

Directional valves ▶ Supplementary products

5/2-directional valve, Series TC15

▶ Qn = 1500 l/min ▶ Pilot valve width: 15 mm ▶ pipe connection ▶ compressed air connection output: 1/4-18 NPTF ▶ Electr. connection: Plug, ISO 15217, form C ▶ Manual override: with detent ▶ single solenoid



00137795

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
Compressed air connection	according to ANSI B1.20.3
Connector standard	ISO 15217
Degree of protection With connection	IP65
Duty cycle	100 %
mounting screw tightening torque	2.5 Nm
Weight	See table below
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	Switch-on power		Holding power	
DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz	AC 60 Hz
						W	VA	VA	VA	VA
12 V	-	-	-10% / +10%	-	-	2	-	-	-	-
-	110 V	110 V	-	-10% / +10%	-10% / +10%	-	2.2	2	1.6	1.4
-	230 V	230 V	-	-10% / +10%	-10% / +10%	-	2.2	2	1.6	1.4

	MO	Compressed air connection			Operational voltage			Power consumption	Holding power	Part No.
		Input	Output	Exhaust	DC	AC 50 Hz	AC 60 Hz	24 V DC	AC 50 Hz	
								[W]	[VA]	
		1/4-18 NPTF	1/4-18 NPTF	1/4-18 NPTF	12 V	-	-	2	-	R422101248
	-				110 V	110 V	-	1.6	R422101250	
	-				230 V	230 V	-	1.6	R422101251	
		1/4-18 NPTF	1/4-18 NPTF	1/4-18 NPTF	12 V	-	-	2	-	R422101252
	-				110 V	110 V	-	1.6	R422101254	
	-				230 V	230 V	-	1.6	R422101255	

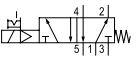

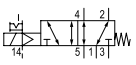

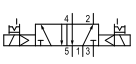

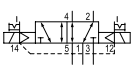

Supplementary products

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

Pneumatics catalog, online PDF, as of 2015-03-16, ©AVENTICS S.a.r.l., subject to change

5/2-directional valve, Series TC15

► Q_n = 1500 l/min ► Pilot valve width: 15 mm ► pipe connection ► compressed air connection output: 1/4-18 NPTF ► Electr. connection: Plug, ISO 15217, form C ► Manual override: with detent ► single solenoid

	MO	Compressed air connection			Operational voltage			Power consumption	Holding power	Part No.
		Input	Output	Exhaust	DC	AC 50 Hz	AC 60 Hz	24 V DC	AC 50 Hz	
								[W]	[VA]	
		1/4-18 NPTF	1/4-18 NPTF	1/4-18 NPTF	12 V	-	-	2	-	R422101256
					-	110 V	110 V	-	1.6	R422101258
					-	230 V	230 V	-	1.6	R422101259
		1/4-18 NPTF	1/4-18 NPTF	1/4-18 NPTF	12 V	-	-	2	-	R422101260
					-	110 V	110 V	-	1.6	R422101262
					-	230 V	230 V	-	1.6	R422101263
		1/4-18 NPTF	1/4-18 NPTF	1/4-18 NPTF	12 V	-	-	2	-	R422101264
					-	110 V	110 V	-	1.6	R422101266
					-	230 V	230 V	-	1.6	R422101267
		1/4-18 NPTF	1/4-18 NPTF	1/4-18 NPTF	12 V	-	-	2	-	R422101268
					-	110 V	110 V	-	1.6	R422101270
					-	230 V	230 V	-	1.6	R422101271

Part No.	Holding power	Switch-on power	Switch-on power	Flow conductance	Flow rate value	Nominal resistance	Working pressure min./max.	Control pressure min./max.	Switch-on time									
										AC 60 Hz	AC 50 Hz	AC 60 Hz	b	C	Q _n	[bar]	[bar]	t _F
										[VA]	[VA]	[VA]		[l/(s*bar)]	[l/min]			[ms]
R422101248	-	-	-	-	-	-	-	-	-	-								
R422101250	1.4	2.2	2	0.33	6.8	1500	185	2.5 / 10	2.5 / 10	21								
R422101251	1.4	2.2	2															
R422101252	-	-	-	-	-	-	-	-	-	-								
R422101254	1.4	2.2	2	0.33	6.8	1500	185	-0.9 / 10	2.5 / 10	21								
R422101255	1.4	2.2	2															
R422101256	-	-	-	-	-	-	-	-	-	-								
R422101258	1.4	2.2	2	0.33	6.8	1500	185	3 / 10	3 / 10	12								
R422101259	1.4	2.2	2															
R422101260	-	-	-	-	-	-	-	-	-	-								
R422101262	1.4	2.2	2	0.33	6.8	1500	185	-0.9 / 10	3 / 10	12								
R422101263	1.4	2.2	2															
R422101264	-	-	-	-	-	-	-	-	-	-								
R422101266	1.4	2.2	2	0.33	6.8	1500	185	2 / 10	2 / 10	10								
R422101267	1.4	2.2	2															
R422101268	-	-	-	-	-	-	-	-	-	-								
R422101270	1.4	2.2	2	0.33	6.8	1500	185	-0.9 / 10	2 / 10	10								
R422101271	1.4	2.2	2															

Part No.	Switch-off time	Weight	Note			
				t _F		
				[ms]	[kg]	
R422101248						
R422101250	22	0.235	1)			
R422101251						
R422101252						
R422101254	22	0.235	2)			
R422101255						

HHB = Manual override

1) Pilot: internal

2) Pilot: External

push-in fitting: Brass, nickel-plated; Die cast zinc, chrome-plated

Nominal flow Q_n at 6 bar and Δp = 1 bar

Directional valves ▶ Supplementary products
5/2-directional valve, Series TC15

▶ Qn = 1500 l/min ▶ Pilot valve width: 15 mm ▶ pipe connection ▶ compressed air connection output: 1/4-18 NPTF ▶ Electr. connection: Plug, ISO 15217, form C ▶ Manual override: with detent ▶ single solenoid

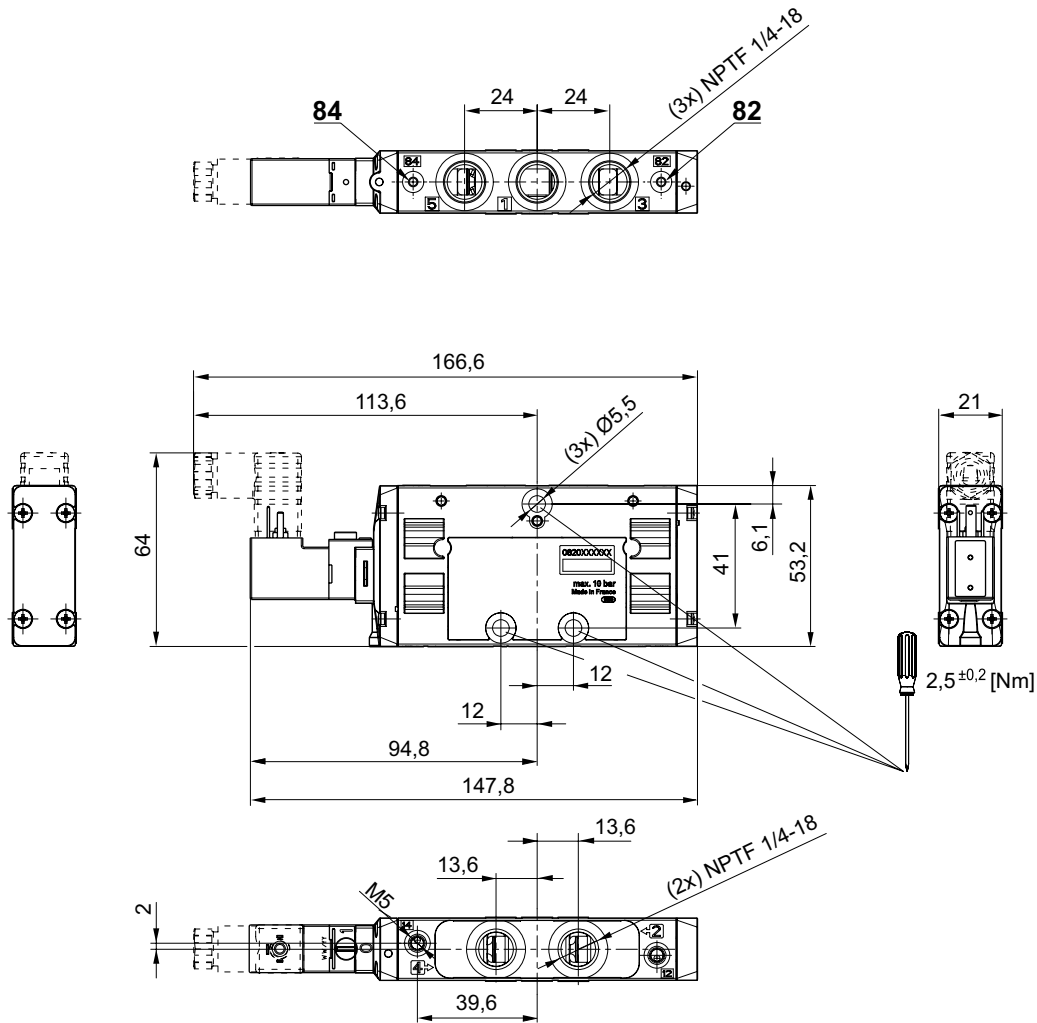
Part No.	Switch-off time	Weight	Note
	t_E		
	[ms]	[kg]	
R422101256 R422101258 R422101259	35	0.235	1)
R422101260 R422101262 R422101263	35	0.235	2)
R422101264 R422101266 R422101267	10	0.263	1)
R422101268 R422101270 R422101271	10	0.263	2)

HHB = Manual override
 1) Pilot: internal
 2) Pilot: External
 push-in fitting: Brass, nickel-plated; Die cast zinc, chrome-plated
 Nominal flow Qn at 6 bar and $\Delta p = 1$ bar

5/2-directional valve, Series TC15

▶ $Q_n = 1500$ l/min ▶ Pilot valve width: 15 mm ▶ pipe connection ▶ compressed air connection output: 1/4-18 NPTF ▶ Electr. connection: Plug, ISO 15217, form C ▶ Manual override: with detent ▶ single solenoid

Dimensions in mm, single solenoid



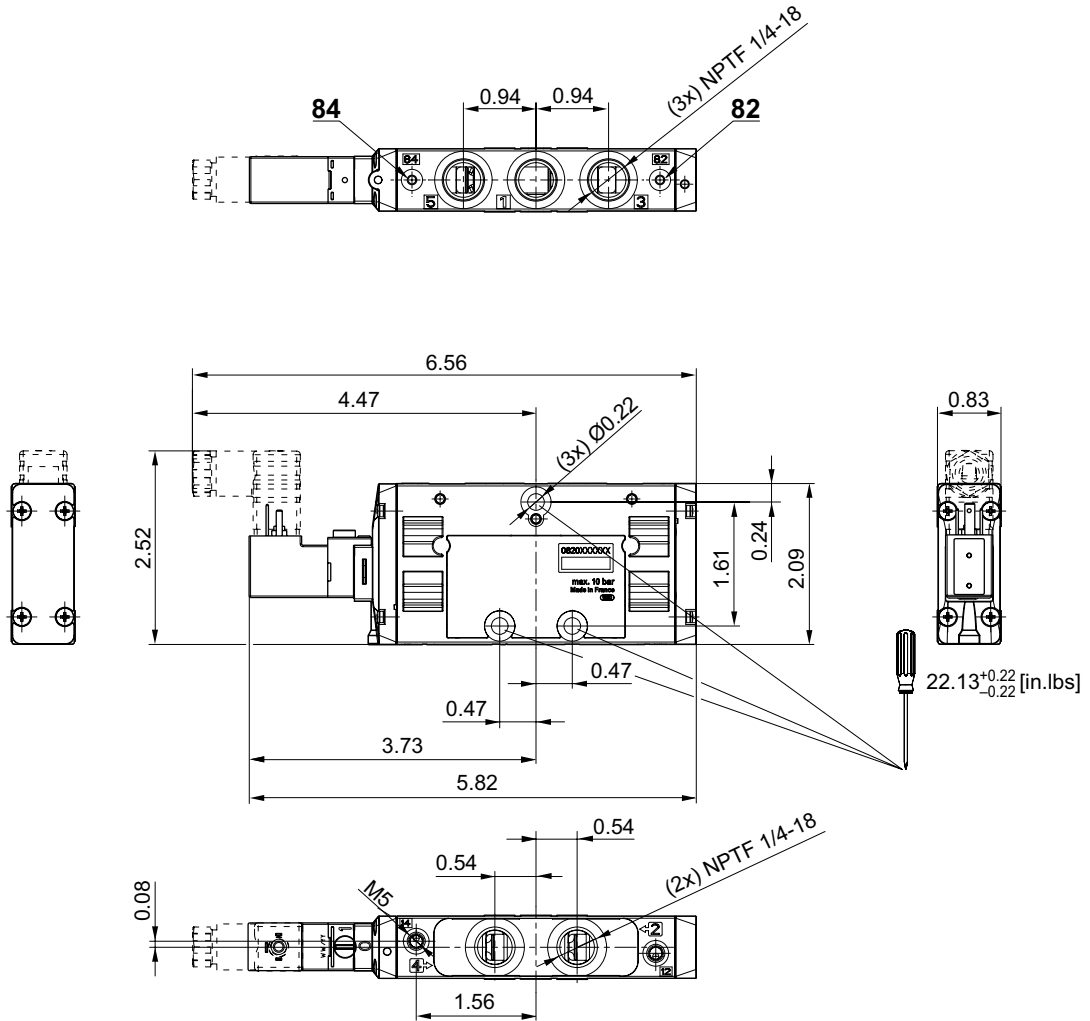
00127581

Directional valves ▶ Supplementary products

5/2-directional valve, Series TC15

▶ Qn = 1500 l/min ▶ Pilot valve width: 15 mm ▶ pipe connection ▶ compressed air connection output: 1/4-18 NPTF ▶ Electr. connection: Plug, ISO 15217, form C ▶ Manual override: with detent ▶ single solenoid

Dimensions in inches, single solenoid

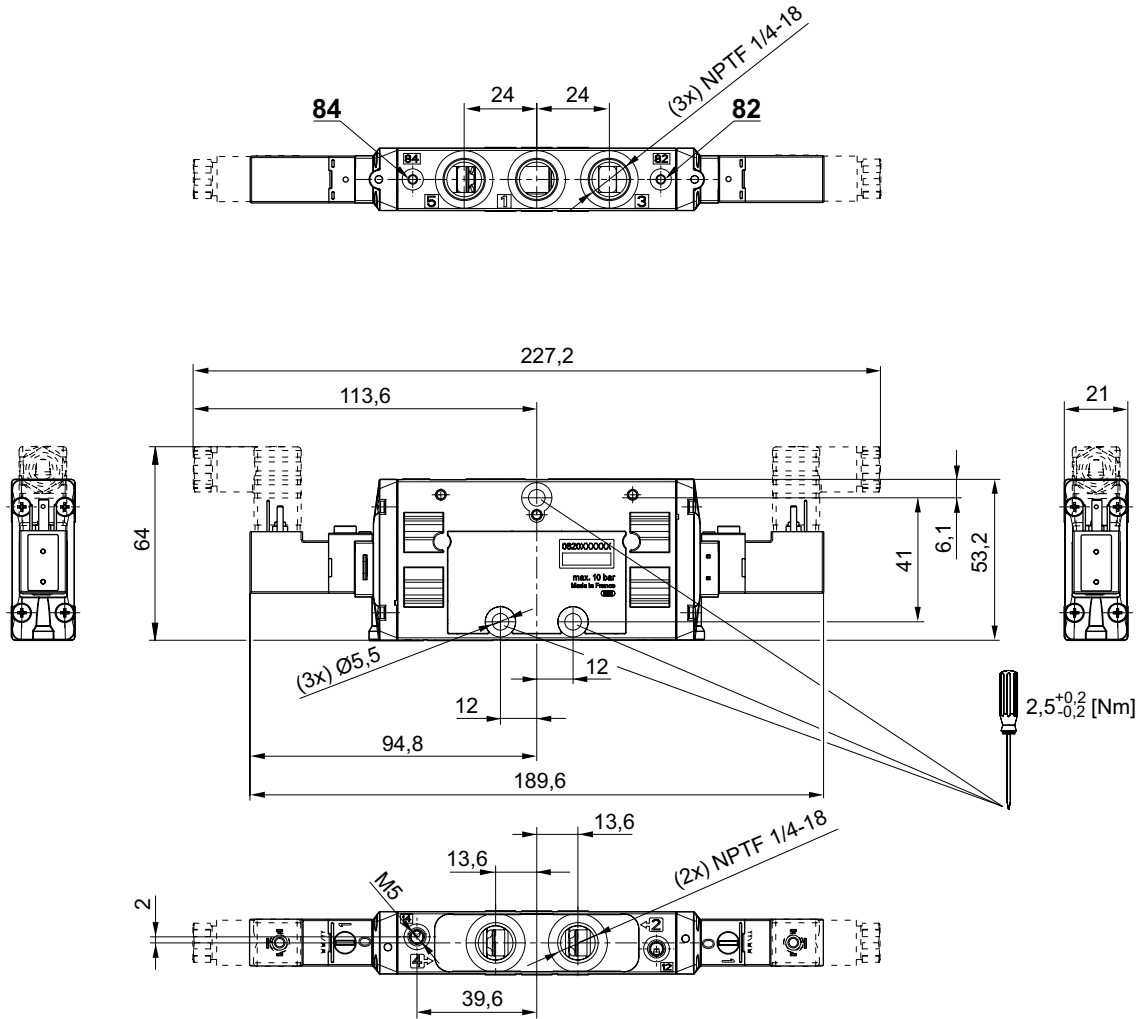


00127581_a

5/2-directional valve, Series TC15

▶ $Q_n = 1500$ l/min ▶ Pilot valve width: 15 mm ▶ pipe connection ▶ compressed air connection output: 1/4-18 NPTF ▶ Electr. connection: Plug, ISO 15217, form C ▶ Manual override: with detent ▶ single solenoid

Dimensions in mm, double solenoid



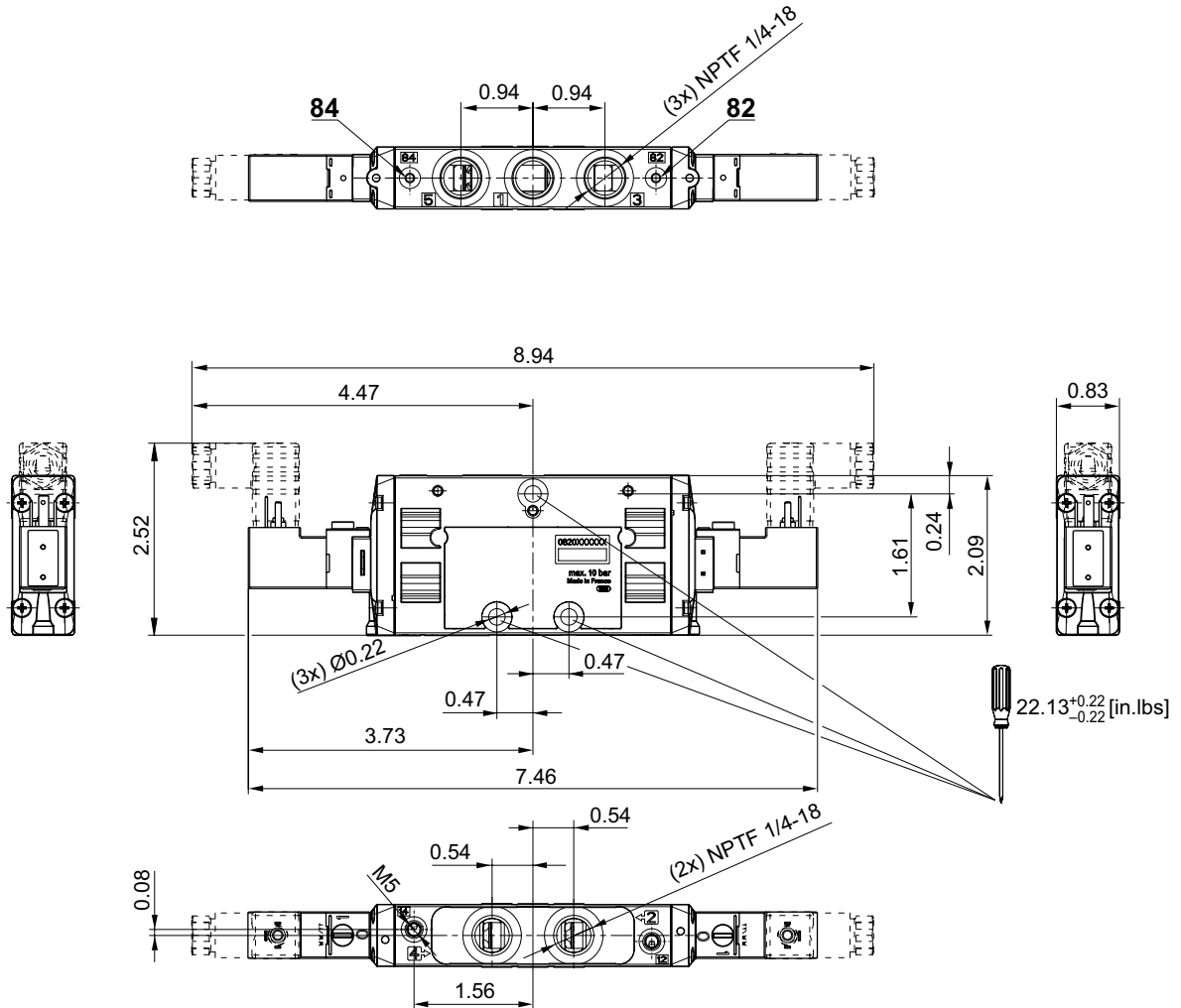
00127582

Directional valves ▶ Supplementary products

5/2-directional valve, Series TC15

▶ Qn = 1500 l/min ▶ Pilot valve width: 15 mm ▶ pipe connection ▶ compressed air connection output: 1/4-18 NPTF ▶ Electr. connection: Plug, ISO 15217, form C ▶ Manual override: with detent ▶ single solenoid

Dimensions in inches, double solenoid



00127582_a