

# 2x3/2-directional valve, Series TC15 - inch

- Operating voltage 12 V AC, 110 V AC, 230 V AC
- 2x3/2
- Qn = 1100 l/min
- Pilot valve width : 15 mm
- NC/NC NO/NO NC/NO
- Pipe connection
- Compressed air connection output : 1/4 - 18 NPTF
- Electrical connection : Plug, ISO 15217, form C
- Manual override : with detent
- double solenoid
- With spring return
- 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.	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/m <sup>3</sup>
Nominal flow Qn	1100 l/min
Compressed air connection	according to ANSI B1.20.3
Connector standard	ISO 15217
Protection class with connection	IP65
Duty cycle	100 %
Typ. switch-on time	12 ms
Typ. switch-off time	16 ms
Generic emission standard in accordance with	EN 50081-2:1993
Mounting on manifold strip	P-strip
Mounting screw tightening torque	2,5 Nm
Tightening torque tolerance	±0,2 mT
Weight	0,278 kg



## Technical data

Part No.		MO		Compressed air connection	
					Input
R422102235			NC/NC		1/4 - 18 NPTF
R422102237			NC/NC		1/4 - 18 NPTF
R422102238			NC/NC		1/4 - 18 NPTF
R422102239			NO/NO		1/4 - 18 NPTF
R422102241			NO/NO		1/4 - 18 NPTF
R422102242			NO/NO		1/4 - 18 NPTF
R422102243			NC/NO		1/4 - 18 NPTF
R422102245			NC/NO		1/4 - 18 NPTF
R422102246			NC/NO		1/4 - 18 NPTF
R422102247			NC/NC		1/4 - 18 NPTF
R422102249			NC/NC		1/4 - 18 NPTF
R422102250			NC/NC		1/4 - 18 NPTF
R422102251			NC/NC		1/4 - 18 NPTF
R422102253			NC/NC		1/4 - 18 NPTF
R422102254			NC/NC		1/4 - 18 NPTF
R422102255			NC/NO		1/4 - 18 NPTF
R422102257			NC/NO		1/4 - 18 NPTF
R422102258			NC/NO		1/4 - 18 NPTF

Part No.	Compressed air connection	
	Output	Exhaust
R422102235	1/4 - 18 NPTF	1/4 - 18 NPTF
R422102237	1/4 - 18 NPTF	1/4 - 18 NPTF
R422102238	1/4 - 18 NPTF	1/4 - 18 NPTF
R422102239	1/4 - 18 NPTF	1/4 - 18 NPTF
R422102241	1/4 - 18 NPTF	1/4 - 18 NPTF
R422102242	1/4 - 18 NPTF	1/4 - 18 NPTF
R422102243	1/4 - 18 NPTF	1/4 - 18 NPTF
R422102245	1/4 - 18 NPTF	1/4 - 18 NPTF
R422102246	1/4 - 18 NPTF	1/4 - 18 NPTF
R422102247	1/4 - 18 NPTF	1/4 - 18 NPTF
R422102249	1/4 - 18 NPTF	1/4 - 18 NPTF
R422102250	1/4 - 18 NPTF	1/4 - 18 NPTF
R422102251	1/4 - 18 NPTF	1/4 - 18 NPTF
R422102253	1/4 - 18 NPTF	1/4 - 18 NPTF
R422102254	1/4 - 18 NPTF	1/4 - 18 NPTF
R422102255	1/4 - 18 NPTF	1/4 - 18 NPTF
R422102257	1/4 - 18 NPTF	1/4 - 18 NPTF
R422102258	1/4 - 18 NPTF	1/4 - 18 NPTF

Part No.	Compressed air connection		Operational voltage	Operational voltage
		Pilot Input		
R422102235	-	-	12 V	-
R422102237	-	-	-	110 V
R422102238	-	-	-	230 V

Part No.	Compressed air connection	Operational voltage	Operational voltage
	Pilot Input	DC	AC 50 Hz
R422102239	-	12 V	-
R422102241	-	-	110 V
R422102242	-	-	230 V
R422102243	-	12 V	-
R422102245	-	-	110 V
R422102246	-	-	230 V
R422102247	M5	12 V	-
R422102249	M5	-	110 V
R422102250	M5	-	230 V
R422102251	M5	12 V	-
R422102253	M5	-	110 V
R422102254	M5	-	230 V
R422102255	M5	12 V	-
R422102257	M5	-	110 V
R422102258	M5	-	230 V

Part No.	Operational voltage	Voltage tolerance	Voltage tolerance	Voltage tolerance
	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz
R422102235	-	-10% / +15%	-	-
R422102237	110 V	-	-10% / +10%	-10% / +10%
R422102238	230 V	-	-10% / +10%	-10% / +10%
R422102239	-	-10% / +10%	-	-
R422102241	110 V	-	-10% / +10%	-10% / +10%
R422102242	230 V	-	-10% / +10%	-10% / +10%
R422102243	-	-10% / +10%	-	-
R422102245	110 V	-	-10% / +10%	-10% / +10%
R422102246	230 V	-	-10% / +10%	-10% / +10%
R422102247	-	-10% / +10%	-	-
R422102249	110 V	-	-10% / +10%	-10% / +10%
R422102250	230 V	-	-10% / +10%	-10% / +10%
R422102251	-	-10% / +10%	-	-
R422102253	110 V	-	-10% / +10%	-10% / +10%
R422102254	230 V	-	-10% / +10%	-10% / +10%
R422102255	-	-10% / +10%	-	-
R422102257	110 V	-	-10% / +10%	-10% / +10%
R422102258	230 V	-	-10% / +10%	-10% / +10%

Part No.	Power consumption	Holding power	Holding power	Switch-on power
	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz
R422102235	2 W	-	-	-
R422102237	-	1,6 VA	1,4 VA	2,2 VA
R422102238	-	1,6 VA	1,4 VA	2,2 VA
R422102239	2 W	-	-	-
R422102241	-	1,6 VA	1,4 VA	2,2 VA
R422102242	-	1,6 VA	1,4 VA	2,2 VA
R422102243	2 W	-	-	-
R422102245	-	1,6 VA	1,4 VA	2,2 VA

Part No.	Power consumption	Holding power	Holding power	Switch-on power
	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz
R422102246	-	1,6 VA	1,4 VA	2,2 VA
R422102247	2 W	-	-	-
R422102249	-	1,6 VA	1,4 VA	2,2 VA
R422102250	-	1,6 VA	1,4 VA	2,2 VA
R422102251	2 W	-	-	-
R422102253	-	1,6 VA	1,4 VA	2,2 VA
R422102254	-	1,6 VA	1,4 VA	2,2 VA
R422102255	2 W	-	-	-
R422102257	-	1,6 VA	1,4 VA	2,2 VA
R422102258	-	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	
R422102235	-	Internal	0,25	5,9 l/(s*bar)	185 Ω
R422102237	2 VA	Internal	0,25	5,9 l/(s*bar)	185 Ω
R422102238	2 VA	Internal	0,25	5,9 l/(s*bar)	185 Ω
R422102239	-	Internal	0,25	5,9 l/(s*bar)	185 Ω
R422102241	2 VA	Internal	0,25	5,9 l/(s*bar)	185 Ω
R422102242	2 VA	Internal	0,25	5,9 l/(s*bar)	185 Ω
R422102243	-	Internal	0,25	5,9 l/(s*bar)	185 Ω
R422102245	2 VA	Internal	0,25	5,9 l/(s*bar)	185 Ω
R422102246	2 VA	Internal	0,25	5,9 l/(s*bar)	185 Ω
R422102247	-	External	0,25	5,9 l/(s*bar)	185 Ω
R422102249	2 VA	External	0,25	5,9 l/(s*bar)	185 Ω
R422102250	2 VA	External	0,25	5,9 l/(s*bar)	185 Ω
R422102251	-	External	0,25	5,9 l/(s*bar)	185 Ω
R422102253	2 VA	External	0,25	5,9 l/(s*bar)	185 Ω
R422102254	2 VA	External	0,25	5,9 l/(s*bar)	185 Ω
R422102255	-	External	0,25	5,9 l/(s*bar)	185 Ω
R422102257	2 VA	External	0,25	5,9 l/(s*bar)	185 Ω
R422102258	2 VA	External	0,25	5,9 l/(s*bar)	185 Ω

Part No.	Working pressure min./max.
R422102235	3 ... 10 bar
R422102237	3 ... 10 bar
R422102238	3 ... 10 bar
R422102239	3 ... 10 bar
R422102241	3 ... 10 bar
R422102242	3 ... 10 bar
R422102243	3 ... 10 bar
R422102245	3 ... 10 bar
R422102246	3 ... 10 bar
R422102247	-0,95 ... 10 bar
R422102249	-0,95 ... 10 bar
R422102250	-0,95 ... 10 bar
R422102251	-0,95 ... 10 bar
R422102253	-0,95 ... 10 bar
R422102254	-0,95 ... 10 bar

Part No.	Working pressure min./max.
R422102255	-0,95 ... 10 bar
R422102257	-0,95 ... 10 bar
R422102258	-0,95 ... 10 bar

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

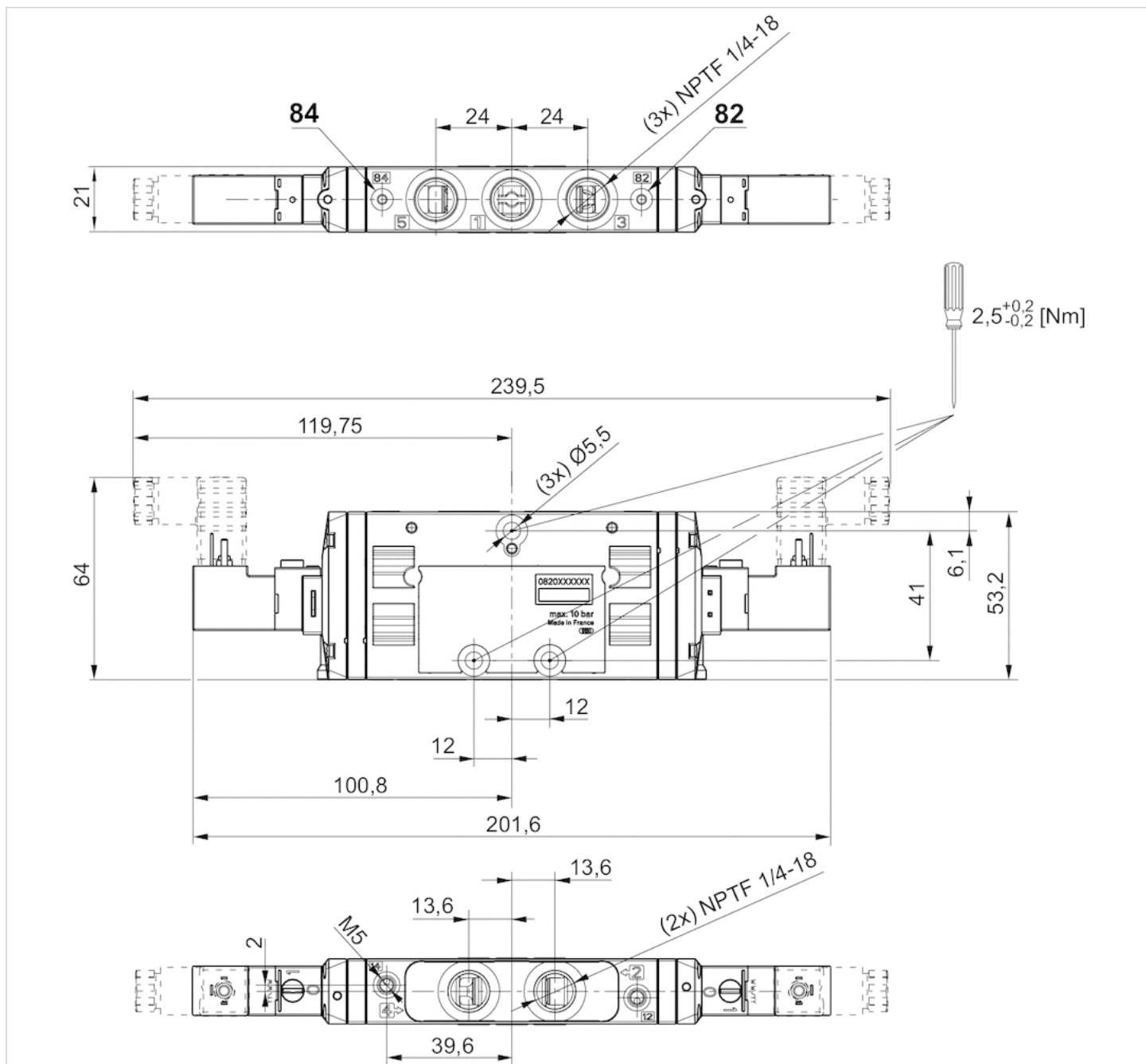
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

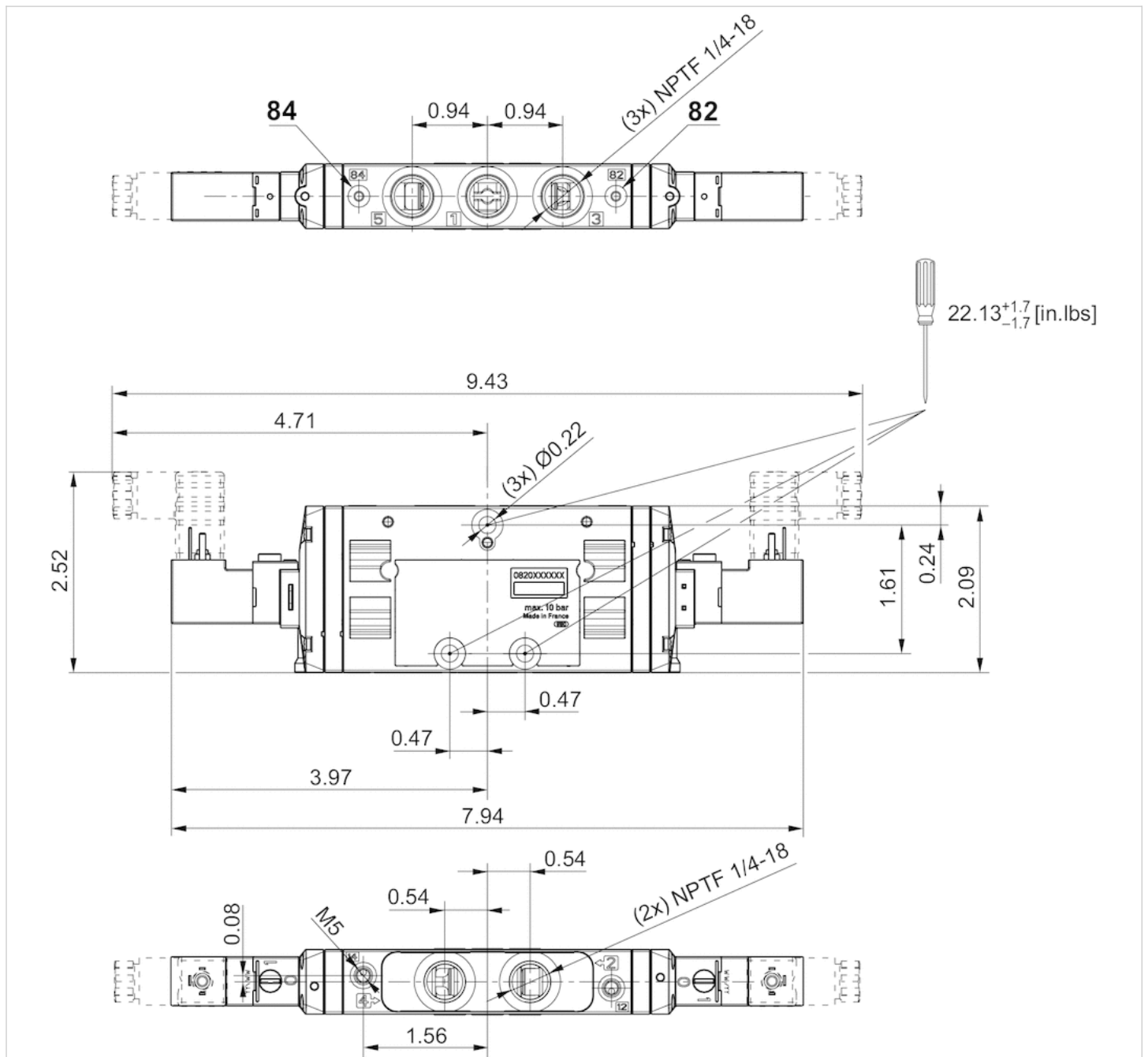
Material	
Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber Hydrogenated nitrile butadiene rubber
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, nickel-plated chrome-plated

# Dimensions

## Dimensions in mm



Dimensions in inches



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