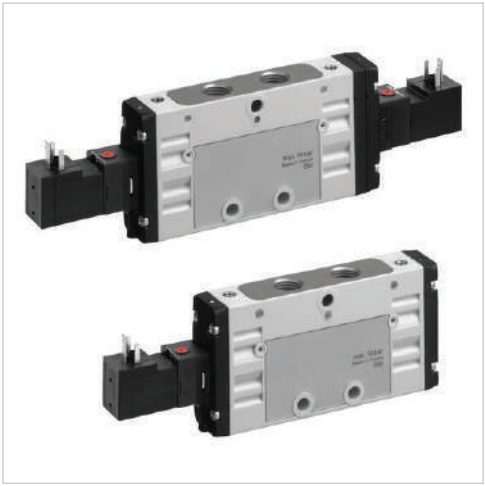
5/2-directional valve, Series TC15

- Operating voltage 24 V DC
- Qn = 1500 l/min
- Pilot valve width : 15 mm
- Pipe connection
- Compressed air connection output : G 1/4
- 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	1500 l/min
Connector standard	ISO 15217
Protection class with connection	IP65
Duty cycle	100 %
Mounting on manifold strip	P-strip
Mounting screw tightening torque	2,5 Nm
Weight	See table below

Technical data

Part No.		MO	Compressed air connection	Compressed air connection
			Input	Output
0820058101			G 1/4	G 1/4
0820058151			G 1/4	G 1/4
0820058126			G 1/4	G 1/4
R422103064			G 1/4	G 1/4
0820058176			G 1/4	G 1/4
R422103066			G 1/4	G 1/4
0820058601			G 1/4	G 1/4
R422103068			G 1/4	G 1/4
0820058651			G 1/4	G 1/4
R422103070			G 1/4	G 1/4

Part No.	Compressed air connection	Compressed air connection	Operationalvoltage
	Exhaust	Pilot Input	DC
0820058101	G 1/4	-	24 V
0820058151	G 1/4	M5	24 V
0820058126	G 1/4	-	24 V

Part No.	Compressed air connection	Compressed air connection	Operationalvoltage
	Exhaust	Pilot Input	DC
R422103064	G 1/4	-	-
0820058176	G 1/4	M5	24 V
R422103066	G 1/4	M5	-
0820058601	G 1/4	-	24 V
R422103068	G 1/4	-	-
0820058651	G 1/4	M5	24 V
R422103070	G 1/4	M5	-

Part No.	Voltage tolerance	Power consumption	Pilot	Flow conductance
	DC	DC		b
0820058101	-10% / +10%	2 W	internal	0,33
0820058151	-10% / +10%	2 W	external	0,33
0820058126	-10% / +10%	2 W	internal	0,33
R422103064	-	-	internal	0,33
0820058176	-10% / +10%	2 W	external	0,33
R422103066	-	-	external	0,33
0820058601	-10% / +10%	2 W	internal	0,33
R422103068	-	-	internal	0,33
0820058651	-10% / +10%	2 W	external	0,33
R422103070	-	-	external	0,33

Part No.	Flow conductance	Nominal resistance	Working pressure min./max.	Control pressure min./max.
	C-value			
0820058101	6,8 l/(s*bar)	280 Ω	2,5 ... 10 bar	2,5 ... 10 bar
0820058151	6,8 l/(s*bar)	280 Ω	-0,9 ... 10 bar	2,5 ... 10 bar
0820058126	6,8 l/(s*bar)	280 Ω	3 ... 10 bar	3 ... 10 bar
R422103064	6,8 l/(s*bar)	-	3 ... 10 bar	3 ... 10 bar
0820058176	6,8 l/(s*bar)	280 Ω	-0,9 ... 10 bar	3 ... 10 bar
R422103066	6,8 l/(s*bar)	-	-0,9 ... 10 bar	3 ... 10 bar
0820058601	6,8 l/(s*bar)	280 Ω	2 ... 10 bar	2 ... 10 bar
R422103068	6,8 l/(s*bar)	-	2 ... 10 bar	2 ... 10 bar
0820058651	6,8 l/(s*bar)	280 Ω	-0,9 ... 10 bar	2 ... 10 bar
R422103070	6,8 l/(s*bar)	-	-0,9 ... 10 bar	2 ... 10 bar

Part No.	Typ. switch-on time	Typ. switch-off time	basic valve with electrical connector	Weight
0820058101	21 ms	22 ms	-	0,235 kg
0820058151	21 ms	22 ms	-	0,235 kg
0820058126	12 ms	35 ms	-	0,235 kg
R422103064	12 ms	35 ms	Basic valve without coil	0,235 kg
0820058176	12 ms	35 ms	-	0,235 kg
R422103066	12 ms	35 ms	Basic valve without coil	0,235 kg
0820058601	10 ms	10 ms	-	0,263 kg
R422103068	10 ms	10 ms	Basic valve without coil	0,263 kg
0820058651	10 ms	10 ms	-	0,263 kg
R422103070	10 ms	10 ms	Basic valve without coil	0,263 kg

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

Technical information

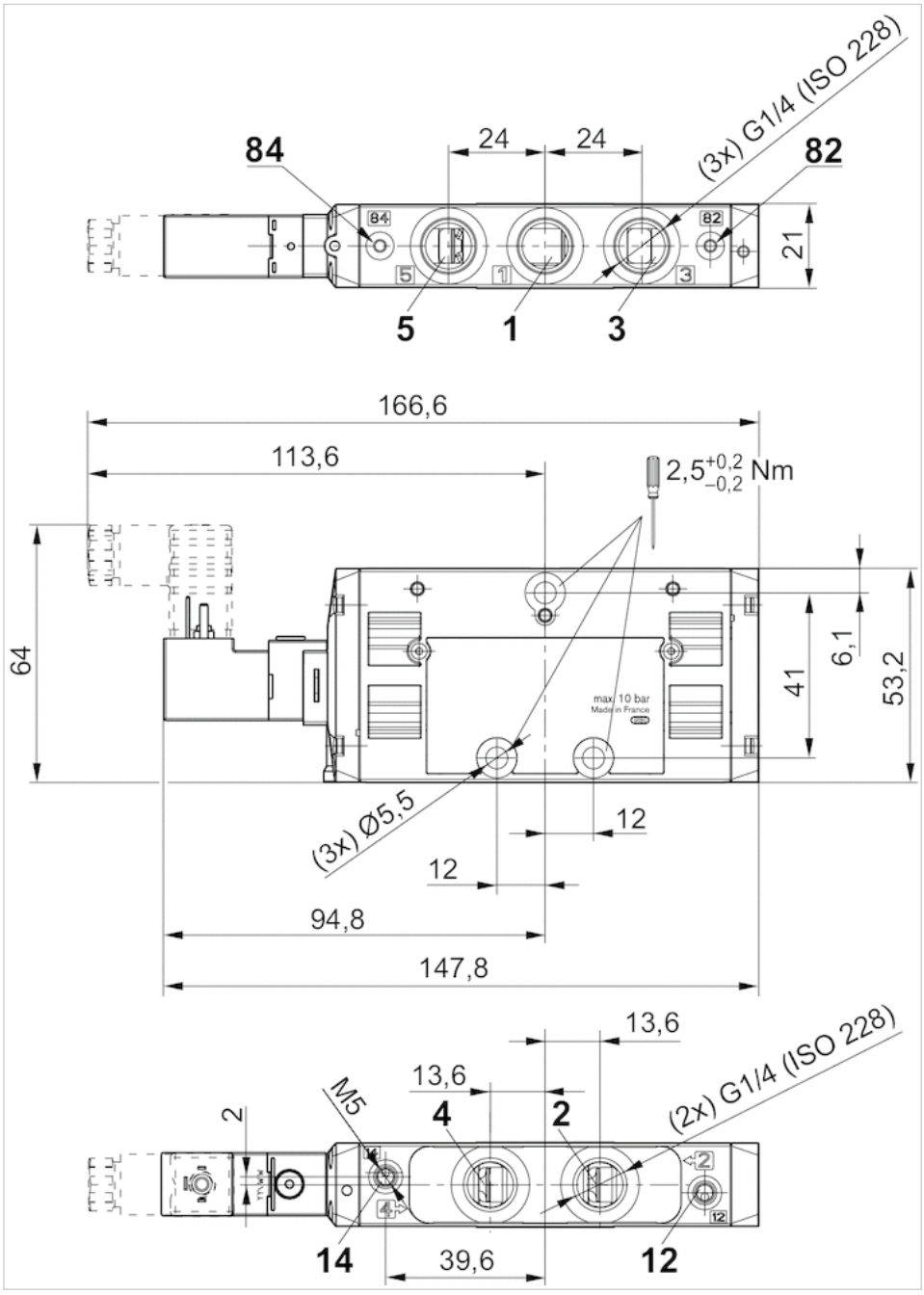
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only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

Technical information

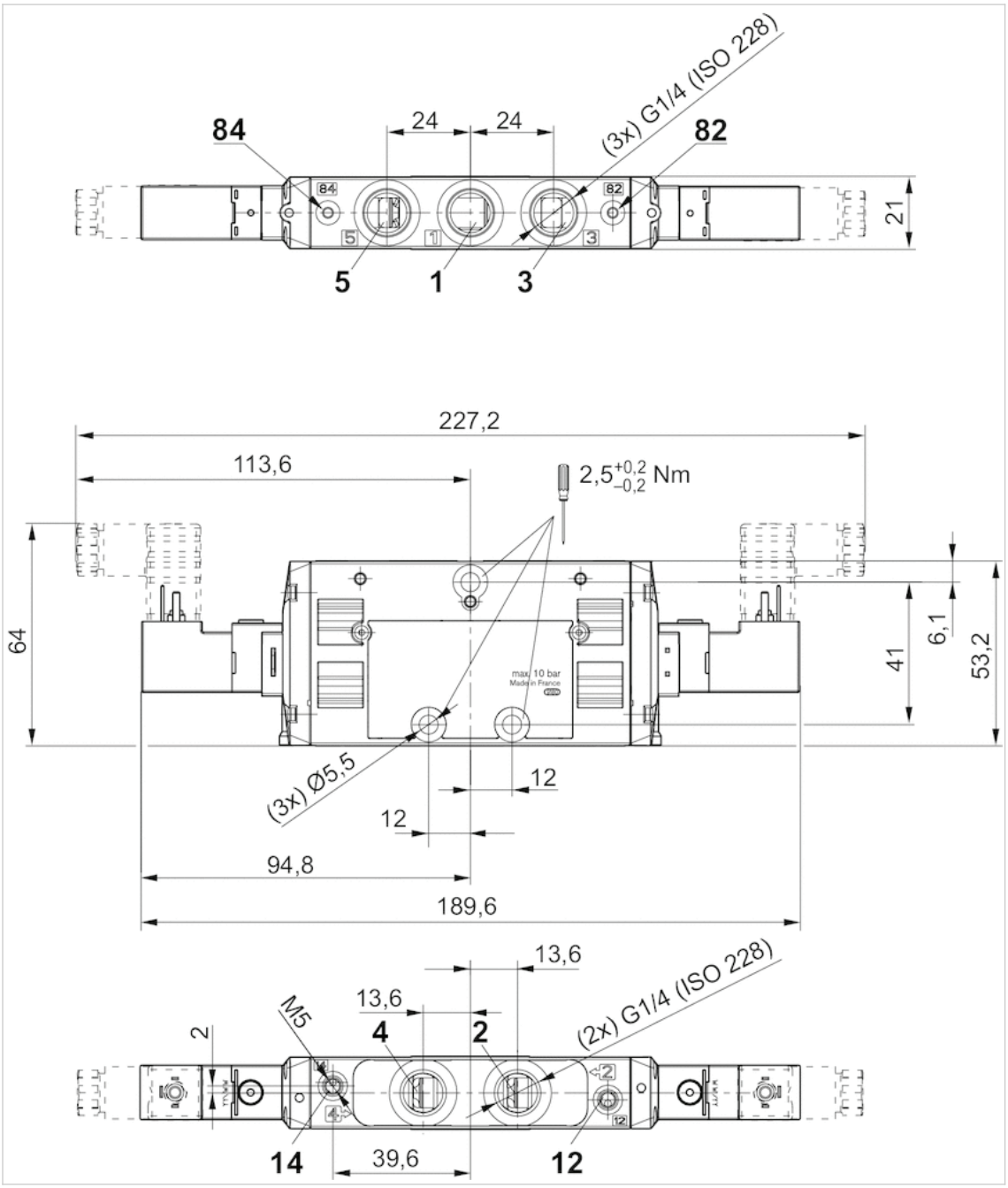
Material	
Housing	Polyamide, fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber Hydrogenated nitrile butadiene rubber
Front plate	Polyamide, fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, nickel-plated chrome-plated

Dimensions

dimensions single solenoid



dimensions double solenoid



5/3-directional valve, Series TC15

- Operating voltage 24 V DC
- Qn = 1300 l/min
- Pilot valve width : 15 mm
- Pipe connection
- Compressed air connection output : G 1/4
- 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	1300 l/min
Connector standard	ISO 15217
Protection class with connection	IP65
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	0,278 kg

Technical data

Part No.		MO	Compressed air connection	Compressed air connection
			Input	Output
0820059101			G 1/4	G 1/4
R422103072			G 1/4	G 1/4
0820059151			G 1/4	G 1/4
R422103074			G 1/4	G 1/4
0820059111			G 1/4	G 1/4
R422103076			G 1/4	G 1/4
0820059161			G 1/4	G 1/4
0820059171			G 1/4	G 1/4
0820059121			G 1/4	G 1/4

Part No.	Compressed air connection	Compressed air connection	Operationalvoltage
	Exhaust	Pilot Input	DC
0820059101	G 1/4	-	24 V
R422103072	G 1/4	-	-
0820059151	G 1/4	M5	24 V
R422103074	G 1/4	M5	-
0820059111	G 1/4	-	24 V
R422103076	G 1/4	-	-
0820059161	G 1/4	M5	24 V
0820059171	G 1/4	M5	24 V
0820059121	G 1/4	-	24 V

Part No.	Voltage tolerance	Power consumption	Pilot	Flow conductance
	DC	DC		b
0820059101	-10% / +10%	2 W	internal	0,31
R422103072	-	-	internal	0,31
0820059151	-10% / +10%	2 W	external	0,31
R422103074	-	-	external	0,31
0820059111	-10% / +10%	2 W	internal	0,31
R422103076	-	-	internal	0,31
0820059161	-10% / +10%	2 W	external	0,31
0820059171	-10% / +10%	2 W	external	0,31
0820059121	-10% / +10%	2 W	internal	0,31

Part No.	Flow conductance	Nominal resistance	Working pressure min./max.
	C-value		
0820059101	5,9 l/(s*bar)	280 Ω	3 ... 10 bar
R422103072	5,9 l/(s*bar)	-	3 ... 10 bar
0820059151	5,9 l/(s*bar)	280 Ω	-0,9 ... 10 bar
R422103074	5,9 l/(s*bar)	-	-0,9 ... 10 bar
0820059111	5,9 l/(s*bar)	280 Ω	3 ... 10 bar
R422103076	5,9 l/(s*bar)	-	3 ... 10 bar
0820059161	5,9 l/(s*bar)	280 Ω	-0,9 ... 10 bar
0820059171	5,9 l/(s*bar)	280 Ω	-0,9 ... 10 bar
0820059121	5,9 l/(s*bar)	280 Ω	3 ... 10 bar

Part No.	basic valve with electrical connector
0820059101	-
R422103072	Basic valve without coil
0820059151	-
R422103074	Basic valve without coil
0820059111	-
R422103076	Basic valve without coil
0820059161	-
0820059171	-
0820059121	-

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

Technical information

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Dimensions

Dimensions