

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



Type	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	Class III
Electrically	
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 Q_n at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

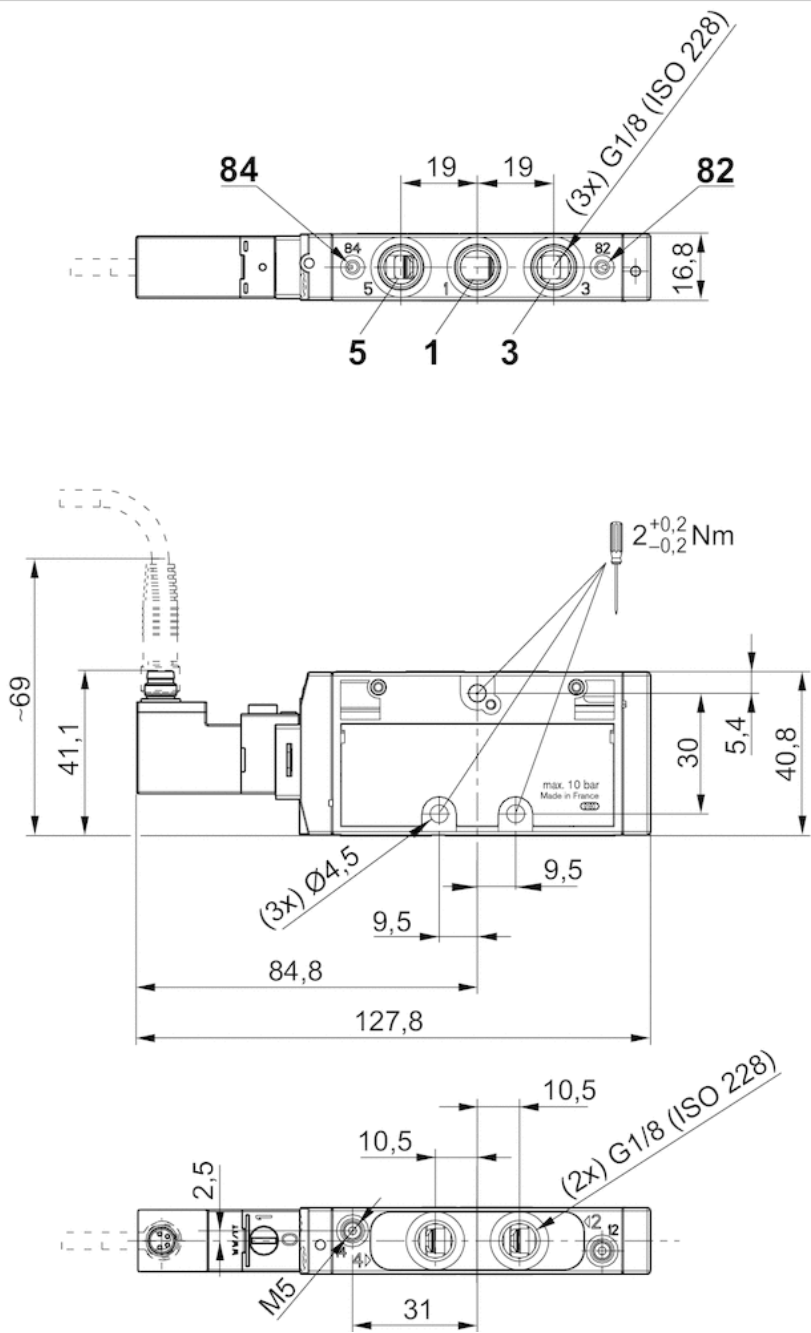
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only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

Technical information

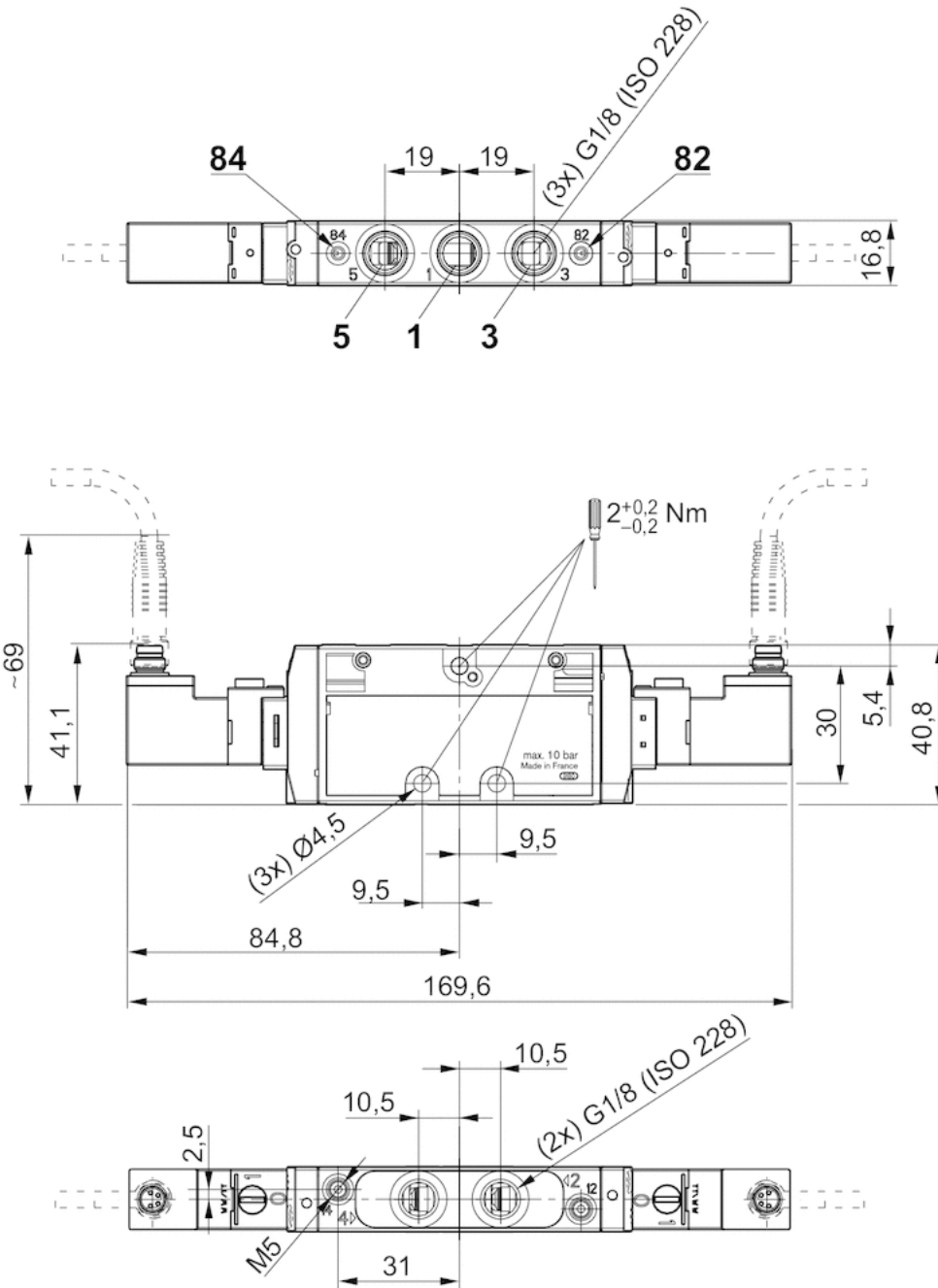
Material	
Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber Polyurethane
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, nickel-plated chrome-plated

Dimensions

Dimensions, single solenoid

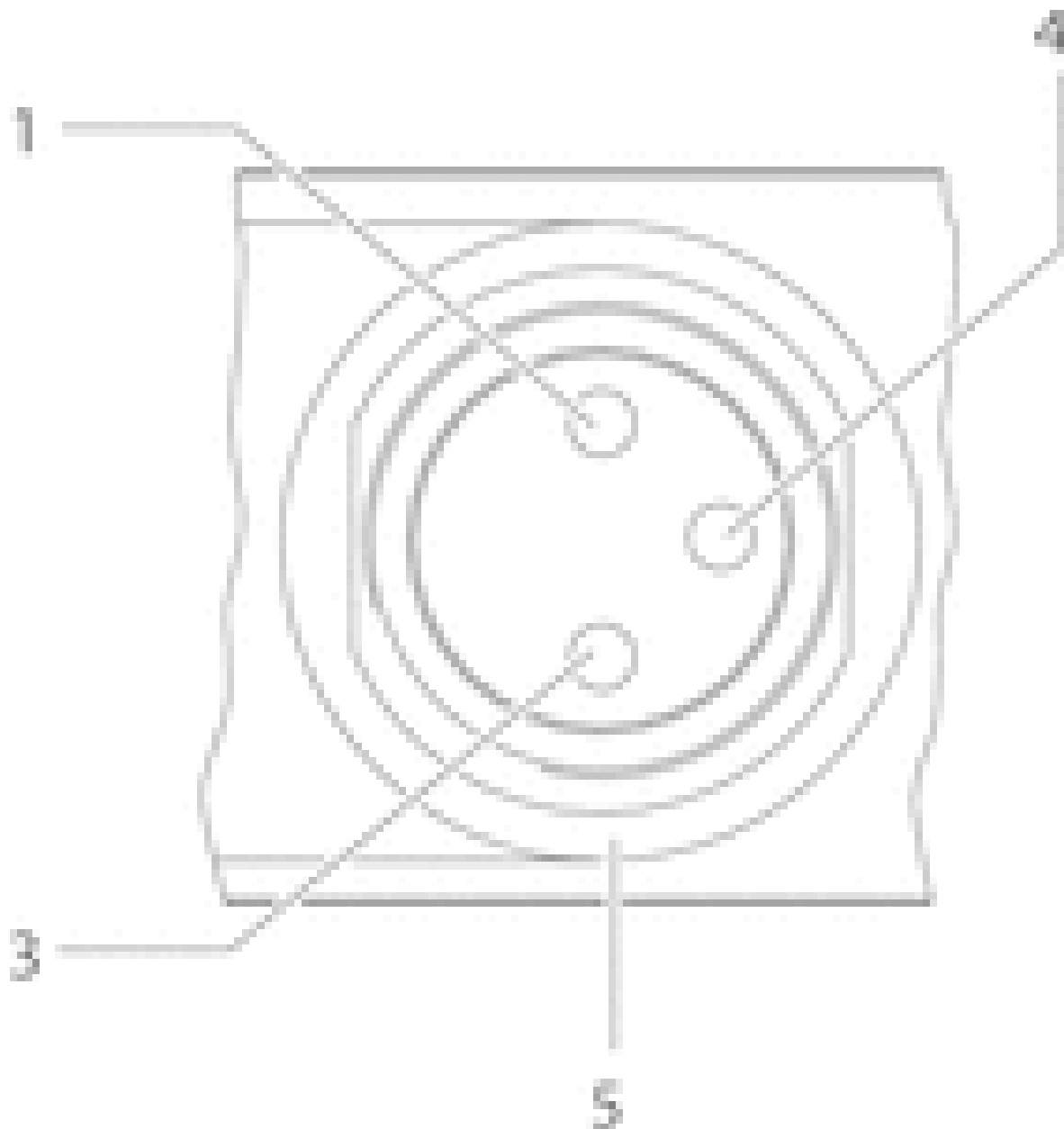


Dimensions, double solenoid



Pin assignments

PIN assignment and cable colors for valve plug connectors



PIN assignment:

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

Cable color

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

Note: Bi-polar protective circuit to prevent overvoltage