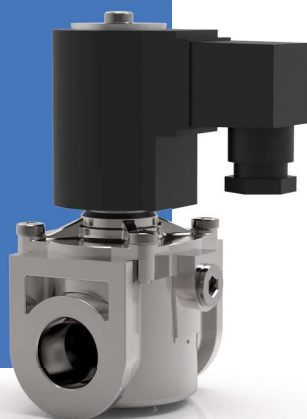


MD2 SERIES

Solenoid valves for gas appliances

MD2 are 2-way Normally Closed Automatic valves specially designed for gas appliances.

These valves can be supplied with a flow rate regulation.



TECHNICAL DATA

PORT CONNECTION	G1/2 ÷ G2
SEALING MATERIALS	NBR
FLUIDS	non-aggressive gases of family I, II, III (dry gases)
RESPONSE TIME	opening time < 1 s closing time < 1 s
FILTER ELEMENT	1 mm wire mesh
PROTECTION DEGREE	IP65 EN 60529 (DIN 40050) with plug connector
VOLTAGE TOLERANCE	-15% +10%
COIL HOUSING	CLASS F (155°C)
AMBIENT TEMPERATURE	-20°C +60°C
MAX SURFACE TEMPERATURE	MD21 - MD22 85°C MD23 90°C

MATERIALS

BODY	Brass or Aluminum
SEALING	NBR

SIL LEVEL

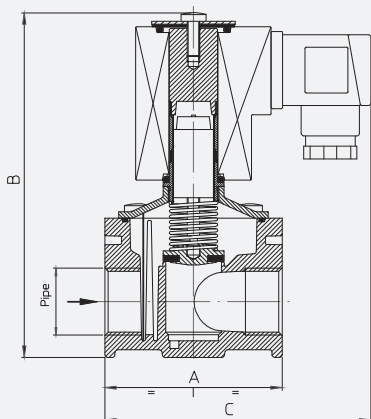
HARDWARE FAILURE TOLERANCE - HFT	0
COMMON CAUSE FAILURE - CCF IN POINTS	75
SAFE FAILURE FRACTION - SFF IN %	65%
EXPECTED LIFETIME CYCLES - B_{10d}	251278
EXPECTED LIFETIME T_{10d} [yr]	87
PROBABILITY OF DANGEROUS FAILURES PFH_d [1/h]	1,33E-07
PL - PERFORMANCE LEVEL	D
SAFETY INTEGRITY LEVEL - SIL	2
MEAN TIME TO DANGEROUS FAILURE $MTTF_o$ [yr]	860

- **CE**
- 2014/30/EU (EMC)
- 2014/35/EU (LVD)
- 2016/426 (GAR)
- Approval certificate IMQ CE-0051
- EC certified according to EN 161+A3:2013

▪ Please check the compatibility of the fluids in contact with the materials at RFQ stage.

Process Valves & Components ■ Solenoid valves for gas appliances ■ **MD2 SERIES**

DRAWING 1-2



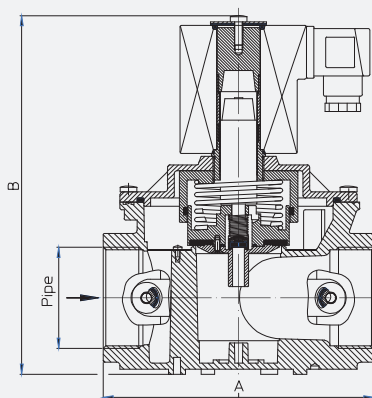
DRAWING 1

PIPE	DIMENSIONS [mm]		
	A	B	C
G3/4	70	136	103
G1	70	136	103

DRAWING 2

PIPE	DIMENSIONS [mm]		
	A	B	C
G3/4	70	136	105
G1	70	136	105

DRAWING 3-4



DRAWING 3

PIPE	DIMENSIONS [mm]	
	A	B
G1 1/4	160	187
G1 1/2	160	187

DRAWING 4

PIPE	DIMENSIONS [mm]	
	A	B
G1 1/2	160	213
G2	160	213

2/2 NC AUTOMATIC

PIPE	ORIFICE SIZE	COIL TYPE	CONNECTOR TYPE	MAX WORKING PRESSURE [mbar]	CODE	DRAWING REFERENCE
	Ø [mm]				ALUMINUM	
G1/2	15	C	A - C - D	200	MD21G04C4B015	1
		C*	E - F - G - M	360	MD22G04C4B015	2
G3/4	20	C	A - C - D	200	MD21G05C4B020	1
		C*	E - F - G - M	360	MD22G05C4B020	2
G1	25	C*	E - F - G - M	200	MD21G06C4B025	1
		C**	E - F - G - M	360	MD22G06C4B025	2
G1 1/4	32	D	E - F - G - M	200	MD21G07C4B032	3
		D	E - F - G - M	360	MD22G07C4B032	4
		D	E - F - G - M	500	MD23G07C4B032	4
G1 1/2	40	D	E - F - G - M	200	MD21G08C4B040	3
		D	E - F - G - M	360	MD22G08C4B040	4
		D	E - F - G - M	500	MD23G08C4B040	4
G2	50	D	E - F - G - M	200	MD21G04C4B050	4
		D	E - F - G - M	360	MD22G09C4B050	4
		D	E - F - G - M	500	MD23G09C4B050	4

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	
MD1	1	G	04	C	1	B	015	-	B	02	A

CODIFICATION

- I. SERIES**
MD2 -2/2 NC Automatic
- II. MAX. WORKING PRESSURE**
1 - 200 mbar
2 - 360 mbar
3 - 500 mbar
- III. THREADED CONNECTION TYPE**
G - gas
- IV. PIPE SIZE**
04 - 1/2"
05 - 3/4"
06 - 1"
07 - 1 1/4"
08 - 1 1/2"
09 - 2"
- V. VALVE TYPE**
C - 2/2 NC
- VI. SECURITY KEY**
4 - Automatic
- VII. SEALING MATERIAL**
B - NBR
- VIII. ORIFICE DIAMETER**
015 - 15 mm
020 - 20 mm
025 - 25 mm
032 - 32 mm
040 - 40 mm
050 - 50 mm

IX. COIL TYPE	X. VOLTAGE		XI. CONNECTOR OPTION	POWER [W/VA]
C	04	12 V DC	A	16
	14	12 V - 50/60 Hz	C	12
	24	24 V DC	A	17
	34	24 V - 50/60 Hz	C	14
	64	110 V - 50/60 Hz	D	17
	75	230 V - 50/60 Hz	D	18
C*	05	12 V DC	E	23/6
	15	12 V - 50/60 Hz	F	20/6
	25	24 V DC	E	27/7
	35	24 V - 50/60 Hz	F	24/7
	65	110 V - 50/60 Hz	M	29/9
	76	230 V - 50/60 Hz	G	30/9
C**	06	12 V DC	E	56/16
	16	12 V - 50/60 Hz	F	56/16
	26	24 V DC	E	56/16
	36	24 V - 50/60 Hz	F	56/16
	66	110 V - 50/60 Hz	M	63/20
	77	230 V - 50/60 Hz	G	54/18
D	27	24 V DC	E	68/18
	37	24 V - 50/60 Hz	F	68/18
	67	110 V - 50/60 Hz	M	77/23
	78	230 V - 50/60 Hz	G	89/25

- XI. CONNECTOR OPTION**
- A - Standard
 - C - Rectified (12 V-50/60 Hz - 24 V-50/60 Hz)
 - D - Rectified (110 V-50/60 Hz - 230 V-50/60 Hz)
 - E - Standard + Energy Saving (12 V DC - 24 V DC)
 - F - Rectified + Energy Saving (12 V-50/60 Hz - 24 V-50/60 Hz)
 - G - Rectified + Energy Saving (230 V-50/60 Hz)
 - M - Rectified + Energy Saving (110 V-50/60 Hz)