

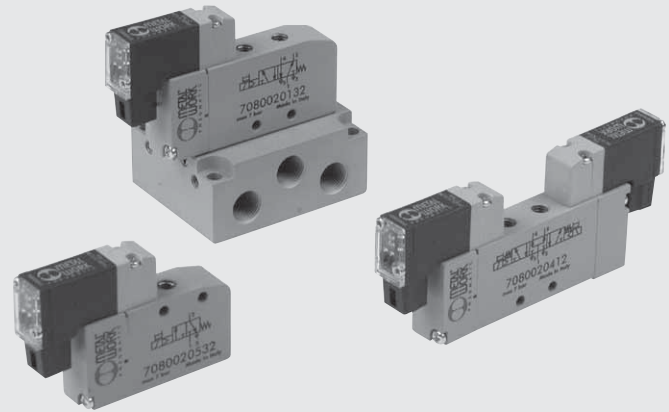
VALVES MINIMACH



Space-saving valve, ideal for in industrial automation applications. Made according to the well-proven design of the Mach series, the MINIMACH has a painted aluminium body to ensure extra sturdiness and reliable operation in even the harshest of environments. The internal seals are made of FKM/FPM and are compatible with all oils used in compressors. The pneumatic couplings are M5 threaded, allowing the user to choose the diameter, type and angle of the fitting. The valve can be mounted in line or on a panel or multiple-port base. The following versions are available:

- 3/2 normally open or normally closed
- 5/2 monostable or bistable
- 5/3 closed centres, open centres, pressure centres.

Electropneumatic actuation with a 24V DC pilot.

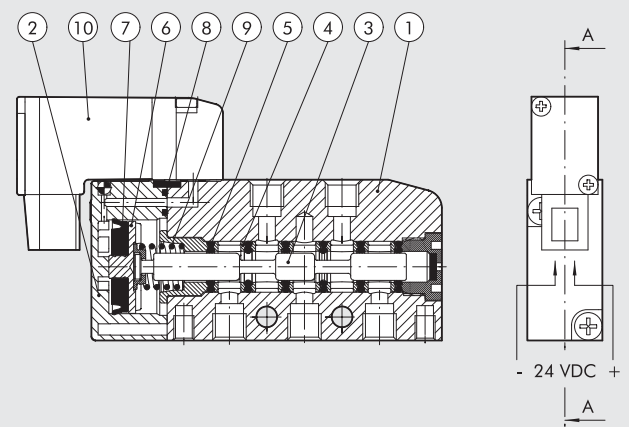


DISTRIBUTORS
VALVES MINIMACH

TECHNICAL DATA		
Valve port thread		M5
Type of actuation		electric-pneumatic
Maximum external diameter of fittings	mm	Ø 11
Operating temperature range	°C	-10 to +60
	°F	14 to +140
Fluid		Filtered air without lubrication; lubrication, if used, must be continuous
Pressure range	MPa	0.3 to 0.7
	bar	3 to 7
	psi	44 to 102
Flow rate at 6 bar ΔP 1 3/2	NI/min	140
Flow rate at 6 bar ΔP 1 5/2	NI/min	170
Flow rate at 6 bar ΔP 1 5/3	NI/min	80
Voltage range		24 VDC ± 10%
Power	W	0.9
Solenoid rating		100% ED
Manual operator		Monostable
TRA/TRR 3/2 at 6 bar	ms	8/23
TRA/TRR 5/2 monostable at 6 bar	ms	8/30
TRA/TRR 5/2 bistable at 6 bar	ms	15/15
TRA/TRR 5/3 at 6 bar	ms	9/30
Insulation class		F155
Degree of protection		IP 51
Installation		In any position. As for the bistable ones, if subject to vibration, the vertical assembly is not advisable
Compatibility with oils		See chapter Z1

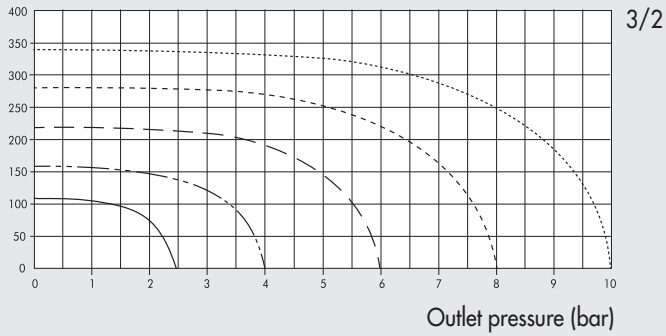
COMPONENTS

- ① VALVE BODY: chemically nickel-plated aluminium
- ② CONTROL/END CAP: Hostaform®
- ③ SPOOL: chemically nickel-plated aluminium
- ④ DISTANCE PLATES: tecnopolymer
- ⑤ GASKETS: FKM-FPM
- ⑥ PISTONS: Hostaform®
- ⑦ PISTON GASKET: Polyurethane
- ⑧ FILTER: sintered bronze
- ⑨ SPRINGS: special steel
- ⑩ PILOT: with integrated coil

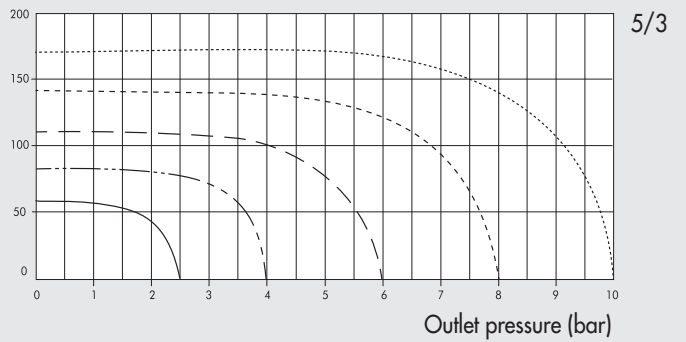


FLOW CHART

Flow rates (Nl/min)



Flow rates (Nl/min)



Flow rates (Nl/min)



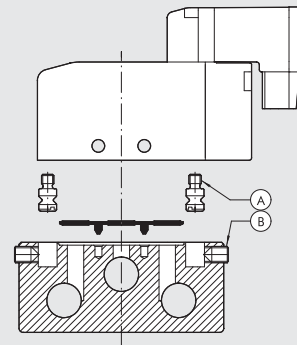
HOW TO FIX THE VALVE TO THE BASE

Proceed as follows:

1. screw the pins **Ⓐ** onto the valve
2. secure them with the ready-mounted grub screws **Ⓑ** on the base (0.5 Nm max)

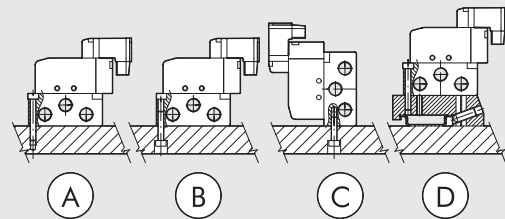
IMPORTANT

To secure properly, press the valve down onto the base while tightening the two grub screws.
Do not tighten one grub screw completely before starting to tighten the other.



HOW TO FIX THE BASE

- Ⓐ From the top using M4 screws
- Ⓑ From below using M5 screws
- Ⓒ From the side using M4 screws
- Ⓓ From the top on the DIN bar via the M4 screws and bracket code 0225004600 (using 1 screw per bracket)

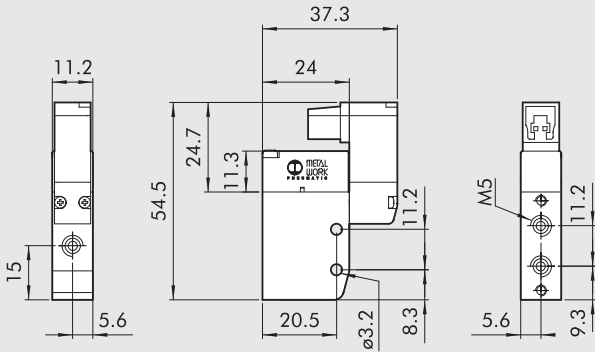


SYNOPTIC, SIZES AND VERSIONS

M S V	0	5	S O	B	O O	2 4 V D C
FAMILY	DIMENSIONS	FUNCTION	OPERATORS 14	RESETTING (12)	FURTHER DETAILS	
MSV minivalves solenoid	0 M5	3 3/2 5 5/2 6 5/3	SO solenoid	B bistable S mechanical springs	NC normally closed NO normally open OO 5/2 standard CC closed centres OC open centres PC pressure centres	24VDC

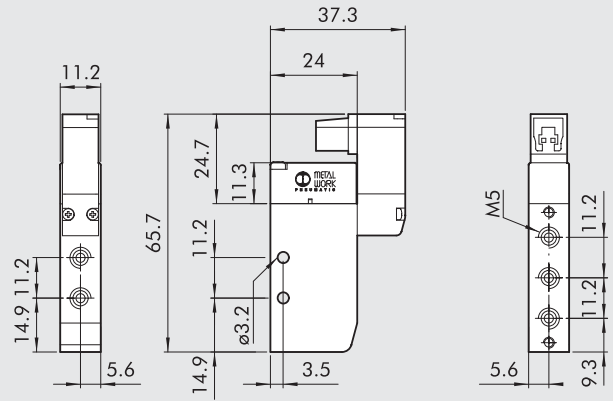
MINIMACH VALVES SOLENOID-PNEUMATIC

MONOSTABLE 3/2



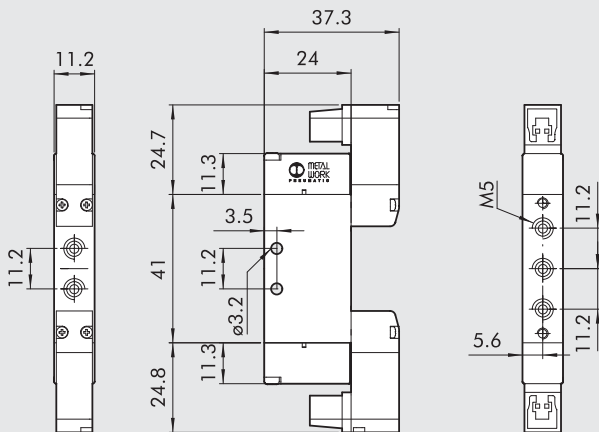
Symbol	Code	Abbrev.	Weight [g]
	7080020532	MSV 03 SOS NC 24VDC	36.2
	7080020632	MSV 03 SOS NO 24VDC	36.2

MONOSTABLE 5/2



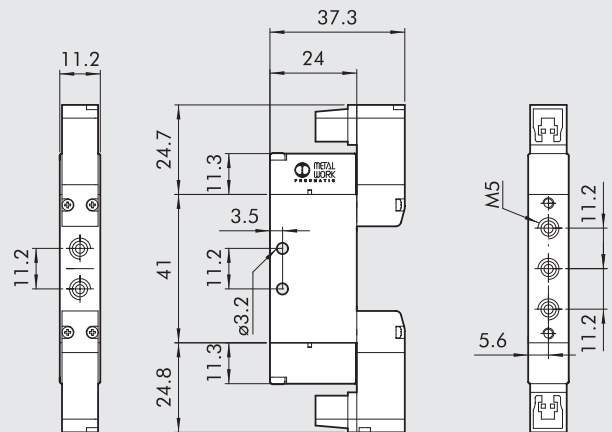
Symbol	Code	Abbrev.	Weight [g]
	7080020132	MSV 05 SOS OO 24VDC	43.3

BISTABLE 5/2



Symbol	Code	Abbrev.	Weight [g]
	7080020112	MSV 05 SOB OO 24VDC	57

MONOSTABLE 5/3



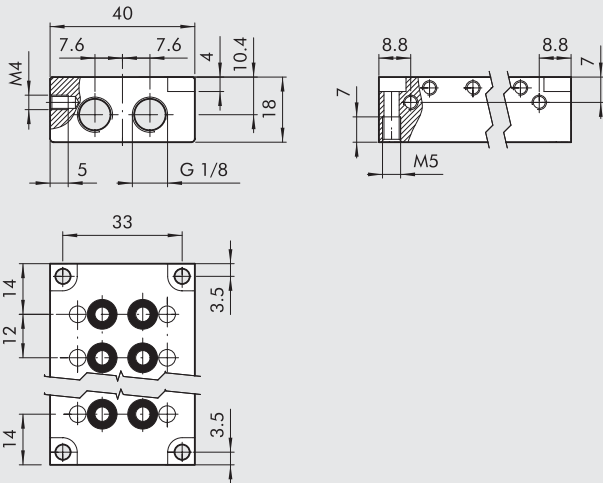
Symbol	Code	Abbrev.	Weight [g]
	7080020212	MSV 06 SOS CC 24VDC	57
	7080020312	MSV 06 SOS OC 24VDC	57
	7080020412	MSV 06 SOS PC 24VDC	57

DISTRIBUTORS

VALVES MINIMACH

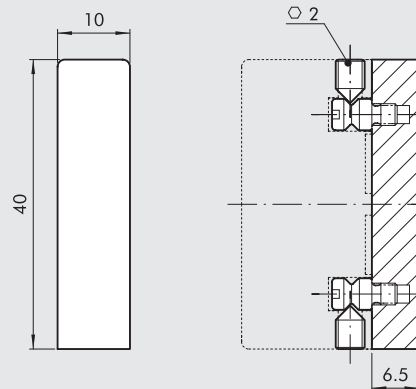
ACCESSORIES: MULTIPLE BASE

3/2 MULTIPLE BASE



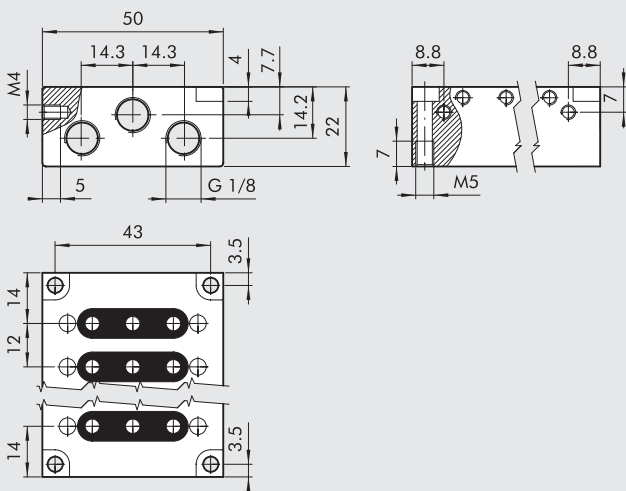
Code	Description	Position	Weight [g]
0225010201	Base 2 posn. for 3/2 valves Minimach	2	60
0225010401	Base 4 posn. for 3/2 valves Minimach	4	99
0225010601	Base 6 posn. for 3/2 valves Minimach	6	135
0225010801	Base 8 posn. for 3/2 valves Minimach	8	178

BLANKING PLATE FOR 3/2 VALVES



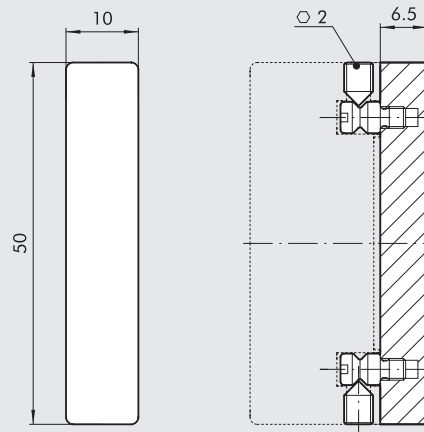
Code	Description	Weight [g]
0226009500	Blanking plate for 3/2 bases Minimach	9.5

5/2 - 5/3 MULTIPLE BASE



Code	Description	Position	Weight [g]
0225020201	Base 2 posn. for 5/2-5/3 valves Minimach	2	95
0225020401	Base 4 posn. for 5/2-5/3 valves Minimach	4	154
0225020601	Base 6 posn. for 5/2-5/3 valves Minimach	6	211
0225020801	Base 8 posn. for 5/2-5/3 valves Minimach	8	270

BLANKING PLATE FOR 5/2 - 5/3 VALVES

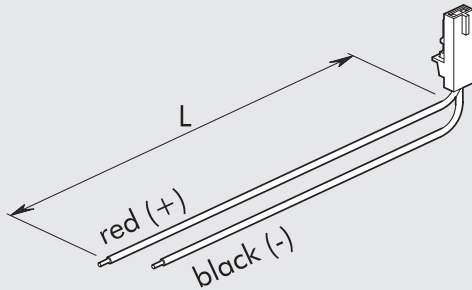


Code	Description	Weight [g]
0226009501	Blanking plate for 5/2-5/3 bases Minimach	11

ACCESSORIES

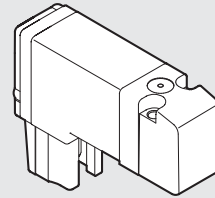
SPARE PARTS

PLUG-IN CONNECTOR



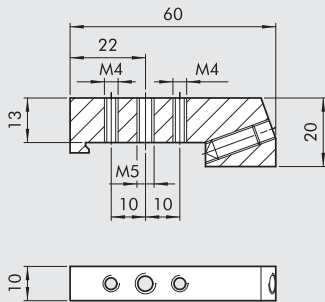
Code	Description
W0970512000	Plug-in connector for MACH 11 L = 300

PLUG-IN PILOT



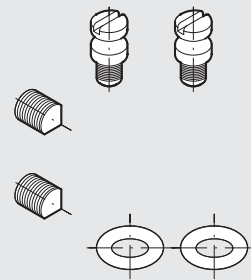
Code	Description
722113541100	PLT-10 722113541100

ADAPTER FOR BAR OMEGA (DIN EN 50022)



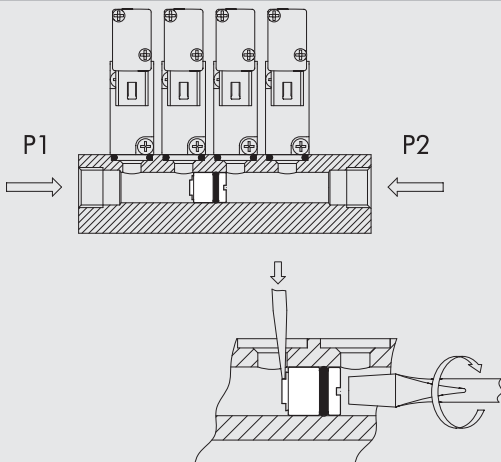
Code	Description	Weight [g]
0225004600	Adapter for bar omega	46

KIT OF SPARE GASKET BASES FOR 3/2 VALVES



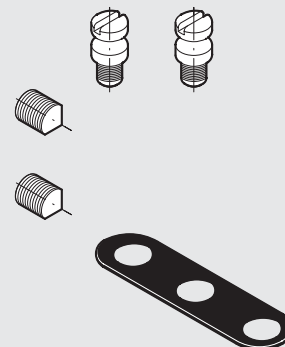
Code	Description	Weight [g]
0226009000	Kit of spare gasket bases for 3/2 valves	2.5

INTERMEDIATE DIAPHRAGM



Code	Description	Weight [g]
0226009010	Multiple base diaphragm	3.5

KIT OF SPARE GASKET BASES FOR 5/2 - 5/3 VALVES



Code	Description	Weight [g]
0226009001	Kit of spare gasket bases for 5/2-5/3 valves	2.5

DISTRIBUTORS

ACCESSORIES - SPARE PARTS FOR VALVES MINIMACH