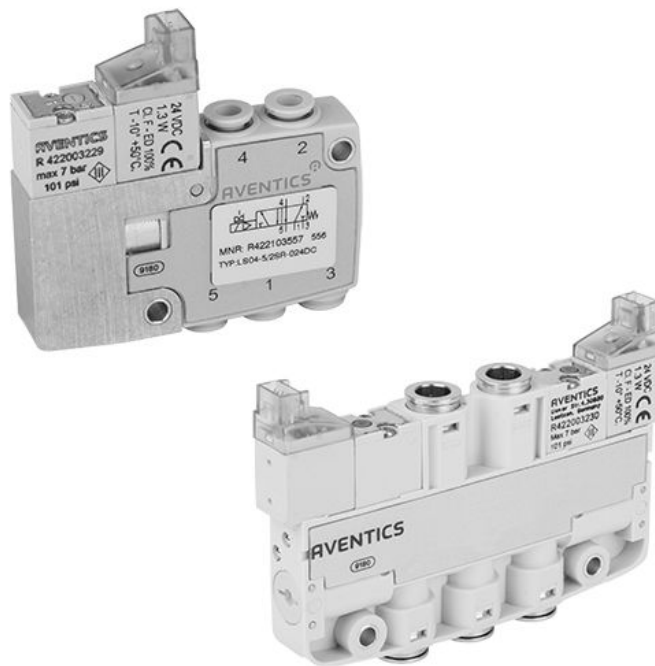


Series LS04



AVENTICS™

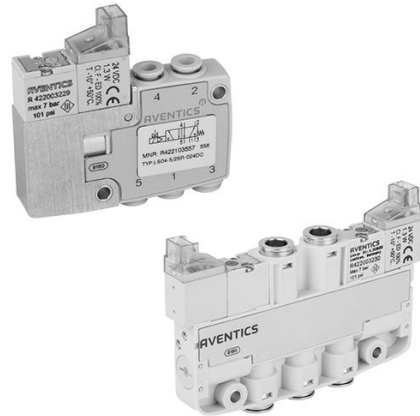
AVENTICS Series LS04
Directional valves


EMERSON™

AVENTICS Series LS04 Directional valves

The AVENTICS Series LS04 are lightweight spool valves and save space with their polyamide and aluminium housing. The valves are suitable for direct mounting onto moving machines and system parts.

- Compact and lightweight
- Fast switching possible
- Easy to integrate
- Suitable for moving applications



Product overview

Electrically operated

	Page
3/2 directional valve, LS04-AF series, 2-pin.....	4
manual override: without detent	
3/2 directional valve, LS04-AF series, 2-pin.....	6
Manual override: with detent	
3/2 directional valve, LS04-AF series, 3-pin.....	8
manual override: without detent	
3/2 directional valve, LS04-AF series, 3-pin.....	11
Manual override: with detent	
3/2-directional valve, Series LS04-PD.....	14
with position detection	
5/2 directional valve, series LS04-PD.....	16
with position detection	
5/2-directional valve, Series LS04-AF, 2-pin.....	18
Manual override: with detent	
5/2-directional valve, Series LS04-AF, 2-pin.....	20
manual override: without detent	
5/2-directional valve, Series LS04-XS, 2-pin.....	22
5/2, with spring return	
5/2-directional valve, Series LS04-XS, 3-pin.....	24
5/2, with spring return	
5/2-directional valve, Series LS04-AF, 3-pin.....	26
manual override: without detent - 5/2, with spring return	
5/2-directional valve, Series LS04-AF, 3-pin.....	28
Manual override: with detent - 5/2, with spring return	
5/3-directional valve, Series LS04-AF, 2-pin.....	31
Manual override: with detent	
5/3-directional valve, Series LS04-AF, 2-pin.....	33
manual override: without detent	
5/3-directional valve, Series LS04-AF, 3-pin.....	35
manual override: without detent	
5/3-directional valve, Series LS04-AF, 3-pin.....	38
Manual override: with detent	

Accessories LS04

Round plug connector, Series CON-RD.....	41
Socket - M8x1 - 3-pin - straight - Soldering	
Round plug connector, Series CON-RD.....	42
Socket - M8x1 - 3-pin - angled - Soldering	
Round plug connector, Series CON-RD.....	43
Socket - M8x1 - 3-pin - straight - open cable ends - 3-pin	
Round plug connector, Series CON-RD.....	45
Socket - M8x1 - 3-pin - angled - open cable ends - 3-pin	
Valve plug connector, series CON-VP.....	47
for series LS04 - Socket - RJ - 2-pin - straight - open cable ends	

3/2 directional valve, LS04-AF series, 2-pin

Activation: Electrically

Electrical connection 2, thread size: Industrial plug connector

Electrical connection 2, number of poles: 2-pin

Compressed air connection type: Push-in fitting

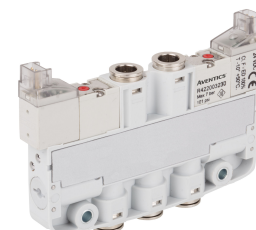
Duty cycle: 100 %

Type: Spool valve, positive overlapping

Ambient temperature min./max.: -10 °C ... 50 °C

Medium temperature min./max.: -10 °C ... 50 °C

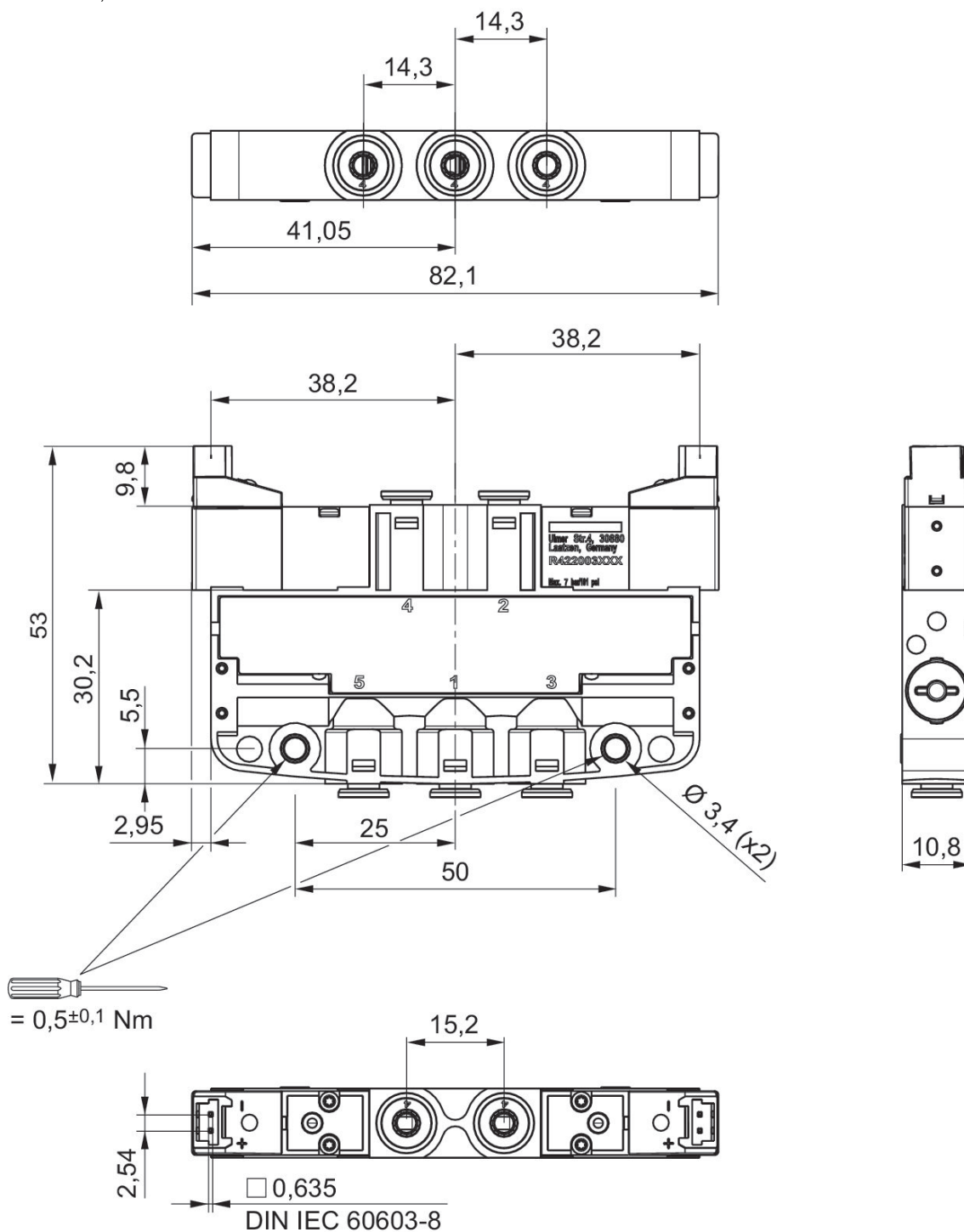
Working pressure min./max.: 3 bar ... 7 bar



	Valve function	Switching principle	port pneumatic input 1	Compressed air connection output	Compressed air connection, exhaust	Operational voltage	Pilot	Part No.
	NO/NO	2x 3/2 NO/NO, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	R422103571
	NO/NO	2x 3/2 NO/NO, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	R422103572
	NC/NC	2x 3/2 NC/NC, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	R422103579
	NC/NC	2x 3/2 NC/NC, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	R422103580
	NC/NO	2x 3/2 NC/NO, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	R422103587
	NC/NO	2x 3/2 NC/NO, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	R422103588

Power consumption DC [W]	Voltage tolerance DC	Manual override	Nominal flow Qn 1 to 2 [l/min]	Part No.
0.8	-10 % / +10 %	without detent	175	R422103571
0.8	-10 % / +10 %	without detent	250	R422103572
0.8	-10 % / +10 %	without detent	180	R422103579
0.8	-10 % / +10 %	without detent	310	R422103580
0.8	-10 % / +10 %	without detent	175	R422103587
0.8	-10 % / +10 %	without detent	250	R422103588

dimensions, double solenoid



3/2 directional valve, LS04-AF series, 2-pin

Activation: Electrically

Electrical connection 2, thread size: Industrial plug connector

Electrical connection 2, number of poles: 2-pin

Compressed air connection type: Push-in fitting

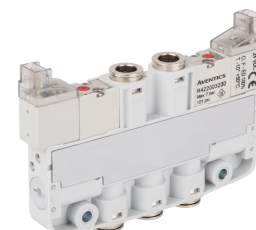
Duty cycle: 100 %

Type: Spool valve, positive overlapping

Ambient temperature min./max.: -10 °C ... 50 °C

Medium temperature min./max.: -10 °C ... 50 °C

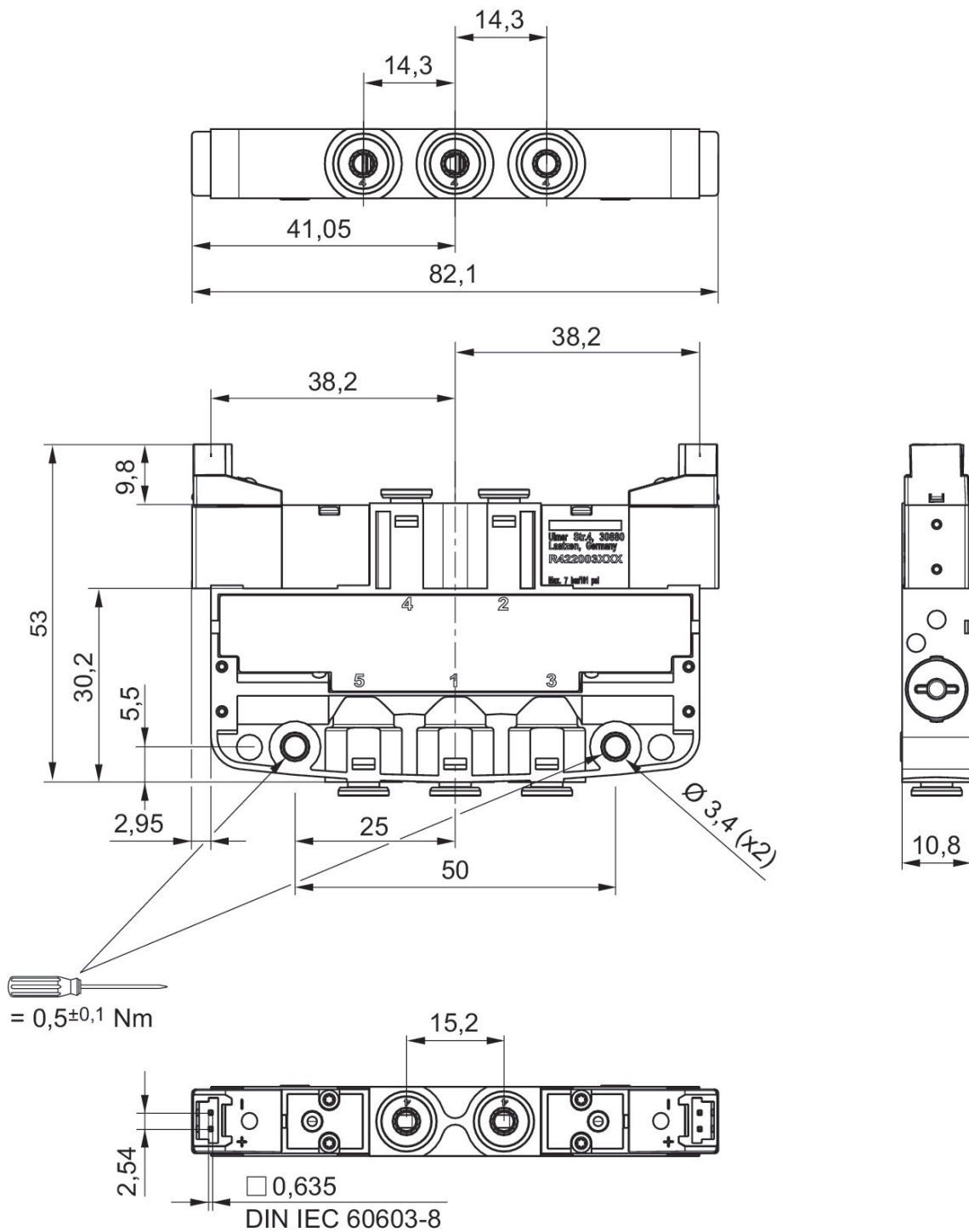
Working pressure min./max.: 3 bar ... 7 bar



	Valve function	Switching principle	port pneumatic input 1	Compressed air connection output	Compressed air connection, exhaust	Operational voltage	Pilot	Part No.
	NO/NO	2x 3/2 NO/NO, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	R422103575
	NO/NO	2x 3/2 NO/NO, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	R422103576
	NC/NC	2x 3/2 NC/NC, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	R422103583
	NC/NC	2x 3/2 NC/NC, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	R422103584
	NC/NO	2x 3/2 NC/NO, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	R422103591
	NC/NO	2x 3/2 NC/NO, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	R422103592

Power consumption DC [W]	Voltage tolerance DC	Manual override	Nominal flow Qn 1 to 2 [l/min]	Part No.
0.8	-10 % / +10 %	with detent	175	R422103575
0.8	-10 % / +10 %	with detent	250	R422103576
0.8	-10 % / +10 %	with detent	180	R422103583
0.8	-10 % / +10 %	with detent	310	R422103584
0.8	-10 % / +10 %	with detent	175	R422103591
0.8	-10 % / +10 %	with detent	250	R422103592

dimensions, double solenoid



3/2 directional valve, LS04-AF series, 3-pin

Activation: Electrically

Electrical connection 2, thread size: M8

Electrical connection 2, number of poles: 3-pin

Compressed air connection type: Push-in fitting

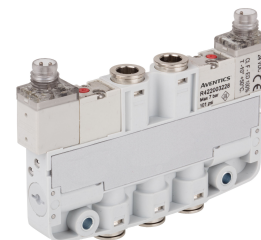
Duty cycle: 100 %

Type: Spool valve

Ambient temperature min./max.: -10 °C ... 50 °C

Medium temperature min./max.: -10 °C ... 50 °C

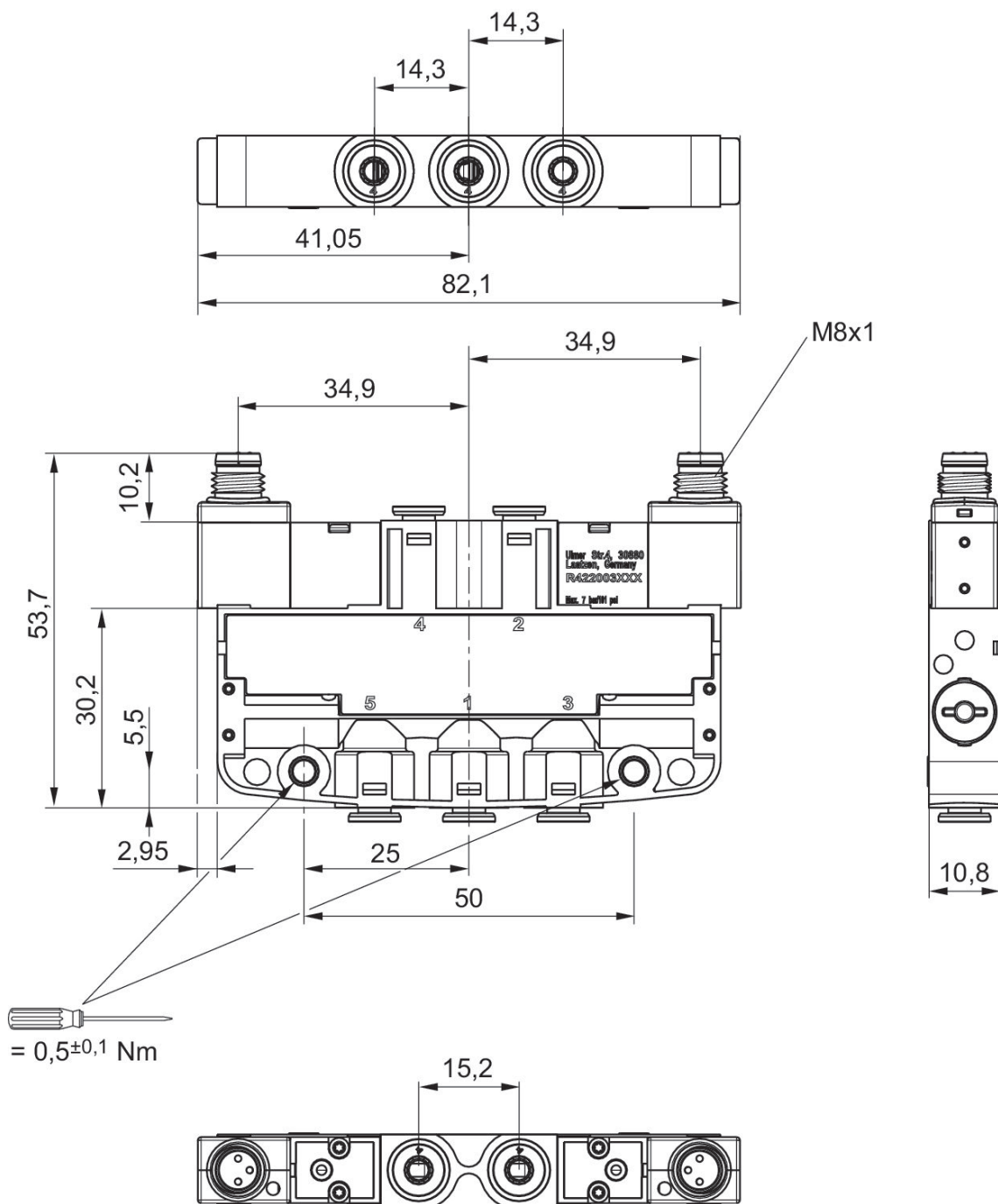
Working pressure min./max.: 3.5 bar ... 7 bar



	Valve function	Switching principle	port pneumatic input 1	Compressed air connection output	Compressed air connection, exhaust	Operational voltage	Pilot	Part No.
	NO/NO	2x 3/2 NO/NO, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	R422103573
	NO/NO	2x 3/2 NO/NO, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	R422103574
	NC/NC	2x 3/2 NC/NC, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	R422103581
	NC/NC	2x 3/2 NC/NC, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	R422103582
	NC/NC	2x 3/2 NC/NC, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	R422103602
	NC/NO	2x 3/2 NC/NO, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	R422103589
	NC/NO	2x 3/2 NC/NO, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	R422103590

Power consumption DC [W]	Voltage tolerance DC	Manual override	Nominal flow Qn 1 to 2 [l/min]	Part No.
0.8	-10 % / +10 %	without detent	175	R422103573
0.8	-10 % / +10 %	without detent	250	R422103574
0.8	-10 % / +10 %	without detent	180	R422103581
0.8	-10 % / +10 %	without detent	310	R422103582
0.8	-10 % / +10 %	without detent	310	R422103602
0.8	-10 % / +10 %	without detent	175	R422103589
0.8	-10 % / +10 %	without detent	250	R422103590

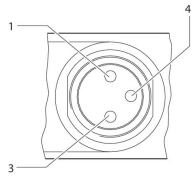
Dimensions
Double Solenoid



R422103573, R422103574, R422103581, R422103582, R422103602, R422103589, R422103590

PIN assignment for valve plug connectors

3-pin



1) Pin not assigned 3) 0 V 4) 24 V Note: Bi-polar protective circuit to prevent overvoltage

3/2 directional valve, LS04-AF series, 3-pin

Activation: Electrically

Electrical connection 2, thread size: M8

Electrical connection 2, number of poles: 3-pin

Compressed air connection type: Push-in fitting

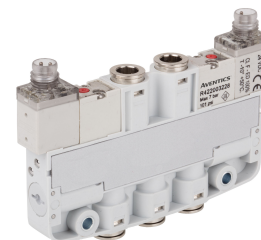
Duty cycle: 100 %

Type: Spool valve, positive overlapping

Ambient temperature min./max.: -10 °C ... 50 °C

Medium temperature min./max.: -10 °C ... 50 °C

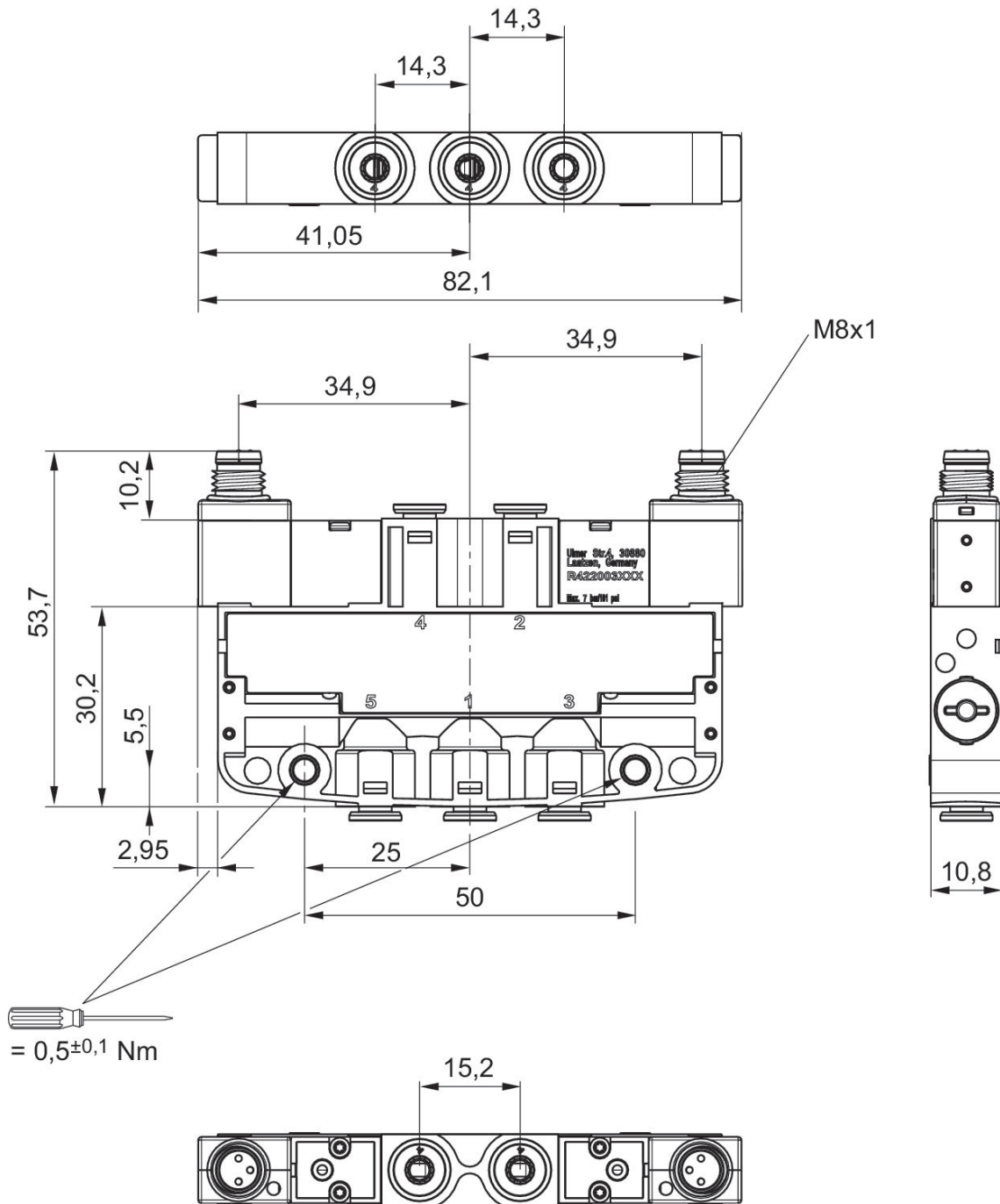
Working pressure min./max.: 3 bar ... 7 bar



	Valve function	Switching principle	port pneumatic input 1	Compressed air connection output	Compressed air connection, exhaust	Operational voltage	Pilot	Part No.
	NO/NO	2x 3/2 NO/NO, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	R422103577
	NO/NO	2x 3/2 NO/NO, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	R422103578
	NC/NC	2x 3/2 NC/NC, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	R422103585
	NC/NC	2x 3/2 NC/NC, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	R422103586
	NC/NO	2x 3/2 NC/NO, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	R422103593
	NC/NO	2x 3/2 NC/NO, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	R422103594

Power consumption DC [W]	Voltage tolerance DC	Manual override	Nominal flow Qn 1 to 2 [l/min]	Part No.
0.8	-10 % / +10 %	with detent	175	R422103577
0.8	-10 % / +10 %	with detent	250	R422103578
0.8	-10 % / +10 %	with detent	180	R422103585
0.8	-10 % / +10 %	with detent	310	R422103586
0.8	-10 % / +10 %	with detent	175	R422103593
0.8	-10 % / +10 %	with detent	250	R422103594

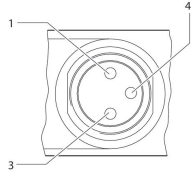
Dimensions
Double Solenoid



R422103577, R422103578, R422103585, R422103586, R422103593, R422103594

PIN assignment for valve plug connectors

3-pin



1) Pin not assigned 3) 0 V 4) 24 V Note: Bi-polar protective circuit to prevent overvoltage

3/2-directional valve, Series LS04-PD

Activation: Electrically

Electrical connection 2, thread size: M8

Electrical connection 2, number of poles: 3-pin

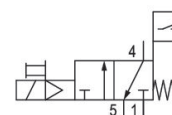
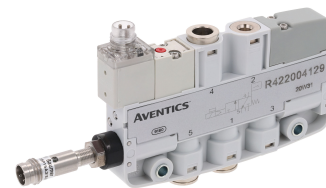
Compressed air connection type: Push-in fitting

Type: Spool valve

Ambient temperature min./max.: -10 °C ... 50 °C

Medium temperature min./max.: -10 °C ... 50 °C

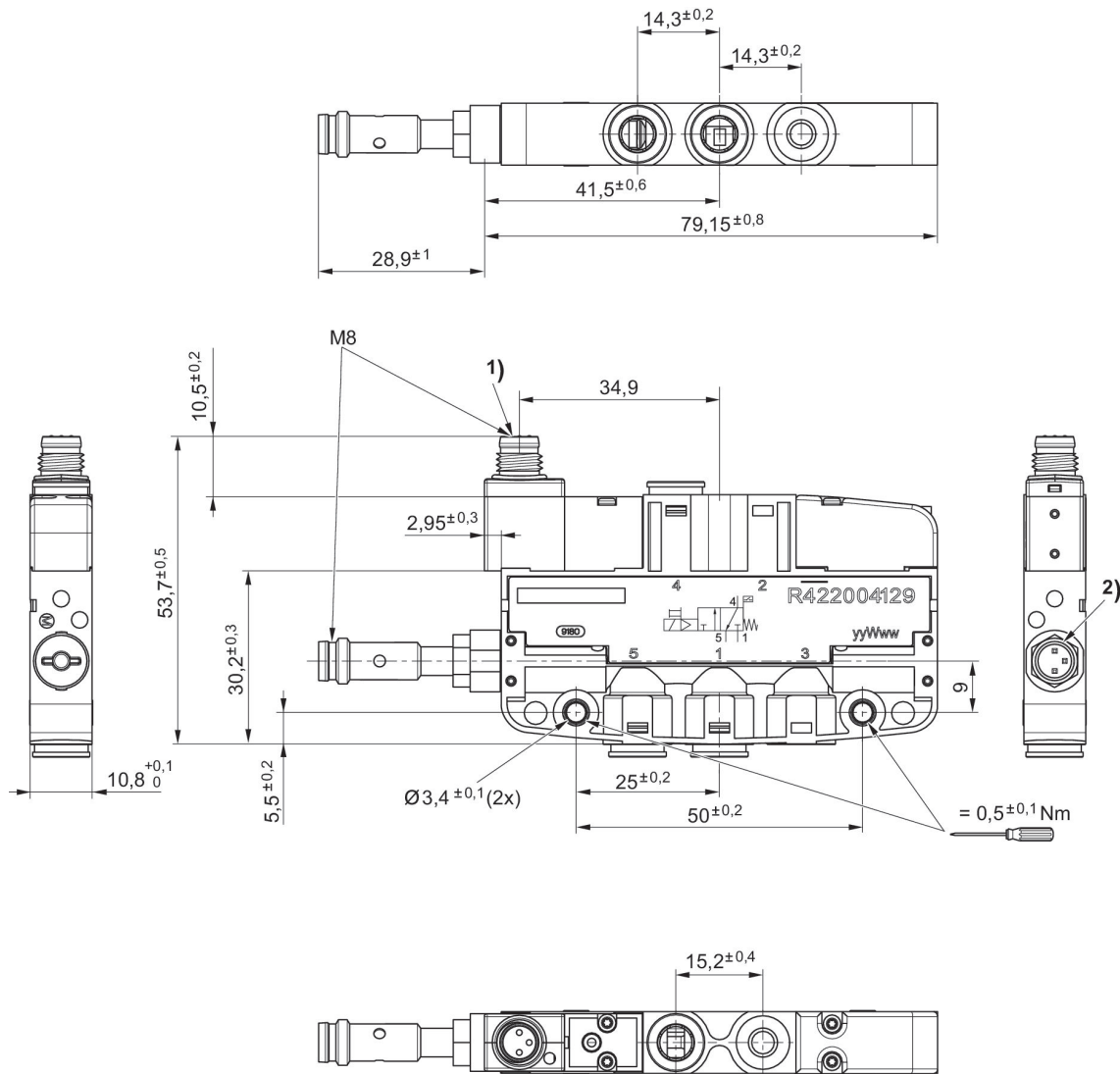
Working pressure min./max.: 3 bar ... 7 bar



Valve function	Switching principle	port pneumatic input 1	Compressed air connection output	Compressed air connection, exhaust	Operational voltage	Pilot	Power consumption DC [W]	Part No.
NC	3/2, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	0.8	R422005154
NC	3/2, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	0.8	R422004129

Voltage tolerance DC	Manual override	Nominal flow Qn 1 to 2 [l/min]	Part No.
-10 % / +10 %	without detent	180	R422005154
-10 % / +10 %	without detent	310	R422004129

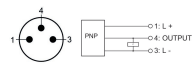
Dimensions



- 1) Valve plug connector M8
- 2) Sensor plug M8, 3-pin

R422005154, R422004129

PIN assignment sensor, plug M8



5/2 directional valve, series LS04-PD

Activation: Electrically

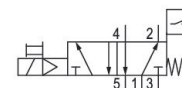
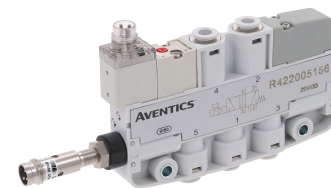
Electrical connection 2, number of poles: 3-pin

Type: Spool valve, positive overlapping

Ambient temperature min./max.: -10 °C ... 50 °C

Medium temperature min./max.: -10 °C ... 50 °C

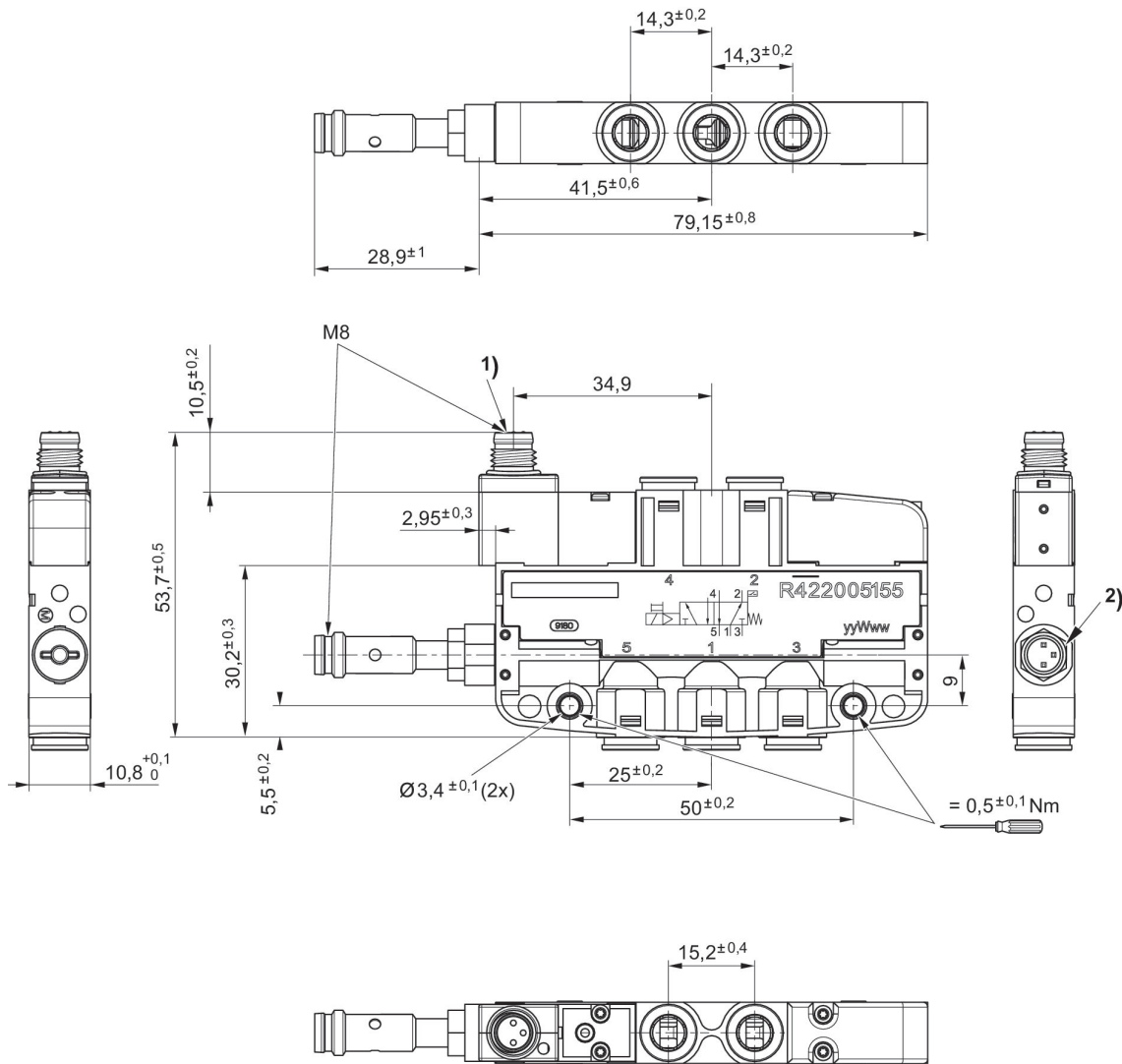
Working pressure min./max.: 7 bar



Switching principle	port pneumatic input 1	Compressed air connection output	Compressed air connection, exhaust	Operational voltage	Pilot	Power consumption DC [W]	Voltage tolerance DC	Part No.
5/2, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	0.8	-10 % / +10 %	R422005156
5/2, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	0.8	-10 % / +10 %	R422005155

Manual override	Nominal flow Qn 1 to 2 [l/min]	Part No.
without detent	180	R422005156
without detent	310	R422005155

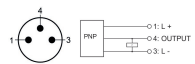
Dimensions



- 1) Valve plug connector M8
- 2) Sensor plug M8, 3-pin

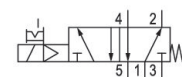
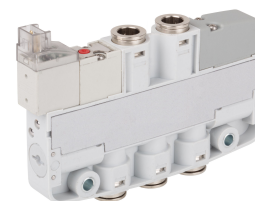
R422005156, R422005155

PIN assignment sensor, plug M8



5/2-directional valve, Series LS04-AF, 2-pin

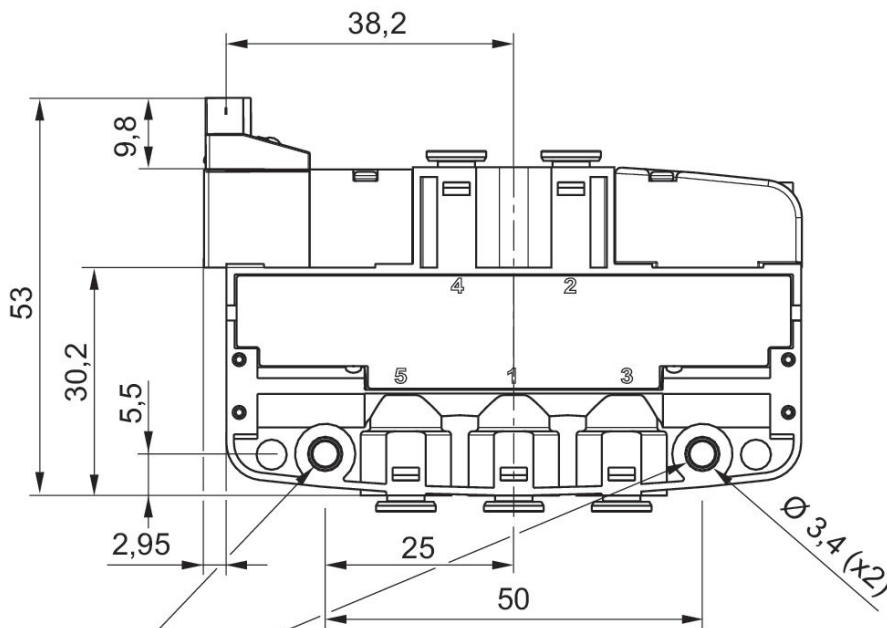
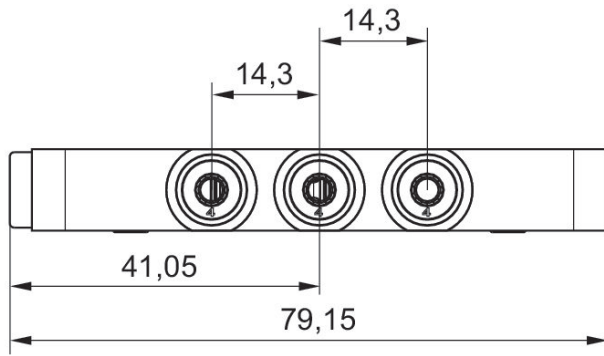
Activation: Electrically
 Electrical connection 2, thread size: Industrial plug connector
 Electrical connection 2, number of poles: 2-pin
 Compressed air connection type: Push-in fitting
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Ambient temperature min./max.: -10 °C ... 50 °C
 Medium temperature min./max.: -10 °C ... 50 °C
 Working pressure min./max.: 3 bar ... 7 bar



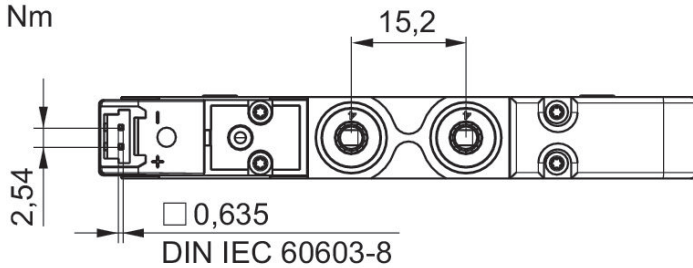
Switching principle	port pneumatic input 1	Compressed air connection output	Compressed air connection, exhaust	Operational voltage	Pilot	Power consumption DC [W]	Voltage tolerance DC	Part No.
5/2, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	0.8	-10 % / +10 %	R422103563
5/2, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	0.8	-10 % / +10 %	R422103564

Manual override	Nominal flow Qn 1 to 2 [l/min]	Part No.
with detent	180	R422103563
with detent	310	R422103564

dimensions, single solenoid



 = 0,5±0,1 Nm



5/2-directional valve, Series LS04-AF, 2-pin

Activation: Electrically

Electrical connection 2, thread size: Industrial plug connector

Electrical connection 2, number of poles: 2-pin

Compressed air connection type: Push-in fitting

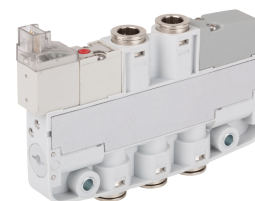
Duty cycle: 100 %

Type: Spool valve, positive overlapping

Ambient temperature min./max.: -10 °C ... 50 °C

Medium temperature min./max.: -10 °C ... 50 °C

Working pressure min./max.: 7 bar

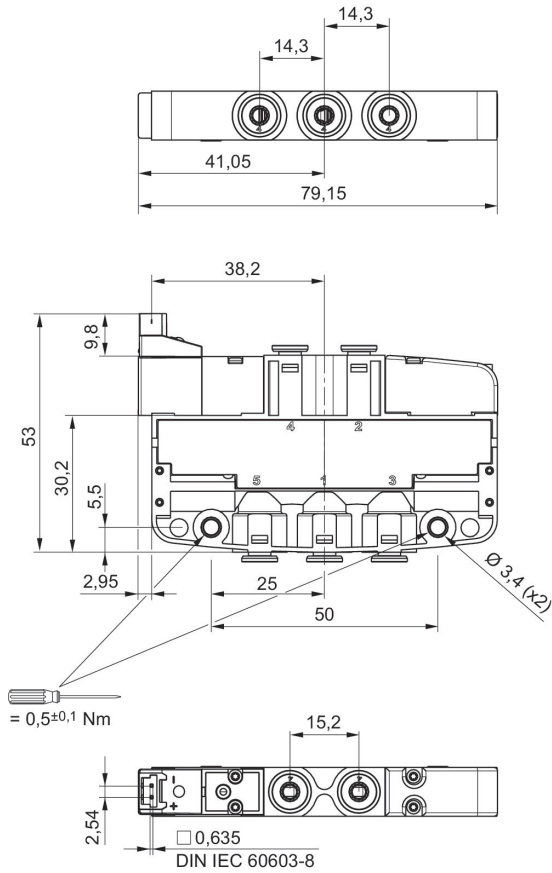


	Switching principle	port pneumatic input 1	Compressed air connection output	Compressed air connection, exhaust	Operational voltage	Pilot	Power consumption DC [W]	Part No.
	5/2, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	0.8	R422103559
	5/2, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	0.8	R422103560
	5/2, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	0.8	R422103567
	5/2, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	0.8	R422103568

Voltage tolerance DC	Manual override	Nominal flow Qn 1 to 2 [l/min]	Part No.
-10 % / +10 %	without detent	180	R422103559
-10 % / +10 %	without detent	310	R422103560
-10 % / +10 %	without detent	180	R422103567
-10 % / +10 %	without detent	310	R422103568

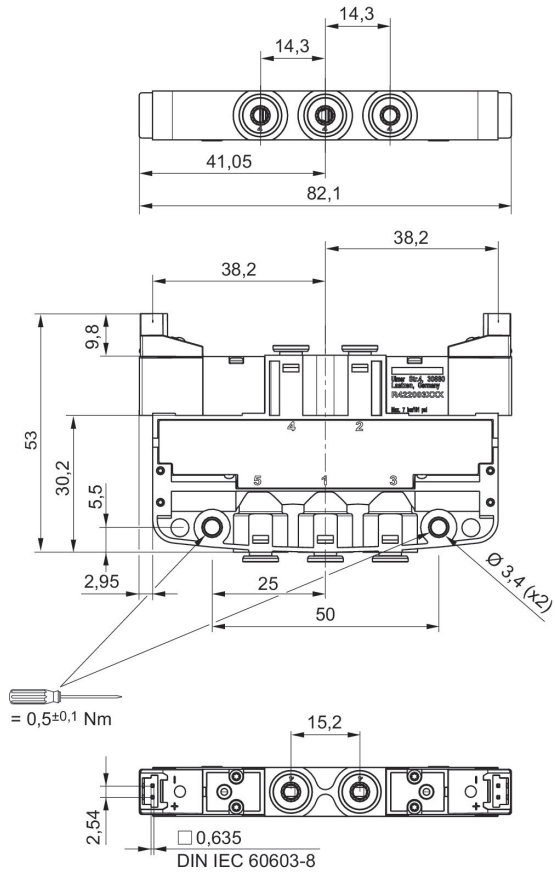
R422103559, R422103560

dimensions, single solenoid



R422103567, R422103568

dimensions, double solenoid



5/2-directional valve, Series LS04-XS, 2-pin

Activation: Electrically

Electrical connection 2, thread size: Industrial plug connector

Electrical connection 2, number of poles: 2-pin

Compressed air connection type: Push-in fitting

Duty cycle: 100 %

Type: Spool valve, positive overlapping

Ambient temperature min./max.: -10 °C ... 50 °C

Medium temperature min./max.: -10 °C ... 50 °C

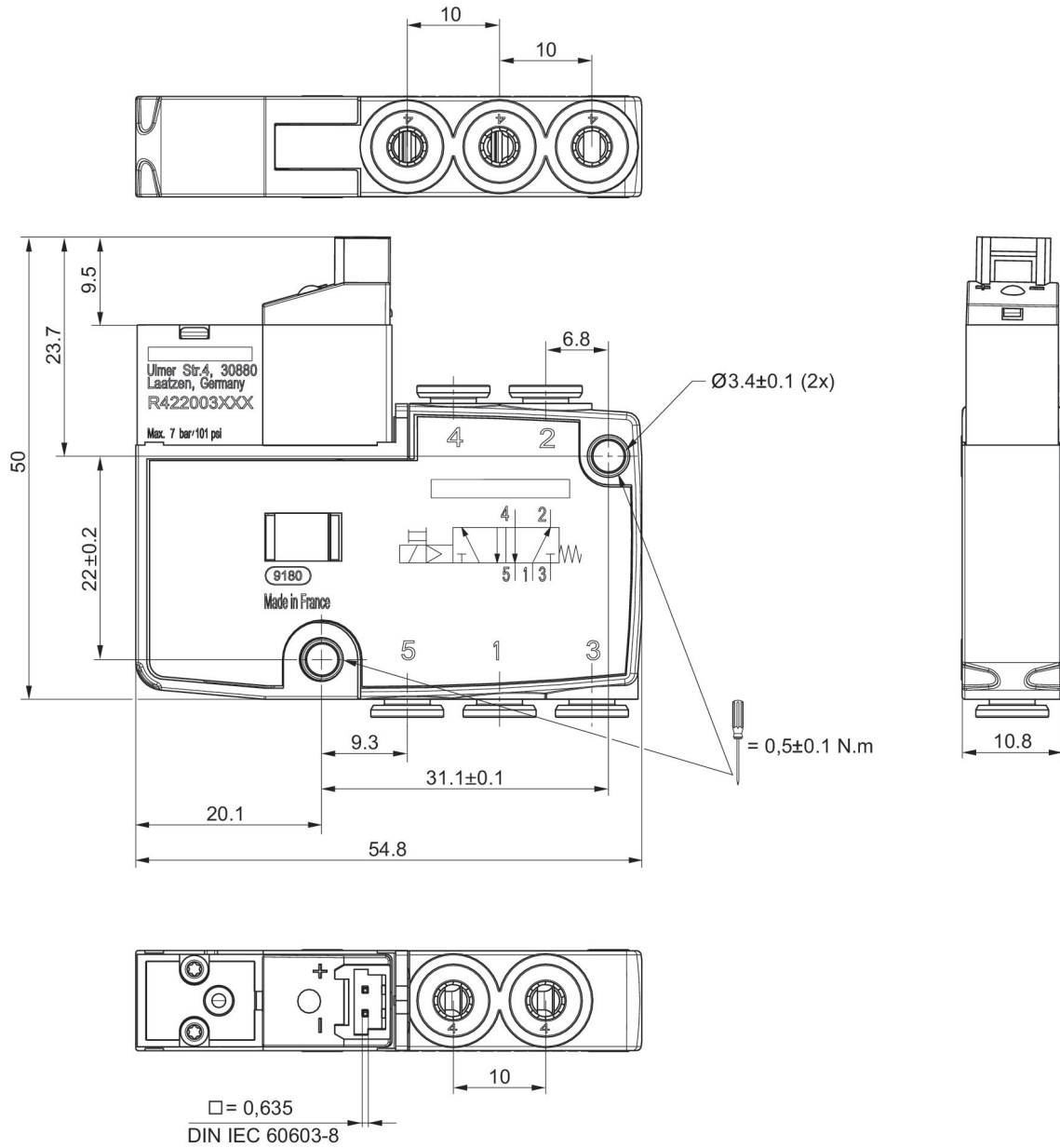
Working pressure min./max.: 3 bar ... 7 bar



	Switching principle	port pneumatic input 1	Compressed air connection output	Compressed air connection, exhaust	Operational voltage	Pilot	Power consumption DC [W]	Part No.
	5/2, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	0.8	R422103557
	5/2, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	0.8	R422103555

Voltage tolerance DC	Manual override	Nominal flow Qn 1 to 2 [l/min]	Part No.
-10 % / +10 %	with detent	200	R422103557
-10 % / +10 %	without detent	200	R422103555

Dimensions



5/2-directional valve, Series LS04-XS, 3-pin

Activation: Electrically

Electrical connection 2, thread size: M8

Electrical connection 2, number of poles: 3-pin

Compressed air connection type: Push-in fitting

Duty cycle: 100 %

Type: Spool valve, positive overlapping

Ambient temperature min./max.: -10 °C ... 50 °C

Medium temperature min./max.: -10 °C ... 50 °C

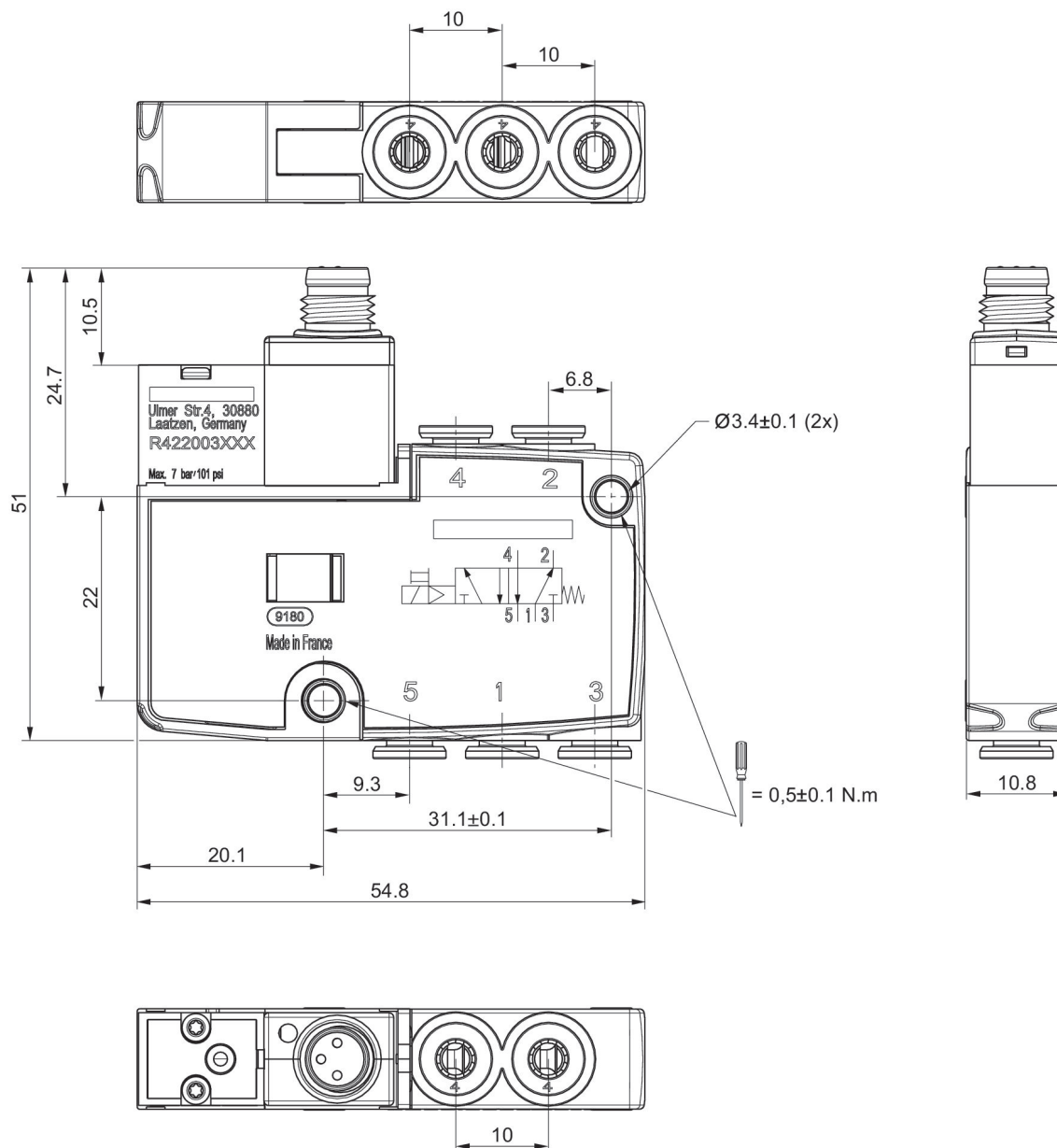
Working pressure min./max.: 3 bar ... 7 bar



	Switching principle	port pneumatic input 1	Compressed air connection output	Compressed air connection, exhaust	Operational voltage	Pilot	Power consumption DC [W]	Part No.
	5/2, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	0.8	R422103556
	5/2, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	0.8	R422103558

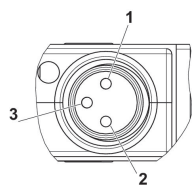
Voltage tolerance DC	Manual override	Nominal flow Qn 1 to 2 [l/min]	Part No.
-10 % / +10 %	without detent	200	R422103556
-10 % / +10 %	with detent	200	R422103558

Dimensions



R422103556, R422103558

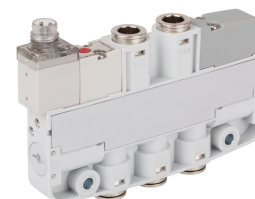
PIN assignment for valve plug connectors



- 1) DC -/+
- 2) not assigned
- 3) DC -/+

5/2-directional valve, Series LS04-AF, 3-pin

Activation: Electrically
 Electrical connection 2, thread size: M8
 Electrical connection 2, number of poles: 3-pin
 Compressed air connection type: Push-in fitting
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Ambient temperature min./max.: -10 °C ... 50 °C
 Medium temperature min./max.: -10 °C ... 50 °C
 Working pressure min./max.: 7 bar



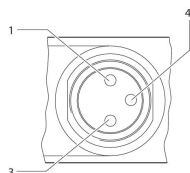
	Switching principle	port pneumatic input 1	Compressed air connection output	Compressed air connection, exhaust	Operational voltage	Pilot	Power consumption DC [W]	Part No.
	5/2, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	0.8	R422103561
	5/2, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	0.8	R422103562
	5/2, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	0.8	R422103569
	5/2, double solenoid	Ø 6	Ø 6	Ø 6	24 V DC	Internal	0.8	R422103570

Voltage tolerance DC	Manual override	Nominal flow Qn 1 to 2 [l/min]	Part No.
-10 % / +10 %	without detent	180	R422103561
-10 % / +10 %	without detent	310	R422103562
-10 % / +10 %	without detent	180	R422103569
-10 % / +10 %	without detent	310	R422103570

R422103561, R422103562, R422103569, R422103570

PIN assignment for valve plug connectors

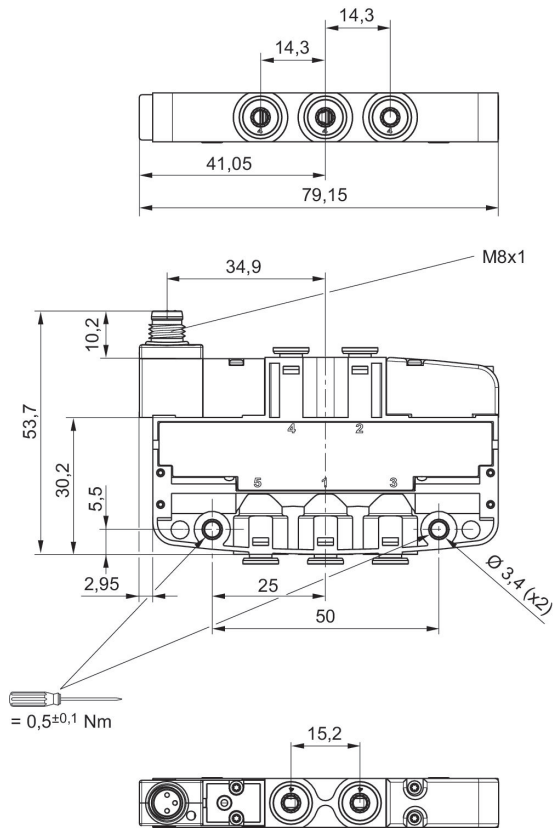
3-pin



1) Pin not assigned 3) 0 V 4) 24 V Note: Bi-polar protective circuit to prevent overvoltage

R422103561, R422103562

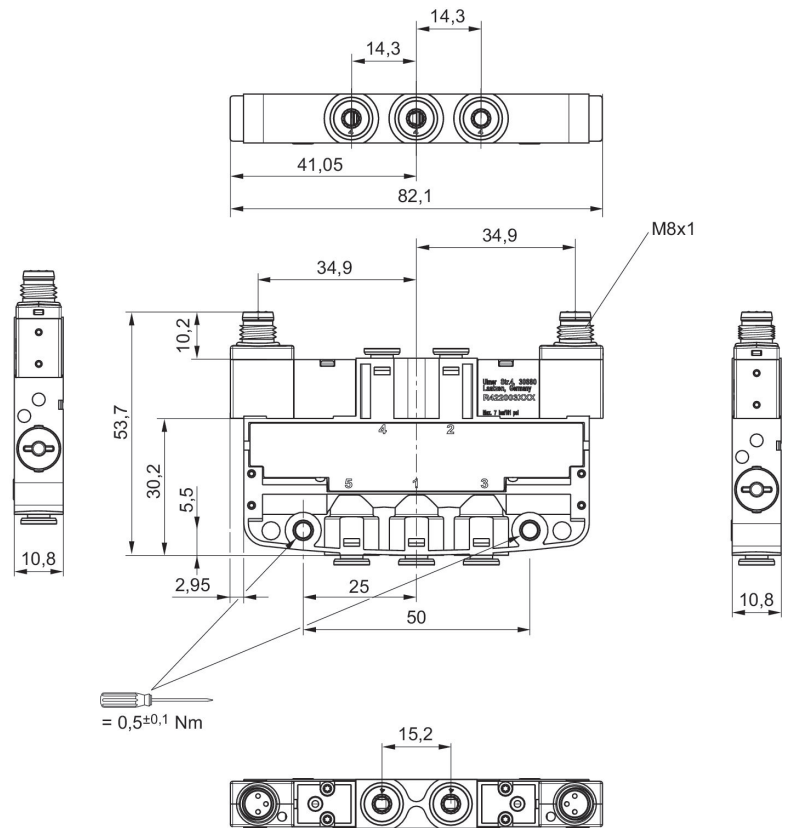
dimensions, single solenoid



R422103569, R422103570

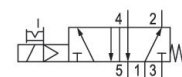
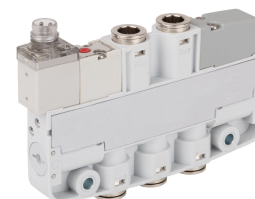
Dimensions

Double Solenoid



5/2-directional valve, Series LS04-AF, 3-pin

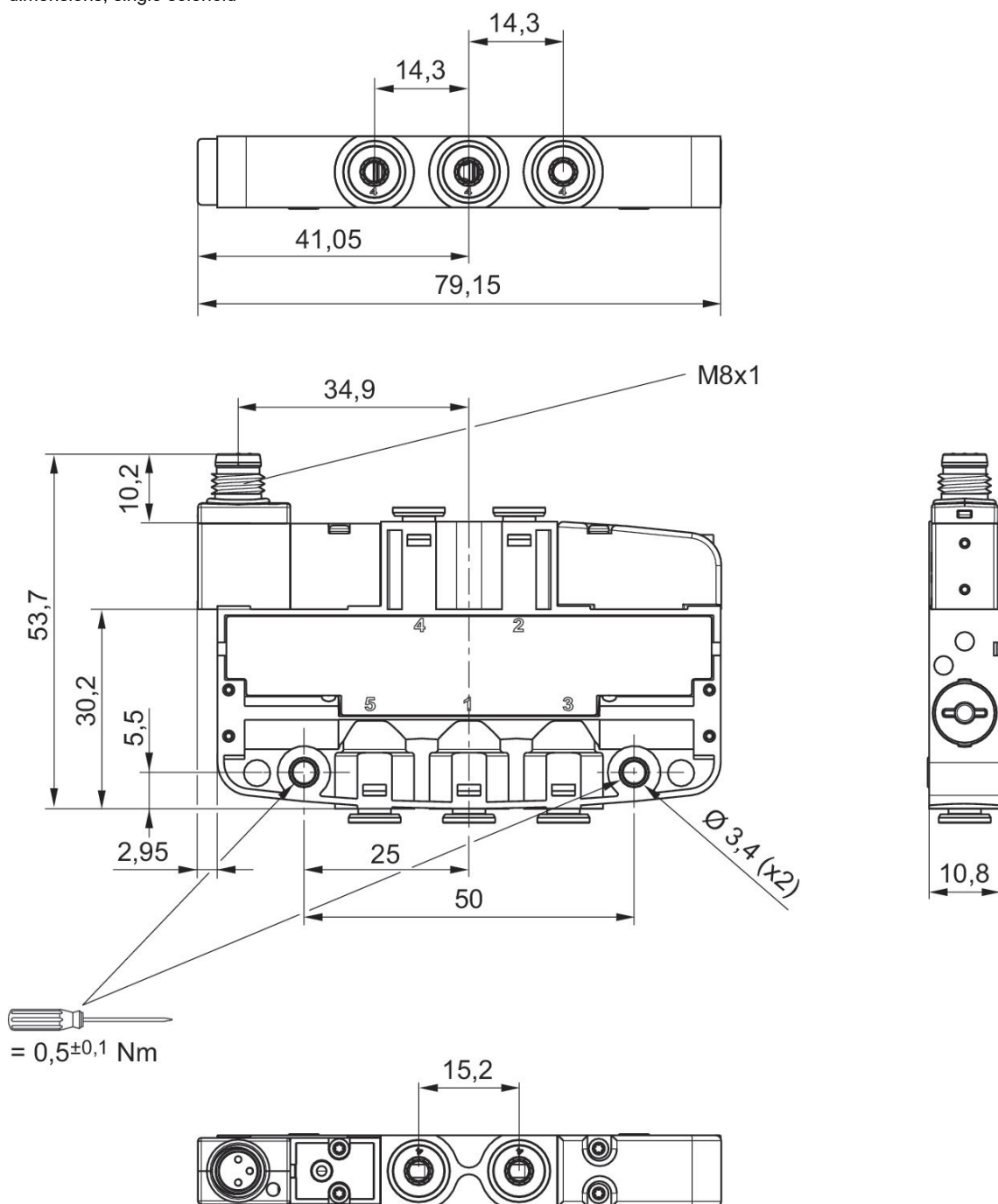
Activation: Electrically
 Electrical connection 2, thread size: M8
 Electrical connection 2, number of poles: 3-pin
 Compressed air connection type: Push-in fitting
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Ambient temperature min./max.: -10 °C ... 50 °C
 Medium temperature min./max.: -10 °C ... 50 °C
 Working pressure min./max.: 3 bar ... 7 bar



Switching principle	port pneumatic input 1	Compressed air connection output	Compressed air connection, exhaust	Operational voltage	Pilot	Power consumption DC [W]	Voltage tolerance DC	Part No.
5/2, with spring return	Ø 4	Ø 4	Ø 4	24 V DC	Internal	0.8	-10 % / +10 %	R422103565
5/2, with spring return	Ø 6	Ø 6	Ø 6	24 V DC	Internal	0.8	-10 % / +10 %	R422103566

Manual override	Nominal flow Qn 1 to 2 [l/min]	Part No.
with detent	180	R422103565
with detent	310	R422103566

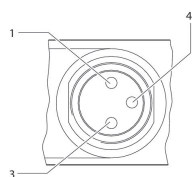
dimensions, single solenoid



R422103565, R422103566

PIN assignment for valve plug connectors

3-pin



1) Pin not assigned 3) 0 V 4) 24 V Note: Bi-polar protective circuit to prevent overvoltage

5/3-directional valve, Series LS04-AF, 2-pin

Activation: Electrically

Electrical connection 2, thread size: Industrial plug connector

Electrical connection 2, number of poles: 2-pin

Compressed air connection type: Push-in fitting

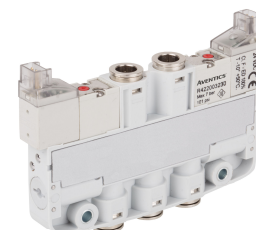
Duty cycle: 100 %

Type: Spool valve, positive overlapping

Ambient temperature min./max.: -10 °C ... 50 °C

Medium temperature min./max.: -10 °C ... 50 °C

Working pressure min./max.: 3 bar ... 7 bar



	Valve function	Switching principle	port pneumatic input 1	Compressed air connection output	Compressed air connection, exhaust	Operational voltage	Pilot	Part No.
	Closed Center	5/3, closed center	Ø 4	Ø 4	Ø 4	24 V DC	Internal	R422103844
	Closed Center	5/3, closed center	Ø 6	Ø 6	Ø 6	24 V DC	Internal	R422103845

Power consumption DC [W]	Voltage tolerance DC	Manual override	Nominal flow Qn 1 to 2 [l/min]	Part No.
0.8	-10 % / +10 %	with detent	170	R422103844
0.8	-10 % / +10 %	with detent	270	R422103845

5/3-directional valve, Series LS04-AF, 2-pin

Activation: Electrically

Electrical connection 2, thread size: Industrial plug connector

Electrical connection 2, number of poles: 2-pin

Compressed air connection type: Push-in fitting

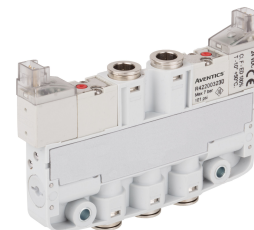
Duty cycle: 100 %

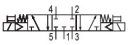
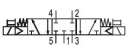
Type: Spool valve, positive overlapping

Ambient temperature min./max.: -10 °C ... 50 °C

Medium temperature min./max.: -10 °C ... 50 °C

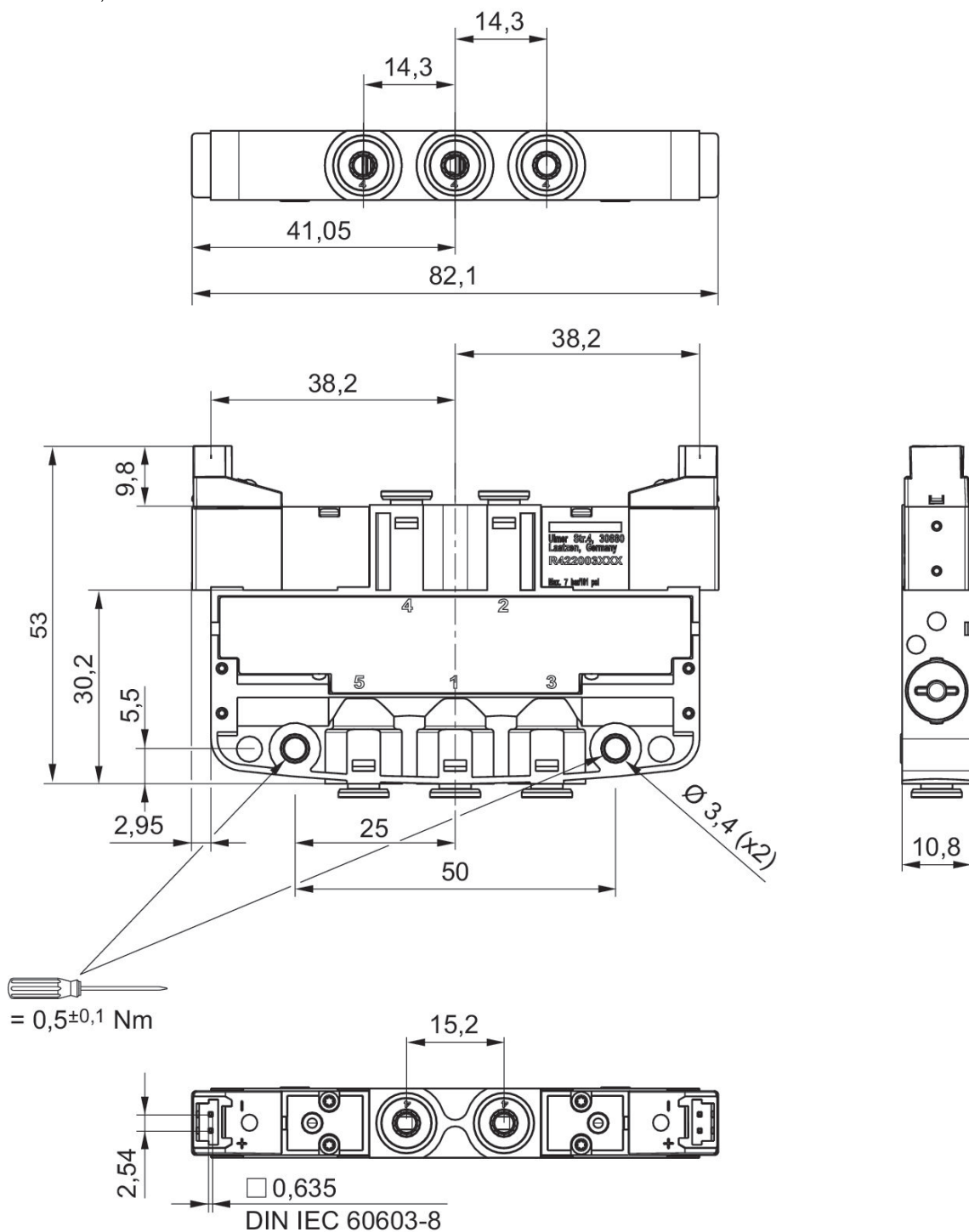
Working pressure min./max.: 3 bar ... 7 bar



	Valve function	Switching principle	port pneumatic input 1	Compressed air connection output	Compressed air connection, exhaust	Operational voltage	Pilot	Part No.
	Closed Center	5/3, closed center	Ø 4	Ø 4	Ø 4	24 V DC	Internal	R422103840
	Closed Center	5/3, closed center	Ø 6	Ø 6	Ø 6	24 V DC	Internal	R422103841

Power consumption DC [W]	Voltage tolerance DC	Manual override	Nominal flow Qn 1 to 2 [l/min]	Part No.
0.8	-10 % / +10 %	without detent	170	R422103840
0.8	-10 % / +10 %	without detent	270	R422103841

dimensions, double solenoid



5/3-directional valve, Series LS04-AF, 3-pin

Activation: Electrically

Electrical connection 2, thread size: M8

Electrical connection 2, number of poles: 3-pin

Compressed air connection type: Push-in fitting

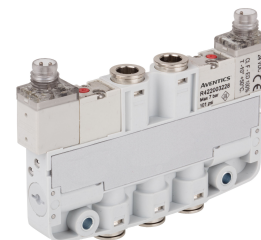
Duty cycle: 100 %

Type: Spool valve, positive overlapping

Ambient temperature min./max.: -10 °C ... 50 °C

Medium temperature min./max.: -10 °C ... 50 °C

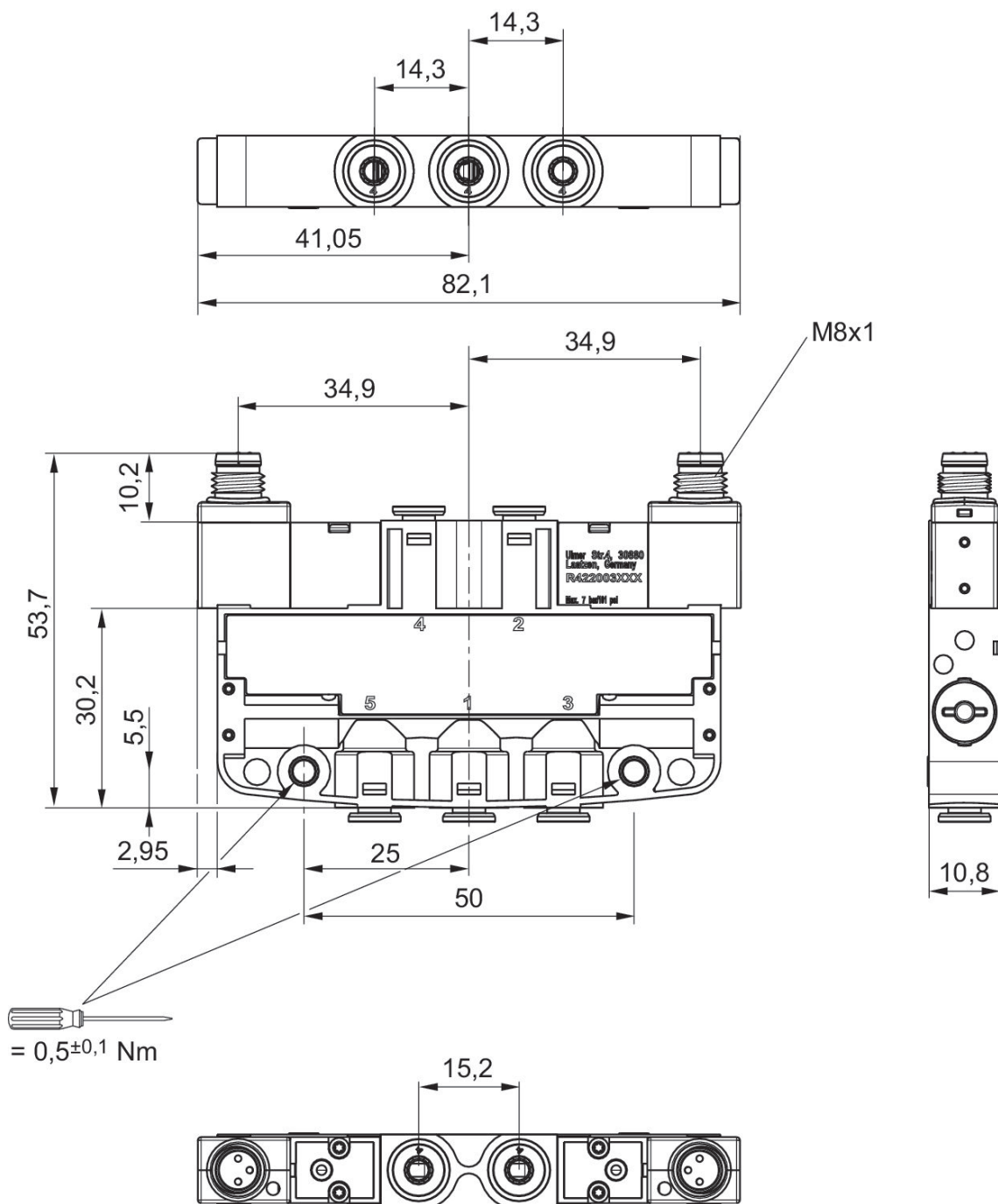
Working pressure min./max.: 3 bar ... 7 bar



	Valve function	Switching principle	port pneumatic input 1	Compressed air connection output	Compressed air connection, exhaust	Operational voltage	Pilot	Part No.
	Closed Center	5/3, closed center	Ø 4	Ø 4	Ø 4	24 V DC	Internal	R422103842
	Closed Center	5/3, closed center	Ø 6	Ø 6	Ø 6	24 V DC	Internal	R422103843

Power consumption DC [W]	Voltage tolerance DC	Manual override	Nominal flow Qn 1 to 2 [l/min]	Part No.
0.8	-10 % / +10 %	without detent	170	R422103842
0.8	-10 % / +10 %	without detent	270	R422103843

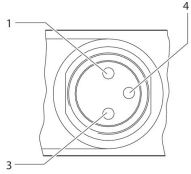
Dimensions
Double Solenoid



R422103842, R422103843

PIN assignment for valve plug connectors

3-pin



1) Pin not assigned 3) 0 V 4) 24 V Note: Bi-polar protective circuit to prevent overvoltage

5/3-directional valve, Series LS04-AF, 3-pin

Activation: Electrically

Electrical connection 2, thread size: M8

Electrical connection 2, number of poles: 3-pin

Compressed air connection type: Push-in fitting

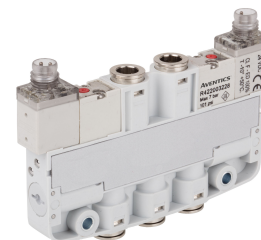
Duty cycle: 100 %

Type: Spool valve, positive overlapping

Ambient temperature min./max.: -10 °C ... 50 °C

Medium temperature min./max.: -10 °C ... 50 °C

Working pressure min./max.: 3 bar ... 7 bar



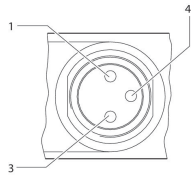
	Valve function	Switching principle	port pneumatic input 1	Compressed air connection output	Compressed air connection, exhaust	Operational voltage	Pilot	Part No.
	Closed Center	5/3, closed center	Ø 4	Ø 4	Ø 4	24 V DC	Internal	R422103846
	Closed Center	5/3, closed center	Ø 6	Ø 6	Ø 6	24 V DC	Internal	R422103847

Power consumption DC [W]	Voltage tolerance DC	Manual override	Nominal flow Qn 1 to 2 [l/min]	Part No.
0.8	-10 % / +10 %	with detent	170	R422103846
0.8	-10 % / +10 %	with detent	270	R422103847

R422103846, R422103847

PIN assignment for valve plug connectors

3-pin



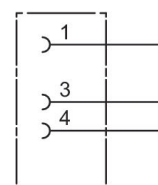
1) Pin not assigned 3) 0 V 4) 24 V Note: Bi-polar protective circuit to prevent overvoltage

Round plug connector, Series CON-RD

Electrical connection 1: Socket ... M8x1 ... 3-pin ... straight

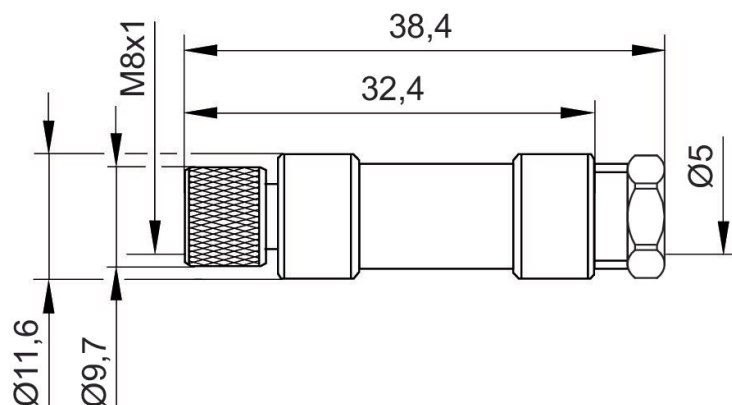
Connection type: Soldering

Ambient temperature min./max.: -25 °C ... 80 °C



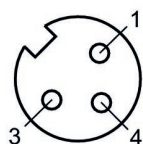
Operational voltage	Coding	Shielding	Connection type	Max. current [A]	min. suitable cable Ø [mm]	max. suitable cable Ø [mm]	Part No.
48 V AC/DC	A-coded	unshielded	Soldering	4	3.5	5	1834484173

Dimensions



1834484173

Pin assignment, socket

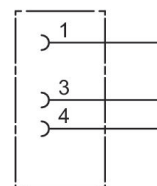


Round plug connector, Series CON-RD

Electrical connection 1: Socket ... M8x1 ... 3-pin ... angled

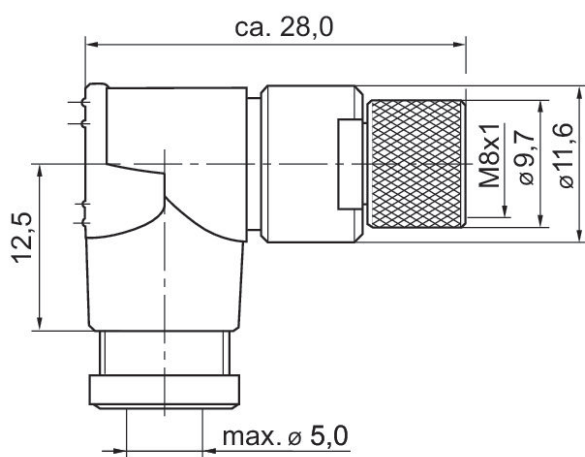
Connection type: Soldering

Ambient temperature min./max.: -25 °C ... 80 °C



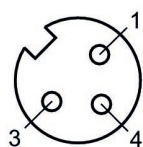
Operational voltage	Coding	Shielding	Connection type	Max. current [A]	min. suitable cable Ø [mm]	max. suitable cable Ø [mm]	Part No.
48 V AC/DC	A-coded	unshielded	Soldering	4	3.5	5	1834484174

Dimensions in mm



1834484174

Pin assignment, socket



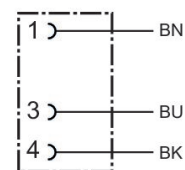
Round plug connector, Series CON-RD

Electrical connection 1: Socket ... M8x1 ... 3-pin ... straight

Electrical connection 2: open cable ends ... 3-pin

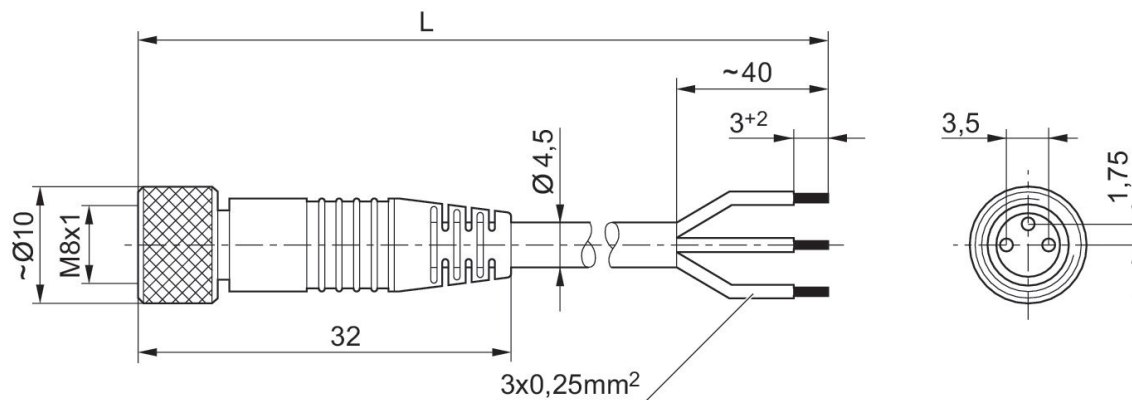
Certification: UL (Underwriters Laboratories)

Ambient temperature min./max.: -25 °C ... 85 °C



Operational voltage	Electrical connection 1, type	Electrical connection 1, thread size	Electrical connection 1, number of poles	Electrical connection 1, coding	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	open cable ends	3-pin	3	1834484166
48 V AC/DC	Socket	M8x1	3-pin	A-coded	open cable ends	3-pin	5	1834484168
48 V AC/DC	Socket	M8x1	3-pin	A-coded	open cable ends	3-pin	10	1834484247

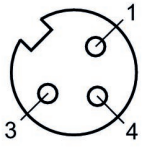
Dimensions



L = length

1834484166, 1834484168, 1834484247

Pin assignment, socket



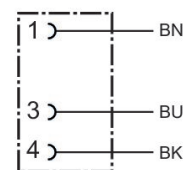
(1) BN=brown (3) BU=blue (4) BK=black

Round plug connector, Series CON-RD

Electrical connection 1: Socket ... M8x1 ... 3-pin ... angled

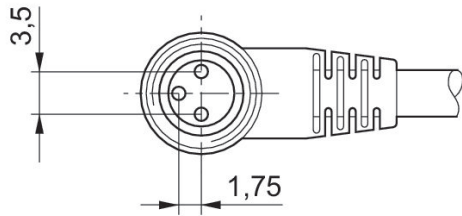
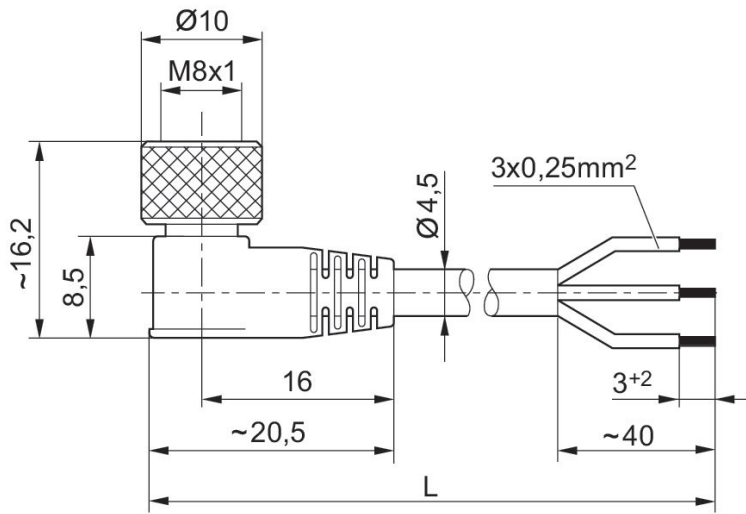
Electrical connection 2: open cable ends ... 3-pin

Ambient temperature min./max.: -40 °C ... 85 °C



Operational voltage	Electrical connection 1, type	Electrical connection 1, thread size	Electrical connection 1, number of poles	Electrical connection 1, coding	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	open cable ends	3-pin	3	1834484167
48 V AC/DC	Socket	M8x1	3-pin	A-coded	open cable ends	3-pin	5	1834484169
48 V AC/DC	Socket	M8x1	3-pin	A-coded	open cable ends	3-pin	10	1834484248

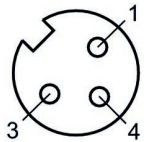
Dimensions



L = length

1834484167, 1834484169, 1834484248

Pin assignment, socket

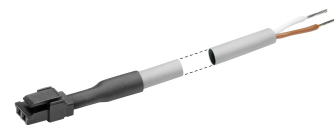


(1) BN=brown (3) BU=blue (4) BK=black

Valve plug connector, series CON-VP

Electrical connection 1: Socket ... RJ ... 2-pin ... straight

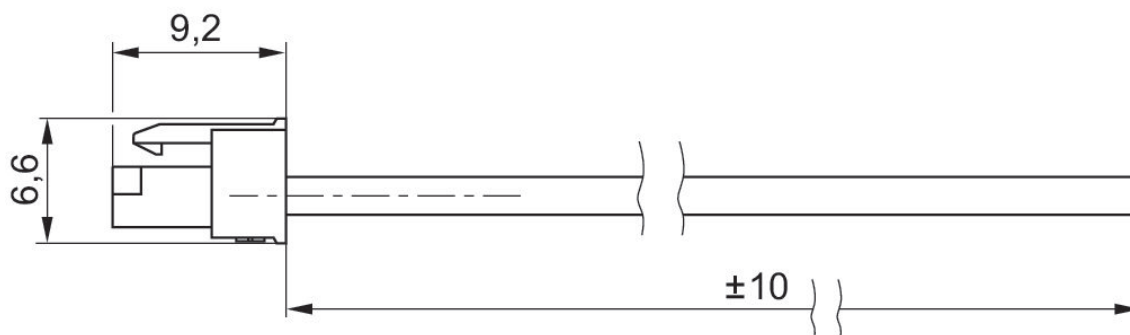
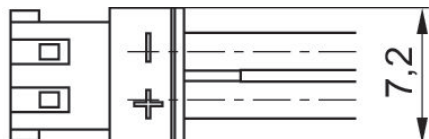
Electrical connection 2: open cable ends



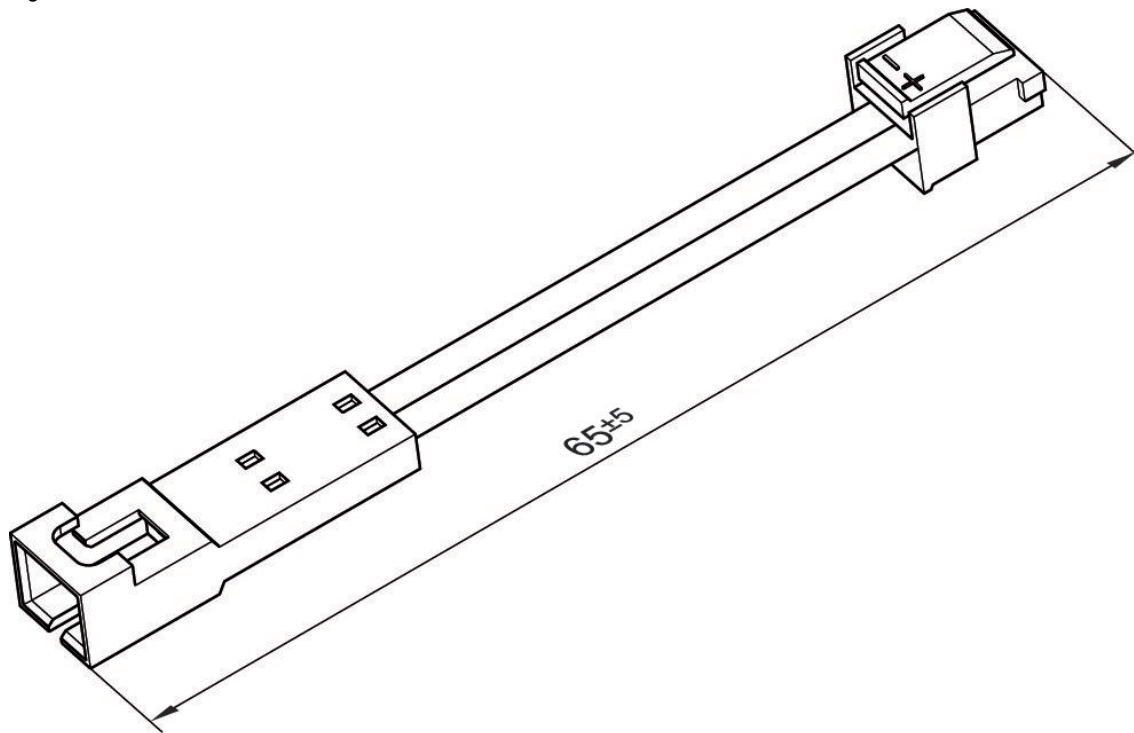
Operational voltage	Electrical connection 1, type	Electrical connection 1, thread size	Electrical connection 1, number of poles	Electrical connection 2, type	Electrical connection 2, thread size	Electrical connection 2, number of poles	Cable length [m]	Part No.
48 V AC/DC	Socket	Industrial plug connector	2-pin	open cable ends				R422003277
48 V AC/DC	Socket	Industrial plug connector	2-pin	open cable ends		2-pin	3	R422003278
48 V AC/DC	Socket	Industrial plug connector	2-pin	open cable ends		2-pin	5	R422003279
48 V AC/DC	Socket	Industrial plug connector	2-pin	Plug	Industrial plug connector	2-pin	0.06	R412024482

Dimensions

Fig. 1







Dimensions
Fig. 2



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™