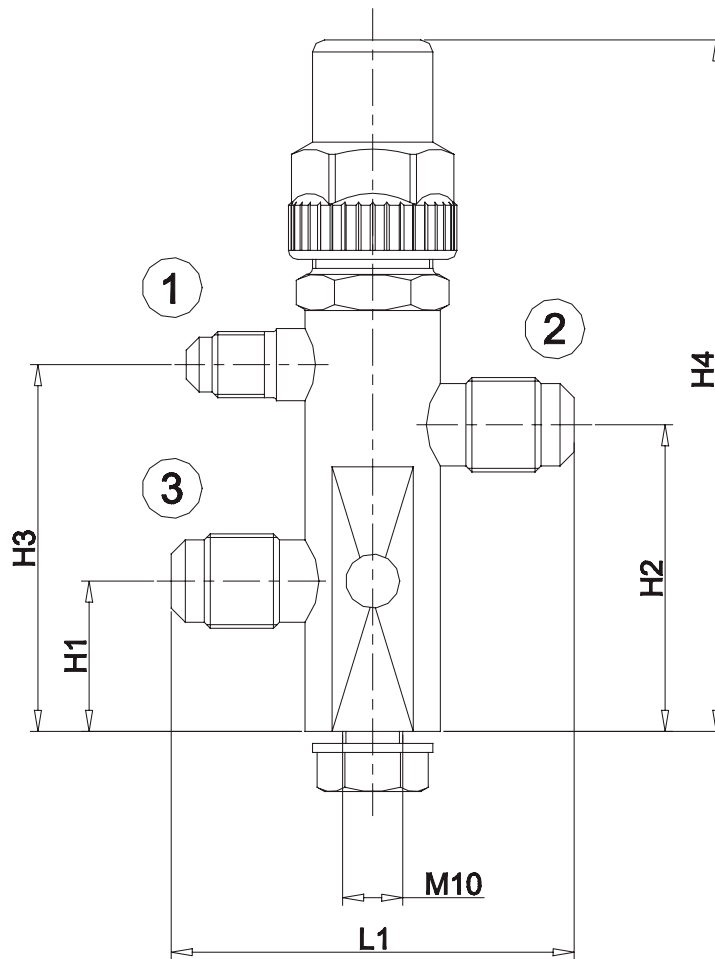
6010



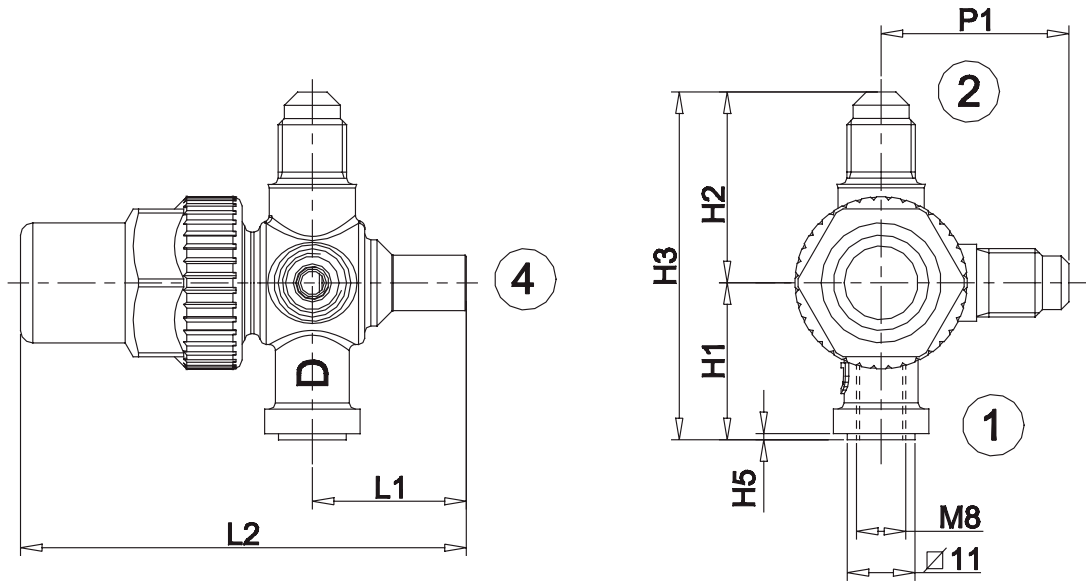
6012



6020



6062



6072

