

SRS/SRM50

HIGH-RESOLUTION MOTOR FEEDBACK SYSTEM

Motor feedback systems rotary HIPERFACE®

SICK
Sensor Intelligence.



Spring plate, tapered shaft



Resolver support, tapered shaft

Built-in

Technical data

	Standard		Safety	
Number of sine/cosine periods per revolution	1,024		1,024	
Total number of steps via RS 485	Single SRS 32,768 Multi SRM: 134,217,728 (= 32,768 x 4,096)		Single SRS: 32,768 Multi SRM: 134,217,728 (= 32,768 x 4,096)	
Non-linearity	Integral		Integral	
	Differential		Differential	
Working speed ^{*)}	6,000 rpm		6,000 rpm	
Working temperature range	-30°C ... +115°C		-30°C ... +115°C	
			-20°C ... +115°C	
Operating voltage range	7 ... 12 V		7 ... 12 V	
Type ID	Single SRS: 22h Multi SRM: 27h		Single SRS: 22h Multi SRM: 27h	

Safety specifications to EN ISO 13849

Category (of synchomotors)		3		3
Performance level		PL d		PL d
PFH _D ¹⁾		1.0*10 ⁻⁸ [1/h]		1.0*10 ⁻⁸ [1/h]
MTTF _D		1073 [a]		1073 [a]
T _M (Mission Time)		20 [a]		20 [a]

References

Dimensional drawings and mounting suggestions	See page 11	See page 11	See page 12	See page 12
Ordering information	see from page 7	see from page 7	see from page 7	see from page 7

^{*)} up to which the absolute position can be reliably determined

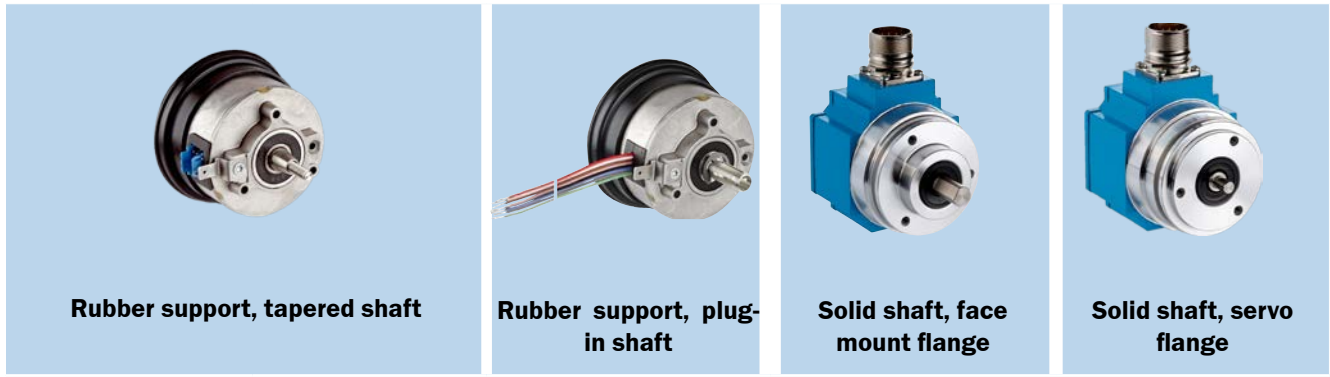
¹⁾ The stated values apply to a diagnostic degree of coverage of 90%, which must be achieved by the external drive system.

²⁾ error limits for evaluating sine/cosine signals with untensioned stator coupling

³⁾ error limits for evaluating sine/cosine signals

⁴⁾ non-linearity of a sine/cosine period





Standalone

Standard	Safety	Standard	Standard	Standard
1,024		1,024	1,024	1,024
Single SRS: 32,768 Multi SRM: 134,217,728 (= 32,768 x 4,096)		Single SRS: 32,768 Multi SRM: 134,217,728 (= 32,768 x 4,096)	Single SRS: 32,768 Multi SRM: 134,217,728 (= 32,768 x 4,096)	Single SRS: 32,768 Multi SRM: 134,217,728 (= 32,768 x 4,096)
Typ. ± 45 angular seconds ²⁾ ± 7 angular seconds ⁴⁾		Typ. ± 45 angular seconds ²⁾ ± 7 angular seconds ⁴⁾	Typ. ± 45 angular seconds ³⁾ ± 7 angular seconds ⁴⁾	Typ. ± 45 angular seconds ³⁾ ± 7 angular seconds ⁴⁾
6,000 rpm		6,000 rpm	6,000 rpm	6,000 rpm
-30 °C ... +115 °C	-20 °C ... +115 °C	-30 °C ... +115 °C	-30 °C ... +85 °C	-30 °C ... +85 °C
7 ... 12 V		7 ... 12 V	7 ... 12 V	7 ... 12 V
Single SRS: 22h Multi SRM: 27h		Single SRS: 22h Multi SRM: 27h	Single SRS: 22h Multi SRM: 27h	Single SRS: 22h Multi SRM: 27h
	3			
	PL d			
	1.0*10 ⁻⁸ [1/h]			
	1073 [a]			
	20 [a]			
see page 14	see page 14	see page 13	see page 15	see page 15
see from page 7	see from page 7	see from page 7	see from page 7	see from page 7



HIGH-RESOLUTION MOTOR FEEDBACK SYSTEM



Product description

Motor feedback systems of the SRS/SRM50 product family are used worldwide in a wide variety of applications and environments. With 1024 sine/cosine signals per revolution, this family represents the high-end solution of motor feedback systems with the HIPERFACE® interface. They use a precise metal code disk and the largest possible distance between the two ball bearings. Absolute position indication is based on an incre-

ment number of 32,768 increments per revolution and a maximum of 4,096 revolutions. Storage of motor-specific data in the electronic type label and the programming are important features of this product family. The motor feedback systems certified to SIL2/PL d meet current requirements with regard to safety technology and make the certification process easier.

At a glance

- Motor feedback systems for the top performance range
- 1,024 sine/ cosine periods per revolution
- Absolute position with a resolution of 32,768 increments per revolution and 4,096 revolutions with the multiturn system
- HIPERFACE® interface Programming of the position value and electronic type label
- Plug-in shaft or tapered shaft with various stator couplings
- Installation, mounted or standalone versions
- Certified according to SIL2/PL d (only valid for SRS50S/SRM50S...)
- RoHS-compliant

Your benefits

- Motor feedback systems with HIPERFACE® interface
- High shock/vibration resistance thanks to built-in metal code disk
- Consistent motor design due to identical size of single and multiturn versions
- The use of a motor feedback system certified to SIL2/PL d makes it easier to have your system certified
- Very smooth running thanks to maximum ball bearing distance



Safety certification not valid for all models. See type label on the motor feedback system

Additional information

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 Dimensional drawings 11
 Pin assignment 16
 Hiperface description 17
 Accessories 20

→ www.mysick.com/en/SRS_SRM50

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.



Detailed technical data

Performance

	Built-in	Standalone
Number of sine/cosine periods per revolution	1,024	
Total number of steps	Singleturn 32,768 Multiturn 134,217,728	
Measurement step	0.3 angular seconds for interpolation of the sine/cosine signals with e.g. 12 bit	
Typ. integral non-linearity	± 45 angular seconds (error limits for evaluating sine/cosine signals) with untensioned stator coupling	± 45 angular seconds (error limits for evaluating sine/cosine signals)
Differential non-linearity	± 7 angular seconds (non-linearity of a sine/cosine period)	
Working speed	6,000 rpm, up to which the absolute position can be reliably determined	

Interfaces

Code type for the absolute value	Binary	
Code sequence	Ascending for clockwise shaft rotation, looking in direction "A" (see dimensional drawing)	
Interface signals	Process data channel SIN, REFSIN, COS, REFCOS: analog, differential Parameter channel RS 485: digital	
Available memory area	in E ² PROM 512 128 bytes in E ² PROM 2048 1,792 bytes	

Electrical data

Operating voltage range/supply voltage	7 V DC ... 12 V DC
Recommended supply voltage	8 V DC
Operating current (no load)	80 mA
Output frequency for sine/cosine signals	0 kHz ... 200 kHz

Mechanical data

	Built-in	Standalone
Shaft type	Plug-in shaft Tapered shaft	Solid shaft
Dimensions	See dimensional drawing	
Mass	0.2 kg	0.55 kg
Rotor moment of inertia	10 gcm ²	25 gcm ²
Maximum operating speed	12,000 rpm	6,000 rpm
Maximum angular acceleration	≤ 200,000 rad/s ²	
Operating torque	0.2 Ncm	1 Ncm
Startup torque	0.4 Ncm	1.5 Ncm
Permissible shaft movement, radial, static	±0.5 mm	–
Permissible shaft movement, radial, dynamic	± 0.1 mm	–
Permissible shaft movement, axial, static	± 0.75 mm	–

	Built-in	Standalone
Permissible shaft movement, axial, dynamic	± 0.2 mm	-
Permissible shaft loading	-	40 N radial 20 N axial
Angular motion perpendicular to rotational axis, static	± 0.005 mm/mm	-
Angular motion perpendicular to rotational axis, dynamic	± 0.0025 mm/mm	-
Service life of ball bearings	3.6 x 10 ⁹ revolutions	
Connection type	Male connector, 8-pin Stranded cable, 8-wire, radial, 200 mm	M23 male connector, 12-pin, radial Cable, 8-wire, radial, 1.5 m

Ambient conditions

	Built-in	Standalone
Working temperature range	Standard	-30 °C ... +85 °C
	Safety	
	Spring mounting plate, tapered shaft	
	Resolver support, tapered shaft	
	Rubber support, tapered shaft	
Storage temperature range	-40 °C ... +125 °C, without packaging	-30 °C ... +90 °C, without packaging
Relative humidity / condensation	90%, condensation not permitted	
Resistance to shocks	100 g / 10 ms (according to EN 60068-2-27)	30 g / 11 ms (according to EN 60068-2-27)
Resistance to vibrations	20 g / 10 Hz ... 2,000 Hz (according to EN 60068-2-6)	
EMC	(according to EN 61000-6-2 and EN 61000-6-3) ¹⁾	
Enclosure rating	IP 40	IP 65 with mating plug connected (according to IEC 60529)

¹⁾ The EMC according to the standards cited is achieved when the motor feedback system is mounted in an electrically conductive housing that is connected to the central grounding point of the motor controller via a cable screen. The GND-(0V) connection of the supply voltage is also grounded here. If other screening concepts are used, the user must perform their own tests.

Safety-related characteristics (valid for SIL2-certified versions only)*

	Built-in	Standalone
Safety integrity level	SIL2 (IEC 61508), SILCL2 (EN 62061)	-
Category	3 (EN ISO 13849)	-
Maximum demand rate	Continuous (analog signals)	-
Performance level	PL d (EN ISO 13849) ¹⁾	-
PFHd Probability of dangerous failure per hour	1.0 x 10 ^{-8 2)}	-
T _M (Mission Time)	20 years (EN ISO 13849)	-
MTTFd: Mean time to dangerous failure	1,073 years (EN ISO 13849)	-

¹⁾ For more detailed information on the exact configuration of your machine/unit, please consult your local SICK subsidiary.

²⁾ The stated values apply to a diagnostic degree of coverage of 90%, which must be achieved by the external drive system.

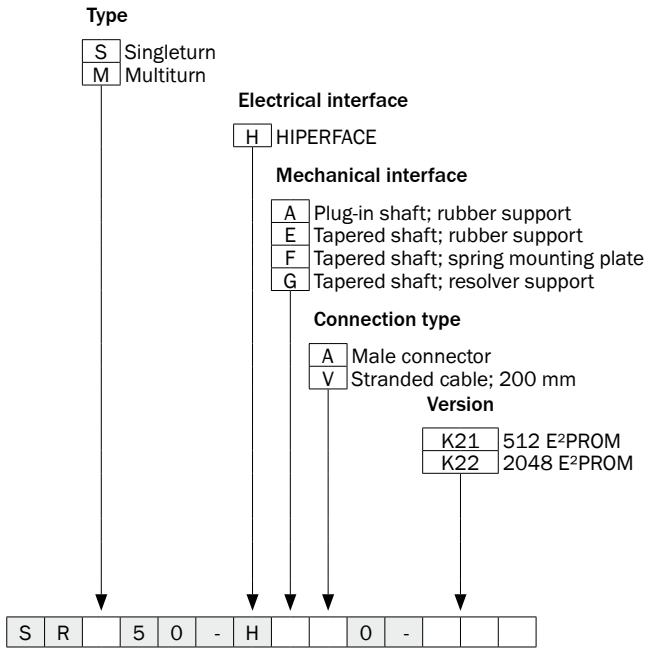
*The motor feedback system can be used in safety-relevant drive systems. It meets the requirements of Category 3 (EN ISO 13849), PL d (EN ISO 13849) and SILCL2/SIL2 (EN 62061 and IEC 61508). Implementation handbook 8014120 must be followed when using safety-certified HIPERFACE® motor feedback systems in safety-relevant drive systems.

Ordering information

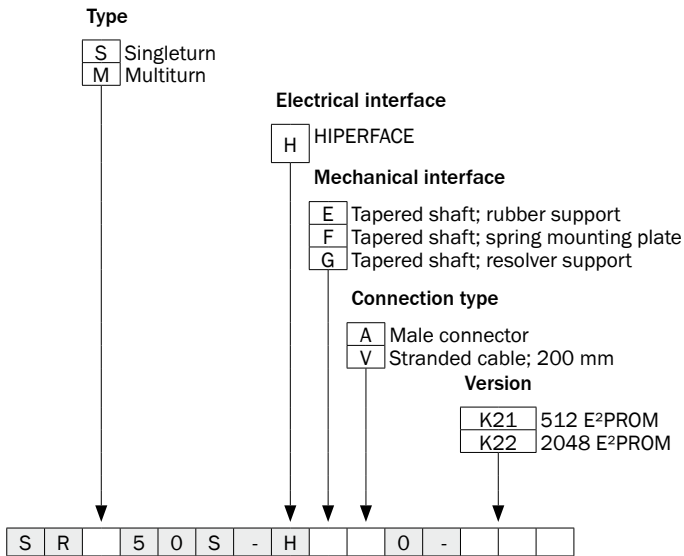
Other device versions are available at www.mysick.com/en/SRS_SRM50

Type code

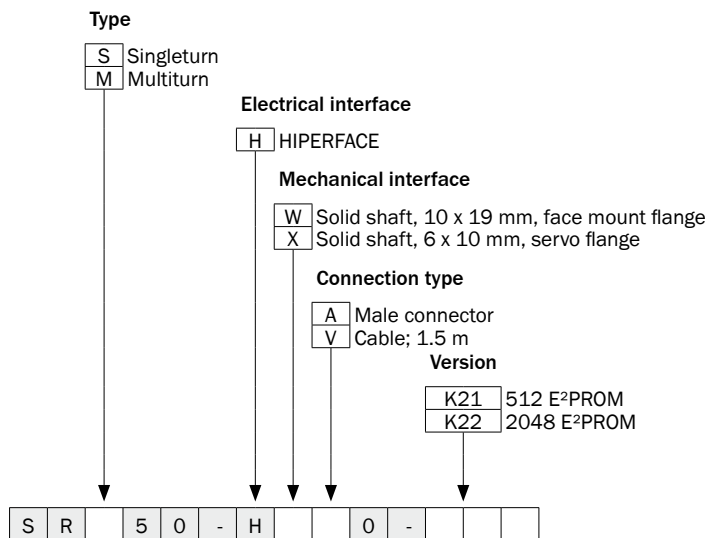
Built-in, Standard



Built-in, Safety



Standalone



Data acquisition, multiturn

- **Electrical interface:** HIPERFACE
- **Programmable/configurable:** ✓

Mechanical version	Memory area	Connection type	Model name	Part no.
Plug-in shaft; rubber support	E ² PROM 512	Male connector	SRM50-HAA0-K21	1037063
	E ² PROM 2048	Male connector	SRM50-HAA0-K22	1037064
	E ² PROM 512	Stranded cable	SRM50-HAV0-K21	1037065
	E ² PROM 2048	Stranded cable	SRM50-HAV0-K22	1037066
Tapered shaft; spring mounting plate	E ² PROM 512	Male connector	SRM50-HFA0-K21	1037071
	E ² PROM 2048	Male connector	SRM50-HFA0-K22	1037072
	E ² PROM 512	Stranded cable	SRM50-HFV0-K21	1037073
	E ² PROM 2048	Stranded cable	SRM50-HFV0-K22	1037074
Tapered shaft; resolver support	E ² PROM 512	Male connector	SRM50-HGA0-K21	1037079
	E ² PROM 2048	Male connector	SRM50-HGA0-K22	1037080
	E ² PROM 512	Stranded cable	SRM50-HGV0-K21	1037081
	E ² PROM 2048	Stranded cable	SRM50-HGV0-K22	1037082
Tapered shaft; rubber support	E ² PROM 512	Male connector	SRM50-HEA0-K21	1037087
	E ² PROM 2048	Male connector	SRM50-HEA0-K22	1037088
	E ² PROM 512	Stranded cable	SRM50-HEV0-K21	1037089
	E ² PROM 2048	Stranded cable	SRM50-HEV0-K22	1037090
Standalone solid shaft, face mount flange	E ² PROM 512	Male connector	SRM50-HWA0-K21	1037095
	E ² PROM 2048	Male connector	SRM50-HWA0-K22	1037096
	E ² PROM 512	Cable	SRM50-HWV0-K21	1037097
	E ² PROM 2048	Cable	SRM50-HWV0-K22	1037098
Standalone solid shaft, servo flange	E ² PROM 512	Male connector	SRM50-HXA0-K21	1037103
	E ² PROM 2048	Male connector	SRM50-HXA0-K22	1037104
	E ² PROM 512	Cable	SRM50-HXV0-K21	1037105
	E ² PROM 2048	Cable	SRM50-HXV0-K22	1037106

Data acquisition, singleturn

- **Electrical interface:** HIPERFACE
- **Programmable/configurable:** ✓

Mechanical version	Memory area	Connection type	Model name	Part no.
Plug-in shaft; rubber support	E ² PROM 512	Male connector	SRS50-HAA0-K21	1037059
	E ² PROM 2048	Male connector	SRS50-HAA0-K22	1037060
	E ² PROM 512	Stranded cable	SRS50-HAV0-K21	1037061
	E ² PROM 2048	Stranded cable	SRS50-HAV0-K22	1037062
Tapered shaft; spring mounting plate	E ² PROM 512	Male connector	SRS50-HFA0-K21	1037067
	E ² PROM 2048	Male connector	SRS50-HFA0-K22	1037068
	E ² PROM 512	Stranded cable	SRS50-HFV0-K21	1037069
	E ² PROM 2048	Stranded cable	SRS50-HFV0-K22	1037070
Tapered shaft; resolver support	E ² PROM 512	Male connector	SRS50-HGA0-K21	1037075
	E ² PROM 2048	Male connector	SRS50-HGA0-K22	1037076
	E ² PROM 512	Stranded cable	SRS50-HGV0-K21	1037077
	E ² PROM 2048	Stranded cable	SRS50-HGV0-K22	1037078
Tapered shaft; rubber support	E ² PROM 512	Male connector	SRS50-HEA0-K21	1037083
	E ² PROM 2048	Male connector	SRS50-HEA0-K22	1037084
	E ² PROM 512	Stranded cable	SRS50-HEV0-K21	1037085
	E ² PROM 2048	Stranded cable	SRS50-HEV0-K22	1037086
Standalone solid shaft, servo flange	E ² PROM 512	Male connector	SRS50-HWA0-K21	1037091
	E ² PROM 2048	Male connector	SRS50-HWA0-K22	1037092
	E ² PROM 512	Cable	SRS50-HWV0-K21	1037093
	E ² PROM 2048	Cable	SRS50-HWV0-K22	1037094
Standalone solid shaft, servo flange	E ² PROM 512	Male connector	SRS50-HXA0-K21	1037099
	E ² PROM 2048	Male connector	SRS50-HXA0-K22	1037100
	E ² PROM 512	Cable	SRS50-HXV0-K21	1037101
	E ² PROM 2048	Cable	SRS50-HXV0-K22	1037102

Data acquisition, multiturn

- **Safety system:** ✓
- **Electrical interface:** HIPERFACE
- **Programmable/configurable:** ✓



Mechanical version	Memory area	Connection type	Model name	Part no.
Tapered shaft; spring mounting plate	E ² PROM 512	Male connector	SRM50S-HFA0-K21	1051793
	E ² PROM 2048	Male connector	SRM50S-HFA0-K22	1051794
	E ² PROM 512	Stranded cable	SRM50S-HFV0-K21	1051795
	E ² PROM 2048	Stranded cable	SRM50S-HFV0-K22	1051796
Tapered shaft; resolver support	E ² PROM 512	Male connector	SRM50S-HGA0-K21	1051801
	E ² PROM 2048	Male connector	SRM50S-HGA0-K22	1051802
	E ² PROM 512	Stranded cable	SRM50S-HGV0-K21	1051803
	E ² PROM 2048	Stranded cable	SRM50S-HGV0-K22	1051804
Tapered shaft; rubber support	E ² PROM 512	Male connector	SRM50S-HEA0-K21	1051809
	E ² PROM 2048	Male connector	SRM50S-HEA0-K22	1051810
	E ² PROM 512	Stranded cable	SRM50S-HEV0-K21	1051811
	E ² PROM 2048	Stranded cable	SRM50S-HEV0-K22	1051812

Data acquisition, singleturn

- **Safety system:** ✓
- **Electrical interface:** HIPERFACE
- **Programmable/configurable:** ✓

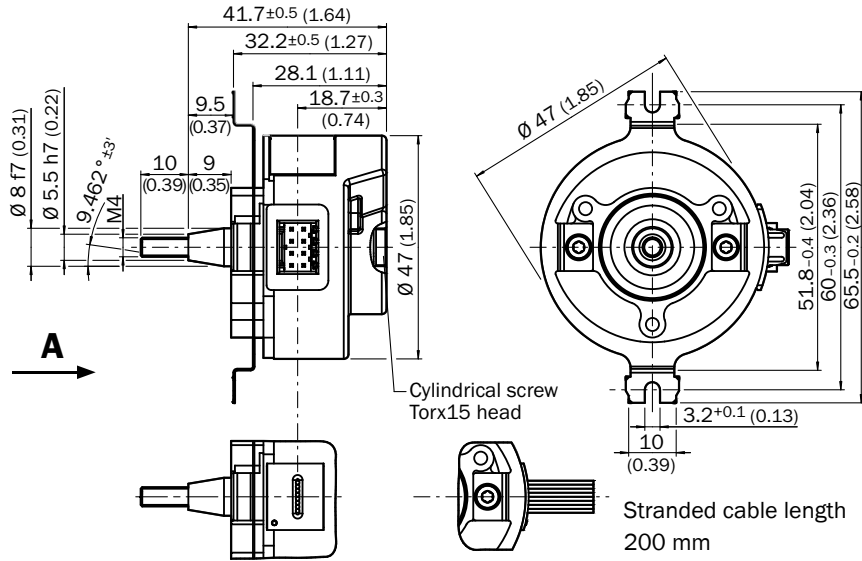


Mechanical version	Memory area	Connection type	Model name	Part no.
Tapered shaft; spring mounting plate	E ² PROM 512	Male connector	SRS50S-HFA0-K21	1051789
	E ² PROM 2048	Male connector	SRS50S-HFA0-K22	1051790
	E ² PROM 512	Stranded cable	SRS50S-HFV0-K21	1051791
	E ² PROM 2048	Stranded cable	SRS50S-HFV0-K22	1051792
Tapered shaft; resolver support	E ² PROM 512	Male connector	SRS50S-HGA0-K21	1051797
	E ² PROM 2048	Male connector	SRS50S-HGA0-K22	1051798
	E ² PROM 512	Stranded cable	SRS50S-HGV0-K21	1051799
	E ² PROM 2048	Stranded cable	SRS50S-HGV0-K22	1051800
Tapered shaft; rubber support	E ² PROM 512	Male connector	SRS50S-HEA0-K21	1051805
	E ² PROM 2048	Male connector	SRS50S-HEA0-K22	1051806
	E ² PROM 512	Stranded cable	SRS50S-HEV0-K21	1051807
	E ² PROM 2048	Stranded cable	SRS50S-HEV0-K22	1051808

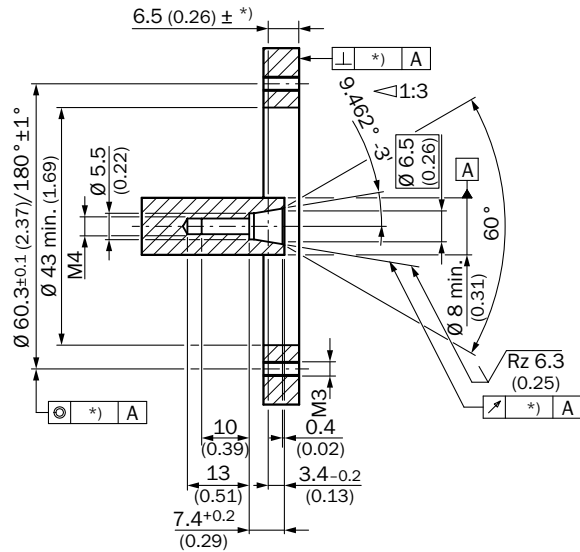
Dimensional drawings (dimensions in mm)

Spring mounting plate, tapered shaft

General tolerances according to ISO 2768-mk



Mounting suggestion



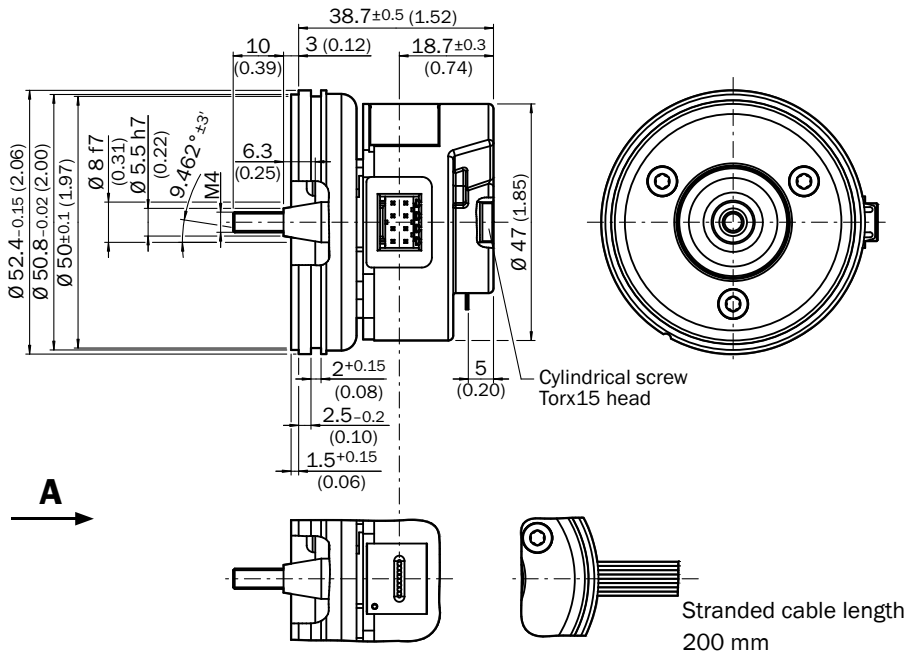
*) Size of tolerance reduce the allowed movement of the shaft see data sheet.

All dimensions in mm (inch)

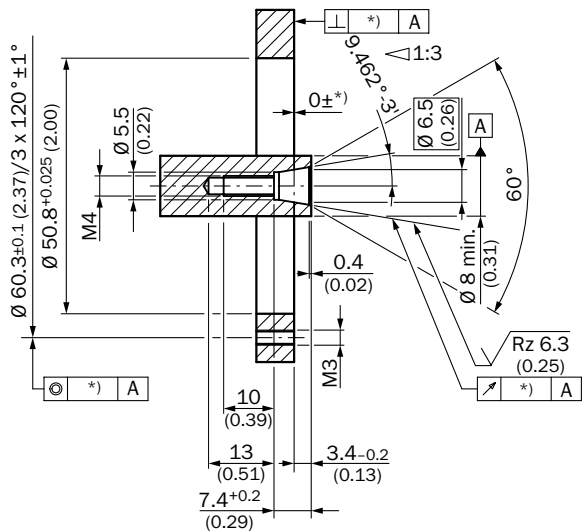
These dimensional drawings also apply to the SIL2 variants

Resolver support, tapered shaft

General tolerances according to ISO 2768-mk



Mounting suggestion

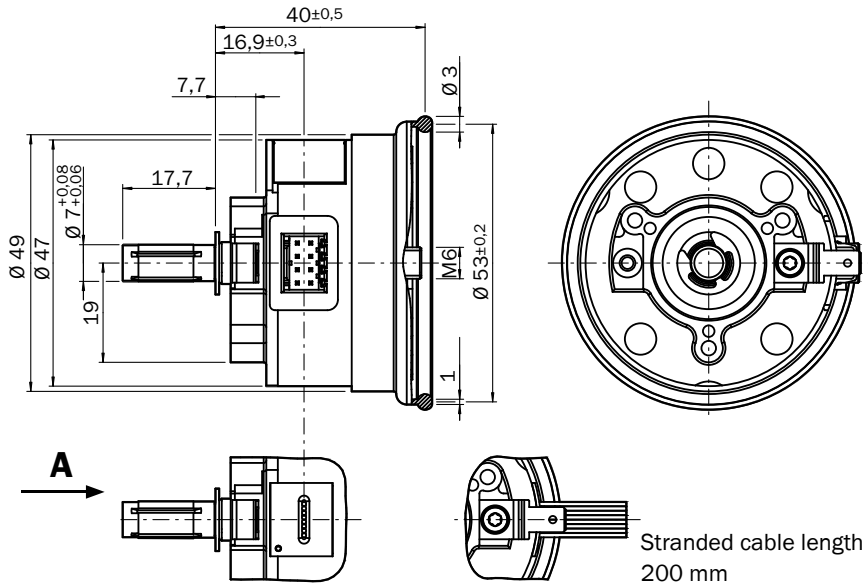


*) Size of tolerance reduce the allowed movement of the shaft see data sheet. All dimensions in mm (inch)

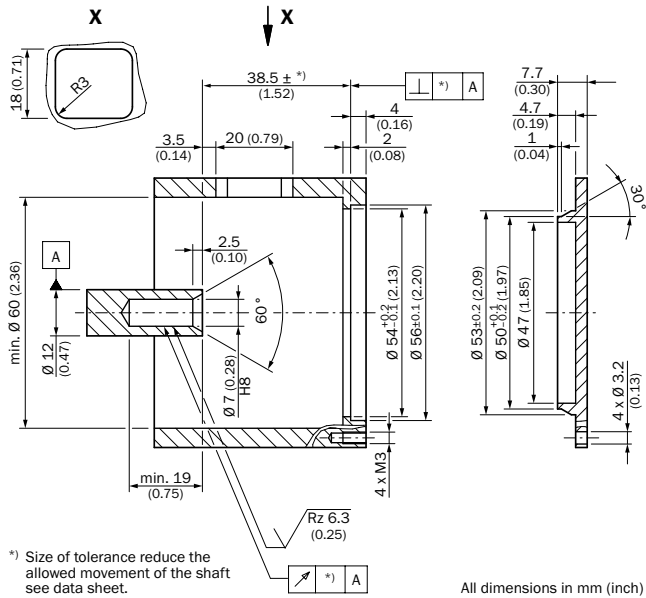
These dimensional drawings also apply to the SIL2 variants

Rubber support, plug-in shaft

General tolerances according to ISO 3302-1

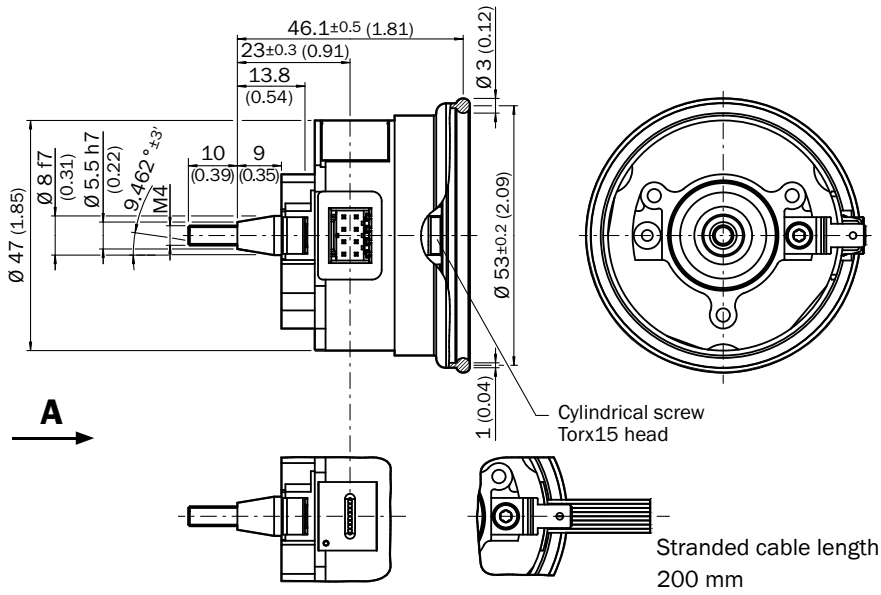


Mounting suggestion

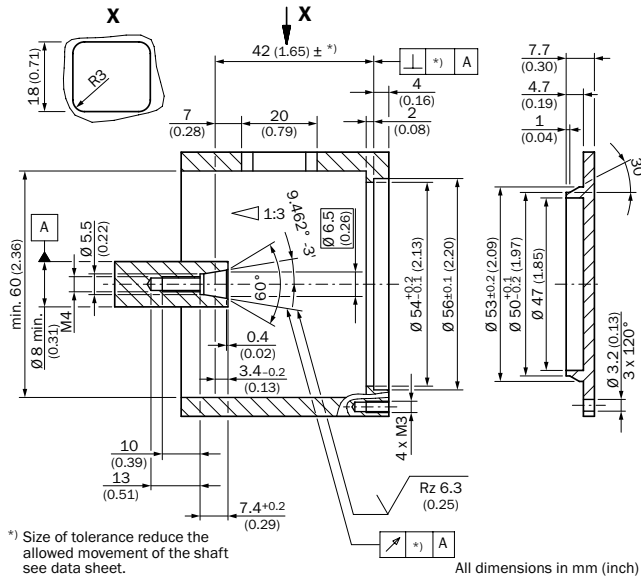


Rubber support, tapered shaft

General tolerances according to ISO 3302-1



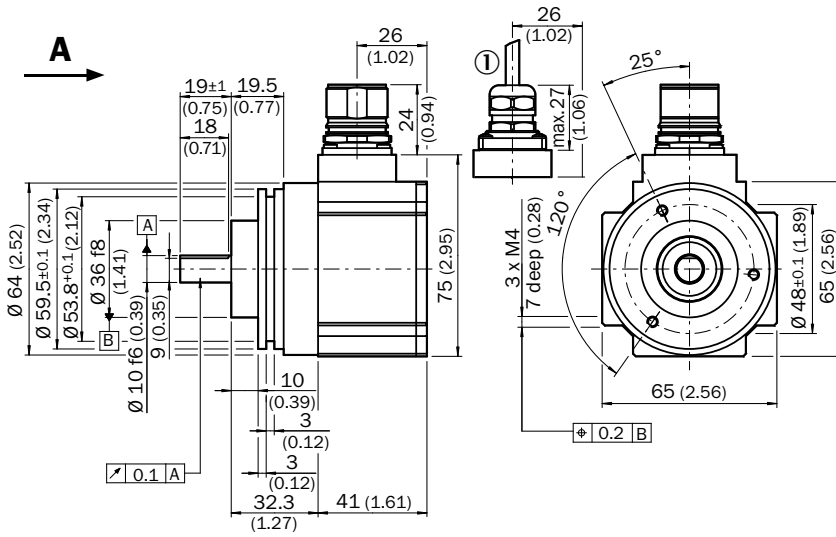
Mounting suggestion



These dimensional drawings also apply to the SIL2 variants

Solid shaft face mount flange, standalone

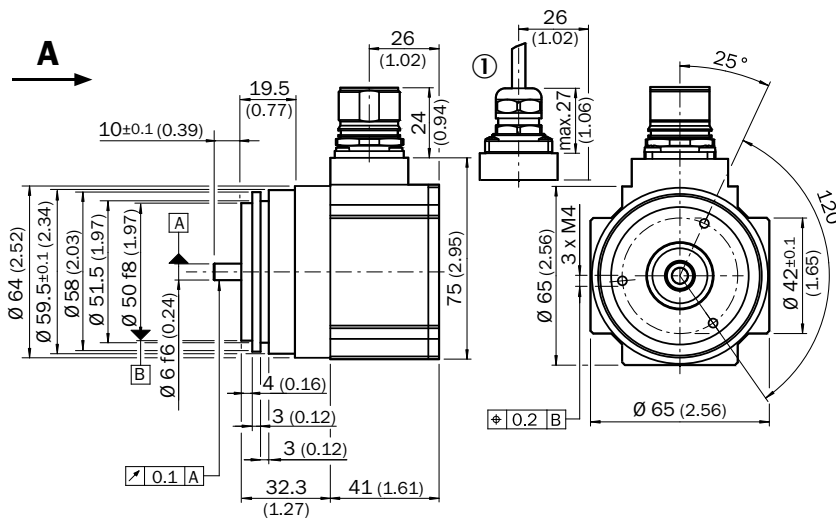
General tolerances according to ISO 2768-mk



① R = min. bend radius 40 mm

Solid shaft servo flange, standalone

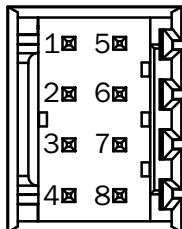
General tolerances according to ISO 2768-mk



① R = min. bend radius 40 mm

Pin assignment

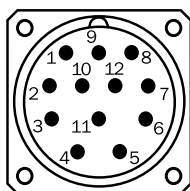
Built-in



Pin	Signal	Wire colors	Explanation
1	U _s	Red	7 ... 12 V supply voltage
2	GND	Blue	Ground connection
3	REFSIN	Brown	Process data channel
4	REFCOS	Black	Process data channel
5	Data +	Gray or Yellow	RS-485 parameter channel
6	Data -	Green or Violet	RS-485 parameter channel
7	+ SIN	White	Process data channel
8	+ COS	Pink	Process data channel

To ensure proper function, the screen connection strand (200 mm) must be connected. It is included in the supply. Except spring mounting plate with traped shaft versions, here is the encoder housing connected to the motor, via the torque support. The connection space is thus screened via the motor housing such that, within the connection space, unscreened connection strand can be used.

Standalone



View of the plug-in face

Shield connection at the connector housing

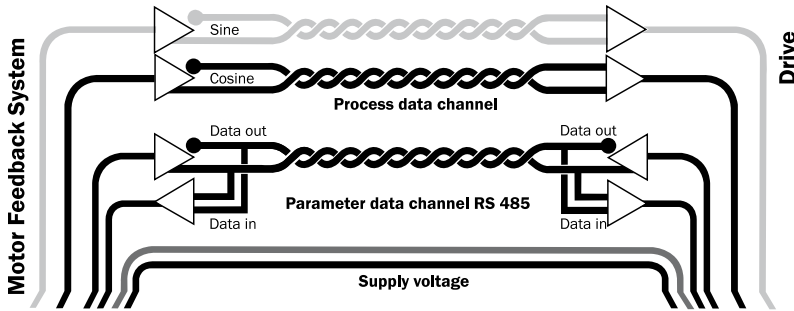
N. C. = Not connected

Pin	Signal	Wire colors	Explanation
1	REFCOS	Black	Process channel
2	Data +	Gray or Yellow	RS-485 parameter channel
3	n.c.	-	n.c.
4	n.c.	-	n.c.
5	SIN	White	Process data channel
6	REFSIN	Brown	Process data channel
7	Data -	Green or Violet	RS-485 parameter channel
8	COS	Pink	Process data channel
9	n.c.	-	n.c.
10	GND	Blue	Ground connection
11	n.c.	-	n.c.
12	U _s	Red	7 ... 12 V supply voltage



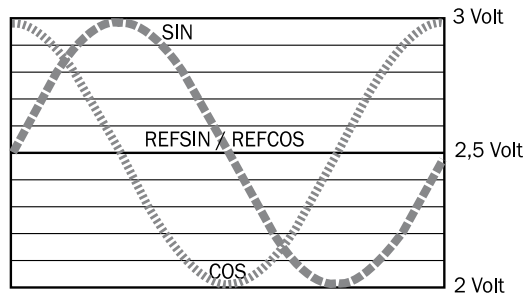
Electrical interface

- Secure data transmission
- High information content
- Electronic type label
- Just 8 leads
- Bus-compatible parameter channel
- Process channel in real time



Signal specification of the process channel

Signal diagram for clockwise rotation of shaft looking in direction "A"



1 period = 360° : 1024

Access to the process data used for speed control, i.e. to the sine and cosine signals, is practically always "online". When the supply voltage is applied, the speed controller has access to this information at any time. Sophisticated technology guarantees stable amplitudes of the analogue signals across all specified environmental conditions, with a maximum variation of only 20%.

Characteristics applicable to all stated ambient conditions	
Signal	Values/unit
Signal peak, peak V_{pp} of SIN, COS	0.9 ... 1.1 V
Signal offset REFSIN, REFCOS	2.2 ... 2.8 V

Type-specific settings	SRS	SRM
Type ID (command 52h)	22h	27h
Free E ² PROM [bytes]	128/1,792	128/1,792
Address	40h	40h
Mode_485	E4h	E4h
Codes 0 to 3	55h	55h
Counter	0	0

Overview of supported commands			SRS	SRM
Command byte	Function	Code 0 ¹⁾	Comment	Comment
42h	Read position (5 bits per sine/cosine period)		15 bits	27 bits
43h	Set position	■		
44h	Read analog value		Channel number 48h	Channel number 48h
			Temperature [°C]	Temperature [°C]
46h	Read counter			
47h	Increase counter			
49h	Delete counter	■		
4Ah	Read data			
4Bh	Store data			
4Ch	Determine status of a data field			
4Dh	Create data field			
4Eh	Determine available memory area			
4Fh	Change access code			
50h	Read encoder status			
52h	Read out type label		Encoder type=22h	Encoder type=27h
53h	Encoder reset			
55h	Allocate encoder address	■		
56h	Read serial number and program version			
57h	Configure serial interface	■		

¹⁾The commands thus marked include the parameter "Code 0". Code 0 is a byte inserted into the protocol to provide additional protection of vital system parameters against accidental overwriting. When the device is supplied, "Code 0" = 55h.

Overview of status messages				
	Status code	Description	SRS	SRM
Error type	00h	The encoder has not detected any faults	■	■
Initialization	01h	Incorrect alignment data	■	■
	02h	Incorrect internal angular offset	■	■
	03h	Data field partitioning table destroyed	■	■
	04h	Analog limit values not available	■	■
	05h	Internal I2C bus inoperative	■	■
	06h	Internal checksum error	■	■
Protocol	07h	Encoder reset occurred as a result of program monitoring	■	■
	09h	Parity error	■	■
	0Ah	Checksum of transmitted data is incorrect	■	■
	0Bh	Unknown command code	■	■
	0Ch	Number of transmitted data is incorrect	■	■
	0Dh	Transmitted command argument is not allowed	■	■
Data	0Eh	The selected data field may not be written to	■	■
	0Fh	Incorrect access code	■	■
	10h	Size of specified data field cannot be changed	■	■
	11h	Specified word address lies outside the data field	■	■
Position	12h	Access to non-existent data field	■	■
	01h	Analog signals outside specification	■	■
	1Fh	Speed too high, no position formation possible	■	■
	20h	Singleturn position unreliable	■	■
	21h	Multiturn position error		■
	22h	Multiturn position error		■
Other	23h	Multiturn position error		■
	1Ch	Value monitoring of the analog signals (process data)	■	■
	1Dh	Transmitter current critical (contamination, transmitter breakage)	■	■
	1Eh	Encoder temperature critical	■	■
	08h	Counter overflow	■	■

For more information on the interface see HIPERFACE® - description, part no. 8010701

Accessories

Programming and configuration tools

sVip®-PGT-11-S: the universal visualization and programming tool



There was a very clear motivation behind the development of the innovative sVip®: We wanted a single programming tool which supported all existing and future motor feedback systems. By developing this 'one-for-all' tool, we managed to achieve just that. sVip® is ideal for use with our systems and replaces all previous programming tools.

The sVip® supplements the familiar functions of predecessor programming tools by offering additional and improved applications for programming and analysis. What's more, the sVip® has a single standard user interface for all tasks.

- Oscilloscope function – for qualitative signal analysis
- Presentation of histograms, e.g., temperature
- Reading out and saving of E²PROM content
- Enables synchronization of analog signals and the absolute position of HIPERFACE® products.

Ordering information

Description	Part no.
PGT-11-S LAN sVip®	1057324
PGT-11-S WLAN sVip®	1067474

You can find more information in document 8017195

Scope of delivery

Power supply	100–240 V AC/12 V DC
Primary adapter	Europe, UK, USA/Japan, Australia
Ethernet cable	3 m in length

Note: The corresponding accessory leads for the connection of the motor feedback systems must be ordered separately.

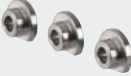
sVip® accessory leads

HIPERFACE®			
Figure	Brief description	Model name	Part no.
	Male connector, M23, 17 pin, straight, cable HIPERFACE®, screened Female connector, DUBOX, 8-pin	DSL-2317-G01MJB1	2071326
	Male connector, M23, 17 pin, straight, cable HIPERFACE®, screened Female connector, JST, 8-pin	DSL-2317-G01MJB6	2071327
	Male connector, M23, 17 pin, straight, cable HIPERFACE®, screened Female connector, M23, 12-pin	DSL-2317-G01MJB2	2071328
	Male connector, M23, 17 pin, straight, cable HIPERFACE®, screened Female connector, M12, 8-pin	DSL-2317-G01MJC1	2071329
	Male connector, M23, 17 pin, straight, cable HIPERFACE®, screened Female connector, terminal block, 8-pin	DSL-2317-G01MJC6	2071330

Accessories for Built-in variants

Other mounting accessories

Servo clamps

Figure	Brief description	Usable for	Model name	Part no.
	Servo clamps, small, for servo flange (clamping bracket, eccentric fastener), (3 pcs), without fastening material	Built-in Safety	BEF-WK-RESOL	2039082

Plug connectors and cables

Connecting cable (female connector-open)

Brief description	Length of cable	Usable for	Model name	Part no.
Female connector, stranded cable, 8-pin, HIPERFACE® straight cable, un-screened	0.2 m	Built-in Safety	DOL-0B08-G0M2XB1	2031081
Female connector, stranded cable, 8-pin, HIPERFACE® straight cable, un-screened	0.4 m	Built-in Safety	DOL-0B08-G0M4XB1	2031083
Female connector, stranded cable, 8-pin, HIPERFACE® straight cable, un-screened	0.5 m	Built-in Safety	DOL-0B08-G0M5XB1	2069859


Cable (open-open)

Brief description	Usable for	Model name	Part no.
HIPERFACE® cable, suitable for drag chains, PUR halogen-free, screened	Built-in Safety Standalone	LTG-2708-MW	6028361

Accessories for standalone variants


Mounting brackets/plates

Mounting bracket

Figure	Brief description	Usable for	Model name	Part no.
	Mounting bracket for encoder with 36 mm centering collar including mounting kit	Standalone	BEF-WF-36	2029164

Other mounting accessories

Servo clamps


Figure	Brief description	Usable for	Model name	Part no.
	Servo clamps, large, for servo flange (clamping bracket, eccentric fastener), (3 pcs.), without fastening material	Standalone	BEF-WK-SF	2029166

Plug connectors and cables

Connecting cable (female connector-open)

Brief description	Length of cable	Usable for	Model name	Part no.
Female connector, M23, 12-pin, HIPERFACE® straight cable, suitable for drag chains, PUR, screened	1.5 m	Standalone	DOL-2308-G1M5JB2	2031069
Female connector, M23, 12-pin, HIPERFACE® straight cable, suitable for drag chains, PUR, screened	3 m	Standalone	DOL-2308-G03MJB2	2031070
Female connector, M23, 12-pin, HIPERFACE® straight cable, suitable for drag chains, PUR, screened	5 m	Standalone	DOL-2308-G05MJB2	2031071
Female connector, M23, 12-pin, HIPERFACE® straight cable, suitable for drag chains, PUR, screened	10 m	Standalone	DOL-2308-G10MJB2	2031072
Female connector, M23, 12-pin, HIPERFACE® straight cable, suitable for drag chains, PUR, screened	15 m	Standalone	DOL-2308-G15MJB2	2031073


Female connector (ready to assemble)

Figure	Brief description	Usable for	Model name	Part no.
	Female connector, M23, 12-pin, straight - HIPERFACE®, SSI, incremental, screened	Standalone	DOS-2312-G	6027538

Cable (open-open)

Brief description	Usable for	Model name	Part no.
HIPERFACE® cable, suitable for drag chains, PUR halogen-free, screened	Built-in Safety Standalone	LTG-2708-MW	6028361

Male connector (ready to assemble)

Figure	Brief description	Usable for	Model name	Part no.
	Male connector, M23, 12-pin, screened	Standalone	STE-2312-G	6027537

Shaft adaption

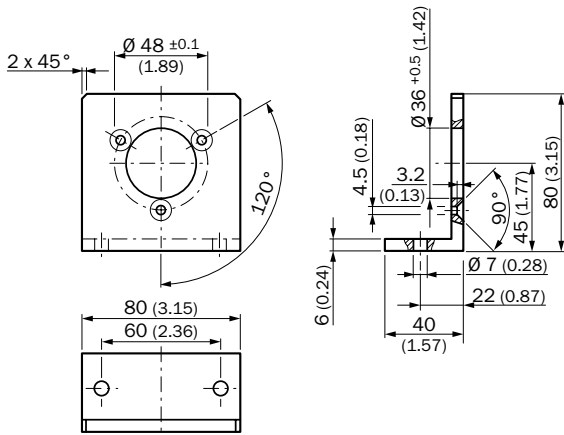
Shaft couplings

Figure	Brief description	Usable for	Model name	Part no.
	Bellows coupling, shaft diameter 6 mm/6 mm	Standalone	KUP-0606-B	5312981
	Bellows coupling, shaft diameter 6 mm/10 mm	Standalone	KUP-0610-B	5312982
	Bellows coupling, shaft diameter 10 mm/10 mm	Standalone	KUP-1010-B	5312983
	Bellows coupling, shaft diameter 10 mm/12 mm	Standalone	KUP-1012-B	5312984

Dimensional drawings, accessories (dimensions in mm (inch))

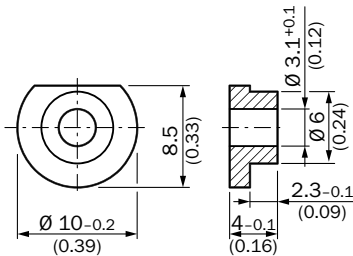
Mounting brackets/plates - mounting brackets

BEF-WF-36

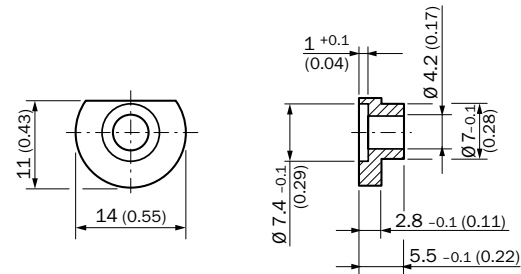


Other mounting accessories - servoclamps

BEF-WK-RESOL

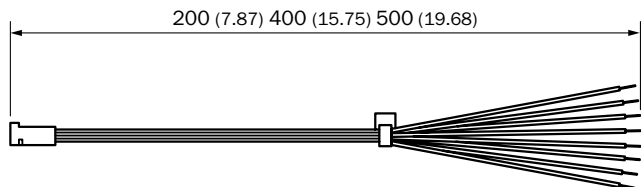


BEF-WK-SF



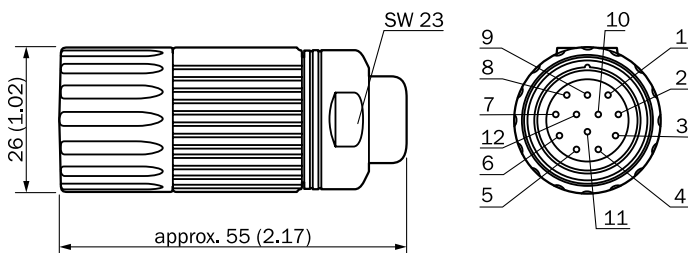
Plug connectors and connecting cables (female connector-open)

- DOL-0B08-G0M2XB1
- DOL-0B08-G0M4XB1
- DOL-0B08-G0M5XB1



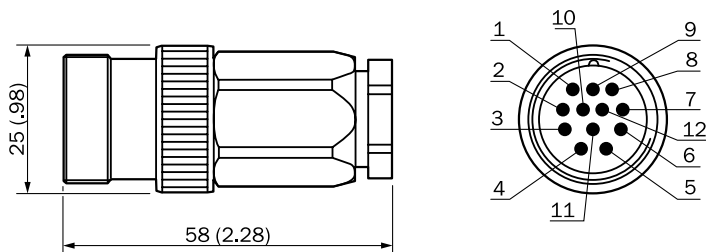
Plug connectors and female connector cables (ready to assemble)

DOS-2312-G



Plug connectors and male connector cables (ready to assemble)

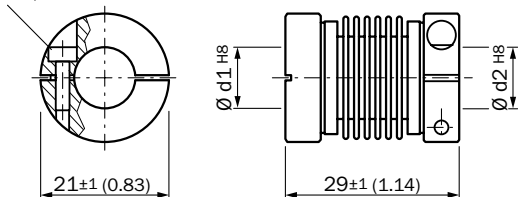
STE-2312-G



Shaft adaptation, shaft couplings

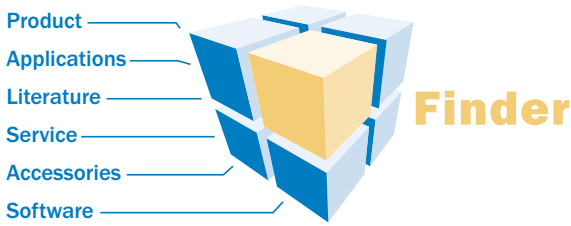
- KUP-0606-B
- KUP-0610-B
- KUP-1010-B
- KUP-1012-B

Cheese-head screw
M2.5 x 8, DIN 912 A2



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