

CHANGEOVER VALVE FOR R744 TRANSCRITICAL SYSTEMS AND AMMONIA

Stainless steel valve for HVAC-R systems.

The changeover valve lets to replace one of the pressure relief devices, while the other one keeps on working on the system.





MAIN FEATURES

- These new stainless steel valves have been designed with the use of high performance materials of premium quality for a perfect internal tightness in any application.
- A strategy of continuos product innovation has made it possible to improve the mechanical resistance and the energy efficiency of the valve. Valves were designed using FEM analysis and CFD simulations to optimise the flow efficiency for each given connection size.
- Rotate completely the stem inside the valve to switch from the one to the second configuration as shown in the picture above.
- Functional tests are executed on 100% of the produced ball valves by using a proper high pressure system.

SPECIFICATIONS

Refrigerants	R744 (Transcritical)	R717 (Ammonia)
Media temperature range	- 40 °C + 150 °C	- 40 °C + 100 °C
Maximum working pressure (PS)	140 bar (2031 psig)	40 bar (580 psig)
Maximum test pressure	PS x 1,43	
Oils	POE, PAG	PAO
Approvals	CE 2014/68/UE PED	

CONNECTIONS SIZE AND OVERALL DIMENSIONS

The valves are available with thread port NPT (1/2, 3/4, 1, 1-1/4)



	CONNECTIONS	Kv	
	THREAD	m³/h	
	NPT 1/2	5,7	
	NPT 3/4	8,7	
	NPT 1	13,9	
	NPT 1-1/4	23,2	
The changeover valve equipped with a couple of pressure relief device (safety valves) can pro- tect equipment such as evaporators, conden- sers, liquid receivers, oil separators, compres- sors, heat exchangers and other under pres- sure vessels from the overpressures.			



■ CHANGEOVER VALVES IN THE REFRIGERATING SYSTEM WITH R744

For the different sections of the refrigerating system the changeover valves are equipped with pressure relief devices with different settings:

- High pressure booster suction line......60 bar
- Liquid receiver......60 bar



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