

HIPERFACE®-SSI Adapter, HIPERFACE®-Profibus Adapter, HIPERFACE®-DeviceNet Adapter and HIPERFACE®-CANopen Adapter: robust, flexible and versatile



In conjunction with interface adapter modules, these can also be used in a broad range of applications in automation technology, for example in applications where

- space is very limited at the location of the installation
- environmental conditions such as dirt, temperature, shock and/or vibration must be isolated from a large part of the electronics
- customer-specific encoder flange and housing options are required, which must be realised quickly and at low-cost
- high encoder resolutions are necessary, which can be generated easily in the interface adapter via interpolation of the Hiperface® encoder signals.

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The use of interface adapter modules for connecting up singleturn or multiturn encoders with the HIPERFACE® interface opens up a variety of application options in all areas of automation technology.

At the output of the interface adapter modules, SSI, Profibus DP, DeviceNet und CANopen are available, interfaces that fulfil the high requirements of automation technology. In line with future-oriented trends, M12 connectors are used for the interface adapter modules. The diverse range of possible combinations of interface adapter modules and encoders provides a high level of flexibility, as well as low part replacement and stocking costs for our customers.



Interface adapter module



Interface adapter module



Interface adapter module



Interface adapter module

Encoders with the HIPERFACE® interface are being designed as Motor Feedback systems for drive technology. This creates an extremely compact design. In addition to encoders integrated into drives, stand-alone designs are also available

SICK | STEGMANN

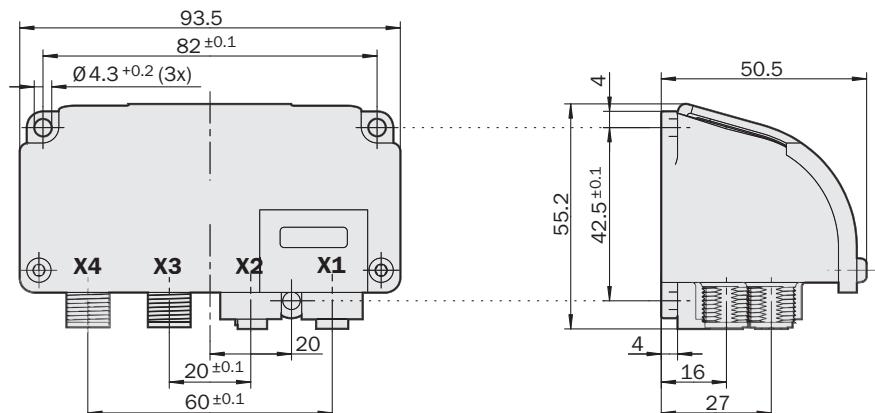
HIPERFACE®-SSI Adapter



Interface adapter module

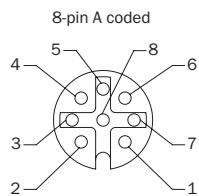
- SSI Output
- Automatic encoder detection
- Electronically adjustable
- Enclosure rating IP 64

Dimensional drawing HIPERFACE®-SSI Adapter



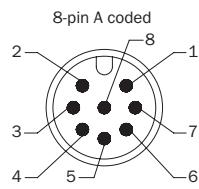
General tolerances to DIN ISO 2768-mk

PIN and wire allocation HIPERFACE® input (X1)



PIN	Colour of wires	Signal	Explanation
1	brown	REFSIN	Process data channel
2	white	+ SIN	Process data channel
3	black	REFCOS	Process data channel
4	pink	+ COS	Process data channel
5	yellow	Data +	RS 485 Parameter channel
6	violet	Data -	RS 485 Parameter channel
7	blue	GND	Ground connection
8	red	+ U _s	Encoder Supply voltage via the Adapter
		Screen	Housing potential

PIN and wire allocation SSI output, incl. U_s (X3)



PIN	Colour of wires	Signal	Explanation
1	brown	Data -	Interface signals
2	white	Data +	Interface signals
3	black	N. C.	
4	pink	N. C.	
5	yellow	Clock +	Interface signals
6	violet	Clock -	Interface signals
7	blue	GND	Ground connection
8	red	+ U _s	Operating voltage
		Screen	Housing potential

Connections X2 and X4 on the HIPERFACE®-SSI Adapter not allocated.



Listed accessory which is to use with listee's listed SICK-STEGMANN GmbH encoders.

For use in NFPA 79 applications only.
Interconnection cables and accessories are available from SICK-STEGMANN.

The following encoders with a HIPERFACE® interface are detected by the HIPERFACE®-SSI Adapter:

Designation/ encoder series ¹⁾	Number of revs.	Steps/rev. ²⁾ Standard/DEFAULT	Max. steps/rev. ³⁾
SRS...	1	4096	32 768 (15-bit)
SCK...	1	4096	32 768 (15-bit)
SKS...	1	4096	32 768 (15-bit)
SEK...	1	4096	4096 (12-bit)
SRM...	4096	4096	32 768 (15-bit)
SCL...	4096	4096	32 768 (15-bit)
SKM...	4096	4096	32 768 (15-bit)

Output on the adapter – Gray code, right-justified to the 12th single bit.

¹⁾ Valid for all standard encoders from the relevant product range.

²⁾ Factory default setting

³⁾ Max. possible steps/rev. that can be configured at the factory on request.

Accessories

Connection technology

Technical data	SSI								
Housing	Die-cast zinc								
Mass	Approx. 350 g								
Supported encoders	See encoder table on page 2								
Configuration of the adapter of the encoder connected	Automatically by using the electronic name plate								
Code type ¹⁾	GRAY								
Count direction cw/ccw	Via DIP switches								
Measurement step (rotary Encoder)	360°/step count per revolution								
Steps per revolution ¹⁾	See encoder table on page 2								
Number of revolutions	See encoder table on page 2								
Error limits	See encoder data sheet								
Reproducibility	See encoder data sheet								
Data format for singleturn encoders ¹⁾	12-bit (right-justified)								
Data format for multiturn encoders ¹⁾	24-bit (right-justified)								
Position sample time	100 µs								
Working temperature range	- 20 ... + 70 °C								
Storage temperature range	- 25 ... + 85 °C								
Permissible relative humidity ²⁾	90 %								
EMC ³⁾									
Resistance									
to shocks ⁴⁾	70 g/6 ms								
to vibration ⁵⁾	20 g/10 ... 2000 Hz								
Protection to IEC 60529 ⁶⁾	IP 64								
Operating voltage range (U_s)	10 ... 30 V DC								
Encoder operating voltage via the adapter	8 V DC ± 10 % (max. 500 mA)								
Power consumption (without encoder)	1.6 W								
Initialisation time ⁷⁾	Typ. 200 ms (50 ms after encoder-ready signal)								

Input interface HIPERFACE®

Electrical connection to the encoder (HIPERFACE®)	Signal line via 8-pin female device connector, potential-free to the housing	
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Output interface SSI

Interface signals	
Clock +, Clock -, Data +, Data -	SSI max. clock frequency 1.0 MHz or min. LOW level (Clock +): 500 ns
Electrical interface	RS422 for SSI
DC isolation at the output to PLC	No
Electronic adjustment (number set) ⁸⁾	Via DIP switches
Status information	HIPERFACE® status (LED yellow) Adapter status (LED green)
Error value output	No
Electrical connection to control (SSI)	Signal line via 8-pin male device connector, potential-free to the housing

¹⁾ Additional data formats, output codes and resolutions on request

²⁾ Condensation not permissible

³⁾ EN 61000-6-2

EN 61000-4-2
EN 61000-4-3
EN 61000-4-4
EN 61000-4-5
EN 61000-4-6

EN 61000-6-3
EN 55011

⁴⁾ To EN 60068-2-27

⁵⁾ To EN 60068-2-6

⁶⁾ With mating connector fitted

Exposure to direct sunlight over an extended period is not permissible

⁷⁾ The time that elapses after connection of the supply voltage until the data word can be correctly read in

⁸⁾ Set to zero (0) at the factory, other numbers set on request

Ordering information**HIPERFACE®-SSI Adapter****Type**

AD-HFSSIS2

Part no.

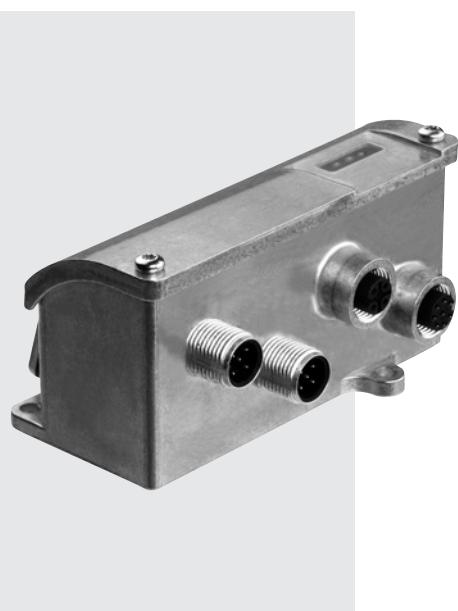
1035482

HIPERFACE®-Profibus Adapter



Interface adapter module

- Bus link RS 485 according to Profibus DP specification
- Automatic encoder detection
- Electronically adjustable, configurable resolution
- Enclosure rating IP 64



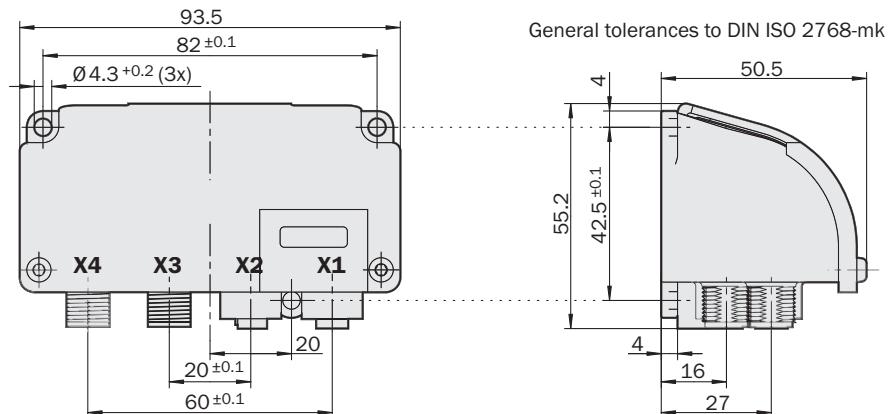
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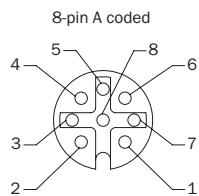
Listed accessory which is to use with listee's listed SICK-STEGMANN GmbH encoders.

For use in NFPA 79 applications only.
Interconnection cables and accessories are available from SICK-STEGMANN.

Dimensional drawing HIPERFACE®-Profibus Adapter

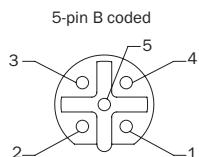


PIN and wire allocation HIPERFACE® input (X1)



PIN	Colour of wires	Signal	Explanation
1	brown	REFSIN	Process data channel
2	white	+ SIN	Process data channel
3	black	REFCOS	Process data channel
4	pink	+ COS	Process data channel
5	yellow	Data +	RS 485 Parameter channel
6	violet	Data -	RS 485 Parameter channel
7	blue	GND	Ground connection
8	red	+ U _s	Encoder Supply voltage via the Adapter
		Screen	Housing potential

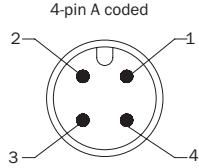
PIN and wire allocation Profibus DP (out) (X2)



PIN	Signal	Explanation
1	2PS	+ 5 V (potential-free isolated) ¹⁾
2	A	A-cable Profibus DP
3	2M	0 V (potential-free isolated) ¹⁾
4	B	B-cable Profibus DP
5	Screen	Housing potential

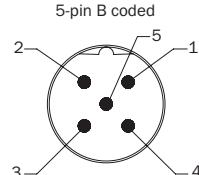
¹⁾ For external bus connection or supply to the sender/receiver of an LWL connection.

PIN and wire allocation Operating voltage U_s (X3)



PIN	Signal	Explanation
1	U _s	Operating voltage
2	N. C.	-
3	GND	0 V (ground)
4	N. C.	-

PIN and wire allocation Profibus DP (in) (X4)



PIN	Signal	Explanation
1	N. C.	-
2	A	A-cable Profibus DP
3	N. C.	-
4	B	B-cable Profibus DP
5	Screen	Housing potential

The following encoders with a HIPERFACE® interface are detected by the HIPERFACE®-Profibus Adapter:

Designation/encoder series ¹⁾	Max. number of revs. ²⁾	Max. steps/rev. ²⁾
SRS...	1	262 144 (18-bit)
SCK...	1	262 144 (18-bit)
SKS...	1	32 768 (15-bit)
SEK...	1	4096 (12-bit)
SRM...	4096	262 144 (18-bit)
SCL...	4096	262 144 (18-bit)
SKM...	4096	32 768 (15-bit)

Designation/encoder series ¹⁾	Resolution ²⁾
L230	on request
XKS...	0.05 mm

¹⁾ Valid for all standard encoders from the relevant product range.

²⁾ Scaling via bus protocol. Default values in EDS file = maximum values.

Accessories

Connection technology

Technical data		Profib.									
Housing	Die-cast zinc										
Mass	Approx. 400 g										
Supported encoders	See encoder table on page 4										
Configuration of the adapter of the encoder connected	Automatically by using the electronic name plate										
Count direction cw/ccw	Via bus protocol										
Measurement step (rotary Encoder)	360°/step count per revolution										
Steps per revolution¹⁾	See encoder table on page 4										
Number of revolutions	See encoder table on page 4										
Error limits	See encoder data sheet										
Reproducibility	See encoder data sheet										
Position sample time	100 µs										
Working temperature range	- 20 ... + 60 °C										
Storage temperature range	- 25 ... + 85 °C										
Permissible relative humidity²⁾	90 %										
EMC³⁾											
Resistance											
to shocks ⁴⁾	70 g/6 ms										
to vibration ⁵⁾	20 g/10 ... 2000 Hz										
Protection to IEC 60529⁶⁾	IP 64										
Operating voltage range (U_s)	10 ... 30 V DC										
Encoder operating voltage via the adapter	8 V DC ± 5 % (max. 650 mA)										
Power consumption (without encoder)	2.2 W										
Initialisation time⁶⁾	Typ. 360 ms (50 ms after encoder-ready signal)										
Input interface HIPERFACE®											
Electrical connection to the encoder (HIPERFACE®)	Signal line via 8-pin female device connector, potential-free to the housing										
Output interface Profibus DP											
Electrical interface⁷⁾	RS485 with DC isolation										
Protocol	DP V0 + isochronous Mode (DP V2) Encoderprofile Class 1 and 2										
Address setting (node no.)	1 ... 125 DIP switches 126 EEPROM addressing via protocol										
Data transfer rate (baud rate)	9.6 kBaud ... 12 MBaud automatic detection										
Electronic adjustment (number set)	Via bus protocol and DIP switches										
Status information	HIPERFACE® status (LED yellow) PROFIBUS status (LED red) and (LED bi-color red/green) [alternatively: green]										
Error value output	In accordance with bus diagnostic function										
Bus termination⁸⁾	Via external terminating resistor										
Electrical connection to control (PROFIBUS)	Signal line via 5-pin male device connector (bus IN) and 5-pin female device connector (bus OUT) as well as 4-pin male device connector (U _s), potential-free to the housing										

¹⁾ Condensation not permissible³⁾ To EN 60068-2-27⁷⁾ To EN 50170-2²⁾ EN 61000-6-2⁴⁾ To EN 60068-2-6^(DIN 19245 Part 1-3)

EN 61000-4-2

⁵⁾ With mating connector fitted

DC-isolated via opto-

EN 61000-4-3

Exposure to direct sunlight over an extended period is not permissible

couplers

EN 61000-4-4

⁶⁾ For encoders with type code FF, the initialisation time is typ. 240 ms

Activation only at the last bus subscriber of the line.

EN 61000-4-5

EN 61000-4-6

EN 61000-6-3

EN 55011

Ordering information**HIPERFACE®-Profibus Adapter****Type**

AD-HFPLRS4

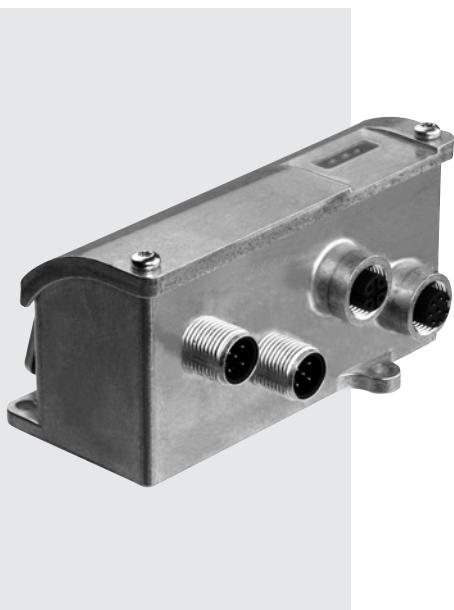
Part no.

1035483

HIPERFACE®-DeviceNet-Adapter



- Bus link to ISO11898
- CAN-High Speed to CAN Specification 2.0B
- Automatic encoder detection
- Electronically adjustable, configurable resolution
- Enclosure rating IP 64



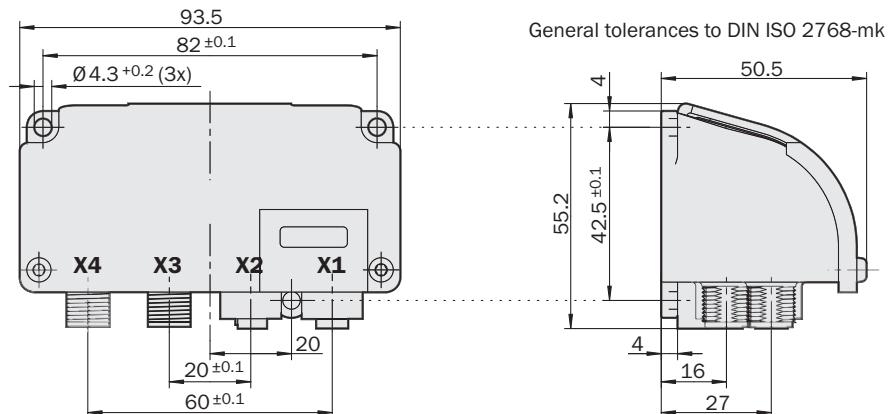
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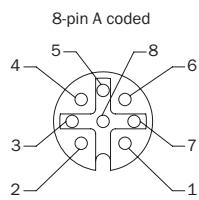
Listed accessory which is to use with listee's listed SICK-STEGMANN GmbH encoders.

For use in NFPA 79 applications only.
Interconnection cables and accessories are available from SICK-STEGMANN.

Dimensional drawing HIPERFACE®-DeviceNet Adapter

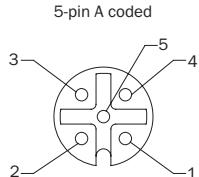


PIN and wire allocation HIPERFACE® input (X1)



PIN	Colour of wires	Signal	Explanation
1	brown	REFSIN	Process data channel
2	white	+ SIN	Process data channel
3	black	REFCOS	Process data channel
4	pink	+ COS	Process data channel
5	yellow	Data +	RS 485 Parameter channel
6	violet	Data -	RS 485 Parameter channel
7	blue	GND	Ground connection
8	red	+ U _s	Encoder Supply voltage via the Adapter
	Screen		Housing potential

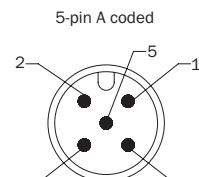
PIN and wire allocation DeviceNet (out) (X2)



PIN	Signal	Explanation
1	Drain/Screen	Bus Drain/Screen must not have any connection to the housing
2	V +	Supply voltage via the Bus
3	V -	Ground connection (GND)
4	CAN_H	CAN High
5	CAN_L	CAN Low

PIN and wire allocation (X3) – not connected

PIN and wire allocation DeviceNet (in) (X4)



PIN	Signal	Explanation
1	Drain/Screen	Bus Drain/Screen must not have any connection to the housing
2	V +	Supply voltage via the Bus
3	V -	Ground connection (GND)
4	CAN_H	CAN High
5	CAN_L	CAN Low

The following encoders with a HIPERFACE® interface are detected by the HIPERFACE®-DeviceNet Adapter:

Designation/encoder series ¹⁾	Max. number of revs. ²⁾	Max. steps/rev. ²⁾
SRS...	1	262 144 (18-bit)
SCK...	1	262 144 (18-bit)
SKS...	1	32 768 (15-bit)
SEK...	1	4096 (12-bit)
SRM...	4096	262 144 (18-bit)
SCL...	4096	262 144 (18-bit)
SKM...	4096	32 768 (15-bit)
Designation/encoder series ¹⁾	Resolution ²⁾	
L230	on request	
XKS...	0.05 mm	

¹⁾ Valid for all standard encoders from the relevant product range.

²⁾ Scaling via bus protocol. Default values in EDS file = maximum values.

Accessories

Connection technology

Technical data		DN								
Housing	Die-cast zinc									
Mass	Approx. 400 g									
Supported encoders	See encoder table on page 6									
Configuration of the adapter of the encoder connected	Automatically by using the electronic name plate									
Count direction cw/ccw	Via bus protocol									
Measurement step (rotary Encoder)	360°/step count per revolution									
Steps per revolution	See encoder table on page 6									
Max. Number of revolutions	See encoder table on page 6									
Error limits	See encoder data sheet									
Reproducibility	See encoder data sheet									
Position sample time	< 1 ms									
Working temperature range	- 20 ... + 60 °C									
Storage temperature range	- 25 ... + 85 °C									
Permissible relative humidity¹⁾	90 %									
EMC²⁾										
Resistance										
to shocks ³⁾	70 g/6 ms									
to vibration ⁴⁾	20 g/10 ... 2000 Hz									
Protection to IEC 60529⁵⁾	IP 64									
Operating voltage range (U_s)	10 ... 30 V DC									
Encoder operating voltage via the adapter	8 V DC ± 5 % (max. 500 mA)									
Power consumption (without encoder)	2.2 W									
Initialisation time	Appr. 2 s (incl. Duplicates MAC-ID-Check)									
Input interface HIPERFACE®										
Electrical connection to the encoder (HIPERFACE®)	Signal line via 8-pin female device connector, potential-free to the housing									
Output interface DeviceNet										
Electrical interface⁶⁾										
Protocol⁷⁾										
Address setting (node no.)	0 ... 63 DIP switches or addressing via bus protocol									
Data transfer rate (Baudrate)	100 ... 500 kBaud via DIP switches, bus protocol or Autobaud									
Electronic adjustment (number set)	Via bus protocol and DIP switches									
Status information	HIPERFACE® status (LED yellow) Supply voltage (LED green) Bus status (LED bicolor red/green)									
Error value output	Analysis of the alarms and warnings									
Bus termination⁸⁾	Via external terminating resistor									
Electrical connection to control (DeviceNet)	Signal line via 5-pin male device connector (bus IN) and 5-pin female device connector (bus OUT) potential-free to the housing (Supply voltage via Bus-cable)									

¹⁾ Condensation not permissible²⁾ EN 61000-6-2

EN 61000-4-2
EN 61000-4-3
EN 61000-4-4
EN 61000-4-5
EN 61000-4-6

EN 61000-6-3
EN 55011

³⁾ To EN 60068-2-27⁴⁾ To EN 60068-2-6

⁵⁾ With mating connector fitted
Exposure to direct sunlight over an extended period is not permissible

⁶⁾ To ISO 11898 CAN-High Speed to CAN-specification 2.0B, DC-isolated

⁷⁾ DeviceNet protocol specification Release 2.0 Vol. 1 and 3; Device Profiles (Encoder Device Type 22_h)

⁸⁾ Activation only at the last bus subscriber of the line.

Ordering information

HIPERFACE®-DeviceNet Adapter

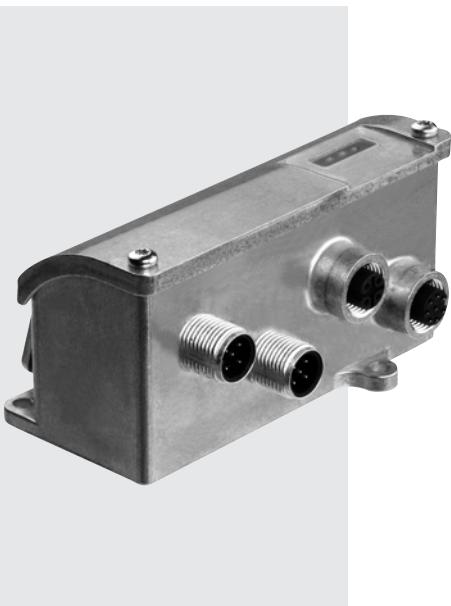
Type	Part no.
AD-HFCDNS3	1035646

HIPERFACE®-CANopen Adapter



Interface adapter module

- Bus link to ISO11898
- CAN-High Speed to CAN Specification 2.0B
- Automatic encoder detection
- Electronically adjustable, configurable resolution
- Enclosure rating IP 64



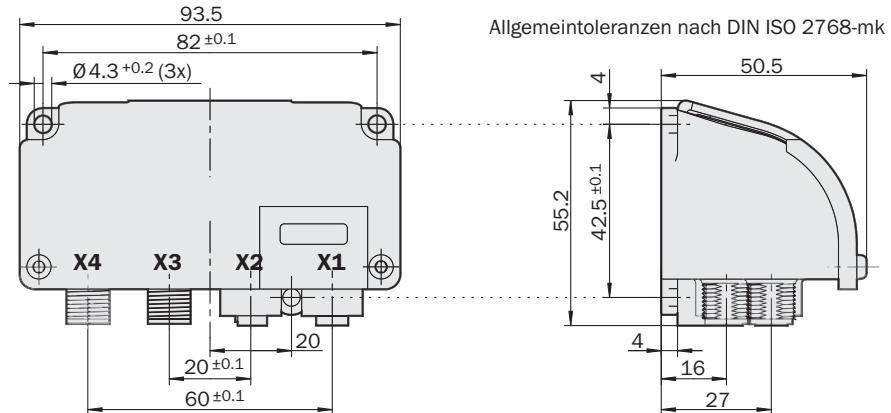
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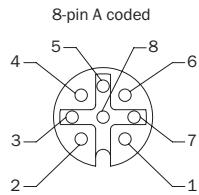
Listed accessory which is to use with listee's listed SICK-STEGMANN GmbH encoders.

For use in NFPA 79 applications only.
Interconnection cables and accessories are available from SICK-STEGMANN.

Dimensional drawing HIPERFACE®-CANopen Adapter

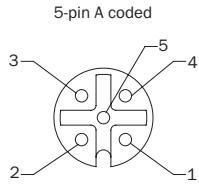


PIN and wire allocation HIPERFACE® input (X1)



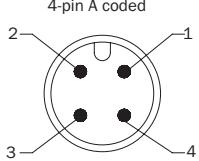
PIN	Colour of wires	Signal	Explanation
1	brown	REFSIN	Process data channel
2	white	+ SIN	Process data channel
3	black	REFCOS	Process data channel
4	pink	+ COS	Process data channel
5	yellow	Data +	RS 485 Parameter channel
6	violet	Data -	RS 485 Parameter channel
7	blue	GND	Ground connection
8	red	+ U _s	Encoder Supply voltage via the Adapter
	Screen		Housing potential

PIN and wire allocation CANopen (out) (X2)



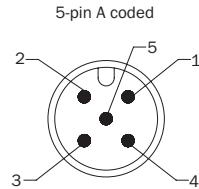
PIN	Signal	Explanation
1	Drain/Screen	Housing potential
2	V +	Supply voltage via the Bus
3	V -	Ground connection (GND)
4	CAN_H	CAN High
5	CAN_L	CAN Low

PIN and wire allocation Operating voltage U_s (X3)



PIN	Signal	Explanation
1	U _s	Operating voltage
2	N. C.	-
3	GND	0 V (ground)
4	N. C.	-

PIN and wire allocation CANopen (in) (X4)



PIN	Signal	Explanation
1	Drain/Screen	Housing potential
2	V +	Supply voltage via the Bus
3	V -	Ground connection (GND)
4	CAN_H	CAN High
5	CAN_L	CAN Low

The following encoders with a HIPERFACE® interface are detected by the HIPERFACE® CANopen Adapter:

Designation/encoder series ¹⁾	Max. number of revs. ²⁾	Max. steps/rev. ²⁾
SRS...	1	262 144 (18-bit)
SCK...	1	262 144 (18-bit)
SKS...	1	32 768 (15-bit)
SEK...	1	4096 (12-bit)
SRM...	4096	262 144 (18-bit)
SCL...	4096	262 144 (18-bit)
SKM...	4096	32 768 (15-bit)
Designation/encoder series ¹⁾	Resolution ²⁾	
L230	on request	
XKS...	0.05 mm	

¹⁾ Valid for all standard encoders from the relevant product range.

²⁾ Scaling via bus protocol. Default values in EDS file = maximum values.

Accessories

Connection technology

Technical data		CAN									
Housing	Die-cast zinc										
Mass	Approx. 400 g										
Supported encoders	See encoder table on page 8										
Configuration of the adapter of the encoder connected	Automatically by using the electronic name plate										
Count direction cw/ccw	Via bus protocol										
Measurement step (rotary Encoder)	360°/step count per revolution										
Steps per revolution	See encoder table on page 8										
Max. Number of revolutions	See encoder table on page 8										
Error limits	See encoder data sheet										
Reproducibility	See encoder data sheet										
Position sample time	< 1 ms										
Working temperature range	- 20 ... + 60 °C										
Storage temperature range	- 25 ... + 85 °C										
Permissible relative humidity¹⁾	90 %										
EMC²⁾											
Resistance											
to shocks ³⁾	70 g/6 ms										
to vibration ⁴⁾	20 g/10 ... 2000 Hz										
Protection to IEC 60529⁵⁾	IP 64										
Operating voltage range (U_s)	10 ... 30 V DC										
Encoder operating voltage via the adapter	8 V DC ± 5 % (max. 500 mA)										
Power consumption (without encoder)	2.2 W										
Initialisation time	< 1250 ms										
Input interface HIPERFACE®											
Electrical connection to the encoder (HIPERFACE®)	Signal line via 8-pin female device connector, potential-free to the housing										
Output interface CANopen											
Electrical interface⁶⁾											
Protocol⁷⁾											
Address setting (node no.)	1 ... 63 DIP switches										
Data transfer rate (Baudrate)	100 ... 1000 kBaud via DIP switches, bus protocol or Autobaud										
Electronic adjustment (number set)	Via bus protocol and DIP switches										
Status information	HIPERFACE® status (LED yellow) Supply voltage (LED green) Bus status (LED bicolor red/green)										
Error value output	Analysis of the alarms and warnings										
Bus termination⁸⁾	Via external terminating resistor										
Electrical connection to control (CANopen)	Signal line via 5-pin male device connector (bus IN) and 5-pin female device connector (bus OUT) and 4-pin male device connector (U _s), potential-free to the housing										

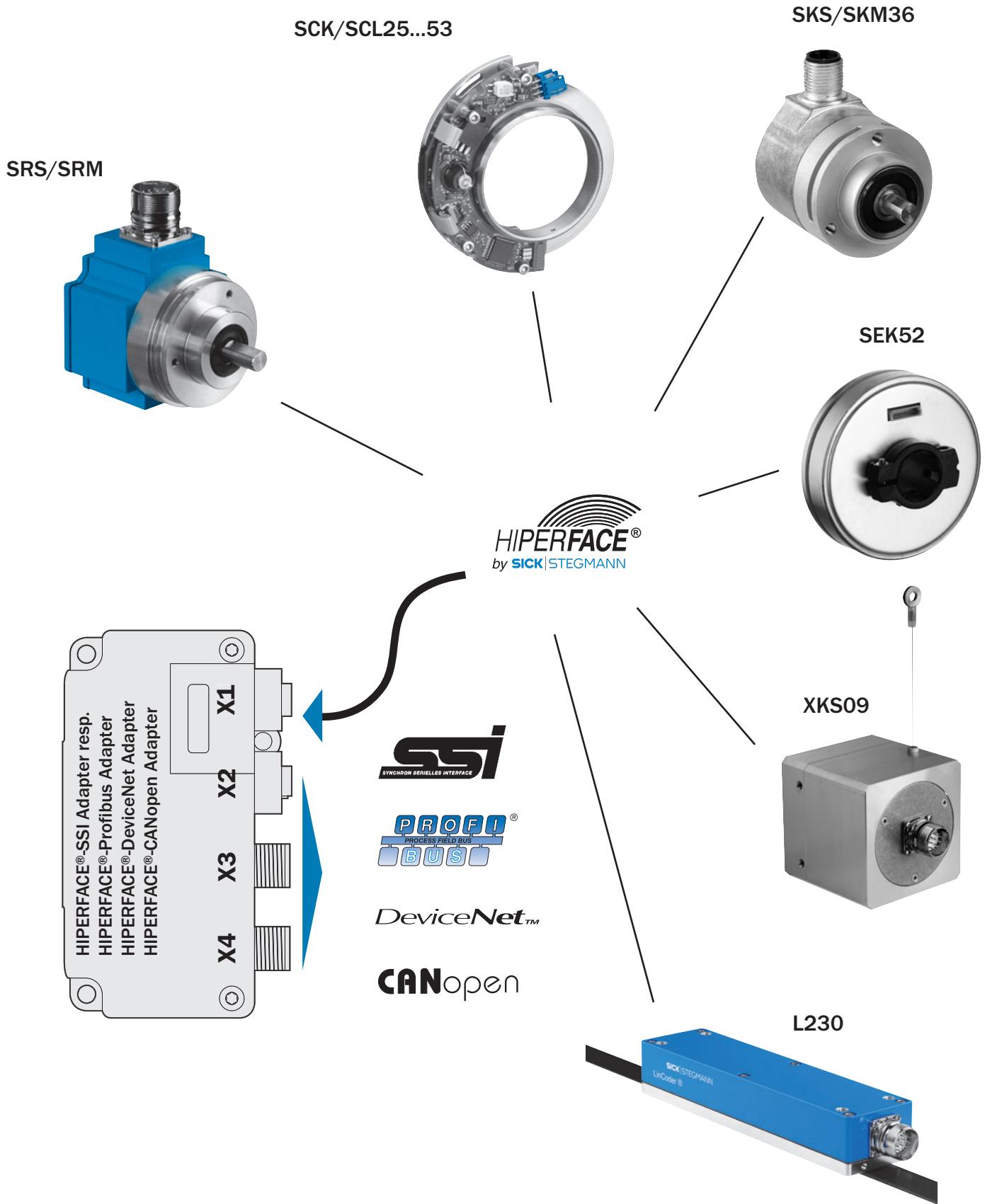
¹⁾ Condensation not permissible²⁾ EN 61000-6-2EN 61000-4-2
EN 61000-4-3
EN 61000-4-4
EN 61000-4-5
EN 61000-4-6EN 61000-6-3
EN 55011³⁾ To EN 60068-2-27⁴⁾ To EN 60068-2-6⁵⁾ With mating connector fitted
Exposure to direct sunlight over an extended period is not permissible⁶⁾ To ISO 11898 CAN-High Speed to CAN-Specification 2.0B, DC-isolated⁷⁾ CANopen communication profile DS301 V4.01, Device Profile acc. CIA DS 406 V3.1 Device Profile for Encoder (Class 2)⁸⁾ Activation only at the last bus subscriber of the line.**Ordering information****HIPERFACE®-CANopen Adapter****Type**

AD-HFCANS4

Part no.

1035645

Functional Diagram of Interface Adapter Module



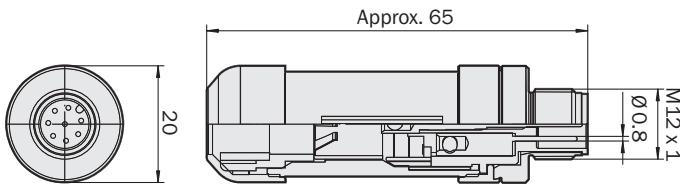
Dimensional drawings and ordering information

Round screw system M12/M23 for the HIPERFACE® connection (AD-HF.)

1

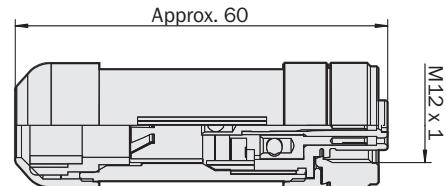
**Loose male connector M12, 8-pin, straight, screened,
for field assembly (adapter side)**

Type	Part no.	Contacts/cable diameter
STE-1208-GA	6028370	8 / 4 ... 8 mm



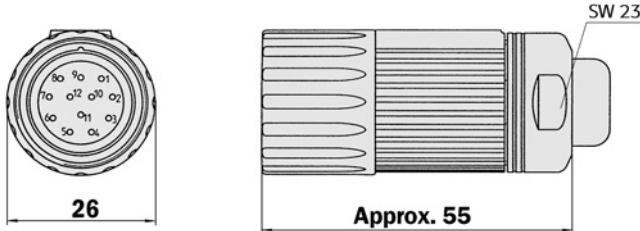
**Loose female connector M12, 8-pin, straight, screened,
for field assembly (encoder side)**

Type	Part no.	Contacts/cable diameter
DOS-1208-GA	6028369	8 / 4 ... 8 mm



**Loose female connector M23, 12-pin, straight, screened,
for field assembly (encoder side)**

Type	Part no.	Contacts
DOS-2312-G	6027538	12



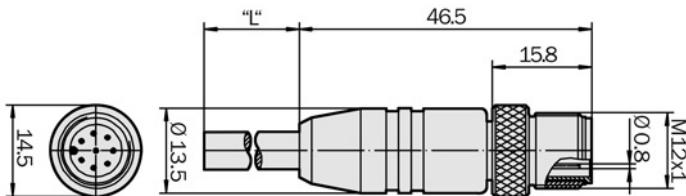
**Cable 8-wire, per metre, 4 x 2 x 0.25 mm², screened,
flexible, cable diameter 7.0 mm**

Type	Part no.	Wires
LTG-3208-MW	6032870	8

Male connector M12, 8-pin, straight, pre-wired with cable

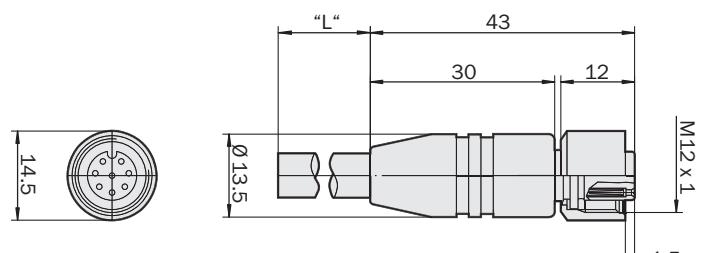
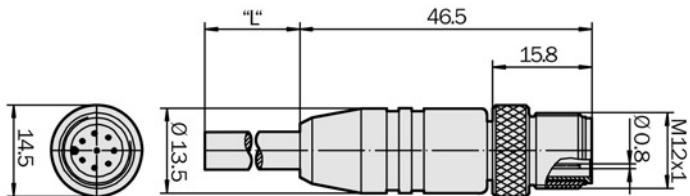
8-wire, 4 x 2 x 0.25 mm², screened, flexible (adapter side)

Type	Part no.	Contacts	Cable length
STL-1208-G02MAC1	6032452	8	2.0 m
STL-1208-G05MAC1	6032453	8	5.0 m
STL-1208-G10MAC1	6032454	8	10.0 m
STL-1208-G20MAC1	6032455	8	20.0 m



**Male connector M12 (adapter side) and female connector M12
(encoder side), 8-pin, straight, pre-wired with cable 8-wire,
4 x 2 x 0.25 mm², screened, flexible**

Type	Part no.	Contacts	Cable length
DSL-1208-G05MAC1	6032913	8	5.0 m



1 Max. permissible cable length between the encoder and the interface adapter ≤ 30m!

Dimensional drawings and ordering information

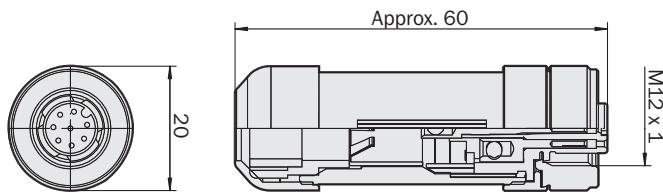
Round screw system M12 for the SSI connection (AD-HFSSIS2)

Loose female connector M12, 8-pin, straight, screened, for field assembly (adapter side)

Type	Part no.	Contacts/cable diameter
DOS-1208-GA	6028369	8 / 4 ... 8 mm

Cable 8-wire, per metre, 4 x 2 x 0.25 mm², screened, flexible, cable diameter 7.0 mm

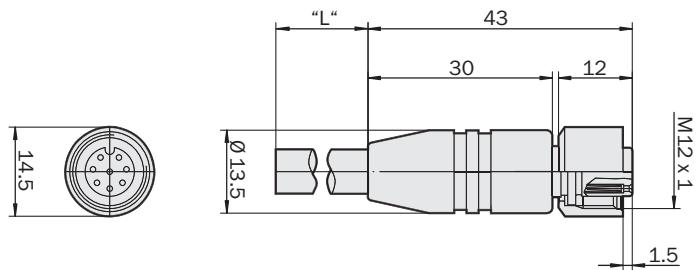
Type	Part no.	Wires
LTG-3208-MW	6032870	8



Female connector M12, 8-pin, straight, pre-wired with cable

8-wire, 4 x 2 x 0.25 mm², screened, flexible (adapter side)

Type	Part no.	Contacts	Cable length
DOL-1208-G02MAC1	6032866	8	2.0 m
DOL-1208-G05MAC1	6032867	8	5.0 m
DOL-1208-G10MAC1	6032868	8	10.0 m
DOL-1208-G20MAC1	6032869	8	20.0 m



Dimensional drawings and ordering information

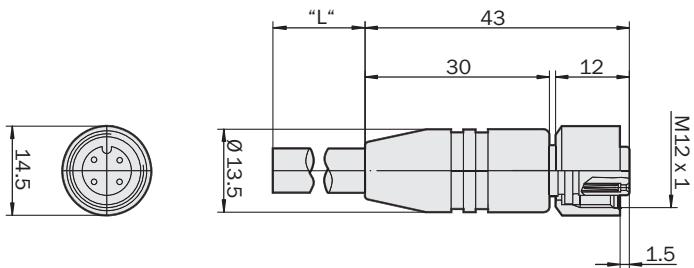
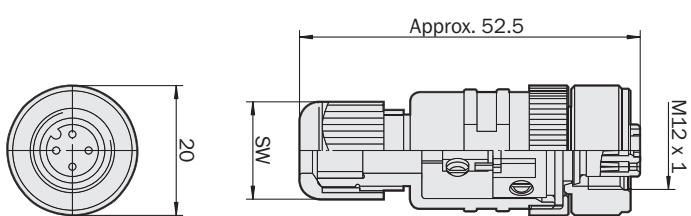
Round screw system M12 for the Profibus connection (AD-HFPRLS4)

**Loose female connector M12, 4-pin, straight, for field assembly,
for operating voltage (adapter side)**

Type	Part no.	Contacts
DOS-1204-G	6007302	4

**Female connector M12, 4-pin, straight, pre-wired with cable for
operating voltage, (adapter side)**

Type	Part no.	Description
DOL-1204-G05M	6009866	Cable 5 m, PVC



**Loose female/male connector M12, 5-pin, straight, screened,
for field assembly, for bus cable, B-coding (adapter side)**

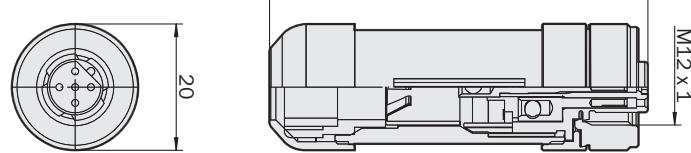
Type	Part no.	Description
PR-DOS-1205-G	6021353	Profibus female connector
PR-STE-1205-G	6021354	Profibus male connector

Bus cable, 2-wire, per metre 2 x 0.22 mm², screened

Type	Part no.	Wires
LTG-2102-MW	6021355	2

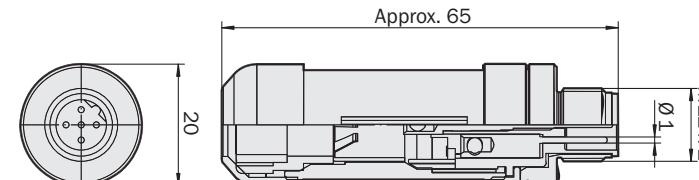
Profibus terminating resistor

Type	Part no.	Description
PRE-STE-END	6021156	Connector, 4 contacts



Male connector M12, 5-pin, straight, pre-wired with bus cable

2-wire, 2 x 0.22 mm², screened, B-coding (adapter side)

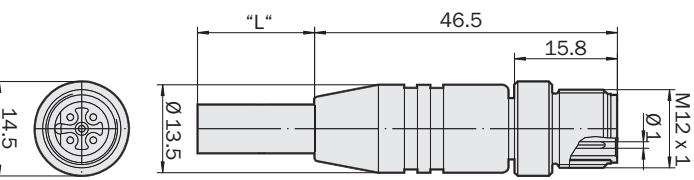


Female connector M12, 5-pin, straight, pre-wired with bus cable

2-wire, 2 x 0.22 mm², screened, B-coding (adapter side)

Type	Part no.	Description
DOL-12PR-G05M	6026006	Profibus cable 5 m
DOL-12PR-G10M	6026008	Profibus cable 10 m

Type	Part no.	Description
STL-12PR-G05M	6026005	Profibus cable 5 m
STL-12PR-G10M	6026007	Profibus cable 10 m



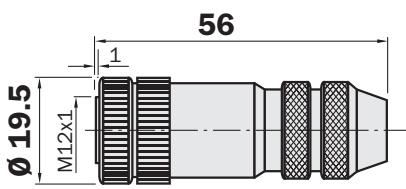
Dimensional drawings and ordering information

Round screw system M12 for the DeviceNet connection (AD-HFCDNS3)

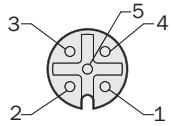
Loose female connector M12, 5-pin, straight, screened

360°-shield on locking nut, field assembly for bus cable

Type	Part no.
DOS-1205-GA	6027534



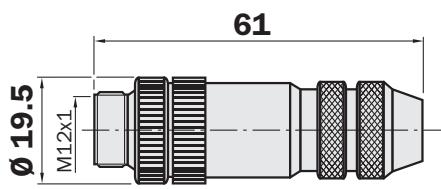
Cable Ø
max. 4.5 up to 7 mm



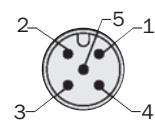
Male connector M12, 5-pin, straight, screened

360°-shield on locking nut, field assembly for bus cable

Type	Part no.
STE-1205-GA	6027533



Cable Ø
max. 4.5 up to 7 mm



Bus cable per metre, 4 x 0,34 mm², twisted 2x in pairs, shielded with AL-PT tape

Type	Part no.	Description
LTG-2804-MW	6028328	Cable diameter 6.9 mm

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Brasil Phone +55 11 3215-4900 E-Mail sac@sick.com.br	Republika Slovenija Phone +386 (0)1-47 69 990 E-Mail office@sick.si
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