



B01-2016\_RSS-EN

## Actuators characteristics

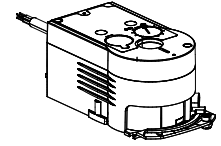
Part number	Rotation angle	Torque [Nm]	Running time [sec]	Voltage [V]	Frequency [Hz]	Power [W]	Ambient temperature [°C]		Degree of protection
							min	Max	
9700/RA2 (1)	90°	10	60	24	50/60	4,8	-20	+55	IP 54
9700/RA6 (2)	90°	10	60	230	50/60	2,9	-20	+55	IP 54
9720/RA2 (1)	90°	30	120	24	50/60	2,4	-20	+55	IP 54
9720/RA6 (2)	90°	30	120	230	50/60	3,7	-20	+55	IP 54

(1) Wiring connections : switching output 2 points (open/close) or continuous output (0 ÷ 10V)

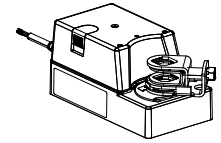
(2) Wiring connections : switching output 2 points (open/close)

## Auxiliary switch units characteristics

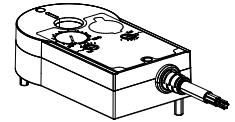
Part number	Designed for actuator	Contact type	Max loading [A]	Ambient temperature [°C]		Degree of protection
				min	Max	
9750/X01	9700/RA2	Double	5	-20	+55	IP 54
9750/X02	9700/RA6 ; 9720/RA2 ; 9720/RA6	Double	5	-20	+55	IP 54



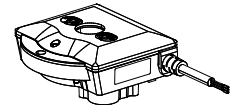
9700/RA2



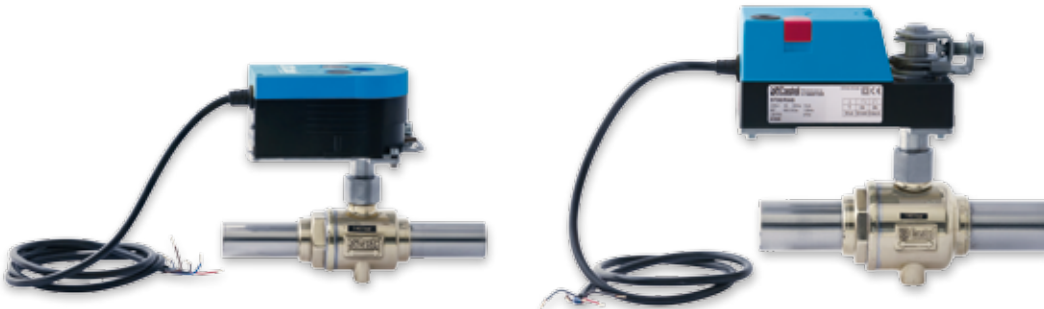
9700/RA6  
9720



9750/X01



9750/X02



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.



ISO 14001

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CASTEL S.r.l.

Via Provinciale, 2-4 [C.P. 67] - 20060 Pessano con Bornago (MI) - Tel. +39 02.957021 - Fax +39 02.95741317 - email info@castel.it - www.castel.it

# Ball valves arranged for the actuator assembly



The products, shown in this leaflet, are designed for installation on commercial refrigerating systems and on civil and industrial conditioning plants.

The valves series:

- 6570 ; 6571 ; 6590 ; 6591
- 6570EL ; 6590EL
- 6570E ; 6590E
- 6577E ; 6597E
- 6578E ; 6598E

may be coupled, **with suitable flanged adapter separately sold**, to the electrical actuators supplied by Castel.

The available adapters have the following codes: **9901/X21 ; 9901/X22 ; 9901/X23 ; 9901/X27 ; 9901/X28 ; 9901/X30.**

The right matchings of: *valve + adapter + actuator* are shown on the enclosed tables of ball valves. After coupling the ball valve to the actuator it is possible a remote control on valve opening / closing or a manual control, excluding the actuator.

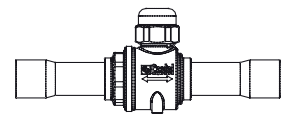
**All the electrical actuators can be equipped with auxiliary switch units, separately sold.**

As above the ball valves arranged for motor-driving, are the following ones:

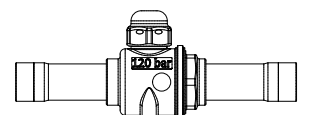
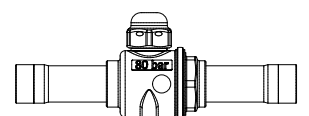
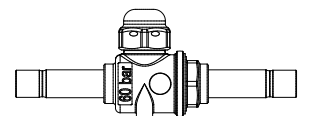
- Series: 6570 ; 6571 ; 6590 ; 6591 with PS = 45 bar, copper connections equipped, for systems with traditional fluids: R134a, R22, R404A , R407C, R410A, R507. For specific applications with other fluids, please contact Castel Technical Department.
- Series: 6570EL ; 6590EL with PS = 60 bar, copper connections equipped, for CO<sub>2</sub> sub-critical systems.
- Series 6570E ; 6590E with PS = 80 bar, copper connections equipped, for CO<sub>2</sub> trans-critical systems, low pressure side and medium pressure side.
- Series: 6577E; 6597E with PS = 120 bar, reinforced copper connections equipped, for CO<sub>2</sub> trans-critical systems, high pressure side.
- Series: 6578E ; 6598E with PS = 140 bar, stainless steel connections equipped, for CO<sub>2</sub> trans-critical systems, high pressure side



SERIES	Ball Valves		ODS Connections		Actuators	Voltage	Frequency	Auxiliary Switches	Adapters
	Part Number		Ø [in.]	Ø [mm]					
6570-6571 6590-6591 PS = 45 bar	6570/3	6570/3A	3/8"	-	9700/RA2	24	50/60	9750/X01	9901/X30
	6570/M10	6570/M10A	-	10					
	6570/M12	6570/M12A	-	12					
	6570/4	6570/4A	1/2"	-					
	6571/5		5/8"	16					
	6570/M15	6570/M15A	-	15					
	6570/5	6570/5A	5/8"	16					
	6570/M18	6570/M18A	-	18					
	6570/6	6570/6A	3/4"	-					
	6571/7		7/8"	22					
HFC/HFO Refrigerants	6570/7	6570/7A	7/8"	22	9700/RA2 9700/RA6	24 230	50/60 50/60	9750/X01 9750/X02	9901/X27 9901/X28
	6571/M28		-	28					
	6571/9		1.1/8"	-					
	6570/M28	6570/M28A	-	28					
	6570/9	6570/9A	1.1/8"	-					
	6571/11		1.3/8"	35					
6590/11	6590/11	6590/11A	1.3/8"	35	9720/RA2 9720/RA6	24 230	50/60 50/60	9750/X02 9750/X02	9901/X23 9901/X23
	6591/13		1.5/8"	-					
	6591/M42		-	42					
	6590/13	6590/13A	1.5/8"	-					
	6590/M42	6590/M42A	-	42					
	6591/17		2.1/8"	54					



SERIES	Ball Valves	ODS Connections		Actuators	Voltage	Frequency	Auxiliary Switches	Adapters	
		Part Number							Ø [in.]
6570EL 6590EL PS = 60 bar	6570EL/3		3/8"	-	9700/RA2	24	50/60	9750/X01	9901/X30
	6570EL/M10		-	10					
	6570EL/M12		-	12					
	6570EL/4		1/2"	-					
	6570EL/5		5/8"	16					
	6570EL/M18		-	18					
	6570EL/6		3/4"	-					
	6570EL/7		7/8"	22					
	6570EL/M28		-	28					
	6570EL/9		1.1/8"	-					
CO <sub>2</sub> Refrigerants	6590EL/11		1.3/8"	35	9720/RA2 9720/RA6	24 230	50/60 50/60	9750/X02 9750/X02	9901/X23 9901/X23
	6590EL/13		1.5/8"	-					
	6590EL/M42		-	42					
	6590EL/11		1.3/8"	35					
6570E 6590E PS = 80 bar	6570E/3		3/8"	-	9700/RA2	24	50/60	9750/X01	9901/X30
	6570E/M10		-	10					
	6570E/M12		-	12					
	6570E/4		1/2"	-					
	6570E/5		5/8"	16					
	6570E/M18		-	18					
	6570E/6		3/4"	-					
	6570E/7		7/8"	22					
	6570E/M28		-	28					
	6570E/9		1.1/8"	-					
CO <sub>2</sub> Refrigerants	6590E/11		1.3/8"	35	9720/RA2 9720/RA6	24 230	50/60 50/60	9750/X02 9750/X02	9901/X23 9901/X23
	6590E/13		1.5/8"	-					
	6590E/M42		-	42					
	6590E/11		1.3/8"	35					
6577E 6597E PS = 120 bar	6577E/3		3/8"	-	9700/RA2	24	50/60	9750/X01	9901/X30
	6577E/4		1/2"	-					
	6577E/5		5/8"	16					
	6577E/6		3/4"	-					
	6597E/7		7/8"	22					
	6597E/9		1.1/8"	-					
	6597E/11		1.3/8"	35					
	6597E/13		1.5/8"	-					



SERIES	Ball Valves	W Connections	Actuators	Voltage	Frequency	Auxiliary Switches	Adapters	
								Part Number
6578E 6598E PS = 140 bar	6578E/M10		10	9700/RA2	24	50/60	9750/X01	9901/X30
	6578E/M12		12					
	6578E/M16		16					
	6578E/M18		18					
	6598E/M22		22					
CO <sub>2</sub> Refrigerants	6598E/M28		28	9700/RA6	230	50/60	9750/X02	9901/X22
	6598E/M35		33,4	9720/RA2	24	50/60	9750/X02	9901/X23
	6598E/M42		42,2	9720/RA6	230	50/60	9750/X02	9901/X23

