

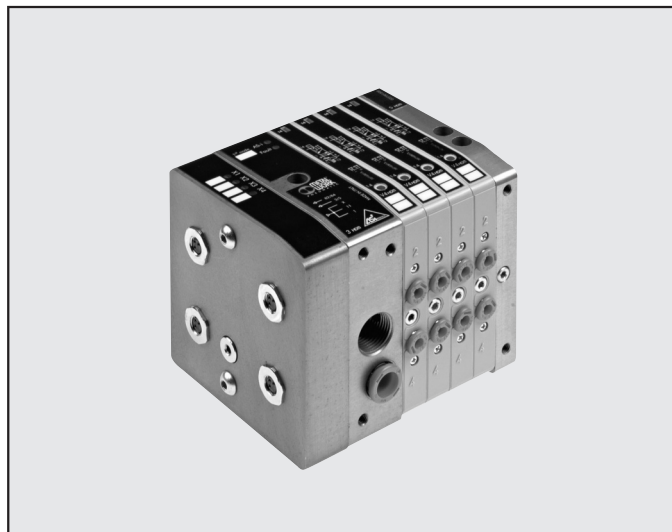
HDM + AS-INTERFACE HEAVY DUTY MULTIMACH



The HDM+AS-Interface system has been designed in such a way that the pneumatic input terminal contains all the electronics, signals and AS-I connectors. It is a very compact and sturdy system where everything is housed in a thick casing aluminium to protect the delicate components against impact. The valves and accessories are HDM standard, which means that you only need to replace the input terminal to convert the valve island with multiple connector into an AS-I island. All the advantages of the HDM system can be exploited: the possibility of mounting valves of different size, with fittings for pipes 4, 6 or 8; the insertion of intermediate modules with separate power supply or outlets; aluminium valves with chemical nickel plating enclosed in a protective casing in reinforced technopolymer, with an index of protection IP65. The arrangement of the functions continues the traditional optimisation of the HDMs: the user interface of the valves and bus all on one side, so that the fitter and service engineer have everything within easy reach: all compressed air connections on the other side; the connectors for AS-I cables on the opposite side longitudinally, so that several valve islands can be arranged in line, fixed on a DIN bar.

There are many AS-I terminal variants to meet all possible requirements:

- with 1 node, for controlling up to 4 valve solenoid pilots;
- with 2 nodes, for controlling up to 8 solenoid pilots;
- with 1 node for output and input for controlling up to 4 solenoid pilots and receiving up to 4 input signals. The input connectors are M8 or M12;
- with 2 nodes for output and input for controlling up to 8 solenoid pilots and receiving up to 8 input signals with M8 connectors;
- power supply with the AS-I yellow cable only;
- power supply with two cables: the yellow AS-I cable and the black power supply cable.
- traditional V2.1 addressing or extended AB V3.0 address for an increase in the node numbers which can be connected up to 62 and for a better diagnostics

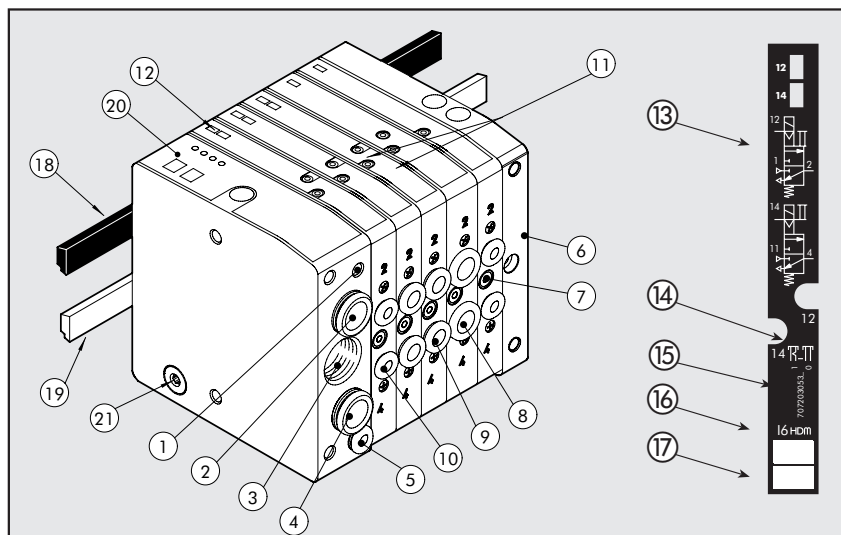


TECHNICAL DATA

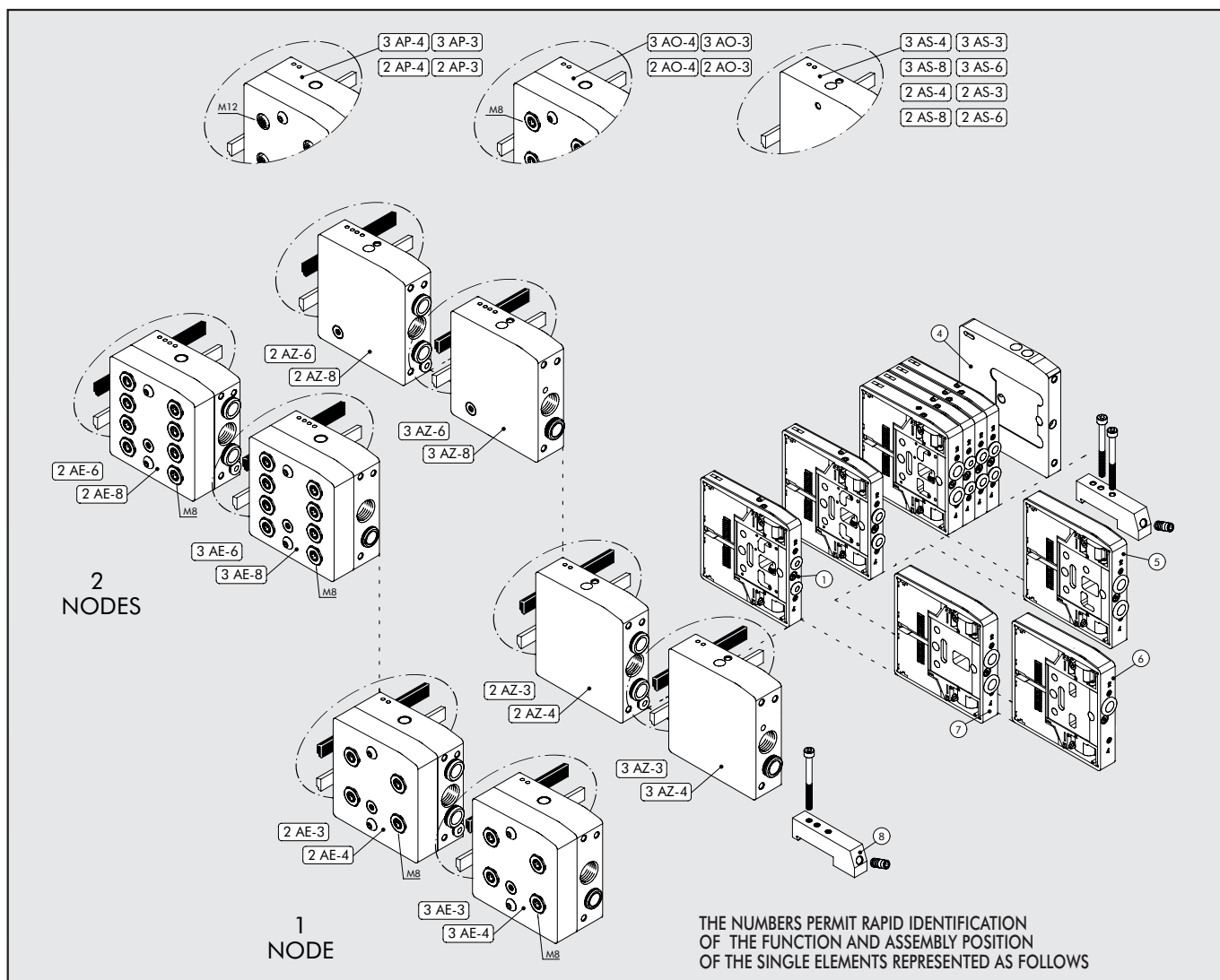
Valve port connections	quick-connection ports 2 and 4, Ø 4,6,8 mm / power supply port for Ø 8 fitting / threaded exhaust port 3/8 or fitting Ø8 mm		
Connection on the end-plate for the supply of pilots	Automatic fitting Ø 4 mm		
Maximum number of pilots	terminal with 1 node = 4 / terminal with 2 node = 8		
Maximum number of valves	terminal with 2 node = 4 (same as the max. no. of pilots) / terminal with 2 node = 8 (same as the max. no. of pilots)		
Operating temperature range	-10 ÷ +60		
Fluid	Filtered air without lubrication; lubrication, if used, must be continuous		
Flow rate at 6 bar ΔP 1bar	11mm Ø 4 = 200	11mm Ø 6 = 500	14mm Ø 8 = 800
Pressure range	X (pilot supply)		1-11 (valve supply)
	3 ÷ 7 bar		vacuum at 10 bar
	- terminal 1-11		
	- terminal 1	3 ÷ 7 bar	
Voltage range	24 VDC ±10%		
Power for each pilot	0,9		
Solenoid Pilot Insulation class	F155		
Degree of protection	IP65 (with conveyed exhaust, and that - in case of no use - the BUS OUT connector gets plugged.)		
Solenoid rating	100% ED		
TRA/TRR 2X3/2 monostable at 6 bar	8 / 45		
TRA/TRR 5/2 monostable at 6 bar	8 / 33		
TRA/TRR 5/2 bistable at 6 bar	20 / 20		
TRA/TRR 5/3 cc monostable at 6 bar	20 / 20		
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

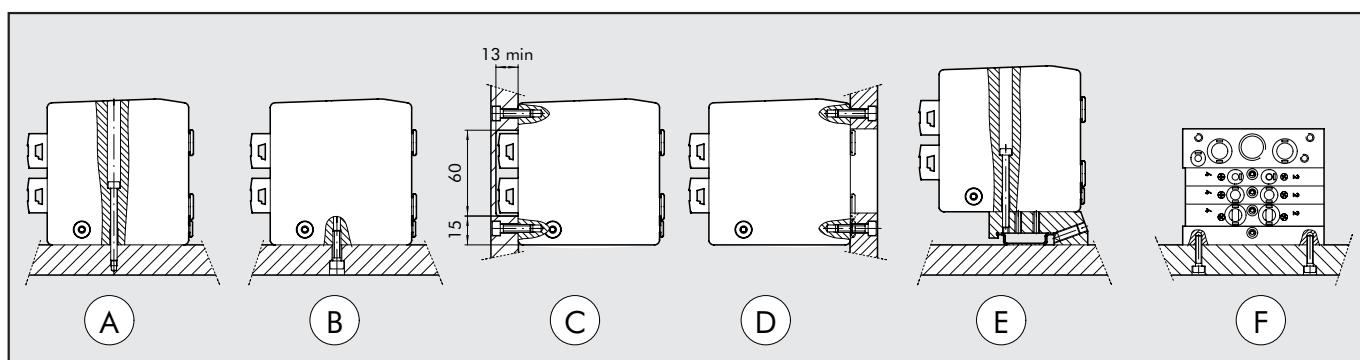
- Exhaust – Solenoid pilot 82/84
- Valve supply – port 1
- Threaded connection of exhausts 3/5
- Valve supply – port 11
- Electrical control supply X
- Blind end-plate
- Screw for valve wall-mounting
- Utility port for pipe Ø 8 mm
- Utility port for pipe Ø 6 mm
- Utility port for pipe Ø 4 mm
- Manual control
- LED (LED on, solenoid valve energised)
- Pneumatic symbol
- Identification of the monostable or bistable manual control
- Valve ordering code
- Valve identification code
- Blank space for valve number
- Black cable for 24V (if present)
- AS-INTERFACE yellow cable
- AS-INTERFACE led



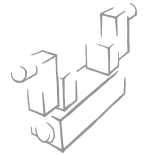
THE MULTIMACH WORLD: FLEXIBILITY



FIXING THE BASE



- A:** Fixing from above using the 1 or 1-1 input terminal and the blind terminal.
- B-C:** Fixing from above using the 1 or 1-1 input terminal and the blind terminal, using the M5 threads on the bottom and the rear of the terminals.
- D:** Fixing from above using the 1 or 1-1 input terminal and the blind terminal, using the M5 threads on the front of the terminals. An opening for the pipes is made in the plate.
- E:** Fixing on the DIN bar with end-plate 1 or 1-11 and blind and plate, using the push-in bracket code 0227301600.
- F:** Lateral fixing using the blind terminal, and its the M4 threads on the side lateral.
- Note:** The sole fixing admitted is the one showed.

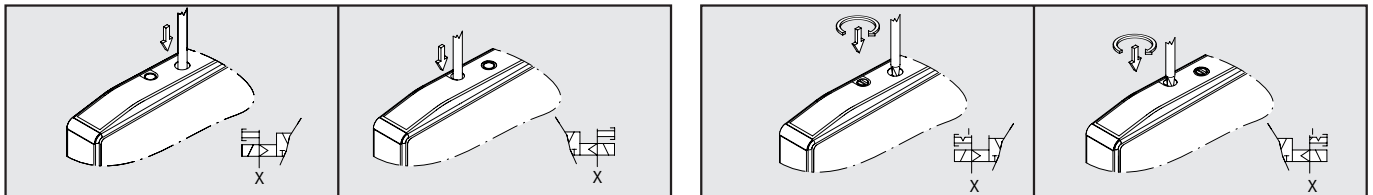


KEY TO CODE - MULTIMACH-UNIT HDM - AS-INTERFACE

H	D	M	2	AS-4	M	16-W8-W6-O4-L8-5	16
VALVE			INPUT END-PLATE	SUPP. ELETT	MANUAL TYPE	TYPE OF VALVE	FURTHER DETAILS
Heavy duty Multimach IP65	2	End-plate 1-11	3	End-plate 1		I n° 2 3/2 NC	16 n° 2 brackets for DIN bar
	3	End-plate 1				W n° 2 3/2 NO	
					M Monostable manual control	L 3/2 NO + 3/2 NC	
					B Bistable manual control	V 5/2 monostable	
						K 5/2 bistable	
						O 5/3 monostable	
						*F 5/2 monostable	
						5 blind end-plate	
						6 Passing-intermed.	
						7 Blind intermediate	
						20 exhaust section.	
						4 cartridge 4	
						6 cartridge 6	
						8 cartridge 8	

* uses a single PIN (like the V) and occupies 2 signals ** standard versions handled from stock

MANUAL CONTROLS



MONOSTABLE OVERRIDE PORT 2
servo-assisted

- Press and hold the manual control in position (not necessary for bistable type K valve)
- Release the manual control:
 - The manual control returns to the home position.
 - Valves type I, W, L, V, F, and O reposition.
 - The type K valve remains switched

MONOSTABLE OVERRIDE PORT 4
servo-assisted

- Press and hold the manual control in position (not necessary for bistable type K valve)
- Release the manual control:
 - The manual control returns to the home position.
 - Valves type I, W, L, V and F reposition.
 - The type K valve remains switched

With type F and V valves, this manual control is not present.

BISTABLE OVERRIDE PORT 2
servo-assisted

- Press the manual control right in then turn it clockwise 90 degrees and Leave it in position.
- Rotate the manual control 90 degrees anticlockwise, and then release it.
 - The manual control returns to the home position.
 - Valves type I, W, L, V, F, and O reposition.
 - The type K valve remains switched

BISTABLE OVERRIDE PORT 4
servo-assisted

- Press the manual control right in then turn it 90 degrees clockwise and Leave it in position.
- Rotate the manual control 90 degrees anticlockwise, and then release it:
 - The manual control returns to the home position.
 - Valves type I, W, L and O reposition.
 - The type K valve remains switched

With type F and V valves, this manual control is not present.

N.B.: The pilot power supply X must be present.

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• The reference code for the monostable control ends in 0 (2 for type F).

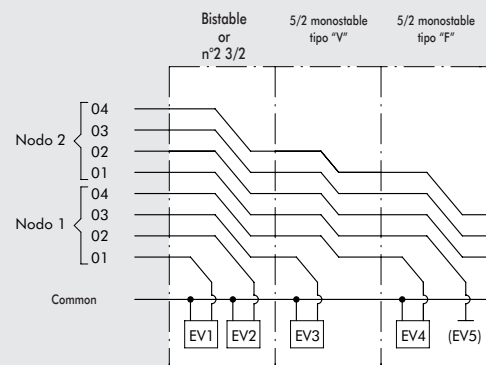
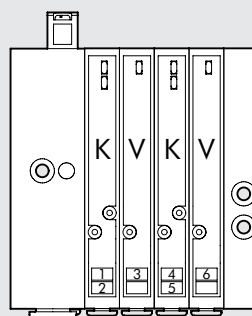
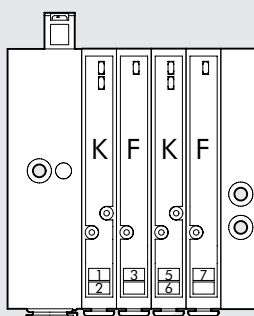
• The reference code for the monostable control ends in 1 (3 for type F).

Example: 707203053_

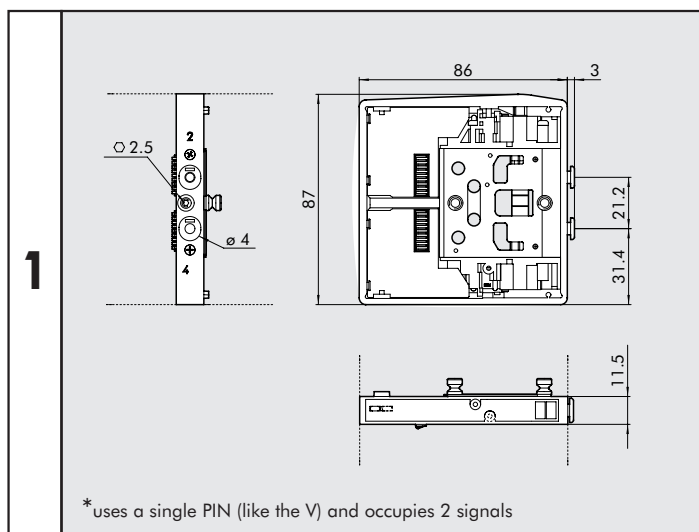
Example: 707203053_

WIRING DIAGRAM

NOTE: The type f monostable valve uses one PIN only (like the V) but occupies 2 signals.

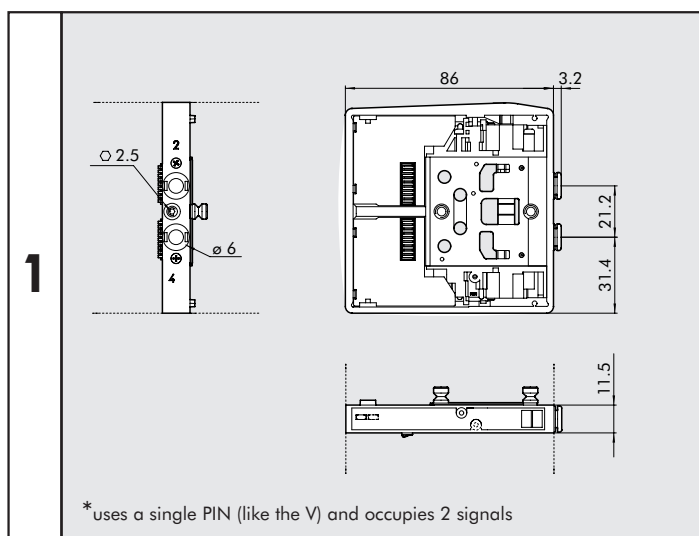


VALVE DIMENSIONS HDM Ø 4



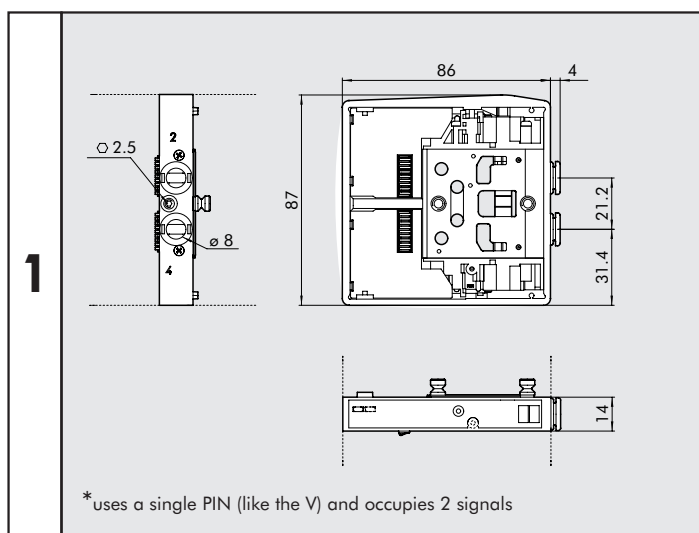
Symbol	Manual Control	Code	Weight [g]
I4 _{HDM}	monostable bistable	7071030530 7071030531	130
W4 _{HDM}	monostable bistable	7071030630 7071030631	130
L4 _{HDM}	monostable bistable	7071030730 7071030731	130
V4 _{HDM}	monostable bistable	7071030130 7071030131	115
*F4 _{HDM}	monostable bistable	7071030132 7071030133	115
K4 _{HDM}	monostable bistable	7071030110 7071030111	130
O4 _{HDM}	monostable bistable	7071030210 7071030211	130

VALVE DIMENSIONS HDM Ø 6

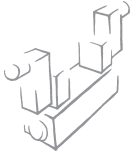


Symbol	Manual Control	Code	Weight [g]
I6 _{HDM}	monostable bistable	7072030530 7072030531	130
W6 _{HDM}	monostable bistable	7072030630 7072030631	130
L6 _{HDM}	monostable bistable	7072030730 7072030731	130
V6 _{HDM}	monostable bistable	7072030130 7072030131	115
*F6 _{HDM}	monostable bistable	7072030132 7072030133	115
K6 _{HDM}	monostable bistable	7072030110 7072030111	130
O6 _{HDM}	monostable bistable	7072030210 7072030211	130

VALVE DIMENSIONS HDM Ø 8

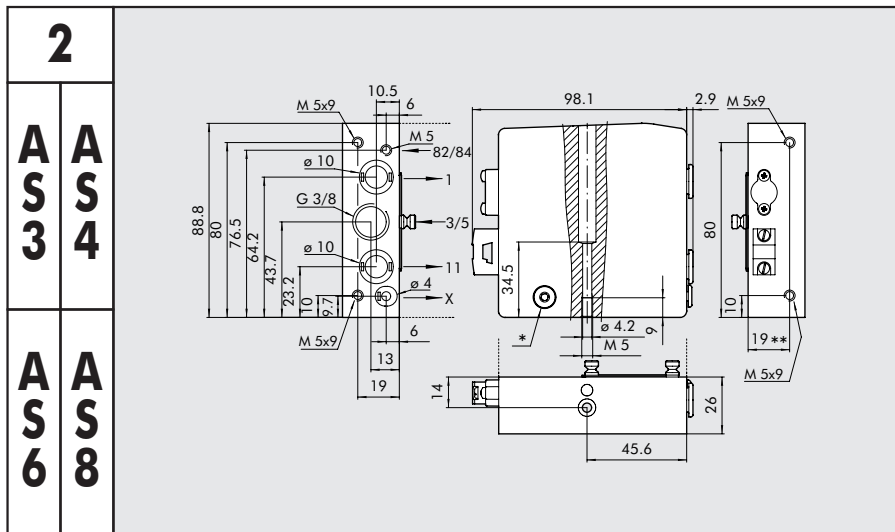


Symbol	Manual Control	Code	Weight [g]
I8 _{HDM}	monostable bistable	7073030530 7073030531	140
W8 _{HDM}	monostable bistable	7073030630 7073030631	140
L8 _{HDM}	monostable bistable	7073030730 7073030731	140
V8 _{HDM}	monostable bistable	7073030130 7073030131	130
*F8 _{HDM}	monostable bistable	7073030132 7073030133	130
K8 _{HDM}	monostable bistable	7073030110 7073030111	140
O8 _{HDM}	monostable bistable	7073030210 7073030211	140



ACCESSORIES

TERMINAL 1-11AS-4, AS-8, AS-3, AS-6

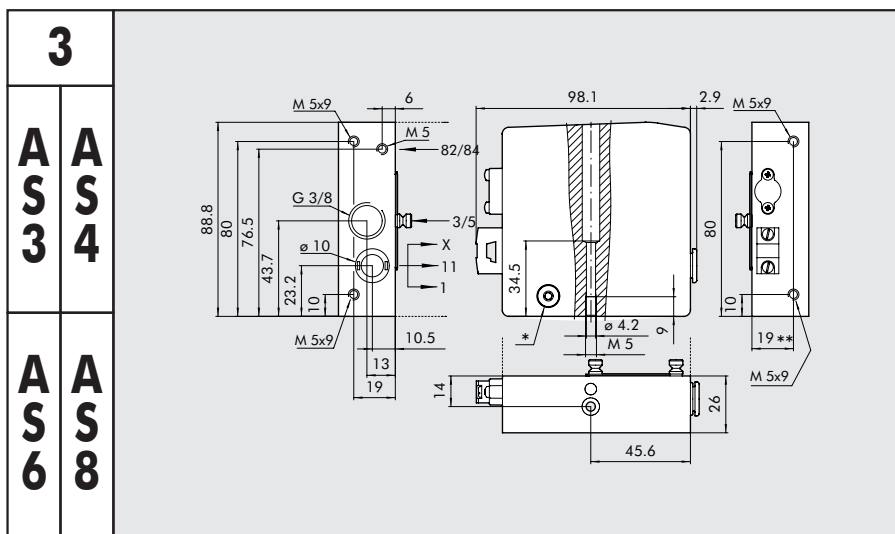


Code	Description
0227301203	KIT TERMINAL HDM 1-11 AS-4 1 node, 4 Out, yellow cable
0227301209	KIT TERMINAL HDM 1-11 AS-8 2 nodes, 8 Out, yellow cable
0227301246	KIT TERMINAL HDM 1-11 AS-3 1 node extended address, V3.0 4 Out, yellow cable
0227301247	KIT TERMINAL HDM 1-11 AS-6 2 nodes extended address, V3.0 8 Out, yellow cable

* M7 plug for 2nd node addressing.
N.B. For versions with 2 nodes only

** 21 for AS-8

TERMINAL 1 AS-4, AS-8, AS-3, AS-6



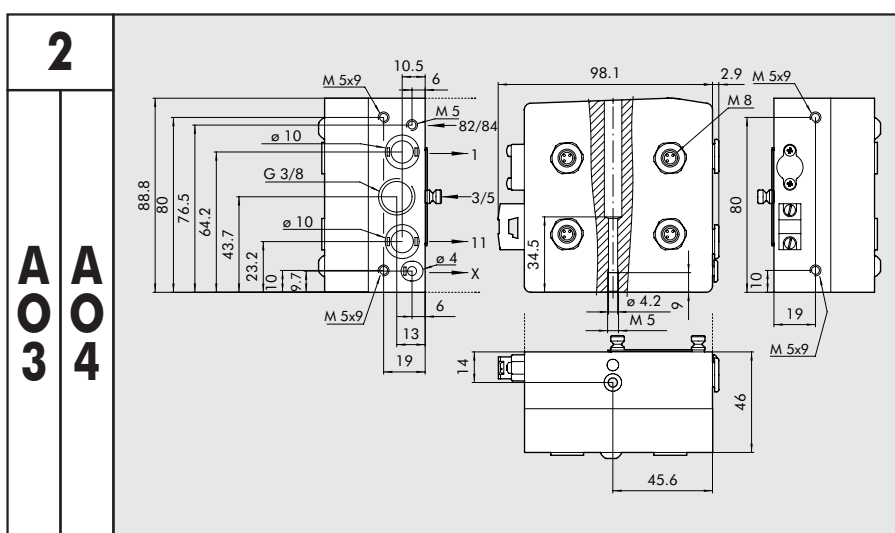
Code	Description
0227301202 •	KIT TERMINAL HDM 1 AS-4 1 node, 4 Out, yellow cable
0227301208 •	KIT TERMINAL HDM 1 AS-8 2 nodes, 8 Out, yellow cable
0227301232	KIT TERMINAL HDM 1 AS-3 1 node extended address, V3.0 4 Out, yellow cable
0227301233	KIT TERMINAL HDM 1 AS-6 2 nodes extended address, V3.0 8 Out, yellow cable

* M7 plug for 2nd node addressing.
N.B. For versions with 2 nodes only

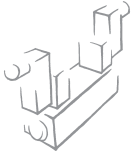
** 21 for AS-8

• standard versions handled from stock

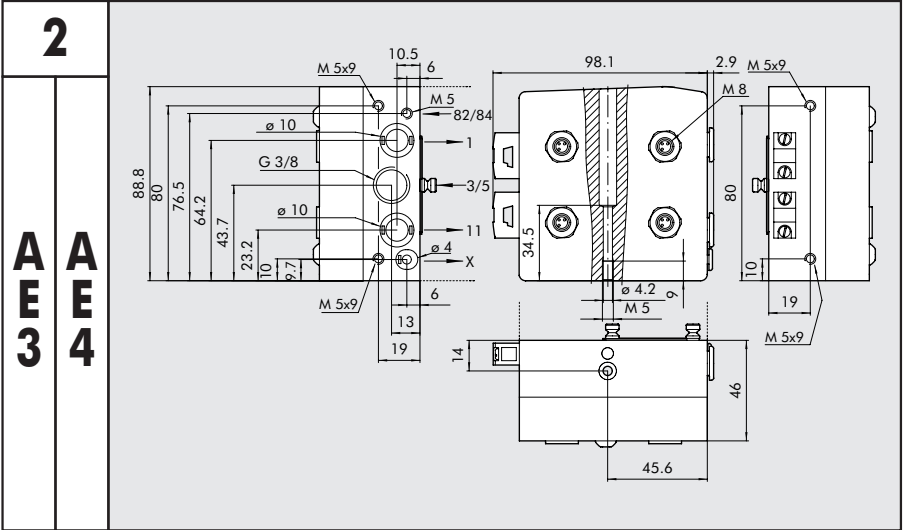
TERMINAL 1-11 AO-4, AO-3 M8



Code	Description
0227301219	KIT TERMINAL HDM 1-11 AO-4 1 node, 4 Out and 4 In M8, yellow cable
0227301234	KIT TERMINAL HDM 1-11 AO-3 1 node extended address, V3.0 4 Out and 4 In M8, yellow cable



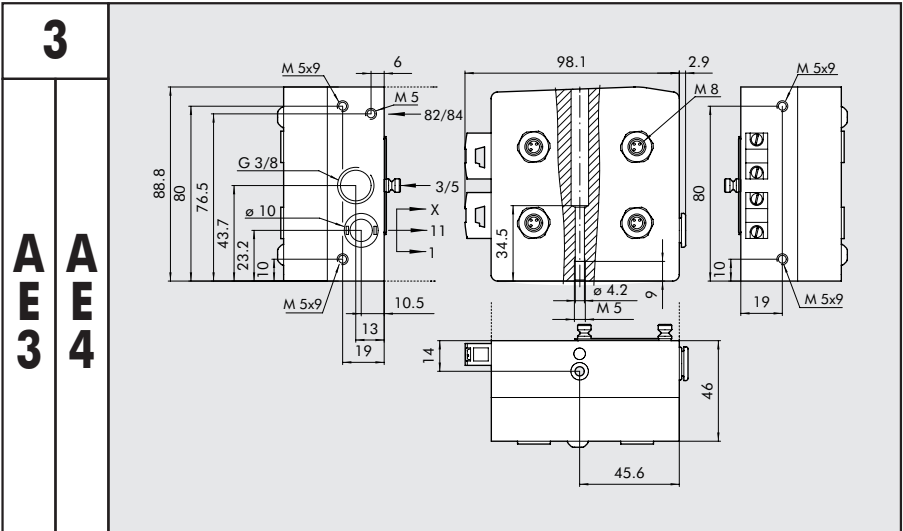
TERMINAL 1-11 AE-4, AE-3 M8



Code	Description
0227301215	KIT TERMINAL HDM 1-11 AE-4 1 node, 4 Out and 4 In M8, yellow cable and black cable
0227301238	KIT TERMINAL HDM 1-11 AE-3 1 node extended address, V3.0 4 Out and 3 In M8, yellow cable and black cable

2

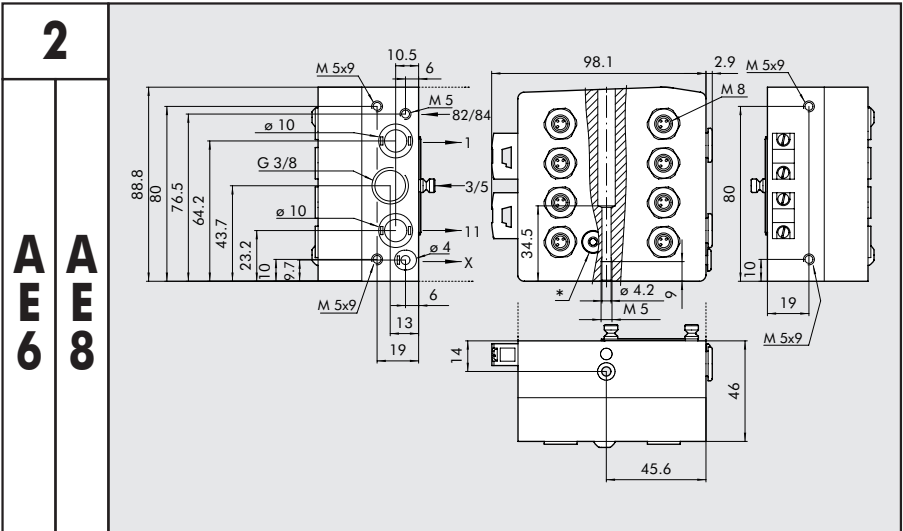
TERMINAL 1 AE-4, AE-3 M8



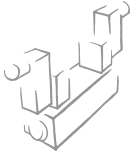
Code	Description
0227301214 •	KIT TERMINAL HDM 1 AE-4 1 node, 4 Out and 4 In M8, yellow cable and black cable
0227301239	KIT TERMINAL HDM 1 AE-3 1 node extended address, V3.0 4 Out and 3 In M8, yellow cable and black cable

• standard versions handled from stock

TERMINAL 1-11 AE-8, AE-6 M8

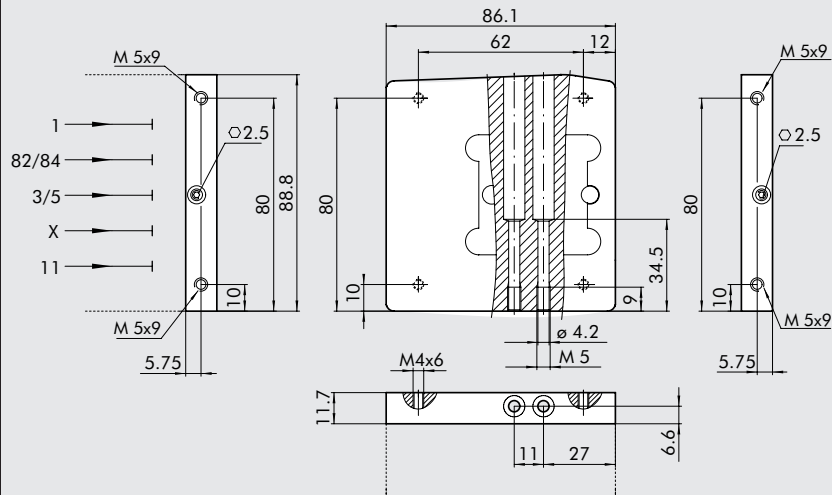


Code	Description
0227301217	KIT TERMINAL HDM 1-11 AE-8 2 nodes, 8 Out and 8 In M8, yellow cable and black cable
0227301240	KIT TERMINAL HDM 1-11 AE-6 2 nodes extended address, V3.0 8 Out and 8 In M8, yellow cable and black cable



BLIND END-PLATE

5

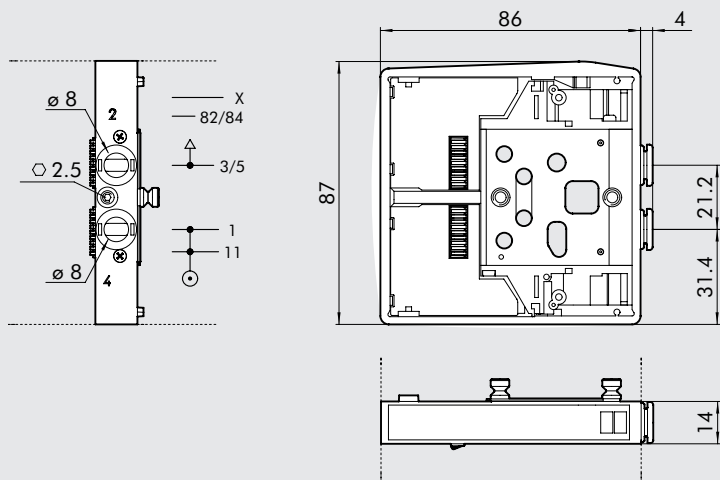


Code	Description	Weight [g]
0227301500	BLIND END-PLATE HDM	230

2

INTERMEDIATE THROUGH

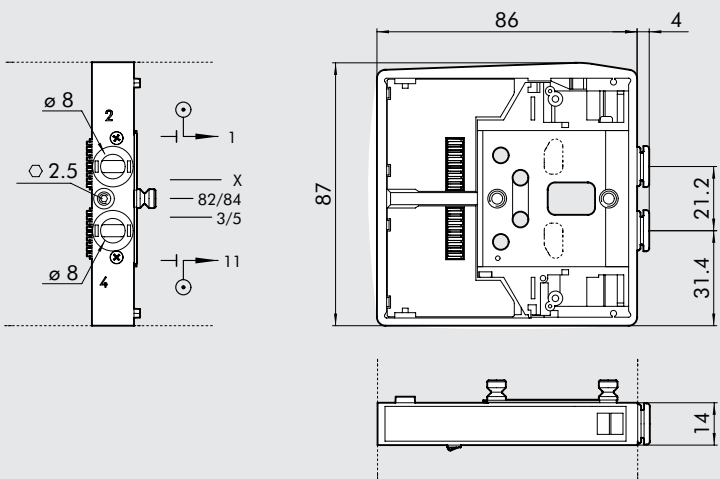
6



Code	Description	Weight [g]
0227301301	INTERMEDIATE THROUGH HDM	120

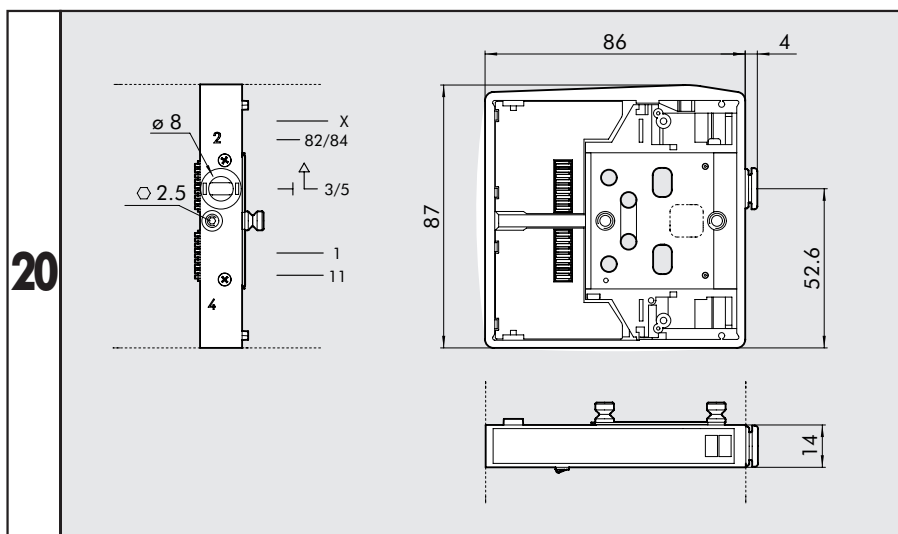
INTERMEDIATE BLIND

7



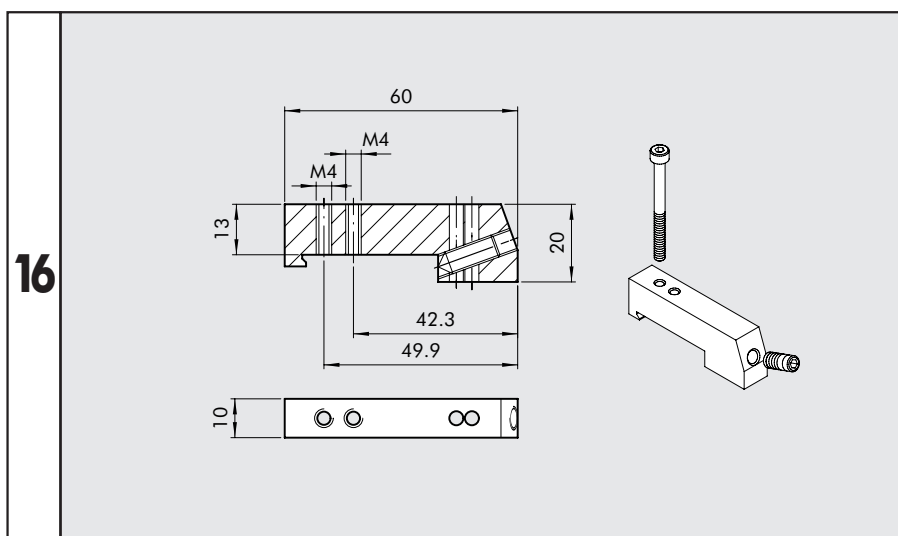
Code	Description	Weight [g]
0227301302	INTERMEDIATE BLIND HDM	117

INTERMEDIATE EXHAUST SWITCH



Code	Description	Weight [g]
0227301303	INTERMEDIATE EXHAUST SWITCH HDM	125

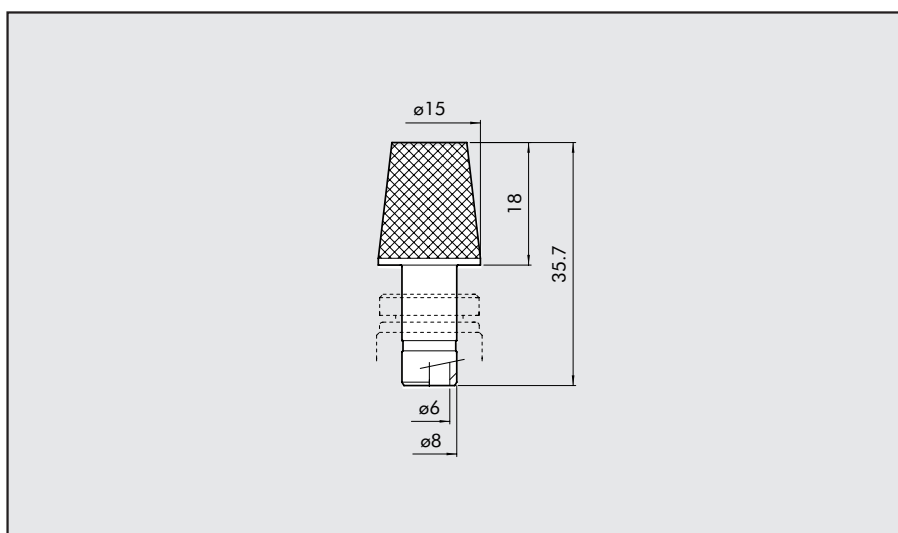
CONNECTION BRACKETS ON DIN BAR



Code	Description	Weight [g]
0227301600	CONNECTION BRACKETS ON DIN BAR HDM/CM	30

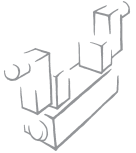
Supplied complete with one M4x45 screws and one M6 grub screw Individually packed

SILENCER FOR FITTING, Ø 8

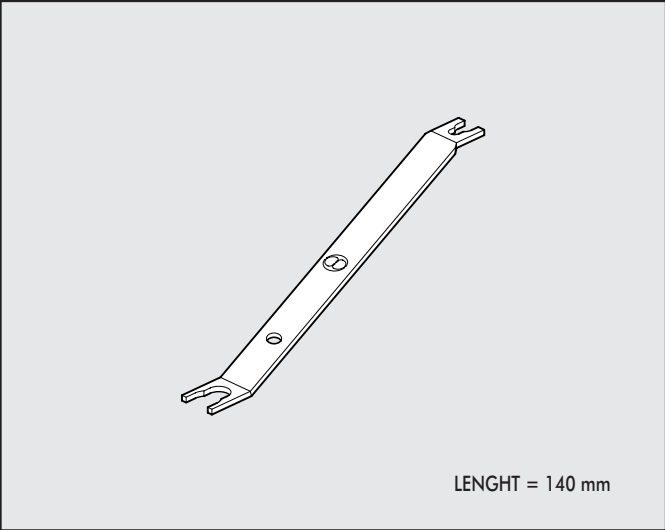


Code	Description	Weight [g]
W0970530084	SILENCER FOR FITTING, Ø 8	15

At the 3/5-exhaust port of the intermediate through reference 6 and of the exhaust switch reference 20

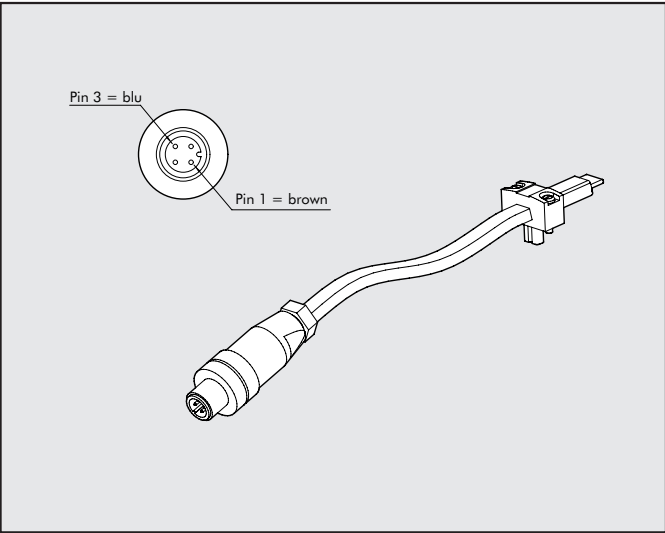


R17 - PIPE RELEASE SPANNER



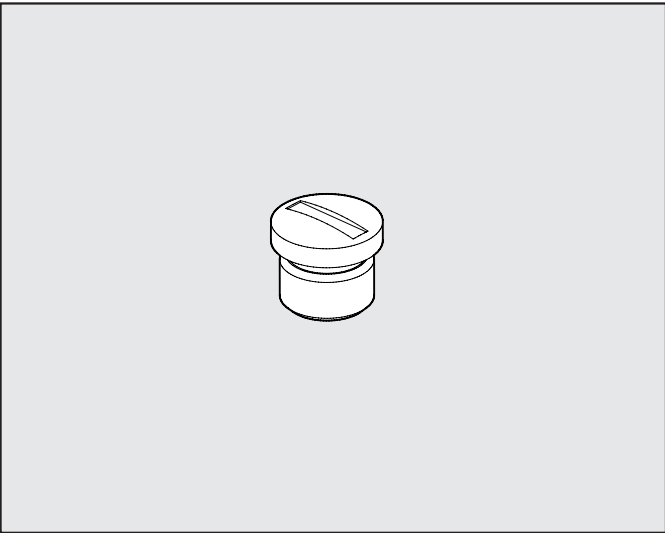
Code	Description	Ø Tube	Notes
2L17001	RL17	from Ø 3 to Ø 10	For R fitting and Fox fitting

AS-INTERFACE ADDRESS CONNECTOR KIT



Code	Description
0226950150	AS-INTERFACE ADDRESS CONNECTOR CABLE L=1 MT

M8 - M12 PLUG



Code	Description
0240009039	PLUG M8
0240009040	PLUG M12

A technical line drawing of a bolt and a nut. The bolt is shown horizontally, with a hexagonal head on the left and a pointed tip on the right. The nut is shown above the bolt, oriented vertically with its hexagonal face at the top and a pointed tip at the bottom. Both components have a threaded section.

Comes in 1+1 pc. packs

[illegible]