SENSOR HUB & SENSORS

SHC 071 | IO-Link, DC 24 V, 4 Sensor Ports

> - Digital IO-Link Interface
> - Small dimensions
> - Easy DIN rail and screw mounting
> - M12 plug-in connector

> - For 1 to 4 digital STEGO sensors
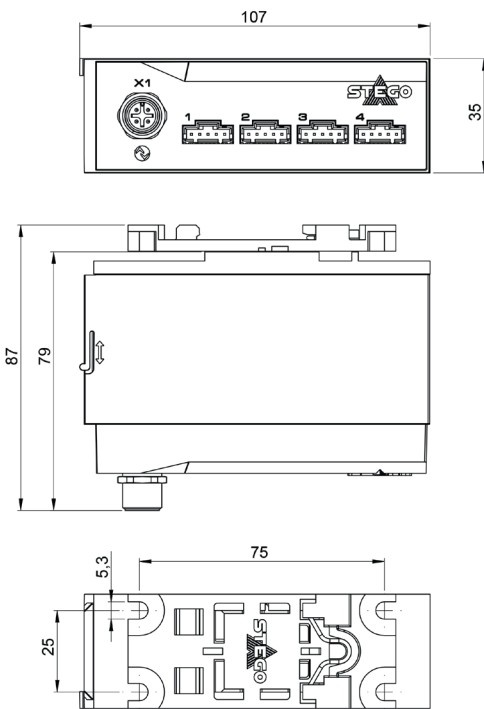> - Quick connection of sensors via connectors
> - 4 sensor types

The SHC 071 sensor hub enables up to four digital STEGO SEN 073 sensors to be integrated into IO-Link. Thus, up to eight measured values can be made available on one IO-Link port. Conventional IO-Link-capable sensors, on the other hand, will occupy one IO-Link port each on the IO-Link master. The slot assignment of the sensors on the SHC 071 sensor hub is freely selectable. The sensors SEN 073 can only be operated with the sensor hub SHC 071. Detailed information on the STEGO sensors SEN 073 for the sensor hub SHC 071 is provided on the following pages.
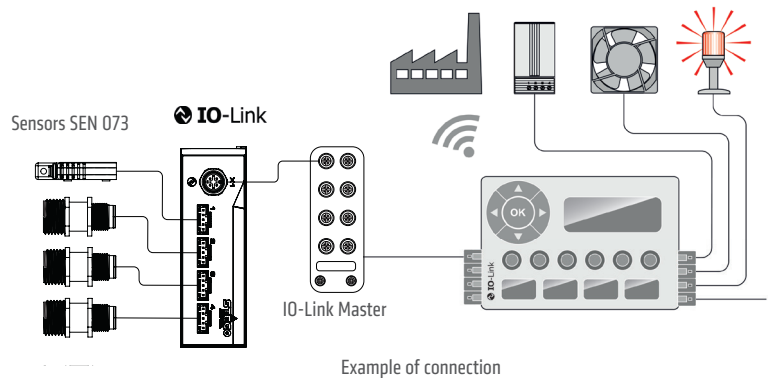
IO-Link CE UKCA RoHS 3

TECHNICAL DATA

Sensor connection	4 ports with strain relief for up to 4 STEGO sensors[1]
IO-Link connection	M12 round plug connector, IEC 61076-2-101, 4-pin, A-coded
Electrical protection	Reverse-polarity, short circuit, overvoltage protection
Mounting	clip for 35 mm DIN rail, EN 60715 and screw mounting (M5)
Casing	plastic according to UL94 V-0, light grey
Dimensions	107 x 35 x 79 mm (87 mm with universal mounting bracket)
Weight	approx. 110 g
Fitting position	variable
Operating temperature	-40 to +80 °C (-40 to +176 °F)
Storage temperature	-40 to +85 °C (-40 to +185 °F)
Operating/Storage humidity	max. 90 % RH (non-condensing)
Operating altitude	≤ 4,000 m above sea level
Protection type/Protection class	IP40 / III (SELV)
Certificates	EC 61010-1 UL and VDE up-comming

[1] STEGO sensors SEN 073 must be ordered separately.
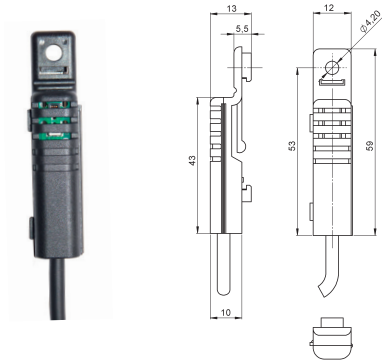
Universal mounting bracket for DIN rail and screw mounting

Sensors SEN 073

IO-Link

IO-Link Master

Example of connection

Art. No.	Interface	Operating voltage	Power consumption max.
07100.2-00	IO-Link (digital, specified acc. to version 1.1)	DC 24 V (DC 18-30 V)	0.5 W

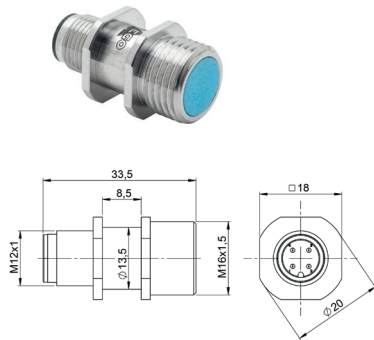# DIGITAL PLUG & CONNECT SENSORS SEN 073 FOR SENSOR HUB SHC 071

The sensors for the SHC 071 Sensor Hub must be ordered separately. The digital sensors listed below are the current range of Plug & Connect compatible components for the Sensor Hub. All these sensors are pre-calibrated and thus immediately ready for use; individual calibration effort is not required. Due to their small dimensions and customizable cable lengths, they can be flexibly positioned and easily mounted. A mounting clip is included in the scope of delivery for each sensor.

TECHNICAL DATA

Mounting	clip for 35 mm DIN rail, EN 60715 and screw mounting (M4)
Casing	plastic according to UL94 V-0, black
Dimensions/Weight	59 x 12 x 13 mm
Fitting position	variable
Response time T_{63}	temperature: < 1,5 min, humidity: < 7 s
Operating/Storage temperature	-40 to +85 °C (-40 to +185 °F)
Operating/Storage humidity	100 % RH / max. 90 % RH (non-condensing)
Operating altitude	≤ 4,000 m above sea level
Protection type	IP20

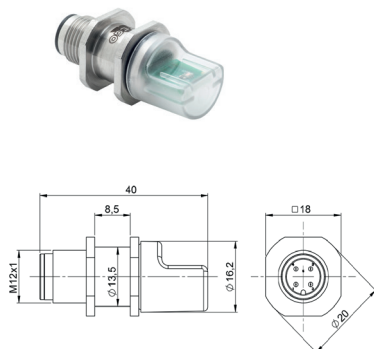| Art. No.	Sensor	Connection	Measuring range 1	Measuring range 2	Weight (approx.)
07300.1-00	Temperature + rel. Humidity	cable with connector, shielded, 1.0 m	-40 to +80 °C (-40 to +176 °F) ±0.2 K	0 to 100 % RH ±2 %	40 g
07300.1-01	Temperature + rel. Humidity	cable with connector, shielded, 2.0 m	-40 to +80 °C (-40 to +176 °F) ±0.2 K	0 to 100 % RH ±2 %	70 g

TECHNICAL DATA

Mounting	incl. mounting clip for screw mounting, Ø 3 mm, see photo
Casing	stainless steel
Dimensions/Weight	33.5 x Ø 20 mm / approx. 25 g
Fitting position	variable
Connection	M12 plug IEC 61076-2-101, 4-pin, A-coded
Operating/Storage humidity	100 % RH / max. 90 % RH (non-condensing)
Operating altitude	≤ 4,000 m above sea level
Protection type	IP64
Note	Max. two of the four ports can be assigned with VOC sensors

Art. No.	Sensor	Operating/Storage temperature	Measuring range 1	Measuring range 2	Response time T_{63}
07300.0-00	Temperature + relative Humidity	-40 to +70 °C (-40 to +158 °F) / -40 to +85 °C (-40 to +185 °F)	0 to 100 % RH ±2 %	0 to 100 % rF ± 2 %	temperature: < 2 min, humidity: < 20 s
07301.0-00	Absolute atmospheric pressure + temperature	-40 to +70 °C (-40 to +158 °F) / -40 to +85 °C (-40 to +185 °F)	300 to 1100 hPa	-40 to +70 °C (-40 to +158 °F)	absolute atmospheric pressure: < 5 s, temperature: < 2,5 min
07303.0-00	Air quality + temperature	-10 to +50 °C (-10 to +122 °F) / -5 to +30 °C (-41 to +86 °F)	VOC-Index: 0 - 500	-10 to +50 °C	air quality: < 10 s temperature: < 2,5 min

Photo: Mounting clip for screw mounting, Ø 3 mm (included)

TECHNICAL DATA

Mounting	incl. mounting clip for screw mounting, Ø 3 mm, see photo
Casing	stainless steel
Dimensions/Weight	33.5 x Ø 20 mm / approx. 25 g
Fitting position	variable
Operating/Storage temperature	-40 to +85 °C (-40 to +185 °F)
Operating/Storage humidity	100 % RH / max. 90 % RH (non-condensing)
Operating altitude	≤ 4,000 m above sea level
Note	IP65

Art. No.	Sensor	Connection	Measuring range	Relative accuracy	Response time T_{63}
07302.0-00	Visible light	M12 plug IEC 61076-2-101, 4-pin, A-coded	0,01 to 83.865 lx	0,2 %	< 7 s

CABLE

These cables are required to connect the IO-Link sensor hub SHC 071 and its digital plug & connect sensors of the series SEN 073. The cables are not included in the scope of delivery of the sensors. The sensor cable with plug connection is locking and shielded.
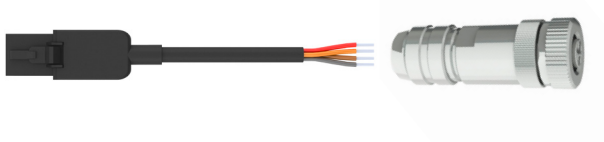
Image: standard cable - Art. No. 244445

Image: customizable lenghts - Art. No. 244446 and Art. No. 244447

Art. No.	Length	Connection
244445	2,0 m	fully assembled with female M12 plug IEC 61076-2-101, 4-pin, A-coded, shielded
244446	5,0 m	for self-assembly, incl. female M12 plug IEC 61076-2-101, 4-pin, A-coded, shielded
244447	20,0 m	for self-assembly, incl. female M12 plug IEC 61076-2-101, 4-pin, A-coded, shielded

CONNECTION EXAMPLE

The illustration shows the IO-Link Sensor Hub SHC 071 with different sensors and connection cables (from top down):
(1) Cable with connector and female M12 plug in 2.0 m length (Art. No. 244445)
(2) Cable with connector in 5.0 m length (Art. No. 244446) and (3) 20.0 m length (Art. No. 244447), each incl. (4) female M12 plug for self-assembly
(5) Temperature+Humidity Sensor SEN 073, IP20, in 1.0 m or 2.0 m cable length with connector