



**Normally closed
Force-actuated diaphragms**

G 1/2 - 3/4 - 1

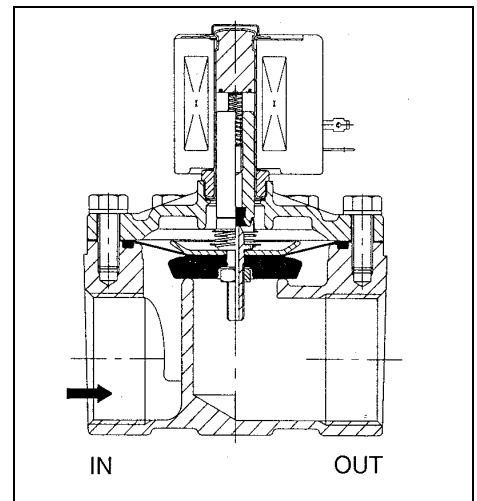
**MV 102 ES - MV 122 ES
MV 103 ES - MV 123 ES
MV 104 ES - MV 124 ES**

Description

- Shut-off valve for controlling air, inert gas, water, light oil and other media automatically according to the sealants that are used.
- The valves do **not** require a minimum working pressure.
- The high-quality materials which are used for the valves and a series of extensive tests guarantee a long service life.
- The solenoid valves are in line with international standards. 12

General

Pressure difference 0 to 9 bar [1 bar = 100 kPa]
Permissible static pressure 18 bar
Maximum viscosity 65 cSt (mm²/s)
Response time 15 to 120 ms



Medium	Temperature range (1)	Sealant	Order No.	
			NBR	FPM
Air, gas, water, light oil	-20 to +85 °C -20 to +100 °C	NBR FPM	MV 102 ES MV 103 ES MV 104 ES	MV 122 ES MV 123 ES MV 124 ES

(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				Ambient temperature (1)	Degree of protection (with connector socket fitted)
	Pickup ~	Holding ~		=		
		(VA)	(VA)			
CMXX-FB	78	35.0	16.7	-	-20 to +50	IP 65
CM12-FT	110	23.6	15.4	-	-20 to +75	IP 65
CMXX-FT	55	23.0	10.5	11.2	-20 to +50	IP 65
MLXX-HP	-	-	-	30.6	-20 to +25	NEMA 3,7,9

Characteristics

Con- nec- tion	Nom. width	Flow coefficient Cv		Working pressure difference (bar)								Coil type		Catalogue number Please use the suffix »G« to order DC (=)	
				min.	max.						=				
					Air/gas		Water		Oil<65cSt						
G	(mm)	(m ³ /h)	(l/min)		~	=	~	=	~	=	~	=	NBR	FPM	
1/2	16	3.4	57	0	9	3	9	3	9	-	CMXX-FB	CMXX-FT	MV 102 ES	MV 122 ES	
3/4	16	3.9	65	0	9	3	9	3	9	-	CMXX-FB	CMXX-FT	MV 103 ES	MV 123 ES	
1	25	9.6	160	0	9	7	9	7	9	5	CM12-FT	MLXX-HP	MV 104 ES	MV 124 ES	

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Design features

	MV 102 ES to MV 104 ES	MV 122 ES to MV 124 ES
Body	Stainless steel	Stainless steel
Guide pipe	Stainless steel	Stainless steel
Armature of magnet and counter-armature	Stainless steel	Stainless steel
Springs	Stainless steel	Stainless steel
Valve seat	Stainless steel	Stainless steel
Seals	NBR	FPM
Diaphragms and valve disc	NBR	FPM
End ring	Silver	Silver
Insulation class (coil)	F or H	F or H
Electrical connection	ISO 4400; connector socket (PG 11P)	ISO 4400; connector socket (PG 11P)
Electrical design	IEC 335	IEC 335

Main spare parts

Order No.	Spare parts set	Diaphragms
MV 102 ES	302328	226156-001
MV 102 ES-G	302423	226156-001
MV 103 ES	302328	226156-001
MV 103 ES-G	302423	226156-001
MV 104 ES	302329	202715-044
MV 104 ES-G	On request	On request
MV 122 ES	302328 V	226156-004
MV 122 ES-G	302423 V	226156-004
MV 123 ES	302328 V	226156-004
MV 123 ES-G	302423 V	226156-004
MV 124 ES	302329 V	202715-058
MV 124 ES-G	On request	On request

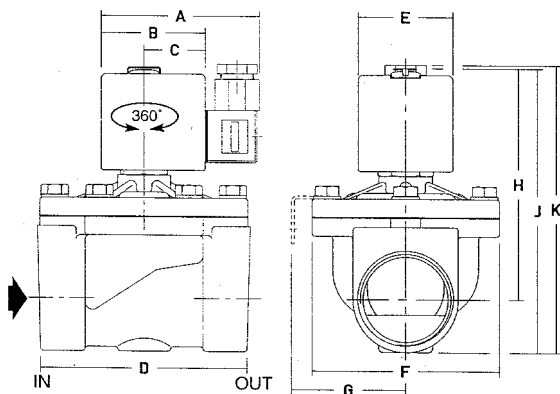
Coils

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 102 ES					~		~		~		~	
MV 122 ES	400425-201	24	400425-141	12	FB FT	HP	155		105		50	
MV 103 ES	400425-217	230	400425-142	24			155		80		75	
MV 123 ES							180		155		25	
MV 104 ES	400525-101	24	MLXX-HP	24								
MV 124 ES	400525-117	230										

(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.	102 ES	102 ES-G	104 ES	On request
»MV«	103 ES	103 ES-G	104 ES	104 ES-G
	122 ES	122 ES-G	124 ES	124 ES-G
	123 ES	123 ES-G		
A	80		86	Not illustrated
B	50		56	
C	30		33	
D	71		95	
E	45		50	
F	61		98	
G	41		56	
H	87		113	
J	105		136	
K	122		141	
Weight (4)	1000		2500	

(4) Including coil and connector socket

Special designs (on request)

- 1 Seals and valve disc made of EPDM (ethylene-propylene), CR (neoprene)
- 1 Flameproof body in accordance with CENELEC and national standards
- 1 Assembly clamp for valves with a brass body
- 1 Manual override
- 1 Connector socket with LED and suppressor circuit

Installation

- 1 Mounting position: G 1/2 and G 3/4 - any
 G 1 - piping axis horizontal, magnetic head pointing upwards
- 1 Assembly clamp included in scope of supply
- 1 Other threaded connections on request
- 1 Assembly and servicing instructions enclosed with each valve
- 1 Spare parts and replacement coils (see above)