5/2-directional valve, Series TC15 - inch

- Operating voltage 12 V AC, 110 V AC, 230 V AC
- 5/2
- Qn = 1500 l/min
- Pilot valve width : 15 mm
- Pipe connection
- Compressed air connection output : 1/4 - 18 NPTF
- Electrical connection : Plug, ISO 15217, form C
- Manual override : with detent
- single solenoid
- With air 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.	See table below
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/m³
Nominal flow Qn	1500 l/min
Compressed air connection	according to ANSI B1.20.3
Connector standard	ISO 15217
Protection class with connection	IP65
Duty cycle	100 %
Mounting on manifold strip	P-strip
Mounting screw tightening torque	2,5 Nm
Weight	See table below

Technical data

Part No.		MO	Compressed air connection	Compressed air connection
			Input	Output
R422101248			1/4 - 18 NPTF	1/4 - 18 NPTF
R422101250			1/4 - 18 NPTF	1/4 - 18 NPTF
R422101251			1/4 - 18 NPTF	1/4 - 18 NPTF
R422101252			1/4 - 18 NPTF	1/4 - 18 NPTF
R422101254			1/4 - 18 NPTF	1/4 - 18 NPTF
R422101255			1/4 - 18 NPTF	1/4 - 18 NPTF
R422101256			1/4 - 18 NPTF	1/4 - 18 NPTF
R422101258			1/4 - 18 NPTF	1/4 - 18 NPTF
R422101259			1/4 - 18 NPTF	1/4 - 18 NPTF
R422101260			1/4 - 18 NPTF	1/4 - 18 NPTF
R422101262			1/4 - 18 NPTF	1/4 - 18 NPTF
R422101263			1/4 - 18 NPTF	1/4 - 18 NPTF
R422101264			1/4 - 18 NPTF	1/4 - 18 NPTF
R422101266			1/4 - 18 NPTF	1/4 - 18 NPTF
R422101267			1/4 - 18 NPTF	1/4 - 18 NPTF
R422101268			1/4 - 18 NPTF	1/4 - 18 NPTF
R422101270			1/4 - 18 NPTF	1/4 - 18 NPTF
R422101271			1/4 - 18 NPTF	1/4 - 18 NPTF

Part No.	Compressed air connection	Operational voltage	Operational voltage
	Exhaust	DC	AC 50 Hz
R422101248	1/4 - 18 NPTF	12 V	-
R422101250	1/4 - 18 NPTF	-	110 V
R422101251	1/4 - 18 NPTF	-	230 V
R422101252	1/4 - 18 NPTF	12 V	-
R422101254	1/4 - 18 NPTF	-	110 V
R422101255	1/4 - 18 NPTF	-	230 V
R422101256	1/4 - 18 NPTF	12 V	-
R422101258	1/4 - 18 NPTF	-	110 V
R422101259	1/4 - 18 NPTF	-	230 V
R422101260	1/4 - 18 NPTF	12 V	-
R422101262	1/4 - 18 NPTF	-	110 V
R422101263	1/4 - 18 NPTF	-	230 V
R422101264	1/4 - 18 NPTF	12 V	-
R422101266	1/4 - 18 NPTF	-	110 V
R422101267	1/4 - 18 NPTF	-	230 V
R422101268	1/4 - 18 NPTF	12 V	-
R422101270	1/4 - 18 NPTF	-	110 V
R422101271	1/4 - 18 NPTF	-	230 V

Part No.	Operational voltage	Voltage tolerance	Voltage tolerance	Voltage tolerance
	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz
R422101248	-	-10% / +10%	-	-
R422101250	110 V	-	-10% / +10%	-10% / +10%

Part No.	Operational voltage	Voltage tolerance	Voltage tolerance	Voltage tolerance
	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz
R422101251	230 V	-	-10% / +10%	-10% / +10%
R422101252	-	-10% / +10%	-	-
R422101254	110 V	-	-10% / +10%	-10% / +10%
R422101255	230 V	-	-10% / +10%	-10% / +10%
R422101256	-	-10% / +10%	-	-
R422101258	110 V	-	-10% / +10%	-10% / +10%
R422101259	230 V	-	-10% / +10%	-10% / +10%
R422101260	-	-10% / +10%	-	-
R422101262	110 V	-	-10% / +10%	-10% / +10%
R422101263	230 V	-	-10% / +10%	-10% / +10%
R422101264	-	-10% / +10%	-	-
R422101266	110 V	-	-10% / +10%	-10% / +10%
R422101267	230 V	-	-10% / +10%	-10% / +10%
R422101268	-	-10% / +10%	-	-
R422101270	110 V	-	-10% / +10%	-10% / +10%
R422101271	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
R422101248	2 W	-	-	-
R422101250	-	1,6 VA	1,4 VA	2,2 VA
R422101251	-	1,6 VA	1,4 VA	2,2 VA
R422101252	2 W	-	-	-
R422101254	-	1,6 VA	1,4 VA	2,2 VA
R422101255	-	1,6 VA	1,4 VA	2,2 VA
R422101256	2 W	-	-	-
R422101258	-	1,6 VA	1,4 VA	2,2 VA
R422101259	-	1,6 VA	1,4 VA	2,2 VA
R422101260	2 W	-	-	-
R422101262	-	1,6 VA	1,4 VA	2,2 VA
R422101263	-	1,6 VA	1,4 VA	2,2 VA
R422101264	2 W	-	-	-
R422101266	-	1,6 VA	1,4 VA	2,2 VA
R422101267	-	1,6 VA	1,4 VA	2,2 VA
R422101268	2 W	-	-	-
R422101270	-	1,6 VA	1,4 VA	2,2 VA
R422101271	-	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	
R422101248	-	Internal	0,33	6,8 l/(s*bar)	185 Ω
R422101250	2 VA	Internal	0,33	6,8 l/(s*bar)	185 Ω
R422101251	2 VA	Internal	0,33	6,8 l/(s*bar)	185 Ω
R422101252	-	External	0,33	6,8 l/(s*bar)	185 Ω
R422101254	2 VA	External	0,33	6,8 l/(s*bar)	185 Ω
R422101255	2 VA	External	0,33	6,8 l/(s*bar)	185 Ω
R422101256	-	Internal	0,33	6,8 l/(s*bar)	185 Ω
R422101258	2 VA	Internal	0,33	6,8 l/(s*bar)	185 Ω

Part No.	Switch-on power AC 60 Hz	Pilot	Flow conductance b	Flow conductance C-value	Nominal resistance
R422101259	2 VA	Internal	0,33	6,8 l/(s*bar)	185 Ω
R422101260	-	External	0,33	6,8 l/(s*bar)	185 Ω
R422101262	2 VA	External	0,33	6,8 l/(s*bar)	185 Ω
R422101263	2 VA	External	0,33	6,8 l/(s*bar)	185 Ω
R422101264	-	Internal	0,33	6,8 l/(s*bar)	185 Ω
R422101266	2 VA	Internal	0,33	6,8 l/(s*bar)	185 Ω
R422101267	2 VA	Internal	0,33	6,8 l/(s*bar)	185 Ω
R422101268	-	External	0,33	6,8 l/(s*bar)	185 Ω
R422101270	2 VA	External	0,33	6,8 l/(s*bar)	185 Ω
R422101271	2 VA	External	0,33	6,8 l/(s*bar)	185 Ω

Part No.	Working pressure min./max.	Control pressure min./max.	Typ. switch-on time	Typ. switch-off time
R422101248	2,5 ... 10 bar	2,5 ... 10 bar	21 ms	22 ms
R422101250	2,5 ... 10 bar	2,5 ... 10 bar	21 ms	22 ms
R422101251	2,5 ... 10 bar	2,5 ... 10 bar	21 ms	22 ms
R422101252	-0,9 ... 10 bar	2,5 ... 10 bar	21 ms	22 ms
R422101254	-0,9 ... 10 bar	2,5 ... 10 bar	21 ms	22 ms
R422101255	-0,9 ... 10 bar	2,5 ... 10 bar	21 ms	22 ms
R422101256	3 ... 10 bar	3 ... 10 bar	12 ms	35 ms
R422101258	3 ... 10 bar	3 ... 10 bar	12 ms	35 ms
R422101259	3 ... 10 bar	3 ... 10 bar	12 ms	35 ms
R422101260	-0,9 ... 10 bar	3 ... 10 bar	12 ms	35 ms
R422101262	-0,9 ... 10 bar	3 ... 10 bar	12 ms	35 ms
R422101263	-0,9 ... 10 bar	3 ... 10 bar	12 ms	35 ms
R422101264	2 ... 10 bar	2 ... 10 bar	10 ms	10 ms
R422101266	2 ... 10 bar	2 ... 10 bar	10 ms	10 ms
R422101267	2 ... 10 bar	2 ... 10 bar	10 ms	10 ms
R422101268	-0,9 ... 10 bar	2 ... 10 bar	10 ms	10 ms
R422101270	-0,9 ... 10 bar	2 ... 10 bar	10 ms	10 ms
R422101271	-0,9 ... 10 bar	2 ... 10 bar	10 ms	10 ms

Part No.	Weight
R422101248	0,235 kg
R422101250	0,235 kg
R422101251	0,235 kg
R422101252	0,235 kg
R422101254	0,235 kg
R422101255	0,235 kg
R422101256	0,235 kg
R422101258	0,235 kg
R422101259	0,235 kg
R422101260	0,235 kg
R422101262	0,235 kg
R422101263	0,235 kg
R422101264	0,263 kg
R422101266	0,263 kg
R422101267	0,263 kg

Part No.	Weight
R422101268	0,263 kg
R422101270	0,263 kg
R422101271	0,263 kg

Nominal flow Qn at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

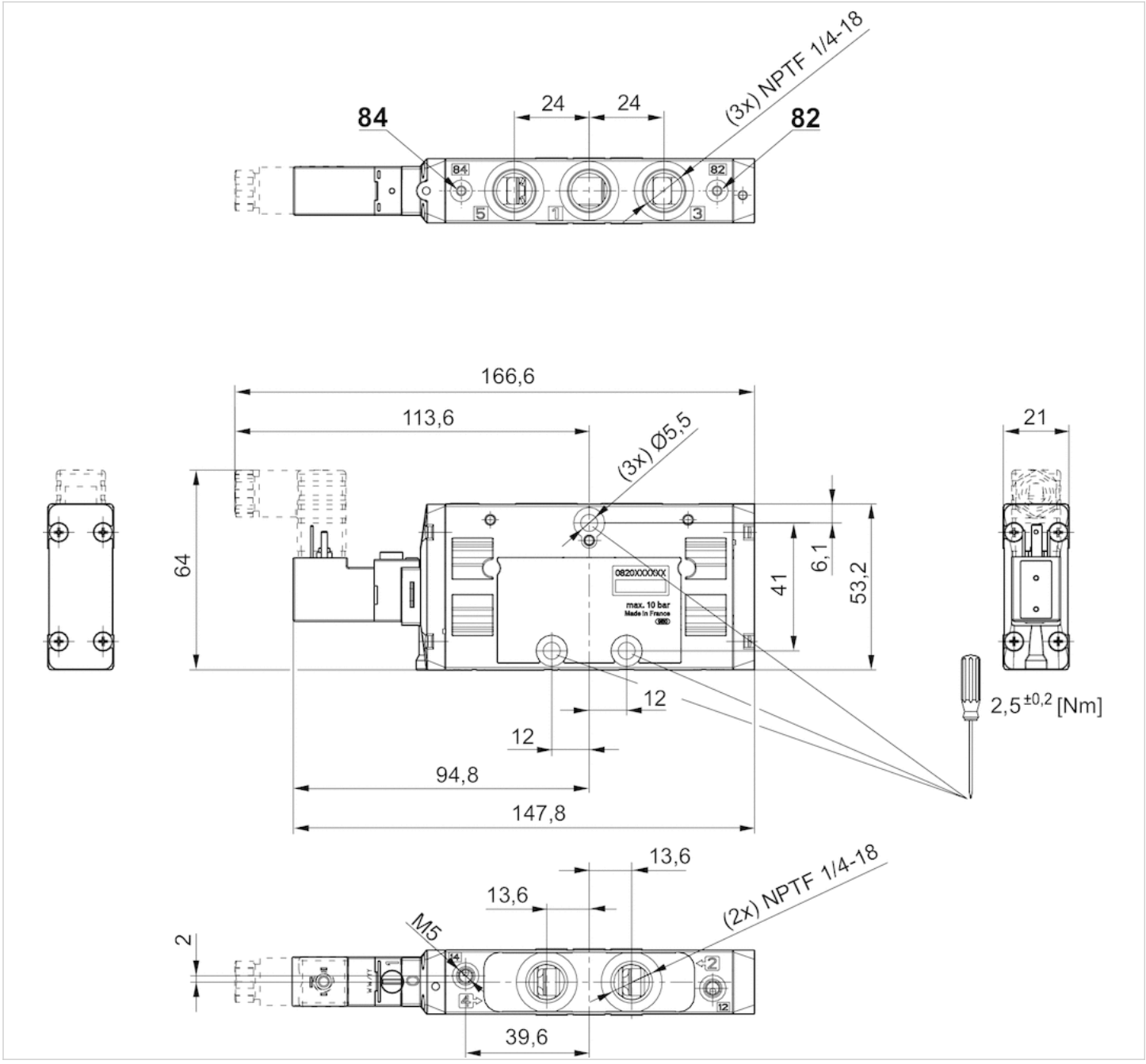
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in the MediaCentre).

Technical information

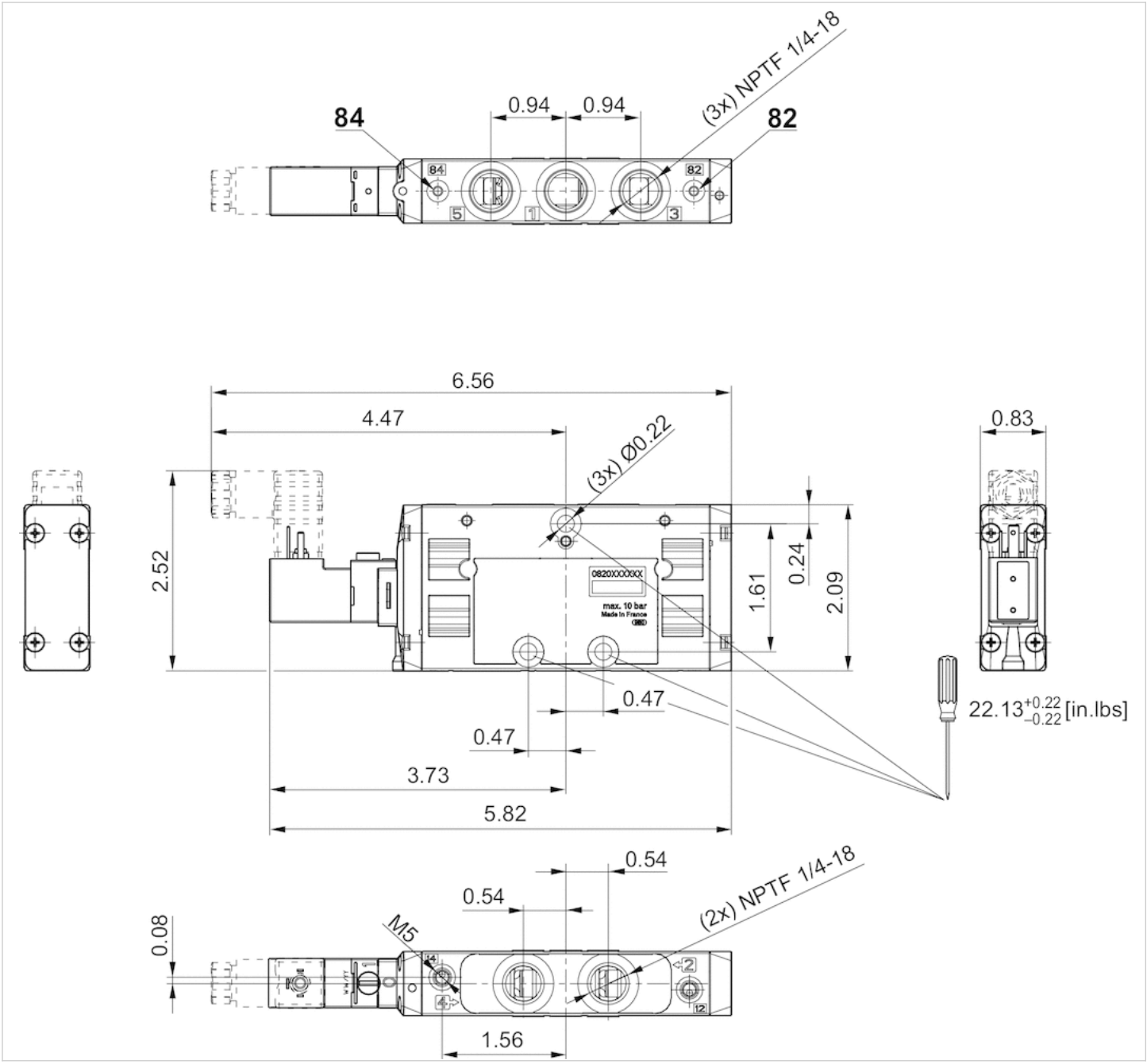
Material	
Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber Hydrogenated nitrile butadiene rubber
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, nickel-plated chrome-plated

Dimensions

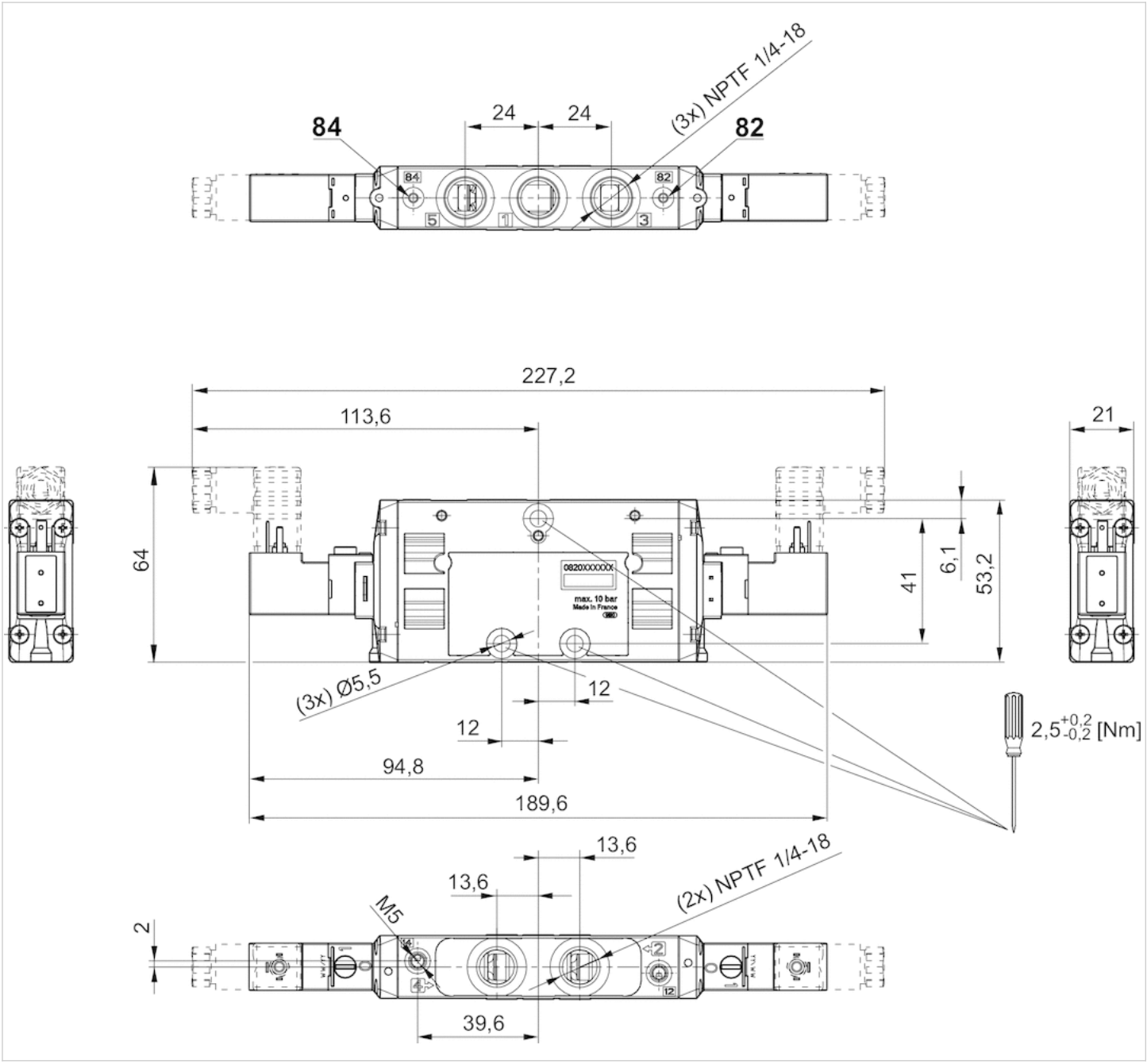
Dimensions in mm, single solenoid



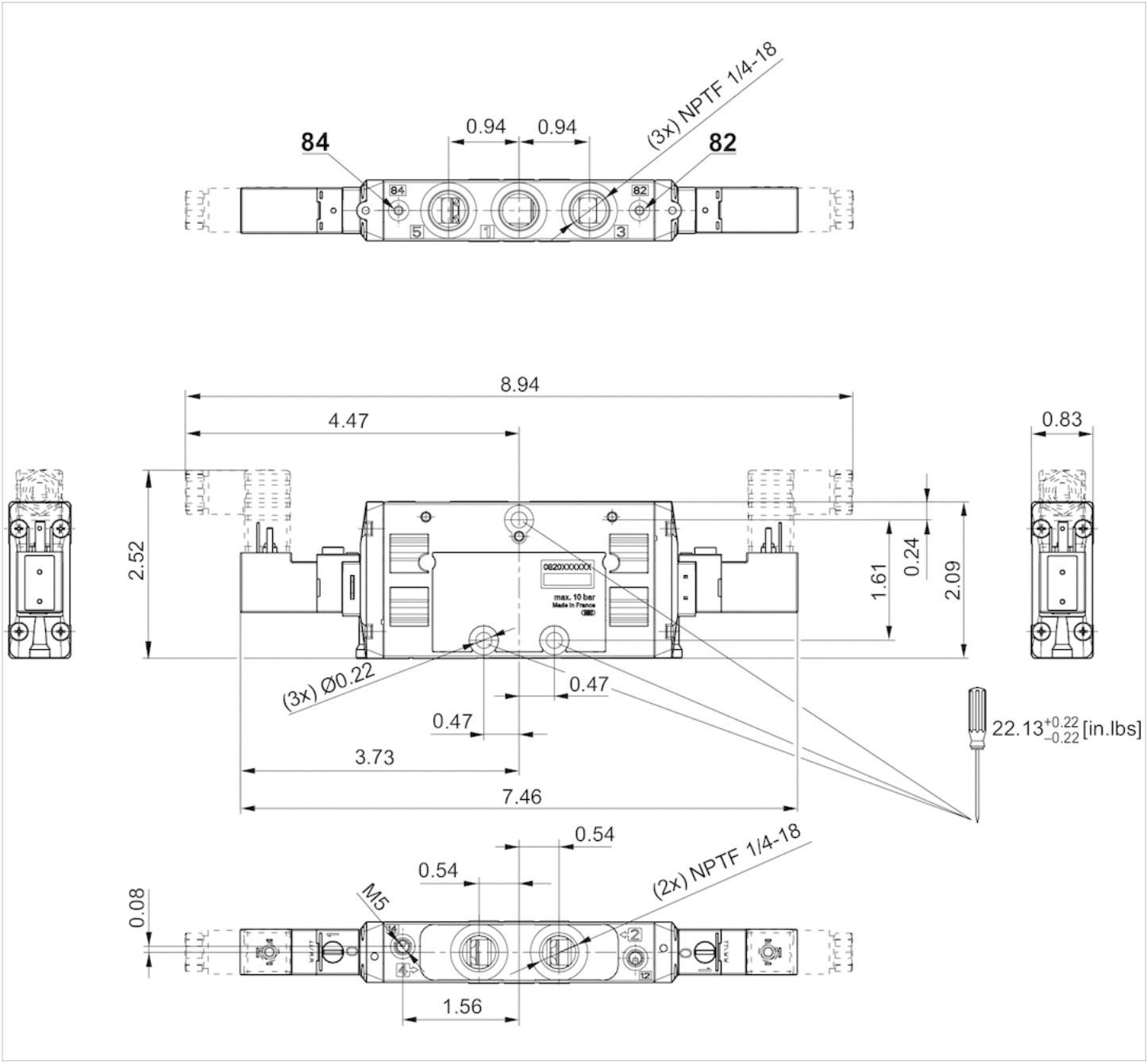
Dimensions in inches, single solenoid



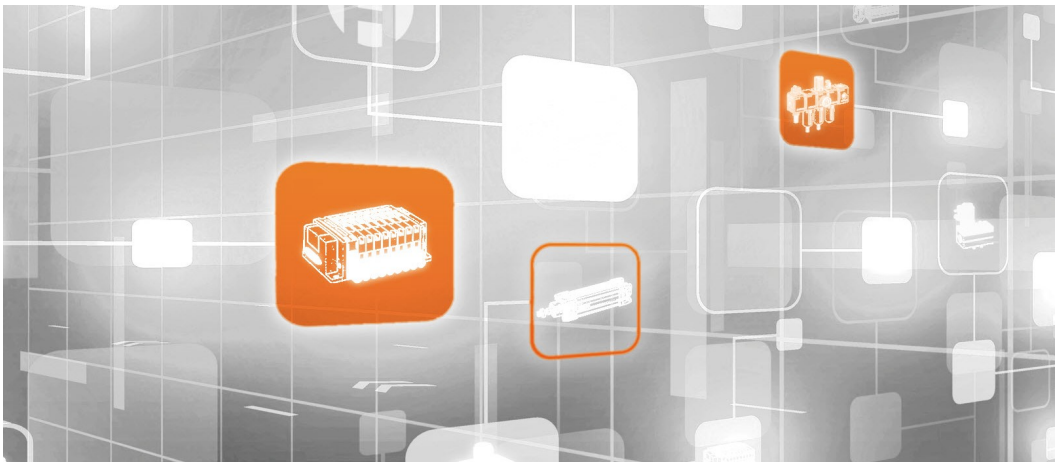
Dimensions in mm, double solenoid



Dimensions in inches, double solenoid



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