

Directional valves → Electrically operated

**5/2-way valve, Series TC15**

► Qn = 1500 l/min ► pipe connection ► compressed air connection output: G 1/4 ► Electr. connection: Plug, M8, 3-pin ► manual override: with detent ► single solenoid, double solenoid



00120262

Version	Spool valve, zero overlap
Sealing principle	soft sealing
Mounting on manifold strip	P-strip
Working pressure min./max.	See table below
Control pressure min./max.	See table below
Ambient temperature min./max.	-10 °C / +50 °C
Medium temperature min./max.	-10 °C / +50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Connector standard	EN 61076-2-101
Protection class according to EN 60529: with electrical connector/plug	IP 65
Status display LED	Yellow
Duty cycle	100 %
mounting screw tightening torque	2.5 Nm
<b>Materials:</b>	
Housing	Polyamide, fiber-glass reinforced
Seals	Acrylonitrile Butadiene Rubber; Hydrogenated nitrile butadiene rubber
Front plate	Polyamide, fiber-glass reinforced

Technical Remarks	
■	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 air pressure must remain constant during the life cycle.
■	Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.

Operating voltage	Voltage tolerance	Power consumption	
		DC	W
DC	DC		
24 V	-10% / +10%		2.2



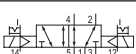

	MO	Compressed air connection				Operating voltage	Flow conductance		Flow rate value	Working pressure min./max.	Part No.	
		Input	Output	Exhaust	Pilot connection		DC	b				C
		G 1/4	G 1/4	G 1/4	-	24 V	0.33	6.8	1500	2.5 / 10	R422100986	
		G 1/4	G 1/4	G 1/4	M5	24 V	0.33	6.8	1500	-0.9 / 10	R422100987	
		G 1/4	G 1/4	G 1/4	-	24 V	0.33	6.8	1500	3 / 10	R422100988	
		G 1/4	G 1/4	G 1/4	M5	24 V	0.33	6.8	1500	-0.9 / 10	R422100989	

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for detailed information Pneumatics catalog, online PDF, as of 2010-03-09, © Bosch Rexroth AG, subject to change

## Directional valves → Electrically operated

**5/2-way valve, Series TC15**

► Qn = 1500 l/min ► pipe connection ► compressed air connection output: G 1/4 ► Electr. connection: Plug, M8, 3-pin ► manual override: with detent ► single solenoid, double solenoid

	MO	Compressed air connection				Operating voltage	Flow conductance		Flow rate value	Working pressure min./max.	Part No.	
		Input	Output	Exhaust	Pilot connection		DC	b				C
								[l/(s*bar)]				[l/min]
		G 1/4	G 1/4	G 1/4	-	24 V	0.33	6.8	1500	2 / 10	R422100990	
		G 1/4	G 1/4	G 1/4	M5	24 V	0.33	6.8	1500	-0.9 / 10	R422100991	
Part No.	Control pressure min./max.	Switch-on time		Switch-off time		Weight		Note				
	[bar]	[ms]		[ms]		[kg]						
R422100986	2.5 / 10	21		22		0.235		1)				
R422100987	2.5 / 10	21		22		0.235		2)				
R422100988	3 / 10	12		35		0.235		1)				
R422100989	3 / 10	12		35		0.235		2)				
R422100990	2 / 10	10		10		0.265		1)				
R422100991	2 / 10	10		10		0.265		2)				

MO = Manual override

1) Pilot: internal

2) Pilot: external

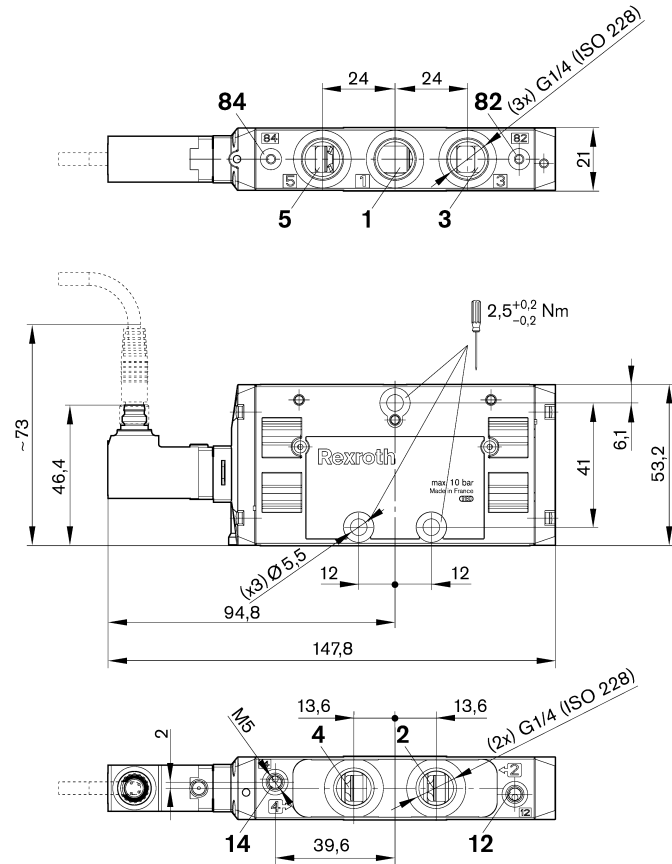
Nominal flow Qn at 6 bar and  $\Delta p = 1$  bar

## Directional valves → Electrically operated

**5/2-way valve, Series TC15**

► Qn = 1500 l/min ► pipe connection ► compressed air connection output: G 1/4 ► Electr. connection: Plug, M8, 3-pin ► manual override: with detent ► single solenoid, double solenoid

## Dimensions, single solenoid



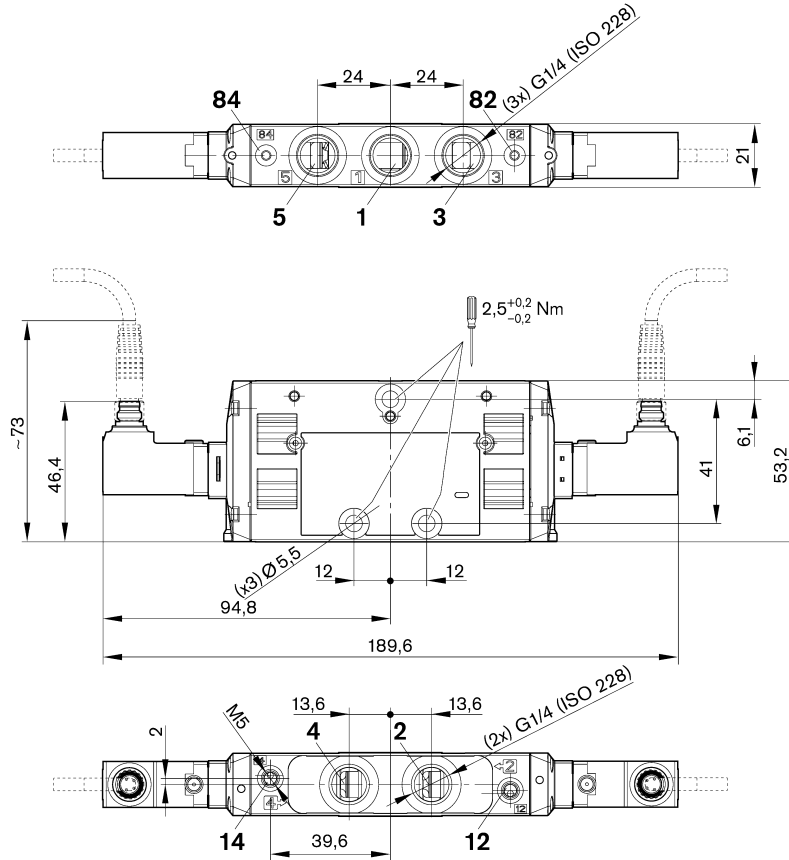
00111971\_a

## Directional valves → Electrically operated

**5/2-way valve, Series TC15**

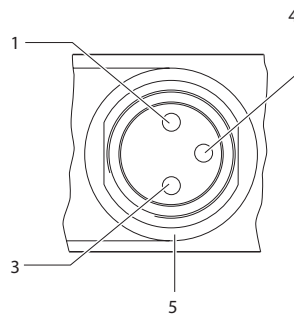
►  $Q_n = 1500 \text{ l/min}$  ► pipe connection ► compressed air connection output: G 1/4 ► Electr. connection: Plug, M8, 3-pin ► manual override: with detent ► single solenoid, double solenoid

## Dimensions, double solenoid



0011972\_a

## PIN assignment for electrical connector



00125554

Pin assignment:

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

Note: Bi-polar protective circuit to prevent overvoltage