

### GENERAL DESCRIPTION

The 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 200 feet 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 approved (Dust Ex)

### TRANSDUCERS

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

### PROPERTIES

Functions	EasyTREK
	SCD-300
Relay	■
HART	■
Dust Ex version	■

### TECHNICAL DATA

Type	EasyTREK SCD-300	
System	4-wire	
Accuracy <sup>(1)</sup>	± (0.2% of measured distance + 0.1 % of range)	
Resolution	0.4 inch (10 mm)	
Output	Analogue	4-20 mA
	Relay	SPST, 48 V AC / 5 A, AC12
	Digital Communication	4-20 mA + HART
Ambient temperature	-22 °F to +140 °F	
Process temperature	-22 °F to +167 °F	
Process pressure	10 ... 16 psig P <sub>absolute</sub> and ±1.45 psig 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 AWG20 shielded Ø 0.3 inch cable; standard cable length: 16.5 feet (can be ordered up to 100 feet)	
Ingress protection	IP65	
Explosion protection	See: „Special data for Ex certified models“ table	
Mass	6.6 lb – 7.7 lb	

<sup>(1)</sup> Under optimum conditions and stabilized transducer temperature

### SPECIAL DATA FOR Ex CERTIFIED MODELS

Type	EasyTREK SCD-300
Protection type	Dust Ex
Ex marking	See: <a href="http://www.nivelco.com">www.nivelco.com</a>
Ambient temperature	-22 °F to +140 °F
Process temperature	
Electrical connection	LiYCY type 7x AWG20 shielded Ø 0.3 inch cable; standard cable length: 16.5 feet



### TRANSDUCER DATA AND DIMENSIONS

LEVEL TRANSMITTERS

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 and aluminum, Ex type: Paint coated aluminum		
Surface of the transducer	Closed cell Polyurethane foam sensor face (PUR)		
Beam angle	5°		
Max. measuring range <sup>(1)</sup>	50 feet (15 m)	100 feet (30 m)	200 feet (60 m)
Min. measuring range <sup>(1)</sup>	2 feet (0.6 m)		3.3 feet (1 m)

<sup>(1)</sup> Under optimum conditions and stabilized transducer temperature



SCD-31J-8 Ex



SCD-31J-4

### EasyTREK SCD-34/33/31

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

#### Type

<b>S C D - 3</b> ■ ■ - ■	
4	2-50 ft (0.6-15 m; 40 kHz)
3	2-100 ft (0.6-30 m; 30 kHz)
1	3.3-200 ft (1-60 m; 15 kHz)

#### Mounting

<b>S C D - 3</b> ■ ■ - ■	
0	1" BSP thread
J	Aiming device

#### Output / Approval

<b>S C D - 3</b> ■ ■ - ■	
4	4-20 mA + HART + Relay
8	4-20 mA + HART + SSR / Ex

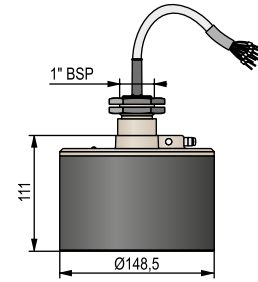
#### Cable

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

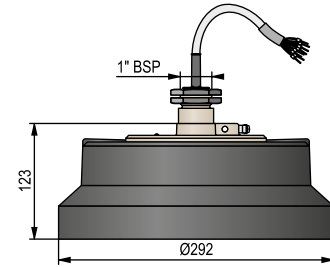
#### Accessories to order (see relevant page for details)

#### Type

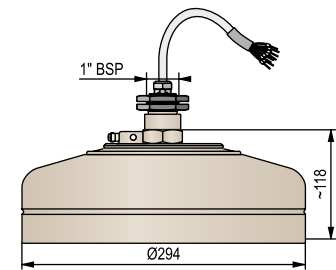
<b>S F A - 3</b> ■ ■ - 0	Flanges
<b>S A T - 3 0 4 - 0</b>	HART-USB modem
<b>S A K - 3 0 5 - 2</b>	HART-USB/RS485 modem
<b>S A K - 3 0 5 - 6</b>	HART-USB/RS485 modem / Ex ia
<b>S A A - 1 0 1 - 0</b>	Fast connecting gland for pipe mounting devices with 1" process connection, PP
<b>S A A - 1 0 2 - 0</b>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



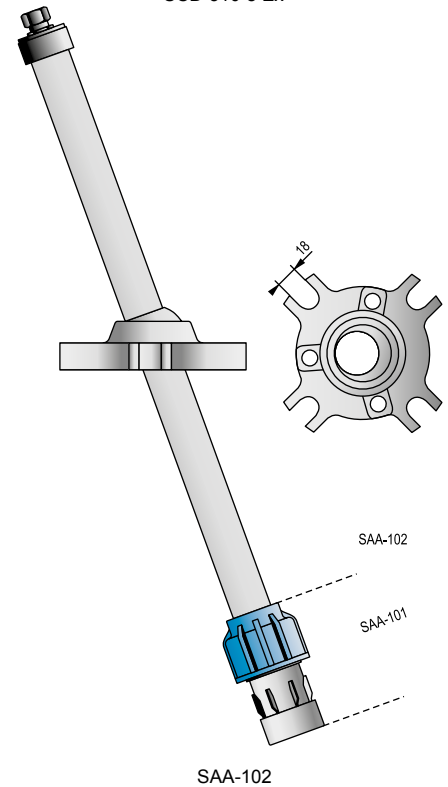
SCD-330 / 340



SCD-310



SCD-310-8 Ex



SAA-102

SAA-101

SAA-102