Series TC15

AVENTICS™ Series TC15

EMERSON.

Valve system, Series TC15

- Configurable valve systems

Blocking principle	Plate principle
Working pressure min./max.	-13 ... 145 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m³
Nominal flow Qn	1.52 Cv
Number of valve positions max.	12
Protection class with connection	IP65

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

Overview of variants

	Version	You have the following options:
	Single plug-in wiring	Electrical connection Plug M8 plug, form C Valve plug connector

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 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
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).

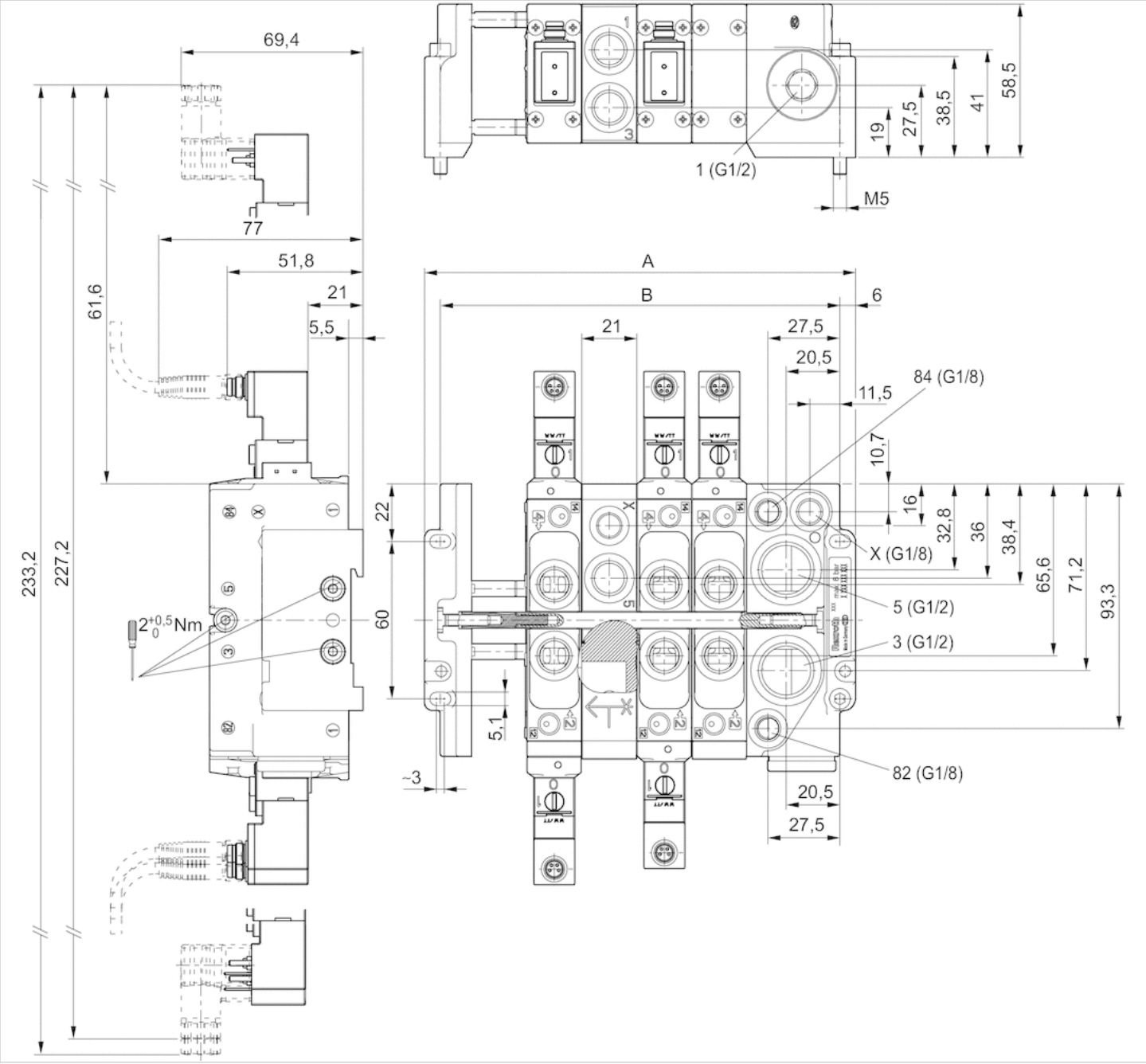
See the following pages on the series for technical data on individual components.
It is necessary to maintain the electrical current in the coil of double solenoid valves to avoid unexpected auto-switching.

Technical information

Material	
End plate	Die-cast aluminum
Seal	Acrylonitrile butadiene rubber
Base plate	Polyamide

Dimensions

Dimensions in mm, pneumatic subbase, right, Thread connections acc. to ISO 228-1



An example configuration is illustrated. The delivered product may thus deviate from the illustration.
Mounted via 4 through-holes in the end plates or assembly on DIN rail as per EN 60715

Dimensions

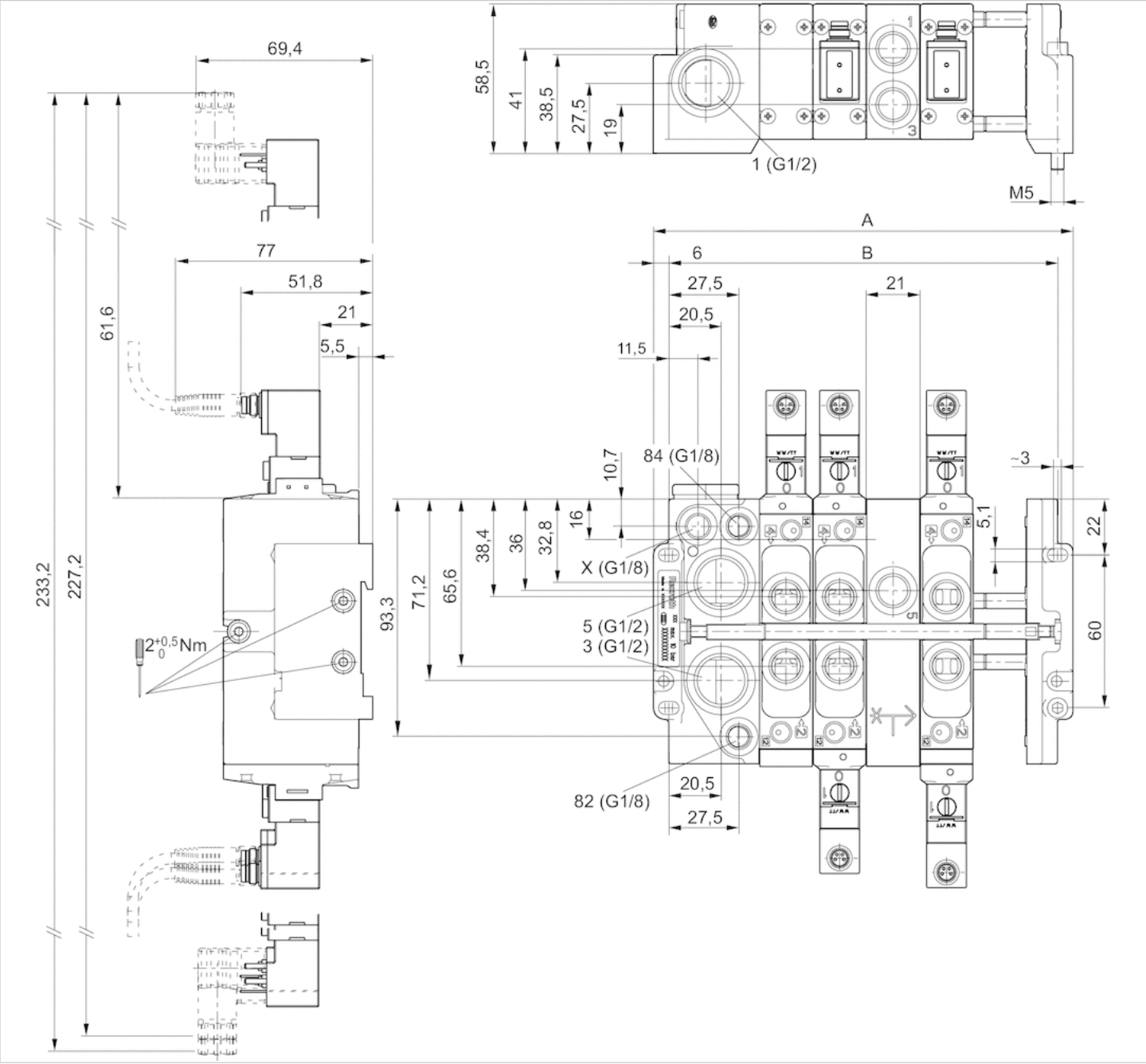
n	A	B
2	101.5	89.5
3	122.5	110.5
4	143.5	131.5
5	164.5	152.5
6	185.5	173.5

n	A	B
7	206.5	194.5
8	227.5	215.5
9	248.5	236.5
10	269.5	257.5
11	290.5	278.5
12	311.5	299.5

n = number of valve positions

Dimensions

Dimensions in mm, pneumatic subbase, left, Thread connections acc. to ISO 228-1



An example configuration is illustrated. The delivered product may thus deviate from the illustration.
Mounted via 4 through-holes in the end plates or assembly on DIN rail as per EN 60715

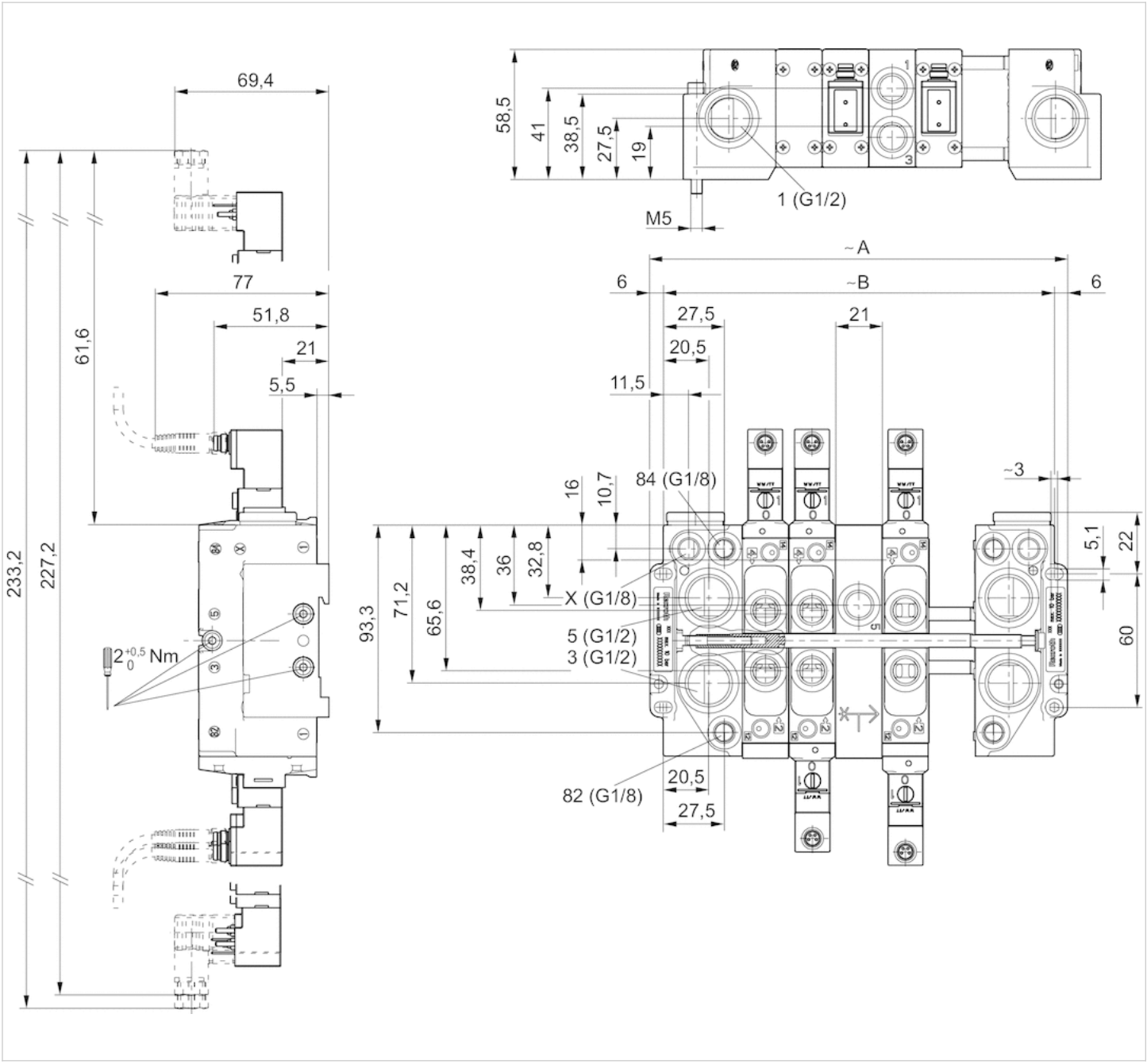
Dimensions

n	A	B
2	101.5	89.5
3	122.5	110.5
4	143.5	131.5
5	164.5	152.5
6	185.5	173.5
7	206.5	194.5
8	227.5	215.5
9	248.5	236.5
10	269.5	257.5
11	290.5	278.5
12	311.5	299.5

n = number of valve positions

Dimensions

Dimensions in mm, pneumatic subbase on both sides, Thread connections acc. to ISO 228-1



An example configuration is illustrated. The delivered product may thus deviate from the illustration.
Mounted via 4 through-holes in the end plates or assembly on DIN rail as per EN 60715

Dimensions

n	A	B
2	125	113
3	146	134
4	167	155
5	188	176
6	209	197

n	A	B
7	230	218
8	251	239
9	272	260
10	293	281
11	314	302
12	335	323

n = number of valve positions

5/2-directional valve, Series TC15

- 5/3
- Qn = 1.52 Cv
- Pilot valve width : 15 mm
- Plate connection Pipe connection
- Compressed air connection output : G 1/4
- Electrical connection : Plug, M8, 3-pin
- Can be assembled into blocks
- Manual override : with detent
- single solenoid double solenoid
- Pilot : External

Type	Spool valve, positive overlapping
Activation	Electrically
Pilot	External
Sealing principle	Soft sealing
Blocking principle	Plate principle
Working pressure min./max.	-13 ... 145 psi
Control pressure min./max.	See table below
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m³
Nominal flow Qn	1.52 Cv
Connector standard	DIN EN 60947-5-2
Protection class acc. to DIN EN 61140 Electrically	Class III
Protection class with connection	IP65
LED status display	Yellow
Duty cycle	100 %
Rail mounting DIN EN 60715	TH35 x 15
Weight	See table below

Technical data

Part No.		MO	Compressed air connection	Operational voltage
			Output	DC
R422100980			G 1/4	24 V
R422100981			G 1/4	24 V
R422100982			G 1/4	24 V

Part No.	Voltage tolerance	Power consumption	Flow conductance	Flow conductance
	DC	DC	b	C-value
R422100980	-10% / +10%	2.2 W	0.33	6.8 l/(s*bar)
R422100981	-10% / +10%	2.2 W	0.33	6.8 l/(s*bar)
R422100982	-10% / +10%	2.2 W	0.33	6.8 l/(s*bar)

Part No.	Nominal resistance	Control pressure min./max.	Typ. switch-on time	Typ. switch-off time	Weight
R422100980	280 Ω	37 ... 145 psi	22 ms	20 ms	0.445 lbs
R422100981	280 Ω	44 ... 145 psi	12 ms	35 ms	0.445 lbs
R422100982	280 Ω	29 ... 145 psi	11 ms	11 ms	0.507 lbs

Nominal flow Qn at 87 psi and Δp = 14.5 psi, MO = Manual override

Technical information

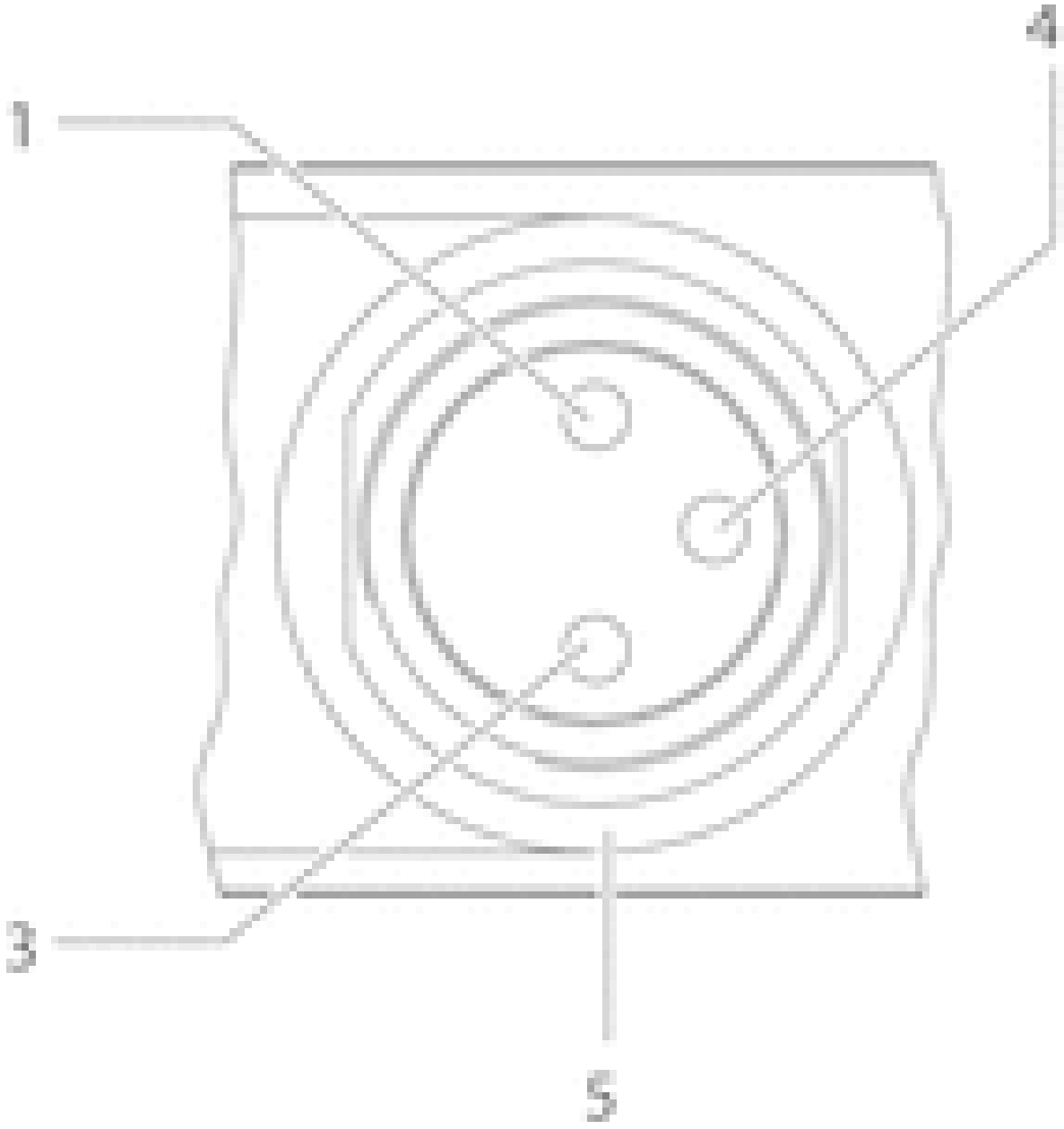
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
The oil content of compressed air must remain constant during the life cycle.
Use 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

Pin assignments

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 TC15

- 5/2-directional valve with air spring return 5/2-directional valve with spring return 5/2-directional valve, double solenoid
- Qn = 1.52 Cv
- Pilot valve width : 15 mm
- Plate connection Pipe connection
- Compressed air connection output : G 1/4
- Electrical connection : Plug, M8, 4-pin
- Can be assembled into blocks
- Manual override : with detent without detent
- double solenoid single solenoid
- Pilot : External

Type	Spool valve, positive overlapping
Activation	Electrically
Pilot	External
Sealing principle	Soft sealing
Blocking principle	Plate principle
Working pressure min./max.	-13 ... 145 psi
Control pressure min./max.	See table below
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air
Nominal flow Qn	1.52 Cv
Connector standard	DIN EN 60947-5-2
Protection class acc. to DIN EN 61140 Electrically	Class III
Protection class with connection	IP65
LED status display	Yellow
Duty cycle	100 %
Rail mounting DIN EN 60715	TH35 x 15
Weight	See table below

Technical data

Part No.		MO	Compressed air connection	Operational voltage
			Output	DC
0820058796			G 1/4	24 V
0820058797			G 1/4	24 V
0820058798			G 1/4	24 V
0820058896			G 1/4	24 V
0820058897			G 1/4	24 V
0820058898			G 1/4	24 V

Part No.	Voltage tolerance	Power consumption	Flow conductance	Flow conductance
	DC	DC	b	C-value
0820058796	-10% / +10%	2.2 W	0.33	6.8 l/(s*bar)
0820058797	-10% / +10%	2.2 W	0.33	6.8 l/(s*bar)
0820058798	-10% / +10%	2.2 W	0.33	6.8 l/(s*bar)

Part No.	Voltage tolerance	Power consumption	Flow conductance	Flow conductance
	DC	DC	b	C-value
0820058896	-10% / +10%	2.2 W	0.33	6.8 l/(s*bar)
0820058897	-10% / +10%	2.2 W	0.33	6.8 l/(s*bar)
0820058898	-10% / +10%	2.2 W	0.33	6.8 l/(s*bar)

Part No.	Nominal resistance	Control pressure min./max.	Typ. switch-on time	Typ. switch-off time	Weight
0820058796	280 Ω	37 ... 145 psi	22 ms	20 ms	0.445 lbs
0820058797	280 Ω	44 ... 145 psi	12 ms	35 ms	0.445 lbs
0820058798	280 Ω	29 ... 145 psi	11 ms	11 ms	0.507 lbs
0820058896	280 Ω	37 ... 145 psi	22 ms	20 ms	0.445 lbs
0820058897	280 Ω	44 ... 145 psi	12 ms	35 ms	0.445 lbs
0820058898	280 Ω	29 ... 145 psi	11 ms	11 ms	0.507 lbs

Nominal flow Qn at 87 psi and Δp = 14.5 psi, MO = Manual override

Technical information

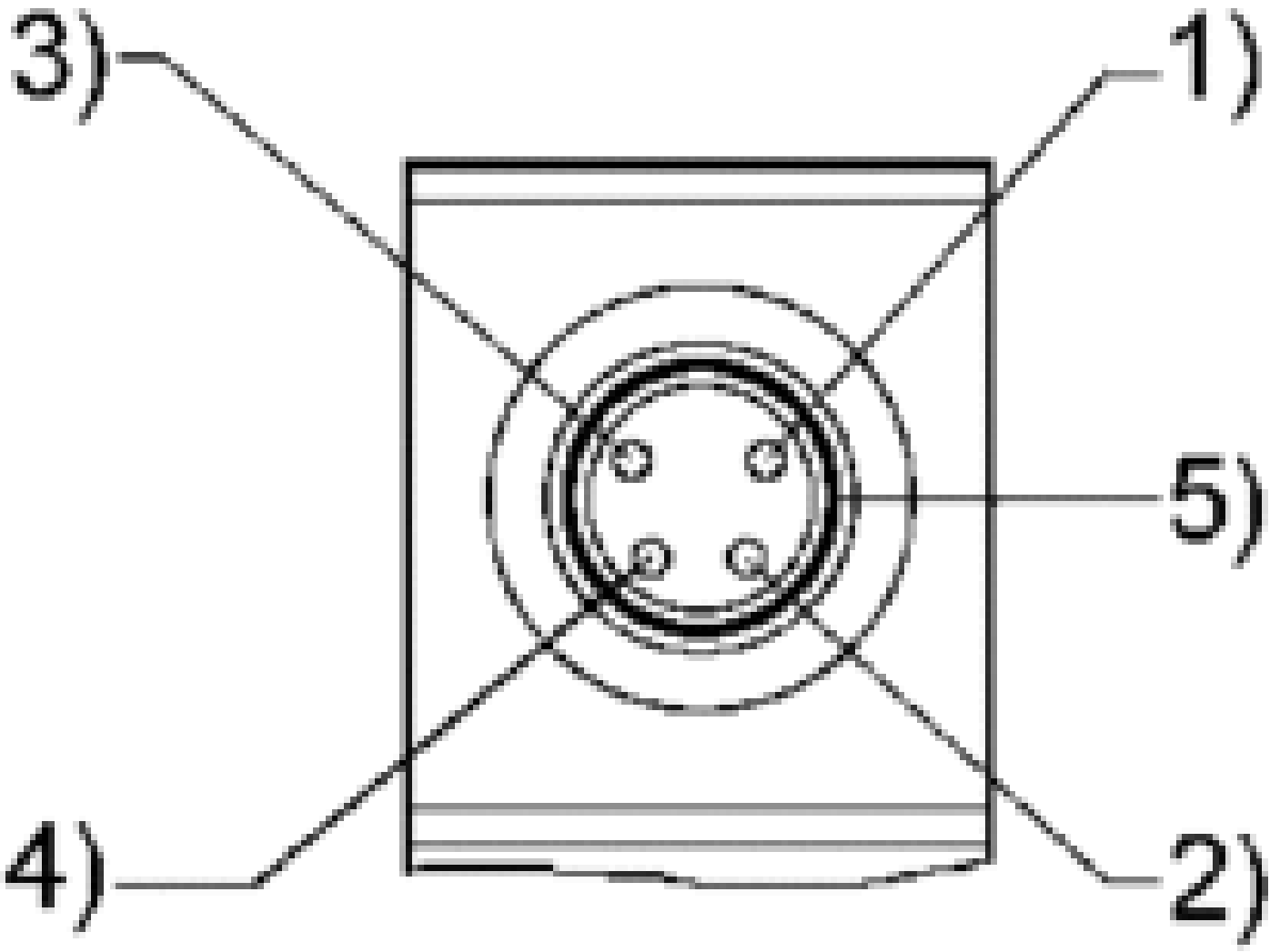
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
The oil content of compressed air must remain constant during the life cycle.
Use 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

Pin assignments

PIN assignment and cable colors for valve plug connectors



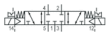
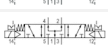
PIN assignment:
1) PIN not assigned
2) PIN not assigned
3) 0 V
4) 24 V
5) LED
Cable colors
1) Brown
2) White
3) Blue
4) Black

5/3-directional valve, Series TC15

- 5/3
- Qn = 1.32 Cv
- Pilot valve width : 15 mm
- closed center exhausted center pressurized center
- Plate connection Pipe connection
- Compressed air connection output : G 1/4
- Electrical connection : Plug, M8, 3-pin
- Can be assembled into blocks
- Manual override : with detent
- double solenoid
- Pilot : External

Type	Spool valve, positive overlapping
Activation	Electrically
Pilot	External
Sealing principle	Soft sealing
Blocking principle	Plate principle
Working pressure min./max.	-13 ... 145 psi
Control pressure min./max.	44 ... 145 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air
Nominal flow Qn	1.32 Cv
Connector standard	DIN EN 60947-5-2
Protection class acc. to DIN EN 61140 Electrically	Class III
Protection class with connection	IP65
LED status display	Yellow
Duty cycle	100 %
Typ. switch-on time	12 ms
Typ. switch-off time	13 ms
Rail mounting DIN EN 60715	TH35 x 15
Weight	0.54 lbs

Technical data

Part No.		MO		Compressed air connection
				Output
R422100983			closed center	G 1/4
R422100984			exhausted center	G 1/4
R422100985			pressurized center	G 1/4

Part No.	Operational voltage	Voltage tolerance	Power consumption
	DC	DC	DC
R422100983	24 V	-10% / +10%	2.2 W
R422100984	24 V	-10% / +10%	2.2 W
R422100985	24 V	-10% / +10%	2.2 W

Part No.	Flow conductance	Flow conductance	Nominal resistance
	b	C-value	
R422100983	0.31	5.9 l/(s*bar)	280 Ω
R422100984	0.31	5.9 l/(s*bar)	280 Ω
R422100985	0.31	5.9 l/(s*bar)	280 Ω

Nominal flow Qn at 87 psi and Δp = 14.5 psi, MO = Manual override

Technical information

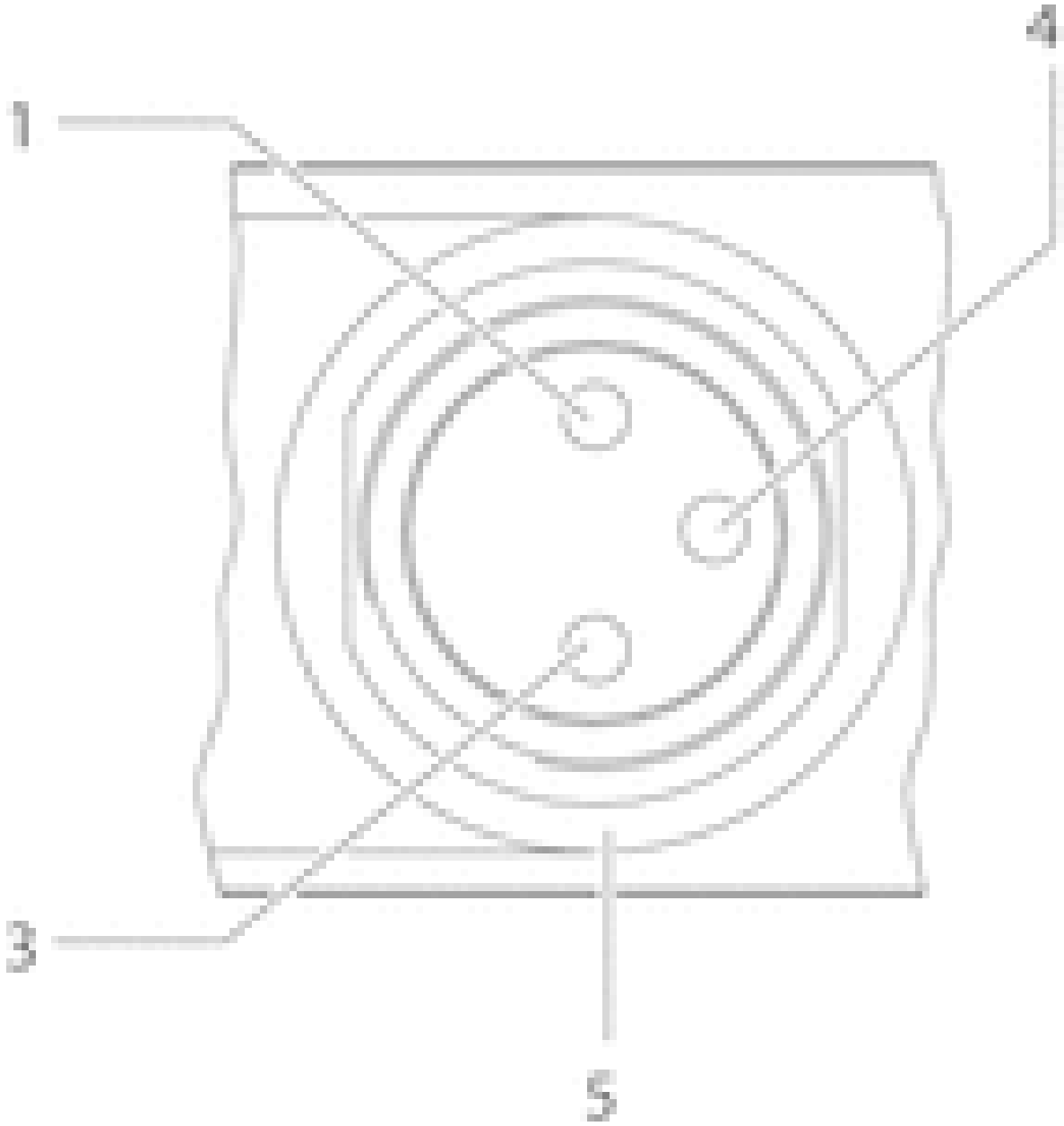
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
The oil content of compressed air must remain constant during the life cycle.
Use 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

Pin assignments

PIN assignment and cable colors for valve plug connectors



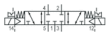
PIN assignment:
1) PIN not assigned
3) 0 V
4) 24 V
5) LED
Cable color
1) Brown
3) Blue
4) Black
Note: Bi-polar protective circuit to prevent overvoltage

5/3-directional valve, Series TC15

- 5/3-directional valve, closed center 5/3-directional valve, exhausted center 5/3-directional valve, pressurized center
- Qn = 1.32 Cv
- Pilot valve width : 15 mm
- closed center exhausted center pressurized center
- Plate connection Pipe connection
- Compressed air connection output : G 1/4
- Electrical connection : Plug, M8, 4-pin
- Can be assembled into blocks
- Manual override : with detent without detent
- double solenoid
- Pilot : External

Type	Spool valve, positive overlapping
Activation	Electrically
Pilot	External
Sealing principle	Soft sealing
Blocking principle	Plate principle
Working pressure min./max.	-13 ... 145 psi
Control pressure min./max.	44 ... 145 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air
Nominal flow Qn	1.32 Cv
Connector standard	DIN EN 60947-5-2
Protection class acc. to DIN EN 61140 Electrically	Class III
Protection class with connection	IP65
LED status display	Yellow
Duty cycle	100 %
Typ. switch-on time	12 ms
Typ. switch-off time	13 ms
Rail mounting DIN EN 60715	TH35 x 15
Weight	0.54 lbs

Technical data

Part No.		MO		Compressed air connection
				Output
0820059796			closed center	G 1/4
0820059797			exhausted center	G 1/4
0820059798			pressurized center	G 1/4
0820059896			closed center	G 1/4
0820059897			exhausted center	G 1/4
0820059898			pressurized center	G 1/4

Part No.	Operational voltage	Voltage tolerance	Power consumption
	DC	DC	DC

Part No.	Operational voltage	Voltage tolerance	Power consumption
	DC	DC	DC
0820059796	24 V	-10% / +10%	2.2 W
0820059797	24 V	-10% / +10%	2.2 W
0820059798	24 V	-10% / +10%	2.2 W
0820059896	24 V	-10% / +10%	2.2 W
0820059897	24 V	-10% / +10%	2.2 W
0820059898	24 V	-10% / +10%	2.2 W

Part No.	Flow conductance	Flow conductance	Nominal resistance
	b	C-value	
0820059796	0.31	5.9 l/(s*bar)	280 Ω
0820059797	0.31	5.9 l/(s*bar)	280 Ω
0820059798	0.31	5.9 l/(s*bar)	280 Ω
0820059896	0.31	5.9 l/(s*bar)	280 Ω
0820059897	0.31	5.9 l/(s*bar)	280 Ω
0820059898	0.31	5.9 l/(s*bar)	280 Ω

Nominal flow Qn at 87 psi and Δp = 14.5 psi, MO = Manual override

Technical information

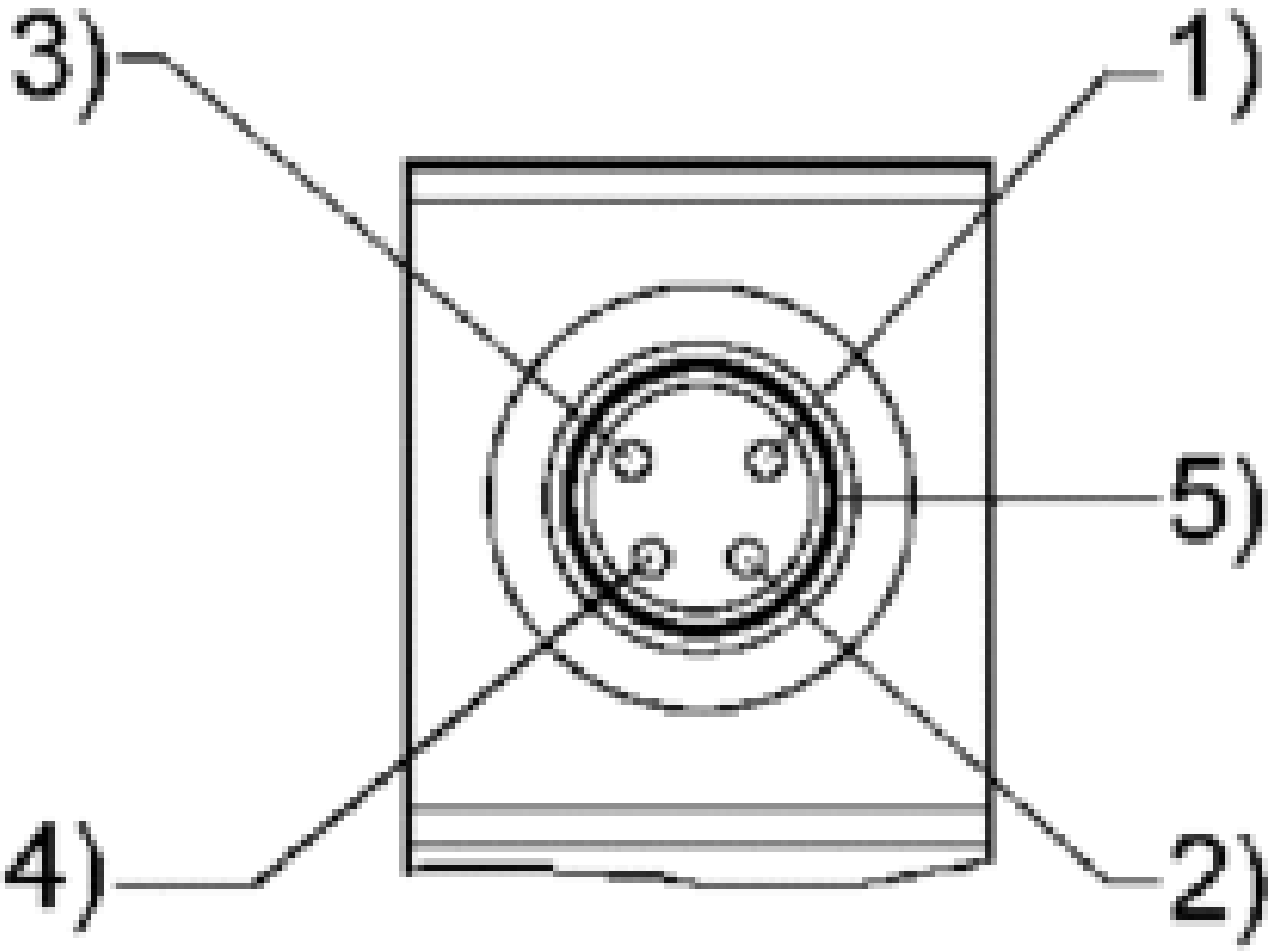
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
The oil content of compressed air must remain constant during the life cycle.
Use 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

Pin assignments

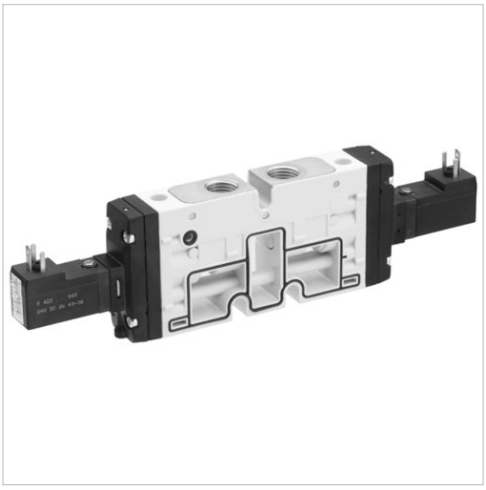
PIN assignment and cable colors for valve plug connectors



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 TC15

- Qn = 1.12 Cv
- Pilot valve width : 15 mm
- NC/NC NO/NO NC/NO
- Plate connection Pipe connection
- Compressed air connection output : G 1/4
- Electrical connection : Plug, ISO 15217, form C
- Can be assembled into blocks
- Manual override : with detent without detent
- double solenoid
- With spring return
- Pilot : External



Type	Spool valve, positive overlapping
Activation	Electrically
Pilot	External
Sealing principle	Soft sealing
Blocking principle	Plate principle
Working pressure min./max.	-13 ... 145 psi
Control pressure min./max.	44 ... 145 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m³
Nominal flow Qn	1.12 Cv
Connector standard	ISO 15217
Protection class with connection	IP65
Duty cycle	100 %
Typ. switch-on time	12 ms
Typ. switch-off time	16 ms
Generic emission standard in accordance with	EN 50081-2:1993
Generic immunity standard in accordance with	EN 50082-2
Weight	0.551 lbs

Technical data

Part No.		MO		Compressed air connection	Operational voltage
				Output	DC
R422102197			NC/NC	G 1/4	24 V
R422102201			NO/NO	G 1/4	24 V
R422102205			NC/NO	G 1/4	24 V
R422102209			NC/NC	G 1/4	24 V
R422102213			NO/NO	G 1/4	24 V
R422102217			NC/NO	G 1/4	24 V

Part No.	Voltage tolerance	Power consumption	Flow conductance	Flow conductance
	DC	DC	b	C-value
R422102197	-10% / +10%	2 W	0.25	5.9 l/(s*bar)
R422102201	-10% / +10%	2 W	0.25	5.9 l/(s*bar)
R422102205	-10% / +10%	2 W	0.25	5.9 l/(s*bar)
R422102209	-10% / +10%	2 W	0.25	5.9 l/(s*bar)
R422102213	-10% / +10%	2 W	0.25	5.9 l/(s*bar)
R422102217	-10% / +10%	2 W	0.25	5.9 l/(s*bar)

Part No.	Nominal resistance
R422102197	280 Ω
R422102201	280 Ω
R422102205	280 Ω
R422102209	280 Ω
R422102213	280 Ω
R422102217	280 Ω

Nominal flow Qn at 87 psi and Δp = 14.5 psi, MO = Manual override

Technical information

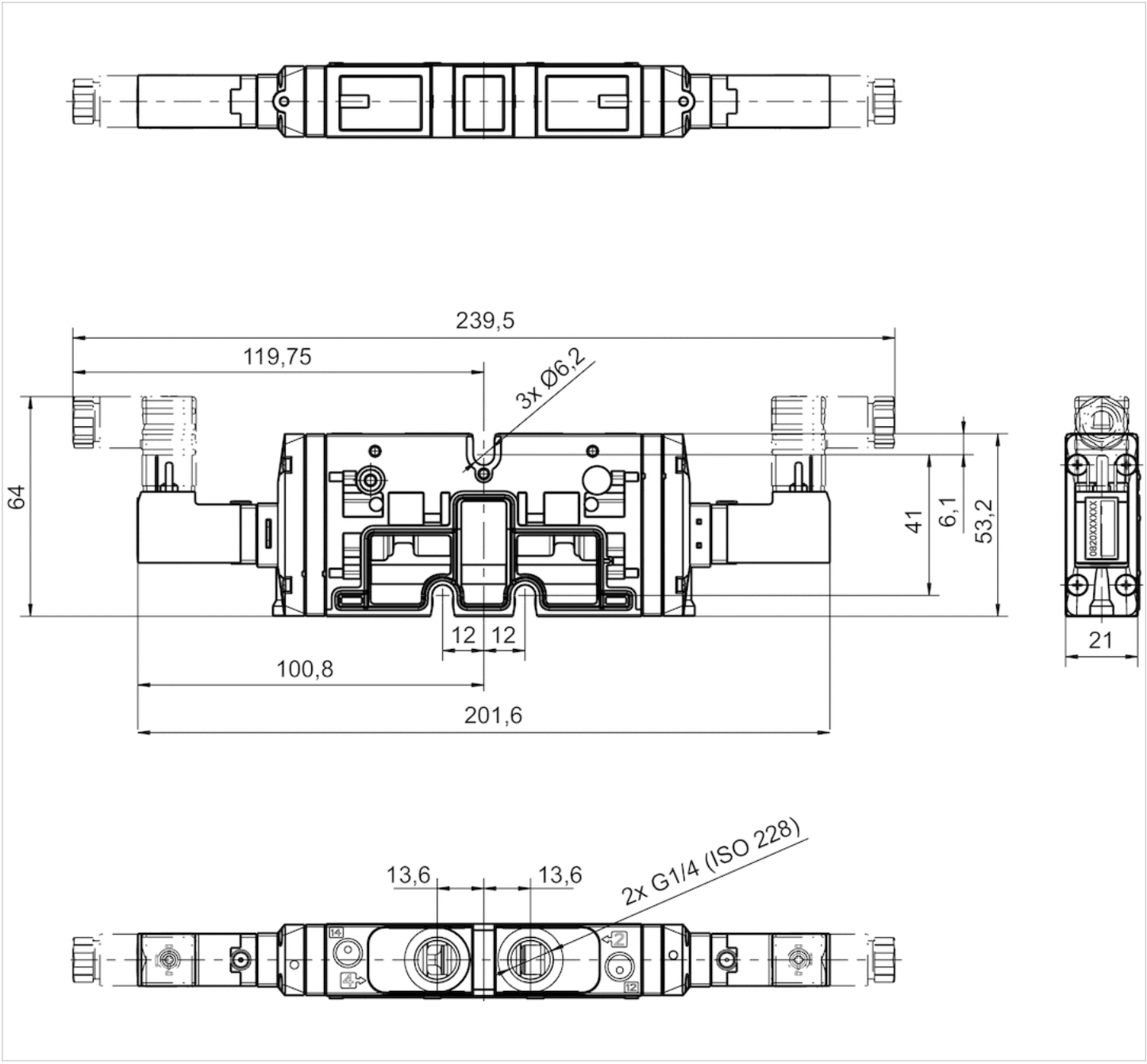
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
The oil content of compressed air must remain constant during the life cycle.
Use 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



5/2-directional valve, Series TC15

- 5/2
- Qn = 1.52 Cv
- Pilot valve width : 15 mm
- Plate connection Pipe connection
- Compressed air connection output : G 1/4
- Electrical connection : Plug, ISO 15217, form C
- Can be assembled into blocks
- Manual override : with detent without detent
- single solenoid double solenoid
- Pilot : External

Type	Spool valve, positive overlapping
Activation	Electrically
Pilot	External
Sealing principle	Soft sealing
Blocking principle	Plate principle
Working pressure min./max.	-13 ... 145 psi
Control pressure min./max.	See table below
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air
Max. particle size	5 µm
Nominal flow Qn	1.52 Cv
Connector standard	ISO 15217
Protection class with connection	IP65
Duty cycle	100 %
Rail mounting DIN EN 60715	TH35 x 15
Weight	See table below

Technical data

Part No.		MO	Compressed air connection	Operational voltage
			Output	DC
0820058751			G 1/4	24 V
0820058761			G 1/4	24 V
0820058771			G 1/4	24 V
R422103060			G 1/4	-
0820058851			G 1/4	24 V
0820058861			G 1/4	24 V
R422103061			G 1/4	-
0820058871			G 1/4	24 V

Part No.	Voltage tolerance	Power consumption	Flow conductance	Flow conductance
	DC	DC	b	C-value
0820058751	-10% / +10%	2 W	0.33	6.8 l/(s*bar)
0820058761	-10% / +10%	2 W	0.33	6.8 l/(s*bar)
0820058771	-10% / +10%	2 W	0.33	6.8 l/(s*bar)
R422103060	-	-	0.33	6.8 l/(s*bar)

Part No.	Voltage tolerance	Power consumption	Flow conductance	Flow conductance
	DC	DC	b	C-value
0820058851	-10% / +10%	2 W	0.33	6.8 l/(s*bar)
0820058861	-10% / +10%	2 W	0.33	6.8 l/(s*bar)
R422103061	-	-	0.33	6.8 l/(s*bar)
0820058871	-10% / +10%	2 W	0.33	6.8 l/(s*bar)

Part No.	Nominal resistance	Control pressure min./max.	Typ. switch-on time	Typ. switch-off time
0820058751	280 Ω	37 ... 145 psi	22 ms	20 ms
0820058761	280 Ω	44 ... 145 psi	12 ms	35 ms
0820058771	280 Ω	29 ... 145 psi	11 ms	11 ms
R422103060	-	44 ... 145 psi	12 ms	35 ms
0820058851	280 Ω	37 ... 145 psi	22 ms	20 ms
0820058861	280 Ω	44 ... 145 psi	12 ms	35 ms
R422103061	-	29 ... 145 psi	11 ms	11 ms
0820058871	280 Ω	29 ... 145 psi	11 ms	11 ms

Part No.	basic valve with electrical connector	Weight
0820058751	-	0.443 lbs
0820058761	-	0.443 lbs
0820058771	-	0.505 lbs
R422103060	Basic valve without coil	0.443 lbs
0820058851	-	0.443 lbs
0820058861	-	0.443 lbs
R422103061	Basic valve without coil	0.505 lbs
0820058871	-	0.505 lbs

Nominal flow Qn at 87 psi and Δp = 14.5 psi, MO = Manual override

Technical information

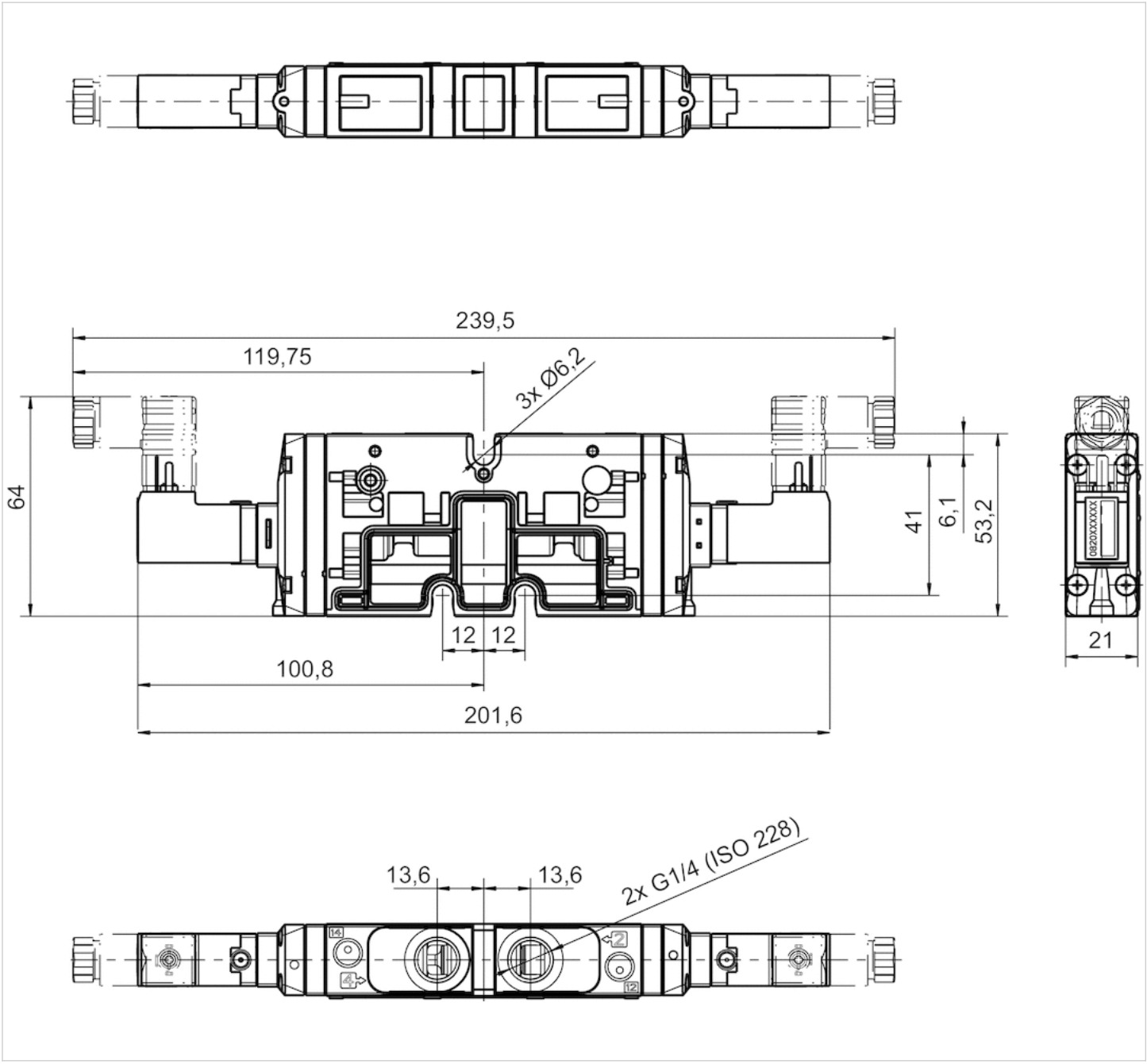
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
The oil content of compressed air must remain constant during the life cycle.
Use 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

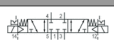
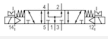
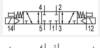
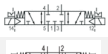
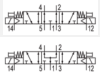
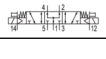


5/3-directional valve, Series TC15

- 5/3
- Qn = 1.32 Cv
- Pilot valve width : 15 mm
- closed center exhausted center pressurized center
- Plate connection Pipe connection
- Compressed air connection output : G 1/4
- Electrical connection : Plug, ISO 15217, form C
- Can be assembled into blocks
- Manual override : with detent without detent
- double solenoid
- Pilot : External

Type	Spool valve, positive overlapping
Activation	Electrically
Pilot	External
Sealing principle	Soft sealing
Blocking principle	Plate principle
Working pressure min./max.	-13 ... 145 psi
Control pressure min./max.	44 ... 145 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air
Max. particle size	5 µm
Nominal flow Qn	1.32 Cv
Connector standard	ISO 15217
Protection class with connection	IP65
Duty cycle	100 %
Typ. switch-on time	12 ms
Typ. switch-off time	13 ms
Rail mounting DIN EN 60715	TH35 x 15
Weight	0.538 lbs

Technical data

Part No.		MO		Compressed air connection
				Output
0820059751			closed center	G 1/4
0820059761			exhausted center	G 1/4
0820059771			pressurized center	G 1/4
0820059851			closed center	G 1/4
R422103062			closed center	G 1/4
0820059861			exhausted center	G 1/4
0820059871			pressurized center	G 1/4

Part No.	Operational voltage	Voltage tolerance	Power consumption
	DC	DC	DC
0820059751	24 V	-10% / +10%	2 W
0820059761	24 V	-10% / +10%	2 W

Part No.	Operational voltage	Voltage tolerance	Power consumption
	DC	DC	DC
0820059771	24 V	-10% / +10%	2 W
0820059851	24 V	-10% / +10%	2 W
R422103062	-	-	-
0820059861	24 V	-10% / +10%	2 W
0820059871	24 V	-10% / +10%	2 W

Part No.	Flow conductance	Flow conductance	Nominal resistance	basic valve with electrical connector
	b	C-value		
0820059751	0.31	5.9 l/(s*bar)	280 Ω	-
0820059761	0.31	5.9 l/(s*bar)	280 Ω	-
0820059771	0.31	5.9 l/(s*bar)	280 Ω	-
0820059851	0.31	5.9 l/(s*bar)	280 Ω	-
R422103062	0.31	5.9 l/(s*bar)	-	Basic valve without coil
0820059861	0.31	5.9 l/(s*bar)	280 Ω	-
0820059871	0.31	5.9 l/(s*bar)	280 Ω	-

Nominal flow Qn at 87 psi and Δp = 14.5 psi, MO = Manual override

Technical information

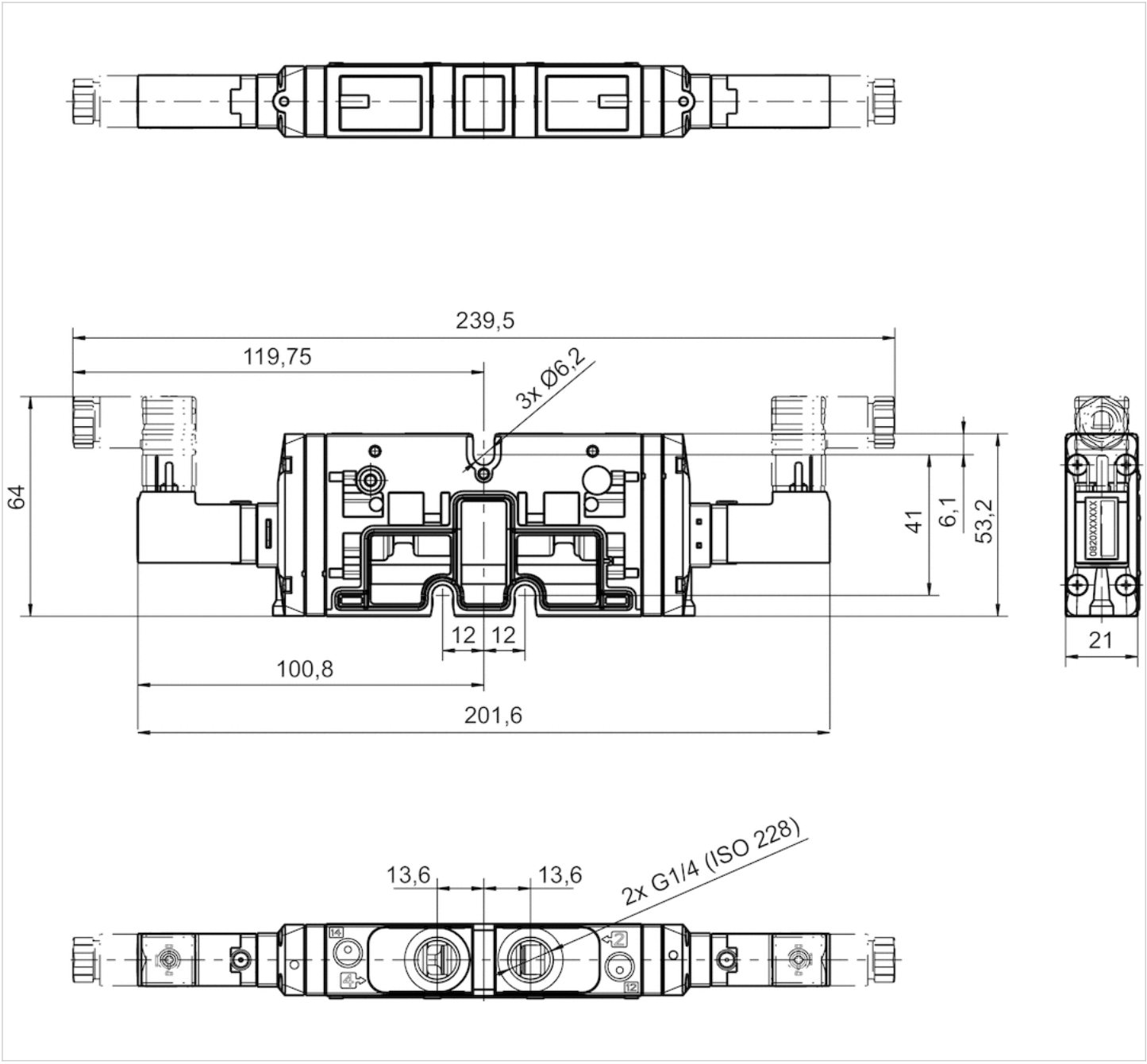
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
The oil content of compressed air must remain constant during the life cycle.
Use 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



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

- Qn = 1.12 Cv
- Pilot valve width : 15 mm
- NC/NC NO/NO NC/NO
- Plate connection Pipe connection
- Compressed air connection output : 1/4 - 18 NPTF
- Electrical connection : Plug, ISO 15217, form C
- Can be assembled into blocks
- Manual override : with detent
- double solenoid
- With spring return
- Pilot : External

Type	Spool valve, positive overlapping
Activation	Electrically
Pilot	External
Sealing principle	Soft sealing
Blocking principle	Plate principle
Working pressure min./max.	-13 ... 145 psi
Control pressure min./max.	44 ... 145 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m³
Nominal flow Qn	1.12 Cv
Connector standard	ISO 15217
Protection class with connection	IP65
Duty cycle	100 %
Typ. switch-on time	12 ms
Typ. switch-off time	16 ms
Generic emission standard in accordance with	EN 50081-2:1993
Weight	0.551 lbs

Technical data

Part No.		MO		Compressed air connection	Operational voltage
				Output	DC
R422102260			NC/NC	1/4 - 18 NPTF	24 V
R422102264			NO/NO	1/4 - 18 NPTF	24 V
R422102268			NC/NO	1/4 - 18 NPTF	24 V

Part No.	Voltage tolerance	Power consumption	Flow conductance	Flow conductance
	DC	DC	b	C-value
R422102260	-10% / +10%	2 W	0.25	5.9 l/(s*bar)
R422102264	-10% / +10%	2 W	0.25	5.9 l/(s*bar)
R422102268	-10% / +10%	2 W	0.25	5.9 l/(s*bar)

Part No.	Nominal resistance
R422102260	185 Ω
R422102264	185 Ω
R422102268	185 Ω

Nominal flow Qn at 87 psi and Δp = 14.5 psi, MO = Manual override

Technical information

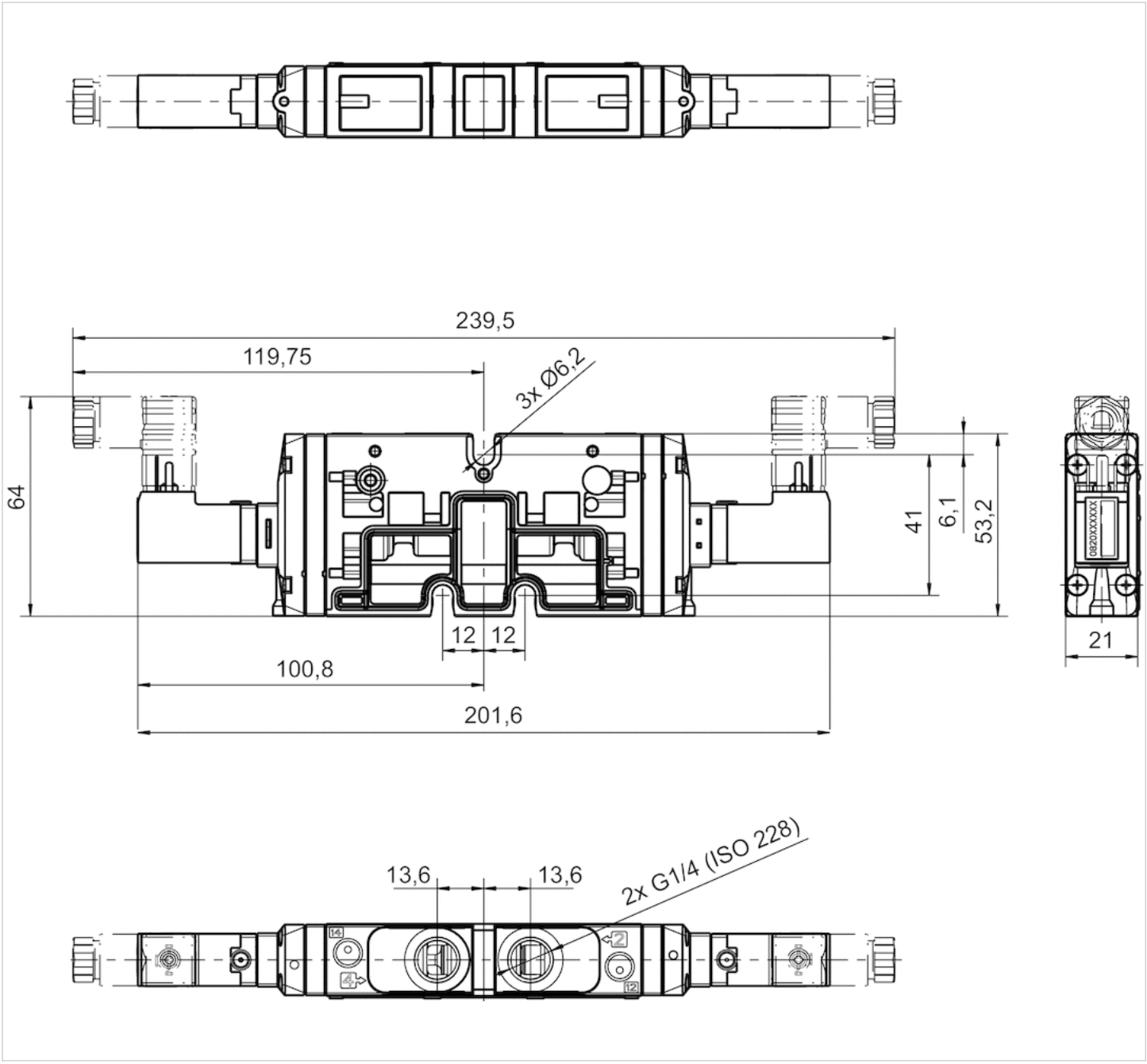
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
The oil content of compressed air must remain constant during the life cycle.
Use 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

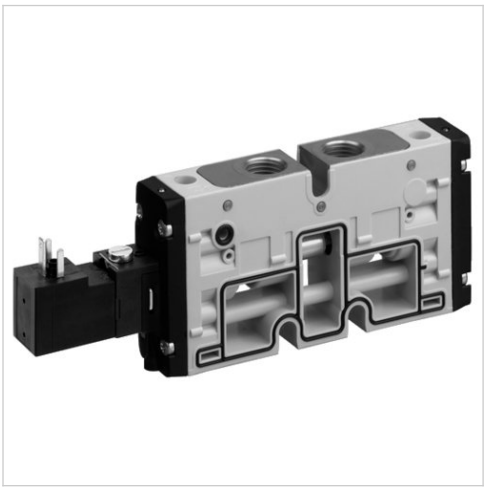
Dimensions

Dimensions



5/2-directional valve, Series TC15 - inch

- 5/2
- Qn = 1.52 Cv
- Pilot valve width : 15 mm
- Plate connection Pipe connection
- Compressed air connection output : 1/4 - 18 NPTF
- Electrical connection : Plug, ISO 15217, form C
- Can be assembled into blocks
- Manual override : with detent
- single solenoid double solenoid
- Pilot : External



Type	Spool valve, positive overlapping
Activation	Electrically
Pilot	External
Sealing principle	Soft sealing
Blocking principle	Plate principle
Working pressure min./max.	-13 ... 145 psi
Control pressure min./max.	See table below
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m³
Nominal flow Qn	1.52 Cv
Compressed air connection	according to ANSI B1.20.3
Connector standard	ISO 15217
Protection class with connection	IP65
Duty cycle	100 %
Generic emission standard in accordance with	EN 50081:1992
Rail mounting DIN EN 60715	TH35 x 15
Weight	See table below

Technical data

Part No.		MO	Compressed air connection	Operational voltage
			Output	DC
R422101177			1/4 - 18 NPTF	24 V
R422101181			1/4 - 18 NPTF	24 V
R422101185			1/4 - 18 NPTF	24 V

Part No.	Voltage tolerance	Power consumption	Flow conductance	Flow conductance
	DC	DC	b	C-value
R422101177	-10% / +10%	2 W	0.33	6.8 l/(s*bar)
R422101181	-10% / +10%	2 W	0.33	6.8 l/(s*bar)
R422101185	-10% / +10%	2 W	0.33	6.8 l/(s*bar)

Part No.	Nominal resistance	Control pressure min./max.	Typ. switch-on time	Typ. switch-off time	Weight
R422101177	185 Ω	37 ... 145 psi	22 ms	20 ms	0.443 lbs
R422101181	185 Ω	44 ... 145 psi	12 ms	35 ms	0.443 lbs
R422101185	185 Ω	29 ... 145 psi	11 ms	11 ms	0.505 lbs

Nominal flow Qn at 87 psi and Δp = 14.5 psi, MO = Manual override

Technical information

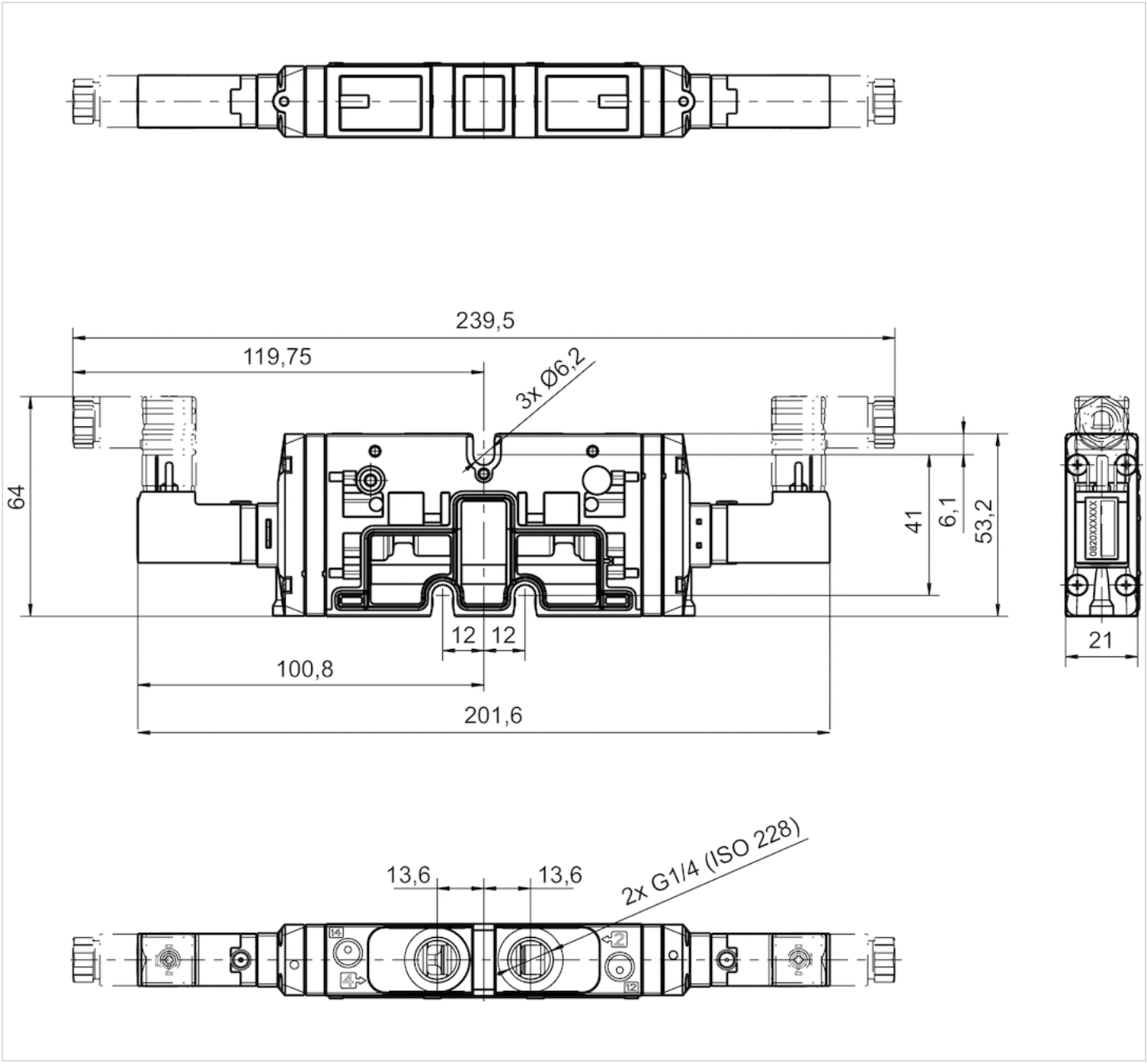
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
The oil content of compressed air must remain constant during the life cycle.
Use 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

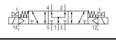


5/3-directional valve, Series TC15 - inch

- 5/3
- Qn = 1.12 Cv
- Pilot valve width : 15 mm
- Plate connection Pipe connection
- Compressed air connection output : 1/4 - 18 NPTF
- Electrical connection : Plug, ISO 15217, form C
- Can be assembled into blocks
- Manual override : with detent
- double solenoid
- With spring return
- Pilot : External

Type	Spool valve, positive overlapping
Activation	Electrically
Pilot	External
Sealing principle	Soft sealing
Blocking principle	Plate principle
Working pressure min./max.	-13 ... 145 psi
Control pressure min./max.	44 ... 145 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m³
Nominal flow Qn	1.12 Cv
Compressed air connection	according to ANSI B1.20.3
Connector standard	ISO 15217
Protection class with connection	IP65
Duty cycle	100 %
Typ. switch-on time	12 ms
Typ. switch-off time	13 ms
Generic emission standard in accordance with	EN 50081:1992
Rail mounting DIN EN 60715	TH35 x 15
Weight	0.551 lbs

Technical data

Part No.		MO	Compressed air connection	Operational voltage
			Output	DC
R422101189			1/4 - 18 NPTF	24 V
R422101193			1/4 - 18 NPTF	24 V
R422101197			1/4 - 18 NPTF	24 V

Part No.	Voltage tolerance	Power consumption	Flow conductance	Flow conductance
	DC	DC	b	C-value
R422101189	-10% / +10%	2 W	0.31	5.9 l/(s*bar)
R422101193	-10% / +10%	2 W	0.31	5.9 l/(s*bar)

Part No.	Voltage tolerance	Power consumption	Flow conductance	Flow conductance
	DC	DC	b	C-value
R422101197	-10% / +10%	2 W	0.31	5.9 l/(s*bar)

Part No.	Nominal resistance
R422101189	185 Ω
R422101193	185 Ω
R422101197	185 Ω

Nominal flow Qn at 87 psi and Δp = 14.5 psi, MO = Manual override

Technical information

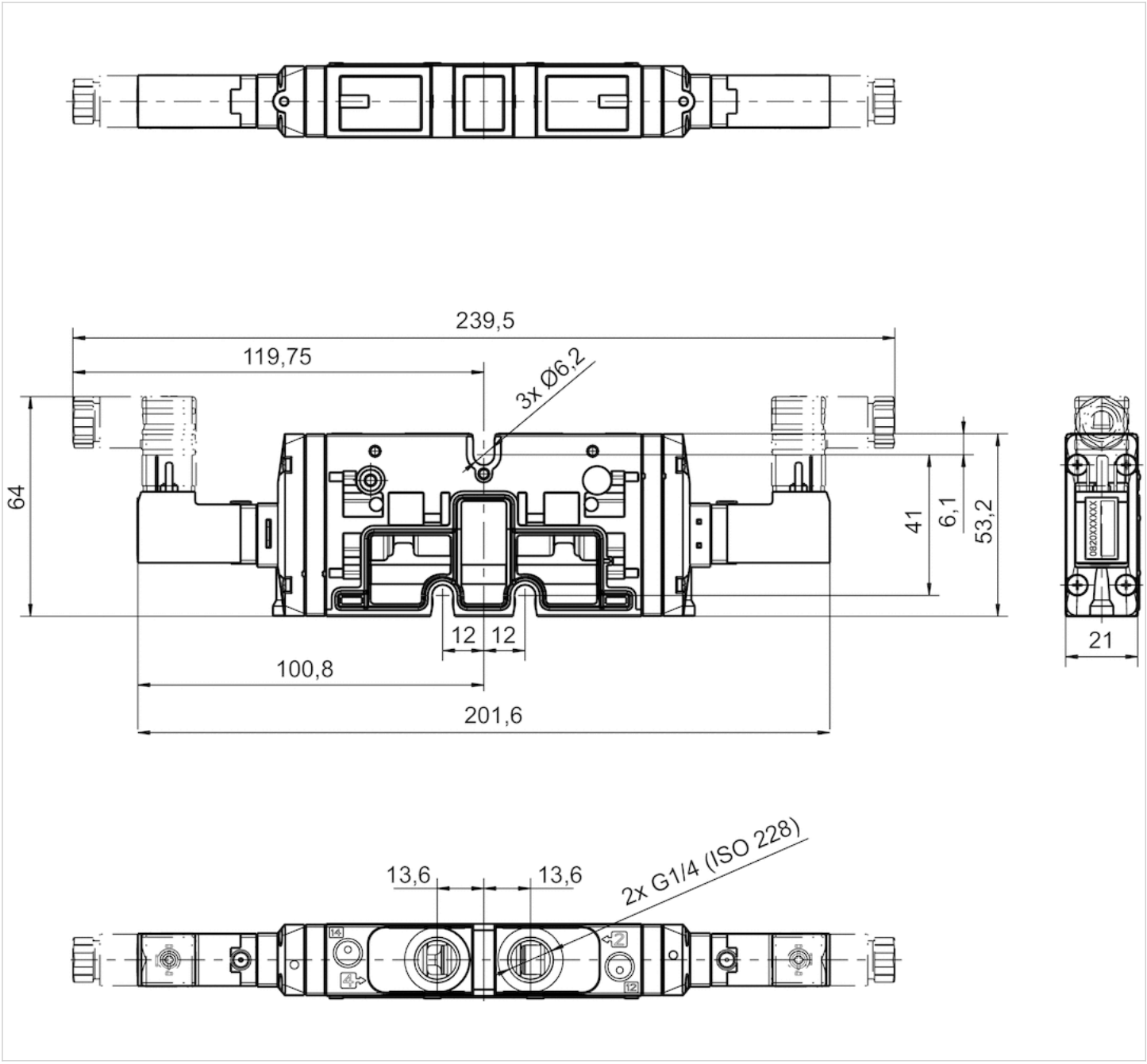
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
The oil content of compressed air must remain constant during the life cycle.
Use 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



2x3/2-directional valve, Series TC15

- Qn = 1.12 Cv
- Compressed air connection output G 1/4
- With spring return
- Plate connection Pipe connection

Type	Spool valve
Activation	pneumatically
Sealing principle	Soft sealing
Blocking principle	Plate principle
Flow rate value Qn	1.12 Cv
Working pressure min./max.	-13 ... 145 psi
Control pressure min./max.	44 ... 145 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m³
Mounting screw tightening torque	1.84 ft./lbs.
Weight	0.397 lbs

Technical data

Part No.			Compressed air connection	Compressed air connection
			Output	Pilot control exhaust
R422102232		NC/NC	G 1/4	M5
R422102233		NO/NO	G 1/4	M5
R422102234		NC/NO	G 1/4	M5

Part No.	Flow conductance	Flow conductance
	b	C-value
R422102232	0.25	5.9 l/(s*bar)
R422102233	0.25	5.9 l/(s*bar)
R422102234	0.25	5.9 l/(s*bar)

Nominal flow Qn at 87 psi and Δp = 14.5 psi

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 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
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
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, chrome-plated nickel-plated

5/2-directional valve, Series TC15

- Qn = 1.52 Cv
- Compressed air connection output G 1/4
- With air spring return With spring return With differential piston
- Plate connection Pipe connection

Type	Spool valve, positive overlapping
Activation	pneumatically
Pilot	External
Sealing principle	Soft sealing
Blocking principle	Plate principle
Flow rate value Qn	1.52 Cv
Working pressure min./max.	See table below
Control pressure min./max.	See table below
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m³
Rail mounting DIN EN 60715	TH35 x 15
Weight	0.35 lbs

Technical data

Part No.		Compressed air connection	Compressed air connection
		Input	Output
0820258703		G 1/4	G 1/4
0820258701		G 1/4	G 1/4
0820258702		G 1/4	G 1/4
0820258704		G 1/4	G 1/4

Part No.	Compressed air connection	Compressed air connection	Flow conductance
	Exhaust	Pilot control exhaust	b
0820258703	G 1/4	M5	0.33
0820258701	G 1/4	M5	0.33
0820258702	G 1/4	M5	0.33
0820258704	G 1/4	M5	0.33

Part No.	Flow conductance	Working pressure min./max.	Control pressure min./max.
	C-value		
0820258703	6.8 l/(s*bar)	-13 ... 145 psi	29 ... 145 psi
0820258701	6.8 l/(s*bar)	37 ... 145 psi	37 ... 145 psi
0820258702	6.8 l/(s*bar)	44 ... 145 psi	44 ... 145 psi
0820258704	6.8 l/(s*bar)	-13 ... 145 psi	37 ... 145 psi

Nominal flow Qn at 87 psi and Δp = 14.5 psi

Technical information

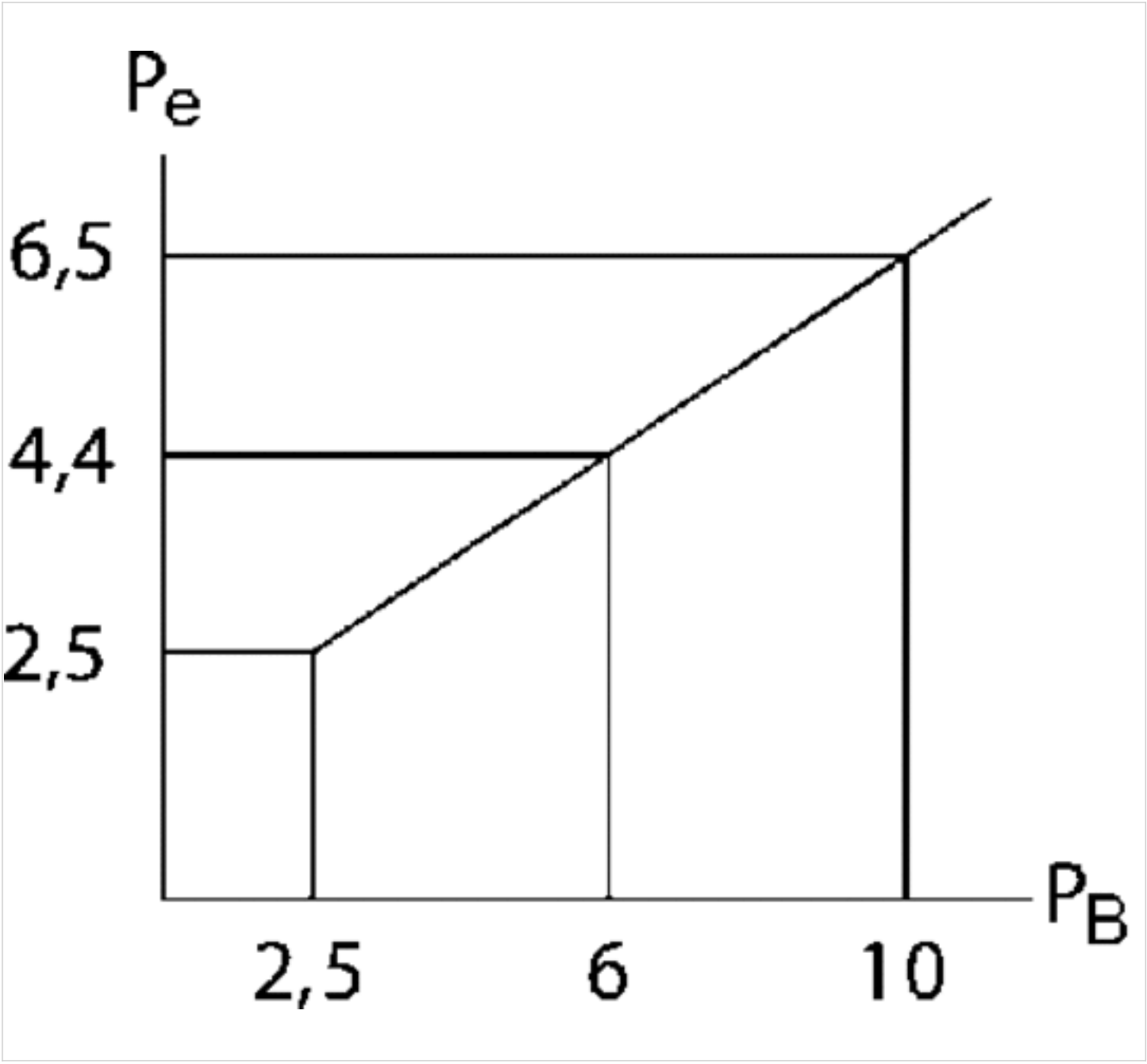
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
The oil content of compressed air must remain constant during the life cycle.
Use 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
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, chrome-plated nickel-plated

Diagrams

Control pressure



Pe = external control pressure, min.
PB= Working pressure

5/3-directional valve, Series TC15

- Qn = 1.32 Cv
- Compressed air connection output G 1/4
- Plate connection Pipe connection

Type	Spool valve, positive overlapping
Activation	pneumatically
Pilot	External
Sealing principle	Soft sealing
Blocking principle	Plate principle
Flow rate value Qn	1.32 Cv
Working pressure min./max.	-13 ... 145 psi
Control pressure min./max.	44 ... 145 psi
Ambient temperature min./max.	14 ... 122 °F
Medium temperature min./max.	14 ... 122 °F
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m³
Rail mounting DIN EN 60715	TH35 x 15
Weight	0.384 lbs

Technical data

Part No.			Compressed air connection
			Input
0820259701		closed center	G 1/4
0820259702		exhausted center	G 1/4
0820259703		pressurized center	G 1/4

Part No.	Compressed air connection	Compressed air connection
	Output	Exhaust
0820259701	G 1/4	G 1/4
0820259702	G 1/4	G 1/4
0820259703	G 1/4	G 1/4

Part No.	Compressed air connection	Flow conductance	Flow conductance
	Pilot control exhaust	b	C-value
0820259701	M5	0.31	5.9 l/(s*bar)
0820259702	M5	0.31	5.9 l/(s*bar)
0820259703	M5	0.31	5.9 l/(s*bar)

Nominal flow Qn at 87 psi and Δp = 14.5 psi

Technical information

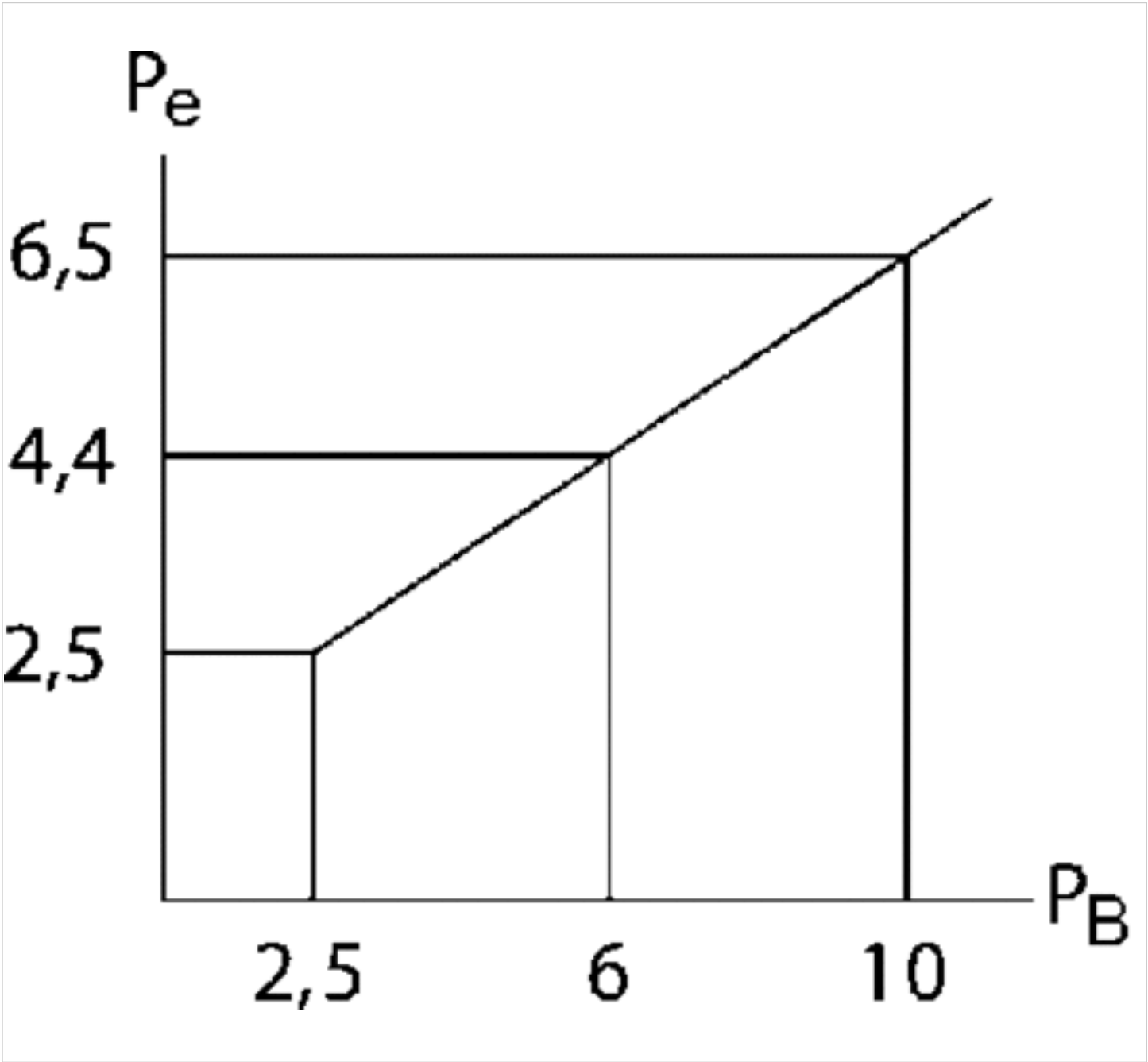
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
The oil content of compressed air must remain constant during the life cycle.
Use 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
Front plate	Polyamide fiber-glass reinforced
Threaded bushing	Brass Die cast zinc, chrome-plated nickel-plated

Diagrams

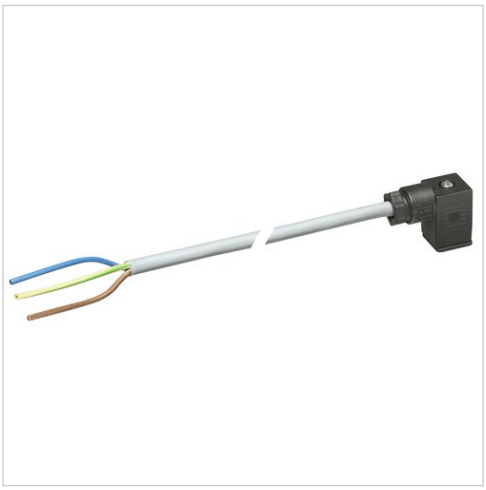
Control pressure



Pe = external control pressure, min.
PB= Working pressure

Valve plug connector, series CON-VP

- Socket form C 2+E angled 90°
- open cable ends 3-pin
- with cable
- unshielded



Ambient temperature min./max.	-4 ... 176 °F
Operational voltage	See table below
Protection class	IP67
Mounting screw tightening torque	0.3 ft./lbs.
Weight	See table below

Technical data

Part No.		Operational voltage	Max. current	Protective circuit	Contact assignment
1834484212		230 V AC/DC	6 A	-	2+E
1834484213		230 V AC/DC	6 A	-	2+E
1834484214		230 V AC/DC	6 A	-	2+E
1834484215		230 V AC/DC	6 A	-	2+E
1834484204		24 V AC/DC	6 A	Z-diode	2+E
1834484205		24 V AC/DC	6 A	Z-diode	2+E
1834484206		24 V AC/DC	6 A	Z-diode	2+E
1834484207		24 V AC/DC	6 A	Z-diode	2+E
1834484208		230 V AC/DC	6 A	Varistor	2+E
1834484209		230 V AC/DC	6 A	Varistor	2+E
1834484210		230 V AC/DC	6 A	Varistor	2+E
1834484211		230 V AC/DC	6 A	Varistor	2+E
1834484236		24 V AC/DC	6 A	Z-diode	2+E

Part No.	LED status display	Number of wires	Cable length	Weight	Fig.	
1834484212	-	3	9.84 ft.	0.403 lbs	Fig. 1	-
1834484213	-	3	9.84 ft.	0.403 lbs	Fig. 2	-
1834484214	-	3	16.4 ft.	0.679 lbs	Fig. 1	-
1834484215	-	3	16.4 ft.	0.679 lbs	Fig. 2	-
1834484204	Yellow	3	9.84 ft.	0.408 lbs	Fig. 1	1)
1834484205	Yellow	3	9.84 ft.	0.408 lbs	Fig. 2	1)
1834484206	Yellow	3	16.4 ft.	0.644 lbs	Fig. 1	1)
1834484207	Yellow	3	16.4 ft.	0.657 lbs	Fig. 2	1)
1834484208	Yellow	3	9.84 ft.	0.377 lbs	Fig. 1	1)
1834484209	Yellow	3	9.84 ft.	0.428 lbs	Fig. 2	1)
1834484210	Yellow	3	16.4 ft.	0.655 lbs	Fig. 1	1)

Part No.	LED status display	Number of wires	Cable length	Weight	Fig.	
1834484211	Yellow	3	16.4 ft.	0.628 lbs	Fig. 2	1)
1834484236	Yellow	3	32.81 ft.	1.26 lbs	Fig. 2	1)

1) Scope of delivery incl. flat gasket

Technical information

The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Seals	caoutchouc/butadiene caoutchouc
Cable sheath	Polyvinyl chloride

Dimensions

Fig. 1, Dimensions in mm, 0° female insert

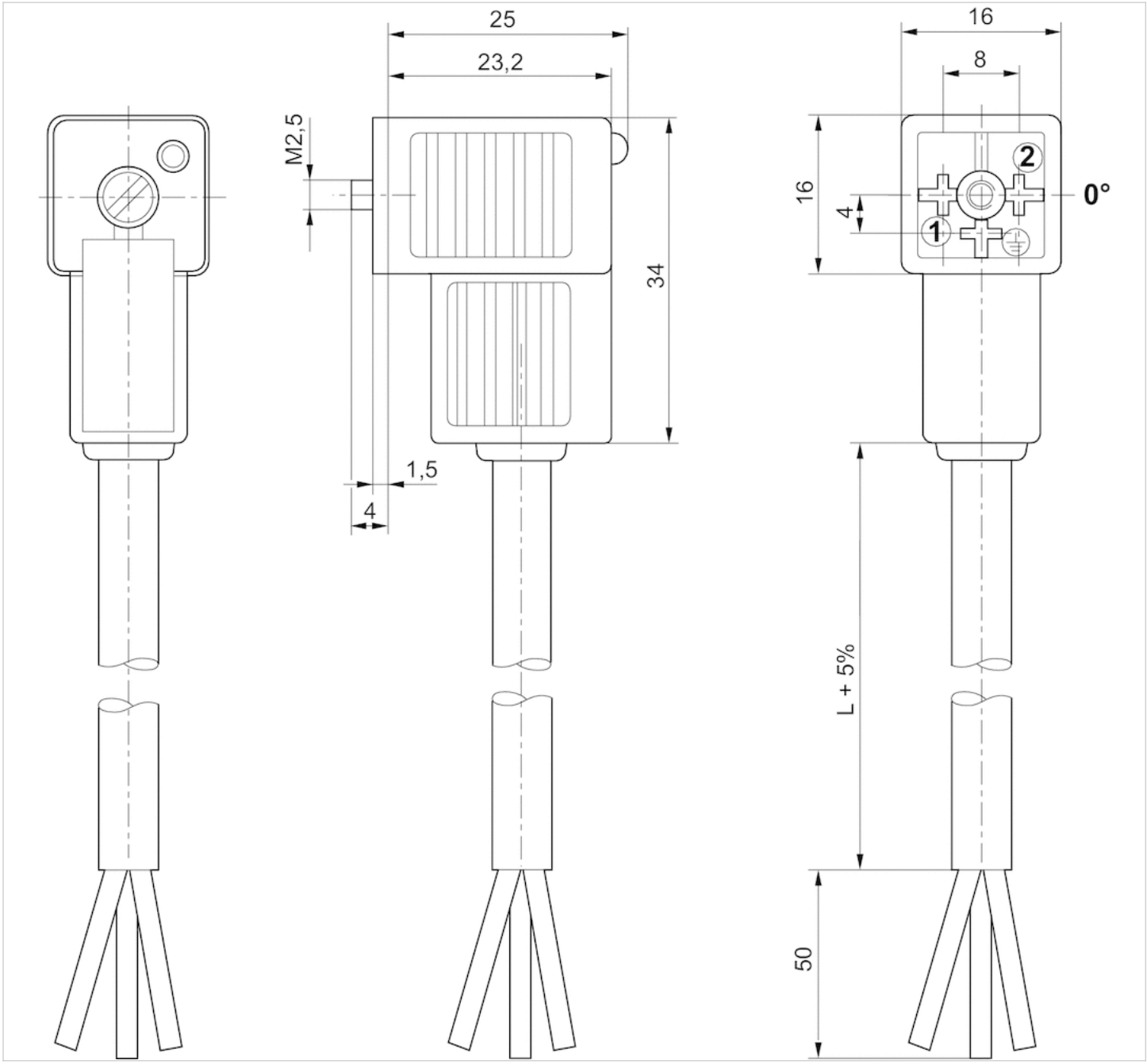
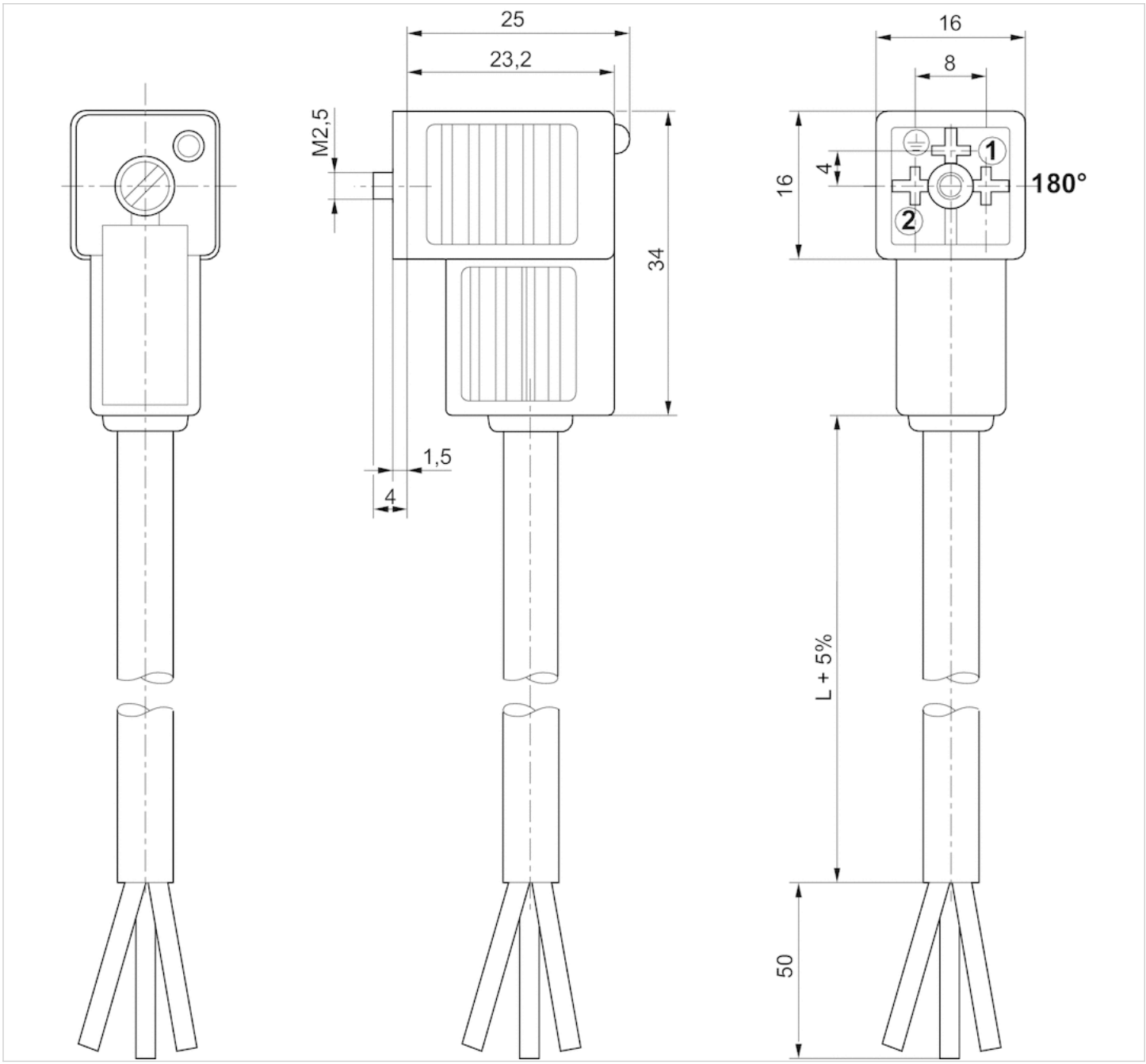


Fig. 2, Dimensions in mm, 180° female insert



Valve plug connector, series CON-VP

- Socket, form C, 2+E, angled, 90°
- ISO 15217
- unshielded
- with LED Green

Connection type	Screws
Ambient temperature min./max.	-40 ... 194 °F
Operational voltage	See table below
Protection class	IP65
Mounting screw tightening torque	0.3 ft./lbs.
Weight	See table below

Technical data

Part No.		Operational voltage	Max. current	Protective circuit	Contact assignment
1834484187		250 / 300 V AC/DC	6 A	-	2+E
4402050330		24 V AC/DC	-	Z-diode	2+E

Part No.	LED status display	suitable cable-Ø min./max	Seal	Weight
1834484187	-	0.16 / 0.23 inch	caoutchouc/butadiene caoutchouc	0.026 lbs
4402050330	Green	-	-	0.031 lbs

Part No.	Fig.	
1834484187	Fig. 1	-
4402050330	Fig. 3	1)

1)

Technical information

The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Seals	caoutchouc/butadiene caoutchouc

Dimensions

Fig. 1

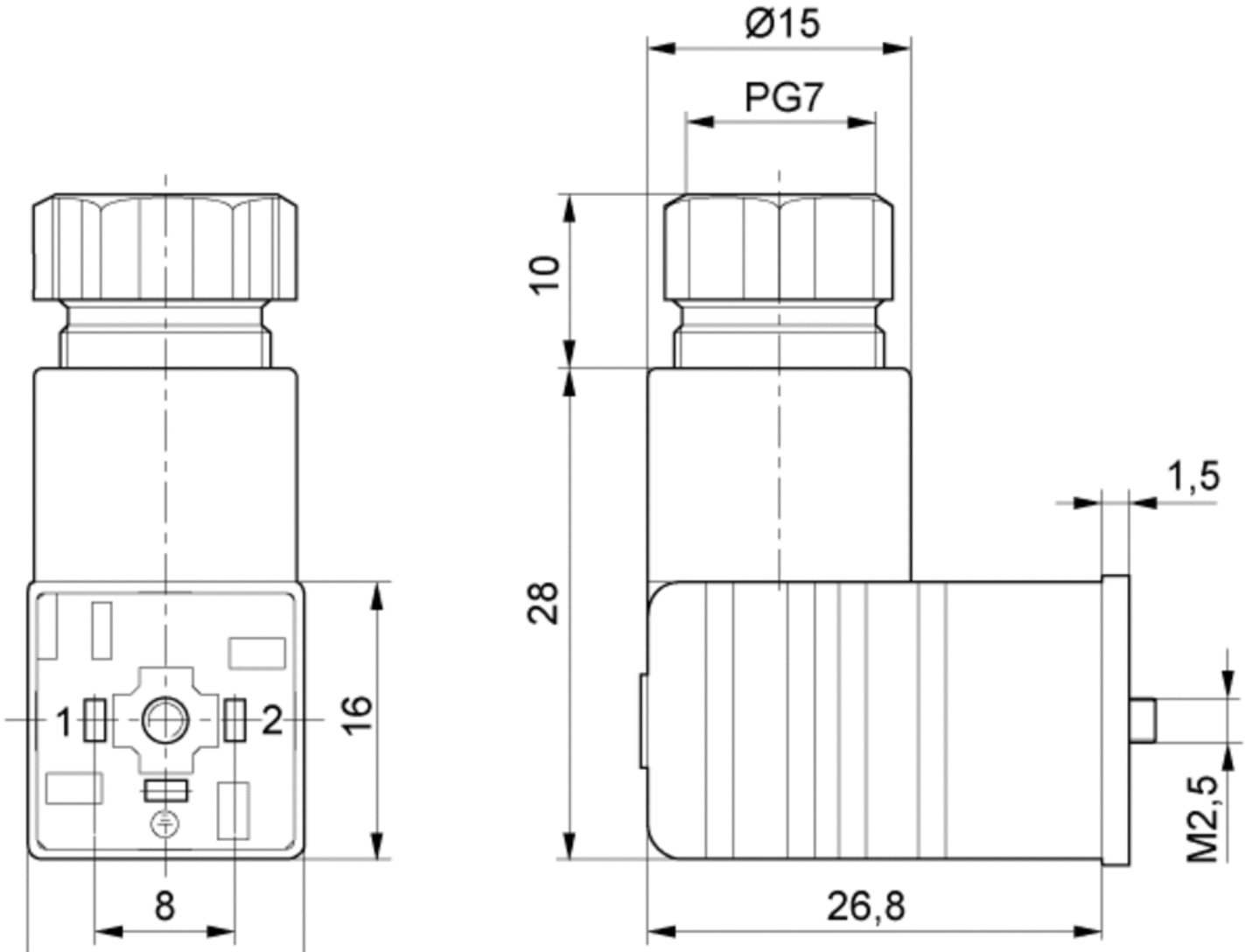


Fig. 2

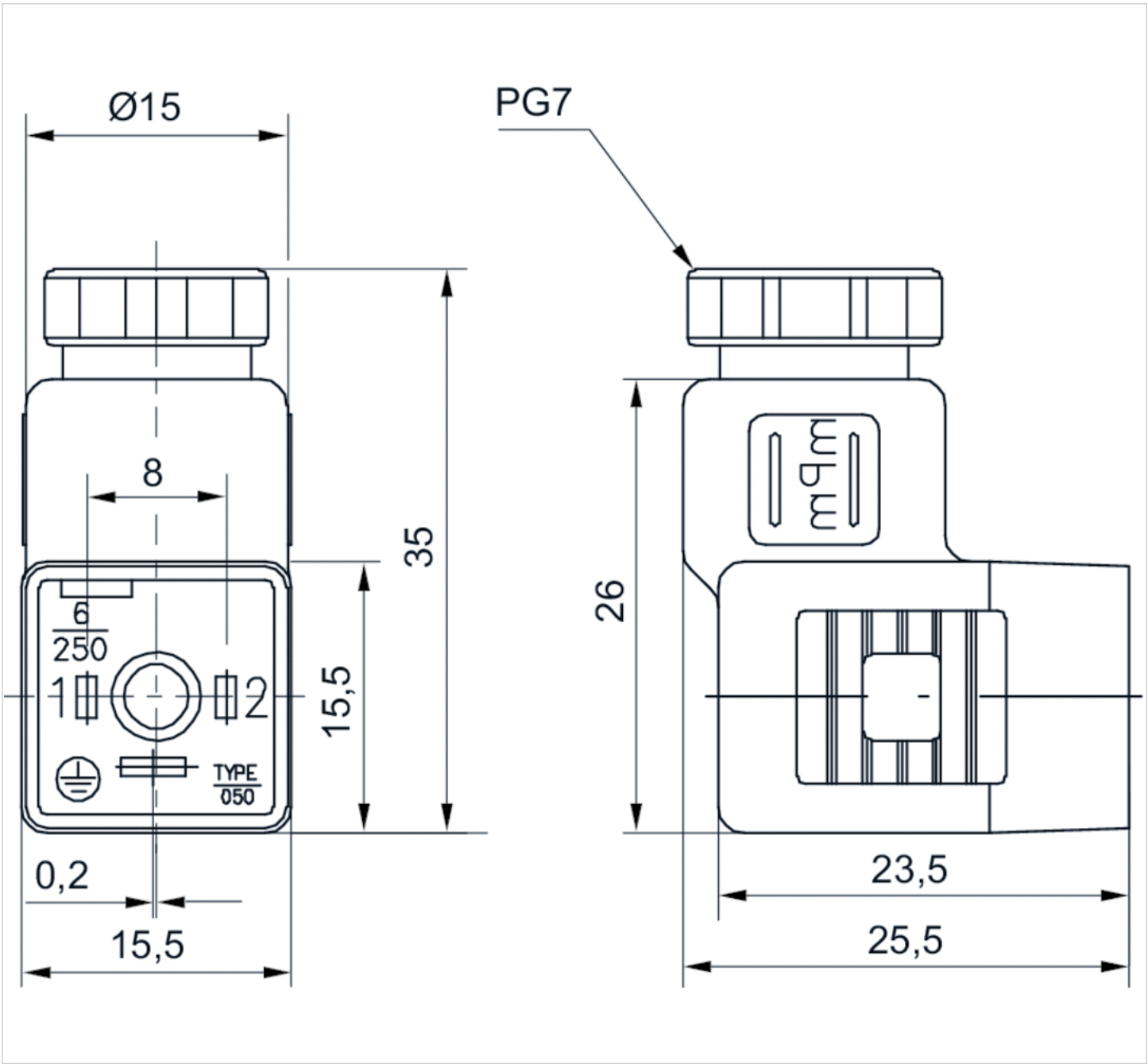
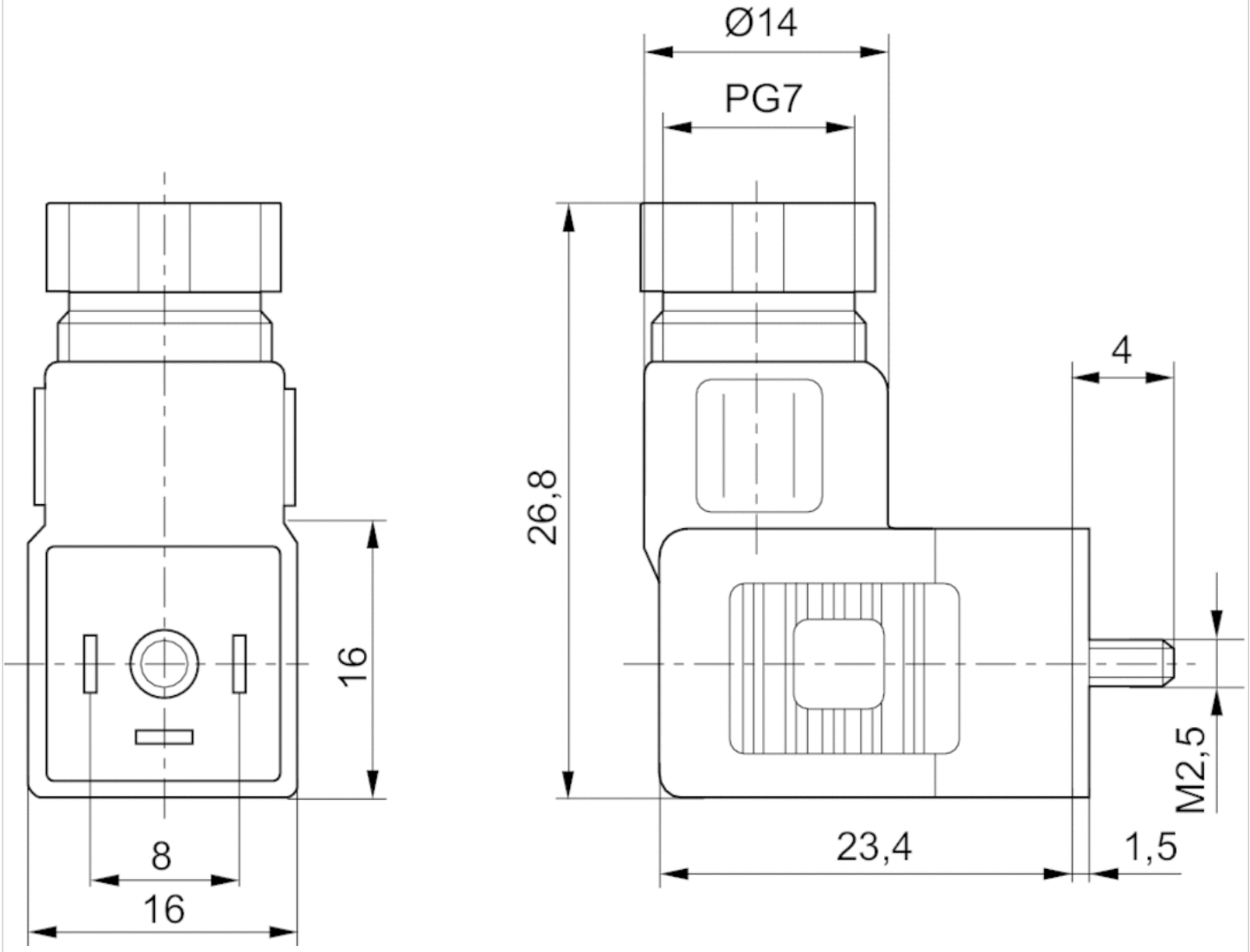
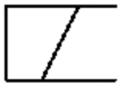


Fig. 3



Coil, Series CO1

- Form C, coil kit
- Coil width 0.59 inch
- Power consumption DC 2 W
- Holding power AC 1.6 VA
- Switch-on power AC 2.2 VA



Connector standard	ISO 15217
electrical connections	Plug, 3-pin
Ambient temperature min./max.	14 ... 122 °F
Protection class With valve plug connector/plug	IP65
Duty cycle ED	100 %
Weight	See table below

Technical data

Part No.	Operational voltage	Operational voltage	Operational voltage
	DC	AC 50 Hz	AC 60 Hz
R422101598	-	110 V	110 V
R422101599	-	230 V	230 V
R422101600	24 V	-	-
R422101601	-	24 V	24 V
R422101602	12 V	-	-

Part No.	Voltage tolerance	Voltage tolerance	Voltage tolerance	Power consumption
	DC	AC 50 Hz	AC 60 Hz	DC
R422101598	-	-10% / +10%	-10% / +10%	-
R422101599	-	-10% / +10%	-10% / +10%	-
R422101600	-10% / +10%	-	-	2 W
R422101601	-	-10% / +10%	-10% / +10%	-
R422101602	-10% / +10%	-	-	2 W

Part No.	Holding power	Holding power	Switch-on power	Switch-on power	Weight	
	AC 50 Hz	AC 60 Hz	AC 50 Hz	AC 60 Hz		
R422101598	1.6 VA	1.4 VA	2.2 VA	2 VA	0.051 lbs	1)
R422101599	1.6 VA	1.4 VA	2.2 VA	2 VA	0.048 lbs	1)
R422101600	-	-	-	-	0.053 lbs	-
R422101601	1.6 VA	1.4 VA	2.2 VA	2 VA	0.051 lbs	1)

Part No.	Holding power	Holding power	Switch-on power	Switch-on power	Weight	
	AC 50 Hz	AC 60 Hz	AC 50 Hz	AC 60 Hz		
R422101602	-	-	-	-	0.053 lbs	-

1) Can only be combined with TC series base valves and TC series valves with alternating voltage (AC).

Technical information

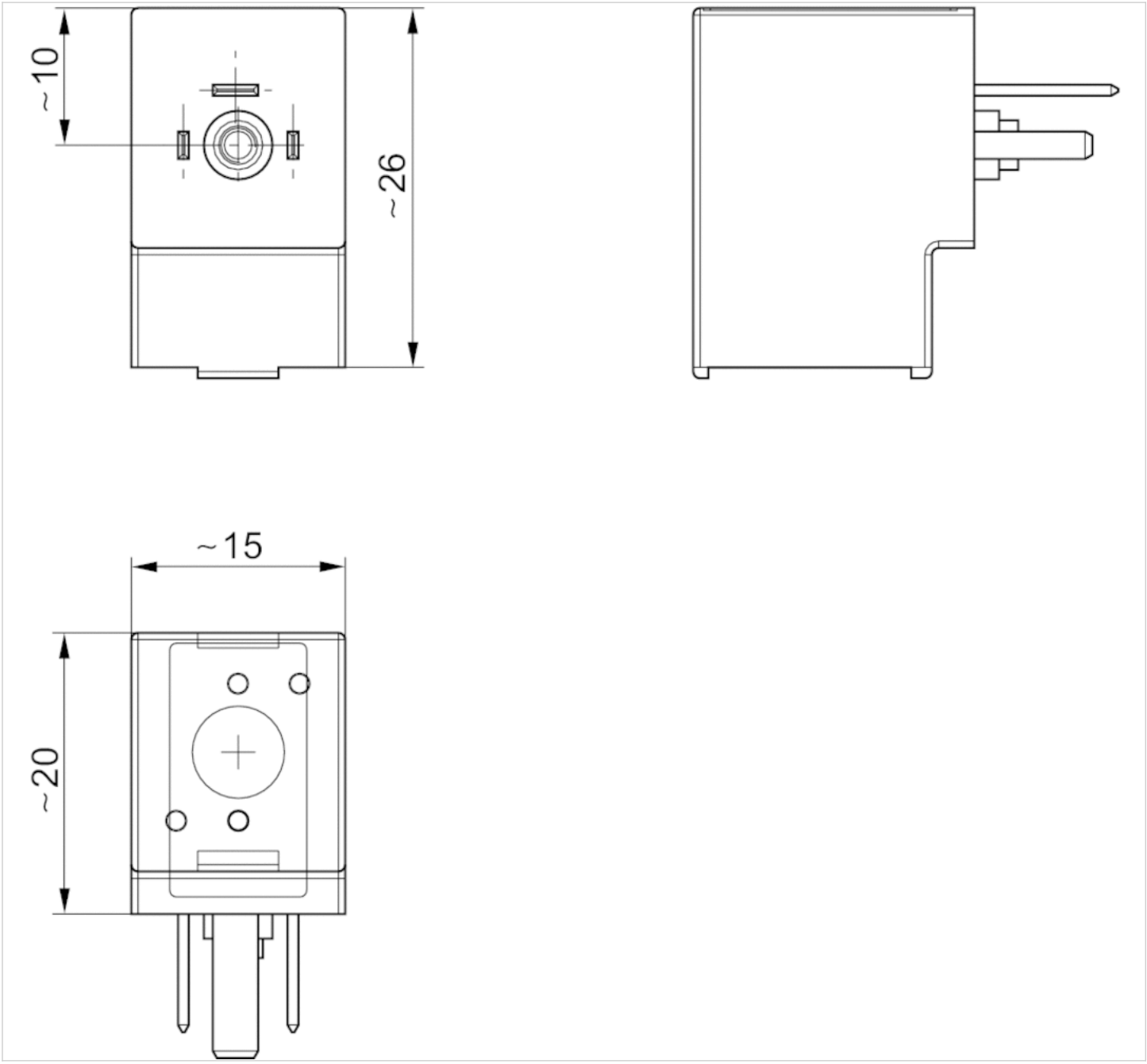
Please note that the coils are only compatible with TC series valves that were produced starting in 2011.

Technical information

Material	
Housing	Polyamide

Dimensions

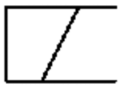
Dimensions



Coil, Series CO1

- M8, coil kit
- Coil width 0.63 inch
- Power consumption DC 2.2 W

Connector standard	DIN EN 60947-5-2
electrical connections	See table below
Ambient temperature min./max.	14 ... 122 °F
Protection class acc. to DIN EN 61140 Electrically	Class III
Protection class With valve plug connector/plug	IP65
Duty cycle ED	100 %
LED status display	Yellow
Weight	0.055 lbs



Technical data

Part No.	electrical connections	Operational voltage	Voltage tolerance
		DC	DC
R422101603	Plug, M8x1, 4-pin	24 V	-10% / +10%
R422101604	Plug, M8x1, 3-pin	24 V	-10% / +10%

Part No.	Power consumption
	DC
R422101603	2.2 W
R422101604	2.2 W

Technical information

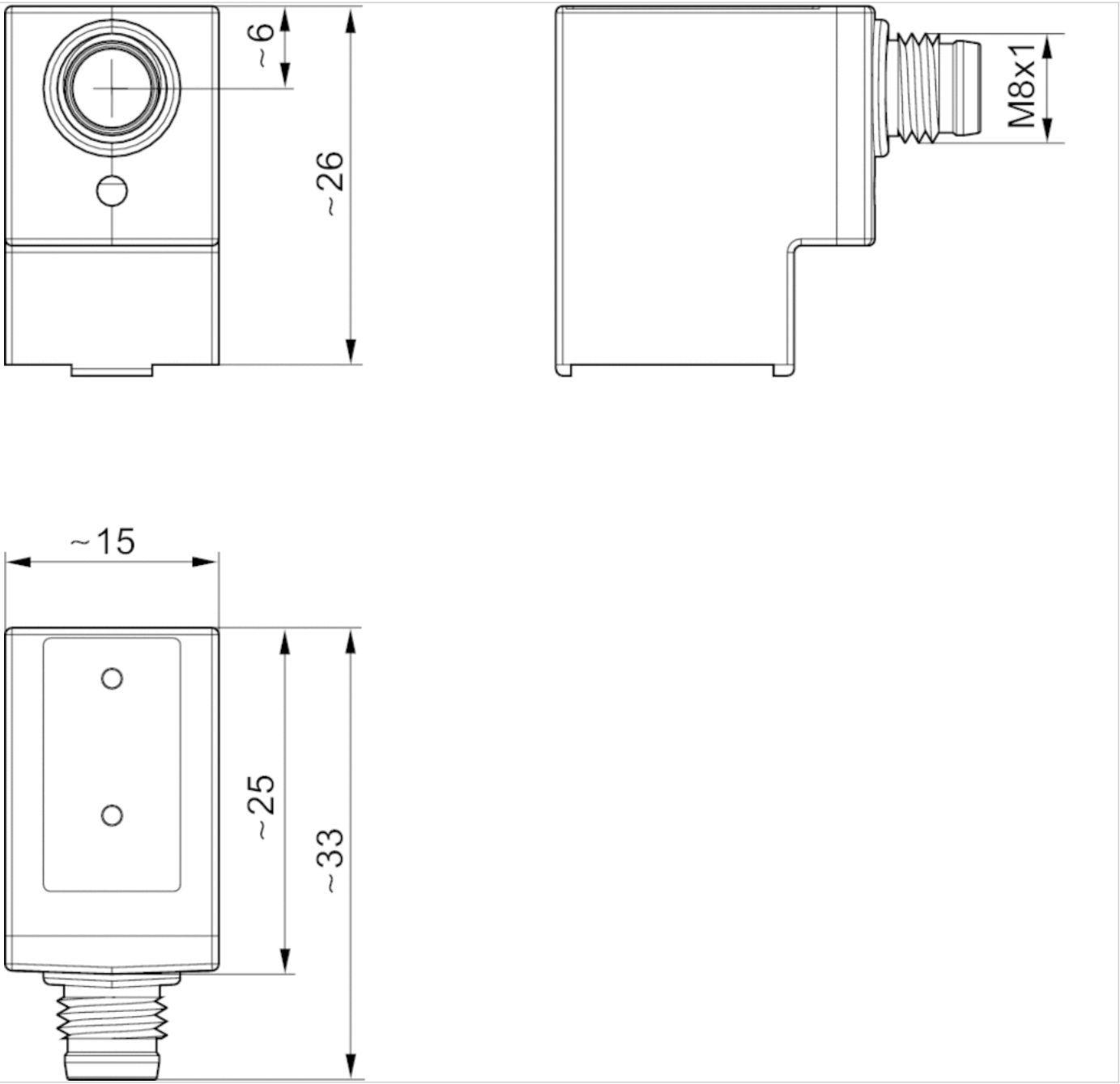
Please note that the coils are only compatible with TC series valves that were produced starting in 2011.

Technical information

Material	
Housing	Polyamide

Dimensions

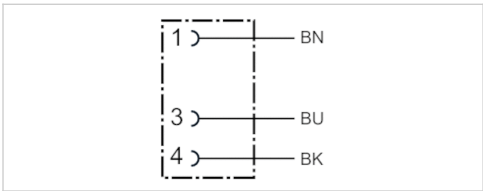
Dimensions



Round plug connector, Series CON-RD

- Socket M8x1 3-pin A-coded straight 180°
- open cable ends
- with cable
- UL (Underwriters Laboratories)
- unshielded

Ambient temperature min./max.	-13 ... 185 °F
Operational voltage	48 V AC/DC
Protection class	IP67
Wire cross-section	0 in²
Weight	See table below



Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Certification	Weight
1834484166	4 A	3	0.18 inch	9.84 ft.	UL (Underwriters Laboratories)	0.201 lbs
1834484168	4 A	3	0.18 inch	16.4 ft.	UL (Underwriters Laboratories)	0.32 lbs
1834484247	4 A	3	0.18 inch	32.81 ft.	UL (Underwriters Laboratories)	0.728 lbs

Technical information

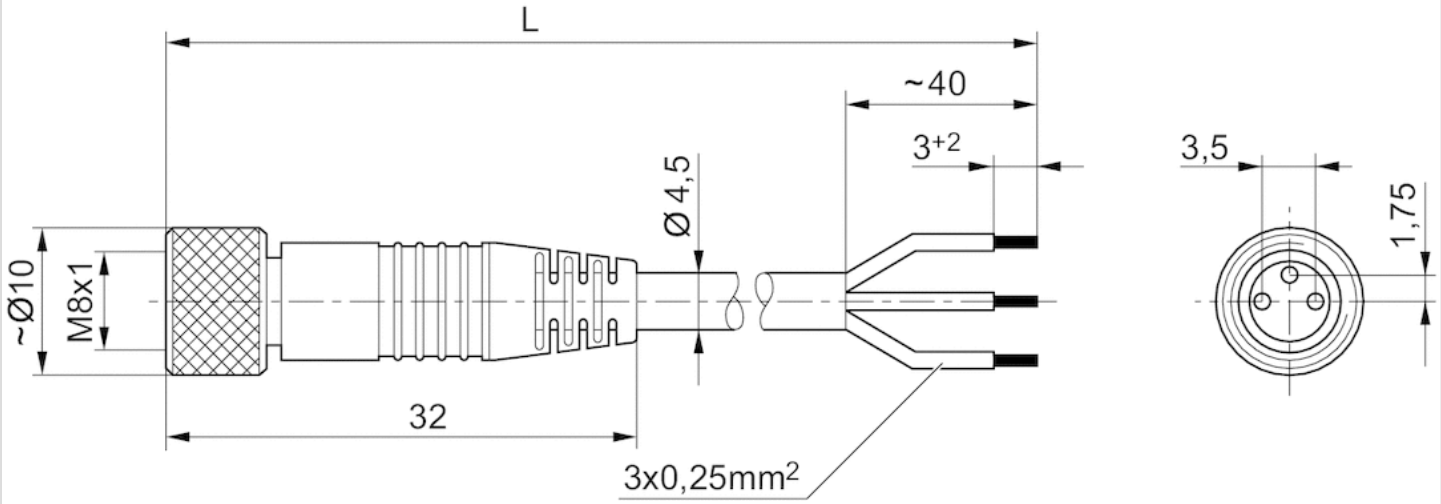
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

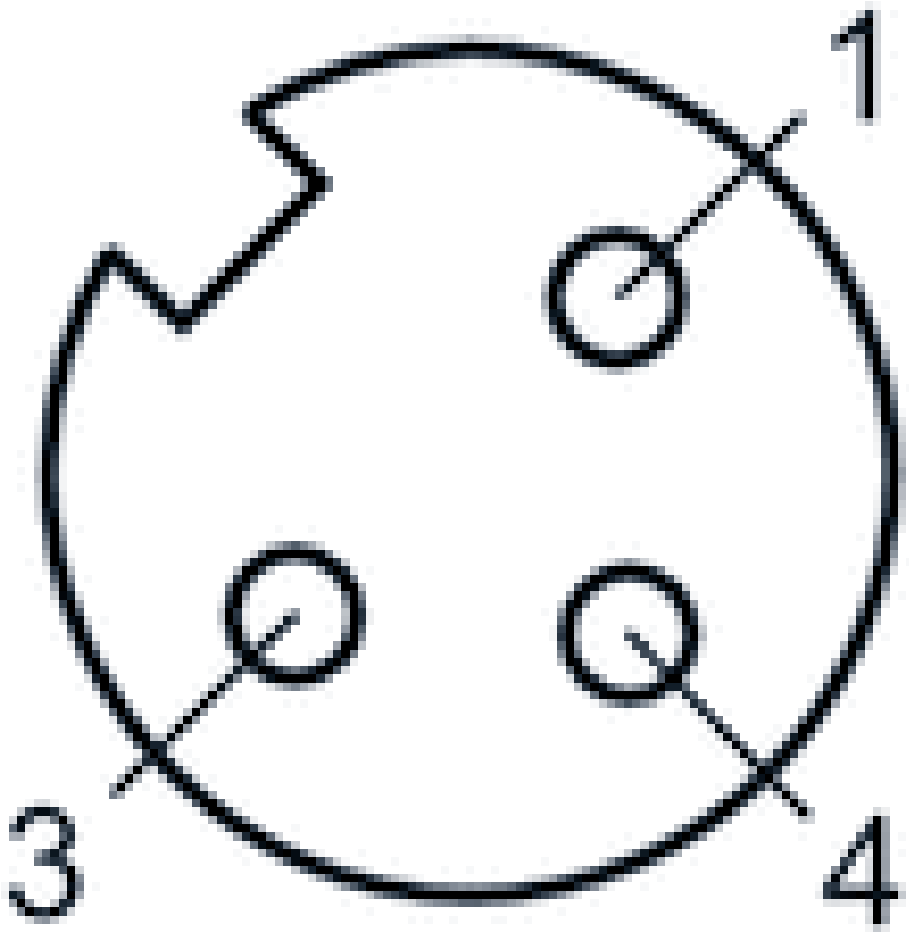
Dimensions



L = length

Pin assignments

Pin assignment, socket

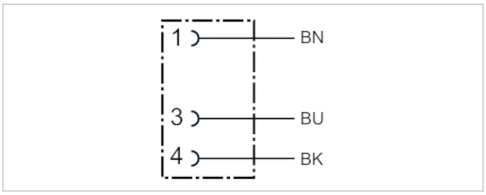


(1) BN=brown
(3) BU=blue
(4) BK=black

Round plug connector, Series CON-RD

- Socket M8x1 3-pin A-coded angled 90°
- open cable ends
- with cable
- unshielded

Ambient temperature min./max.	-40 ... 185 °F
Operational voltage	48 V AC/DC
Protection class	IP67
Wire cross-section	0 in²
Weight	See table below



Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Weight
1834484167	4 A	3	0.18 inch	9.84 ft.	0.203 lbs
1834484169	4 A	3	0.18 inch	16.4 ft.	0.311 lbs
1834484248	4 A	3	0.18 inch	32.81 ft.	0.608 lbs

Technical information

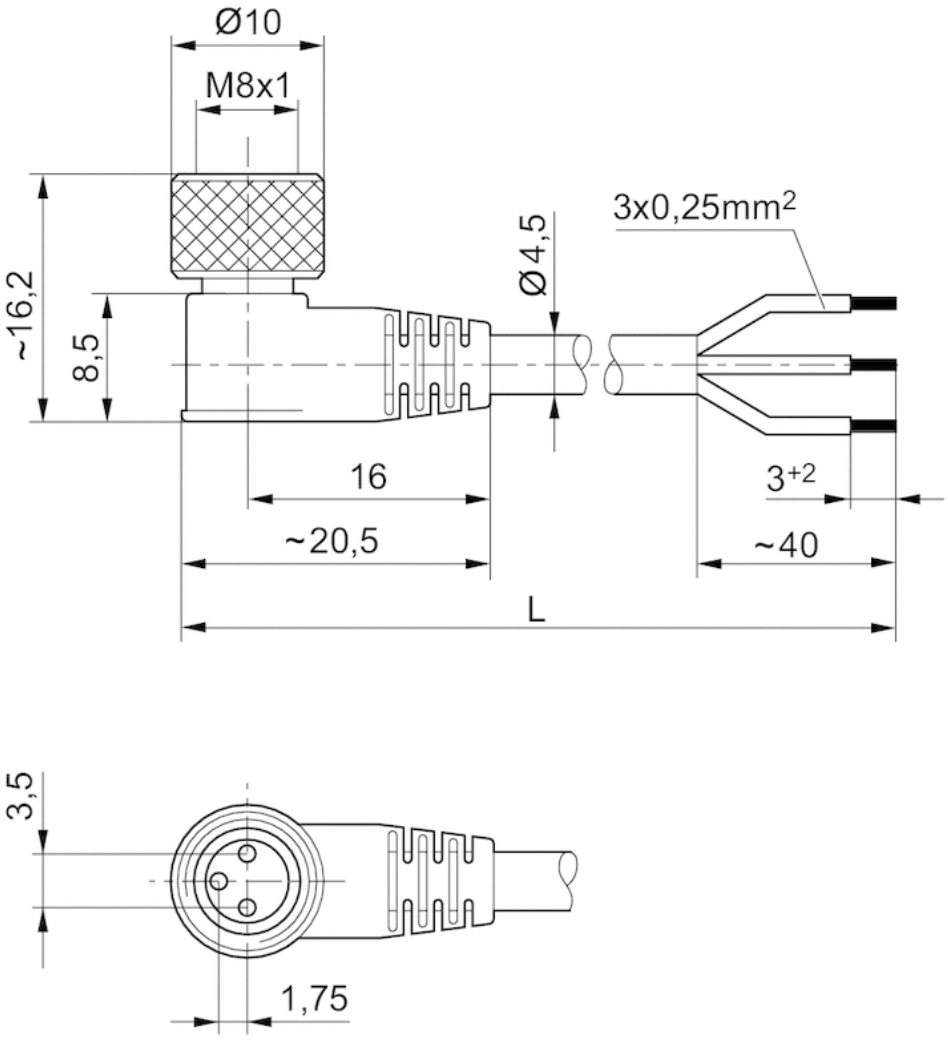
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

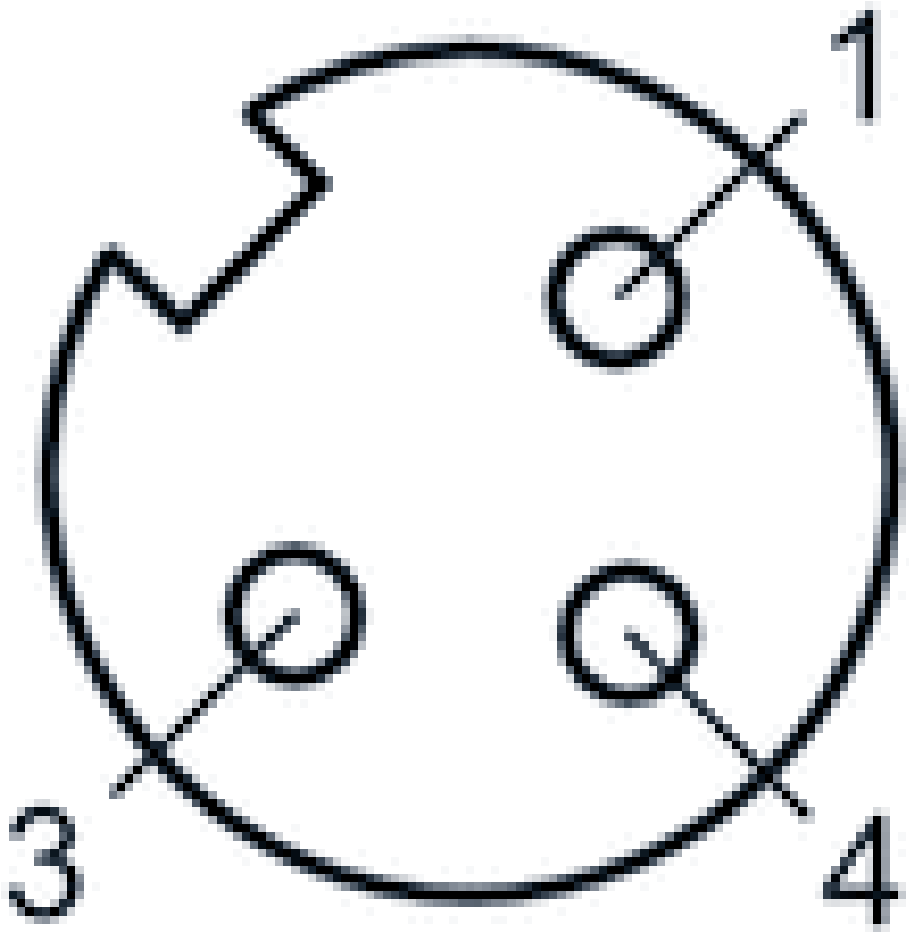
Dimensions



L = length

Pin assignments

Pin assignment, socket

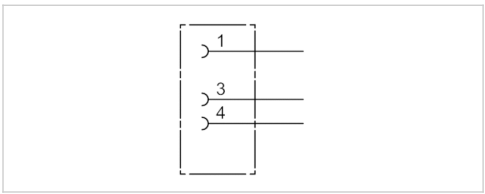


(1) BN=brown
(3) BU=blue
(4) BK=black

Round plug connector, Series CON-RD

- Socket, M8x1, 3-pin, A-coded, straight, 180°
- UL (Underwriters Laboratories)
- unshielded

Connection type	Soldering
Ambient temperature min./max.	-13 ... 176 °F
Operational voltage	48 V AC/DC
Protection class	IP67
Weight	0.02 lbs



Technical data

Part No.	Max. current	suitable cable-Ø min./max
1834484173	4 A	0.14 / 0.19 inch

Technical information

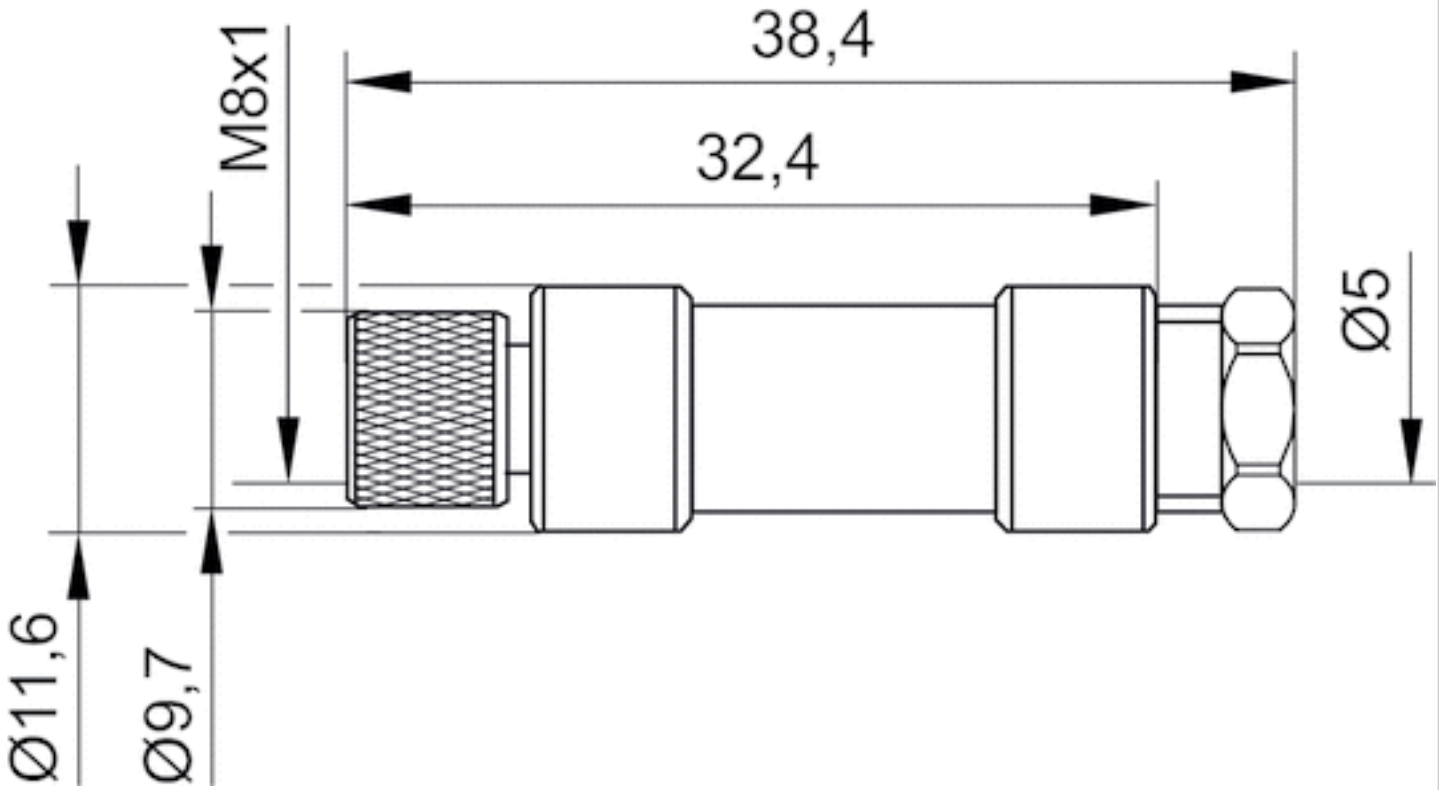
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyamide

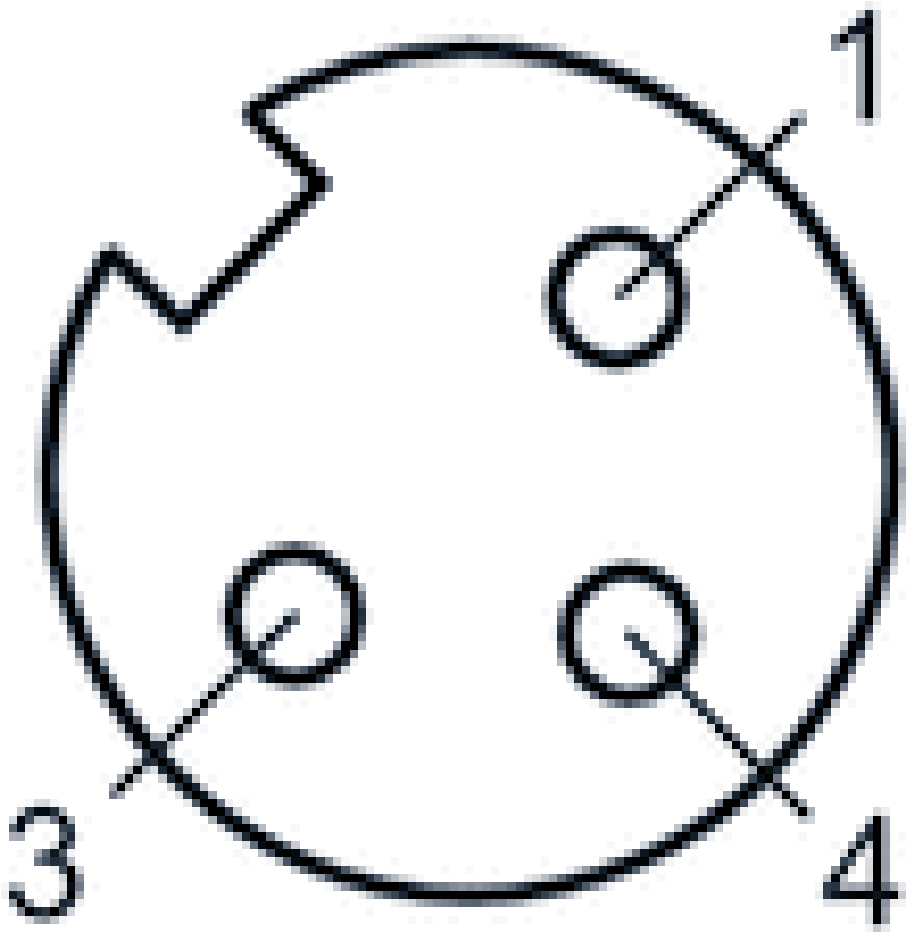
Dimensions

Dimensions



Pin assignments

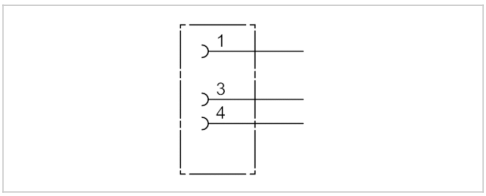
Pin assignment, socket



Round plug connector, Series CON-RD

- Socket, M8x1, 3-pin, A-coded, angled, 90°
- UL (Underwriters Laboratories)
- unshielded

Connection type	Soldering
Ambient temperature min./max.	-13 ... 185 °F
Operational voltage	48 V AC/DC
Protection class	IP67
Weight	0.02 lbs



Technical data

Part No.	Max. current	Contact assignment	suitable cable-Ø min./max
1834484174	4 A	3	0.14 / 0.19 inch

Technical information

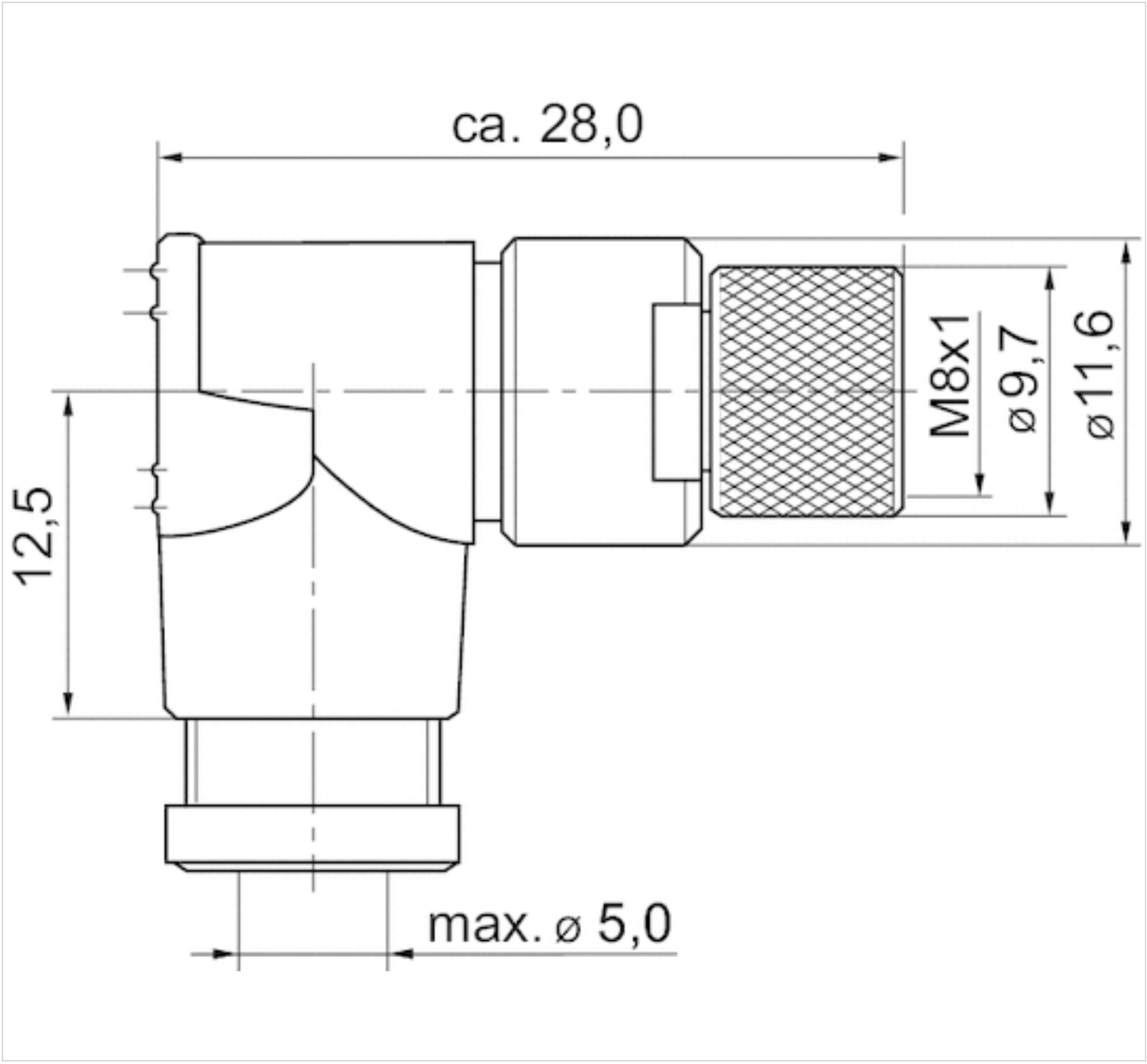
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyamide

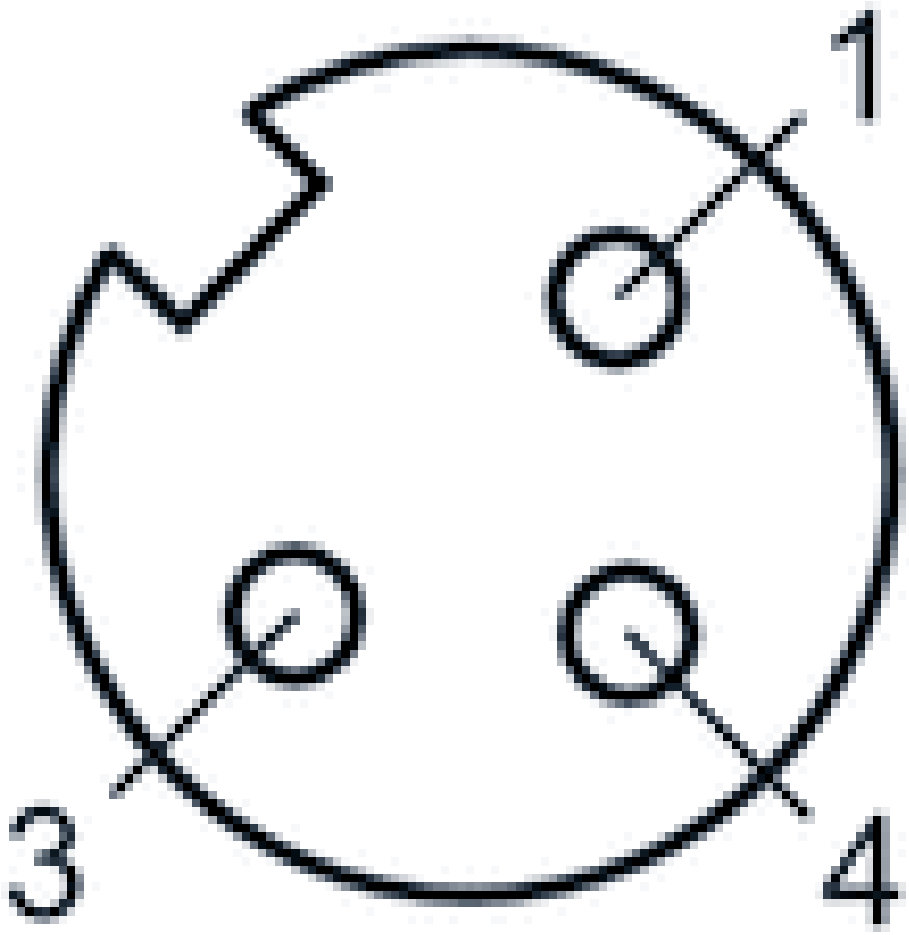
Dimensions

Dimensions



Pin assignments

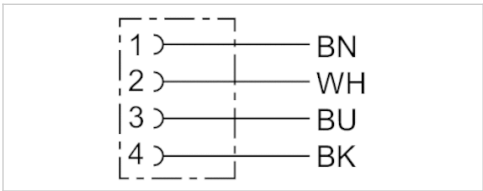
Pin assignment, socket



Round plug connector, Series CON-RD

- Socket M8x1 4-pin A-coded straight 180°
- open cable ends
- with cable
- UL (Underwriters Laboratories)
- unshielded

Ambient temperature min./max.	-40 ... 185 °F
Operational voltage	48 V AC/DC
Protection class	IP67
Wire cross-section	0 in²



Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Certification
1834484144	4 A	4	0.18 inch	9.84 ft.	UL (Underwriters Laboratories)
1834484146	4 A	4	0.18 inch	16.4 ft.	UL (Underwriters Laboratories)

Technical information

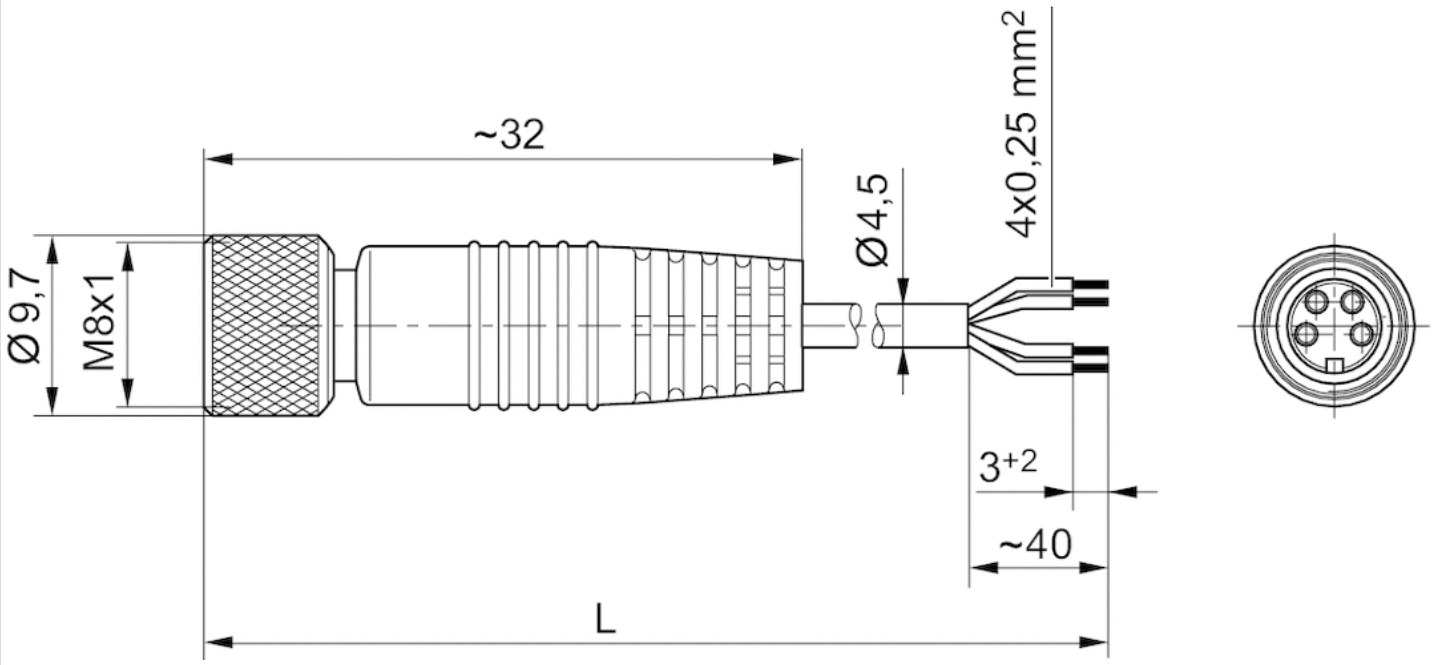
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

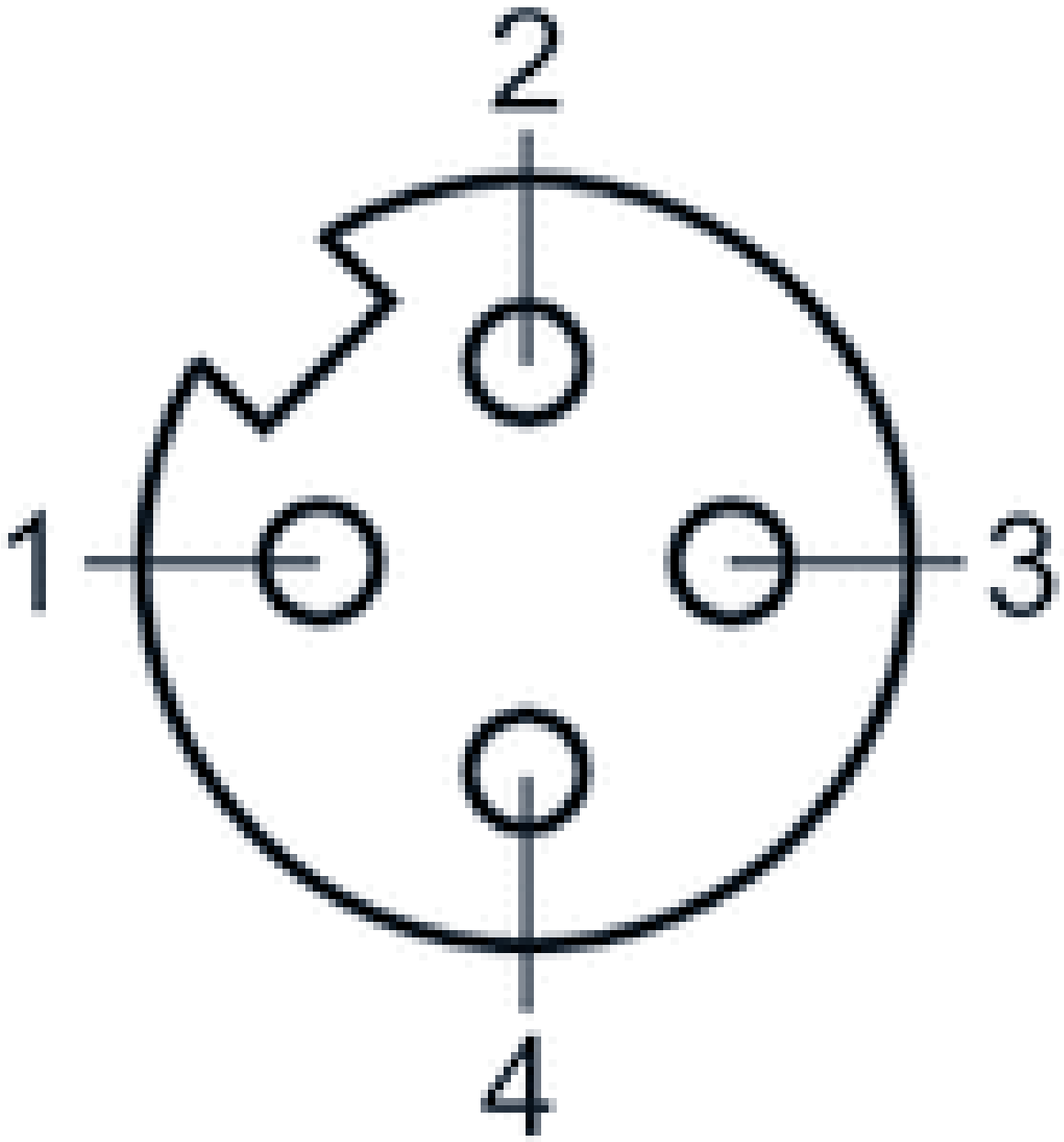
Dimensions



L = length

Pin assignments

Pin assignment, socket

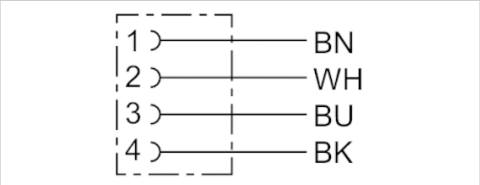


(1) BN=brown
(2) WH=white
(3) BU=blue
(4) BK=black

Round plug connector, Series CON-RD

- Socket M8x1 4-pin A-coded angled 90°
- open cable ends
- with cable
- unshielded

Ambient temperature min./max.	-40 ... 185 °F
Operational voltage	48 V AC/DC
Protection class	IP67
Wire cross-section	0 in²
Weight	See table below



Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Weight
1834484145	4 A	4	0.18 inch	9.84 ft.	0.19 lbs
1834484147	4 A	4	0.18 inch	16.4 ft.	0.311 lbs

Technical information

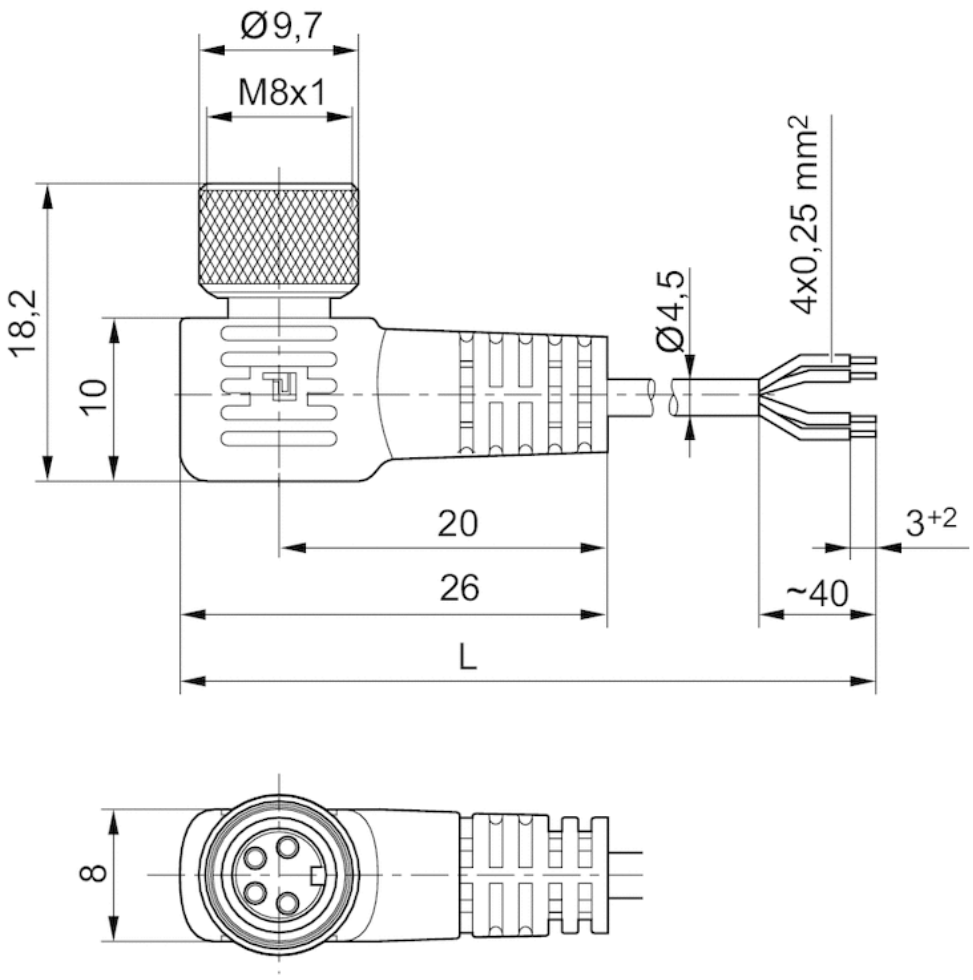
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

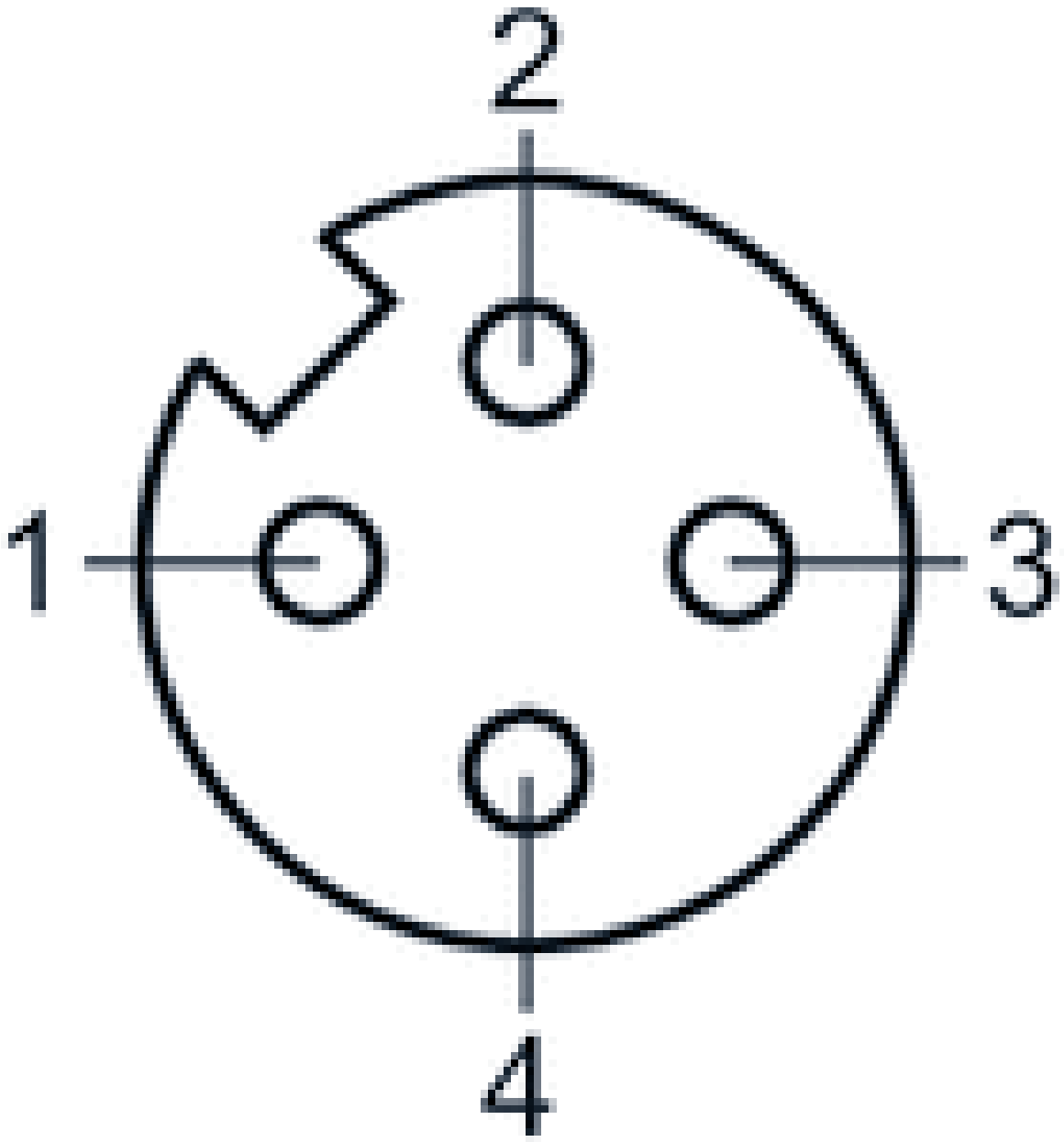
Dimensions



L = length

Pin assignments

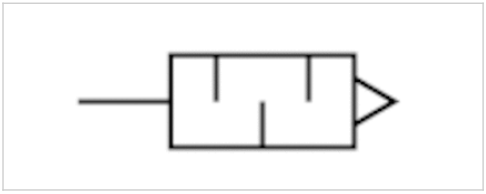
Pin assignment, socket



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

Silencers, series SI1

- G 1/8
- Sintered bronze



Working pressure min./max.	0 ... 145 psi
Ambient temperature min./max.	-13 ... 176 °F
Medium	Compressed air
Sound pressure level	75 dB
Weight	0.022 lbs
Comment	Flow characteristic curves can be found under “Diagrams”.

Technical data

Part No.	Compressed air connection	Flow	Delivery unit
		Qn	
1827000000	G 1/8	1.5 Cv	10 piece

Weight per piece

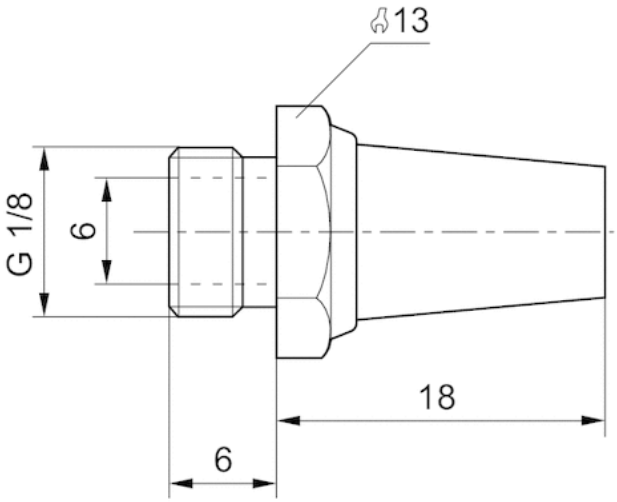
Nominal flow Qn at p1 = 87 psi (absolute) freely discharged. Sound pressure level measured at 87 psi against atmosphere at 3.281 ft. distance.

Technical information

Material	
Silencer	Sintered bronze
Thread	Brass

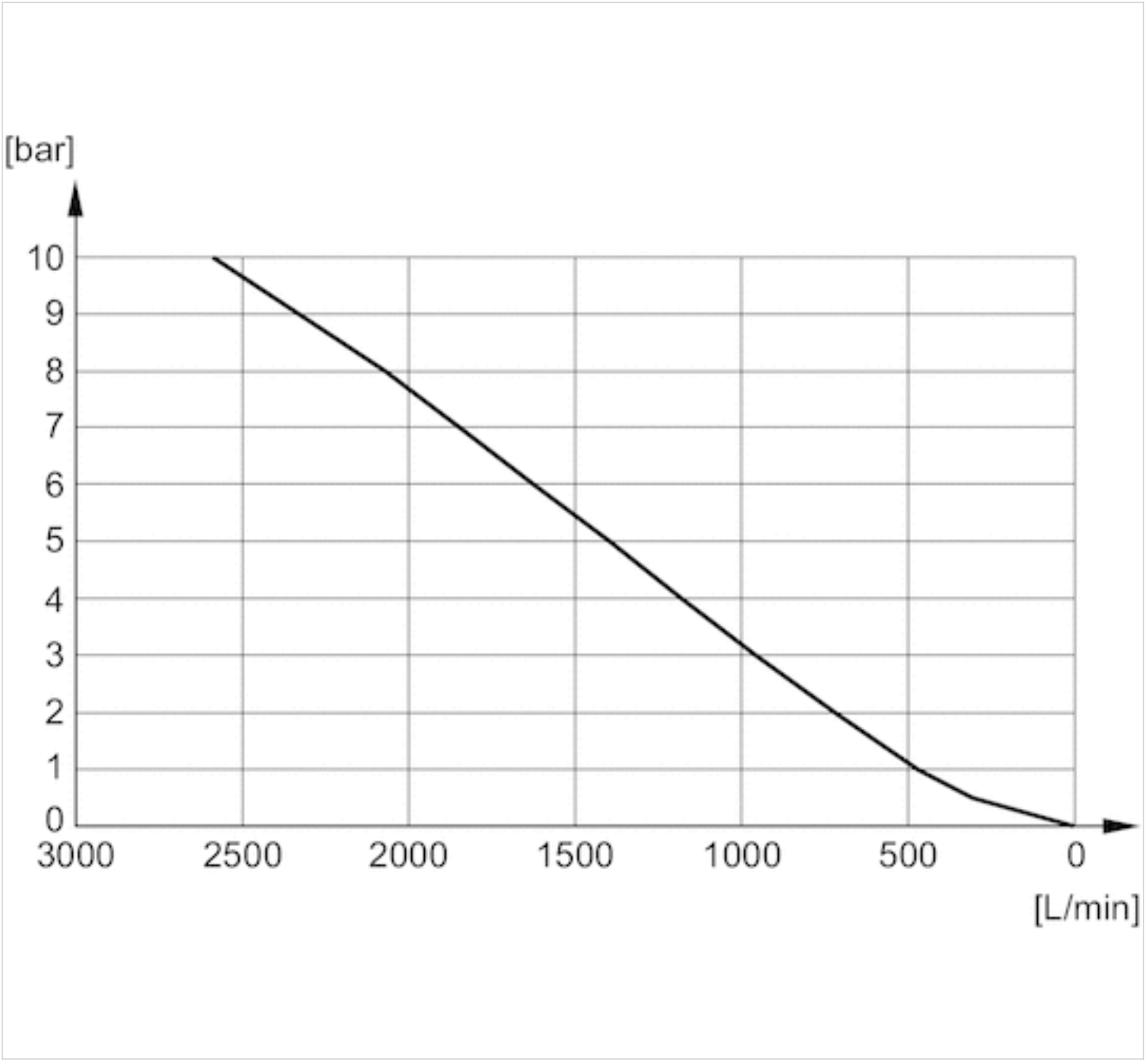
Dimensions

Dimensions in mm



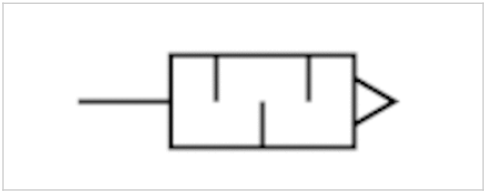
Diagrams

Flow diagram, 1827000000



Silencers, series SI1

- G 1/2
- Sintered bronze



Working pressure min./max.	0 ... 145 psi
Ambient temperature min./max.	-13 ... 176 °F
Medium	Compressed air
Sound pressure level	90 dB
Weight	0.176 lbs
Comment	Flow characteristic curves can be found under “Diagrams”.

Technical data

Part No.	Compressed air connection	Flow	Delivery unit
		Qn	
1827000003	G 1/2	7.1 Cv	2 piece

Weight per piece

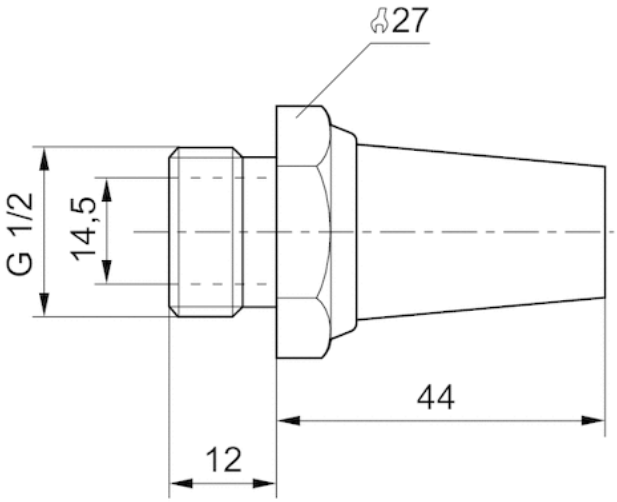
Nominal flow Qn at p1 = 87 psi (absolute) freely discharged. Sound pressure level measured at 87 psi against atmosphere at 3.281 ft. distance.

Technical information

Material	
Silencer	Sintered bronze
Thread	Brass

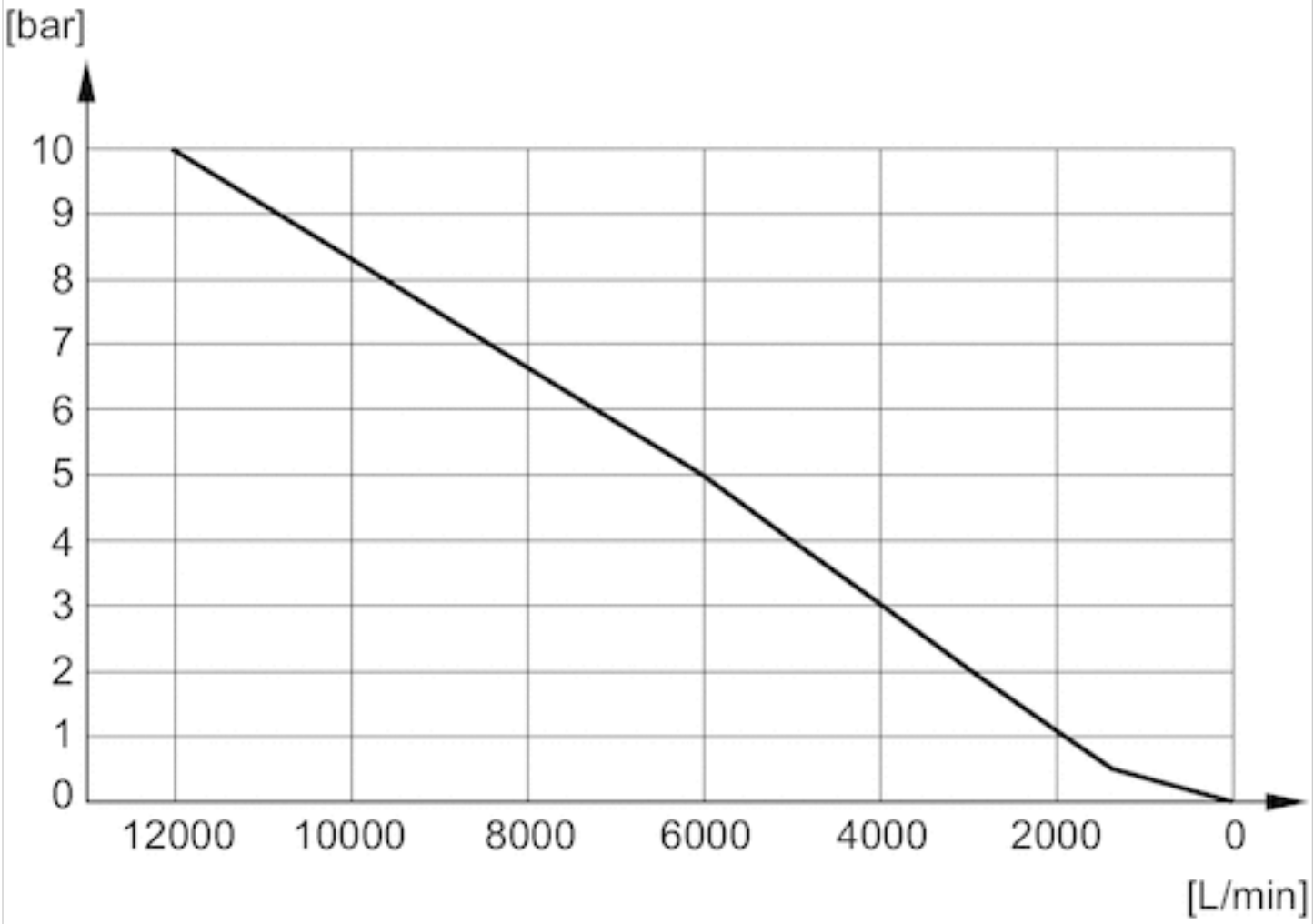
Dimensions

Dimensions in mm



Diagrams

Flow diagram, 1827000003



Mounting kit for DIN rails DIN

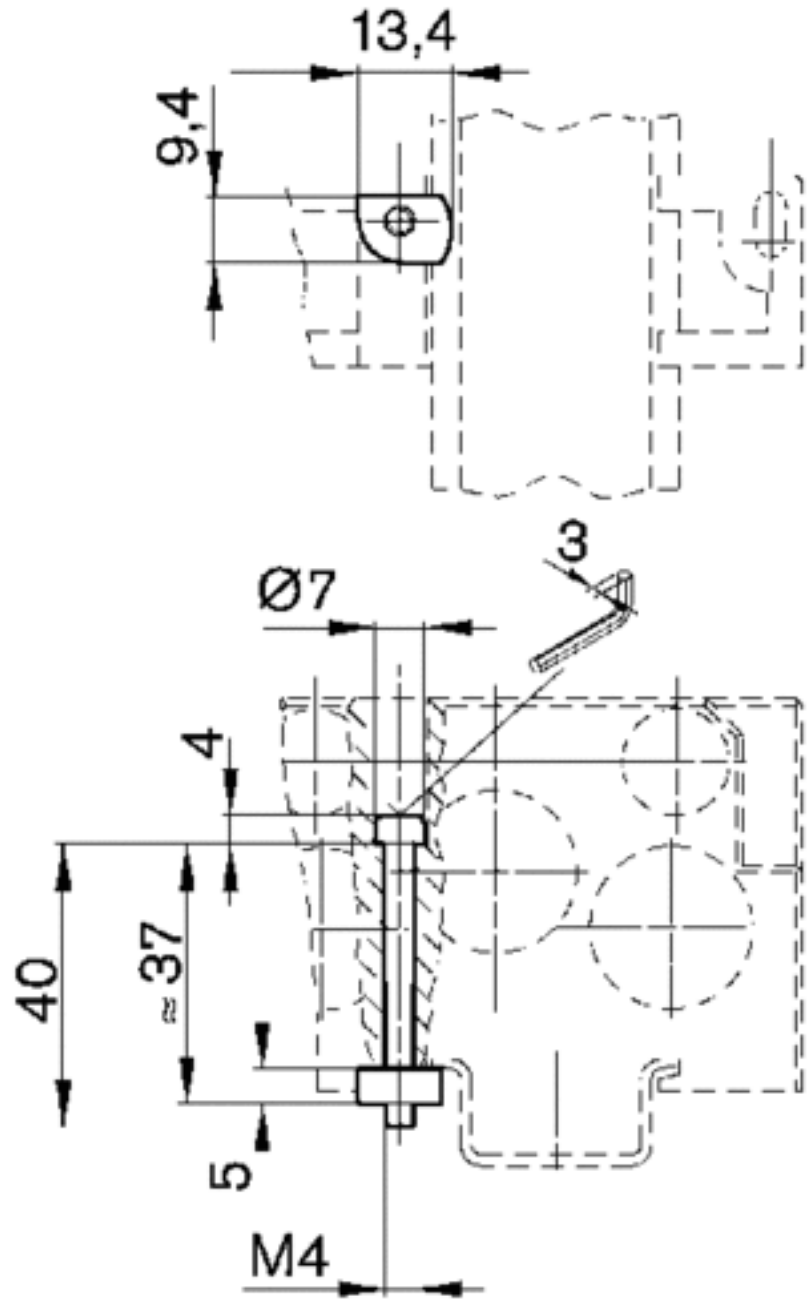
- standard 26 mm
- type A

Weight 0.031 lbs

Technical data

Part No.	Type	Accessory type	Frame size	Delivery unit
1821398007	Mounting kit for DIN rails EN 60715, 35x15	type A	26 mm	1 piece

Dimensions



Accessories, Series TC15

Weight See table below

Technical data

Part No.	Type	L = length
1825504357	end plate kit: internal pilot, pneumatic subbase, right	-
R422101300	End plate kit: internal pilot, right pneumatic subbase, connection thread NPTF	-
1825504358	end plate kit: external pilot, pneumatic subbase, right	-
R422101301	End plate kit: external pilot, right pneumatic subbase, connection thread NPTF	-
R422000802	end plate kit: internal pilot, pneumatic subbase, left	-
R422000803	end plate kit: external pilot, pneumatic subbase, left	-
R422000678	end plate kit: internal pilot, pneumatic subbase on both sides	-
R422000679	end plate kit: external pilot, pneumatic subbase on both sides	-
1821039042	supply/separation plate, channels 1,3,5 closed, for subbase, right	-
R422101302	Supply/separation plate, channels 1, 3, 5 closed, for right subbase, connection thread NPTF	-
R412009789	supply/separation plate, channels 1,3,5 closed, for subbase, left	-
R422000726	supply/separation plate, channel 1 closed, channels 3 and 5 open, for subbase, right	-
R422101303	Supply/separation plate, channel 1 closed, channels 3 and 5 open, for right subbase, connection thread NPTF	-
R422000502	Blanking plate	-
1823053258	Tie rod, 2x, 1 piece	2.66 inch
1823053259	Tie rod, 3x, 1 piece	3.48 inch
1823053260	Tie rod, 4x, 1 piece	4.31 inch
1823053261	Tie rod, 5x, 1 piece	5.13 inch
1823053262	Tie rod, 6x, 1 piece	5.95 inch
1823053263	Tie rod, 7x, 1 piece	6.78 inch
1823053264	Tie rod, 8x, 1 piece	7.6 inch
1823053265	Tie rod, 9x, 1 piece	8.42 inch
1823053266	Tie rod, 10x, 1 piece	9.24 inch
1823053267	Tie rod, 11x, 1 piece	10.07 inch
1823053268	Tie rod, 12x, 1 piece	10.89 inch
1823503999	Tie rod extension, 1 piece	-
R422000141	Sealing kit, 10 pieces	-

Part No.	Weight
1825504357	0.959 lbs

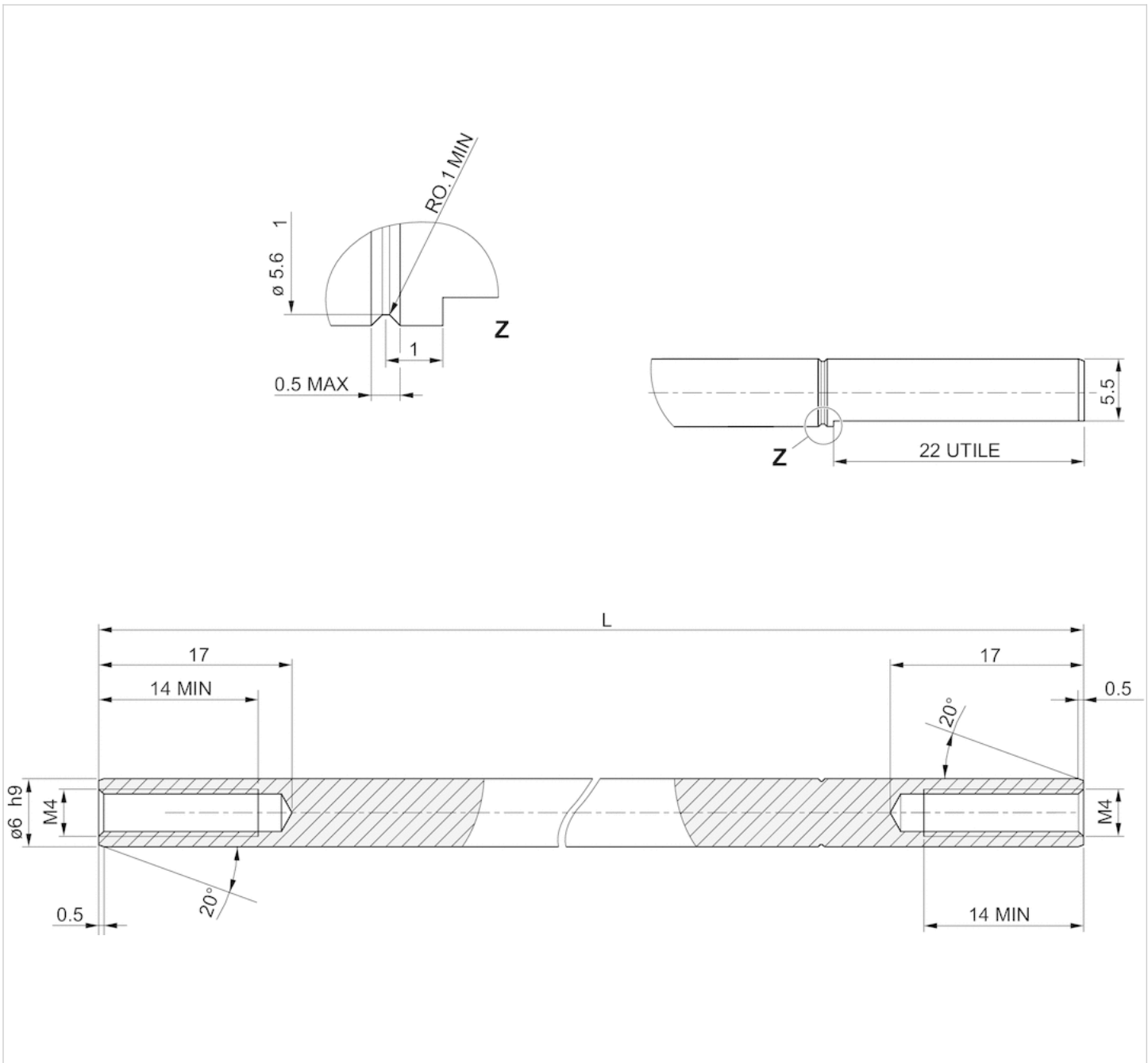
Part No.	Weight
R422101300	0.959 lbs
1825504358	0.946 lbs
R422101301	0.946 lbs
R422000802	1.07 lbs
R422000803	0.957 lbs
R422000678	1.65 lbs
R422000679	2.06 lbs
1821039042	0.54 lbs
R422101302	0.54 lbs
R412009789	0.54 lbs
R422000726	0.538 lbs
R422101303	0.538 lbs
R422000502	0.584 lbs
1823053258	0.026 lbs
1823053259	0.037 lbs
1823053260	0.046 lbs
1823053261	0.057 lbs
1823053262	0.068 lbs
1823053263	0.079 lbs
1823053264	0.088 lbs
1823053265	0.101 lbs
1823053266	0.11 lbs
1823053267	0.121 lbs
1823053268	0.15 lbs
1823503999	0.009 lbs
R422000141	0.088 lbs

Technical information

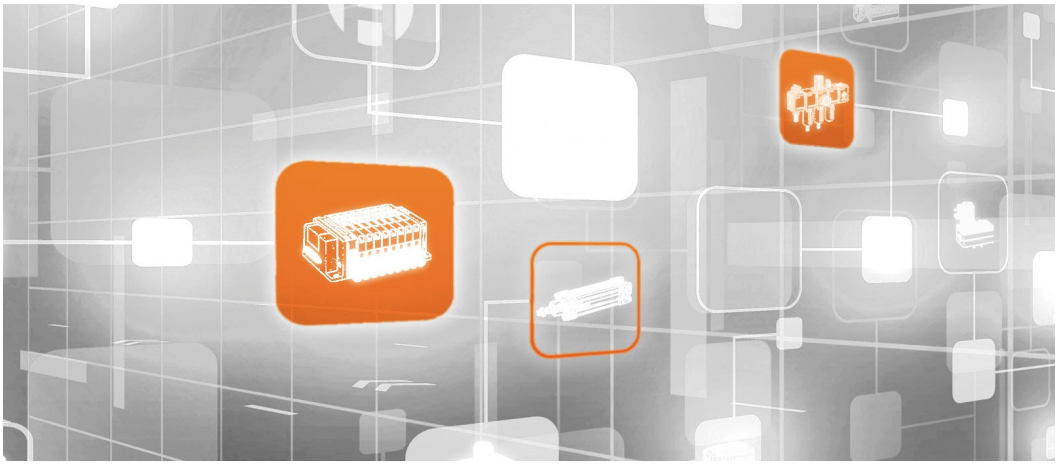
3 tie rods are required per valve system.

Dimensions

Dimensions, Tie-rods



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



Visit us: Emerson.com/Aventics

Your local contact: Emerson.com/contactus

Emerson.com

Facebook.com/EmersonAutomationSolutions

LinkedIn.com/company/Emerson-Automation-Solutions

Twitter.com/EMR_Automation

2020-12

EMERSON

CONSIDER IT SOLVED™