

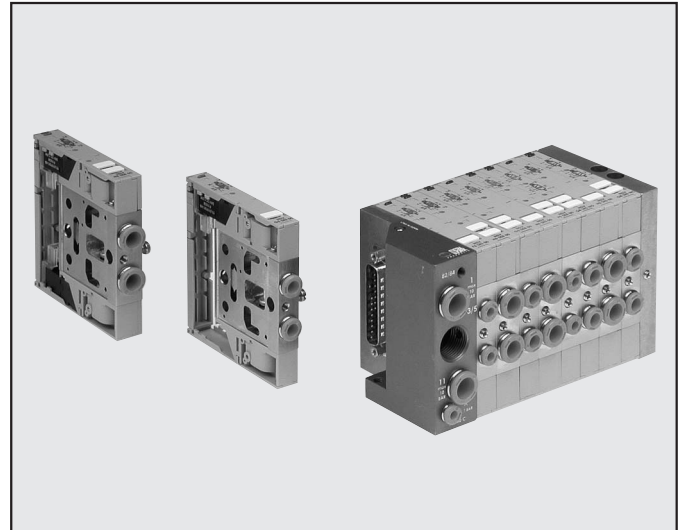
MULTIMACH

Multimach is not a mere valve, it is an electropneumatic distribution "island" - a single block ready for connection to power and air delivery pipes and a multi-pin cable.

All the pneumatic connections are situated on one side with built-in push-in fittings. The user interface is on the other side so that the fitter or serviceman has everything within an easy reach: manual controls, active valve signalling lights, compressed air system diagram, valve identification plates. The user can count on four different orientations for the electric connector.

Multimach provides full flexibility in the application of valves: 1 to 24 valves, power plates and drain for pipes of various sizes, electric 9- or 25-pin plug connector. But the real novelty, which is patented by Metal Work, is the possibility of mounting valves of different flow rates: three different valves can be mounted at a time and a valve can be replaced with another of a different flow rate. This revolutionary concept enables the user to optimise space and costs and adapt the unit to different performance requirements.

The ratio between the flow rate of the Multimach system and sizes is incomparable: the top in terms of miniaturisation and efficiency.



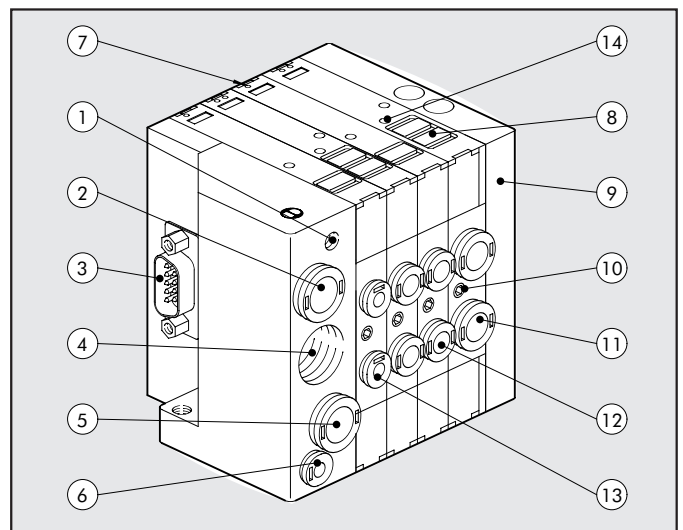
2

TECHNICAL DATA

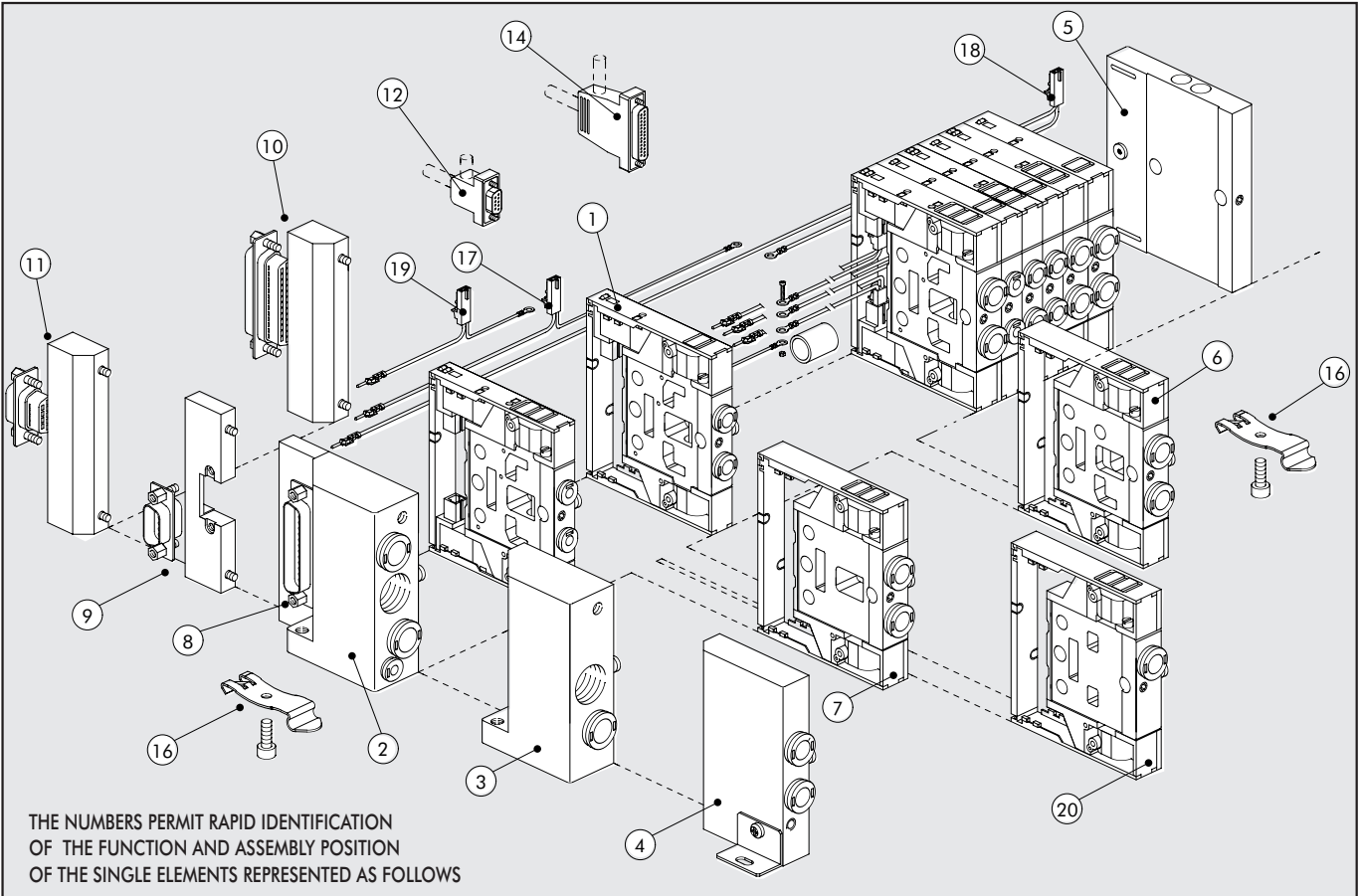
Valve port connections	quick-connection ports 2 and 4, Ø 4,6,8 mm	threaded exhaust port 3/8 or fitting Ø8
Connection on the end-plate for the supply of pilots	Automatic fitting Ø 4	
Operating temperature range	-10°C to 60°C	
Fluid	Filtered air without lubrication; lubrication, if used, must be continuous	
Screw for valve - wall-mounting	according to the end-plate used: see page 2.1/110	
Flow rate at 6 bar ΔP 1bar	11mm Ø 4: 200 NI/min	11mm Ø 6: 500 NI/min 14mm Ø 8: 800 NI/min
Voltage range	24 VDC ±10%	
Power	1,2 W	
Insulation class	F155	
Degree of protection	IP51	
Solenoid rating	100% ED	
Pressure range	X (pilot supply) 3 ÷ 7 bar	1-11 (valve supply) vacuum at 10 bar
- terminal 1-11		
- terminal 1		3 ÷ 7 bar
- terminal 1 reduced		3 ÷ 7 bar
TRA/TRR 2X3/2 monostable at 6 bar		8 ms / 45 ms
TRA/TRR 5/2 monostable at 6 bar		8 ms / 33 ms
TRA/TRR 5/2 bistable at 6 bar		20 ms / 20 ms
TRA/TRR 5/3 cc monostable at 6 bar		20 ms / 20 ms
Note on use	Insert the pipes in the fittings, before passing air through the valves, otherwise the basket may be pulled out of its seat by the flow of air.	
Compatibility with oils:	please refer to page 6.1/08	

COMPONENTS

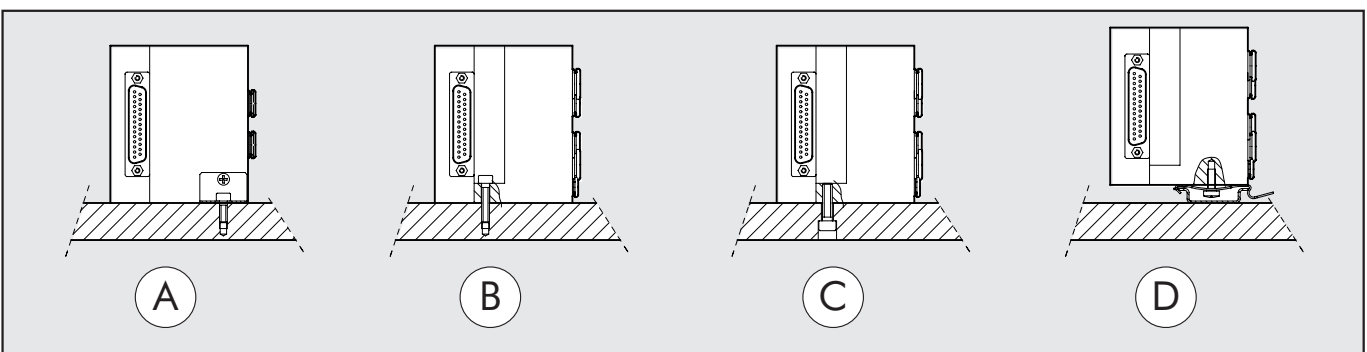
- ① Exhaust – Solenoid pilot
- ② Valve supply – port 1
- ③ Electrical multiple connection with 9 or 25 pins
- ④ Threaded connection of exhausts 3/5
- ⑤ Valve supply
- ⑥ Electrical control supply
- ⑦ LED (LED on, solenoid valve energised)
- ⑧ Removable identification labels
- ⑨ Blind end-plate
- ⑩ Screw for valve wall-mounting
- ⑪ Utility port for pipe Ø 8 mm
- ⑫ Utility port for pipe Ø 6 mm
- ⑬ Utility port for pipe Ø 4 mm
- ⑭ Manual control



THE MULTIMACH WORLD: FLEXIBILITY



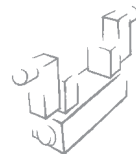
FIXING THE BASE:



- A: Fixing with reduced end-plate 1, CODE 0227300300, supplied complete with bracket.
- B: Fixing with end-plate 1-11 CODE 0227300200 or with end-plate CODE 0227300201
- C: Fixing with end-plate 1-11 CODE 0227300200 or with end-plate 1 CODE 0227300201 using the M4-thread found on the M5 end-plate.
- D: Fixing on the DIN bar with end-plate 1-11 CODE 0227300 using the reduced end-plate 1 CODE 0227300300 or end-plate CODE 0227300201 using the push-in bracket CODE 0227300600. If you have to remove the base from the bar, this is rapid and can be performed without using any tools.

VALVE CODES

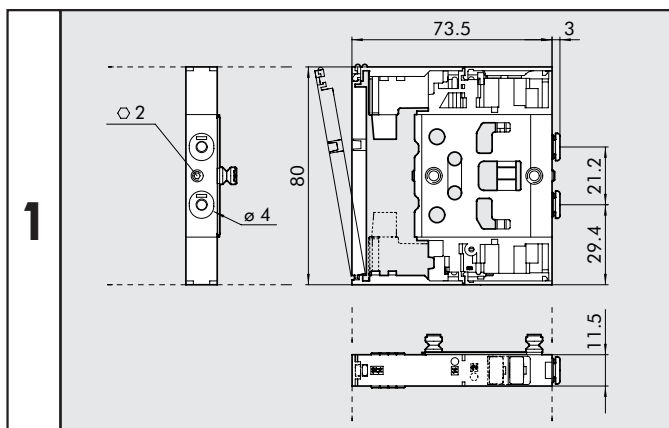
N	S	V	F	5	S	E	B	0	0	2 4 V D C	
FAMILY		PORT		FUNCTION	OPERATORS		RESETTING		FURTHER DETAILS		VOLTAGE
NSV	mini-solenoid valve	F	11 mm cartridges Ø 4	5 5/2	SE	Solenoid valve	B	bistable	00	5/2	24VDC
		G	11 mm cartridges Ø 6	6 5/3			S	mechanical spring		3/2 NC+	
		H	14 mm cartridges Ø 8	8 3/2x2						3/2 NO	
										CC5/3 closed centres	
										NC normally closed	
										NO normally open	



KEY TO CODES – MULTIMACH-UNIT

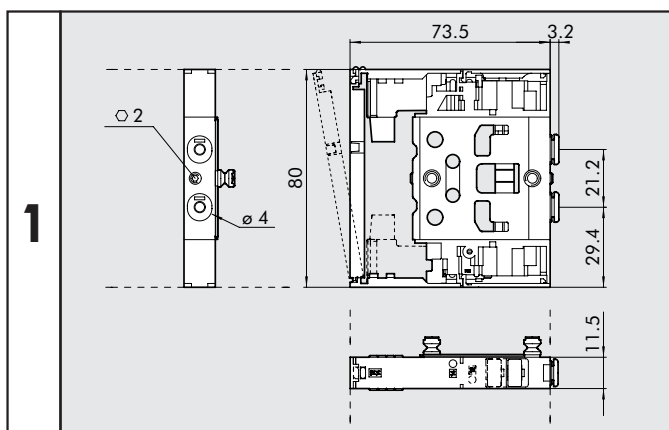
M	5	1	2	8	16-W8-W6-O4-L8-5			1 2 - 1 4
VALVE			INPUT END-PLATE	ELECTRICAL BASE	TYPE OF VALVE			FURTHER DETAILS
Multimach IP51			2 End-plate 1-11 3 End-plate 1 4 Reduced end-plate 1	8 Axial 25-wire connector base 9 Axial 9-wire connector base 10 25-wire rear connector base 11 9-wire rear connector base	I no. 2 3/2NC W no. 2 3/2NO L 3/2 NO + 3/2 NC V 5/2 monostable K 5/2 bistable O 5/3 monostable	5 blind end-plate 6 Passing-intermed. 7 Blind intermediate 20 exhaust section.	4 cartridge 4 6 cartridge 6 8 cartridge 8	12 9-wire connector 14 25-wire connector 16 Brackets for DIN bar

VALVE DIMENSIONS Ø 4



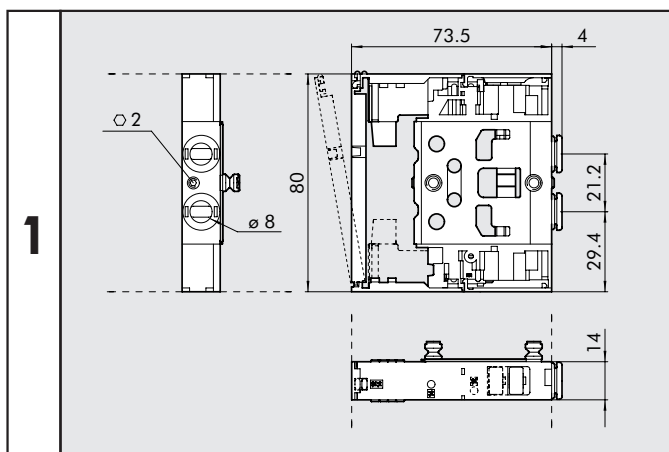
	Symbol	Abbrev.	Code	Weight [g]
I4		NSV F8 SES NC	7068030532	118
W4		NSV F8 SES NO	7068030632	118
L4		NSV F8 SES 00	7068030732	118
V4		NSV F5 SES 00	7068030132	100
K4		NSV F5 SEB 00	7068030112	114
O4		NSV F6 SES CC	7068030212	115

VALVE DIMENSIONS Ø 6



	Symbol	Abbrev.	Code	Weight [g]
I6		NSV G8 SES NC	7069030532	110
W6		NSV G8 SES NO	7069030632	110
L6		NSV G8 SES 00	7069030732	110
V6		NSV G5 SES 00	7069030132	90
K6		NSV G5 SEB 00	7069030112	107
O6		NSV G6 SES CC	7069030212	108

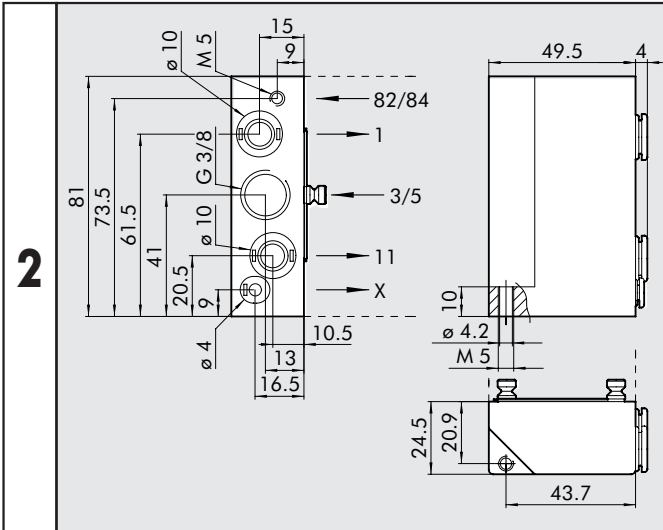
VALVE DIMENSIONS Ø 8



	Symbol	Abbrev.	Code	Weight [g]
I8		NSV H8 SES NC	7070030532	124
W8		NSV H8 SES NO	7070030632	124
L8		NSV H8 SES 00	7070030732	124
V8		NSV H5 SES 00	7070030132	105
K8		NSV H5 SEB 00	7070030112	120
O8		NSV H6 SES CC	7070030212	121

2

END-PLATE 1-11

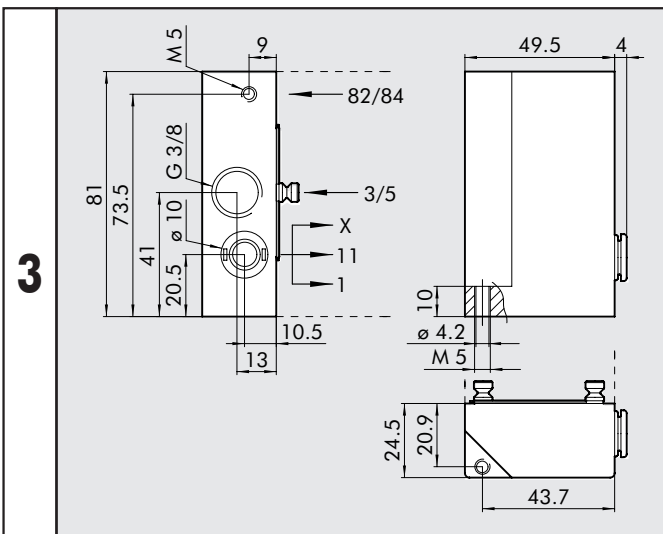


Code	Description	Weight [g]
0227300200	END-PLATE KIT 1-11	223

This end-plate allows for supplies to be differentiated

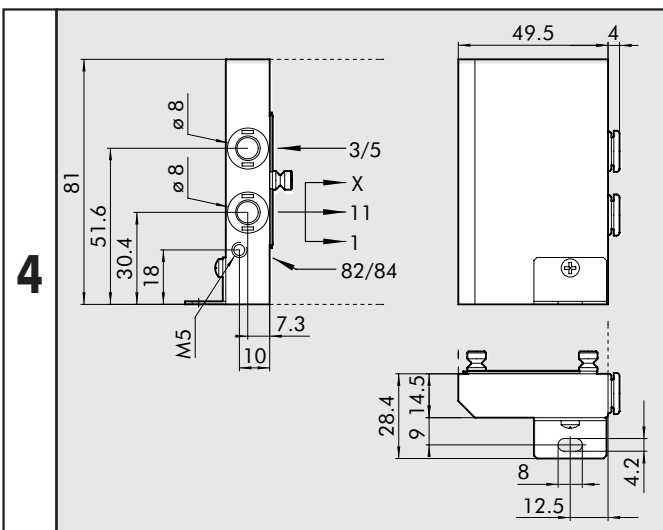
- port 2
- port 4
- pilot supply

END-PLATE 1

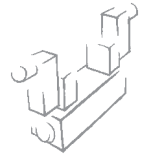


Code	Description	Weight [g]
0227300201	END-PLATE KIT 1	224

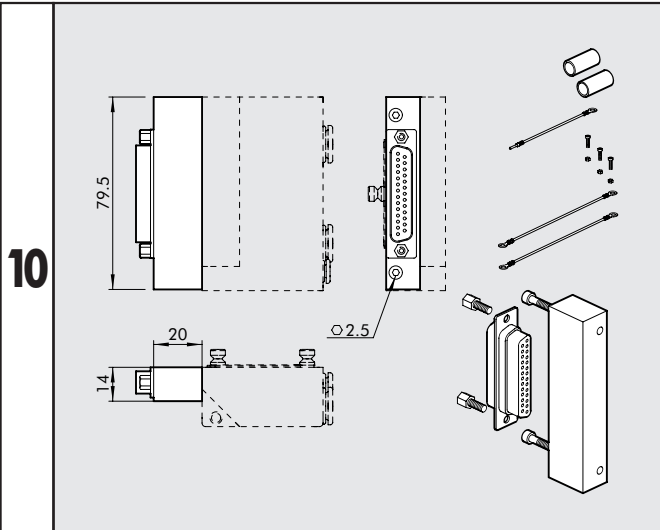
REDUCED END-PLATE 1



Code	Description	Weight [g]
0227300300	REDUCED END-PLATE KIT 1	148

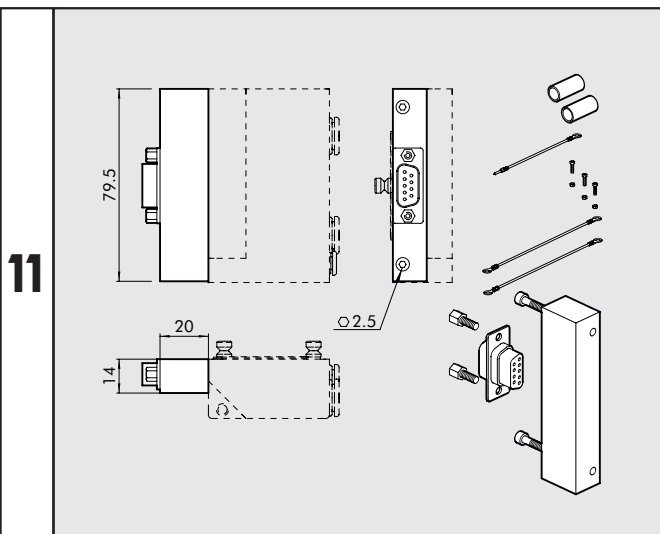


REAR CONNECTOR BASE, 25 WIRES



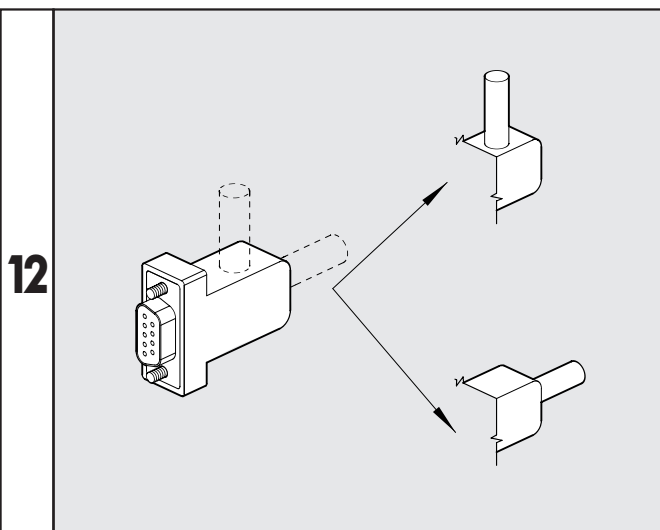
Code	Description	Weight [g]
0226180003	REAR CONNECTOR BASE KIT, 25 WIRES	73

REAR CONNECTOR BASE, 9 WIRES



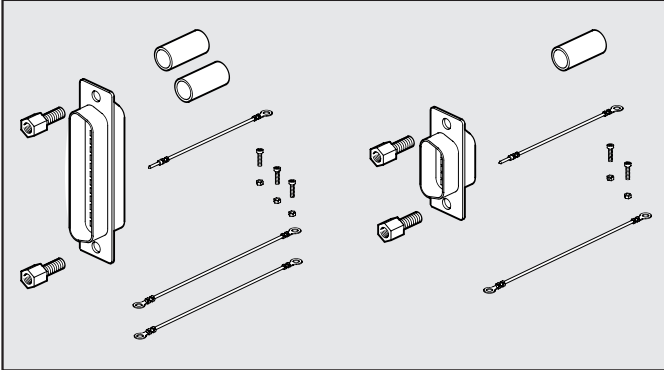
Code	Description	Weight [g]
0226180004	REAR CONNECTOR BASE KIT, 9 WIRES	77

STRAIGHT AND 90° CONNECTOR KIT, 9 WIRES



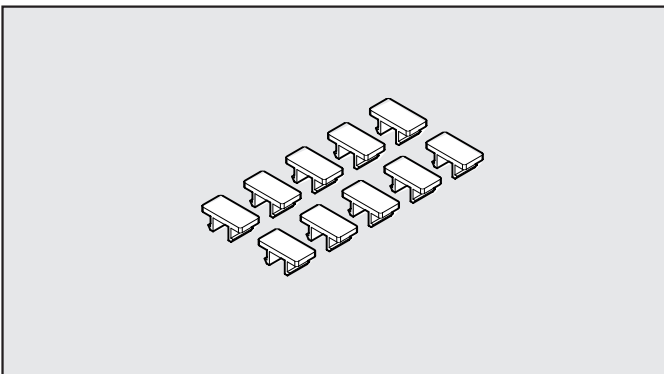
Code	Description	Weight [g]
0226180102	STRAIGHT AND 90° CONNECTOR KIT, 9 WIRES	31

MALE CONNECTOR KIT + CONTACTS + COMMON TERMINAL



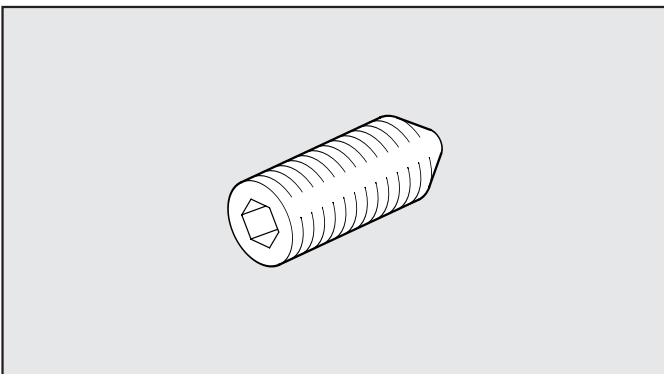
Code	Description
0226180201	MALE CONNECTOR KIT - 25 PINS
0226180202	MALE CONNECTOR KIT - 9 PINS

IDENTIFICATION PLATE KIT



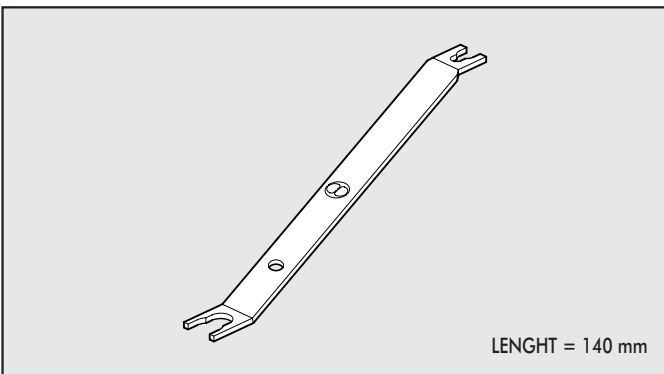
Code	Description
0226107000	IDENTIFICATION PLATE KIT
Comes in 10-pc. packs	

GRUB SCREW

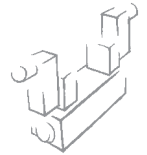


Code	Description
0227300800	GRUB SCREW FOR MULTIMACH
Comes in 10-pc. pack	

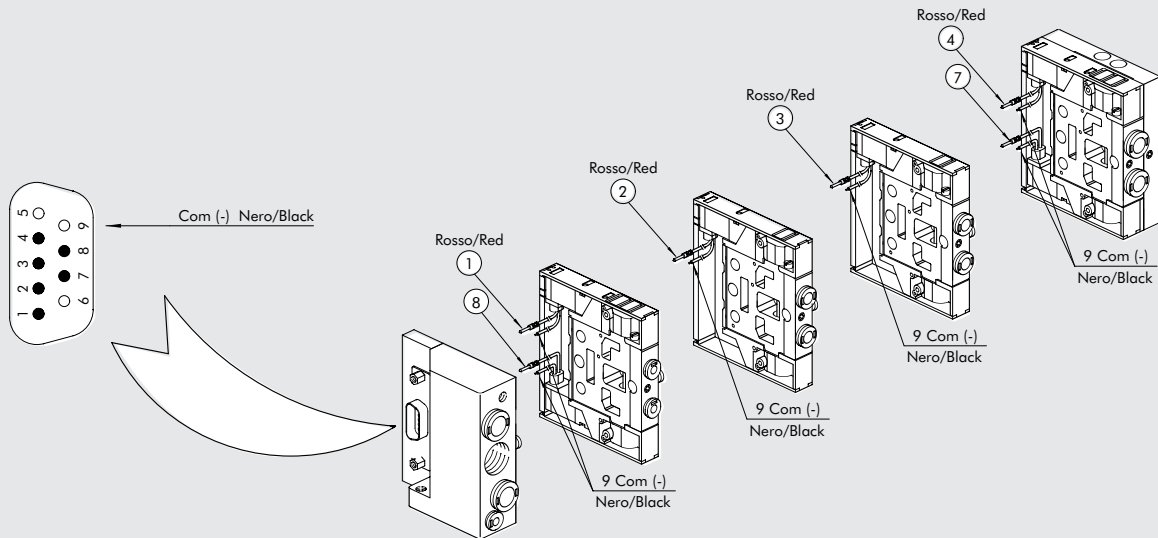
R17 - PIPE RELEASE SPANNER



Code	Description	Ø Tube	Notes
2L17001	RL17	from Ø 3 to Ø 10	For R fitting and Fox fitting

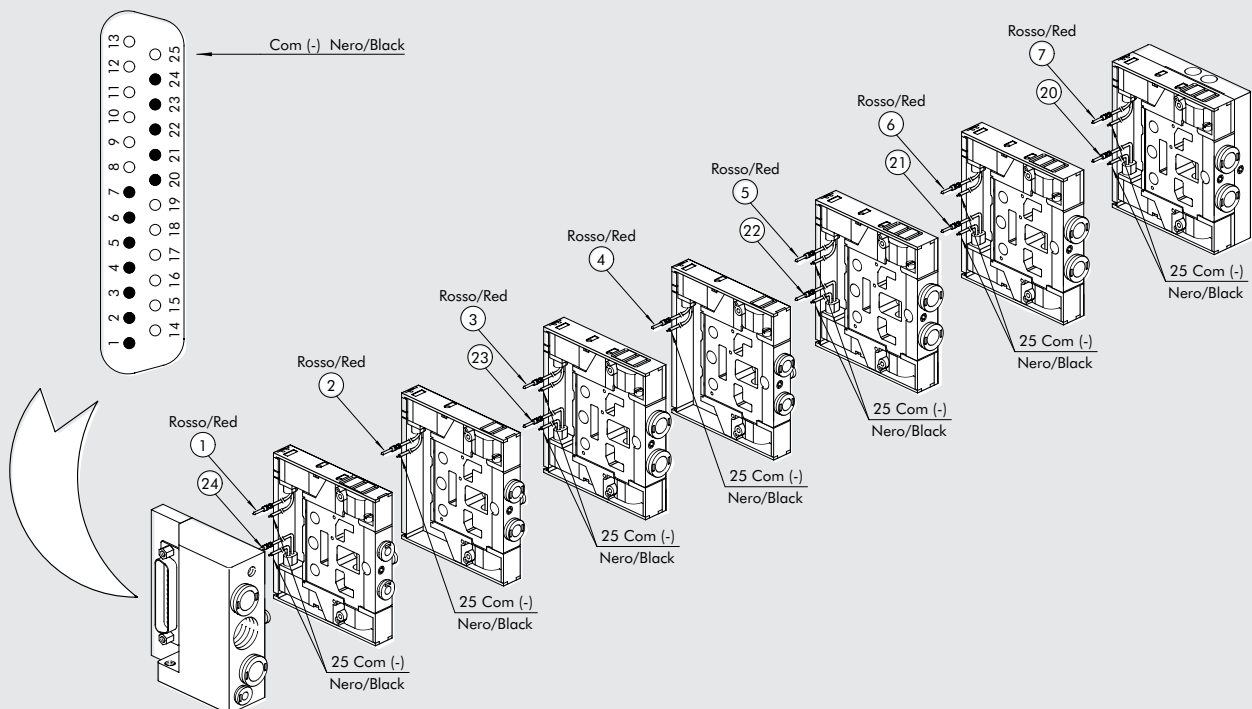


WIRING DIAGRAM OF THE 9-PIN CONNECTOR



NOTE: AVAILABLE WITH POSITIVE COMMON WIRE ON REQUEST

WIRING DIAGRAM OF THE 25-PIN CONNECTOR



NOTE: AVAILABLE WITH POSITIVE COMMON WIRE ON REQUEST.