Series BM-01, 3/2-way and 2 x 3/2-way G1/8 • 550 to 660 NI/min (0.559 to 0.671 Cv)



Order code BM-01-310-HNR-462

Series and function

BM = Standard

HNT = non-detented manual override

HNR = detented manual override

| Coil options | | | | |
|---------------------|-----------------------|----------------------|------------------------|--|
| Standard voltage | Plug socket upward | Plug socket downward | M12 connections upward | |
| 12 V DC, 1 W | 461 | 431 | | |
| 24 V DC, 1 W | 462 | 432 | N62 | |
| 24 V AC, 3 VA | 452 | 422 | War will | |
| 115 V AC, 3 VA | 456 | 426 | | |
| 230 V AC, 3 VA | 457 | 427 | | |

The requested plug socket must be purchased seperately. Plug sockets see page 4.283.

Design, function and technical data

Spool valve actuated by an electrical signal. Please specify required control voltage when ordering.

3/2-way valve



| Order number | BM-01-310-HN | BM-01-312-HN | | | |
|--|--|-----------------------|--|--|--|
| Please complete according to order code. | 12 2 | 10 2 | | | |
| Function | 1 3 | 1 3 | | | |
| | 3/2-way NC | 3/2-way NO | | | |
| Connection | G1/8 | | | | |
| Nominal size | 5 mm | | | | |
| Flow rate | 660 NI/min (0.671 Cv) | 600 NI/min (0.610 Cv) | | | |
| Pressure range | 2 8 bar (29 116 psi) | | | | |
| Control pressure | Control pressure is identical to main pressure range | | | | |
| Response time at 6 bar | on 19 ms off 32 ms | on 16 ms off 30 ms | | | |
| Temperature range | e range - 5 °C + 50 °C (+ 23 °F + 122 °F) | | | | |
| Materials | Body: AI (anodized) and PA, Seals: NBR and PU, Inner parts: AI, brass and POM | | | | |
| Medium | Compressed air in accordance with ISO 8573-1:2010, Class 7:2:4 - and free of aggressive additives. | | | | |
| Degree of protection | IP 65 according to EN 60529 | | | | |
| Weight | 0.108 kg (0.238 lb.) | 0.110 kg (0.242 lb.) | | | |

2 x 3/2-way valves



| Order number | BM-01-310/2-HN | BM-01-312/2-HN | BM-01-314/2-HN | | |
|--|--|-----------------------|-----------------------|--|--|
| Please complete according to order code. Function | 14 12 12 17 17 17 17 17 17 17 17 17 17 17 17 17 | 14 12 2 | 5 1 3 | | |
| | 2 x 3/2-way NC | 2 x 3/2-way NO | 2 x 3/2-way NO/NC | | |
| Connection | G1/8 | | | | |
| Nominal size | 5 mm | | | | |
| Flow rate | 650 NI/min (0.661 Cv) | 550 NI/min (0.559 Cv) | 580 NI/min (0.589 Cv) | | |
| Pressure range | 2 8 bar (29 116 psi) | | | | |
| Control pressure | Control pressure is identical to main p | pressure range | | | |
| Response time at 6 bar | on 18 ms off 34 ms off 32 ms | | | | |
| Temperature range | - 5 °C + 50 °C (+ 23 °F + 122 °F) | | | | |
| Materials | Body: AI (anodized) and PA, Seals: NBR and PU, Inner parts: AI, brass and POM | | | | |
| Medium | Compressed air in accordance with ISO 8573-1:2010, Class 7:2:4 – and free of aggressive additives. | | | | |
| Degree of protection | IP 65 according to EN 60529 | | | | |
| Weight | 0,154 kg (0.339 lb.) | | | | |

Series BM-01 (BME-01), 5/2-way and 5/3-way G1/8 • 670 to 1030 NI/min (0.681 to 1.047 CV)



Order code

BM-01-510-HNR-462

Series and function

BM = Standard

BME = Valves with external pilot supply

Manual override

HNT = non-detented manual override

HNR = detented manual override

| Coil options | | | | |
|------------------|-----------------------|----------------------|------------------------|--|
| Standard voltage | Plug socket upward | Plug socket downward | M12 connections upward | |
| 12 V DC, 1 W | 461 | 431 | | |
| 24 V DC, 1 W | 462 | 432 | N62 | |
| 24 V AC, 3 VA | 452 | 422 | War will | |
| 115 V AC, 3 VA | 456 | 426 | | |
| 230 V AC, 3 VA | 457 | 427 | | |

The requested plug socket must be purchased seperately. Plug sockets see page 4.283.

Design, function and technical data

Spool valve actuated by an electrical signal. Please specify required control voltage when ordering.

5/2-way valve



| Order number | BM-01-510-HN | BM-01-511-HN | BM-01-520-HN | BME-01-511-HN | BME-01-520-HN | |
|--|---|----------------------------------|-----------------------|--------------------------------------|--------------------------------------|--|
| Please complete according to order code. | 14 4 2 | 14 4 2 T 5 1 3 | 14 4 2 12 | 14 4 2 1 14 5 1 1 3 | 14 4 2 12 14 5 1 3 12 | |
| Function | 5/2-way | 5/2-way | 5/2-way | 5/2-way | 5/2-way | |
| | single solenoid air spring return | single solenoid spring return | double solenoid | single solenoid ext. pilot supply | double solenoid ext. pilot supply | |
| Connection | G1/8 | | | | | |
| Nominal size | 5 mm | | | | | |
| Flow rate | 780 NI/min (0.793 Cv) | 800 NI/min (0.813 Cv) | 790 NI/min (0.803 Cv) | 800 NI/min (0.813 Cv) | 790 NI/min (0.803 Cv) | |
| Pressure range | 2 8 bar (29 116 psi) 3 8 bar (43.5 116 psi) 2 8 bar (29 116 psi) - 0,95 8 bar (- 14 + 116 psi) | | | + 116 psi) | | |
| Control pressure | Control pressure is ide | ntical to main pressure | range | 3 8 bar (43.5 116 psi) | 2 8 bar (29 116 psi) | |
| Response time at 6 bar | on 17 ms off 32 ms | on 15 ms off 35 ms | 13 ms | on 15 ms off 35 ms | 13 ms | |
| Temperature range | emperature range - 5 °C + 50 °C (+ 23 °F + 122 °F) | | | | | |
| Materials | Body: AI (anodized) and PA, Seals: NBR and PU, Inner parts: AI, brass and POM | | | | | |
| Medium | Compressed air in accordance with ISO 8573-1: 2010, Class 7:2:4 - and free of aggressive additives. | | | | | |
| Degree of protection | IP 65 according to EN | IP 65 according to EN 60529 | | | | |
| Weight | 0.118 kg (0.260 lb.) | 0.120 kg (0.264 lb.) | 0.156 kg (0.344 lb.) | 0.126 kg (0.278 lb.) | 0.168 kg (0.370 lb.) | |

5/3-way valve



| Order number | BM-01-530-HN | BM-01-533-HN | BM-01-534-HN | BME-01-530-HN | BME-01-533-HN | BME-01-534-HN |
|--|--|-----------------------------|----------------------------|--------------------------------|--------------------------------------|----------------------------------|
| Please complete according to order code. | 14 2 12 12 12 13 15 13 15 13 15 15 15 | 14 W 4 2 W 12 S 1 3 S 1 3 S | 14 W 12 12 12 5 1 1 3 1 12 | 14 W 12 12 12 14 15 11 3 12 12 | 14 W 4 2 W 12 12 14 14 15 11 3 12 12 | 14 W 12 W 12 14 5 1 3 1 12 1 |
| Function | 5/3-way | 5/3-way | 5/3-way | 5/3-way | 5/3-way | 5/3-way |
| | center position closed | center position exhausted | center position | center position closed | center position exhausted | center position |
| | Closed | exhausteu | pressurized | ext. pilot supply | ext. pilot supply | pressurized ext. pilot supply |
| Connection | G1/8 | | | | | |
| Nominal size | 5 mm | | | | | |
| Flow rate | 690 NI/min (0.701 Cv) | 670 NI/min (0.681 Cv) | 1030 NI/min (1.047 Cv) | 690 NI/min (0.701 Cv) | 670 NI/min (0.681 Cv) | 1030 NI/min (1.047 Cv) |
| Pressure range | 3 8 bar (43.5 | 116 psi) | | - 0,95 8 bar (- 1 | 14 + 116 psi) | |
| Control pressure | Control pressure is | identical to main p | ressure range | 3 8 bar (43.5 | 116 psi) | |
| Response time at 6 bar | 17 ms | on 16 ms off 43 ms | on 17 ms off 49 ms | 17 ms | on 16 ms off 43 ms | on 17 ms off 49 ms |
| Temperature range | ge - 5 °C + 50 °C (+ 23 °F + 122 °F) | | | | | |
| Materials | Body: AI (anodized) and PA, Seals: NBR and PU, Inner parts: AI, brass and POM | | | | | |
| Medium | Compressed air in accordance with ISO 8573-1:2010, Class 7:2:4 – and free of aggressive additives. | | | | | |
| Degree of protection | IP 65 according to | EN 60529 | · | · | · | |
| Weight | 0.154 kg (0.339 lb.) | | | 0.166 kg (0.366 lb.) | | |

Series BM-01, 3/2-, 2 x 3/2-, 5/2- and 5/3-way G1/8 • 550 to 1030 NI/min (0.559 to 1.047 Cv)



BM-01-310-HN, BM-01-312-HN

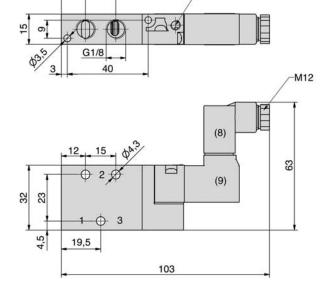
Note:

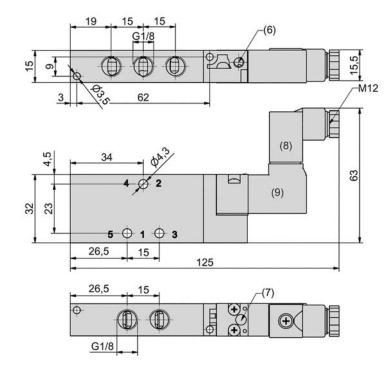
(6)

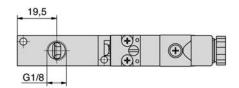
Plug socket(s) not included in scope of delivery.



BM-01-510-HN, BM-01-511-HN







= pressure inlet

2, 4 = outlets

3, 5 = exhausts

(6) = Pilot air exhaust, M5

(7) = Manual override,

detented or non-detented

plug socket can be repositioned by 180°

= Solenoid, pins for plug socket connection upward or downward

BM-01-310/2-HN, BM-01-312/2-HN, BM-01-314/2-HN, BM-01-520-HN, BM-01-530-HN, BM-01-533-HN, BM-01-534-HN



Note:

Plug socket(s) not included in scope of delivery.

= pressure inlet

2, 4 = outlets

3, 5 = exhausts

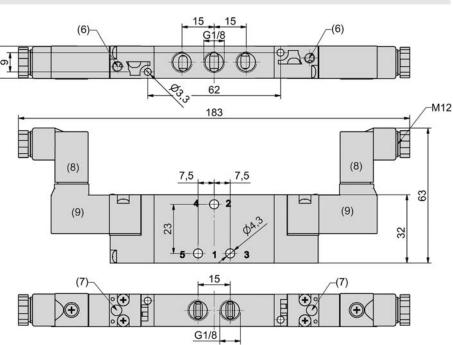
(6) = Pilot air exhaust, M5

= Manual override,

detented or non-detented

= plug socket can be repositioned by 180° (8)

= Solenoid, pins for plug socket connection upward or downward



Series BM-01 (BME-01), 5/2- and 5/3-way with ext. pilot supply G1/8 • 670 to 1030 NI/min (0.681 to 1.047 CV)



BME-01-511-HN



Note:

Plug socket(s) not included in scope of delivery.

1 = pressure inlet

2, 4 = outlets

3, 5 = exhausts

(5) = ext. pilot supply, M5

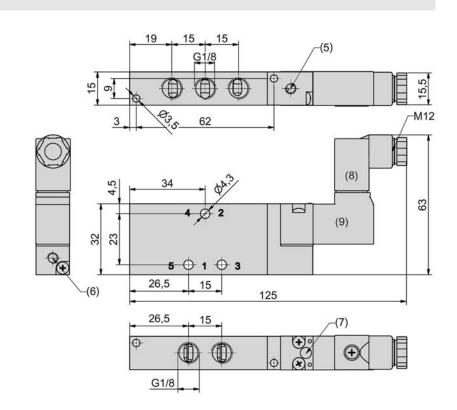
(6) = Pilot air exhaust, M5

(7) = Manual override,

detented or non-detented
(8) = plug socket can be repositioned

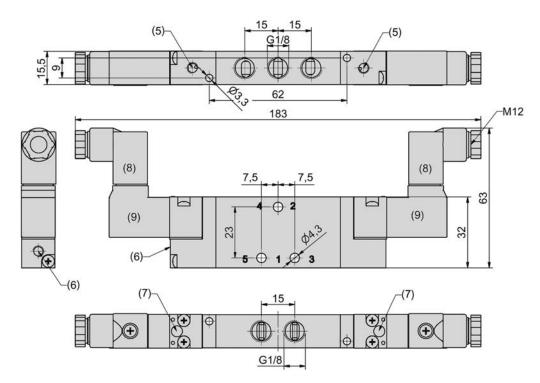
by 180°

(9) = Solenoid, pins for plug socket connection upward or downward



BME-01-520-HN, BME-01-530-HN, BME-01-533-HN, BME-01-534-HN





Note:

Plug socket(s) not included in scope of delivery.

1 = pressure inlet

2, 4 = outlets

3, 5 = exhausts

(5) = ext. pilot supply, M5

(6) = Pilot air exhaust, M5

(7) = Manual override,

detented or non-detented

(8) = plug socket can be repositioned by 180°

(9) = Solenoid, pins for plug socket connection upward or downward

Accessories for electrically operated valves

Series BM-01 and BME-01



Solenoid



Solenoid with pins for plug socket connection on the same side as manual override (upward). **23-M-09-19-...** page 4.281



Solenoid with pins for plug socket connection on the opposite side of the manual override (downward). **23-M-09-19-...** page 4.281

Plug sockets



Standard plug socket **28-ST-02-1** page 4.283



Plug socket with LED **28-ST-09-1-...** page 4.283



Plug socket with LED and circuit protection **28-ST-10-1-...** page 4.283

Manifolds



Manifold will be delivered completely assembled with valves if requested.



Manifold with n/stations. Ports on the side. RF-01-AB/n



Manifold with n/stations. Ports on the side and the top. **RF-01-CD/n**



Manifold with n/stations. Ports on both sides and top. RF-01-AD/n



One station element. **RF-01-Z**



Blind plate for blank valve station. **RF-01-V**



Adapter plate for additional air supply and exhaust. **RF-01-PE**



End plate A with side ports. **RF-01-EA**



End plate B with side ports. RF-01-EB



End plate C with side and top ports. **RF-01-EC**



End plate D with side and top ports. **RF-01-ED**

Additional single elements: RF-01-ZE

RF-01-ZE "Add-on" element to add one valve station.
RF-01-DT Seal plate for two different pressures.
RE-46-RSV Check valve for dynamic exhaust pressures.

User information

Modular manifold system for valve series BM-01. The assembled manifold consists of one station element (RF-01-Z) and end plates with common supply and exhaust ports. The end plates contain ports to the side (RF-01-EA, RF-01-EB) or at the top and the side (RF-01-EC, RF-01-ED).

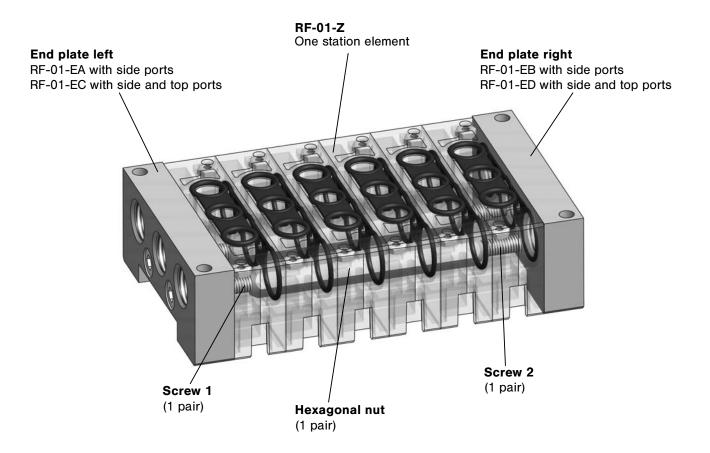
The manifolds are quickly assembled with the 4 screws and a hexagonal nut. Adding or removing stations is possible at any time.

The manifold can be either DIN-rail mounted, screw on by 4 M5 screws or flange mounting via M4 screws.

The necessary seals and screws for valve mounting are included in the scope of delivery.



Manifold design



User information

To add stations to the manifold without changing screws and nut, the set RF-01-ZE is available. This contains a one station element, a screw to extend the hexagonal nut and seals and screws for valve mounting.

| Order number | Hexagonal nut | Screw 1 | Screw 2 |
|--------------|---------------|---------|---------|
| RF-01-AB/02 | 21-R-07-07/05 | M5 x 16 | M5 x 16 |
| RF-01-AB/03 | 21-R-07-07/05 | M5 x 25 | M5 x 25 |
| RF-01-AB/04 | 21-R-07-07/05 | M5 x 30 | M5 x 30 |
| RF-01-AB/05 | 21-R-07-07/2 | M5 x 20 | M5 x 20 |
| RF-01-AB/06 | 21-R-07-07/2 | M5 x 25 | M5 x 25 |
| RF-01-AB/07 | 21-R-07-07/2 | M5 x 35 | M5 x 35 |
| RF-01-AB/08 | 21-R-07-07/2 | M5 x 40 | M5 x 40 |
| RF-01-AB/09 | 21-R-07-07/4 | M5 x 16 | M5 x 16 |
| RF-01-AB/10 | 21-R-07-07/4 | M5 x 25 | M5 x 25 |
| RF-01-AB/11 | 21-R-07-07/4 | M5 x 35 | M5 x 35 |
| RF-01-AB/12 | 21-R-07-07/4 | M5 x 40 | M5 x 40 |

| Order number | Hexagonal nut | Screw 1 | Screw 2 |
|--------------|---------------|---------|---------|
| RF-01-CD/02 | 21-R-07-07/05 | M5 x 30 | M5 x 30 |
| RF-01-CD/03 | 21-R-07-07/05 | M5 x 35 | M5 x 35 |
| RF-01-CD/04 | 21-R-07-07/05 | M5 x 45 | M5 x 45 |
| RF-01-CD/05 | 21-R-07-07/2 | M5 x 30 | M5 x 30 |
| RF-01-CD/06 | 21-R-07-07/2 | M5 x 40 | M5 x 40 |
| RF-01-CD/07 | 21-R-07-07/2 | M5 x 45 | M5 x 45 |
| RF-01-CD/08 | 21-R-07-07/2 | M5 x 55 | M5 x 55 |
| RF-01-CD/09 | 21-R-07-07/4 | M5 x 30 | M5 x 30 |
| RF-01-CD/10 | 21-R-07-07/4 | M5 x 40 | M5 x 40 |
| RF-01-CD/11 | 21-R-07-07/4 | M5 x 45 | M5 x 45 |
| RF-01-CD/12 | 21-R-07-07/4 | M5 x 55 | M5 x 55 |

| Order number | Hexagonal nut | Screw 1 | Screw 2 |
|--------------|---------------|---------|---------|
| RF-01-AD/02 | 21-R-07-07/05 | M5 x 16 | M5 x 30 |
| RF-01-AD/03 | 21-R-07-07/05 | M5 x 25 | M5 x 35 |
| RF-01-AD/04 | 21-R-07-07/05 | M5 x 30 | M5 x 45 |
| RF-01-AD/05 | 21-R-07-07/2 | M5 x 20 | M5 x 30 |
| RF-01-AD/06 | 21-R-07-07/2 | M5 x 25 | M5 x 40 |
| RF-01-AD/07 | 21-R-07-07/2 | M5 x 35 | M5 x 45 |
| RF-01-AD/08 | 21-R-07-07/2 | M5 x 40 | M5 x 55 |
| RF-01-AD/09 | 21-R-07-07/4 | M5 x 16 | M5 x 30 |
| RF-01-AD/10 | 21-R-07-07/4 | M5 x 25 | M5 x 40 |
| RF-01-AD/11 | 21-R-07-07/4 | M5 x 35 | M5 x 45 |
| RF-01-AD/12 | 21-R-07-07/4 | M5 x 40 | M5 x 55 |

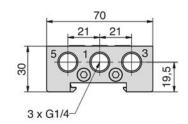
Manifolds for electrically operated valves

Series BM-01



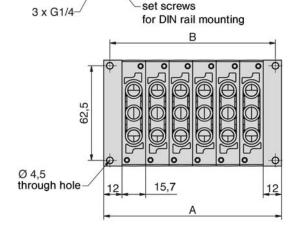
RF-01-AB





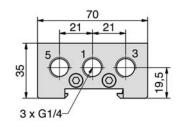
Materials: End plate AI (anodized), 1 station element PA, Seals NBR, Screws steel zinc plated

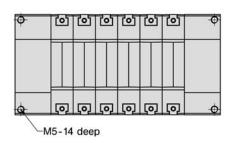
| Order number | Α | В | Weight |
|--------------|--------------------|--------------------|-----------------------|
| RF-01-AB/02 | 55.4 + 0.3 /- 0.2 | 47.2 + 0.2 /- 0.1 | 0.150 kg (0.331 lb.) |
| RF-01-AB/03 | 71.1 + 0.35/- 0.2 | 63.1 + 0.25/- 0.1 | 0.190 kg (0.419 lb.) |
| RF-01-AB/04 | 86.8 + 0.4 /- 0.2 | 78.8 + 0.3 /- 0.1 | 0.230 kg (0.507 lb.) |
| RF-01-AB/05 | 102.5 + 0.45/- 0.2 | 94.5 + 0.35/- 0.1 | 0.270 kg (0.595 lb.) |
| RF-01-AB/06 | 118.2 + 0.5 /- 0.2 | 110.2 + 0.4 /- 0.1 | 0.310 kg (0.683 lb.) |
| RF-01-AB/07 | 133.9 + 0.55/- 0.2 | 125.9 + 0.45/- 0.1 | 0.350 kg (0.772 lb.) |
| RF-01-AB/08 | 149.6 + 0.6 /- 0.2 | 141.6 + 0.5 /- 0.1 | 0.390 kg (0.860 lb.) |
| RF-01-AB/09 | 165.3 + 0.65/- 0.2 | 157.3 + 0.55/- 0.1 | 0.430 kg (0.948 lb.) |
| RF-01-AB/10 | 181 + 0.7 /- 0.2 | 173 + 0.6 /- 0.1 | 0.470 kg (1.036 lbs.) |
| RF-01-AB/11 | 196.7 + 0.75/- 0.2 | 188.7 + 0.65/- 0.1 | 0.510 kg (1.124 lbs.) |
| RF-01-AB/12 | 212.4 + 0.8 /- 0.2 | 204.4 + 0.7 /- 0.1 | 0.550 kg (1.212 lbs.) |



RF-01-CD

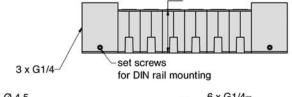


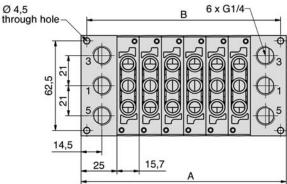




Materials: End plate AI (anodized), 1 station element PA, Seals NBR, Screws steel zinc plated

| <u> </u> | | | | |
|--------------|--------------------|--------------------|-----------------------|--|
| Order number | Α | В | Weight | |
| RF-01-CD/02 | 81.4 + 0.3 /- 0.2 | 73.4 + 0.2 /- 0.1 | 0.300 kg (0.661 lb.) | |
| RF-01-CD/03 | 97.1 + 0.35/- 0.2 | 89.1 + 0.25/- 0.1 | 0.340 kg (0.750 lb.) | |
| RF-01-CD/04 | 112.8 + 0.4 /- 0.2 | 104.8 + 0.3 /- 0.1 | 0.380 kg (0.838 lb.) | |
| RF-01-CD/05 | 128.5 + 0.45/- 0.2 | 120.5 + 0.35/- 0.1 | 0.420 kg (0.926 lb.) | |
| RF-01-CD/06 | 144.2 + 0.5 /- 0.2 | 136.2 + 0.4 /- 0.1 | 0.460 kg (1.014 lbs.) | |
| RF-01-CD/07 | 159.9 + 0.55/- 0.2 | 151.9 + 0.45/- 0.1 | 0.500 kg (1.102 lbs.) | |
| RF-01-CD/08 | 175.6 + 0.6 /- 0.2 | 167.6 + 0.5 /- 0.1 | 0.540 kg (1.190 lbs.) | |
| RF-01-CD/09 | 191.3 + 0.65/- 0.2 | 183.3 + 0.55/- 0.1 | 0.580 kg (1.278 lbs.) | |
| RF-01-CD/10 | 207 + 0.7 /- 0.2 | 199 + 0.6 /- 0.1 | 0.620 kg (1.367 lbs.) | |
| RF-01-CD/11 | 222.7 + 0.75/- 0.2 | 214.7 + 0.65/- 0.1 | 0.660 kg (1.455 lbs.) | |
| RF-01-CD/12 | 238.4 + 0.8 /- 0.2 | 230.4 + 0.7 /- 0.1 | 0.700 kg (1.543 lbs.) | |



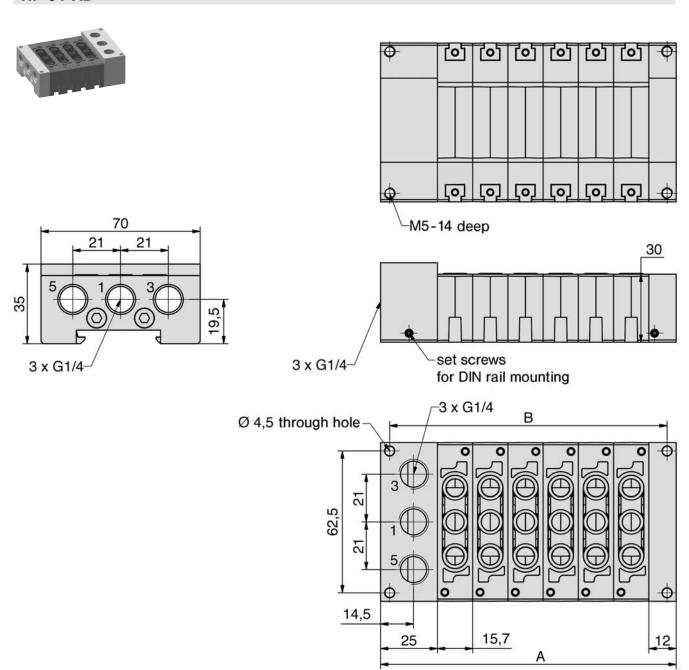


Manifolds for electrically operated valves

Series BM-01



RF-01-AD



Materials: End plate Al (anodized), 1 station element PA,

Seals NBR, Screws steel zinc plated

| Order number | A | В | Weight |
|--------------|--------------------|--------------------|-----------------------|
| RF-01-AD/02 | 68.4 + 0.3 /- 0.2 | 60.4 + 0.2 /- 0.1 | 0.230 kg (0.507 lb.) |
| RF-01-AD/03 | 84.1 + 0.35/- 0.2 | 76.1 + 0.25/- 0.1 | 0.270 kg (0.595 lb.) |
| RF-01-AD/04 | 99.8 + 0.4 /- 0.2 | 91.8 + 0.3 /- 0.1 | 0.310 kg (0.683 lb.) |
| RF-01-AD/05 | 115.5 + 0.45/- 0.2 | 107.5 + 0.35/- 0.1 | 0.350 kg (0.772 lb.) |
| RF-01-AD/06 | 131.2 + 0.5 /- 0.2 | 123.2 + 0.4 /- 0.1 | 0.390 kg (0.860 lb.) |
| RF-01-AD/07 | 146.9 + 0.55/- 0.2 | 138.9 + 0.45/- 0.1 | 0.430 kg (0.948 lb.) |
| RF-01-AD/08 | 162.6 + 0.6 /- 0.2 | 154.6 + 0.5 /- 0.1 | 0.470 kg (1.036 lbs.) |
| RF-01-AD/09 | 178.3 + 0.65/- 0.2 | 170.3 + 0.55/- 0.1 | 0.510 kg (1.124 lbs.) |
| RF-01-AD/10 | 194 + 0.7 /- 0.2 | 186 + 0.6 /- 0.1 | 0.550 kg (1.212 lbs.) |
| RF-01-AD/11 | 209.7 + 0.75/- 0.2 | 201.7 + 0.65/- 0.1 | 0.590 kg (1.301 lbs.) |
| RF-01-AD/12 | 225.4 + 0.8 /- 0.2 | 217.4 + 0.7 /- 0.1 | 0.630 kg (1.389 lbs.) |

Accessories for electrically operated valves Solenoid coils





Solenoid coils with connection pattern pursuant to DIN EN 175301-803 Shape C

| Degree of protection | IP 65 according to EN 60529 with connected plug socket |
|----------------------|--|
| Duty cycle | 100 % |
| Temperature range | - 20 °C + 50 °C (- 4 °F + 122 °F) |
| Voltage tolerance | ± 10 % |
| Standard for series | BM-01, BM-02 |



| Order number | 23-M-09-19-461-T | 23-M-09-19-462-T | 23-M-09-19-452-T | 23-M-09-19-456-T | 23-M-09-19-457-T |
|-----------------------------|------------------------------------|------------------|------------------|------------------|------------------|
| Standard voltage | 12 V DC | 24 V DC | 24 V AC | 115 V AC | 230 V AC |
| Power consumption | 1 W | 1 W | 3 VA | 3 VA | 3 VA |
| Ambient temperature | - 10 °C + 50 °C (+ 14 °F + 122 °F) | | | | |
| Manual override | non detented | | | | |
| Position of manual override | Side of the contacts | | | | |

| Order number | 23-M-09-19-461-R | 23-M-09-19-462-R | 23-M-09-19-452-R | 23-M-09-19-456-R | 23-M-09-19-457-R |
|-----------------------------|------------------------------------|------------------|------------------|------------------|------------------|
| Standard voltage | 12 V DC | 24 V DC | 24 V AC | 115 V AC | 230 V AC |
| Power consumption | 1 W | 1 W | 3 VA | 3 VA | 3 VA |
| Ambient temperature | - 10 °C + 50 °C (+ 14 °F + 122 °F) | | | | |
| Manual override | detented | | | | |
| Position of manual override | Side of the contacts | | | | |



| Order number | 23-M-09-19-431-T | 23-M-09-19-432-T | 23-M-09-19-422-T | 23-M-09-19-426-T | 23-M-09-19-427-T |
|-----------------------------|-----------------------|------------------|------------------|------------------|------------------|
| Standard voltage | 12 V DC | 24 V DC | 24 V AC | 115 V AC | 230 V AC |
| Power consumption | 1 W | 1 W | 3 VA | 3 VA | 3 VA |
| Manual override | non detented | | | | |
| Position of manual override | Opposite the contacts | | | | |

| Order number | 23-M-09-19-431-R | 23-M-09-19-432-R | 23-M-09-19-422-R | 23-M-09-19-426-R | 23-M-09-19-427-R |
|-----------------------------|-----------------------|------------------|------------------|------------------|------------------|
| Standard voltage | 12 V DC | 24 V DC | 24 V AC | 115 V AC | 230 V AC |
| Power consumption | 1 W | 1 W | 3 VA | 3 VA | 3 VA |
| Manual override | detented | | | | |
| Position of manual override | Opposite the contacts | | | | |

Accessories for electrically operated valves

Plug sockets for coil



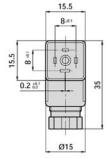
Plug sockets pursuant to DIN EN 175301-803 Shape C

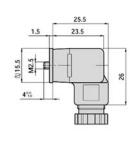
(2pol. + PE, 15,5 x 15,5 mm, Contact distance 8 mm)







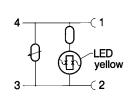


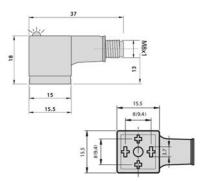


| Order number | 28-ST-02-1 | 28-ST-09-1-112 | 28-ST-09-1-127 | 28-ST-10-1-112 | 28-ST-10-1-127 | 28-ST-10-1-K3-112 |
|-------------------------|---|----------------|----------------|----------------|----------------|-------------------|
| Standard voltage | all | 24 V DC | 230 V AC | 24 V DC | 230 V AC | 24 V DC |
| Protective circuit | no | no | no | yes | yes | yes |
| Status indicator | without | yes | yes | yes | yes | yes |
| Degree of protection | IP 65 pursuant to EN 60529 requires a flat gasket | | | | | |
| Connecting cable | without | without | | | | 3 m |
| max. Ø Connecting cable | 6,5 mm | 6,5 mm | | | | _ |
| Max. wire cross section | 0,75 mm² | | | | | _ |
| for coil | 23-M-09-19 | | | | | |

Plug socket 28-ST-02-1-05









2 = +24 Volt (+) 3 = 0 Volt (-) 4 = not connected

| Order number | 28-ST-02-1-05 |
|----------------------|---|
| Standard voltage | 24 V DC |
| Protective circuit | yes |
| Status indicator | yes |
| Degree of protection | IP 65 pursuant to EN 60529 requires a flat gasket |
| Contact distance | 8 mm |
| for plug sockets | M8 |
| for coil | 23-M-09-19 |