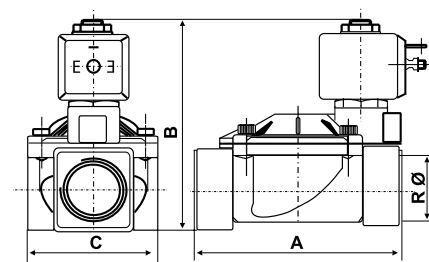


# M29

## Servo-assisted diaphragm valve bodies, normally-open

Solenoid valves suitable for large flow capacity, suitable for water, air, fuel-oil, inert gases and other non-corrosive fluids, for copper alloys fluids with viscosity up to 2° Engler.



Dimensions (mm)	type	A	B	C
	M29C13	69	2,5	40
	M29D13	72	94,5	40
	M29E20	100	100	65
	M29F25	104	105,5	65
	M29G35	145	127	102
	M29H40	145	127	102
	M29I50	173	141	118

N.B. Dimensions and weights are including the coils.

	Passage orifice diameter	Female connection	KV m <sup>3</sup> /h	Closing time DP of 1 bar	Minimum differential pressure	Maximum differential pressure	Testing pressure (DIN2401) PN
M29C13	13 mm	G 3/8	3	1 sec.	20 bar	0,1 bar	25 bar
M29D13	13 mm	G 1/2	3	1 sec.	20 bar	0,1 bar	25 bar
M29E20	20 mm	G 3/4	8,4	1,5 sec.	20 bar	0,1 bar	25 bar
M29F25	25 mm	G 1	9,6	1,5 sec.	20 bar	0,1 bar	25 bar
M29G35	35 mm	G 1 1/4	25,2	2,5 sec.	10 bar	0,1 bar	16 bar
M29H40	40 mm	G 1 1/2	30	3 sec.	10 bar	0,1 bar	16 bar
M29I50	50 mm	G 2	37,2	3,5 sec.	10 bar	0,1 bar	16 bar

Kv = water flow in m<sup>3</sup>/h with pressure drop of 1 bar (1 bar = 100kPa).

## INSTALLATION

Female threaded connection from G 3/8 to G 2.  
The valves can be installed in any position.

# OPERATION

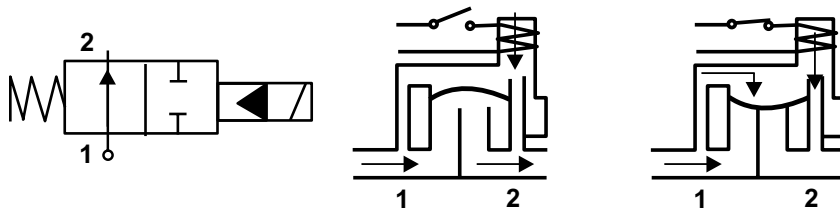
2-way execution, normally-open.

Indirect operation with blocked servo-membrane.

The fluid under pressure before the valve passes freely above and below the diaphragm, in the passage orifice of the valve and in the pilot plug orifice.

When the coil is energized, the pilot plug closes and the fluid under pressure before the valve enters the space above the membrane, pressing it against the seat, blocking the passage.

N.B. Minimum operation pressure between the upper and lower limit should be 0,1 bar.



# FEATURES

Press-forged brass valve body OT58 UNI 5705.

Gaskets in NBR (Buna N) - Viton.

Rod in stainless steel AISI 304.

Core in stainless steel AISI 430F.

Spring in stainless steel AISI 302.

Antivibration brass ring.

Operating temperature:  $-10 \div 90^{\circ}\text{C}$ .

Ambient maximum temperature  $50^{\circ}\text{C}$ .

Unit weights:

- M29C13 0,56 Kg
- M29D13 0,58 Kg
- M29E20 1,05 Kg
- M29F25 1,11 Kg
- M29G35 3,12 Kg
- M29H40 2,87 Kg
- M29I50 4,26 Kg

## ELECTROMAGNETS

M29 valve bodies are working exclusively with IM29 coil, which is supplied separately from the valve body, look page 10 for technical specifications and the codes for ordering.

# ACCESSORIES



**IM30A**  
Control coil 12Vdc  
(with coil in c.c. the indicated pressure should be reduced by 60%)



**1578501**  
Quick connection connector DIN 43650, suitable for all IM2 coils.  
Cable gland Pg9 (cable diameter 6÷8 mm).  
Pg11 cable gland thread;  
Adjustable cable outlet in 4 positions every 90°.

**IM29F**  
Control coil 24Vac

**IM29M**  
Control coil 230Vac 50/60Hz