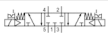
5/3-directional valve, Series TC15

- Operating voltage 24 V DC
- 5/3
- Qn = 1300 l/min
- Pilot valve width : 15 mm
- closed center exhausted center pressurized center
- Pipe connection
- Compressed air connection output : G 1/4
- Electrical connection : Plug, M8, 4-pin
- Manual override : with detent
- 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.	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	1300 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	12 ms
Typ. switch-off time	13 ms
Mounting on manifold strip	P-strip
Mounting screw tightening torque	2,5 Nm
Weight	0,279 kg

Technical data

Part No.		MO		Compressed air connection
				Input
0820059201			closed center	G 1/4
0820059251			closed center	G 1/4
0820059211			exhausted center	G 1/4
0820059261			exhausted center	G 1/4
0820059221			pressurized center	G 1/4
0820059271			pressurized center	G 1/4

Part No.	Compressed air connection	Compressed air connection
	Output	Exhaust
0820059201	G 1/4	G 1/4
0820059251	G 1/4	G 1/4
0820059211	G 1/4	G 1/4
0820059261	G 1/4	G 1/4
0820059221	G 1/4	G 1/4
0820059271	G 1/4	G 1/4

Part No.	Compressed air connection	Operational voltage	Voltage tolerance
	Pilot Input	DC	DC
0820059201	-	24 V	-10% / +10%
0820059251	M5	24 V	-10% / +10%
0820059211	-	24 V	-10% / +10%
0820059261	M5	24 V	-10% / +10%
0820059221	-	24 V	-10% / +10%
0820059271	M5	24 V	-10% / +10%

Part No.	Power consumption	Pilot	Flow conductance	Flow conductance	Nominal resistance
	DC		b	C-value	
0820059201	2,2 W	Internal	0,31	5,9 l/(s*bar)	280 Ω
0820059251	2,2 W	External	0,31	5,9 l/(s*bar)	280 Ω
0820059211	2,2 W	Internal	0,31	5,9 l/(s*bar)	280 Ω
0820059261	2,2 W	External	0,31	5,9 l/(s*bar)	280 Ω
0820059221	2,2 W	Internal	0,31	5,9 l/(s*bar)	280 Ω
0820059271	2,2 W	External	0,31	5,9 l/(s*bar)	280 Ω

Part No.	Working pressure min./max.	push-in fitting
0820059201	3 ... 10 bar	Brass Die cast zinc nickel-plated chrome-plated
0820059251	-0,9 ... 10 bar	Brass Die cast zinc nickel-plated chrome-plated
0820059211	3 ... 10 bar	Brass Die cast zinc nickel-plated chrome-plated
0820059261	-0,9 ... 10 bar	Brass Die cast zinc nickel-plated chrome-plated
0820059221	3 ... 10 bar	Brass Die cast zinc nickel-plated chrome-plated
0820059271	-0,9 ... 10 bar	-

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

Technical information

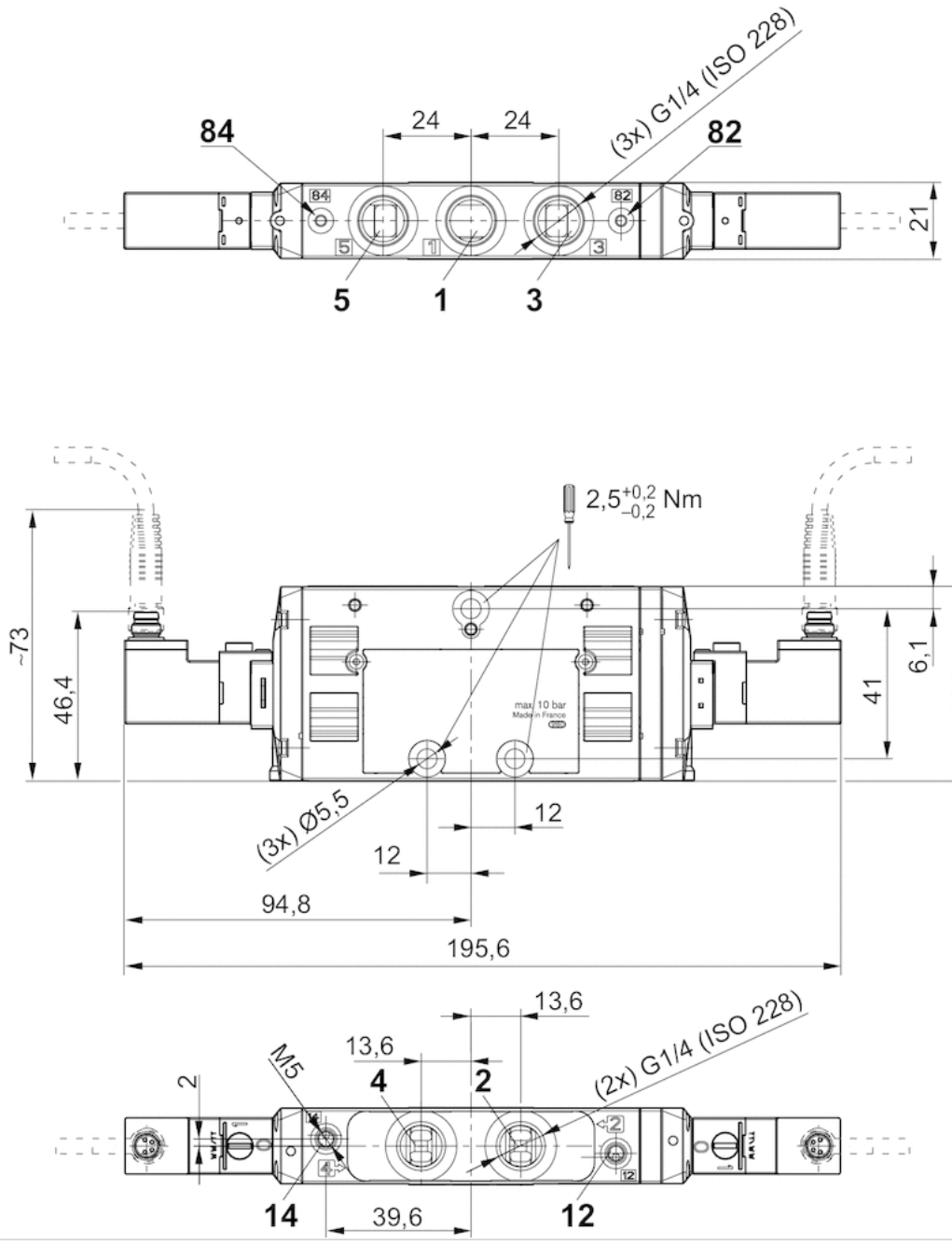
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only 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 Hydrogenated nitrile butadiene rubber
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, nickel-plated chrome-plated

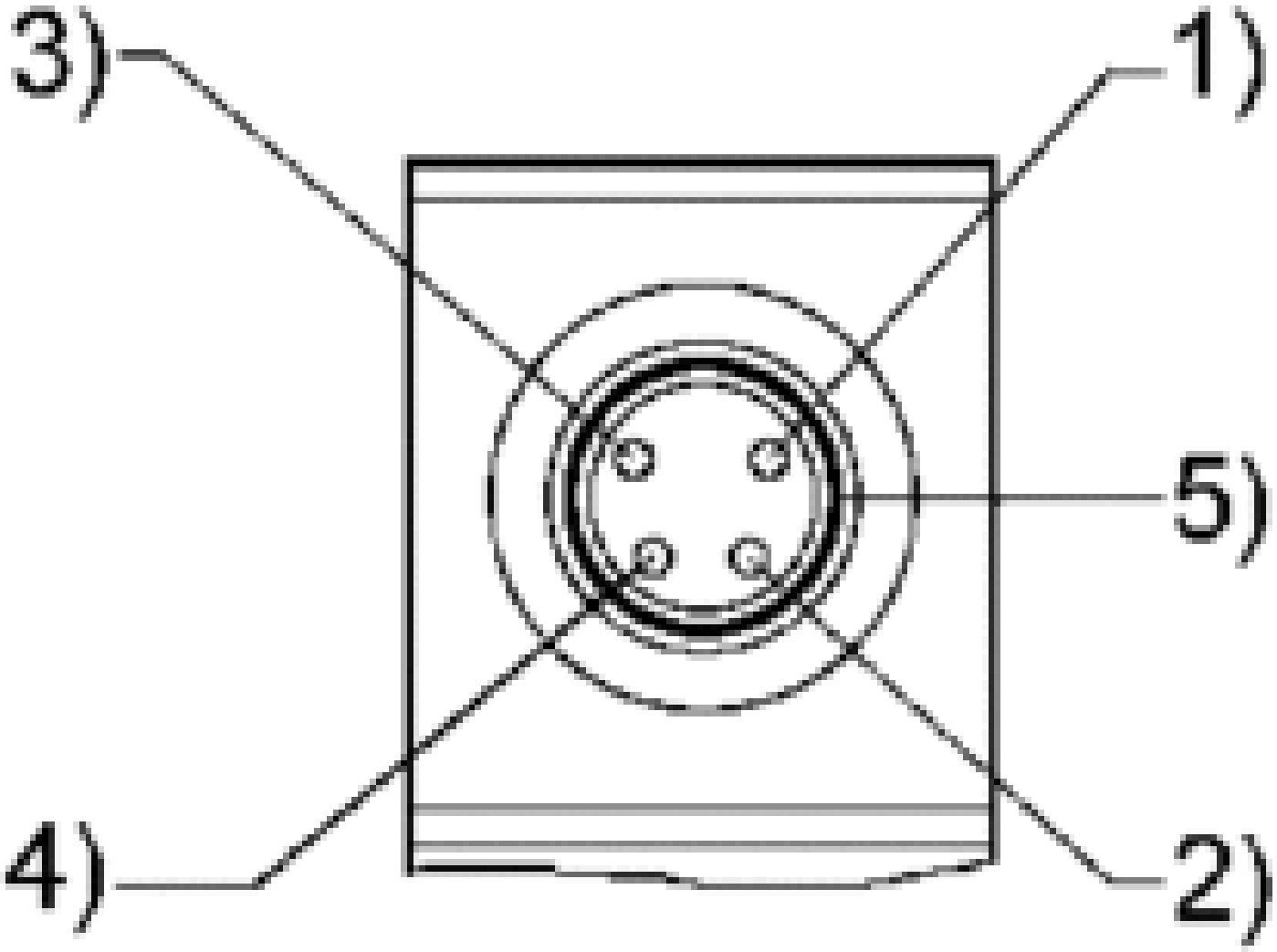
Dimensions

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

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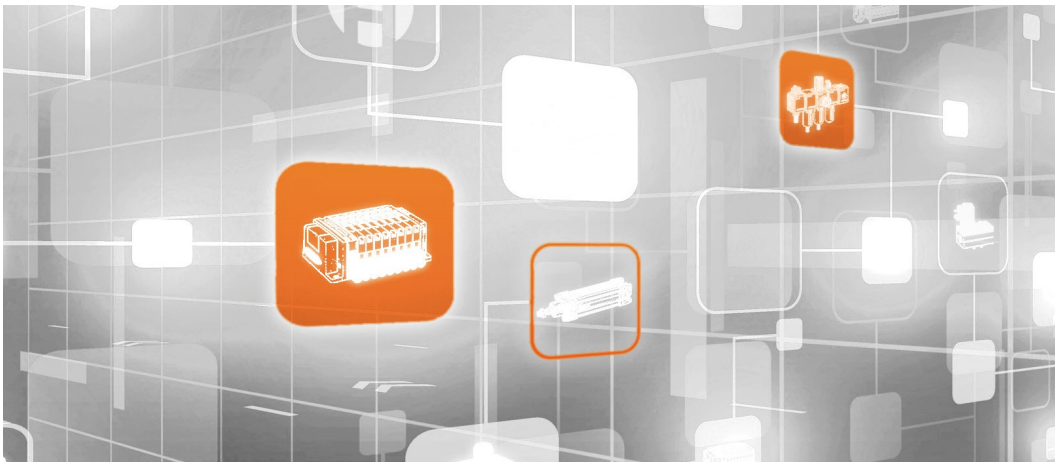

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