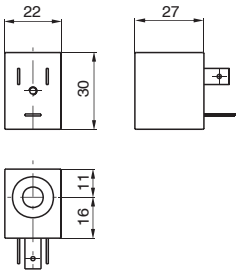
Coil

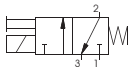


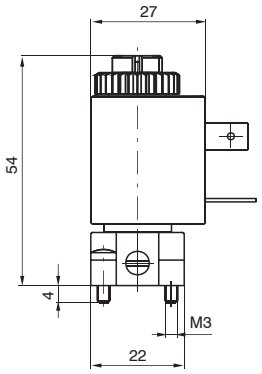
Weight 54 g

* Use only with M2/9

Ordering code	Available voltages Coils
MB 4 **MB 5** **MB 6**	12 D.C. 24 D.C. 48 D.C. — Direct current
MB 9*	24 D.C. (2 Watt) (Direct current, low consumption)
MB 17 **MB 21** **MB 22** **MB 24**	24/50 48/50 110/50 230/50 — Alternating current 50 Hz
MB 37 **MB 39** **MB 41**	24/60 110/60 230/60 — Alternating current 60 Hz
MB 56 **MB 57** **MB 58**	24/50-60 110/50-60 230/50-60 — Alternating current 50/60 Hz
MB 66 **MB 67** **MB 68**	24/50-60 110/50-60 230/50-60 — Alternating current (low consumption) 50/60 Hz

Miniature solenoid valve Normally Closed (N.C.)

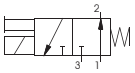


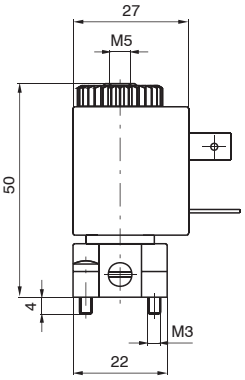


Weight 100 g

Ordering code	Available voltages Miniature solenoid valve N.C.
M 2.4 **M 2.5** **M 2.6** **M 2.9**	12 D.C. 24 D.C. 48 D.C. 24 D.C. (2 Watt) — Direct current
M 2.17 **M 2.21** **M 2.22** **M 2.24**	24/50 48/50 110/50 230/50 — Alternating current 50 Hz
M 2.37 **M 2.39** **M 2.41**	24/60 110/60 230/60 — Alternating current 60 Hz
M 2.56 **M 2.57** **M 2.58**	24/50-60 110/50-60 230/50-60 — Alternating current 50/60 Hz
M 2.66 **M 2.67** **M 2.68**	24/50-60 110/50-60 230/50-60 — Alternating current (low consumption) 50/60 Hz

Miniature solenoid valve Normally Open (N.O.)





Weight 103 g

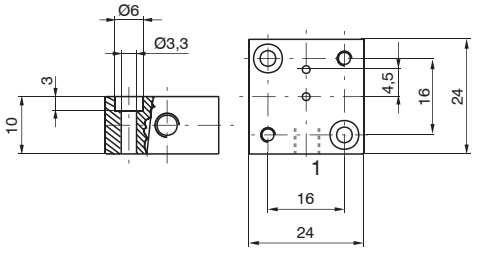
Ordering code	Available voltages Miniature solenoid valve N.O.
M 2/1.4 **M 2/1.5** **M 2/1.6** **M 2/1.9**	12 D.C. 24 D.C. 48 D.C. 24 D.C. (2 Watt) — Direct current
M 2/1.17 **M 2/1.21** **M 2/1.22** **M 2/1.24**	24/50 48/50 110/50 230/50 — Alternating current 50 Hz
M 2/1.37 **M 2/1.39** **M 2/1.41**	24/60 110/60 230/60 — Alternating current 60 Hz
M 2/1.56 **M 2/1.57** **M 2/1.58**	24/50-60 110/50-60 230/50-60 — Alternating current 50/60 Hz

External feeding base

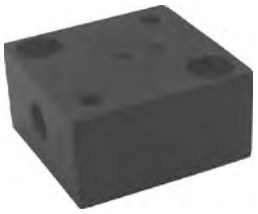
Use with solenoid valves for piloting pressure different from the using pressure

Ordering code
305.10.05

Weight 18 g



Individual base



Ordering code

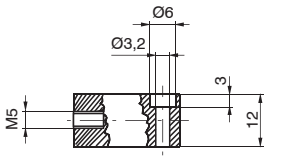
305.00.00

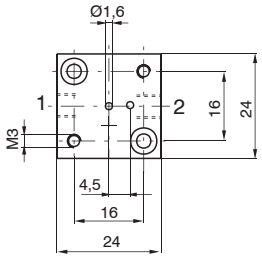
In line ports - thread M5

1 = INLET PORT (N.C.)
2 = OUTLET PORT

With a N.O. miniature solenoid valve
1 = EXHAUST
2 = OUTLET PORT

Weight 56 g





Ordering code

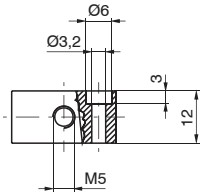
305.90.00

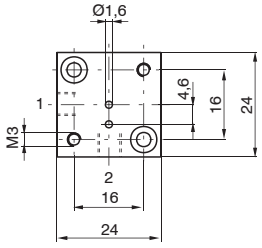
90° Port - thread M5

1 = INLET PORT (N.C.)
2 = OUTLET PORT (N.C)

With a N.O, miniature solenoid valve
1 = EXHAUST
2 = OUTLET PORT

Weight 56 g





Ordering code

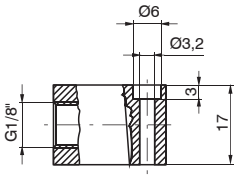
305.00.18

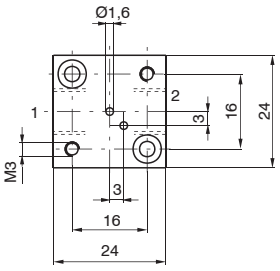
In line ports - thread G 1/8"

1 = INLET PORT (N.C.)
2 = OUTLET PORT (N.C)

With a N.O. miniature solenoid valve
1 = EXHAUST
2 = OUTLET PORT

Weight 75 g





Ordering code

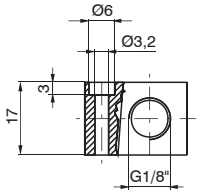
305.90.18

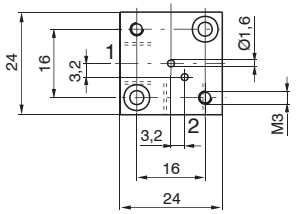
90° Port - thread G 1/8"

1 = INLET PORT (N.C.)
2 = OUTLET PORT (N.C.)

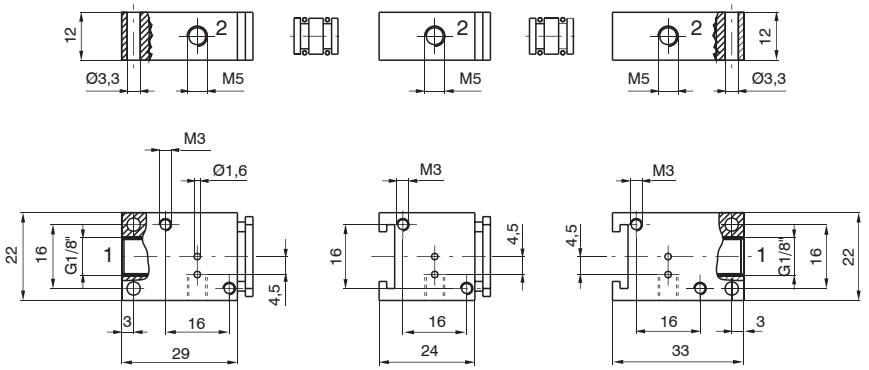
With a N.O. miniature solenoid valve
1 = EXHAUST
2 = OUTLET PORT

Weight 75 g





Modular bases for series mounting



Initial base *Intermediate base* *Last base*

Ordering code

Initial base
305.05.00
Weight 57 g

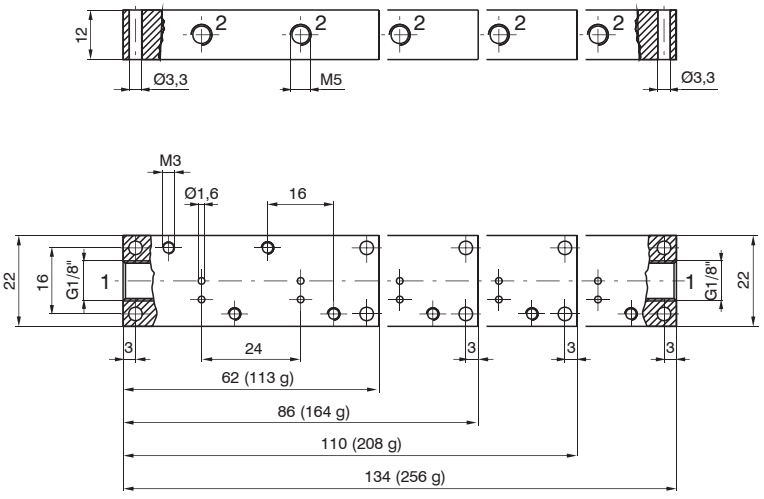
Intermediate base
305.06.00
Weight 44 g

Last base
305.07.00
Weight 53 g

Bored spacer
305.05.01
Weight 3 g

Solid spacer
305.05.02
Weight 4 g

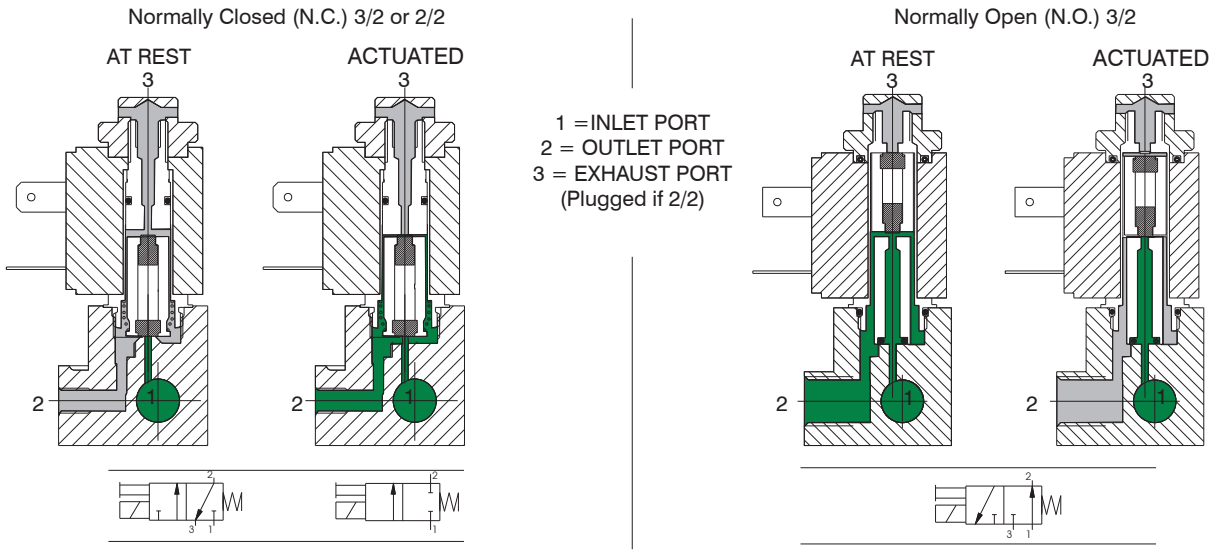
Multiple integral bases for series mounting



Ordering code

305.08.02 **2** positions
305.08.03 **3** positions
305.08.04 **4** positions
305.08.05 **5** positions

Functional schematic



Construction characteristics

Electrical parts: Solenoids: the solenoid consist of coils having different diameter copper wire windings insulated according standards "H"; they are encased in a nylon-glass compound. All parts are corrosion resistant.

Mechanical parts: Nickel plated brass tube nitrile (NBR) stainless steel plunger (AISI 430F), stainless steel adjusted springs, viton poppet seals, tropicalized zinc alloy interface plate, nickeled brass manual override, Technopolymer coil lock nut, zinc steel mounting screws. Electrical connectors are standard.

Technical characteristics

Pneumatic	Working pressure	0 ... 10 bar	
	Orifice size	1,3 mm	(1,1 mm for 2 W)
	Maximum fluid temperature	50°C	
	Maximum ambient temperature	50°C	
	Maximum flow rate at 6 bar with Δp = 1	53 Nl/min	(35 Nl/min. for 2 W)
	Cycles/minute	700	
	Fluids	Air-Vacuum-Inert gases	
	Lubrication	Non needed	
	Life	40 to 50 million cycles	
Electrical	Power consumption holding - D.C	5 W	(2 W) low consumption
	Power consumption holding - A.C	8 VA	(6 VA) low consumption
	Operating voltage tolerance	±10%	
	Response time opening *	8 ms	
	Response time closing *	6 ms	
	Insulation of the copper wire	H	
	Insulation of the coil	F	
	Connector protection	IP 65	
	Cable protection	DIN 43650 INDUSTRIAL FORM	

(*) "Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001, Pneumatic fluid power - Directional control valves - Measurement of shifting time"

Maintenance and replacement parts

Maintenace practices for these valves are similar to those already detailed for other products - replacement of the plunger or poppet is not advisable since the new replacement would not provide the best fit with the rest of the already used valve.

Special care should be taken that no dirt is accumulated between the working surface of fixed core and the plunger which would result in vibrations and overheating of the solenoid. In the case of microsolenoid it must be assured that the alternate current coil is not charged when the machanical part is not mounted to avoid destruction of the coil.

The electrical connections have to be perfect, especially where low currents are used (12-24 V). Oxidation of contacts between the connector and the coil can lead to intermittent malfunctions which are difficult to trace. Oxidation of contacts due to humidity or corrosive atmosphere are one of the most common causes of false alarms. Clean the contacts with appropriate spray.