

2.6

10 mm Solenoid Valves

MMD 510 301 24DC/MMD 510 341 24DC



MMD 510 301 24DC
MMD 510 341 24DC



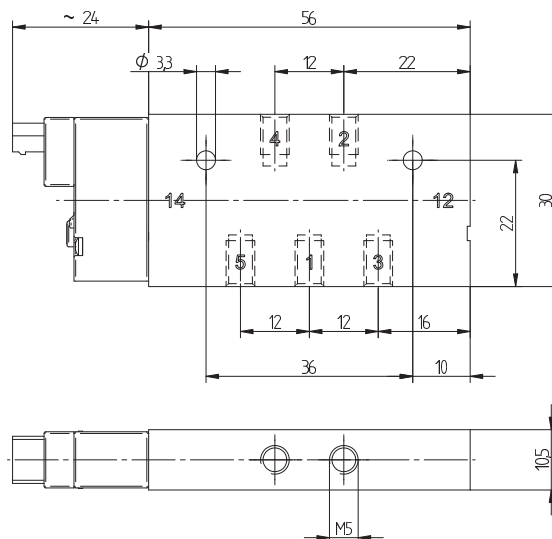
5/2-way solenoid valve actuated by permanent signal and equipped with air spring return.

Available with 24V= solenoid system for connector according to JPC standard.
12V= available on request.

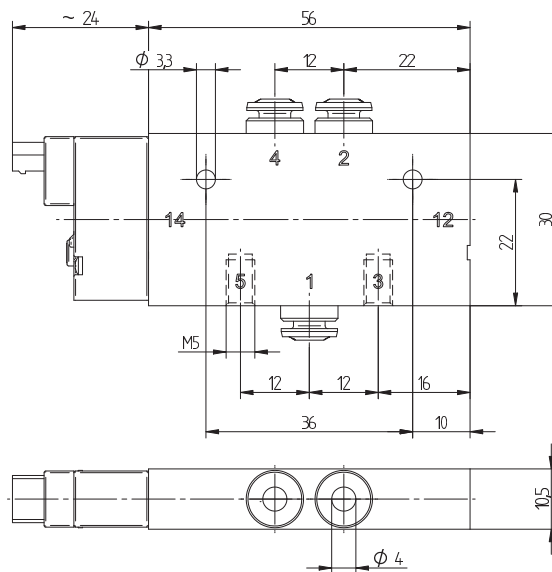
Solenoid with integrated LED and varistor. Protection class IP 40.

Valves are generally equipped with manual override to push.

Connector according to JPC standard with a cable length of 300 mm is included.



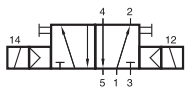
MMD 510 301 24DC



MMD 510 341 24DC

| Type | Ports 1,2,3 | Air flow | Operating press. | Power consumption | Weight |
|------------------|-------------|-----------|------------------|-------------------|----------|
| MMD 510 301 24DC | M5 | 230 l/min | 3 - 8 bar | 0,6 W | 0,058 kg |
| MMD 510 341 24DC | pif 4 mm | 230 l/min | 3 - 8 bar | 0,6 W | 0,064 kg |

MMD 520 301 24DC/MMD 520 341 24DC



MMD 520 301 24DC
MMD 520 341 24DC



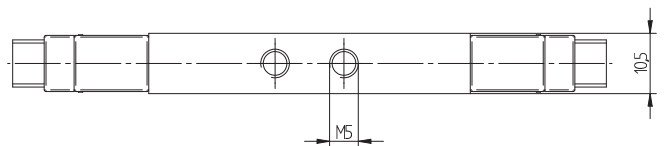
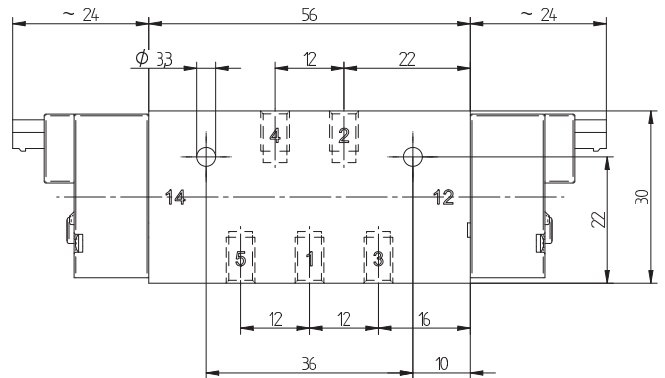
5/2-way double solenoid valve actuated by impulse. Position is kept until an electrical signal is applied to the opposite side even when not attached to electrical signal.

Available with 24V= solenoid system for connector according to JPC standard.
12V= available on request.

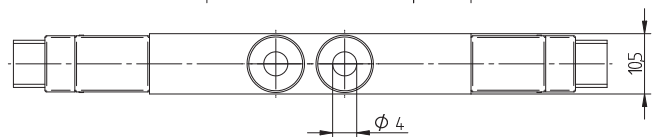
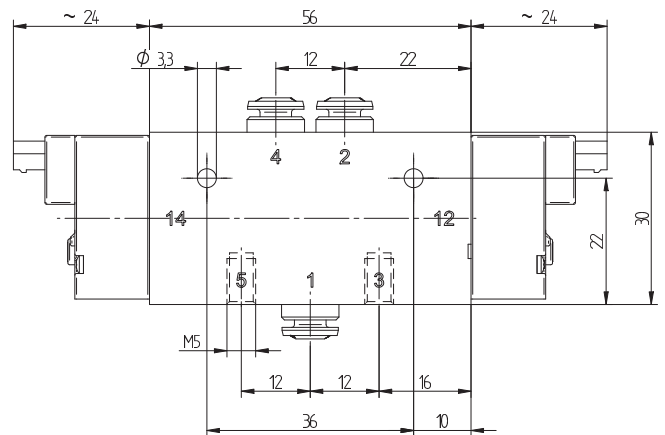
Solenoid with integrated LED and varistor. Protection class IP 40.

Valves are generally equipped with manual override to push.

Connectors according to JPC standard with a cable length of 300 mm are included.



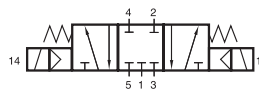
MMD 520 301 24DC



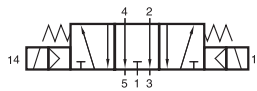
MMD 520 341 24DC

| Type | Ports 1,2,3 | Air flow | Operating press. | Power consumption | Weight |
|------------------|-------------|-----------|------------------|-------------------|----------|
| MMD 520 301 24DC | M5 | 230 l/min | 3 - 8 bar | 0,6 W | 0,058 kg |
| MMD 520 341 24DC | pif 4 mm | 230 l/min | 3 - 8 bar | 0,6 W | 0,064 kg |

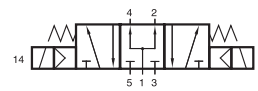
MMD 53_ 301 24DC/MMD 53_ 341 24DC



MMD 531 301 24DC
MMD 531 341 24DC



MMD 532 301 24DC
MMD 532 341 24DC



MMD 533 301 24DC
MMD 533 341 24DC



5/3-way solenoid valve with spring return to middle position, actuated by permanent signal.

- Type 531 centre closed
- Type 532 centre exhausted
- Type 533 centre pressurised

When ordering please complete the type number by 1, 2 or 3 according to the type required.

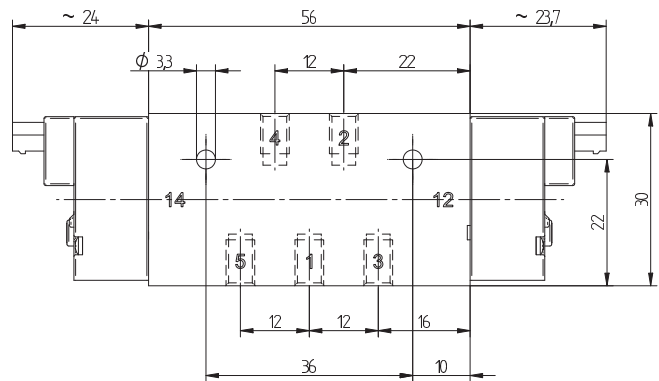
Available with 24V= solenoid system for connector according to JPC standard.

12V= available on request.

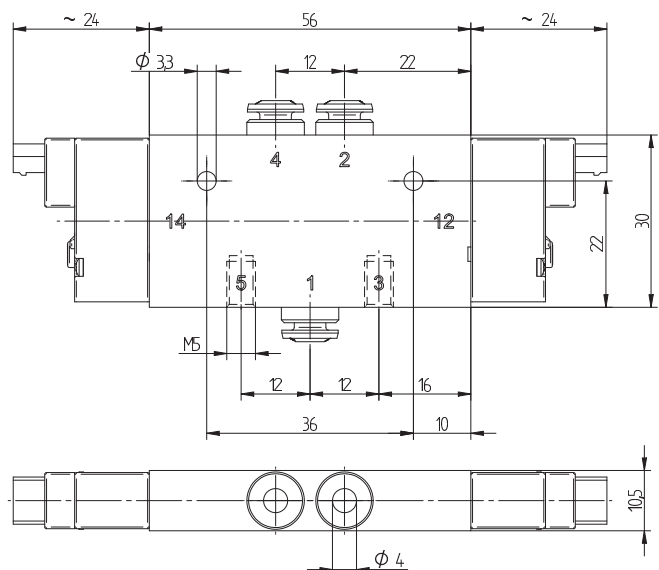
Solenoid with integrated LED and varistor. Protection class IP 40.

Valves are generally equipped with manual override to push.

Connectors according to JPC standard with a cable length of 300 mm are included.



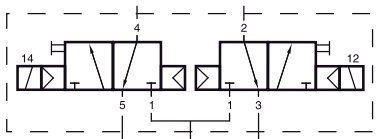
MMD 510 301 24DC



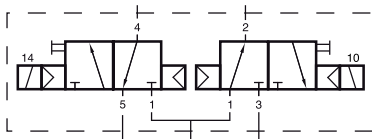
MMD 510 341 24DC

| Type | Ports 1,2,3 | Air flow | Operating press. | Power consumption | Weight |
|------------------|-------------|-----------|------------------|-------------------|----------|
| MMD 53_ 301 24DC | M5 | 230 l/min | 3 - 8 bar | 0,6 W | 0,068 kg |
| MMD 53_ 341 24DC | pif 4 mm | 230 l/min | 3 - 8 bar | 0,6 W | 0,074 kg |

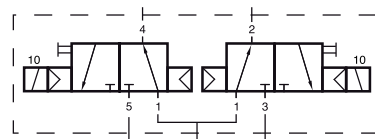
MMD 231 304 24DC/MMD 232 304 24DC MMD 233 304 24DC



MMD 231 304 24DC



MMD 232 304 24DC



MMD 233 304 24DC



Double 3/2-way solenoid valve actuated by permanent signal and equipped with air spring return.

| | |
|----------|---------|
| Type 231 | NC & NC |
| Type 232 | NC & NO |
| Type 233 | NO & NO |

When ordering please complete the type number by 1, 2 or 3 according to the type required.

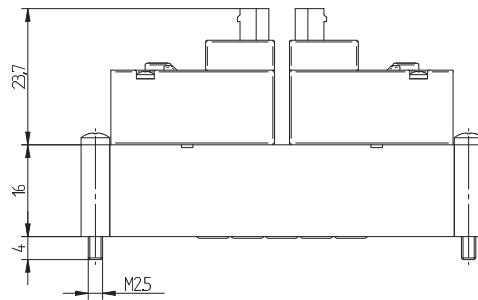
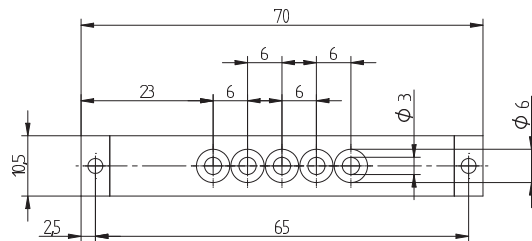
Available with 24V= solenoid system for connector according to JPC standard.
12V= available on request.

Solenoid with integrated LED and varistor. Protection class IP 40.

Valves are generally equipped with manual override to push.

Connectors according to JPC standard with a cable length of 300 mm are included.

Modular manifold system type RM 5 304 on page 2.6.2.4, valve terminals on page 2.6.2.5.



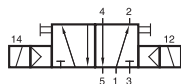
MMD 23_304 24DC

| Type | Ports 1,2,3 | Air flow | Operating press. | Power consumption | Weight |
|-----------------|-------------|-----------|------------------|-------------------|----------|
| MMD 23_304 24DC | Ø 3 mm | 230 l/min | 3 - 8 bar | 0,6 W | 0,054 kg |

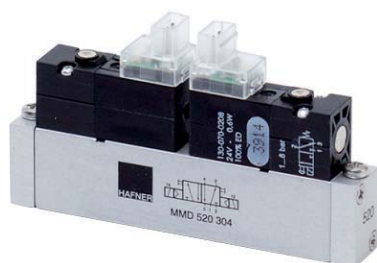
MMD 510 304 24DC/MMD 520 304 24DC



MMD 510 304 24DC



MMD 520 304 24DC



MMD 510 304

5/2-way solenoid valve actuated by permanent signal and equipped with air spring return. All the ports are in the plate.

MMD 520 304

5/2-way double solenoid valve actuated by impulse. Position is kept until an electrical signal is applied to the opposite side even when not attached to electrical signal. All the ports are in the plate.

Available with 24V= solenoid system for connector according to JPC standard.

12V= available on request.

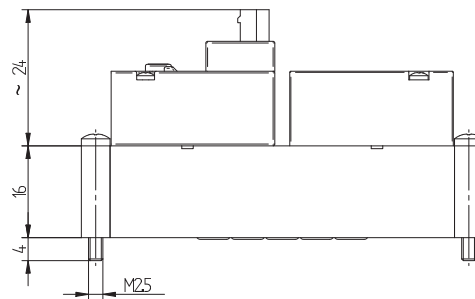
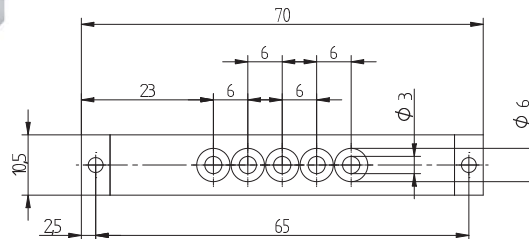
Solenoid with integrated LED and varistor. Protection class IP 40.

Valves are generally equipped with manual override to push.

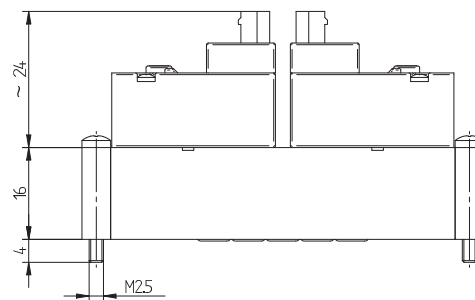
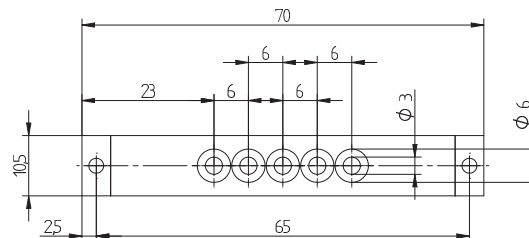
Connector according to JPC standard with a cable length of 300 mm is included.

MMD 520 304 24DC equipped with two connectors.

Modular manifold system type RM 5 304 on page 2.6.2.4, valve terminals on page 2.6.2.5.



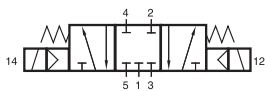
MMD 510 304 24DC



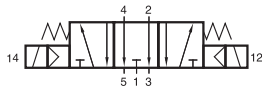
MMD 520 304 24DC

| Type | Ports 1,2,3 | Air flow | Operating press. | Power consumption | Weight |
|------------------|-------------|-----------|------------------|-------------------|----------|
| MMD 510 304 24DC | Ø 3 mm | 230 l/min | 3 - 8 bar | 0,6 W | 0,054 kg |
| MMD 520 304 24DC | Ø 3 mm | 230 l/min | 3 - 8 bar | 0,6 W | 0,054 kg |

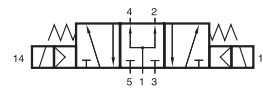
MMD 53_ 304 24DC



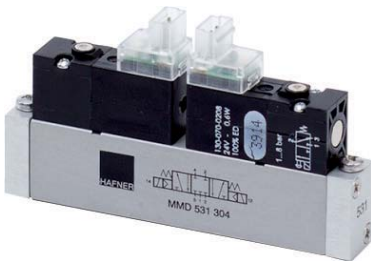
MMD 531 304 24DC



MMD 532 304 24DC



MMD 533 304 24DC



5/3-way solenoid valve with spring return to middle position, actuated by permanent signal. All the ports are in the plate.

- Type 531 centre closed
- Type 532 centre exhausted
- Type 533 centre pressurised

When ordering please complete the type number by 1, 2 or 3 according to the type required.

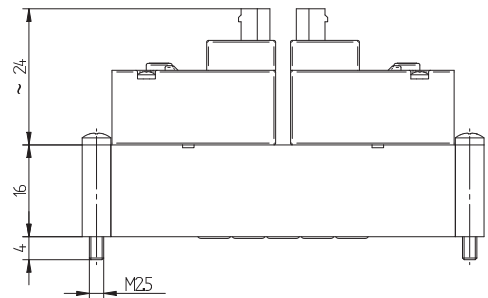
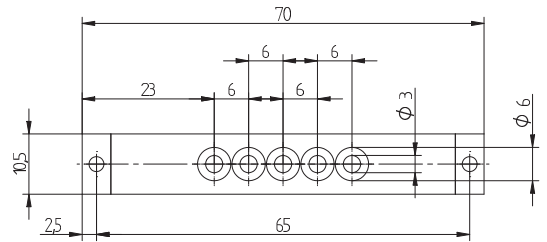
Available with 24V= solenoid system for connector according to JPC standard.
12V= available on request.

Solenoid with integrated LED and varistor. Protection class IP 40.

Valves are generally equipped with manual override to push.

Connectors according to JPC standard with a cable length of 300 mm are included.

Modular manifold system type RM 5 304 on page 2.6.2.4, valve terminals on page 2.6.2.5.



MMD 53_ 304 24DC

| Type | Ports 1,2,3 | Air flow | Operating press. | Power consumption | Weight |
|------------------|-------------|-----------|------------------|-------------------|----------|
| MMD 53_ 304 24DC | Ø 3 mm | 230 l/min | 3 - 8 bar | 0,6 W | 0,054 kg |

RM 5__344



Modular manifold system for common connection to ports 1 (pressure), 3 and 5 (exhaust). Ports 2 and 4 of the individual valves are also located in the manifold plate and equipped with 4 mm push-in fittings.

The system can be built and taken apart just by operating two hexagon socket screws. Additional stations can be added at any position and any time.

Valves to be screwed from the top onto the modular manifold plate.

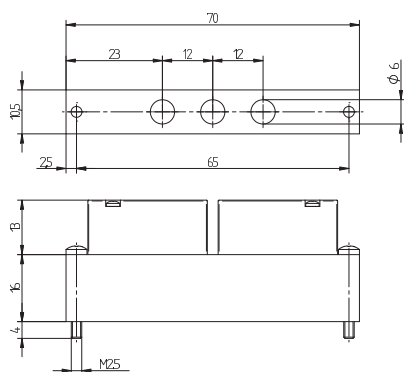
The following valves can be assembled to the manifold plate RM 5__304:

| Type | Function | Page |
|------------------|---------------------------|---------|
| MMD 231 304 24DC | Double 3/2-way (NC&NC) | 2.6.2.1 |
| MMD 232 304 24DC | Double 3/2-way (NC&NO) | 2.6.2.1 |
| MMD 233 304 24DC | Double 3/2-way (NO&NO) | 2.6.2.1 |
| MMD 510 304 24DC | 5/2 single sol. | 2.6.2.2 |
| MMD 520 304 24DC | 5/2 double sol. | 2.6.2.2 |
| MMD 531 304 24DC | 5/3 solenoid, closed | 2.6.2.3 |
| MMD 532 304 24DC | 5/3 solenoid, exhausted | 2.6.2.3 |
| MMD 533 304 24DC | 5/3 solenoid, pressurised | 2.6.2.3 |

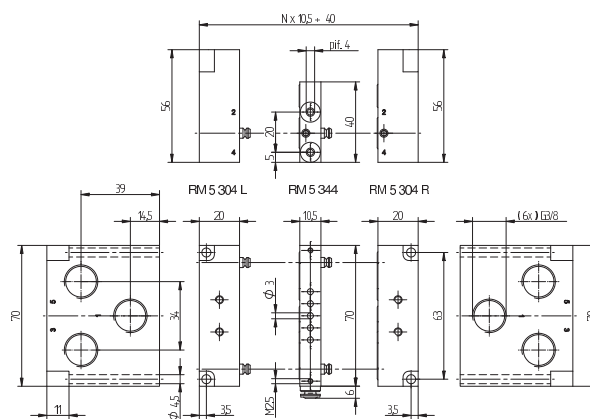
Blanking plates are also available type BPM 5 304.

The plates can also be ordered assembled by the manufacturer. In this case order RM 5__344. Please add two digits for the number of positions required.

End-plates do not offer a valve-position.



BPM 5 304



RM 5 304 L/RM 5 344/RM 5 304 R

| Type | Function | Ports | Weight |
|------------|---------------------|----------|----------|
| RM 5 304 L | End-plate left | G 3/8" | 0,176 kg |
| RM 5 304 R | End-plate right | G 3/8" | 0,176 kg |
| RM 5 344 | Individual position | pif 4 mm | 0,064 kg |
| BPM 5 304 | Blanking plate | - | 0,054 kg |

T_10 5__344



Valve terminal with 2 to 20 valve positions for valves with one or two solenoids. Common connection to ports 1 (pressure), 3 and 5 (exhaust).

Ports 2 and 4 of the individual valves are also located in the manifold plate and equipped with 4 mm push-in fittings.

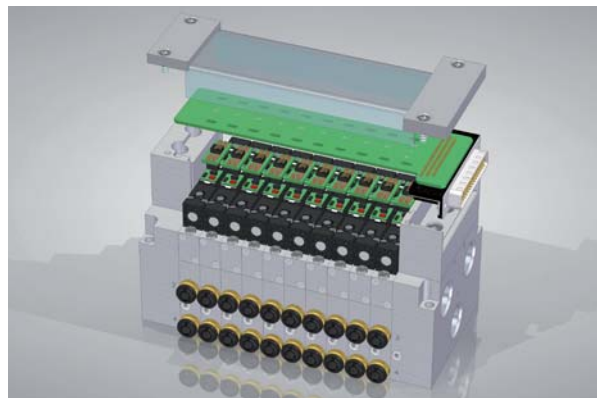
Valves are screwed from the top onto the modular manifold plate. Electric part is added afterwards. The electric part has a defined number of positions and can be chosen with cable connection either on the left or on the right side. The following illustration shows a TR 10 510 344.

The TL 10 has the connector on the opposite side.

Blanking plates are also available type BPM 5 304, displayed on page 2.6.2.4.

The valve terminal will be equipped and tested by the manufacturer. Please advise configuration.

End-plates do not offer a valve-position.

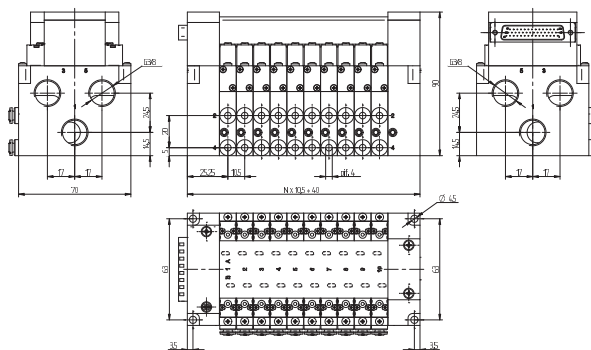


The following valves can be assembled to the valve terminal T_10 5__344:

| Type | Function | Page |
|------------------|---------------------------|---------|
| MMD 231 304 24DC | Double 3/2-way (NC&NC) | 2.6.2.1 |
| MMD 232 304 24DC | Double 3/2-way (NC&NO) | 2.6.2.1 |
| MMD 233 304 24DC | Double 3/2-way (NO&NO) | 2.6.2.1 |
| MMD 510 304 24DC | 5/2 single sol. | 2.6.2.2 |
| MMD 520 304 24DC | 5/2 double sol. | 2.6.2.2 |
| MMD 531 304 24DC | 5/3 solenoid, closed | 2.6.2.3 |
| MMD 532 304 24DC | 5/3 solenoid, exhausted | 2.6.2.3 |
| MMD 533 304 24DC | 5/3 solenoid, pressurised | 2.6.2.3 |



Element with ports 2+4 on the bottom:
RM 5 344 K1



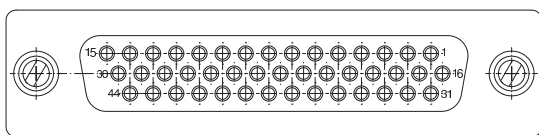
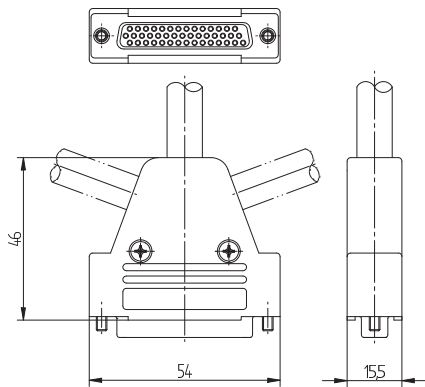
T_10 5__344

| Type | Connector | Ports | Comment |
|-----------------|-------------------|------------|---|
| TR 10 5__344 | On the right side | front side | Please amend the type nr. by the required positions |
| TL 10 5__344 | On the left side | front side | Please amend the type nr. by the required positions |
| TR 10 5__344 K1 | On the right side | bottom | Please amend the type nr. by the required positions |
| TL 10 5__344 K1 | On the left side | bottom | Please amend the type nr. by the required positions |

ST 54 20 L3000/ST 54 40 L3000



Straight electrical connector for 10 mm valve terminals.
Cable can be offset by 2 x 90°.
Standard cable length 3000 mm, others on request.



PIN-numbering

| Valve | Solenoid | Colour | PIN |
|-----------------------------------|----------|--------------|-----|
| 1 | A | brown | 23 |
| | B | yellow | 37 |
| 2 | A | green | 38 |
| | B | red | 22 |
| 3 | A | blue | 9 |
| | B | pink | 7 |
| 4 | A | grey | 24 |
| | B | violet | 36 |
| 5 | A | black | 39 |
| | B | brown-green | 21 |
| 6 | A | white-green | 10 |
| | B | red-blue | 6 |
| 7 | A | grey-pink | 25 |
| | B | yellow-brown | 35 |
| 8 | A | white-yellow | 40 |
| | B | pink-brown | 20 |
| 9 | A | white-pink | 11 |
| | B | grey-brown | 5 |
| 10 | A | white-grey | 26 |
| | B | white-red | 34 |
| 11 | A | white-blue | 41 |
| | B | grey-green | 19 |
| 12 | A | brown-black | 12 |
| | B | white-black | 4 |
| 13 | A | brown-red | 27 |
| | B | pink-green | 33 |
| 14 | A | yellow-grey | 42 |
| | B | green-red | 18 |
| 15 | A | yellow-blue | 13 |
| | B | green-blue | 3 |
| 16 | A | yellow-pink | 28 |
| | B | grey-blue | 32 |
| 17 | A | yellow-black | 29 |
| | B | green-black | 17 |
| 18 | A | yellow-red | 43 |
| | B | grey-red | 2 |
| 19 | A | pink-blue | 14 |
| | B | grey-black | 31 |
| 20 | A | pink-red | 44 |
| | B | blue-black | 16 |
| common +/- up to 10 valves | | white | 8 |
| 2. common +/- for 10 to 20 valves | | brown-blue | 8 |
| Without function | | pink-black | |
| | | red-black | |

Solenoid A and B are marked on the terminal.
For TR10 solenoids A are on valve-side 12, the B solenoids are on valve-side 14.
For TL10 solenoids A are on valve-side 14, the B solenoids are on valve-side 12.

| Type | Comment |
|----------------|-------------------------------|
| ST 54 20 L3000 | Connector for up to 10 valves |
| ST 54 40 L3000 | Connector for up to 20 valves |