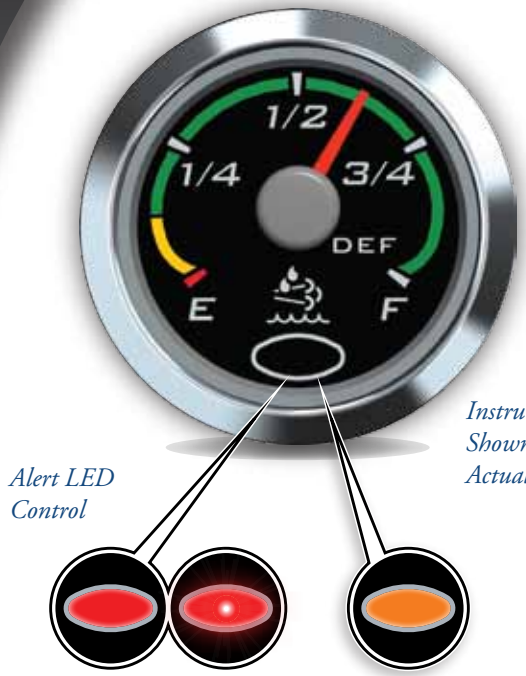
2-inch DEF Level Instrument - SAE J1939

NexSysLink®
CAN Instruments Product Family



Features

- SAE J1939 CAN protocol support
- SPN 5245 or 1761 LED alert styles available
- Stand-alone operation
- Advanced stepper motor technology
- Bright, adjustable LED illumination
- Environmentally sealed connectors

Product Description

This NexSysLink® stand-alone instrument directly interfaces to an SAE J1939 compliant CAN bus without the need for a Beede Master Node Instrument or some other gateway device to display DEF (Diesel Exhaust Fluid) level.

The instrument employs advanced stepper motor technology that provides a full 250° pointer sweep.

Standard features include LED illumination and an environmentally sealed connector.

A large, bright LED alert indicator activates to

provide visual warning when the DEF level is low.

Operation/Configuration

This The analog indicator (pointer) for DEF level is always controlled by Suspect Parameter Number (SPN) 1761 data.

The alert LED indicator control is available from the factory to use either SPN 1761 or SPN 5245 data.

SPN 1761 Alert Indicator Control

When the DEF level falls to 12.5% of full tank, a steady-on, amber LED alert indicator appears to warn users of the low level condition. If the level continues to fall to 2.5% of full tank, the LED alert indicator changes to a flashing red indicator.

SPN 5245 Alert Indicator Control

Alert LED activation occurs upon receiving the following CAN message data bit combinations:

000 - LED off = adequate DEF level.

001 - LED steady-on red = Low DEF level.

100 - LED on fast blink red = Lower DEF level than steady-on indicator, second warning.

Customizable Features

Bezel profile, material & finish

Dial face graphics & colors

LED Illumination Color

Faria Beede Instruments, Inc.
P. O. Box 983
Uncasville, CT 06382
860.848.9271
Fax: 860.848.2704

88 Village Street
Penacook, NH 03303
603.753.6362
Toll-free: 800.451.8255
Fax: 603.753.6201

Made in the USA

fm-001-0125 rev A 06/2015 - SK806

2-inch DEF Level Instrument - SAE J1939

Specifications

Protocol Compliance

Society of Automotive Engineers SAE J1939

Environmental Specifications

Shock (Non-operating):
- 50G, 9-13mS half-sine,
- 25 shocks in each of three orthogonal axes

Vibration (Non-operating):
- 0.06" (1.5mm) double amplitude 10-80-10 Hz
- 2 hours in each of three orthogonal axes

Temperature:
- Operating, -20°F to 158°F (-30°C to 70°C)
- Storage, -40°F to 185°F (-40°C to 85°C) 50% RH

Humidity:
- 95% relative humidity @110°F (43°C) non-condensing

Salt Spray:
- Meets or exceeds ASTM 117, 48 hours

Mounting Specifications

Mounting hole size: Ø2.125±.015" (Ø53.98±0.38mm)
Mounting hardware torque: 6 lb-in (0.68 N-m) max.
Refer to the appropriate Beede installation instruction sheet for complete installation requirements.

Electrical Specifications

Reverse Polarity Protection: Standard entire system
Load Dump:
- Meets SAE J1113, 3 positive 80V transients one minute intervals

Operating Voltage: 11-16VDC standard
Over Voltage:
- Withstands 18V continuously for one hour

Accuracy: ±2% of input signal
Illumination:
- LED backlit
- Color, red, standard

Connector Specifications

Mates with Deutsch I.P.D. DT Series connector
DT-06-6S, Locking wedge W6S
16-20 AWG stranded copper wire recommended.

Mechanical

Bezel Material:
- Stainless steel or aluminum
- Finish, customer specified

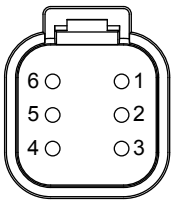
Case:
- White thermoplastic copolymer

Dial:
- Textured finish polymer
- Backlit graphics, opaque background

Pointer:
- Illuminated orange blade with gray cap standard

Sealing:
- Window sealing IP 67 compliant

Wiring Connections

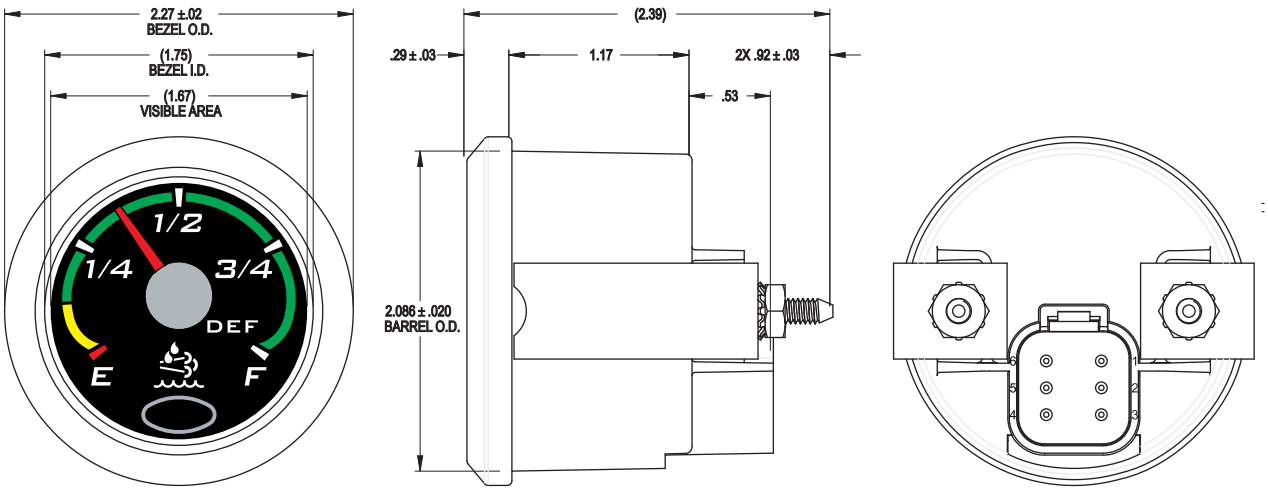


Connection Chart (Standard Configuration)	
Pin Number	Connection Name
1	Battery +
2	Ground
3	No Connection (See Note)
4	Lamp (B+)
5	CAN-H
6	CAN-L

Connection Chart (DDB Configuration)	
Pin Number	Connection Name
1	Battery +
2	CAN -
3	CAN +
4	Lamp (B+)
5	No Connection (See Note)
6	Ground

Note: This Pin is a serial data input connection used for factory purposes only.

Product Outline Drawing



Dimensions shown are in inches.