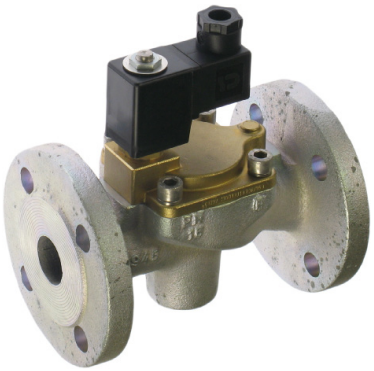


References:

For contaminated fluids insertion of a strainer is recommended

At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.

Attention! The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

Description:

- 2/2-way valve in flanged design
- poppet valve with membrane sealing
- servo operated
- face-to-face length acc. to EN558-1, series 1
- duty cycle 100% (VDE0580)
- installation position: with upright solenoid
- flanges acc. to EN1092-1 PN16/40
- adjustable close muting from DN20
- types in grey cast iron and cast steel for corrosion protection with thick-film passivation
- connector plug acc. to EN 175301-803

Range of application:

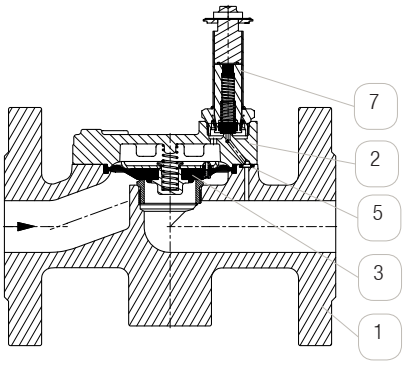
- viscosity 22mm²/s
- medium temperature -10°C up to +80°C
- ambient temperature: -10°C up to +35°C
- working pressure: 0,3- 20 bar
- Minimum pressure must be present as a differential pressure
- IP65 (with a professionally installed connector socket) according to DIN 60529
- for hot and cold water, oil and air

Comments:

Voltage tolerance +10% / -10% with maximum pressure and standard ambient temperature. Please note when installing the flow direction (marked with arrow on body).

Valves with ANSI flanges available.

Other voltage, coil power or sealing on request! These can be found in the catalog under "spare parts and accessories". Included in delivery is the **connector plug acc. to EN 175301-803**. Further connector socket can be found in the catalog under square parts and accessories. **Higher protection class** than IP65 with special coils and connector sockets are possible on request.



pos.	part	grey cast iron		cast steel		stainless steel		options	
1	body	EN-GJL-250 thick-film passivated	L	GP240GH thick-film passivated	K	1.4581	O		
2	cover	brass		brass		1.4581			
3	membrane	NBR	B	NBR	B	NBR	B	FKM	V
								EPDM	E
5	O-ring (servo hole)	NBR		FKM / EPDM		FKM / EPDM			
7	plunger	1.4104		1.4104					

Wear parts*:

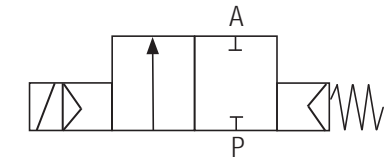
- Membrane
- Spring
- O-ring (Option -RS)
- O-ring for servo hole
- tube
- plunger
- plunger spring
- solenoid
- connector socket

*Wear parts can vary depending on the valve design.

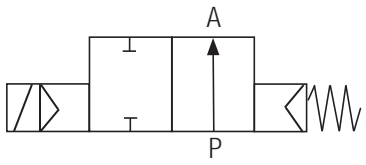
An overview of the complete material code you can find at the beginning of each product section of the product catalogue.

Options:

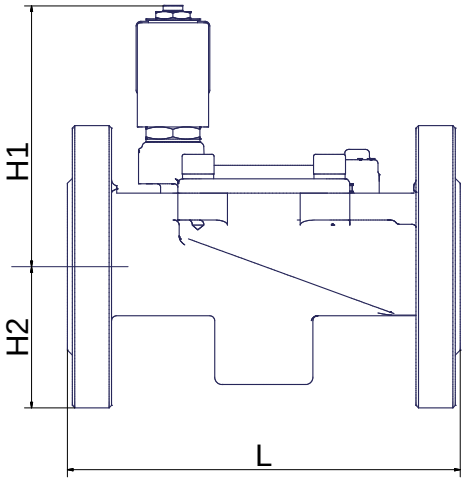
- NO: opened in rest position
- HA: manual override
- TH: high temperature design up to 130°C
- OF: free of oil and grease
- BU: free of non-ferrous metal
- PS: position indicator
- explosion protection acc. to ATEX:
  Ex II 2G EEx m II T4
  Ex II 2G EEx md IIc T4
- RS: adjustable close muting up to DN25 (from DN32 as standard)
- AA: sealed plunger spot

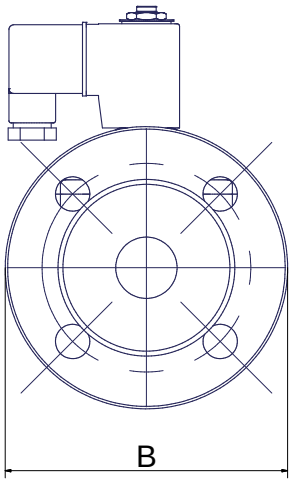


function NC (normally closed valve)



function NO (normally opened valve)





Match code	Siee [inch]	Nominal size [mm]	Working pressure [bar] min.	Working pressure [bar] max.	L [mm]	H1 [mm]	H2 [mm]	B [mm]	Weight [kg]	CV** [m³/h]	Power coil AC*	Power coil DC
FMV2800-52-3xx150-G03-x	DN15	15	0,3	16 (20)	130	97	47,5	95	3	3,9	24VA / 15VA	11W
FMV2800-53-3xx200-G03-x	DN20	20	0,3	16 (20)	150	105	52,5	105	4	10,8	24VA / 15VA	11W
FMV2800-54-3xx250-G03-x	DN25	25	0,3	16 (20)	160	105	57,5	115	4,5	13	24VA / 15VA	11W
FMV2800-55-3xx320-G03-x	DN32	32	0,5	16	180	120	70	140	6	30	24VA / 15VA	11W
FMV2800-56-3xx400-G03-x	DN40	40	0,5	16	200	120	75	150	7,5	32	24VA / 15VA	11W
FMV2800-57-3xx500-G03-x	DN50	50	0,5	16	230	135	82,5	165	10	45	24VA / 15VA	11W

***solenoid power for AC:** listed are the pick-up power and the holding power.

****CV-value:** The nominal flow rate CV according to VDI / VDE 2173 is the water quantity in m³/h for the flow direction with the pressure difference Δp = 1 bar and a medium temperature between +5°C and 30°C.

Power of the coils:

Type	AC*	DC
G03	24VA / 15VA	11W
G04	43VA / 24VA	18,5W
G07	with separate rectifier	25W
G08		30W
G09		46W
G10		100W

FMV2800	-	[XX-3]	[XX]	[X]	-	G03-[X]	-	[XX]
1		2	3	4		5		6

Order information:

1: Type: FMV2800

2: Connection size: 52-63 (siehe Tabelle)

3: Material:

- 1. Digit: Gehäusewerkstoff
  L=grey iron cast
  K=steel cast
  O=stainless steel
- 2. Digit: Dichtung
  B=NBR (Standard)
  V=FKM
  E=EPDM

4. Nominal size in 1/10mm (s.chart)

5: Operation:

- 1. digit (3 digits): specification solenoid type (see table / options)
- 2. digit: specification voltage: 0: 230V AC
  1: 24V DC
  2: 110V AC (on request)
  Other voltage on request..

6: Options (see „Options“)

Please ask for field specifications that are not listed in this data sheet.

Before installation please consider the installation and maintenance manual, especially the safety indications!

Heating and power of solenoid coils

default solenoid valves are designed for continuous operation (100% ED = power-on time) under normal operating

conditions. The pulling force of a solenoid coil is basically influenced by three elements:

- the self-heating of the magnet coil
- the medium temperature
- the ambient temperature

Solenoid coils are by default designed for a maximum ambient temperature of +35 °C. This specification applies for the maximum allowable operating pressure specified in the data sheet of the corresponding valve, 100% duty cycle and a medium temperature of +80 °C.

A higher ambient temperature is possible, when lower values are applied for the other influencing parameters. When the max. operation pressure and max. ambient temperature of +50 °C is given the medium temperature is not allowed to be higher than max. +50 °C. In addition to that, deviations from the default design temperature range are possible, e.g. when temperature coils or other constructive measures are used. Please contact the MIT headquarters to discuss the specific application.

More precise specifications and technical data with regard to the operating conditions can be found in the data sheets of the solenoid coils and the solenoid valve regarded. Please observe that the surface temperature of a permanently loaded coil can amount up to +120 °C, solely by the self-heating of the coil. The power consumption of our default solenoid valves was calculated to DIN VDE 05820 for a coil temperature of +20 °C.