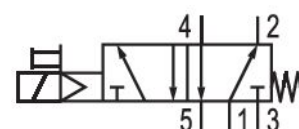


# 5/2-directional valve, Series TC15

0820058311

General series information  
Series TC15

- The AVENTICS Series TC08/TC15 includes a wide range of spool valves with housings made of high-performance polymers with robust and flexible metal inserts. It is designed for flow rate performances from 800 to 1500 l/min. These directional valves are easy to assemble, making them ideal for applications requiring the highest efficiency in limited spaces.



## Technical data

Industry  
Industrial

Activation  
Electrically

Nominal flow Qn  
1500 l/min

Switching principle  
5/2

Compressed air connection output  
G 1/4

Working pressure min.  
3 bar

Working pressure max  
10 bar

DC operating voltage  
24 V

Pilot valve width  
15 mm

Voltage tolerance DC  
-10% / +10%

Manual override  
without detent

Electrical connection type  
Plug

Electrical connection size  
M8

Electrical connection number of poles  
4-pin

Actuating control  
Single Solenoid

Sealing principle  
Soft Seal

Pilot  
Internal

Valve type  
Spool valve, positive overlapping

**Connection type**  
Pipe connection

**Return**  
With spring return

**Control pressure min.**  
3 bar

**Max. medium temperature**  
50 °C

**Control pressure max.**  
10 bar

**Medium**  
Compressed air

**Min. ambient temperature**  
-10 °C

**Max. particle size**  
5 µm

**Max. ambient temperature**  
50 °C

**Oil content of compressed air min.**  
0 mg/m<sup>3</sup>

**Min. medium temperature**  
-10 °C

**Oil content of compressed air max.**  
5 mg/m<sup>3</sup>

**Compressed air connection input**  
G 1/4

**Flow conductance b**  
0.33

**Compressed air connection, exhaust**  
G 1/4

**Flow conductance C**  
6.8 l/(s\*bar)

**Power consumption DC**  
2.2 W

**Duty cycle**  
100 %

**Nominal resistance**  
280 Ω

**Typ. switch-on time**  
12 ms

**LED status display**  
Yellow

**Typ. switch-off time**  
35 ms

**Pilot valve width**  
15 mm

**Mounting on manifold strip**  
P-strip

**Connector standard**  
DIN EN 60947-5-2

**Mounting screw tightening torque**  
2.5 Nm

**Protection class acc. to DIN EN 61140**  
Class III

**Weight**  
0.235 kg

**Protection class with connection**  
IP65

**Housing material**  
Polyamide fiber-glass reinforced

Die cast zinc

**Seal material**  
Acrylonitrile butadiene rubber  
Hydrogenated nitrile butadiene rubber

**Material front plate**  
Polyamide fiber-glass reinforced

**Material threaded bushing**  
Brass

**Part No.**  
0820058311

## Technical information

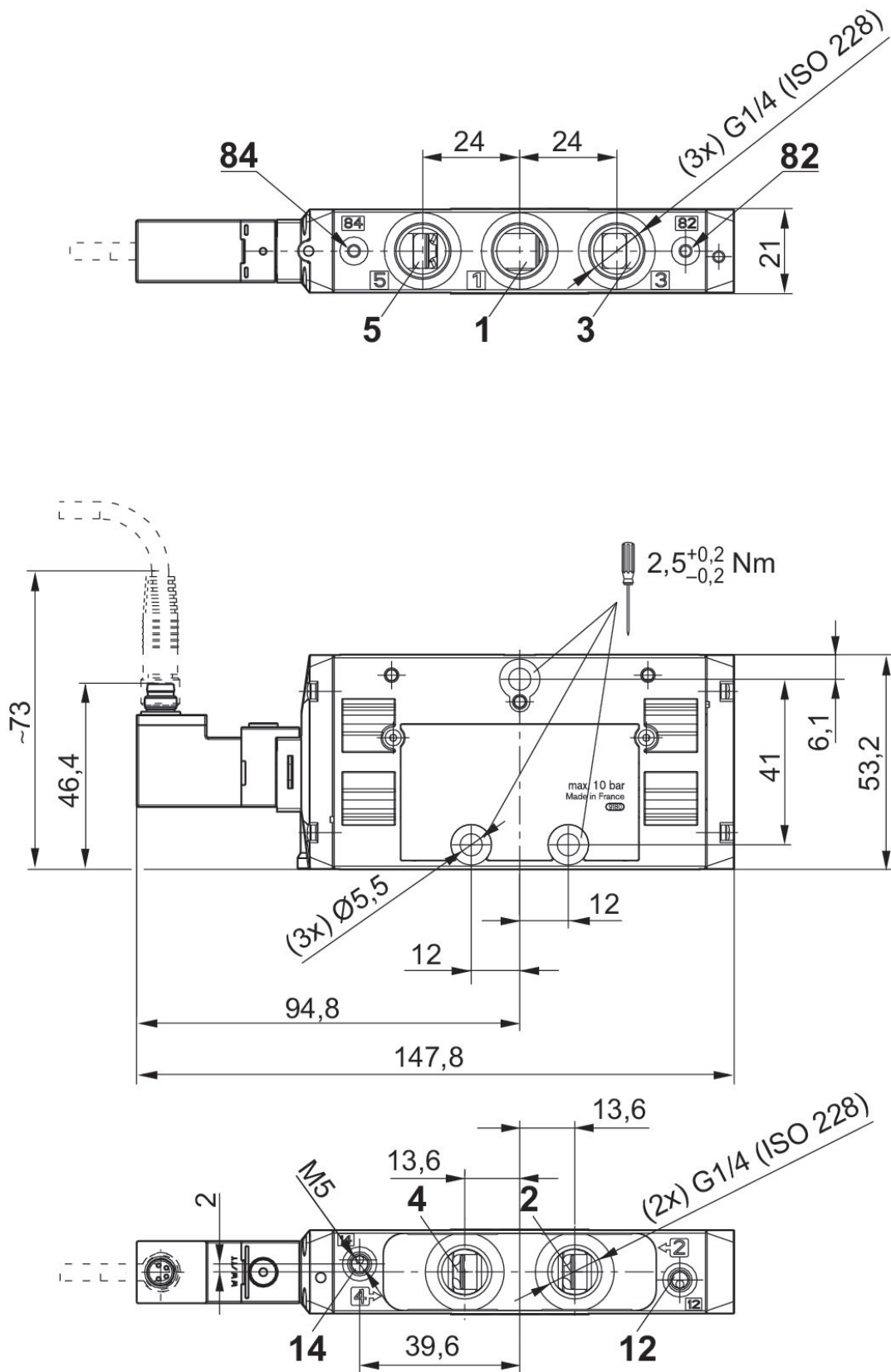
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

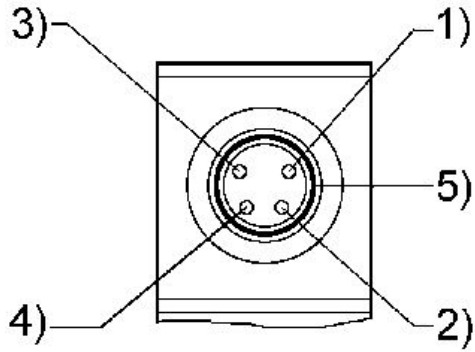
The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in <https://www.emerson.com/en-us/support>).

Dimensions  
Single Solenoid



### 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