

5/2-directional valve, Series TC15

- Operating voltage 24 V AC, 110 V AC, 230 V AC
- 5/2
- 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



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	1500 l/min
Connector standard	ISO 15217
Protection class with connection	IP65
Duty cycle	100 %
Generic emission standard in accordance with	EN 50081:1992
Mounting on manifold strip	P-strip
Mounting screw tightening torque	2,5 Nm
Weight	See table below
Comment	An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Technical data

Part No.		MO	Compressed air connection	
			Input	Output
R422000117			G 1/4	G 1/4
0820058102			G 1/4	G 1/4
0820058103			G 1/4	G 1/4
0820058152			G 1/4	G 1/4
0820058153			G 1/4	G 1/4
R422000119			G 1/4	G 1/4
0820058127			G 1/4	G 1/4
0820058128			G 1/4	G 1/4
0820058177			G 1/4	G 1/4
0820058178			G 1/4	G 1/4
R422000121			G 1/4	G 1/4
0820058602			G 1/4	G 1/4
0820058603			G 1/4	G 1/4
0820058652			G 1/4	G 1/4
0820058653			G 1/4	G 1/4

Part No.	Compressed air connection	
	Exhaust	Pilot Input
R422000117	G 1/4	-
0820058102	G 1/4	-
0820058103	G 1/4	-
0820058152	G 1/4	M5
0820058153	G 1/4	M5
R422000119	G 1/4	-
0820058127	G 1/4	-
0820058128	G 1/4	-
0820058177	G 1/4	M5
0820058178	G 1/4	M5
R422000121	G 1/4	-
0820058602	G 1/4	-
0820058603	G 1/4	-
0820058652	G 1/4	M5
0820058653	G 1/4	M5

Part No.	Operational voltage		Voltage tolerance
	AC 50 Hz	AC 60 Hz	AC 50 Hz
R422000117	24 V	24 V	-10% / +10%
0820058102	110 V	110 V	-10% / +10%
0820058103	230 V	230 V	-10% / +10%
0820058152	110 V	110 V	-10% / +10%
0820058153	230 V	230 V	-10% / +10%
R422000119	24 V	24 V	-10% / +10%
0820058127	110 V	110 V	-10% / +10%
0820058128	230 V	230 V	-10% / +10%
0820058177	110 V	110 V	-10% / +10%

Part No.	Operational voltage	Operational voltage	Voltage tolerance
	AC 50 Hz	AC 60 Hz	AC 50 Hz
0820058178	230 V	230 V	-10% / +10%
R422000121	24 V	24 V	-10% / +10%
0820058602	110 V	110 V	-10% / +10%
0820058603	230 V	230 V	-10% / +10%
0820058652	110 V	110 V	-10% / +10%
0820058653	230 V	230 V	-10% / +10%

Part No.	Voltage tolerance	Holding power	Holding power	Switch-on power
	AC 60 Hz	AC 50 Hz	AC 60 Hz	AC 50 Hz
R422000117	-10% / +10%	1,6 VA	1,4 VA	2,2 VA
0820058102	-10% / +10%	1,6 VA	1,4 VA	2,2 VA
0820058103	-10% / +10%	1,6 VA	1,4 VA	2,2 VA
0820058152	-10% / +10%	1,6 VA	1,4 VA	2,2 VA
0820058153	-10% / +10%	1,6 VA	1,4 VA	2,2 VA
R422000119	-10% / +10%	1,6 VA	1,4 VA	2,2 VA
0820058127	-10% / +10%	1,6 VA	1,4 VA	2,2 VA
0820058128	-10% / +10%	1,6 VA	1,4 VA	2,2 VA
0820058177	-10% / +10%	1,6 VA	1,4 VA	2,2 VA
0820058178	-10% / +10%	1,6 VA	1,4 VA	2,2 VA
R422000121	-10% / +10%	1,6 VA	1,4 VA	2,2 VA
0820058602	-10% / +10%	1,6 VA	1,4 VA	2,2 VA
0820058603	-10% / +10%	1,6 VA	1,4 VA	2,2 VA
0820058652	-10% / +10%	1,6 VA	1,4 VA	2,2 VA
0820058653	-10% / +10%	1,6 VA	1,4 VA	2,2 VA

Part No.	Switch-on power	Pilot	Flow conductance	Flow conductance	Nominal resistance
	AC 60 Hz		b	C-value	
R422000117	2 VA	Internal	0,33	6,8 l/(s*bar)	185 Ω
0820058102	2 VA	Internal	0,33	6,8 l/(s*bar)	3700 Ω
0820058103	2 VA	Internal	0,33	6,8 l/(s*bar)	14700 Ω
0820058152	2 VA	External	0,33	6,8 l/(s*bar)	3700 Ω
0820058153	2 VA	External	0,33	6,8 l/(s*bar)	14700 Ω
R422000119	2 VA	Internal	0,33	6,8 l/(s*bar)	185 Ω
0820058127	2 VA	Internal	0,33	6,8 l/(s*bar)	3700 Ω
0820058128	2 VA	Internal	0,33	6,8 l/(s*bar)	14700 Ω
0820058177	2 VA	External	0,33	6,8 l/(s*bar)	3700 Ω
0820058178	2 VA	External	0,33	6,8 l/(s*bar)	14700 Ω
R422000121	2 VA	Internal	0,33	6,8 l/(s*bar)	185 Ω
0820058602	2 VA	Internal	0,33	6,8 l/(s*bar)	3700 Ω
0820058603	2 VA	Internal	0,33	6,8 l/(s*bar)	14700 Ω
0820058652	2 VA	External	0,33	6,8 l/(s*bar)	3700 Ω
0820058653	2 VA	External	0,33	6,8 l/(s*bar)	14700 Ω

Part No.	Working pressure min./max.	Control pressure min./max.	Typ. switch-on time	Typ. switch-off time
R422000117	2,5 ... 10 bar	2,5 ... 10 bar	21 ms	22 ms
0820058102	2,5 ... 10 bar	2,5 ... 10 bar	21 ms	22 ms
0820058103	2,5 ... 10 bar	2,5 ... 10 bar	21 ms	22 ms

Part No.	Working pressure min./max.	Control pressure min./max.	Typ. switch-on time	Typ. switch-off time
0820058152	-0,9 ... 10 bar	2,5 ... 10 bar	21 ms	22 ms
0820058153	-0,9 ... 10 bar	2,5 ... 10 bar	21 ms	22 ms
R422000119	3 ... 10 bar	3 ... 10 bar	12 ms	35 ms
0820058127	3 ... 10 bar	3 ... 10 bar	12 ms	35 ms
0820058128	3 ... 10 bar	3 ... 10 bar	12 ms	35 ms
0820058177	-0,9 ... 10 bar	3 ... 10 bar	12 ms	35 ms
0820058178	-0,9 ... 10 bar	3 ... 10 bar	12 ms	35 ms
R422000121	2 ... 10 bar	2 ... 10 bar	10 ms	10 ms
0820058602	2 ... 10 bar	2 ... 10 bar	10 ms	10 ms
0820058603	2 ... 10 bar	2 ... 10 bar	10 ms	10 ms
0820058652	-0,9 ... 10 bar	2 ... 10 bar	10 ms	10 ms
0820058653	-0,9 ... 10 bar	2 ... 10 bar	10 ms	10 ms

Part No.	Weight
R422000117	0,235 kg
0820058102	0,235 kg
0820058103	0,235 kg
0820058152	0,235 kg
0820058153	0,235 kg
R422000119	0,235 kg
0820058127	0,235 kg
0820058128	0,235 kg
0820058177	0,235 kg
0820058178	0,235 kg
R422000121	0,263 kg
0820058602	0,263 kg
0820058603	0,263 kg
0820058652	0,263 kg
0820058653	0,263 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 Hydrogenated nitrile butadiene rubber
Front plate	Polyamide fiber-glass reinforced

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