

Vibrating Level Switch



LSE20 SERIES

- When covered by media, the frequency of the fork decreases and provides a switching function
- Can be used for low or high level detection
- Pressure, temperature, foam will not influence the accuracy
- Can be cleaned-in-place (CIP) or steamed-in-place (SIP)

APPLICATIONS

- Suitable for all type of liquids
- Provides protection from run dry conditions for pumps, tanks, and pipelines.
- Threaded versions for common industrial applications
- Tri-Clamp versions specialized for food, pharmaceutical and beverage industries

SPECIFICATIONS

Insertion length for industrial*	3"
Insertion length for sanitary*	2-3/8"
Switching output	PNP/3-wire (Transistor PNP)
Accuracy parameters	
Switchpoint accuracy	+/-0.08 inches (+/- 2 mm)
Switch hysteresis	≤ 0.12 in (3 mm)
Repeatability	0.004 inches (0.1 mm)
Response time	Covered by media - 0.5 seconds Uncovered by media - 1.0 seconds
Density of media	0.018 to 0.09 lbs/in ³ (0.5 to 2.5 g/cm ³)
Viscosity	0.1 to 10,000 mPa s (0.1 to 10,000 cP)
Temperature ranges	Media: Sanitary -40 °F to 302 °F (-40 °C to 150 °C)
	Standard -40 °F to 212 °F (-40 °C to 100 °C)
	High Temp -40 °F to 302 °F (-40 °C to 150 °C)
LED status	Ambient: -40 °F to 140 °F (-40 °C to 60 °C)
	Storage: -40 °F to 140 °F (-40 °C to 60 °C)
	Green: Open Red: Closed Flashing Red: Error
Power requirement**	10Vdc to 30Vdc
Power consumption	< 1 W
Operating pressure	-15 psi to 930 psi
Housing material	316L Stainless Steel
Wetted parts	316L Stainless Steel, Optional: Hastelloy C-276
Sanitary wetted parts	Ra < 30 uin (0.76 um) ASME BPE SF3
Environmental rating	M12x1 (4-pin) - IP66/68, DIN Form A - IP65 per IEC 60529
Electromagnetic rating	RFI, EMI and ESD protection
Electrical protection	Protected against reverse polarity, over-voltage and short circuit
Weight	Approximately 7 oz.

*Other lengths available, consult factory

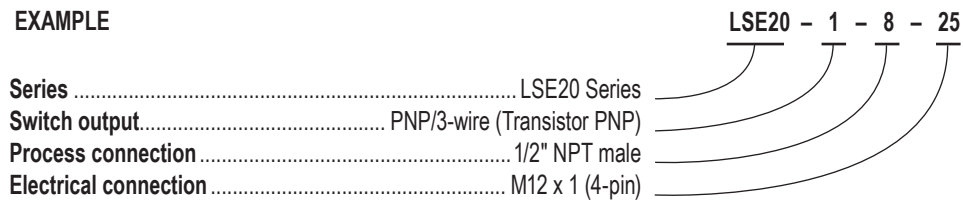
** See user manual for detailed specifications

ORDERING INFORMATION			
SERIES	LSE20	Vibrating level switch	
SWITCH OUTPUT	1	PNP/3-wire (Transistor PNP)	
PROCESS CONNECTIONS*	8	1/2" NPT male	101 1-1/2" Tri-Clamp
	18	3/4" NPT male	102 2" Tri-Clamp
ELECTRICAL CONNECTIONS	8	DIN EN 175301-803 Form A	25 M12 x 1 (4-pin)

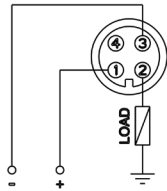
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information

*Other Connections Available, Consult Factory

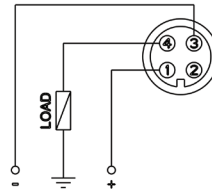
EXAMPLE



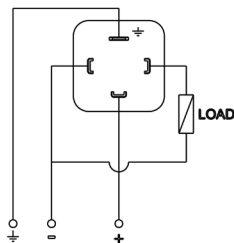
PNP output
Supply voltage 10 Vdc to 30 Vdc
High Alarm



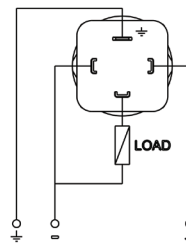
PNP output
Supply voltage 10 Vdc to 30 Vdc
Low Alarm



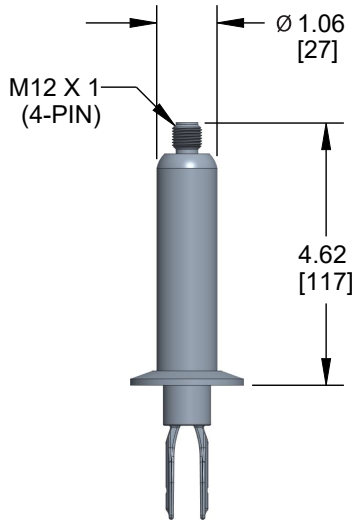
PNP output
Supply voltage 10 Vdc to 30 Vdc
High Alarm



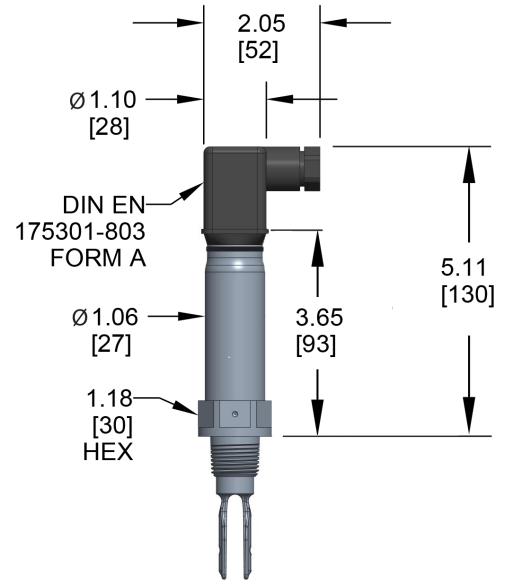
PNP output
Supply voltage 10 Vdc to 30 Vdc
Low Alarm



LSE20-25 (M12 x 1 (4-pin))



LSE20-8 (DIN EN 175301-803 Form A)



LSE20 Process Connections

