

Series TC08



AVENTICS™ Series TC08



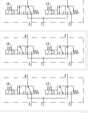



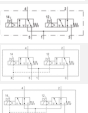



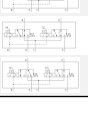



2x3/2-directional valve, Series TC08

- Operating voltage 24 V DC
- 2x3/2
- Qn = 600 l/min
- Pilot valve width : 15 mm
- NC/NC NO/NO NC/NO
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, M8, 3-pin
- Manual override : with detent
- double solenoid
- With spring return
- Pilot : External, Internal



| | |
|---------------------------------------|-----------------------------------|
| Version | Spool valve, positive overlapping |
| Activation | Electrically |
| Pilot | External, Internal |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | 3 ... 10 bar |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Qn | 600 l/min |
| Compressed air connection | according to ISO 228-1 |
| Connector standard | DIN EN 60947-5-2 |
| Protection class acc. to DIN EN 61140 | Class III |
| Electrically | |
| Protection class with connection | IP65 |
| LED status display | Yellow |
| Duty cycle | 100 % |
| Typ. switch-on time | 10 ms |
| Typ. switch-off time | 14 ms |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Tightening torque tolerance | ±0,2 mT |
| Weight | 0.182 kg |

Technical data

| Part No. | | MO | | Compressed air connection | |
|------------|---|---|-------|---------------------------|-------|
| | | | | | Input |
| R422102055 |  |  | NC/NC | | G 1/8 |
| R422102056 |  |  | NO/NO | | G 1/8 |
| R422102057 |  |  | NC/NO | | G 1/8 |
| R422102058 |  |  | NC/NC | | G 1/8 |
| R422102059 |  |  | NO/NO | | G 1/8 |
| R422102060 |  |  | NC/NO | | G 1/8 |

| Part No. | Compressed air connection | |
|------------|---------------------------|---------|
| | Output | Exhaust |
| R422102055 | G 1/8 | G 1/8 |
| R422102056 | G 1/8 | G 1/8 |
| R422102057 | G 1/8 | G 1/8 |
| R422102058 | G 1/8 | G 1/8 |
| R422102059 | G 1/8 | G 1/8 |
| R422102060 | G 1/8 | G 1/8 |

| Part No. | Compressed air connection | | Operational voltage | Voltage tolerance |
|------------|---------------------------|-------------|---------------------|-------------------|
| | | Pilot Input | | |
| R422102055 | - | - | 24 V | -10% / +10% |
| R422102056 | - | - | 24 V | -10% / +10% |
| R422102057 | - | - | 24 V | -10% / +10% |
| R422102058 | M5 | - | 24 V | -10% / +10% |
| R422102059 | M5 | - | 24 V | -10% / +10% |
| R422102060 | M5 | - | 24 V | -10% / +10% |

| Part No. | Power consumption | Flow conductance | Flow conductance | Nominal resistance |
|------------|-------------------|------------------|------------------|--------------------|
| | DC | b | C-value | |
| R422102055 | 2.2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102056 | 2.2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102057 | 2.2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102058 | 2.2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102059 | 2.2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102060 | 2.2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |

| Part No. | Working pressure min./max. |
|------------|----------------------------|
| R422102055 | 3 ... 10 bar |
| R422102056 | 3 ... 10 bar |
| R422102057 | 3 ... 10 bar |
| R422102058 | -0.9 ... 10 bar |
| R422102059 | -0.9 ... 10 bar |
| R422102060 | -0.9 ... 10 bar |

Nominal flow Q_n at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

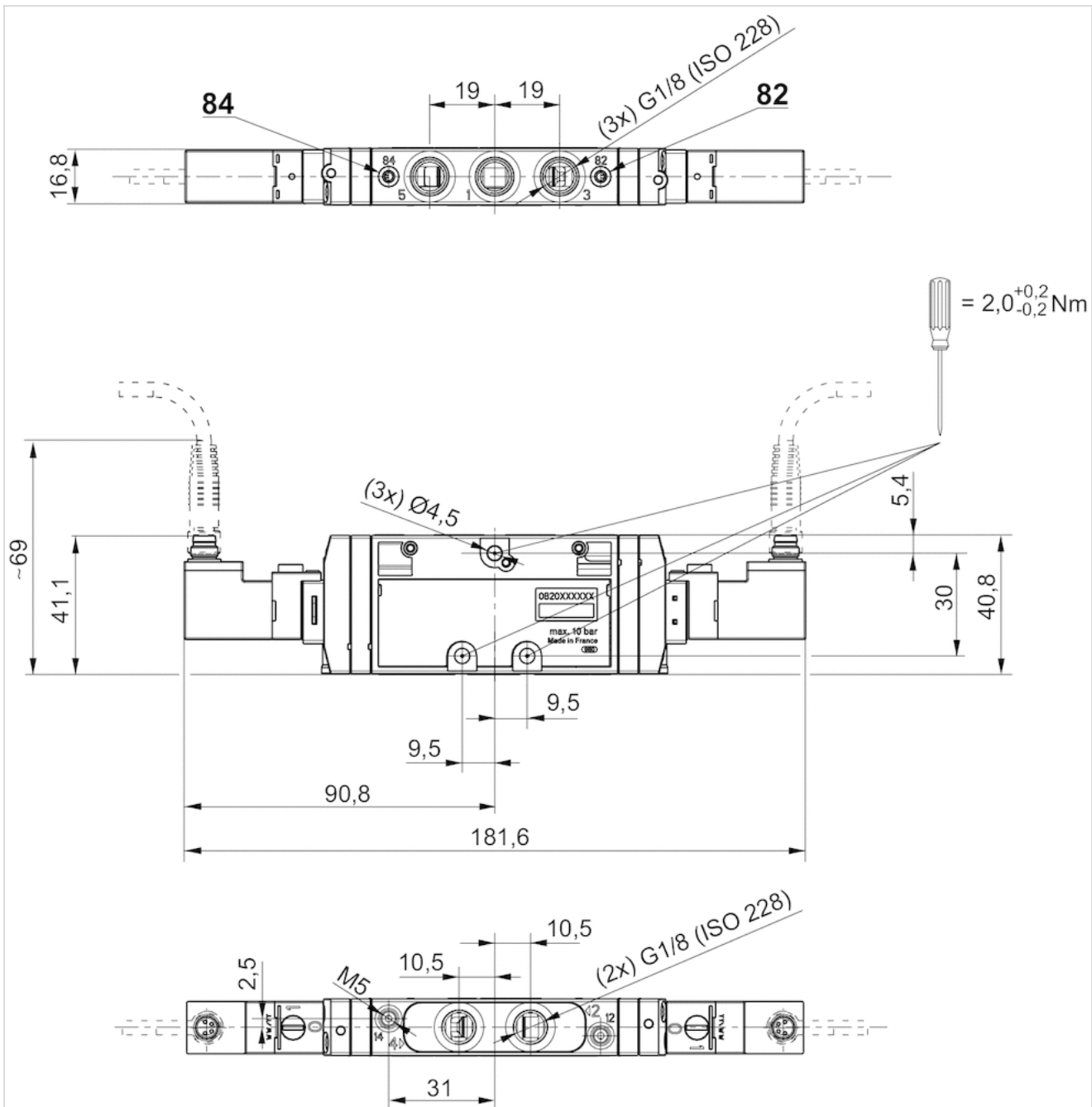
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber Polyurethane |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, nickel-plated chrome-plated |

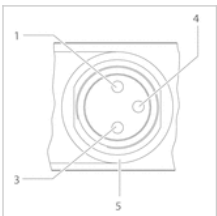
Dimensions

Dimensions



Pin assignments

PIN assignment and cable colors for valve plug connectors



PIN assignment:
1) PIN not assigned

- 3) 0 V
- 4) 24 V
- 5) LED

Cable color

- 1) Brown
- 3) Blue
- 4) Black

Note: Bi-polar protective circuit to prevent overvoltage













2x3/2-directional valve, Series TC08

- Operating voltage 24 V DC
- 2x3/2
- Qn = 600 l/min
- Pilot valve width : 15 mm
- NC/NC NO/NO NC/NO
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, M8, 4-pin
- Manual override : without detent
- double solenoid
- With spring return
- Pilot : External, Internal



| | |
|--|-----------------------------------|
| Version | Spool valve, positive overlapping |
| Activation | Electrically |
| Pilot | External, Internal |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | 3 ... 10 bar |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Qn | 600 l/min |
| Compressed air connection | according to ISO 228-1 |
| Connector standard | DIN EN 60947-5-2 |
| Protection class acc. to DIN EN 61140 Electrically | Class III |
| Protection class with connection | IP65 |
| LED status display | Yellow |
| Duty cycle | 100 % |
| Typ. switch-on time | 10 ms |
| Typ. switch-off time | 14 ms |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Tightening torque tolerance | ±0,2 mT |
| Weight | 0.182 kg |

Technical data

| Part No. | | MO | | Compressed air connection | |
|------------|---|---|--|---------------------------|-------|
| | | | | Input | |
| R422102049 |  |  | | NC/NC | G 1/8 |
| R422102050 |  |  | | NO/NO | G 1/8 |
| R422102051 |  |  | | NC/NO | G 1/8 |
| R422102052 |  |  | | NC/NC | G 1/8 |
| R422102053 |  |  | | NO/NO | G 1/8 |
| R422102054 |  |  | | NC/NO | G 1/8 |

| Part No. | Compressed air connection | |
|------------|---------------------------|---------|
| | Output | Exhaust |
| R422102049 | G 1/8 | G 1/8 |
| R422102050 | G 1/8 | G 1/8 |
| R422102051 | G 1/8 | G 1/8 |
| R422102052 | G 1/8 | G 1/8 |
| R422102053 | G 1/8 | G 1/8 |
| R422102054 | G 1/8 | G 1/8 |

| Part No. | Compressed air connection | | Operational voltage | Voltage tolerance |
|------------|---------------------------|--|---------------------|-------------------|
| | Pilot Input | | | |
| R422102049 | - | | 24 V | -10% / +10% |
| R422102050 | - | | 24 V | -10% / +10% |
| R422102051 | - | | 24 V | -10% / +10% |
| R422102052 | M5 | | 24 V | -10% / +10% |
| R422102053 | M5 | | 24 V | -10% / +10% |
| R422102054 | M5 | | 24 V | -10% / +10% |

| Part No. | Power consumption | Flow conductance | Flow conductance | Nominal resistance |
|------------|-------------------|------------------|------------------|--------------------|
| | DC | b | C-value | |
| R422102049 | 2.2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102050 | 2.2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102051 | 2.2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102052 | 2.2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102053 | 2.2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102054 | 2.2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |

| Part No. | Working pressure min./max. |
|------------|----------------------------|
| R422102049 | 3 ... 10 bar |
| R422102050 | 3 ... 10 bar |
| R422102051 | 3 ... 10 bar |
| R422102052 | -0.9 ... 10 bar |
| R422102053 | -0.9 ... 10 bar |
| R422102054 | -0.9 ... 10 bar |

Nominal flow Q_n at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

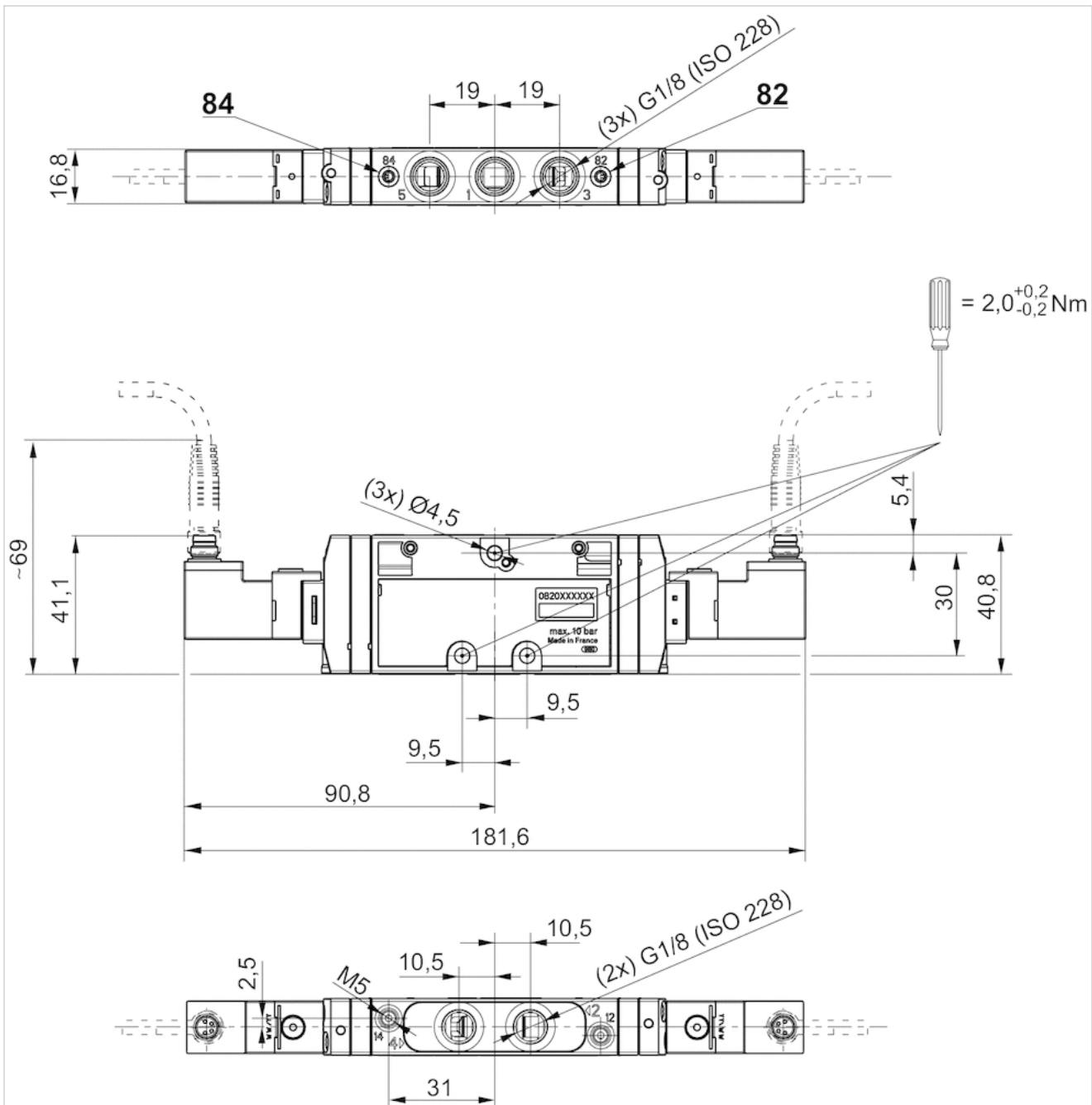
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Technical information

| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber Polyurethane |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, nickel-plated chrome-plated |

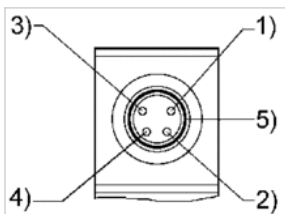
Dimensions

Dimensions



Pin assignments

PIN assignment and cable colors for valve plug connectors



PIN assignment:
1) PIN not assigned

2) PIN not assigned

3) 0 V

4) 24 V

5) LED

Cable colors

1) Brown

2) White

3) Blue

4) Black













2x3/2-directional valve, Series TC08

- Operating voltage 24 V DC
- 2x3/2
- Qn = 600 l/min
- Pilot valve width : 15 mm
- NC/NC NO/NO NC/NO
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, M8, 4-pin
- Manual override : with detent
- double solenoid
- With spring return
- Pilot : External, Internal



| | |
|--|-----------------------------------|
| Version | Spool valve, positive overlapping |
| Activation | Electrically |
| Pilot | External, Internal |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | 2.5 ... 10 bar |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Qn | 600 l/min |
| Compressed air connection | according to ISO 228-1 |
| Connector standard | DIN EN 60947-5-2 |
| Protection class acc. to DIN EN 61140 Electrically | Class III |
| Protection class with connection | IP65 |
| LED status display | Yellow |
| Duty cycle | 100 % |
| Typ. switch-on time | 10 ms |
| Typ. switch-off time | 14 ms |
| Generic immunity standard in accordance with | EN 50082-2 |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Tightening torque tolerance | ±0,2 mT |
| Weight | 0.182 kg |

Technical data

| Part No. | | MO | | Compressed air connection | |
|------------|---|---|-------|---------------------------|-------|
| | | | | Input | |
| R422102043 |  |  | NC/NC | | G 1/8 |
| R422102044 |  |  | NO/NO | | G 1/8 |
| R422102045 |  |  | NC/NO | | G 1/8 |
| R422102046 |  |  | NC/NC | | G 1/8 |
| R422102047 |  |  | NO/NO | | G 1/8 |
| R422102048 |  |  | NC/NO | | G 1/8 |

| Part No. | Compressed air connection | |
|------------|---------------------------|---------|
| | Output | Exhaust |
| R422102043 | G 1/8 | G 1/8 |
| R422102044 | G 1/8 | G 1/8 |
| R422102045 | G 1/8 | G 1/8 |
| R422102046 | G 1/8 | G 1/8 |
| R422102047 | G 1/8 | G 1/8 |
| R422102048 | G 1/8 | G 1/8 |

| Part No. | Compressed air connection | | Operational voltage | Voltage tolerance |
|------------|---------------------------|--|---------------------|-------------------|
| | Pilot Input | | | |
| R422102043 | - | | 24 V | -10% / +10% |
| R422102044 | - | | 24 V | -10% / +10% |
| R422102045 | - | | 24 V | -10% / +10% |
| R422102046 | M5 | | 24 V | -10% / +10% |
| R422102047 | M5 | | 24 V | -10% / +10% |
| R422102048 | M5 | | 24 V | -10% / +10% |

| Part No. | Power consumption | Flow conductance | Flow conductance | Nominal resistance |
|------------|-------------------|------------------|------------------|--------------------|
| | DC | b | C-value | |
| R422102043 | 2.2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102044 | 2.2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102045 | 2.2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102046 | 2.2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102047 | 2.2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102048 | 2.2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |

| Part No. | Working pressure min./max. |
|------------|----------------------------|
| R422102043 | 3 ... 10 bar |
| R422102044 | 3 ... 10 bar |
| R422102045 | 3 ... 10 bar |
| R422102046 | -0.9 ... 10 bar |
| R422102047 | -0.9 ... 10 bar |
| R422102048 | -0.9 ... 10 bar |

Nominal flow Q_n at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

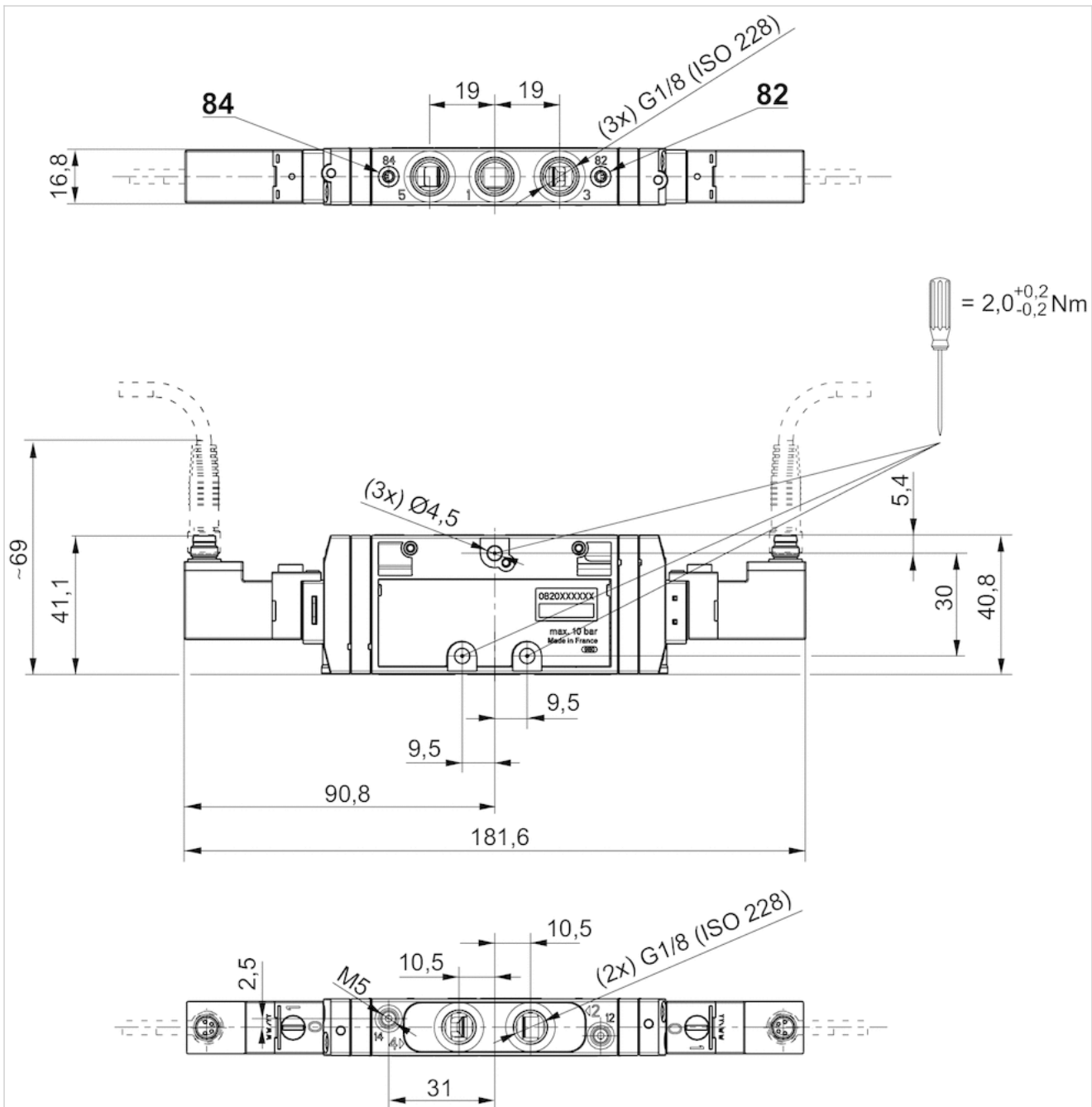
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Technical information

| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber Polyurethane |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, nickel-plated chrome-plated |

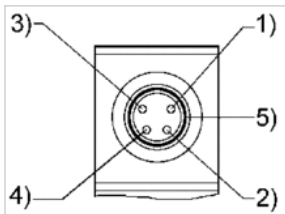
Dimensions

Dimensions



Pin assignments

PIN assignment and cable colors for valve plug connectors



PIN assignment:
1) PIN not assigned

2) PIN not assigned

3) 0 V

4) 24 V

5) LED

Cable colors

1) Brown

2) White

3) Blue

4) Black














5/2-directional valve, Series TC08

- Operating voltage 24 V DC
- 5/2
- Qn = 800 l/min
- Pilot valve width : 15 mm
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, M8, 3-pin
- Manual override : with detent
- single solenoid double solenoid
- Pilot : Internal External



| | |
|--|--|
| Version | Spool valve, positive overlapping |
| Activation | Electrically |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | See table below |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Qn | 800 l/min |
| Connector standard | DIN EN 60947-5-2 |
| Protection class acc. to DIN EN 61140 Electrically | Class III |
| Protection class with connection | IP65 |
| LED status display | Yellow |
| Duty cycle | 100 % |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Weight | See table below |
| Comment | An example configuration is illustrated. The delivered product may thus deviate from the illustration. |

Technical data

| Part No. |  | MO | Compressed air connection | |
|------------|---|---|---------------------------|--------|
| | | | Input | Output |
| R422100968 |  |  | G 1/8 | G 1/8 |
| R422100969 |  |  | G 1/8 | G 1/8 |
| R422100970 |  |  | G 1/8 | G 1/8 |
| R422100971 |  |  | G 1/8 | G 1/8 |
| R422100972 |  |  | G 1/8 | G 1/8 |
| R422100973 |  |  | G 1/8 | G 1/8 |

| Part No. | Compressed air connection | | Operational voltage | Voltage tolerance |
|------------|---------------------------|--|---------------------|-------------------|
| | Exhaust | | DC | DC |
| R422100968 | G 1/8 | | 24 V | -10% / +10% |
| R422100969 | G 1/8 | | 24 V | -10% / +10% |
| R422100970 | G 1/8 | | 24 V | -10% / +10% |
| R422100971 | G 1/8 | | 24 V | -10% / +10% |
| R422100972 | G 1/8 | | 24 V | -10% / +10% |
| R422100973 | G 1/8 | | 24 V | -10% / +10% |

| Part No. | Power consumption | Pilot | Flow conductance | Flow conductance | Nominal resistance |
|------------|-------------------|----------|------------------|------------------|--------------------|
| | DC | | b | C-value | |
| R422100968 | 2.2 W | Internal | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| R422100969 | 2.2 W | External | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| R422100970 | 2.2 W | Internal | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| R422100971 | 2.2 W | External | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| R422100972 | 2.2 W | Internal | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| R422100973 | 2.2 W | External | 0.36 | 3.5 l/(s*bar) | 280 Ω |

| Part No. | Working pressure min./max. | Control pressure min./max. | Typ. switch-on time | Typ. switch-off time |
|------------|----------------------------|----------------------------|---------------------|----------------------|
| R422100968 | 3 ... 10 bar | 2.5 ... 10 bar | 14 ms | 18 ms |
| R422100969 | -0.9 ... 10 bar | 2.5 ... 10 bar | 14 ms | 18 ms |
| R422100970 | 3 ... 10 bar | 3 ... 10 bar | 14 ms | 17 ms |
| R422100971 | -0.9 ... 10 bar | 3 ... 10 bar | 14 ms | 17 ms |
| R422100972 | 2 ... 10 bar | 2 ... 10 bar | 10 ms | 10 ms |
| R422100973 | -0.9 ... 10 bar | 2 ... 10 bar | 10 ms | 10 ms |

| Part No. | Weight |
|------------|----------|
| R422100968 | 0.14 kg |
| R422100969 | 0.14 kg |
| R422100970 | 0.14 kg |
| R422100971 | 0.14 kg |
| R422100972 | 0.172 kg |
| R422100973 | 0.172 kg |

Nominal flow Q_n at 6 bar and $\Delta p = 1$ bar, MO = Manual override

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

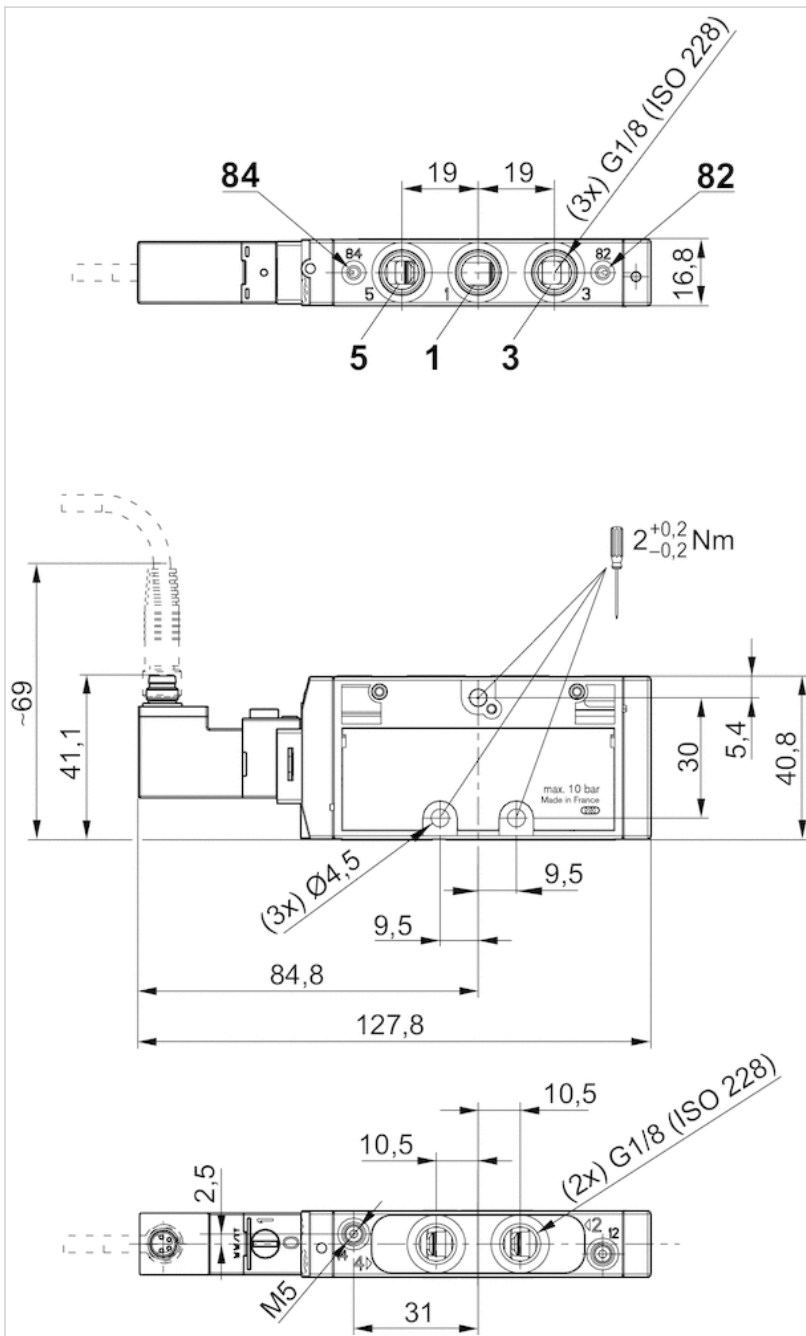
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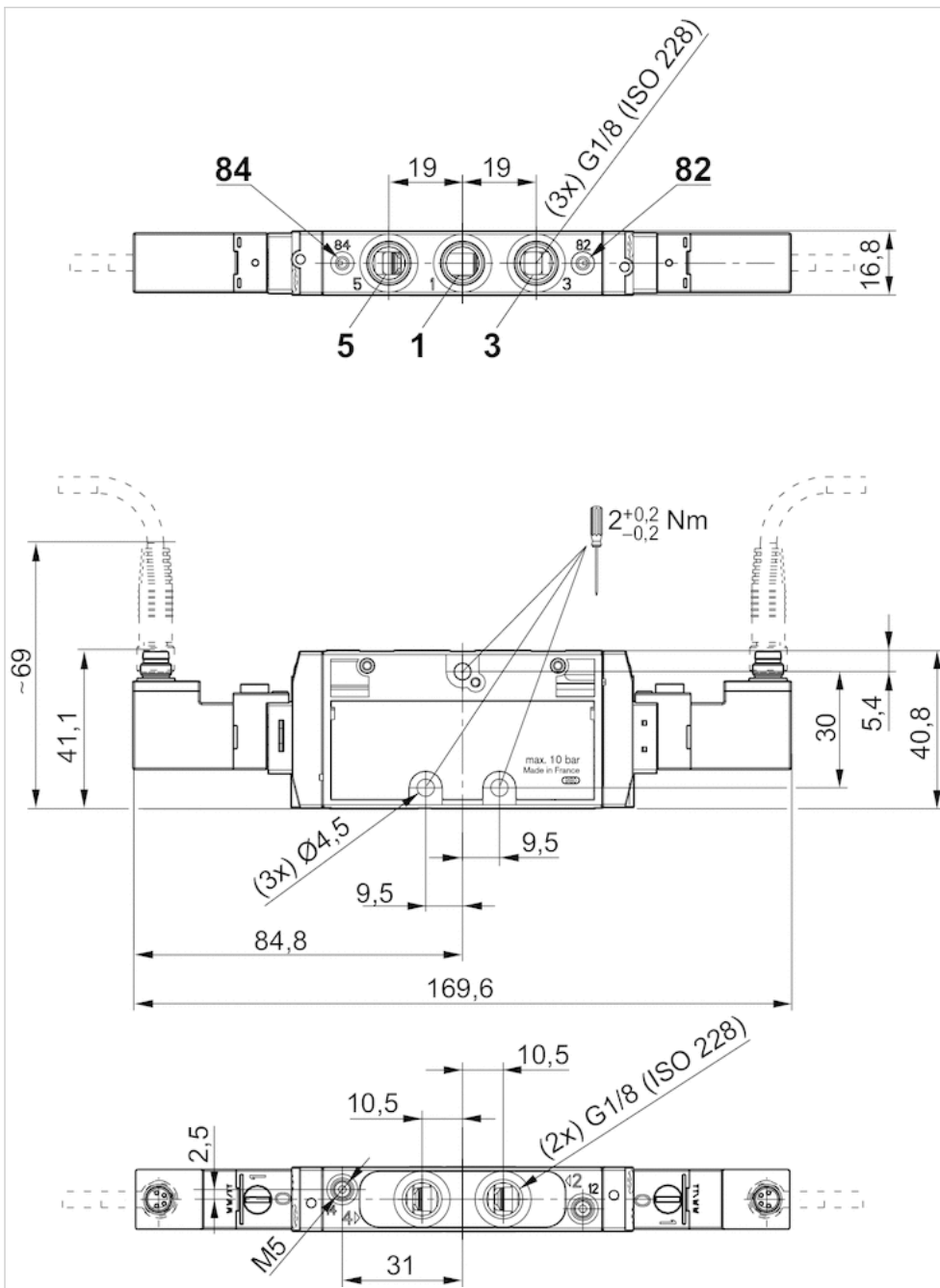
| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber Polyurethane |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, nickel-plated chrome-plated |

Dimensions

Dimensions, single solenoid

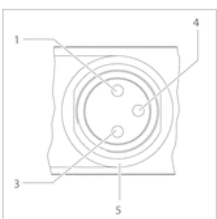


Dimensions, double solenoid



Pin assignments

PIN assignment and cable colors for valve plug connectors



- PIN assignment:
- 1) PIN not assigned
 - 3) 0 V
 - 4) 24 V

5) LED

Cable color

1) Brown

3) Blue

4) Black

Note: Bi-polar protective circuit to prevent overvoltage













5/2-directional valve, Series TC08

- Operating voltage 24 V DC
- 5/2
- Qn = 800 l/min
- Pilot valve width : 15 mm
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, M8, 4-pin
- Manual override : without detent
- single solenoid double solenoid
- Pilot : Internal External



| | |
|--|--|
| Version | Spool valve, positive overlapping |
| Activation | Electrically |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | See table below |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Qn | 800 l/min |
| Connector standard | DIN EN 60947-5-2 |
| Protection class acc. to DIN EN 61140 Electrically | Class III |
| Protection class with connection | IP65 |
| LED status display | Yellow |
| Duty cycle | 100 % |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Weight | See table below |
| Comment | An example configuration is illustrated. The delivered product may thus deviate from the illustration. |

Technical data

| Part No. | | MO | Compressed air connection | |
|------------|---|---|---------------------------|--------|
| | | | Input | Output |
| 0820060301 |  |  | G 1/8 | G 1/8 |
| 0820060351 |  |  | G 1/8 | G 1/8 |
| 0820060311 |  |  | G 1/8 | G 1/8 |
| 0820060361 |  |  | G 1/8 | G 1/8 |
| 0820060321 |  |  | G 1/8 | G 1/8 |
| 0820060371 |  |  | G 1/8 | G 1/8 |

| Part No. | Compressed air connection | | Operational voltage | Voltage tolerance |
|------------|---------------------------|--|---------------------|-------------------|
| | Exhaust | | DC | DC |
| 0820060301 | G 1/8 | | 24 V | -10% / +10% |
| 0820060351 | G 1/8 | | 24 V | -10% / +10% |
| 0820060311 | G 1/8 | | 24 V | -10% / +10% |
| 0820060361 | G 1/8 | | 24 V | -10% / +10% |
| 0820060321 | G 1/8 | | 24 V | -10% / +10% |
| 0820060371 | G 1/8 | | 24 V | -10% / +10% |

| Part No. | Power consumption | Pilot | Flow conductance | Flow conductance | Nominal resistance |
|------------|-------------------|----------|------------------|------------------|--------------------|
| | DC | | b | C-value | |
| 0820060301 | 2.2 W | Internal | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| 0820060351 | 2.2 W | External | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| 0820060311 | 2.2 W | Internal | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| 0820060361 | 2.2 W | External | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| 0820060321 | 2.2 W | Internal | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| 0820060371 | 2.2 W | External | 0.36 | 3.5 l/(s*bar) | 280 Ω |

| Part No. | Working pressure min./max. | Control pressure min./max. | Typ. switch-on time | Typ. switch-off time |
|------------|----------------------------|----------------------------|---------------------|----------------------|
| 0820060301 | 3 ... 10 bar | 3 ... 10 bar | 14 ms | 18 ms |
| 0820060351 | -0.9 ... 10 bar | 3 ... 10 bar | 14 ms | 18 ms |
| 0820060311 | 3 ... 10 bar | 3 ... 10 bar | 14 ms | 17 ms |
| 0820060361 | -0.9 ... 10 bar | 3 ... 10 bar | 14 ms | 17 ms |
| 0820060321 | 2 ... 10 bar | 2 ... 10 bar | 10 ms | 10 ms |
| 0820060371 | -0.9 ... 10 bar | 2 ... 10 bar | 10 ms | 10 ms |

| Part No. | Weight |
|------------|----------|
| 0820060301 | 0.14 kg |
| 0820060351 | 0.14 kg |
| 0820060311 | 0.14 kg |
| 0820060361 | 0.14 kg |
| 0820060321 | 0.172 kg |
| 0820060371 | 0.172 kg |

Nominal flow Q_n at 6 bar and $\Delta p = 1$ bar, MO = Manual override

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

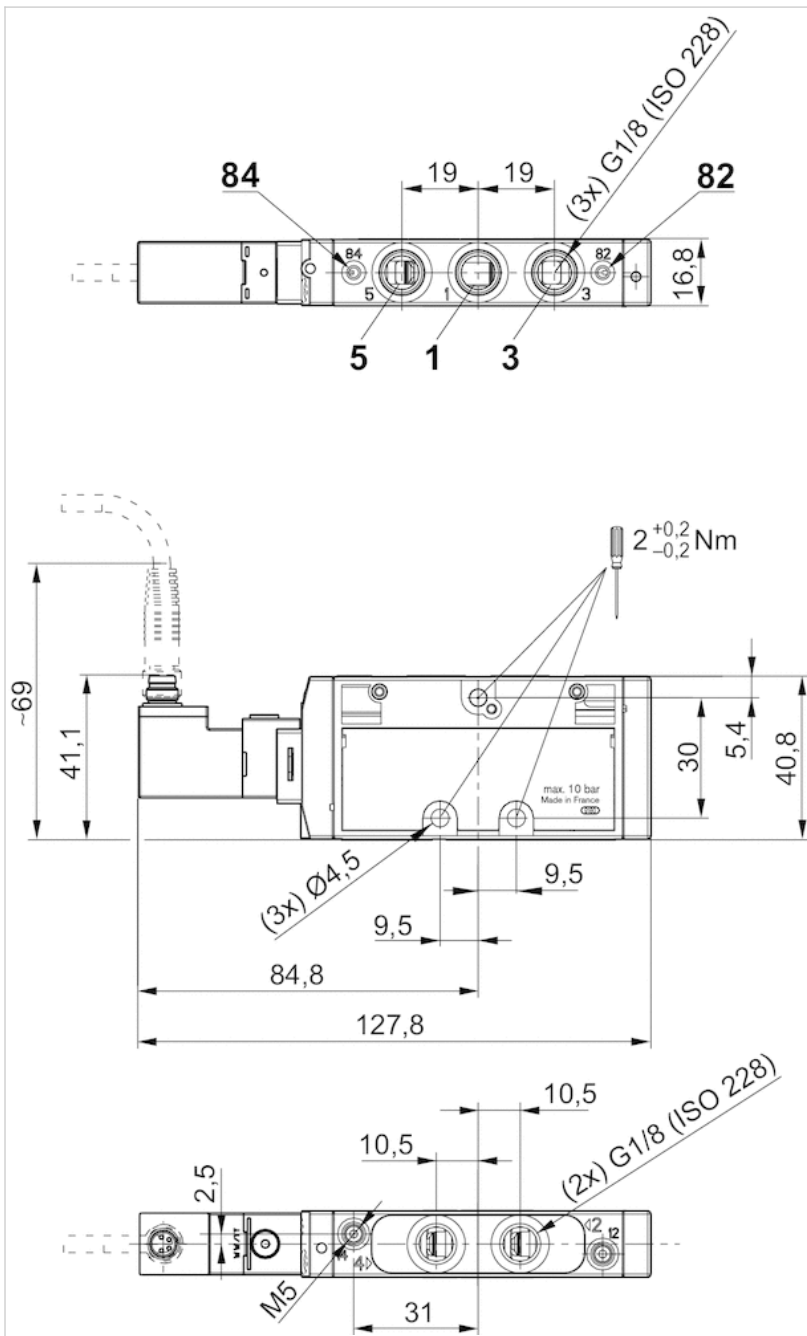
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

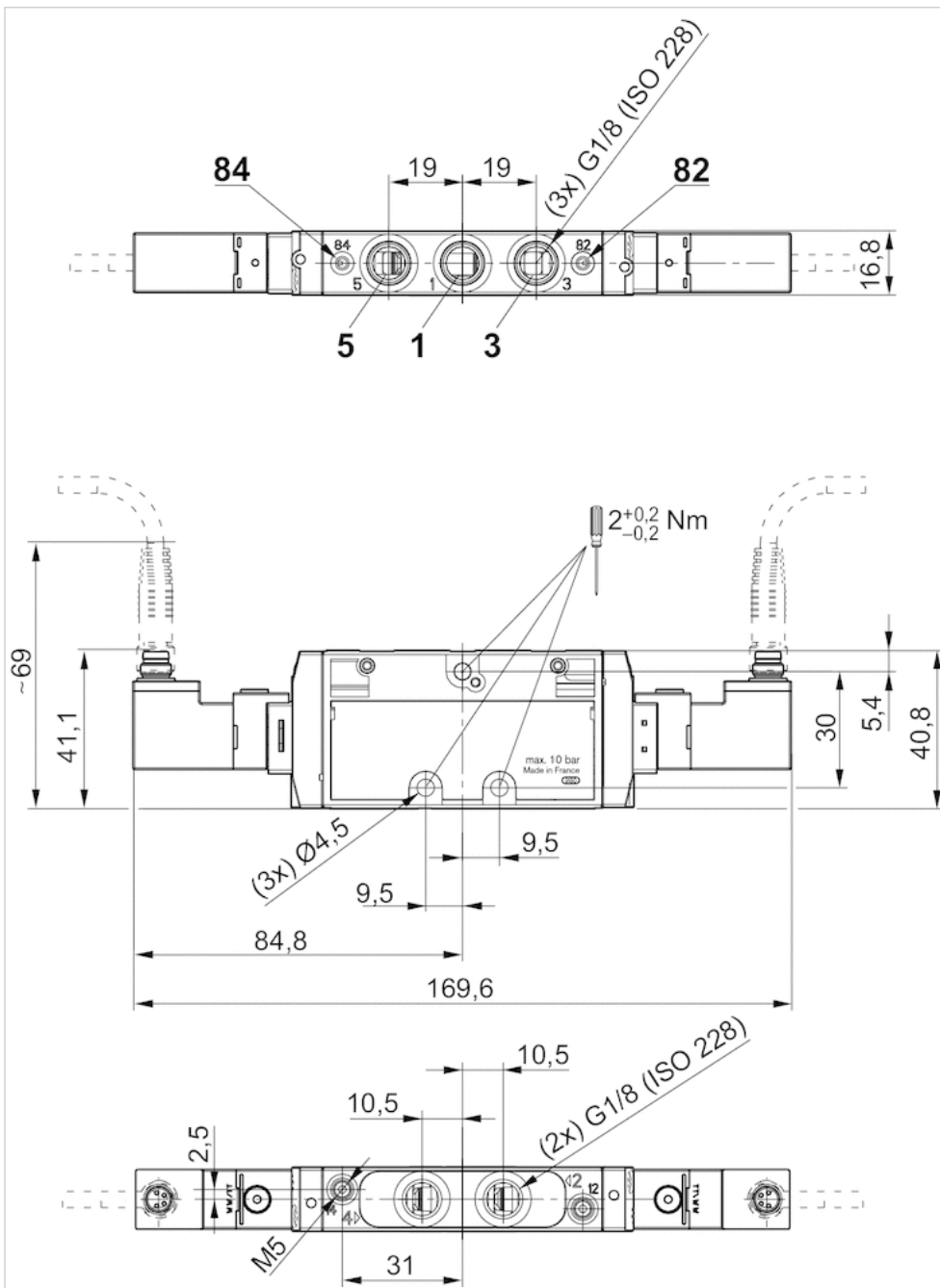
| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber Polyurethane |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, nickel-plated chrome-plated |

Dimensions

Dimensions, single solenoid

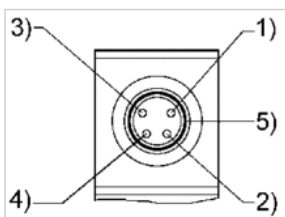


Dimensions, double solenoid



Pin assignments

PIN assignment and cable colors for valve plug connectors



PIN assignment:

- 1) PIN not assigned
- 2) PIN not assigned
- 3) 0 V

4) 24 V

5) LED

Cable colors

1) Brown

2) White

3) Blue

4) Black














5/2-directional valve, Series TC08

- Operating voltage 24 V DC
- 5/2
- Qn = 800 l/min
- Pilot valve width : 15 mm
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, M8, 4-pin
- Manual override : with detent
- single solenoid double solenoid
- Pilot : Internal External



| | |
|--|--|
| Version | Spool valve, positive overlapping |
| Activation | Electrically |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | See table below |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Qn | 800 l/min |
| Connector standard | DIN EN 60947-5-2 |
| Protection class acc. to DIN EN 61140 Electrically | Class III |
| Protection class with connection | IP65 |
| LED status display | Yellow |
| Duty cycle | 100 % |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Weight | See table below |
| Comment | An example configuration is illustrated. The delivered product may thus deviate from the illustration. |

Technical data

| Part No. |  | MO | Compressed air connection | |
|------------|---|---|---------------------------|--------|
| | | | Input | Output |
| 0820060201 |  |  | G 1/8 | G 1/8 |
| 0820060251 |  |  | G 1/8 | G 1/8 |
| 0820060211 |  |  | G 1/8 | G 1/8 |
| 0820060261 |  |  | G 1/8 | G 1/8 |
| 0820060221 |  |  | G 1/8 | G 1/8 |
| 0820060271 |  |  | G 1/8 | G 1/8 |

| Part No. | Compressed air connection | | Operational voltage | Voltage tolerance |
|------------|---------------------------|--|---------------------|-------------------|
| | Exhaust | | DC | DC |
| 0820060201 | G 1/8 | | 24 V | -10% / +10% |
| 0820060251 | G 1/8 | | 24 V | -10% / +10% |
| 0820060211 | G 1/8 | | 24 V | -10% / +10% |
| 0820060261 | G 1/8 | | 24 V | -10% / +10% |
| 0820060221 | G 1/8 | | 24 V | -10% / +10% |
| 0820060271 | G 1/8 | | 24 V | -10% / +10% |

| Part No. | Power consumption | Pilot | Flow conductance | Flow conductance | Nominal resistance |
|------------|-------------------|----------|------------------|------------------|--------------------|
| | DC | | b | C-value | |
| 0820060201 | 2.2 W | Internal | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| 0820060251 | 2.2 W | External | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| 0820060211 | 2.2 W | Internal | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| 0820060261 | 2.2 W | External | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| 0820060221 | 2.2 W | Internal | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| 0820060271 | 2.2 W | External | 0.36 | 3.5 l/(s*bar) | 280 Ω |

| Part No. | Working pressure min./max. | Control pressure min./max. | Typ. switch-on time | Typ. switch-off time |
|------------|----------------------------|----------------------------|---------------------|----------------------|
| 0820060201 | 3 ... 10 bar | 3 ... 10 bar | 14 ms | 18 ms |
| 0820060251 | -0.9 ... 10 bar | 3 ... 10 bar | 14 ms | 18 ms |
| 0820060211 | 3 ... 10 bar | 3 ... 10 bar | 14 ms | 17 ms |
| 0820060261 | -0.9 ... 10 bar | 3 ... 10 bar | 14 ms | 17 ms |
| 0820060221 | 2 ... 10 bar | 2 ... 10 bar | 10 ms | 10 ms |
| 0820060271 | -0.9 ... 10 bar | 2 ... 10 bar | 10 ms | 10 ms |

| Part No. | Weight |
|------------|----------|
| 0820060201 | 0.14 kg |
| 0820060251 | 0.14 kg |
| 0820060211 | 0.14 kg |
| 0820060261 | 0.14 kg |
| 0820060221 | 0.172 kg |
| 0820060271 | 0.172 kg |

Nominal flow Q_n at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

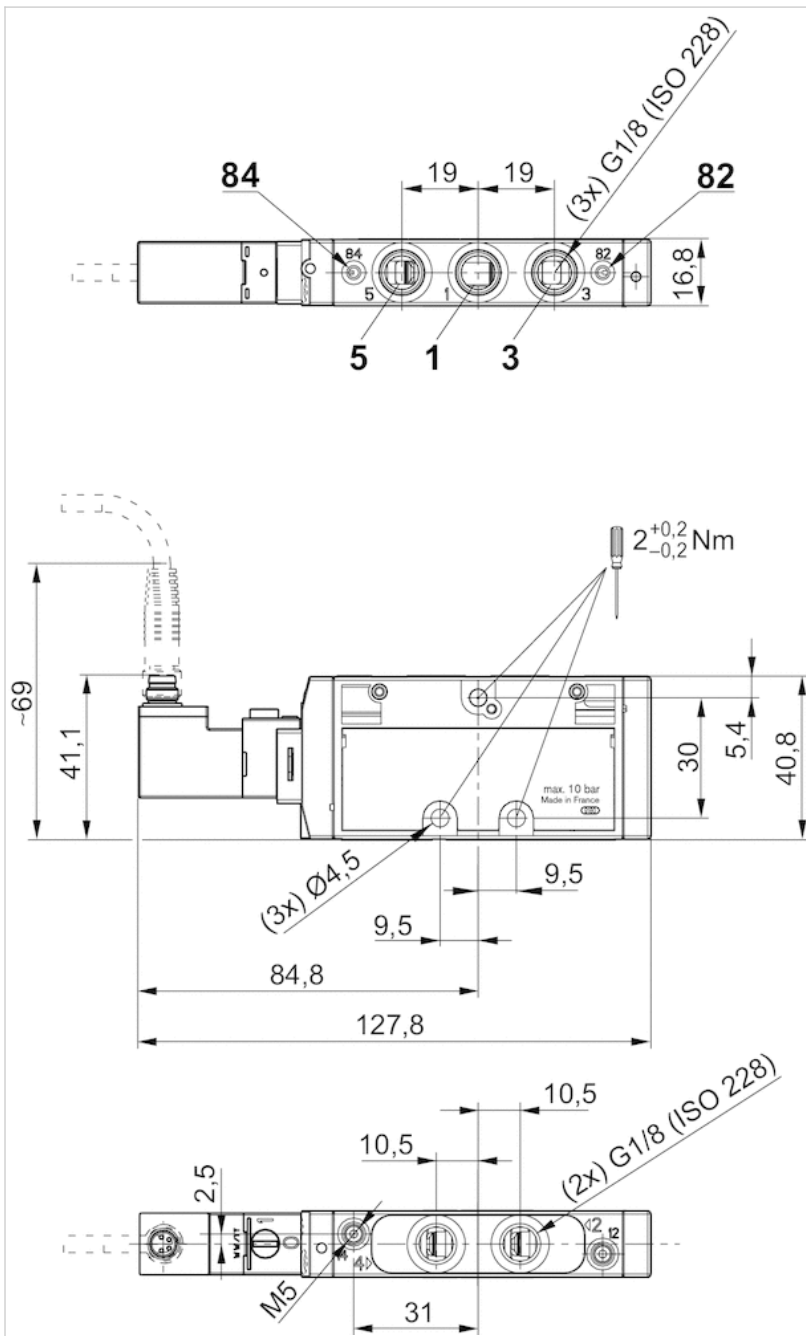
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

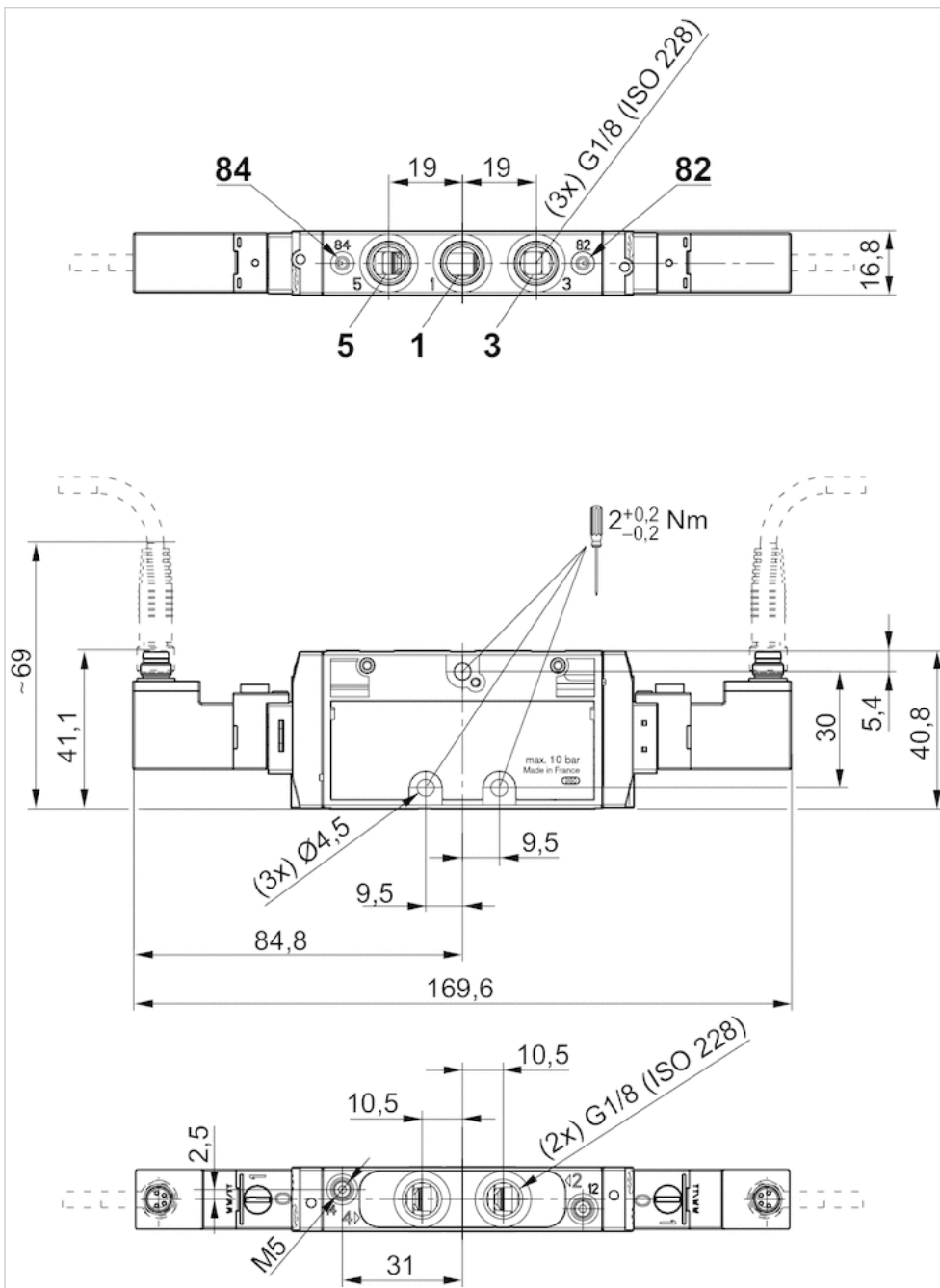
| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber Polyurethane |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, nickel-plated chrome-plated |

Dimensions

Dimensions, single solenoid

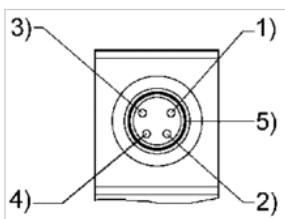


Dimensions, double solenoid



Pin assignments

PIN assignment and cable colors for valve plug connectors



- PIN assignment:
- 1) PIN not assigned
 - 2) PIN not assigned
 - 3) 0 V

4) 24 V

5) LED

Cable colors

1) Brown

2) White

3) Blue

4) Black

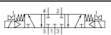

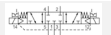



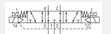

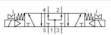



5/3-directional valve, Series TC08

- Operating voltage 24 V DC
- 5/3
- $Q_n = 700$ l/min
- Pilot valve width : 15 mm
- closed center exhausted center pressurized center
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, M8, 3-pin
- Manual override : with detent
- double solenoid
- Pilot : Internal External



| | |
|---------------------------------------|-----------------------------------|
| Version | Spool valve, positive overlapping |
| Activation | Electrically |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | 3 ... 10 bar |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Q_n | 700 l/min |
| Connector standard | DIN EN 60947-5-2 |
| Protection class acc. to DIN EN 61140 | Class III |
| Electrically | |
| Protection class with connection | IP65 |
| LED status display | Yellow |
| Duty cycle | 100 % |
| Typ. switch-on time | 10 ms |
| Typ. switch-off time | 11 ms |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Weight | 0.178 kg |

Technical data

| Part No. | | MO | Compressed air connection | |
|------------|---|---|---------------------------|-------|
| | | | | Input |
| R422100974 |  |  | closed center | G 1/8 |
| R422100975 |  |  | closed center | G 1/8 |
| R422100976 |  |  | exhausted center | G 1/8 |
| R422100977 |  |  | exhausted center | G 1/8 |
| R422100978 |  |  | pressurized center | G 1/8 |
| R422100979 |  |  | pressurized center | G 1/8 |

| Part No. | Compressed air connection | Compressed air connection |
|------------|---------------------------|---------------------------|
| | Output | Exhaust |
| R422100974 | G 1/8 | G 1/8 |
| R422100975 | G 1/8 | G 1/8 |
| R422100976 | G 1/8 | G 1/8 |
| R422100977 | G 1/8 | G 1/8 |
| R422100978 | G 1/8 | G 1/8 |
| R422100979 | G 1/8 | G 1/8 |

| Part No. | Operational voltage | Voltage tolerance | Power consumption | Pilot |
|------------|---------------------|-------------------|-------------------|----------|
| | DC | DC | DC | |
| R422100974 | 24 V | -10% / +10% | 2.2 W | Internal |
| R422100975 | 24 V | -10% / +10% | 2.2 W | External |
| R422100976 | 24 V | -10% / +10% | 2.2 W | Internal |
| R422100977 | 24 V | -10% / +10% | 2.2 W | External |
| R422100978 | 24 V | -10% / +10% | 2.2 W | Internal |
| R422100979 | 24 V | -10% / +10% | 2.2 W | External |

| Part No. | Flow conductance | Flow conductance | Nominal resistance | Working pressure min./max. |
|------------|------------------|------------------|--------------------|----------------------------|
| | b | C-value | | |
| R422100974 | 0.34 | 3 l/(s*bar) | 280 Ω | 3 ... 10 bar |
| R422100975 | 0.34 | 3 l/(s*bar) | 280 Ω | -0.9 ... 10 bar |
| R422100976 | 0.34 | 3 l/(s*bar) | 280 Ω | 3 ... 10 bar |
| R422100977 | 0.34 | 3 l/(s*bar) | 280 Ω | -0.9 ... 10 bar |
| R422100978 | 0.34 | 3 l/(s*bar) | 280 Ω | 3 ... 10 bar |
| R422100979 | 0.34 | 3 l/(s*bar) | 280 Ω | -0.9 ... 10 bar |

Nominal flow Q_n at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

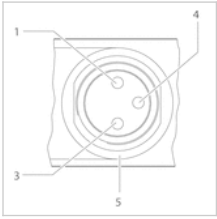
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Pin assignments

PIN assignment and cable colors for valve plug connectors



PIN assignment:

- 1) PIN not assigned
- 3) 0 V
- 4) 24 V
- 5) LED

Cable color

- 1) Brown
- 3) Blue
- 4) Black

Note: Bi-polar protective circuit to prevent overvoltage

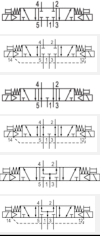
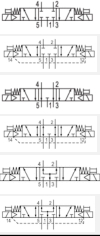

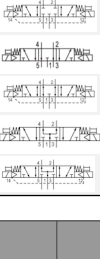

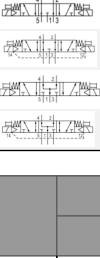

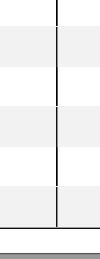

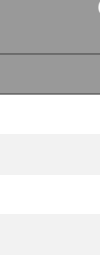

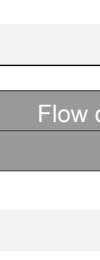

5/3-directional valve, Series TC08

- Operating voltage 24 V DC
- 5/3
- $Q_n = 700$ l/min
- Pilot valve width : 15 mm
- closed center exhausted center pressurized center
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, M8, 4-pin
- Manual override : without detent
- double solenoid
- Pilot : Internal External



| | |
|---------------------------------------|-----------------------------------|
| Version | Spool valve, positive overlapping |
| Activation | Electrically |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | 3 ... 10 bar |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Q_n | 700 l/min |
| Connector standard | DIN EN 60947-5-2 |
| Protection class acc. to DIN EN 61140 | Class III |
| Electrically | |
| Protection class with connection | IP65 |
| LED status display | Yellow |
| Duty cycle | 100 % |
| Typ. switch-on time | 10 ms |
| Typ. switch-off time | 11 ms |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Weight | 0.178 kg |

Technical data

| Part No. |  | MO | Compressed air connection | |
|------------|---|---|---------------------------|-------|
| | | | | Input |
| 0820061301 |  |  | closed center | G 1/8 |
| 0820061351 |  |  | closed center | G 1/8 |
| 0820061311 |  |  | exhausted center | G 1/8 |
| 0820061361 |  |  | exhausted center | G 1/8 |
| 0820061321 |  |  | pressurized center | G 1/8 |
| 0820061371 |  |  | pressurized center | G 1/8 |

| Part No. | Compressed air connection | Compressed air connection |
|------------|---------------------------|---------------------------|
| | Output | Exhaust |
| 0820061301 | G 1/8 | G 1/8 |
| 0820061351 | G 1/8 | G 1/8 |
| 0820061311 | G 1/8 | G 1/8 |
| 0820061361 | G 1/8 | G 1/8 |
| 0820061321 | G 1/8 | G 1/8 |
| 0820061371 | G 1/8 | G 1/8 |

| Part No. | Operational voltage | Voltage tolerance | Power consumption | Pilot |
|------------|---------------------|-------------------|-------------------|----------|
| | | DC | DC | |
| 0820061301 | 24 V | -10% / +10% | 2.2 W | Internal |
| 0820061351 | 24 V | -10% / +10% | 2.2 W | External |
| 0820061311 | 24 V | -10% / +10% | 2.2 W | Internal |
| 0820061361 | 24 V | -10% / +10% | 2.2 W | External |
| 0820061321 | 24 V | -10% / +10% | 2.2 W | Internal |
| 0820061371 | 24 V | -10% / +10% | 2.2 W | External |

| Part No. | Flow conductance | Flow conductance | Nominal resistance | Working pressure min./max. |
|------------|------------------|------------------|--------------------|----------------------------|
| | b | C-value | | |
| 0820061301 | 0.34 | 3 l/(s*bar) | 280 Ω | 3 ... 10 bar |
| 0820061351 | 0.34 | 3 l/(s*bar) | 280 Ω | -0.9 ... 10 bar |
| 0820061311 | 0.34 | 3 l/(s*bar) | 280 Ω | 3 ... 10 bar |
| 0820061361 | 0.34 | 3 l/(s*bar) | 280 Ω | -0.9 ... 10 bar |
| 0820061321 | 0.34 | 3 l/(s*bar) | 280 Ω | 3 ... 10 bar |
| 0820061371 | 0.34 | 3 l/(s*bar) | 280 Ω | -0.9 ... 10 bar |

Nominal flow Q_n at 6 bar and $\Delta p = 1$ bar, MO = Manual override

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

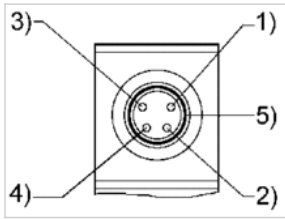
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Pin assignments

PIN assignment and cable colors for valve plug connectors



PIN assignment:

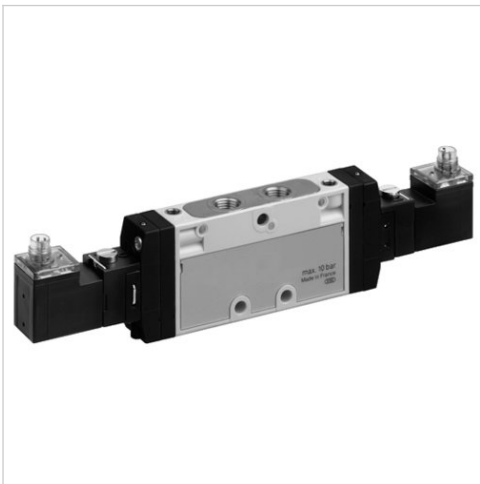
- 1) PIN not assigned
- 2) PIN not assigned
- 3) 0 V
- 4) 24 V
- 5) LED

Cable colors

- 1) Brown
- 2) White
- 3) Blue
- 4) Black

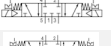

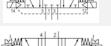

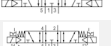

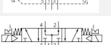

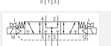



5/3-directional valve, Series TC08

- Operating voltage 24 V DC
- 5/3
- $Q_n = 700$ l/min
- Pilot valve width : 15 mm
- closed center exhausted center pressurized center
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, M8, 4-pin
- Manual override : with detent
- double solenoid
- Pilot : Internal External



| | |
|---------------------------------------|-----------------------------------|
| Version | Spool valve, positive overlapping |
| Activation | Electrically |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | 3 ... 10 bar |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Q_n | 700 l/min |
| Connector standard | DIN EN 60947-5-2 |
| Protection class acc. to DIN EN 61140 | Class III |
| Electrically | |
| Protection class with connection | IP65 |
| LED status display | Yellow |
| Duty cycle | 100 % |
| Typ. switch-on time | 10 ms |
| Typ. switch-off time | 11 ms |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Weight | 0.178 kg |

Technical data

| Part No. | | MO | Compressed air connection | |
|------------|---|---|---------------------------|-------|
| | | | | Input |
| 0820061201 |  |  | closed center | G 1/8 |
| 0820061251 |  |  | closed center | G 1/8 |
| 0820061211 |  |  | exhausted center | G 1/8 |
| 0820061261 |  |  | exhausted center | G 1/8 |
| 0820061221 |  |  | pressurized center | G 1/8 |
| 0820061271 |  |  | pressurized center | G 1/8 |

| Part No. | Compressed air connection | Compressed air connection |
|------------|---------------------------|---------------------------|
| | Output | Exhaust |
| 0820061201 | G 1/8 | G 1/8 |
| 0820061251 | G 1/8 | G 1/8 |
| 0820061211 | G 1/8 | G 1/8 |
| 0820061261 | G 1/8 | G 1/8 |
| 0820061221 | G 1/8 | G 1/8 |
| 0820061271 | G 1/8 | G 1/8 |

| Part No. | Operational voltage | Voltage tolerance | Power consumption | Pilot |
|------------|---------------------|-------------------|-------------------|----------|
| | | | | |
| 0820061201 | 24 V | -10% / +10% | 2.2 W | Internal |
| 0820061251 | 24 V | -10% / +10% | 2.2 W | External |
| 0820061211 | 24 V | -10% / +10% | 2.2 W | Internal |
| 0820061261 | 24 V | -10% / +10% | 2.2 W | External |
| 0820061221 | 24 V | -10% / +10% | 2.2 W | Internal |
| 0820061271 | 24 V | -10% / +10% | 2.2 W | External |

| Part No. | Flow conductance | Flow conductance | Nominal resistance | Working pressure min./max. |
|------------|------------------|------------------|--------------------|----------------------------|
| | b | C-value | | |
| 0820061201 | 0.34 | 3 l/(s*bar) | 280 Ω | 3 ... 10 bar |
| 0820061251 | 0.34 | 3 l/(s*bar) | 280 Ω | -0.9 ... 10 bar |
| 0820061211 | 0.34 | 3 l/(s*bar) | 280 Ω | 3 ... 10 bar |
| 0820061261 | 0.34 | 3 l/(s*bar) | 280 Ω | -0.9 ... 10 bar |
| 0820061221 | 0.34 | 3 l/(s*bar) | 280 Ω | 3 ... 10 bar |
| 0820061271 | 0.34 | 3 l/(s*bar) | 280 Ω | -0.9 ... 10 bar |

Nominal flow Q_n at 6 bar and $\Delta p = 1$ bar, MO = Manual override

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

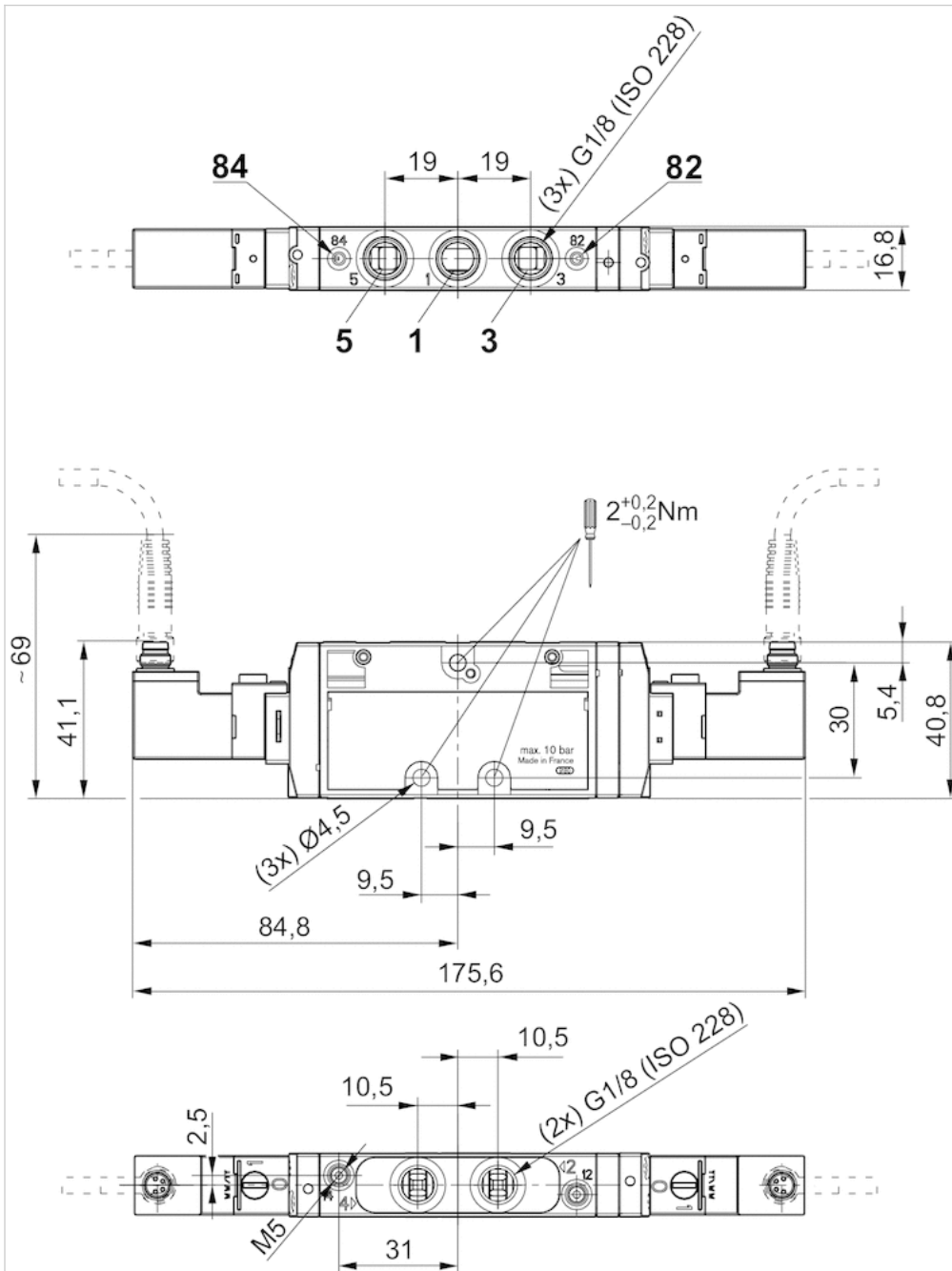
Technical information

Material

| | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber Polyurethane |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, nickel-plated chrome-plated |

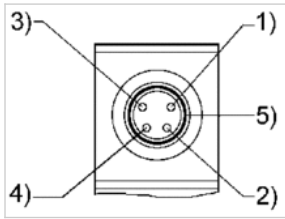
Dimensions

Dimensions



Pin assignments

PIN assignment and cable colors for valve plug connectors



PIN assignment:

- 1) PIN not assigned
- 2) PIN not assigned
- 3) 0 V
- 4) 24 V
- 5) LED

Cable colors

- 1) Brown
- 2) White
- 3) Blue
- 4) Black













2x3/2-directional valve, Series TC08

- Operating voltage 24 V DC
- 2x3/2
- Qn = 600 l/min
- Pilot valve width : 15 mm
- NC/NC NO/NO NC/NO
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, ISO 15217, form C
- Manual override : with detent
- double solenoid
- With spring return
- Pilot : External, Internal



| | |
|--|-----------------------------------|
| Version | Spool valve, positive overlapping |
| Activation | Electrically |
| Pilot | External, Internal |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | 2.5 ... 10 bar |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Qn | 600 l/min |
| Compressed air connection | according to ISO 228-1 |
| Connector standard | ISO 15217 |
| Protection class with connection | IP65 |
| Duty cycle | 100 % |
| Typ. switch-on time | 10 ms |
| Typ. switch-off time | 14 ms |
| Generic emission standard in accordance with | EN 50081-2:1993 |
| Generic immunity standard in accordance with | EN 50082-2 |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Tightening torque tolerance | ±0,2 mT |
| Weight | 0.181 kg |

Technical data

| Part No. | | MO | | Compressed air connection | |
|------------|---|---|-------|---------------------------|-------|
| | | | | Input | |
| R422102002 |  |  | NC/NC | | G 1/8 |
| R422102006 |  |  | NO/NO | | G 1/8 |
| R422102010 |  |  | NC/NO | | G 1/8 |
| R422102013 |  |  | NC/NC | | G 1/8 |
| R422102016 |  |  | NO/NO | | G 1/8 |
| R422102019 |  |  | NC/NO | | G 1/8 |

| Part No. | Compressed air connection | |
|------------|---------------------------|---------|
| | Output | Exhaust |
| R422102002 | G 1/8 | G 1/8 |
| R422102006 | G 1/8 | G 1/8 |
| R422102010 | G 1/8 | G 1/8 |
| R422102013 | G 1/8 | G 1/8 |
| R422102016 | G 1/8 | G 1/8 |
| R422102019 | G 1/8 | G 1/8 |

| Part No. | Compressed air connection | | Operational voltage | Voltage tolerance |
|------------|---------------------------|--|---------------------|-------------------|
| | Pilot Input | | | |
| R422102002 | - | | 24 V | -10% / +10% |
| R422102006 | - | | 24 V | -10% / +10% |
| R422102010 | - | | 24 V | -10% / +10% |
| R422102013 | M5 | | 24 V | -10% / +10% |
| R422102016 | M5 | | 24 V | -10% / +10% |
| R422102019 | M5 | | 24 V | -10% / +10% |

| Part No. | Power consumption | Flow conductance | Flow conductance | Nominal resistance |
|------------|-------------------|------------------|------------------|--------------------|
| | DC | b | C-value | |
| R422102002 | 2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102006 | 2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102010 | 2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102013 | 2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102016 | 2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102019 | 2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |

| Part No. | Working pressure min./max. |
|------------|----------------------------|
| R422102002 | 2.5 ... 10 bar |
| R422102006 | 2.5 ... 10 bar |
| R422102010 | 2.5 ... 10 bar |
| R422102013 | -0.9 ... 10 bar |
| R422102016 | -0.9 ... 10 bar |
| R422102019 | -0.9 ... 10 bar |

Nominal flow Q_n at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

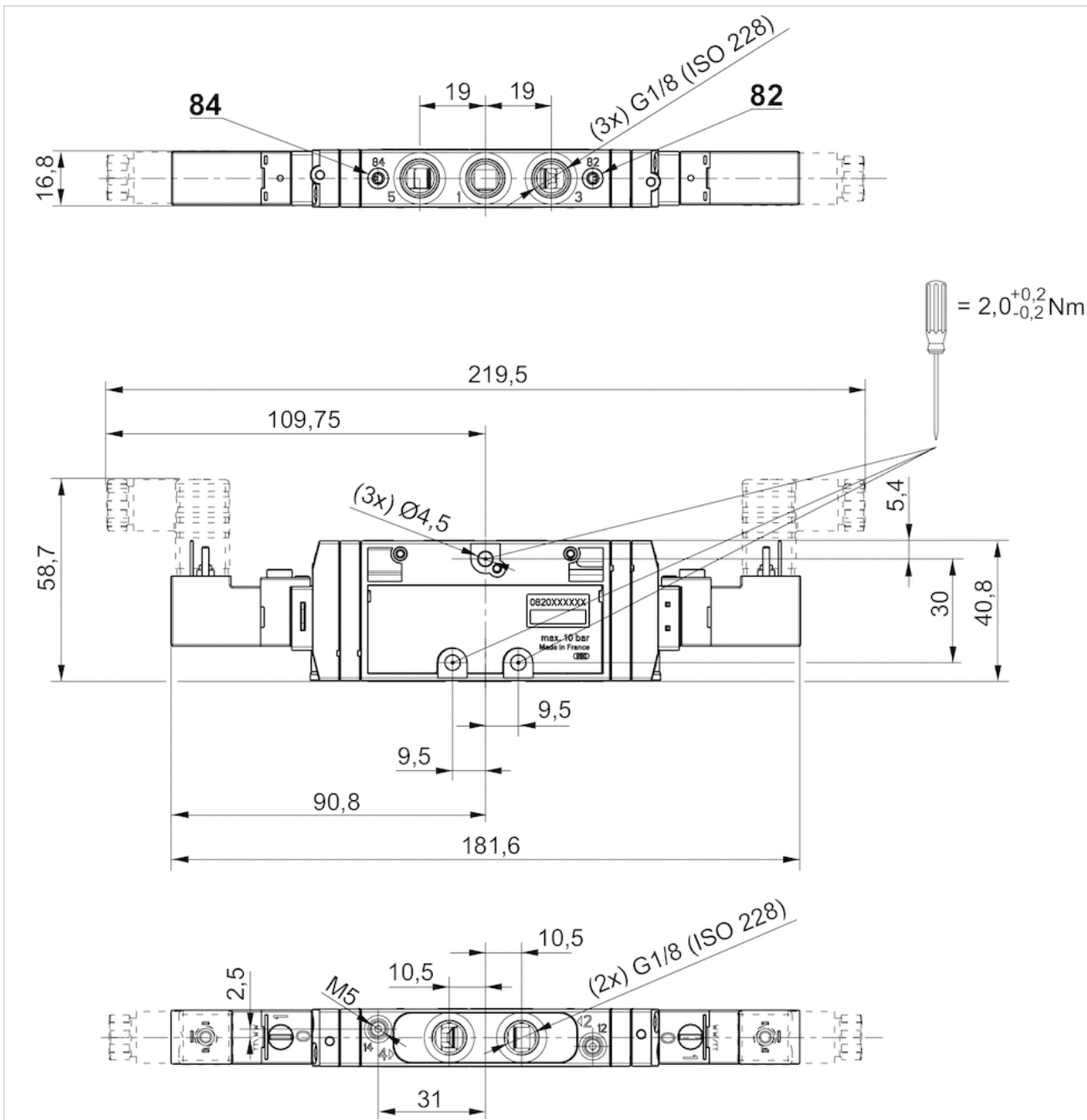
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber Polyurethane |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, nickel-plated chrome-plated |

Dimensions

Dimensions















2x3/2-directional valve, Series TC08

- Operating voltage 24 V DC
- 2x3/2
- Qn = 600 l/min
- Pilot valve width : 15 mm
- NC/NC NO/NO NC/NO
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, ISO 15217, form C
- Manual override : without detent
- double solenoid
- With spring return
- Pilot : External, Internal



| | |
|--|-----------------------------------|
| Version | Spool valve, positive overlapping |
| Activation | Electrically |
| Pilot | External, Internal |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | 3 ... 10 bar |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Qn | 600 l/min |
| Compressed air connection | according to ISO 228-1 |
| Connector standard | ISO 15217 |
| Protection class with connection | IP65 |
| Duty cycle | 100 % |
| Typ. switch-on time | 10 ms |
| Typ. switch-off time | 14 ms |
| Generic emission standard in accordance with | EN 50081-2:1993 |
| Generic immunity standard in accordance with | EN 50082-2 |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Tightening torque tolerance | ±0,2 mT |
| Weight | 0.181 kg |

Technical data

| Part No. | | MO | Compressed air connection | | |
|------------|---|---|---------------------------|-------|-------|
| | | | | Input | |
| R422102023 |  |  | | NC/NC | G 1/8 |
| R422102027 |  |  | | NO/NO | G 1/8 |
| R422102031 |  |  | | NC/NO | G 1/8 |
| R422102034 |  |  | | NC/NC | G 1/8 |
| R422102037 |  |  | | NO/NO | G 1/8 |
| R422102040 |  |  | | NC/NO | G 1/8 |

| Part No. | Compressed air connection | Compressed air connection |
|------------|---------------------------|---------------------------|
| | Output | Exhaust |
| R422102023 | G 1/8 | G 1/8 |
| R422102027 | G 1/8 | G 1/8 |
| R422102031 | G 1/8 | G 1/8 |
| R422102034 | G 1/8 | G 1/8 |
| R422102037 | G 1/8 | G 1/8 |
| R422102040 | G 1/8 | G 1/8 |

| Part No. | Compressed air connection | Operational voltage | Voltage tolerance |
|------------|---------------------------|---------------------|-------------------|
| | Pilot Input | DC | DC |
| R422102023 | - | 24 V | -10% / +10% |
| R422102027 | - | 24 V | -10% / +10% |
| R422102031 | - | 24 V | -10% / +10% |
| R422102034 | M5 | 24 V | -10% / +10% |
| R422102037 | M5 | 24 V | -10% / +10% |
| R422102040 | M5 | 24 V | -10% / +10% |

| Part No. | Power consumption | Flow conductance | Flow conductance | Nominal resistance |
|------------|-------------------|------------------|------------------|--------------------|
| | DC | b | C-value | |
| R422102023 | 2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102027 | 2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102031 | 2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102034 | 2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102037 | 2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |
| R422102040 | 2 W | 0.27 | 2.8 l/(s*bar) | 280 Ω |

| Part No. | Working pressure min./max. |
|------------|----------------------------|
| R422102023 | 3 ... 10 bar |
| R422102027 | 3 ... 10 bar |
| R422102031 | 3 ... 10 bar |
| R422102034 | -0.9 ... 10 bar |
| R422102037 | -0.9 ... 10 bar |
| R422102040 | -0.9 ... 10 bar |

Nominal flow Q_n at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

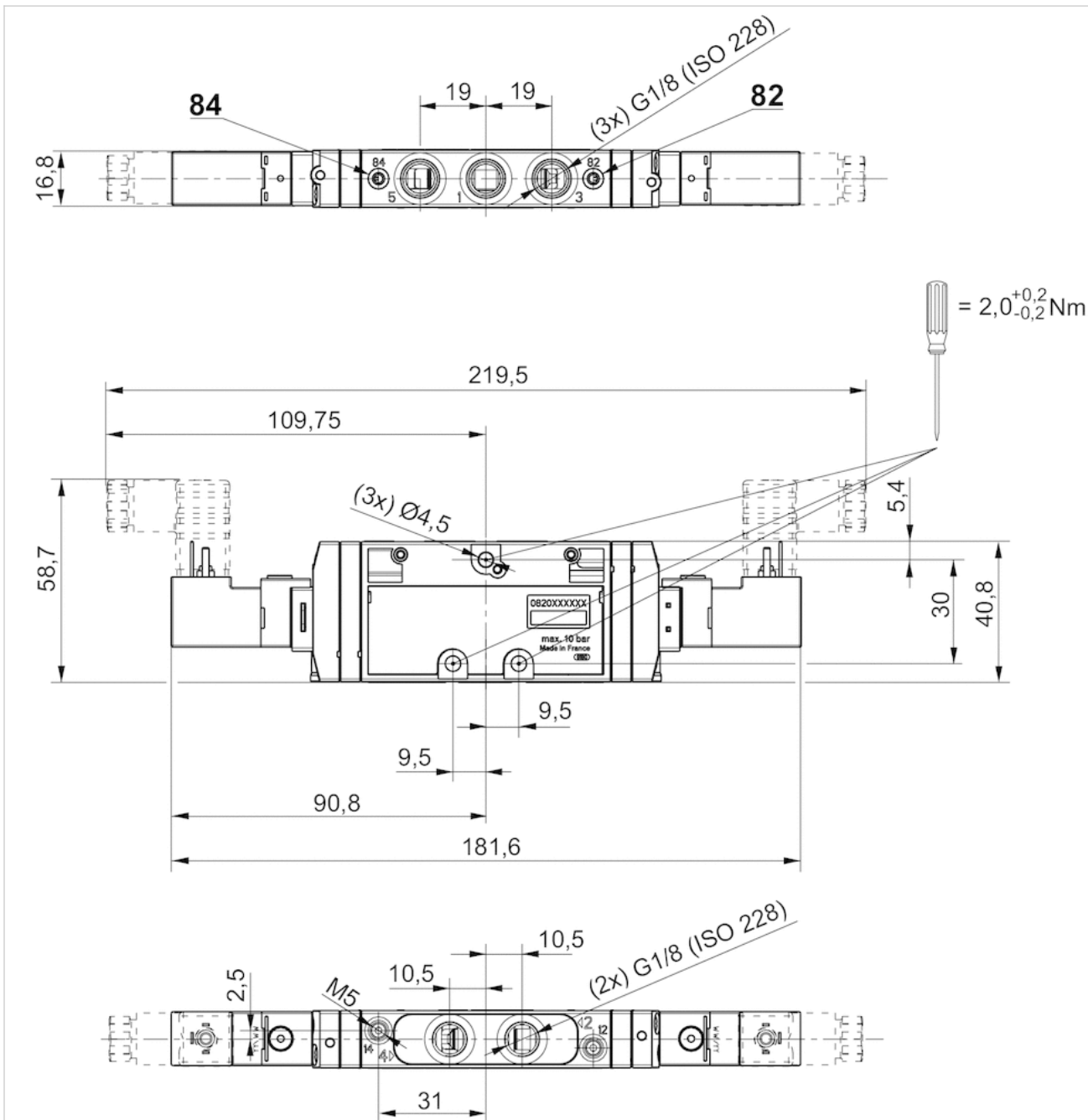
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber Polyurethane |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, nickel-plated chrome-plated |

Dimensions

Dimensions
























5/2-directional valve, Series TC08

- Operating voltage 24 V DC
- 5/2
- $Q_n = 800$ l/min
- Pilot valve width : 15 mm
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, ISO 15217, form C
- Manual override : without detent
- single solenoid double solenoid
- Pilot : Internal External



| | |
|----------------------------------|---|
| Version | Spool valve, positive overlapping |
| Activation | Electrically |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | See table below |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Q_n | 800 l/min |
| Connector standard | ISO 15217 |
| Protection class with connection | IP65 |
| Duty cycle | 100 % |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Weight | See table below |
| Comment | An example configuration is illustrated. The delivered product may thus deviate from the illustration. |

Technical data

| Part No. |  | MO | Compressed air connection | |
|------------|---|---|---------------------------|--------|
| | | | Input | Output |
| 0820060101 |  |  | G 1/8 | G 1/8 |
| 0820060151 |  |  | G 1/8 | G 1/8 |
| 0820060126 |  |  | G 1/8 | G 1/8 |
| R422103047 |  |  | G 1/8 | G 1/8 |
| 0820060176 |  |  | G 1/8 | G 1/8 |
| R422103049 |  |  | G 1/8 | G 1/8 |
| 0820060601 |  |  | G 1/8 | G 1/8 |
| R422103051 |  |  | G 1/8 | G 1/8 |
| 0820060651 |  |  | G 1/8 | G 1/8 |
| R422103053 |  |  | G 1/8 | G 1/8 |

| Part No. | Compressed air connection | | Operational voltage | Voltage tolerance |
|------------|---------------------------|--|---------------------|-------------------|
| | Exhaust | | DC | DC |
| 0820060101 | G 1/8 | | 24 V | -10% / +10% |
| 0820060151 | G 1/8 | | 24 V | -10% / +10% |
| 0820060126 | G 1/8 | | 24 V | -10% / +10% |
| R422103047 | G 1/8 | | - | - |
| 0820060176 | G 1/8 | | 24 V | -10% / +10% |
| R422103049 | G 1/8 | | - | - |
| 0820060601 | G 1/8 | | 24 V | -10% / +10% |
| R422103051 | G 1/8 | | - | - |
| 0820060651 | G 1/8 | | 24 V | -10% / +10% |
| R422103053 | G 1/8 | | - | - |

| Part No. | Power consumption | Pilot | Flow conductance | Flow conductance | Nominal resistance |
|------------|-------------------|----------|------------------|------------------|--------------------|
| | DC | | b | C-value | |
| 0820060101 | 2 W | Internal | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| 0820060151 | 2 W | External | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| 0820060126 | 2 W | Internal | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| R422103047 | - | Internal | 0.36 | 3.5 l/(s*bar) | - |
| 0820060176 | 2 W | External | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| R422103049 | - | External | 0.36 | 3.5 l/(s*bar) | - |
| 0820060601 | 2 W | Internal | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| R422103051 | - | Internal | 0.36 | 3.5 l/(s*bar) | - |
| 0820060651 | 2 W | External | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| R422103053 | - | External | 0.36 | 3.5 l/(s*bar) | - |

| Part No. | Working pressure min./max. | Control pressure min./max. | Typ. switch-on time | Typ. switch-off time |
|------------|----------------------------|----------------------------|---------------------|----------------------|
| 0820060101 | 3 ... 10 bar | 3 ... 10 bar | 14 ms | 18 ms |
| 0820060151 | -0.9 ... 10 bar | 3 ... 10 bar | 14 ms | 18 ms |
| 0820060126 | 3 ... 10 bar | 3 ... 10 bar | 14 ms | 17 ms |
| R422103047 | 3 ... 10 bar | 3 ... 10 bar | 14 ms | 17 ms |
| 0820060176 | -0.9 ... 10 bar | 3 ... 10 bar | 14 ms | 17 ms |
| R422103049 | -0.9 ... 10 bar | 3 ... 10 bar | 14 ms | 17 ms |
| 0820060601 | 2 ... 10 bar | 2 ... 10 bar | 10 ms | 10 ms |

| Part No. | Working pressure min./max. | Control pressure min./max. | Typ. switch-on time | Typ. switch-off time |
|------------|----------------------------|----------------------------|---------------------|----------------------|
| R422103051 | 2 ... 10 bar | 2 ... 10 bar | 10 ms | 10 ms |
| 0820060651 | -0.9 ... 10 bar | 2 ... 10 bar | 10 ms | 10 ms |
| R422103053 | -0.9 ... 10 bar | 2 ... 10 bar | 10 ms | 10 ms |

| Part No. | basic valve with electrical connector | Weight |
|------------|---------------------------------------|----------|
| 0820060101 | - | 0.14 kg |
| 0820060151 | - | 0.14 kg |
| 0820060126 | - | 0.14 kg |
| R422103047 | Basic valve without coil | 0.14 kg |
| 0820060176 | - | 0.14 kg |
| R422103049 | Basic valve without coil | 0.14 kg |
| 0820060601 | - | 0.172 kg |
| R422103051 | Basic valve without coil | 0.172 kg |
| 0820060651 | - | 0.172 kg |
| R422103053 | Basic valve without coil | 0.172 kg |

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar, MO = Manual override

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

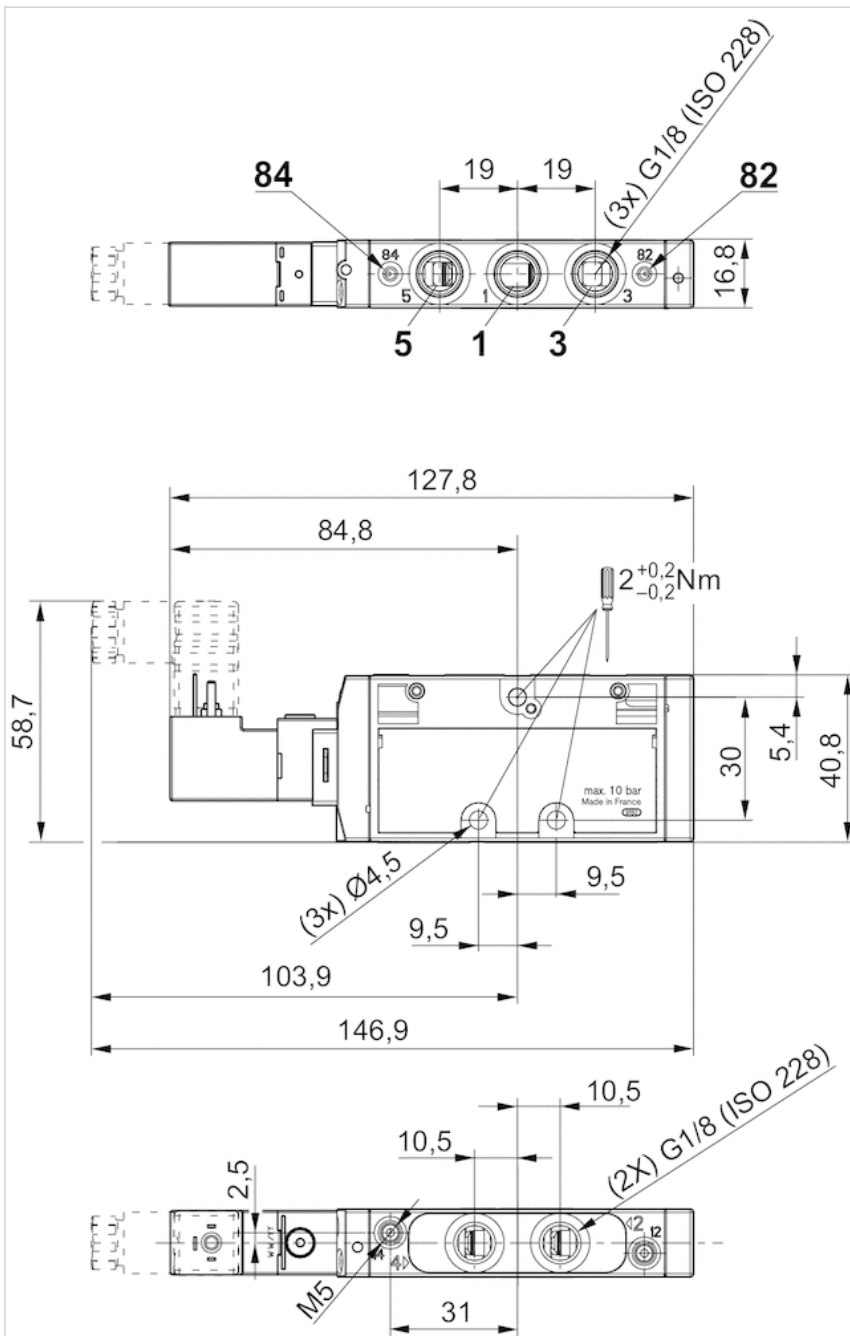
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

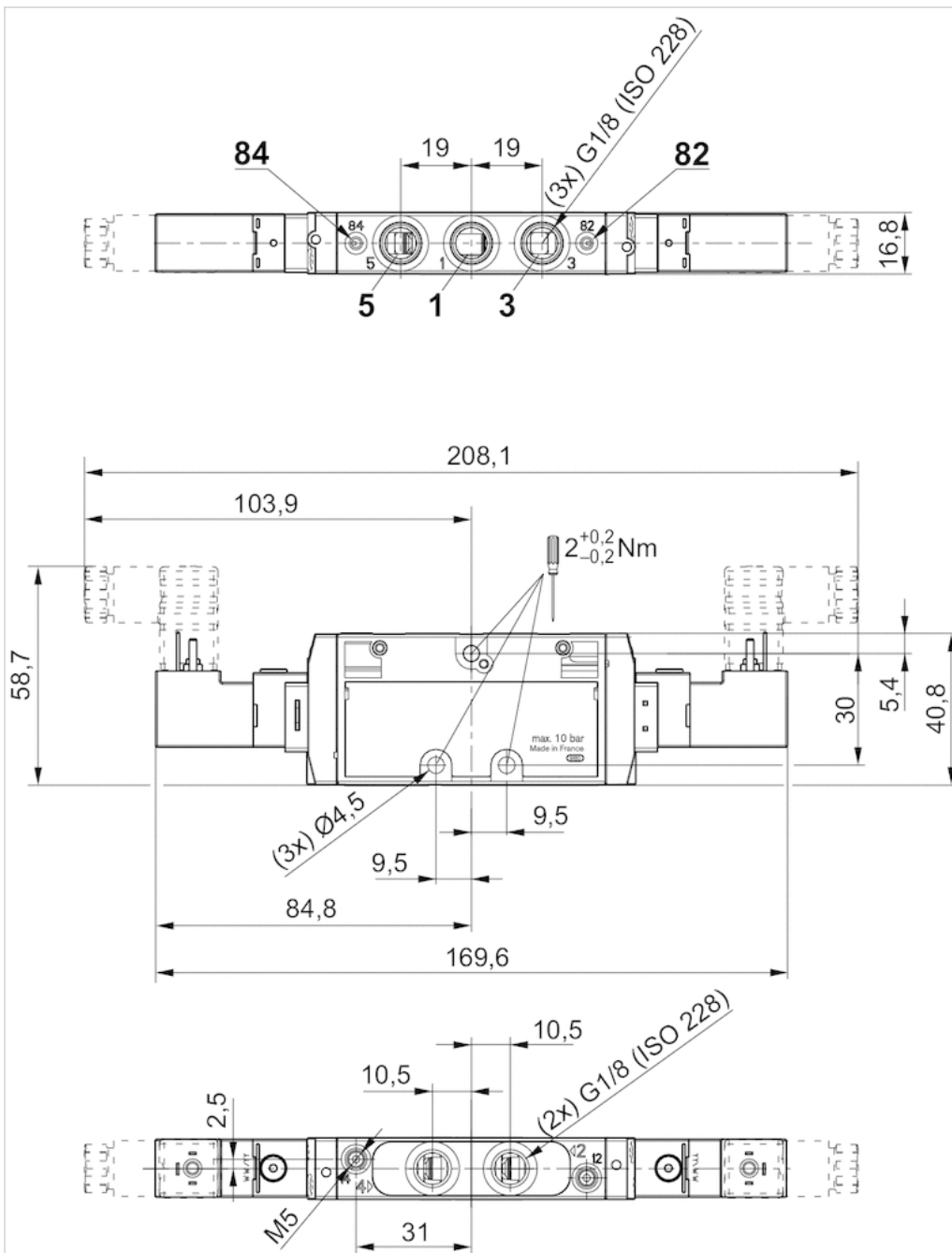
| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber Polyurethane |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, nickel-plated chrome-plated |

Dimensions

Dimensions, single solenoid



Dimensions, double solenoid
























5/2-directional valve, Series TC08

- Operating voltage 24 V DC
- 5/2
- Qn = 800 l/min
- Pilot valve width : 15 mm
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, ISO 15217, form C
- Manual override : with detent
- single solenoid double solenoid
- Pilot : Internal External



| | |
|----------------------------------|---|
| Version | Spool valve, positive overlapping |
| Activation | Electrically |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | See table below |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Qn | 800 l/min |
| Connector standard | ISO 15217 |
| Protection class with connection | IP65 |
| Duty cycle | 100 % |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Weight | See table below |
| Comment | An example configuration is illustrated. The delivered product may thus deviate from the illustration. |

Technical data

| Part No. |  | MO | Compressed air connection | |
|------------|---|---|---------------------------|--------|
| | | | Input | Output |
| 0820060001 |  |  | G 1/8 | G 1/8 |
| 0820060051 |  |  | G 1/8 | G 1/8 |
| 0820060026 |  |  | G 1/8 | G 1/8 |
| R422103046 |  |  | G 1/8 | G 1/8 |
| 0820060076 |  |  | G 1/8 | G 1/8 |
| R422103048 |  |  | G 1/8 | G 1/8 |
| 0820060501 |  |  | G 1/8 | G 1/8 |
| R422103050 |  |  | G 1/8 | G 1/8 |
| 0820060551 |  |  | G 1/8 | G 1/8 |
| R422103052 |  |  | G 1/8 | G 1/8 |

| Part No. | Compressed air connection | | Operational voltage | Voltage tolerance |
|------------|---------------------------|--|---------------------|-------------------|
| | Exhaust | | DC | DC |
| 0820060001 | G 1/8 | | 24 V | -10% / +10% |
| 0820060051 | G 1/8 | | 24 V | -10% / +10% |
| 0820060026 | G 1/8 | | 24 V | -10% / +10% |
| R422103046 | G 1/8 | | - | - |
| 0820060076 | G 1/8 | | 24 V | -10% / +10% |
| R422103048 | G 1/8 | | - | - |
| 0820060501 | G 1/8 | | 24 V | -10% / +10% |
| R422103050 | G 1/8 | | - | - |
| 0820060551 | G 1/8 | | 24 V | -10% / +10% |
| R422103052 | G 1/8 | | - | - |

| Part No. | Power consumption | Pilot | Flow conductance | Flow conductance | Nominal resistance |
|------------|-------------------|----------|------------------|------------------|--------------------|
| | DC | | b | C-value | |
| 0820060001 | 2 W | Internal | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| 0820060051 | 2 W | External | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| 0820060026 | 2 W | Internal | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| R422103046 | - | Internal | 0.36 | 3.5 l/(s*bar) | - |
| 0820060076 | 2 W | External | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| R422103048 | - | External | 0.36 | 3.5 l/(s*bar) | - |
| 0820060501 | 2 W | Internal | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| R422103050 | - | Internal | 0.36 | 3.5 l/(s*bar) | - |
| 0820060551 | 2 W | External | 0.36 | 3.5 l/(s*bar) | 280 Ω |
| R422103052 | - | External | 0.36 | 3.5 l/(s*bar) | - |

| Part No. | Working pressure min./max. | Control pressure min./max. | Typ. switch-on time | Typ. switch-off time |
|------------|----------------------------|----------------------------|---------------------|----------------------|
| 0820060001 | 3 ... 10 bar | 3 ... 10 bar | 14 ms | 18 ms |
| 0820060051 | -0.9 ... 10 bar | 3 ... 10 bar | 14 ms | 18 ms |
| 0820060026 | 3 ... 10 bar | 3 ... 10 bar | 14 ms | 17 ms |
| R422103046 | 3 ... 10 bar | 3 ... 10 bar | 14 ms | 17 ms |
| 0820060076 | -0.9 ... 10 bar | 3 ... 10 bar | 14 ms | 17 ms |
| R422103048 | -0.9 ... 10 bar | 3 ... 10 bar | 14 ms | 17 ms |
| 0820060501 | 2 ... 10 bar | 2 ... 10 bar | 10 ms | 10 ms |

| Part No. | Working pressure min./max. | Control pressure min./max. | Typ. switch-on time | Typ. switch-off time |
|------------|----------------------------|----------------------------|---------------------|----------------------|
| R422103050 | 2 ... 10 bar | 2 ... 10 bar | 10 ms | 10 ms |
| 0820060551 | -0.9 ... 10 bar | 2 ... 10 bar | 10 ms | 10 ms |
| R422103052 | -0.9 ... 10 bar | 2 ... 10 bar | 10 ms | 10 ms |

| Part No. | basic valve with electrical connector | Weight |
|------------|---------------------------------------|----------|
| 0820060001 | - | 0.14 kg |
| 0820060051 | - | 0.14 kg |
| 0820060026 | - | 0.14 kg |
| R422103046 | Basic valve without coil | 0.14 kg |
| 0820060076 | - | 0.14 kg |
| R422103048 | Basic valve without coil | 0.14 kg |
| 0820060501 | - | 0.172 kg |
| R422103050 | Basic valve without coil | 0.172 kg |
| 0820060551 | - | 0.172 kg |
| R422103052 | Basic valve without coil | 0.172 kg |

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar, MO = Manual override

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

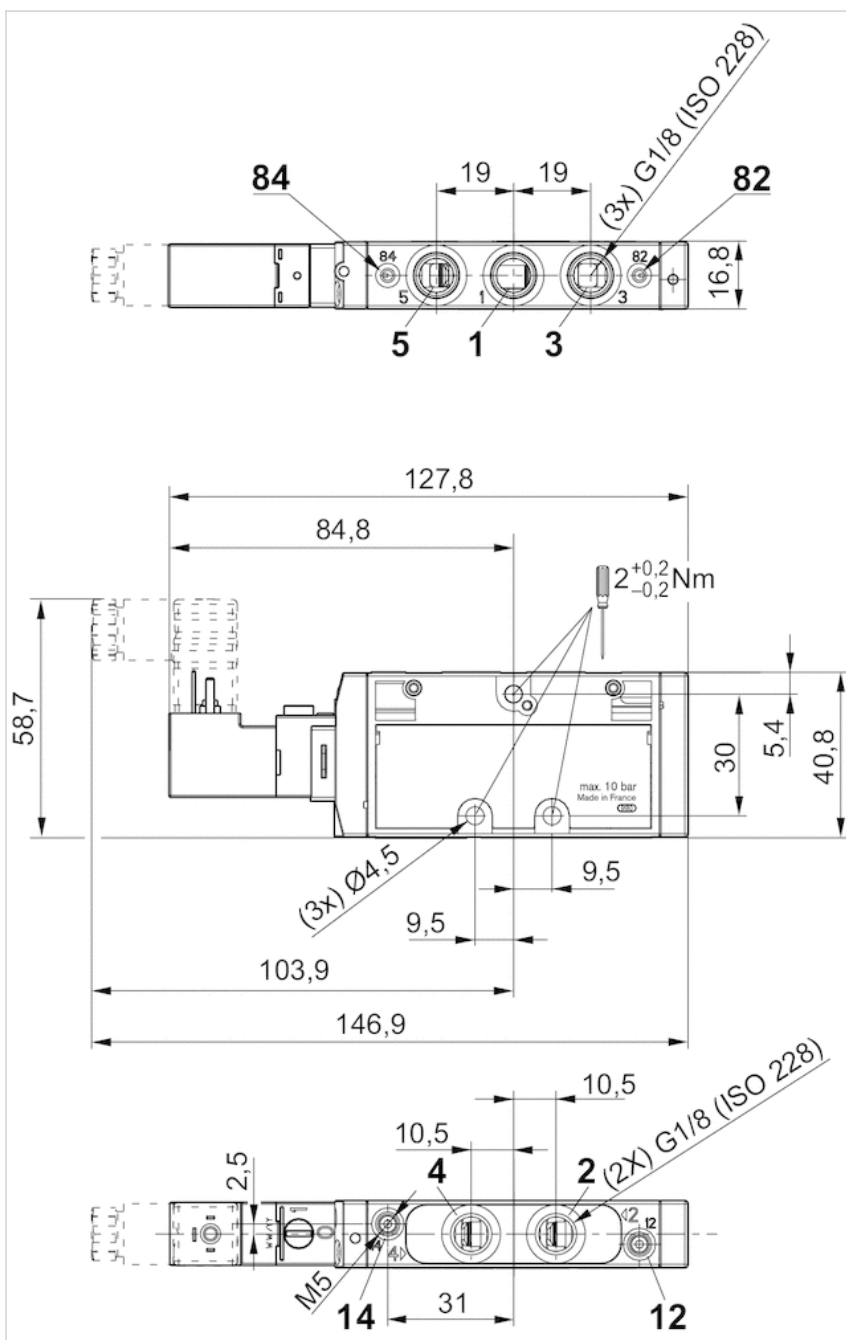
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

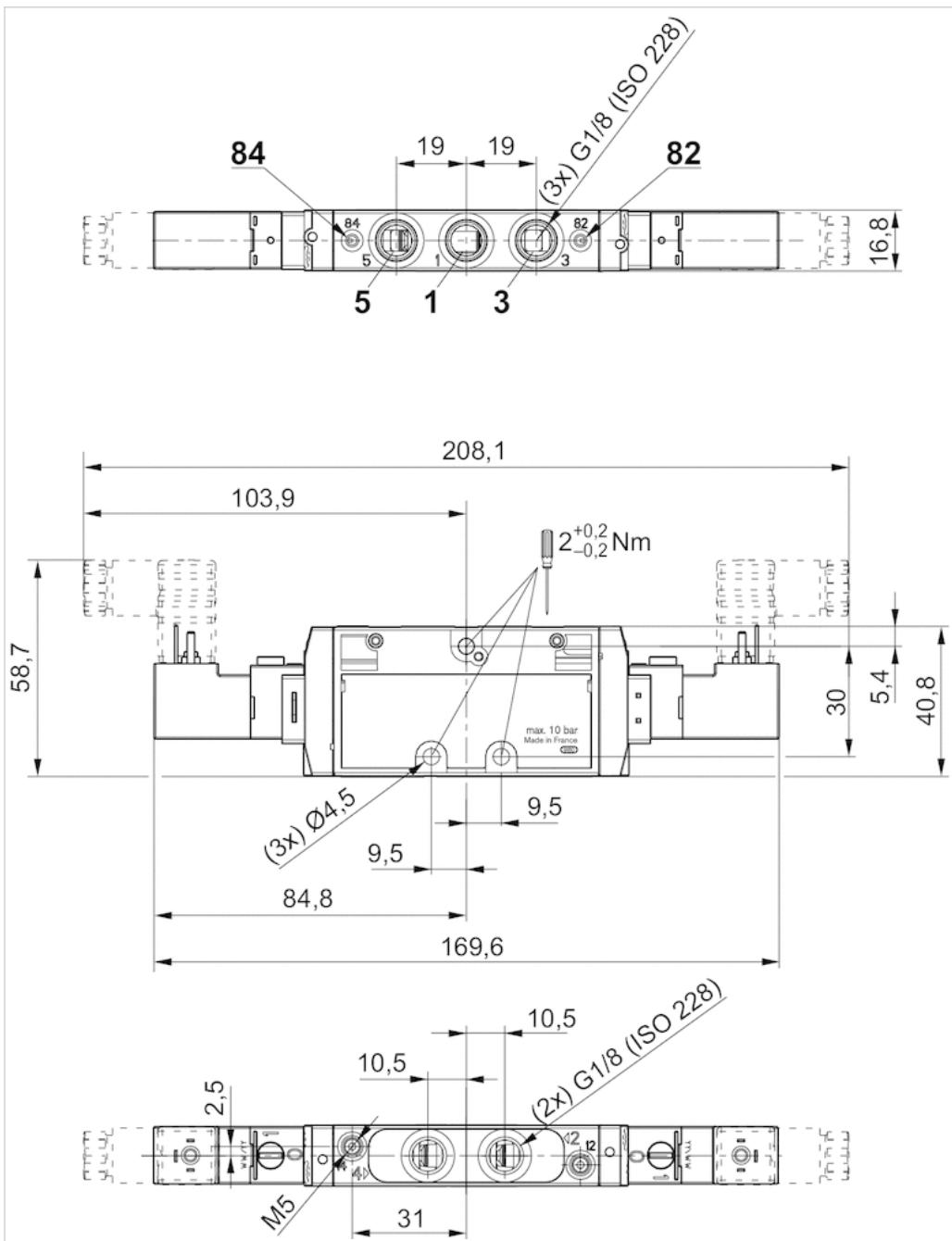
| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber Polyurethane |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, nickel-plated chrome-plated |

Dimensions

Dimensions, single solenoid



Dimensions, double solenoid



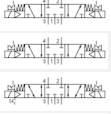
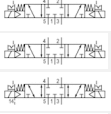

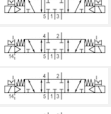

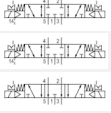

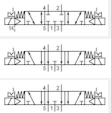

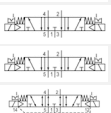

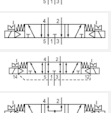

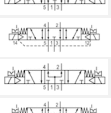

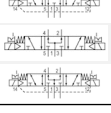

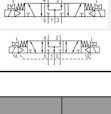

5/3-directional valve, Series TC08

- Operating voltage 24 V DC
- 5/3
- $Q_n = 700$ l/min
- Pilot valve width : 15 mm
- closed center exhausted center pressurized center
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, ISO 15217, form C
- Manual override : with detent
- double solenoid
- Pilot : Internal External



| | |
|----------------------------------|-----------------------------------|
| Version | Spool valve, positive overlapping |
| Activation | Electrically |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | 3 ... 10 bar |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Q_n | 700 l/min |
| Connector standard | ISO 15217 |
| Protection class with connection | IP65 |
| Duty cycle | 100 % |
| Typ. switch-on time | 10 ms |
| Typ. switch-off time | 11 ms |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Weight | 0.178 kg |

Technical data

| Part No. |  | MO | Compressed air connection | |
|------------|---|---|---------------------------|-------|
| | | | | Input |
| 0820061001 |  |  | closed center | G 1/8 |
| R422103054 |  |  | closed center | G 1/8 |
| 0820061051 |  |  | closed center | G 1/8 |
| R422103056 |  |  | closed center | G 1/8 |
| 0820061011 |  |  | exhausted center | G 1/8 |
| R422103058 |  |  | exhausted center | G 1/8 |
| 0820061061 |  |  | exhausted center | G 1/8 |
| 0820061021 |  |  | pressurized center | G 1/8 |
| 0820061071 |  |  | pressurized center | G 1/8 |

| Part No. | Compressed air connection | Compressed air connection |
|------------|---------------------------|---------------------------|
| | Output | Exhaust |
| 0820061001 | G 1/8 | G 1/8 |
| R422103054 | G 1/8 | G 1/8 |
| 0820061051 | G 1/8 | G 1/8 |
| R422103056 | G 1/8 | G 1/8 |
| 0820061011 | G 1/8 | G 1/8 |
| R422103058 | G 1/8 | G 1/8 |
| 0820061061 | G 1/8 | G 1/8 |
| 0820061021 | G 1/8 | G 1/8 |
| 0820061071 | G 1/8 | G 1/8 |

| Part No. | Operational voltage | Voltage tolerance | Power consumption | Pilot |
|------------|---------------------|-------------------|-------------------|----------|
| | DC | DC | DC | |
| 0820061001 | 24 V | -10% / +10% | 2 W | Internal |
| R422103054 | - | - | - | Internal |
| 0820061051 | 24 V | -10% / +10% | 2 W | External |
| R422103056 | - | - | - | External |
| 0820061011 | 24 V | -10% / +10% | 2 W | Internal |
| R422103058 | - | - | - | Internal |
| 0820061061 | 24 V | -10% / +10% | 2 W | External |
| 0820061021 | 24 V | -10% / +10% | 2 W | Internal |
| 0820061071 | 24 V | -10% / +10% | 2 W | External |

| Part No. | Flow conductance | Flow conductance | Nominal resistance | Working pressure min./max. |
|------------|------------------|------------------|--------------------|----------------------------|
| | b | C-value | | |
| 0820061001 | 0.34 | 3 l/(s*bar) | 280 Ω | 3 ... 10 bar |
| R422103054 | 0.34 | 3 l/(s*bar) | - | 3 ... 10 bar |
| 0820061051 | 0.34 | 3 l/(s*bar) | 280 Ω | -0.9 ... 10 bar |
| R422103056 | 0.34 | 3 l/(s*bar) | - | -0.9 ... 10 bar |
| 0820061011 | 0.34 | 3 l/(s*bar) | 280 Ω | 3 ... 10 bar |
| R422103058 | 0.34 | 3 l/(s*bar) | - | 3 ... 10 bar |
| 0820061061 | 0.34 | 3 l/(s*bar) | 280 Ω | -0.9 ... 10 bar |
| 0820061021 | 0.34 | 3 l/(s*bar) | 280 Ω | 3 ... 10 bar |
| 0820061071 | 0.34 | 3 l/(s*bar) | 280 Ω | -0.9 ... 10 bar |

| Part No. | basic valve with electrical connector |
|------------|---------------------------------------|
| 0820061001 | - |
| R422103054 | Basic valve without coil |
| 0820061051 | - |
| R422103056 | Basic valve without coil |
| 0820061011 | - |
| R422103058 | Basic valve without coil |
| 0820061061 | - |
| 0820061021 | - |
| 0820061071 | - |

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar, MO = Manual override

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

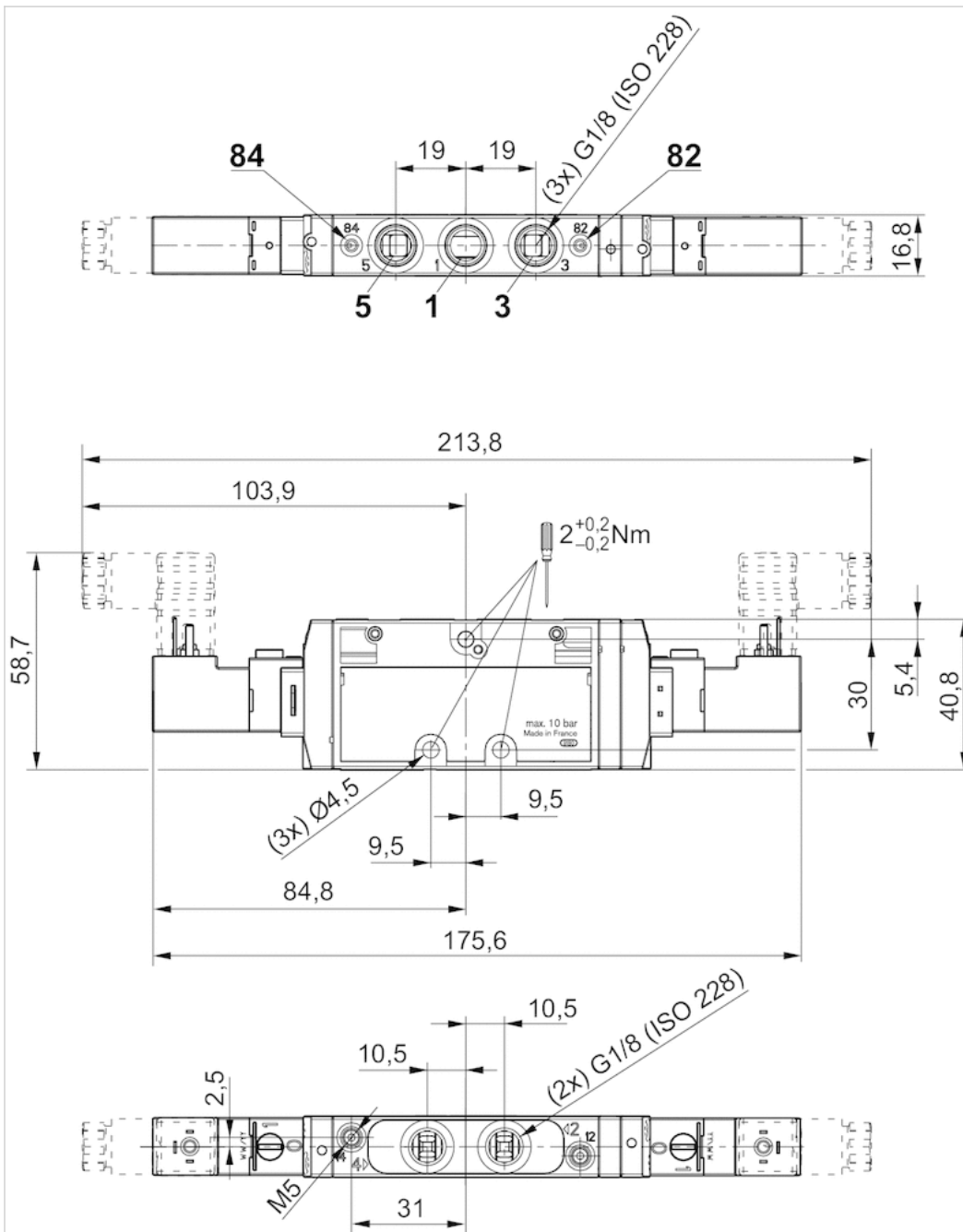
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber Polyurethane |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, nickel-plated chrome-plated |

Dimensions

Dimensions



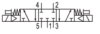

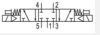

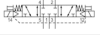

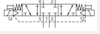

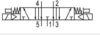

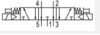

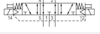



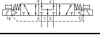

5/3-directional valve, Series TC08

- Operating voltage 24 V DC
- 5/3
- Qn = 700 l/min
- Pilot valve width : 15 mm
- closed center exhausted center pressurized center
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, ISO 15217, form C
- Manual override : without detent
- double solenoid
- Pilot : Internal External



| | |
|----------------------------------|-----------------------------------|
| Version | Spool valve, positive overlapping |
| Activation | Electrically |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | 3 ... 10 bar |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Qn | 700 l/min |
| Connector standard | ISO 15217 |
| Protection class with connection | IP65 |
| Duty cycle | 100 % |
| Typ. switch-on time | 10 ms |
| Typ. switch-off time | 11 ms |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Weight | 0.178 kg |

Technical data

| Part No. | | MO | | Compressed air connection | |
|------------|---|---|--|---------------------------|-------|
| | | | | | Input |
| 0820061101 |  |  | | closed center | G 1/8 |
| R422103055 |  |  | | closed center | G 1/8 |
| 0820061151 |  |  | | closed center | G 1/8 |
| R422103057 |  |  | | closed center | G 1/8 |
| 0820061111 |  |  | | exhausted center | G 1/8 |
| R422103059 |  |  | | exhausted center | G 1/8 |
| 0820061161 |  |  | | exhausted center | G 1/8 |
| 0820061121 |  |  | | pressurized center | G 1/8 |
| 0820061171 |  |  | | pressurized center | G 1/8 |

| Part No. | Compressed air connection | |
|------------|---------------------------|---------|
| | Output | Exhaust |
| 0820061101 | G 1/8 | G 1/8 |
| R422103055 | G 1/8 | G 1/8 |
| 0820061151 | G 1/8 | G 1/8 |
| R422103057 | G 1/8 | G 1/8 |
| 0820061111 | G 1/8 | G 1/8 |
| R422103059 | G 1/8 | G 1/8 |
| 0820061161 | G 1/8 | G 1/8 |
| 0820061121 | G 1/8 | G 1/8 |
| 0820061171 | G 1/8 | G 1/8 |

| Part No. | Operational voltage | Voltage tolerance | Power consumption | Pilot |
|------------|---------------------|-------------------|-------------------|----------|
| | DC | DC | DC | |
| 0820061101 | 24 V | -10% / +10% | 2 W | Internal |
| R422103055 | - | - | - | Internal |
| 0820061151 | 24 V | -10% / +10% | 2 W | External |
| R422103057 | - | - | - | External |
| 0820061111 | 24 V | -10% / +10% | 2 W | Internal |
| R422103059 | - | - | - | Internal |
| 0820061161 | 24 V | -10% / +10% | 2 W | External |
| 0820061121 | 24 V | -10% / +10% | 2 W | Internal |
| 0820061171 | 24 V | -10% / +10% | 2 W | External |

| Part No. | Flow conductance | Flow conductance | Nominal resistance | Working pressure min./max. |
|------------|------------------|------------------|--------------------|----------------------------|
| | b | C-value | | |
| 0820061101 | 0.34 | 3 l/(s*bar) | 280 Ω | 3 ... 10 bar |
| R422103055 | 0.34 | 3 l/(s*bar) | - | 3 ... 10 bar |
| 0820061151 | 0.34 | 3 l/(s*bar) | 280 Ω | -0.9 ... 10 bar |
| R422103057 | 0.34 | 3 l/(s*bar) | - | -0.9 ... 10 bar |
| 0820061111 | 0.34 | 3 l/(s*bar) | 280 Ω | 3 ... 10 bar |
| R422103059 | 0.34 | 3 l/(s*bar) | - | 3 ... 10 bar |
| 0820061161 | 0.34 | 3 l/(s*bar) | 280 Ω | -0.9 ... 10 bar |
| 0820061121 | 0.34 | 3 l/(s*bar) | 280 Ω | 3 ... 10 bar |
| 0820061171 | 0.34 | 3 l/(s*bar) | 280 Ω | -0.9 ... 10 bar |

| Part No. | basic valve with electrical connector |
|------------|---------------------------------------|
| 0820061101 | - |
| R422103055 | Basic valve without coil |
| 0820061151 | - |
| R422103057 | Basic valve without coil |
| 0820061111 | - |
| R422103059 | Basic valve without coil |
| 0820061161 | - |
| 0820061121 | - |
| 0820061171 | - |

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar, MO = Manual override

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

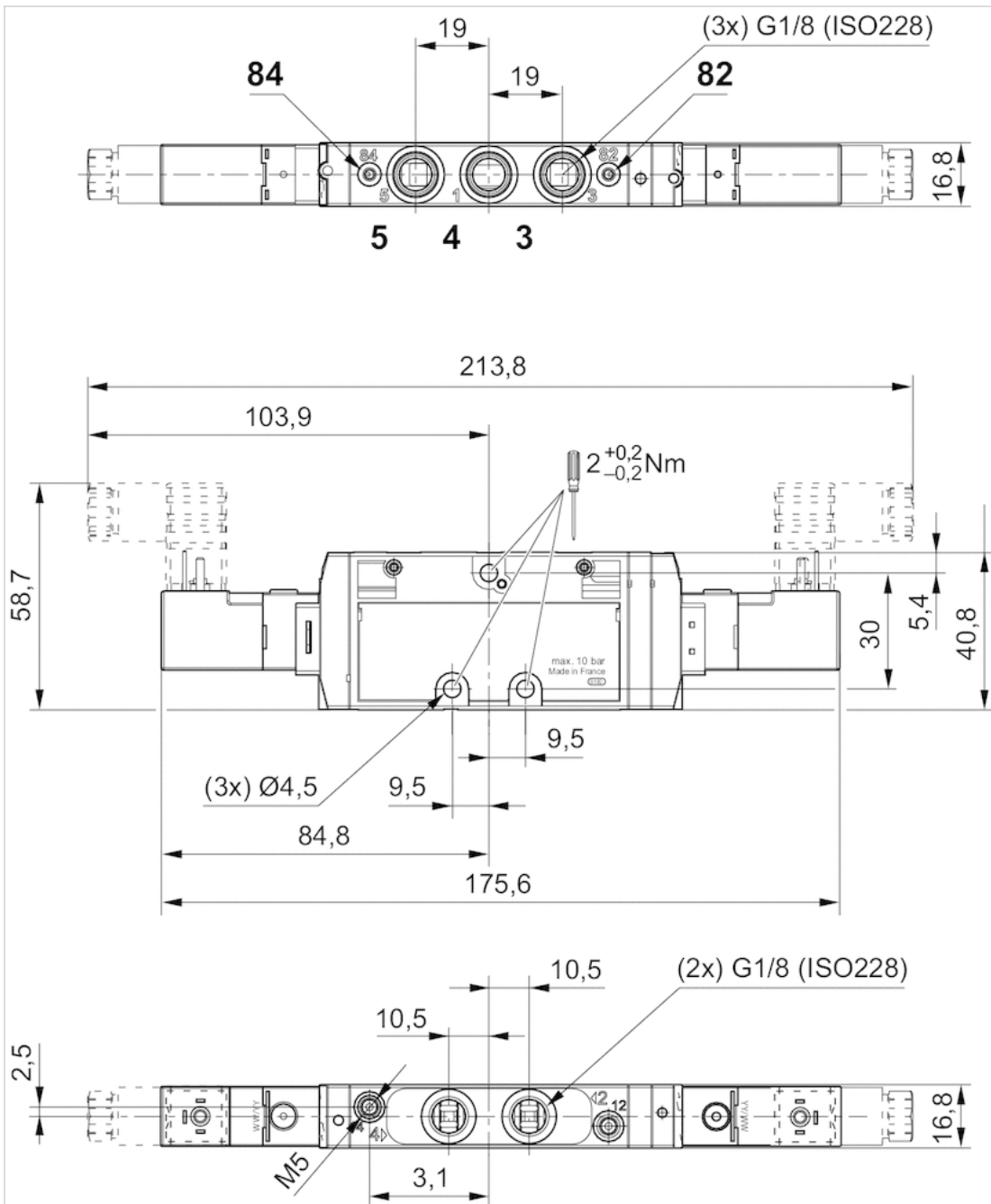
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber Polyurethane |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, nickel-plated chrome-plated |

Dimensions

Dimensions









2x3/2-directional valve, Series TC08 - inch

- Operating voltage 24 V DC
- 2x3/2
- Qn = 600 l/min
- Pilot valve width : 15 mm
- NC NC NO NO NC NO
- Compressed air connection output : 1/8-27 NPTF
- Electrical connection : Plug, ISO 15217, form C
- Manual override : with detent
- double solenoid
- With spring return
- Pilot : Internal External



| | |
|--|-----------------------------------|
| Version | Spool valve, negative overlapping |
| Activation | Electrically |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | 2.5 ... 10 bar |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 50 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Qn | 600 l/min |
| Compressed air connection | according to ANSI B1.20.3 |
| Connector standard | ISO 15217 |
| Protection class with connection | IP65 |
| Duty cycle | 100 % |
| Typ. switch-on time | 10 ms |
| Typ. switch-off time | 14 ms |
| Generic emission standard in accordance with | EN 50081-2:1993 |
| Generic immunity standard in accordance with | EN 50082-2 |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Tightening torque tolerance | ±0,2 mT |
| Weight | 0.181 kg |

Technical data

| Part No. | | | Compressed air connection | |
|------------|---|-------|---------------------------|-------------|
| | | | Input | Output |
| R422102101 |  | NC NC | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102105 |  | NO NO | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102109 |  | NC NO | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102113 |  | NC NC | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102117 |  | NO NO | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102121 |  | NC NO | 1/8-27 NPTF | 1/8-27 NPTF |

| Part No. | Compressed air connection | |
|------------|---------------------------|---------------|
| | Exhaust | Pilot Exhaust |
| R422102101 | 1/8-27 NPTF | - |
| R422102105 | 1/8-27 NPTF | - |
| R422102109 | 1/8-27 NPTF | - |
| R422102113 | 1/8-27 NPTF | M5 |
| R422102117 | 1/8-27 NPTF | M5 |
| R422102121 | 1/8-27 NPTF | M5 |

| Part No. | Operational voltage | Voltage tolerance | Power consumption | Pilot |
|------------|---------------------|-------------------|-------------------|----------|
| | | | | |
| R422102101 | 24 V | -10% / +10% | 2 W | Internal |
| R422102105 | 24 V | -10% / +10% | 2 W | Internal |
| R422102109 | 24 V | -10% / +10% | 2 W | Internal |
| R422102113 | 24 V | -10% / +10% | 2 W | External |
| R422102117 | 24 V | -10% / +10% | 2 W | External |
| R422102121 | 24 V | -10% / +10% | 2 W | External |

| Part No. | Flow conductance | | Nominal resistance | Working pressure min./max. |
|------------|------------------|--|--------------------|----------------------------|
| | C-value | | | |
| R422102101 | 2.8 l/(s*bar) | | 280 Ω | 3 ... 10 bar |
| R422102105 | 2.8 l/(s*bar) | | 280 Ω | 3 ... 10 bar |
| R422102109 | 2.8 l/(s*bar) | | 280 Ω | 3 ... 10 bar |
| R422102113 | 2.8 l/(s*bar) | | 280 Ω | -0.9 ... 10 bar |
| R422102117 | 2.8 l/(s*bar) | | 280 Ω | -0.9 ... 10 bar |
| R422102121 | 2.8 l/(s*bar) | | 280 Ω | -0.9 ... 10 bar |

Nominal flow Q_n at 6 bar and $\Delta p = 1$ bar .

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).



















2x3/2-directional valve, Series TC08 - inch

- 2x3/2
- Qn = 600 l/min
- Pilot valve width : 15 mm
- NC NC NO NO NC NO
- Compressed air connection output : 1/8-27 NPTF
- Electrical connection : Plug, ISO 15217, form C
- Manual override : with detent
- double solenoid
- With spring return
- Pilot : Internal External



| | |
|--|-----------------------------------|
| Version | Spool valve, negative overlapping |
| Activation | Electrically |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | 2.5 ... 10 bar |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 50 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Qn | 600 l/min |
| Compressed air connection | according to ANSI B1.20.3 |
| Connector standard | ISO 15217 |
| Protection class with connection | IP65 |
| Duty cycle | 100 % |
| Typ. switch-on time | 10 ms |
| Typ. switch-off time | 14 ms |
| Generic emission standard in accordance with | EN 50081-2:1993 |
| Generic immunity standard in accordance with | EN 50082-2 |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Tightening torque tolerance | ±0,2 mT |
| Weight | 0.181 kg |

Technical data

| Part No. | | | Compressed air connection | |
|------------|---|-------|---------------------------|-------------|
| | | | Input | Output |
| R422102100 |  | NC NC | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102102 |  | NC NC | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102103 |  | NC NC | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102104 |  | NO NO | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102106 |  | NO NO | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102107 |  | NO NO | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102107 |  | NC NO | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102110 |  | NC NO | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102111 |  | NC NO | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102112 |  | NC NC | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102114 |  | NC NC | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102115 |  | NC NC | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102116 |  | NO NO | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102118 |  | NO NO | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102119 |  | NO NO | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102120 |  | NC NO | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102122 |  | NC NO | 1/8-27 NPTF | 1/8-27 NPTF |
| R422102123 |  | NC NO | 1/8-27 NPTF | 1/8-27 NPTF |

| Part No. | Compressed air connection | |
|------------|---------------------------|---------------|
| | Exhaust | Pilot Exhaust |
| R422102100 | 1/8-27 NPTF | - |
| R422102102 | 1/8-27 NPTF | - |
| R422102103 | 1/8-27 NPTF | - |
| R422102104 | 1/8-27 NPTF | - |
| R422102106 | 1/8-27 NPTF | - |
| R422102107 | 1/8-27 NPTF | - |
| R422102107 | 1/8-27 NPTF | - |
| R422102110 | 1/8-27 NPTF | - |
| R422102111 | 1/8-27 NPTF | - |
| R422102112 | 1/8-27 NPTF | M5 |
| R422102114 | 1/8-27 NPTF | M5 |
| R422102115 | 1/8-27 NPTF | M5 |
| R422102116 | 1/8-27 NPTF | M5 |
| R422102118 | 1/8-27 NPTF | M5 |
| R422102119 | 1/8-27 NPTF | M5 |
| R422102120 | 1/8-27 NPTF | M5 |
| R422102122 | 1/8-27 NPTF | M5 |
| R422102123 | 1/8-27 NPTF | M5 |

| Part No. | Operational voltage | Operational voltage | Voltage tolerance |
|------------|---------------------|---------------------|-------------------|
| | DC | AC 50 Hz | DC |
| R422102100 | 12 V | - | -10% / +10% |
| R422102102 | - | 110 V | - |
| R422102103 | - | 230 V | - |

| Part No. | Operational voltage | Operational voltage | Voltage tolerance |
|------------|---------------------|---------------------|-------------------|
| | DC | AC 50 Hz | DC |
| R422102104 | 12 V | - | -10% / +10% |
| R422102106 | - | 110 V | - |
| R422102107 | - | 230 V | - |
| R422102107 | 12 V | - | -10% / +10% |
| R422102110 | - | 110 V | - |
| R422102111 | - | 230 V | - |
| R422102112 | 12 V | - | -10% / +10% |
| R422102114 | - | 110 V | - |
| R422102115 | - | 230 V | - |
| R422102116 | 12 V | - | -10% / +10% |
| R422102118 | - | 110 V | - |
| R422102119 | - | 230 V | - |
| R422102120 | 12 V | - | -10% / +10% |
| R422102122 | - | 110 V | - |
| R422102123 | - | 230 V | - |

| Part No. | Voltage tolerance | Power consumption | Holding power | Holding power |
|------------|-------------------|-------------------|---------------|---------------|
| | AC 50 Hz | DC | AC 50 Hz | AC 60 Hz |
| R422102100 | - | 2 W | - | - |
| R422102102 | -10% / +10% | - | 1.6 VA | 1.4 VA |
| R422102103 | -10% / +10% | - | 1.6 VA | 1.4 VA |
| R422102104 | - | 2 W | - | - |
| R422102106 | -10% / +10% | - | 1.6 VA | 1.4 VA |
| R422102107 | -10% / +10% | - | 1.6 VA | 1.4 VA |
| R422102107 | - | 2 W | - | - |
| R422102110 | -10% / +10% | - | 1.6 VA | 1.4 VA |
| R422102111 | -10% / +10% | - | 1.6 VA | 1.4 VA |
| R422102112 | - | 2 W | - | - |
| R422102114 | -10% / +10% | - | 1.6 VA | 1.4 VA |
| R422102115 | -10% / +10% | - | 1.6 VA | 1.4 VA |
| R422102116 | - | 2 W | - | - |
| R422102118 | -10% / +10% | - | 1.6 VA | 1.4 VA |
| R422102119 | -10% / +10% | - | 1.6 VA | 1.4 VA |
| R422102120 | - | 2 W | - | - |
| R422102122 | -10% / +10% | - | 1.6 VA | 1.4 VA |
| R422102123 | -10% / +10% | - | 1.6 VA | 1.4 VA |

| Part No. | Switch-on power | Switch-on power | Pilot | Flow conductance |
|------------|-----------------|-----------------|----------|------------------|
| | AC 50 Hz | AC 60 Hz | | b |
| R422102100 | - | - | Internal | 0.27 |
| R422102102 | 2.2 VA | 2 VA | Internal | 0.27 |
| R422102103 | 2.2 VA | 2 VA | Internal | 0.27 |
| R422102104 | - | - | Internal | 0.27 |
| R422102106 | 2.2 VA | 2 VA | Internal | 0.27 |
| R422102107 | 2.2 VA | 2 VA | Internal | 0.27 |
| R422102107 | - | - | Internal | 0.27 |
| R422102110 | 2.2 VA | 2 VA | Internal | 0.27 |
| R422102111 | 2.2 VA | 2 VA | Internal | 0.27 |

| Part No. | Switch-on power | Switch-on power | Pilot | Flow conductance |
|------------|-----------------|-----------------|----------|------------------|
| | AC 50 Hz | AC 60 Hz | | b |
| R422102112 | - | - | External | 0.27 |
| R422102114 | 2.2 VA | 2 VA | External | 0.27 |
| R422102115 | 2.2 VA | 2 VA | External | 0.27 |
| R422102116 | - | - | External | 0.27 |
| R422102118 | 2.2 VA | 2 VA | External | 0.27 |
| R422102119 | 2.2 VA | 2 VA | External | 0.27 |
| R422102120 | - | - | External | 0.27 |
| R422102122 | 2.2 VA | 2 VA | External | 0.27 |
| R422102123 | 2.2 VA | 2 VA | External | 0.27 |

| Part No. | Flow conductance | Nominal resistance | Working pressure min./max. |
|------------|------------------|--------------------|----------------------------|
| | C-value | | |
| R422102100 | 2.8 l/(s*bar) | 72 Ω | 3 ... 10 bar |
| R422102102 | 2.8 l/(s*bar) | 3700 Ω | 3 ... 10 bar |
| R422102103 | 2.8 l/(s*bar) | 14700 Ω | 3 ... 10 bar |
| R422102104 | 2.8 l/(s*bar) | 72 Ω | 3 ... 10 bar |
| R422102106 | 2.8 l/(s*bar) | 3700 Ω | 3 ... 10 bar |
| R422102107 | 2.8 l/(s*bar) | 14700 Ω | 3 ... 10 bar |
| R422102107 | 2.8 l/(s*bar) | 72 Ω | 3 ... 10 bar |
| R422102110 | 2.8 l/(s*bar) | 3700 Ω | 3 ... 10 bar |
| R422102111 | 2.8 l/(s*bar) | 14700 Ω | 3 ... 10 bar |
| R422102112 | 2.8 l/(s*bar) | 72 Ω | -0.9 ... 10 bar |
| R422102114 | 2.8 l/(s*bar) | 3700 Ω | -0.9 ... 10 bar |
| R422102115 | 2.8 l/(s*bar) | 14700 Ω | -0.9 ... 10 bar |
| R422102116 | 2.8 l/(s*bar) | 72 Ω | -0.9 ... 10 bar |
| R422102118 | 2.8 l/(s*bar) | 3700 Ω | -0.9 ... 10 bar |
| R422102119 | 2.8 l/(s*bar) | 3700 Ω | -0.9 ... 10 bar |
| R422102120 | 2.8 l/(s*bar) | 72 Ω | -0.9 ... 10 bar |
| R422102122 | 2.8 l/(s*bar) | 3700 Ω | -0.9 ... 10 bar |
| R422102123 | 2.8 l/(s*bar) | 14700 Ω | -0.9 ... 10 bar |

Nominal flow Q_n at 6 bar and $\Delta p = 1$ bar .

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

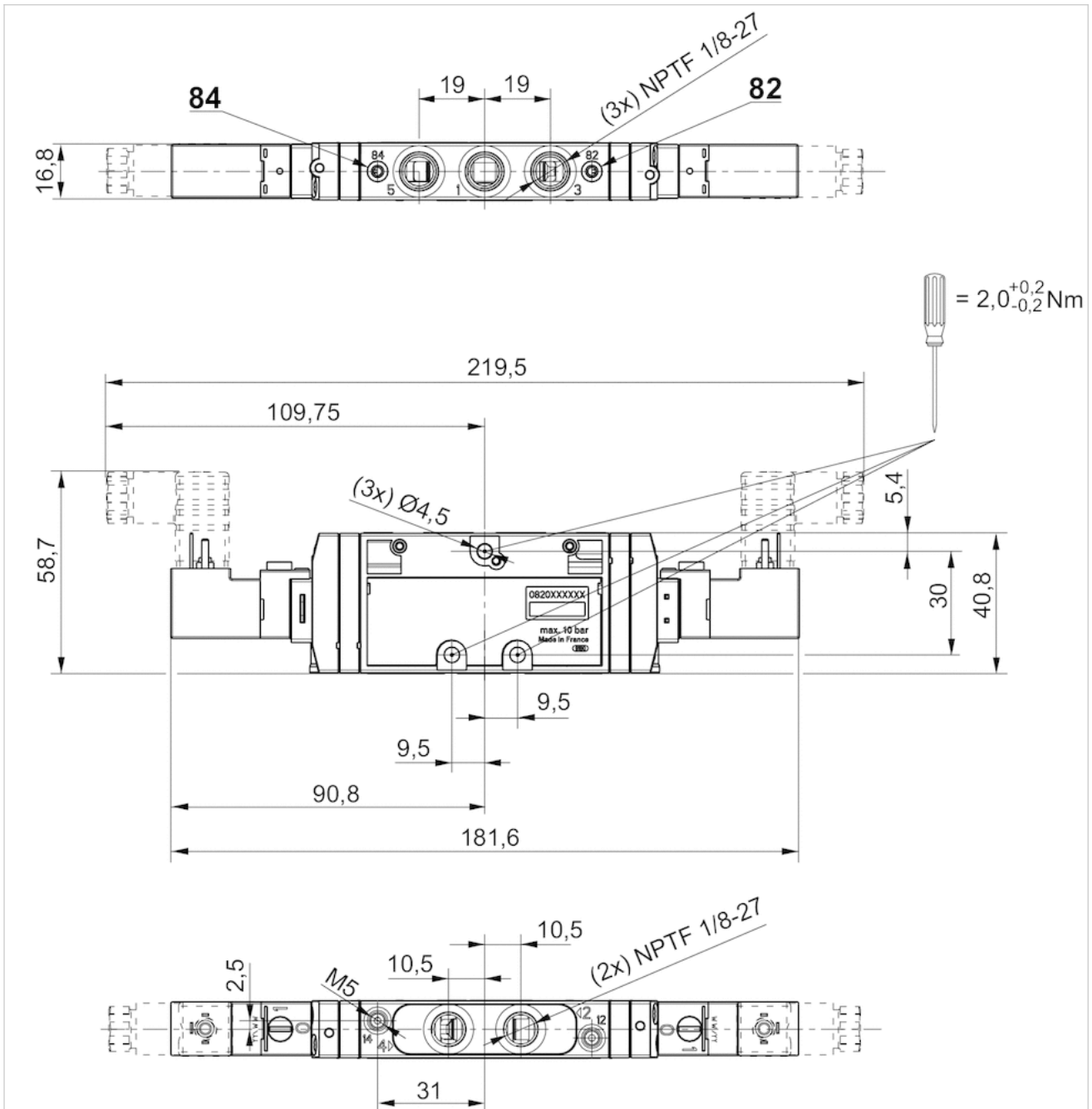
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, nickel-plated chrome-plated |

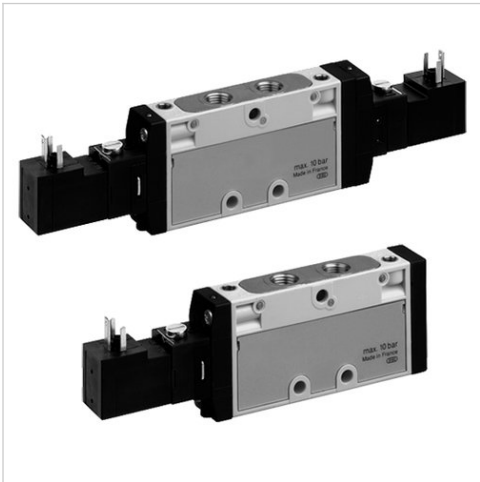
Dimensions

Dimensions in mm










5/2-directional valve, Series TC08 - inch

- Operating voltage 24 V DC
- 5/2
- $Q_n = 800$ l/min
- Pilot valve width : 15 mm
- Compressed air connection output : 1/8-27 NPTF
- Electrical connection : Plug, ISO 15217, form C
- Manual override : with detent
- Single or double solenoid
- With air spring return
- Pilot : Internal External



| | |
|--|-----------------------------------|
| Version | Spool valve, negative overlapping |
| Activation | Electrically |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | See table below |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 50 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Q_n | 800 l/min |
| Compressed air connection | according to ANSI B1.20.3 |
| Connector standard | ISO 15217 |
| Protection class with connection | IP65 |
| Duty cycle | 100 % |
| Generic emission standard in accordance with | EN 50081-2:1993 |
| Generic immunity standard in accordance with | EN 50082-2 |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Tightening torque tolerance | ±0,2 mT |
| Weight | See table below |

Technical data

| Part No. |  | Compressed air connection | |
|------------|---|---------------------------|-------------|
| | | Input | Output |
| R422101201 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101205 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101209 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101213 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101217 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101221 |  | 1/8-27 NPTF | 1/8-27 NPTF |

| Part No. | Compressed air connection | |
|------------|---------------------------|---------------|
| | Exhaust | Pilot Exhaust |
| R422101201 | 1/8-27 NPTF | M5 |
| R422101205 | 1/8-27 NPTF | M5 |
| R422101209 | 1/8-27 NPTF | M5 |
| R422101213 | 1/8-27 NPTF | M5 |
| R422101217 | 1/8-27 NPTF | M5 |
| R422101221 | 1/8-27 NPTF | M5 |

| Part No. | Operational voltage | Voltage tolerance | Power consumption | Pilot |
|------------|---------------------|-------------------|-------------------|----------|
| | | | | |
| R422101201 | 24 V | -10% / +10% | 2 W | Internal |
| R422101205 | 24 V | -10% / +10% | 2 W | External |
| R422101209 | 24 V | -10% / +10% | 2 W | Internal |
| R422101213 | 24 V | -10% / +10% | 2 W | External |
| R422101217 | 24 V | -10% / +10% | 2 W | Internal |
| R422101221 | 24 V | -10% / +10% | 2 W | External |

| Part No. | Flow conductance | Flow conductance | Nominal resistance | Working pressure min./max. |
|------------|------------------|------------------|--------------------|----------------------------|
| | b | C-value | | |
| R422101201 | 0.36 | 3.5 l/(s*bar) | 185 Ω | 2.5 ... 10 bar |
| R422101205 | 0.36 | 3.5 l/(s*bar) | 185 Ω | -0.9 ... 10 bar |
| R422101209 | 0.36 | 3.5 l/(s*bar) | 185 Ω | 3 ... 10 bar |
| R422101213 | 0.36 | 3.5 l/(s*bar) | 185 Ω | -0.9 ... 10 bar |
| R422101217 | 0.36 | 3.5 l/(s*bar) | 185 Ω | 2 ... 10 bar |
| R422101221 | 0.36 | 3.5 l/(s*bar) | 185 Ω | -0.9 ... 10 bar |

| Part No. | Control pressure min./max. | Typ. switch-on time | Typ. switch-off time | Weight |
|------------|----------------------------|---------------------|----------------------|----------|
| R422101201 | 2.5 ... 10 bar | 14 ms | 18 ms | 0.14 kg |
| R422101205 | 2.5 ... 10 bar | 14 ms | 18 ms | 0.14 kg |
| R422101209 | 3 ... 10 bar | 14 ms | 17 ms | 0.14 kg |
| R422101213 | 3 ... 10 bar | 14 ms | 17 ms | 0.14 kg |
| R422101217 | 2 ... 10 bar | 10 ms | 10 ms | 0.14 kg |
| R422101221 | 2 ... 10 bar | 10 ms | 10 ms | 0.172 kg |

Nominal flow Q_n at 6 bar and $\Delta p = 1$ bar .

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

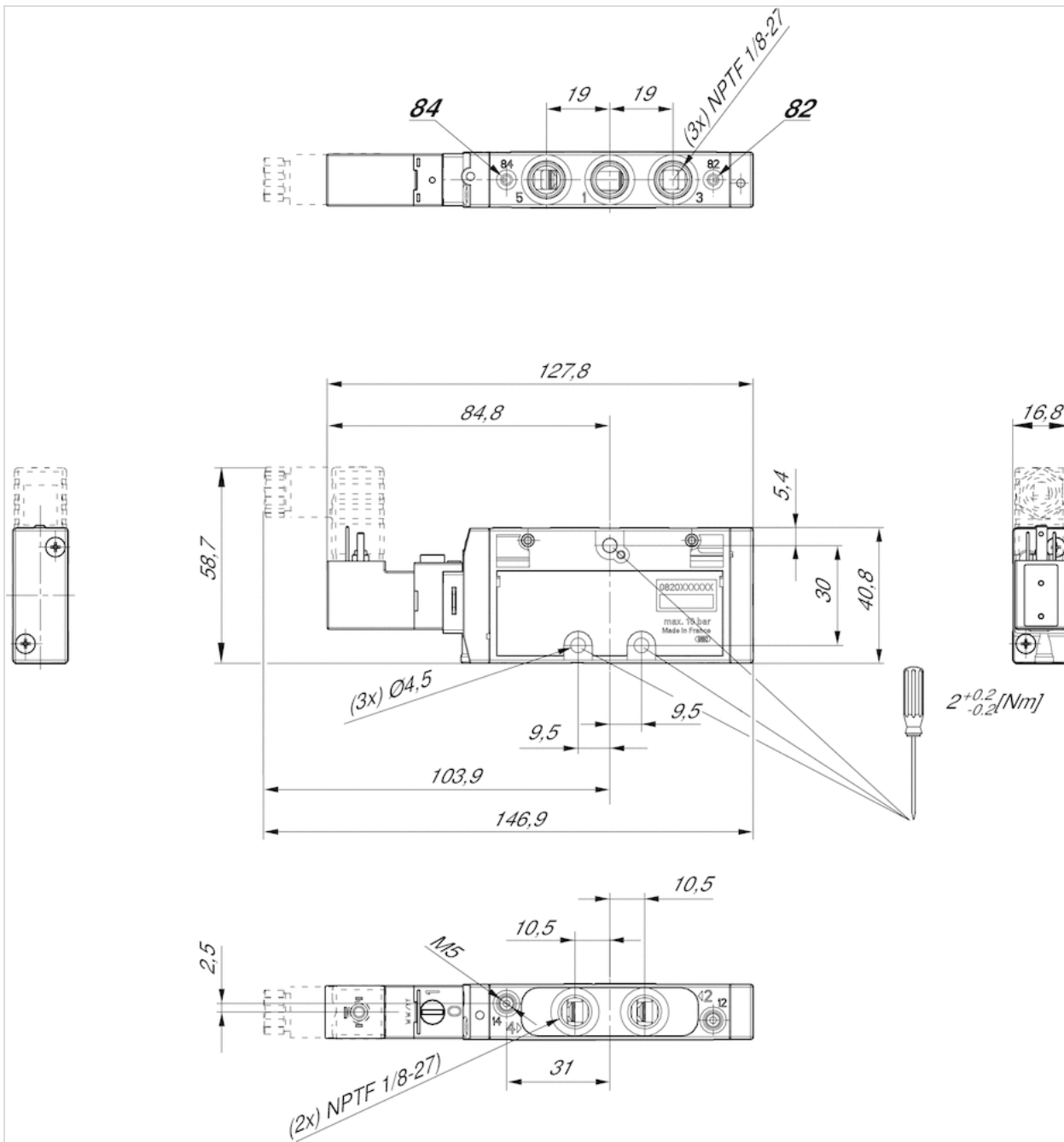
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

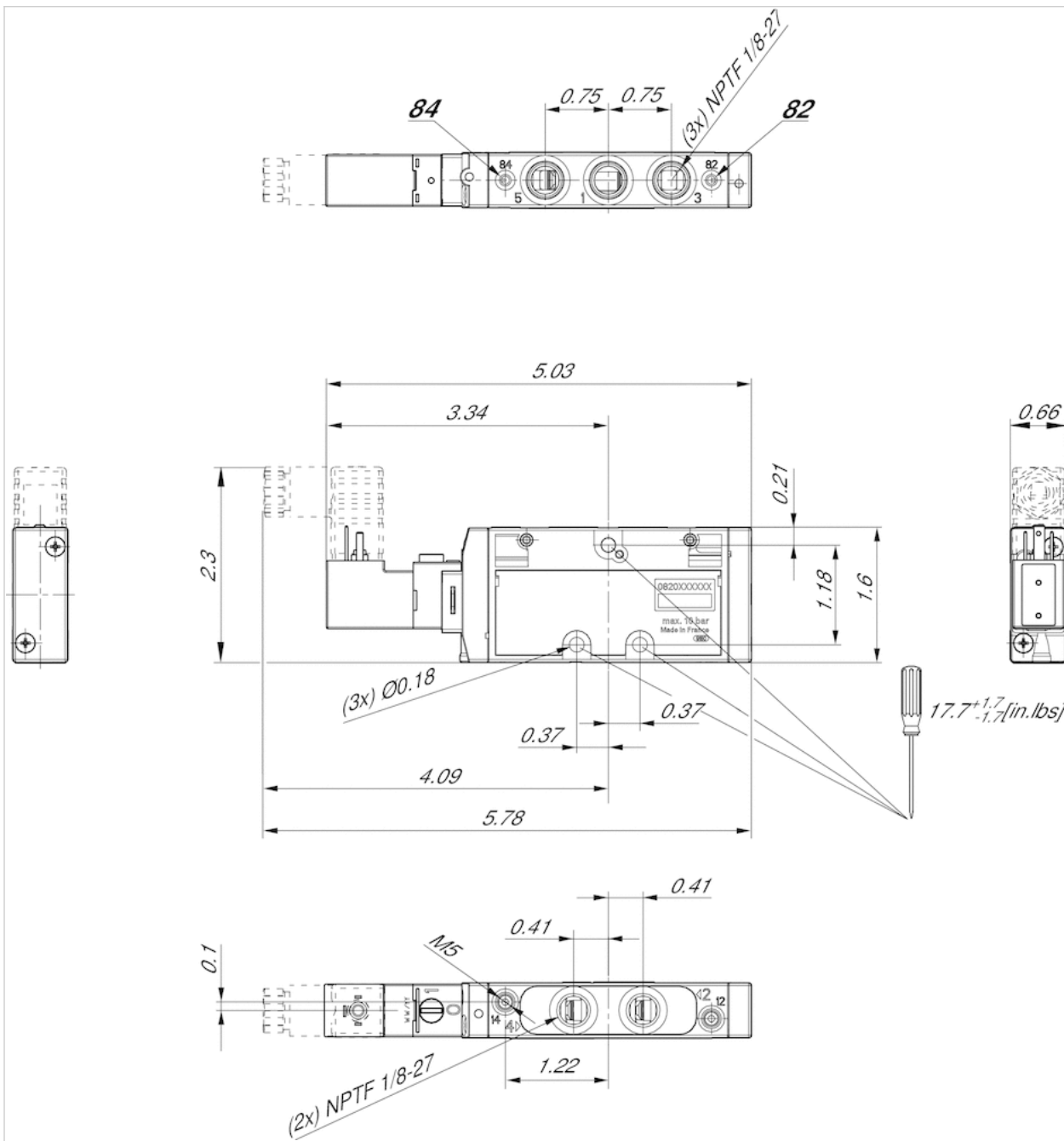
| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, nickel-plated chrome-plated |

Dimensions

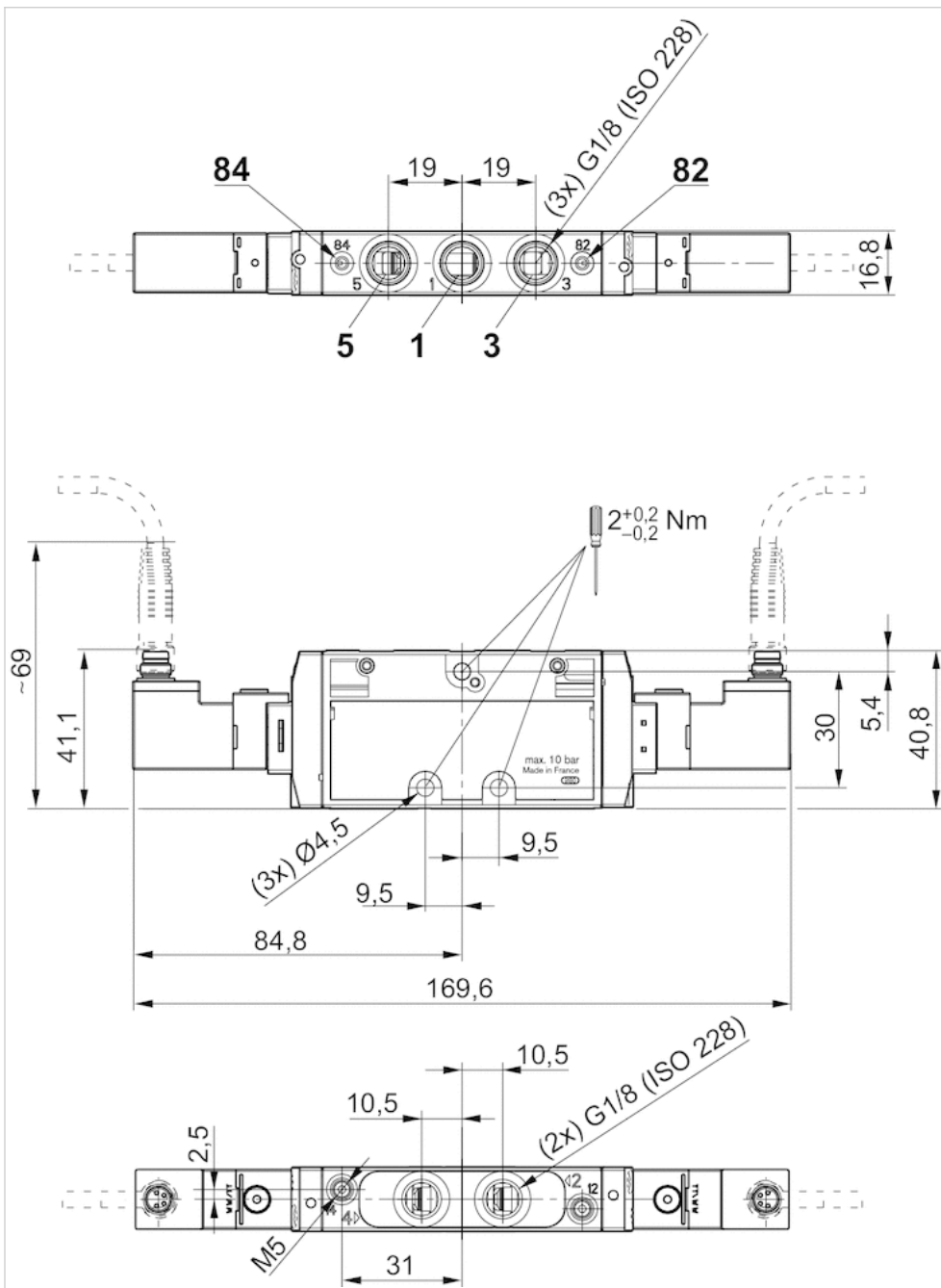
Dimensions in mm, single solenoid



Dimensions in inches, single solenoid

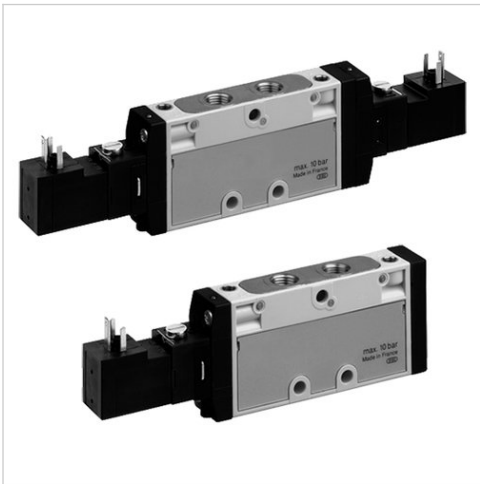


Dimensions in mm, double solenoid






















5/2-directional valve, Series TC08 - inch

- 5/2
- Qn = 800 l/min
- Pilot valve width : 15 mm
- Compressed air connection output : 1/8-27 NPTF
- Electrical connection : Plug, ISO 15217, form C
- Manual override : with detent
- Single or double solenoid
- With air spring return
- Pilot : Internal External



| | |
|--|-----------------------------------|
| Version | Spool valve, negative overlapping |
| Activation | Electrically |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | See table below |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 50 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Qn | 800 l/min |
| Compressed air connection | according to ANSI B1.20.3 |
| Connector standard | ISO 15217 |
| Protection class with connection | IP65 |
| Duty cycle | 100 % |
| Generic emission standard in accordance with | EN 50081-2:1993 |
| Generic immunity standard in accordance with | EN 50082-2 |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Tightening torque tolerance | ±0,2 mT |
| Weight | See table below |

Technical data

| Part No. |  | Compressed air connection | |
|------------|---|---------------------------|-------------|
| | | Input | Output |
| R422101200 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101202 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101203 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101204 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101206 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101207 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101208 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101210 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101211 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101212 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101214 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101215 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101216 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101218 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101219 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101220 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101222 |  | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101223 |  | 1/8-27 NPTF | 1/8-27 NPTF |

| Part No. | Compressed air connection | |
|------------|---------------------------|---------------|
| | Exhaust | Pilot Exhaust |
| R422101200 | 1/8-27 NPTF | M5 |
| R422101202 | 1/8-27 NPTF | M5 |
| R422101203 | 1/8-27 NPTF | M5 |
| R422101204 | 1/8-27 NPTF | M5 |
| R422101206 | 1/8-27 NPTF | M5 |
| R422101207 | 1/8-27 NPTF | M5 |
| R422101208 | 1/8-27 NPTF | M5 |
| R422101210 | 1/8-27 NPTF | M5 |
| R422101211 | 1/8-27 NPTF | M5 |
| R422101212 | 1/8-27 NPTF | M5 |
| R422101214 | 1/8-27 NPTF | M5 |
| R422101215 | 1/8-27 NPTF | M5 |
| R422101216 | 1/8-27 NPTF | M5 |
| R422101218 | 1/8-27 NPTF | M5 |
| R422101219 | 1/8-27 NPTF | M5 |
| R422101220 | 1/8-27 NPTF | M5 |
| R422101222 | 1/8-27 NPTF | M5 |
| R422101223 | 1/8-27 NPTF | M5 |

| Part No. | Operational voltage | | Operational voltage |
|------------|---------------------|----------|---------------------|
| | DC | AC 50 Hz | AC 60 Hz |
| R422101200 | 24 V | - | - |
| R422101202 | - | 110 V | 230 V |
| R422101203 | - | 110 V | 230 V |

| Part No. | Operational voltage | Operational voltage | Operational voltage |
|------------|---------------------|---------------------|---------------------|
| | DC | AC 50 Hz | AC 60 Hz |
| R422101204 | 24 V | - | - |
| R422101206 | - | 110 V | 230 V |
| R422101207 | - | 110 V | 230 V |
| R422101208 | 24 V | - | - |
| R422101210 | - | 110 V | 230 V |
| R422101211 | - | 110 V | 230 V |
| R422101212 | 24 V | - | - |
| R422101214 | - | 110 V | 230 V |
| R422101215 | - | 110 V | 230 V |
| R422101216 | 24 V | - | - |
| R422101218 | - | 110 V | 230 V |
| R422101219 | - | 230 V | 230 V |
| R422101220 | 24 V | - | - |
| R422101222 | - | 110 V | 230 V |
| R422101223 | - | 230 V | 230 V |

| Part No. | Voltage tolerance | Voltage tolerance | Voltage tolerance | Power consumption |
|------------|-------------------|-------------------|-------------------|-------------------|
| | DC | AC 50 Hz | AC 60 Hz | DC |
| R422101200 | -10% / +10% | - | - | 2 W |
| R422101202 | - | -10% / +10% | -10% / +10% | - |
| R422101203 | - | -10% / +10% | -10% / +10% | - |
| R422101204 | -10% / +10% | - | - | 2 W |
| R422101206 | - | -10% / +10% | -10% / +10% | - |
| R422101207 | - | -10% / +10% | -10% / +10% | - |
| R422101208 | -10% / +10% | - | - | 2 W |
| R422101210 | - | -10% / +10% | -10% / +10% | - |
| R422101211 | - | -10% / +10% | -10% / +10% | - |
| R422101212 | -10% / +10% | - | - | 2 W |
| R422101214 | - | -10% / +10% | -10% / +10% | - |
| R422101215 | - | -10% / +10% | -10% / +10% | - |
| R422101216 | -10% / +10% | - | - | 2 W |
| R422101218 | - | -10% / +10% | -10% / +10% | - |
| R422101219 | - | -10% / +10% | -10% / +10% | - |
| R422101220 | -10% / +10% | - | - | 2 W |
| R422101222 | - | -10% / +10% | -10% / +10% | - |
| R422101223 | - | -10% / +10% | -10% / +10% | - |

| Part No. | Holding power | Holding power | Switch-on power | Switch-on power | Pilot |
|------------|---------------|---------------|-----------------|-----------------|----------|
| | AC 50 Hz | AC 60 Hz | AC 50 Hz | AC 60 Hz | |
| R422101200 | - | - | - | - | Internal |
| R422101202 | 1.6 VA | 1.4 VA | 2.2 VA | 2 VA | Internal |
| R422101203 | 1.6 VA | 1.4 VA | 2.2 VA | 2 VA | Internal |
| R422101204 | - | - | - | - | External |
| R422101206 | 1.6 VA | 1.4 VA | 2.2 VA | 2 VA | External |
| R422101207 | 1.6 VA | 1.4 VA | 2.2 VA | 2 VA | External |
| R422101208 | - | - | - | - | Internal |
| R422101210 | 1.6 VA | 1.4 VA | 2.2 VA | 2 VA | Internal |
| R422101211 | 1.6 VA | 1.4 VA | 2.2 VA | 2 VA | Internal |

| Part No. | Holding power | Holding power | Switch-on power | Switch-on power | Pilot |
|------------|---------------|---------------|-----------------|-----------------|----------|
| | AC 50 Hz | AC 60 Hz | AC 50 Hz | AC 60 Hz | |
| R422101212 | - | - | - | - | External |
| R422101214 | 1.6 VA | 1.4 VA | 2.2 VA | 2 VA | External |
| R422101215 | 1.6 VA | 1.4 VA | 2.2 VA | 2 VA | External |
| R422101216 | - | - | - | - | Internal |
| R422101218 | 1.6 VA | 1.4 VA | 2.2 VA | 2 VA | Internal |
| R422101219 | 1.6 VA | 1.4 VA | 2.2 VA | 2 VA | Internal |
| R422101220 | - | - | - | - | External |
| R422101222 | 1.6 VA | 1.4 VA | 2.2 VA | 2 VA | External |
| R422101223 | 1.6 VA | 1.4 VA | 2.2 VA | 2 VA | External |

| Part No. | Flow conductance | Flow conductance | Nominal resistance | Working pressure min./max. |
|------------|------------------|------------------|--------------------|----------------------------|
| | b | C-value | | |
| R422101200 | 0.36 | 3.5 l/(s*bar) | 185 Ω | 2.5 ... 10 bar |
| R422101202 | 0.36 | 3.5 l/(s*bar) | 185 Ω | 2.5 ... 10 bar |
| R422101203 | 0.36 | 3.5 l/(s*bar) | 185 Ω | 2.5 ... 10 bar |
| R422101204 | 0.36 | 3.5 l/(s*bar) | 185 Ω | -0.9 ... 10 bar |
| R422101206 | 0.36 | 3.5 l/(s*bar) | 185 Ω | -0.9 ... 10 bar |
| R422101207 | 0.36 | 3.5 l/(s*bar) | 185 Ω | -0.9 ... 10 bar |
| R422101208 | 0.36 | 3.5 l/(s*bar) | 185 Ω | 3 ... 10 bar |
| R422101210 | 0.36 | 3.5 l/(s*bar) | 185 Ω | 3 ... 10 bar |
| R422101211 | 0.36 | 3.5 l/(s*bar) | 185 Ω | 3 ... 10 bar |
| R422101212 | 0.36 | 3.5 l/(s*bar) | 185 Ω | -0.9 ... 10 bar |
| R422101214 | 0.36 | 3.5 l/(s*bar) | 185 Ω | -0.9 ... 10 bar |
| R422101215 | 0.36 | 3.5 l/(s*bar) | 185 Ω | -0.9 ... 10 bar |
| R422101216 | 0.36 | 3.5 l/(s*bar) | 185 Ω | 2 ... 10 bar |
| R422101218 | 0.36 | 3.5 l/(s*bar) | 185 Ω | 2 ... 10 bar |
| R422101219 | 0.36 | 3.5 l/(s*bar) | 185 Ω | 2 ... 10 bar |
| R422101220 | 0.36 | 3.5 l/(s*bar) | 185 Ω | -0.9 ... 10 bar |
| R422101222 | 0.36 | 3.5 l/(s*bar) | 185 Ω | -0.9 ... 10 bar |
| R422101223 | 0.36 | 3.5 l/(s*bar) | 185 Ω | -0.9 ... 10 bar |

| Part No. | Control pressure min./max. | Typ. switch-on time | Typ. switch-off time | Weight |
|------------|----------------------------|---------------------|----------------------|----------|
| R422101200 | 2.5 ... 10 bar | 14 ms | 17 ms | 0.14 kg |
| R422101202 | 2.5 ... 10 bar | 14 ms | 17 ms | 0.14 kg |
| R422101203 | 2.5 ... 10 bar | 14 ms | 17 ms | 0.14 kg |
| R422101204 | 2.5 ... 10 bar | 14 ms | 17 ms | 0.14 kg |
| R422101206 | 2.5 ... 10 bar | 14 ms | 17 ms | 0.14 kg |
| R422101207 | 2.5 ... 10 bar | 14 ms | 17 ms | 0.14 kg |
| R422101208 | 3 ... 10 bar | 14 ms | 17 ms | 0.14 kg |
| R422101210 | 3 ... 10 bar | 14 ms | 17 ms | 0.14 kg |
| R422101211 | 3 ... 10 bar | 14 ms | 17 ms | 0.14 kg |
| R422101212 | 3 ... 10 bar | 14 ms | 17 ms | 0.14 kg |
| R422101214 | 3 ... 10 bar | 14 ms | 17 ms | 0.14 kg |
| R422101215 | 3 ... 10 bar | 14 ms | 17 ms | 0.14 kg |
| R422101216 | 2 ... 10 bar | 10 ms | 10 ms | 0.14 kg |
| R422101218 | 2 ... 10 bar | 10 ms | 10 ms | 0.14 kg |
| R422101219 | 2 ... 10 bar | 10 ms | 10 ms | 0.14 kg |
| R422101220 | 2 ... 10 bar | 10 ms | 10 ms | 0.172 kg |

| Part No. | Control pressure min./max. | Typ. switch-on time | Typ. switch-off time | Weight |
|------------|----------------------------|---------------------|----------------------|----------|
| R422101222 | 2 ... 10 bar | 10 ms | 10 ms | 0.172 kg |
| R422101223 | 2 ... 10 bar | 10 ms | 10 ms | 0.172 kg |

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar .

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

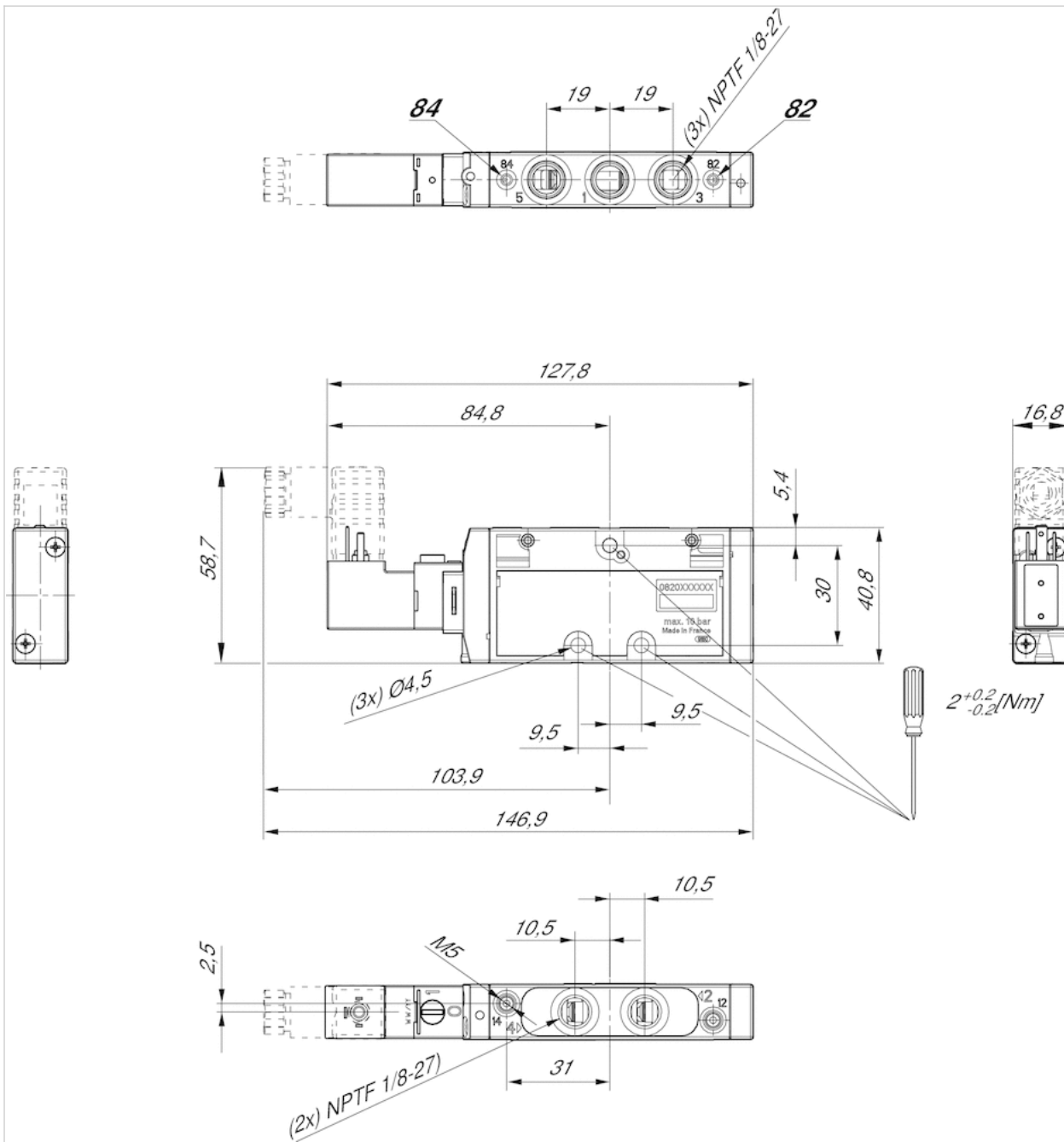
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

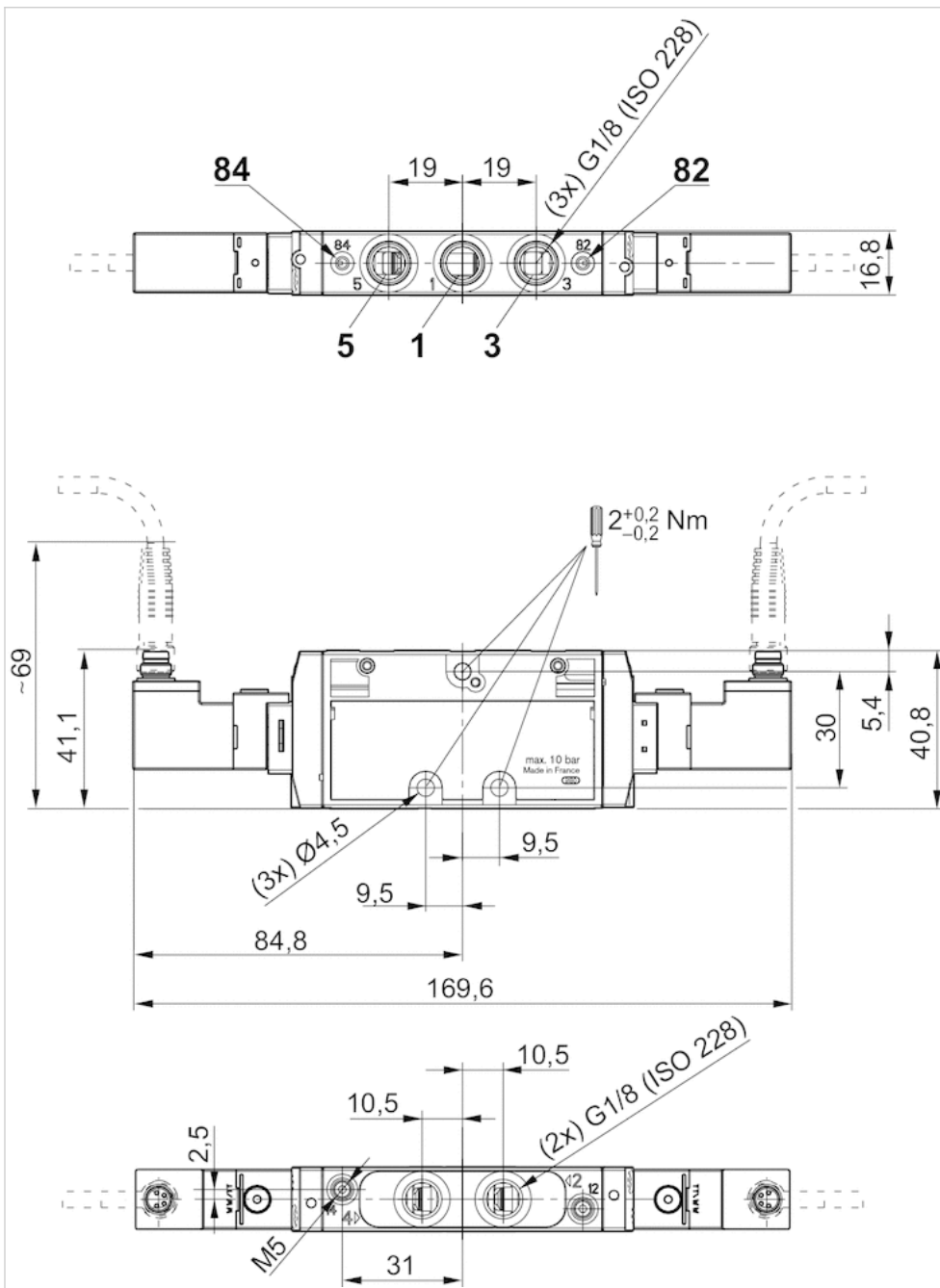
| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, nickel-plated chrome-plated |

Dimensions

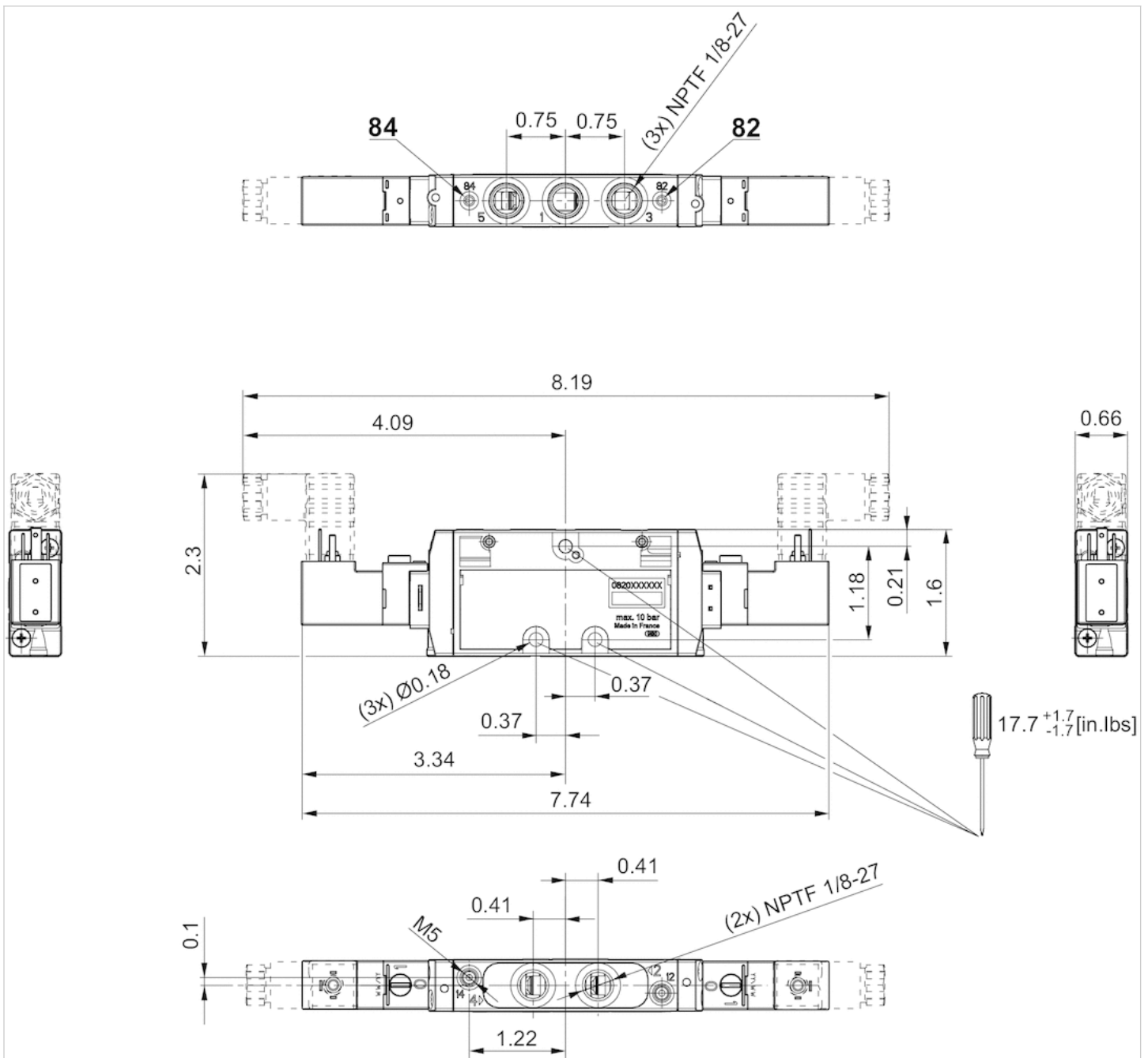
Dimensions in mm, single solenoid



Dimensions in mm, double solenoid

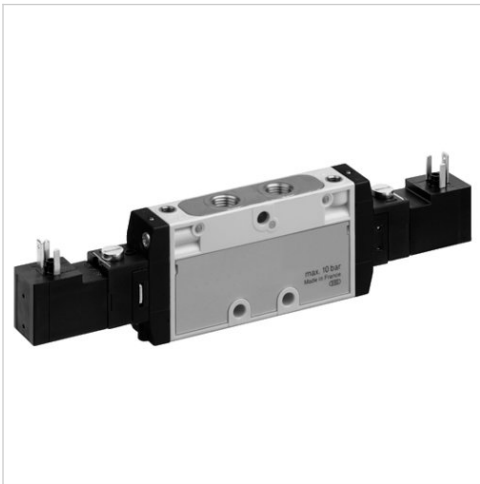


Dimensions in inches, double solenoid




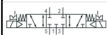


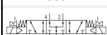
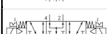
5/3-directional valve, Series TC08 - inch

- Operating voltage 24 V DC
- 5/3
- $Q_n = 700$ l/min
- Pilot valve width : 15 mm
- closed center
- Compressed air connection output : 1/8-27 NPTF
- Electrical connection : Plug, ISO 15217, form C
- double solenoid
- Pilot : Internal External



| | |
|--|---------------------------|
| Activation | Electrically |
| Sealing principle | Soft sealing |
| Working pressure min./max. | See table below |
| Control pressure min./max. | 3 ... 10 bar |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 50 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Q_n | 700 l/min |
| Compressed air connection | according to ANSI B1.20.3 |
| Connector standard | ISO 15217 |
| Protection class with connection | IP65 |
| Duty cycle | 100 % |
| Typ. switch-on time | 14 ms |
| Typ. switch-off time | 18 ms |
| Generic emission standard in accordance with | EN 50081-2:1993 |
| Generic immunity standard in accordance with | EN 50082-2 |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Tightening torque tolerance | ±0,2 mT |
| Weight | 0.14 kg |

Technical data

| Part No. | | | Compressed air connection | |
|------------|---|---------------|---------------------------|-------------|
| | | | Input | Output |
| R422101225 |  | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101229 |  | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101233 |  | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101237 |  | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101241 |  | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101245 |  | closed center | 1/8-27 NPTF | 1/8-27 NPTF |

| Part No. | Compressed air connection | |
|------------|---------------------------|---------------|
| | Exhaust | Pilot Exhaust |
| R422101225 | 1/8-27 NPTF | M5 |
| R422101229 | 1/8-27 NPTF | M5 |
| R422101233 | 1/8-27 NPTF | M5 |
| R422101237 | 1/8-27 NPTF | M5 |
| R422101241 | 1/8-27 NPTF | M5 |
| R422101245 | 1/8-27 NPTF | M5 |

| Part No. | Operational voltage | Voltage tolerance | Power consumption | Pilot |
|------------|---------------------|-------------------|-------------------|----------|
| | DC | DC | DC | |
| R422101225 | 24 V | -10% / +10% | 1.9 W | Internal |
| R422101229 | 24 V | -10% / +10% | 1.9 W | External |
| R422101233 | 24 V | -10% / +10% | 1.9 W | Internal |
| R422101237 | 24 V | -10% / +10% | 1.9 W | External |
| R422101241 | 24 V | -10% / +10% | 1.9 W | Internal |
| R422101245 | 24 V | -10% / +10% | 1.9 W | External |

| Part No. | Flow conductance | Flow conductance | Nominal resistance | Working pressure min./max. |
|------------|------------------|------------------|--------------------|----------------------------|
| | b | C-value | | |
| R422101225 | 0.34 | 3 l/(s*bar) | 185 Ω | 3 ... 10 bar |
| R422101229 | 0.34 | 3 l/(s*bar) | 185 Ω | -0.9 ... 10 bar |
| R422101233 | 0.34 | 3 l/(s*bar) | 185 Ω | 3 ... 10 bar |
| R422101237 | 0.34 | 3 l/(s*bar) | 185 Ω | -0.9 ... 10 bar |
| R422101241 | 0.34 | 3 l/(s*bar) | 185 Ω | 3 ... 10 bar |
| R422101245 | 0.34 | 3 l/(s*bar) | 185 Ω | -0.9 ... 10 bar |

Nominal flow Q_n at 6 bar and $\Delta p = 1$ bar .

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

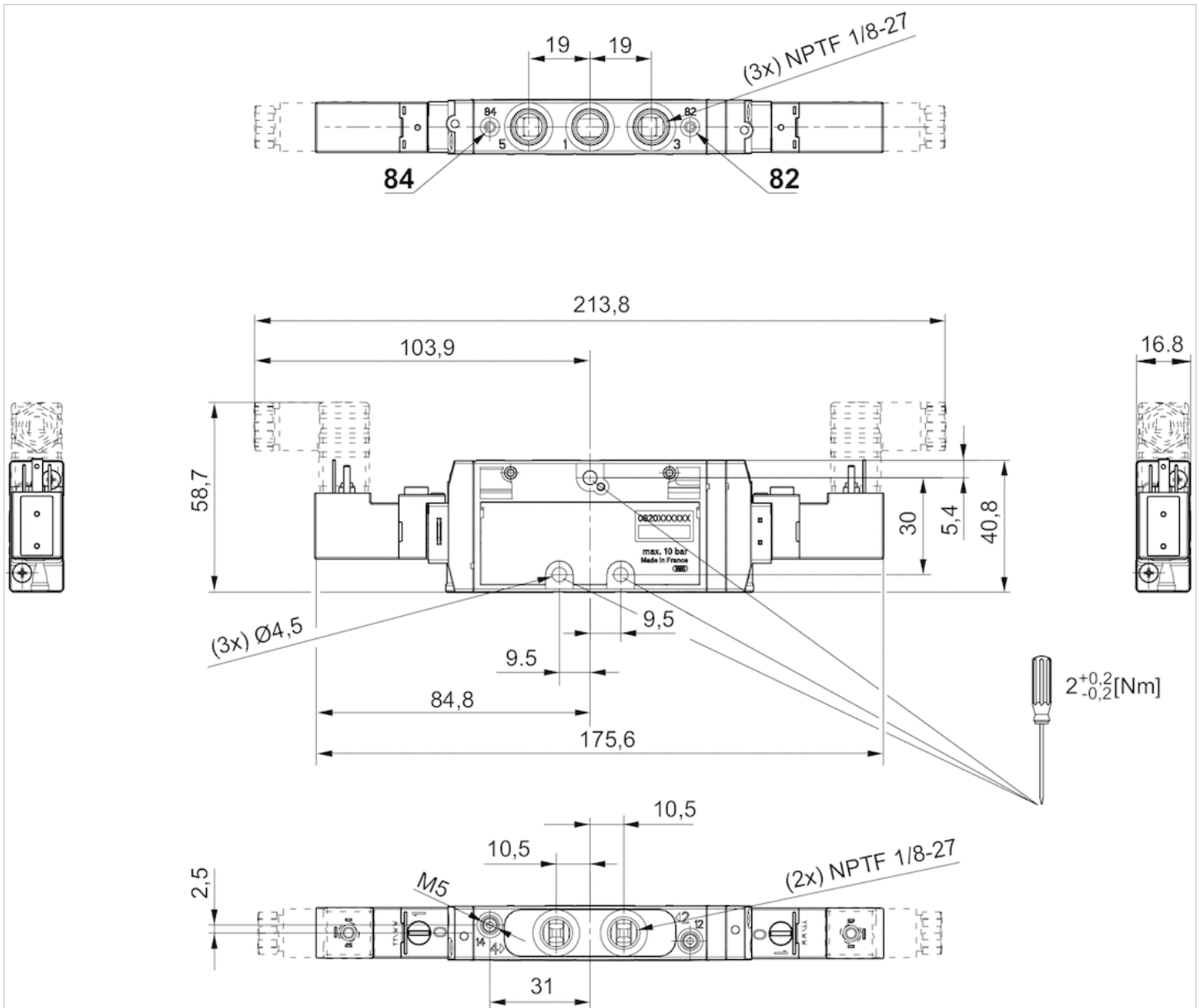
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Technical information

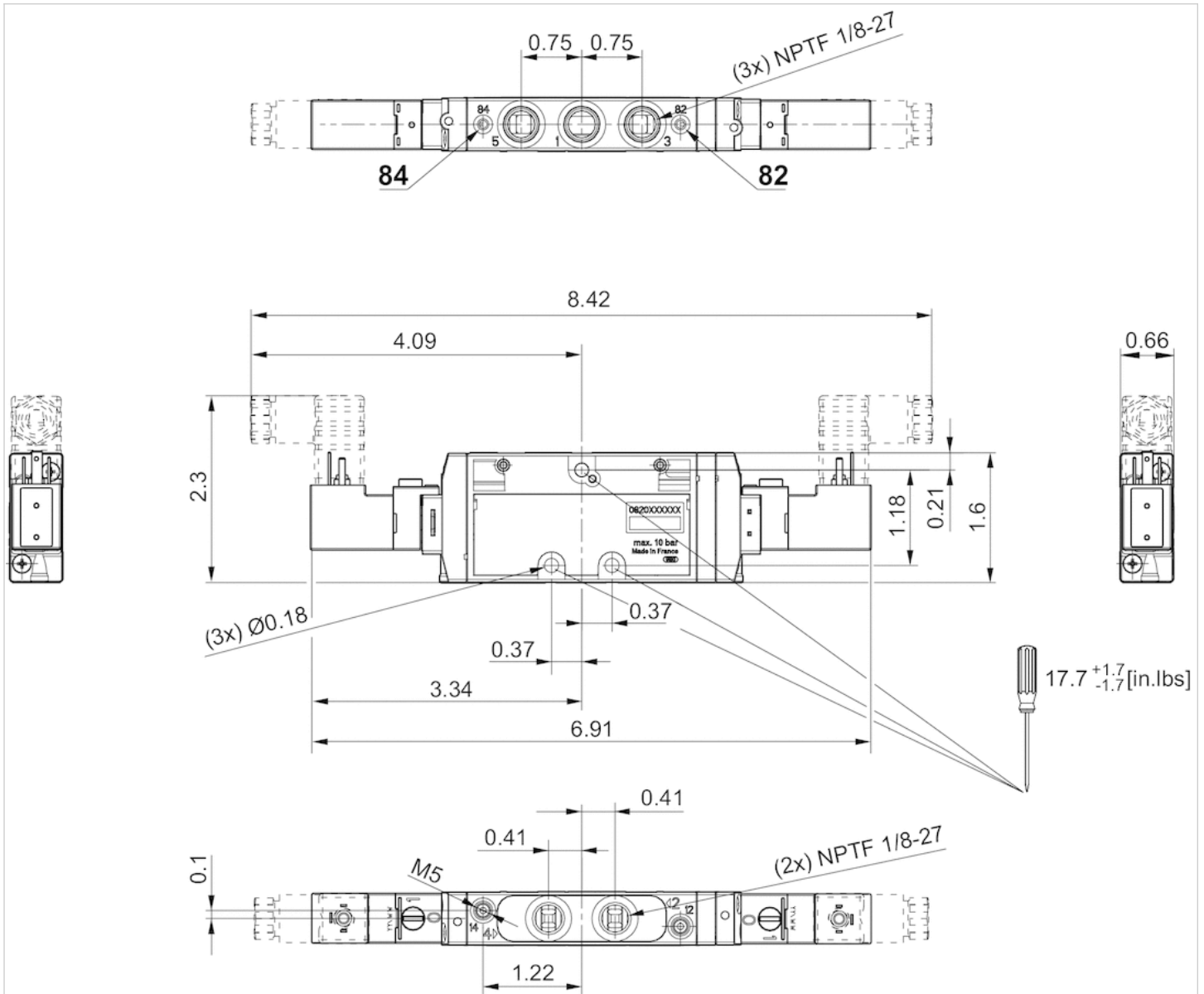
| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, nickel-plated chrome-plated |

Dimensions

Dimensions in mm

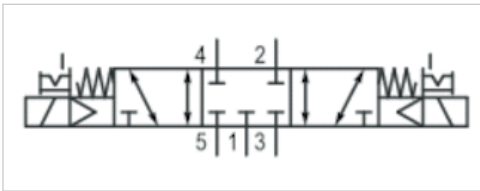


Dimensions in inches



5/3-directional valve, Series TC08 - inch

- 5/3
- $Q_n = 700$ l/min
- Pilot valve width : 15 mm
- closed center
- Compressed air connection output : 1/8-27 NPTF
- Electrical connection : Plug, ISO 15217, form C
- double solenoid
- Pilot : Internal External



| | |
|--|---------------------------|
| Activation | Electrically |
| Sealing principle | Soft sealing |
| Working pressure min./max. | 3 ... 10 bar |
| Control pressure min./max. | 3 ... 10 bar |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 50 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Nominal flow Q_n | 700 l/min |
| Compressed air connection | according to ANSI B1.20.3 |
| Connector standard | ISO 15217 |
| Protection class with connection | IP65 |
| Duty cycle | 100 % |
| Typ. switch-on time | 14 ms |
| Typ. switch-off time | 18 ms |
| Generic emission standard in accordance with | EN 50081-2:1993 |
| Generic immunity standard in accordance with | EN 50082-2 |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Tightening torque tolerance | ±0,2 mT |
| Weight | 0.14 kg |

Technical data

| Part No. | | Compressed air connection | |
|------------|---------------|---------------------------|-------------|
| | | Input | Output |
| R422101224 | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101226 | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101227 | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101228 | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101230 | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101231 | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101232 | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101234 | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101235 | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101236 | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101238 | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101239 | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101240 | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101242 | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101243 | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101244 | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101246 | closed center | 1/8-27 NPTF | 1/8-27 NPTF |
| R422101247 | closed center | 1/8-27 NPTF | 1/8-27 NPTF |

| Part No. | Compressed air connection | |
|------------|---------------------------|---------------|
| | Exhaust | Pilot Exhaust |
| R422101224 | 1/8-27 NPTF | M5 |
| R422101226 | 1/8-27 NPTF | M5 |
| R422101227 | 1/8-27 NPTF | M5 |
| R422101228 | 1/8-27 NPTF | M5 |
| R422101230 | 1/8-27 NPTF | M5 |
| R422101231 | 1/8-27 NPTF | M5 |
| R422101232 | 1/8-27 NPTF | M5 |
| R422101234 | 1/8-27 NPTF | M5 |
| R422101235 | 1/8-27 NPTF | M5 |
| R422101236 | 1/8-27 NPTF | M5 |
| R422101238 | 1/8-27 NPTF | M5 |
| R422101239 | 1/8-27 NPTF | M5 |
| R422101240 | 1/8-27 NPTF | M5 |
| R422101242 | 1/8-27 NPTF | M5 |
| R422101243 | 1/8-27 NPTF | M5 |
| R422101244 | 1/8-27 NPTF | M5 |
| R422101246 | 1/8-27 NPTF | M5 |
| R422101247 | 1/8-27 NPTF | M5 |

| Part No. | Operational voltage | | Operational voltage |
|------------|---------------------|----------|---------------------|
| | DC | AC 50 Hz | AC 60 Hz |
| R422101224 | 12 V | - | - |
| R422101226 | - | 110 V | - |
| R422101227 | - | 230 V | 230 V |

| Part No. | Operational voltage | Operational voltage | Operational voltage |
|------------|---------------------|---------------------|---------------------|
| | DC | AC 50 Hz | AC 60 Hz |
| R422101228 | 12 V | - | - |
| R422101230 | - | 110 V | - |
| R422101231 | - | 230 V | 230 V |
| R422101232 | 12 V | - | - |
| R422101234 | - | 110 V | - |
| R422101235 | - | 230 V | 230 V |
| R422101236 | 12 V | - | - |
| R422101238 | - | 110 V | - |
| R422101239 | - | 230 V | 230 V |
| R422101240 | 12 V | - | - |
| R422101242 | - | 110 V | - |
| R422101243 | - | 230 V | 230 V |
| R422101244 | 12 V | - | - |
| R422101246 | - | 110 V | - |
| R422101247 | - | 230 V | 230 V |

| Part No. | Voltage tolerance | Voltage tolerance | Power consumption | Holding power |
|------------|-------------------|-------------------|-------------------|---------------|
| | DC | AC 50 Hz | DC | AC 50 Hz |
| R422101224 | -10% / +10% | - | 1.9 W | - |
| R422101226 | - | -10% / +10% | - | 1.6 VA |
| R422101227 | - | -10% / +10% | - | 1.6 VA |
| R422101228 | -10% / +10% | - | 1.9 W | - |
| R422101230 | - | -10% / +10% | - | 1.6 VA |
| R422101231 | - | -10% / +10% | - | 1.6 VA |
| R422101232 | -10% / +10% | - | 1.9 W | - |
| R422101234 | - | -10% / +10% | - | 1.6 VA |
| R422101235 | - | -10% / +10% | - | 1.6 VA |
| R422101236 | -10% / +10% | - | 1.9 W | - |
| R422101238 | - | -10% / +10% | - | 1.6 VA |
| R422101239 | - | -10% / +10% | - | 1.6 VA |
| R422101240 | -10% / +10% | - | 1.9 W | - |
| R422101242 | - | -10% / +10% | - | 1.6 VA |
| R422101243 | - | -10% / +10% | - | 1.6 VA |
| R422101244 | -10% / +10% | - | 1.9 W | - |
| R422101246 | - | -10% / +10% | - | 1.6 VA |
| R422101247 | - | -10% / +10% | - | 1.6 VA |

| Part No. | Holding power | Switch-on power | Switch-on power | Pilot | Flow conductance |
|------------|---------------|-----------------|-----------------|----------|------------------|
| | AC 60 Hz | AC 50 Hz | AC 60 Hz | | b |
| R422101224 | - | - | - | Internal | 0.34 |
| R422101226 | 1.4 VA | 2.2 VA | 2 VA | Internal | 0.34 |
| R422101227 | 1.4 VA | 2.2 VA | 2 VA | Internal | 0.34 |
| R422101228 | - | - | - | External | 0.34 |
| R422101230 | 1.4 VA | 2.2 VA | 2 VA | External | 0.34 |
| R422101231 | 1.4 VA | 2.2 VA | 2 VA | External | 0.34 |
| R422101232 | - | - | - | Internal | 0.34 |
| R422101234 | 1.4 VA | 2.2 VA | 2 VA | Internal | 0.34 |
| R422101235 | 1.4 VA | 2.2 VA | 2 VA | Internal | 0.34 |

| Part No. | Holding power | Switch-on power | Switch-on power | Pilot | Flow conductance |
|------------|---------------|-----------------|-----------------|----------|------------------|
| | AC 60 Hz | AC 50 Hz | AC 60 Hz | | b |
| R422101236 | - | - | - | External | 0.34 |
| R422101238 | 1.4 VA | 2.2 VA | 2 VA | External | 0.34 |
| R422101239 | 1.4 VA | 2.2 VA | 2 VA | External | 0.34 |
| R422101240 | - | - | - | Internal | 0.34 |
| R422101242 | 1.4 VA | 2.2 VA | 2 VA | Internal | 0.34 |
| R422101243 | 1.4 VA | 2.2 VA | 2 VA | Internal | 0.34 |
| R422101244 | - | - | - | External | 0.34 |
| R422101246 | 1.4 VA | 2.2 VA | 2 VA | External | 0.34 |
| R422101247 | 1.4 VA | 2.2 VA | 2 VA | External | 0.34 |

| Part No. | Flow conductance | Nominal resistance |
|------------|------------------|--------------------|
| | C-value | |
| R422101224 | 3 l/(s*bar) | 185 Ω |
| R422101226 | 3 l/(s*bar) | 185 Ω |
| R422101227 | 3 l/(s*bar) | 185 Ω |
| R422101228 | 3 l/(s*bar) | 185 Ω |
| R422101230 | 3 l/(s*bar) | 185 Ω |
| R422101231 | 3 l/(s*bar) | 185 Ω |
| R422101232 | 3 l/(s*bar) | 185 Ω |
| R422101234 | 3 l/(s*bar) | 185 Ω |
| R422101235 | 3 l/(s*bar) | 185 Ω |
| R422101236 | 3 l/(s*bar) | 185 Ω |
| R422101238 | 3 l/(s*bar) | 185 Ω |
| R422101239 | 3 l/(s*bar) | 185 Ω |
| R422101240 | 3 l/(s*bar) | 185 Ω |
| R422101242 | 3 l/(s*bar) | 185 Ω |
| R422101243 | 3 l/(s*bar) | 185 Ω |
| R422101244 | 3 l/(s*bar) | 185 Ω |
| R422101246 | 3 l/(s*bar) | 185 Ω |
| R422101247 | 3 l/(s*bar) | 185 Ω |

Nominal flow Q_n at 6 bar and $\Delta p = 1$ bar .

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

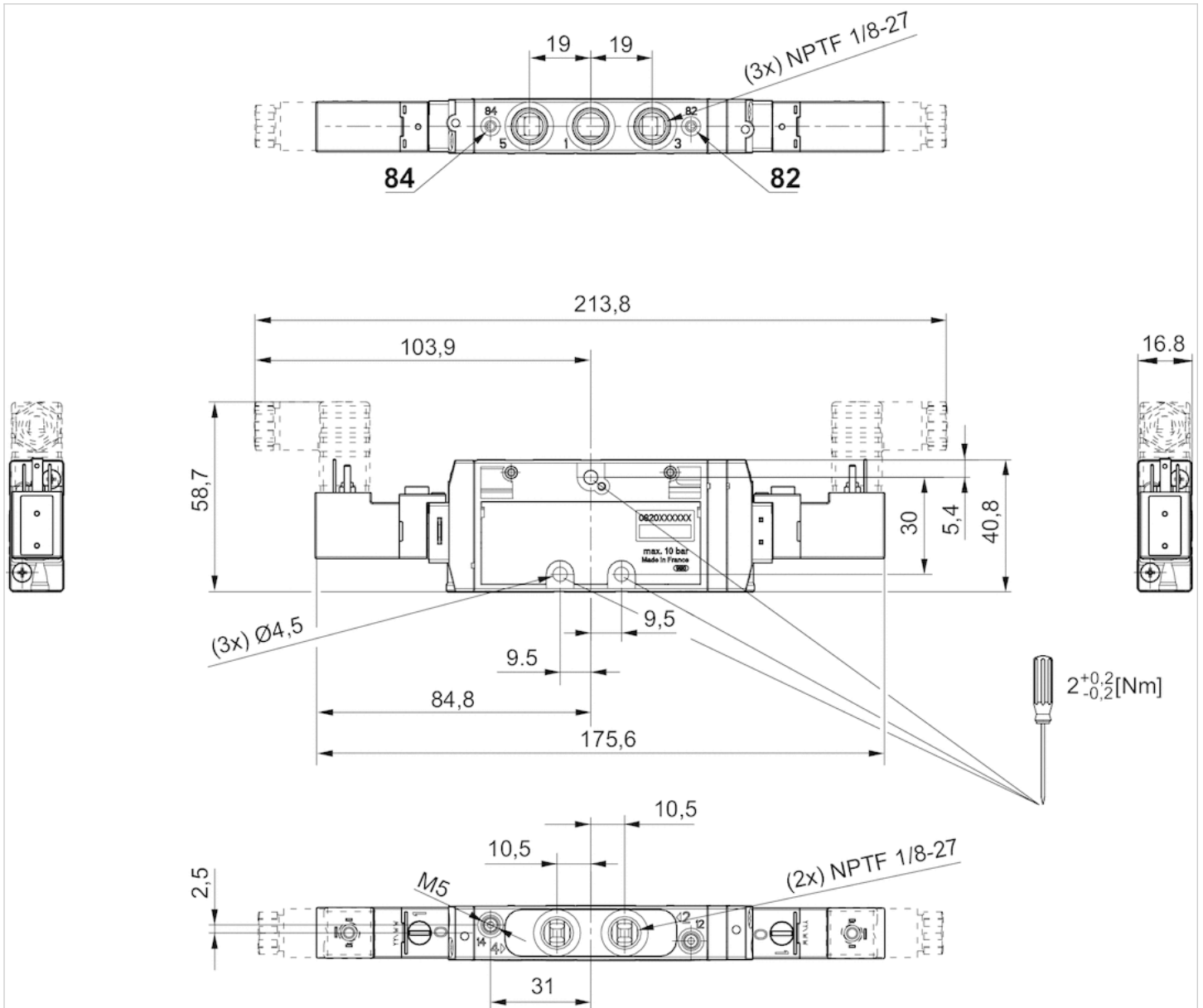
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

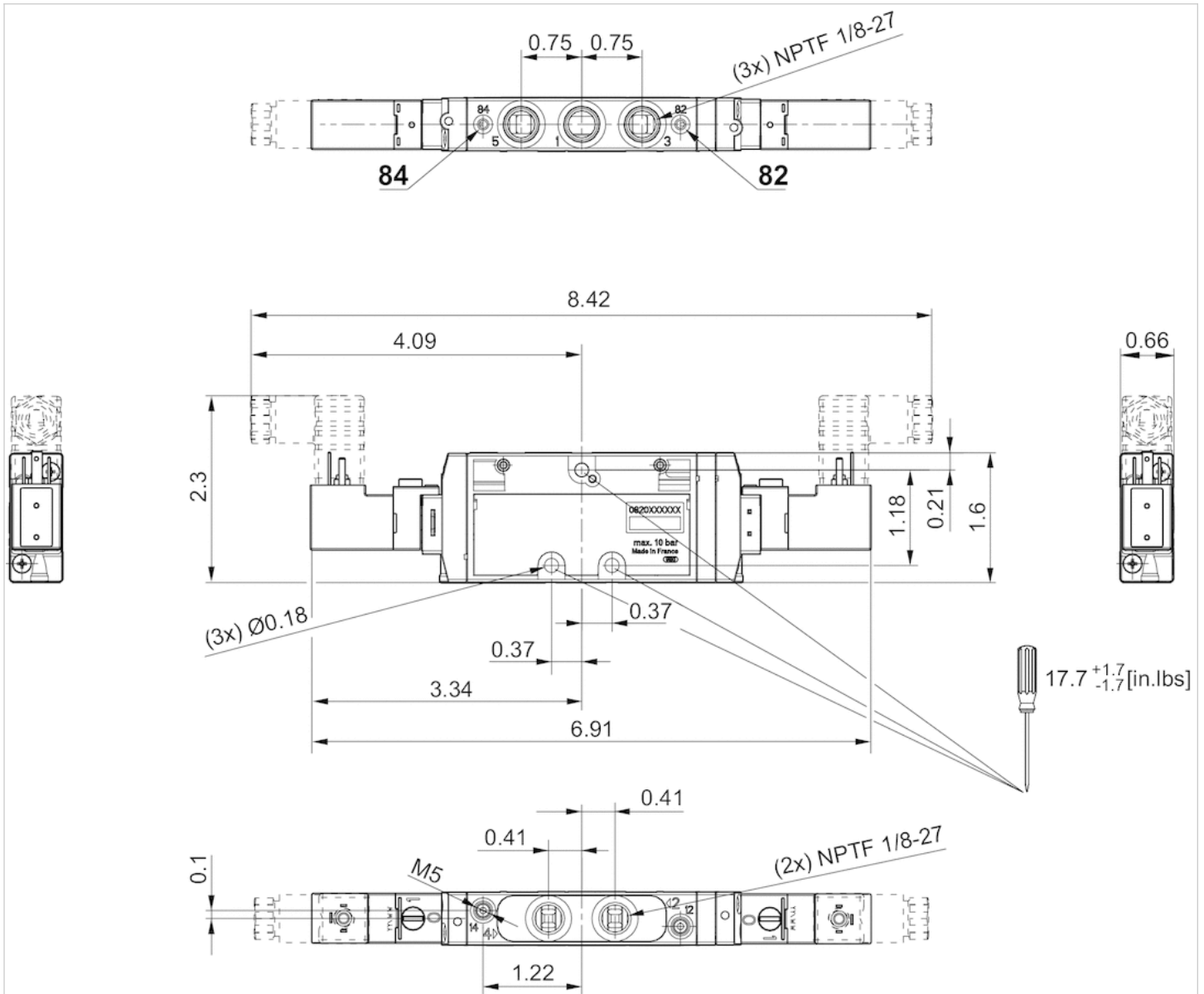
| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, nickel-plated chrome-plated |

Dimensions

Dimensions in mm



Dimensions in inches






2x3/2-directional valve, Series TC08

- Qn = 600 l/min
- Compressed air connection output G 1/8
- Pipe connection



| | |
|----------------------------------|---------------------------|
| Version | Spool valve |
| Activation | pneumatically |
| Pilot | External |
| Sealing principle | Soft sealing |
| Flow rate value Qn | 600 l/min |
| Working pressure min./max. | -0.9 ... 10 bar |
| Control pressure min./max. | 2.5 ... 10 bar |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Weight | 0.113 kg |

Technical data

| Part No. | | | Compressed air connection | |
|------------|---|-------|---------------------------|--------|
| | | | Input | Output |
| R422102094 |  | NC/NC | G 1/8 | G 1/8 |
| R422102095 |  | NO/NO | G 1/8 | G 1/8 |
| R422102096 |  | NC/NO | G 1/8 | G 1/8 |

| Part No. | Compressed air connection | | Flow conductance |
|------------|---------------------------|-----------------------|------------------|
| | Exhaust | Pilot control exhaust | b |
| R422102094 | G 1/8 | M5 | 0.27 |
| R422102095 | G 1/8 | M5 | 0.27 |
| R422102096 | G 1/8 | M5 | 0.27 |

| Part No. | Flow conductance |
|------------|------------------|
| | C-value |
| R422102094 | 2.8 l/(s*bar) |
| R422102095 | 2.8 l/(s*bar) |
| R422102096 | 2.8 l/(s*bar) |

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar, Caution: The minimum control pressure depends on the working pressure (see "Control pressure" diagram below).

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

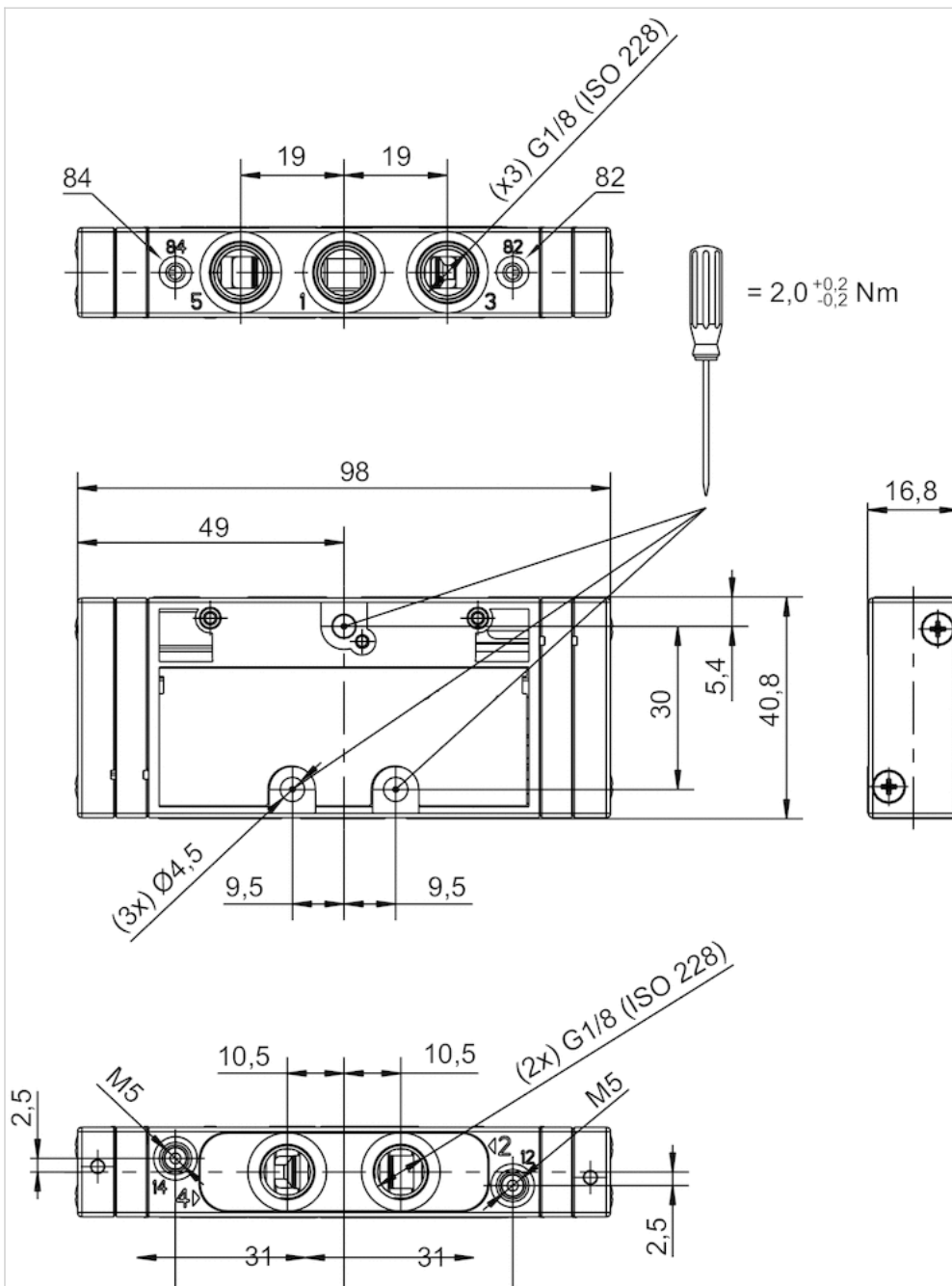
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, chrome-plated nickel-plated |

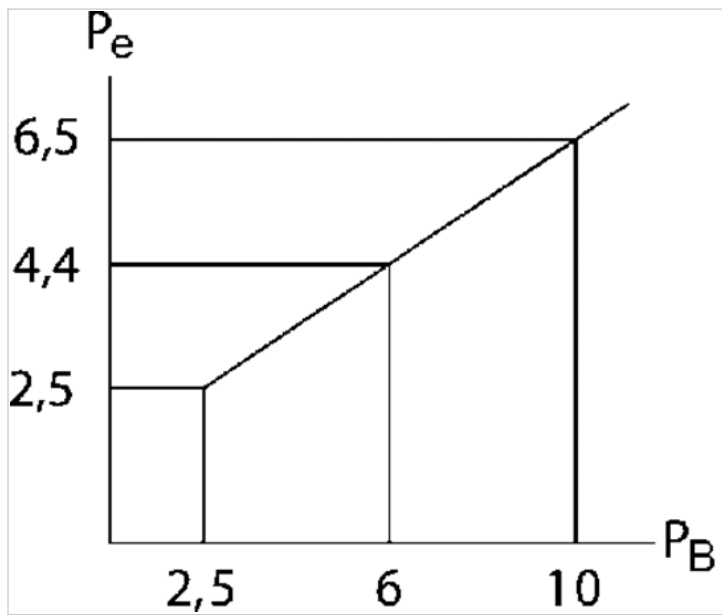
Dimensions

Dimensions



Diagrams

Control pressure



Pe = external control pressure, min.

PB= Working pressure





5/2-directional valve, Series TC08

- Qn = 800 l/min
- Compressed air connection output G 1/8
- Pipe connection



| | |
|----------------------------------|-----------------------------------|
| Version | Spool valve, positive overlapping |
| Activation | pneumatically |
| Pilot | External |
| Sealing principle | Soft sealing |
| Flow rate value Qn | 800 l/min |
| Working pressure min./max. | See table below |
| Control pressure min./max. | See table below |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Mounting on manifold strip | P-strip |
| Mounting screw tightening torque | 2 Nm |
| Weight | 0.097 kg |

Technical data

| Part No. | | Compressed air connection | |
|------------|---|---------------------------|--------|
| | | Input | Output |
| 0820260001 |  | G 1/8 | G 1/8 |
| 0820260002 |  | G 1/8 | G 1/8 |
| 0820260003 |  | G 1/8 | G 1/8 |
| 0820260004 |  | G 1/8 | G 1/8 |

| Part No. | Compressed air connection | | Flow conductance b |
|------------|---------------------------|-----------------------|-----------------------|
| | Exhaust | Pilot control exhaust | |
| 0820260001 | G 1/8 | M5 | 0.36 |
| 0820260002 | G 1/8 | M5 | 0.36 |
| 0820260003 | G 1/8 | M5 | 0.36 |
| 0820260004 | G 1/8 | M5 | 0.36 |

| Part No. | Flow conductance C-value | | Working pressure min./max. | Control pressure min./max. |
|------------|-----------------------------|--|----------------------------|----------------------------|
| | | | | |
| 0820260001 | 3.5 l/(s*bar) | | 2.5 ... 10 bar | 2.5 ... 10 bar |
| 0820260002 | 3.5 l/(s*bar) | | 3 ... 10 bar | 3 ... 10 bar |
| 0820260003 | 3.5 l/(s*bar) | | -0.9 ... 10 bar | 2 ... 10 bar |
| 0820260004 | 3.5 l/(s*bar) | | -0.9 ... 10 bar | 2.5 ... 10 bar |

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar, Caution: The minimum control pressure depends on the working pressure (see "Control pressure" diagram below).

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

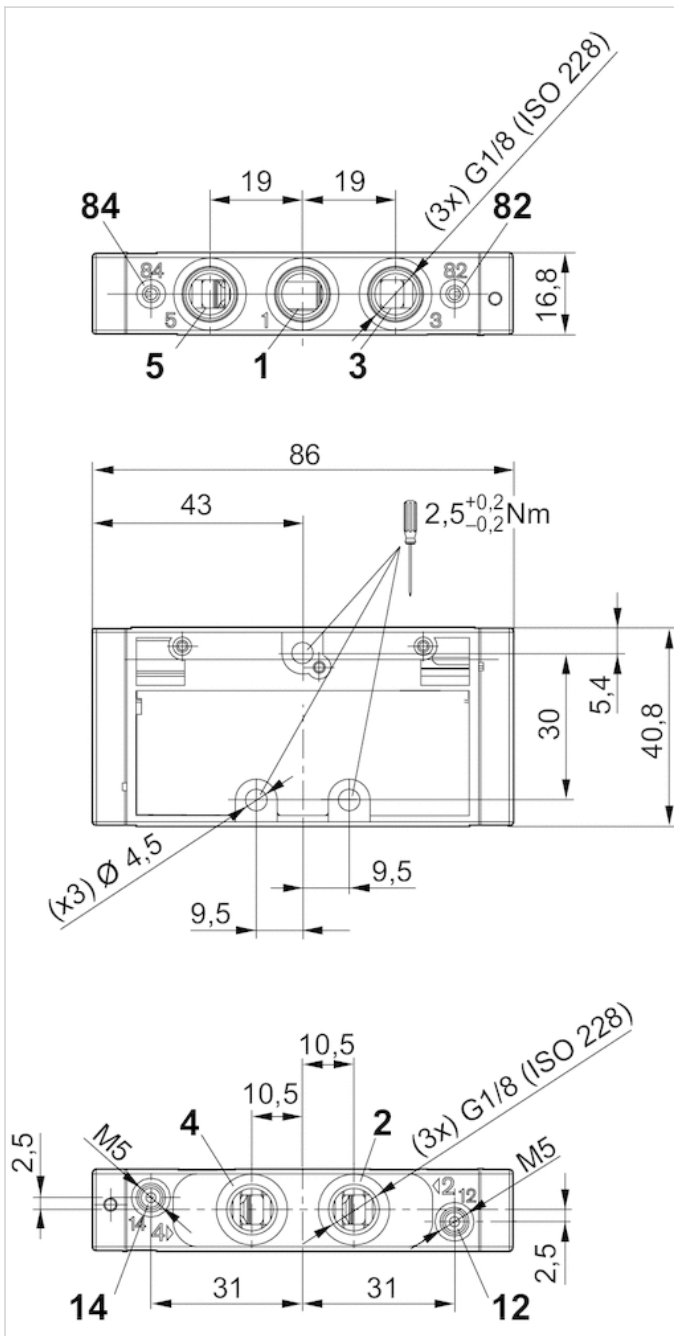
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, chrome-plated nickel-plated |

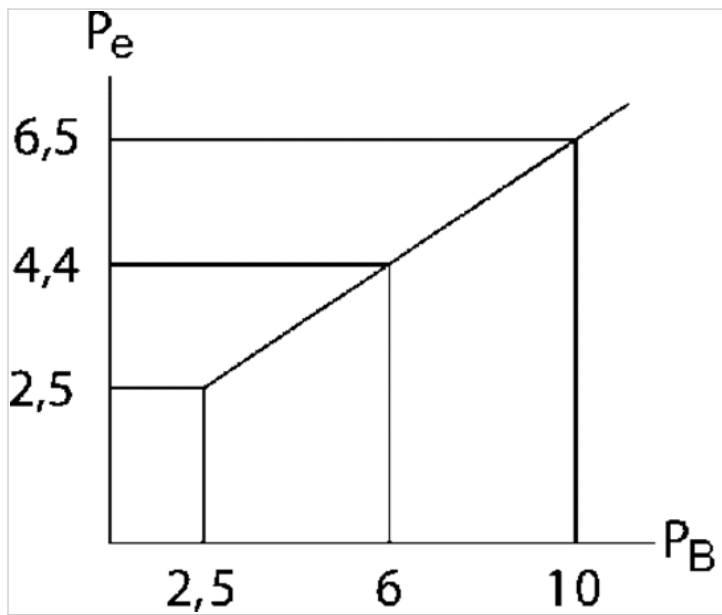
Dimensions

Dimensions



Diagrams

Control pressure



Pe = external control pressure, min.

PB= Working pressure




5/3-directional valve, Series TC08

- Qn = 700 l/min
- Compressed air connection output G 1/8
- Pipe connection



| | |
|-------------------------------|-----------------------------------|
| Version | Spool valve, positive overlapping |
| Activation | pneumatically |
| Pilot | External |
| Sealing principle | Soft sealing |
| Flow rate value Qn | 700 l/min |
| Working pressure min./max. | -0.9 ... 10 bar |
| Control pressure min./max. | 3 ... 10 bar |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Mounting on manifold strip | P-strip |
| Weight | 0.103 kg |

Technical data

| Part No. | | Compressed air connection | |
|------------|---|---------------------------|--------|
| | | Input | Output |
| 0820261001 |  | G 1/8 | G 1/8 |
| 0820261002 |  | G 1/8 | G 1/8 |
| 0820261003 |  | G 1/8 | G 1/8 |

| Part No. | Compressed air connection | | Flow conductance b |
|------------|---------------------------|-----------------------|-----------------------|
| | Exhaust | Pilot control exhaust | |
| 0820261001 | G 1/8 | M5 | 0.34 |
| 0820261002 | G 1/8 | M5 | 0.34 |
| 0820261003 | G 1/8 | M5 | 0.34 |

| Part No. | Flow conductance | |
|------------|------------------|--|
| | C-value | |
| 0820261001 | 3 l/(s*bar) | |
| 0820261002 | 3 l/(s*bar) | |
| 0820261003 | 3 l/(s*bar) | |

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

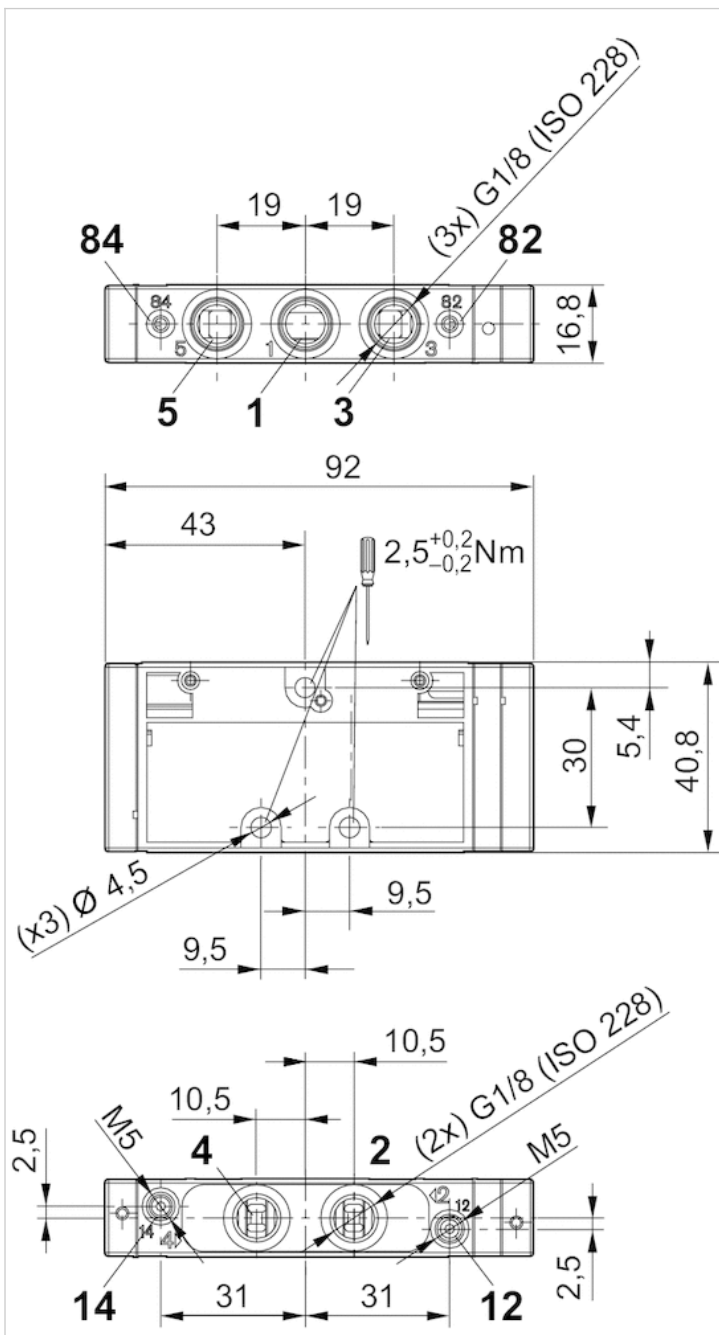
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

| Material | |
|------------------|--|
| Housing | Polyamide fiber-glass reinforced |
| Seals | Acrylonitrile butadiene rubber |
| Front plate | Polyamide fiber-glass reinforced |
| Threaded bushing | Brass Die cast zinc, chrome-plated nickel-plated |

Dimensions

Dimensions

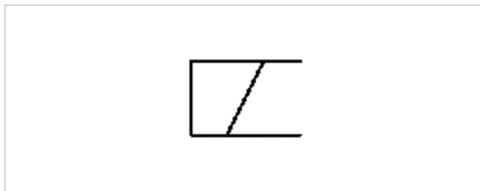


Coil, Series C01

- Form C, coil kit
- Coil width 15 mm
- Power consumption DC 2 W
- Holding power AC 1.6 VA
- Switch-on power AC 2.2 VA



| | |
|---|-----------------|
| Connector standard | ISO 15217 |
| electrical connections | Plug, 3-pin |
| Ambient temperature min./max. | -10 ... 50 °C |
| Protection class With valve plug connector/plug | IP65 |
| Duty cycle ED | 100 % |
| Weight | See table below |



Technical data

| Part No. | Operational voltage | Operational voltage | Operational voltage |
|------------|---------------------|---------------------|---------------------|
| | DC | AC 50 Hz | AC 60 Hz |
| R422101598 | - | 110 V | 110 V |
| R422101599 | - | 230 V | 230 V |
| R422101600 | 24 V | - | - |
| R422101601 | - | 24 V | 24 V |
| R422101602 | 12 V | - | - |

| Part No. | Voltage tolerance | Voltage tolerance | Voltage tolerance | Power consumption |
|------------|-------------------|-------------------|-------------------|-------------------|
| | DC | AC 50 Hz | AC 60 Hz | DC |
| R422101598 | - | -10% / +10% | -10% / +10% | - |
| R422101599 | - | -10% / +10% | -10% / +10% | - |
| R422101600 | -10% / +10% | - | - | 2 W |
| R422101601 | - | -10% / +10% | -10% / +10% | - |
| R422101602 | -10% / +10% | - | - | 2 W |

| Part No. | Holding power | Holding power | Switch-on power | Switch-on power | Weight | |
|------------|---------------|---------------|-----------------|-----------------|----------|----|
| | AC 50 Hz | AC 60 Hz | AC 50 Hz | AC 60 Hz | | |
| R422101598 | 1.6 VA | 1.4 VA | 2.2 VA | 2 VA | 0.023 kg | 1) |
| R422101599 | 1.6 VA | 1.4 VA | 2.2 VA | 2 VA | 0.022 kg | 1) |
| R422101600 | - | - | - | - | 0.024 kg | - |
| R422101601 | 1.6 VA | 1.4 VA | 2.2 VA | 2 VA | 0.023 kg | 1) |

| Part No. | Holding power | Holding power | Switch-on power | Switch-on power | Weight | |
|------------|---------------|---------------|-----------------|-----------------|----------|---|
| | AC 50 Hz | AC 60 Hz | AC 50 Hz | AC 60 Hz | | |
| R422101602 | - | - | - | - | 0.024 kg | - |

1) Can only be combined with TC series base valves and TC series valves with alternating voltage (AC).

Technical information

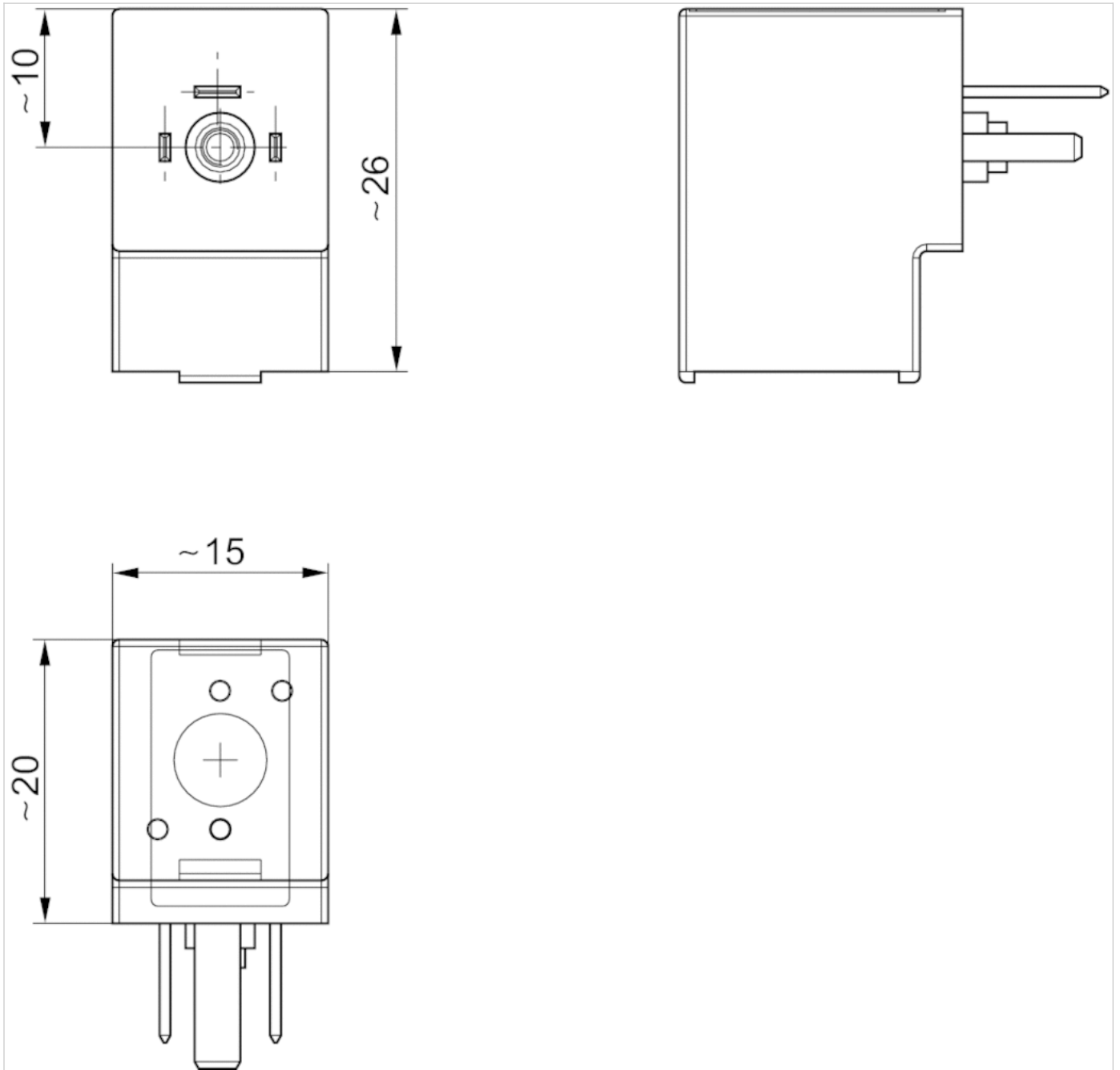
Please note that the coils are only compatible with TC series valves that were produced starting in 2011.

Technical information

| Material | |
|----------|-----------|
| Housing | Polyamide |

Dimensions

Dimensions

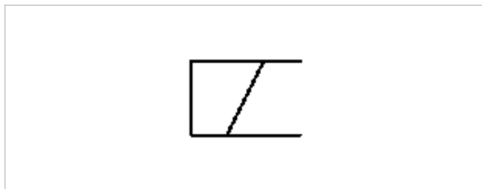


Coil, Series C01

- M8, coil kit
- Coil width 15 mm
- Power consumption DC 2.2 W



| | |
|---------------------------------------|------------------|
| Connector standard | DIN EN 60947-5-2 |
| electrical connections | See table below |
| Ambient temperature min./max. | -10 ... 50 °C |
| Protection class acc. to DIN EN 61140 | Class III |
| Electrically | |
| Protection class With valve plug | IP65 |
| connector/plug | |
| Duty cycle ED | 100 % |
| LED status display | Yellow |
| Weight | 0.025 kg |



Technical data

| Part No. | electrical connections | Operational voltage | Voltage tolerance |
|------------|------------------------|---------------------|-------------------|
| | | DC | DC |
| R422101603 | Plug, M8x1, 4-pin | 24 V | -10% / +10% |
| R422101604 | Plug, M8x1, 3-pin | 24 V | -10% / +10% |

| Part No. | Power consumption |
|------------|-------------------|
| | DC |
| R422101603 | 2.2 W |
| R422101604 | 2.2 W |

Technical information

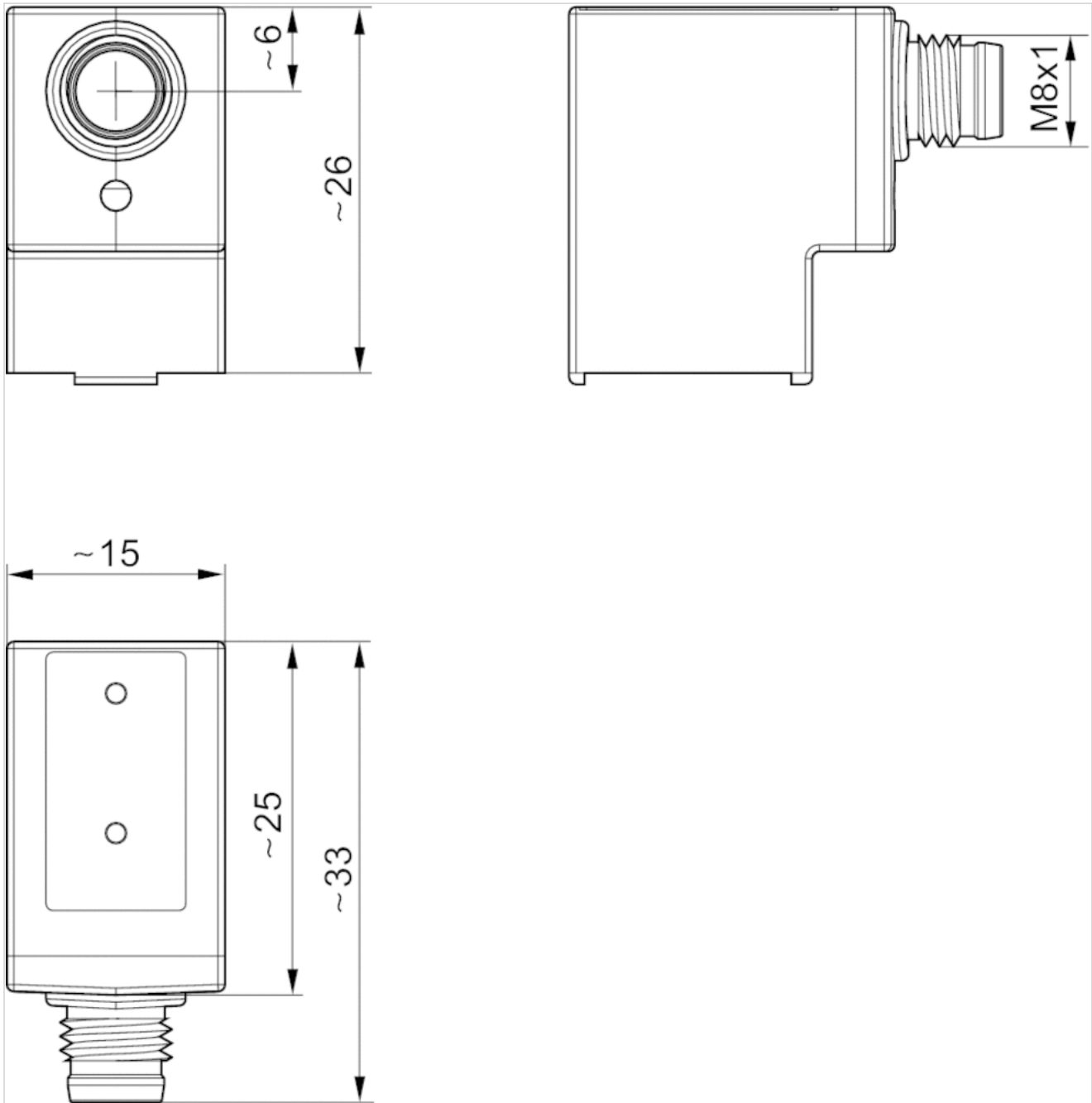
Please note that the coils are only compatible with TC series valves that were produced starting in 2011.

Technical information

| Material | |
|----------|-----------|
| Housing | Polyamide |

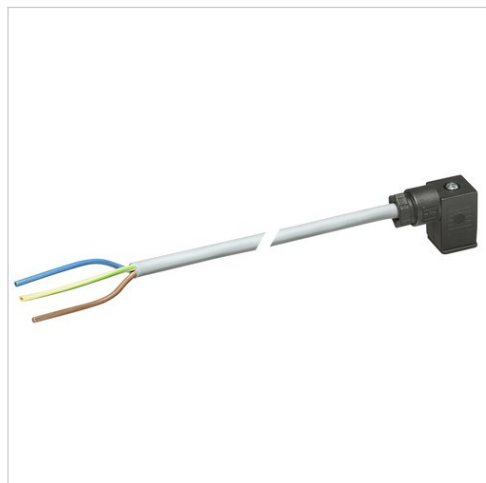
Dimensions

Dimensions



Valve plug connector, series CON-VP

- Socket form C 2+E angled 90°
- open cable ends 3-pin
- with cable
- unshielded



| | |
|----------------------------------|----------------------|
| Ambient temperature min./max. | -20 ... 80 °C |
| Operational voltage | See table below |
| Protection class | IP67 |
| Wire cross-section | 0.75 mm ² |
| Mounting screw tightening torque | 0.4 Nm |
| Weight | See table below |

Technical data

| Part No. | | Operational voltage | Max. current | Protective circuit | Contact assignment |
|------------|---|---------------------|--------------|--------------------|--------------------|
| 1834484212 |  | 230 V AC/DC | 6 A | - | 2+E |
| 1834484213 |  | 230 V AC/DC | 6 A | - | 2+E |
| 1834484214 |  | 230 V AC/DC | 6 A | - | 2+E |
| 1834484215 |  | 230 V AC/DC | 6 A | - | 2+E |
| 1834484204 |  | 24 V AC/DC | 6 A | Z-diode | 2+E |
| 1834484205 |  | 24 V AC/DC | 6 A | Z-diode | 2+E |
| 1834484206 |  | 24 V AC/DC | 6 A | Z-diode | 2+E |
| 1834484207 |  | 24 V AC/DC | 6 A | Z-diode | 2+E |
| 1834484208 |  | 230 V AC/DC | 6 A | Varistor | 2+E |
| 1834484209 |  | 230 V AC/DC | 6 A | Varistor | 2+E |
| 1834484210 |  | 230 V AC/DC | 6 A | Varistor | 2+E |
| 1834484211 |  | 230 V AC/DC | 6 A | Varistor | 2+E |
| 1834484236 |  | 24 V AC/DC | 6 A | Z-diode | 2+E |

| Part No. | LED status display | Number of wires | Cable-Ø | Cable length | Weight | Fig. | |
|------------|--------------------|-----------------|---------|--------------|----------|--------|----|
| 1834484212 | - | 3 | 5.9 mm | 3 m | 0.183 kg | Fig. 1 | - |
| 1834484213 | - | 3 | 5.9 mm | 3 m | 0.183 kg | Fig. 2 | - |
| 1834484214 | - | 3 | 5.9 mm | 5 m | 0.308 kg | Fig. 1 | - |
| 1834484215 | - | 3 | 5.9 mm | 5 m | 0.308 kg | Fig. 2 | - |
| 1834484204 | Yellow | 3 | 5.9 mm | 3 m | 0.185 kg | Fig. 1 | 1) |
| 1834484205 | Yellow | 3 | 5.9 mm | 3 m | 0.185 kg | Fig. 2 | 1) |
| 1834484206 | Yellow | 3 | 5.9 mm | 5 m | 0.292 kg | Fig. 1 | 1) |
| 1834484207 | Yellow | 3 | 5.9 mm | 5 m | 0.298 kg | Fig. 2 | 1) |
| 1834484208 | Yellow | 3 | 5.9 mm | 3 m | 0.171 kg | Fig. 1 | 1) |
| 1834484209 | Yellow | 3 | 5.9 mm | 3 m | 0.194 kg | Fig. 2 | 1) |
| 1834484210 | Yellow | 3 | 5.9 mm | 5 m | 0.297 kg | Fig. 1 | 1) |

| Part No. | LED status display | Number of wires | Cable-Ø | Cable length | Weight | Fig. | |
|------------|--------------------|-----------------|---------|--------------|----------|--------|----|
| 1834484211 | Yellow | 3 | 5.9 mm | 5 m | 0.285 kg | Fig. 2 | 1) |
| 1834484236 | Yellow | 3 | 5.9 mm | 10 m | 0.571 kg | Fig. 2 | 1) |

1) Scope of delivery incl. flat gasket

Technical information

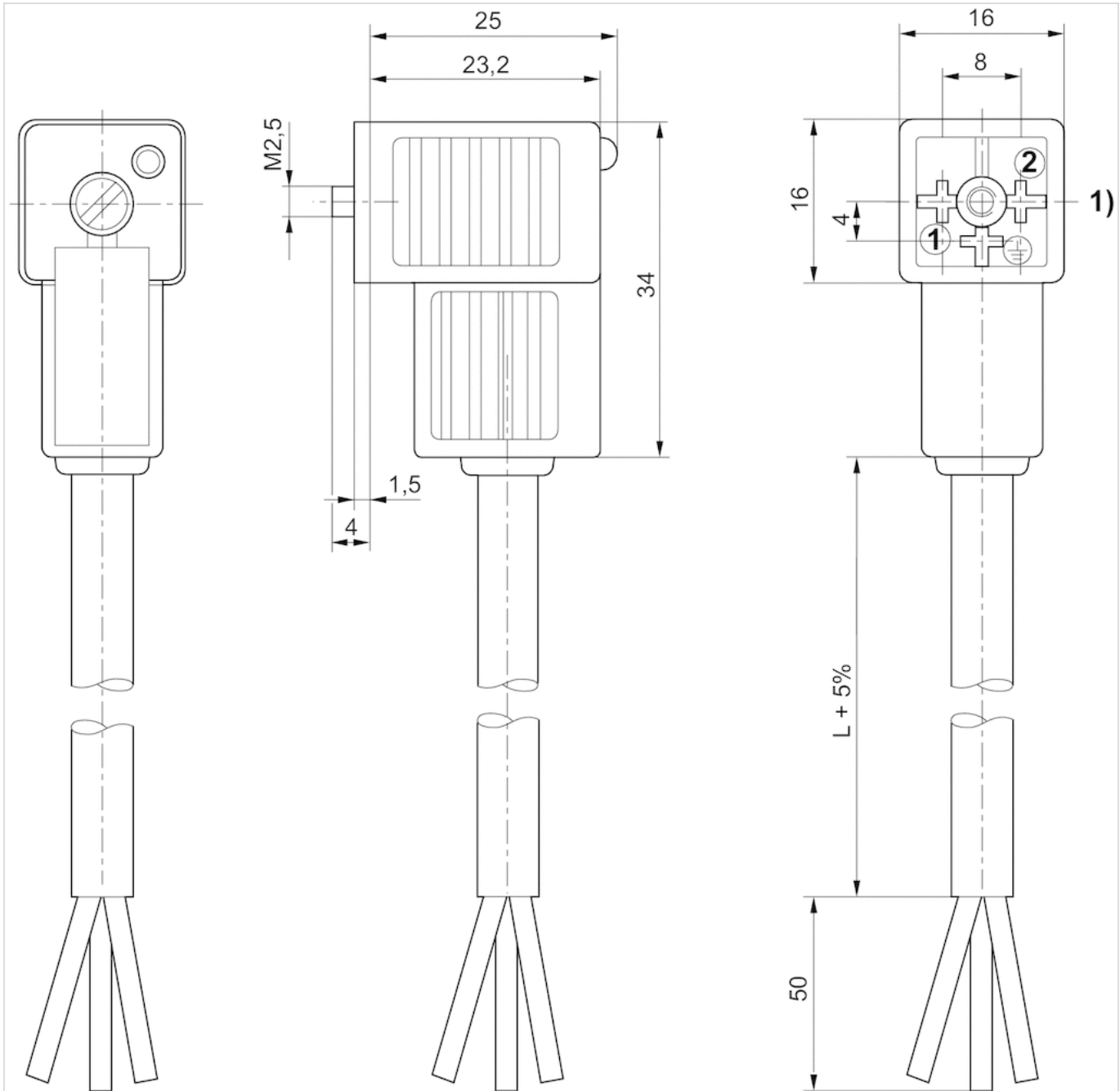
The specified protection class is only valid in assembled and tested state.

Technical information

| Material | |
|--------------|---------------------------------|
| Seals | caoutchouc/butadiene caoutchouc |
| Cable sheath | Polyvinyl chloride |

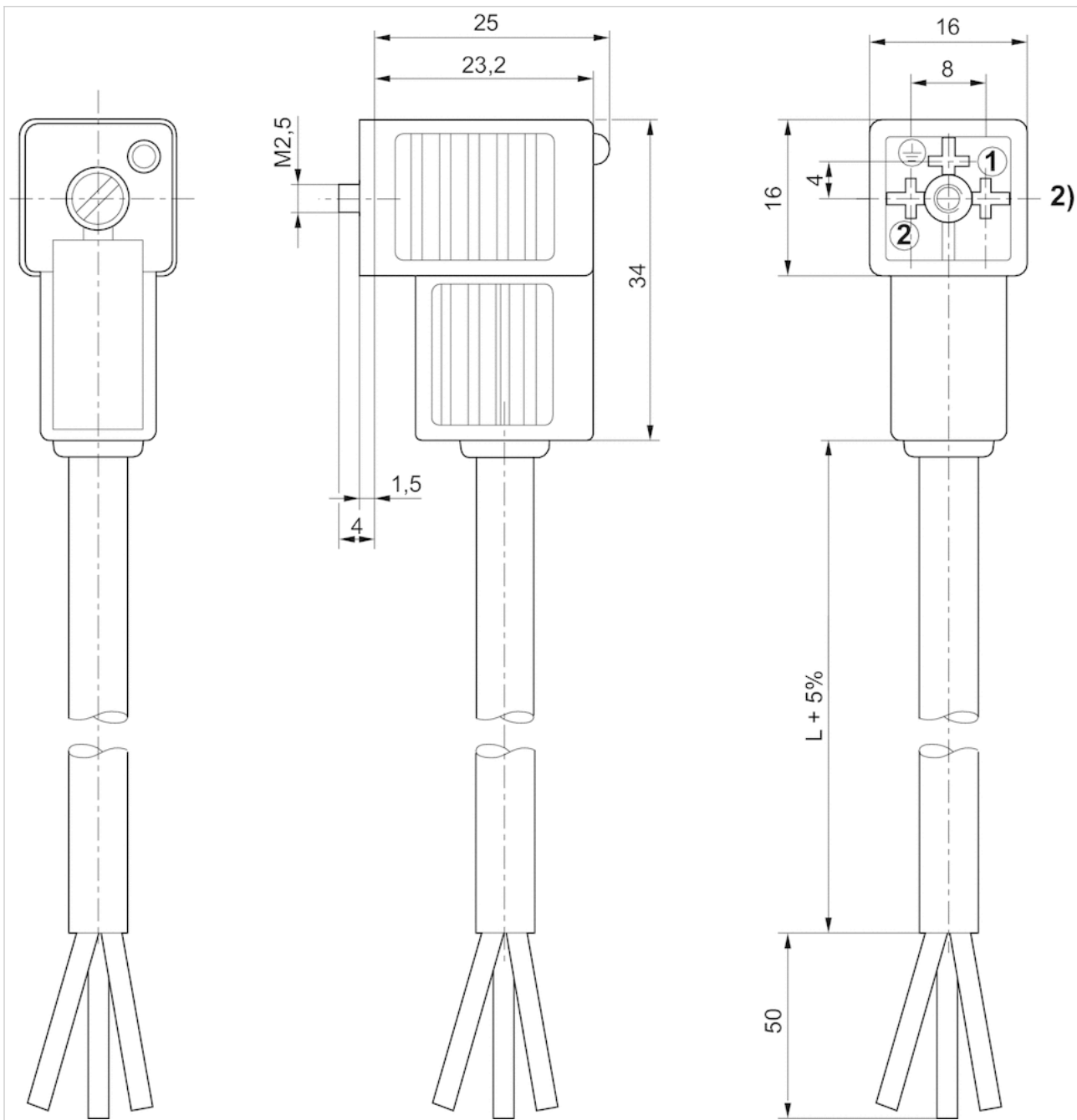
Dimensions

Fig. 1



1) 0° female insert

Fig. 2



2) 180° female insert


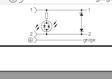
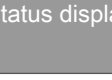
Valve plug connector, series CON-VP

- Socket, form C, 2+E, angled, 90°
- ISO 15217
- unshielded
- with LED Green



| | |
|----------------------------------|-----------------|
| Connection type | Screws |
| Ambient temperature min./max. | -40 ... 90 °C |
| Operational voltage | See table below |
| Protection class | IP65 |
| Mounting screw tightening torque | 0.4 Nm |
| Weight | See table below |

Technical data

| Part No. | | Operational voltage | Max. current | Protective circuit | Contact assignment |
|------------|---|---------------------|--------------|--------------------|--------------------|
| 1834484187 |  | 250 / 300 V AC/DC | 6 A | - | 2+E |
| 8941012202 |  | 250 / 300 V AC/DC | 6 A | - | 2+E |
| 4402050330 |  | 24 V AC/DC | - | Z-diode | 2+E |

| Part No. | LED status display | suitable cable-Ø min./max | Seal | Weight |
|------------|--------------------|---------------------------|---------------------------------|----------|
| 1834484187 | - | 4 / 8 mm | caoutchouc/butadiene caoutchouc | 0.012 kg |
| 8941012202 | - | 4 / 8 mm | - | 0.012 kg |
| 4402050330 | Green | - | - | 0.014 kg |

| Part No. | Fig. | |
|------------|--------|----|
| 1834484187 | Fig. 1 | - |
| 8941012202 | Fig. 2 | - |
| 4402050330 | Fig. 3 | 1) |

1)

Technical information

The specified protection class is only valid in assembled and tested state.

Technical information

Material

Seals

caoutchouc/butadiene caoutchouc

Dimensions

Fig. 1

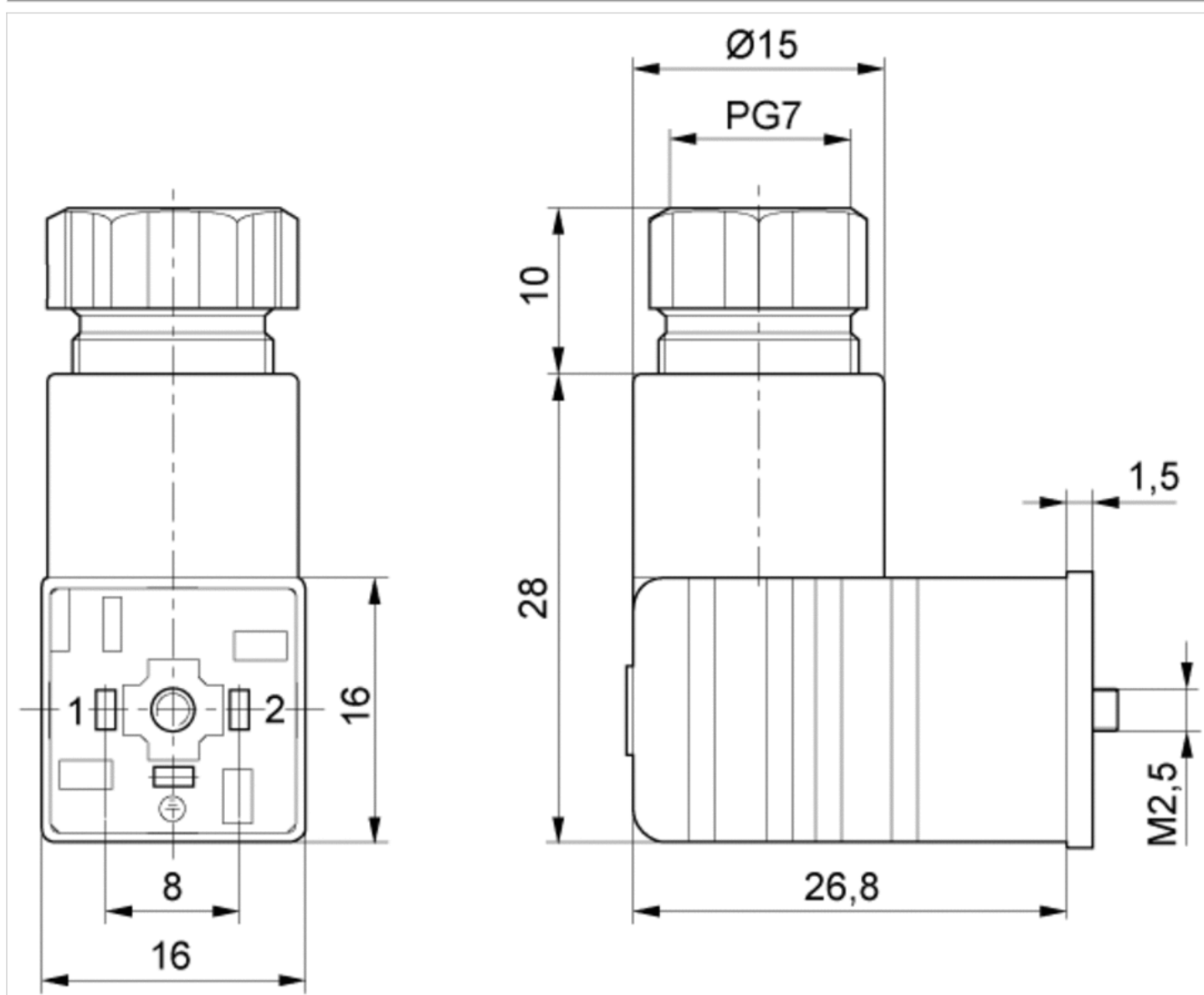


Fig. 2

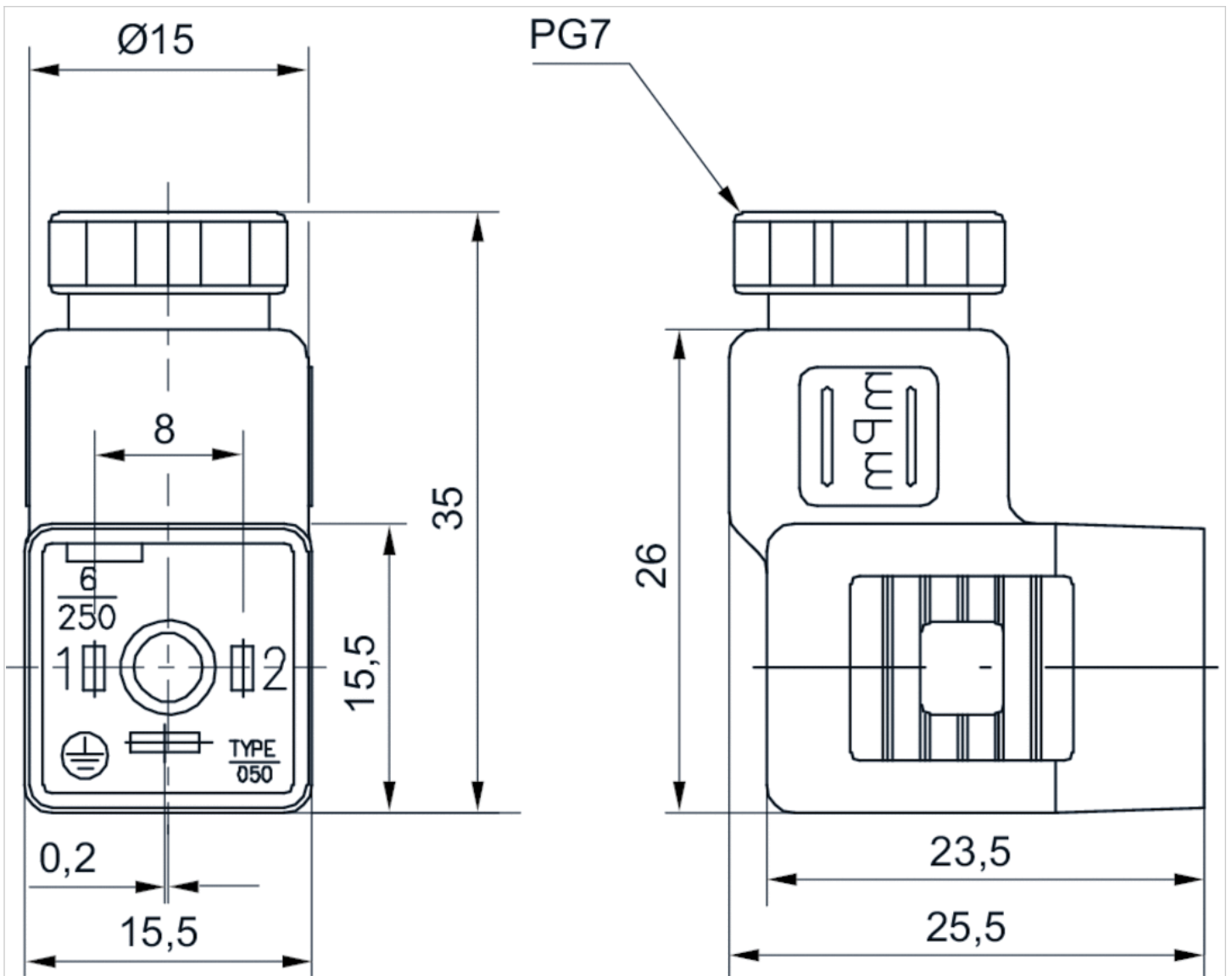
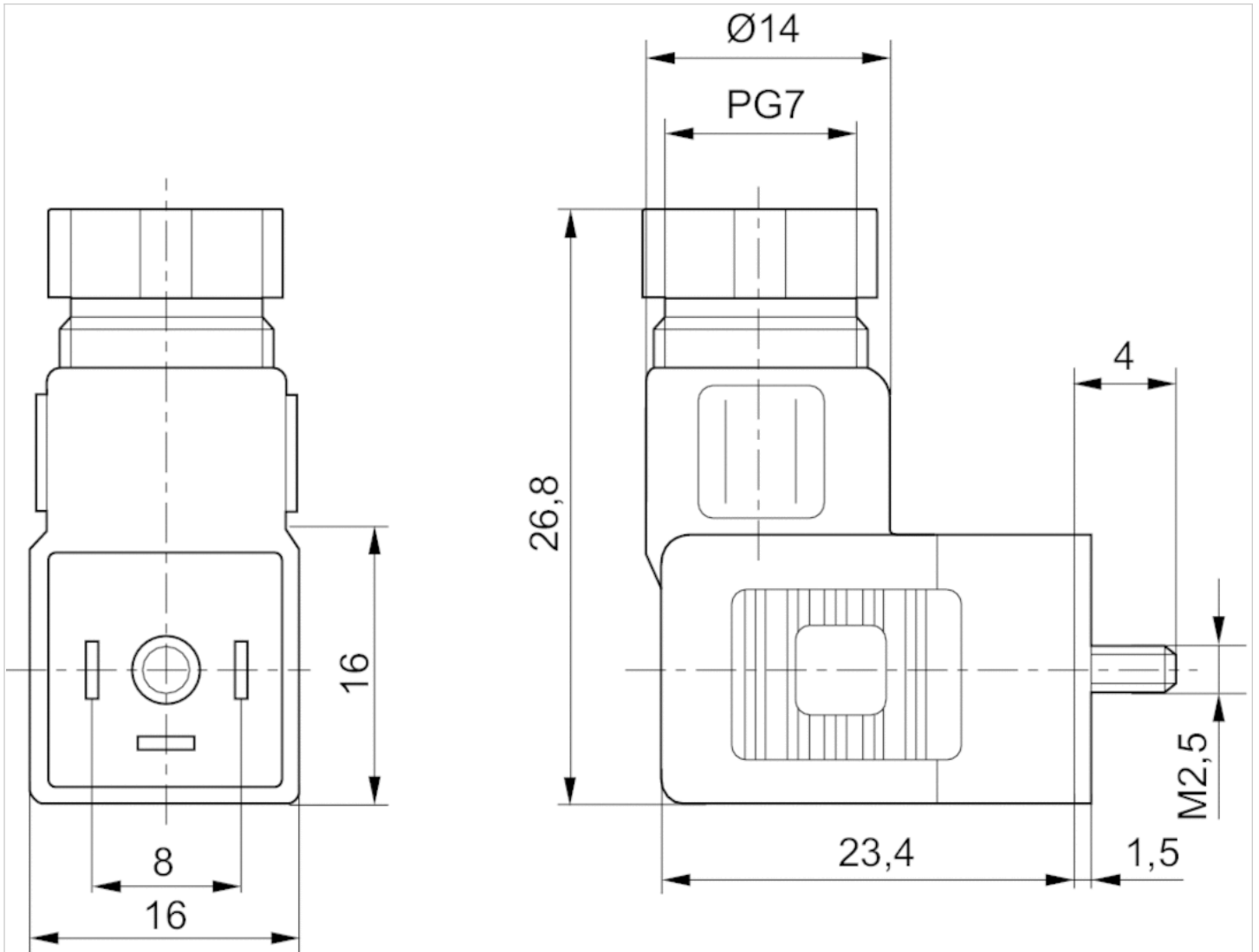
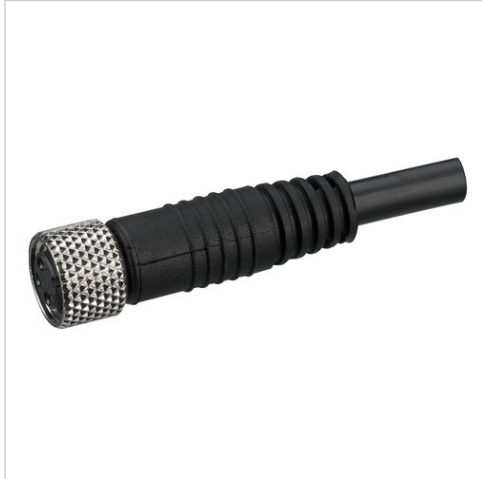


Fig. 3

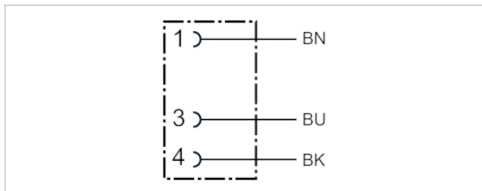


Round plug connector, Series CON-RD

- Socket M8x1 3-pin A-coded straight 180°
- open cable ends
- with cable
- UL (Underwriters Laboratories)
- unshielded



| | |
|-------------------------------|----------------------|
| Ambient temperature min./max. | -25 ... 85 °C |
| Operational voltage | 48 V AC/DC |
| Protection class | IP67 |
| Wire cross-section | 0.24 mm ² |
| Weight | See table below |



Technical data

| Part No. | Max. current | Number of wires | Cable-Ø | Cable length | Certification | Weight |
|------------|--------------|-----------------|---------|--------------|--------------------------------|----------|
| 1834484166 | 4 A | 3 | 4.5 mm | 3 m | UL (Underwriters Laboratories) | 0.087 kg |
| 1834484168 | 4 A | 3 | 4.5 mm | 5 m | UL (Underwriters Laboratories) | 0.141 kg |
| 1834484247 | 4 A | 3 | 4.5 mm | 10 m | UL (Underwriters Laboratories) | 0.277 kg |

Technical information

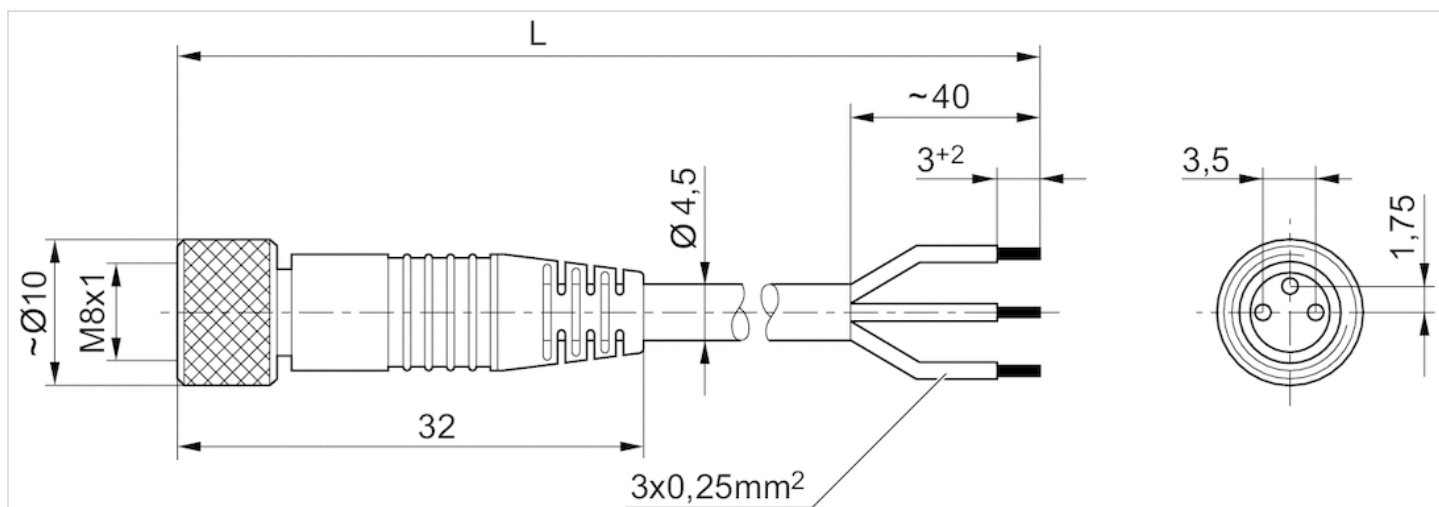
The specified protection class is only valid in assembled and tested state.

Technical information

| Material | |
|--------------|--------------|
| Housing | Polyurethane |
| Cable sheath | Polyurethane |

Dimensions

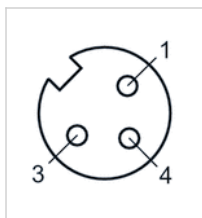
Dimensions



L = length

Pin assignments

Pin assignment, socket



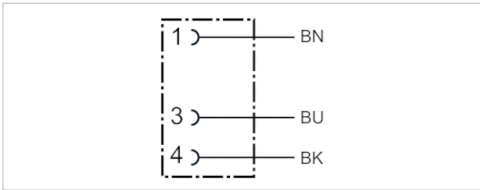
- (1) BN=brown
- (3) BU=blue
- (4) BK=black

Round plug connector, Series CON-RD

- Socket M8x1 3-pin A-coded angled 90°
- open cable ends
- with cable
- unshielded



| | |
|-------------------------------|----------------------|
| Ambient temperature min./max. | -40 ... 85 °C |
| Operational voltage | 48 V AC/DC |
| Protection class | IP67 |
| Wire cross-section | 0.24 mm ² |
| Weight | See table below |



Technical data

| Part No. | Max. current | Number of wires | Cable-Ø | Cable length | Weight |
|------------|--------------|-----------------|---------|--------------|----------|
| 1834484167 | 4 A | 3 | 4.5 mm | 3 m | 0.087 kg |
| 1834484169 | 4 A | 3 | 4.5 mm | 5 m | 0.139 kg |
| 1834484248 | 4 A | 3 | 4.5 mm | 10 m | 0.279 kg |

Technical information

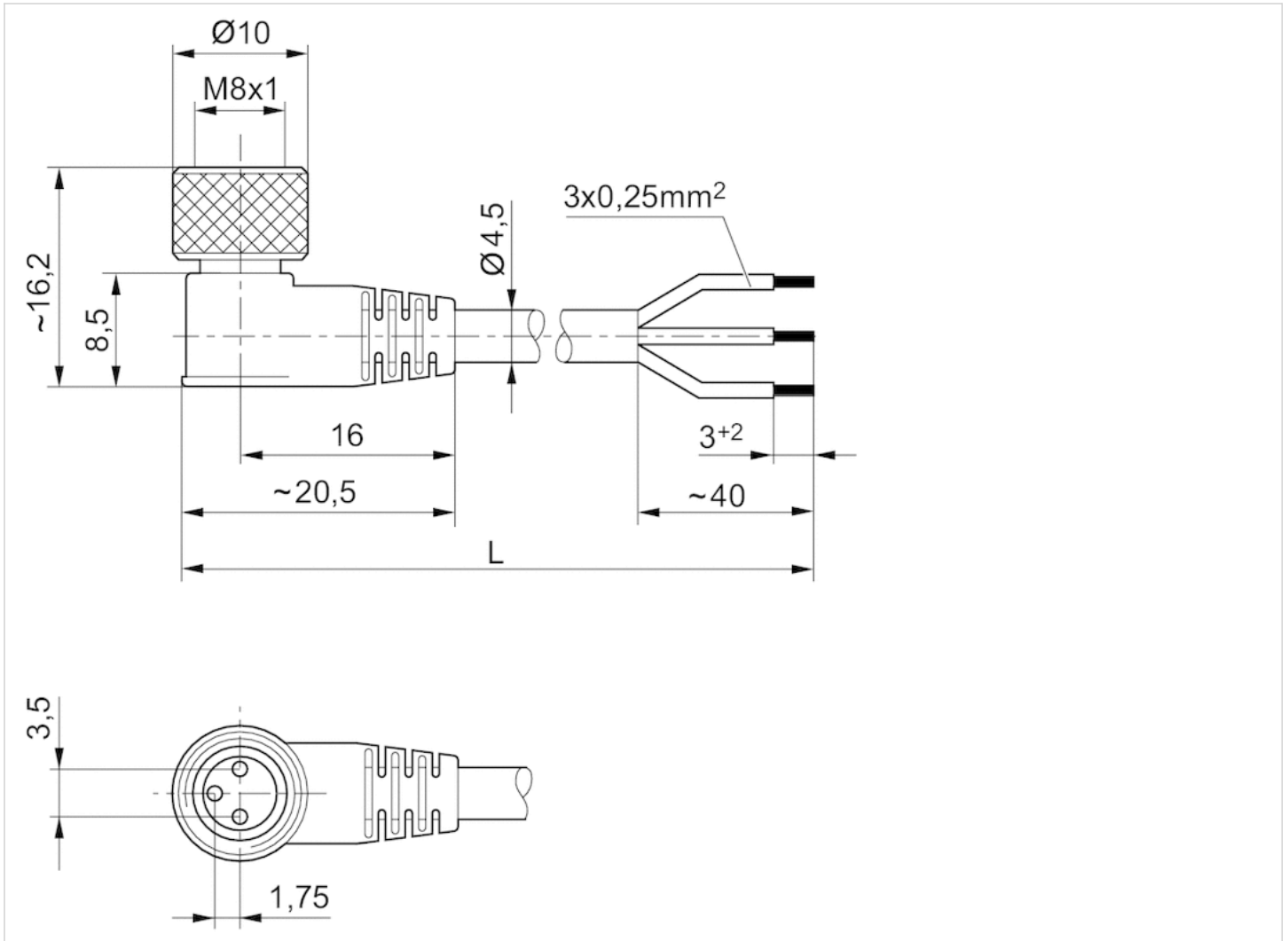
The specified protection class is only valid in assembled and tested state.

Technical information

| Material | |
|--------------|--------------|
| Housing | Polyurethane |
| Cable sheath | Polyurethane |

Dimensions

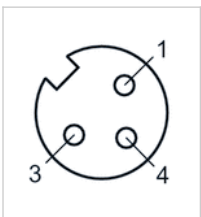
Dimensions



L = length

Pin assignments

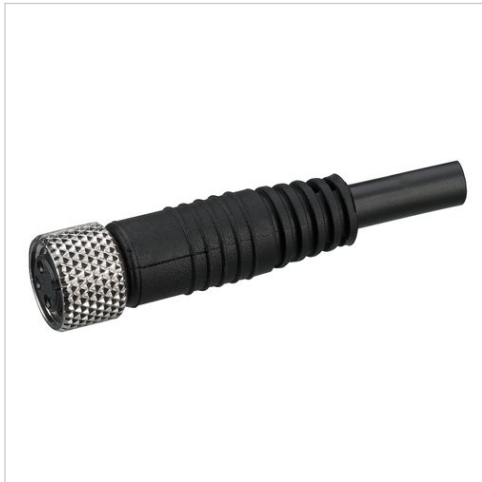
Pin assignment, socket



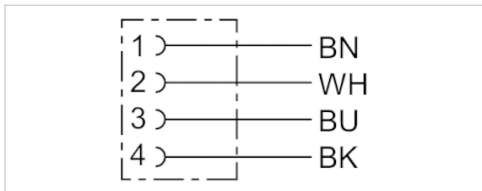
- (1) BN=brown
- (3) BU=blue
- (4) BK=black

Round plug connector, Series CON-RD

- Socket M8x1 4-pin A-coded straight 180°
- open cable ends
- with cable
- UL (Underwriters Laboratories)
- unshielded



| | |
|-------------------------------|----------------------|
| Ambient temperature min./max. | -40 ... 85 °C |
| Operational voltage | 48 V AC/DC |
| Protection class | IP67 |
| Wire cross-section | 0.25 mm ² |
| Weight | See table below |



Technical data

| Part No. | Max. current | Number of wires | Cable-Ø | Cable length | Certification | Weight |
|------------|--------------|-----------------|---------|--------------|--------------------------------|----------|
| 1834484144 | 4 A | 4 | 4.5 mm | 3 m | UL (Underwriters Laboratories) | 0.087 kg |
| 1834484146 | 4 A | 4 | 4.5 mm | 5 m | UL (Underwriters Laboratories) | 0.14 kg |

Technical information

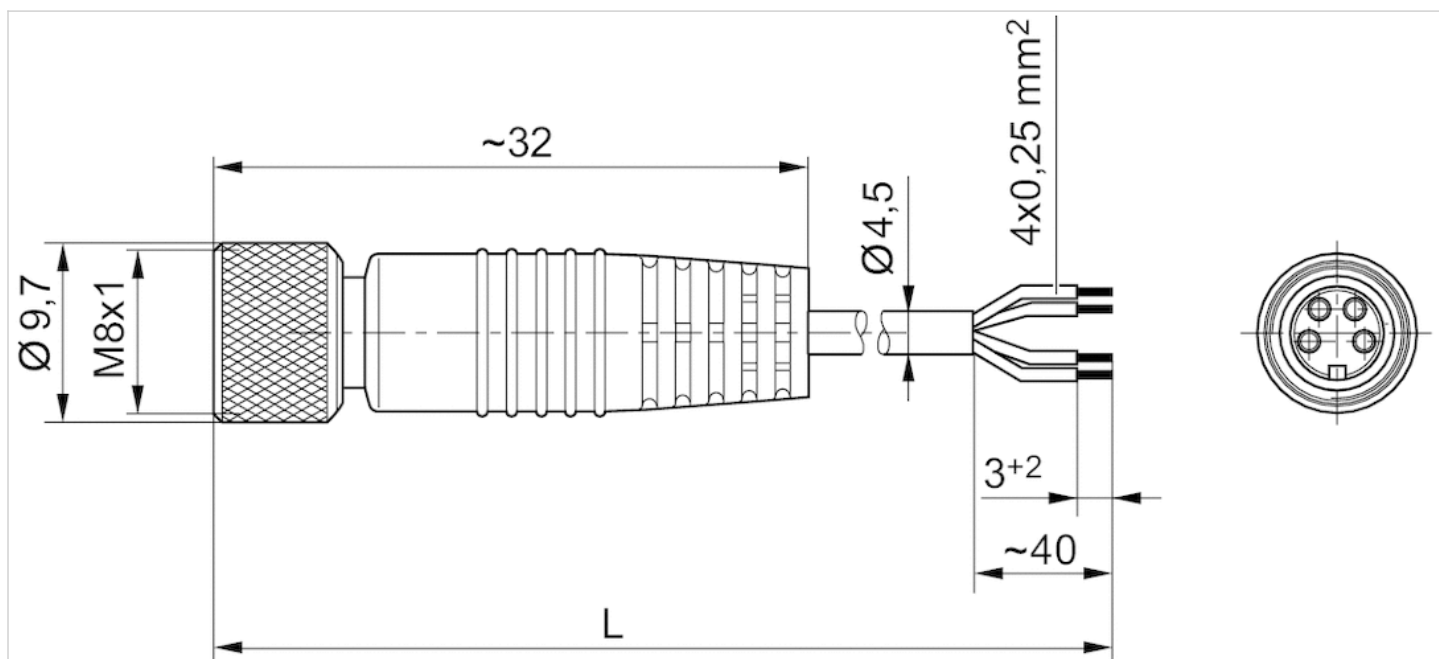
The specified protection class is only valid in assembled and tested state.

Technical information

| Material | |
|--------------|--------------|
| Housing | Polyurethane |
| Cable sheath | Polyurethane |

Dimensions

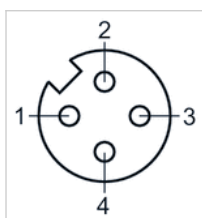
Dimensions



L = length

Pin assignments

Pin assignment, socket



- (1) BN=brown
- (2) WH=white
- (3) BU=blue
- (4) BK=black

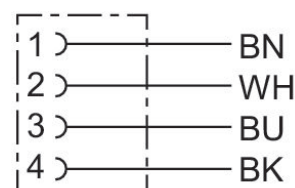
Round plug connector, Series CON-RD

1834484145

General series information

Round plug connectors with cable, Series CON-RD

- The AVENTICS Series CON-RD offers round plug connectors for self assembly, as well as terminating plug for fieldbus, adaptors and y-connectors as well as IP protection caps.



Technical data

Industry
Industrial

Type
Round plug connectors

Cable
with cable

Operational voltage
48 V AC/DC

Operating voltage AC max.
48 V DC

Operating voltage DC, max.
48 V AC

Electrical connection 1, type
Socket

Electrical connection 1, thread size
M8x1

Electrical connection 1, number of poles
4-pin

Electrical connection 1, coding
A-coded

Cable exit
angled

Cable exit angle
90°

Electrical connection 2, type
open cable ends

Number of wires
4

Shielding
unshielded

Cable length
3 m

Protection class
IP67
Min. ambient temperature
-25 °C
Max. ambient temperature
85 °C
Max. current
4 A

Wire cross-section
0.25 mm²
Cable-Ø
4.5 mm
Weight
0.086 kg

Material

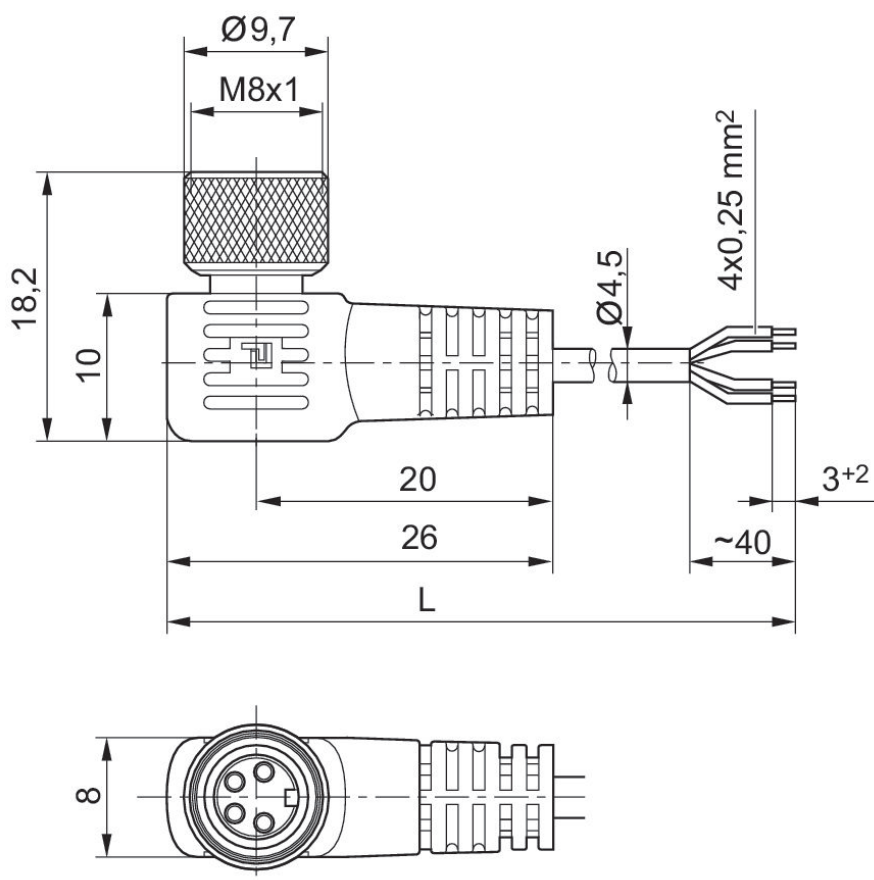
Housing material
Polyurethane
Material cable sheath
Polyurethane

Part No.
1834484145

Technical information

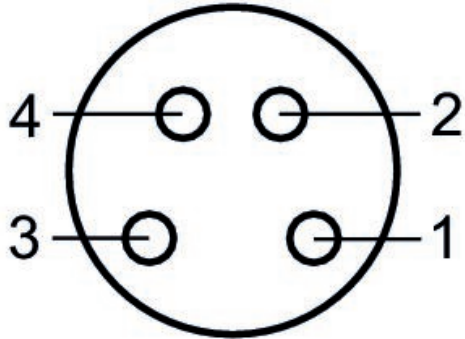
The specified protection class is only valid in assembled and tested state.

Dimensions in mm



L = length

Pin assignment, socket



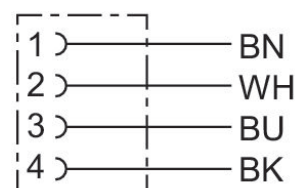
Round plug connector, Series CON-RD

1834484147

General series information

Round plug connectors with cable, Series CON-RD

- The AVENTICS Series CON-RD offers round plug connectors for self assembly, as well as terminating plug for fieldbus, adaptors and y-connectors as well as IP protection caps.



Technical data

Industry
Industrial

Type
Round plug connectors

Cable
with cable

Operational voltage
48 V AC/DC

Operating voltage AC max.
48 V DC

Operating voltage DC, max.
48 V AC

Electrical connection 1, type
Socket

Electrical connection 1, thread size
M8x1

Electrical connection 1, number of poles
4-pin

Electrical connection 1, coding
A-coded

Cable exit
angled

Cable exit angle
90°

Electrical connection 2, type
open cable ends

Number of wires
4

Shielding
unshielded

Cable length
5 m

Protection class
IP67
Min. ambient temperature
-25 °C
Max. ambient temperature
85 °C
Max. current
4 A

Wire cross-section
0.25 mm²
Cable-Ø
4.5 mm
Weight
0.141 kg

Material

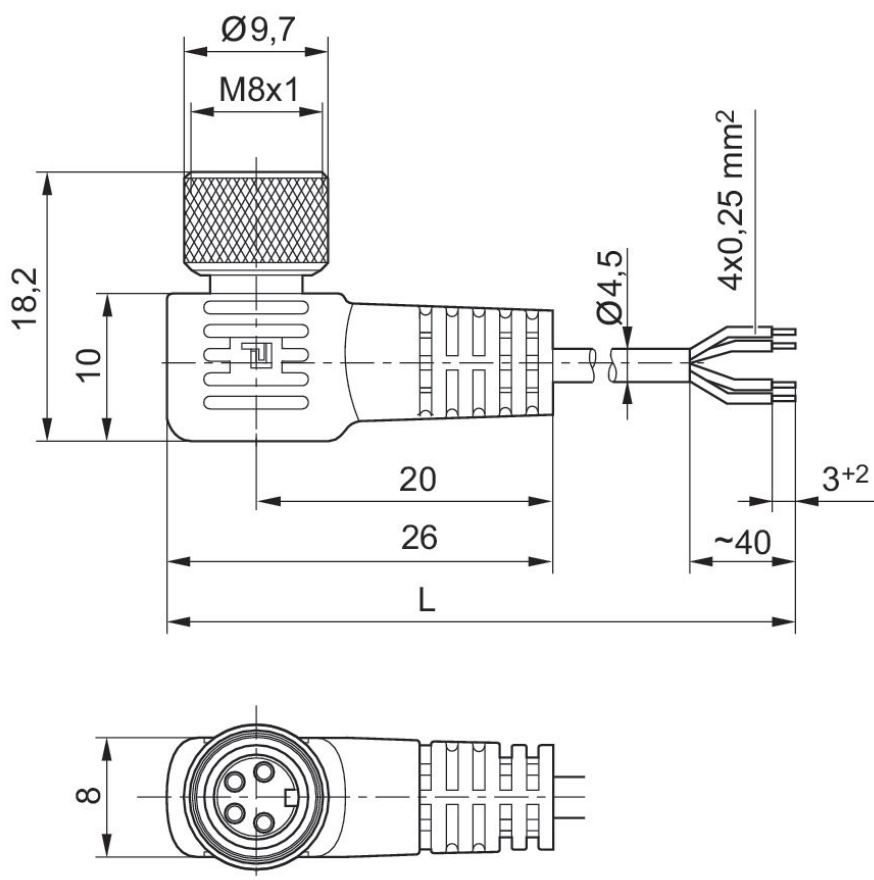
Housing material
Polyurethane
Material cable sheath
Polyurethane

Part No.
1834484147

Technical information

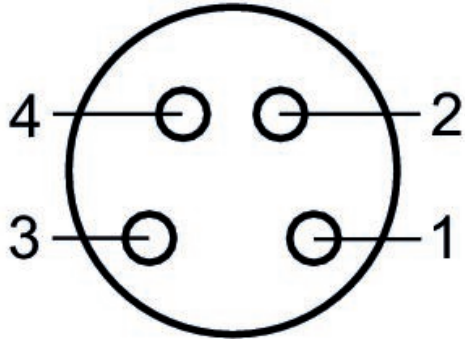
The specified protection class is only valid in assembled and tested state.

Dimensions in mm



L = length

Pin assignment, socket

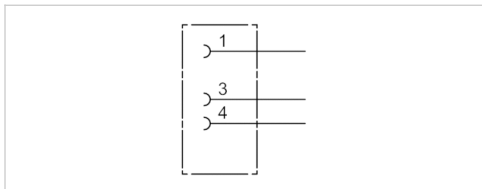


Round plug connector, Series CON-RD

- Socket, M8x1, 3-pin, A-coded, straight, 180°
- UL (Underwriters Laboratories)
- unshielded



| | |
|-------------------------------|---------------|
| Connection type | Soldering |
| Ambient temperature min./max. | -25 ... 80 °C |
| Operational voltage | 48 V AC/DC |
| Protection class | IP67 |
| Weight | 0.009 kg |



Technical data

| Part No. | Max. current | suitable cable-Ø min./max |
|------------|--------------|---------------------------|
| 1834484173 | 4 A | 3.5 / 5 mm |

Technical information

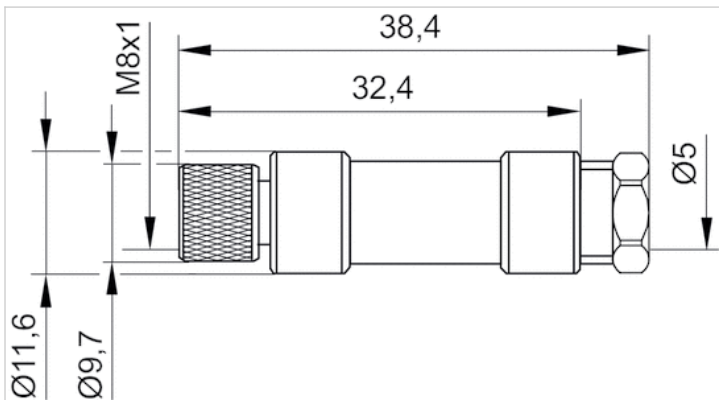
The specified protection class is only valid in assembled and tested state.

Technical information

| Material | |
|----------|-----------|
| Housing | Polyamide |

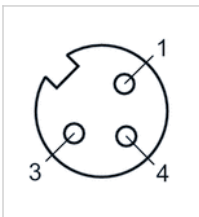
Dimensions

Dimensions



Pin assignments

Pin assignment, socket

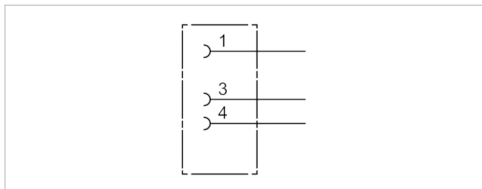


Round plug connector, Series CON-RD

- Socket, M8x1, 3-pin, A-coded, angled, 90°
- UL (Underwriters Laboratories)
- unshielded



| | |
|-------------------------------|---------------|
| Connection type | Soldering |
| Ambient temperature min./max. | -40 ... 85 °C |
| Operational voltage | 48 V AC/DC |
| Protection class | IP67 |
| Weight | 0.01 kg |



Technical data

| Part No. | Max. current | Contact assignment | suitable cable-Ø min./max |
|------------|--------------|--------------------|---------------------------|
| 1834484174 | 4 A | 3 | 3.5 / 5 mm |

Technical information

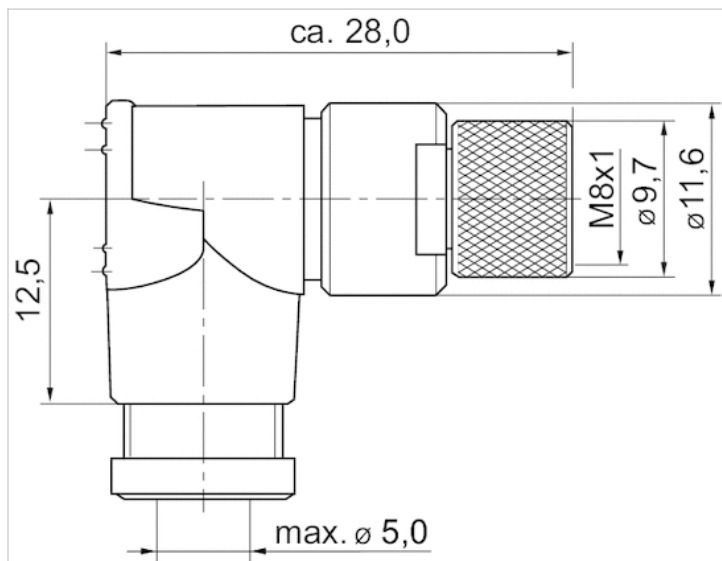
The specified protection class is only valid in assembled and tested state.

Technical information

| Material | |
|----------|-----------|
| Housing | Polyamide |

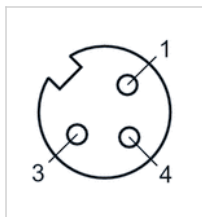
Dimensions

Dimensions



Pin assignments

Pin assignment, socket



Manifold strip

- for TC08



| | |
|-------------------------------|-----------------|
| Nominal flow Q _n | 800 l/min |
| Ambient temperature min./max. | -10 ... 50 °C |
| Medium | Compressed air |
| Weight | See table below |

Technical data

| Part No. | Type | Number of valve positions | Weight |
|------------|----------------|---------------------------|----------|
| R422000931 | Manifold strip | 2 | 0.115 kg |
| R422000932 | Manifold strip | 3 | 0.148 kg |
| R422000933 | Manifold strip | 4 | 0.182 kg |
| R422000934 | Manifold strip | 5 | 0.218 kg |
| R422000935 | Manifold strip | 6 | 0.247 kg |
| R412012677 | Manifold strip | 8 | 0.313 kg |
| R412012678 | Manifold strip | 10 | 0.38 kg |
| R412012679 | Manifold strip | 12 | 0.448 kg |
| R422000937 | Mounting kit | - | 0.13 kg |
| R422000939 | Blanking plate | - | 0.049 kg |

mounting kit for 6 valves, delivery incl. seals and mounting screws, Blanking plates, 5 pcs., delivery incl. seals and mounting screws

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

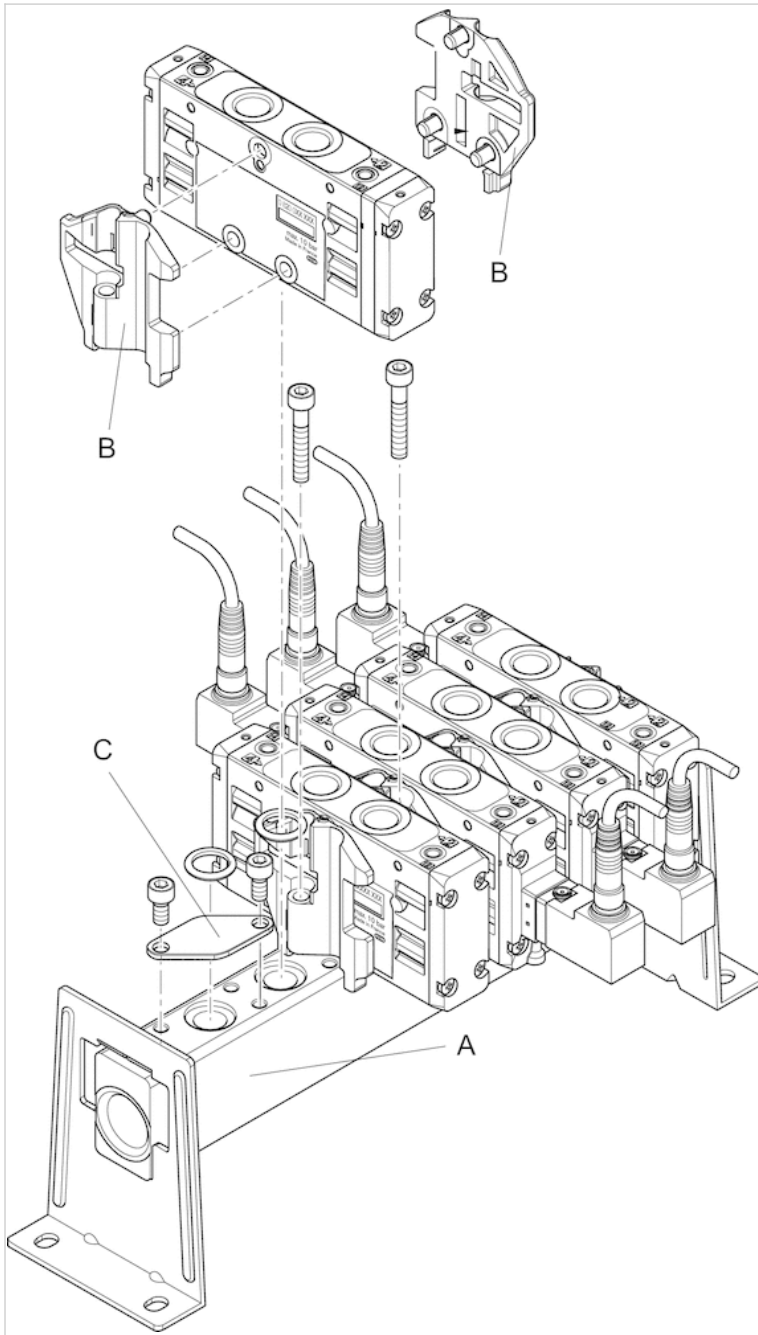
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

| Material | |
|------------|--------------------------------|
| Base plate | Aluminum |
| Seal | Acrylonitrile butadiene rubber |

Dimensions

Dimensions



The following must be ordered to mount the valves: manifold strip A and mounting kit B
 C = Blanking plate

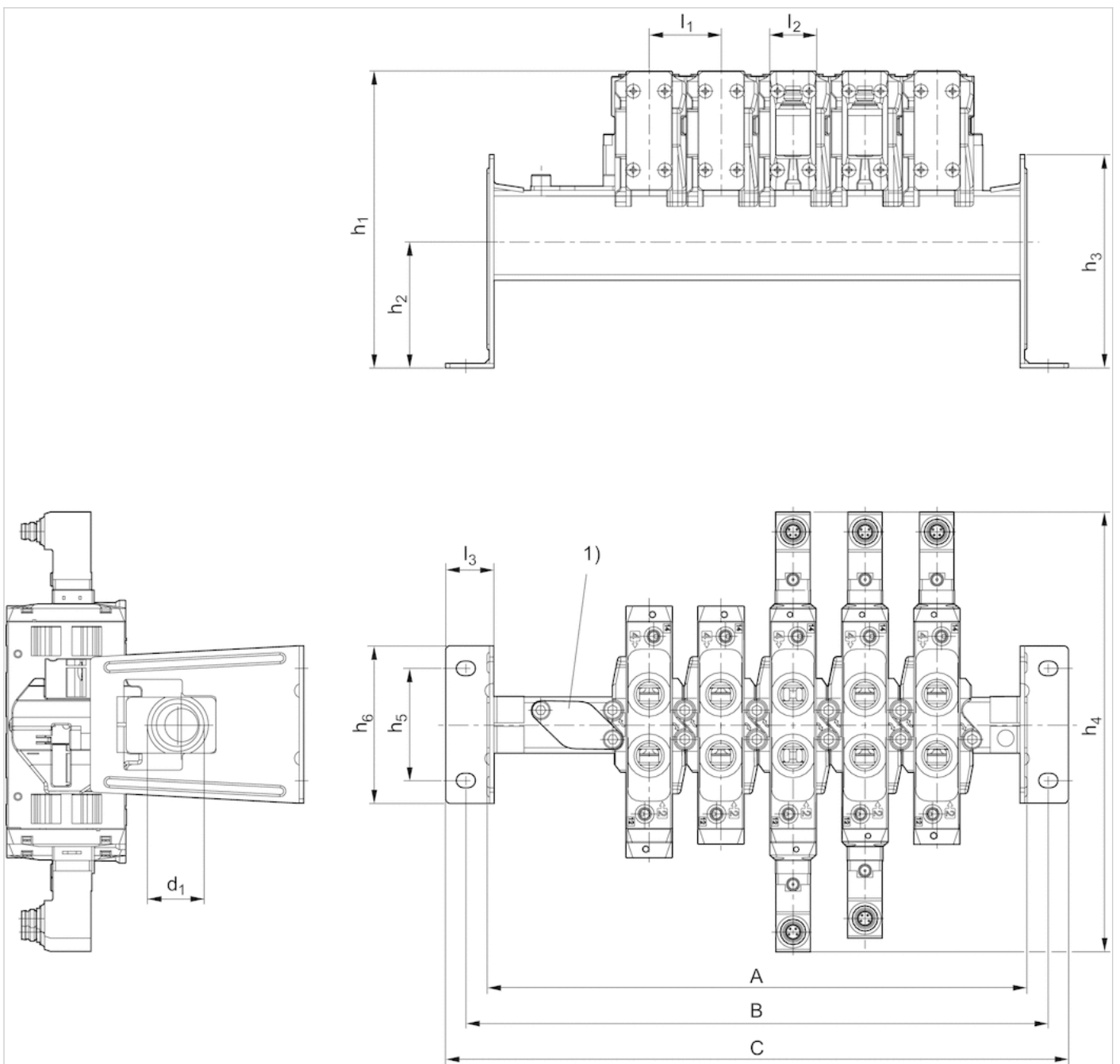
Dimensions

| Part No. | |
|------------|---|
| R422000931 | A |
| R422000932 | A |
| R422000933 | A |
| R422000934 | A |
| R422000935 | A |

| Part No. | |
|------------|---|
| R412012677 | A |
| R412012678 | A |
| R412012679 | A |
| R422000937 | B |
| R422000939 | C |

Dimensions

Dimensions, P-strip with mounting bracket



1) Blanking plate

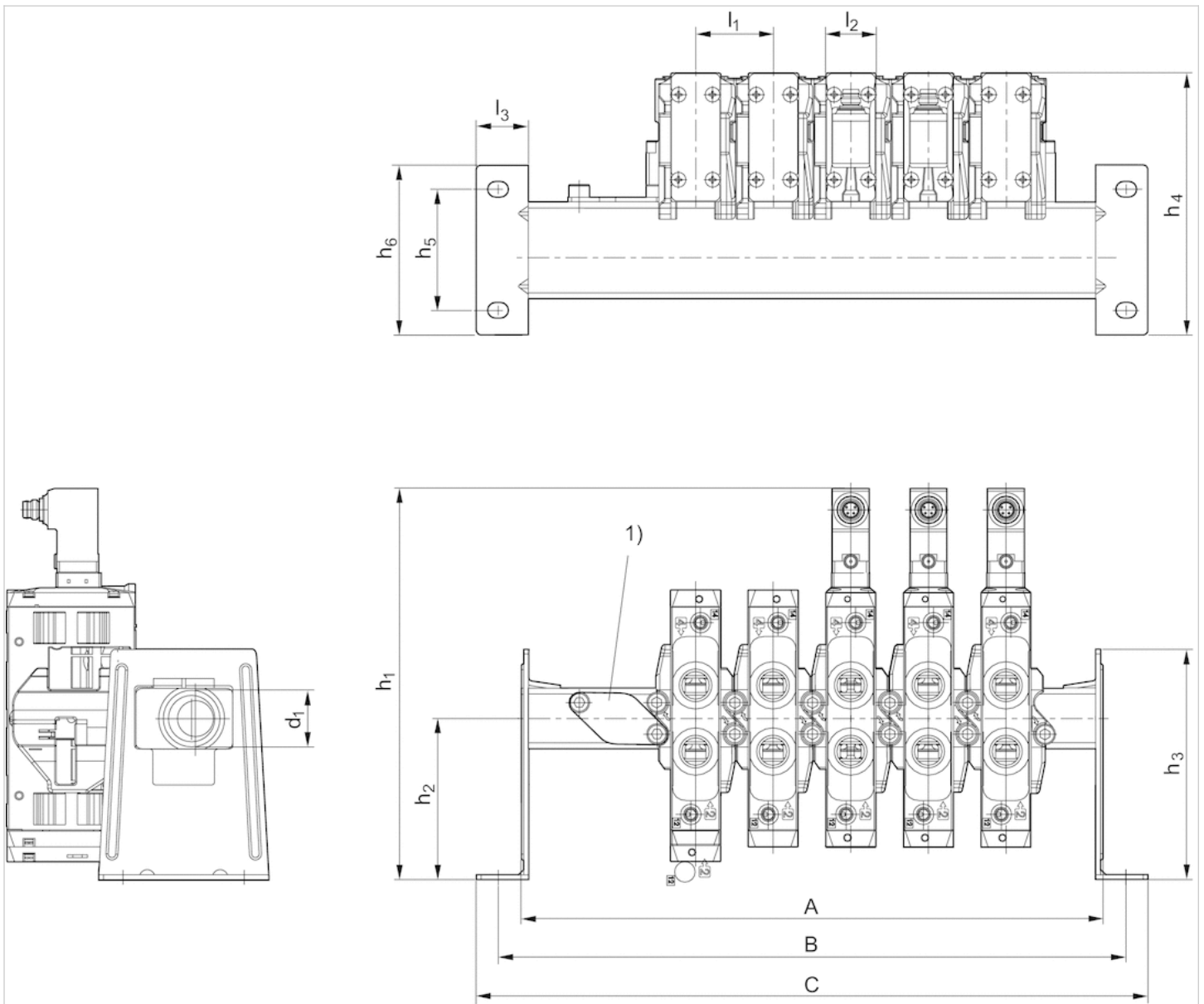
Dimensions

| Part No. | n | A | B | C | d1 | h1 | h2 | h3 | h4 | h5 | h6 | l1 | l2 | l3 |
|------------|----|-------|-------|-------|-------|-------|------|----|-------|----|----|----|------|------|
| R422000931 | 2 | 90.4 | 108.4 | 123,4 | G 3/8 | 102,8 | 45,5 | 80 | 175,6 | 44 | 60 | 26 | 16,8 | 19,5 |
| R422000932 | 3 | 116.4 | 134.4 | 149,4 | G 3/8 | 102,8 | 45,5 | 80 | 175,6 | 44 | 60 | 26 | 16,8 | 19,5 |
| R422000933 | 4 | 142.4 | 160.4 | 175,4 | G 3/8 | 102,8 | 45,5 | 80 | 175,6 | 44 | 60 | 26 | 16,8 | 19,5 |
| R422000934 | 5 | 168.4 | 186.4 | 201,4 | G 3/8 | 102,8 | 45,5 | 80 | 175,6 | 44 | 60 | 26 | 16,8 | 19,5 |
| R422000935 | 6 | 194.4 | 212.4 | 227,4 | G 3/8 | 102,8 | 45,5 | 80 | 175,6 | 44 | 60 | 26 | 16,8 | 19,5 |
| R412012677 | 8 | 246.4 | 264.4 | 279,4 | G 3/8 | 102,8 | 45,5 | 80 | 175,6 | 44 | 60 | 26 | 16,8 | 19,5 |
| R412012678 | 10 | 298,4 | 316,4 | 331,4 | G 3/8 | 102,8 | 45,5 | 80 | 175,6 | 44 | 60 | 26 | 16,8 | 19,5 |
| R412012679 | 12 | 350,4 | 368,4 | 383,4 | G 3/8 | 102,8 | 45,5 | 80 | 175,6 | 44 | 60 | 26 | 16,8 | 19,5 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

n = number of valve positions

Dimensions

Dimensions, P-strip with mounting bracket



1) Blanking plate

Dimensions

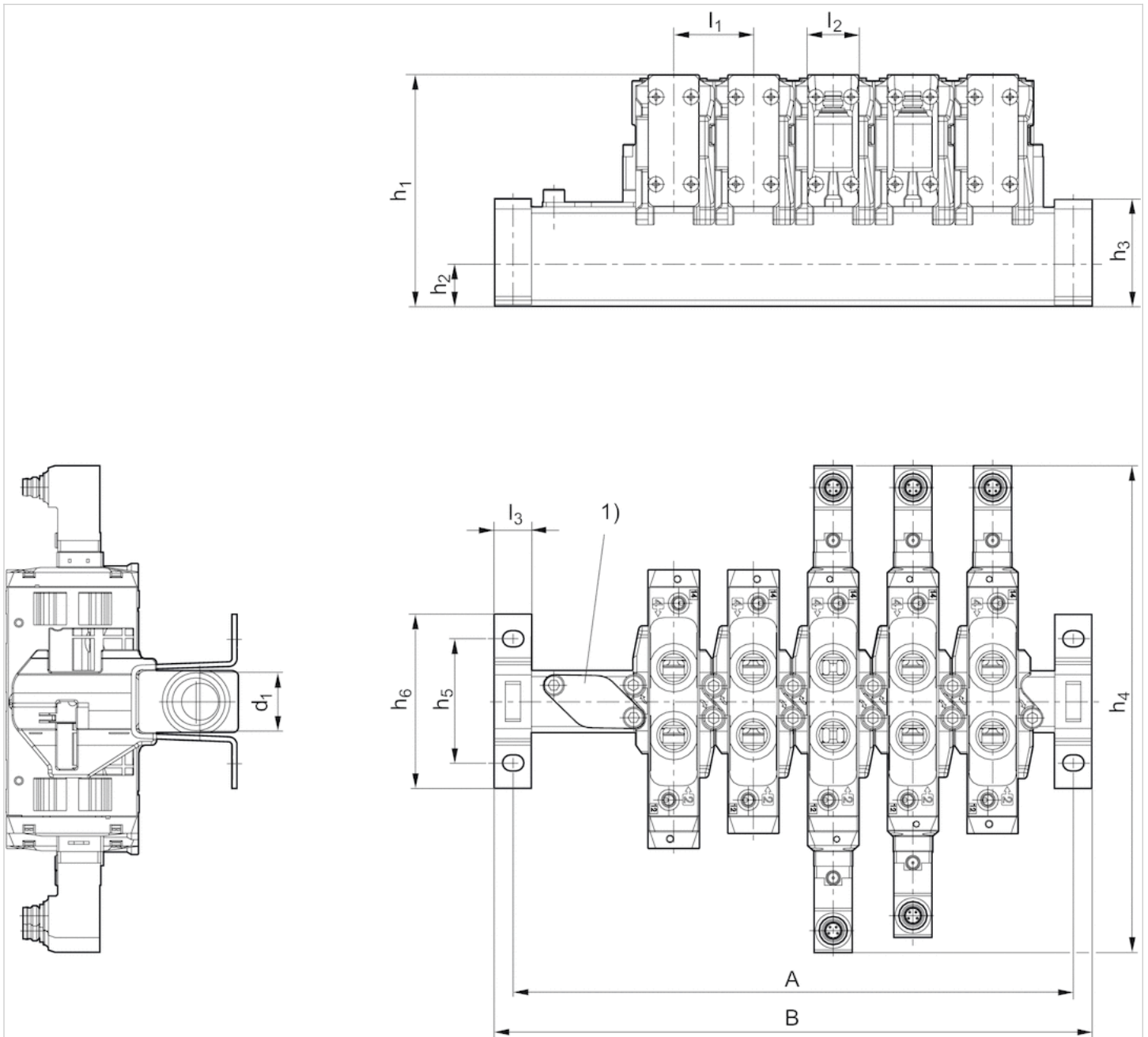
| Part No. | n | A | B | C | d1 | h1 | h2 | h3 | h4 | h5 | h6 | l1 | l2 | l3 |
|------------|----|-------|-------|-------|-------|-------|------|----|------|----|----|----|------|------|
| R422000931 | 2 | 90,4 | 108,4 | 123,4 | G 3/8 | 127,8 | 51,5 | 80 | 86,4 | 44 | 60 | 26 | 16,8 | 19,5 |
| R422000932 | 3 | 116,4 | 134,4 | 149,4 | G 3/8 | 127,8 | 51,5 | 80 | 86,4 | 44 | 60 | 26 | 16,8 | 19,5 |
| R422000933 | 4 | 142,4 | 160,4 | 175,4 | G 3/8 | 127,8 | 51,5 | 80 | 86,4 | 44 | 60 | 26 | 16,8 | 19,5 |
| R422000934 | 5 | 168,4 | 186,4 | 201,4 | G 3/8 | 127,8 | 51,5 | 80 | 86,4 | 44 | 60 | 26 | 16,8 | 19,5 |
| R422000935 | 6 | 194,4 | 212,4 | 227,4 | G 3/8 | 127,8 | 51,5 | 80 | 86,4 | 44 | 60 | 26 | 16,8 | 19,5 |
| R412012677 | 8 | 246,4 | 264,4 | 279,4 | G 3/8 | 127,8 | 51,5 | 80 | 86,4 | 44 | 60 | 26 | 16,8 | 19,5 |
| R412012678 | 10 | 298,4 | 316,4 | 331,4 | G 3/8 | 127,8 | 51,5 | 80 | 86,4 | 44 | 60 | 26 | 16,8 | 19,5 |
| R412012679 | 12 | 350,4 | 368,4 | 383,4 | G 3/8 | 127,8 | 51,5 | 80 | 86,4 | 44 | 60 | 26 | 16,8 | 19,5 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| Part No. | n | A | B | C | d1 | h1 | h2 | h3 | h4 | h5 | h6 | l1 | l2 | l3 |
|----------|---|---|---|---|----|----|----|----|----|----|----|----|----|----|
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

n = number of valve positions

Dimensions

Dimensions, p-strip with support bracket



1) Blanking plate

Dimensions

| Part No. | n | A | B | d1 | h1 | h2 | h3 | h4 | h5 | h6 | l1 | l2 | l3 |
|------------|---|-------|-------|-------|------|------|------|-------|----|----|----|------|----|
| R422000931 | 2 | 76,4 | 90,4 | G 3/8 | 70,8 | 13,5 | 33,5 | 175,6 | 44 | 58 | 26 | 16,8 | 14 |
| R422000932 | 3 | 102,4 | 116,4 | G 3/8 | 70,8 | 13,5 | 33,5 | 175,6 | 44 | 58 | 26 | 16,8 | 14 |

| Part No. | n | A | B | d1 | h1 | h2 | h3 | h4 | h5 | h6 | l1 | l2 | l3 |
|------------|----|-------|-------|-------|------|------|------|-------|----|----|----|------|----|
| R422000933 | 4 | 128,4 | 142,4 | G 3/8 | 70,8 | 13,5 | 33,5 | 175,6 | 44 | 58 | 26 | 16,8 | 14 |
| R422000934 | 5 | 154,4 | 168,4 | G 3/8 | 70,8 | 13,5 | 33,5 | 175,6 | 44 | 58 | 26 | 16,8 | 14 |
| R422000935 | 6 | 180,4 | 194,4 | G 3/8 | 70,8 | 13,5 | 33,5 | 175,6 | 44 | 58 | 26 | 16,8 | 14 |
| R412012677 | 8 | 232,4 | 246,4 | G 3/8 | 70,8 | 13,5 | 33,5 | 175,6 | 44 | 58 | 26 | 16,8 | 14 |
| R412012678 | 10 | 284,4 | 298,4 | G 3/8 | 70,8 | 13,5 | 33,5 | 175,6 | 44 | 58 | 26 | 16,8 | 14 |
| R412012679 | 12 | 336,4 | 350,4 | G 3/8 | 70,8 | 13,5 | 33,5 | 175,6 | 44 | 58 | 26 | 16,8 | 14 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - |

n = number of valve positions

Mounting bracket

- for TC08, RA18



Weight

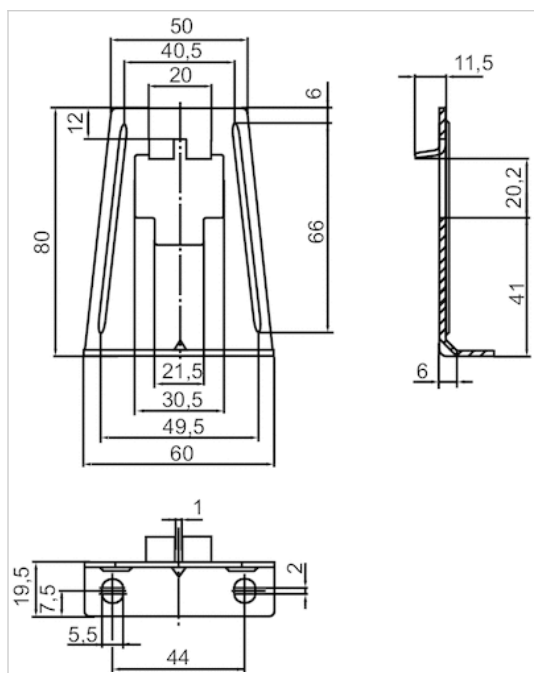
0.075 kg

Technical data

| Part No. | Type | Delivery unit |
|------------|------------------|---------------|
| 1821332048 | Mounting bracket | 1 piece |

2 mountings are required per manifold strip.

Dimensions



Mounting clip



Weight

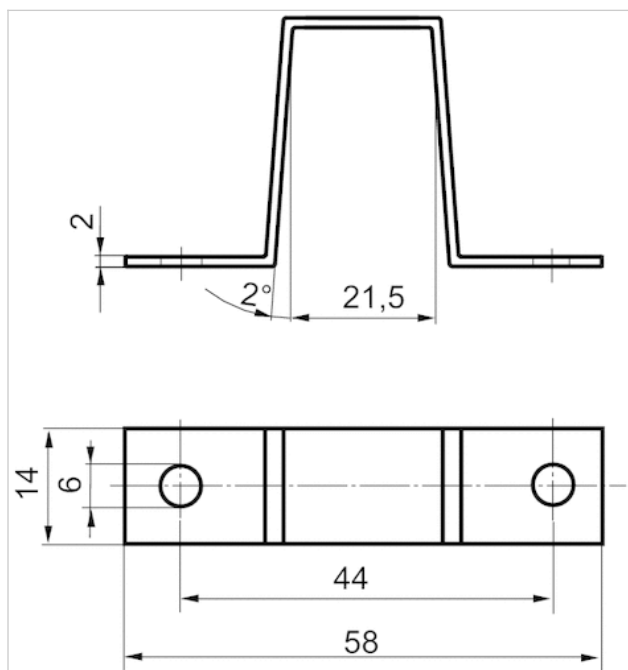
0.024 kg

Technical data

| Part No. | Type | Delivery unit |
|------------|---------------|---------------|
| 1821332049 | Mounting clip | 2 piece |

2 mountings are required per manifold strip.

Dimensions



Efficient pneumatic solutions, our program: cylinders and drives, valves and valve systems, air supply management



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