Series TC08

AVENTICS™ Series TC08

EMERSON.

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/m³
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
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	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	DC	DC
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 Qn at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

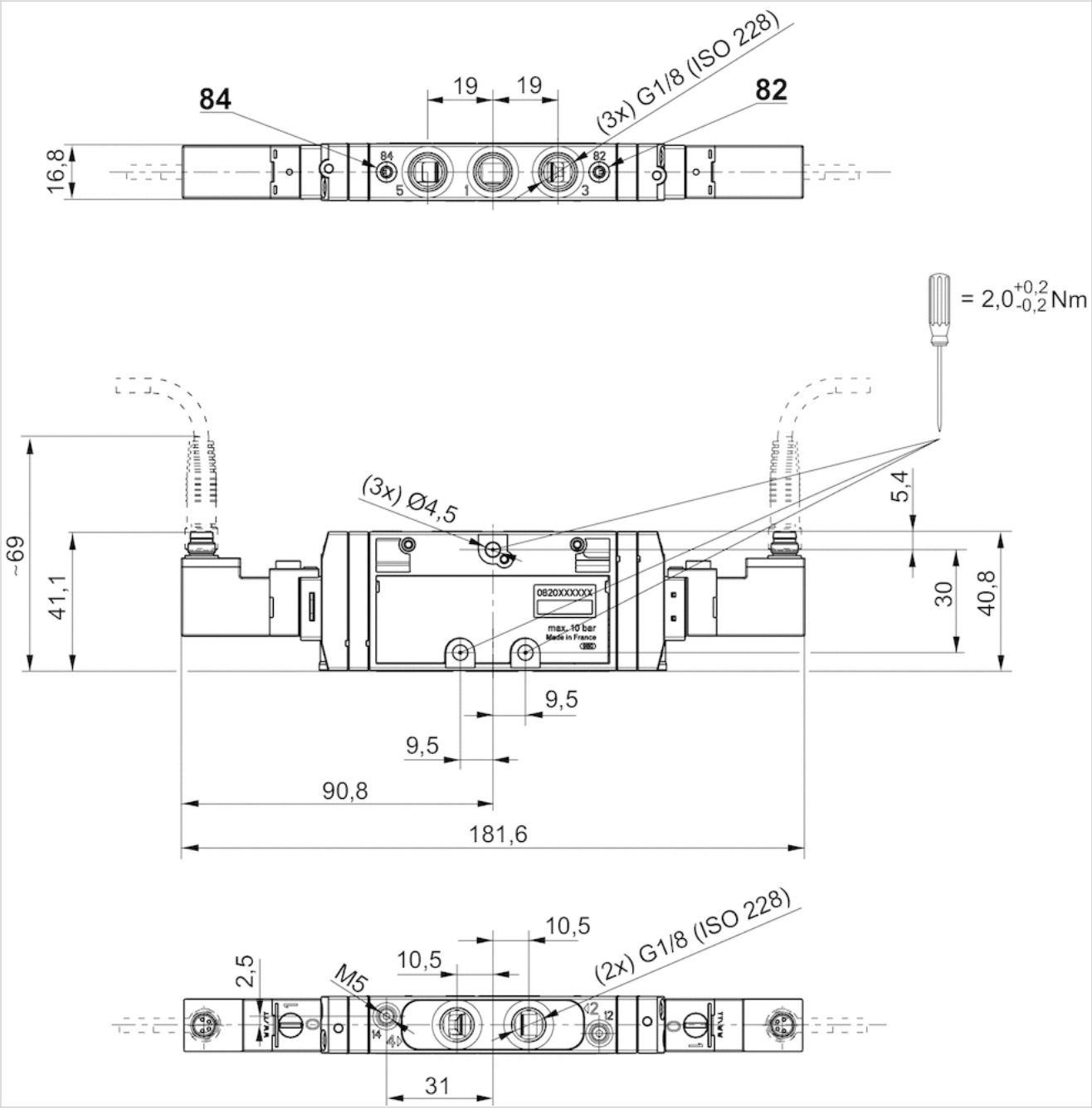
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only 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

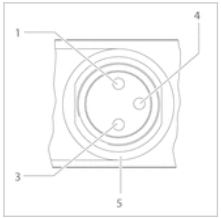
Dimensions

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/m³
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	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	DC	DC
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 Qn at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

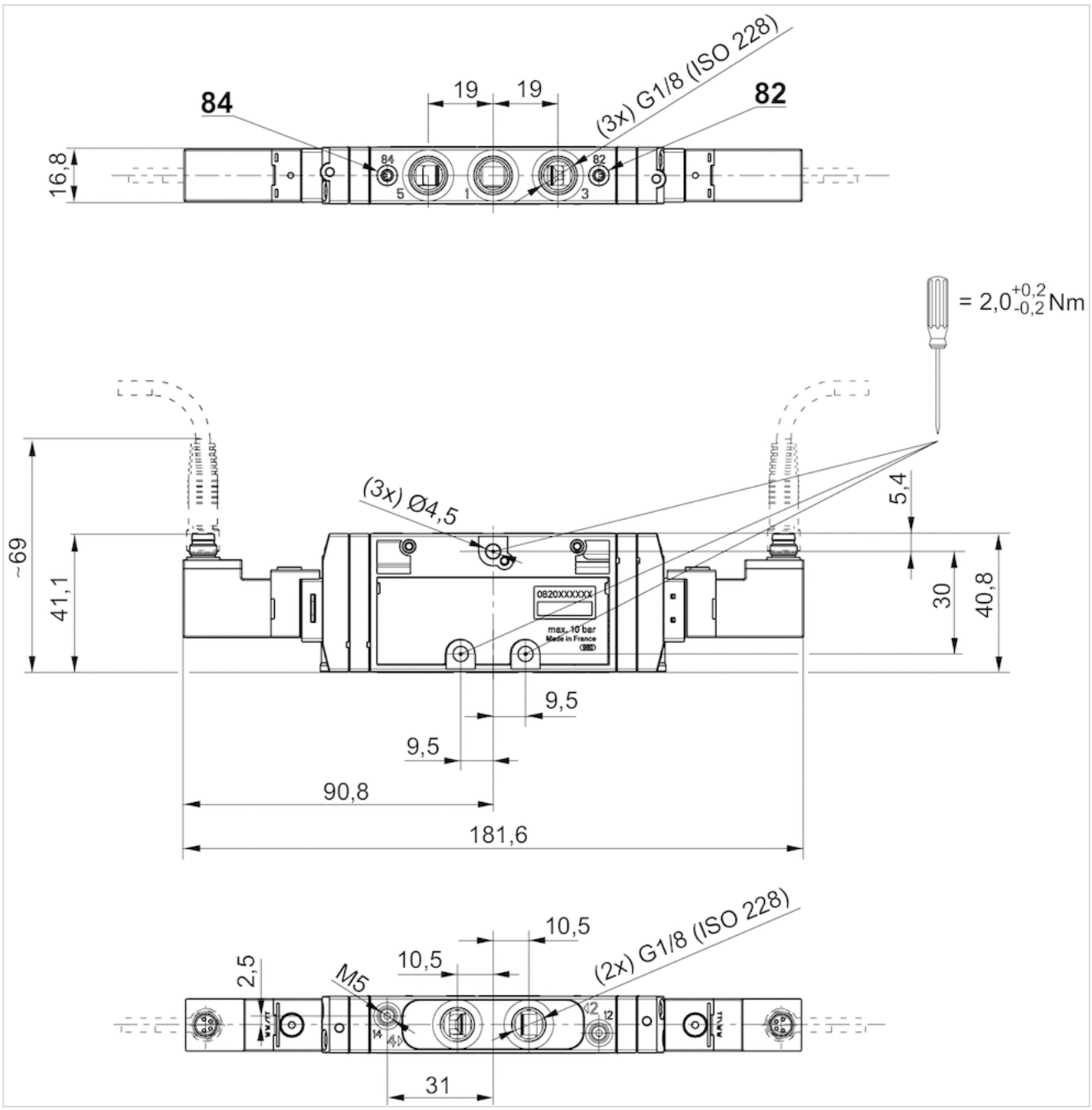
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only 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

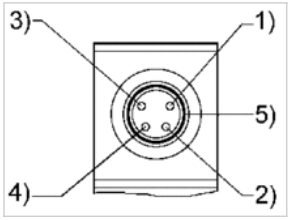
Dimensions

Dimensions



Pin assignments

PIN assignment and cable colors for valve plug connectors



PIN assignment:
1) PIN not assigned

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/m³
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	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	DC	DC
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 Qn at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

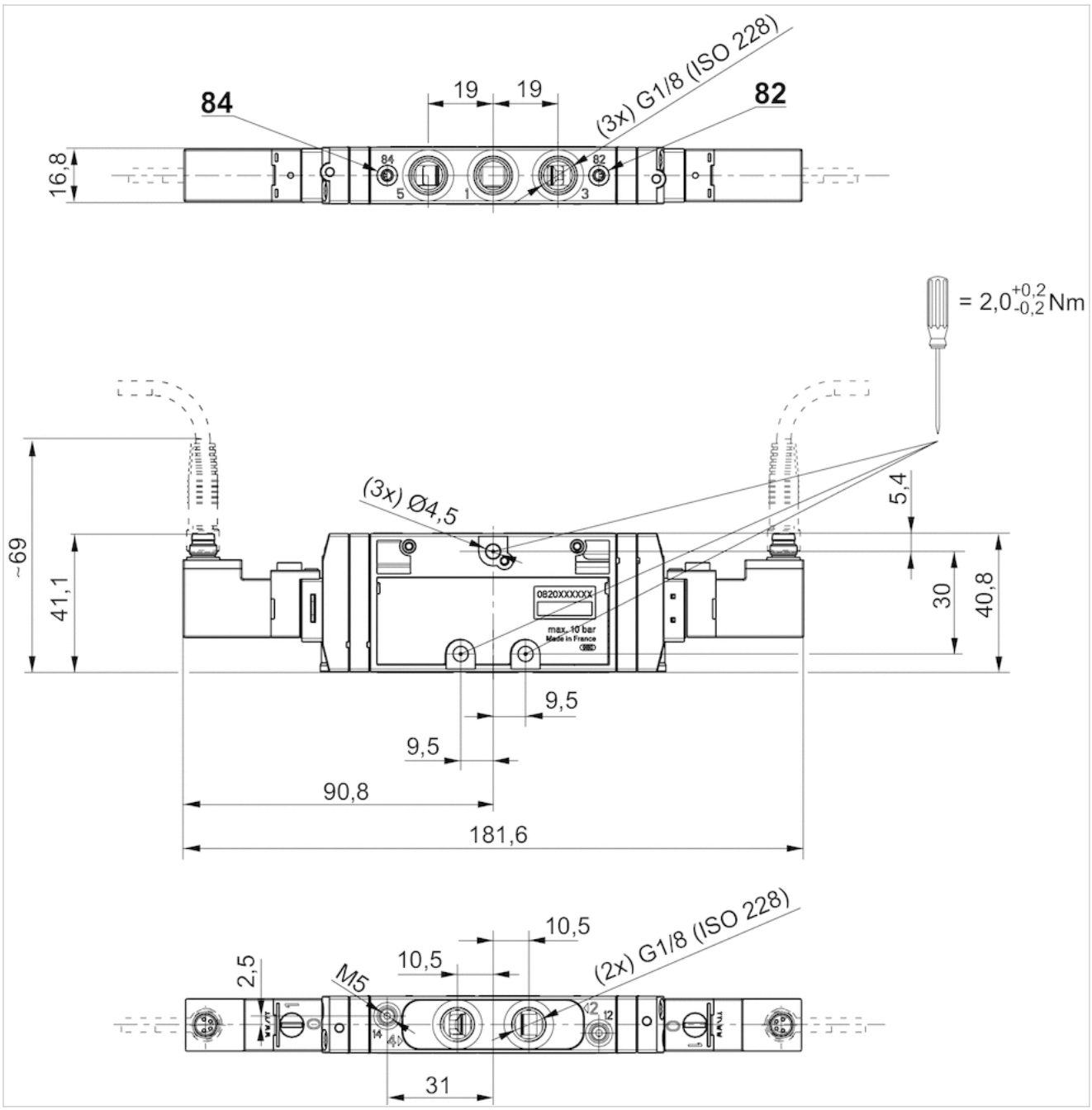
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only 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

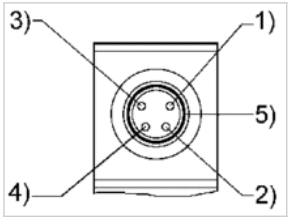
Dimensions

Dimensions



Pin assignments

PIN assignment and cable colors for valve plug connectors



PIN assignment:
1) PIN not assigned

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/m³
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	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 Qn at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

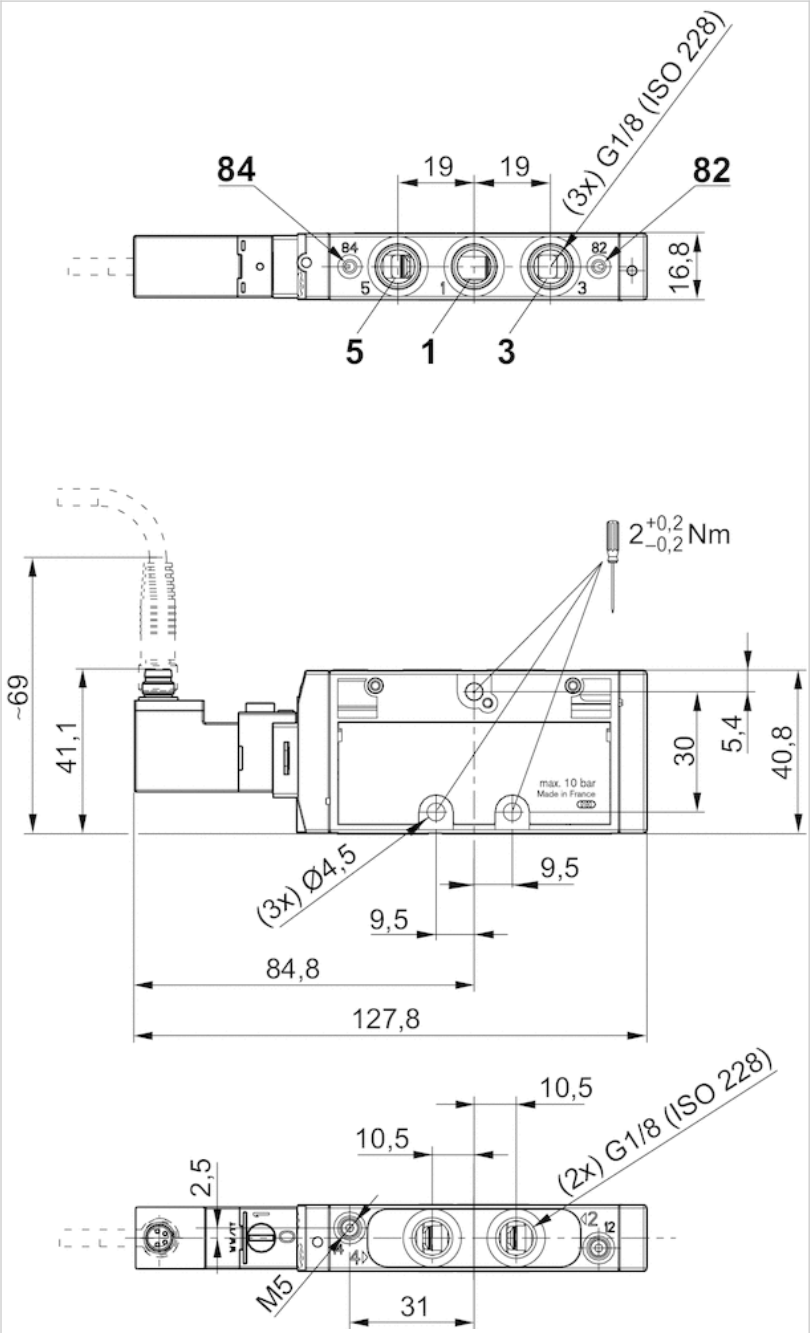
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in the MediaCentre).

Technical information

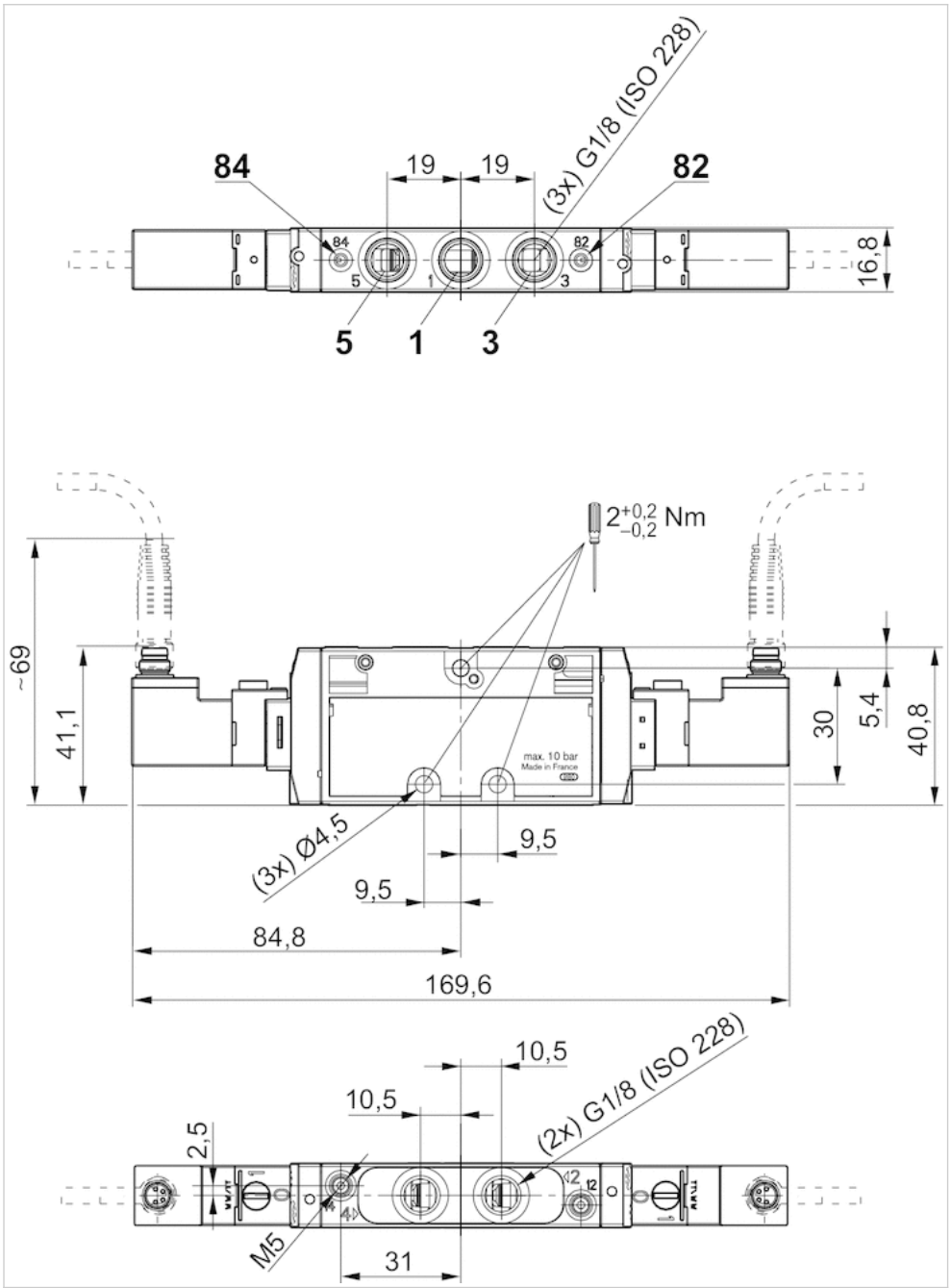
Material	
Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber Polyurethane
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, nickel-plated chrome-plated

Dimensions

Dimensions, single solenoid

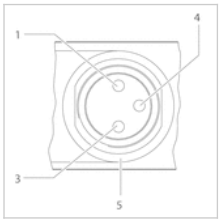


Dimensions, double solenoid



Pin assignments

PIN assignment and cable colors for valve plug connectors



PIN assignment:
1) PIN not assigned
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/m³
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	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 Qn at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

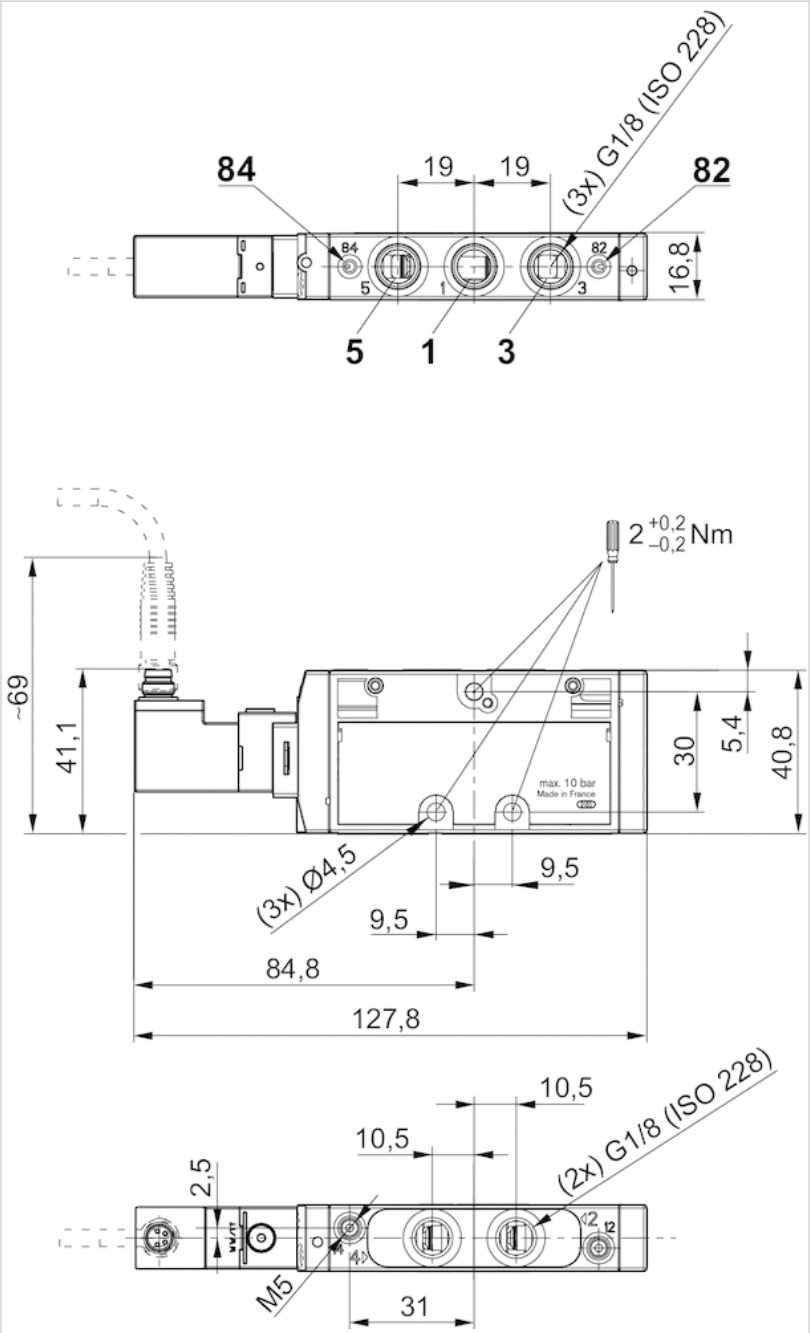
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in the MediaCentre).

Technical information

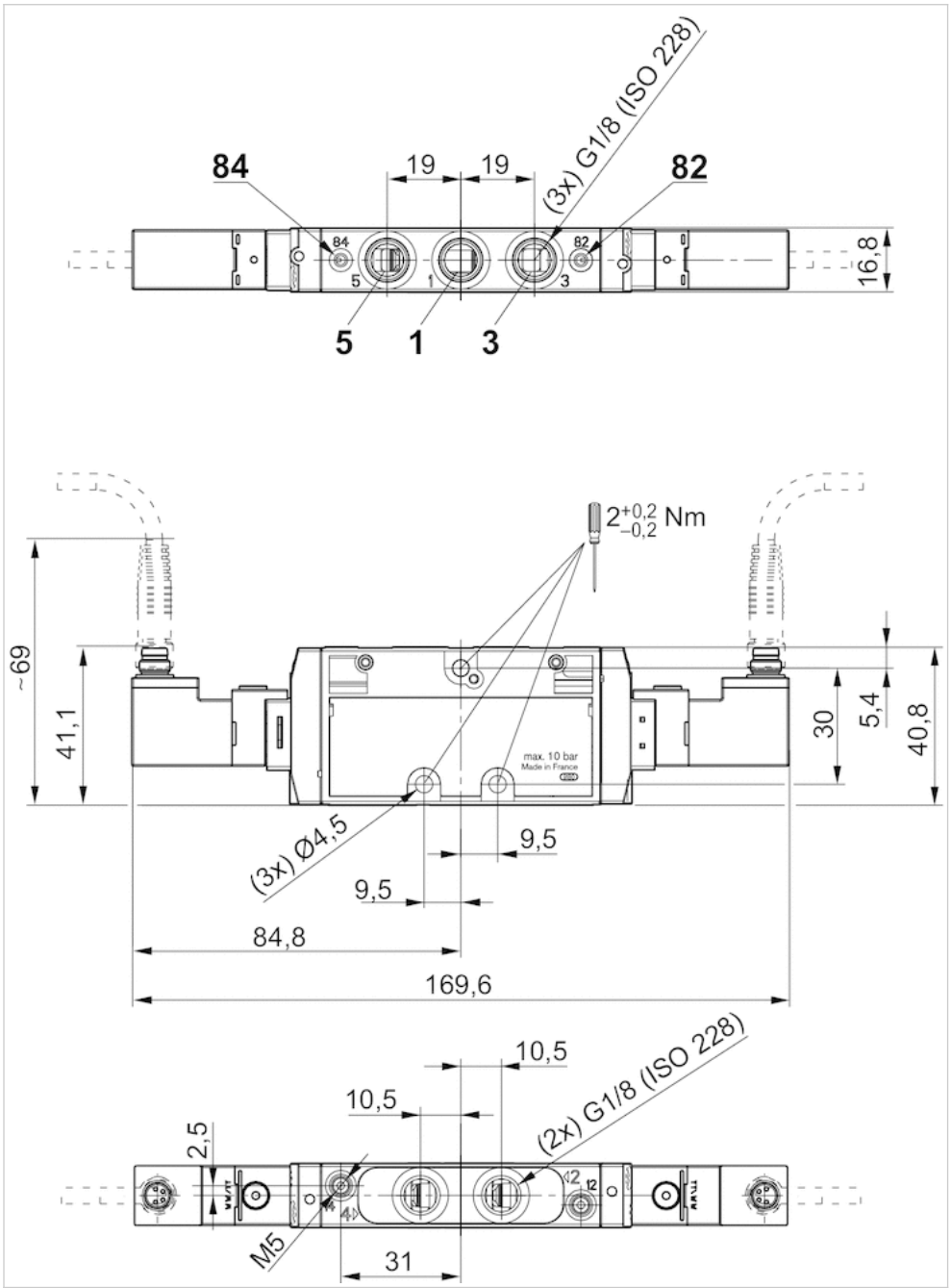
Material	
Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber Polyurethane
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, nickel-plated chrome-plated

Dimensions

Dimensions, single solenoid

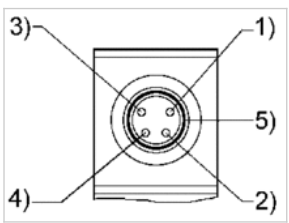


Dimensions, double solenoid



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

5/2-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/m³
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	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 Qn at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

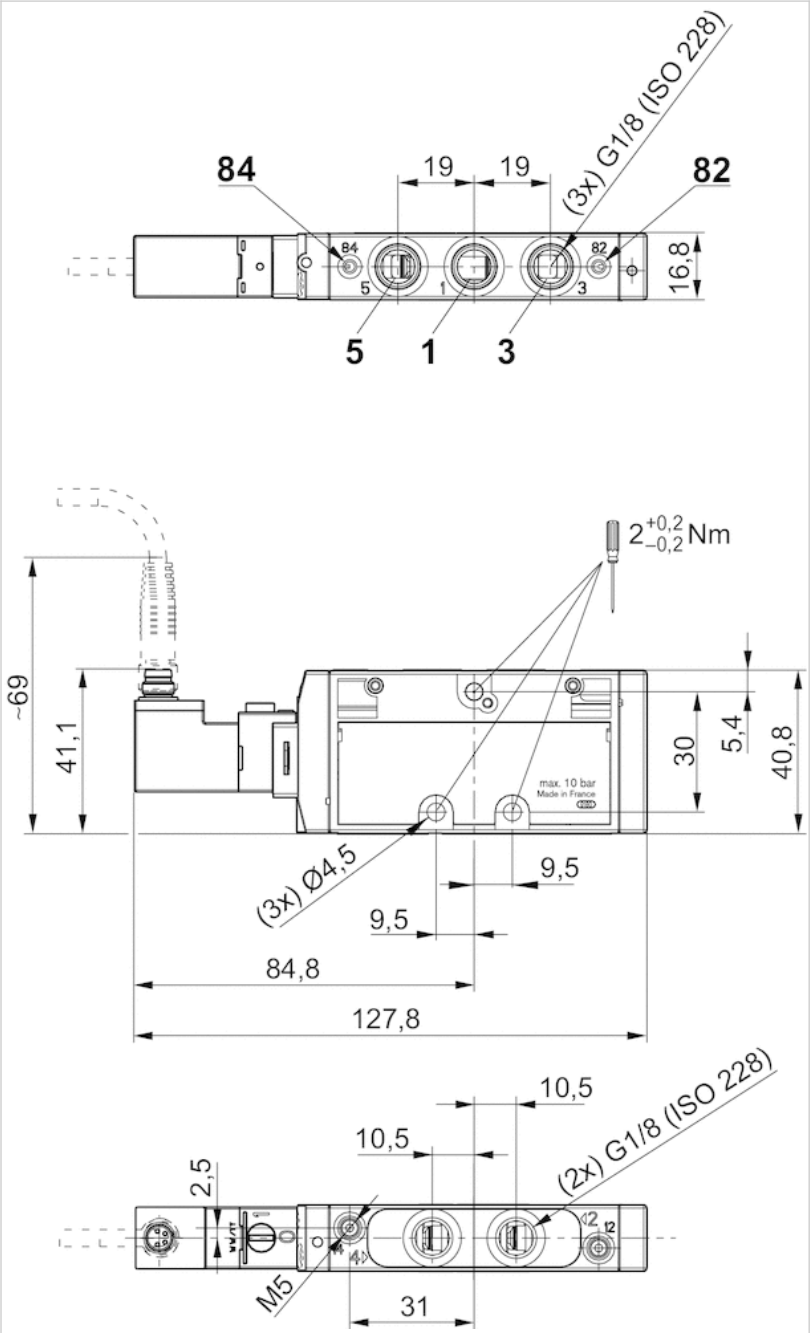
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in the MediaCentre).

Technical information

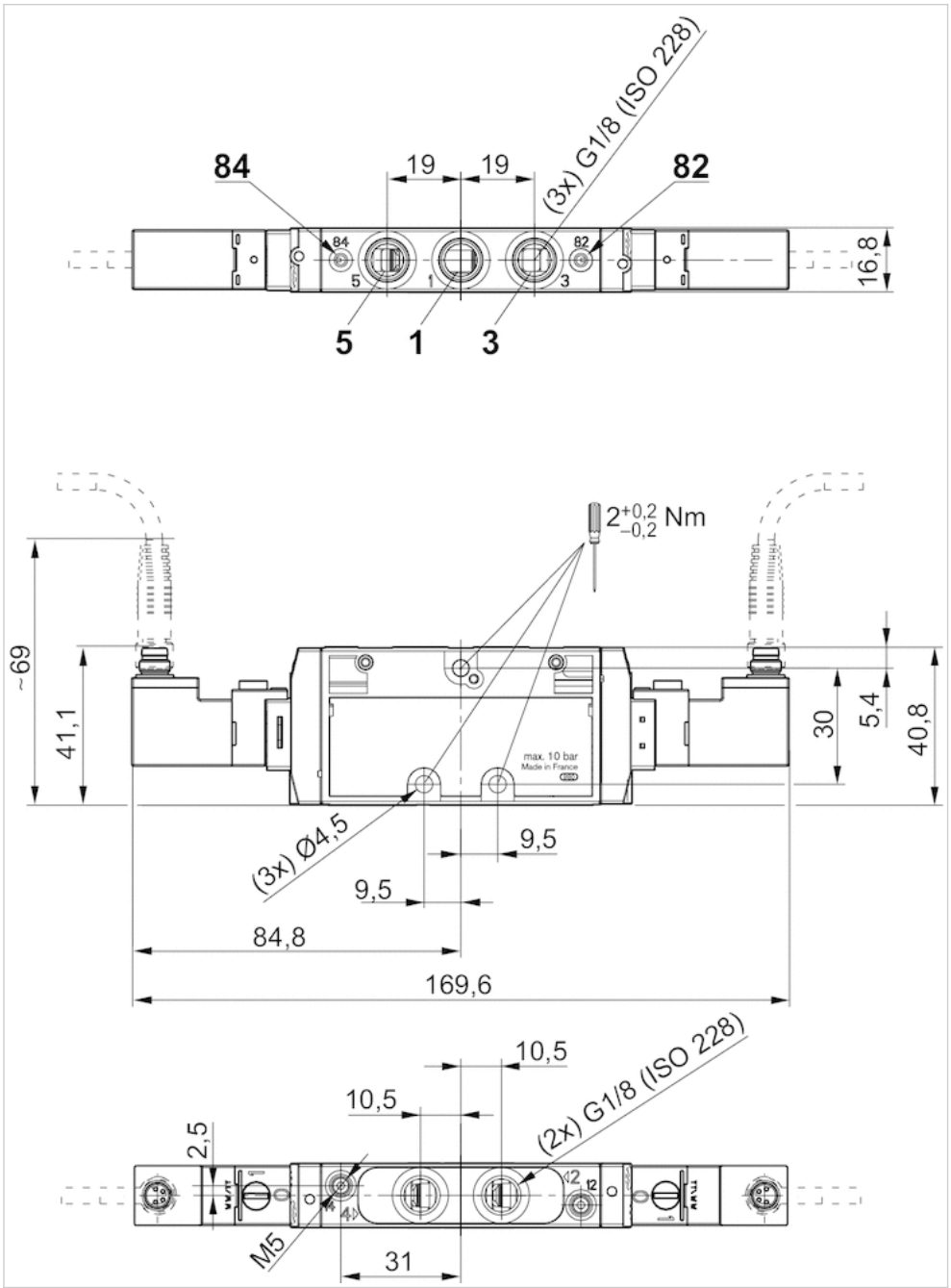
Material	
Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber Polyurethane
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, nickel-plated chrome-plated

Dimensions

Dimensions, single solenoid

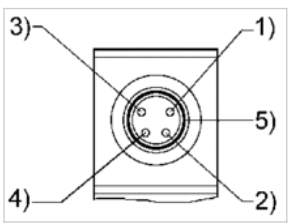


Dimensions, double solenoid



Pin assignments

PIN assignment and cable colors for valve plug connectors



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

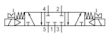
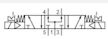
4) 24 V
5) LED
Cable colors
1) Brown
2) White
3) Blue
4) Black

5/3-directional valve, Series TC08

- Operating voltage 24 V DC
- 5/3
- 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, 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/m³
Nominal flow Qn	700 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 %
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 Qn at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

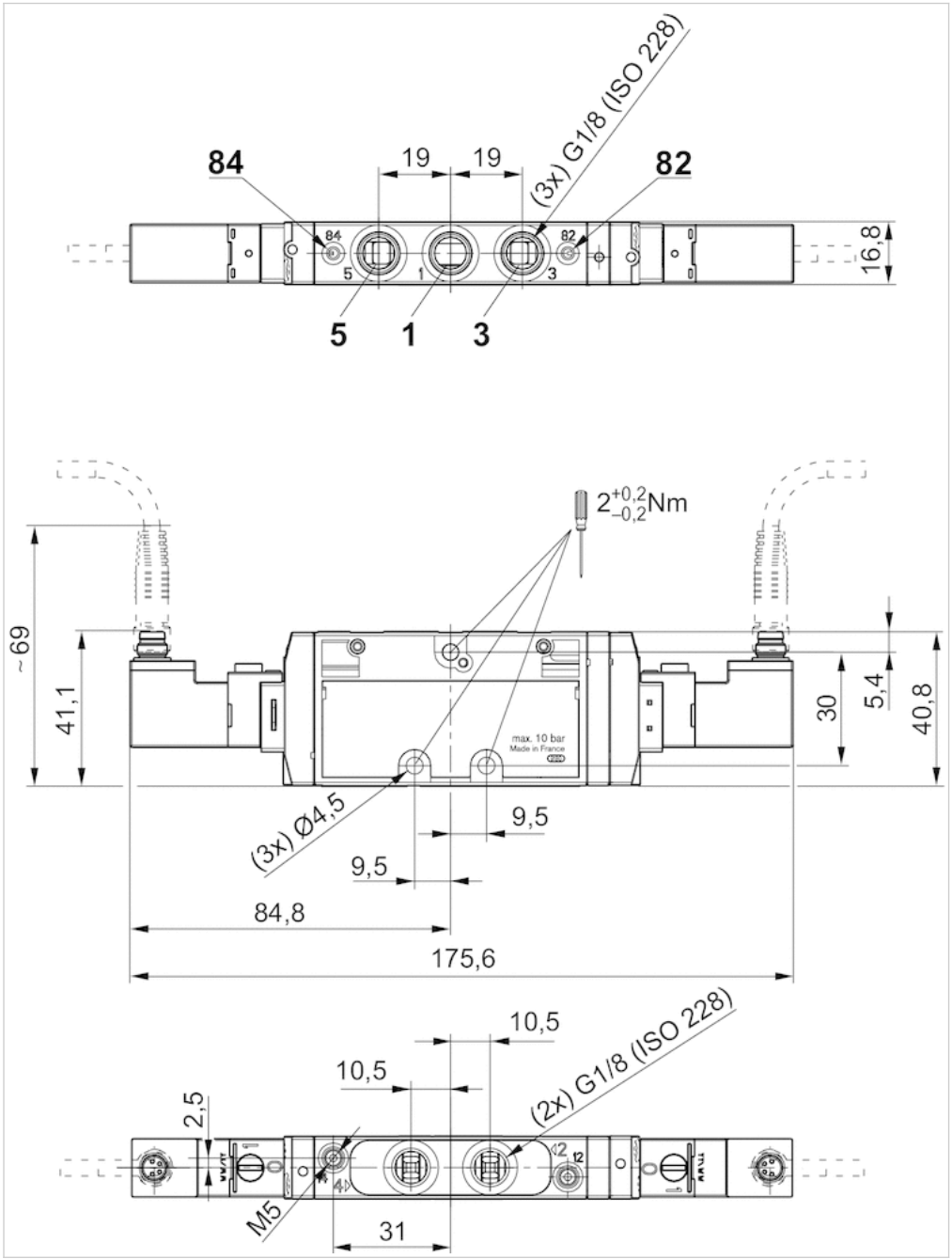
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only 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

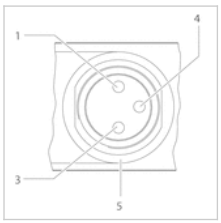
Dimensions

Dimensions



Pin assignments

PIN assignment and cable colors for valve plug connectors



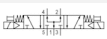
PIN assignment:
1) PIN not assigned
3) 0 V
4) 24 V
5) LED
Cable color
1) Brown
3) Blue
4) Black
Note: Bi-polar protective circuit to prevent overvoltage

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, 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/m³
Nominal flow Qn	700 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 %
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	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 Qn at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

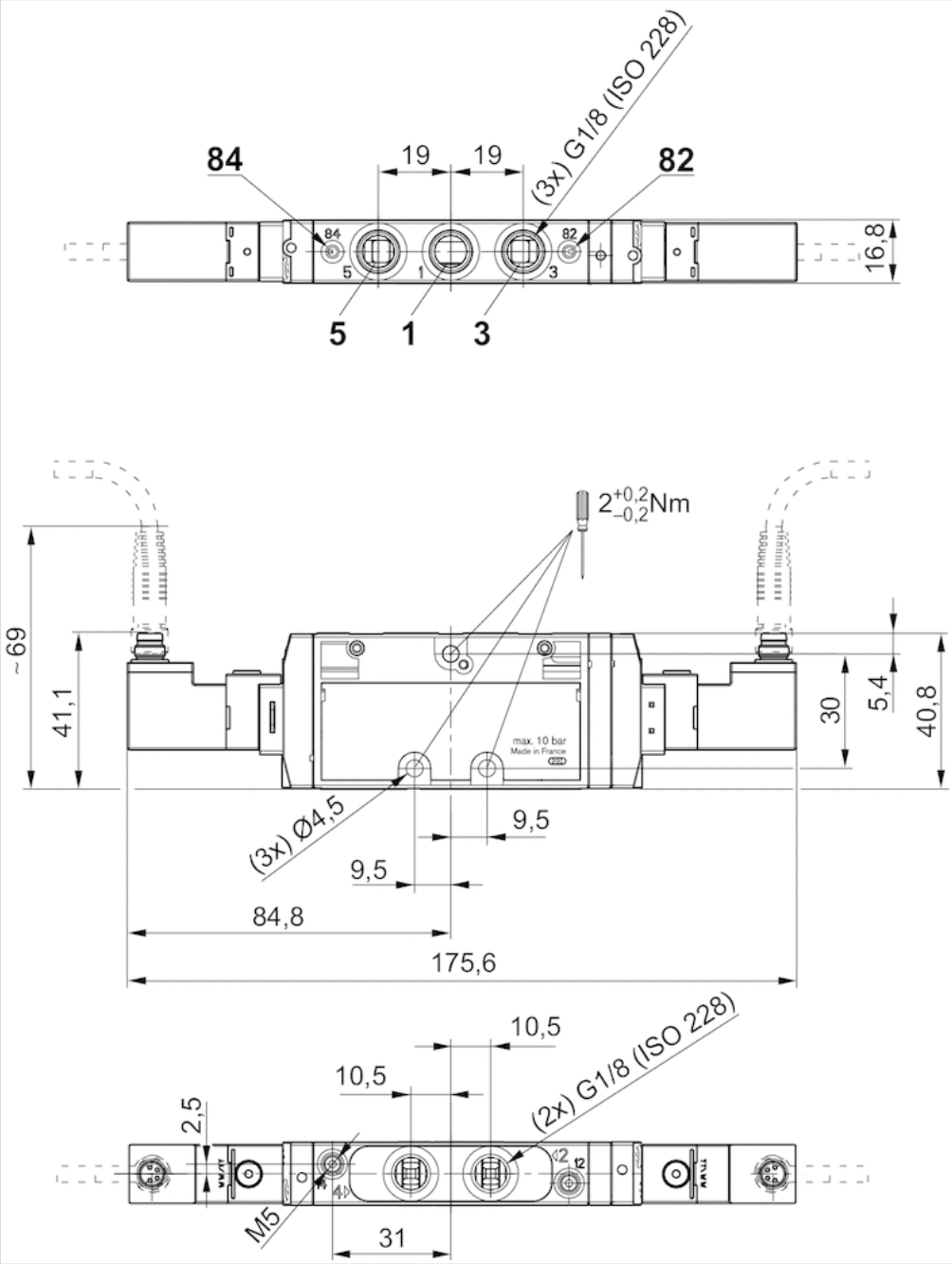
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only 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

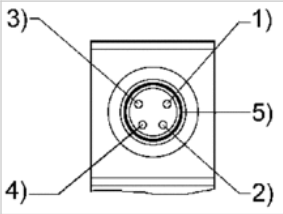
Dimensions

Dimensions



Pin assignments

PIN assignment and cable colors for valve plug connectors



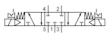
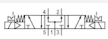
PIN assignment:
1) PIN not assigned
2) PIN not assigned
3) 0 V
4) 24 V
5) LED
Cable colors
1) Brown
2) White
3) Blue
4) Black

5/3-directional valve, Series TC08

- Operating voltage 24 V DC
- 5/3
- 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, 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/m³
Nominal flow Qn	700 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 %
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
	DC	DC	DC	
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 Qn at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

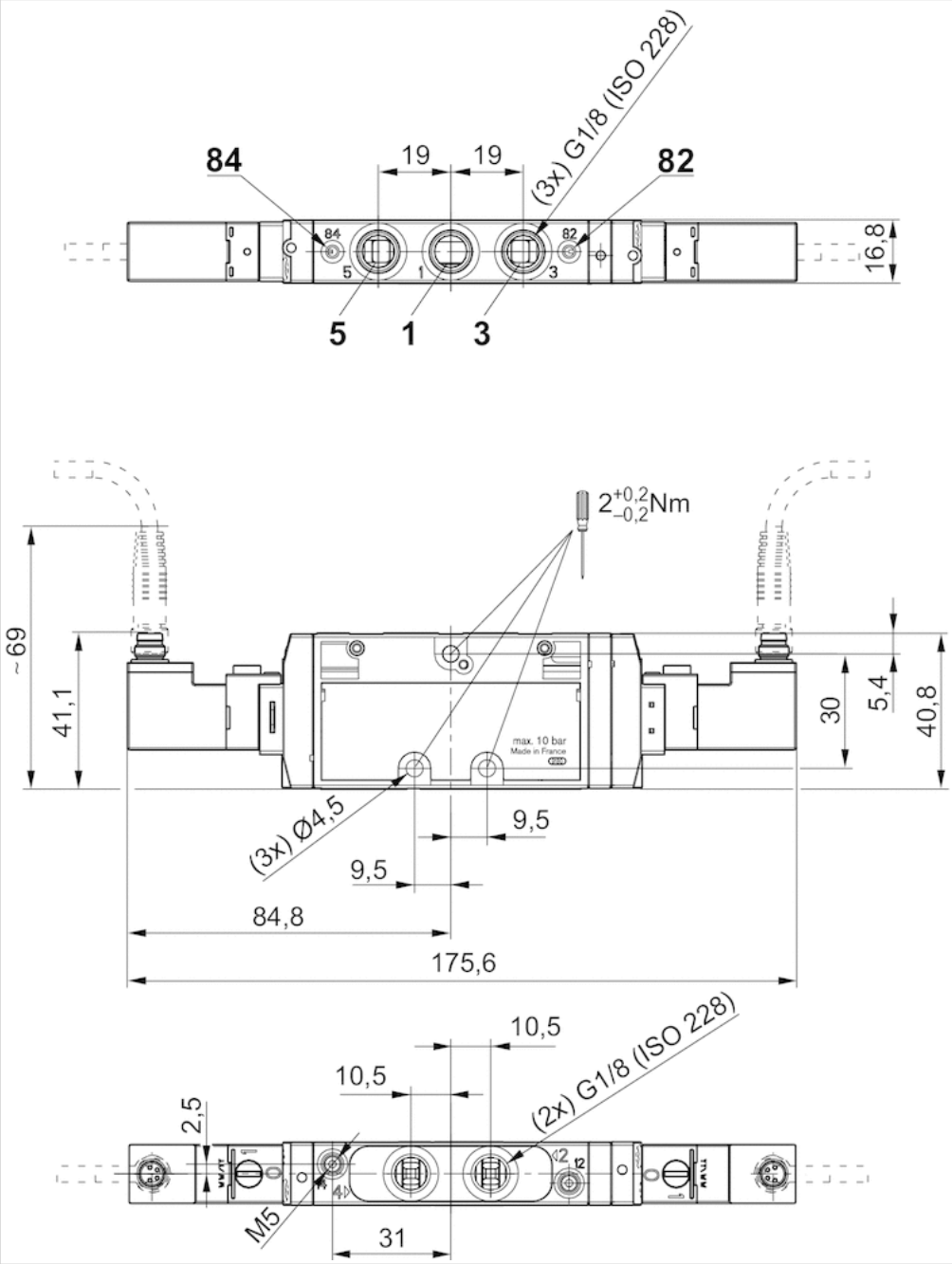
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only 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

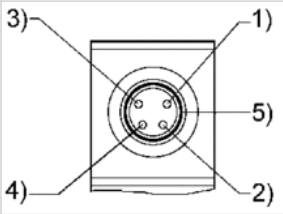
Dimensions

Dimensions



Pin assignments

PIN assignment and cable colors for valve plug connectors



PIN assignment:
1) PIN not assigned
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/m³
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	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	DC	DC
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 Qn at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

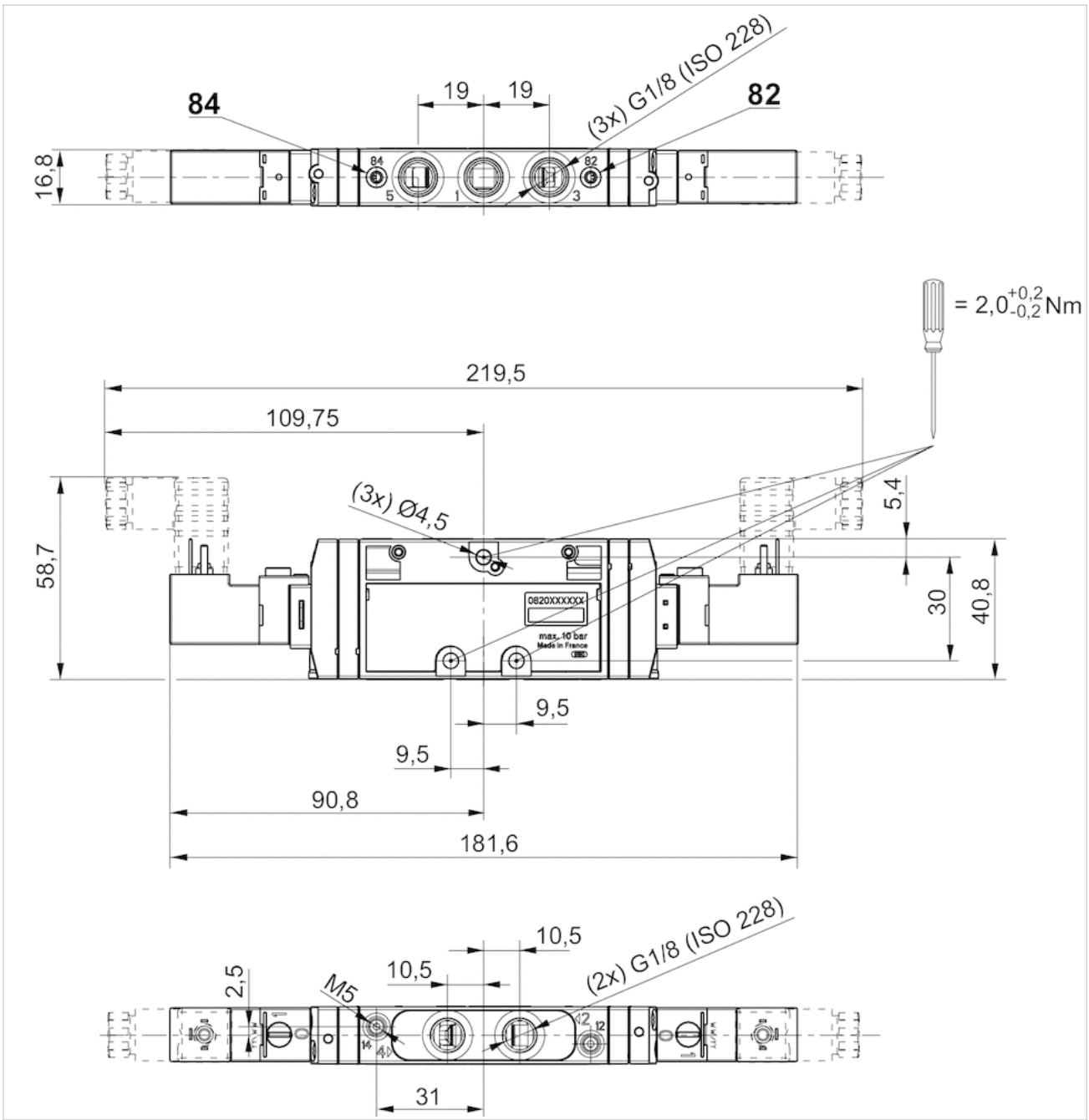
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only 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/m³
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 Qn at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

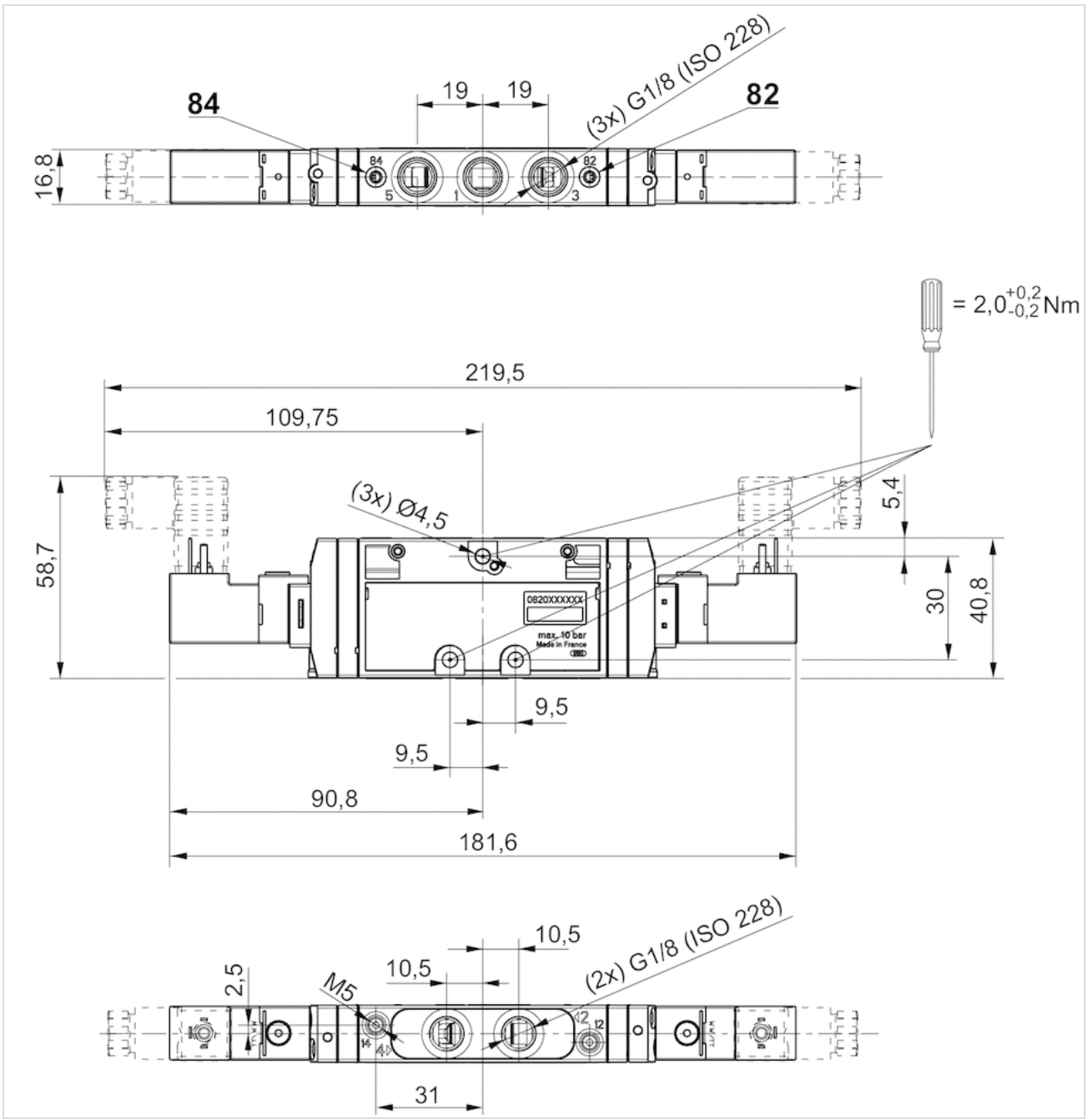
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only 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
- 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 : 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/m³
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	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 Δp = 1 bar, MO = Manual override

Technical information

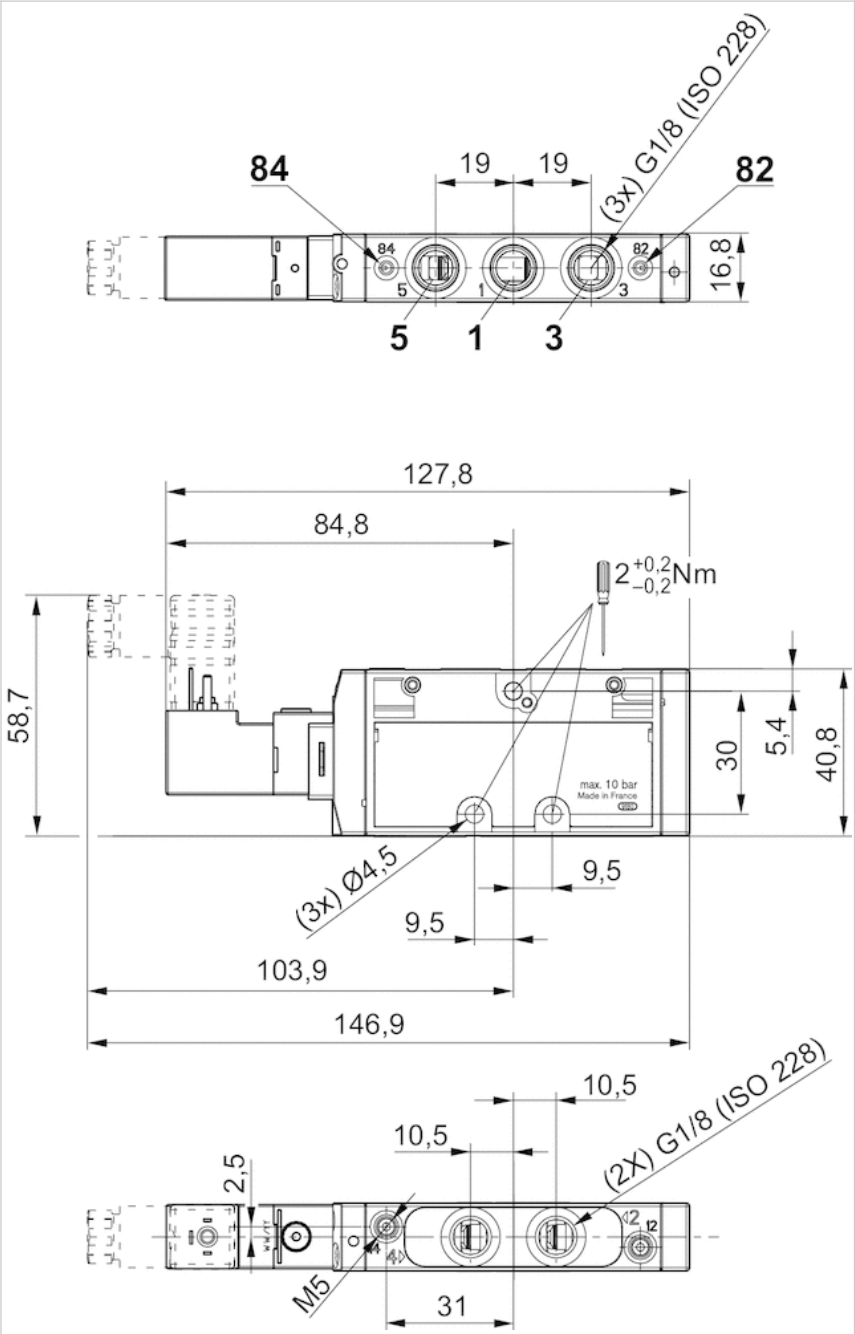
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in the MediaCentre).

Technical information

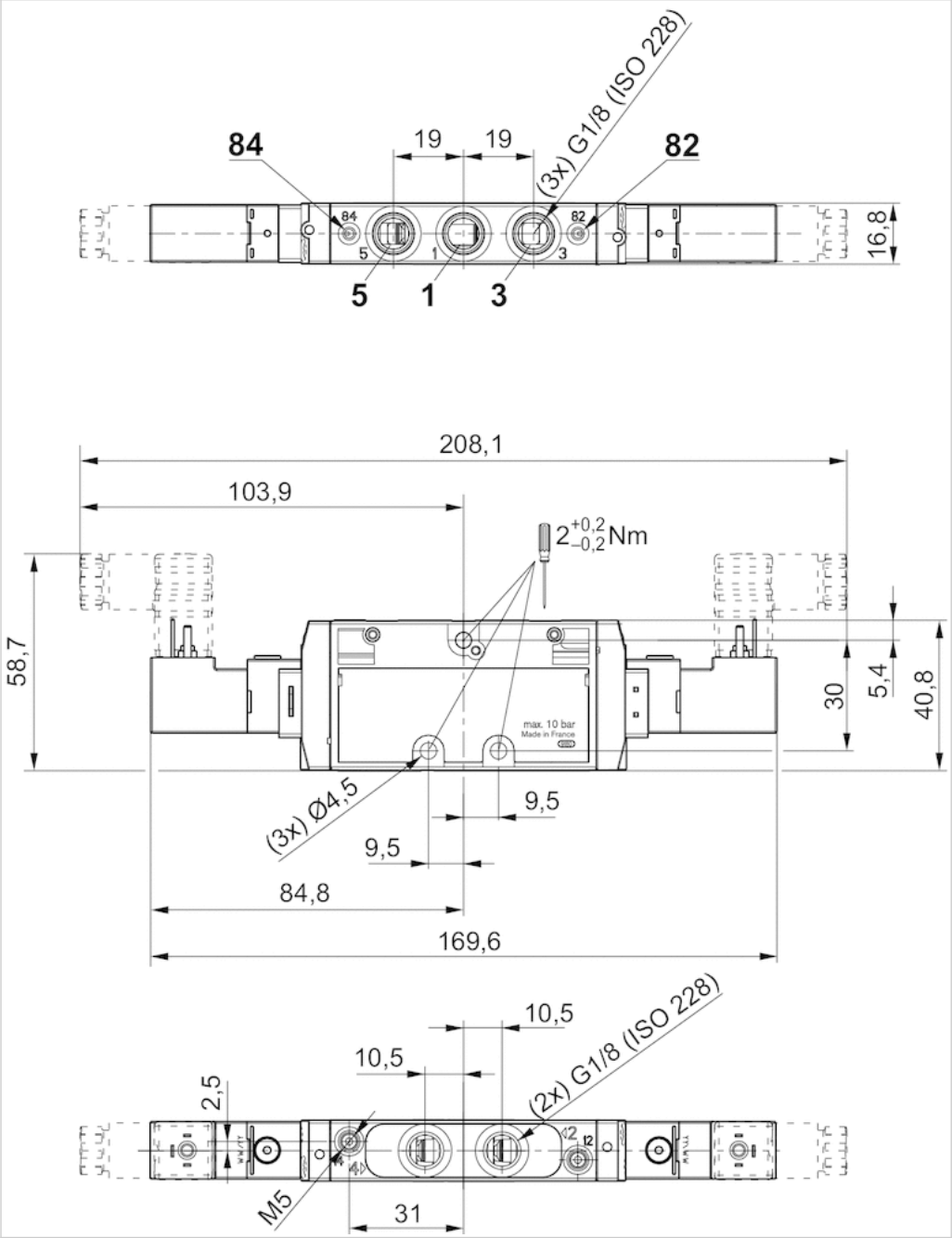
Material	
Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber Polyurethane
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, nickel-plated chrome-plated

Dimensions

Dimensions, single solenoid



Dimensions, double solenoid



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/m³
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	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 Δp = 1 bar, MO = Manual override

Technical information

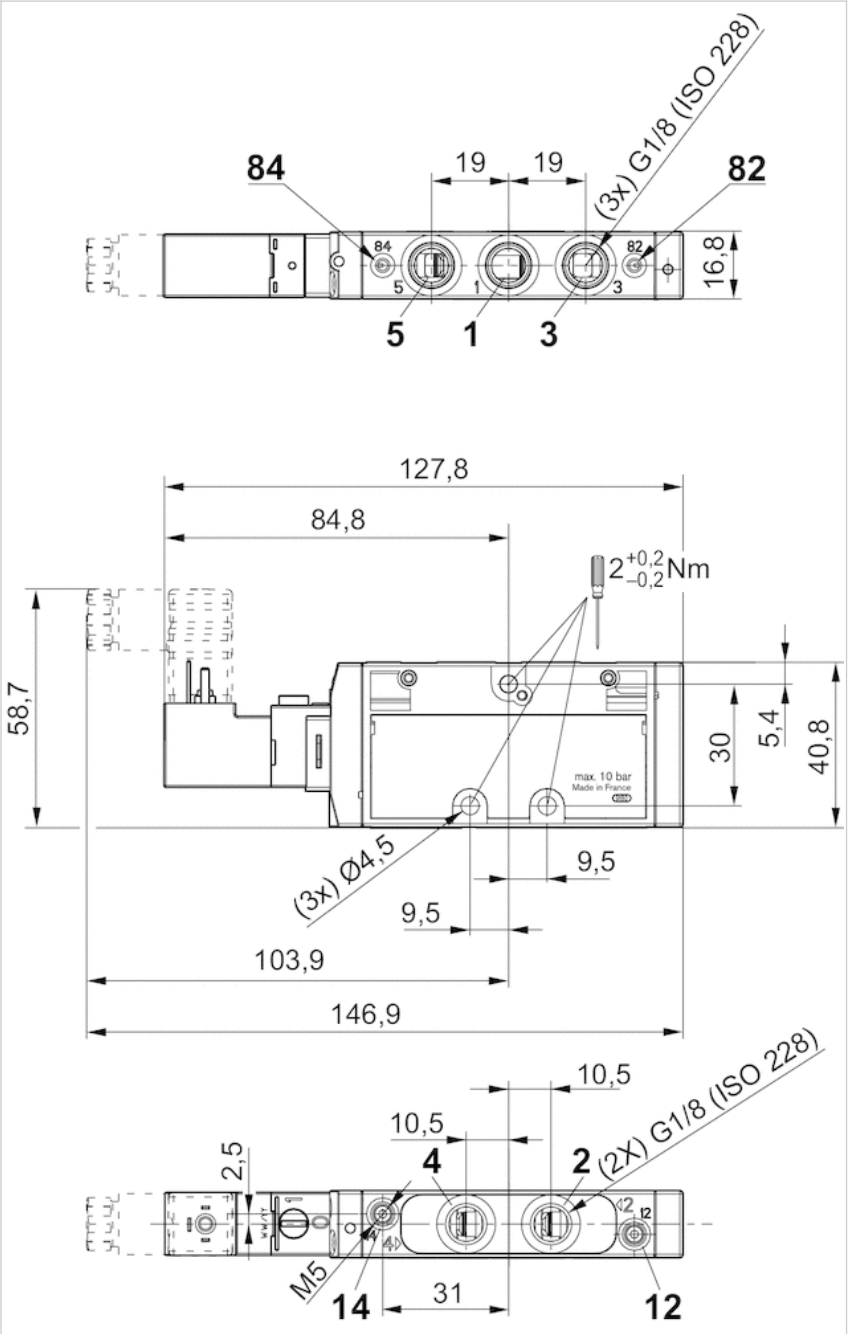
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in the MediaCentre).

Technical information

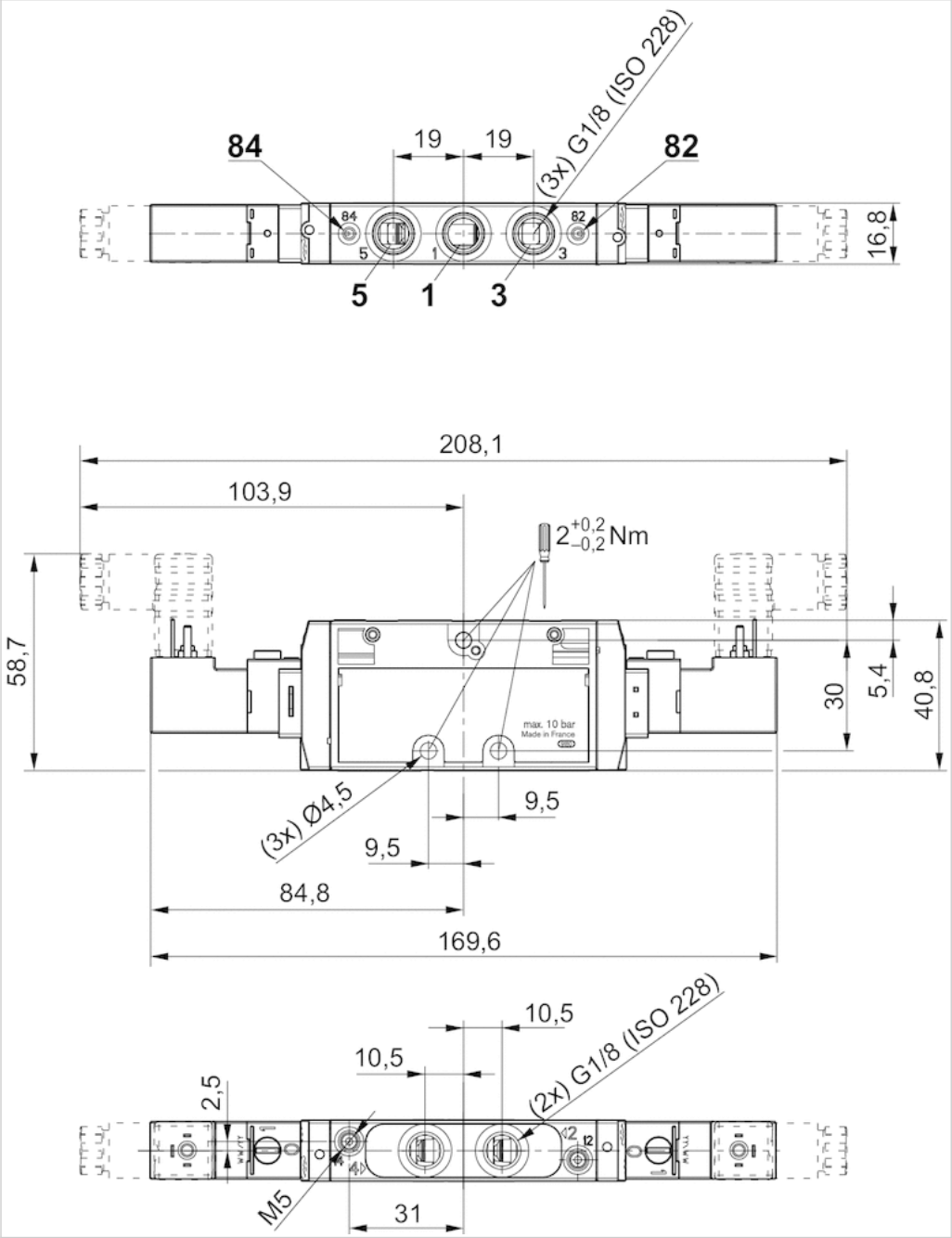
Material	
Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber Polyurethane
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, nickel-plated chrome-plated

Dimensions

Dimensions, single solenoid



Dimensions, double solenoid

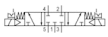
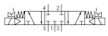
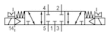
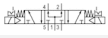


5/3-directional valve, Series TC08

- 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 : 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/m³
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
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 Δp = 1 bar, MO = Manual override

Technical information

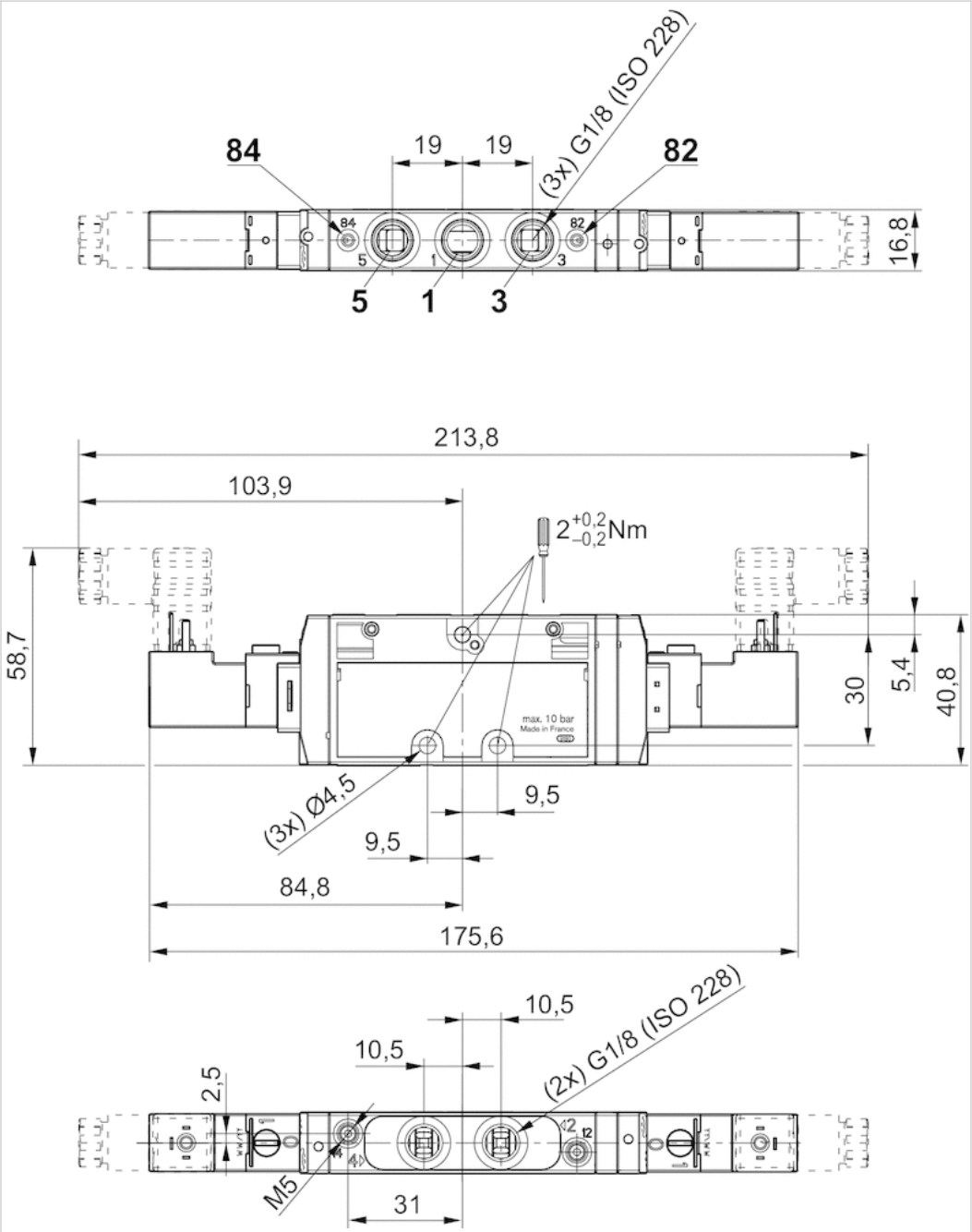
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only 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

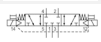
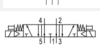
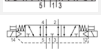
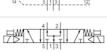
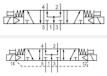


5/3-directional valve, Series TC08

- 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/m³
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	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 Δp = 1 bar, MO = Manual override

Technical information

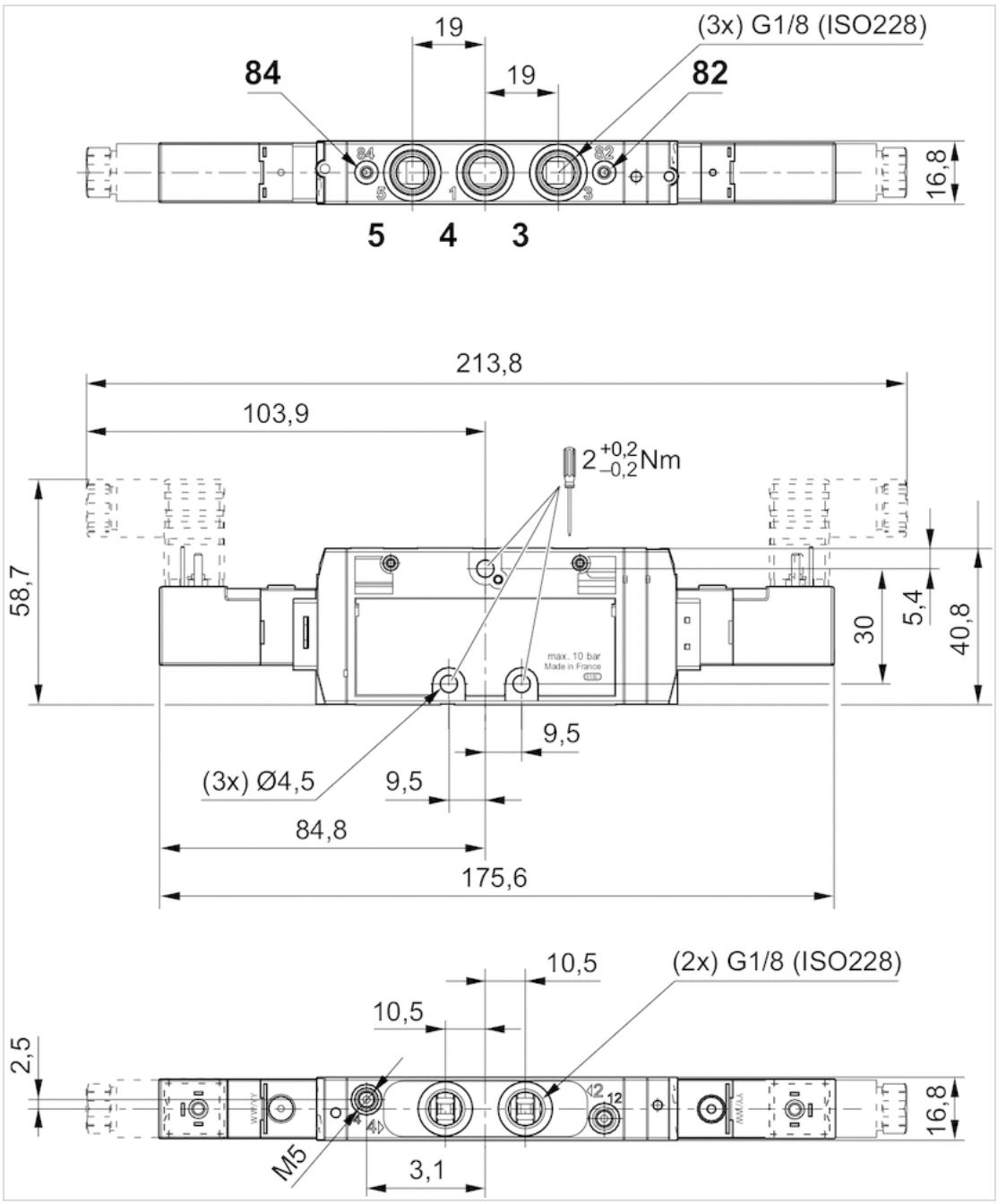
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only 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

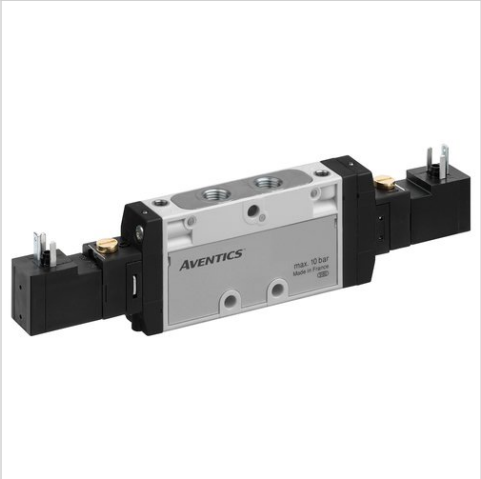
Dimensions

Dimensions



2x3/2-directional valve, Series TC08 - 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/m³
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	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	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
	DC	DC	DC	
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 Qn at 6 bar and Δp = 1 bar .

Technical information

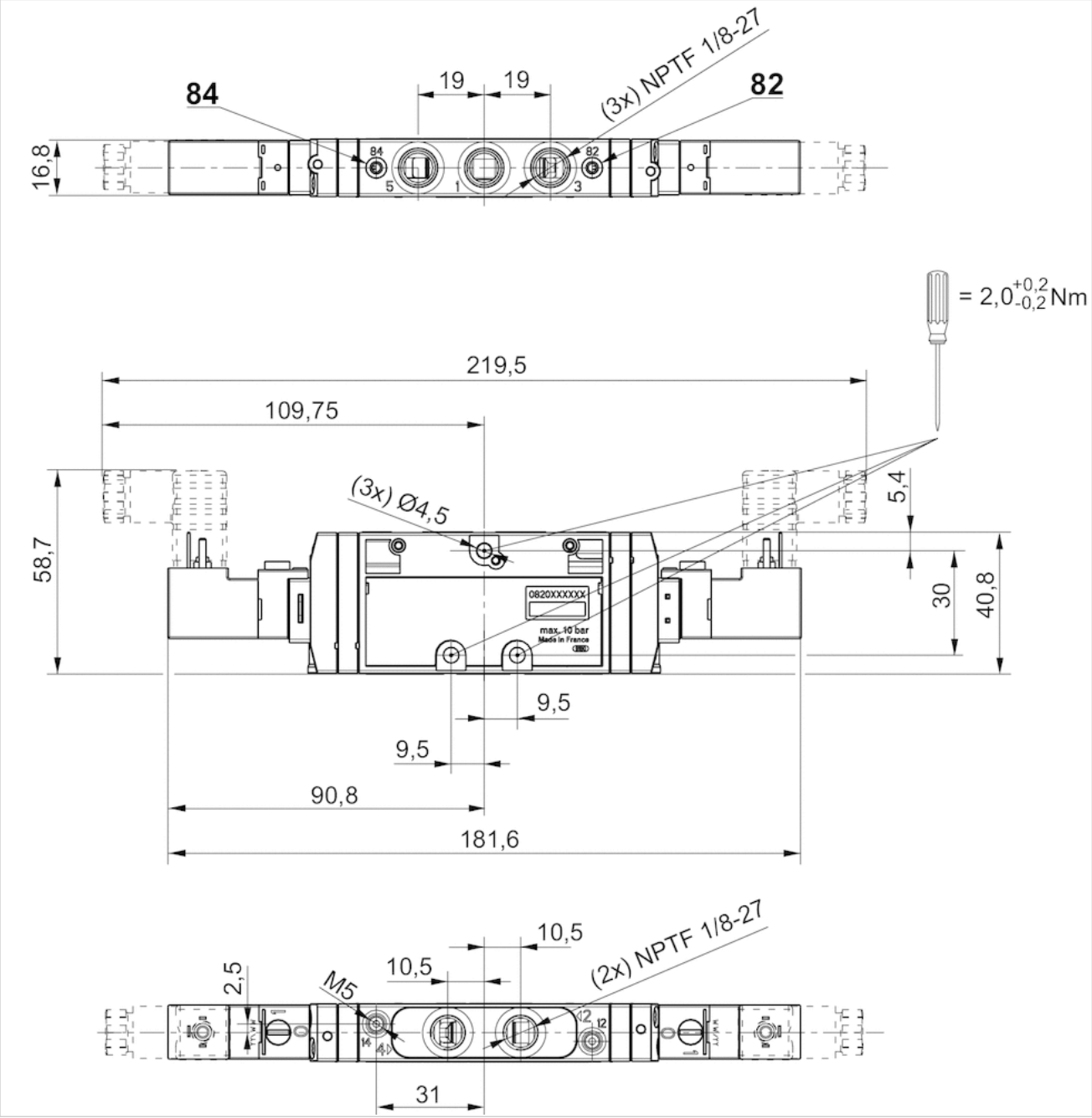
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in the MediaCentre).

Technical information

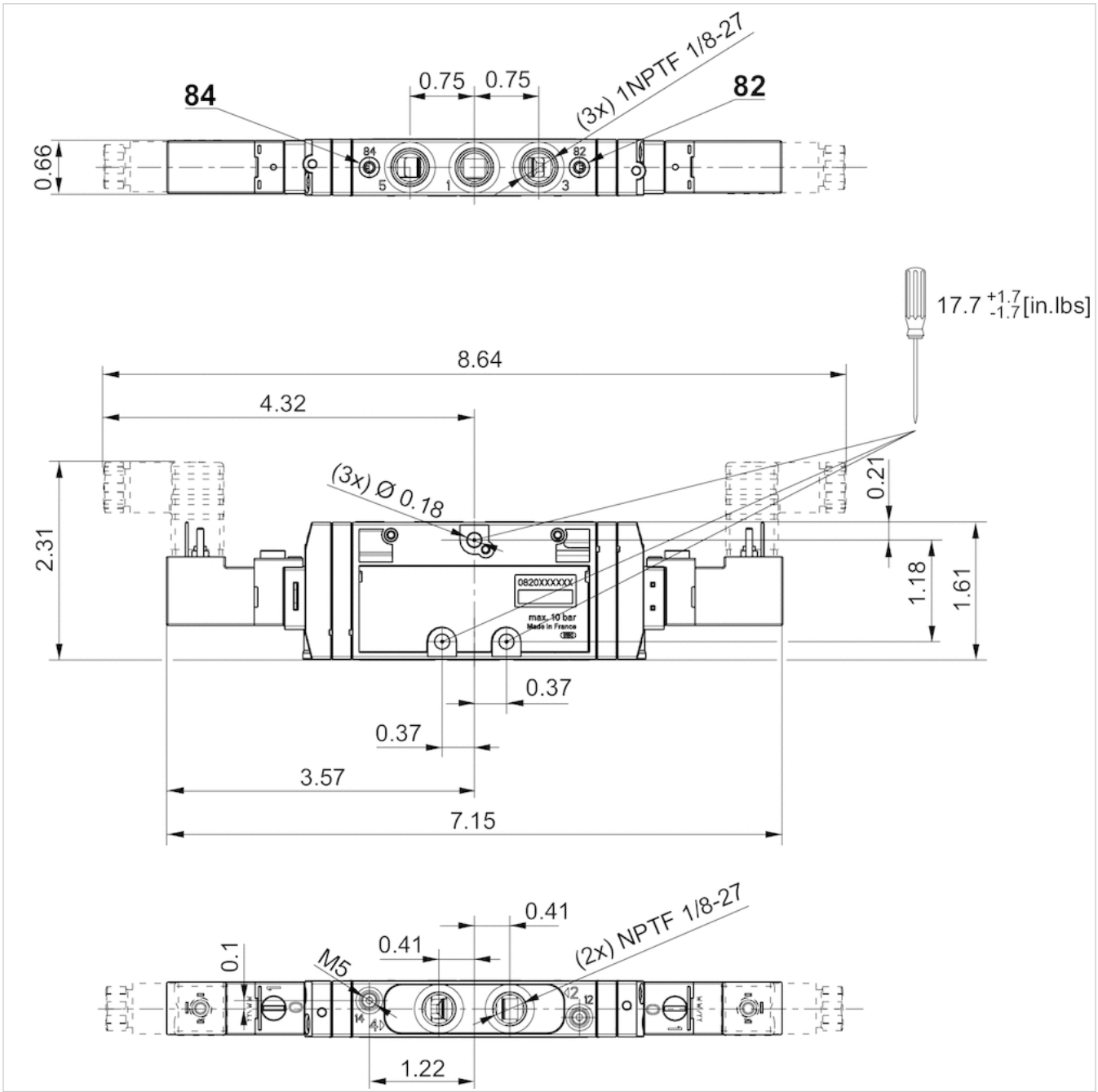
Material	
Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, nickel-plated chrome-plated

Dimensions

Dimensions in mm

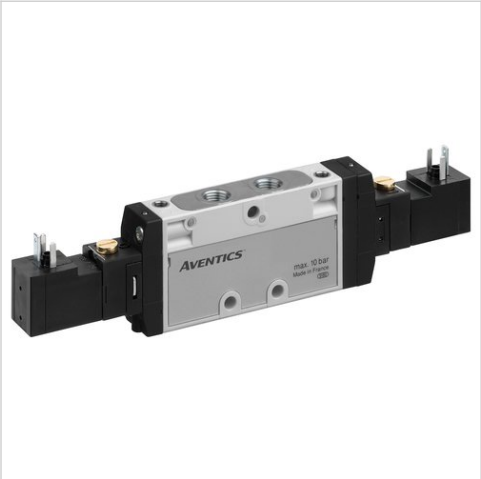


Dimensions in inches



2x3/2-directional valve, Series TC08 - 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/m³
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	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	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 AC 50 Hz	Switch-on power AC 60 Hz	Pilot	Flow conductance 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 C-value	Nominal resistance	Working pressure min./max.
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 Qn at 6 bar and Δp = 1 bar .

Technical information

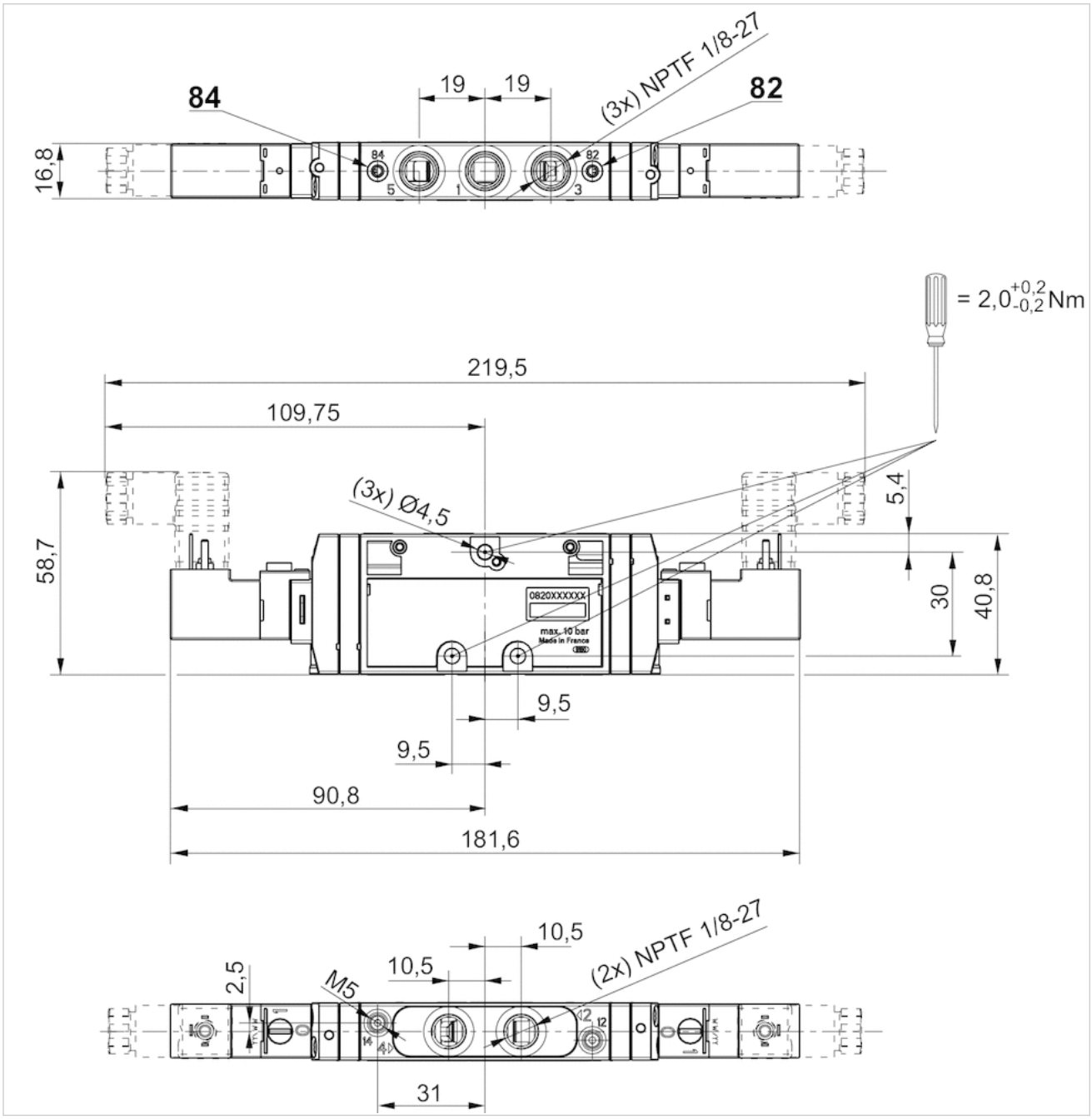
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in the MediaCentre).

Technical information

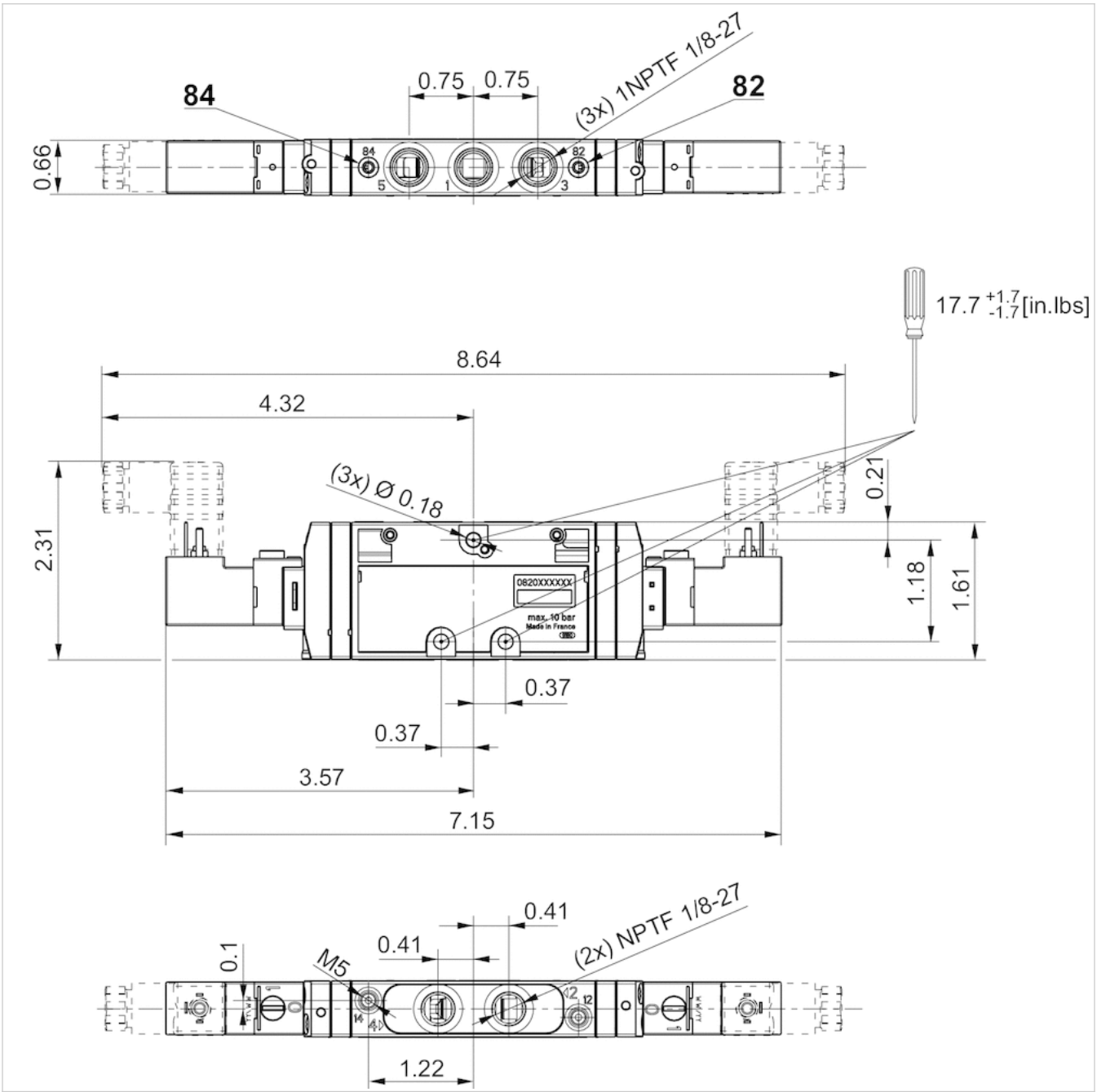
Material	
Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, nickel-plated chrome-plated

Dimensions

Dimensions in mm

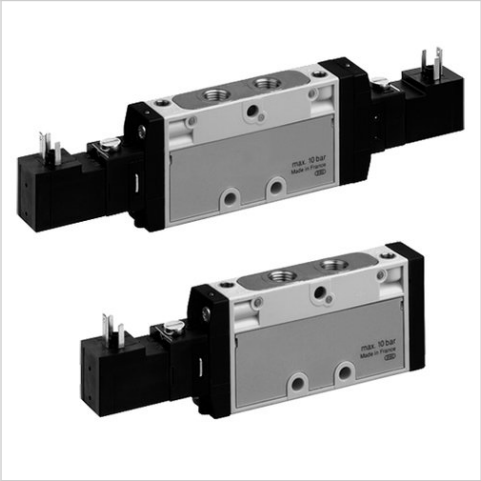


Dimensions in inches



5/2-directional valve, Series TC08 - inch

- Operating voltage 24 V DC
- 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/m³
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	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	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
	DC	DC	DC	
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 Qn at 6 bar and Δp = 1 bar .

Technical information

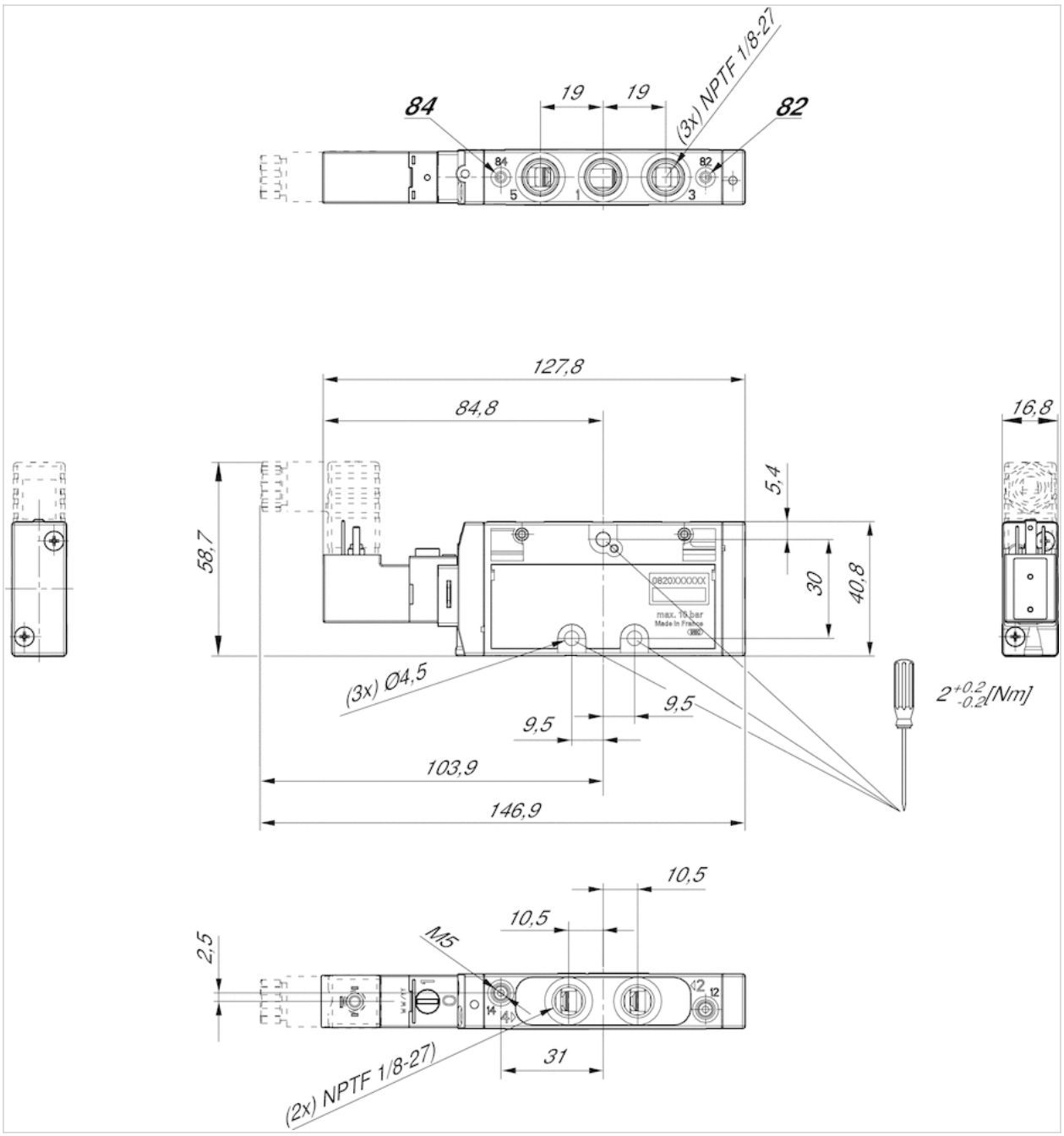
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in the MediaCentre).

Technical information

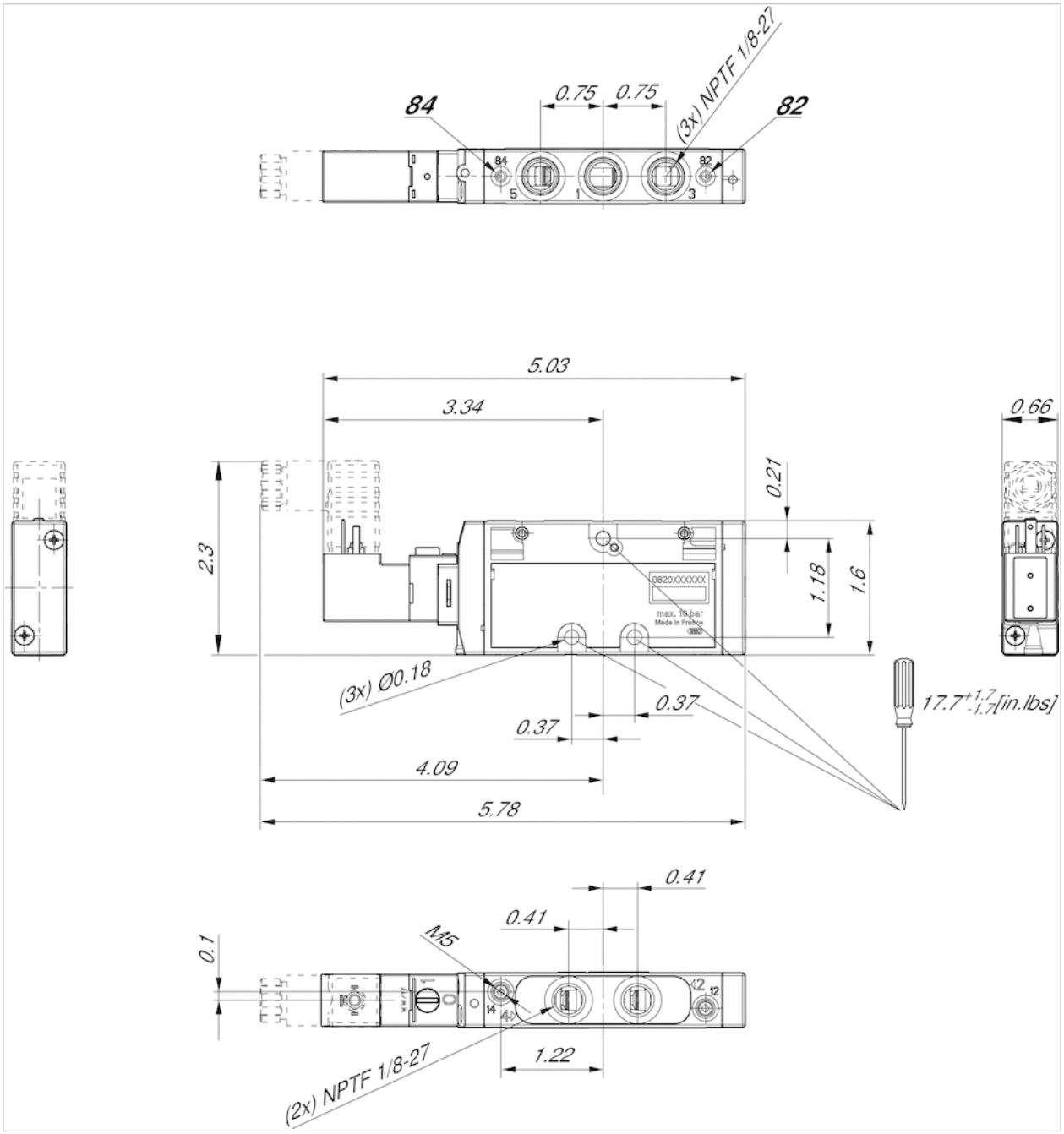
Material	
Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, nickel-plated chrome-plated

Dimensions

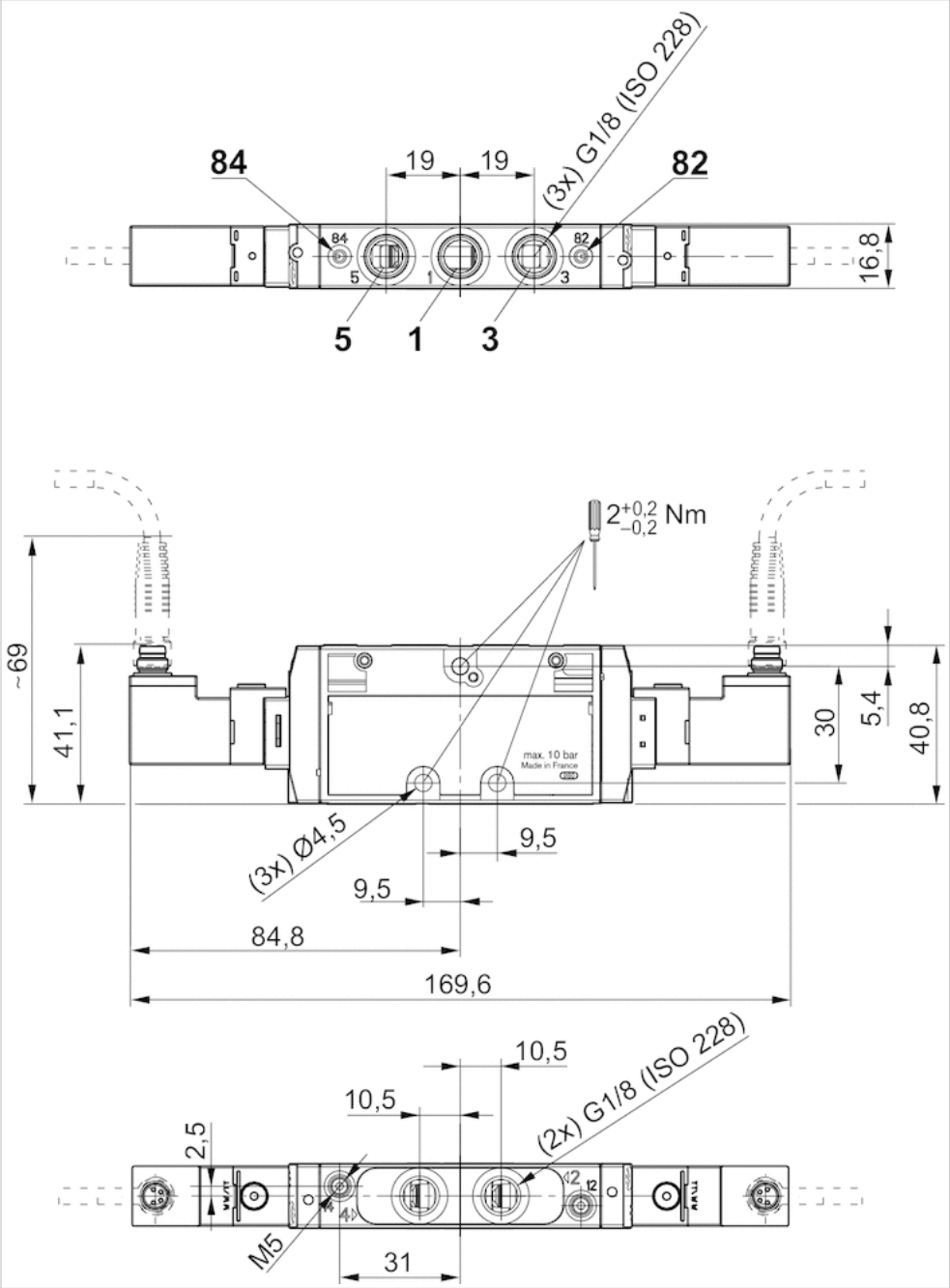
Dimensions in mm, single solenoid



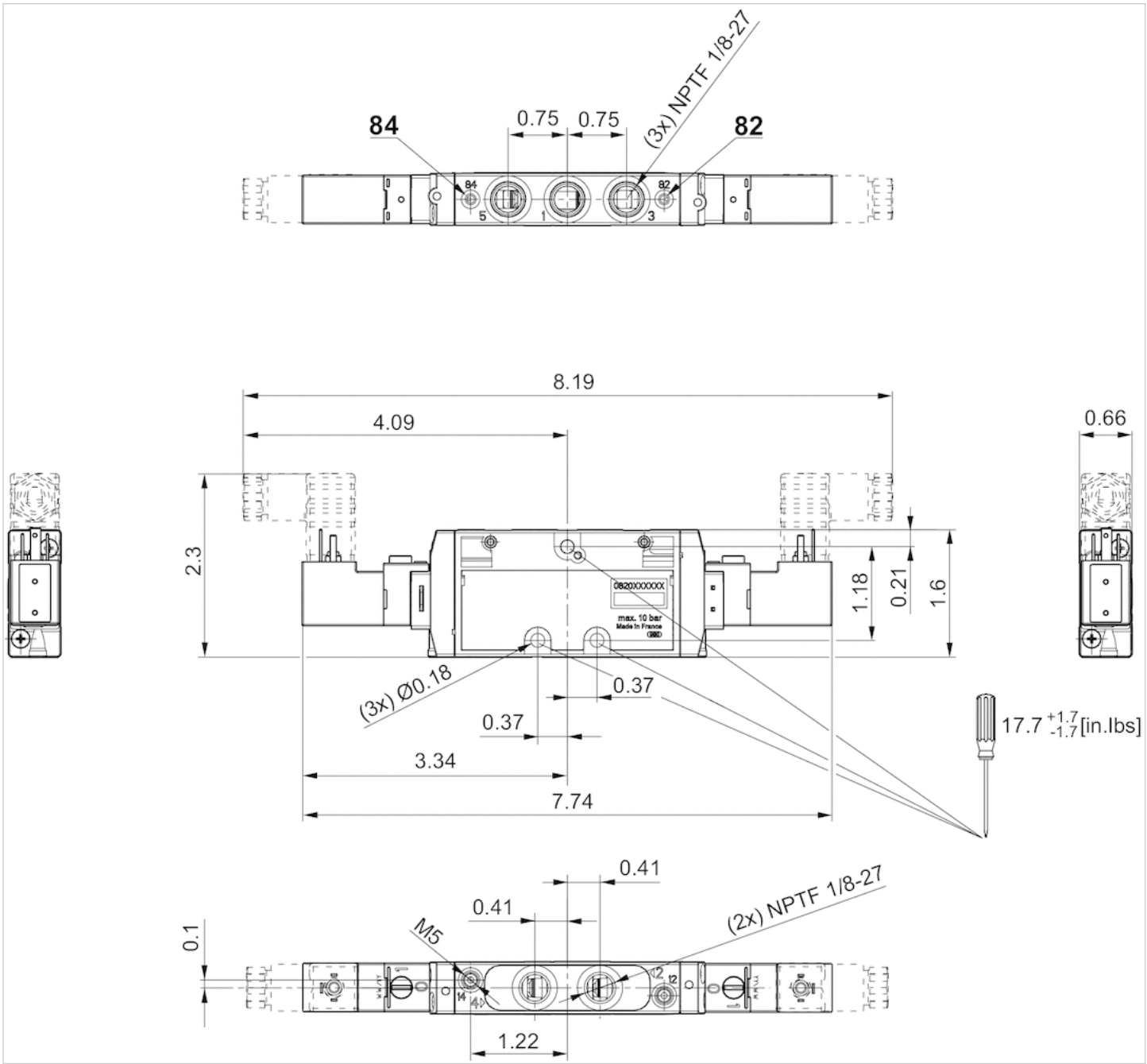
Dimensions in inches, single solenoid



Dimensions in mm, double solenoid

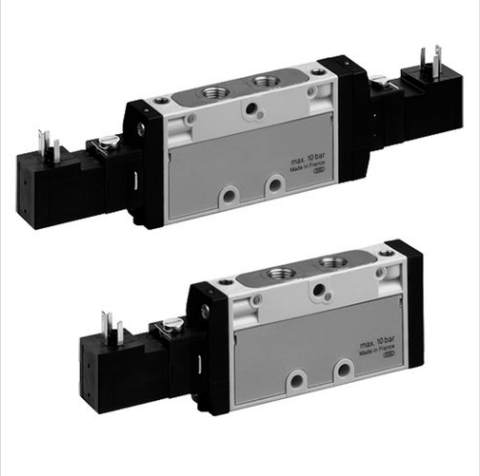


Dimensions in inches, double solenoid



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/m³
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	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	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	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 AC 50 Hz	Holding power AC 60 Hz	Switch-on power AC 50 Hz	Switch-on power AC 60 Hz	Pilot
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 b	Flow conductance C-value	Nominal resistance	Working pressure min./max.
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 Δp = 1 bar .

Technical information

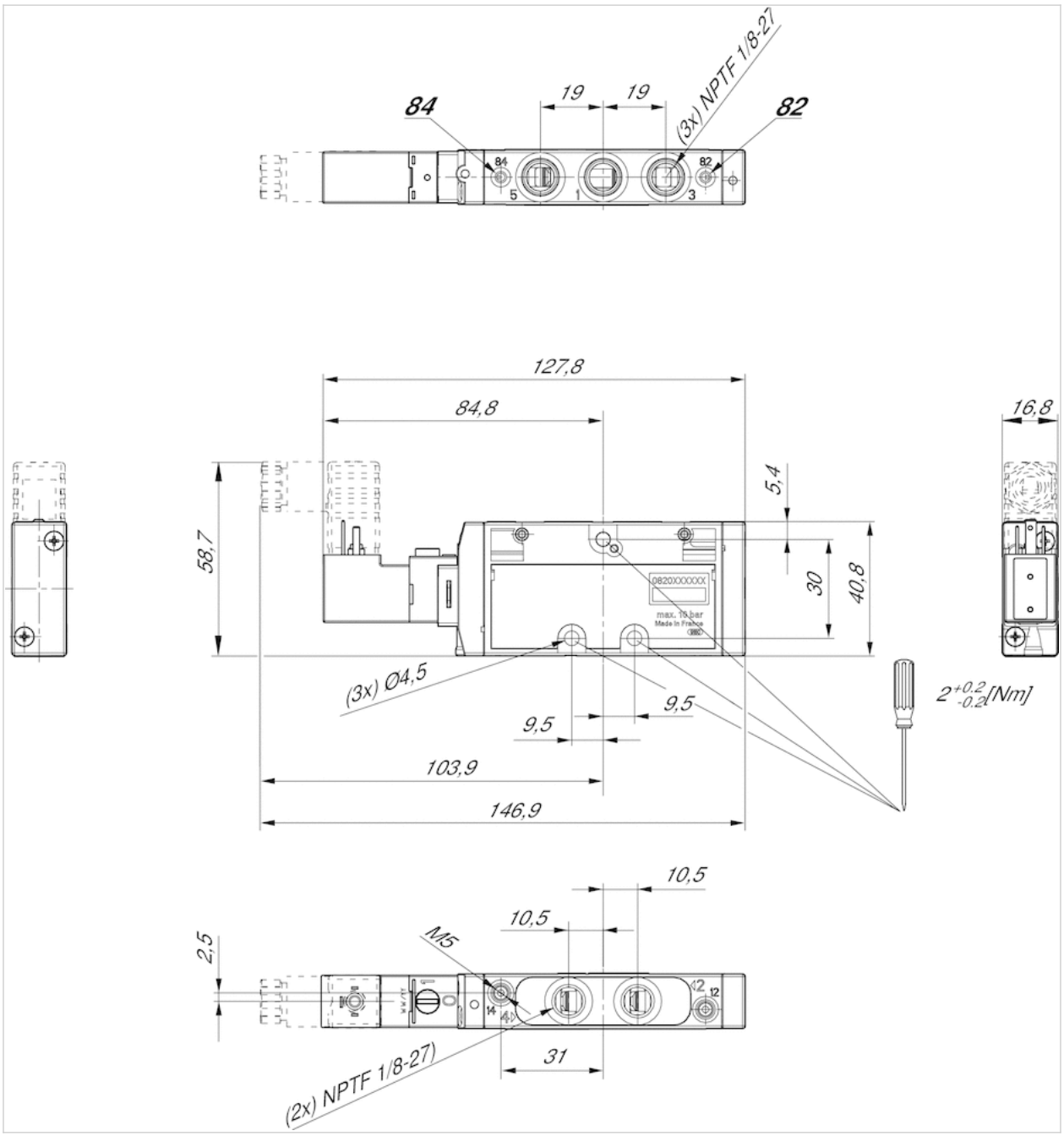
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in the MediaCentre).

Technical information

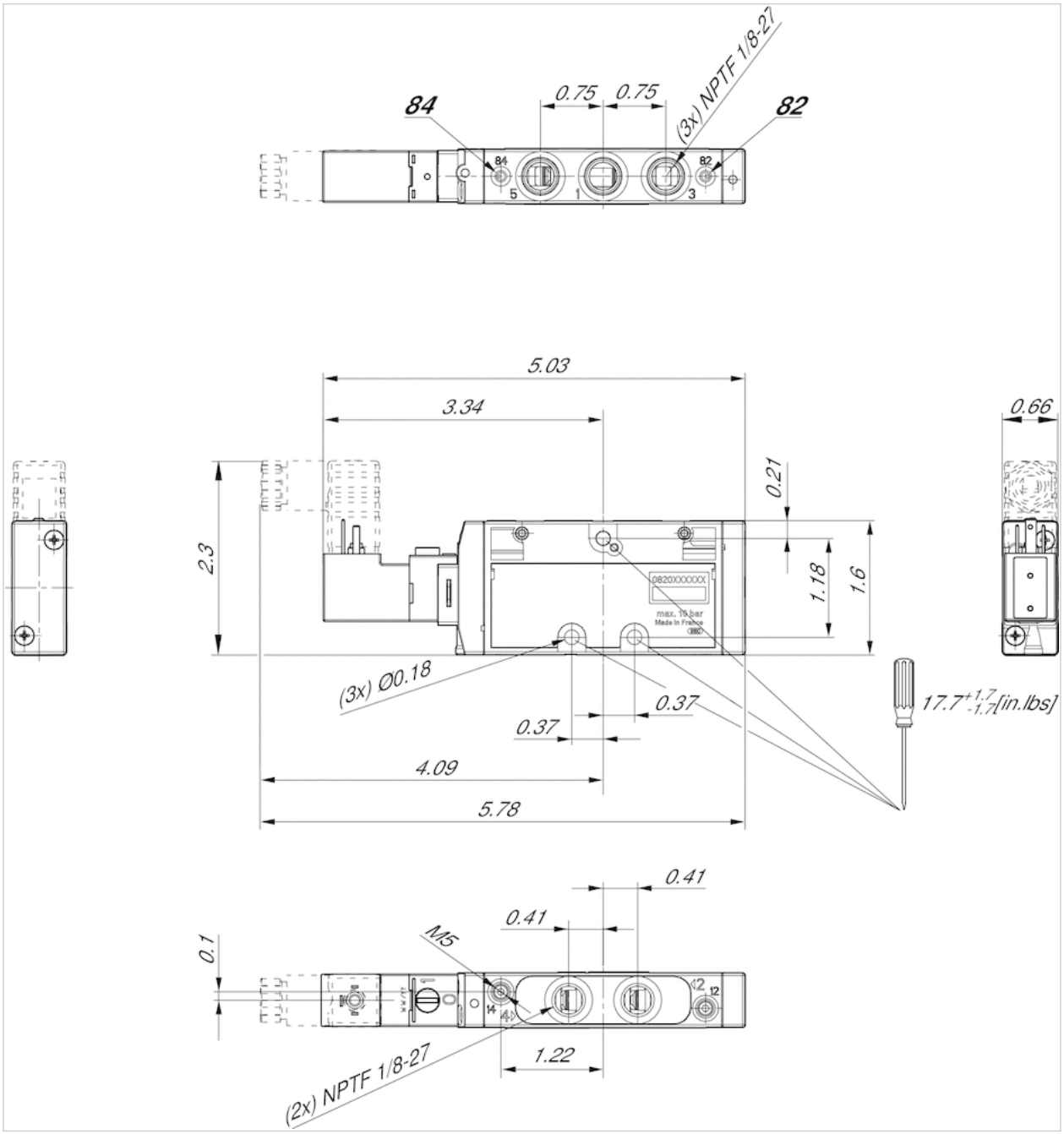
Material	
Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, nickel-plated chrome-plated

Dimensions

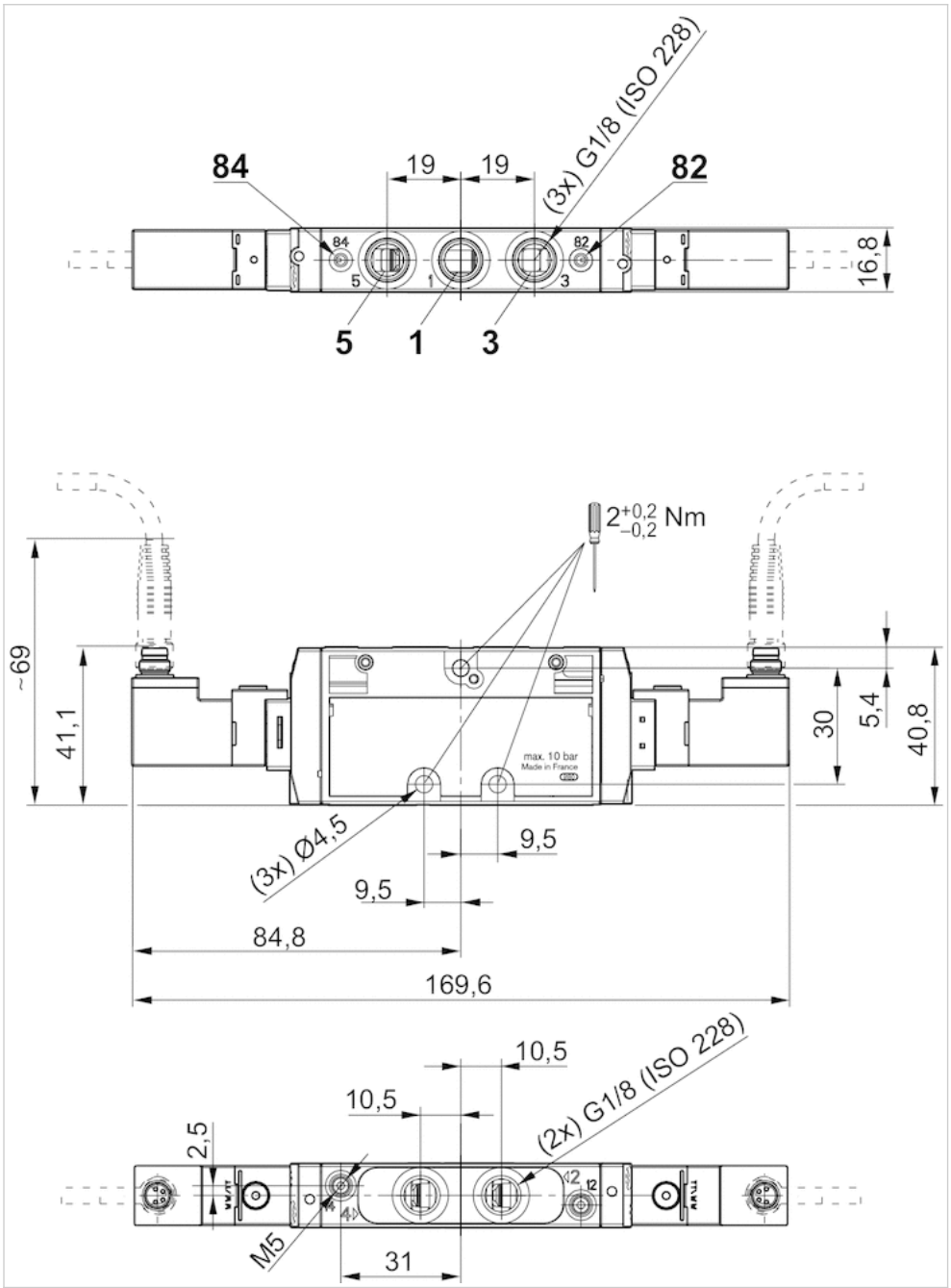
Dimensions in mm, single solenoid



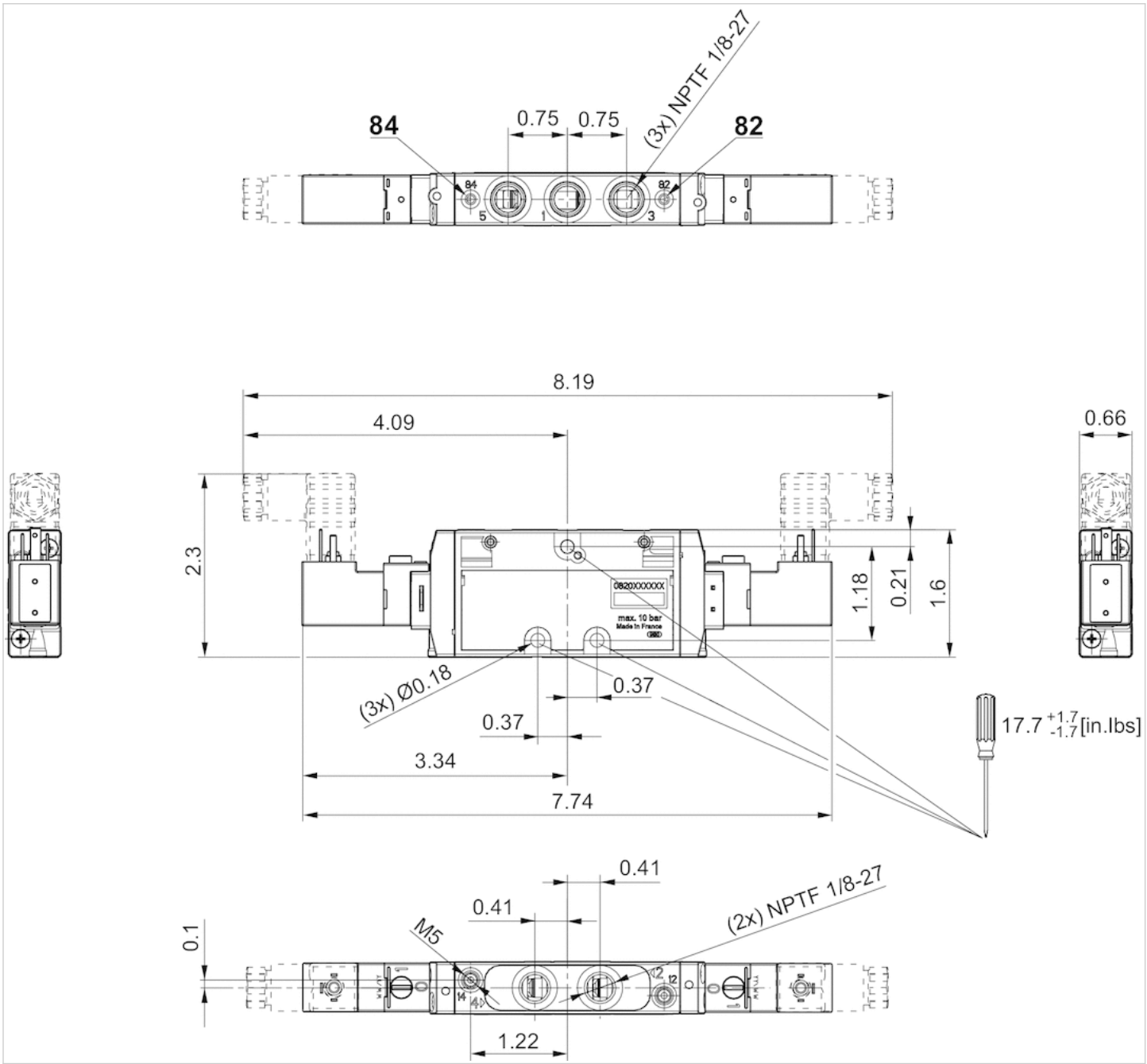
Dimensions in inches, single solenoid



Dimensions in mm, double solenoid

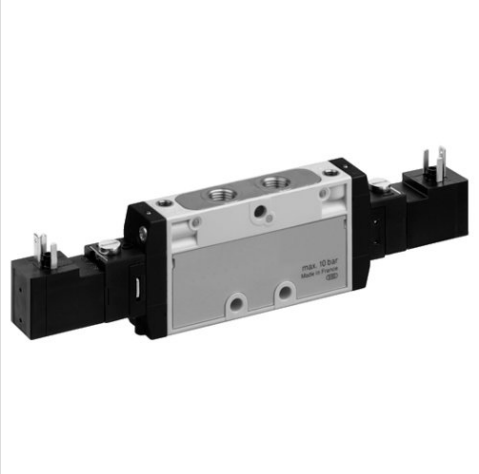


Dimensions in inches, double solenoid



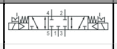
5/3-directional valve, Series TC08 - inch

- Operating voltage 24 V DC
- 5/3
- Qn = 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/m³
Nominal flow Qn	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	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	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 Qn at 6 bar and Δp = 1 bar .

Technical information

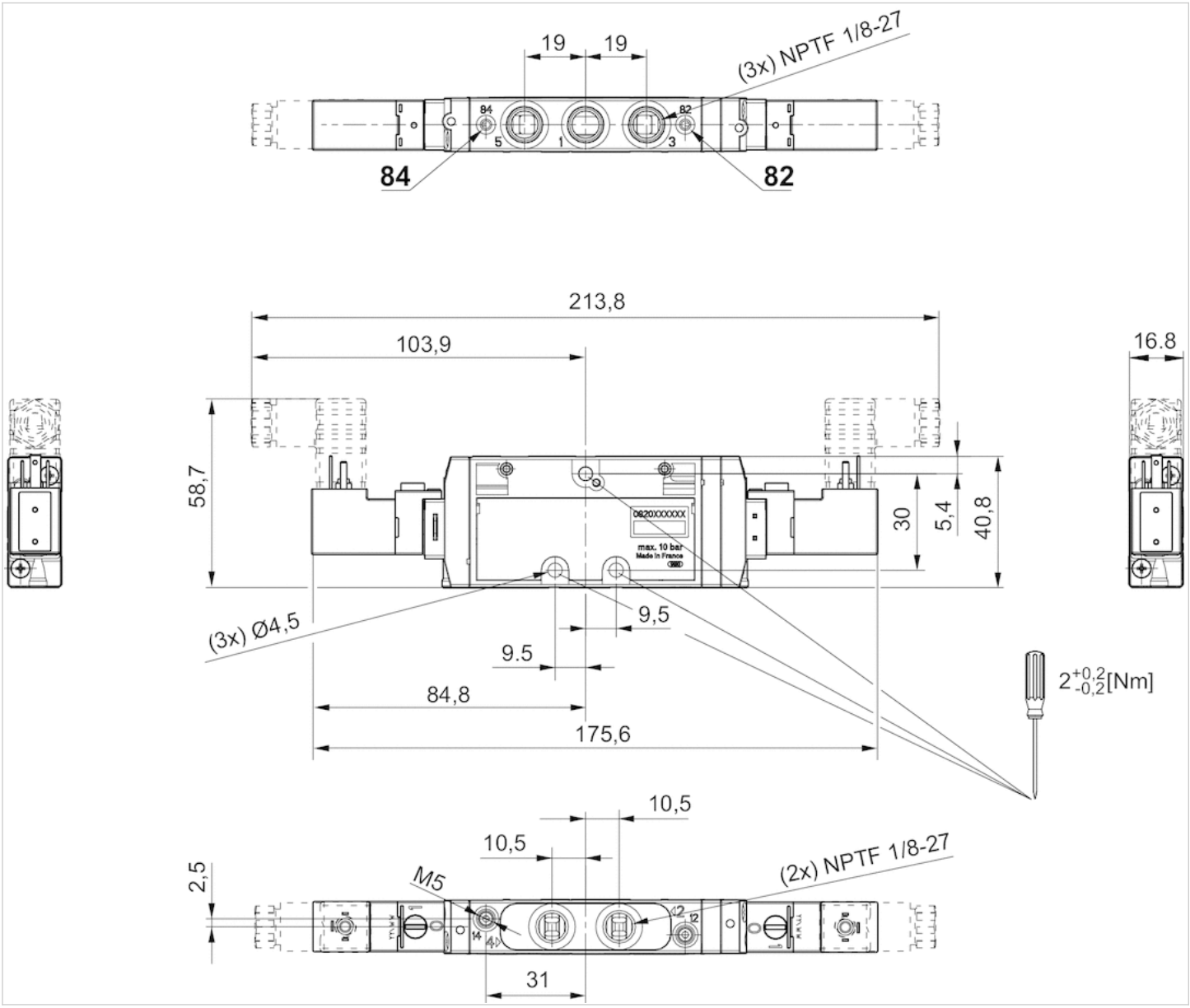
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in the MediaCentre).

Technical information

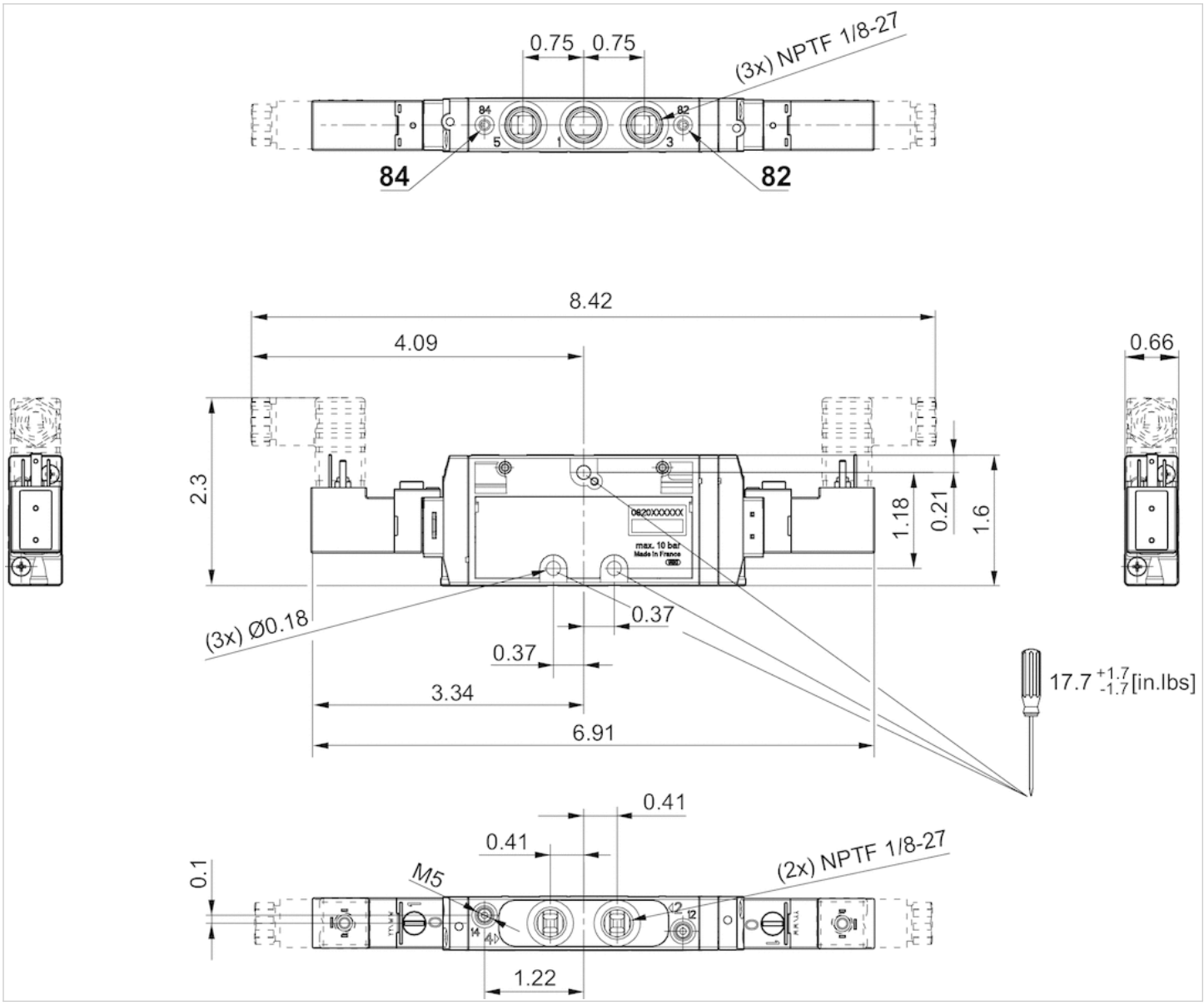
Material	
Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, nickel-plated chrome-plated

Dimensions

Dimensions in mm

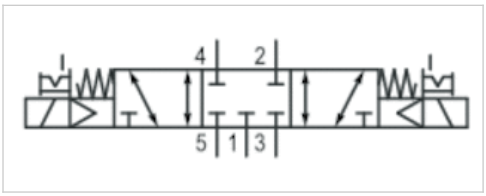


Dimensions in inches



5/3-directional valve, Series TC08 - inch

- 5/3
- Qn = 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/m³
Nominal flow Qn	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	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	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	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 Qn at 6 bar and Δp = 1 bar .

Technical information

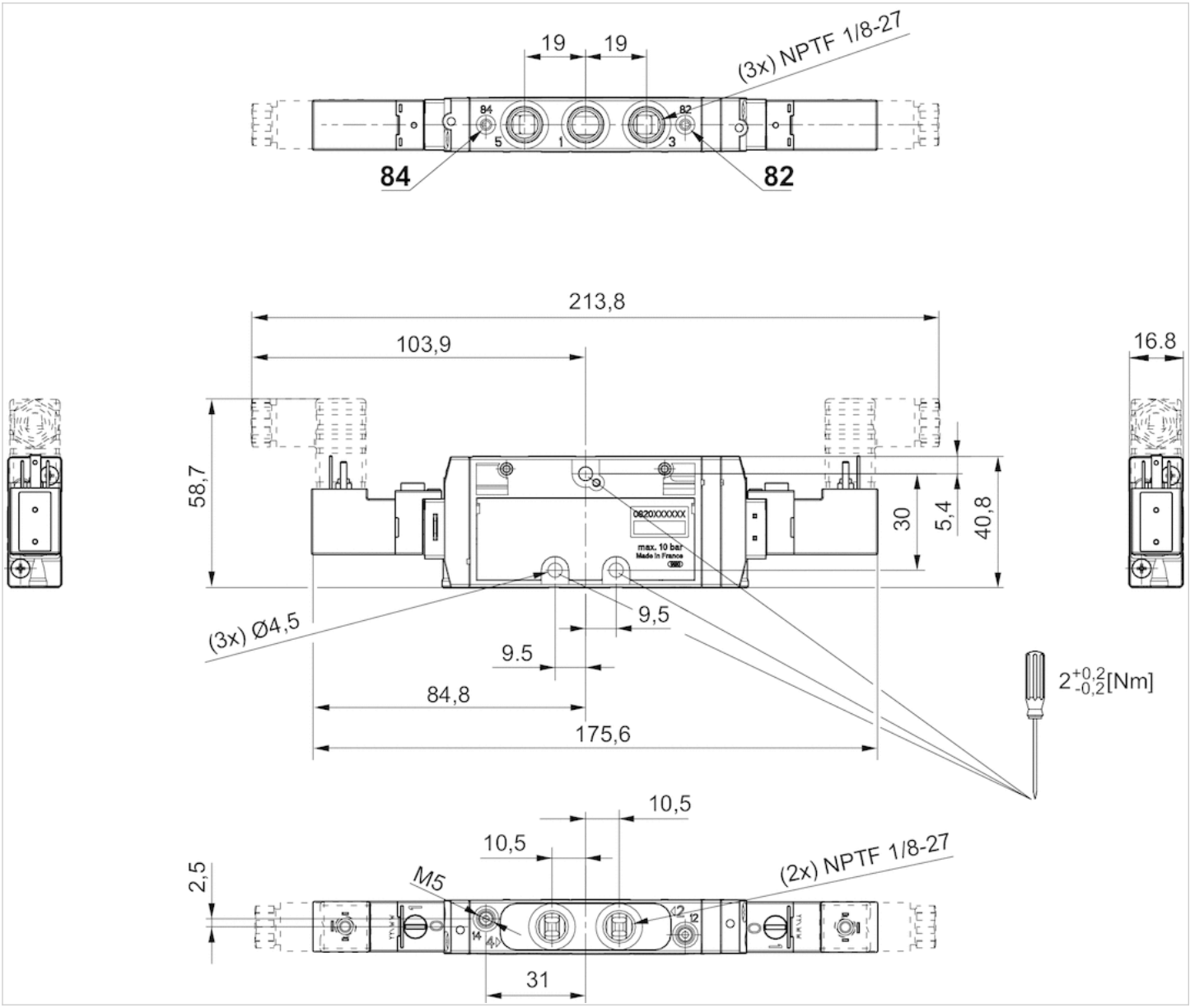
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in the MediaCentre).

Technical information

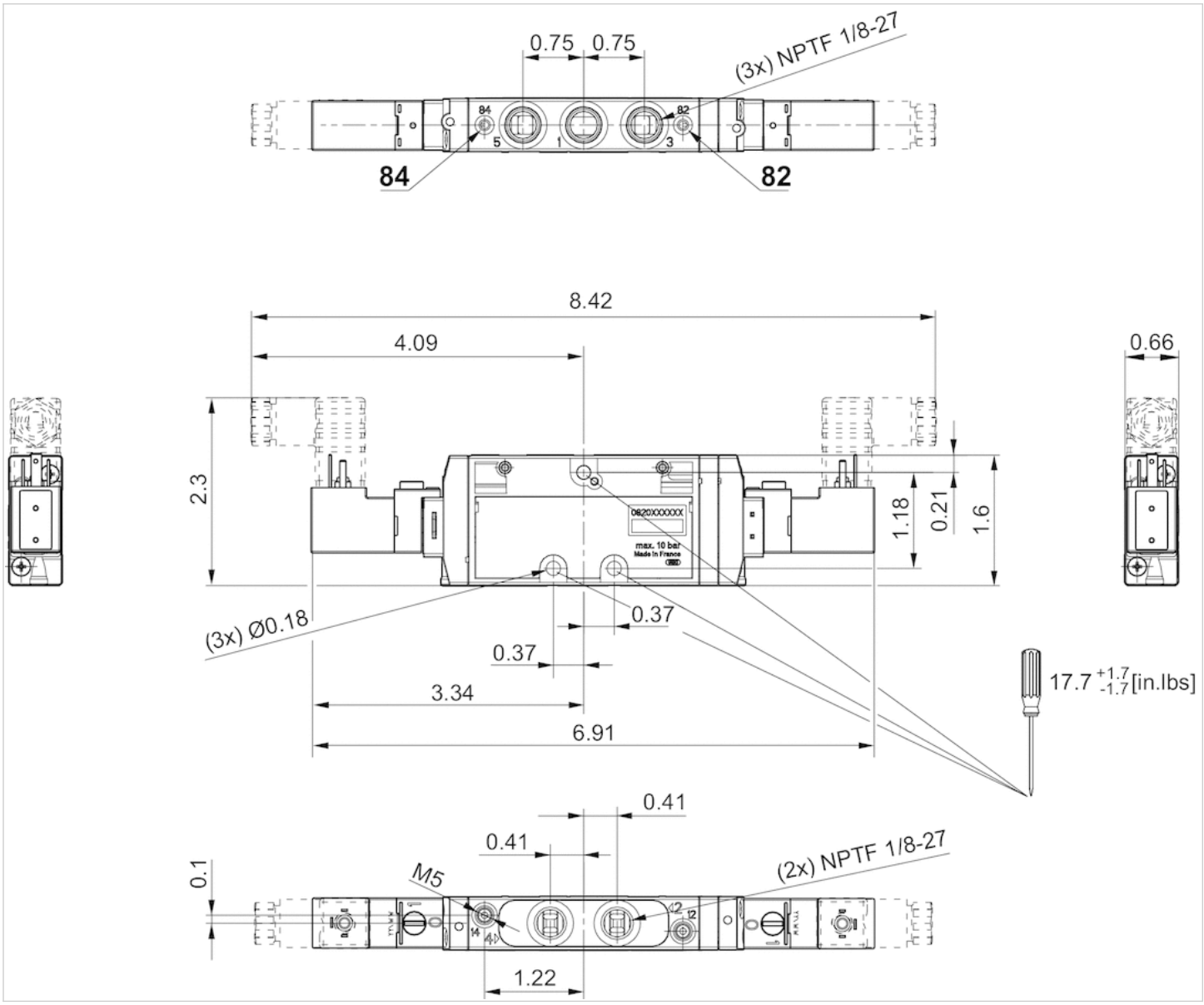
Material	
Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, nickel-plated chrome-plated

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/m³
Mounting on manifold strip	P-strip
Mounting screw tightening torque	2 Nm
Weight	0.113 kg

Technical data

Part No.			Compressed air connection	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	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 Δp = 1 bar, Caution: The minimum control pressure depends on the working pressure (see "Control pressure" diagram below).

Technical information

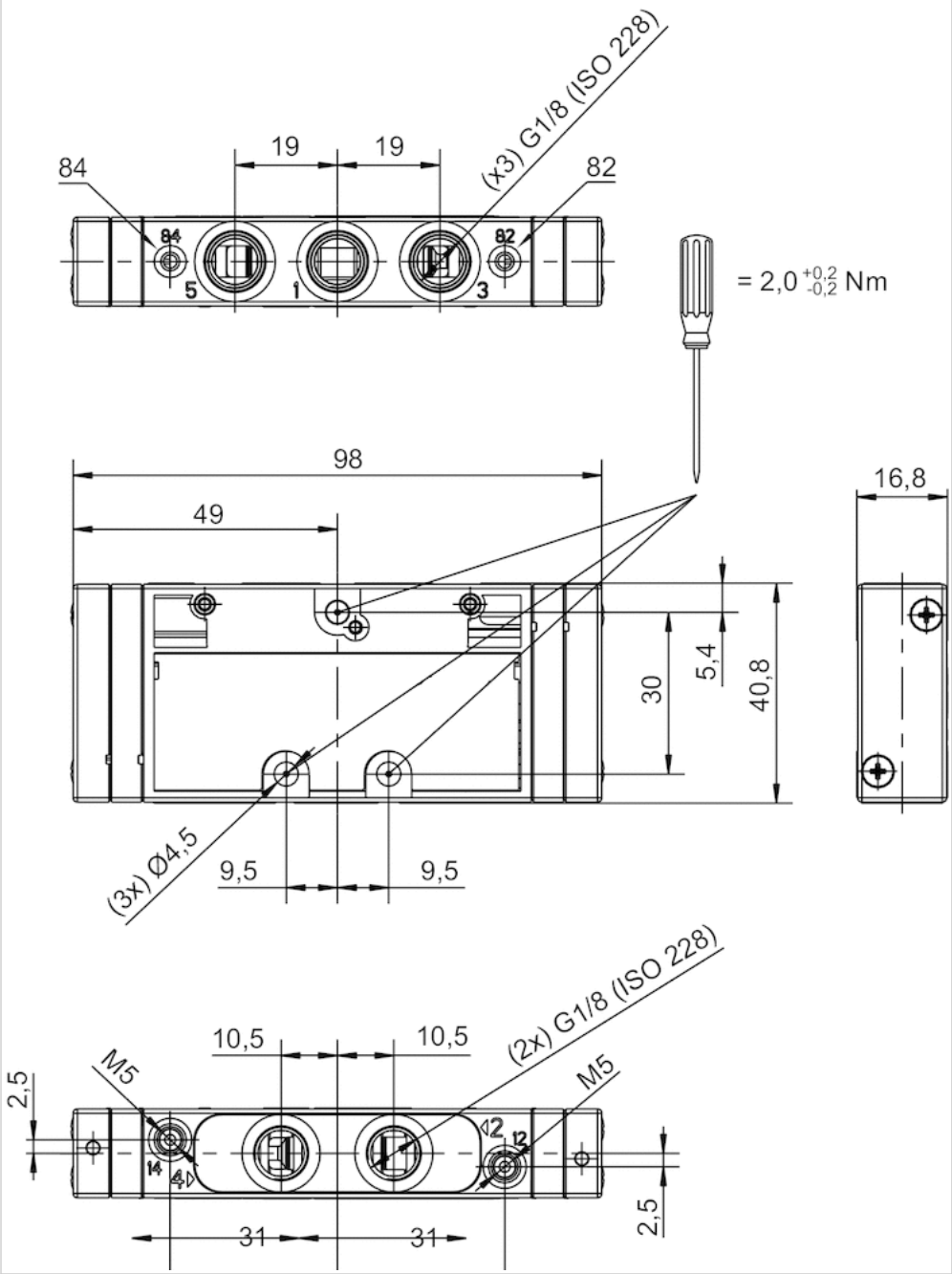
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only 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

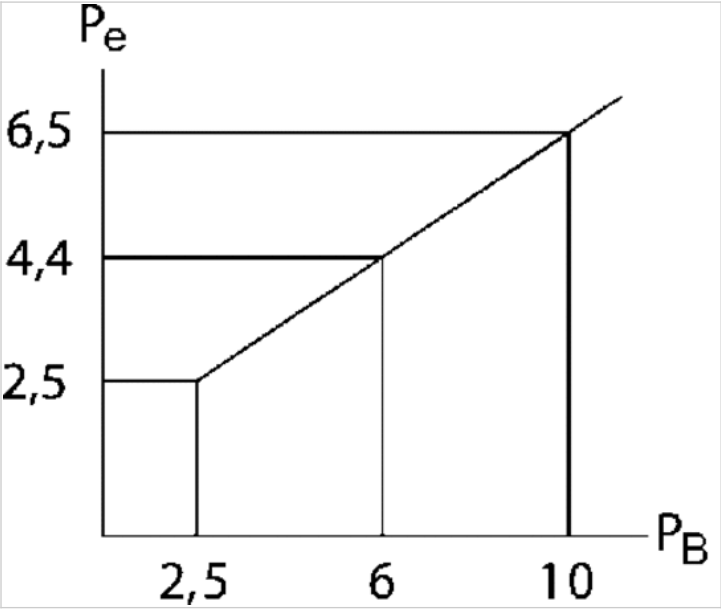
Dimensions

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/m³
Mounting on manifold strip	P-strip
Mounting screw tightening torque	2 Nm
Weight	0.097 kg

Technical data

Part No.		Compressed air connection	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	Compressed air connection	Flow conductance
	Exhaust	Pilot control exhaust	b
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	Working pressure min./max.	Control pressure min./max.
	C-value		
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 Δp = 1 bar, Caution: The minimum control pressure depends on the working pressure (see "Control pressure" diagram below).

Technical information

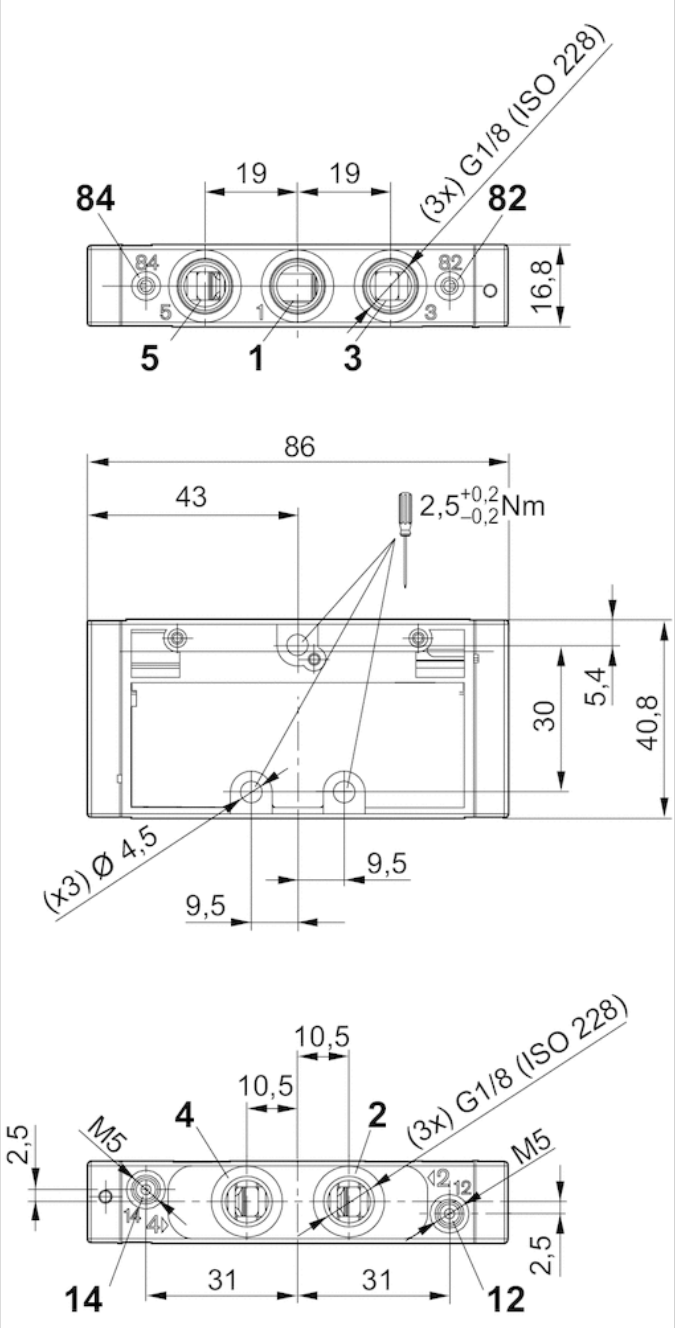
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only 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

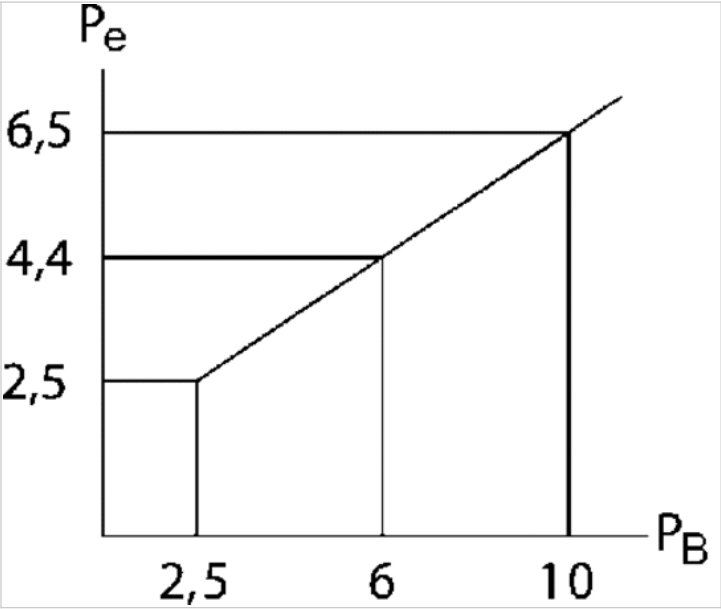
Dimensions

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/m³
Mounting on manifold strip	P-strip
Weight	0.103 kg

Technical data

Part No.		Compressed air connection	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	Compressed air connection	Flow conductance
	Exhaust	Pilot control exhaust	b
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 Δp = 1 bar

Technical information

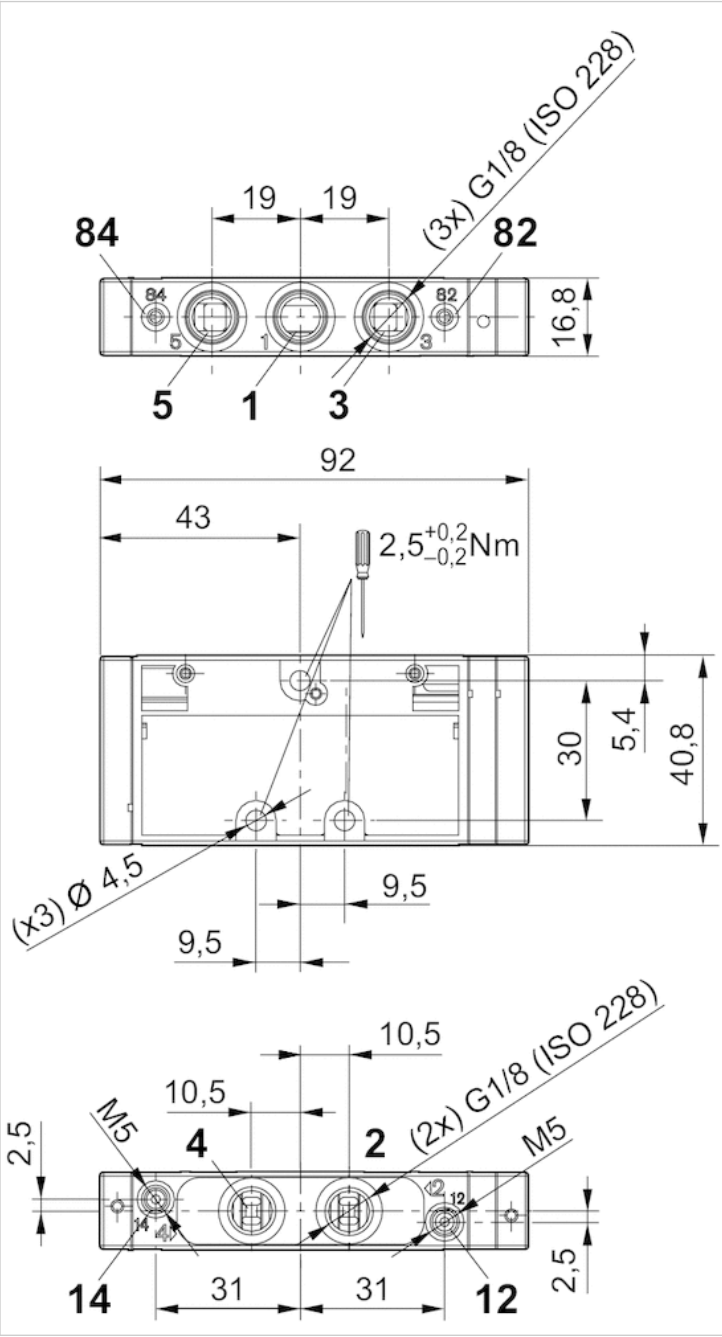
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only 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

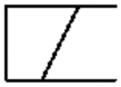
Dimensions

Dimensions



Coil, Series CO1

- 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

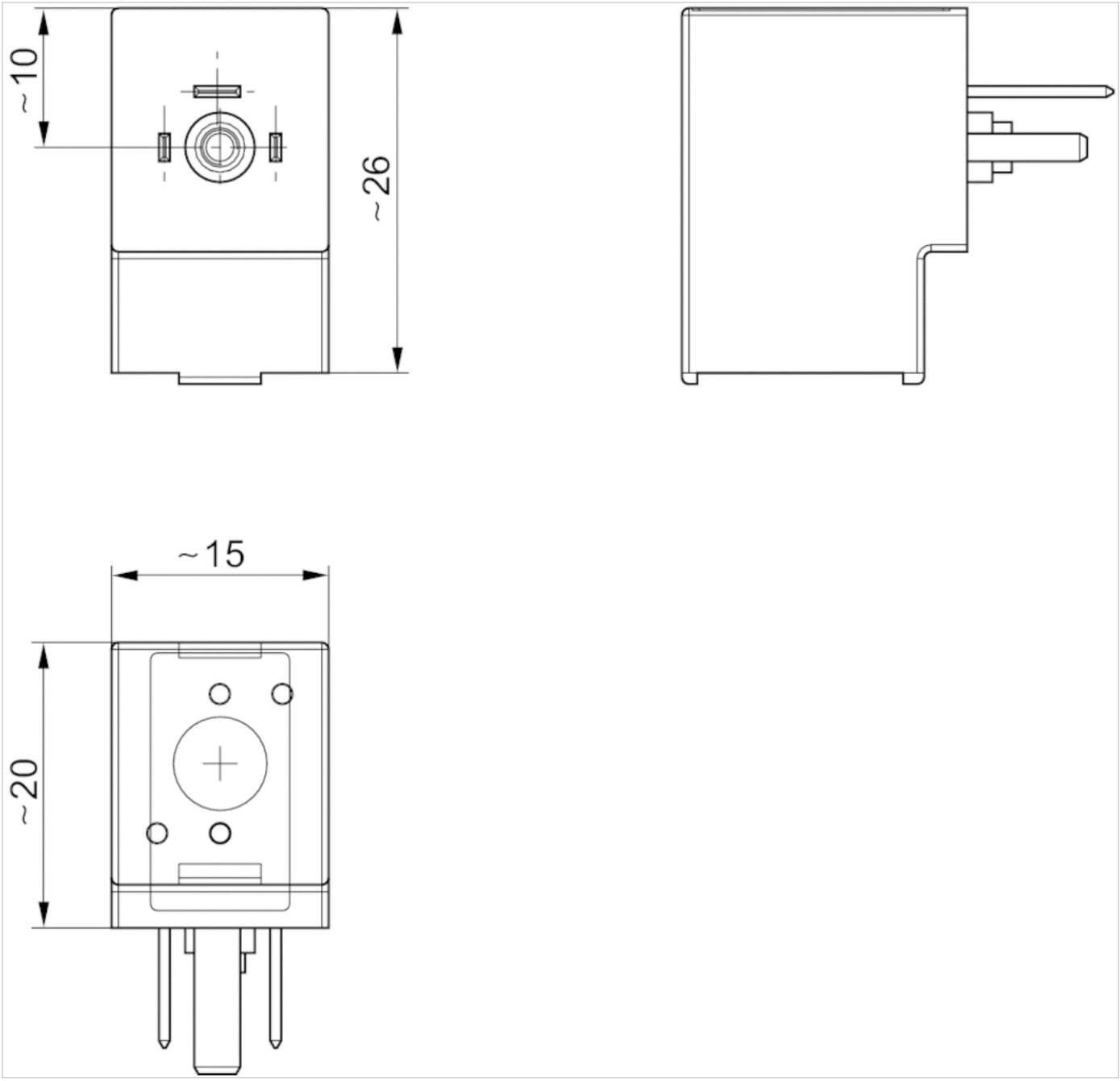
Please note that the coils are only compatible with TC series valves that were produced starting in 2011.

Technical information

Material	
Housing	Polyamide

Dimensions

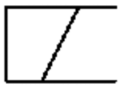
Dimensions



Coil, Series CO1

- 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 Electrically	Class III
Protection class With valve plug connector/plug	IP65
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

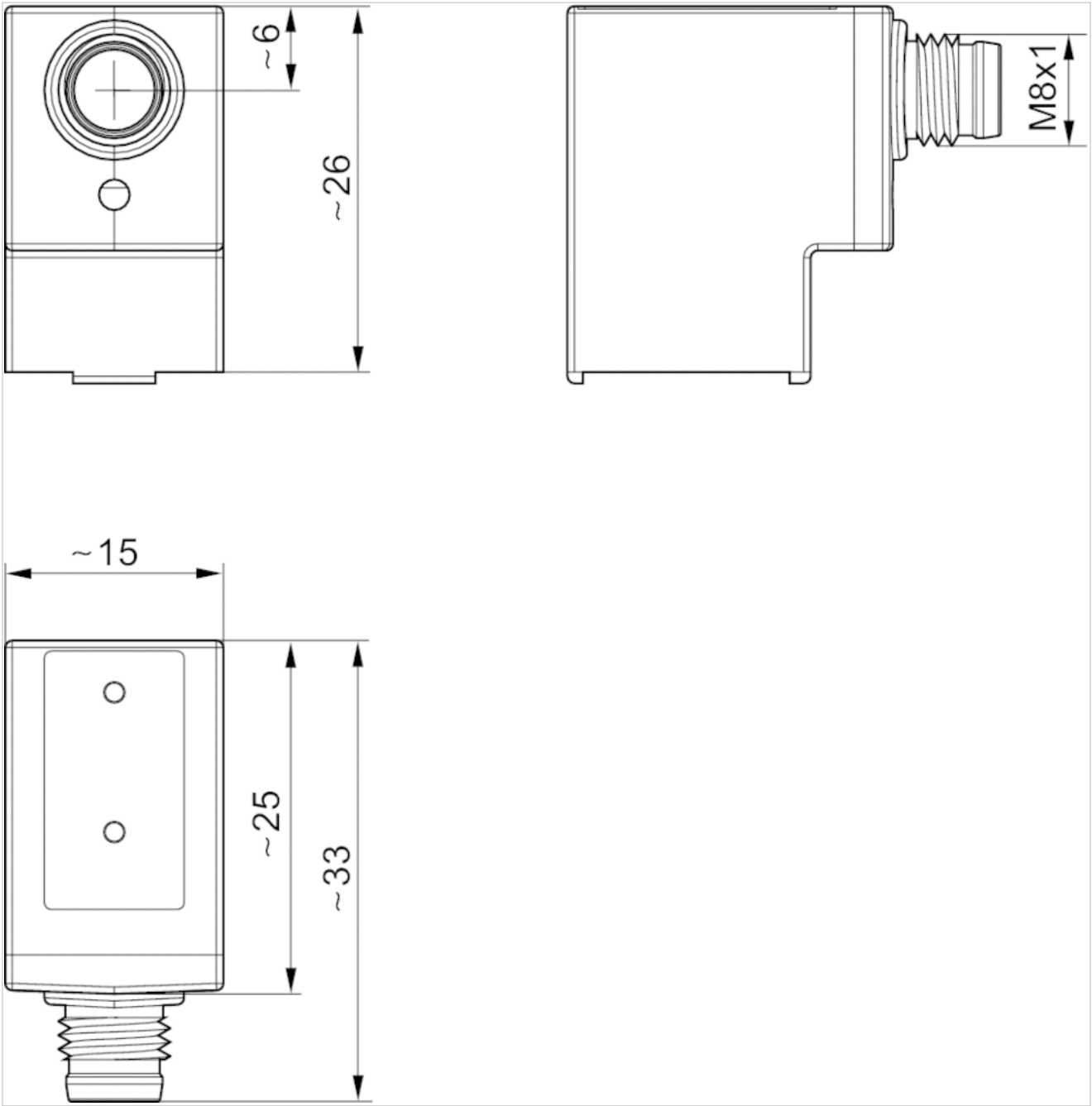
Please note that the coils are only compatible with TC series valves that were produced starting in 2011.

Technical information

Material	
Housing	Polyamide

Dimensions

Dimensions

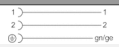


Valve plug connector, series CON-VP

- 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 mm²
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

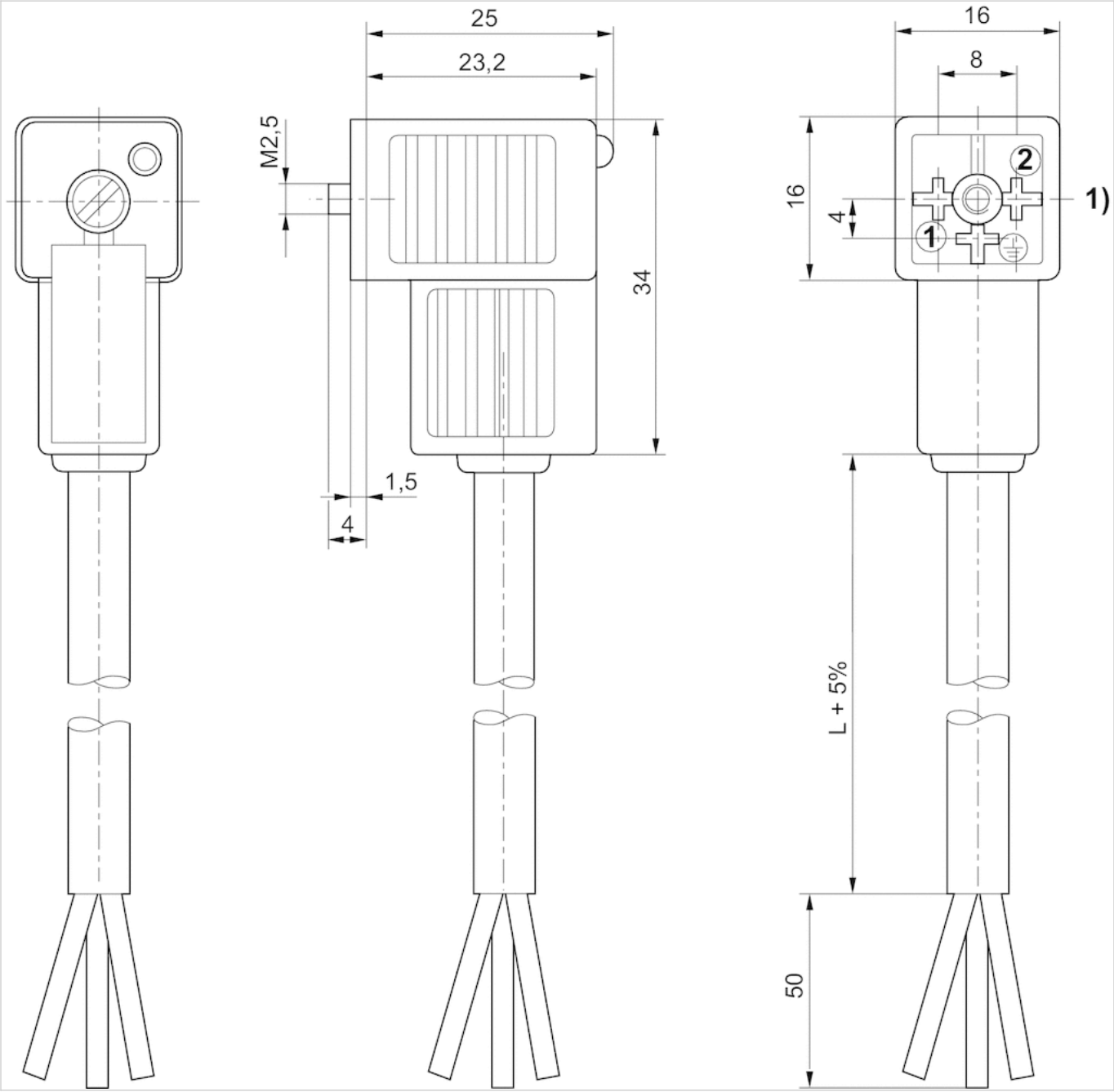
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Seals	caoutchouc/butadiene caoutchouc
Cable sheath	Polyvinyl chloride

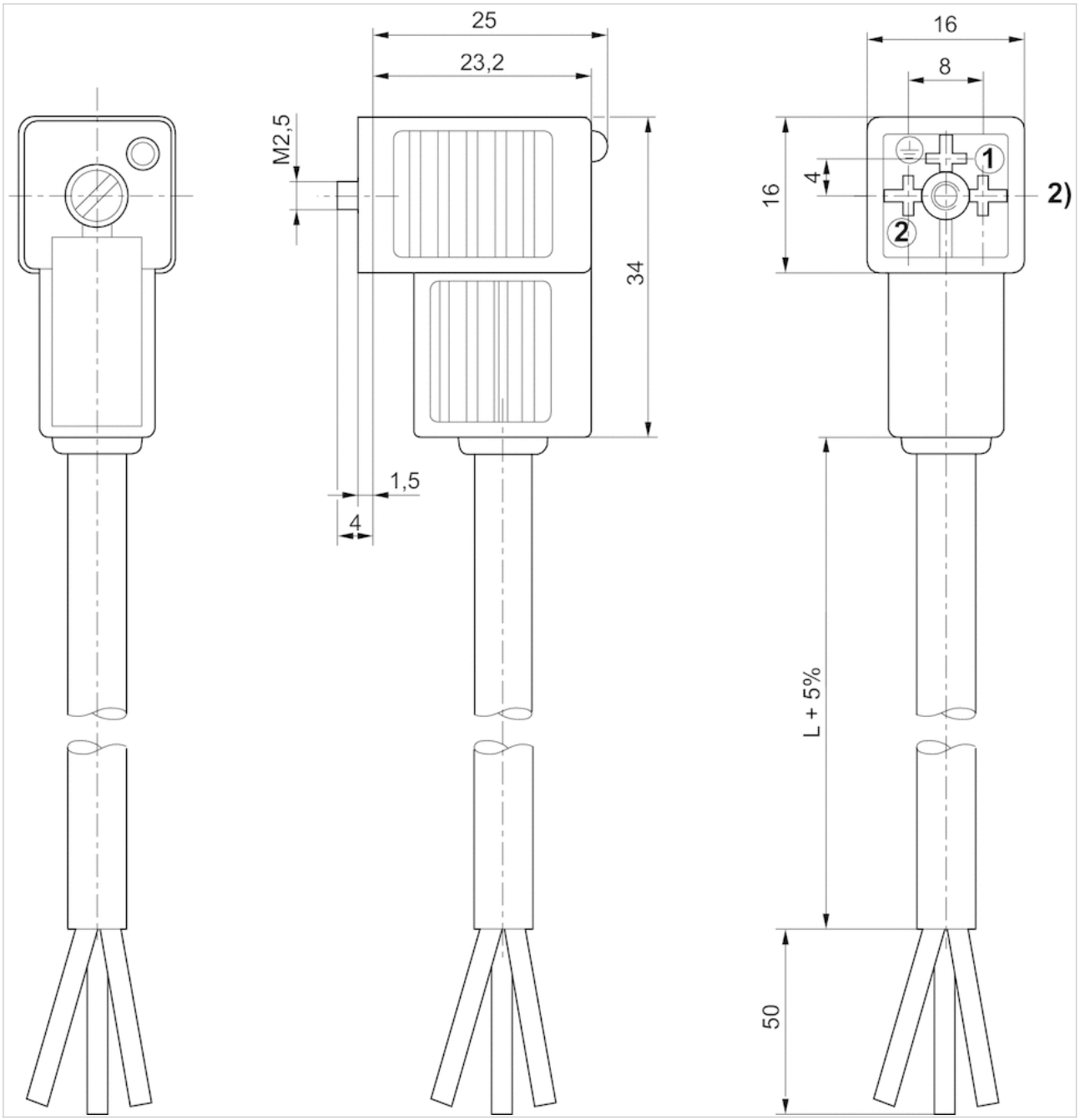
Dimensions

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

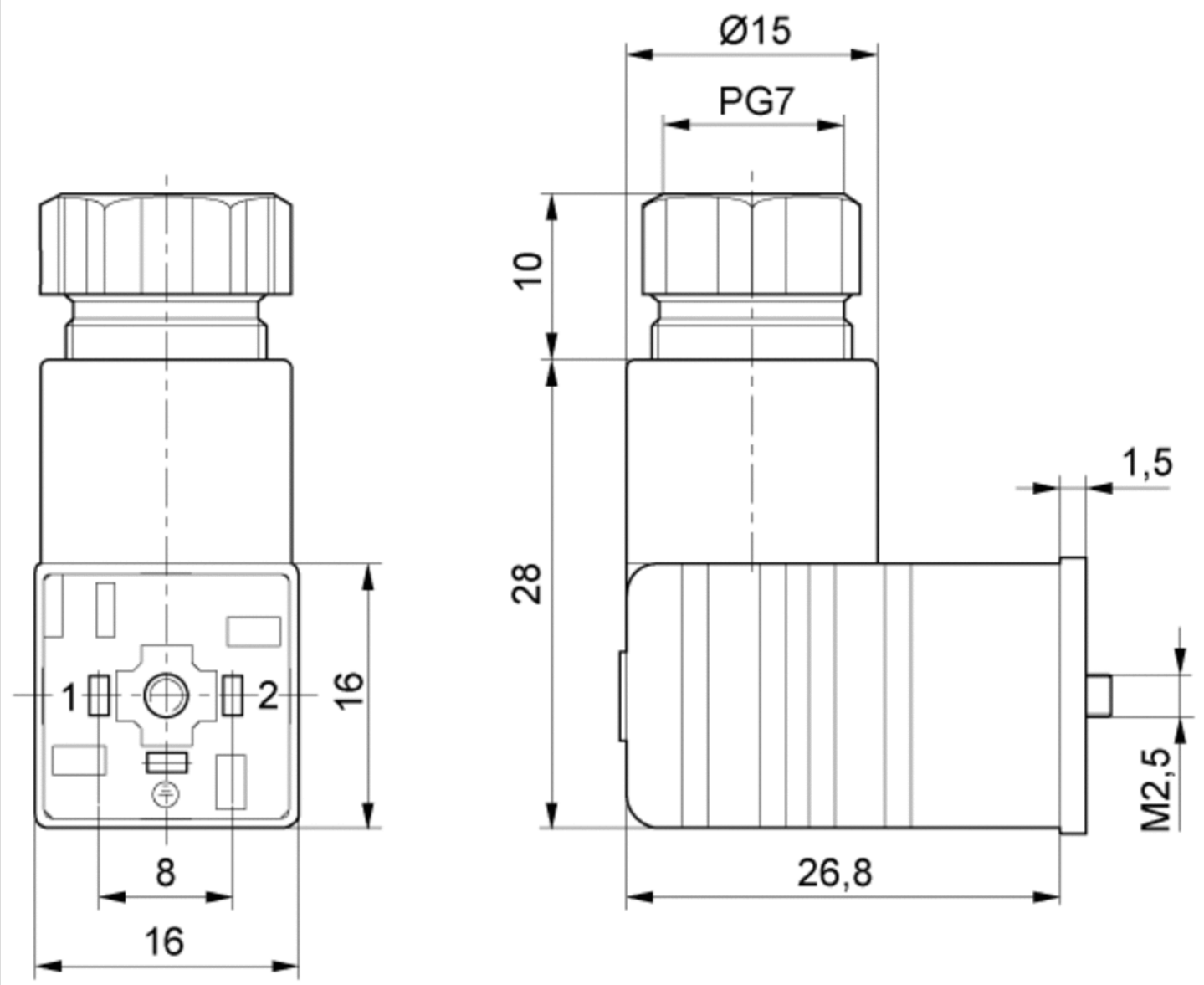


Fig. 2

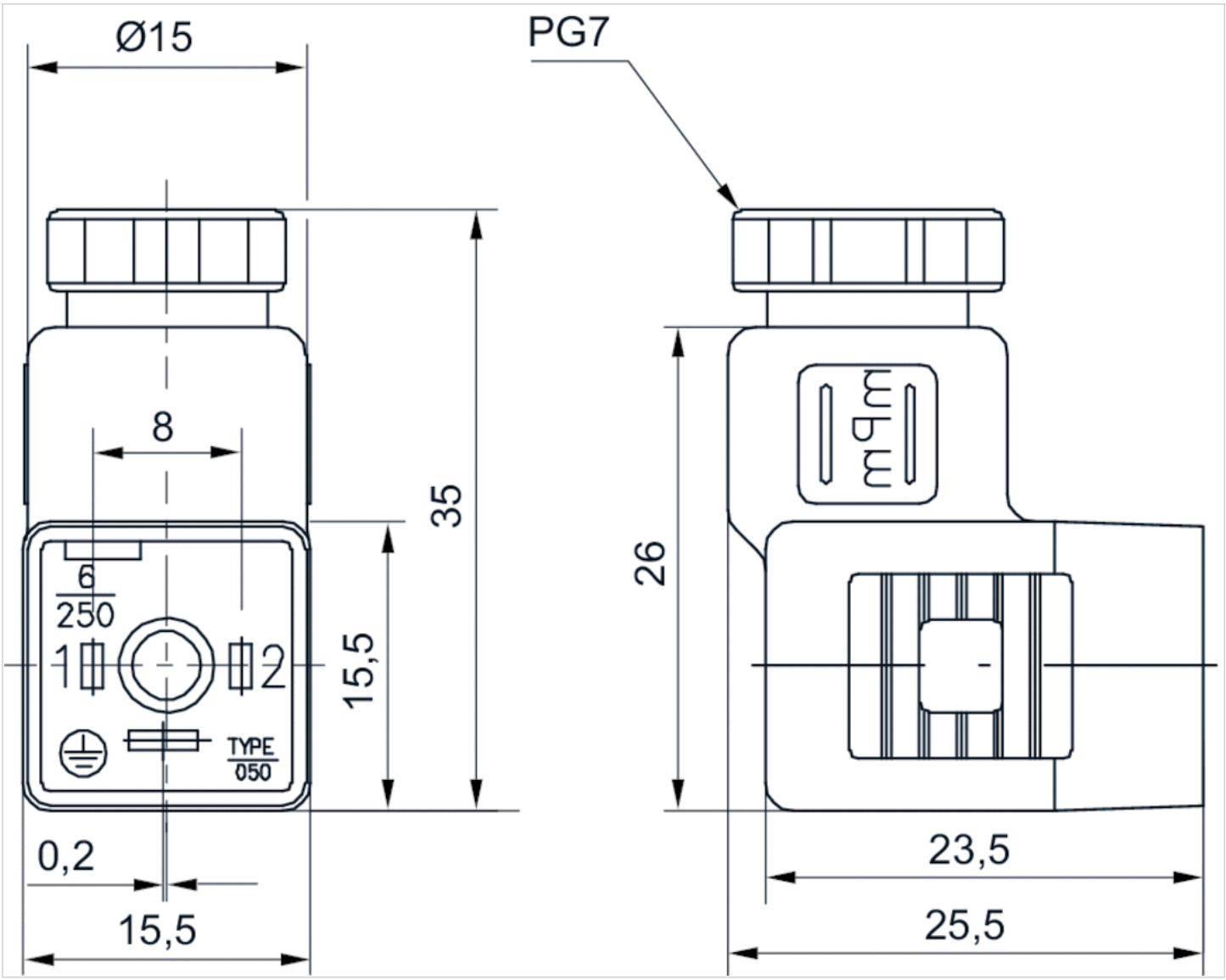
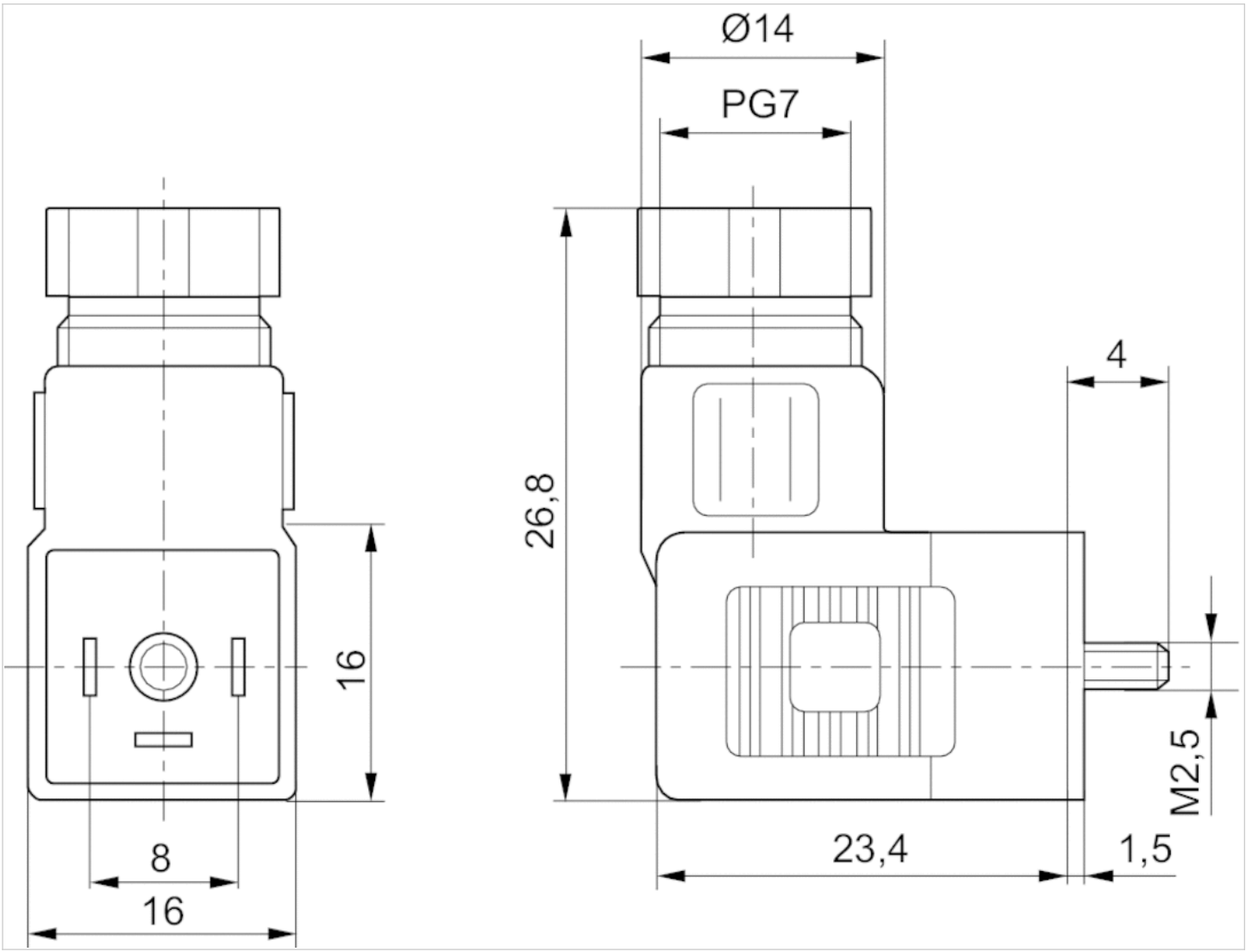


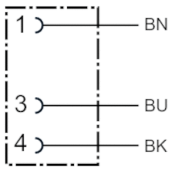
Fig. 3



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 mm²
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

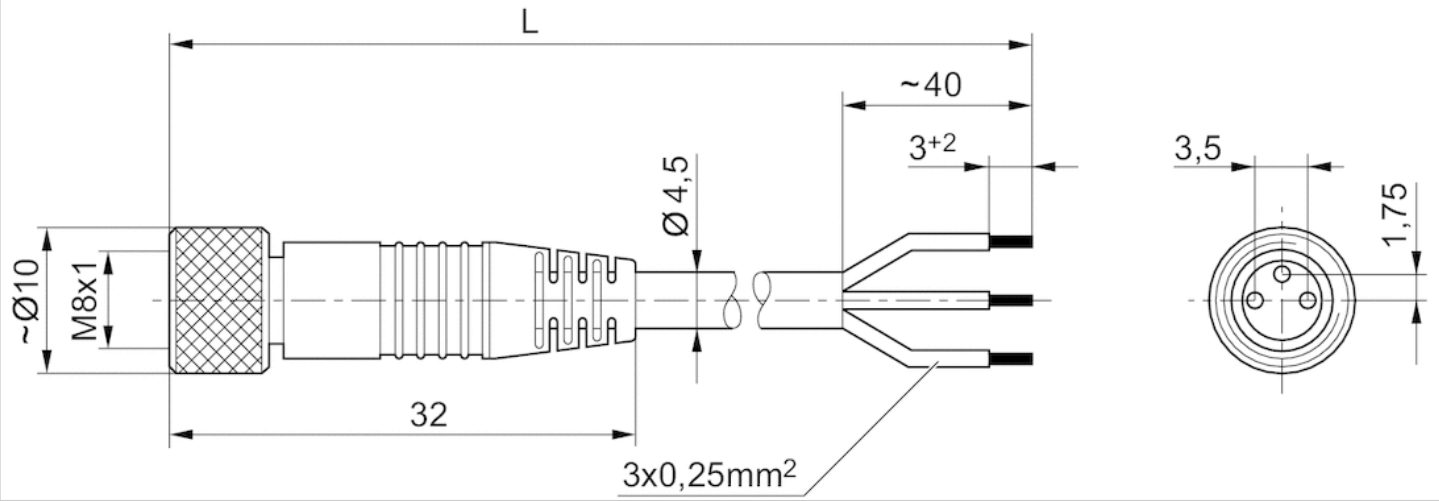
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

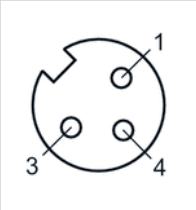
Dimensions



L = length

Pin assignments

Pin assignment, socket

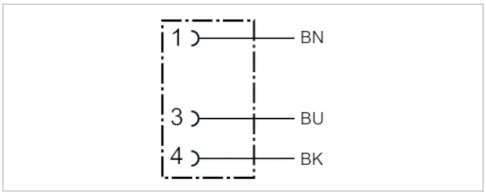


(1) BN=brown
(3) BU=blue
(4) BK=black

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 mm²
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

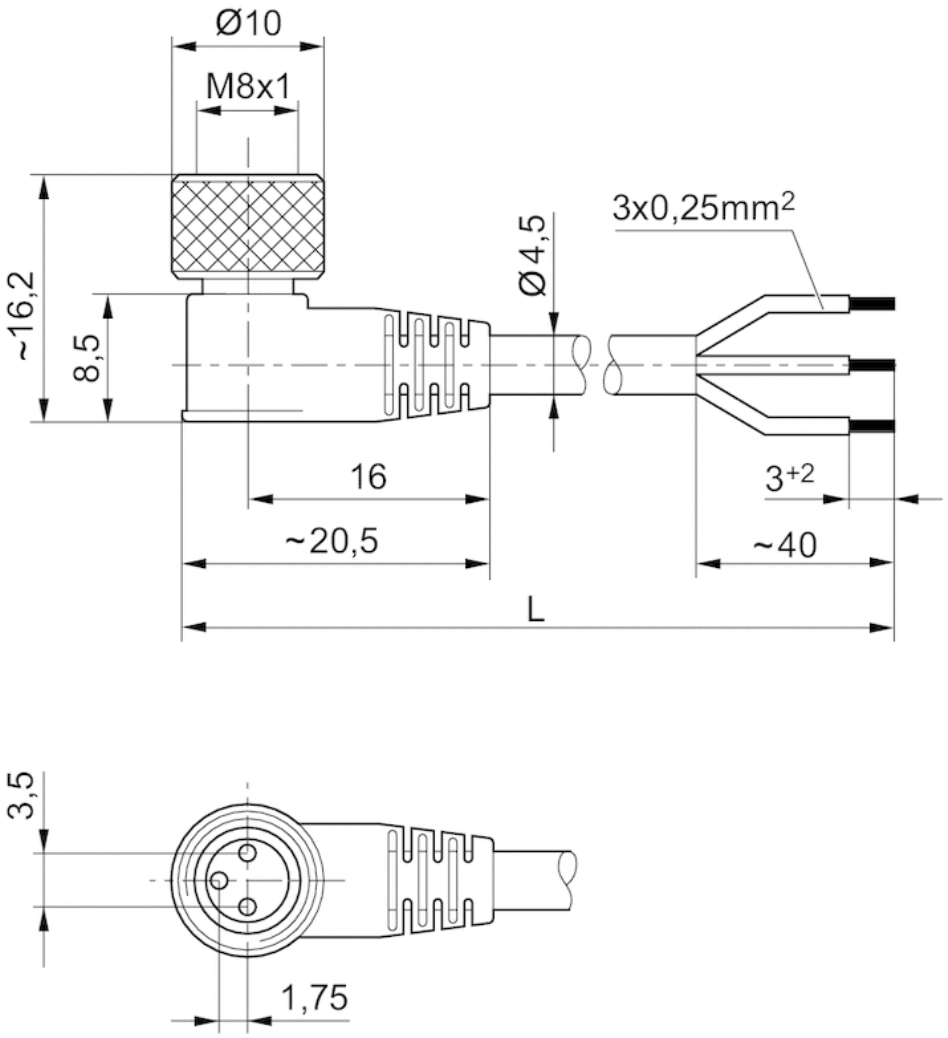
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

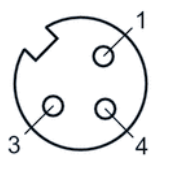
Dimensions



L = length

Pin assignments

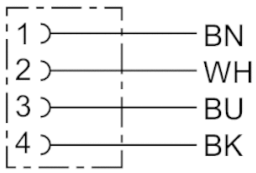
Pin assignment, socket



(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 mm²
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

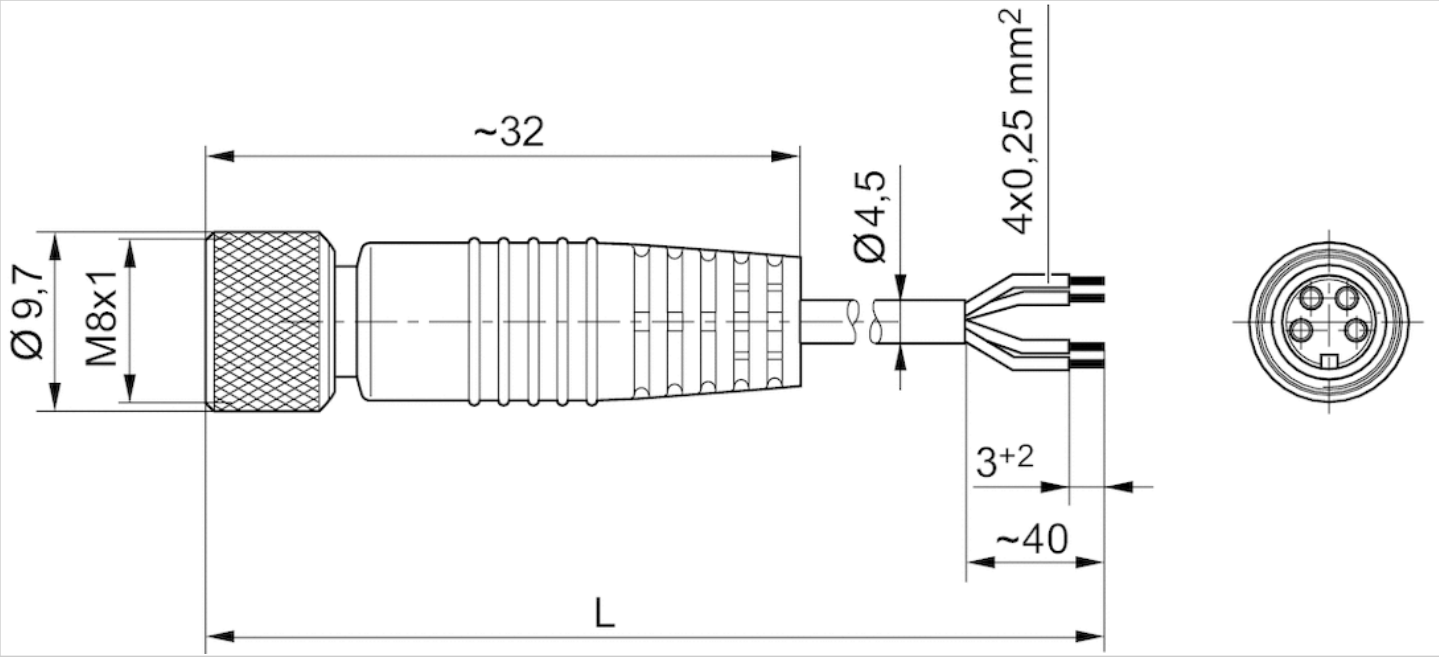
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

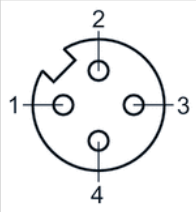
Dimensions



L = length

Pin assignments

Pin assignment, socket

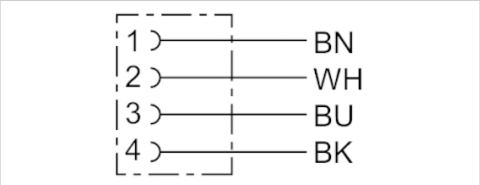


(1) BN=brown
(2) WH=white
(3) BU=blue
(4) BK=black

Round plug connector, Series CON-RD

- Socket M8x1 4-pin A-coded angled 90°
- open cable ends
- with cable
- unshielded

Ambient temperature min./max.	-25 ... 85 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Wire cross-section	0.25 mm²
Weight	See table below



Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Weight
1834484145	4 A	4	4.5 mm	3 m	0.086 kg
1834484147	4 A	4	4.5 mm	5 m	0.141 kg

Technical information

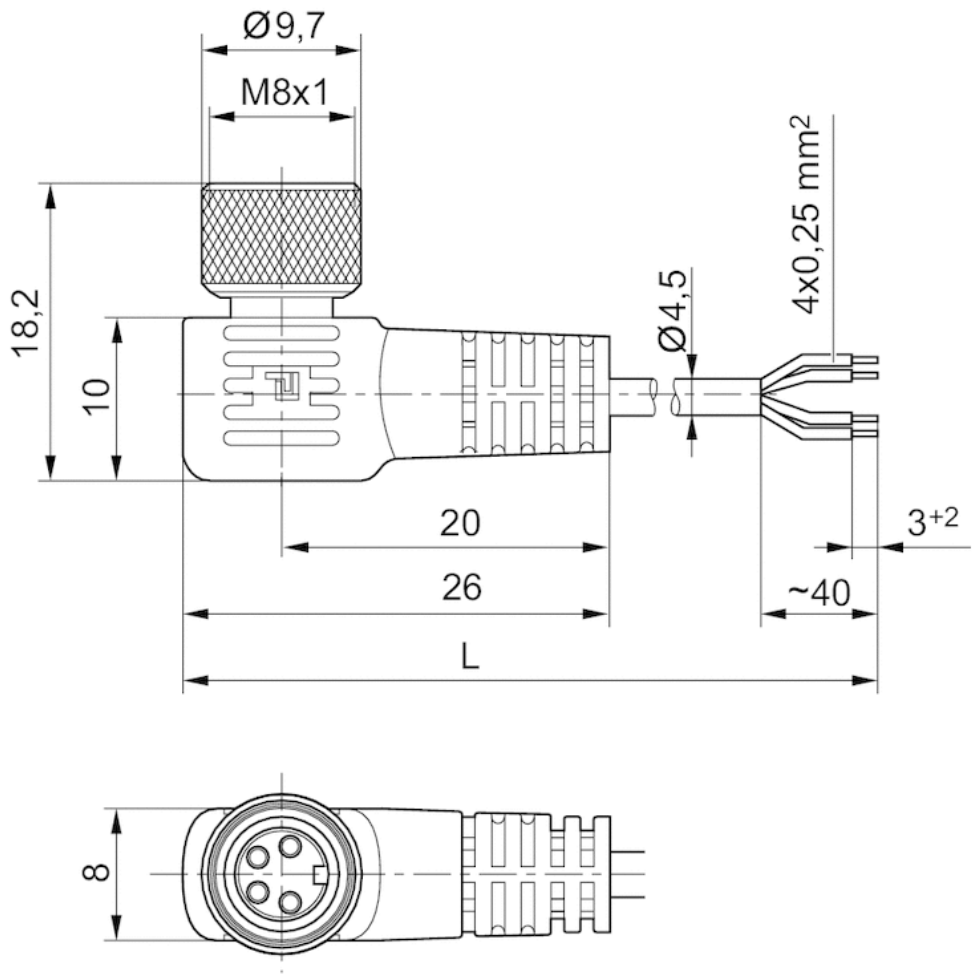
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

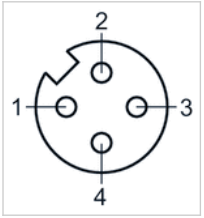
Dimensions



L = length

Pin assignments

Pin assignment, socket

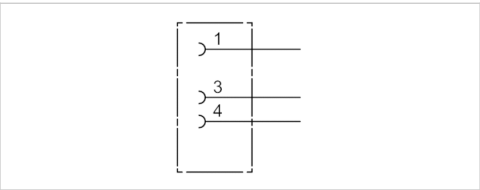


(1) BN=brown
(2) WH=white
(3) BU=blue
(4) BK=black

Round plug connector, Series CON-RD

- 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

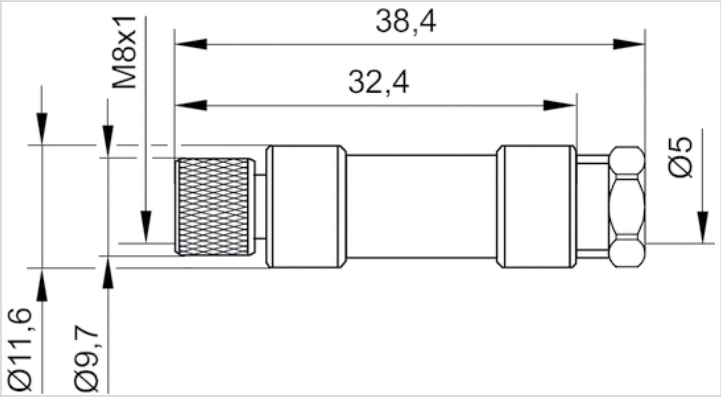
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyamide

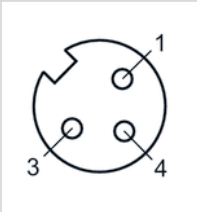
Dimensions

Dimensions



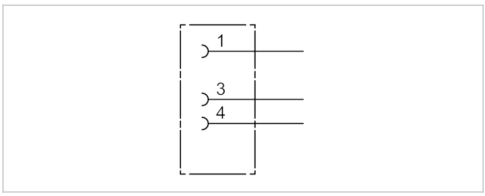
Pin assignments

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

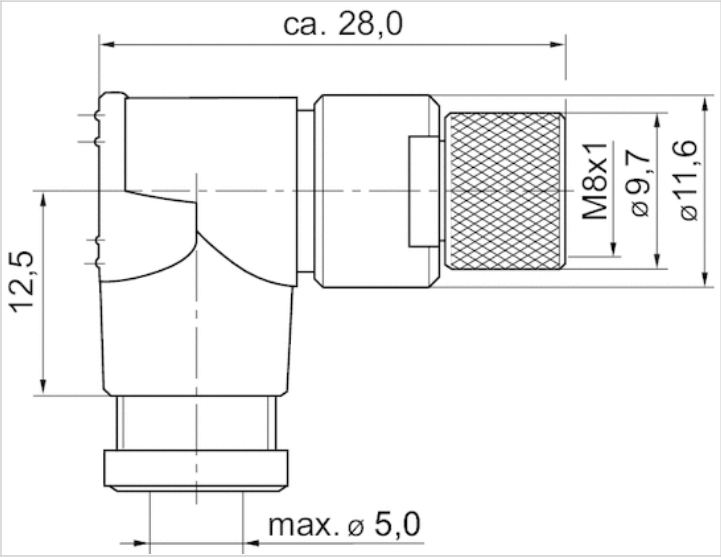
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyamide

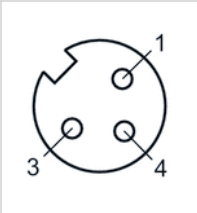
Dimensions

Dimensions



Pin assignments

Pin assignment, socket



Manifold strip

- for TC08

Nominal flow Qn	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

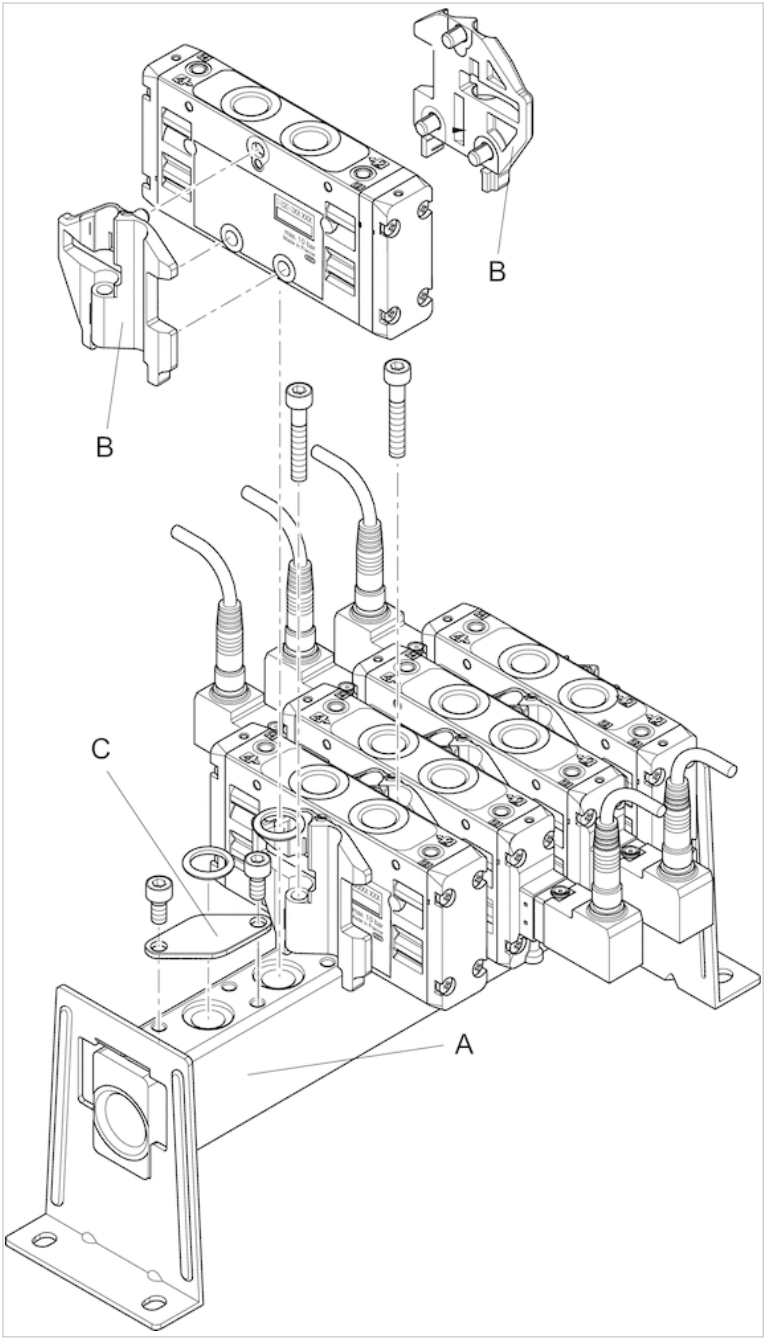
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only 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

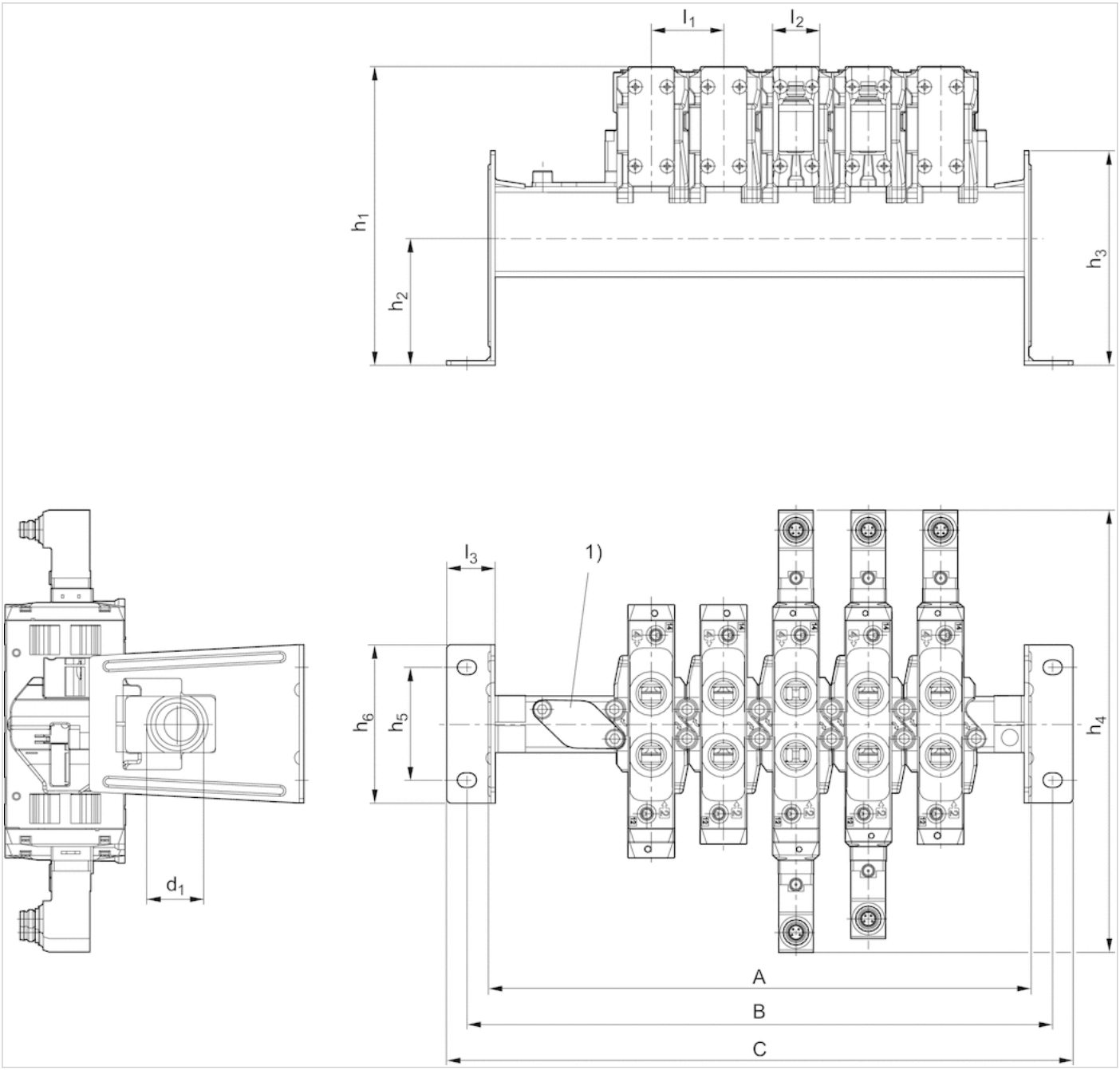
Dimensions

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

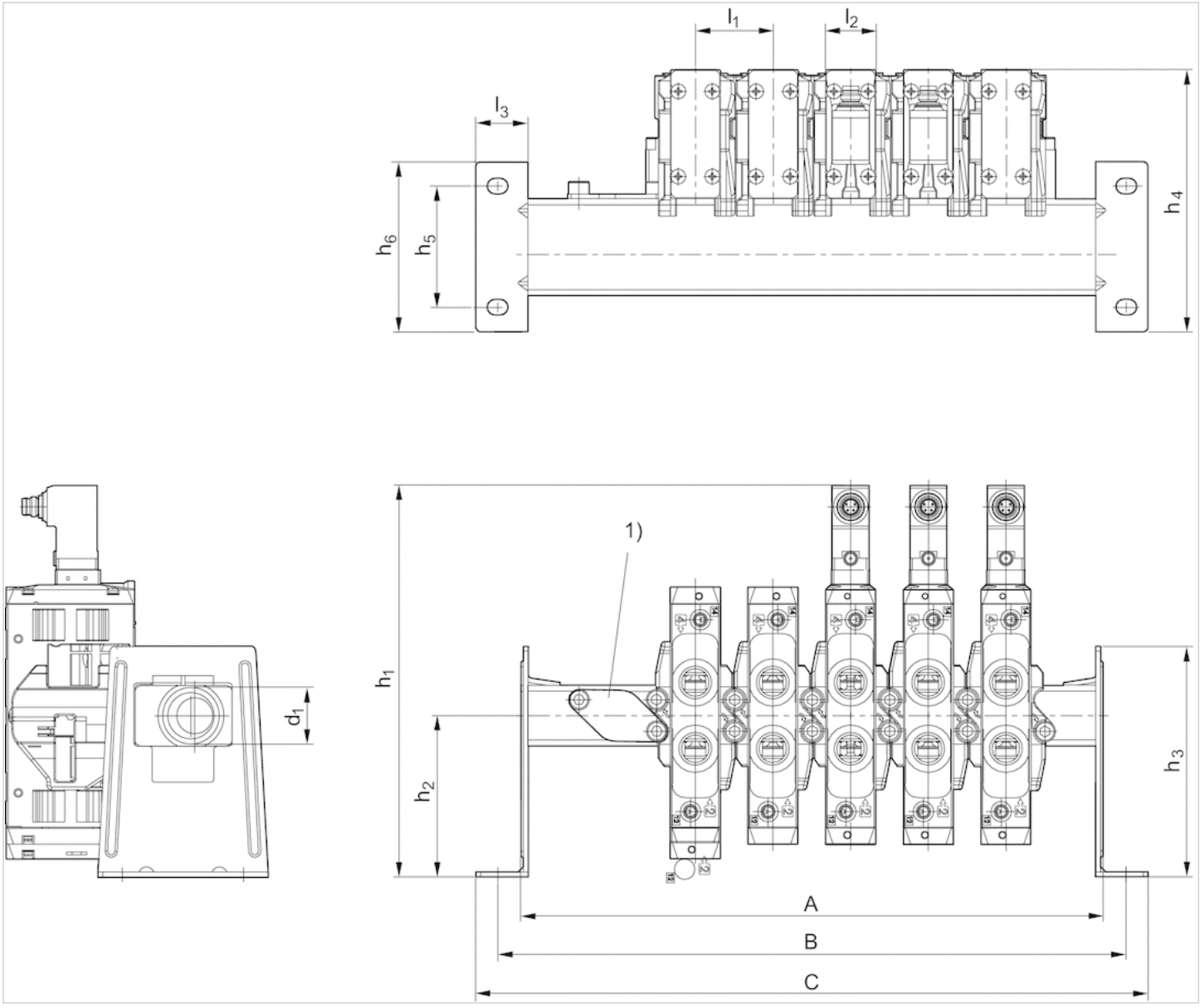
Dimensions

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

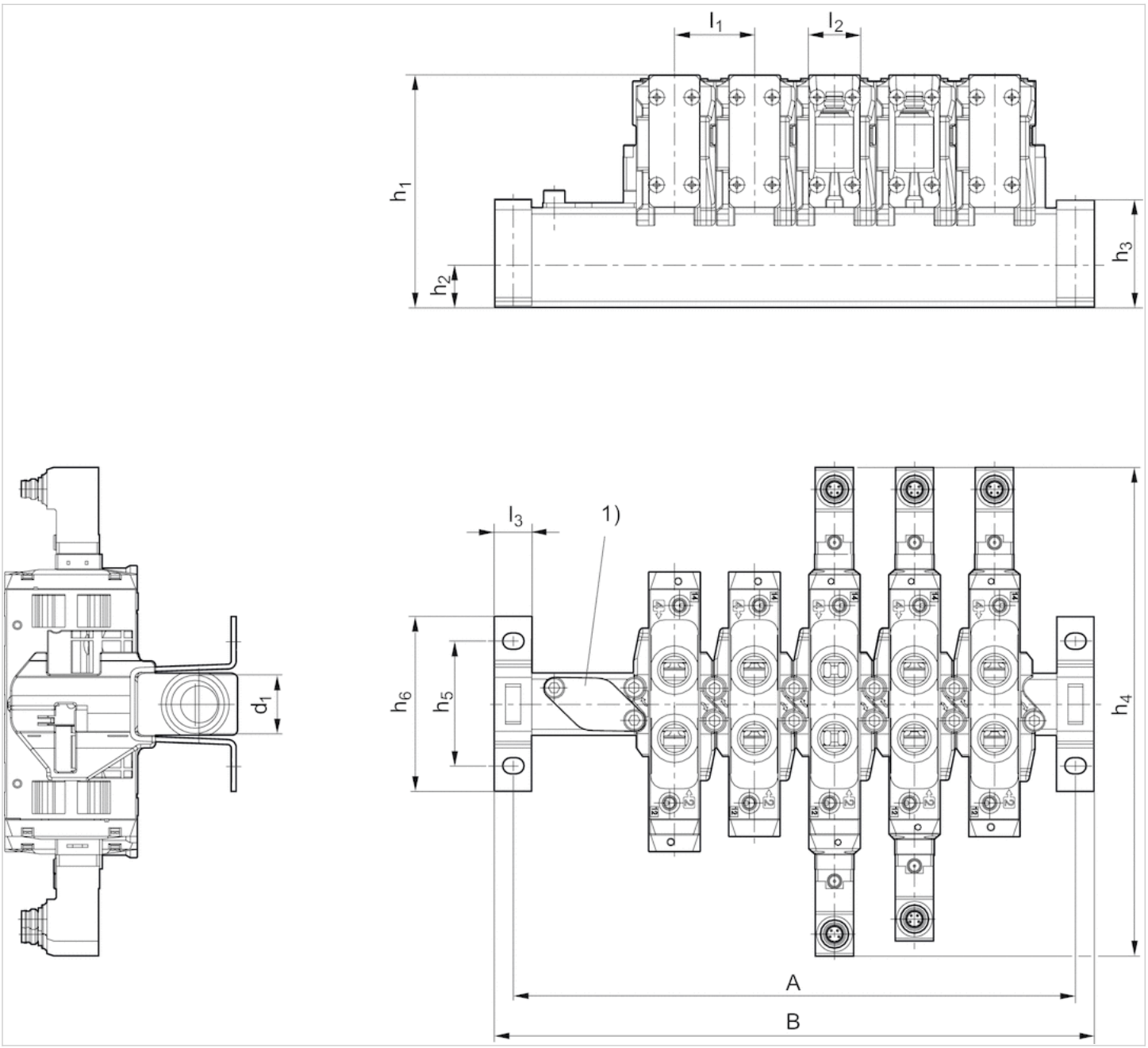
Part No.	n	A	B	C	d1	h1	h2	h3	h4	h5	h6	l1	l2	l3
R422000931	2	90,4	108,4	123,4	G 3/8	127,8	51,5	80	86,4	44	60	26	16,8	19,5
R422000932	3	116,4	134,4	149,4	G 3/8	127,8	51,5	80	86,4	44	60	26	16,8	19,5
R422000933	4	142,4	160,4	175,4	G 3/8	127,8	51,5	80	86,4	44	60	26	16,8	19,5
R422000934	5	168,4	186,4	201,4	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

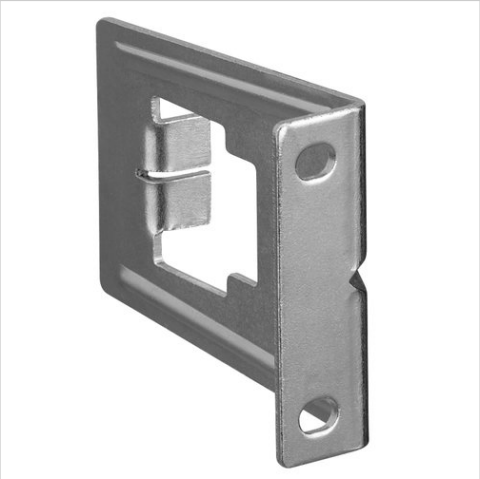
Part No.	n	A	B	d1	h1	h2	h3	h4	h5	h6	l1	l2	l3
R422000931	2	76,4	90,4	G 3/8	70,8	13,5	33,5	175,6	44	58	26	16,8	14
R422000932	3	102,4	116,4	G 3/8	70,8	13,5	33,5	175,6	44	58	26	16,8	14

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



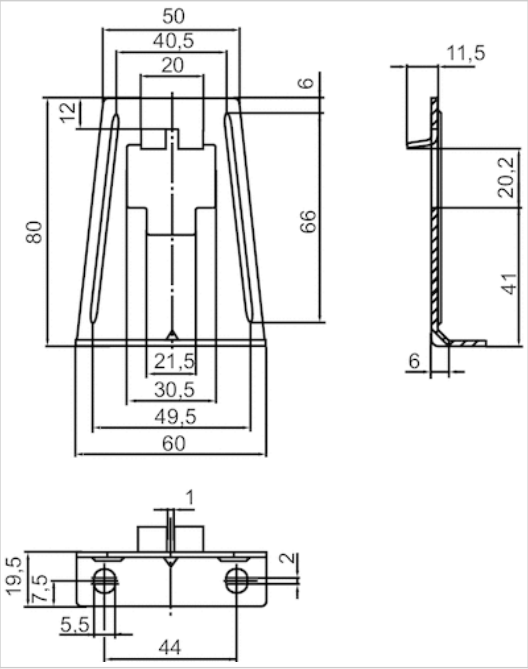
Weight 0.075 kg

Technical data

Part No.	Type	Delivery unit
1821332048	Mounting bracket	1 piece

2 mountings are required per manifold strip.

Dimensions



Mounting clip

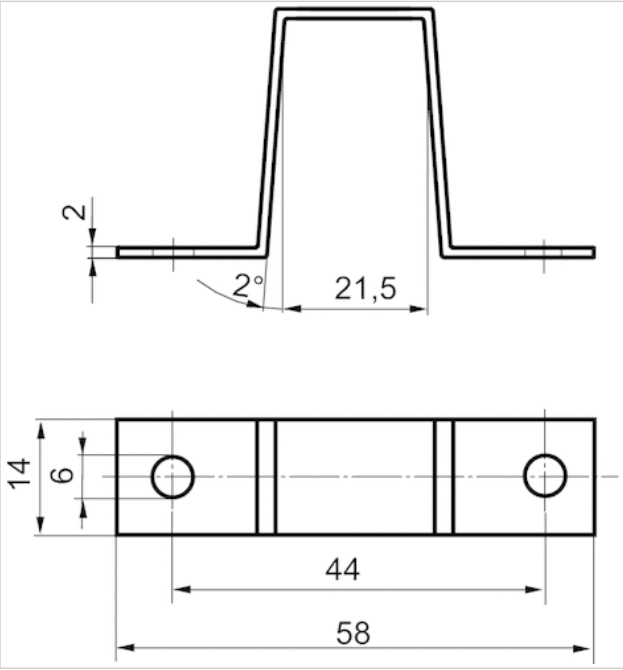
Weight	0.024 kg

Technical data

Part No.	Type	Delivery unit
1821332049	Mounting clip	2 piece

2 mountings are required per manifold strip.

Dimensions



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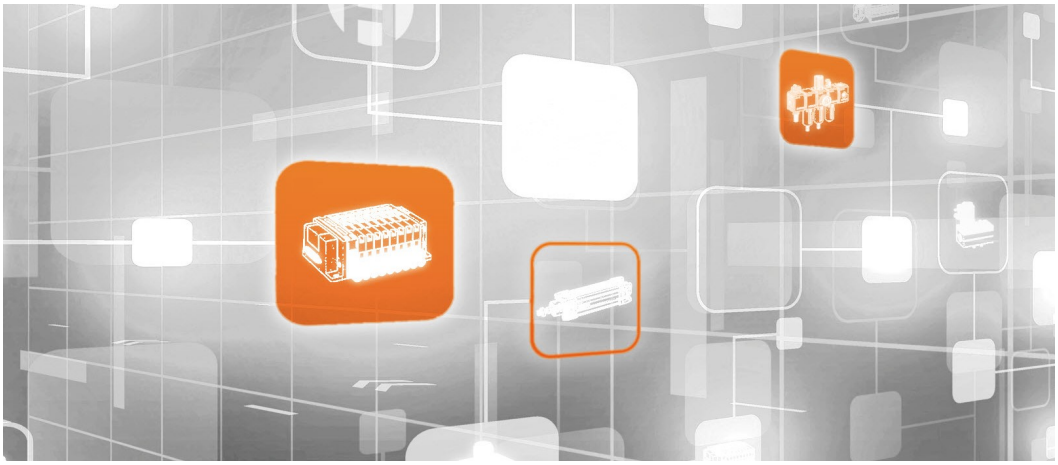

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