

INSTALLATION APPLICATION GUIDE

6VW SENSOR

This document is recommended for end users when looking to install Sensata 6VW sensors on a machine asset. Content includes guidelines and important considerations concerning physical installation specific to each asset type. For additional information or technical support please contact us at

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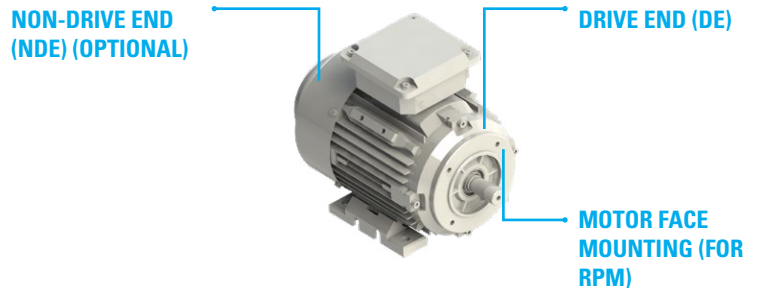
INSTALLATION NOTES

1. Sensors should be solidly installed on the machine component, so that shaft and bearing vibration is transmitted to the sensor. DO NOT install directly on thin coverings, such as a motor fan cover on the Non-Drive End.
2. Some modification of the machine exterior for sensor installation may be required to achieve quality sensor data.
3. Sensors are optimally located in very close proximity to machine asset bearings. Generally one sensor per bearing
4. To extract maximum value from the sensor, mounting in the correct orientation (axial, radial, and tangential) is critical.
5. A range of sensor mounting accessories are available to facilitate installation.
6. If in doubt where to locate sensors on a machine, always start at the Non-Drive End (NDE) of the machine asset and proceed to the other end.

SMALL ELECTRIC MOTOR

(Less than 1 ft or 30 cm length)

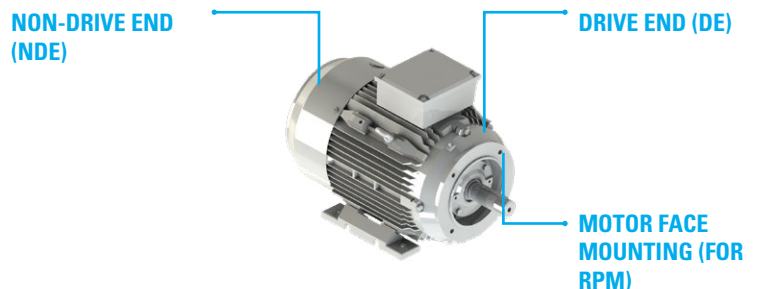
- On a smaller motor, only one sensor on the Drive End (DE) is required.
- A second sensor on the Non-Drive End (NDE) is optional.
- If a variable speed motor and speed is less than 1,000 rpm, a sensor mounted on the motor face will be needed to measure shaft speed.



LARGE MOTOR

(Greater than 1 ft or 30 cm length)

- A sensor is required on both the Drive End (DE) and Non-Drive End (NDE).
- Mount NDE sensor solidly on the motor casing, NOT on the fan cover.
- If a variable speed motor and speed is less than 1000 rpm, a sensor mounted on the motor face will be needed to measure shaft speed.



PUMP

- A sensor is required on both the Drive End (DE) and Non-Drive End (NDE).
- Mount NDE sensor solidly on the motor casing, NOT on the fan cover.
- If a variable speed motor and speed is less than 1000 rpm, a sensor mounted on the motor face will be needed to measure shaft speed.

DRIVEN END (DE)

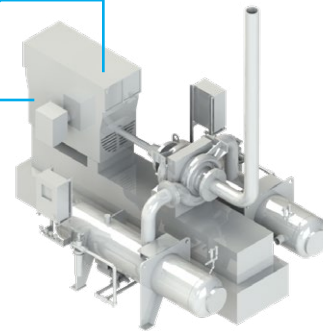


INDUSTRIAL AIR COMPRESSOR

- Identify the location and size of the electric motor incorporated in the industrial compressor.
- A sensor is required on both the Drive End (DE) and Non-Drive End (NDE).
- Mount NDE sensor solidly on the motor casing, NOT on the fan cover.
- If a variable speed motor and speed is less than 1000 rpm, a sensor mounted on the motor face will be needed to measure shaft speed.

DRIVE END (DE)

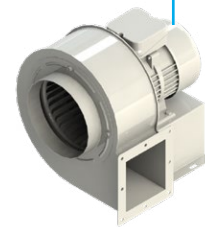
NON-DRIVE END (NDE)



INDUSTRIAL BLOWER

- Sensors should be installed at every bearing location on the asset and as physically close to the bearing as possible.
- DO NOT install the sensor on the fan cover of the Non-Drive End. Solid mounting to the motor casing ensures the best data quality.
- If the motor housing radius is small, consider a dipole (two pole) magnet.

NON-DRIVE END (NDE)

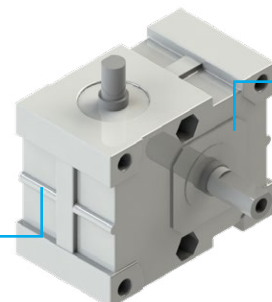


GEARBOX

- One sensor mounted perpendicular near the input shaft.
- One sensor mounted perpendicular near the output shaft.
- Use of dipole (two pole) magnet for sensor installation NOT recommended.

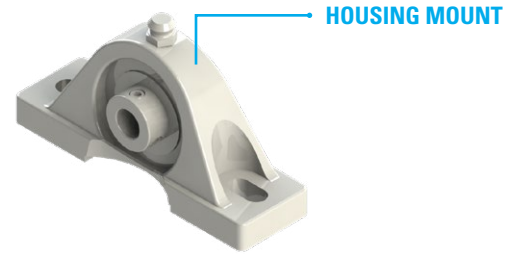
INPUT SHAFT

OUTPUT SHAFT



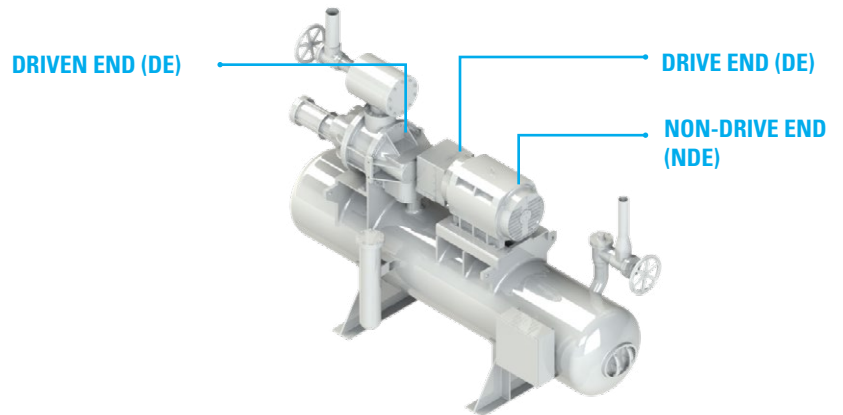
PILLOW/PEDESTAL/PLUMMER BLOCK

- Mount the sensor to the housing as close to the Zerk or lubrication fitting as possible.
- Utilize a magnet mount and two-part epoxy to correctly orient and ensure that the sensor will remain in place.



CHILLER

- A sensor is required on both the Drive End (DE) and Non-Drive End (NDE) of the motor.
- At least one sensor is required on the compressor, at a bearing.



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