

Valvole ad otturatore 3 vie per aria e vuoto

3 ways poppet valves both for air and vacuum



Valvole ad otturatore 3 vie per aria e vuoto

3 ways poppet valves both for air and vacuum

Caratteristiche Tecniche

Technical Data

Valvola 3/2 con sistema ad otturatore bilanciato da 1/8" a 2".

Guarnizioni di tenuta otturatore e membrana di pilotaggio in poliuretano : garantiscono una ottima tenuta ed una lunga durata.

Opportunamente configurate possono funzionare: con aria compressa (con P da 3 a 10 bar) ad asservimento interno del pilota, con aria compressa (con P < 3 bar) ad asservimento esterno del pilota, con vuoto (da 0 a 755 mm Hg) asservito da aria compressa, con vuoto (da 150 a 755 mm Hg) asservito da vuoto .

3/2 valve with balanced poppet system from 1/8" to 2".

Poppet capacity seals and polyurethane pilot membrane guarantee an excellent sealing and a long life.

Opportunely shaped, they can work: for compressed air (with P from 3 to 10 bar) with internal servoassisted pilot, for compressed air (with P < 3 bar) with external servoassisted pilot , for vacuum (from 0 to 755 mm Hg) servoassisted by compressed air, for vacuum (from 150 to 755 mm Hg) servoassisted by vacuum.

Chiave di Codifica

Codification Key

-MF-

F25

00

S

Funzione / Function

Variante / Variant

F25 3/2 comando elettrico per aria compressa
3/2 electric signal for compressed air

F26 3/2 comando pneumatico per aria compressa
3/2 pneumatic signal for compressed air

G30 3/2 comando elettrico per vuoto asservito da aria
3/2 electric signal for vacuum assisted by air

G31 3/2 comando pneumatico per vuoto asservito da aria
3/2 pneumatic signal for vacuum assisted by air

G32 3/2 comando elettrico per vuoto diretto
3/2 electric signal for direct vacuum

G33 2/2 - 3/2 elettro-pilota per vuoto diretto
2/2 - 3/2 electric-pilot for direct vacuum

S fondelli in tecnopolimero
(standard da 1/8" a 1")
*technopolymeric endcaps
(standard from 1/8" to 1")*

/ fondelli in alluminio
(standard per 1-1/2" e 2" ,
a richiesta per le altre taglie)
*aluminium endcaps
(standard for 1-1/2" and 2" ,
on request for other sizes)*

Dati Tecnici

Technical data

Fluido: aria filtrata 50µ non lubrificata; la lubrificazione, se utilizzata, dovrà essere ininterrotta

Pressione di lavoro: per aria (3÷10 bar),
per vuoto asservito da aria (755 mm Hg),
per vuoto diretto (150÷755mm Hg)

Temperatura di funzionamento: -20 ÷ +50°C

Guarnizioni dinamiche: Poliuretano

Guarnizione statiche: NBR

Fluid: filtered air 50µ without lubrication; the lubrication, if used, must be continued.

*Working pressure: for air (3÷10 bar),
for vacuum servoassisted by compressed air (755mm Hg),
for direct vacuum (150÷755mm Hg)*

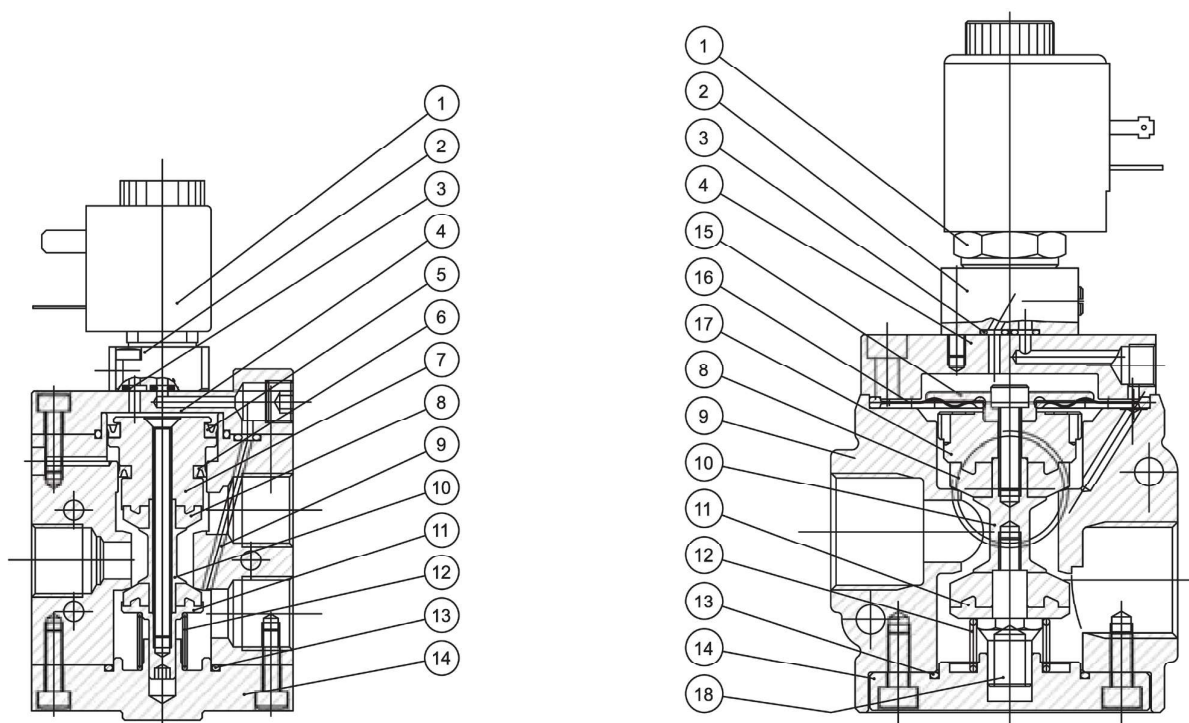
Ambient temperature: -20 ÷ +50°C

Dynamic seals: Polyurethane

Static seals: NBR

Caratteristiche di portata - Flow rate

	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/2"	2"
Diametro nominale - <i>Nominal diameter</i>	5,5	8	10	15	19	25	39	50
Portata aria comp. - <i>Compressed air flow rate at 6 bar (NI/min)</i>	600	1100	1500	5500	6500	13500	35000	60000
Portata vuoto - <i>Vacuum flow rate at 755 mm Hg (m3/h)</i>	1,5	4	10	20	35	90	180	250



Parti meccaniche - *Mechanic items*

POS.	DESCRIZIONE - <i>DESCRIPTION</i>	MATERIALE - <i>MATERIAL</i>
1	Pilota elettromagn. / <i>Electric pilot</i>	Ottone nichelato / <i>Nickel plated brass</i>
2	Basetta pilota / <i>Pilot base</i>	Zama nichelato / <i>Nickel plated zama</i>
4	Fondello / <i>Upper cap</i>	Tecnopolimero - alluminio anodizzato / <i>Technopolymer - anodized aluminium</i>
7	Pistone amplificazione / <i>Amplification piston</i>	Alluminio / <i>Aluminium</i>
9	Corpo valvola / <i>Valve body</i>	Alluminio verniciato / <i>Painted aluminium</i>
10	Spola / <i>Spool</i>	Alluminio / <i>Aluminium</i>
11	Guida otturatore / <i>Poppet guide</i>	Ottone / <i>Brass</i>
12	Molla / <i>Spring</i>	Acciaio / <i>Steel</i>
14	Fondello / <i>Lower cap</i>	Tecnopolimero - alluminio anodizzato / <i>Technopolymer - anodized aluminium</i>
15	Supp. pistone amp. / <i>Amplification piston support</i>	Alluminio / <i>Aluminium</i>
17	Pistone amplificazione / <i>Amplification piston</i>	Resina acetica / <i>Acetal resin</i>
18	Guida otturatore / <i>Poppet guide</i>	Ottone / <i>Brass</i>

Elementi di tenuta - *Seal items*

POS.	DESCRIZIONE - <i>DESCRIPTION</i>	MATERIALE - <i>MATERIAL</i>
3	O-ring / <i>O-ring</i>	NBR
5	Guarnizione a labbro / <i>Seal</i>	Poliuretano / <i>Polyurethane PU 85 sh</i>
6	Guarnizione a labbro / <i>Seal</i>	Poliuretano / <i>Polyurethane PU 85 sh</i>
8	Tampone / <i>Poppet</i>	Poliuretano / <i>Polyurethane PU 85 sh</i>
13	O-ring / <i>O-ring</i>	NBR
16	Membrana / <i>Membrane</i>	Poliuretano / <i>Polyurethane PU 85 sh</i>

Dati Tecnici: versione per aria

Technical data: compressed air version

SIMBOLO / SYMBOL	Taglia / Size	Funzione / Function	Alim. pilota / Pilot supply	Ø (mm)	Portata / Flow (NI / min)	Tempo / Time (ms)		Codice / Code	Bobina / Coil
	1/8"	Sol. / Aria molla N.C. Sol. / Air spring N.C.	Interno / Internal	5,5	600	15	18	-MF-F2500S	M1-M3
	1/4"			8	1100	20	22	-MF-F2510S	M1-M3
	3/8"			10	1500	20	22	-MF-F2520S	M1-M3
	1/2"			15	5500	18	25	-MF-F2530S	M2
	3/4"			19	6500	18	25	-MF-F2540S	M2
	1"			25	13500	20	30	-MF-F2545S	M2
	1 1/2"			39	35000	45	30	-MF-F2560	M2
	2"			50	60000	50	35	-MF-F2580	M2

SIMBOLO / SYMBOL	Taglia / Size	Funzione / Function	Alim. pilota / Pilot supply	Ø (mm)	Portata / Flow (NI / min)	Tempo / Time (ms)		Codice / Code	Bobina / Coil
	1/8"	Sol. / Aria molla N.A. Sol. / Air spring N.O.	Interno / Internal	5,5	600	15	18	-MF-F2501S	M1-M3
	1/4"			8	1100	20	22	-MF-F2511S	M1-M3
	3/8"			10	1500	20	22	-MF-F2521S	M1-M3
	1/2"			15	5500	18	25	-MF-F2531S	M2
	3/4"			19	6500	18	25	-MF-F2541S	M2
	1"			25	13500	20	30	-MF-F2546S	M2
	1 1/2"			39	35000	45	30	-MF-F2561	M2
	2"			50	60000	50	35	-MF-F2581	M2

SIMBOLO / SYMBOL	Taglia / Size	Funzione / Function	Alim. pilota / Pilot supply	Ø (mm)	Portata / Flow (NI / min)	Tempo / Time (ms)		Codice / Code	
	1/8"	Aria / Aria molla N.C. Air / Air spring N.C.	Interno / Internal	5,5	600	05	08	-MF-F2600S	
	1/4"			8	1100	10	12	-MF-F2601S	
	3/8"			10	1500	10	12	-MF-F2606S	
	1/2"			15	5500	08	15	-MF-F2603S	
	3/4"			19	6500	08	15	-MF-F2610S	
	1"			25	13500	10	20	-MF-F2615S	
	1 1/2"			39	35000	45	30	-MF-F2620	
	2"			50	60000	50	35	-MF-F2680	

SIMBOLO / SYMBOL	Taglia / Size	Funzione / Function	Alim. pilota / Pilot supply	Ø (mm)	Portata / Flow (NI / min)	Tempo / Time (ms)		Codice / Code	
	1/8"	Aria / Aria molla N.A. Air / Air spring N.O.	Interno / Internal	5,5	600	05	08	-MF-F2700S	
	1/4"			8	1100	10	12	-MF-F2701S	
	3/8"			10	1500	10	12	-MF-F2706S	
	1/2"			15	5500	08	15	-MF-F2703S	
	3/4"			19	6500	08	15	-MF-F2710S	
	1"			25	13500	10	20	-MF-F2715S	
	1 1/2"			39	35000	45	30	-MF-F2720	
	2"			50	60000	50	35	-MF-F2780	

SIMBOLO / SYMBOL	*Pmin.ass. Taglia / Size (bar)	Funzione / Function	Alim. pilota / Pilot supply	Ø (mm)	Pompa / Pump (MQ / h)	Tempo / Time (ms) Ecc. 12 Dis.10	Codice / Code	Bobina / Coil
	1,5 1/8"	Sol. / Molla N.C. Sol. / Spring N.C.	Esterno / External	5,5	1,5	15 25	-MF-G3001S	M1-M3
	2,5 1/4"			8	4	18 28	-MF-G3009S	M2
	2,5 3/8"			10	10	18 28	-MF-G3011S	M2
	3 1/2"			15	20	20 40	-MF-G3020S	M2
	3 3/4"			19	35	20 40	-MF-G3040S	M2
	3 1"			25	90	20 45	-MF-G3050S	M2
	4 1 1/2"			39	180	60 40	-MF-G3060	M2
	4 2"			50	250	80 50	-MF-G3068	M2

*Pmin.ass. = pressione minima asservimento - minimum servoassist pressure.

SIMBOLO / SYMBOL	*Pmin.ass. Taglia / Size (bar)	Funzione / Function	Alim. pilota / Pilot supply	Ø (mm)	Pompa / Pump (MQ / h)	Tempo / Time (ms) Ecc. 12 Dis.10	Codice / Code	Bobina / Coil
	1,5 1/8"	Sol. / Molla N.A. Sol. / Spring N.O.	Esterno / External	5,5	1,5	15 25	-MF-G3002S	M1-M3
	2,5 1/4"			8	4	18 28	-MF-G3010S	M2
	2,5 3/8"			10	10	18 28	-MF-G3012S	M2
	3 1/2"			15	20	20 40	-MF-G3021S	M2
	3 3/4"			19	35	20 40	-MF-G3041S	M2
	3 1"			25	90	20 45	-MF-G3051S	M2
	4 1 1/2"			39	180	60 40	-MF-G3061	M2
	4 2"			50	250	80 50	-MF-G3069	M2

*Pmin.ass. = pressione minima asservimento - minimum servoassist pressure.

SIMBOLO / SYMBOL	*Pmin.com. Taglia / Size (bar)	Funzione / Function	Alim. pilota / Pilot supply	Ø (mm)	Pompa / Pump (MQ / h)	Tempo / Time (ms) Ecc. 12 Dis.10	Codice / Code
	1,5 1/8"	Aria / Molla N.C. Air / Spring N.C.	/	5,5	1,5	4 8	-MF-G3071S
	2,5 1/4"			8	4	5 10	-MF-G3073S
	2,5 3/8"			10	10	8 10	-MF-G3075S
	3 1/2"			15	20	8 15	-MF-G3081S
	3 3/4"			19	35	10 15	-MF-G3091S
	3 1"			25	90	10 17	-MF-G3100S
	4 1 1/2"			39	180	65 30	-MF-G3110
	4 2"			50	250	80 40	-MF-G3120

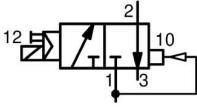
*Pmin.com. = pressione minima di comando - minimum control pressure.

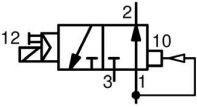
SIMBOLO / SYMBOL	*Pmin.com. Taglia / Size (bar)	Funzione / Function	Alim. pilota / Pilot supply	Ø (mm)	Pompa / Pump (MQ / h)	Tempo / Time (ms) Ecc. 12 Dis.10	Codice / Code
	1,5 1/8"	Aria / Molla N.A. Air / Spring N.O.	/	5,5	1,5	4 8	-MF-G3072S
	2,5 1/4"			8	4	5 10	-MF-G3074S
	2,5 3/8"			10	10	8 10	-MF-G3076S
	3 1/2"			15	20	8 15	-MF-G3082S
	3 3/4"			19	35	10 15	-MF-G3092S
	3 1"			25	90	10 17	-MF-G3101S
	4 1 1/2"			39	180	65 30	-MF-G3111
	4 2"			50	250	80 40	-MF-G3121

*Pmin.com. = pressione minima di comando - minimum control pressure.

Dati Tecnici: versione vuoto diretto

Technical data: direct vacuum

SIMBOLO / SIMBOL	Taglia / Size	Funzione / Function	Alim. pilota / Pilot supply	Ø (mm)	Pompa / Pump (MQ / h)	Tempo / Time (ms)		Codice / Code	Bobina / Coil
						Ecc. 12	Dis.10		
	1/4"	Sol. / Aria N.C. Sol. / Air N.C.	Interno / Internal	8	4	25	18	-MF-G3210S	M2
	3/8"			10	10	25	18	-MF-G3214S	M2
	1/2"			15	20	30	18	-MF-G3222S	M2
	3/4"			19	35	30	18	-MF-G3232S	M2
	1"			25	90	40	20	-MF-G3242S	M2
	1 1/2"			39	180	75	50	-MF-G3256	M2

SIMBOLO / SIMBOL	Taglia / Size	Funzione / Function	Alim. pilota / Pilot supply	Ø (mm)	Pompa / Pump (MQ / h)	Tempo / Time (ms)		Codice / Code	Bobina / Coil
						Ecc. 12	Dis.10		
	1/4"	Sol. / Aria N.A. Sol. / Air N.O.	Interno / Internal	8	4	20	15	-MF-G3211S	M2
	3/8"			10	10	20	15	-MF-G3215S	M2
	1/2"			15	20	20	20	-MF-G3223S	M2
	3/4"			19	35	20	20	-MF-G3233S	M2
	1"			25	90	25	20	-MF-G3243S	M2
	1 1/2"			39	180	70	60	-MF-G3257	M2

Technical data: direct operated version for vacuum

Elettropiloti per vuoto
Electropilot for vacuum

SIMBOLO / SYMBOL	Taglia / Size	Funzione / Function	Ø (mm)	Portata / Flow (NI / min)	Vuoto / Vacuum max (mm Hg)	Tempo / Time (ms) Ecc. 12 Dis.10	Codice / Code	Bobina / Coil
	1/4"	2/2 N.C.	3	5	755	15 8	-MF-G3300	M2
	1/4"		4	5	755	15 8	-MF-G3301	M2
	1/4"		5	5	755	15 8	-MF-G3302	M2
	1/4"		6	5	755	15 8	-MF-G3303	M2
	1/4"	3/2 N.C.	3	5	755	15 8	-MF-G3310	M2
	1/4"		4	5	755	15 8	-MF-G3311	M2
	1/4"		5	5	755	15 8	-MF-G3312	M2
	1/4"		6	5	755	15 8	-MF-G3313	M2

Elettropiloti per aria compressa
Electropilot for compressed air

SIMBOLO / SYMBOL	Taglia / Size	Funzione / Function	Ø (mm)	Portata / Flow (NI / min)	Press. (bar)	Tempo / Time (ms) Ecc. 12 Dis.10	Codice / Code	Bobina / Coil
	1/8"	3/2 N.C.	1,5	60	0 ÷ 10	12 12	-MF-A0211	M1-M3
	1/4"		2,4	150	0 ÷ 10	13 10	-MF-B0822	M2
	1/8"	3/2 N.O.	1,2	30	3 ÷ 10	12 10	-MF-A0213	M1-M3
	1/4"		2	90	3 ÷ 10	14 10	-MF-B0819	M2
	1/4"	2/2 N.C.	3	280	0 ÷ 10	14 12	-MF-B0827	M2
	1/4"		4	450	0 ÷ 8	14 15	-MF-B0829	M2
	1/4"		5	550	0 ÷ 6,5	14 18	-MF-B0831	M2
	1/4"		6	650	0 ÷ 5	14 30	-MF-B0833	M2

Elettropiloti per aria compressa per sottobase
Electropilot for compressed air for sub-base

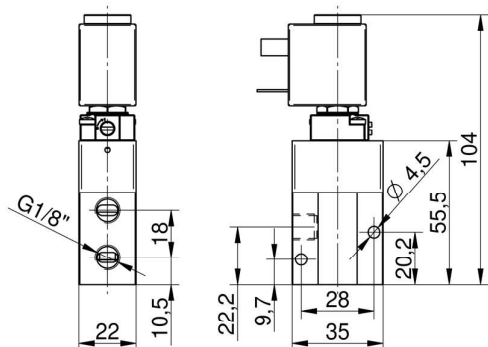
SIMBOLO / SYMBOL	Lato / Side (mm)	Funzione / Function	Ø (mm)	Portata / Flow (NI / min)	Press. (bar)	Tempo / Time (ms) Ecc. 12 Dis.10	Codice / Code	Bobina / Coil
	21	3/2 N.C.	1,5	60	0 ÷ 10	12 10	-MF-A0184	M1-M3
	31		2,4	150	0 ÷ 10	13 10	-MF-B0687	M2
	21	3/2 N.O.	1,2	30	3 ÷ 10	12 10	-MF-A0188	M1-M3
	31		2	90	3 ÷ 10	14 10	-MF-B0685	M2

Dimensioni di ingombro

Overall dimensions

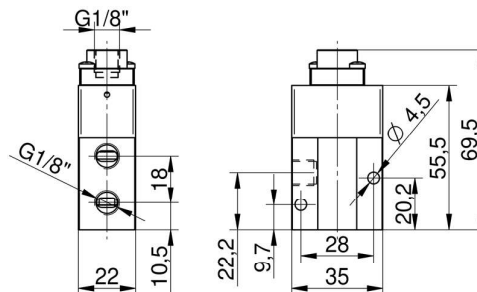
1/8" Segnale elettrico

1/8" Electric signal



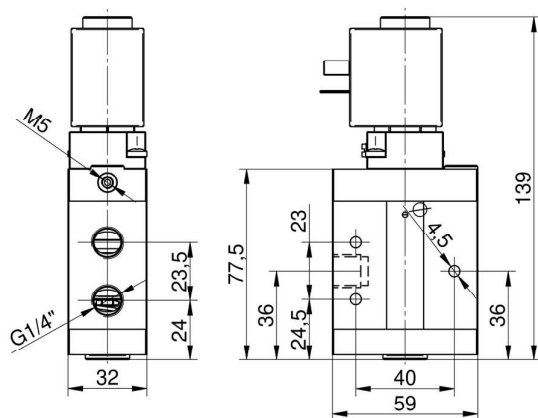
1/8" Segnale pneumatico

1/8" Pneumatic signal



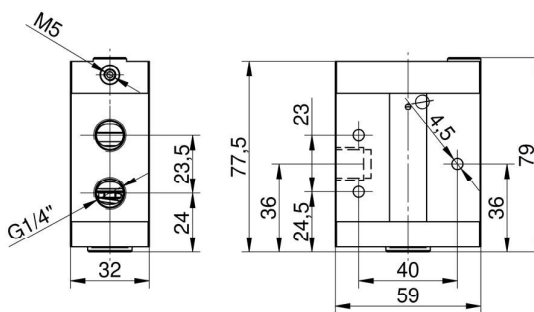
1/4" Segnale elettrico

1/4" Electric signal



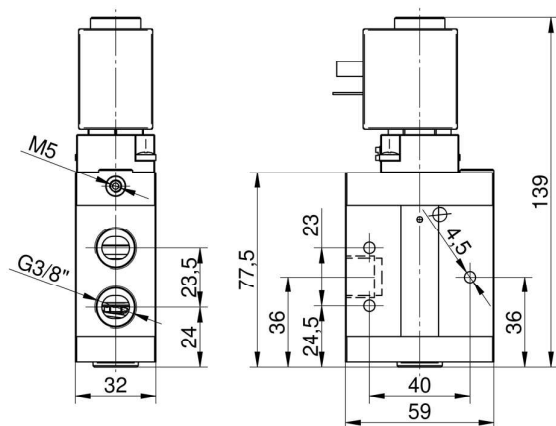
1/4" Segnale pneumatico

1/4" Pneumatic signal



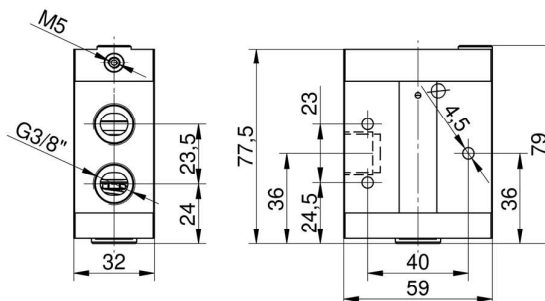
3/8" Segnale elettrico

3/8" Electric signal

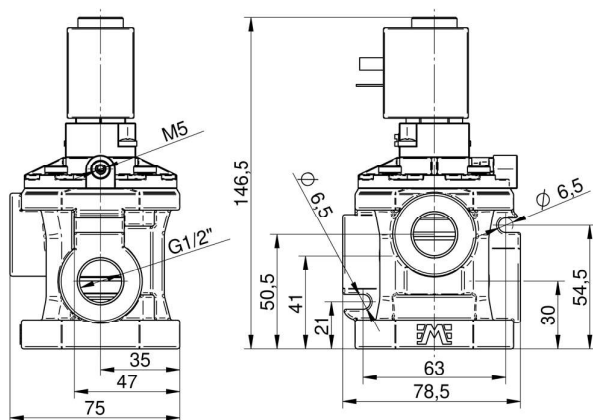


3/8" Segnale pneumatico

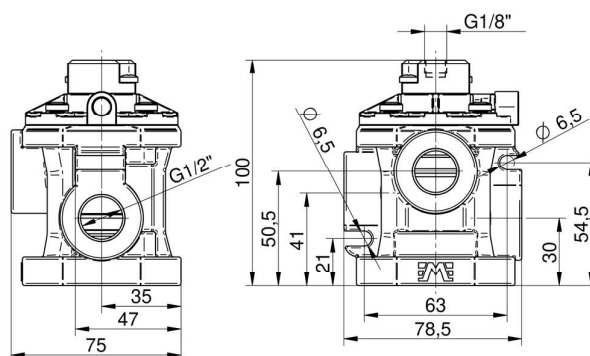
3/8" Pneumatic signal



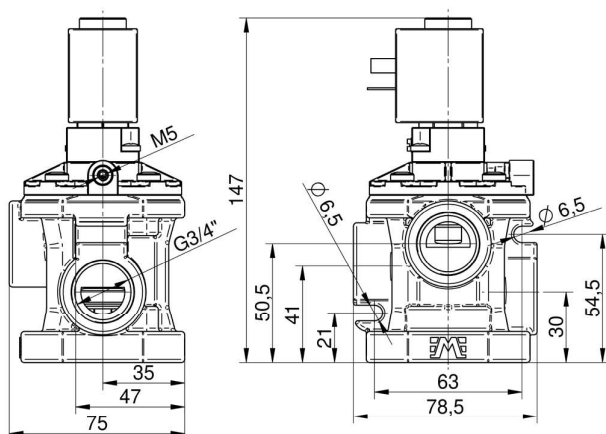
1/2" Segnale elettrico
1/2" Electric signal



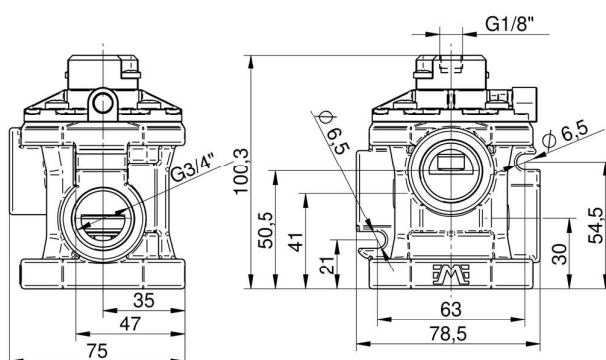
1/2" Segnale pneumatico
1/2" Pneumatic signal



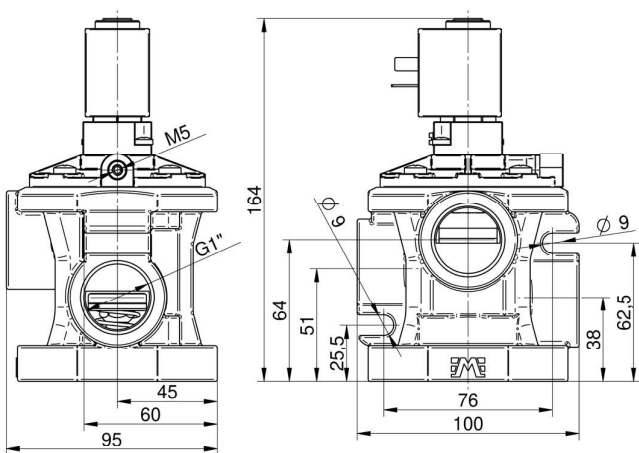
3/4" Segnale elettrico
3/4" Electric signal



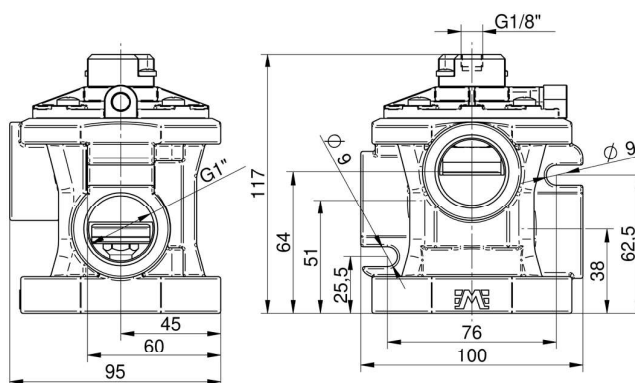
3/4" Segnale pneumatico
3/4" Pneumatic signal



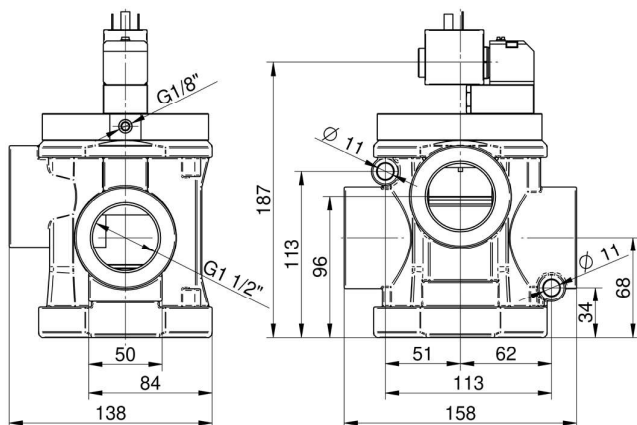
1" Segnale elettrico
1" Electric signal



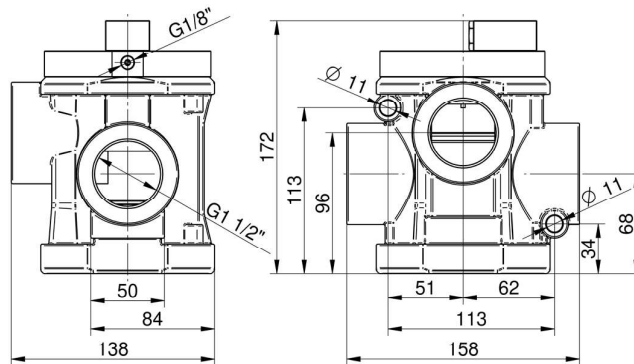
1" Segnale pneumatico
1" Pneumatic signal



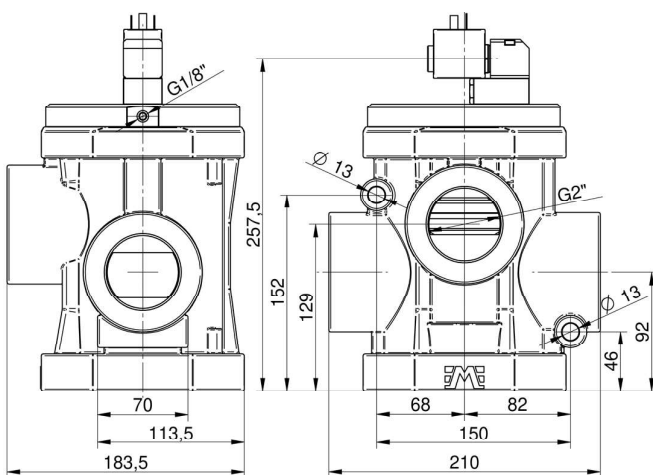
1-1/2" Segnale elettrico
1-1/2" Electric signal



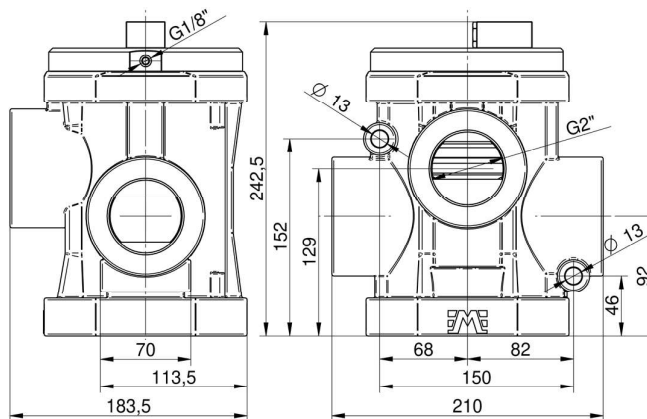
1-1/2" Segnale pneumatico
1-1/2" Pneumatic signal



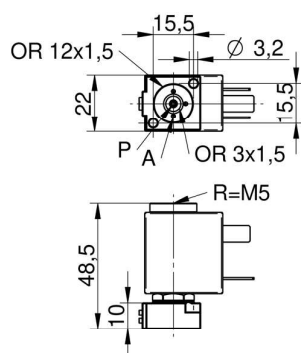
2" Segnale elettrico
2" Electric signal



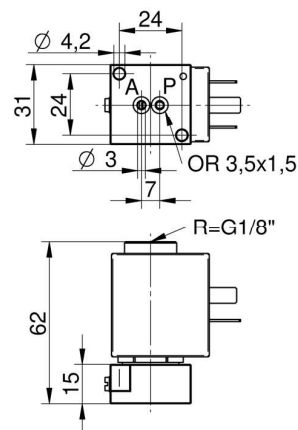
2" Segnale pneumatico
2" Pneumatic signal



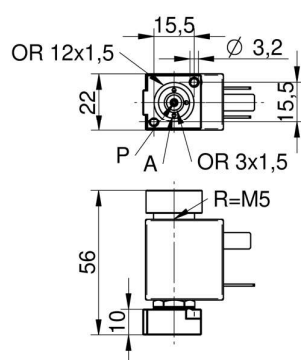
Elettropilota M1 N.C. per sottobase
N.C. electropilot M1 for subbase



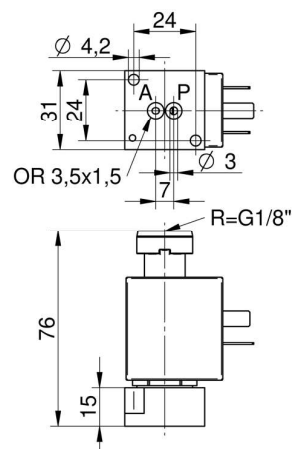
Elettropilota M2 N.C. per sottobase
N.C. electropilot M2 for subbase



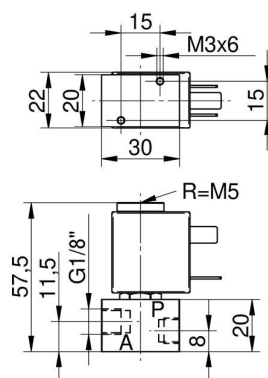
Elettropilota M1 N.A. per sottobase
N.O. electropilot M1 for subbase



Elettropilota M2 N.A. per sottobase
N.O. electropilot M2 for subbase



Elettropilota M1 N.C. 1/8"
N.C. electropilot M1 1/8"



Elettropilota M2 N.C. 1/4"
N.C. electropilot M2 1/4"

