

DESCRIPTION

The poppet valves series EV for vacuum and compressed air, are produced only in the 3/2 N.O. and 3/2 N.C. pneumatic functions with dependent or independent electro-pneumatic actuation and with pneumatic actuations. Their function is to intercept the pressure or vacuum by opening or closing the passages to the fluid.

TECHNICAL DATA

Operating pressure	Valves for vacuum with dependent actuation: 150 ÷ 755 mmHg Valves for vacuum with independent actuation: 0 ÷ 755 mmHg Valves for compressed air with dependent actuation: 3 ÷ 10 bar Valves for compressed air with independent actuation: 0 ÷ 10 bar
Pneumatic piloting pressure	3 ÷ 10 bar
Working temperature	-20 ÷ +50 °C
Fluid temperature	+50°C max
Port size	G 1/8 - G 1/4 - G 3/8 - G 1/2 - G 3/4 - G 1 - G 1 1/2 - G 2
Coils	USB - see on page 2.17 WE3A - see on page 2.112 WE2A - see on page 2.112
Electric connectors	USR102/N9 - see chapter connectors on page 2.18 ULR1B - see chapter connectors on page 2.18



MATERIALS

Bottoms	Anodized aluminium
Body	Anodized aluminium
Springs	Stainless steel
Sleeve	Nickel-plated brass
Core	Stainless steel
Piston	Aluminium
Diaphragm and plunger	Polyurethane

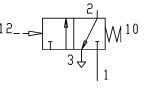
3/2 DEPENDENT SOLENOID ACTUATED VALVE FOR VACUUM (VACUUM ASSISTED)

Symbol	Function	Controls		Ø (mm)	Response time (ms)		Maximum flow rate vacuum at 755 mmHg (m³/h)	Port size	Weight (g)	TYPE*	COIL
		Pilot	Return		Energized	De-energized					
	3/2 N.C.	Dependent solenoid (vacuum assisted)	Mechanical spring	8	25	18	4	G 1/4	414	EVC4V	WE2A
				15	25	18	10	G 3/8	402	EVC3V	WE2A
				15	30	18	20	G 1/2	678	EVC2V	WE2A
				19	30	18	35	G 3/4	640	EVC6V	WE2A
				25	40	20	90	G 1	1002	EVC1V	WE2A
				39	75	50	100	G 1 1/2	3318	EVC12V	WE2A
	3/2 N.O.	Dependent solenoid (vacuum assisted)	Mechanical spring	8	20	15	4	G 1/4	414	EVA4V	WE2A
				15	20	15	10	G 3/8	402	EVA3V	WE2A
				15	20	20	20	G 1/2	678	EVA2V	WE2A
				19	20	20	35	G 3/4	640	EVA6V	WE2A
				25	25	20	90	G 1	1002	EVA1V	WE2A
				39	70	60	100	G 1 1/2	3318	EVA12V	WE2A

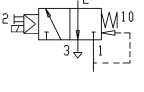
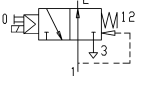
3/2 INDEPENDENT SOLENOID ACTUATED VALVE FOR VACUUM (COMPRESSED AIR PILOT ASSISTED)

Symbol	Function	Controls		Ø (mm)	Response time (ms)		Maximum flow rate vacuum at 755 mmHg (m³/h)	Port size	Weight (g)	TYPE*	COIL
		Pilot	Return		Energized	De-energized					
	3/2 N.C. 3/2 N.O.**	Independent solenoid (compressed air pilot assisted)	Mechanical spring	5,5	15	25	1,5	G 1/8	138	EV8	WE3A
				8	18	28	4	G 1/4	414	EV4	USB
				10	18	28	10	G 3/8	402	EV3	WE2A
				15	20	40	20	G 1/2	678	EV2	WE2A
				19	20	40	35	G 3/4	640	EV6	WE2A
				25	20	45	90	G 1	1002	EV1	WE2A
				39	60	40	180	G 1 1/2	3318	EV12	WE2A
				50	80	50	250	G 2	8694	EV16	WE2A

3/2 INDEPENDENT PNEUMATIC ACTUATED VALVE FOR VACUUM (COMPRESSED AIR PILOT ASSISTED)

Symbol	Function	Controls		Ø (mm)	Response time (ms)		Maximum flow rate vacuum at 755 mmHg (m³/h)	Port size	Weight (g)	TYPE
		Pilot	Return		Energized	De-energized				
	3/2 N.C. 3/2 N.O. **	Independent pneumatic (compressed air pilot assisted)	Mechanical spring	5,5	4	8	1,5	G 1/8	78	EV8/P
				8	5	10	4	G 1/4	354	EV4/P
				10	8	10	10	G 3/8	342	EV3/P
				15	8	15	20	G 1/2	618	EV2/P
				19	10	15	35	G 3/4	580	EV6/P
				25	10	17	90	G 1	942	EV1/P
				39	65	30	180	G 1 1/2	3258	EV12/P
				50	80	40	250	G 2	8634	EV16/P

3/2 DEPENDENT SOLENOID ACTUATED VALVE FOR COMPRESSED AIR

Symbol	Function	Controls		Ø (mm)	Response time (ms)		Flow rate at 6 bar ΔP = 1 bar (l/min)	Port size	Weight (g)	TYPE*	COIL
		Pilot	Return		Energized	De-energized					
	3/2 N.C.	Dependent solenoid	Mechanical spring	5,5	15	18	600	G 1/8	138	EVC8A	WE3A
				8	20	22	1100	G 1/4	414	EVC4A	WE3A
				10	20	22	1500	G 3/8	402	EVC3A	WE3A
				15	18	25	5500	G 1/2	678	EVC2A	WE2A
				19	18	25	6500	G 3/4	640	EVC6A	WE2A
				25	20	30	13500	G 1	1002	EVC1A	WE2A
				39	45	30	35000	G 1 1/2	3318	EVC12A	WE2A
				50	50	35	60000	G 2	8694	EVC16A	WE2A
	3/2 N.O.	Dependent solenoid	Mechanical spring	5,5	15	18	600	G 1/8	138	EVA8A	WE3A
				8	20	22	1100	G 1/4	414	EVA4A	WE3A
				10	20	22	1500	G 3/8	402	EVA3A	WE3A
				15	18	25	5500	G 1/2	678	EVA2A	WE2A
				19	18	25	6500	G 3/4	640	EVA6A	WE2A
				25	20	30	13500	G 1	1002	EVA1A	WE2A
				39	45	30	35000	G 1 1/2	3318	EVA12A	WE2A
				50	50	35	60000	G 2	8694	EVA16A	WE2A

* THE TYPES OF THE SOLENOID VALVES DO NOT INCLUDE COILS

**P.S.: FOR N.O. VERSION ARRANGE THE CONNECTIONS AS INDICATES:

1 = EXHAUST

2 = OUT

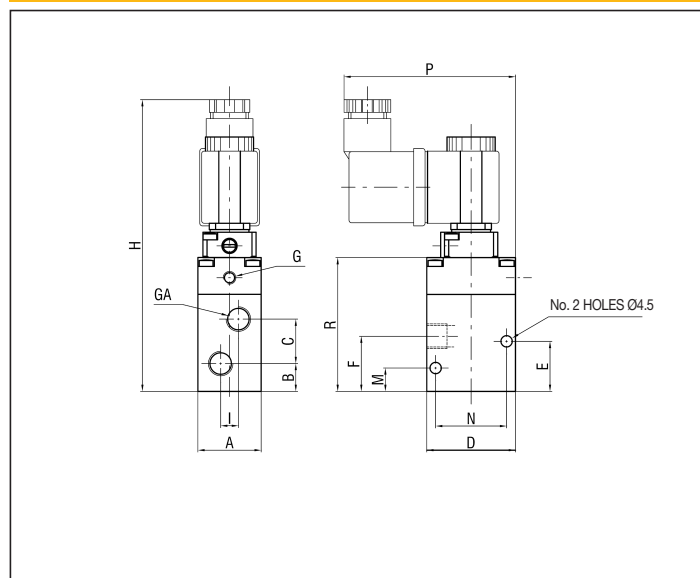
3 = VACUUM

2

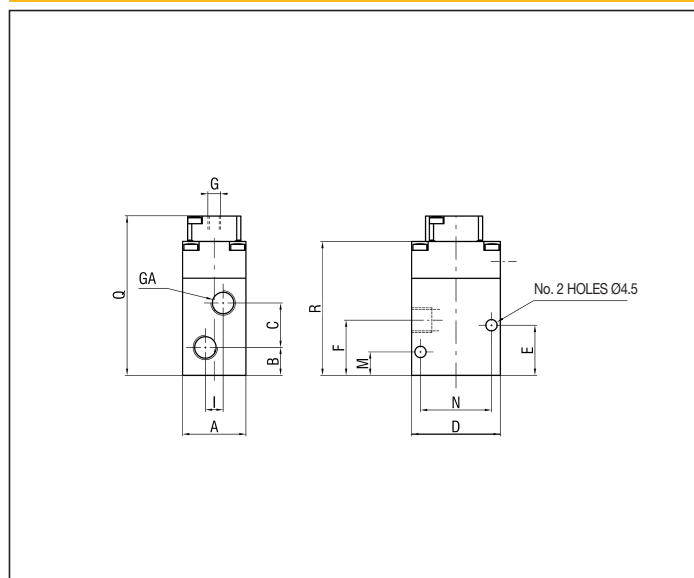
3/2 INDEPENDENT PNEUMATIC ACTUATED VALVE FOR COMPRESSED AIR

Symbol	Function	Controls		Ø (mm)	Response time (ms)		Flow rate at 6 bar ΔP = 1 bar (Nl/min)	Port size	Weight (g)	TYPE
		Pilot	Return		Energized	De-energized				
	3/2 N.C.	Independent pneumatic	Mechanical spring	5,5	15	18	600	G 1/8	78	EVC8A/P
				8	10	22	1100	G 1/4	354	EVC4A/P
				10	10	22	1500	G 3/8	342	EVC3A/P
				15	18	25	5500	G 1/2	618	EVC2A/P
				19	18	25	6500	G 3/4	580	EVC6A/P
				25	20	30	13500	G 1	942	EVC1A/P
				39	45	30	35000	G 1 1/2	3258	EVC12A/P
				50	50	35	60000	G 2	8634	EVC16A/P
	3/2 N.O.	Independent pneumatic	Mechanical spring	5,5	15	18	600	G 1/8	78	EVA8A/P
				8	10	22	1100	G 1/4	354	EVA4A/P
				10	10	22	1500	G 3/8	342	EVA3A/P
				15	18	25	5500	G 1/2	618	EVA2A/P
				19	18	25	6500	G 3/4	580	EVA6A/P
				25	20	30	13500	G 1	942	EVA1A/P
				39	45	30	35000	G 1 1/2	3258	EVA12A/P
				50	50	35	60000	G 2	8634	EVA16A/P

3 PORT SOLENOID ACTUATED G 1/8 - G 1/4 - G 3/8

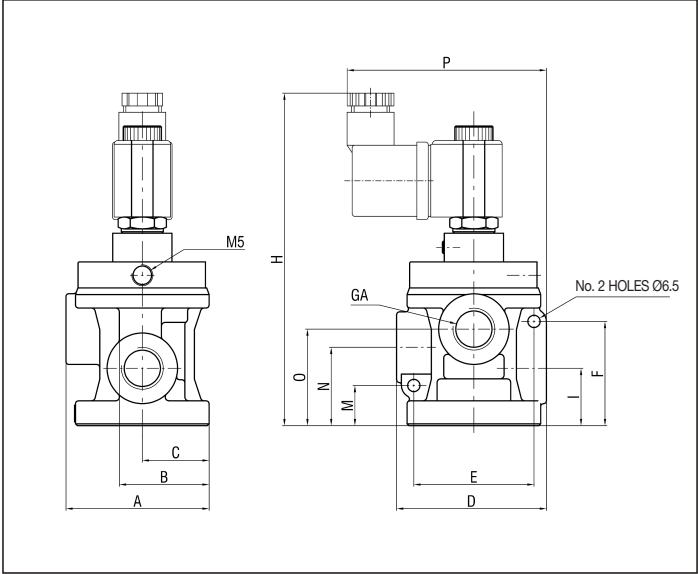


3 PORT PNEUMATIC ACTUATED G 1/8 - G 1/4 - G 3/8

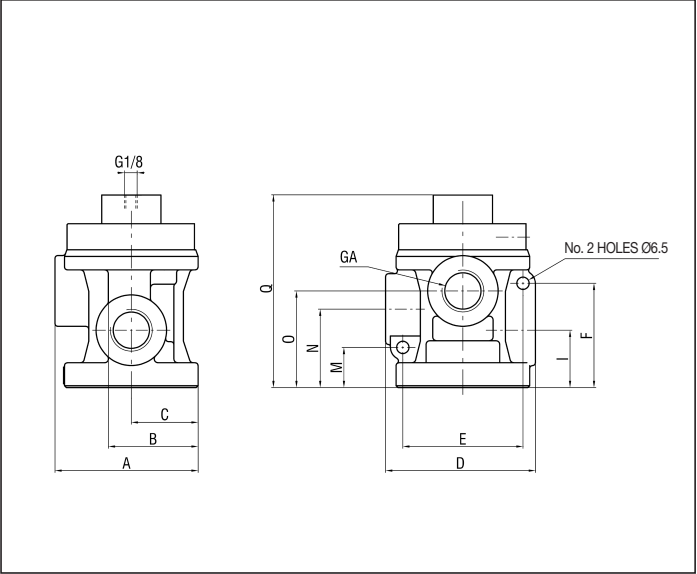


TYPE	A	B	C	D	E	F	G	GA	H	I	M	N	P	Q	R
EV8...	25	11	17.5	35	19.7	21.7	G 1/8	G 1/8	113.5	7	9.2	28	65	64.7	52.7
EV4...	32	24	23.5	59	36	36	M5	G 1/4	151	-	24.5	40	89	88.5	74.5
EV3...	32	24	23.5	59	36	36	M5	G 3/8	151	-	24.5	40	89	88.5	74.5

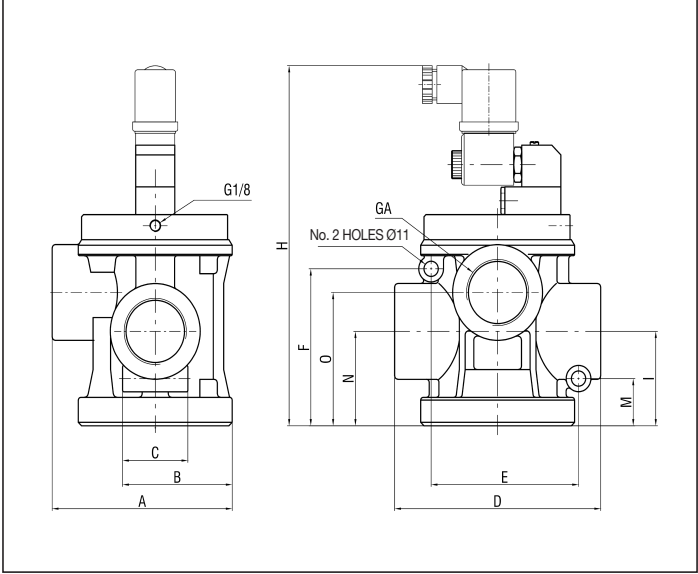
3 PORT SOLENOID ACTUATED G 1/2 - G 3/4 - G 1



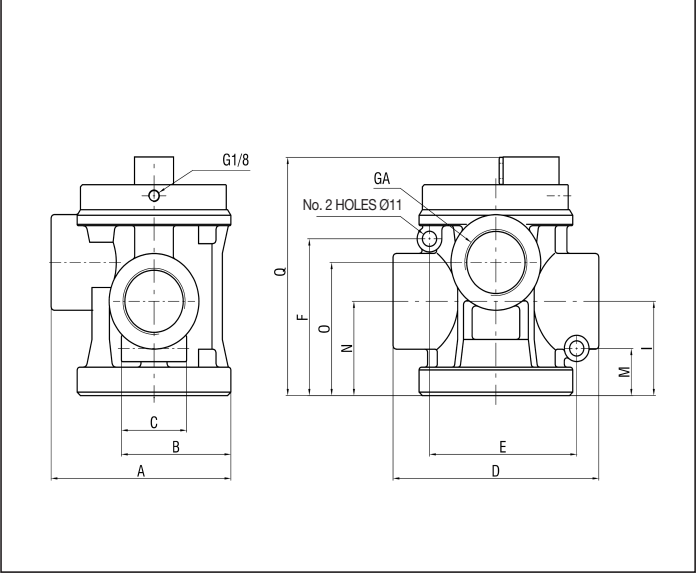
3 PORT PNEUMATIC ACTUATED G 1/2 - G 3/4 - G 1



3 PORT SOLENOID ACTUATED G 1 1/2 - G 2



3 PORT PNEUMATIC ACTUATED G 1 1/2 - G 2



TYPE	A	B	C	D	E	F	GA	H	I	M	N	O	P	Q
EV2...	75	47	35	78.5	63	54.5	G 1/2	164	30	21	41	50.5	85.5	100.6
EV6...	78.5	47	35	78.5	63	54.5	G 3/4	164	30	21	41	50.5	85.5	100.6
EV1...	94	55	45	101	76	62.5	G 1	180	38	25.5	51	64	95	116.7
EV12...	138	84	50	158	113	113	G 1½	240	68	34	68	96	-	172
EV16...	183.5	113.5	70	210	150	152	G 2	308	92	46	92	129	-	242.5