

Very compact design

High flow rate

Low power consumption

High cycling rate – 2000 c.p.m. maximum

Long life – in excess of 100 million cycles ¹⁾

1) Except Hit & Hold valves: 10 million cycles



Technical data

Medium:

Compressed air, filtered to 40 µm, lubricated or non-lubricated;
 neutral fluids or gases (other mediums contact Technical Service)

Operation:

Microsol: Poppet valve, directly actuated with spring return

Microsol interface: Solenoid pilot operated poppet valve,
 servo assisted

Operating pressure:

0 to 10 bar (see page 2 for details)

Mounting:

Through holes, M3 threaded

Flow characteristics:

Flow	Orifice	kv
2 ... 194 l/min	0,12 ... 3,00	0,5 ... 3,6

Fluid response time:

15ms

Ambient temperature:

-10°C to +50°C

Fluid temperature:

-10°C to +30°C

(consult our Technical Service for use below +2°C)

Weight:

Direct acting: 0,03 kg

Pilot acting: 0,06 kg

Materials

(in contact with medium)

Direct acting

Body: for 2/2 valves PPS, for 3/2 valves PPS, PA, AISI 302

Solenoid: AISI 430FR, PAA, AISI 302

Elastomers: NBR

Pilot operated

Body: PPS, PA, POM

Solenoid: AISI 303 and 430FR, PAA

Elastomers: NBR, PUR

Alternative options on request

Function, Pressure range

Vacuum, Coil orientation

Material, Manual override

Voltage, Electrical connector

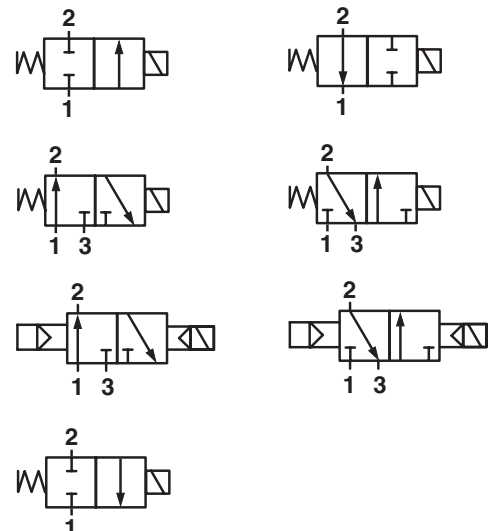
Power, High speed valve

IP65 or IP67 protection

Operation with other medium

Sub-base options

refer to data sheet N/UK 5.4.118.00



Standard models

2/2 direct acting valves

Symbol	Function	Orifice (mm)	Flow l/min	kv	Operating pressure (bar)	Manual override	Hit & hold	Model Ordering number	Voltage	Power (W)	Drawing no.
	2/2 NC	1,1	48	0,75	0 ... 10	None	No	01-211P202-H0+63111+AYZ	24 V d.c.	2	1
	2/2 NO	1,1	48	0,75	0 ... 10	None	No	01-221P202-H0+631A1+AYZ	24 V d.c.	2	2

Note: Electrical connection: for AMP connector. IP51 protection

3/2 direct acting valves

Symbol	Function	Orifice (mm)	Flow l/min	kv	Operating pressure (bar)	Manual override	Hit & hold	Model Ordering number	Voltage	Power (W)	Drawing no.
	3/2 NC	1,1	27	0,42	0 ... 10	Push only	No	01-311P1011H0+61111+AYZ	24 V d.c.	2	4
	3/2 NO	1,1	27	0,42	0 ... 6	None	No	01-321P1011H0+631A1+AYZ	24 V d.c.	2	4

Note: Electrical connection: for AMP connector. IP51 protection

High Flow models

2/2 direct acting valves

Symbol	Function	Orifice (mm)	Flow l/min	kv	Operating pressure (bar)	Manual override	Hit & hold	Model Ordering number	Voltage	Power (W)	Drawing no.
	2/2 NC	3,6	194	3,0	0 ... 6	None	Yes	01-211P-036H0+63111+AZN	24 V d.c.	12 / 0,5	3

Note: Electrical connection: for AMP connector. IP51 protection

3/2 interface valves

Symbol	Function	Orifice (mm)	Flow l/min	kv	Operating pressure (bar)	Manual override	Hit & hold	Model Ordering number	Voltage	Power (W)	Drawing no.
	3/2 NC	3,0	194	3,00	1,5 ... 10	Push only	No	01-312E-06-HP+A1171+AYV	24 V d.c.	1	6
	3/2 NO	3,0	194	3,00	1,5 ... 10	None	No	01-322E-06-HP+C31G1+AYZ	24 V d.c.	2	6

Note: Electrical connection: for AMP connector. IP51 protection

Intrinsincally Safe (IS) models

3/2 direct acting valves

Symbol	Function	Orifice (mm)	Flow l/min	kv	Operating pressure (bar)	Manual override	Hit & hold	Model Ordering number	Voltage	Power (W)	Drawing no.
	3/2 NC	0,5	8	0,12	0 ... 7	Push only	No	01-311P-00-H0+F01003+BCC	12 V a.c./d.c.	0,55	5
	3/2 NC	0,5	8	0,12	0 ... 7	Push only	No	01-311P-00-H0+F01003+BDH	24 V a.c./d.c.	0,7	5
	3/2 NC	0,5	8	0,12	4 ... 7	Push only	No	01-311P-00-H0+H01014+AWD	12 V d.c.	0,1	5
	3/2 NC	0,5	8	0,12	4 ... 7	Push only	No	01-311P-00-H0+H01016+AYG	24 V d.c.	0,1	5

Note: Electrical connection: for AMP connector. IP65 protection

Labeling: EEx ia IIC T6

Standard conformtiy: INERIS 00ATEX0031 X

Other options as used on M54 range

3/2 direct acting valves

Symbol	Function	Orifice (mm)	Flow l/min	kv	Operating pressure (bar)	Manual override	Hit & hold	Model Ordering number	Voltage	Power (W)	Drawing no.
	3/2 NC	0,8	18	0,28	0 ... 10	Push only	No	01-311P101-H0+61511i+AWM	12 V d.c.	1,5	4
	3/2 NC	0,8	18	0,28	0 ... 10	Push only	No	01-311P101-H0+61511i+AYS	24 V d.c.	1,5	4
	3/2 NC	0,8	18	0,28	0 ... 10	Push only	No	01-311P101-H0+11511i+AXX	24 V a.c.	1	4
	3/2 NC	0,8	18	0,28	0 ... 10	Push only	No	01-311P101-H0+11511i+BAU	48 V a.c.	1	4
	3/2 NC	0,8	18	0,28	0 ... 10	Push only	No	01-311P101-H0+11511i+BBJ	110 V a.c.	1	4
	3/2 NC	0,8	18	0,28	0 ... 10	Push only	No	01-311P101-H0+11511i+BCK	220 V a.c.	1	4

for AMP connector with ground pin IP 65 solenoid valves

Electrical details

Voltage tolerance:	-10%/+15%
Rating:	100% E.D.
Electrical insulation:	1500 V a.c.
Insulation class:	F155°C

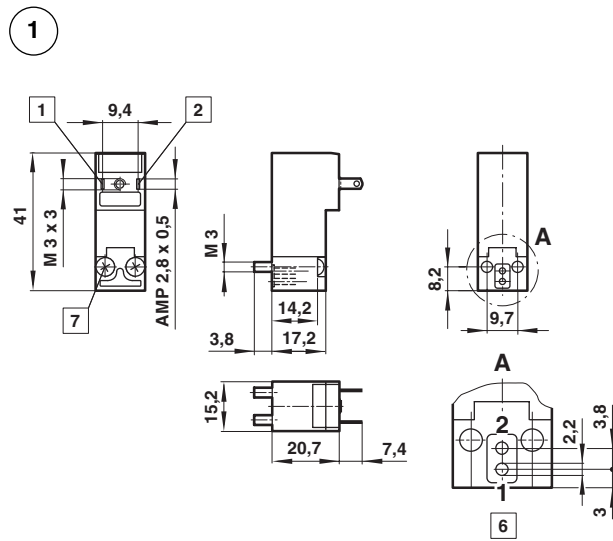
Accessories

Electrical connection

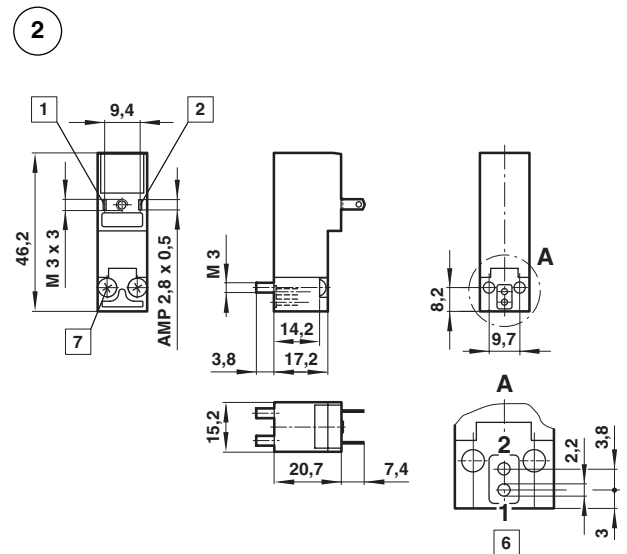


Single connector	M/P43082
Single connector LED+VDR 24v	M/P43086
Single connector LED+VDR 110v	M/P43148
Single connector LED+VDR 220v	M/P43087
1 m flying lead	M/P43066

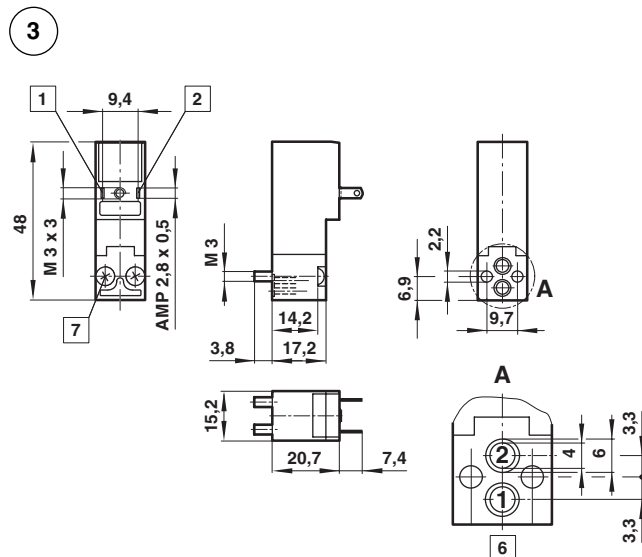
2/2 NC models with 1,1 mm orifice for Amp connection



2/2 NO models with 1,1 mm orifice for Amp connection (flow: port 2 to port 1)



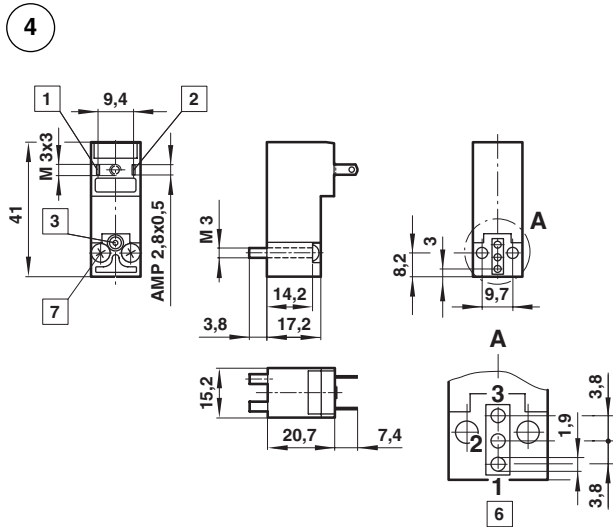
High flow
2/2 NC models with 3,6 mm orifice for Amp connection (flow: port 2 to port 1)



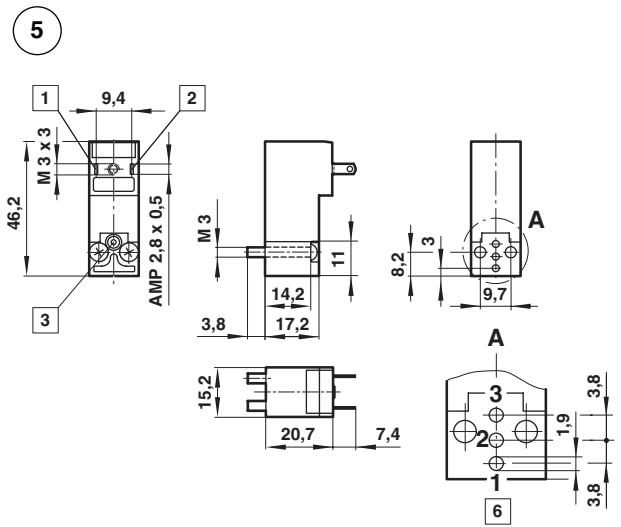
- 1 Wire (red) / Pin +
- 2 Wire (black) / Pin -
- 3 Manual override
- 6 Mounting pattern
- 7 The recommended mounting screw tightening torque is 0.6 nm
All solenoids are supplied with mounting screws and gasket

Warning for Hit & Hold valves: damage could be caused to the valve if wired incorrectly.

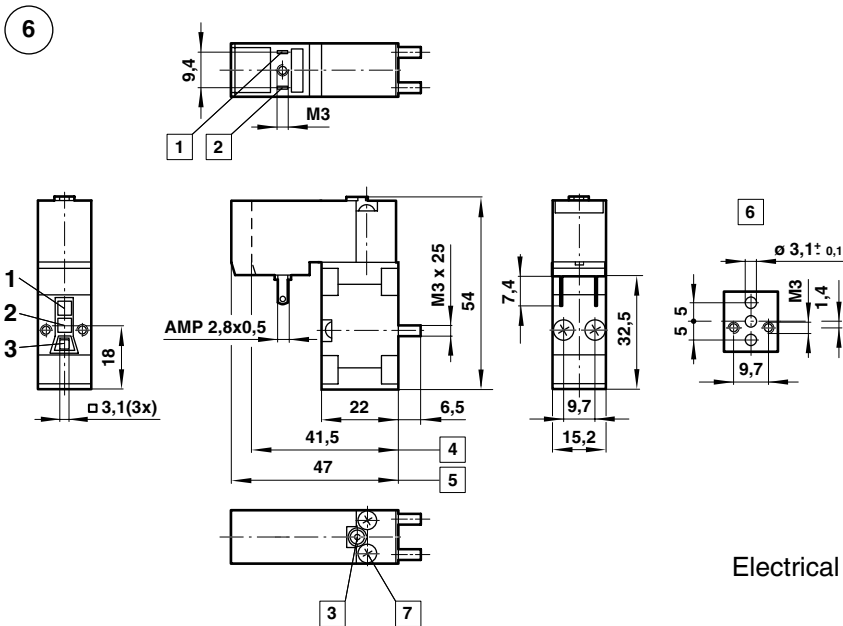
Standard
all 3/2 models for AMP connection



Intrinsically safe for AMP connection



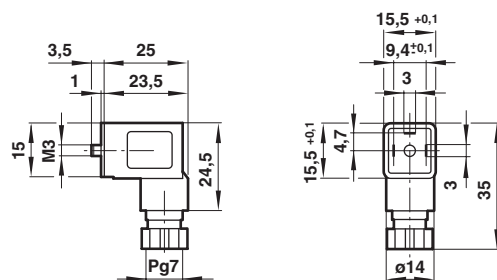
High flow
3/2 interface valve for AMP connector



- 1 Wire (red) / Pin +
- 2 Wire (black) / Pin -
- 3 Manual override
- 4 For NC models
- 5 For NO models
- 6 Mounting pattern
- 7 The recommended mounting screw tightening torque is 0.6 nm
All solenoids are supplied with mounting screws and gasket

Warning for Hit & Hold valves: damage could be caused to the valve if wired incorrectly.

Electrical connection



Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under 'Technical Data'.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult FAS.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.