Directional valves ► Electrically operated

2x3/2-directional valve, Series TC15

► Qn = 1100 l/min ► Pilot valve width: 15 mm ► pipe connection ► compressed air connection output: G 1/4 ► Electr. connection: Plug, M8, 4-pin ► Manual override: with detent ► double solenoid ► Pilot: External, internal

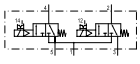
00137992

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.	3 bar / 10 bar
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
Compressed air connection	according to ISO 228-1
Connector standard	DIN EN 60947-5-2
Protection class acc. to DIN EN 61140 electrically	Class III
Degree of protection With connection	IP65
Status display LED	Yellow
Duty cycle	100 %
Switch-on time	12 ms
Switch-off time	16 ms
Generic immunity standard in accordance with	EN 50082-2
mounting screw tightening torque	2.5 Nm
Tightening torque tolerance	±0,2
Weight	0.279 kg
Materials:	
Housing	Polyamide, fiber-glass reinforced
Seals	Acrylonitrile Butadiene Rubber; Hydrogenated nitrile butadiene rubber
Front plate	Polyamide, fiber-glass reinforced

Technical Remarks

- 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, see chapter „Technical information“.

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

		MO	Compressed air connection				Operational voltage	Power consumption	Flow conductance	Part No.
			Input	Output	Exhaust	Pilot connection	DC	24 V DC	b	
								[W]		
	NC/NC		G 1/4	G 1/4	G 1/4	-	24 V	2.2	0.25	R422102178

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information

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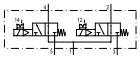
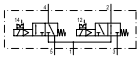
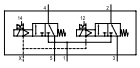
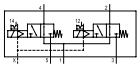
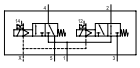
	NO/NO		G 1/4	G 1/4	G 1/4	-	24 V	2.2	0.25	R422102179
	NC/NO		G 1/4	G 1/4	G 1/4	-	24 V	2.2	0.25	R422102180
	NC/NC		G 1/4	G 1/4	G 1/4	M5	24 V	2.2	0.25	R422102181
	NO/NO		G 1/4	G 1/4	G 1/4	M5	24 V	2.2	0.25	R422102182
	NC/NO		G 1/4	G 1/4	G 1/4	M5	24 V	2.2	0.25	R422102183

Part No.	Flow conductance	Flow rate value	Nominal resistance	Working pressure min./max.
	C	Qn		
	[l/(s*bar)]	[l/min]		[bar]
R422102178	5.9	1100	280	3 / 10
R422102179	5.9	1100	280	3 / 10
R422102180	5.9	1100	280	3 / 10
R422102181	5.9	1100	280	-0.9 / 10
R422102182	5.9	1100	280	-0.9 / 10
R422102183	5.9	1100	280	-0.9 / 10

MO = Manual override
push-in fitting: Brass, nickel-plated; Die cast zinc, chrome-plated
Nominal flow Qn at 6 bar and Δp = 1 bar

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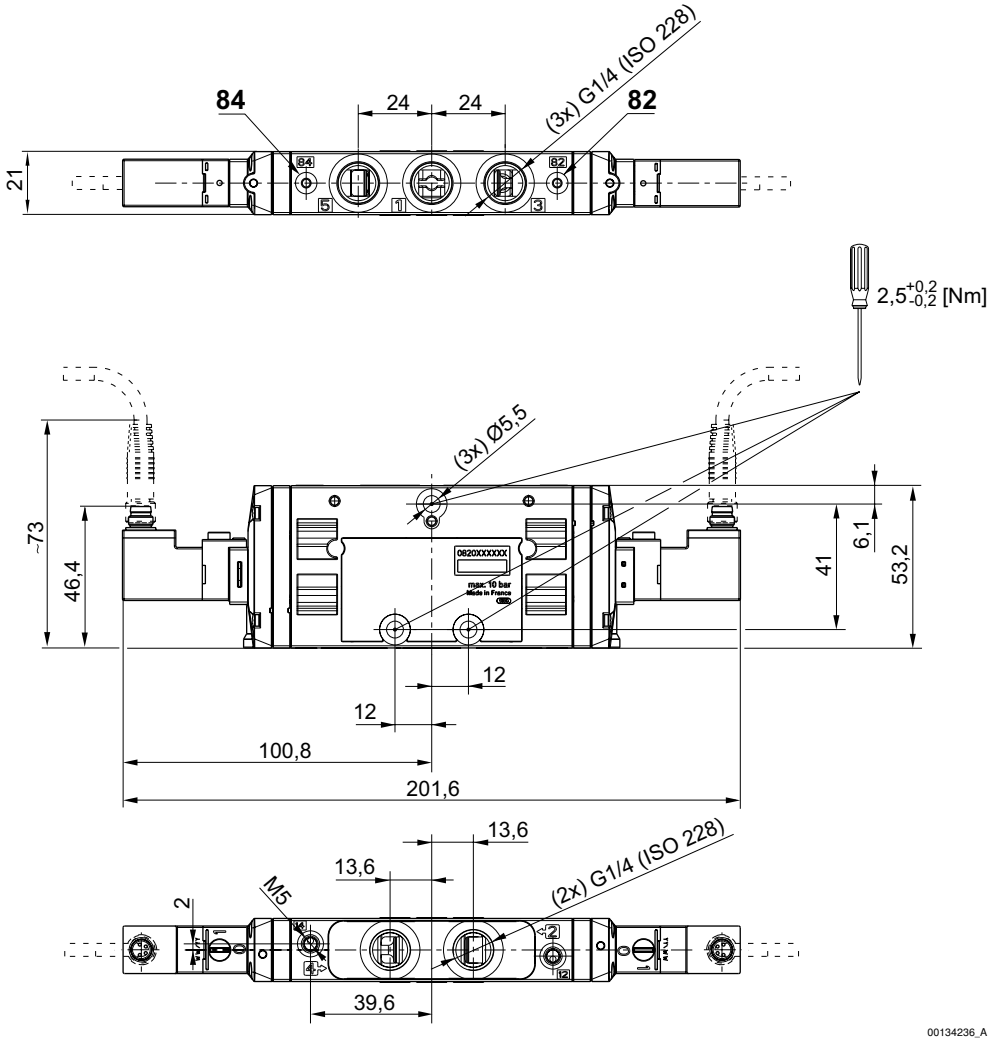
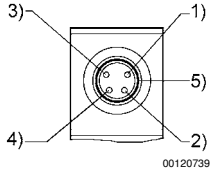
Dimensions



PIN assignment and cable colors for electrical connector



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
Note: Bi-polar protective circuit to prevent overvoltage