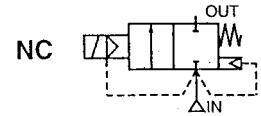




**Normally closed**  
Pilot-operated diaphragm valve

Rp 1 - 1 1/4 - 1 1/2

**MV 1219 - MV 1229**  
**MV 1220 - MV 1230**  
**MV 1221 - MV 1231**

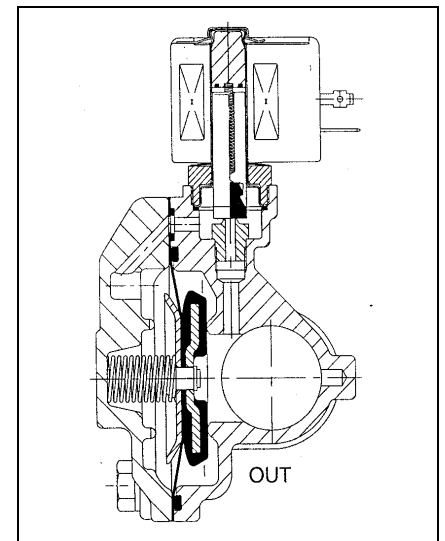


**Description**

- Shut-off valve for controlling air, inert gas, water, light oil and other media according to the seal materials used.
- The solenoid valves are designed for operation at a minimum  $\Delta P$  of 0.35 bar.
- The high-quality materials used for the valves and extensive testing guarantee a long service life.
- The solenoid valves are in line with international standards.

**General**

**Pressure difference** 0.35 to 9 bar [1 bar = 100 kPa]  
**Permissible static pressure** 20 bar  
**Maximum viscosity** 65 cSt (mm<sup>2</sup>/s)  
**Response time** 40 to 120 ms



Medium	Temperature range (1)	Seals	Art. No. – Ident No.	
			NBR	FPM
Air, gas, water, light oil	-20 °C to 85°C -20 °C to 120°C	NBR FPM	MV 1219 (G) – 102860 (102873)	MV 1229 (G) – 102861 (102874)
			MV 1220 (G) – 102862 (102875)	MV 1230 (G) – 102863 (102876)
			MV 1221 (G) – 102864 (102877)	MV 1231 (G) – 102865 (102878)

(1) At temperatures below zero the medium may freeze and damage the valve

**Electrical data**

**Voltages (2)** DC (=) 24 V - 12 V → Please use the suffix »G« to order DC valves  
 AC (-) 24 V/50 Hz - 110 V/50 Hz - 230 V/50 Hz

(2) Other voltages and 60 Hz frequency on request

Coil type	Power			Hot / cold = (W)	Ambient temperature (1) (°C)	Degree of protection (with connector socket fitted)
	Pickup ~ (VA)	Holding ~ (VA)				
CM6-FT	34.0	15.6	-	-	-20 to +75	IP65
CMXX-FT	-	-	-	9 / 11.2	-20 to +75	IP65

**Characteristics**

Con- nec- tion	Nom- inal dia- meter	Flow coefficient Kv		Operating pressure difference (bar)				Coil type		Catalogue No. Please use the suffix »G« to order DC valves			
				Min.	Max.		Water / oil <65 cSt						
					~	=		=					
Rp	(mm)	(m <sup>3</sup> /h)	(l/min)					~	=	NBR	FPM		
1	25	11.1	185	0.35	9	9	9	9	9	CM6-FT	CMXX-FT	MV 1219	MV 1229
1 1/4	28	12.8	213	0.35	9	9	9	9	9	CM6-FT	CMXX-FT	MV 1220	MV 1230
1 1/2	32	19.3	322	0.35	9	9	9	9	9	CM6-FT	CMXX-FT	MV 1221	MV 1231

**Design features**

	MV 1219 to MV 1221	MV 1229 to MV 1231
Body	Brass	Brass
Guide tube	Stainless steel	Stainless steel
Magnet armature and armature plug	Stainless steel	Stainless steel
Springs	Stainless steel	Stainless steel
Valve seat	Brass	Brass
Seals	NBR	FPM
Diaphragm and valve disc	NBR	FPM
Shading ring	Copper	Copper
Insulation class (coil)	F	F
Electrical connection	ISO 4400; connector socket (PG 11P) IEC 335	ISO 4400; connector socket (PG 11P) IEC 335

**Electrical design**

**Main spare parts**

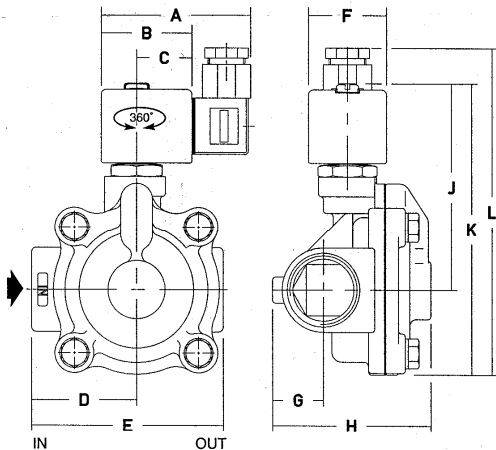
Order No.	Repair kit	Diaphragms
MV 1219	302280	166838-027
MV 1219 G	302379	166838-027
MV 1220	302280	166838-027
MV 1220 G	302379	166838-027
MV 1221	302284	166838-029
MV 1221 G	302383	166838-029
MV 1229	302280V	166838-031
MV 1229 G	302379V	166838-031
MV 1230	302280V	166838-031
MV 1230 G	302379V	166838-031
MV 1231	302284V	166838-030
MV 1231 G	302383V	166838-030

Coils Order No.	Coils				Insulation class	Max. perm. operating temperature °C	Max. perm. temperature rise °C*	Max. perm. ambient temperature °C**
	~ (2)	V	= (3)	V				
MV 1219 MV 1229 MV 1220 MV 1230 MV 1221 MV 1231	400-325-101 400-325-107 400-325-117	24 110 230	400-425-141 400-425-142	12 24	FT	155	80	75

(2) Other voltages and 60 Hz frequency on request  
 (3) Please use the suffix »G« to order DC valves

\* Coil temperature after energising  
 \*\*Additional effect of the medium temperature within the value range stated in the catalogue

**Dimensions [mm], weights [g]**



Order No. »MV«	1219 1229	1220 1230	1221 1231	1219 G 1229 G	1220 G 1230 G	1221 G 1231 G
A	75	75	75	80	80	80
B	45	45	45	50	50	50
C	27	27	27	30	30	30
D	52	52	56	52	52	56
E	95	95	111	95	95	111
F	39	39	39	45	45	45
G	25	30	33	25	30	33
H	75	85	95	75	85	95
J	101	101	105	105	105	109
K	143	143	156	147	147	166
L	160	160	173	164	164	177
Weight (4)	2000	2000	2500	2000	2000	2500

(4) Including coil and connector socket

**Special versions (on request)**

- Seals and valve disc made of EPDM (ethylene-propylene) and CR (neoprene)
- Explosion proof body in accordance with CENELEC and national standards
- High-power coil
- Slow closing
- Mounting bracket for valves with a brass body
- Manual operator
- Connector socket with LED and protective circuit

**Installation**

- Any mounting position
- Other screw connections on request
- Installation and maintenance instructions enclosed with each valve
- Spare parts and replacement coils (see above)