

GENERAL DESCRIPTION

4-wire **EasyTREK** ultrasonic level transmitters are offered for solids level monitoring tasks where previously only more complex, two part systems have performed adequately. **NIVELCO's** high efficiency SenSonic narrow beam angle transducers, giving superb signal transmission, make possible that the **EasyTREK** units overcome filling noise, dusting and irregular surface formations in most cases to give a high performance, compact, powder and solids level measurement transmitter. This is provided by the QUEST+ software, using advanced process adaptive signal processing for reliable echo monitoring, offering a best-in-class solution.

MAIN FEATURES

- Non-contact level measurement
- 4-wire integrated (blind) level transmitters
- Maximum 60 m measuring range
- Narrow (5°) beam angle
- Full temperature compensation
- IP65 protection
- HART® communication
- Dust Ex version

APPLICATIONS

- Level, volume and weight calculation
- Wide application range: light powders to coarse bulk solid materials
- Reliable measurement in challenging applications such as dusting during filling

CERTIFICATIONS

- ATEX (Dust Ex)

TECHNICAL DATA

Type		EasyTREK SCD-300
System		4-wire
Accuracy ⁽¹⁾		± (0.2% of measured distance + 0.1% of range)
Resolution		10 mm
Output	Analogue	4 – 20 mA
	Relay	SPST, 48 V AC / 5 A, AC12
	Digital communication	HART®
Ambient temperature		-30 °C ... +60 °C
Process temperature		
Process pressure		0.07 – 0.11 MPa (0.7 – 1.1 bar) P _{absolute} and ±0.01 MPa (0.1 bar) difference between ambient and tank pressure
Power supply		11.4 – 40 V DC / 4.7 W and 11.4 – 28 V AC / 5.2 VA
Electrical protection		Class III
Housing		Same as the transducer housing material
Electrical connection		LiYCY type 7x 0.5 mm ² shielded Ø7.5 mm cable; standard cable length: 5 m (can be ordered up to 30 m)
Ingress protection		IP65
Explosion protection		See: "Special data for Ex certified models" table
Mass		~3 – 3.5 kg, or 6.5 kg

⁽¹⁾ Under optimum conditions and stabilized transducer temperature

SPECIAL DATA FOR Ex CERTIFIED MODELS

Type	EasyTREK SCD-300
Protection type	Dust Ex
Ex marking	Ⓔ II 1 D Ex ma ta III C T85°C...T130 °C Da
Ambient temperature	-30 °C ... +60 °C
Process temperature	

TRANSDUCERS

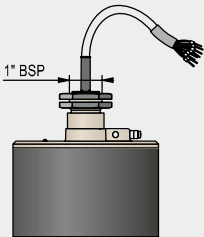
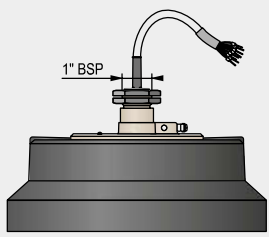
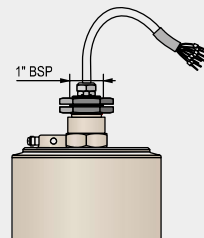
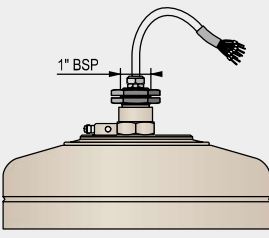
Transducer material	EasyTREK
	SCD-300
PP (Normal version)	■
Aluminium (Ex version)	■

PROPERTIES

Functions	EasyTREK
	SCD-300
Relay or SSR	SPST
HART®	■
Dust Ex version	■



TRANSDUCER DATA AND DIMENSIONS

Transducer type	SCD-34	SCD-33	SCD-31
Recommended applications	Small tanks, hoppers, conveyor belts. Both powders and granules.	Medium sized silos containing all kinds of bulk solids.	Larger silos containing all kinds of bulk solids. Due to its power and low frequency recommended if dust generation is significant.
EasyTREK (normal type)			
EasyTREK (Ex type)			
Transducer material	Normal type: PP, Ex type: Paint coated aluminium		
Surface of the transducer	Closed cell Polyurethane foam sensor face (PUR)		
Beam angle	5°		
Max. measuring range ⁽¹⁾	15 m	30 m	60 m
Min. measuring range ⁽¹⁾	0.6 m		1 m

⁽¹⁾ Under optimum conditions and stabilized transducer temperature



SCD-31J-8 Ex



SCD-31J-4

EasyTREK SCD-34/33/31

5 years

4-wire integrated compact ultrasonic level transmitters for solids
with PP or aluminium cast sensor housing with polyurethane foam face

Range / Frequency

S C D - 3 ■ ■ - ■

4	0.6-15 m (40 kHz)
3	0.6-30 m (30 kHz)
1	1-60 m (15 kHz)

Mounting

S C D - 3 ■ ■ - ■

0	1" BSP thread
J	Aiming device

Output / Approval

S C D - 3 ■ ■ - ■

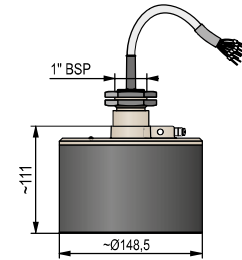
4	4-20 mA + HART + Relay
8	4-20 mA + HART + SSR / Ex

Cable

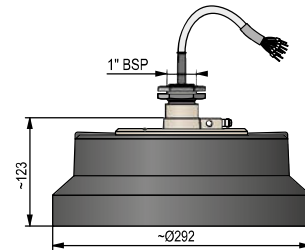
Maximum length 30 m; each started 1 m over the standard 5 m

Accessories to order (see relevant page for details)

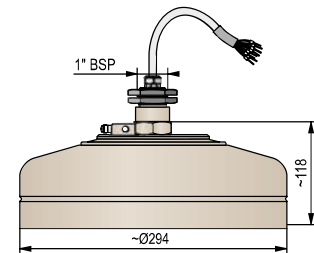
S F A - 3 ■ ■ - 0	Flanges
S A T - 3 0 4 - 0	HART-USB modem
S A T - 5 0 4 - ■	HART-USB/Bluetooth modem
S A K - 3 0 5 - 2	HART-USB/RS485 modem
S A K - 3 0 5 - 6	HART-USB/RS485 modem / Ex ia
S A A - 1 0 1 - 0	Fast connecting gland for pipe mounting devices with 1" process connection, PP
S A A - 1 0 2 - 0	Aiming device, 500 mm, aluminium, Pg9, drilled as DN50 PN16



SCD-330 / 340



SCD-310



SCD-310-8Ex

