

Series TC08



AVENTICS™

**AVENTICS Series TC08
Directional valves**


EMERSON™

Series TC08

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.

- Excellent ratio of installation space and flow rate
- Large selection of electrical connections
- Electrical or pneumatic operated
- Long service life
- Adjustable coil with four 90° positions



Product overview

	Page
Electrically operated, form C	
2x3/2-directional valve, Series TC08, with detent.....	6
15 mm - Double Solenoid - with detent - Soft seal - Plug	
2x3/2-directional valve, Series TC08, without detent.....	8
15 mm - Double Solenoid - without detent - Soft seal - Plug	
5/2-directional valve, Series TC08, without detent, double solenoid.....	10
15 mm - Double Solenoid - without detent - Soft seal - Plug	
5/2-directional valve, Series TC08, without detent.....	12
15 mm - single - without detent - Soft seal - Plug	
5/2-directional valve, Series TC08, with detent, double Solenoid.....	14
15 mm - Double Solenoid - with detent - Soft seal - Plug	
5/2-directional valve, Series TC08, with detent.....	16
15 mm - single - with detent - Soft seal - Plug	
5/3-directional valve, Series TC08, with detent.....	18
15 mm - Double Solenoid - with detent - Soft seal - Plug	
5/3-directional valve, Series TC08, without detent.....	20
15 mm - Double Solenoid - without detent - Soft seal - Plug	
Electrically operated, form C, inch	
2x3/2-directional valve, Series TC08, with detent, inch.....	22
15 mm - Double Solenoid - with detent - Soft seal - Plug	
2x3/2-directional valve, Series TC08, without detent, inch.....	24
15 mm - Double Solenoid - with detent - Soft seal - Plug	
5/2-directional valve, Series TC08, with detent, double solenoid, inch.....	27
15 mm - Double Solenoid - with detent - Soft seal - Plug	
5/2-directional valve, Series TC08, without detent, double solenoid, inch.....	28
15 mm - Double Solenoid - with detent - Soft seal - Plug	
5/2-directional valve, Series TC08, with detent, inch.....	30
15 mm - single - with detent - Soft seal - Plug - 5/2, with air spring return	
5/2-directional valve, Series TC08, without detent, inch.....	32
15 mm - Double Solenoid - with detent - Soft seal - Plug	
5/3-directional valve, Series TC08, with detent, inch.....	34
15 mm - with detent - Soft seal	
5/3-directional valve, Series TC08 - inch.....	35
15 mm - Double Solenoid - Soft seal - Plug	
5/3-directional valve, Series TC08 - inch.....	37
15 mm - Double Solenoid - Soft seal - Plug	
Electrically operated, M8, 3-pin	
2x3/2-directional valve, Series TC08, with detent.....	40
15 mm - Double Solenoid - with detent - Soft seal - Plug	
5/2-directional valve, Series TC08, with detent, double Solenoid.....	43
15 mm - Double Solenoid - with detent - Soft seal - Plug	
5/2-directional valve, Series TC08, with detent.....	46
15 mm - with detent - Soft seal - Plug	
5/3-directional valve, Series TC08, with detent.....	49
15 mm - Double Solenoid - with detent - Soft seal - Plug	
Electrically operated, M8, 4-pin	
2x3/2-directional valve, Series TC08, without detent.....	52
15 mm - Double Solenoid - without detent - Soft seal - Plug	

Product overview

	Page
2x3/2-directional valve, Series TC08, with detent.....	55
15 mm - Double Solenoid - with detent - Soft seal - Plug	
5/2-directional valve, Series TC08, without detent, double solenoid.....	58
15 mm - Double Solenoid - without detent - Soft seal - Plug	
5/2-directional valve, Series TC08, without detent.....	61
15 mm - without detent - Soft seal - Plug	
5/2-directional valve, Series TC08, with detent, double Solenoid.....	64
15 mm - Double Solenoid - with detent - Soft seal - Plug	
5/2-directional valve, Series TC08, with detent.....	67
15 mm - with detent - Soft seal - Plug	
5/3-directional valve, Series TC08, without detent.....	70
15 mm - Double Solenoid - without detent - Soft seal - Plug	
5/3-directional valve, Series TC08, with detent.....	73
15 mm - Double Solenoid - with detent - Soft seal - Plug	
Pneumatically operated	
2x3/2-directional valve, Series TC08.....	76
Soft seal	
5/2-directional valve, Series TC08.....	79
Soft seal	
5/3-directional valve, Series TC08.....	82
Soft seal	
Accessories overview TC08	
Valve plug connector, series CON-VP, 0° female insert.....	84
Valve plug connector with cable series CON-VP,, 180° female insert.....	86
Valve plug connector, series CON-VP, form C, 300 V DC / 250 V AC.....	88
Valve plug connector, series CON-VP, form C, 24 V AC/DC.....	89
Round plug connector, Series CON-RD, straight.....	90
Socket - M8x1 - 3-pin	
Round plug connector, Series CON-RD, angled.....	92
Socket - M8x1 - 3-pin - angled	
Round plug connector, Series CON-RD, open cable ends, straight.....	94
Cable-Ø 4,5 mm - Socket - M8x1 - 3-pin - straight - open cable ends - 3-pin	
Round plug connector, Series CON-RD, open cable ends, angled.....	96
Cable-Ø 4,5 mm - Socket - M8x1 - 3-pin - angled - open cable ends - 3-pin	
Round plug connector, Series CON-RD, open cable ends, straight, 4-pin.....	98
Socket - M8x1 - 4-pin - straight - open cable ends - 4-pin	
Round plug connector, Series CON-RD, Plug M8x1, 4-pin.....	100
Socket - M8x1 - 4-pin - angled - open cable ends - 4-pin	
Coil, Series CO1, Form C.....	102
Form C, coil kit - Plug	
Coil, Series CO1, M8.....	104
M8, coil kit - Plug	
Manifold strip, Series TC08.....	106
Mounting kit, TC08 series.....	108
TC08	
Blanking plate, TC08 series.....	109
Manifold strip, Series TC08.....	110
Manifold strip, Series TC08.....	112
Manifold strip, Series TC08.....	114

Product overview

	Page
Manifold strip, Series TC08.....	116
Manifold strip, Series TC08.....	118
Manifold strip, Series TC08.....	120
Manifold strip, Series TC08.....	122
Mounting clip.....	124
Mounting bracket.....	125

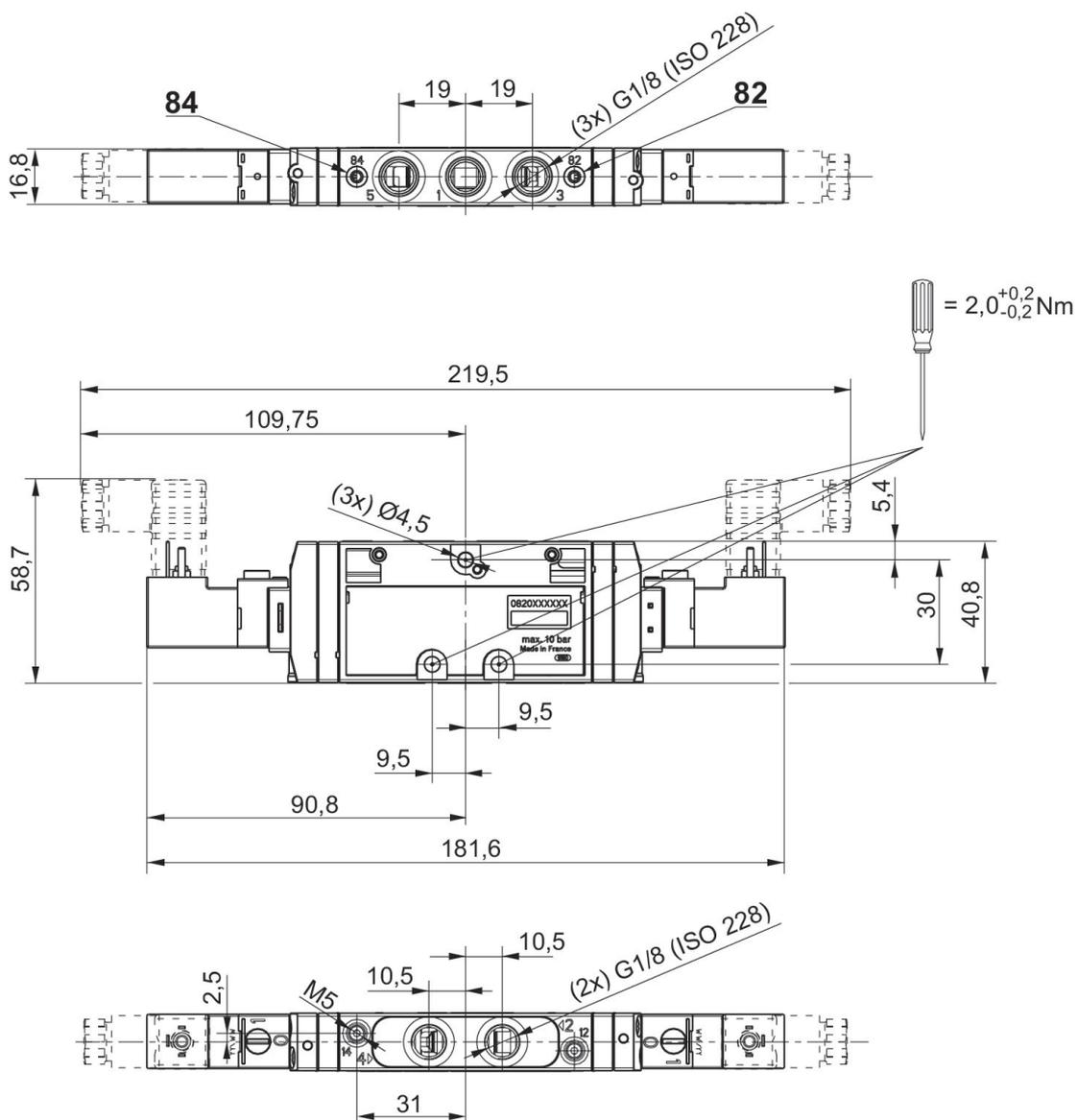
2x3/2-directional valve, Series TC08, with detent

Flow: 600 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: ISO 15217, form C
 Compressed air connection type: Internal thread
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Compressed air connection, exhaust: G 1/8
 Min. control pressure: 2.5 bar
 Max. control pressure: 10 bar
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C
 Max. working pressure: 10 bar



Valve function	Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
NC/NC	2x 3/2 NC/NC, with spring return	24 V DC	Internal	2	10	10	14	R422102002
NO/NO	2x 3/2 NO/NO, with spring return	24 V DC	Internal	2	10	10	14	R422102006
NC/NO	2x 3/2 NC/NO, with spring return	24 V DC	Internal	2	10	10	14	R422102010
NC/NC	2x 3/2 NC/NC, with spring return	24 V DC	External	2	10	10	14	R422102013
NO/NO	2x 3/2 NO/NO, with spring return	24 V DC	External	2	10	10	14	R422102016
NC/NO	2x 3/2 NC/NO, with spring return	24 V DC	External	2	10	10	14	R422102019

Dimensions



2x3/2-directional valve, Series TC08, without detent

Flow: 600 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: ISO 15217, form C
 Compressed air connection type: Internal thread
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Compressed air connection, exhaust: G 1/8
 Min. control pressure: 3 bar
 Max. control pressure: 10 bar
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



Valve function	Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
NC/NC	2x 3/2 NC/NC, with spring return	24 V DC	Internal	2	10	10	14	R422102023
NO/NO	2x 3/2 NO/NO, with spring return	24 V DC	Internal	2	10	10	14	R422102027
NC/NO	2x 3/2 NC/NO, with spring return	24 V DC	Internal	2	10	10	14	R422102031
NC/NC	2x 3/2 NC/NC, with spring return	24 V DC	External	2	10	10	14	R422102034
NO/NO	2x 3/2 NO/NO, with spring return	24 V DC	External	2	10	10	14	R422102037
NC/NO	2x 3/2 NC/NO, with spring return	24 V DC	External	2	10	10	14	R422102040

5/2-directional valve, Series TC08, without detent, double solenoid

Flow: 800 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: ISO 15217, form C
 Compressed air connection type: Internal thread
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



Basic valve equipment	Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
	5/2, double solenoid	24 V DC	Internal	2	10	10	10	0820060601
Basic valve without coil	5/2, double solenoid		Internal		10	10	10	R422103051
	5/2, double solenoid	24 V DC	External	2	10	10	10	0820060651
Basic valve without coil	5/2, double solenoid		External		10	10	10	R422103053

5/2-directional valve, Series TC08, without detent

Flow: 800 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: ISO 15217, form C
 Compressed air connection type: Internal thread
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



Basic valve equipment	Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
	5/2, with air spring return	24 V DC	Internal	2	10	14	18	0820060101
	5/2, with air spring return	24 V DC	External	2	10	14	18	0820060151
	5/2, with spring/air spring return	24 V DC	Internal	2	10	14	17	0820060126
Basic valve without coil	5/2, with spring/air spring return		Internal		10	14	17	R422103047
	5/2, with spring/air spring return	24 V DC	External	2	10	14	17	0820060176
Basic valve without coil	5/2, with spring/air spring return		External		10	14	17	R422103049

5/2-directional valve, Series TC08, with detent, double Solenoid

Flow: 800 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: ISO 15217, form C
 Compressed air connection type: Internal thread
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



Basic valve equipment	Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
	5/2, double solenoid	24 V DC	Internal	2	10	10	10	0820060501
Basic valve without coil	5/2, double solenoid		Internal		10	10	10	R422103050
	5/2, double solenoid	24 V DC	External	2	10	10	10	0820060551
Basic valve without coil	5/2, double solenoid		External		10	10	10	R422103052

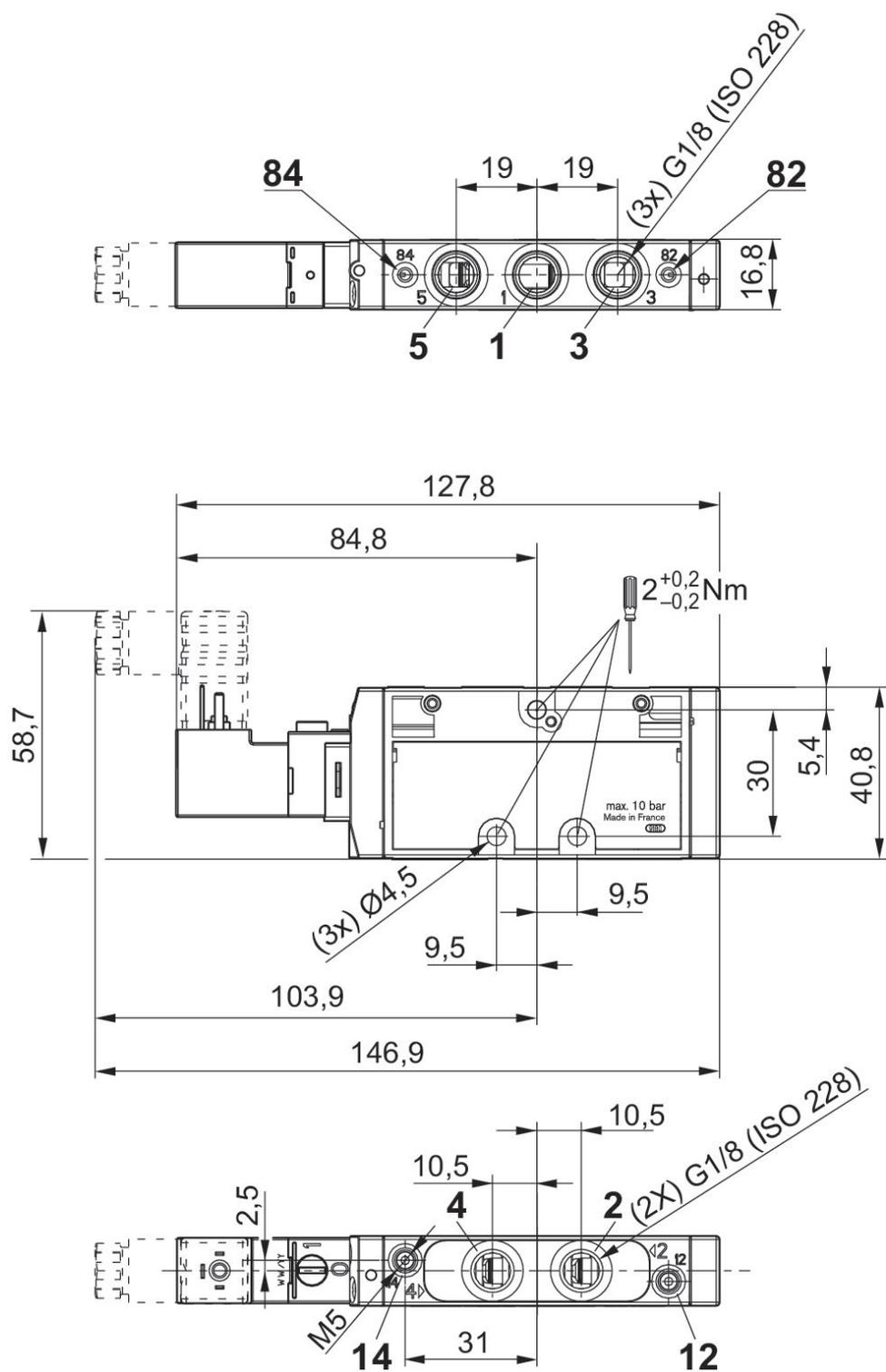
5/2-directional valve, Series TC08, with detent

Flow: 800 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: ISO 15217, form C
 Compressed air connection type: Internal thread
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



Basic valve equipment	Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
	5/2, with air spring return	24 V DC	Internal	2	10	14	18	0820060001
	5/2, with air spring return	24 V DC	External	2	10	14	18	0820060051
	5/2, with spring/air spring return	24 V DC	Internal	2	10	14	17	0820060026
	5/2, with spring/air spring return	24 V DC	External	2	10	14	17	0820060076
Basic valve without coil	5/2, with spring/air spring return		Internal		10	14	17	R422103046
Basic valve without coil	5/2, with spring/air spring return		External		10	14	17	R422103048

Dimensions



5/3-directional valve, Series TC08, with detent

Flow: 700 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: ISO 15217, form C
 Compressed air connection type: Internal thread
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Min. control pressure: 3 bar
 Max. control pressure: 10 bar
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C
 Max. working pressure: 10 bar



Basic valve equipment	Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
	5/3, closed center	24 V DC	Internal	2	10	10	11	0820061001
Basic valve without coil	5/3, closed center		Internal		10	10	11	R422103054
	5/3, closed center	24 V DC	External	2	10	10	11	0820061051
Basic valve without coil	5/3, closed center		External		10	10	11	R422103056
	5/3, exhaust-ed center	24 V DC	Internal	2	10	10	11	0820061011
Basic valve without coil	5/3, exhaust-ed center		Internal		10	10	11	R422103058
	5/3, exhaust-ed center	24 V DC	External	2	10	10	11	0820061061
	5/3, pressur-ized center	24 V DC	Internal	2	10	10	11	0820061021
	5/3, pressur-ized center	24 V DC	External	2	10	10	11	0820061071

5/3-directional valve, Series TC08, without detent

Flow: 700 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: ISO 15217, form C
 Compressed air connection type: Internal thread
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Min. control pressure: 3 bar
 Max. control pressure: 10 bar
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C
 Max. working pressure: 10 bar



Basic valve equipment	Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
	5/3, closed center	24 V DC	Internal	2	10	10	11	0820061101
Basic valve without coil	5/3, closed center		Internal		10	10	11	R422103055
	5/3, closed center	24 V DC	External	2	10	10	11	0820061151
Basic valve without coil	5/3, closed center		External		10	10	11	R422103057
	5/3, exhaust-ed center	24 V DC	Internal	2	10	10	11	0820061111
Basic valve without coil	5/3, exhaust-ed center		Internal		10	10	11	R422103059
	5/3, exhaust-ed center	24 V DC	External	2	10	10	11	0820061161
	5/3, pressur-ized center	24 V DC	Internal	2	10	10	11	0820061121
	5/3, pressur-ized center	24 V DC	External	2	10	10	11	0820061171

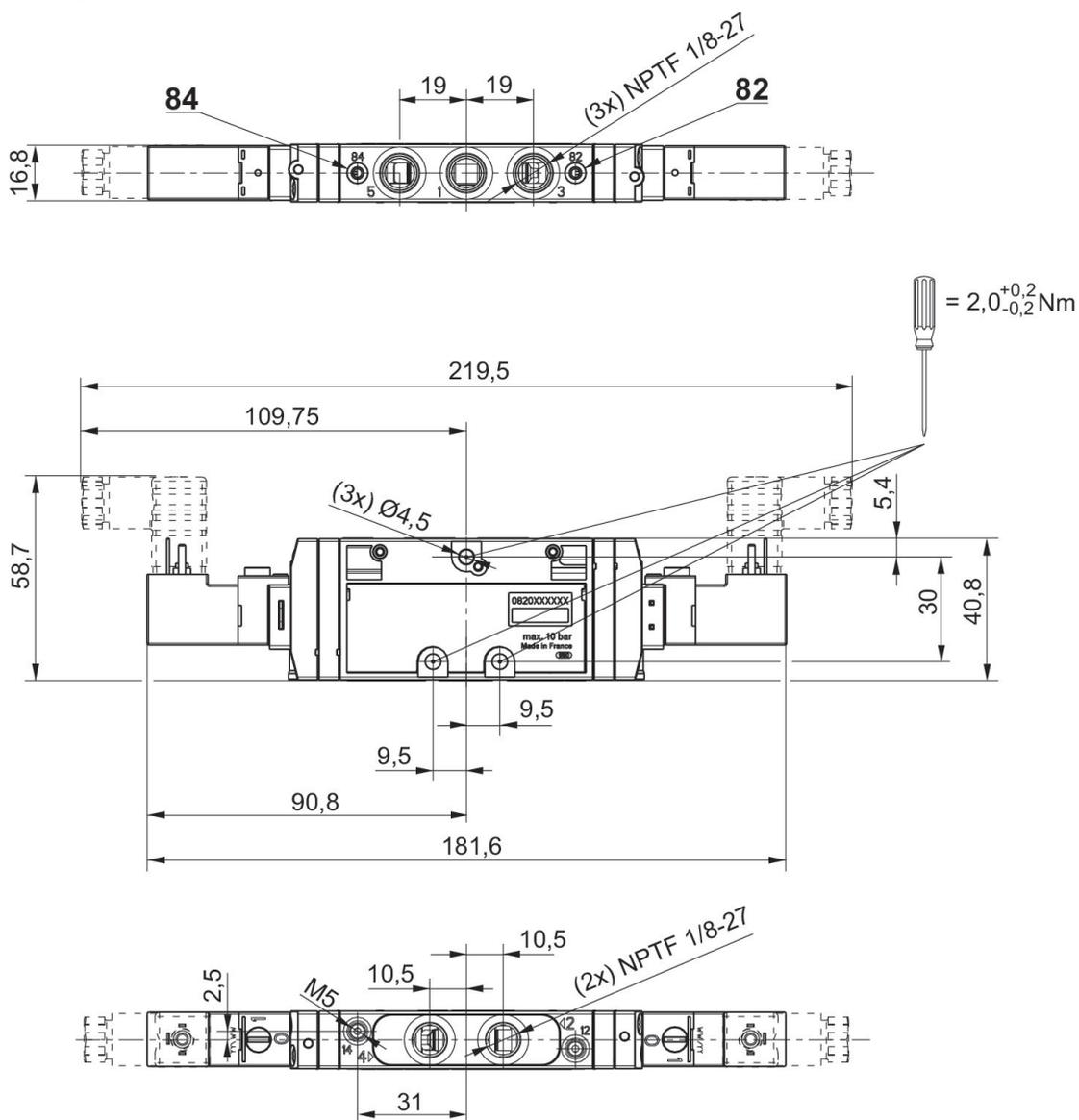
2x3/2-directional valve, Series TC08, with detent, inch

Flow: 600 l/min
 Activation: Electrically
 Electrical connection 2, thread size: ISO 15217, form C
 Min. control pressure: 2.5 bar
 Max. control pressure: 10 bar
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, negative overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



Valve function	Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
NC/NC	2x 3/2 NC/NC, with spring return	24 V DC	Internal	2	10	10	14	R422102101
NO/NO	2x 3/2 NO/NO, with spring return	24 V DC	Internal	2	10	10	14	R422102105
NC/NO	2x 3/2 NC/NO, with spring return	24 V DC	Internal	2	10	10	14	R422102109
NC/NC	2x 3/2 NC/NC, with spring return	24 V DC	External	2	10	10	14	R422102113
NO/NO	2x 3/2 NO/NO, with spring return	24 V DC	External	2	10	10	14	R422102117
NC/NO	2x 3/2 NC/NO, with spring return	24 V DC	External	2	10	10	14	R422102121

Dimensions in mm



2x3/2-directional valve, Series TC08, without detent, inch

Flow: 600 l/min
 Activation: Electrically
 Electrical connection 2, thread size: ISO 15217, form C
 Compressed air connection input: 1/8-27 NPTF
 Compressed air connection output: 1/8-27 NPTF
 Compressed air connection, exhaust: 1/8-27 NPTF
 Min. control pressure: 2.5 bar
 Max. control pressure: 10 bar
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, negative overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C
 Min. working pressure: 3 bar
 Max. working pressure: 10 bar

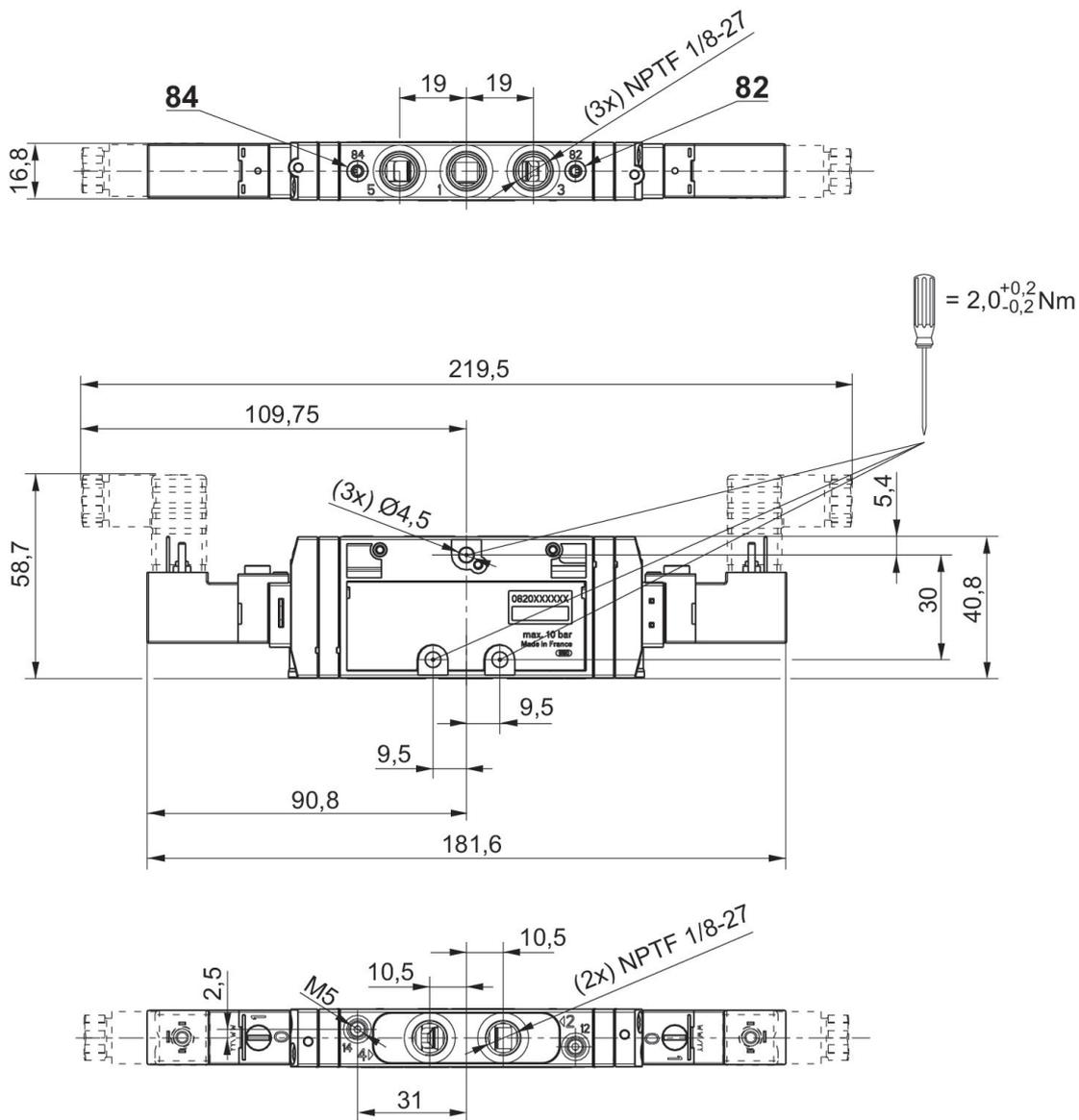


Valve function	Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Operational voltage AC at 50 Hz	Max. working pressure [bar]	Typ. switch-on time [ms]	Part No.
NC/NC	2x 3/2 NC/NC, with spring return	12 V DC	Internal	2		10	10	R422102100
NC/NC	2x 3/2 NC/NC, with spring return	110 V AC	Internal		110 V	10	10	R422102102
NC/NC	2x 3/2 NC/NC, with spring return	230 V AC	Internal		230 V	10	10	R422102103
NO/NO	2x 3/2 NO/NO, with spring return	12 V DC	Internal	2		10	10	R422102104
NO/NO	2x 3/2 NO/NO, with spring return	110 V AC	Internal		110 V	10	10	R422102106
NO/NO	2x 3/2 NO/NO, with spring return	230 V AC	Internal		230 V	10	10	R422102107
NC/NO	2x 3/2 NC/NO, with spring return	12 V DC	Internal	2		10	10	R422102108
NC/NO	2x 3/2 NC/NO, with spring return	110 V AC	Internal		110 V	10	10	R422102110
NC/NO	2x 3/2 NC/NO, with spring return	230 V AC	Internal		230 V	10	10	R422102111
NC/NC	2x 3/2 NC/NC, with spring return	12 V DC	External	2		10	10	R422102112
NC/NC	2x 3/2 NC/NC, with spring return	110 V AC	External		110 V	10	10	R422102114
NC/NC	2x 3/2 NC/NC, with spring return	230 V AC	External		230 V	10	10	R422102115
NO/NO	2x 3/2 NO/NO, with spring return	12 V DC	External	2		10	10	R422102116

Valve function	Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Operational voltage AC at 50 Hz	Max. working pressure [bar]	Typ. switch-on time [ms]	Part No.
NO/NO	2x 3/2 NO/NO, with spring return	110 V AC	External		110 V	10	10	R422102118
NO/NO	2x 3/2 NO/NO, with spring return	230 V AC	External		230 V	10	10	R422102119
NC/NO	2x 3/2 NC/NO, with spring return	12 V DC	External	2		10	10	R422102120
NC/NO	2x 3/2 NC/NO, with spring return	110 V AC	External		110 V	10	10	R422102122
NC/NO	2x 3/2 NC/NO, with spring return	230 V AC	External		230 V	10	10	R422102123

Typ. switch-off time [ms]	Part No.
14	R422102100
14	R422102102
14	R422102103
14	R422102104
14	R422102106
14	R422102107
14	R422102108
14	R422102110
14	R422102111
14	R422102112
14	R422102114
14	R422102115
14	R422102116
14	R422102118
14	R422102119
14	R422102120
14	R422102122
14	R422102123

Dimensions in mm



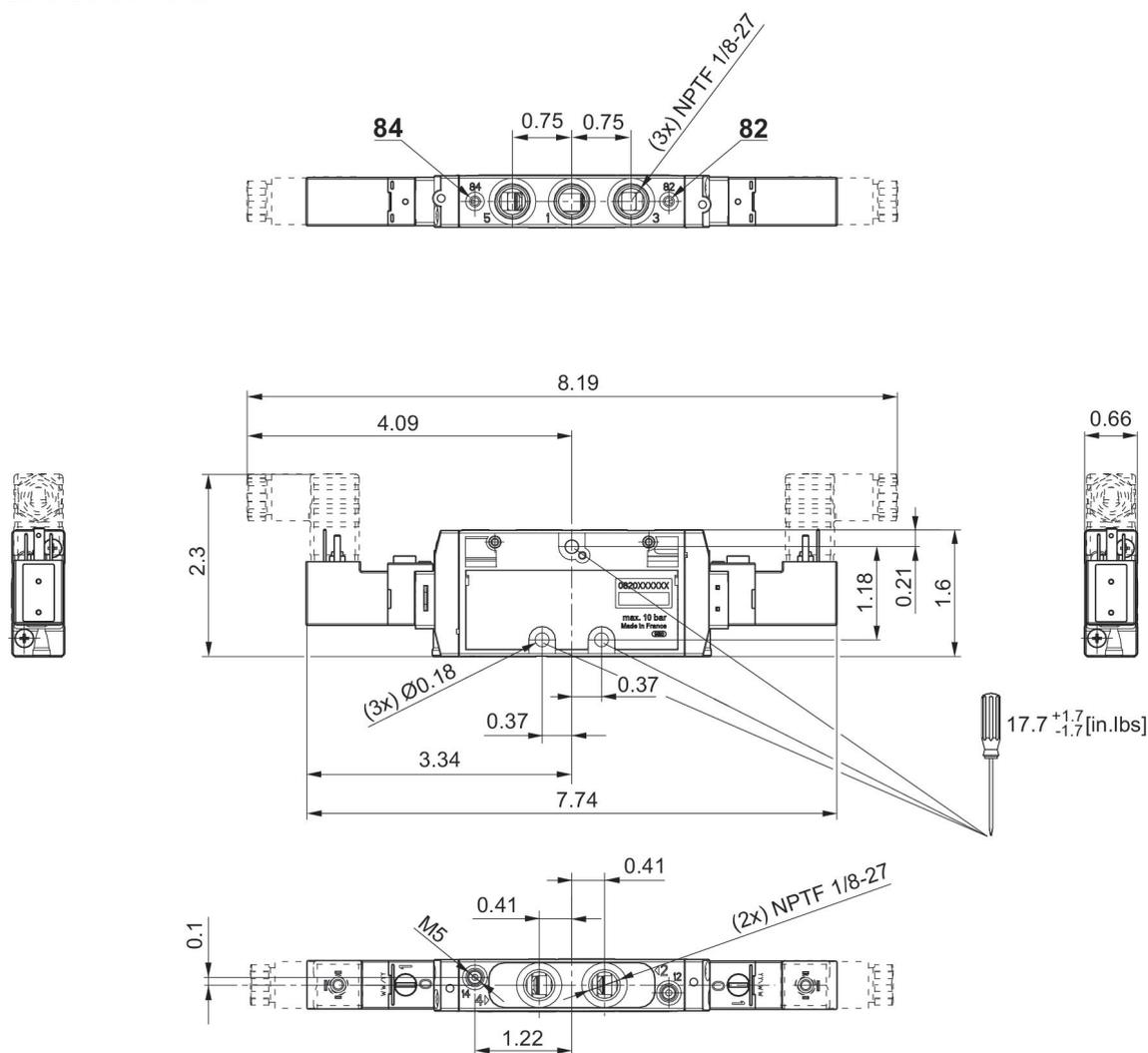
5/2-directional valve, Series TC08, with detent, double solenoid, inch

Flow: 800 l/min
 Activation: Electrically
 Electrical connection 2, thread size: ISO 15217, form C
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, negative overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
5/2, with air spring return	24 V DC	Internal	2	10	10	10	R422101217
5/2, with air spring return	24 V DC	External	2	10	10	10	R422101221

Dimensions in inches



5/2-directional valve, Series TC08, without detent, double solenoid, inch

Flow: 800 l/min
 Activation: Electrically
 Electrical connection 2, thread size: ISO 15217, form C
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, negative overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Operational voltage AC at 50 Hz	Operational voltage AC at 60 Hz	Max. working pressure [bar]	Typ. switch-on time [ms]	Part No.
5/2, with air spring return	12 V DC	Internal	2			10	10	R422101216
5/2, with air spring return	110 V AC	Internal		110 V	230 V	10	10	R422101218
5/2, with air spring return	230 V AC	Internal		230 V	230 V	10	10	R422101219
5/2, with air spring return	12 V DC	External	2			10	10	R422101220
5/2, with air spring return	110 V AC	External		110 V	230 V	10	10	R422101222
5/2, with air spring return	230 V AC	External		230 V	230 V	10	10	R422101223

Typ. switch-off time [ms]	Part No.
10	R422101216
10	R422101218
10	R422101219
10	R422101220
10	R422101222
10	R422101223

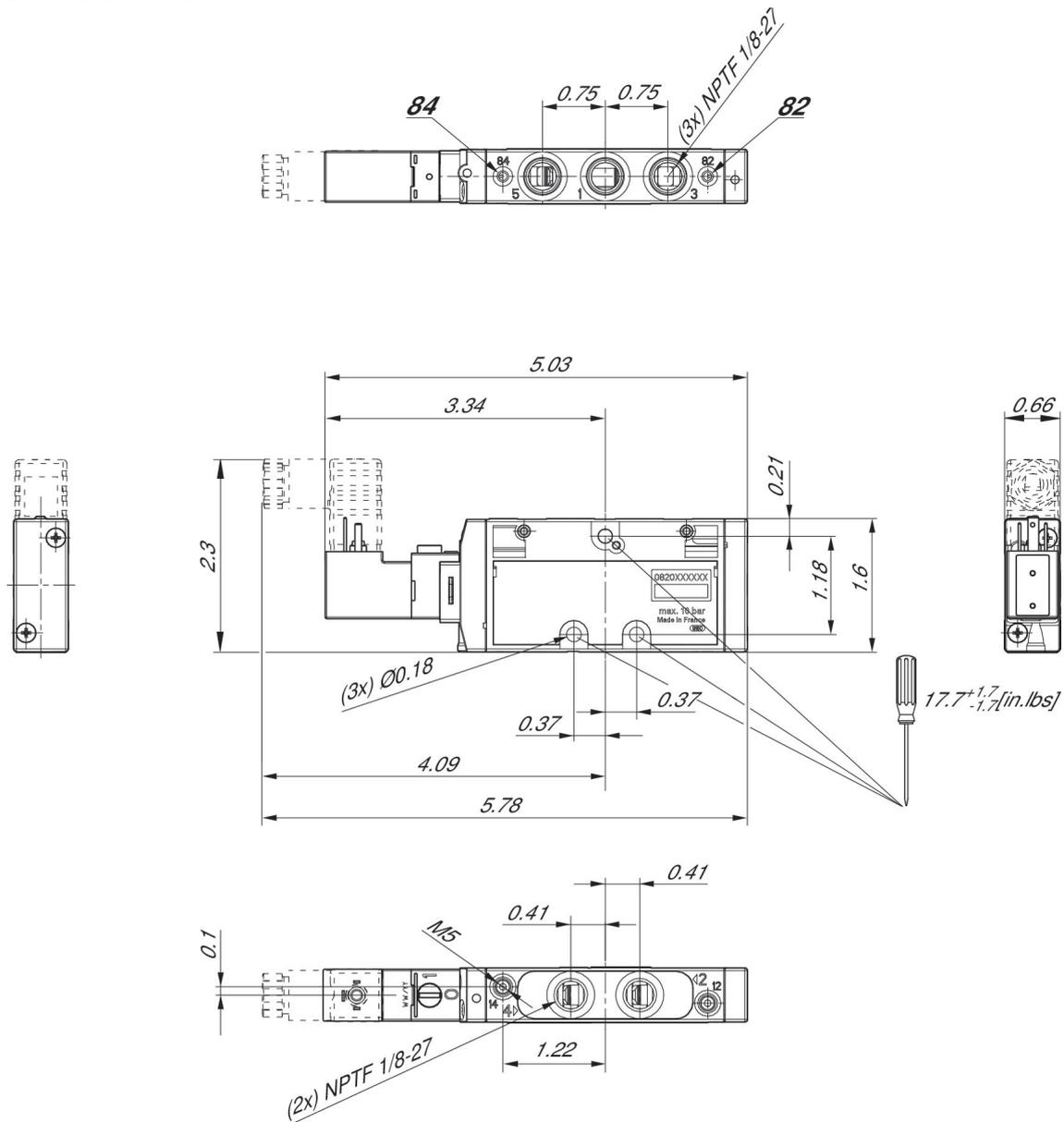
5/2-directional valve, Series TC08, with detent, inch

Flow: 800 l/min
 Activation: Electrically
 Electrical connection 2, thread size: ISO 15217, form C
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, negative overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
5/2, with air spring return	24 V DC	Internal	2	10	14	18	R422101201
5/2, with air spring return	24 V DC	External	2	10	14	18	R422101205
5/2, with spring/air spring return	24 V DC	Internal	2	10	14	17	R422101209
5/2, with spring/air spring return	24 V DC	External	2	10	14	17	R422101213

Dimensions in inches



5/2-directional valve, Series TC08, without detent, inch

Flow: 800 l/min
 Activation: Electrically
 Electrical connection 2, thread size: ISO 15217, form C
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, negative overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C

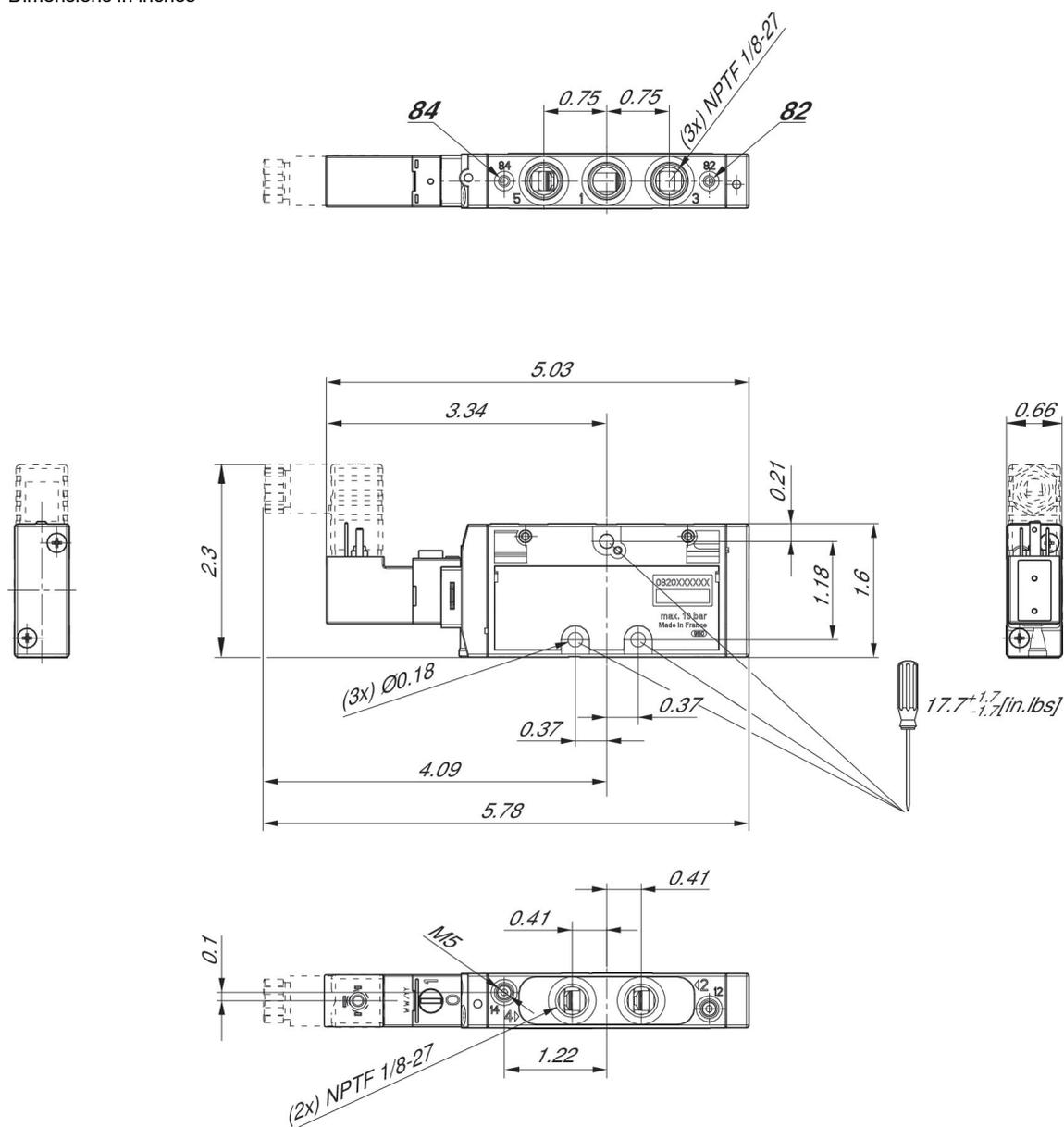


Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Operational voltage AC at 50 Hz	Operational voltage AC at 60 Hz	Max. working pressure [bar]	Typ. switch-on time [ms]	Part No.
5/2, with air spring return	12 V DC	Internal	2			10	14	R422101200
5/2, with air spring return	110 V AC	Internal		110 V	230 V	10	14	R422101202
5/2, with air spring return	230 V AC	Internal		110 V	230 V	10	14	R422101203
5/2, with air spring return	12 V DC	External	2			10	14	R422101204
5/2, with air spring return	110 V AC	External		110 V	230 V	10	14	R422101206
5/2, with air spring return	230 V AC	External		110 V	230 V	10	14	R422101207
5/2, with spring/air spring return	12 V DC	Internal	2			10	14	R422101208
5/2, with spring/air spring return	110 V AC	Internal		110 V	230 V	10	14	R422101210
5/2, with spring/air spring return	230 V AC	Internal		110 V	230 V	10	14	R422101211
5/2, with spring/air spring return	12 V DC	External	2			10	14	R422101212
5/2, with spring/air spring return	110 V AC	External		110 V	230 V	10	14	R422101214
5/2, with spring/air spring return	230 V AC	External		110 V	230 V	10	14	R422101215

Typ. switch-off time [ms]	Part No.
17	R422101200
17	R422101202
17	R422101203
17	R422101204

Typ. switch-off time [ms]	Part No.
17	R422101206
17	R422101207
17	R422101208
17	R422101210
17	R422101211
17	R422101212
17	R422101214
17	R422101215

Dimensions in inches



5/3-directional valve, Series TC08 - inch

Flow: 700 l/min
 Activation: Electrically
 Electrical connection 2, thread size: ISO 15217, form C
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
5/3, closed center	24 V DC	Internal	1.9	10	14	18	R422101225
5/3, closed center	24 V DC	External	1.9	10	14	18	R422101229
5/3, exhausted center	24 V DC	Internal	1.9	10	14	18	R422101233
5/3, exhausted center	24 V DC	External	1.9	10	14	18	R422101237
5/3, pressurized center	24 V DC	Internal	1.9	10	14	18	R422101241
5/3, pressurized center	24 V DC	External	1.9	10	14	18	R422101245

5/3-directional valve, Series TC08 - inch

Flow: 700 l/min
 Activation: Electrically
 Electrical connection 2, thread size: ISO 15217, form C
 Min. control pressure: 3 bar
 Max. control pressure: 10 bar
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Operational voltage AC at 50 Hz	Operational voltage AC at 60 Hz	Max. working pressure [bar]	Typ. switch-on time [ms]	Part No.
5/3, closed center	12 V DC	Internal	1.9			10	14	R422101224
5/3, closed center	110 V AC	Internal		110 V		10	14	R422101226
5/3, closed center	230 V AC	Internal		230 V	230 V	10	14	R422101227
5/3, closed center	12 V DC	External	1.9			10	14	R422101228
5/3, closed center	110 V AC	External		110 V		10	14	R422101230
5/3, closed center	230 V AC	External		230 V	230 V	10	14	R422101231
5/3, exhausted center	12 V DC	Internal	1.9			10	14	R422101232
5/3, exhausted center	110 V AC	Internal		110 V		10	14	R422101234
5/3, exhausted center	230 V AC	Internal		230 V	230 V	10	14	R422101235
5/3, exhausted center	12 V DC	External	1.9			10	14	R422101236
5/3, exhausted center	110 V AC	External		110 V		10	14	R422101238
5/3, exhausted center	230 V AC	External		230 V	230 V	10	14	R422101239
5/3, pressurized center	12 V DC	Internal	1.9			10	14	R422101240
5/3, pressurized center	110 V AC	Internal		110 V		10	14	R422101242
5/3, pressurized center	230 V AC	Internal		230 V	230 V	10	14	R422101243
5/3, pressurized center	12 V DC	External	1.9			10	14	R422101244
5/3, pressurized center	110 V AC	External		110 V		10	14	R422101246
5/3, pressurized center	230 V AC	External		230 V	230 V	10	14	R422101247

Typ. switch-off time [ms]	Part No.
18	R422101224
18	R422101226
18	R422101227
18	R422101228
18	R422101230
18	R422101231
18	R422101232
18	R422101234
18	R422101235
18	R422101236
18	R422101238
18	R422101239
18	R422101240
18	R422101242
18	R422101243
18	R422101244
18	R422101246
18	R422101247

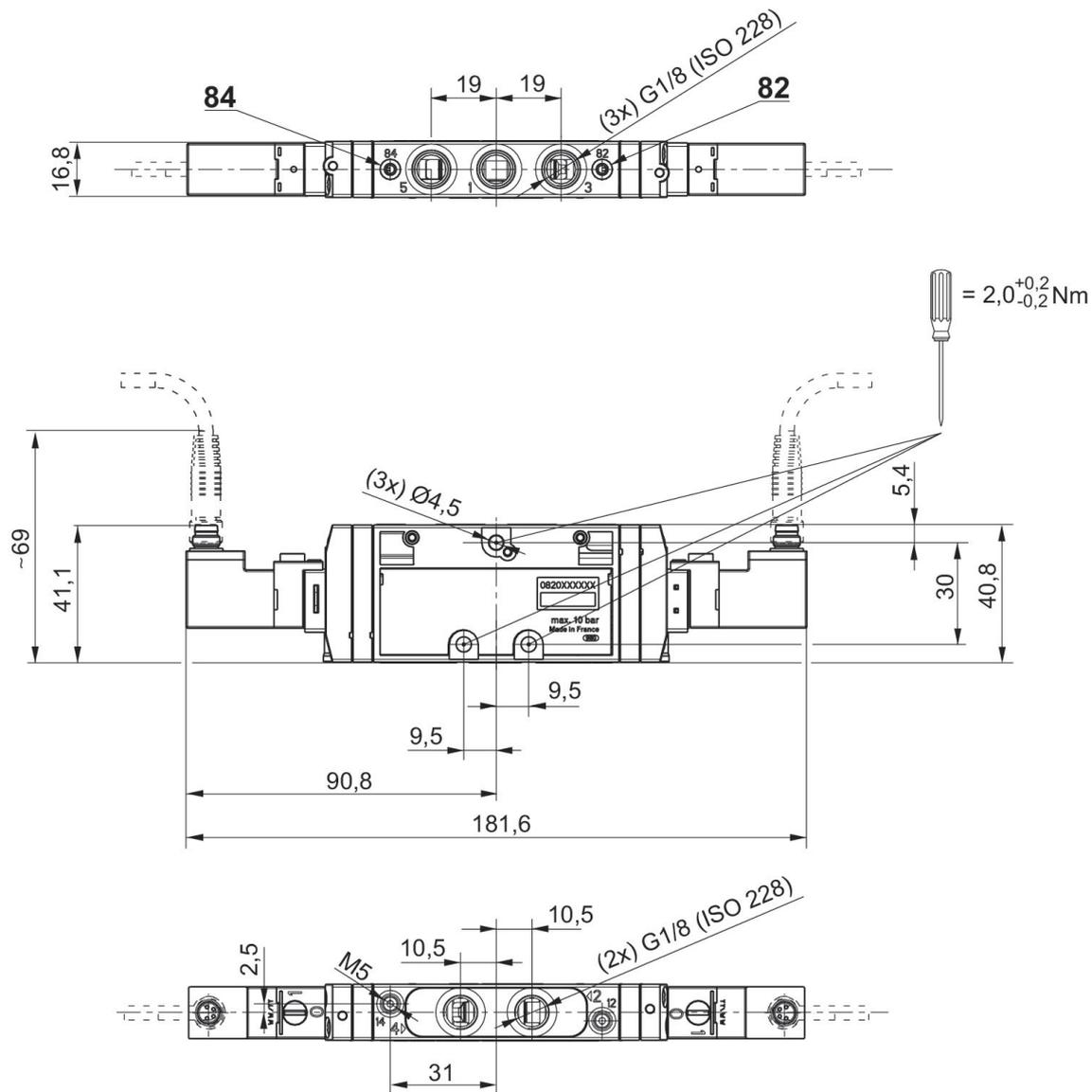
2x3/2-directional valve, Series TC08, with detent

Flow: 600 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: M8
 Compressed air connection type: Internal thread
 Electrical connection 2, number of poles: 3-pin
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Compressed air connection, exhaust: G 1/8
 Min. control pressure: 3 bar
 Max. control pressure: 10 bar
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



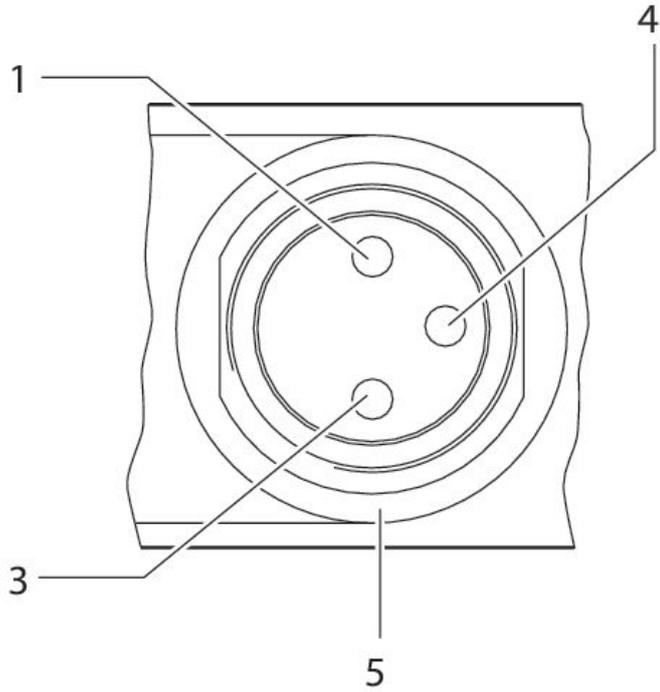
Valve function	Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
NC/NC	2x 3/2 NC/NC, with spring return	24 V DC	Internal	2.2	10	10	14	R422102055
NO/NO	2x 3/2 NO/NO, with spring return	24 V DC	Internal	2.2	10	10	14	R422102056
NC/NO	2x 3/2 NC/NO, with spring return	24 V DC	Internal	2.2	10	10	14	R422102057
NC/NC	2x 3/2 NC/NC, with spring return	24 V DC	External	2.2	10	10	14	R422102058
NO/NO	2x 3/2 NO/NO, with spring return	24 V DC	External	2.2	10	10	14	R422102059
NC/NO	2x 3/2 NC/NO, with spring return	24 V DC	External	2.2	10	10	14	R422102060

Dimensions



R422102055, R422102056, R422102057, R422102058, R422102059, R422102060

PIN assignment and cable colors for valve plug connectors



PIN assignment: 1) PIN not assigned 3) 0 V 4) 24 V 5) LED Cable color 1) Brown 3) Blue 4) Black
Note: Bi-polar protective circuit to prevent overvoltage

5/2-directional valve, Series TC08, with detent, double Solenoid

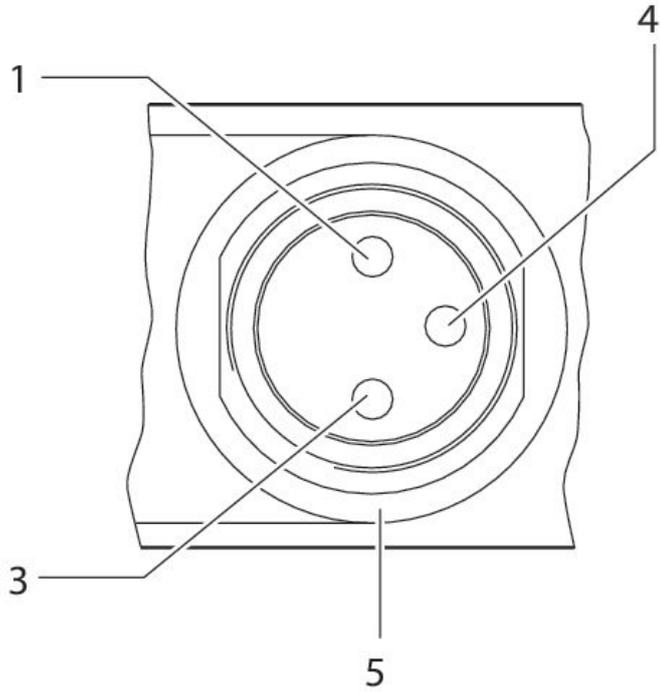
Flow: 800 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: M8
 Compressed air connection type: Internal thread
 Electrical connection 2, number of poles: 3-pin
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
5/2, double solenoid	24 V DC	Internal	2.2	10	10	10	R422100972
5/2, double solenoid	24 V DC	External	2.2	10	10	10	R422100973

R422100972, R422100973

PIN assignment and cable colors for valve plug connectors



PIN assignment: 1) PIN not assigned 3) 0 V 4) 24 V 5) LED Cable color 1) Brown 3) Blue 4) Black
Note: Bi-polar protective circuit to prevent overvoltage

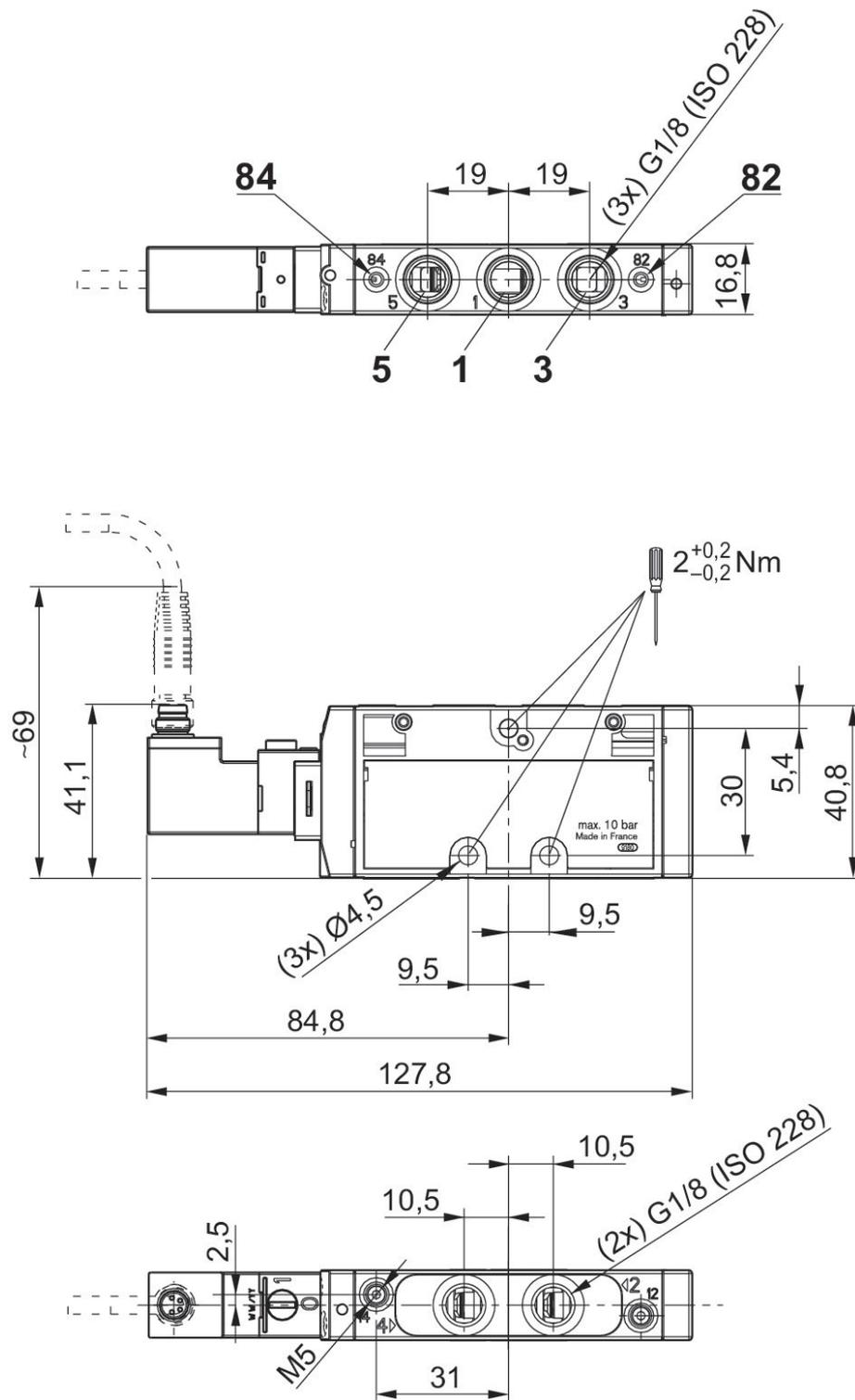
5/2-directional valve, Series TC08, with detent

Flow: 800 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: M8
 Compressed air connection type: Internal thread
 Electrical connection 2, number of poles: 3-pin
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



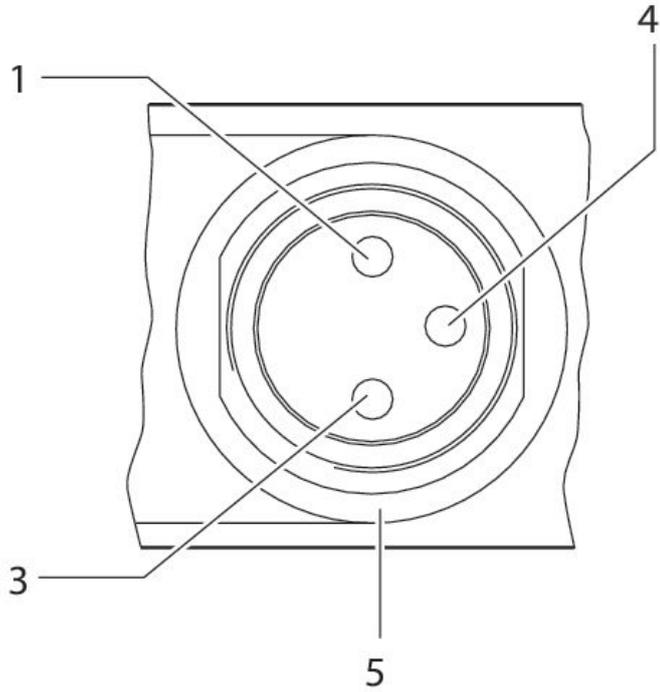
Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
5/2, with air spring return	24 V DC	Internal	2.2	10	14	18	R422100968
5/2, with air spring return	24 V DC	External	2.2	10	14	18	R422100969
5/2, with spring/air spring return	24 V DC	Internal	2.2	10	14	17	R422100970
5/2, with spring/air spring return	24 V DC	External	2.2	10	14	17	R422100971

Dimensions



R422100968, R422100969, R422100970, R422100971

PIN assignment and cable colors for valve plug connectors



PIN assignment: 1) PIN not assigned 3) 0 V 4) 24 V 5) LED Cable color 1) Brown 3) Blue 4) Black
Note: Bi-polar protective circuit to prevent overvoltage

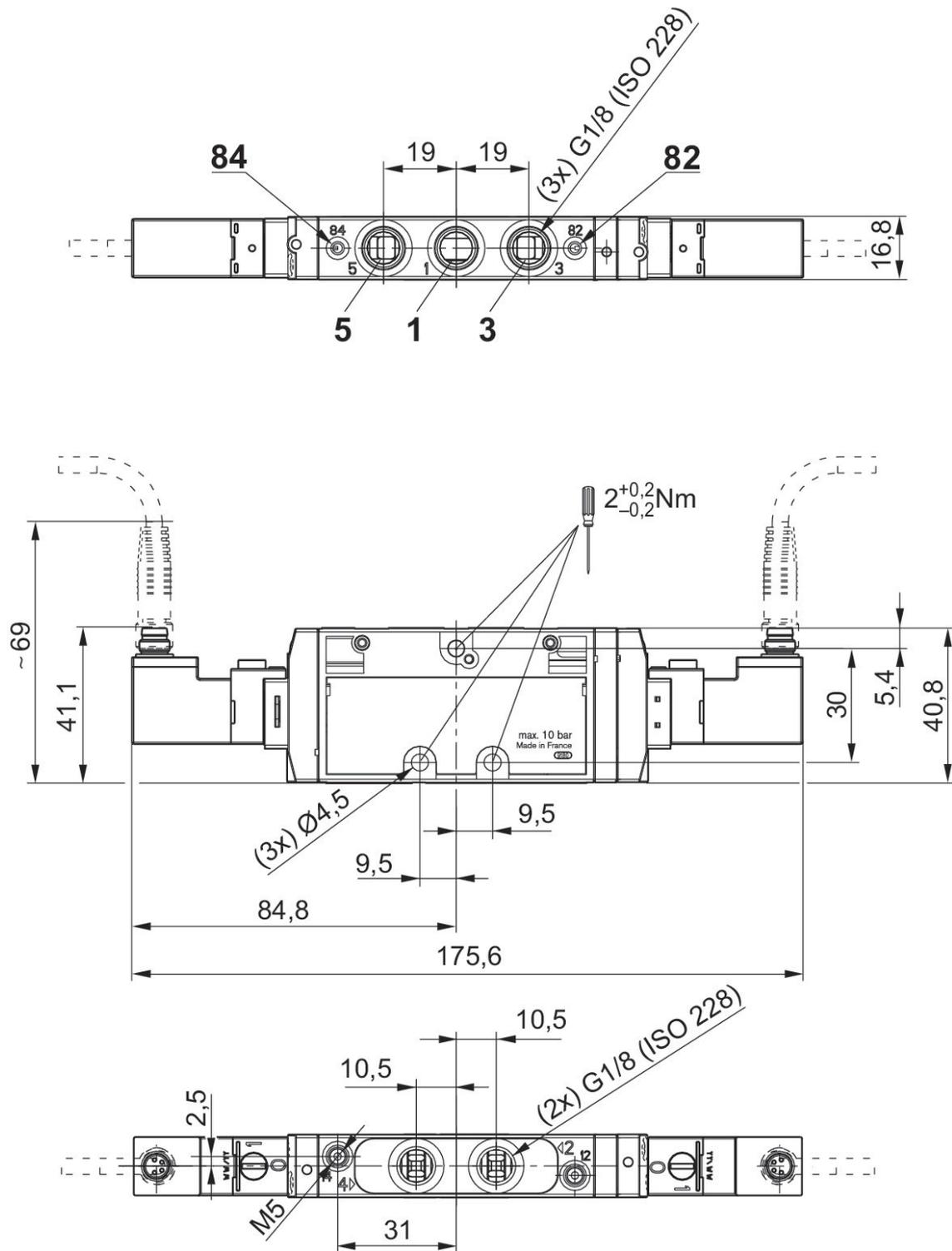
5/3-directional valve, Series TC08, with detent

Flow: 700 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: M8
 Compressed air connection type: Internal thread
 Electrical connection 2, number of poles: 3-pin
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Min. control pressure: 3 bar
 Max. control pressure: 10 bar
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C
 Max. working pressure: 10 bar



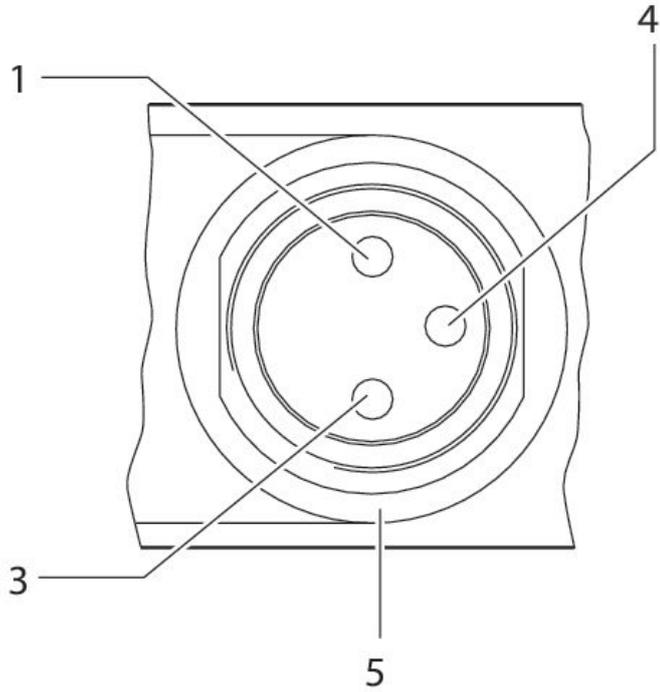
Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
5/3, closed center	24 V DC	Internal	2.2	10	10	11	R422100974
5/3, closed center	24 V DC	External	2.2	10	10	11	R422100975
5/3, exhausted center	24 V DC	Internal	2.2	10	10	11	R422100976
5/3, exhausted center	24 V DC	External	2.2	10	10	11	R422100977
5/3, pressurized center	24 V DC	Internal	2.2	10	10	11	R422100978
5/3, pressurized center	24 V DC	External	2.2	10	10	11	R422100979

Dimensions



R422100974, R422100975, R422100976, R422100977, R422100978, R422100979

PIN assignment and cable colors for valve plug connectors



PIN assignment: 1) PIN not assigned 3) 0 V 4) 24 V 5) LED Cable color 1) Brown 3) Blue 4) Black
Note: Bi-polar protective circuit to prevent overvoltage

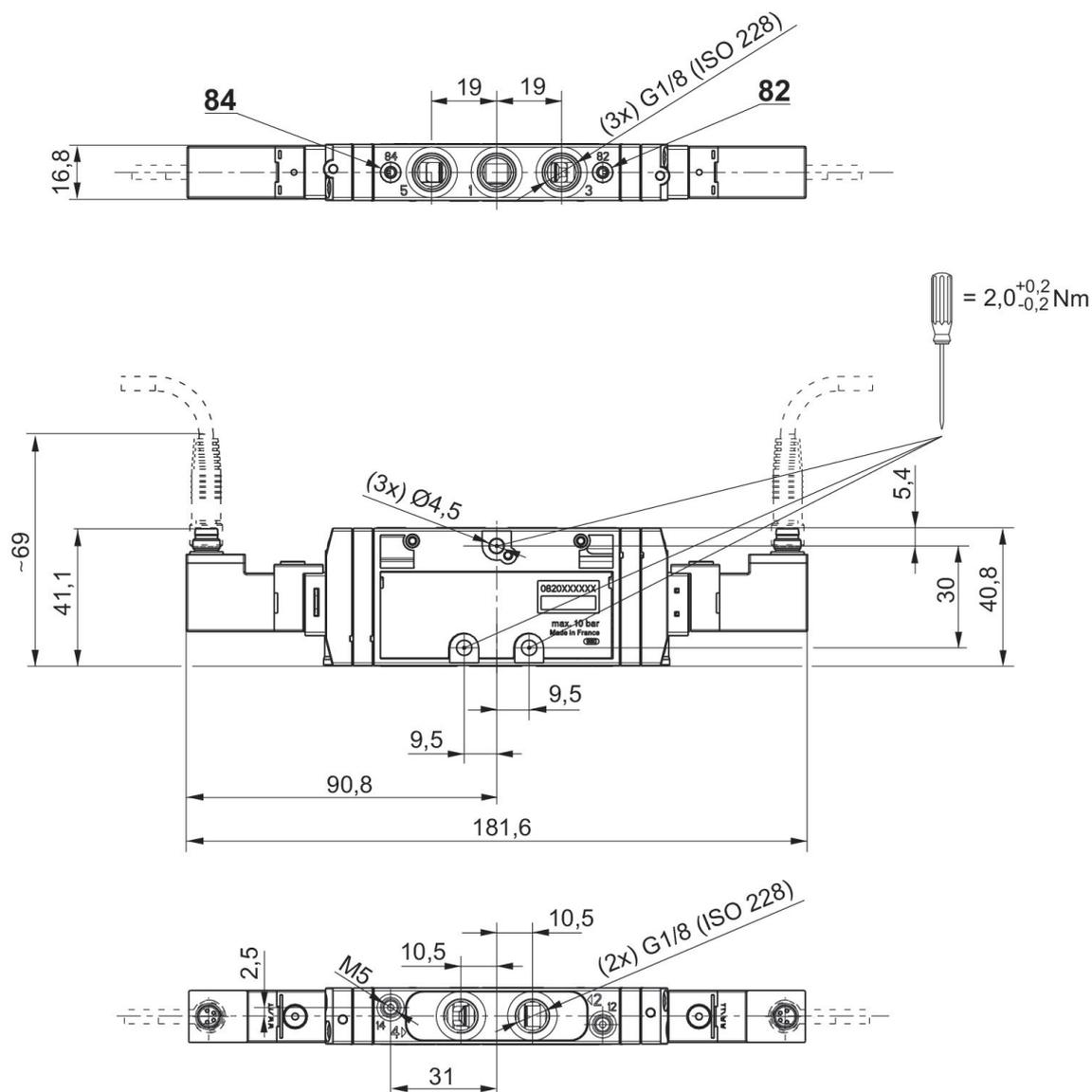
2x3/2-directional valve, Series TC08, without detent

Flow: 600 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: M8
 Compressed air connection type: Internal thread
 Electrical connection 2, number of poles: 4-pin
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Compressed air connection, exhaust: G 1/8
 Min. control pressure: 3 bar
 Max. control pressure: 10 bar
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



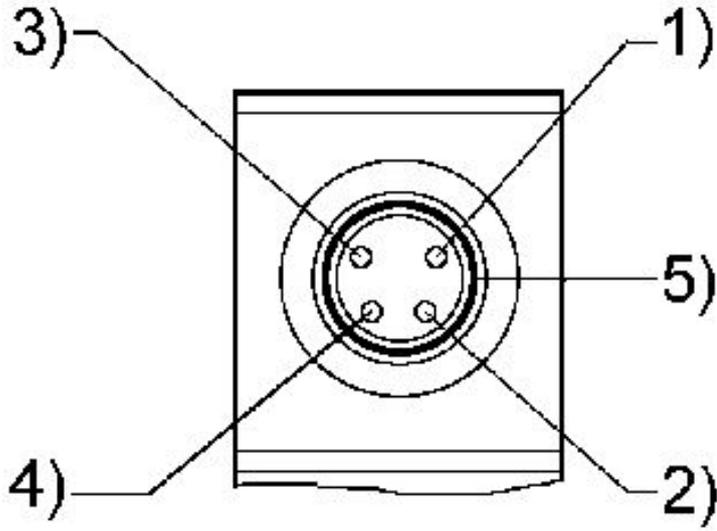
Valve function	Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
NC/NC	2x 3/2 NC/NC, with spring return	24 V DC	Internal	2.2	10	10	14	R422102049
NO/NO	2x 3/2 NO/NO, with spring return	24 V DC	Internal	2.2	10	10	14	R422102050
NC/NO	2x 3/2 NC/NO, with spring return	24 V DC	Internal	2.2	10	10	14	R422102051
NC/NC	2x 3/2 NC/NC, with spring return	24 V DC	External	2.2	10	10	14	R422102052
NO/NO	2x 3/2 NO/NO, with spring return	24 V DC	External	2.2	10	10	14	R422102053
NC/NO	2x 3/2 NC/NO, with spring return	24 V DC	External	2.2	10	10	14	R422102054

Dimensions



R422102049, R422102050, R422102051, R422102052, R422102053, R422102054

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

2x3/2-directional valve, Series TC08, with detent

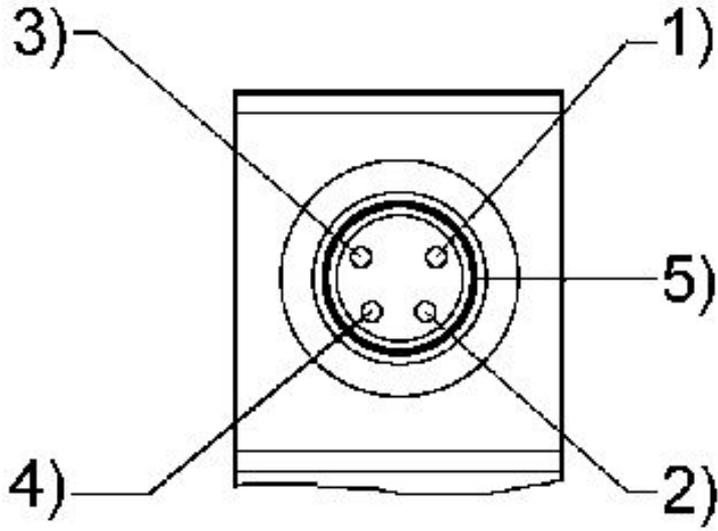
Flow: 600 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: M8
 Compressed air connection type: Internal thread
 Electrical connection 2, number of poles: 4-pin
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Compressed air connection, exhaust: G 1/8
 Min. control pressure: 2.5 bar
 Max. control pressure: 10 bar
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C
 Max. working pressure: 10 bar



Valve function	Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
NC/NC	2x 3/2 NC/NC, with spring return	24 V DC	Internal	2.2	10	10	14	R422102043
NO/NO	2x 3/2 NO/NO, with spring return	24 V DC	Internal	2.2	10	10	14	R422102044
NC/NO	2x 3/2 NC/NO, with spring return	24 V DC	Internal	2.2	10	10	14	R422102045
NC/NC	2x 3/2 NC/NC, with spring return	24 V DC	External	2.2	10	10	14	R422102046
NO/NO	2x 3/2 NO/NO, with spring return	24 V DC	External	2.2	10	10	14	R422102047
NC/NO	2x 3/2 NC/NO, with spring return	24 V DC	External	2.2	10	10	14	R422102048

R422102043, R422102044, R422102045, R422102046, R422102047, R422102048

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

5/2-directional valve, Series TC08, without detent, double solenoid

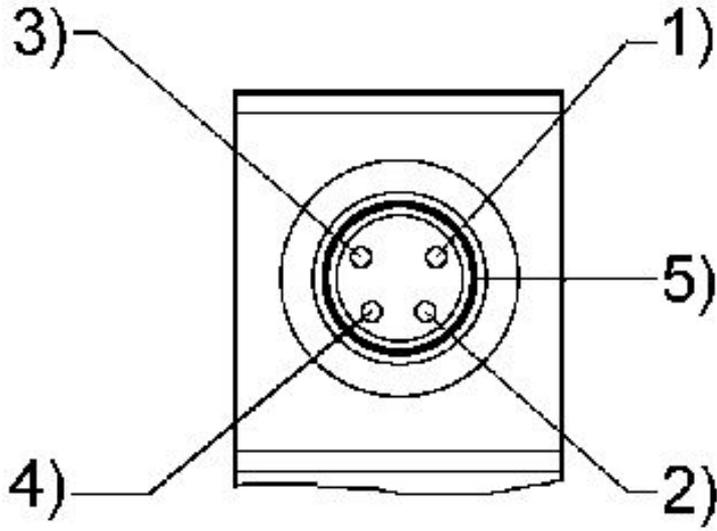
Flow: 800 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: M8
 Compressed air connection type: Internal thread
 Electrical connection 2, number of poles: 4-pin
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
5/2, double solenoid	24 V DC	Internal	2.2	10	10	10	0820060321
5/2, double solenoid	24 V DC	External	2.2	10	10	10	0820060371

0820060321, 0820060371

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

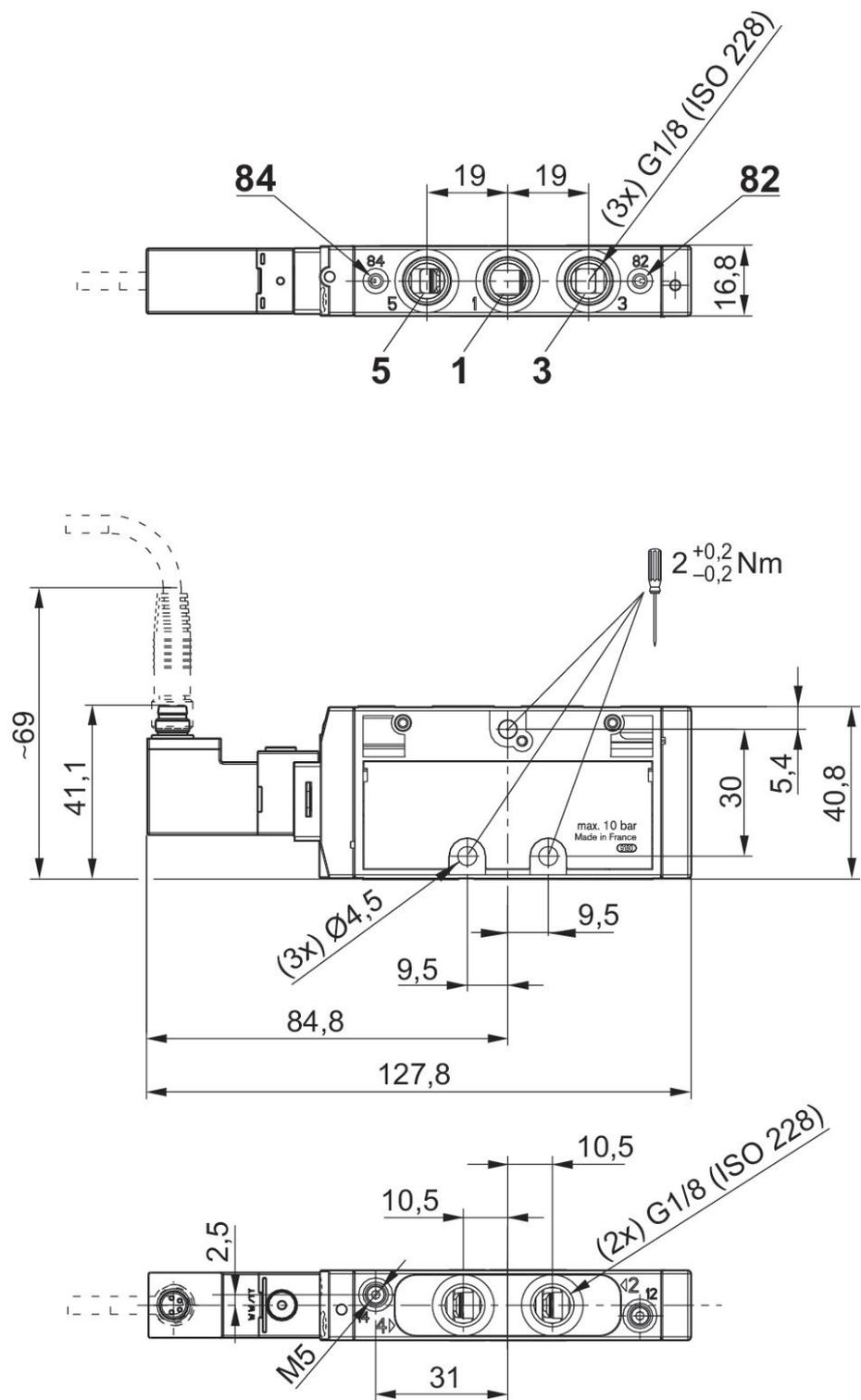
5/2-directional valve, Series TC08, without detent

Flow: 800 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: M8
 Compressed air connection type: Internal thread
 Electrical connection 2, number of poles: 4-pin
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



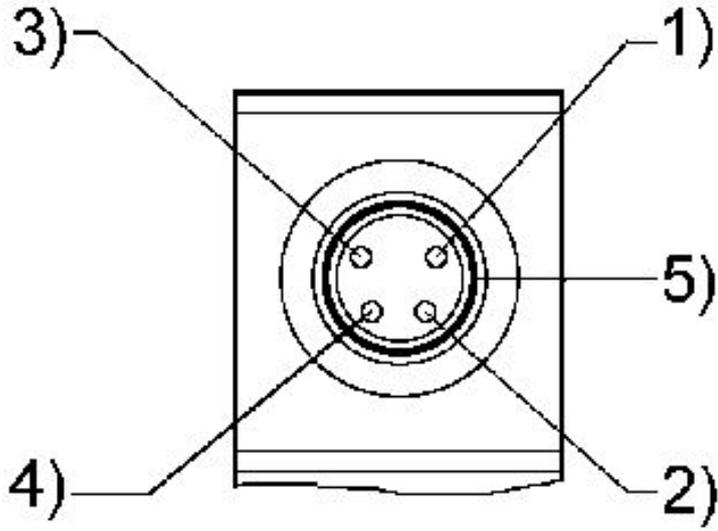
Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
5/2, with air spring return	24 V DC	Internal	2.2	10	14	18	0820060301
5/2, with air spring return	24 V DC	External	2.2	10	14	18	0820060351
5/2, with spring/air spring return	24 V DC	Internal	2.2	10	14	17	0820060311
5/2, with spring/air spring return	24 V DC	External	2.2	10	14	17	0820060361

Dimensions



0820060301, 0820060351, 0820060311, 0820060361

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

5/2-directional valve, Series TC08, with detent, double Solenoid

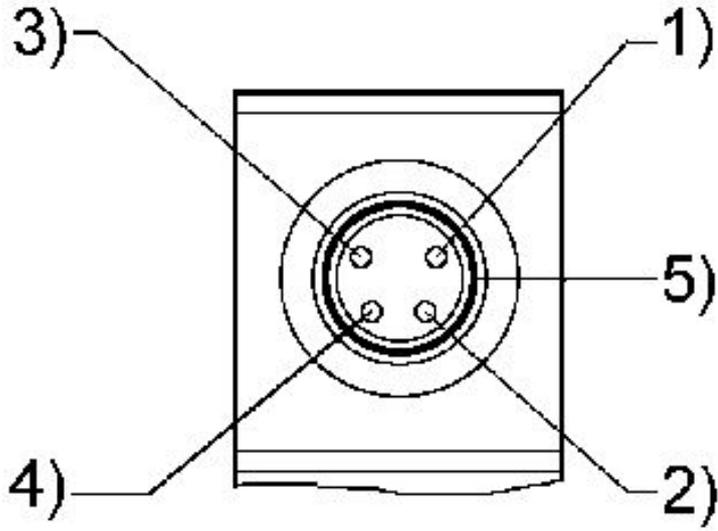
Flow: 800 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: M8
 Compressed air connection type: Internal thread
 Electrical connection 2, number of poles: 4-pin
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
5/2, double solenoid	24 V DC	Internal	2.2	10	10	10	0820060221
5/2, double solenoid	24 V DC	External	2.2	10	10	10	0820060271

0820060221, 0820060271

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

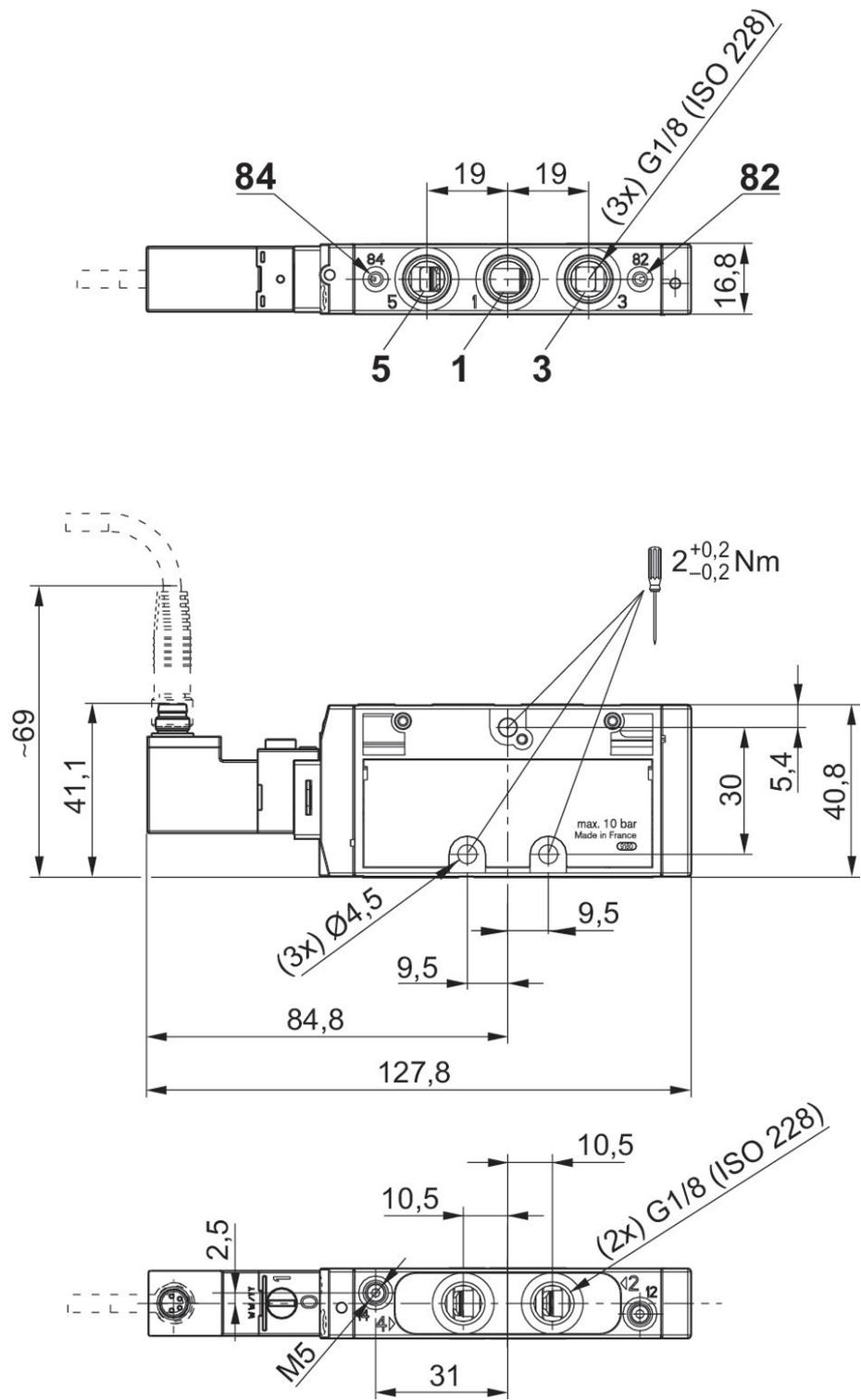
5/2-directional valve, Series TC08, with detent

Flow: 800 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: M8
 Compressed air connection type: Internal thread
 Electrical connection 2, number of poles: 4-pin
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



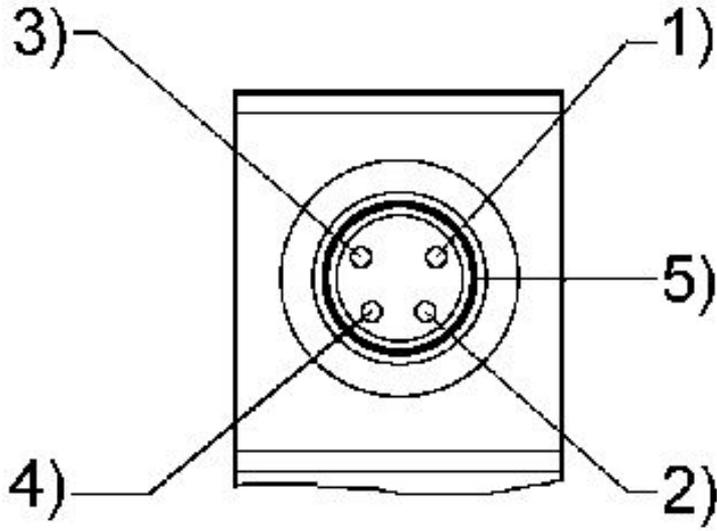
Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
5/2, with air spring return	24 V DC	Internal	2.2	10	14	18	0820060201
5/2, with air spring return	24 V DC	External	2.2	10	14	18	0820060251
5/2, with spring/air spring return	24 V DC	Internal	2.2	10	14	17	0820060211
5/2, with spring/air spring return	24 V DC	External	2.2	10	14	17	0820060261

Dimensions



0820060201, 0820060251, 0820060211, 0820060261

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

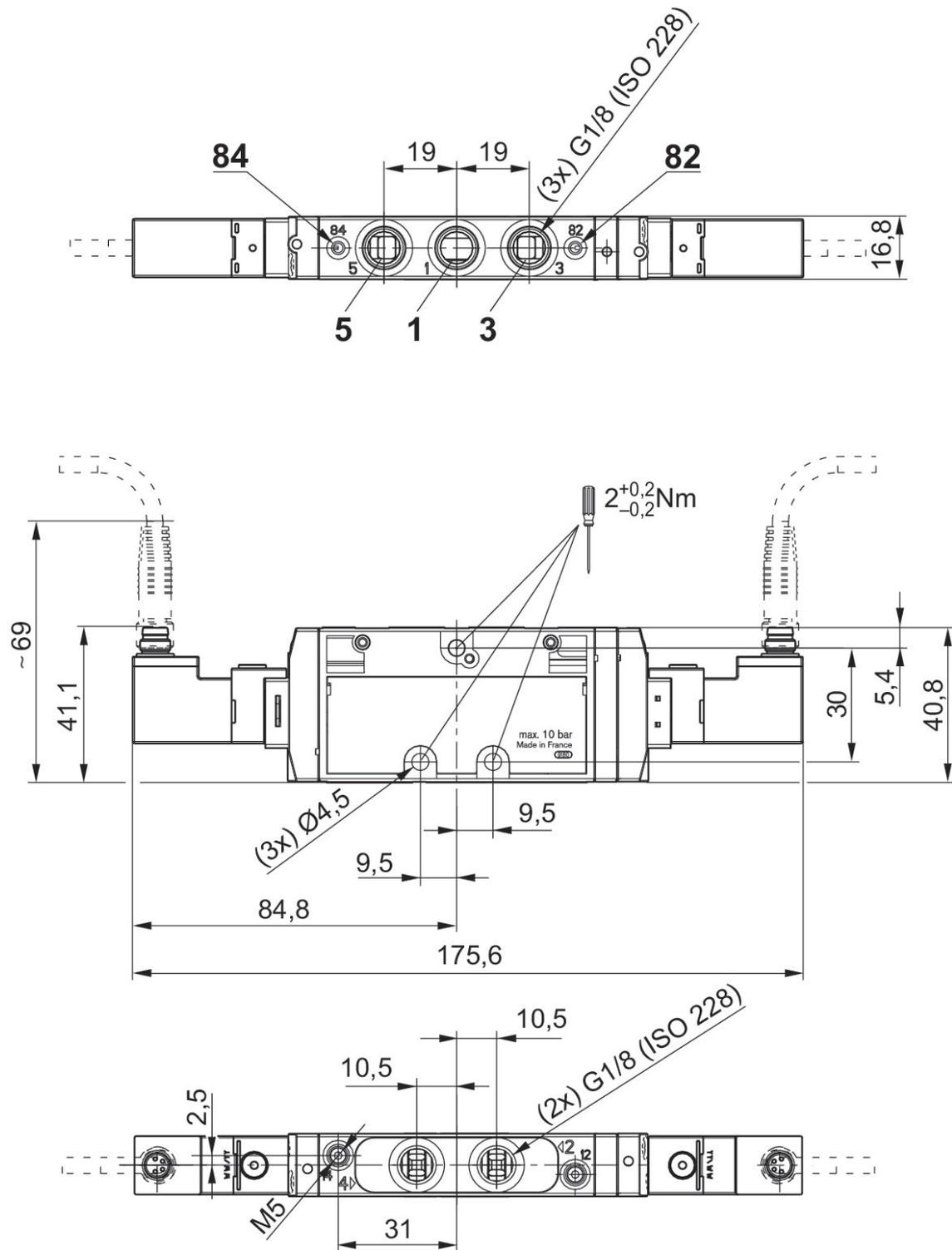
5/3-directional valve, Series TC08, without detent

Flow: 700 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: M8
 Compressed air connection type: Internal thread
 Electrical connection 2, number of poles: 4-pin
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Min. control pressure: 3 bar
 Max. control pressure: 10 bar
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C
 Max. working pressure: 10 bar



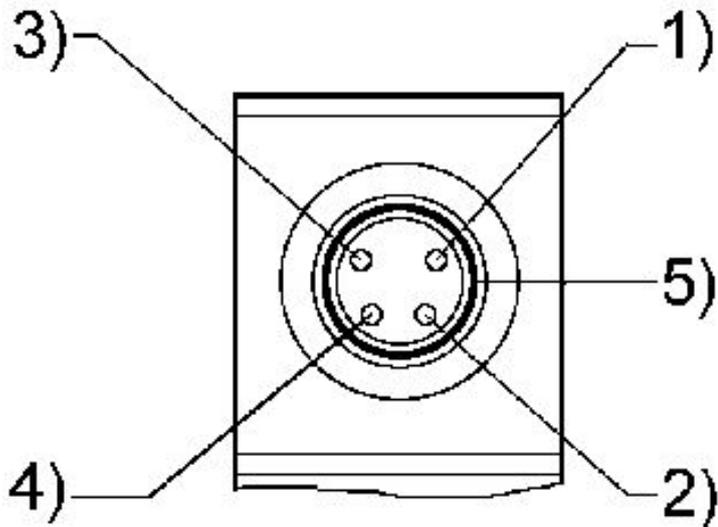
Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
5/3, closed center	24 V DC	Internal	2.2	10	10	11	0820061301
5/3, closed center	24 V DC	External	2.2	10	10	11	0820061351
5/3, exhausted center	24 V DC	Internal	2.2	10	10	11	0820061311
5/3, exhausted center	24 V DC	External	2.2	10	10	11	0820061361
5/3, pressurized center	24 V DC	Internal	2.2	10	10	11	0820061321
5/3, pressurized center	24 V DC	External	2.2	10	10	11	0820061371

Dimensions



0820061301, 0820061351, 0820061311, 0820061361, 0820061321, 0820061371

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

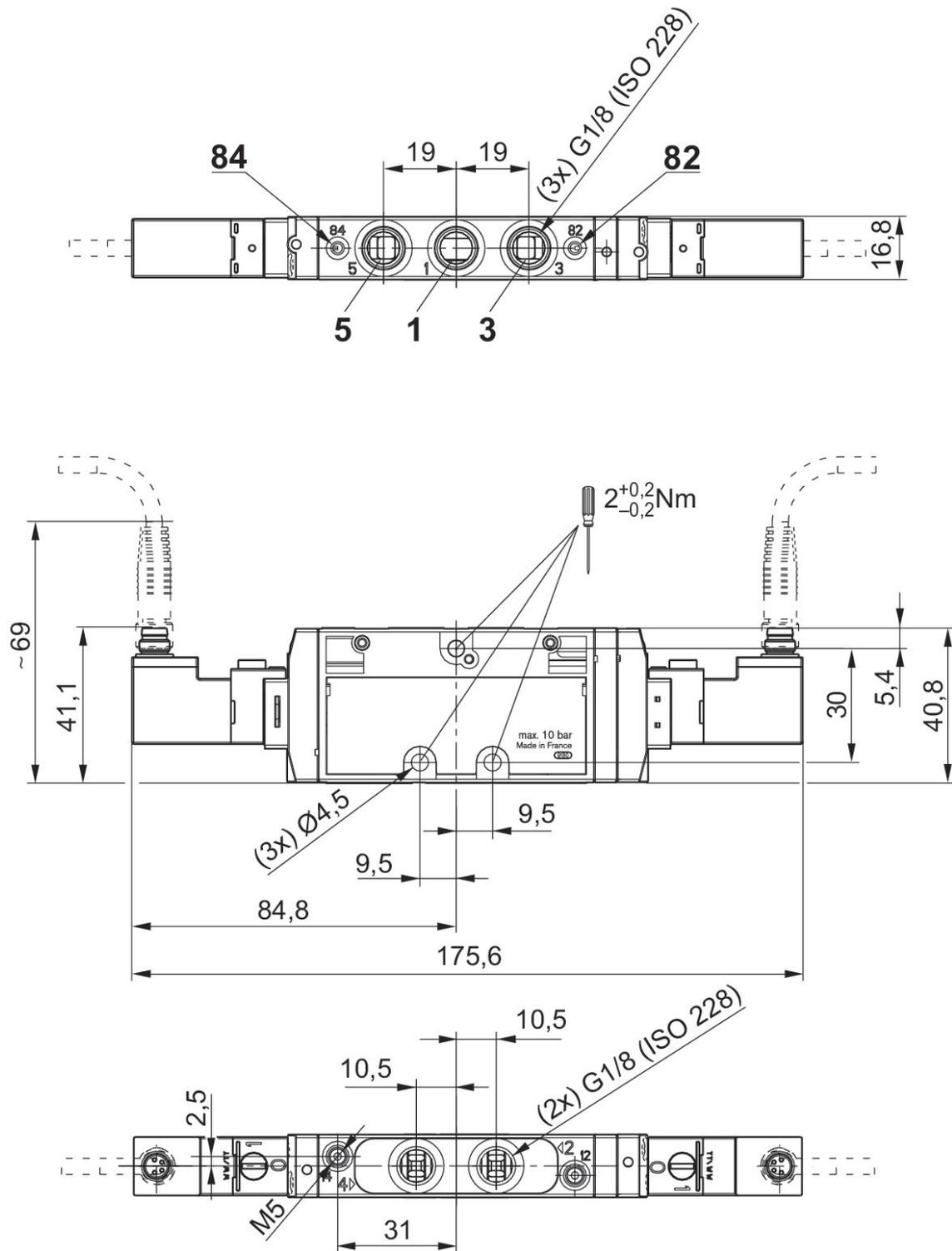
5/3-directional valve, Series TC08, with detent

Flow: 700 l/min
 Activation: Electrically
 Coil width: 15.6 mm
 Electrical connection 2, thread size: M8
 Compressed air connection type: Internal thread
 Electrical connection 2, number of poles: 4-pin
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Min. control pressure: 3 bar
 Max. control pressure: 10 bar
 Pilot valve width: 15 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C
 Max. working pressure: 10 bar



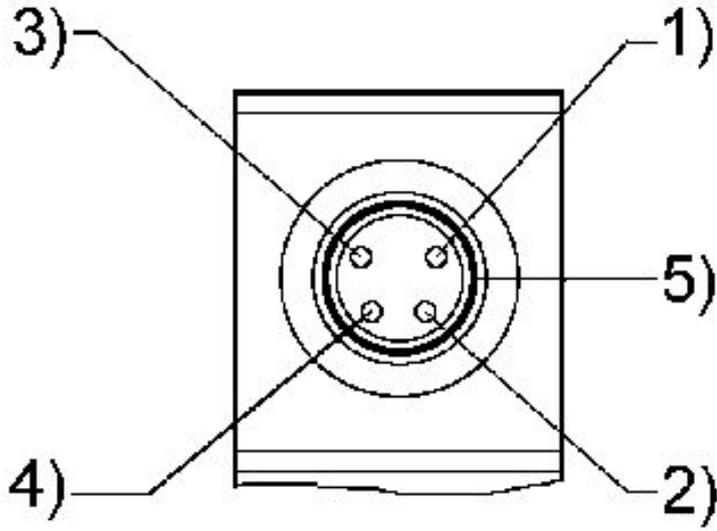
Switching principle	Operational voltage	Pilot	Power consumption DC [W]	Max. working pressure [bar]	Typ. switch-on time [ms]	Typ. switch-off time [ms]	Part No.
5/3, closed center	24 V DC	Internal	2.2	10	10	11	0820061201
5/3, closed center	24 V DC	External	2.2	10	10	11	0820061251
5/3, exhausted center	24 V DC	Internal	2.2	10	10	11	0820061211
5/3, exhausted center	24 V DC	External	2.2	10	10	11	0820061261
5/3, pressurized center	24 V DC	Internal	2.2	10	10	11	0820061221
5/3, pressurized center	24 V DC	External	2.2	10	10	11	0820061271

Dimensions



0820061201, 0820061251, 0820061211, 0820061261, 0820061221, 0820061271

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

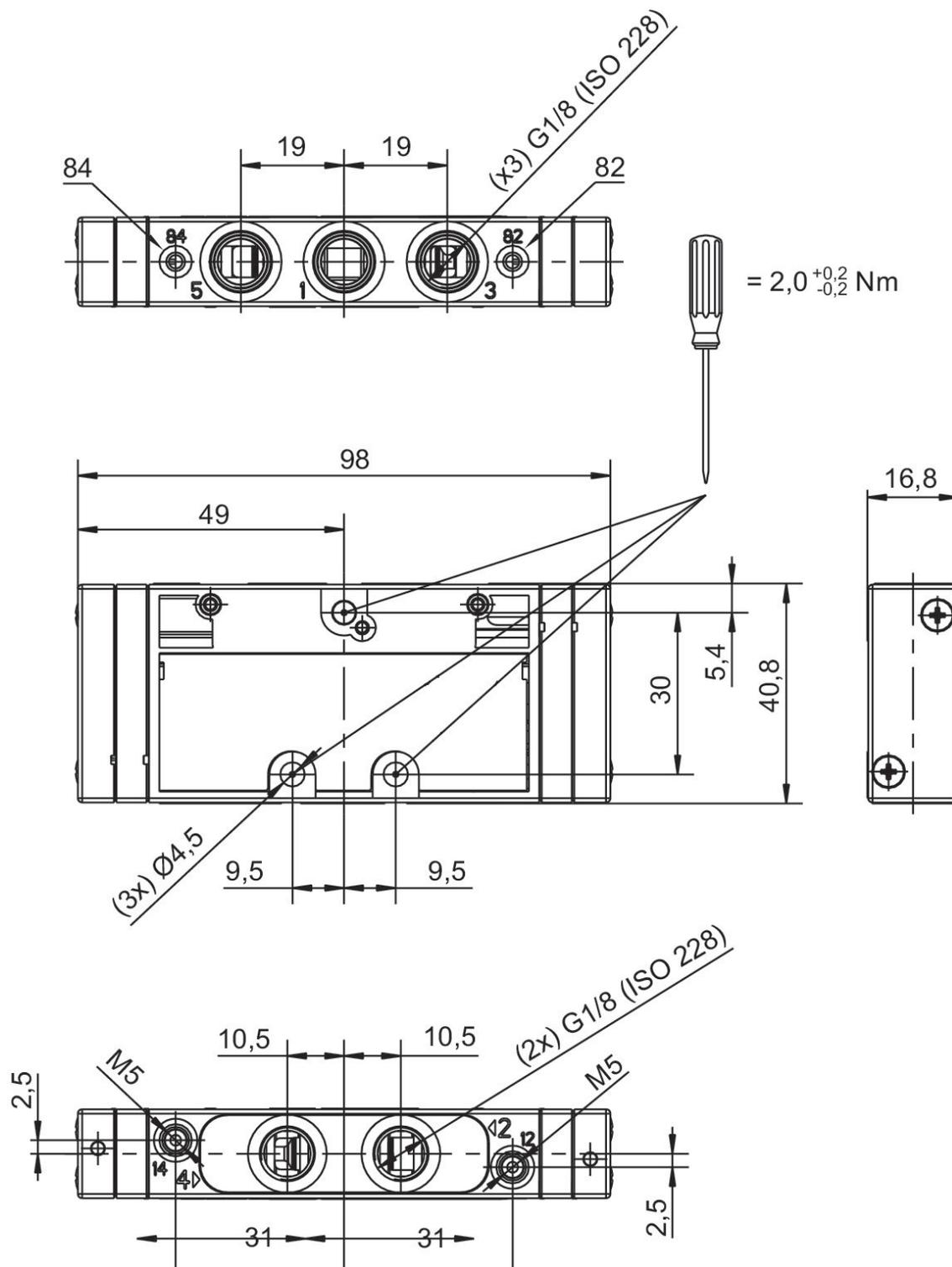
2x3/2-directional valve, Series TC08

Flow: 600 l/min
 Activation: Pneumatically
 Compressed air connection type: Internal thread
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Compressed air connection, exhaust: G 1/8
 Min. control pressure: 2.5 bar
 Max. control pressure: 10 bar
 Type: Spool valve
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C
 Min. working pressure: -0.9 bar
 Max. working pressure: 10 bar

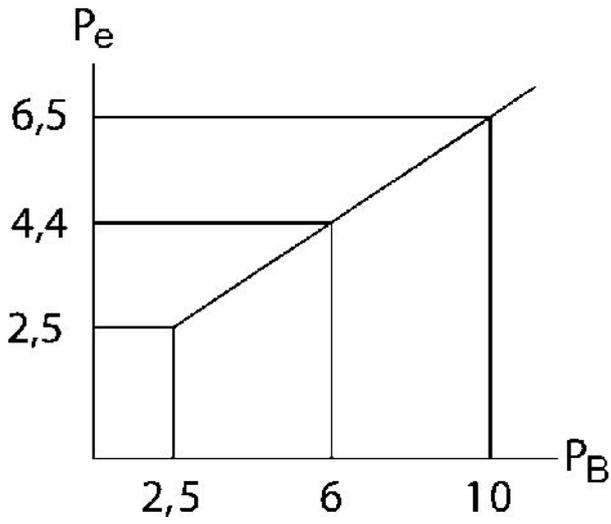


Valve function	Switching principle	Compressed air connection input	Compressed air connection output	Min. working pressure [bar]	Max. working pressure [bar]	Pilot	Flow Qn [l/min]	Min. control pressure [bar]	Max. control pressure [bar]	Part No.
NC/NC	2x 3/2 NC/NC, with spring return	G 1/8	G 1/8	-0.9	10	External	600	2.5	10	R422102094
NO/NO	2x 3/2 NO/NO, with spring return	G 1/8	G 1/8	-0.9	10	External	600	2.5	10	R422102095
NC/NO	2x 3/2 NC/NO, with spring return	G 1/8	G 1/8	-0.9	10	External	600	2.5	10	R422102096

Dimensions



Control pressure



P_e = external control pressure, min.
 P_B = Working pressure

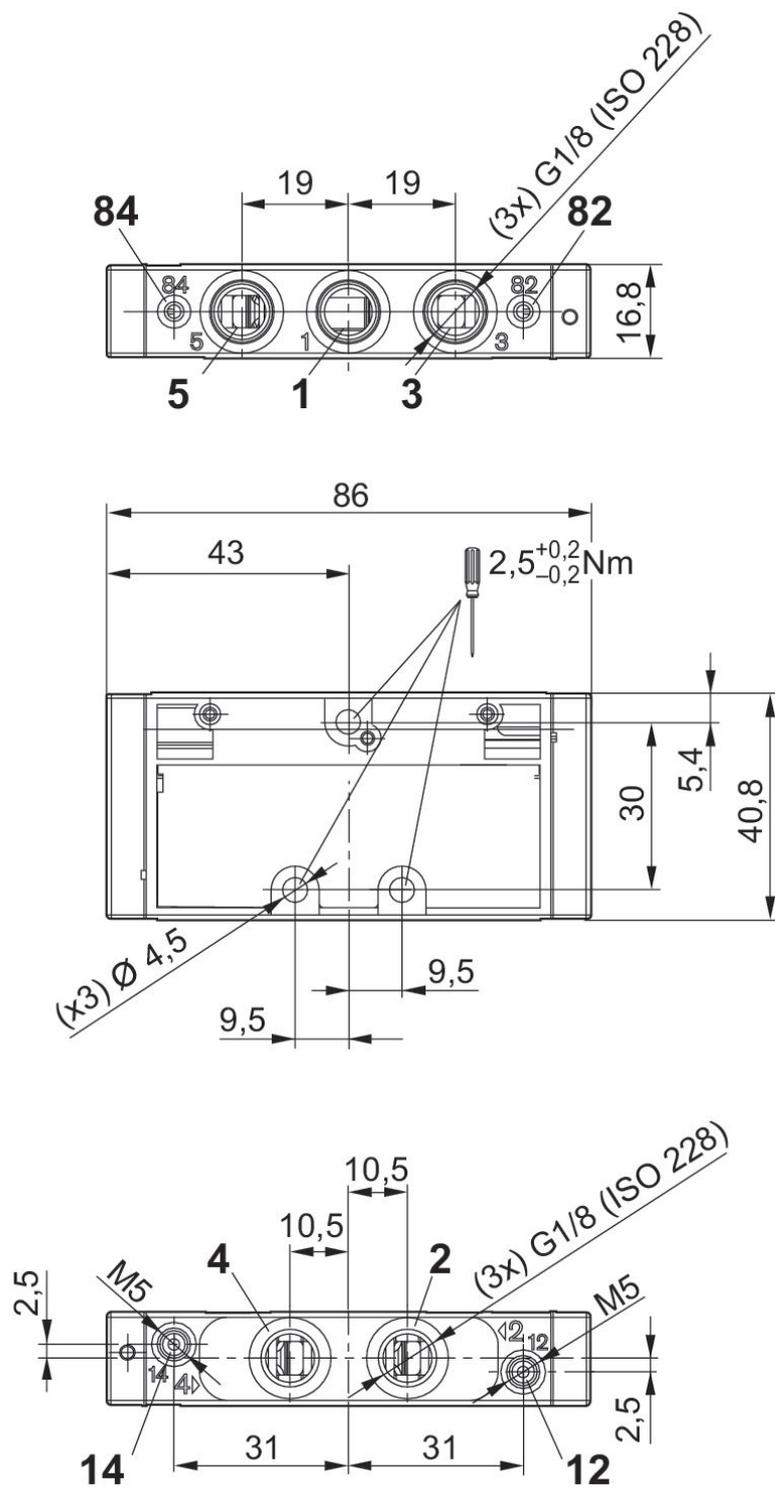
5/2-directional valve, Series TC08

Flow: 800 l/min
 Activation: Pneumatically
 Compressed air connection type: Internal thread
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Max. control pressure: 10 bar
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C

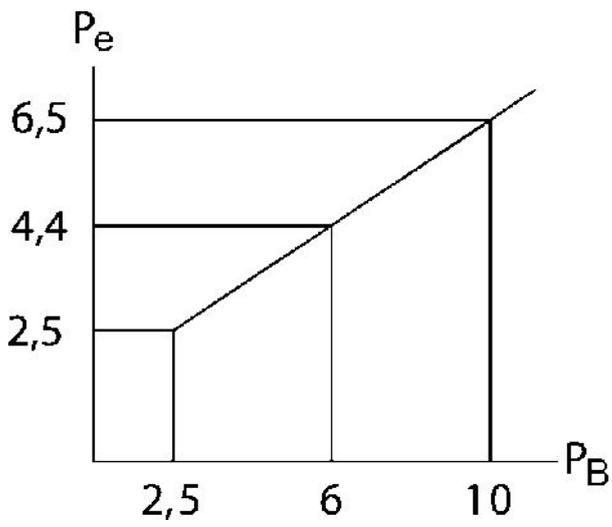


Switching principle	Com-pressed air connection input	Com-pressed air connection output	Min. work-ing pres-sure [bar]	Max. working pressure [bar]	Pilot	Flow Qn [l/min]	Min. control pressure [bar]	Max. control pressure [bar]	Part No.
5/2, with air spring re-turn	G 1/8	G 1/8	2.5	10	External	800	2.5	10	0820260001
5/2, with spring re-turn	G 1/8	G 1/8	3	10	External	800	3	10	0820260002
5/2, double solenoid	G 1/8	G 1/8	-0.9	10	External	800	2	10	0820260003
5/2, double solenoid, with differ-ential piston	G 1/8	G 1/8	-0.9	10	External	800	2.5	10	0820260004

Dimensions



Control pressure



P_e = external control pressure, min.
 P_B = Working pressure

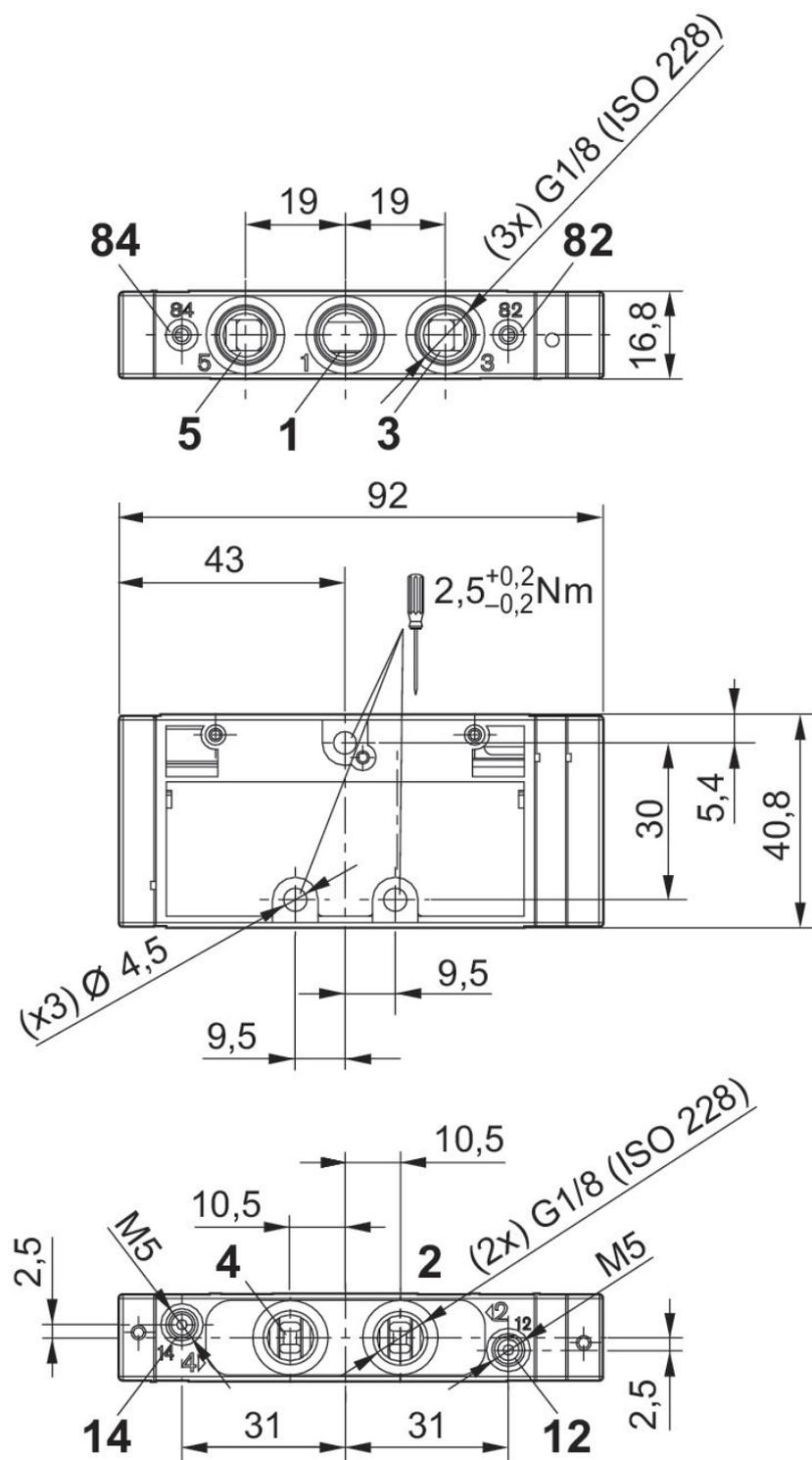
5/3-directional valve, Series TC08

Flow: 700 l/min
 Activation: Pneumatically
 Compressed air connection type: Internal thread
 Compressed air connection input: G 1/8
 Compressed air connection output: G 1/8
 Compressed air connection, exhaust: G 1/8
 Min. control pressure: 3 bar
 Max. control pressure: 10 bar
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C
 Min. working pressure: -0.9 bar
 Max. working pressure: 10 bar



Switching principle	Com-pressed air connec-tion input	Com-pressed air connec-tion output	Min. work-ing pres-sure [bar]	Max. working pressure [bar]	Pilot	Flow Qn [l/min]	Min. con-trol pres-sure [bar]	Max. control pressure [bar]	Part No.
5/3, closed center	G 1/8	G 1/8	-0.9	10	External	700	3	10	0820261001
5/3, ex-hausted center	G 1/8	G 1/8	-0.9	10	External	700	3	10	0820261002
5/3, pres-surized cen-ter	G 1/8	G 1/8	-0.9	10	External	700	3	10	0820261003

Dimensions



Valve plug connector, series CON-VP, 0° female insert

Electrical connection 1, thread size: form C

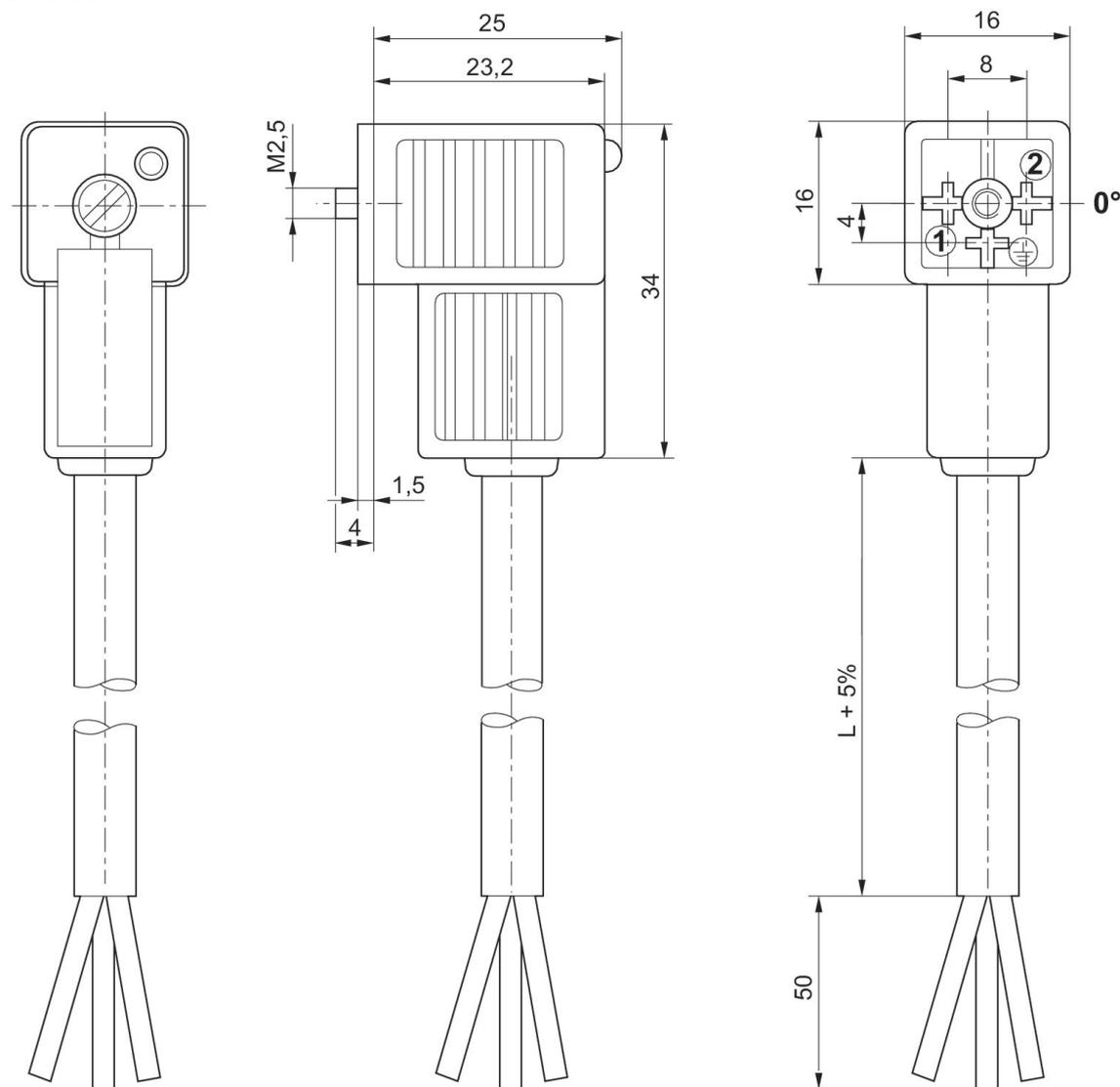
Min. ambient temperature: -20 °C

Max. ambient temperature: 80 °C



Operational voltage	Protective circuit	Max. current [A]	Contact assignment	LED status display	Cable-Ø [mm]	Cable length [m]	Part No.
230 V AC/DC		6	2+E		5.9	3	1834484212
230 V AC/DC		6	2+E		5.9	5	1834484214
24 V AC/DC	Z-diode	6	2+E	Yellow	5.9	3	1834484204
24 V AC/DC	Z-diode	6	2+E	Yellow	5.9	5	1834484206
230 V AC/DC	Varistor	6	2+E	Yellow	5.9	3	1834484208
230 V AC/DC	Varistor	6	2+E	Yellow	5.9	5	1834484210

Dimensions



0° female insert

Valve plug connector with cable series CON-VP,, 180° female insert

Electrical connection 1, thread size: form C

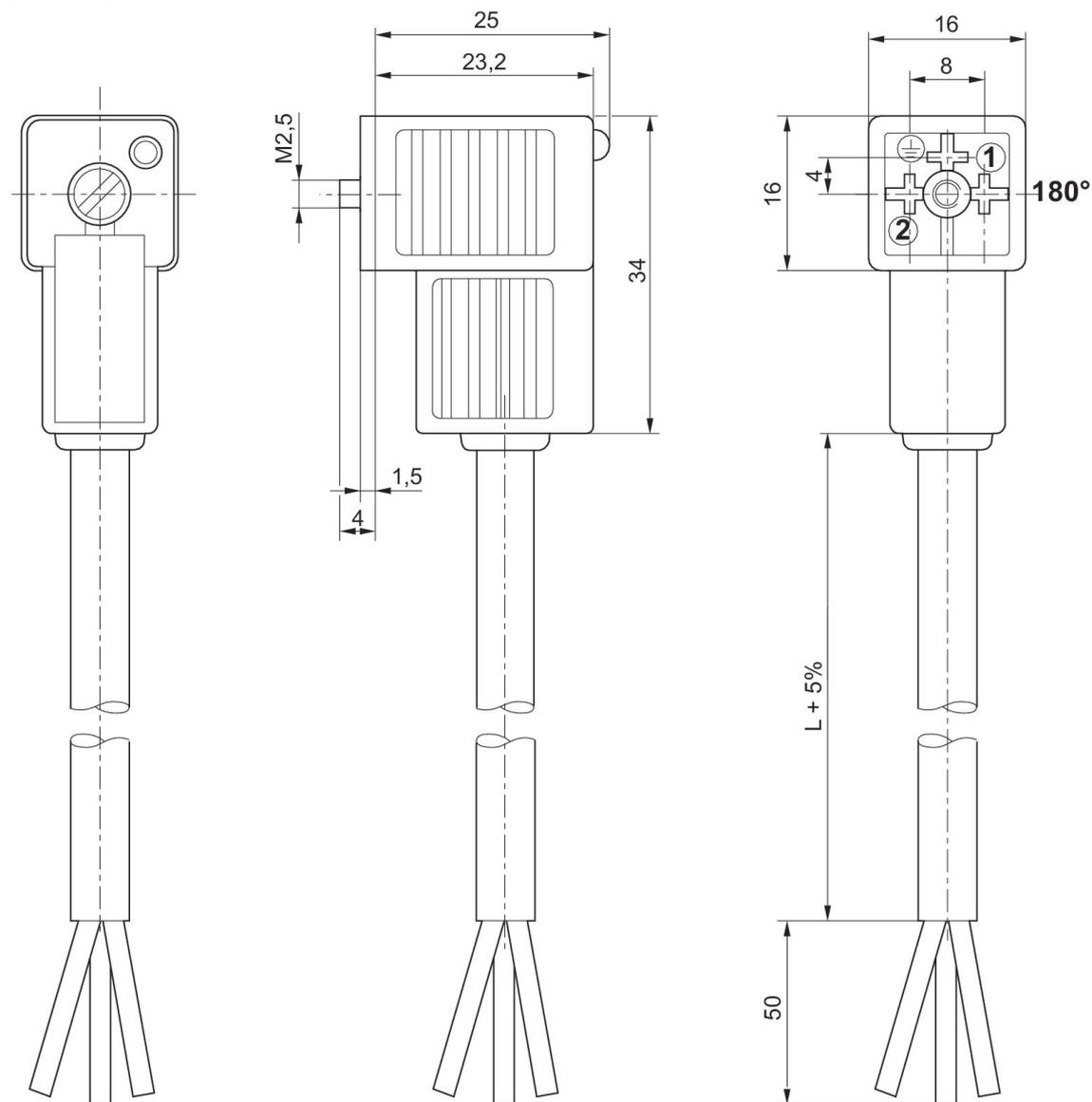
Min. ambient temperature: -20 °C

Max. ambient temperature: 80 °C



Operational voltage	Protective circuit	Max. current [A]	Contact assignment	LED status display	Cable-Ø [mm]	Cable length [m]	Part No.
230 V AC/DC		6	2+E		5.9	3	1834484213
230 V AC/DC		6	2+E		5.9	5	1834484215
24 V AC/DC	Z-diode	6	2+E	Yellow	5.9	3	1834484205
24 V AC/DC	Z-diode	6	2+E	Yellow	5.9	5	1834484207
230 V AC/DC	Varistor	6	2+E	Yellow	5.9	3	1834484209
230 V AC/DC	Varistor	6	2+E	Yellow	5.9	5	1834484211
24 V AC/DC	Z-diode	6	2+E	Yellow	5.9	10	1834484236

Dimensions



180° female insert

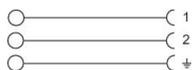
Valve plug connector, series CON-VP, form C, 300 V DC / 250 V AC

Electrical connection 1, thread size: EN 175301-803, form C

Certificates: CE declaration of conformity UKCA

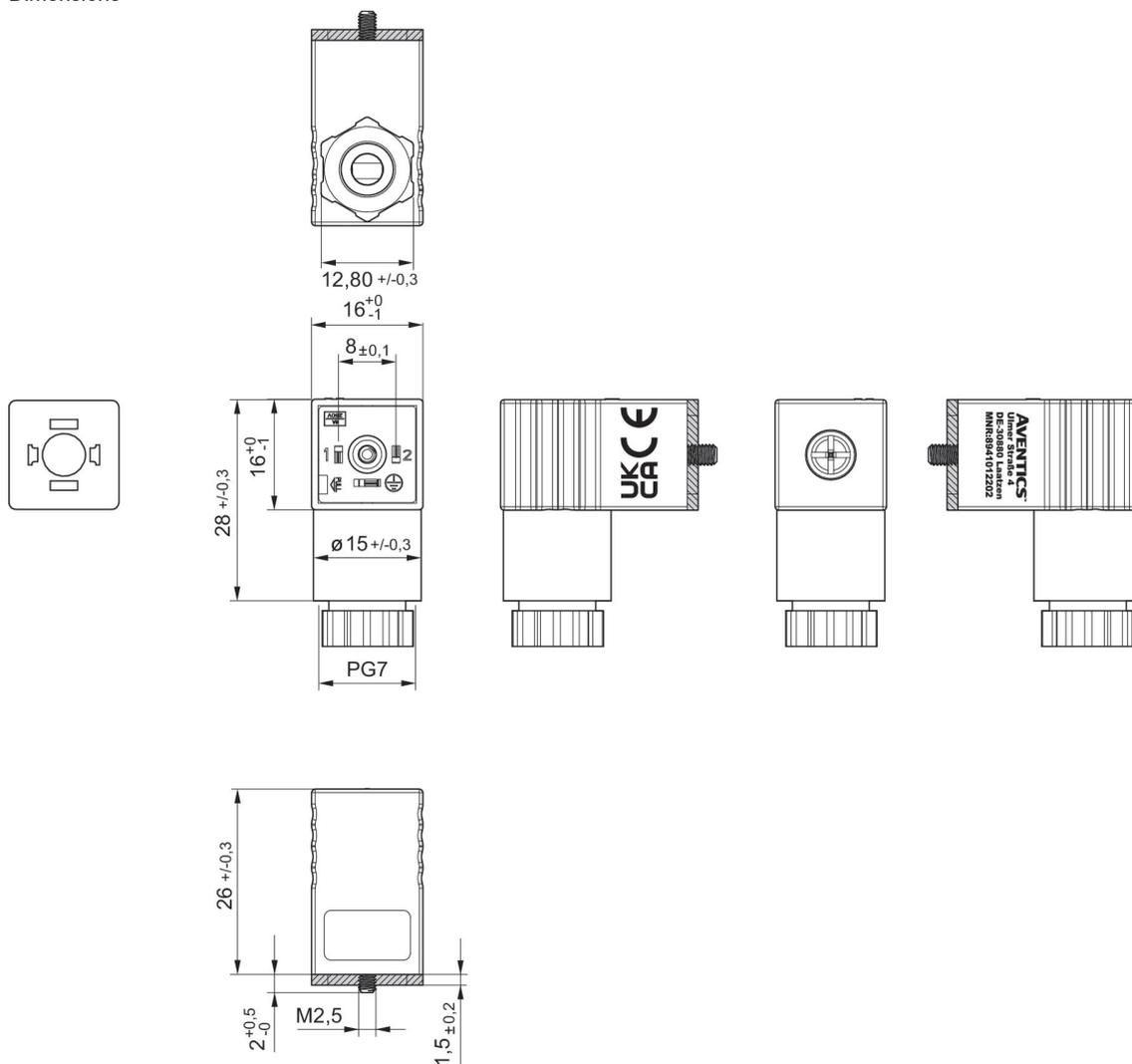
Min. ambient temperature: -40 °C

Max. ambient temperature: 90 °C



Operational voltage	Max. current [A]	Contact assignment	min. suitable cable Ø [mm]	max. suitable cable Ø [mm]	Part No.
300 V DC / 250 V AC	6	2+E	4	6	8941012202

Dimensions



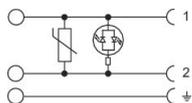
Profile seal

Valve plug connector, series CON-VP, form C, 24 V AC/DC

Electrical connection 1, thread size: EN 175301-803, form C

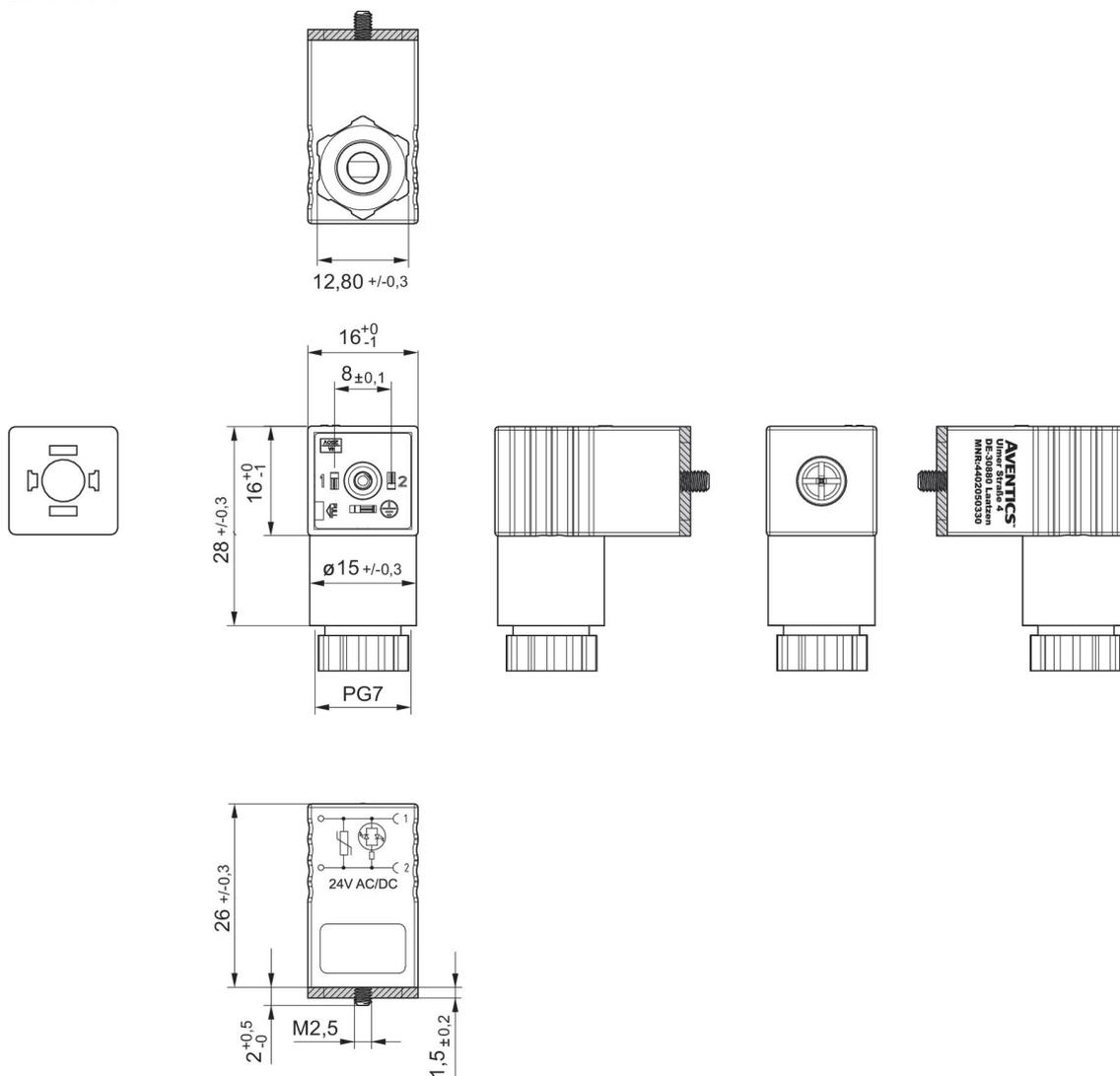
Min. ambient temperature: -40 °C

Max. ambient temperature: 90 °C



Operational voltage	Protective circuit	Max. current [A]	Contact assignment	LED status display	min. suitable cable Ø [mm]	max. suitable cable Ø [mm]	Part No.
24 V AC/DC	Varistor	1.5	2+E	Green	4	6	4402050330

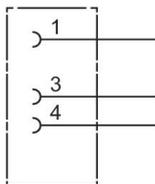
Dimensions



Profile seal

Round plug connector, Series CON-RD, straight

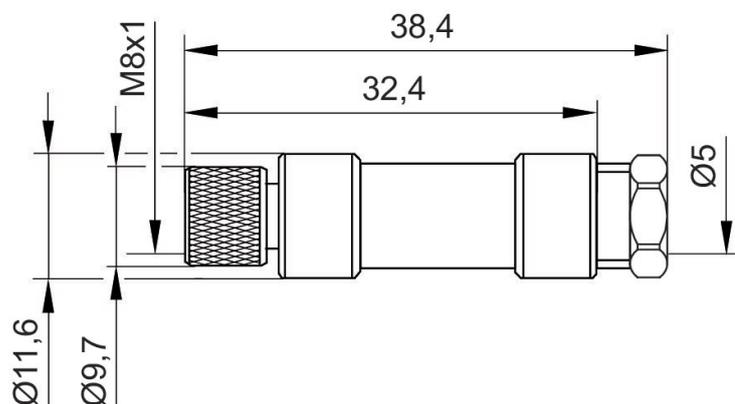
Min. ambient temperature: -25 °C
 Max. ambient temperature: 80 °C
 Electrical connection 1, type: Socket
 Electrical connection 1, thread size: M8x1
 Electrical connection 1, number of poles: 3-pin



Operational voltage	Contact assignment	Coding	Shielding	Connection type	Max. current [A]	min. suitable cable Ø [mm]	max. suitable cable Ø [mm]	Part No.
48 V AC/DC	3-pin	A-coded	unshielded	Soldering	4	3.5	5	1834484173

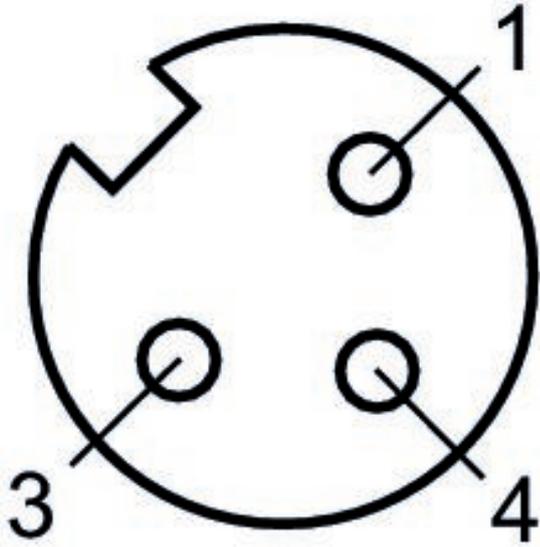
Min. ambient temperature [°C]	Max. ambient temperature [°C]	Part No.
-25	80	1834484173

Dimensions



1834484173

Pin assignment, socket



Round plug connector, Series CON-RD, angled

Min. ambient temperature: -25 °C

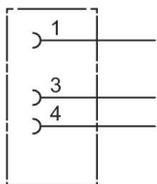
Max. ambient temperature: 80 °C

Electrical connection 1, type: Socket

Electrical connection 1, thread size: M8x1

Electrical connection 1, number of poles: 3-pin

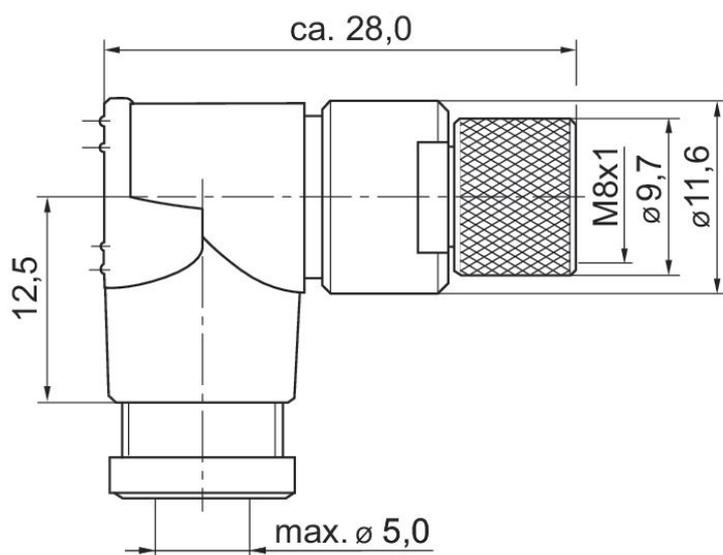
Cable exit 1: angled



Operational voltage	Contact assignment	Coding	Shielding	Connection type	Max. current [A]	min. suitable cable Ø [mm]	max. suitable cable Ø [mm]	Part No.
48 V AC/DC	3-pin	A-coded	unshielded	Soldering	4	3.5	5	1834484174

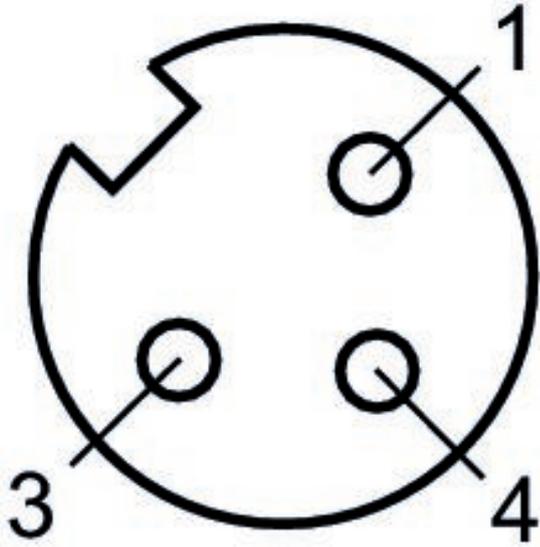
Min. ambient temperature [°C]	Max. ambient temperature [°C]	Part No.
-40	85	1834484174

Dimensions in mm



1834484174

Pin assignment, socket



Round plug connector, Series CON-RD, open cable ends, straight

Min. ambient temperature: -25 °C

Max. ambient temperature: 85 °C

Electrical connection 1, type: Socket

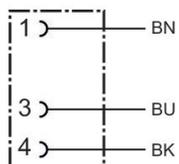
Electrical connection 1, thread size: M8x1

Electrical connection 1, number of poles: 3-pin

Cable exit 1: straight

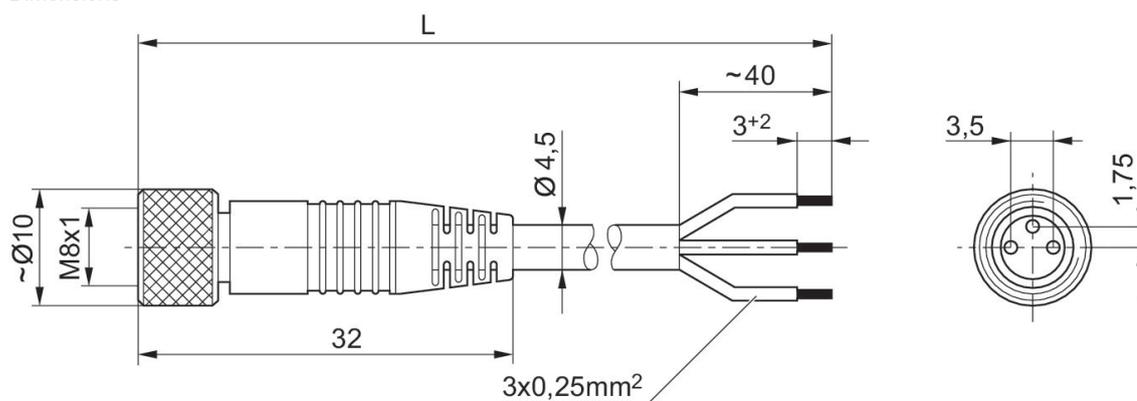
Electrical connection 2, type: open cable ends

Electrical connection 2, number of poles: 3-pin



Operational voltage	Electrical connection 1, type	Electrical connection 1, thread size	Electrical connection 1, number of poles	Electrical connection 1, coding	Cable exit 1	Electrical connection 2, type	Electrical connection 2, number of poles	Cable length [m]	Part No.
48 V AC/DC	Socket	M8x1	3-pin	A-coded	straight	open cable ends	3-pin	3	1834484166
48 V AC/DC	Socket	M8x1	3-pin	A-coded	straight	open cable ends	3-pin	5	1834484168
48 V AC/DC	Socket	M8x1	3-pin	A-coded	straight	open cable ends	3-pin	10	1834484247

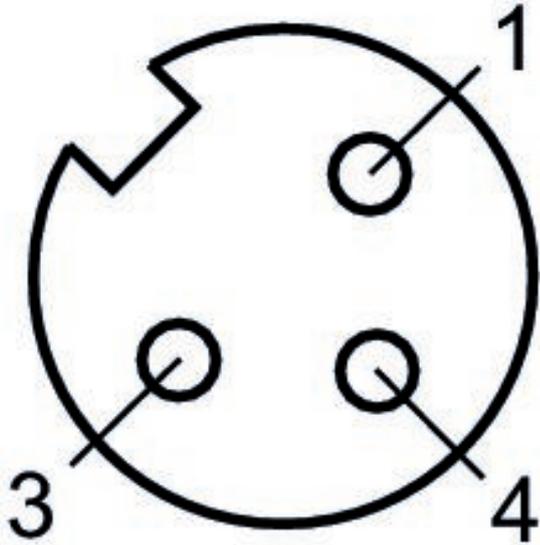
Dimensions



L = length

1834484166, 1834484168, 1834484247

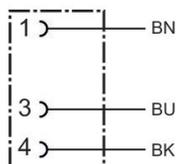
Pin assignment, socket



(1) BN=brown (3) BU=blue (4) BK=black

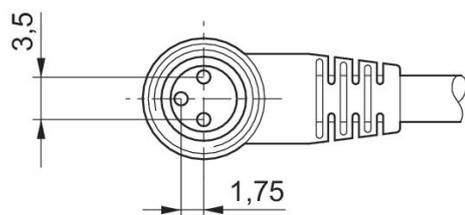
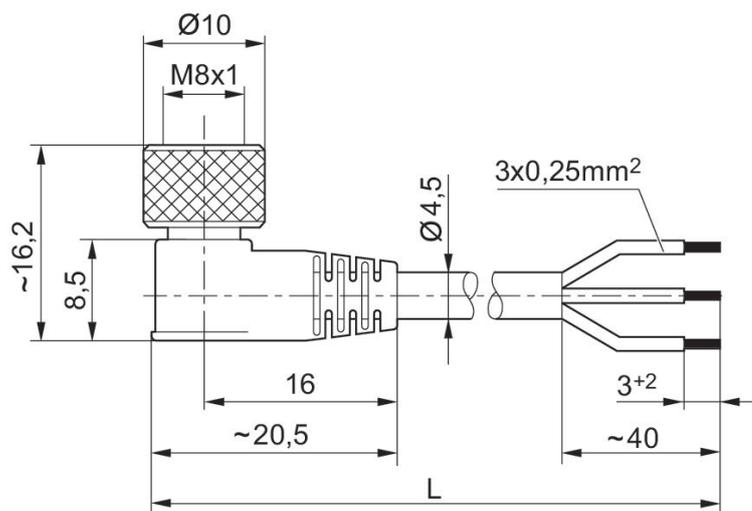
Round plug connector, Series CON-RD, open cable ends, angled

Min. ambient temperature: -40 °C
 Max. ambient temperature: 85 °C
 Electrical connection 1, type: Socket
 Electrical connection 1, thread size: M8x1
 Electrical connection 1, number of poles: 3-pin
 Cable exit 1: angled
 Electrical connection 2, type: open cable ends
 Electrical connection 2, number of poles: 3-pin



Operational voltage	Electrical connection 1, type	Electrical connection 1, thread size	Electrical connection 1, number of poles	Electrical connection 1, coding	Cable exit 1	Electrical connection 2, type	Electrical connection 2, number of poles	Cable length [m]	Part No.
48 V AC/DC	Socket	M8x1	3-pin	A-coded	angled	open cable ends	3-pin	3	1834484167
48 V AC/DC	Socket	M8x1	3-pin	A-coded	angled	open cable ends	3-pin	5	1834484169
48 V AC/DC	Socket	M8x1	3-pin	A-coded	angled	open cable ends	3-pin	10	1834484248

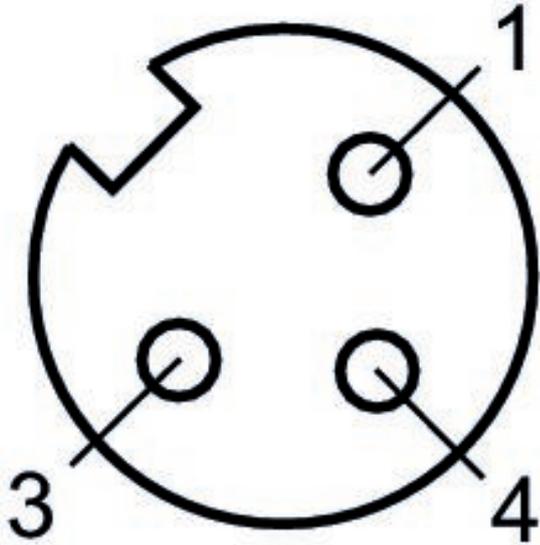
Dimensions



L = length

1834484167, 1834484169, 1834484248

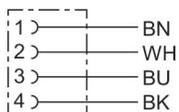
Pin assignment, socket



(1) BN=brown (3) BU=blue (4) BK=black

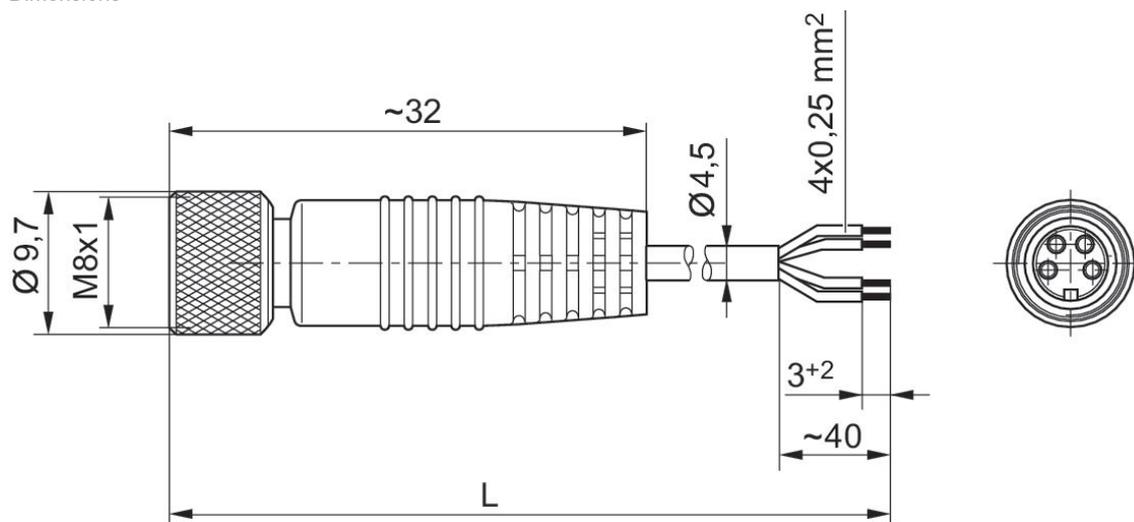
Round plug connector, Series CON-RD, open cable ends, straight, 4-pin

Min. ambient temperature: -40 °C
 Max. ambient temperature: 85 °C
 Electrical connection 1, type: Socket
 Electrical connection 1, thread size: M8x1
 Electrical connection 1, number of poles: 4-pin
 Cable exit 1: straight
 Electrical connection 2, type: open cable ends
 Electrical connection 2, number of poles: 4-pin
 Cable-Ø: 4.5 mm
 Wire cross-section: 0.25 mm²



Operational voltage	Electrical connection 1, type	Electrical connection 1, thread size	Electrical connection 1, number of poles	Electrical connection 1, coding	Cable exit 1	Electrical connection 2, type	Electrical connection 2, number of poles	Cable length [m]	Part No.
48 V AC/DC	Socket	M8x1	4-pin	A-coded	straight	open cable ends	4-pin	3	1834484144
48 V AC/DC	Socket	M8x1	4-pin	A-coded	straight	open cable ends	4-pin	5	1834484146

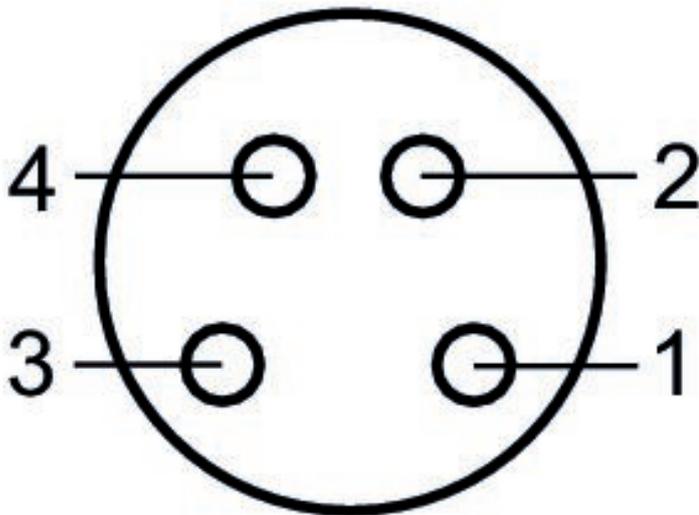
Dimensions



L = length

1834484144, 1834484146

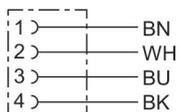
Pin assignment, socket



(1) BN=brown (2) WH=white (3) BU=blue (4) BK=black

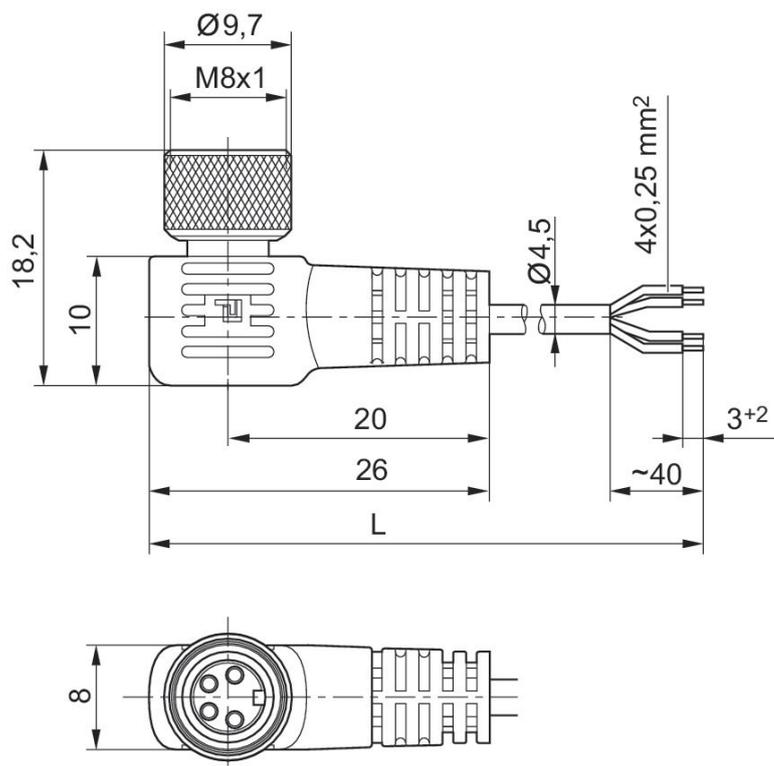
Round plug connector, Series CON-RD, Plug M8x1, 4-pin

Min. ambient temperature: -40 °C
 Max. ambient temperature: 85 °C
 Electrical connection 1, type: Socket
 Electrical connection 1, thread size: M8x1
 Electrical connection 1, number of poles: 4-pin
 Cable exit 1: angled
 Electrical connection 2, type: open cable ends
 Electrical connection 2, number of poles: 4-pin
 Cable-Ø: 4.5 mm
 Wire cross-section: 0.25 mm²



Operational voltage	Electrical connection 1, type	Electrical connection 1, thread size	Electrical connection 1, number of poles	Electrical connection 1, coding	Cable exit 1	Electrical connection 2, type	Electrical connection 2, number of poles	Cable length [m]	Part No.
48 V AC/DC	Socket	M8x1	4-pin	A-coded	angled	open cable ends	4-pin	3	1834484145
48 V AC/DC	Socket	M8x1	4-pin	A-coded	angled	open cable ends	4-pin	5	1834484147

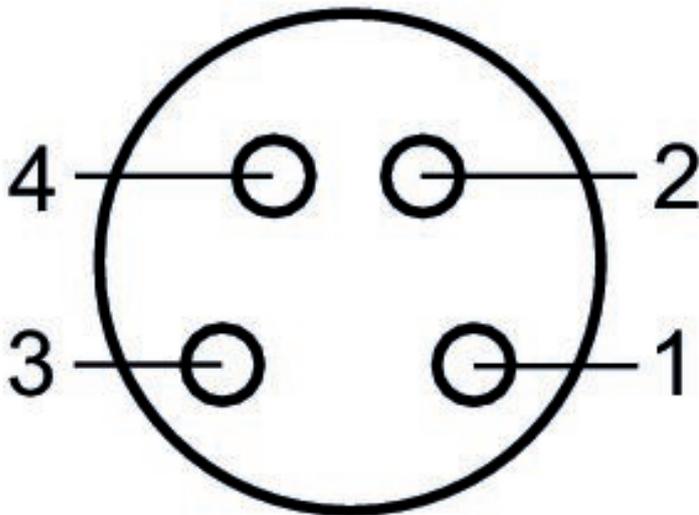
Dimensions in mm



L = length

1834484145, 1834484147

Pin assignment, socket



(1) BN=brown (2) WH=white (3) BU=blue (4) BK=black

Coil, Series CO1, Form C

Coil width: 15 mm

Electrical connection 2, number of poles: 3-pin

Duty cycle: 100 %

Min. ambient temperature: -10 °C

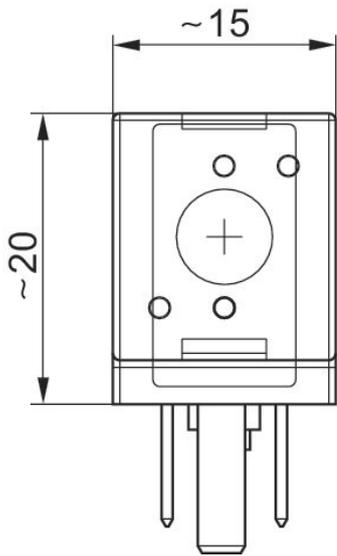
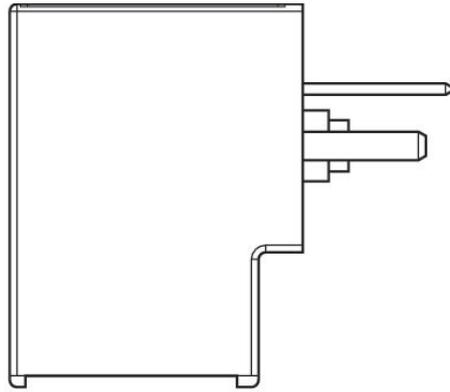
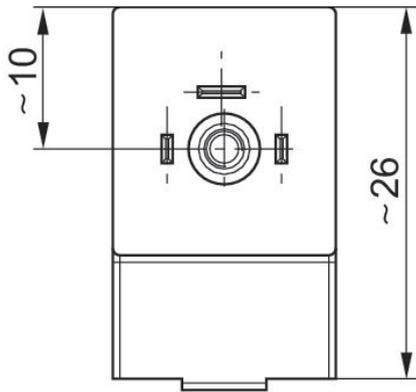
Max. ambient temperature: 50 °C



Operational voltage DC	Number of poles	Operational voltage AC at 50 Hz	Operational voltage AC at 60 Hz	Voltage tolerance DC	Voltage tolerance AC 50 Hz	Voltage tolerance AC 60 Hz	Power consumption DC [W]	Part No.
	3-pin	110 V	110 V		-10 % / +10 %	-10 % / +10 %		R422101598
	3-pin	230 V	230 V		-10 % / +10 %	-10 % / +10 %		R422101599
24 V	3-pin			-10 % / +10 %			2	R422101600
	3-pin	24 V	24 V		-10 % / +10 %	-10 % / +10 %		R422101601
12 V	3-pin			-10 % / +10 %			2	R422101602

Holding power AC 50 Hz [VA]	Switch-on power AC 50 Hz [VA]	Part No.
1.6	2.2	R422101598
1.6	2.2	R422101599
		R422101600
1.6	2.2	R422101601
		R422101602

Dimensions



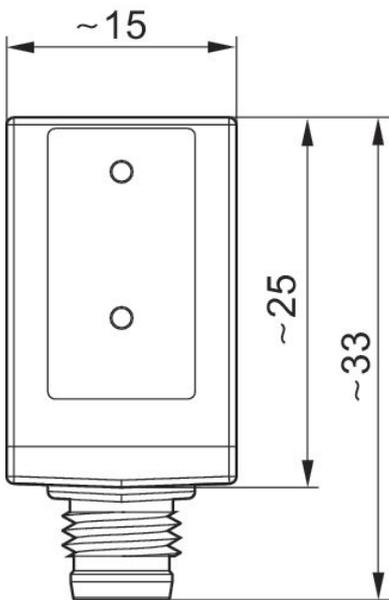
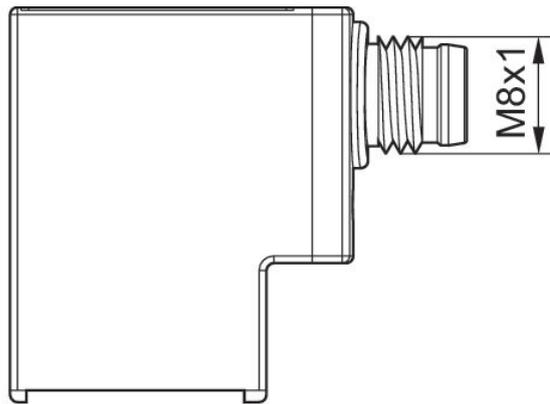
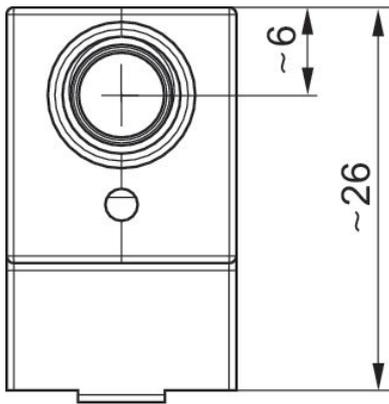
Coil, Series CO1, M8

Coil width: 16 mm
 Electrical connection 2, thread size: M8x1
 Duty cycle: 100 %
 Min. ambient temperature: -10 °C
 Max. ambient temperature: 50 °C



Operational voltage DC	Number of poles	Voltage tolerance DC	Power consumption DC [W]	Part No.
24 V	4-pin	-10 % / +10 %	2.2	R422101603
24 V	3-pin	-10 % / +10 %	2.2	R422101604

Dimensions



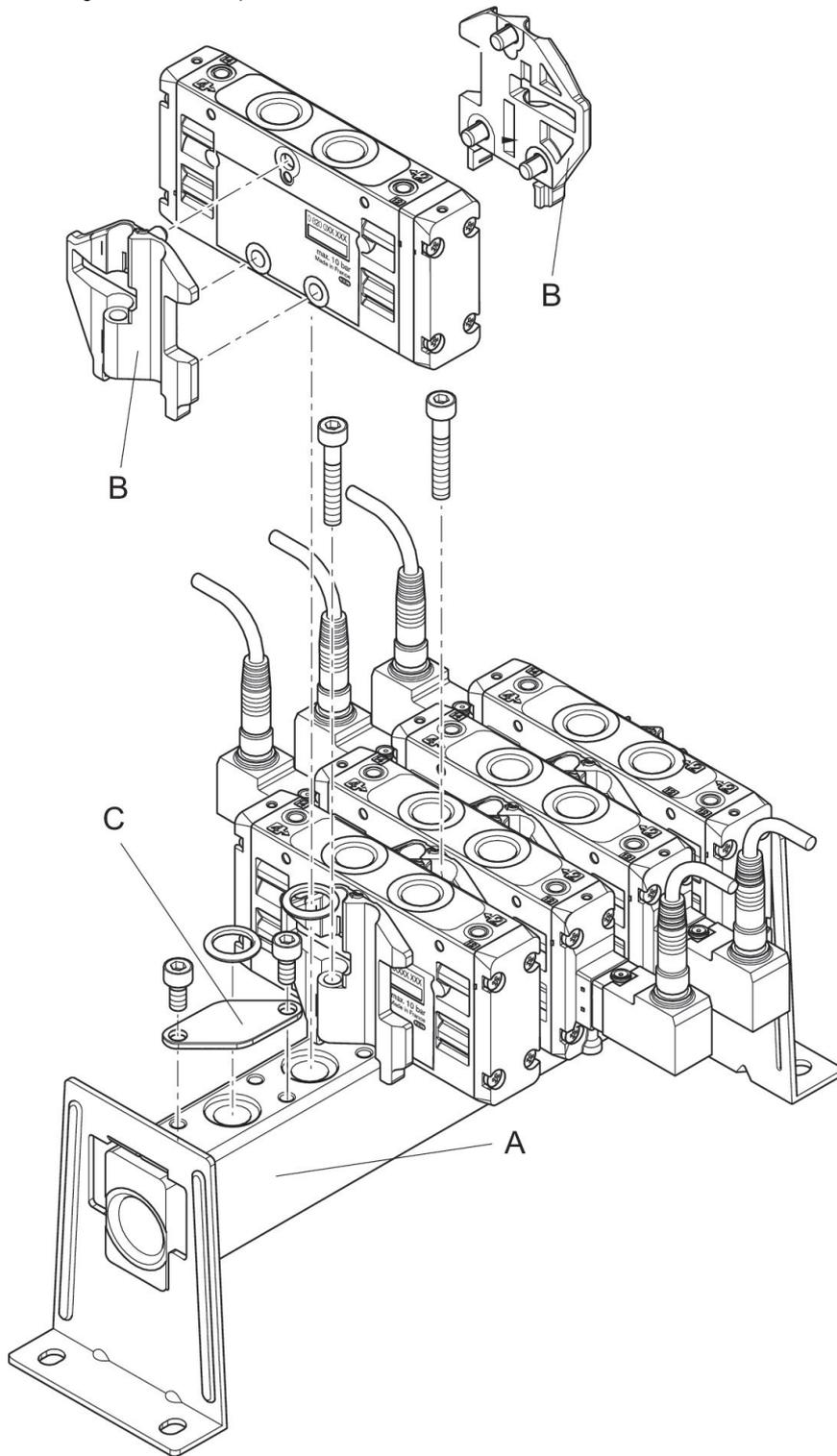
Manifold strip, Series TC08

Flow: 800 l/min
For series: TC08
Min. ambient temperature: -10 °C
Max. ambient temperature: 50 °C



Type	Max. number of valve positions	Part No.
Manifold strip	2	R422000931

Mounting on manifold strip



The following must be ordered to mount the valves: manifold strip A, mounting kit B (R422000937), blanking plate C (R422000939)

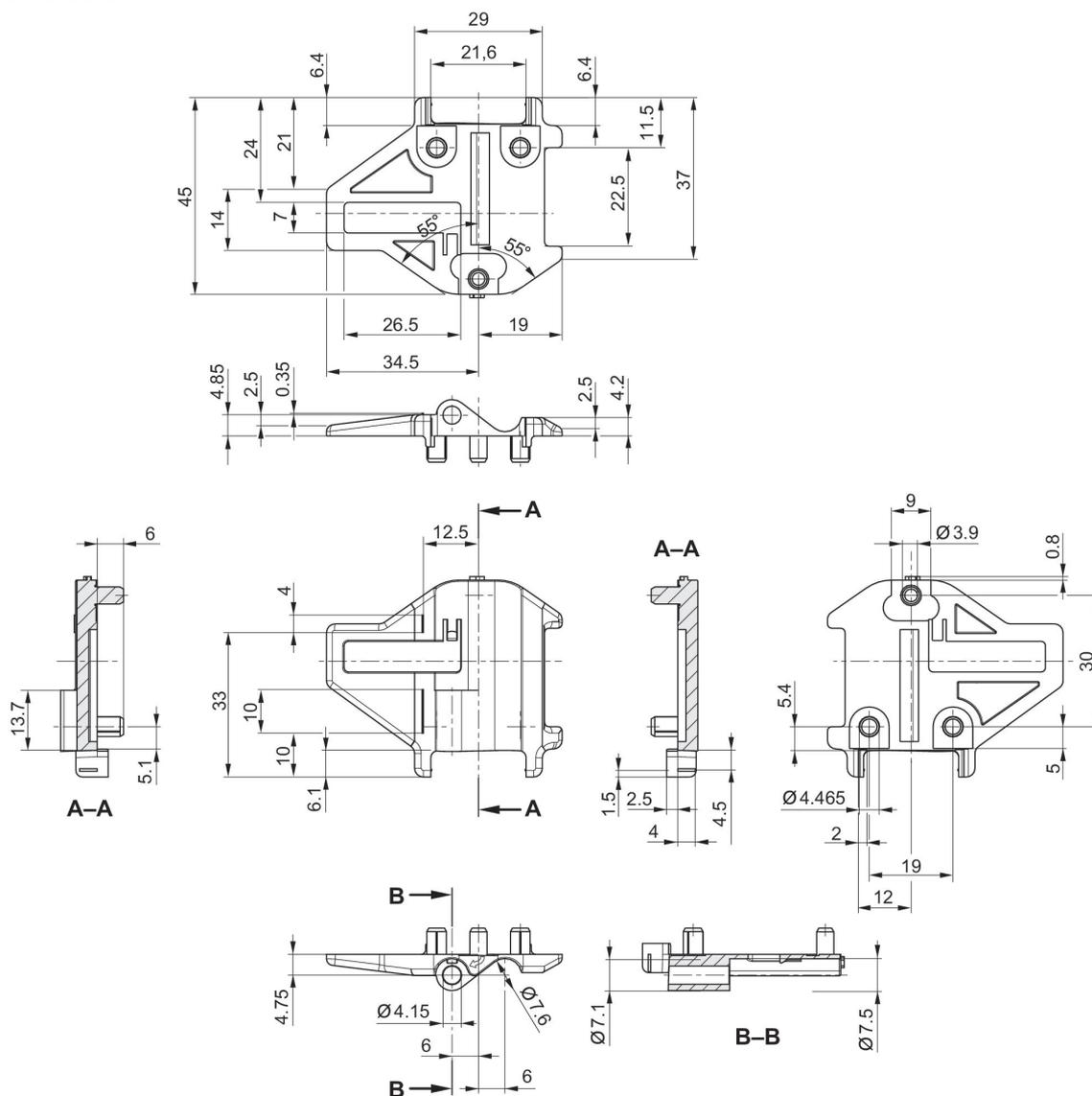
Mounting kit, TC08 series

For series: TC08



Type	Weight [kg]	Part No.
Mounting kit	0.13	R422000937

Dimensions in mm



Scope of delivery incl. seal and mounting screws

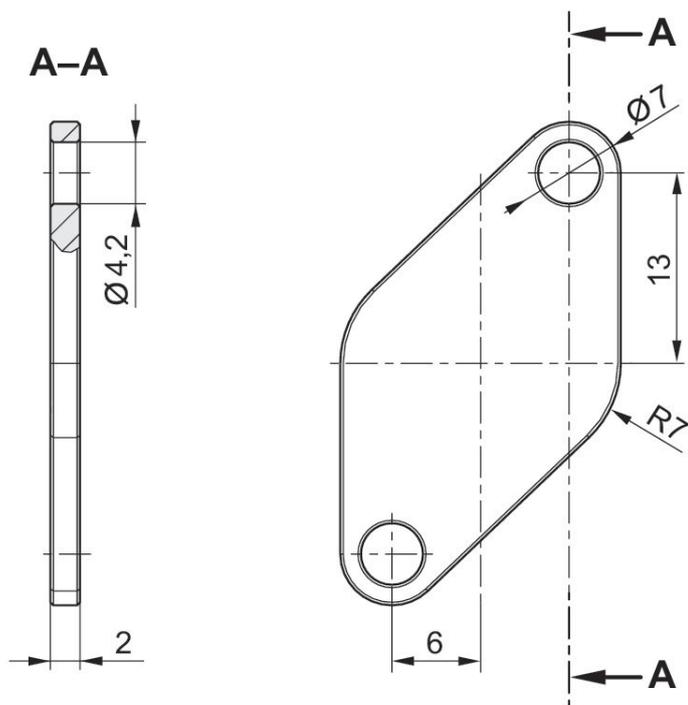
Blanking plate, TC08 series

For series: TC08



Material	Part No.
Galvanized Steel	R422000939

Dimensions in mm



Scope of delivery incl. 2 mounting screws, 1 x O-ring

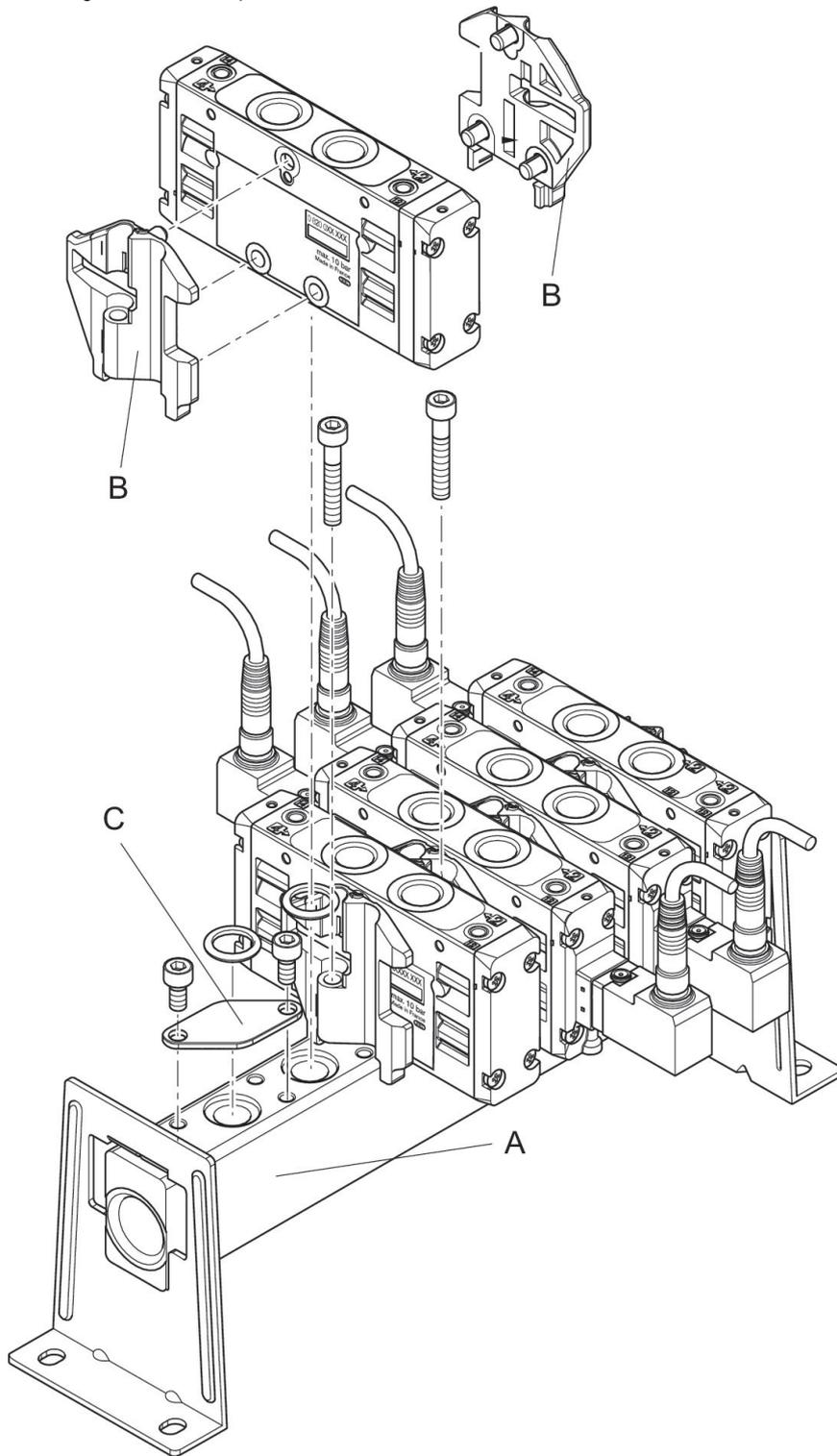
Manifold strip, Series TC08

Flow: 800 l/min
For series: TC08
Min. ambient temperature: -10 °C
Max. ambient temperature: 50 °C



Type	Max. number of valve positions	Part No.
Manifold strip	3	R422000932

Mounting on manifold strip



The following must be ordered to mount the valves: manifold strip A, mounting kit B (R422000937), blanking plate C (R422000939)

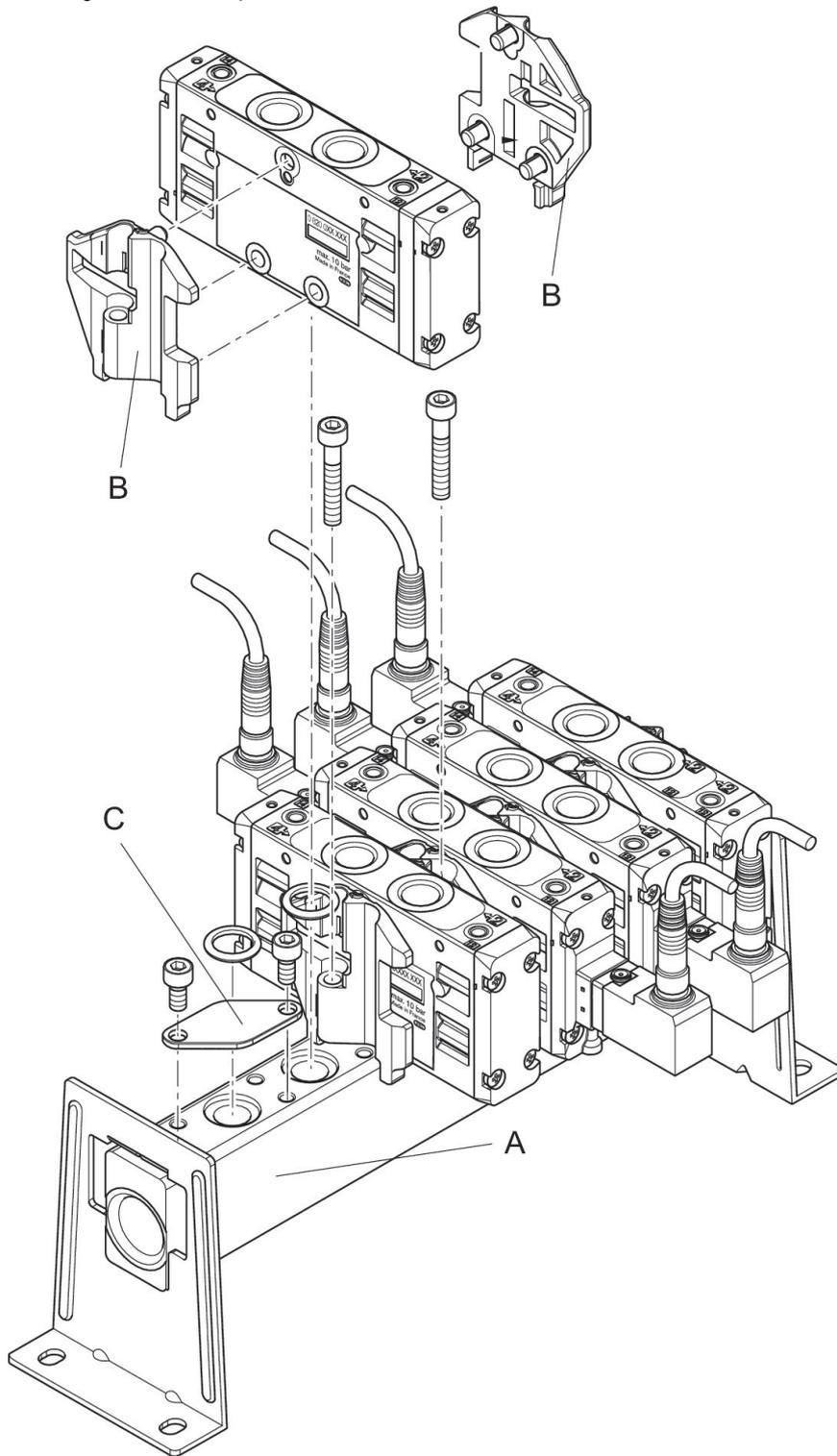
Manifold strip, Series TC08

Flow: 800 l/min
For series: TC08
Min. ambient temperature: -10 °C
Max. ambient temperature: 50 °C



Type	Max. number of valve positions	Part No.
Manifold strip	4	R422000933

Mounting on manifold strip



The following must be ordered to mount the valves: manifold strip A, mounting kit B (R422000937), blanking plate C (R422000939)

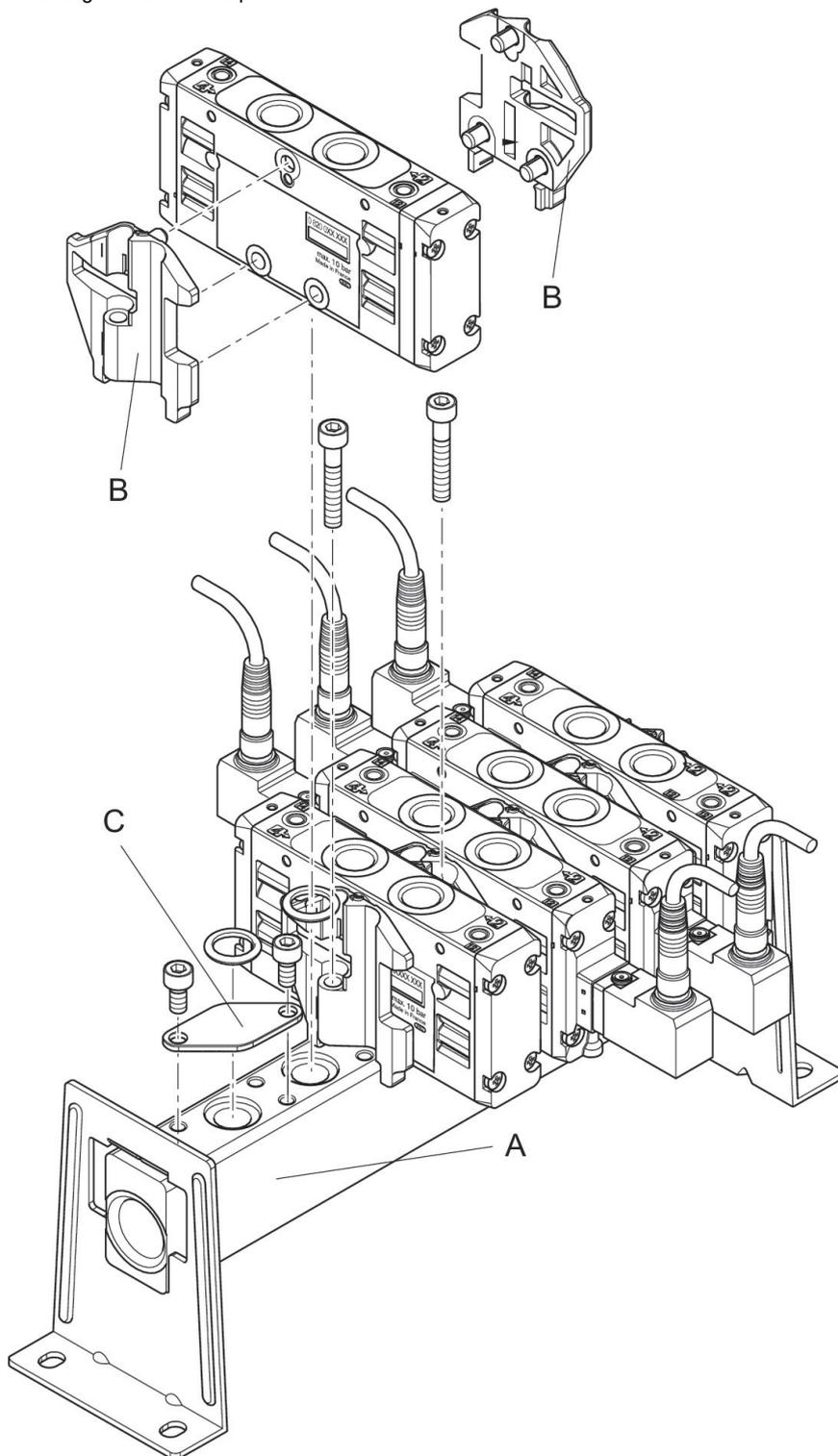
Manifold strip, Series TC08

Flow: 800 l/min
For series: TC08
Min. ambient temperature: -10 °C
Max. ambient temperature: 50 °C



Type	Max. number of valve positions	Part No.
Manifold strip	5	R422000934

Mounting on manifold strip



The following must be ordered to mount the valves: manifold strip A, mounting kit B (R422000937), blanking plate C (R422000939)

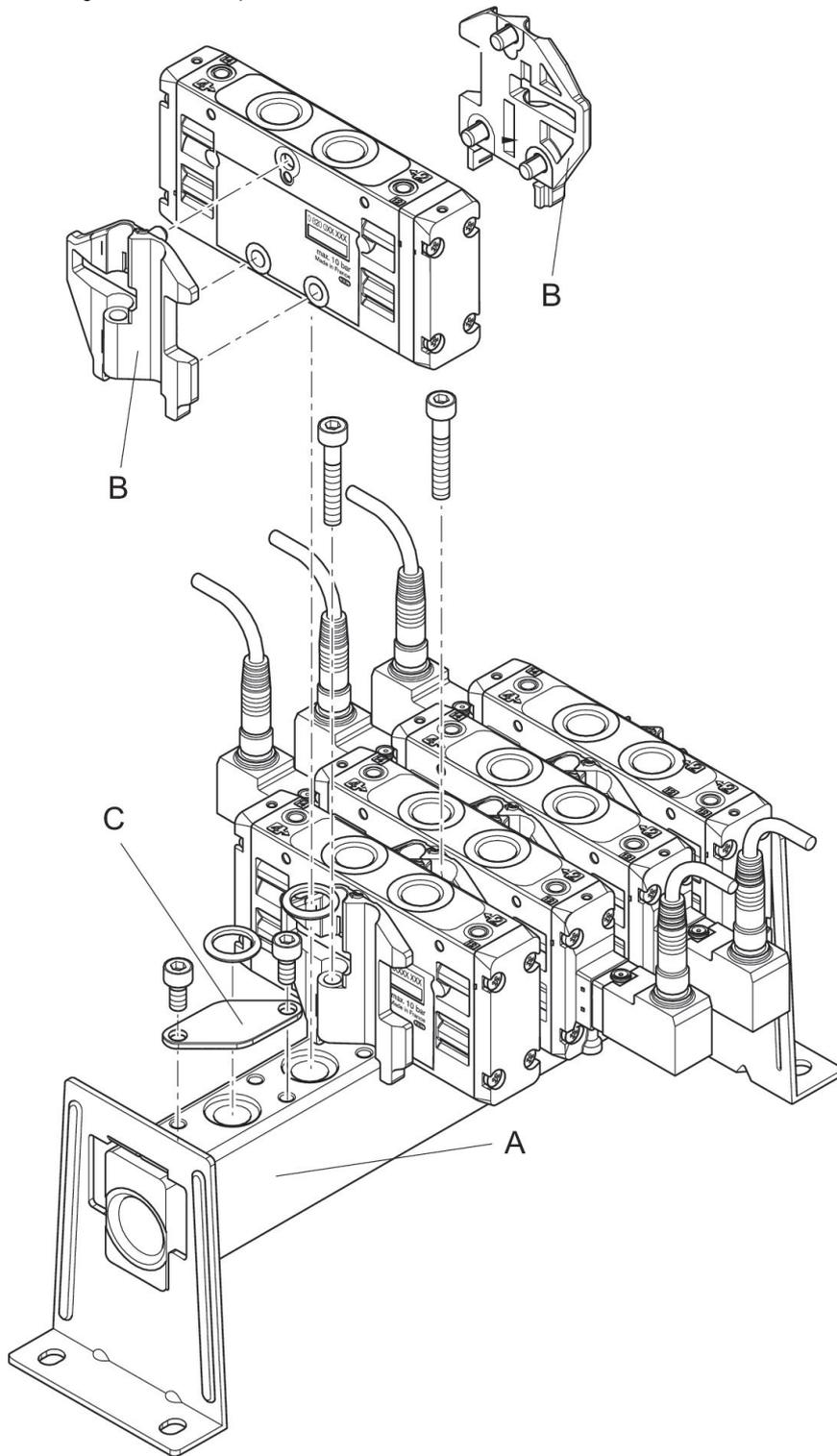
Manifold strip, Series TC08

Flow: 800 l/min
For series: TC08
Min. ambient temperature: -10 °C
Max. ambient temperature: 50 °C



Type	Max. number of valve positions	Part No.
Manifold strip	6	R422000935

Mounting on manifold strip



The following must be ordered to mount the valves: manifold strip A, mounting kit B (R422000937), blanking plate C (R422000939)

Manifold strip, Series TC08

Flow: 800 l/min

For series: TC08

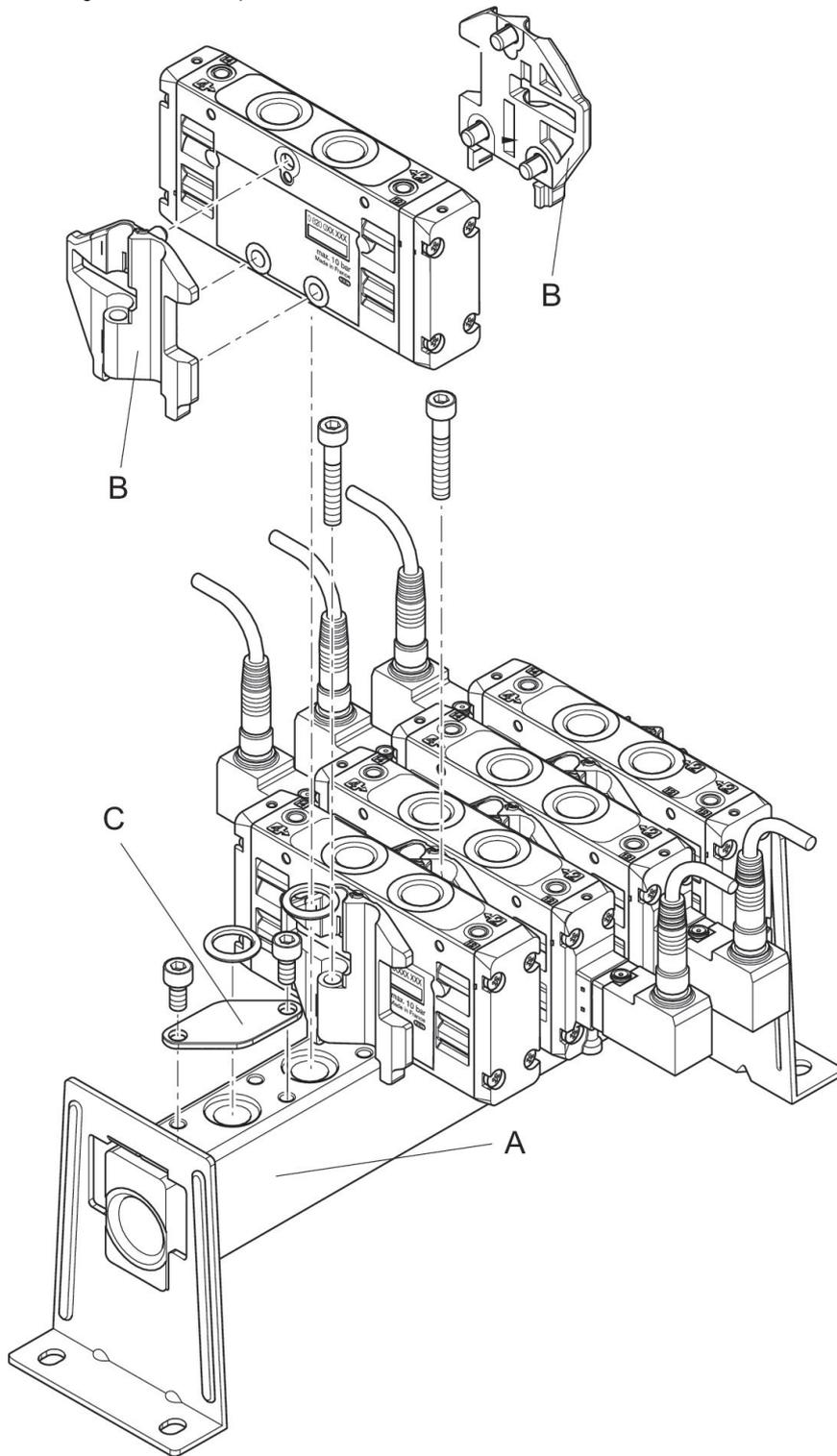
Min. ambient temperature: -10 °C

Max. ambient temperature: 50 °C



Type	Max. number of valve positions	Part No.
Manifold strip	8	R412012677

Mounting on manifold strip



The following must be ordered to mount the valves: manifold strip A, mounting kit B (R422000937), blanking plate C (R422000939)

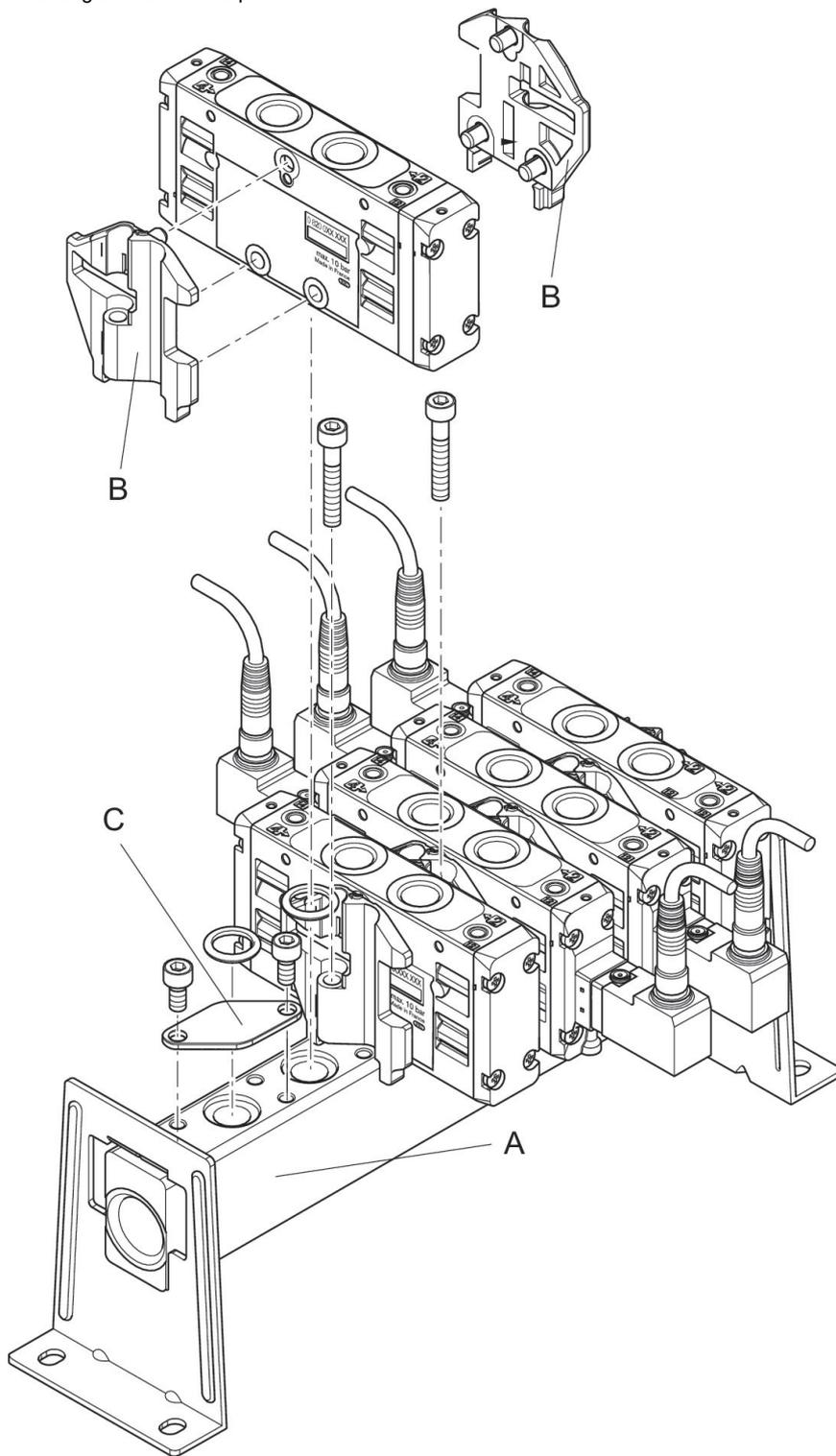
Manifold strip, Series TC08

Flow: 800 l/min
For series: TC08
Min. ambient temperature: -10 °C
Max. ambient temperature: 50 °C



Type	Max. number of valve positions	Part No.
Manifold strip	10	R412012678

Mounting on manifold strip



The following must be ordered to mount the valves: manifold strip A, mounting kit B (R422000937), blanking plate C (R422000939)

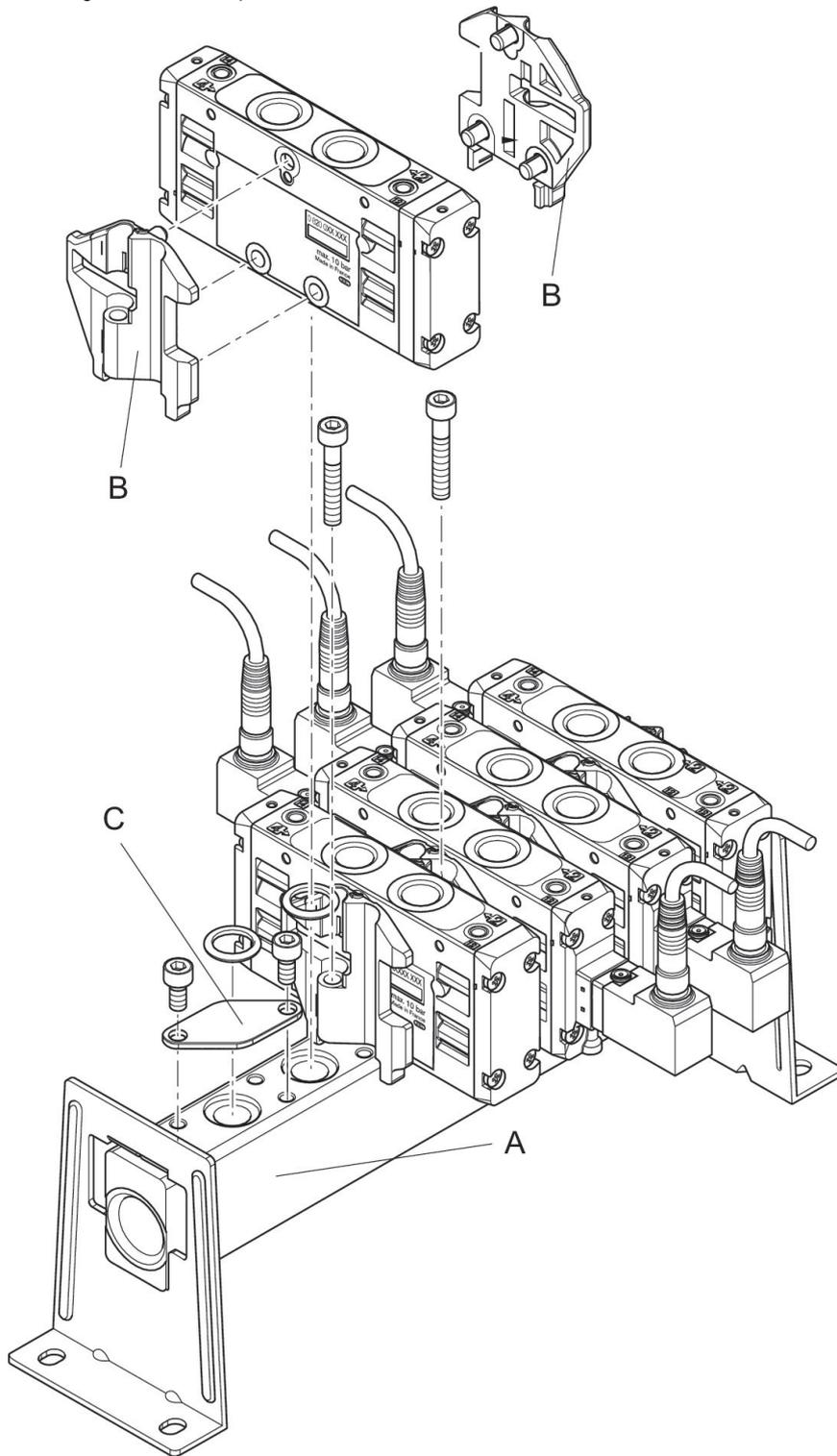
Manifold strip, Series TC08

Flow: 800 l/min
For series: TC08
Min. ambient temperature: -10 °C
Max. ambient temperature: 50 °C



Type	Max. number of valve positions	Part No.
Manifold strip	12	R412012679

Mounting on manifold strip

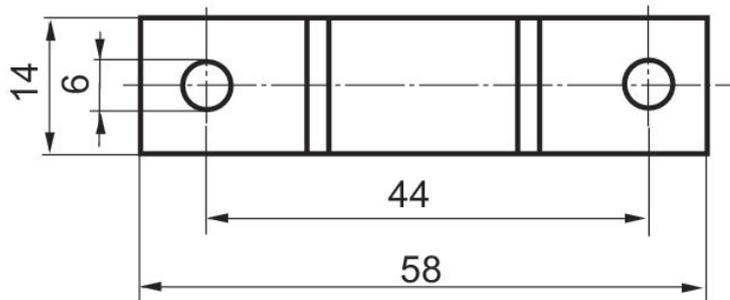
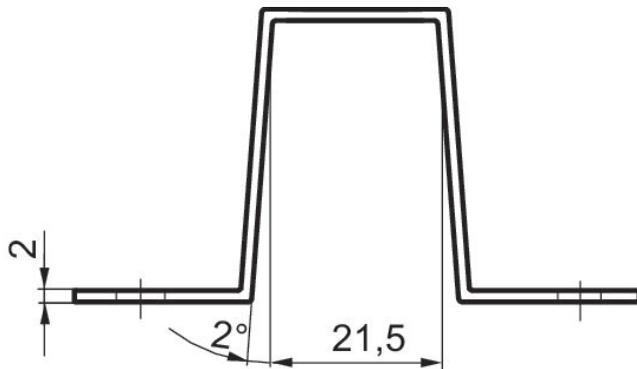


The following must be ordered to mount the valves: manifold strip A, mounting kit B (R422000937), blanking plate C (R422000939)

Mounting clip



Type	Delivery unit [piece]	Weight [kg]	Part No.
Mounting clip	2	0.024	1821332049

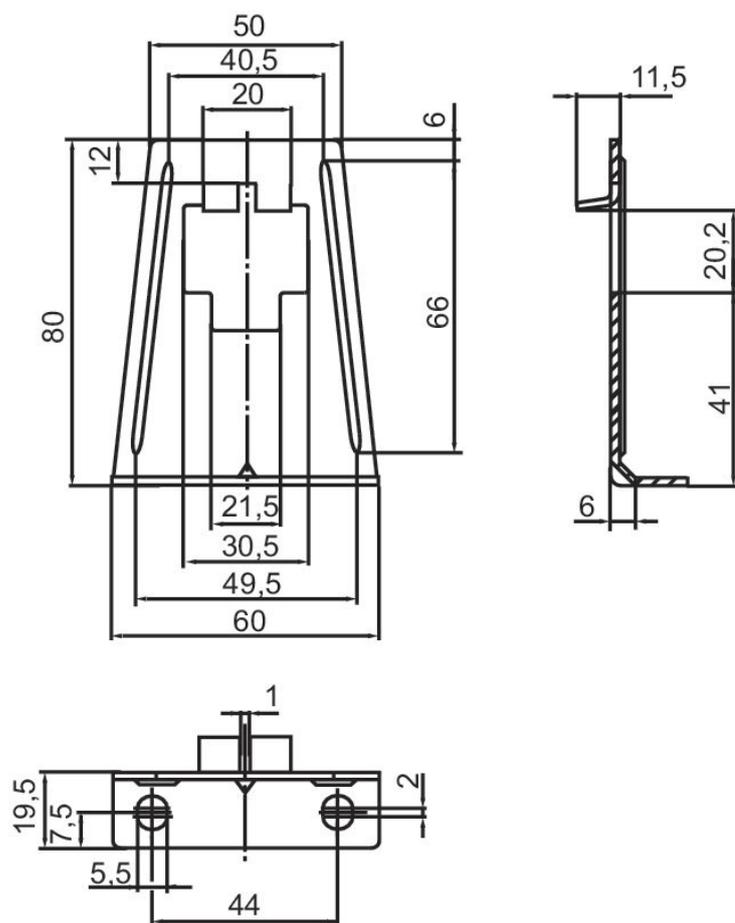


Mounting bracket

For series: TC08 RA18



Type	Delivery unit [piece]	Weight [kg]	Part No.
Mounting bracket	1	0.075	1821332048



Efficient pneumatic solutions, our program:
cylinders and drives, valves and valve systems,
air supply management, proportional pressure
control valves



Visit us: www.Emerson.com/aventics
Your local contact: Emerson.com/contactus

-  Emerson.com
-  Facebook.com/EmersonAutomationSolutions
-  LinkedIn.com/company/Emerson-Automation-Solutions
-  Twitter.com/EMR_Automation



The Emerson logo is a trademark and service mark of Emerson Electric Co. AVENTICS is a registered trademark of one of the Emerson family of companies. All other trademarks are the property of their respective owners. © 2020 Emerson Electric Co. All rights reserved.



CONSIDER IT SOLVED™