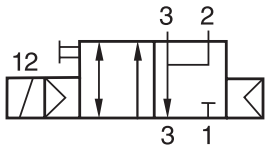
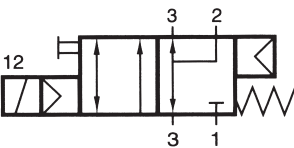


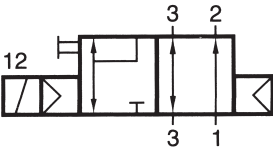
**3/2-, 5/2-, 5/3-way valve G 1/4" »Namur«
as well as for low temperature areas (TT)**



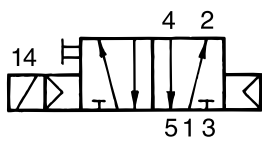
MNH 310 701



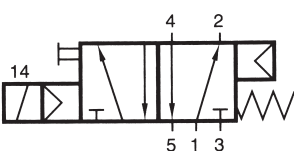
MNH 311 701



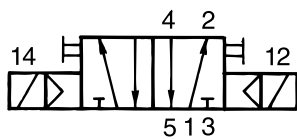
MNOH 310 701



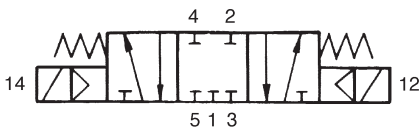
MNH 510 701



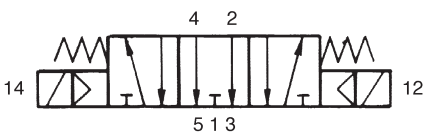
MNH 511 701



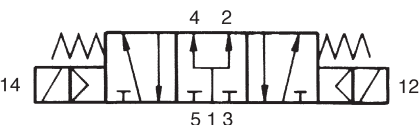
MNH 520 701



MNH 531* 701



MNH 532* 701



MNH 533* 701



Type and function

Spool valve.


Exhaust air can be throttled.

The lever ist not catching.

Valves with NPT-thread on request.

Valves with power consumption 1.8W DC or 3 VA AC, type MNK, on request.

Connector plug (not included in delivery) see data sheet 2.0099.

Products of this series are also available as -protected type according to 94/9/EG (ATEX). Further details see page 4.

Temperature range: -50 °C to +50 °C

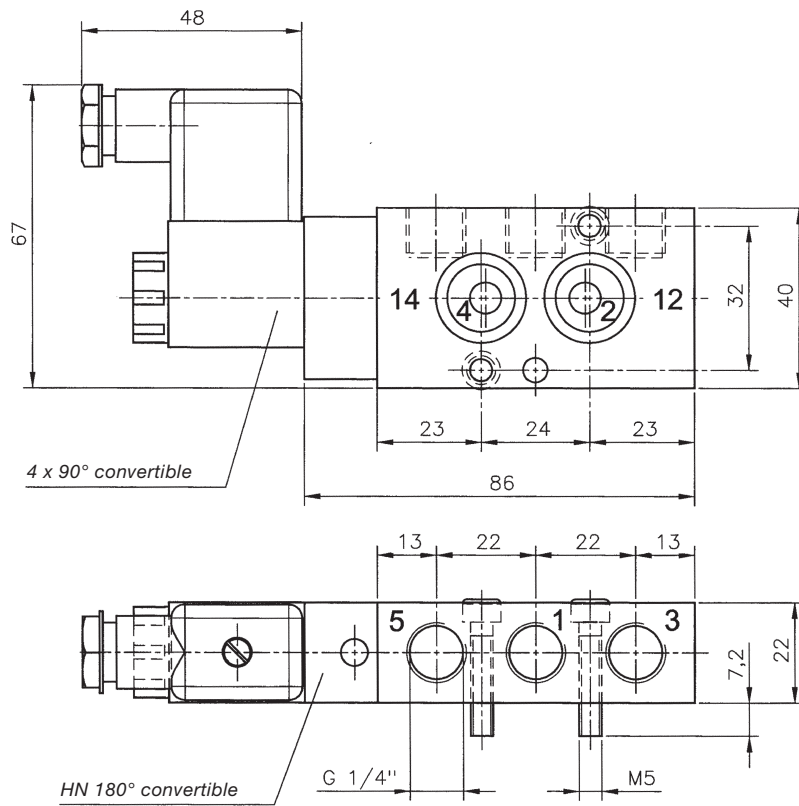
When operated below 0 °C the pressure condensation point has to be at least 15 °C below the temperature of environment and media.

Air has to be dried!

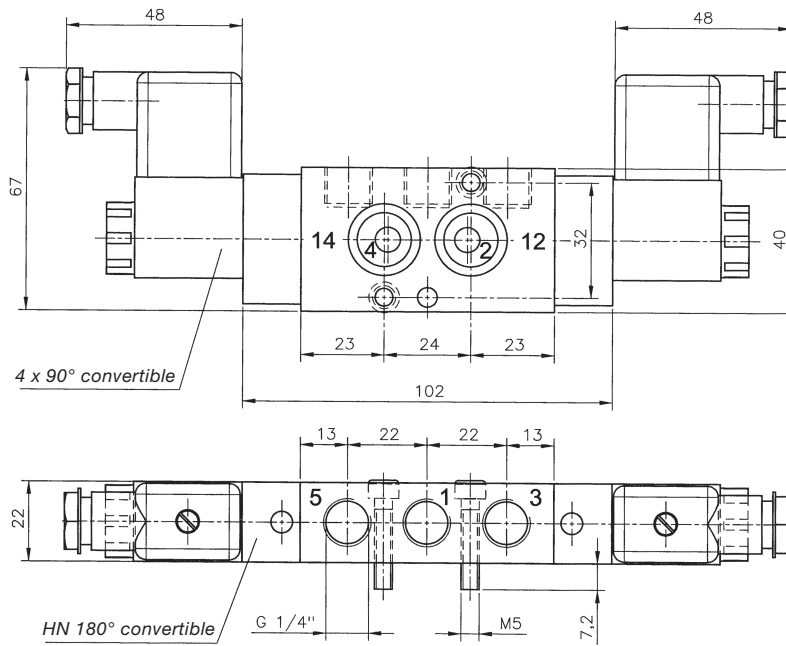
Below -40 °C the leakage-rate of the valves can increase to 10 cm³/min.

Please notice for type 531: Pressure at port 1 has to be higher than pressure at port 2 and 4. If pressure is lost 2 or 4 can exhaust and actuator might move!

MNH 510
MNH 511

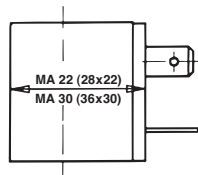


MNH 520
MNH 53*



Valve magnets in basic configuration

| | | |
|--------------------|-------------------|-------------------|
| magnet-type: | MA 22 | MA 30 |
| power consumption: | DC 3 W AC 5 VA | DC 2 W AC 5 VA |
| voltage tolerance: | ± 10 % | ± 10 % |
| power-on time: | 100 % | 100 % |




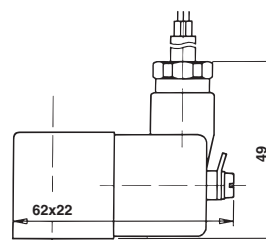
Characteristics of EEx according to 94/9/EG (ATEX 95) directives


| ordering number | standard | MNH 310 701 | MNH 510 701 | MNH 520 701 | MNH 53* 701 |
|---|--|---|----------------------|----------------------|-----------------------------|
| ordering number | low temperature* | MNH 310 701 TT | MNH 510 701 TT | MNH 520 701 TT | MNH 53* 701 TT |
| medium | | filtered, oiled or filtered, not oiled compressed air | | | |
| connection | | G 1/4" | | | |
| nominal bore | | 7 mm | | | |
| nominal flow | | 1,250 l/min. | | | |
| working pressure at EEx m II T4, EEx nA II T5 EEx ia II CT6 | | 2 ... 10 bar 2 ... 8 bar | | | 3 ... 10 bar 3 ... 8 bar |
| response time at 6 bar | on/off | 13/16 ms | | | |
| temperature range | standard low temperature* | -10 °C ... +50 °C -40 °C ... +50 °C | | | |
| materials | standard low temperature* | body al anodized, inner parts brass and synthetic material, spool stainless steel, seal NBR body al anodized, inner parts brass and synthetic material, spool stainless steel, seal PU | | | |
| standard voltage | | DC: 24 V, AC: 230 V-50/60Hz | | | |
| protection class | | IP 65 at DIN 40050 | | | |
| weight at | EEx m II T4 EEx ia II CT6, EEx nA II T5 | 0.480 kg 0.300 kg | 0.500 kg 0.370 kg | 0.860 kg 0.580 kg | |

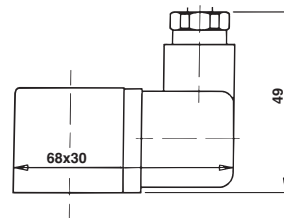
* At low temperature only EEx ia IIC T6.

Valve magnets of EEx according to 94/9/EG (ATEX 95) directives

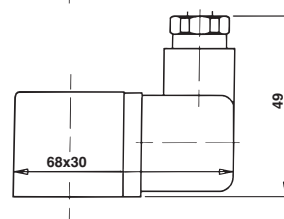
| | |
|--------------------|---|
| magnet-type: | MA 22  II 2G/D EEx m II T4 |
| power consumption: | DC 5 W AC 5,1 VA |
| voltage tolerance: | ± 10 % |
| power-on time: | 100 % |
| temperature range: | -15 °C ... +50 °C |
| cable length: | 3 m |



| | |
|--------------------|--|
| magnet-type: | MA 30  II 3G/D EEx nA II T5 |
| power consumption: | DC 2 W AC 4,0 VA |
| voltage tolerance: | ± 10 % |
| power-on time: | 100 % |
| temperature range: | -20 °C ... +50 °C |



| | |
|-------------------|--|
| magnet-type: | MA 30  II 2 G/D EEx ia IIC T6 |
| intrinsic safety: | »i« DIN EN 60079-11 |
| connector: | DIN 43650-A · ISO 4400 |
| voltage: | only 24 V DC |



Supply only by certified, intrinsic safe circuits with
U < 28 V I < 115 mA P < 1.6 W.

For the coil 30 mm wide (MA30), a spacer plate called „ZPN-5-701“ has to be used.