

High performance direct acting or pilot-operated valves with brass bodies and PTFE seals, suitable for continuous service with liquid nitrogen (LN<sub>2</sub>), liquid carbon dioxide (LCO<sub>2</sub>) and other cryogenic fluids down to -196°C.

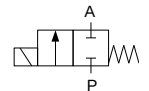


### TECHNICAL DATA:

- **Internal parts:** stainless steel
- **Seals:** PTFE, PAI
- **Fluid temperature:** -196°C to +90°C
- **Ambient temperature:** max +50°C
- **Viscosity:** max 21 mm<sup>2</sup>/s
- **Response time:** 8 - 40 ms (closing)
- **Voltage:** 230, 115, 48, 24 V AC / 24, 12 V DC
- **Duty cycle:** continuous (ED100%)
- **Cycling rate:** 10 to 100 cpm
- **Electrical protection:** IP65  
(with plug to ISO 4400)

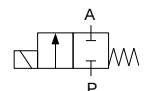
Long term use in humid environment requires the use of sealing sets.

### Closed when de-energised (NC) - Conical seal - Excellent shutoff and durability

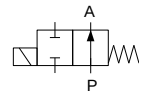


Ports	Orifice Size [mm]	Kv (water at 1 bar) [l/min]	Differential pressure [bar]		Material		Mass [kg]	Coil type	Model	Order code 230 VAC coil	Fig.
			min	max	body	seal					
G1/4	3	3.6	0	30	Brass	PTFE	0.52	TM35	D22c	324916	1
	4.5	7.5	0	9	Brass	PTFE	0.52	TM35	D23c	324914	
G1/2	7	13	0	5	Brass	PTFE	0.52	TM35	D24c	324910	2
	10	28	0	1.5	Brass	PTFE	0.57	TM35	D24c	340459	

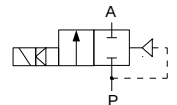
### Closed when de-energised (NC) - Disc seal



Ports	Orifice Size [mm]	Kv (water at 1 bar) [l/min]	Differential pressure [bar]		Material		Mass [kg]	Coil type	Model	Order code 230 VAC coil	Fig.
			min	max	body	seal					
G1/4	1.4	0.85	0	150	Brass	PTFE	0.52	TM35	D22	324792	1
	3	3.6	0	30	Brass	PTFE	0.52	TM35	D222	320586	
	4.5	7.5	0	10	Brass	PTFE	0.52	TM35	D223	320772	
G1/2	7	13	0	5	Brass	PTFE	0.52	TM35	D224	324774	

**Open when de-energised (NO) - Disc seal**


Ports	Orifice Size [mm]	Kv (water at 1 bar) [l/min]	Differential pressure [bar]		Material		Mass [kg]	Coil type	Model	Order code (24VDC coil)	Fig.
			min	max	body	seal					
G1/4	1.4	0.85	0	80	Brass	PTFE	0.52	TM35	D22NO	329420	1
	3	3.6	0	16	Brass	PTFE	0.52	TM35	D22NO	329410	
	4.5	7.5	0	5	Brass	PTFE	0.52	TM35	D22NO	329430	

**Closed when de-energised (NC) - Pilot-operated piston - High flow rate**


Ports	Orifice Size [mm]	Kv (water at 1 bar) [l/min]	Differential pressure [bar]		Material		Mass [kg]	Coil type	Model	Order code 230 VAC coil	Fig.
			min	max	body	seal					
G3/8	8	30	0.8	200	Brass	PAI	0.65	TM35	XBS3	315463	-
G1/2	10	42	0.5	50	Brass	PTFE	0.75	TM35	B27c	316660	2
			0.3	20	Brass	PTFE	0.75	TM35	B27c	316657	
			0	10	Brass	PTFE	0.75	TM35	B25	316663	
G3/4	18	90	1	20	Brass	PTFE	1.0	TM35	B27c	316687	3
			0	10	Brass	PTFE	1.0	TM35	B25	316661	
G1	25	170	0.35	15	Brass	PTFE	1.51	TM35	B26c	316691	4
G6/4	40	350	0.35	10	Brass	PTFE	3.25	TM35	B26c	316697	
G2	50	630	0.5	10	Brass	PTFE	5.45	TM35	B26c	316699	

Solenoid valves for cryogenic liquids with extended coil stem for maximum endurance in the harshest environment



Ports	Orifice Size [mm]	Kv (water at 1 bar) [l/min]	Differential pressure [bar]		Material		Mass [kg]	Coil type	Model	Order code 230 VAC coil	Fig.
			min	max	body	seal					
G1/4	3	3.6	0	30	Brass	PTFE	0.52	TM35	xD22	324899	5
	4.5	7.5	0	9	Brass	PTFE	0.52	TM35	xD22	324896	
G1/2	7	13	0	5	Brass	PTFE	0.52	TM35	xD22	324897	
	10	42	0	1.5	Brass	PTFE	0.52	TM35	xD22	324887	
G1/2	10	42	1	50	Brass	PTFE	0.85	TM35	xB27c	316672	-
			0.3	20	Brass	PTFE	0.85	TM35	xB27c	316668	-
G3/4	18	90	0.35	15	Brass	PTFE	1	TM35	xB27c	316726	-
G1	25	170	0.35	7	Brass	PTFE	1.51	TM35	xB26c	316688	-
G6/4	40	350	0.35	7	Brass	PTFE	3.25	TM35	xB26c	316698	-
G2	50	630	0.5	7	Brass	PTFE	5.45	TM35	xB26c	316701	-

**PLEASE CONTACT US FOR OTHER APPLICATIONS!**

**OPTIONS:**

- EEx me II explosionproof coils
- NPT ports
- Other versions on request