

3-WAY MOTORIZED BALL VALVES



SHAPE OF TECHNOLOGY

Refrigeration and air conditioning is a fast-developing field where today's players need to be dynamic and competitive more than before. This is why Castel focuses on developing products with ever-improving performance, to be at your side in new applications and areas of use.

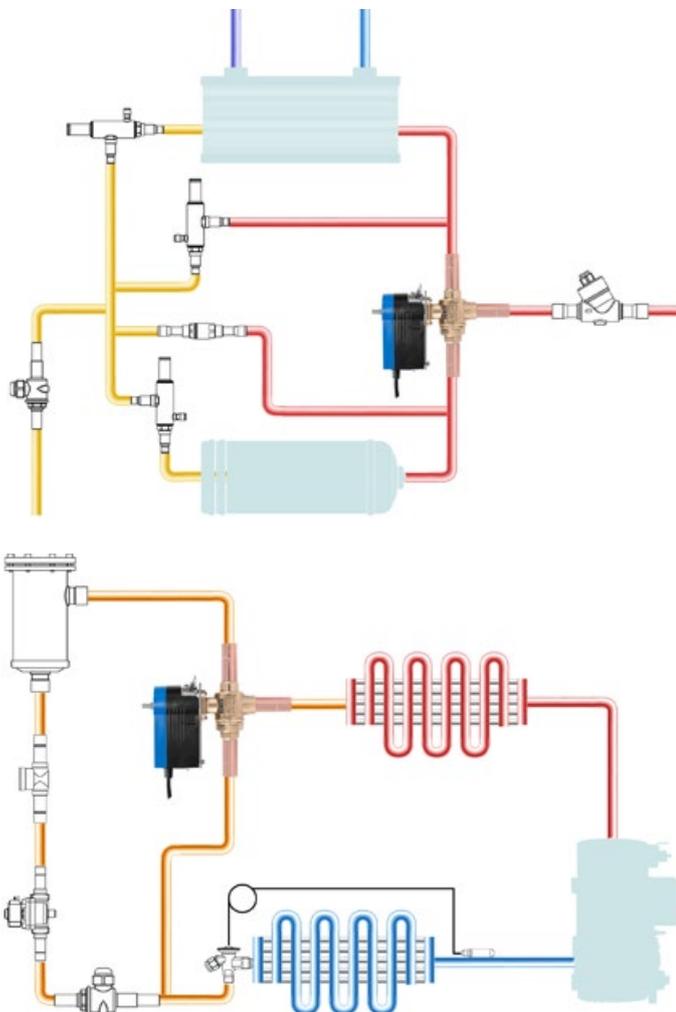
INCREASING REFRIGERATION PERFORMANCE IS NOW POSSIBLE USING CASTEL MOTORIZED BALL VALVES

Having sensitivity for the environment also means optimizing power consumption and recovering heat. Inserting a 3-way valve for heat recovery is a simple solution to optimize your circuits.

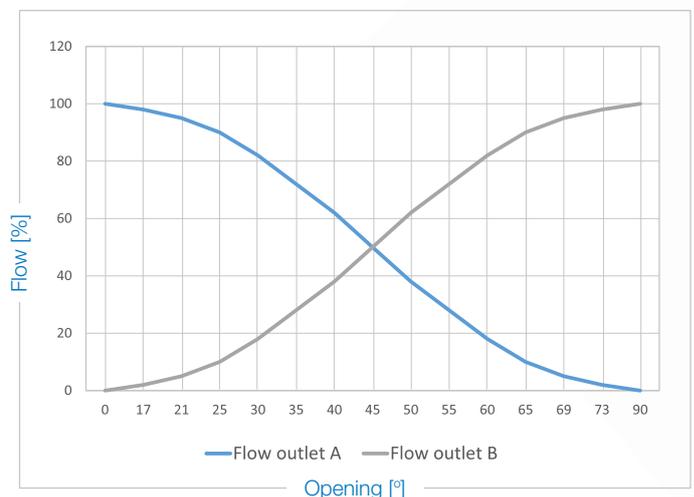
Using a 3-way valve on the filter section allows you to keep the

system running when replacing the filter itself.

It also allows economic savings by replacing the installation of two 2-way valves.



Flow capacity vs. rotation



The 3-way ball valve allows the system to control the flow of the fluid, redirecting it in the most precise way without adding too higher pressure drops. This type of valve is also known as a control valve because the flow velocities need to be controlled and predictable depending on the application.

These enhanced ball valves deliver controllable flow characteristics from the nearly closed to the fully open position of the valve. Though port type and valve size affect the rangeability, Castel ball valves have a minimum rangeability of flow rates and are highly repeatable within the normal 20% - 80% range of travel.



- **No adaptor** needed
- **Efficient diverting** valve
- **Easily installed** in any orientation
- Can be **coupled with any brand** of actuator
- Works also without **any differential pressure**
- **V-port version** available

Body and adaptor in one single component

The assembly of the motorized valve has never been so simple. The absence of intermediate adapters allows the rapid assembly of the motor and actuator. All the components are supplied in one package.



FUTURE PROOF 3-WAY BALL VALVES

Castel, through the creation of the new 3-way ball valves, offers an innovative product as an alternative to the current market solutions, developed in a wide range of dimensions. Special configurations are available, with various connections, fully compatible with all refrigerants and with all pressures. They are designed to operate in low environmental impact fluid systems and recommended in all those installations where the focus on being environmentally friendly is the basis of the design. These valves, allowing the system to precisely manage heat recovery, can raise the values of energy savings and efficiency.

The focus on energy optimization while maintaining a low environmental impact is one of the main philosophies of Castel.


Rubinetti 3 vie motorizzati con attuatore Sauter/Castel , posizionamento 3 punti

Classic PS = 45 bar	PolyHedra PS = 50 bar	GoGreen PS = 80 bar	GoGreen PS = 120 bar	GoGreen PS = 140 bar	Connections		Kv Factor [m ³ /h]	TS [°C]		Voltage	Power
					ODS			min.	max.		
					Ø [in.]	Ø [mm]					
6690M/3RA6	6690NM/3RA6	6690EM/3RA6	6697EM/3RA6		3/8"	-	4,6	-40	+150	220 V 50/60 Hz	2,9 W
6690M/M10RA6	6690NM/M10RA6	6690EM/M10RA6		6698EM/M10RA6	-	10					
6690M/M12RA6	6690NM/M12RA6	6690EM/M12RA6		6698EM/M12RA6	-	12					
6690M/4RA6	6690NM/4RA6	6690EM/4RA6	6697EM/4RA6		1/2"	-					
6690M/5RA6	6690NM/5RA6	6690EM/5RA6	6697EM/5RA6	6698EM/M16RA6	5/8"	16					
6690M/M18RA6	6690NM/M18RA6	6690EM/M18RA6		6698EM/M18RA6	-	18					
6690M/6RA6	6690NM/6RA6	6690EM/6RA6	6697EM/6RA6		3/4"	-					
6690M/7RA6	6690NM/7RA6	6690EM/7RA6	6697EM/7RA6	6698EM/M22RA6	7/8"	22					
6690M/M28RA6	6690NM/M28RA6	6690EM/M28RA6		6698EM/M28RA6	-	28					
6690M/9RA6	6690NM/9RA6	6690EM/9RA6	6697EM/9RA6		1.1/8"	-					
6690M/11RA6	6690NM/11RA6	6690EM/11RA6	6697EM/11RA6	6698EM/M35RA6	1.3/8"	35					
6690M/13RA6	6690NM/13RA6	6690EM/13RA6	6697EM/13RA6		1.5/8"	-					
6690M/M42RA6	6690NM/M42RA6	6690EM/M42RA6		6698EM/M42RA6	-	42					

Rubinetti 3 vie motorizzati con attuatore Sauter/Castel , con modulazione continua della posizione

Classic PS = 45 bar	PolyHedra PS = 50 bar	GoGreen PS = 80 bar	GoGreen PS = 120 bar	GoGreen PS = 140 bar	Connections		Kv Factor [m ³ /h]	TS [°C]		Voltage	Power
					ODS			min.	max.		
					Ø [in.]	Ø [mm]					
6690M/3RA2	6690NM/3RA2	6690EM/3RA2	6697EM/3RA2		3/8"	-	4,6	-40	+150	24 V AC/DC	4,8
6690M/M10RA2	6690NM/M10RA2	6690EM/M10RA2		6698EM/M10RA2	-	10					
6690M/M12RA2	6690NM/M12RA2	6690EM/M12RA2		6698EM/M12RA2	-	12					
6690M/4RA2	6690NM/4RA2	6690EM/4RA2	6697EM/4RA2		1/2"	-					
6690M/5RA2	6690NM/5RA2	6690EM/5RA2	6697EM/5RA2	6698EM/M16RA2	5/8"	16					
6690M/M18RA2	6690NM/M18RA2	6690EM/M18RA2		6698EM/M18RA2	-	18					
6690M/6RA2	6690NM/6RA2	6690EM/6RA2	6697EM/6RA2		3/4"	-					
6690M/7RA2	6690NM/7RA2	6690EM/7RA2	6697EM/7RA2	6698EM/M22RA2	7/8"	22					
6690M/M28RA2	6690NM/M28RA2	6690EM/M28RA2		6698EM/M28RA2	-	28					
6690M/9RA2	6690NM/9RA2	6690EM/9RA2	6697EM/9RA2		1.1/8"	-					
6690M/11RA2	6690NM/11RA2	6690EM/11RA2	6697EM/11RA2	6698EM/M35RA2	1.3/8"	35					
6690M/13RA2	6690NM/13RA2	6690EM/13RA2	6697EM/13RA2		1.5/8"	-					
6690M/M42RA2	6690NM/M42RA2	6690EM/M42RA2		6698EM/M42RA2	-	42					

Rubinetti 3 vie ad azionamento manuale motorizzabili multibrand

Catalogue Number	Connections		Kv Factor [m ³ /h]	TS [°C]							
					ODS			min.	max.		
					Ø [in.]	Ø [mm]					
6690/3	6690N/3	6690E/3	6697E/3		3/8"	-	4,6	-40	+150		
6690/M10	6690N/M10	6690E/M10		6698E/M10	-	10					
6690/M12	6690N/M12	6690E/M12		6698E/M12	-	12					
6690/4	6690N/4	6690E/4	6697E/4		1/2"	-					
6690/5	6690N/5	6690E/5	6697E/5	6698E/M16	5/8"	16					
6690/M18	6690N/M18	6690E/M18		6698E/M18	-	18					
6690/6	6690N/6	6690E/6	6697E/6		3/4"	-					
6690/7	6690N/7	6690E/7	6697E/7	6698E/M22	7/8"	22					
6690/M28	6690N/M28	6690E/M28		6698E/M28	-	28					
6690/9	6690N/9	6690E/9	6697E/9		1.1/8"	-					
6690/11	6690N/11	6690E/11	6697E/11	6698E/M35	1.3/8"	35					
6690/13	6690N/13	6690E/13	6697E/13		1.5/8"	-					
6690/M42	6690N/M42	6690E/M42		6698E/M42	-	42					

Castel®


ISO 14001

Castel has always been aware of environmental sustainability issues and gives its contribution to a cleaner environment, supplying the refrigeration and air conditioning industry with state-of-the-art and environment-friendly technology. With its commitment and steady research in its laboratories, Castel has developed a whole range of products using natural refrigerants, which reduce emissions to the minimum. The large range of products belonging to the Castel "GoGreen" line has been developed to be used in CO₂ (R744) filled systems.

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