

Technical details

Temperature range	-10°C ... +50°C
Medium	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Differing the pressure dew point must be at least 10°C below lowest occurring ambient temperature.
Materials	Body: Al (anodized), plastic, seals: NBR
Protection	IP 65 according to EN 60529



Manifold system with integrated electrical connection including LED indicators. Each station can accommodate two 3/2-way valves or one 5/2- or 5/3-way valve. All connections are accessible from the front.

The valves and the multi-pin plug with cable must be ordered separately.

The valve terminal is delivered pre-assembled and function-tested. If not specified with the order, valve configuration is as follows: Valves are mounted according to their order number, starting with high numbers at the side of the multi-pin, ending with low numbers on the opposite side, followed by blind plates (if ordered).

Order code

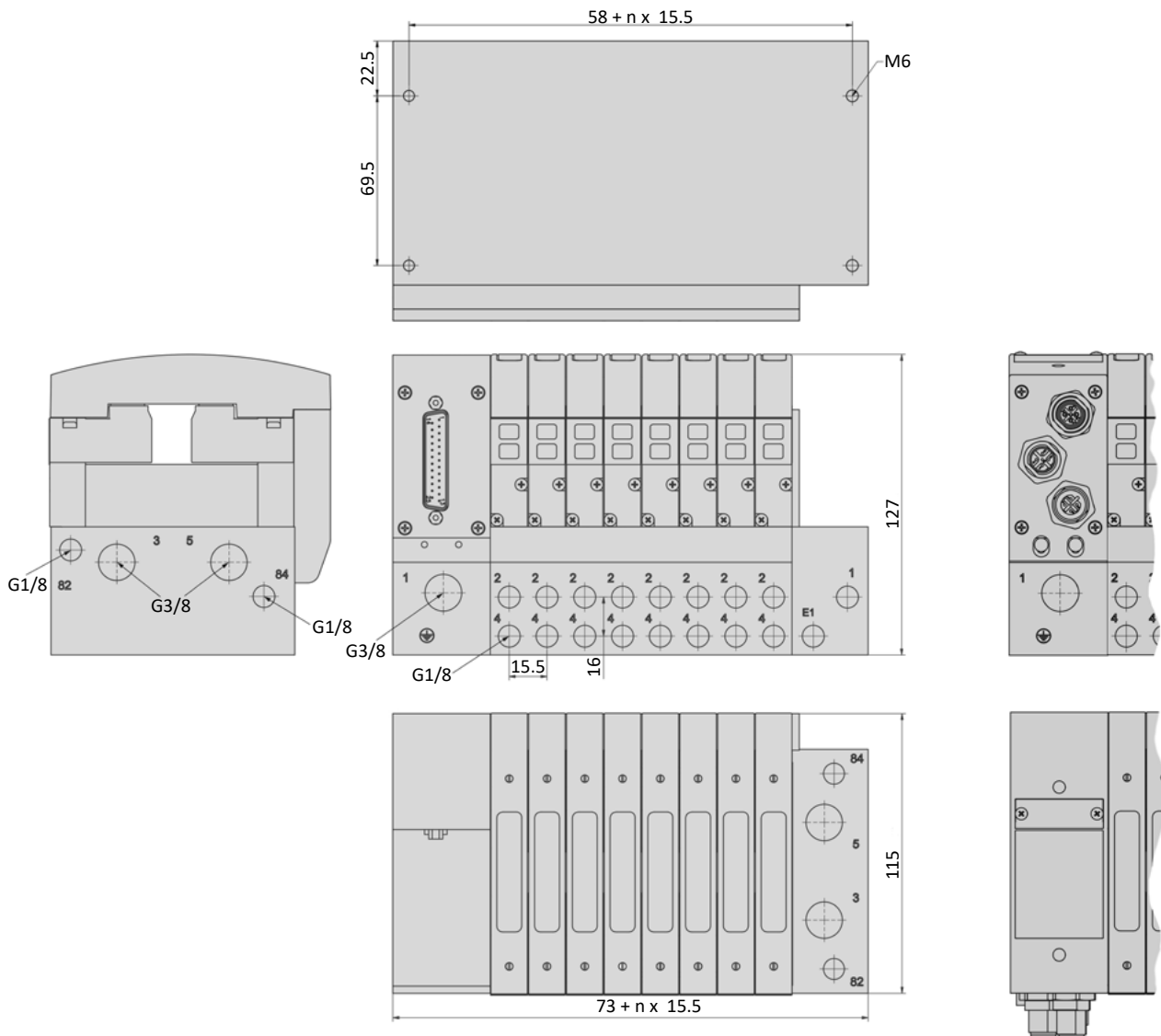
RE-46/**-**-****	
Series	Pneumatical connections
Number of stations	00 G1/8 at 2 and 4 G3/8 at 1
04 4 stations	60 tube connection Ø 6 at 2 and 4 tube connection Ø 10 at 1
06 6 stations	61 tube connection Ø 6 at 2 and 4 tube connection Ø 8 at 1
08 8 stations	62 tube connection Ø 6 at 2 and 4 tube connection Ø 12 at 1
10 10 stations	80 tube connection Ø 8 at 2 and 4 tube connection Ø 10 at 1
12 12 stations	81 tube connection Ø 8 at 2 and 4 tube connection Ø 8 at 1
14 14 stations	82 tube connection Ø 8 at 2 and 4 tube connection Ø 12 at 1
16 16 stations	
18 18 stations	Pilot air
20 20 stations	0 internal (standard)
22* 22 stations	E external
24* 24 stations	
* only for terminals with Bus connection	Electrical options
Position of the pneumatic connection	M-1 Multi-pin
blank at the side	B1-1 Profibus-DP
G* at the bottom	B6-1 CANopen
* only for 8, 12, 16 and 24 stations	B7-1 Profinet-RT
	B8-1* EtherCAT
	* on request



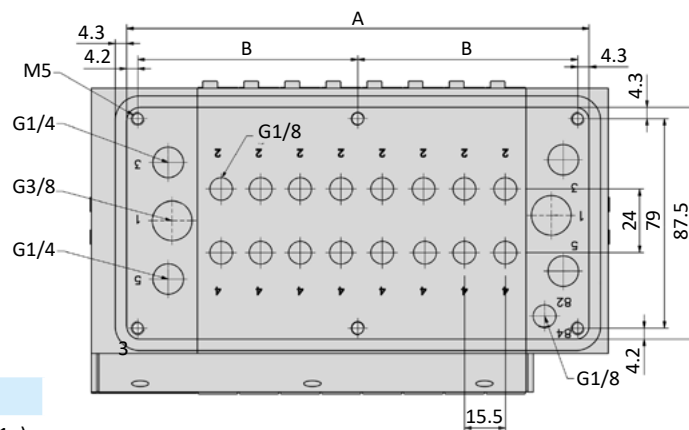
More detailed information about the installation you find in the manual at www.airtec.de.

Dimensions

Multi-pin, Bus connection



Version RE-46-G



Model-No.:	A	B
RE-46/08-G	174,5	83 (1x)
RE-46/12-G	236,5	76 (2x)
RE-46/16-G	298,5	72,5 (3x)
RE-46/24-G	422,5	82,8 (4x)

- 1 = pressure inlet
- 2,4 = outlets
- 3,5 = exhausts
- 82,84 = solenoid exhausts
- n = number of stations

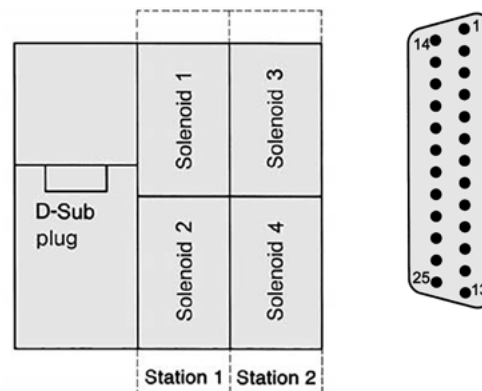
Electrical options

Multi-pin, 2 up to 12 stations

The 25-pin multi plug (see page 06) has to be ordered separately.

Pin	Function	Wire colour
1	GND	white
2	solenoid 1	brown
3	solenoid 3	green
4	solenoid 5	yellow
5	solenoid 7	grey
6	solenoid 9	pink
7	solenoid 11	blue
8	solenoid 13	red
9	solenoid 15	black
10	solenoid 17	violet
11	solenoid 19	grey/ pink
12	solenoid 21	red/ blue
13	solenoid 23	white/ green

Pin	Function	Wire colour
14	solenoid 2	brown/ green
15	solenoid 4	white/ yellow
16	solenoid 6	yellow/ brown
17	solenoid 8	white/ grey
18	solenoid 10	grey/ brown
19	solenoid 12	white/ pink
20	solenoid 14	pink/ brown
21	solenoid 16	white/ blue
22	solenoid 18	brown/ blue
23	solenoid 20	white/ red
24	solenoid 22	brown/ red
25	solenoid 24	white/ black

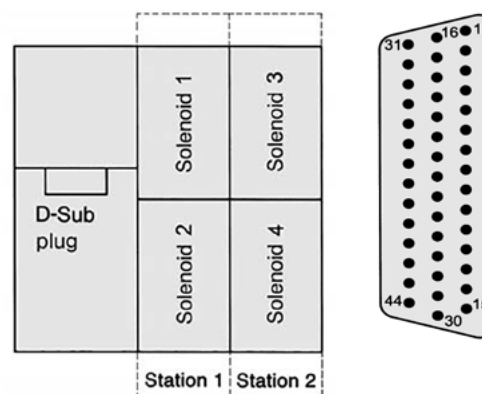


Multi-pin, 14 up to 20 stations

The 44-pin multi plug (see page 7-19) has to be ordered separately.

Pin	Function	Wire colour
1	GND	white
2	solenoid 3	brown
3	solenoid 6	green
4	solenoid 9	yellow
5	solenoid 12	grey
6	solenoid 15	pink
7	solenoid 18	blue
8	solenoid 21	red
9	solenoid 24	black
10	solenoid 27	violet
11	solenoid 30	grey/ pink
12	solenoid 33	red/ blue
13	solenoid 36	white/ green
14	solenoid 39	brown/ green
15	-	white/ yellow
16	GND	yellow/ brown
17	solenoid 2	white/ grey
18	solenoid 5	grey/ brown
19	solenoid 8	white/ pink
20	solenoid 11	pink/ brown
21	solenoid 14	white/ blue
22	solenoid 17	brown/ blue

Pin	Function	Wire colour
23	solenoid 20	white/ red
24	solenoid 23	brown/ red
25	solenoid 26	white/ black
26	solenoid 29	brown/ black
27	solenoid 32	grey/ green
28	solenoid 35	yellow/ grey
29	solenoid 38	pink/ green
30	-	yellow/ pink
31	solenoid 1	green/ blue
32	solenoid 4	yellow/ blue
33	solenoid 7	green/ red
34	solenoid 10	yellow/ red
35	solenoid 13	green/ black
36	solenoid 16	yellow/ black
37	solenoid 19	grey/ blue
38	solenoid 22	pink/ blue
39	solenoid 25	grey/ red
40	solenoid 28	pink/ red
41	solenoid 31	grey/ black
42	solenoid 34	pink/ black
43	solenoid 37	blue/ black
44	solenoid 40	red/ black



Electrical options

Profibus-DP

Bus connector	Bus In: plug M12, 5-pin, B-code
	Bus Out: socket M12, 5-pin, B-code
Power connector	plug M12, 5-pin, A-code
Baud rate	9.6 Kbit/s ... 12 Mbit/s, automatic adjustment
Voltage	24 V DC $\pm$ 10%
Power consumption	2.9 W
Address selection	by 2 decimal coded rotary switches
Bus terminal resistance	external over Bus Out socket



CANopen

Bus connector	Bus In: plug M12, 5-pin, A-code
	Bus Out: socket M12, 5-pin, A-code
Power connector	plug M12, 5-pin, A-code
Baud rate	10 Kbit/s ... 1 Mbit/s
Voltage	24 V DC $\pm$ 10%
Power consumption	2.9 W
Address selection	by 2 decimal coded rotary switches
Bus terminal resistance	external over Bus Out socket



Profinet-RT

Bus connector	Bus In: socket M12, 4-pin, D-code
	Bus Out: socket M12, 4-pin, D-code
Power connector	plug M12, 5-pin, A-code
Baud rate	100 Mbit/s, full duplex
Voltage	24 V DC $\pm$ 10%
Power consumption	3.6 W
Address selection	by controller remote



EtherCAT

Bus connector	Bus In: socket M12, 4-pin, D-code
	Bus Out: socket M12, 4-pin, D-code
Power connector	plug M12, 5-pin, A-code
Baud rate	100 Mbit/s, full duplex
Voltage	24 V DC $\pm$ 10%
Power consumption	3.5 W



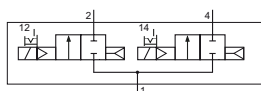
Technical details

Outlets	according to the pneumatical connections of the terminal
Temperature range	-10°C ... +50°C
Medium	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Differing the pressure dew point must be at least 10°C below lowest occurring ambient temperature.
Materials	Body: Al (anodized), plastic, seals: NBR, inner parts: Al, stainless steel and brass
Nominal voltage	24 V DC, ± 10%
Power consumption	1.3 W
Protection	IP 65 according to EN 60529



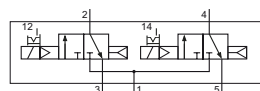
Electrically operated spool valve. The manual override is non-detent. The manual override is located on top of the valve cover.

2/2-way valve

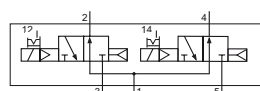


KF-46-210/2-HN-S12
2 x 2/2-way, single solenoid, air spring return, NC

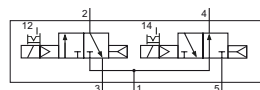
2 x 3/2-way valves



KF-46-310/2-HN-S12
2 x 3/2-way, single solenoid, air spring return, NC

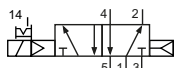


KF-46-312/2-HN-S12
2 x 3/2-way, single solenoid, air spring return, NO

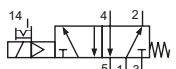


KF-46-314/2-HN-S12
2 x 3/2-way, single solenoid, air spring return, 1 x NC, 1 x NO

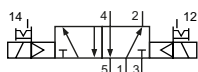
5/2-way valves



KF-46-510-HN-S12
5/2-way, single solenoid, air spring return

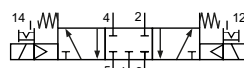


KF-46-511-HN-S12
5/2-way, single solenoid, mechanical spring return

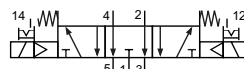


KF-46-520-HN-S12
5/2-way, double solenoid

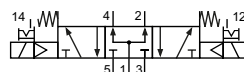
5/3-way valves



KF-46-530-HN-S12
5/3-way, center position closed



KF-46-533-HN-S12
5/3-way, center position exhausted



KF-46-534-HN-S12
5/3-way, center position pressurized

Technical data

Model-no.:	KF-46-210/2-HN-S12	KF-46-310/2-HN-S12	KF-46-312/2-HN-S12	KF-46-314/2-HN-S12
Operating pressure (bar)	2.5...8	2.5...8	2.5...8	2.5...8
Pilot pressure (bar) *	2.5...8	2.5...8	2.5...8	2.5...8
Nominal size (mm)	4.5	4.5	4.5	4.5
Flow rate (NI/min)	430	430	630	430 / 630 (NC / NO)
Response time (ms) at 6 bar	on: 15 off: 28	on: 15 off: 28	on: 15 off: 28	on: 15 off: 28
Weight (kg)	0.188	0.188	0.188	0.188

* Valves are not suitable for external pilot supply.

Series RE-46



Technical data

Model-no.:	KF-46-510-HN-S12	KF-46-511-HN-S12	KF-46-520-HN-S12
Internal pilot pressure			
Operating pressure (bar)	2.5...8	2.5...8	2.5...8
Pilot pressure (bar)	2.5...8	2.5...8	2.5...8
External pilot pressure			
Operating pressure (bar)	- *	0...10	0...10
Pilot pressure (bar)	- *	3...8	3...8
Nominal size (mm)	6	6	6
Flow rate (l/min)	950	810	950
Response time (ms) at 6 bar	on: 15 off: 31	on: 14 off: 33	on: 20 off: 20
Weight (kg)	0.158	0.158	0.188

* Valves are not suitable for external pilot supply.

Model-no.:	KF-46-530-HN-S12	KF-46-533-HN-S12	KF-46-534-HN-S12
Internal pilot pressure			
Operating pressure (bar)	3...8	3...8	3...8
Pilot pressure (bar)	3...8	3...8	3...8
External pilot pressure			
Operating pressure (bar)	0...10	0...10	0...10
Pilot pressure (bar)	3...8	3...8	3...8
Nominal size (mm)	6	6	6
Flow rate (l/min)	680	680	680
Response time (ms) at 6 bar	on: 20 off: 30	on: 20 off: 30	on: 20 off: 30
Weight (kg)	0.188	0.188	0.188

Accessories

Model-no.:	RE-19-DT	Model-no.:	28-ST-46-M1-yy-xxx
	Pressure dividing plug		25- or 44-pin multi plug, straight
Model-no.:	RE-46-RSV		yy = 25 25-pin yy = 44 44-pin xxx = 105 5 m cable xxx = 110 10 m cable
	Check valve	Model-no.:	28-ST-146-M1-yy-xxx
Model-no.:	RE-46-B-01		25- or 44-pin multi plug, 90°
	Mounting bracket (pair)		yy = 25 25-pin yy = 44 44-pin xxx = 105 5 m cable xxx = 110 10 m cable
Model-no.:	RE-x6-V-EP	Model-no.:	28-ST-RE-46-xx-yy
	x = 1 Blind plate, set x = 4 Blind plate for valve and coil station		Connector kit
			xx = 01 in- and output xx = 02 with termination resistance yy = B1 Profibus yy = B6 CANopen