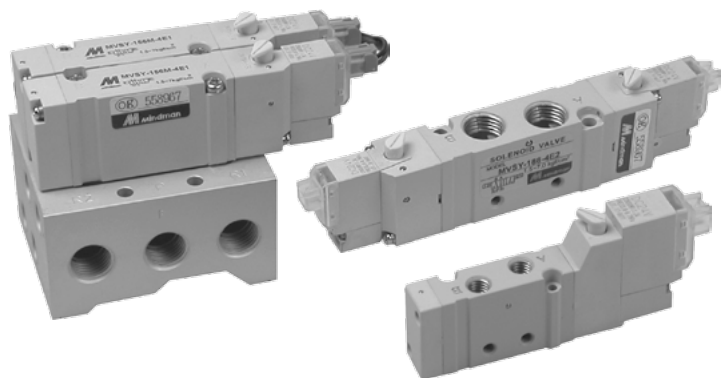


SOLENOID ACTUATED VALVES SERIES MVSY



The new valve series with small space requirements and with improved technical parameters (for example lower power consumption). Versions for direct usage (in-line) as well as manifold valves are available. Valves are solenoid pilot actuated. The product range covers functions 5/2 single or double solenoid and 5/3 with centre closed and exhaust position and position with pressure centre. Connector with 0.5m cable and coil are included in delivery.

This valve series contains rubber gaskets.

Series	MVSY 100	MVSY 156	MVSY 188
Ports	M5	G1/8"	G1/4" (G1/8" for exhaust port 3 and 5)
Flow capacity [Nl/min]	200	630	760
Working pressure [MPa]	0.2 to 0.7	0.15 to 0.7, or 0.2 to 0.7 for function 5/3	
Power input [W, VA]	1.2W for DC voltage, 2.5/1.6VA for AC voltage (inrush/hold), LED indicator		
Response time [ms]	12, or 15 for function 5/3	19, or 32 for function 5/3	23, or 50 for function 5/3
Coil voltage tolerance	±10%		
Temperature range [°C]	ambient temperature -5 to +50		
Enclosure	IP40		

5 Order codes

PMVSY 156 42 D24

Size	
100	series MVSY 100, thread M5**
100M	series MVSY 100, without threads, for manifold *
156	series MVSY 156, thread G1/8"
156M	series MVSY 156, without threads, for manifold *
188	series MVSY 188, thread G1/4"
188M	series MVSY 188, without threads, for manifold *

*) These valves are without threaded ports. Threaded ports are on the side of manifold - for details see below.

) It is **not possible to use the straight push-in fittings for a tube Ø6 with this valve.

Function		
41		5/2 monostable (with 1 coil)
42		5/2 bistable (with 2 coils)
42C		5/3 with closed centre position
42P		5/3 with pressure centre position
42R		5/3 with exhaust centre position

Voltage	
D6	6 V DC ± 10%
D12	12 V DC ± 10%
D24	24 V DC ± 10%
A220	230 V AC ± 10%, 50-60 Hz



Connector with 0.5m cable is included in delivery. Available are also connectors with cable:
length 5m ... order code PMVSY-C5
length 10m ... order code PMVSY-C10.
See page 5-34.

Order codes of manifolds

PMVSY 100 M-5M 4

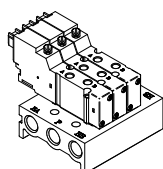
Size	
100	series MVSY 100
156	series MVSY 156
188	series MVSY 188

Type	
-5B	valve with threaded ports
M-5M	valve without threaded ports, manifolds with ports*

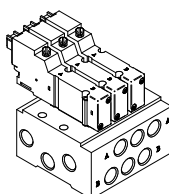
Number of positions	
2 to 10	for 2 to 10 valves

*) For series MVSY 100, it is only possible to use the straight cylindrical push-in fittings for tube Ø4 (N102-004-000-01) and Ø6 (N102-006-000-01). See page 10-2.

It is possible to mount series MVSY valves on manifold with predefined number of position. It isn't possible to add another position to created assembly - it could be necessary to replace manifold or create another manifold. If there is possibility that more valves will be needed in future, we recommend to use manifold with more positions and use blocking plates for unused positions. Valves are mounted to manifold directly - no adaptor is necessary. Valves mounted on manifold could be unmounted separately by unscrew of 2 bolts, which are accessible from top side (side with ports 2 and 4 of valves). Each separate coil must be wired with separate electrical cable. There are also manifolds with a common connector available - for more information, contact our technical department.



Manifolds for valves with threaded ports - PMVSYxxx4... - these valves are with threads on all five ports (ports 1,2,3,4 and 5). In this case, the manifold PMVSYxxx-5Bx, which has only ports 1,3 and 5 is used.



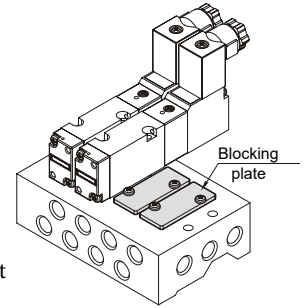
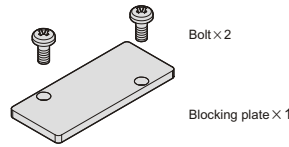
Also available are **manifolds for valves without threads** - PMVSYxxxM4... - these valves are without threads and ports - they are entirely intended for use on manifold. In this case, manifold PMVSYxxxM-5Mx, which has common ports 1,3 and 5 and outlet ports 2 and 4 for each valve position, is used. This lay-out simplifies assembly and maintenance - valve can be easily unmounted without unplugging of connections on ports 2 and 4.

Order codes of blocking plate for manifolds

PMVSY 100 - 5P

Size		Blocking plate	
100	series MVSY 100	-5P	blocking plate
156	series MVSY 156		
188	series MVSY 188		

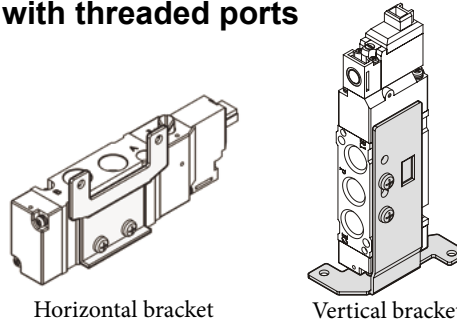
Blocking plates are used for blocking outlets from manifold in case, that not all positions are used presently and expansion of the assembly is planned in the future. In that case, the blocking plate will be changed with valve and manifold is without change.



Order codes of brackets of individual valves with threaded ports

PMVSY 100 - 1A

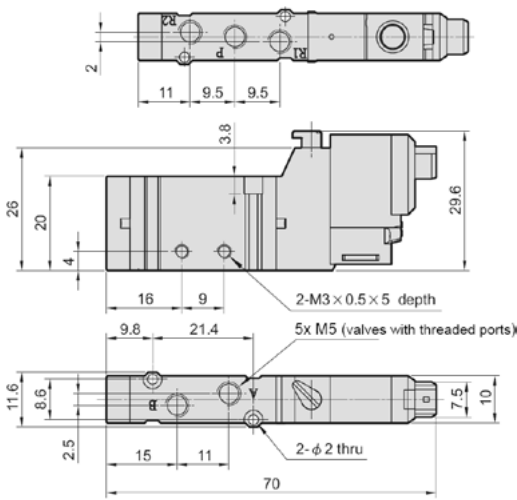
Size		Bracket type	
100	series MVSY 100	-1A	horizontal
156	series MVSY 156	-2A	vertical
188	series MVSY 188		



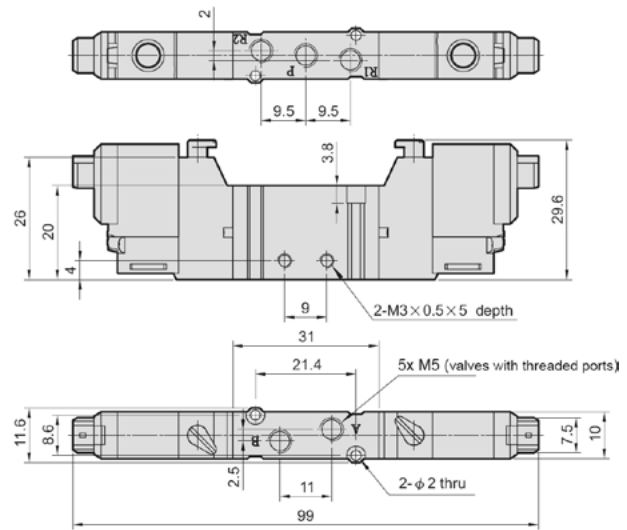
Brackets can be used for individually mounted valves with threaded ports - valves are without through hole for fixing, that is why it is better to use bracket for easy assembly in some cases. **Vertical brackets are only for monostable valves (4/2, one coil, function 41).**

Dimensions of valve series MVSY 100

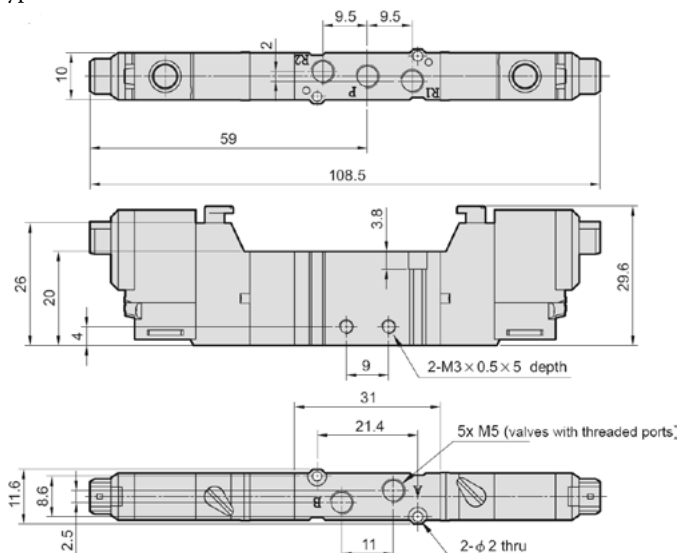
Type 5/2 with single solenoid:



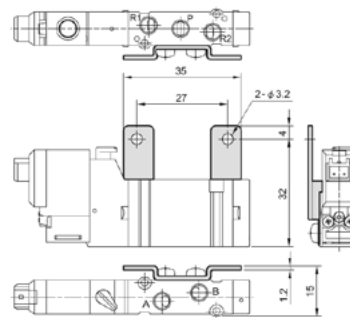
Type 5/2 with double solenoid:



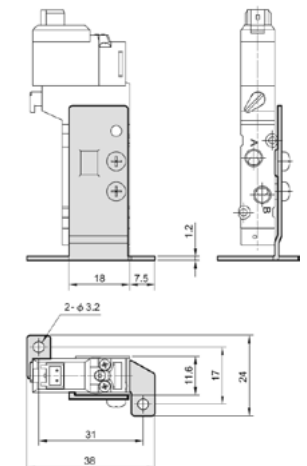
Type 5/3:



Horizontal bracket:



Vertical bracket:

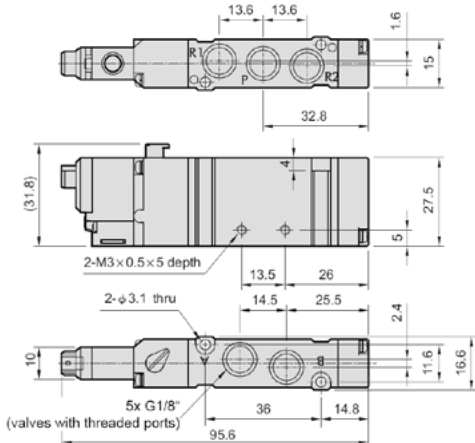


Function	Weight [kg]
41	0,030
42	0,043
42C/P/R	0,055

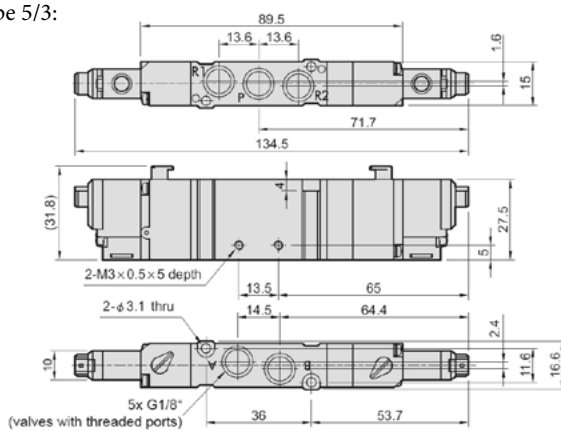
SOLENOID ACTUATED VALVES SERIES MVSY

Dimensions of valve series MVSY 156

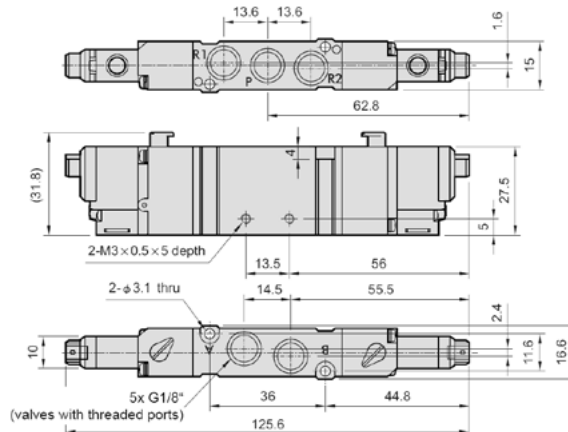
Type 5/2 with single solenoid:



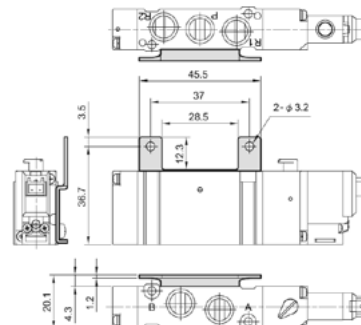
Type 5/3:



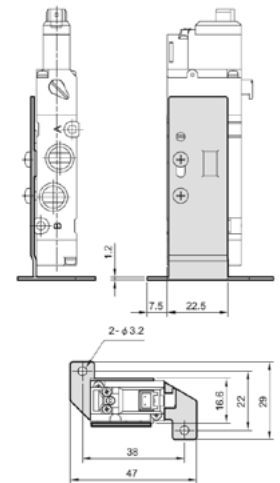
Type 5/2 with double solenoid:



Horizontal bracket:



Vertical bracket:

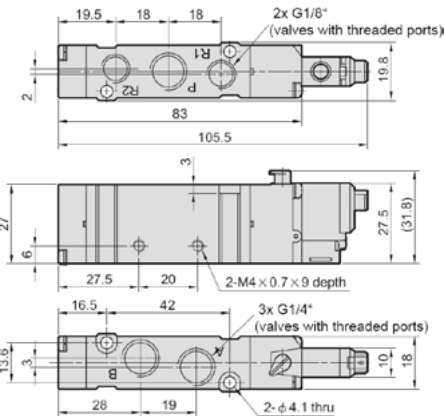


Function	Weight [kg]
41	0.068
42	0.087
42C/P/R	0.096

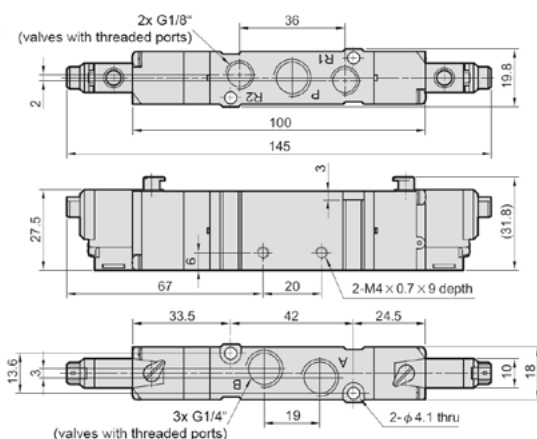
5

Dimensions of valve series MVSY 188

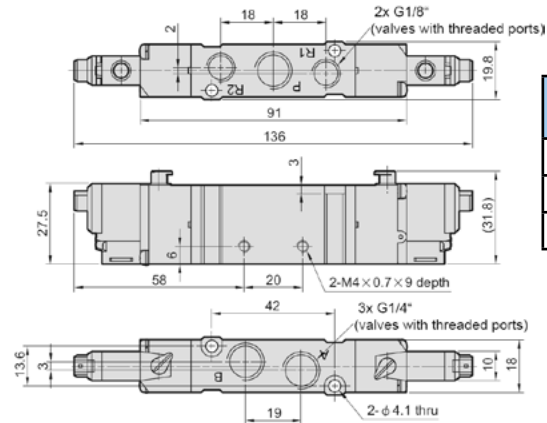
Type 5/2 with single solenoid:



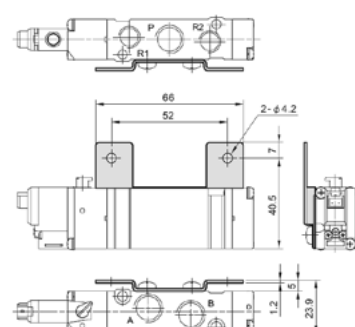
Type 5/3:



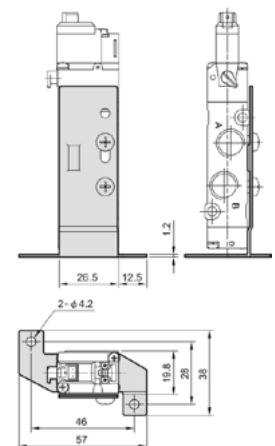
Type 5/2 with double solenoid:



Horizontal bracket:



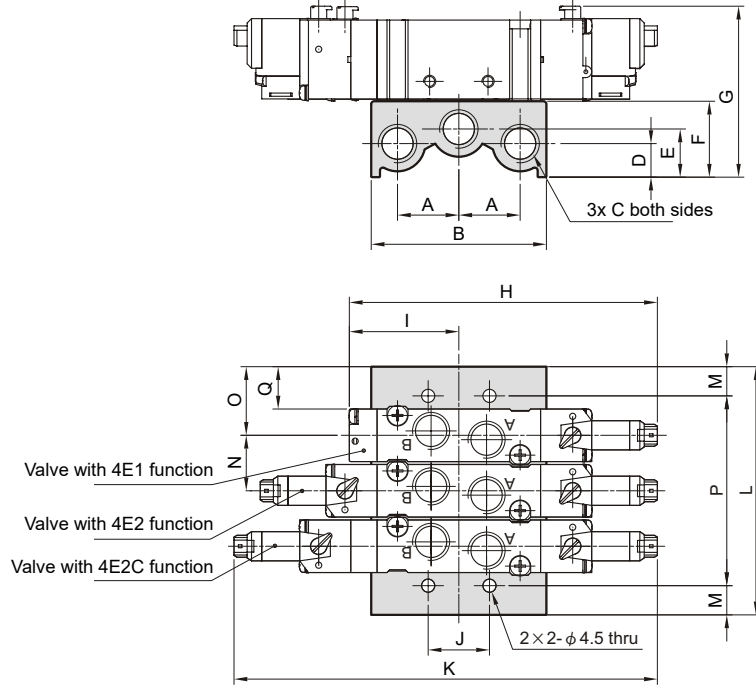
Vertical bracket:



Function	Weight [kg]
41	0.084
42	0.106
42C/P/R	0.116

Dimensions of manifold assemblies of valves series MVSY

Type -5B for valves with threaded ports

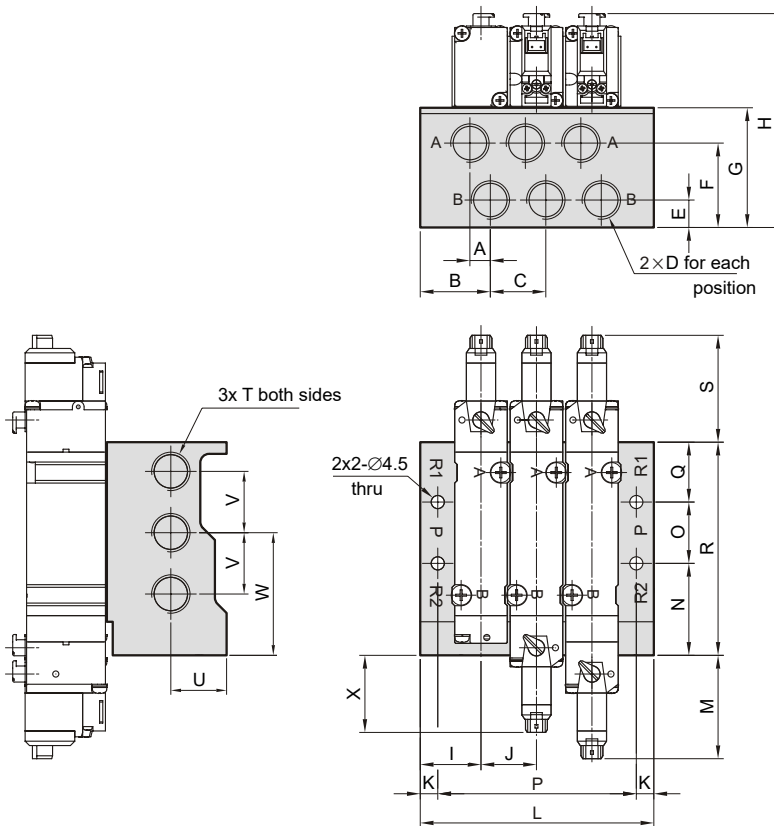


Series	Value	Number of positions									
		2	3	4	5	6	7	8	9	10	
100	L	48.5	59	69.5	80	90.5	101	111.5	122	132.5	
	P	30.5	41	51.5	62	72.5	83	93.5	104	114.5	
	Weight [kg]	0.07	0.08	0.10	0.12	0.13	0.15	0.16	0.18	0.19	
156	L	60	76	92	108	124	140	156	172	188	
	P	40	56	72	88	104	120	136	152	168	
	Weight [kg]	0.14	0.17	0.21	0.24	0.28	0.31	0.35	0.39	0.42	
188	L	66	85	104	123	142	161	180	199	218	
	P	46	65	84	103	122	141	160	179	198	
	Weight [kg]	0.18	0.23	0.27	0.32	0.37	0.42	0.47	0.52	0.57	

Series	A	B	C	D	E	F	G	H	I	J	K
100	16.5	49	G1/8 ^{cc}	12.5	12.5	20	50.1	75	24.5	16	108.5
156	21	60	G1/4 ^{cc}	11.5	16.5	26	58.6	96.5	22.8	20	134.5
188	21	60	G1/4 ^{cc}	11.5	16.5	26	58.6	105.5	37.5	21	145

Series	M	N	O	Q
100	9	10.5	19	14
156	10	16	22	14.5
188	10	19	23.5	14.5

Type M-5M for valves for manifold (without threaded ports)



Series	Value	Number of positions									
		2	3	4	5	6	7	8	9	10	
100	L	47.5	60	72.5	85	97.5	110	122.5	135	147.5	
	P	39.5	52	64.5	77	98.5	102	114.5	127	139.5	
	Weight [kg]	0.18	0.2	0.28	0.32	0.37	0.41	0.46	0.50	0.55	
156	L	59.5	77	94.5	112	129.5	147	164.5	182	199.5	
	P	49.5	67	84.5	102	119.5	137	154.5	172	189.5	
	Weight [kg]	0.25	0.3	0.40	0.47	0.55	0.62	0.69	0.77	0.84	
188	L	61	80	99	118	137	156	175	194	213	
	P	49	68	87	106	125	144	163	182	201	
	Weight [kg]	0.39	0.5	0.62	0.74	0.85	0.97	1.09	1.20	1.32	

Series	A	B	C	D	E	F	G	H	I	J	K	M	N	O	Q	R	S	T	U	V	W	X
100	7	15	12.5	G1/8 ^{cc}	7.4	22.2	32	61.6	18.5	12.5	4	29.9	24.6	16	15.2	55.8	22.8	G1/8 ^{cc}	8 (15)	16	32.6	20.4
156	8.5	19	17.5	G1/4 ^{cc}	10	27.5	38	70.3	21	17.5	5	33.7	29	20	19	68	32.8	G1/4 ^{cc}	17.6	20	39	24.8
188	7	24	19	G1/4 ^{cc}	9.4	28.9	41	73.3	20.8	19	6	35.4	31.5	21	20.5	73	36.6	G1/4 ^{cc}	19.1	21	42	26.4