



**OPTIFY™ Sensor**  
Model: DSV1

**Installation Instructions**  
Review these instructions in their entirety before attempting to install your OPTIFY Sensor.

**Getting Started**

**Necessary equipment:**  
Items included in the OPTIFY Sensor kit:

- OPTIFY Sensor
- Installation tool
- Rubber cover (optional)

**Additional items (required):**

- Smartphone
- Computer

**Additional items (optional):**

- Sensor adapter
- Gloves
- Clean soft cloth
- Torque wrench
- 7/8" (22mm) wrench
- 7/16" (11mm) socket
- Socket wrench

**STEP 1**  
**Install OPTIFY application**



**OPTIFY**  
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Free

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App Store



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Google Play



**STEP 2**  
**Create an OPTIFY account using the desktop or mobile application, then create or join a plant.**

[dodgeoptify.com](https://dodgeoptify.com)

**STEP 3**  
**Create an asset**

Log in to the OPTIFY application with the account created in step 2.

Select "Assets," then add a new asset with the "add" button.

Fill in the required asset details:

- Asset name
- Nominal speed
- Part number

Select "Create Asset".

**STEP 4**  
**Mount sensor**

**Step 4.1**  
Clean surface to be free of dirt and debris.

**Step 4.2**  
Find a grease fitting, oil plug, or any other threaded hole that will accept either the sensor or sensor adapter.

**Optional: Bearing**  
Locate a grease fitting on the 30° face of the bearing and remove plug.



**Optional: Gearing**  
If being mounted to a gear reducer, locate the OPTIFY Sensor adapter and remove the red push-in plug.



**Step 4.3**  
Thread sensor by hand and tighten using the installation tool. If desired, tighten sensor using a torque wrench, applying 7-12 lbs-in (0.8-1.4Nm).



**STEP 5**  
**Begin activation**

Press the silicone button located on the sensor to begin activation. The LED light will blink three times.



**STEP 6**  
**Assign sensor to asset**

On the asset page, select your new asset created in step 3. Select "Commission sensor" on the asset properties page.

Find your sensor serial number from the list.

If desired, name the sensor position, then select "Yes, commission".

**STEP 7**  
**Installation complete**

After completing the installation process, the application should function properly. If there are any problems, please contact support at [engineering@support.dodgeindustrial.com](mailto:engineering@support.dodgeindustrial.com).

**Specific conditions of use for this application are as follows:**

1. The ambient temperature range of the sensor is -30°C to 105°C. The installer is responsible for ensuring that the sensor is used between these limits. The assessment of the sensor's functionality and its role in stopping the bearing in the event of bearing failure is not implied by the certification, which is related to its hazardous area compliance only.

La plage de température ambiante du capteur est de -30°C à 105°C. L'installateur est responsable de s'assurer que le capteur est utilisé entre ces limites. L'évaluation de la fonctionnalité du capteur et de son rôle dans l'arrêt du roulement en cas de défaillance du roulement n'est pas impliquée par la certification, qui concerne uniquement sa conformité aux zones dangereuses.


2. Under extreme circumstances, the non-metallic cap may generate an ignition-capable level of electrostatic charge. Therefore, the sensor shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge. In addition, the equipment shall only be cleaned with a damp cloth, and the metallic base of the sensor shall be effectively connected to earthed metal when installed.

Dans des circonstances extrêmes, le capuchon non métallique peut générer un niveau de charge électrostatique pouvant s'enflammer. Par conséquent, le capteur ne doit pas être installé dans un endroit où les conditions extérieures sont propices à l'accumulation de charges électrostatiques. De plus, l'équipement ne doit être nettoyé qu'avec un chiffon humide et la base métallique du capteur doit être effectivement reliée au métal mis à la terre lorsqu'il est installé.


**To manage your registered assets, visit OPTIFY:**

[dodgeoptify.com](https://dodgeoptify.com)

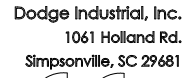
**NOTE:** This sensor is intended for application in hazardous location, typical marking shown below.




II 1 GD IECEx SIR 17.0060X MFG: YYYY IP 68  
I M1 SIRA 17ATEX2237X Tamb -30°C to +105°C SN: NNNNNNNN  
Ex ia I Ma Ex ia IIC 150°C (T3) Ga Ex ia IIIC T146°C Da Model: DSV1  
FCC ID: 2A61E-DSV1 IC:28778-DSV1 CSAE 21UKEX2441X  
CSA 23CA80157383X CI I, Zn 0, AEx ia IIC 150°C Ga CI I, Div.1, Grps ABCD  
MC 302539 CI II, Zn 20, AEx ia IIIC T146°C Da CI II, Div 1, Grps EFG CI III, Div 1



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**NOTE:** These instructions must be read thoroughly before installation or operation. This instruction manual was accurate at the time of printing. Please see [dodgeindustrial.com](http://dodgeindustrial.com) for updated instruction manuals.

**CAUTION:** The sensor should be installed by technically qualified personnel. Failure to install the sensor in compliance with applicable codes and regulation and according to the manufacturer's recommendations may result in unsatisfactory performance or equipment failure, and may void the sensor warranty.

**WARNING:** Only qualified individuals who are familiar with appropriate national codes, local codes and sound practices should install, repair or modify mounted bearings and/or related accessories. Installation should conform to appropriate codes and practices. Failure to follow these instructions could result in serious personal injury, death and/or property damage.

**WARNING:** To ensure the drive is not unexpectedly started, turn off and lock-out or tag power source before proceeding. Failure to observe these precautions could result in bodily injury.

**WARNING:** Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed. Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions in the instruction manuals must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. Proper guards and other suitable safety devices or procedures as may be desirable or as may be specified in safety codes should be provided, and are neither provided by Dodge nor are the responsibility of Dodge. This unit and its associated equipment must be installed, adjusted and maintained by qualified personnel who are familiar with the construction and operation of all equipment in the system and the potential hazards involved. When risk to persons or property may be involved, a holding device must be an integral part of the driven equipment beyond the speed reducer output shaft.

**WARNING:** Batteries inside. Fire or explosion may result if exposed to heat. Do not disassemble, incinerate, or heat above +125°C (+257°F).

Piles à l'intérieur. Un incendie ou une explosion peut survenir en cas d'exposition à la chaleur. Ne pas démonter, incinérer ou chauffer au-dessus de +125°C (+257°F).

**CAUTION:** Mounted bearing surface temperature hazard. The external surface of a mounted bearing may reach temperatures which can cause discomfort, burns or injury to individuals.

**FCC Compliance Statement:**

**CAUTION:** Changes or modifications not expressly approved could void your authority to use this equipment. This device complies with Part 15 of the FCC Rules. Operation to the following two conditions: (1) This device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

**NOTE:** Frequency band(s) in which the radio equipment operates: 2402 MHz–2480 MHz. Maximum radio-frequency power transmitted in the frequency band(s) in which the radio equipment operates: 0dBm.

**Specifications:**

- Intrinsically safe, stand-alone battery powered device (3.6Vdc nominal)
- Low energy Bluetooth (BLE) communications
- 2400-2483.5 MHz
- BW = 2MHz
- EIRP ≤ 2dBm
- GFSK modulation
- Antenna gain = 0dBi

**Industry Canada Statement:**

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Country of Origin: Japan  
HS Code (HTS): 9031.80.8085

**WEEE EU Directive 2012/19/EU**

Products that are marked with the crossed-out wheeled bin symbol as shown here; shall be handled by applying following information:



- The crossed-out wheeled bin symbol on the product(s) and/or accompanying documents means that used electrical and electronic equipment (WEEE) should not be mixed with general household waste.
- For professional users in the European Union, please contact your dealer or supplier for more information on how to discard electrical and electronic equipment (EEE).

**Scan for translated versions:**

[info.dodgeindustrial.com/translations](http://info.dodgeindustrial.com/translations)



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MN7000 REV- 02/23