

## TECHNICAL SPECIFICATIONS and FEATURES

EMV series manual reset automatic actuated mechanical earthquake valves which can be used on gas lines to shut the gas flow automatically according to seismic signal generated by earthquakes. Maximum allowed inlet pressure 0.5 Bar. Customers can choose suitable valves by looking pressure drop diagrams and dimensions.

EMV series manual reset automatic actuated mechanical earthquake valves are available with thread and flange connections and 1/2" to 4" sizes. For non-corrosive gas usage all sealing equipment's are manufactured by using H-NBR compound. Other materials are suitable for non-corrosive gases.

Covers are made by die casting aluminum or zinc which can be chosen by customers. DN 65 and above sizes are made by sand casting aluminum.

EMV series earthquake valve's seismic responses set by TS 12884 standard which is similar to ANSI Z21 and ASCE 25-97

In our valve production facility all of performance tests are made by human independent automation tools to minimize error.



Patented Design

Reliable Mechanic System

%100 Quality Control



## PERFORMANCE CHARACTERISTICS

- Fluid Type:** Non-corrosive gasses
- Maximum Working Pressure:** 0.5 Bar
- Connection:** 1 1/4", 1 1/2", 2" Thread, 2 1/2", 3", 4" flange
- Working Temperature:** -23 °C + 51.5 °C
- Assembly:** Vertical (flange connections vertical and horizontal)
- Way:** 2/2
- Position:** Normally open
- Design Pressure:** 2,5 bar

## MATERIAL INFORMATION

- Valve Body and Cover:** Die cast aluminum or zinc.
- Diaphragm / Orings / Sealing Seat:** H-NBR
- Other Metal Internal Parts:** Aluminum and brass
- Other Plastic Internal Parts:** POM – Nylon 6

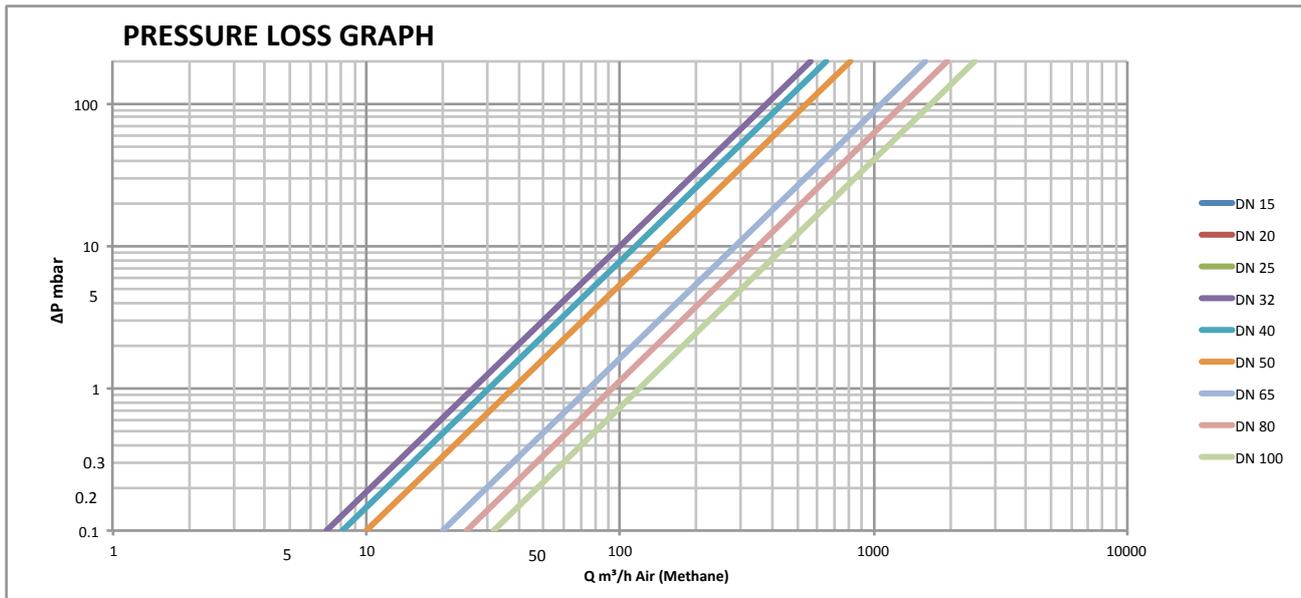
MODEL NAME	NOMINAL DIAMETER (DN)	CONNECTIONS	CONNECTION TYPE	MAX WORKING PRESSURE
EMV 1032	32	1 1/4"	THREAD	0.5 bar
EMV 1040	40	1 1/2"	THREAD	0.5 bar
EMV 1050	50	2"	THREAD	0.5 bar
EMV 1065	65	2 1/2"	FLANGE	0.5 bar
EMV 1080	80	3"	FLANGE	0.5 bar
EMV 1100	100	4"	FLANGE	0.5 bar

## ■ OPTIONS

Seismic actuation responses could be selected in a range according to countries technical regulations.

Flange: EN or ANSI standards

## ■ DIAGRAMS



## ■ CONVERSION

According to technical calculations we shall suggest to avoid above 30 m/s gas velocity. You can choose the bigger valve nominal diameter in order to lower velocity. Please consider %10 tolerance.

To use our valves with another gases except methane, use the calculation below .

$$Q1 = Q2 \times K$$

Q2 : Flow rate for methane

K : Flow conversion equal

Q1 : Flow rate for the gas you need

Fluid	K
Hydrogen	3,04
Town Gas	1,17
Carbon Monoxide	0,81
Nitrogen	0,80
Air	0,78
Oxygen	0,76
Lpg	0,63
Butane	0,56

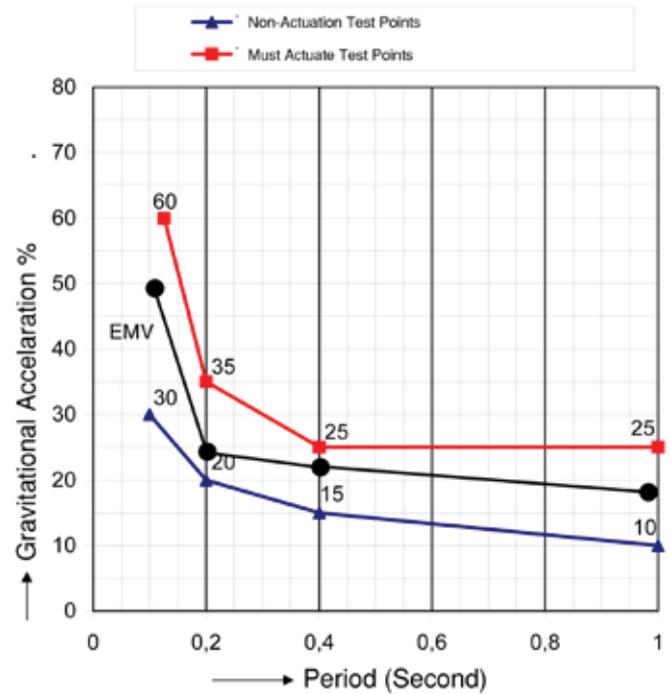
**Flow conversion equal**

## ACTUATION TEST POINTS

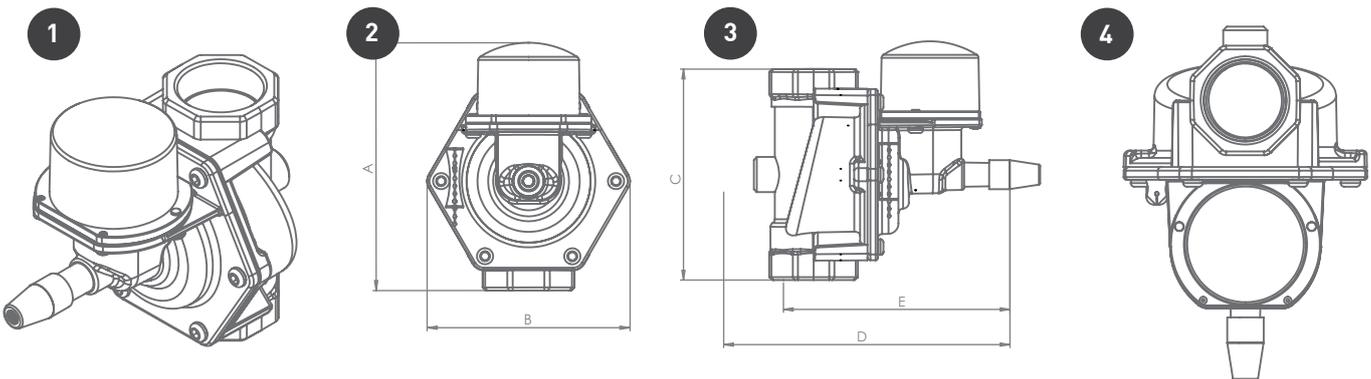
EMV Series Mechanical Gas Shut of Valves perform as a black plot data under the actuation test conditions.

This graph means that valves must be actuate and non actuate certain seismic conditions which in set by TS 12884 or ASCE 25-97 standards.

EMV series earthquake valves must be perform between red and blue plots in order to pass the test. This means that for earthquake valves must be actuated according to seismic acceleration frequency and time to prevent false actuations.

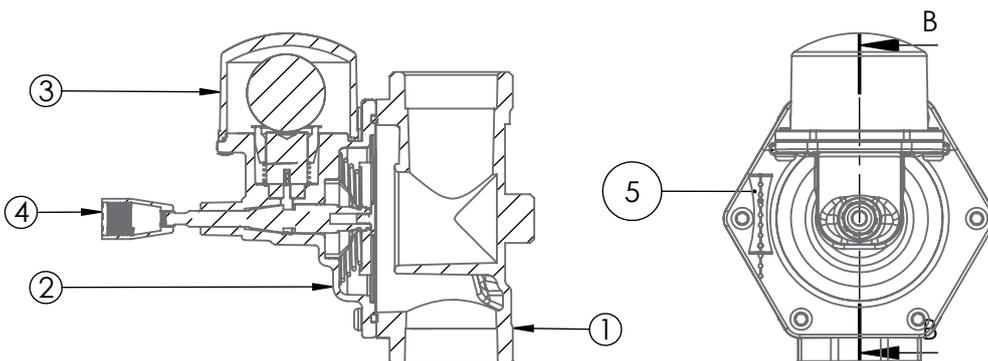


## DIMENSIONS (mm)



MODEL	INLET CONNECTION	NOMINAL DIAMETER (DN)	A	B	C	D	WEIGHT (kg)
EMV 1032	1 1/4"	32	157	132	144	185	1,67
EMV 1040	1 1/2"	40	157	132	144	185	1,62
EMV 1050	2"	50	157	132	144	185	1,69

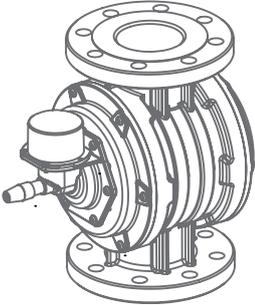
## INTERNAL PARTS



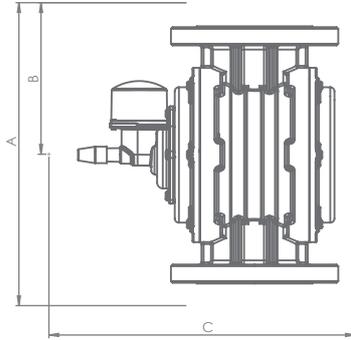
NO	MATERIAL NAME	QTY
1	BODY	1
2	UPPER COVER	1
3	BALL COVER	1
4	PULLING PLASTIC	1
5	BALANCE CHAIN	1

## DIMENSIONS (mm)

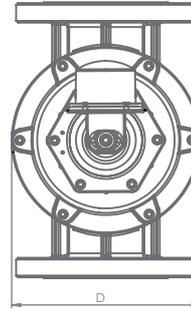
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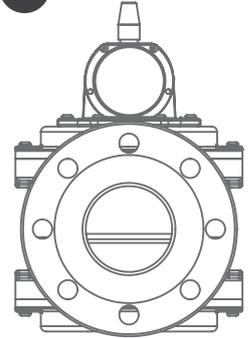
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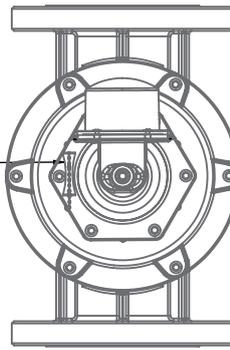
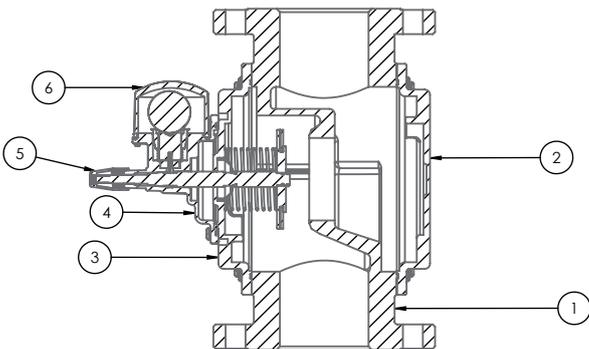
3



4



## INTERNAL PARTS



NO	MATERIAL NAME	QTY
1	BODY	1
2	BOTTOM COVER	1
3	UPPER COVER	1
4	UPPER COVER	1
5	PULLING PLASTIC	1
6	BALL COVER	1
7	BALANCE CHAIN	1

## PICTURES

