



LBV320-GXTGDTVMX05000

LBV3xx

LEVEL SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
LBV320-GXTGDTVMX05000	6039282

Other models and accessories → www.sick.com/LBV3xx

Illustration may differ



Detailed technical data

Features

Medium	Bulk solids
Measurement	Switch
Probe type	Tuning fork
Probe length	5,000 mm
Process pressure	-1 bar ... 6 bar
Process temperature	-20 °C ... +80 °C
Fill material density	≥ 0.008 g/cm ³
Particle size	< 10 mm
Tensile strength	≤ 3,000 N
ATEX approval	ATEX II 1D, 1/2D, 2D Ex ta ta/tb tb IIIC Tx Da, Da/Db, Db
Type examination	BVS 17 ATEX E 099

Performance

Accuracy of sensor element	± 10 mm
Reproducibility	≤ 5 mm
Response time	500 ms ¹⁾ 1,000 ms ²⁾
MTBF	4,61*10 ⁶ h

¹⁾ When covered.

²⁾ When uncovered.

Electronics

Communication interface	-
Supply voltage	10 V DC ... 55 V DC
Residual ripple	≤ 5 V _{pp}
Initialization time	< 2 s
VDE protection class 2	✓

Connection type	M20 x 1.5
Output signal	1 x PNP/NPN
Electronics	Volt-free transistor output PNP/ NPN
Hysteresis	10 mm
Output current	< 300 mA
Inductive load	≤ 1 H
Capacitive load	100 nF
Enclosure rating	IP66 IP67

Mechanics

Wetted parts	Stainless steel 1.4404 / 316L
Process connection	G 1½ A PN 6
Housing material	Stainless steel (investment casting) 316L
Sensor material	Stainless steel 316L, 318LN, PUR

Ambient data

Ambient operating temperature	-40 °C ... +80 °C
Ambient temperature, storage	-40 °C ... +80 °C

Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
China RoHS	✓
ATEX certificate	✓
EAC certificate / DoC	✓

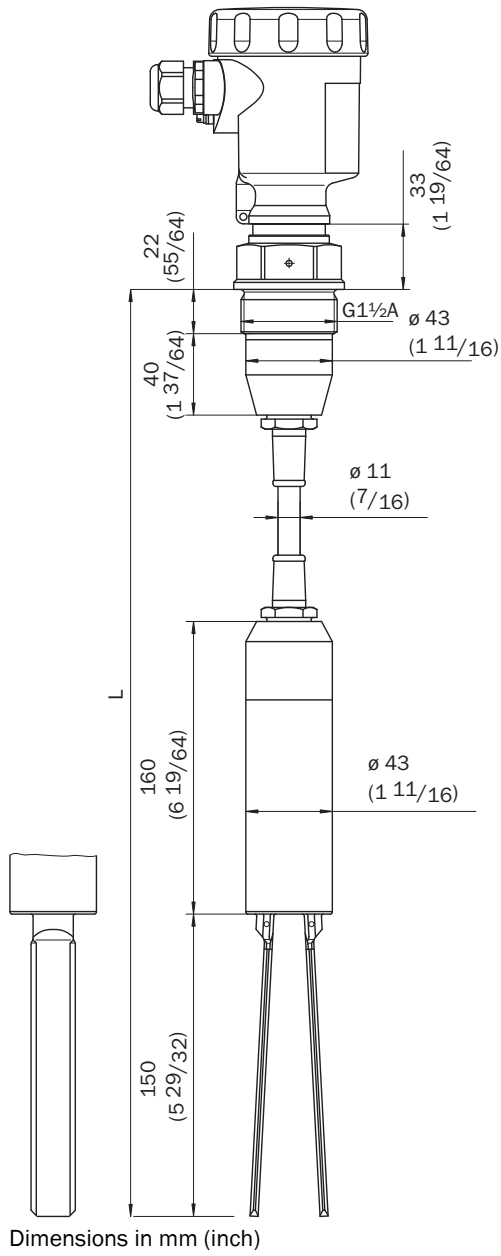
Classifications

ECLASS 5.0	27273202
ECLASS 5.1.4	27273202
ECLASS 6.0	27273202
ECLASS 6.2	27273202
ECLASS 7.0	27273202
ECLASS 8.0	27273202
ECLASS 8.1	27273202
ECLASS 9.0	27273202
ECLASS 10.0	27273202
ECLASS 11.0	27273202
ECLASS 12.0	27273106
ETIM 5.0	EC002654
ETIM 6.0	EC002654
ETIM 7.0	EC002654
ETIM 8.0	EC002654

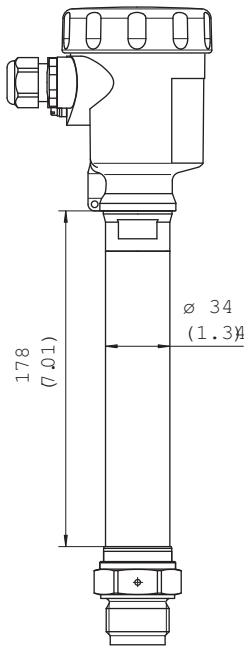
UNSPSC 16.0901

41111938

Dimensional drawing LBV320 with PUR suspension cable, threaded version G 1½ A (DIN ISO 228/1)



Dimensional drawing Temperature adapter



Dimensions in mm (inch)

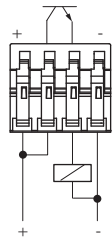
Connection diagram NPN action



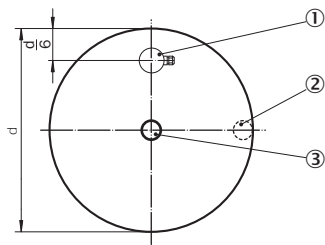
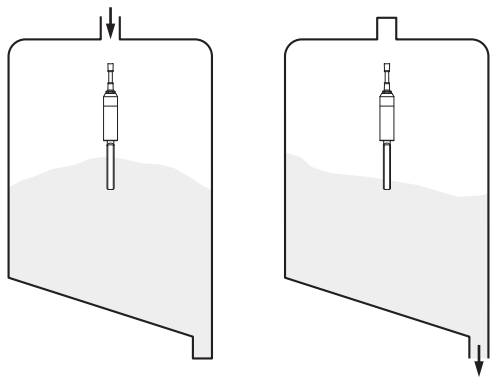
Connection diagram Transistor connection diagram



Connection diagram PNP action

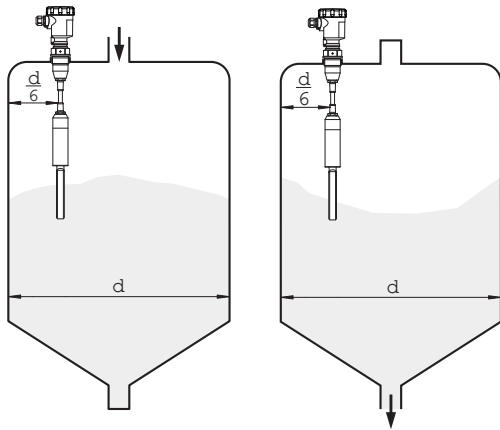


Instruction for installation Filling in the center, emptying laterally

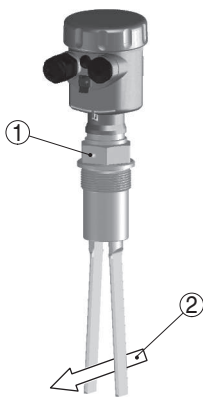


- ① LBV320
- ② Discharge opening
- ③ Filling opening

Instruction for installation LBV320 Filling and emptying centered

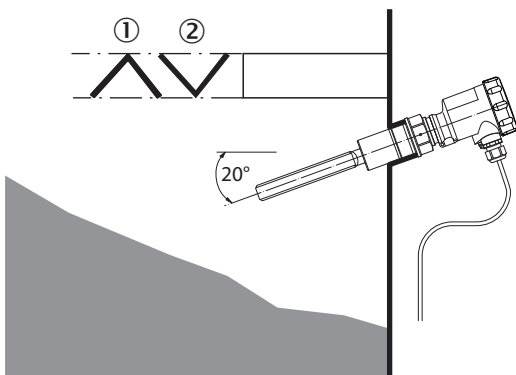


Instruction for installation Flow orientation of the tuning fork



- ① Marking with screwed version
- ② Direction of flow

Instruction for installation Horizontal mounting




- ① Protective sheet

② Concave protective sheet for abrasive solids

Recommended accessories

Other models and accessories → www.sick.com/LBV3xx

	Brief description	Type	part no.
Mounting systems			
	<ul style="list-style-type: none"> Description: Locking screw connection, process pressure -1 bar to 16 bar, process connection G 2 A, inner thread G 1 1/2 A Material: Stainless steel Details: Stainless steel 316L 	BEF-MU-316G20-ALBV	5322462
Power supply units and power supply cables			
	<ul style="list-style-type: none"> Description: Transistor (PNP/NPN): 10 V DC ... 55 V DC 	ECD-RE-LB-VPNP-0001	6038667

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We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

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