

M23 Power
Plug-in connector RLS

DOK-CONNEC-RLS23XX****-DA01-EN-P

R911424869
Edition 01

1 M23 Cable connector SpeedCon Technical data

Technical data



Designation	Symbol	Unit	RLS2301/CM01	RLS2301/CM02	RLS2308/CM03	RLS2311/CM05
Material number (accessory)			R911378092	R911381139	R911381142	R911377460
Type			Cable connector			
Connector size			M23			
Mode of locking			SpeedCon			
Cable type			REL0105	REL0106	REL0107	-
Clamping range ØA	D	mm	11 ... 14		12 ... 15	7.5 ... 9
Coding			Bosch specific pole pattern			
Number of poles plug-in connectors			3+PE+5			
Contacts (amount and size)			4x (0.75 ... 1.5) + 5x (0.25 ... 1.0)		4x (1.0 ... 2.5) + 5x (0.25 ... 1.0)	4x (0.75 ... 1.5)
Maximum rated current plug-in connector power ¹⁾	I _{N P}	A	18 A (CSA) 27 A (UL)			
Maximum rated current plug-in connector signal ²⁾	I _{N S}	A	1 A (CSA+UL)		5 A (CSA) 10 A (UL)	
Mass	m	kg			0.130	
Contact design			Socket			
Connection design			Crimp			
Rated voltage power contact	U _{N P}	V			600	
Rated voltage signal contact	U _{N S}	V			125	
Overvoltage category			III			
Resistor	R	mOhm			< 3	
Temperature range	T _a	°C			-40 ... 125	
Installation altitude	h	m			3000	
Pollution degree			3			
Housing material			GD-Zn nickel-plated			
Contact material			CuZn, gold-plated 0.2 µm			
Mating cycles			100			
Contact carrier material			PA66			
Sealings			FKM			
Protection mode (locked)			IP67			
UL/CSA Approvals			cURus			
E-file number			E153698			
RoHS (EU)			Compliant with Directive 2011/65/EU			
RoHS (China)			according to directive SJ/T 11364, EFUP 50			
Identification "B"			Black			

1) 2) Related to the maximum possible contact size within the respective plug-in connector size. Observe reducing factors, like smaller contacts, cable cross-sections, temperature, local regulations.

Latest amendment: 2024-04-22

Table 1: Cable connector

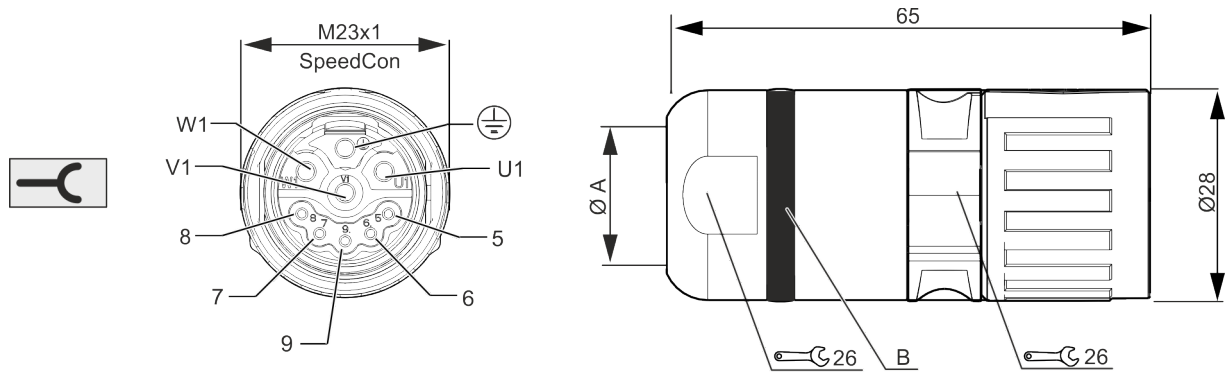


Fig. 1: RLS2301/CM01, RLS2301/CM02, RLS2311/CM05
 ØA Clamping range / cable diameter see "Technical data"
 B Identification see "Technical data"

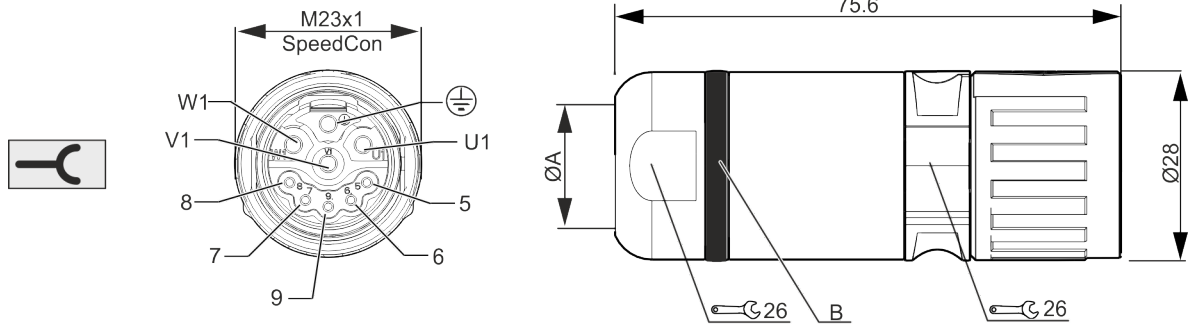


Fig. 2: RLS2308/CM03
 ØA Clamping range / cable diameter see "Technical data"
 B Identification see "Technical data"

2 M23 Cable coupling SpeedCon

Technical data



Designation	Symbol	Unit	RLS2302/CM01	RLS2302/CM02	RLS2309/CM03	RLS2312/CM05
Material number (accessory)			R911380335	R911381140	R911381143	R911342394
Type			Cable coupling			
Connector size			M23			
Mode of locking			SpeedCon			
Cable type			REL0105	REL0106	REL0107	-
Clamping range ØA	D	mm	11 ... 14		12 ... 15	7.5 ... 9.5
Coding			Bosch specific pole pattern			
Number of poles plug-in connectors			3+PE+5			
Contacts (amount and size)			4x (0.75 ... 1.5) + 5x (0.25 ... 1.0)		4x (1.0 ... 2.5) + 5x (0.25 ... 1.0)	4x (0.75 ... 1.5)
Maximum rated current plug-in connector power ¹⁾	I _{N P}	A	18 A (CSA) 27 A (UL)			
Maximum rated current plug-in connector signal ²⁾	I _{N S}	A	5 A (CSA) 10 A (UL)			
Mass	m	kg		0.110		0.100
Contact design			Pin			
Connection design			Crimp			
Rated voltage power contact	U _{N P}	V	600			
Rated voltage signal contact	U _{N S}	V	125			
Overvoltage category			III			
Resistor	R	mOhm	< 3			
Temperature range	T _a	°C	-40 ... 125			
Installation altitude	h	m	3000			
Pollution degree			3			
Housing material			GD-Zn nickel-plated			
Contact material			CuZn, gold-plated 0.2 µm			
Mating cycles			100			
Contact carrier material			PA66			
Sealings			FKM			
Protection mode (locked)			IP67			
UL/CSA Approvals			cURus			
E-file number			E153698			
RoHS (EU)			Compliant with Directive 2011/65/EU			
RoHS (China)			according to directive SJ/T 11364, EFUP 50			
Identification "B"			Black			

1) 2) Related to the maximum possible contact size within the respective plug-in connector size. Observe reducing factors, like smaller contacts, cable cross-sections, temperature, local regulations.

Latest amendment: 2024-04-22

Table 2: Cable coupling

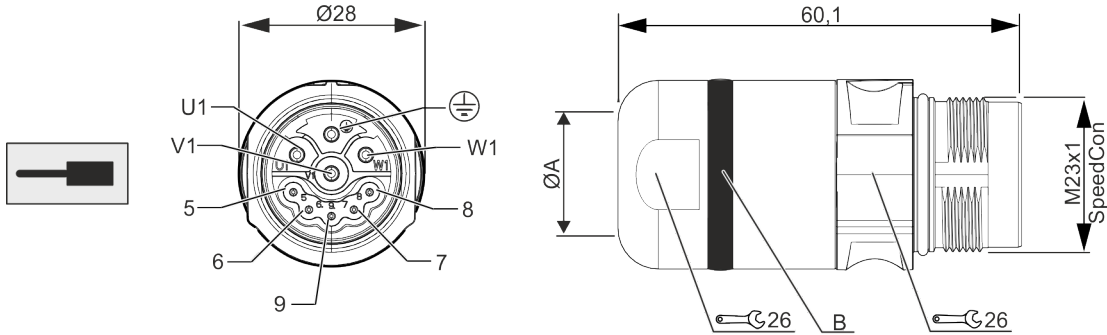


Fig. 3: RLS2302/CM01, RLS2302/CM02, RLS2312/CM05
ØA Clamping range / cable diameter see "Technical data"
B Identification see "Technical data"

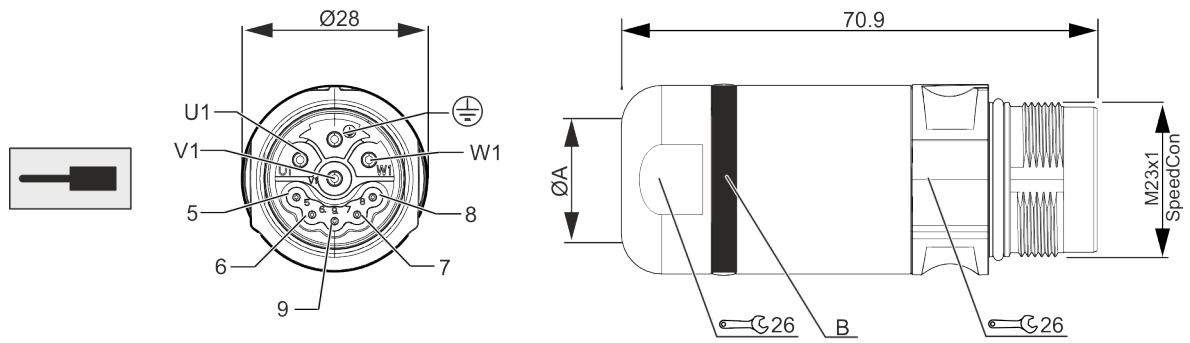


Fig. 4: RLS2309/CM03

ØA Clamping range / cable diameter see "Technical data"

B Identification see "Technical data"

3 M23 Cable coupling Speedtec

Technical data



Designation	Symbol	Unit	RLS2352/CUB3	RLS2362/CUB3	RLS2372/CUB3
Material number (accessory)			R911398822	R911398823	R911398824
Type			Cable coupling		
Connector size			M23		
Mode of locking			Speedtec		
Cable type			Cable tail ML3	Cable tail ML3	Cable tail ML3
Clamping range ØA	D	mm	Twin hole clamping 6.0 / 8.5	Twin hole clamping 5.0 / 10.5	Twin hole clamping 4.5 / 11.5
Coding			-		
Number of poles plug-in connectors			3+PE+4		
Contacts (amount and size)			4x (0.35 ... 2.5) + 2x (0.14 ... 1.0)		
Maximum rated current plug-in connector power ¹⁾	I _{N P}	A	30		
Maximum rated current plug-in connector signal ²⁾	I _{N S}	A	7		
Mass	m	kg	0.124	0.125	0.124
Contact design			Pin		
Connection design			Crimp		
Rated voltage power contact	U _{N P}	V	630 (AC/DC)		
Rated voltage signal contact	U _{N S}	V	250 (AC/DC)		
Overvoltage category			III		
Resistor	R	mOhm	Power < 3 Signal < 5		
Temperature range	T _a	°C	-20 ... 130		
Installation altitude	h	m	2,000		
Pollution degree			3		
Housing material			GD-Zn nickel-plated		
Contact material			CuZn, gold-plated		
Mating cycles			500		
Contact carrier material			PA6.6 mod., UL94/V0		
Sealings			FKM		
Protection mode (locked)			IP66 ... 67		
UL/CSA Approvals			-		
E-file number			-		
RoHS (EU)			Compliant with Directive 2011/65/EU		
RoHS (China)			according to directive SJ/T 11364, EFUP 50		
Identification "B"					

1) 2) Related to the maximum possible contact size within the respective plug-in connector size. Observe reducing factors, like smaller contacts, cable cross-sections, temperature, local regulations.

Latest amendment: 2023-06-01

Table 3: Cable coupling

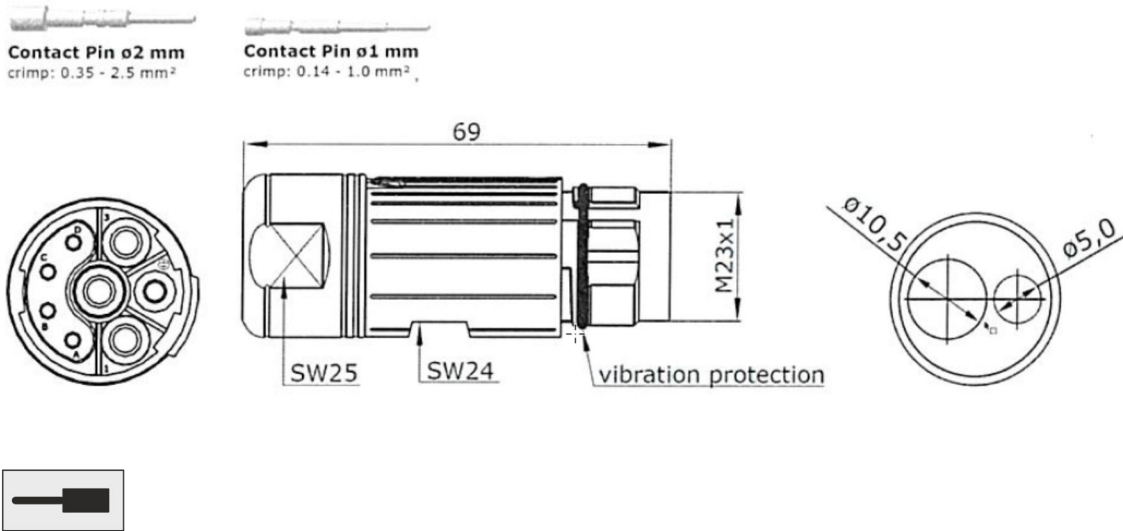


Fig. 5: RLS2362

4 M23 Flange socket SpeedCon Technical data

Technical data



Designation	Symbol	Unit	RLS2303/C02	RLS2303/C03
Material number (accessory set)			R911381141	R911394319
Type			Flange socket	
Connector size			M23	
Mode of locking			SpeedCon	
Cable type			-	
Clamping range ØA	D	mm	-	
Coding			Bosch specific pole pattern	
Number of poles plug-in connectors			3+PE+5	
Contacts (amount and size)			4x (0.75 ... 1.5) + 5x (0.25 ... 1.0	4x (1.0 ... 2.5) + 5x (0.14 ... 0.5)
Maximum rated current plug-in connector power ¹⁾	I _{N P}	A	18 A (CSA) 27 A (UL)	
Maximum rated current plug-in connector signal ²⁾	I _{N S}	A	5 A (CSA) 10 A (UL)	
Mass	m	kg	0.050	
Contact design			Pin	
Connection design			Crimp	
Rated voltage power contact	U _{N P}	V	600	
Rated voltage signal contact	U _{N S}	V	125	
Overvoltage category			III	
Resistor	R	mOhm	< 3	
Temperature range	T _a	°C	-40 ... 125	
Installation altitude	h	m	3000	
Pollution degree			3	
Housing material			GD-Zn nickel-plated	
Contact material			CuZn, gold-plated 0.2 µm	
Mating cycles			100	
Contact carrier material			PA66	
Sealings			FKM	
Protection mode (locked)			IP67	
UL/CSA Approvals			cURus	
E-file number			E153698	
RoHS (EU)			Compliant with Directive 2011/65/EU	
RoHS (China)			according to directive SJ/T 11364, EFUP 50	
Identification “B”			Without	
1) 2) Related to the maximum possible contact size within the respective plug-in connector size. Observe reducing factors, like smaller contacts, cable cross-sections, temperature, local regulations.				
Latest amendment: 2024-04-22				

Table 4: Flange socket

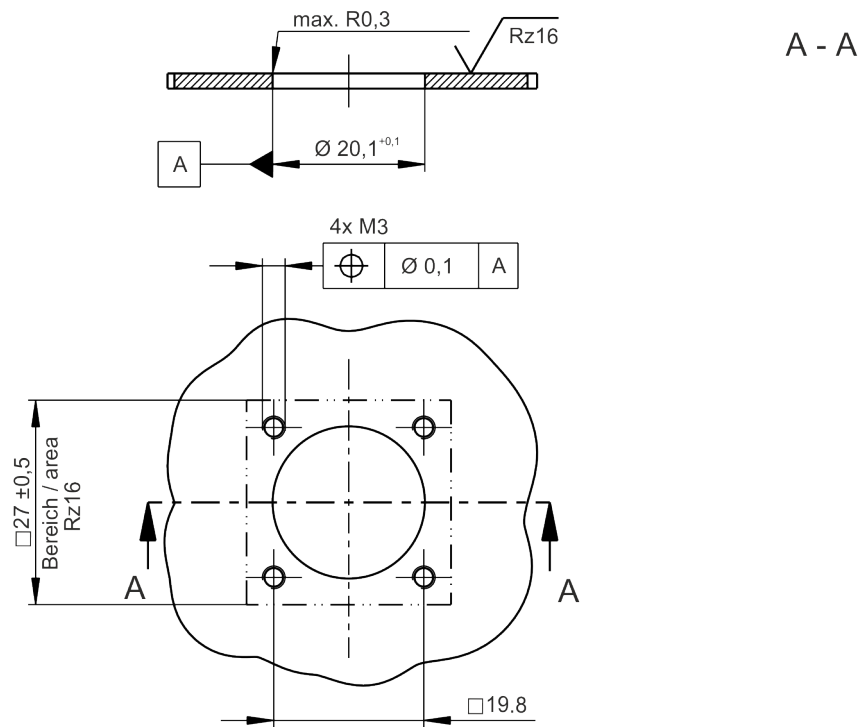
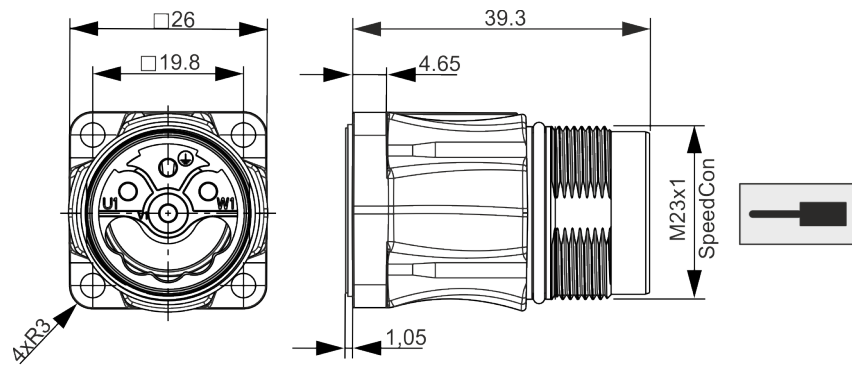


Fig. 6: RLS2303/C02_, RLS2303/C03_

5 M23 Flange socket SpeedCon Technical data

Technical data



Designation	Symbol	Unit	RLS2304/CM01	RLS2304/CM02
Material number (accessory)			RR911386848	R911386847
Type			Flange connector	
Connector size			M23	
Mode of locking			SpeedCon	
Cable type			REL0105	REL0106
Clamping range ØA	D	mm	11 ... 14	
Coding			Bosch specific pole pattern	
Number of poles plug-in connectors			3+PE+5	
Contacts (amount and size)			4x (0.75 ... 1.5) + 5x (0.25 ... 1.0)	
Maximum rated current plug-in connector power ¹⁾	I _{N P}	A	18 A (CSA) 27 A (UL)	
Maximum rated current plug-in connector signal ²⁾	I _{N S}	A	5 A (CSA) 10 A (UL)	
Mass	m	kg	0.150	
Contact design			Pin	
Connection design			Crimp	
Rated voltage power contact	U _{N P}	V	600	
Rated voltage signal contact	U _{N S}	V	125	
Overvoltage category			III	
Resistor	R	mOhm	< 3	
Temperature range	T _a	°C	-40 ... 125	
Installation altitude	h	m	3000	
Pollution degree			3	
Housing material			GD-Zn nickel-plated	
Contact material			CuZn, gold-plated 0.2 µm	
Mating cycles			100	
Contact carrier material			PA66	
Sealings			FKM	
Protection mode (locked)			IP67	
UL/CSA Approvals			cURus	
E-file number			E153698	
RoHS (EU)			Compliant with Directive 2011/65/EU	
RoHS (China)			according to directive SJ/T 11364, EFUP 50	
Identification “B”			Black	
1) 2) Related to the maximum possible contact size within the respective plug-in connector size. Observe reducing factors, like smaller contacts, cable cross-sections, temperature, local regulations.				
Latest amendment: 2019-04-17				

Table 5: Flange connector

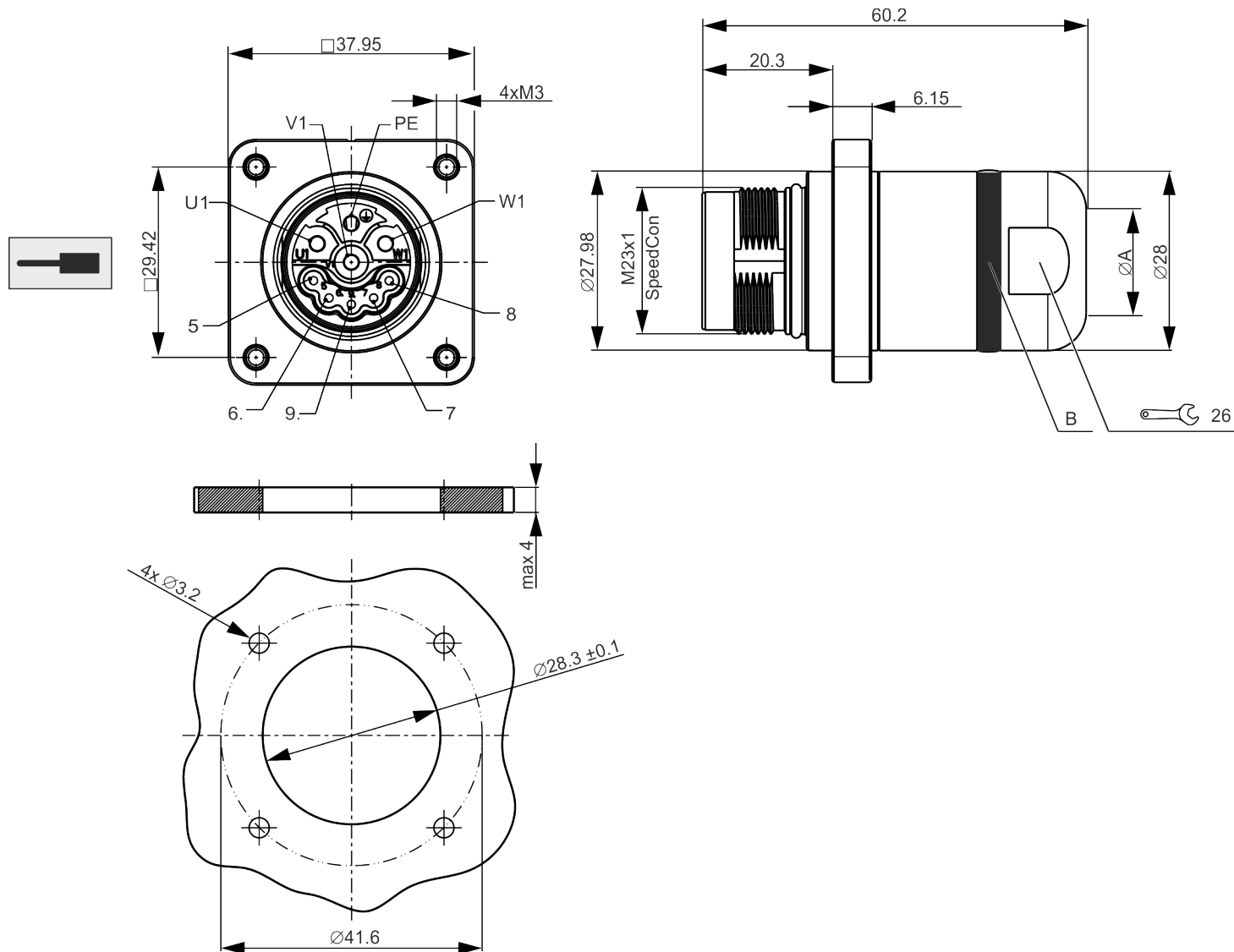


Fig. 7: RLS2304/CM01, RLS2304/CM02

ØA Clamping range / cable diameter see "Technical data"

B Identification see "Technical data"

6 M23 Panel feed-through SpeedCon technical data

Technical data



Designation	Symbol	Unit	RLS2305/A03
Material number (accessory)			R911376888
Type			Panel feed-through
Connector size			M23
Mode of locking			SpeedCon
Cable type			-
Clamping range ØA	D	mm	-
Coding			Bosch specific pole pattern
Number of poles plug-in connectors			3+PE+5
Contacts (amount and size)			4 x (1.0...2.5) + 5 x (0.5...1.0) + 4 x (1.0...2.5) + 5 x (0.5...1.0)
Maximum rated current plug-in connector power ¹⁾	I _{N P}	A	18 A (CSA) 27 A (UL)
Maximum rated current plug-in connector signal ²⁾	I _{N S}	A	5 A (CSA) 10 A (UL)
Mass	m	kg	0.170
Contact design			Pin / socket
Connection design			-
Rated voltage power contact	U _{N P}	V	600
Rated voltage signal contact	U _{N S}	V	125
Overvoltage category			III
Resistor	R	mOhm	< 3
Temperature range	T _a	°C	-40 ... 125
Installation altitude	h	m	3000
Pollution degree			3
Housing material			GD-Zn nickel-plated
Contact material			CuZn, gold-plated 0.2 µm
Mating cycles			100
Contact carrier material			PA66
Sealings			FKM
Protection mode (locked)			IP67
UL/CSA Approvals			cURus
E-file number			E153698
RoHS (EU)			Compliant with Directive 2011/65/EU
RoHS (China)			according to directive SJ/T 11364, EFUP 50
Identification "B"			Without
1) 2) Related to the maximum possible contact size within the respective plug-in connector size. Observe reducing factors, like smaller contacts, cable cross-sections, temperature, local regulations.			
Latest amendment: 2024-04-22			

Table 6: Panel feed-through

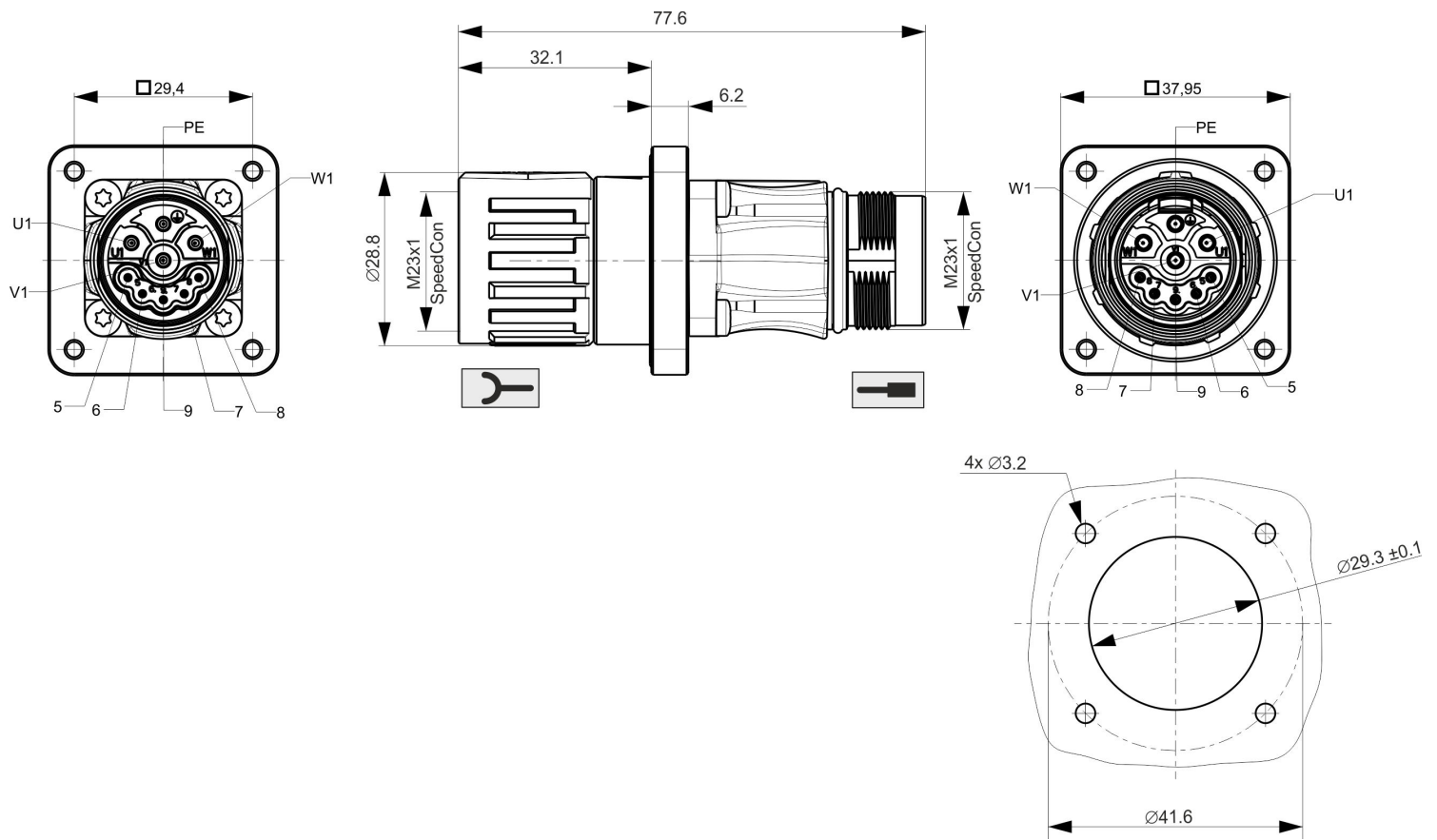


Fig. 8: RLS2305/A02

7 M23 Square mounting flange SpeedCon

Technical data

Designation	Connector accessories	
Material number (accessory)	R911403772	
Square mounting flange for mounting at	RHS2301/CM01 RHS2302/CM01	RLS2301/CM01 RLS2301/CM02 RLS2308/CM03 RLS2311/CM05 RLS2302/CM01 RLS2302/CM02 RLS2309/CM03 RLS2312/CM05

Table 7: Square mounting flange

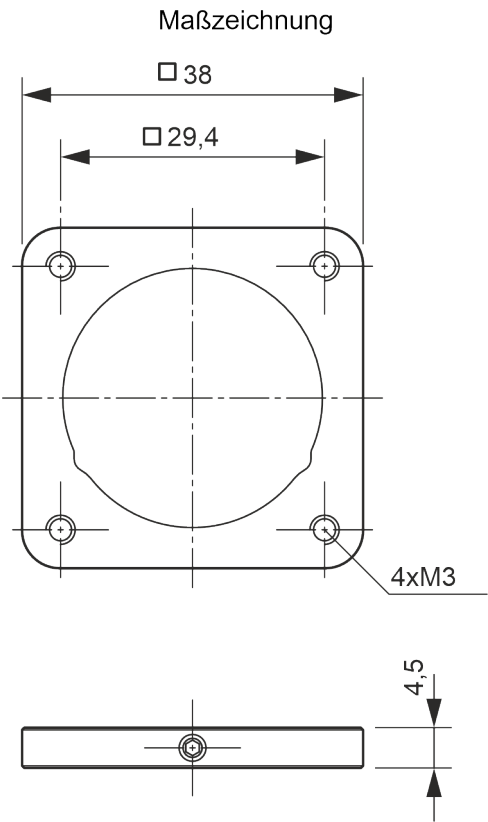


Fig. 9: Square mounting flange

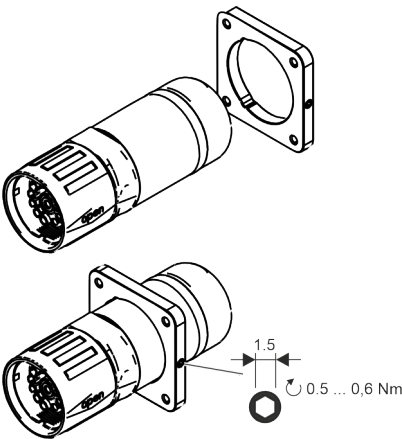


Fig. 10: Assembly square mounting flange

8 M23 Square mounting flange SpeedTec

Technical data



Designation	Connector accessories	
Material number (accessory)	R911404525	
Square mounting flange for mounting at	RHS2321/CM03	RLS2352/CUB3
	RHS2322/CM03	RLS2362/CUB3
		RLS2372/CUB3
RoHS (China)	Period of intended use (EFUP): 50 years	

Table 8: Square mounting flange

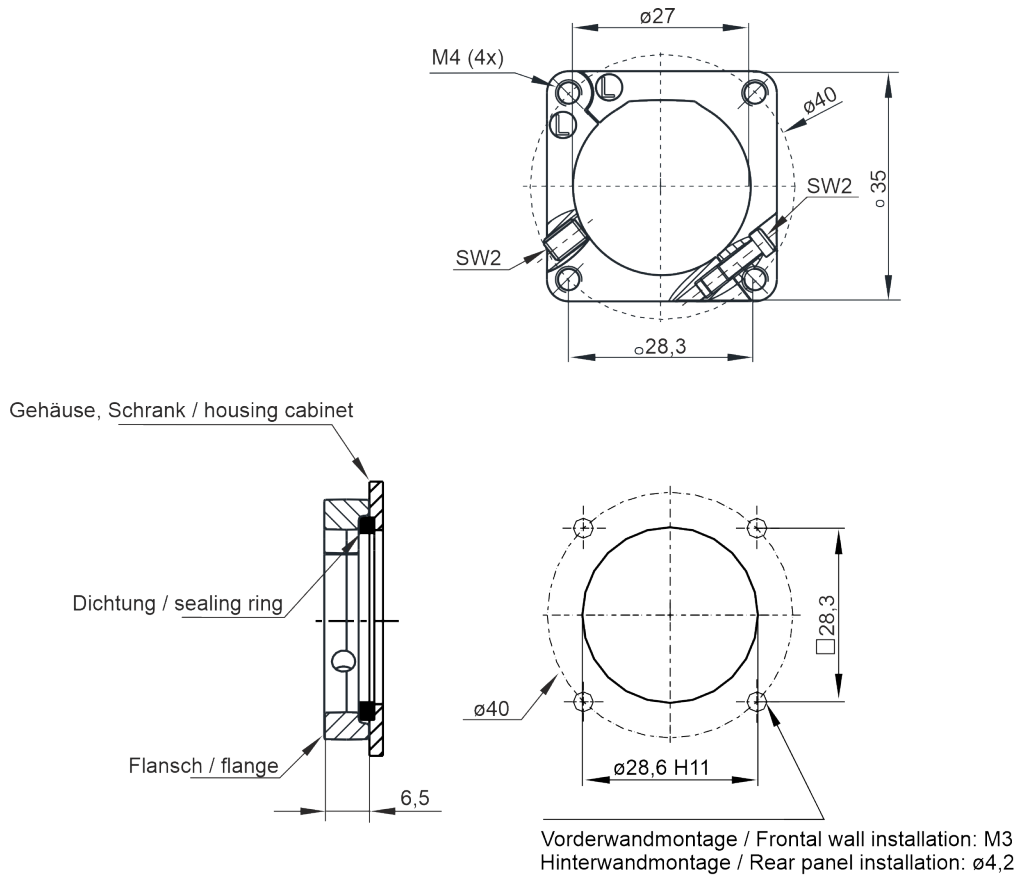


Fig. 11: Dimensions square mounting flange

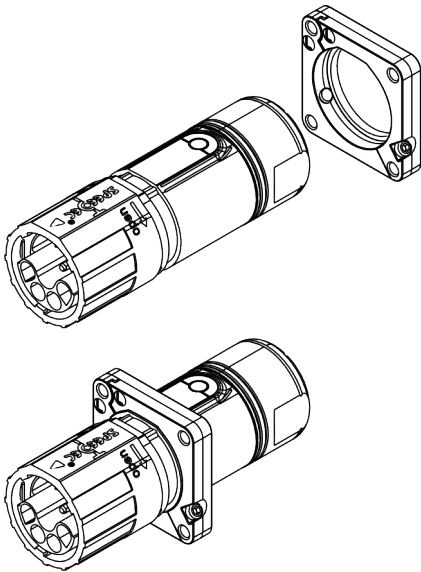


Fig. 12: Assembly square mounting flange

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