

Self Acting Diaphragm Valves are a simple and economic choice to control diverse parameters such as flow rate, pressure, shutting off the fluid and level in all water systems compatible with body and diaphragm materials. These valves are consisting of two main parts: the main valve body and the pilot system. The working principle is based on the self action of the fluid over the rubber and deformable diaphragm. The open and close action of the valve is achieved thanks to the upstream and downstream tube connections through the pilot system. The drawing shows a configuration with two solenoids and one reducing pilot.

Special designed diaphragm to work without spring. It avoids corrosion problems and eases maintenance

Favourable flow thanks to a low pressure drop across the valve

EPOXY coated bodies to prevent the environment corrosion

Multifunction thanks to the diverse available pilot systems

Easy maintenance, by replacing the diaphragm the service is restore, no need to remove the valve out of the pipe work

Absolute tightness thanks to the rubber diaphragm

Low internal turbulence thanks to the hydrodynamic design

Accessories



Float

Solenoid valve

Pilot

Main Features

Nominal pressure: PN16 / PN10 / PN2,5
Valve end connections: Flanged to EN1092-2 type 21/B, PN16 or threaded to DIN 259, BSPP
Pressure Tests: EN12266-1
Inside and outside epoxy coating protection blue color similar to RAL5015. Min. average thickness 250 microns

Main Duties / Limits of use

TS: -10/50°C
DN ≤ 50 PS: 2,1-10 bar; DN80 PS: 1,6-16 bar; DN100/125 PS: 2,4-16 bar; DN150-DN300 PS: 1,6-16 bar
Optional DN ≤ 50 PS: 0,7-3 bar; DN80 PS: 0,5-3 bar; DN100/125 PS: 0,4-3 bar; DN150-DN300 PS: 0,5-3 bar
Questions referring to chemical resistance, please consult us

DN	50/65	80	100	125	150	200	250	300
Q min/max recommended (m³/h)	3/45	4/90	8/150	8/160	18/270	18/330	25/650	25/730

Options

Different functions, angle pattern 90° design, other body material, tubing in copper o st. steel, diaphragm material and pilot combinations. Please contact us.

Codification

V M X C S F F P T T T D D D

V M X : Identifies Self Acting Diaphragm Valve

C - Main valve end connections

- R Threaded BSPP
- B Flanged EN 1092 PN16

S - Main valve working pressure

- 0 Standard working pressure

FF - Main valve function

- EV Solenoid valve function
- FL Float level function
- RP Pressure reducing function
- SP Upstream pressure regulating function

P - Main valve situation in power failure case

- C Normally closed (N/C)
- A Normally open (N/O)

TTT - Voltage*

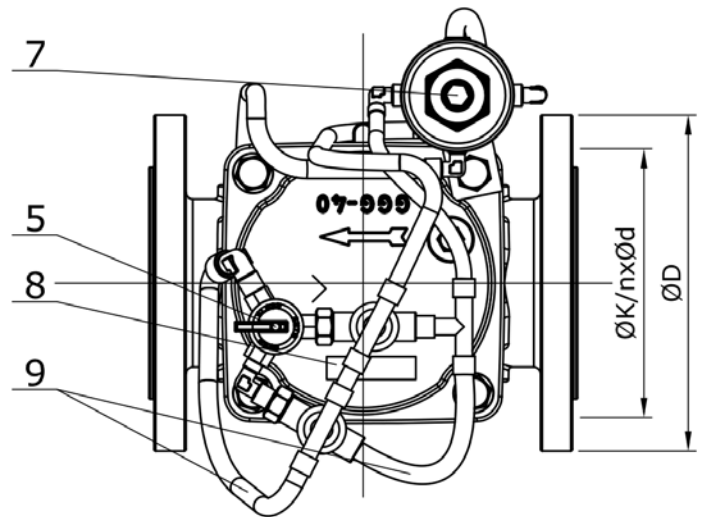
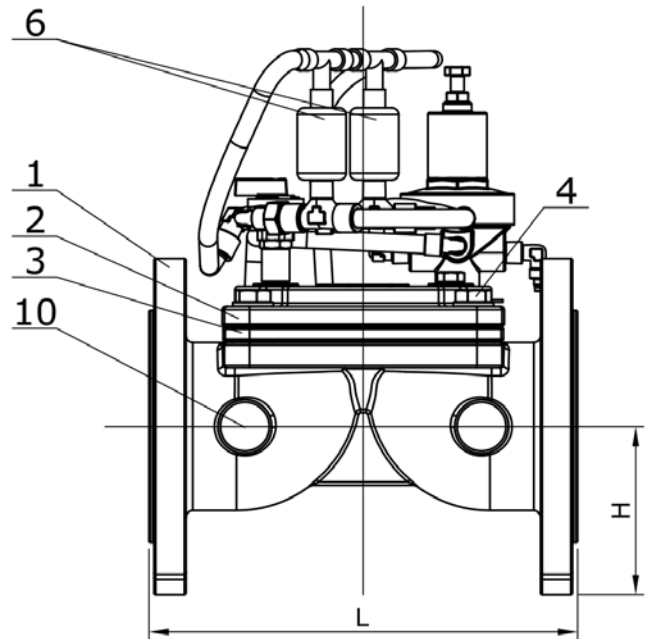
- 12C 12 Vdc
- 24A 24 Vac
- 24C 25 Vdc
- 11A 110 Vac
- 11C 110 Vdc
- 220 220Vac

*For Float level function PTTT=0000

For Pressure reducing function or Upstream pressure regulating function: PTTT=1065 (Regulating pressure range in bar: 1,0-6,5 bar)

DDD - Size

- 050 DN50 / 2"
- 100 DN100 / 4"



Main Parts and Materials

Nº	PART	MATERIAL
1	BODY	Ductile Iron EN-JS1030 (GGG40)
2	COVER	Ductile Iron EN-JS1030 (GGG40)
3	DIAPHRAGM	Natural Rubber
4	BOLTS & NUTS	St. Steel A2
5	VALVE 4 WAY*	Brass with Polyamide lever

Nº	PART	MATERIAL
6	SOLENOID VALVES*	Brass
7	PILOT*	Brass
8	NAMEPLATE	Aluminium
9	TUBING	Flexible
10	INNER STRAINER	Brass

*Configuration and parts depending on pilot circuit

Main Valve Parameters

Flanged	DN50	DN80	DN100	DN125	DN150	DN200	DN250	DN300
L	186	255	315	335	410	465	650	650
ØD	165	202	230	255	290	340	407	460
ØK	125	160	180	210	240	295	355	410
nxØd	4x18	8x18	8x18	8x18	8x22	8x22	12x22	12x22
H	83	100	115	128	145	170	205	230
Approx. Weight	15	17,7	20	23	51	54	125	137

Threaded	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"
L	184	184	184	180	180	186	186
ØD	90	90	90	92	92	100	110
H	26	26	26	32	32	37	45
Approx. Weight	2,9	2,8	2,6	2,9	2,9	3	4

Dimensions in mm subject to manufacturing tolerance / Weights in kg

Information / restriction of technical rules need to be observed!

Installation, Operating and Maintenance Manual can be downloaded at www.comeval.es

The engineer, designing a system or a plant, is responsible for the selection of the correct valve

Product suitability must be verified, contact manufacturer for information