

APPLICATIONS

The diaphragm 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

Diaphragm valves don't have gland seal. The external sealing is ensured by some thin metal discs (diaphragms), which hermetically divide the spindle chamber from the fluid flow area.

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

- Hot forged brass EN 12420 – CW 617N for body
- Brass EN 12164 – CW 614N for spindle
- Harmonic steel for spring
- nylon for seat sealing gaskets

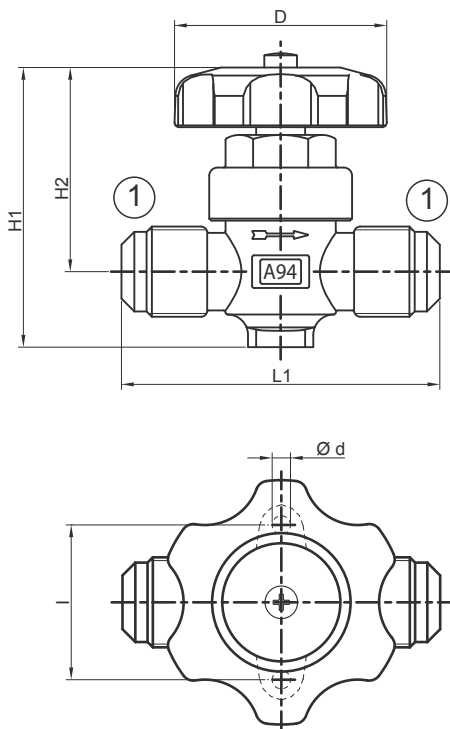
TABLE 1: General Characteristics

Catalogue Number	Connections			Kv Factor [m³/h]	TS [°C]		PS [bar]	Risk Category according to PED
	SAE Flare (1)	ODS (2)			min.	max.		
		Ø [in.]	Ø [mm]					
6210/2	1/4"	-	-	0.28	-35	+90	28	Art. 3.3
6210/3	3/8"			1.00				
6210/4	1/2"			1.30				
6210/5	5/8"			1.80				
6210/6	3/4"			3.65				
6220/M6	-			6				
6220/2	1/4"	-	1.00					
6220/3	3/8"	-						
6220/M10	-	10	1.30					
6220/4	1/2"	-	1.80					
6220/5	5/8"	16	3.65					
6220/6	3/4"	-						
6220/7	7/8"	-						

TABLE 2: Dimensions and Weights

Catalogue Number	Dimensions [mm]						Weight [g]						
	H ₁	H ₂	L ₁	d	l	D							
6210/2	68	53.5	58	4.5	36	52	200						
6210/3	72		74		38		325						
6210/4			78		340								
6210/5			6210/6		86		62.5	98	6.2	50	60	655	
6220/M6	68	53.5	53	4.5	36	52	195						
6220/2	72		61		38		300						
6220/3			70		305								
6220/M10			71		6220/6		86	62.5	92	6.2	50	60	580
6220/4			6220/5		6220/6		94	6.2	50	60	645		

6210



6220

