INDUSTRIAL CUBE HOUSING (IND12)

This more robust unit meets requirements between Standard and Heavy Duty housings while retaining the Cube design. The Industrial 12 (IND12) model features an IP65 shaft seal. The tough, sealed aluminum housing has a wall thickness of 0.187” and offers greater protection from wash down, sprays, dust, moisture, shock, vibration, and other hazards found in industrial environments.

INDUSTRIAL CUBE HOUSING (IND12) SPECIFICATIONS

Refer to all Standard Cube Housing specifications except as follows:

Mechanical
Shaft Size .................. 0.375” diameter
Shaft Type .............. Single- or Double-Ended Shaft Available
Axial Loading .......... 30 lb Maximum
Starting Torque ......... 3 oz-in; 3 oz-in w/IP65 Shaft Seal

All dimensions are in inches with a tolerance of ±0.005” or ±0.01” unless otherwise specified.

HEAVY DUTY CUBE HOUSING (HD12)

The Heavy Duty housing uses a separate 0.375” diameter external shaft and bearing assembly to rotate the shaft of an internally mounted Cube Housing. This provides mechanical isolation from external loads and stress. A flexible coupling between the external shaft and the encoder protects the internal unit from axial and radial loading. The 0.250” aluminum walls protect the encoder from external shock, vibration, and the outside environment.

Heavy Duty Housing Options
HD 1 Heavy Duty 3” x 6” housing
HD 3 Heavy Duty w/conduit connector (threaded for 0.500” NPT Conduit) and terminal strip
HD 5 Heavy Duty w/10 mm outer bearing
HD 12* Heavy Duty w/IP65 rated outer shaft seal
HD 14* Heavy Duty w/IP65 rated outer shaft seal, conduit connector (threaded for 0.500” NPT Conduit), and terminal strip
*These units have an outer boss diameter of 1.000”

ULTRA HEAVY DUTY CUBE HOUSING (HD10)

The HD 10 Ultra Heavy Duty encoder is designed for use in applications with severe shaft loading conditions. The HD 10 offers two shaft sizes: 0.500” and 0.625”. Shaft material is 303 stainless steel. Bearings are conservatively rated at 95 lb radial and 60 lb axial shaft loading. IP65 shaft seal is standard on all units. The HD 10 Ultra Heavy Duty housing uses a larger external shaft and R10 bearing assembly to rotate the shaft of an internally mounted Cube Housing. This provides mechanical isolation from external loads and stress. A flexible coupling between the external shaft and the encoder protects the internal unit from axial and radial loading. The 0.250” aluminum walls protect the encoder from external shock, vibration, and the outside environment.

ULTRA HEAVY DUTY CUBE HOUSING (HD10) SPECIFICATIONS

Mechanical
Max Speed ............... 6000 RPM
Shaft Size ................. 0.500” or 0.625”
Rotation .................. Either direction
Radial Loading ........ 95 lb operating
Axial Loading .......... 60 lb operating
Bearings ................... ABEC precision ball bearings
Bearing Life ............ 15,000 hours at rated load
Starting Torque ........ 3 oz-in IP65 rated
Mounting ................ Tapped holes face and base
Weight ...................... 3.85 lb
EXPLOSION-PROOF HOUSING (EX)

An explosion-proof housing is available for installing the Cube Series Accu-Coder™ in hazardous locations. The Cube Series encoder is mounted within the explosion-proof housing and is coupled to the 0.375” shaft assembly by a flexible shaft coupling. This decreases radial and axial loading on the internal encoder shaft and bearings to ensure long life. Electrical connection to the Accu-Coder™ is by an internal barrier terminal strip. A threaded hole for 0.500” NPT conduit is provided.

SPECIFICATIONS

The explosion-proof housing is designed to meet the following:

- NEC Class 1, Groups C and D
- NEC Class 2, Groups E, F, and G
- UL Standard 1203
- Class 1, Division 1, Groups C and D
- Class 2, Division 1, Groups E, F, and G
- CSA Standard C 22.2 No. 30-M 1986
- NEMA 7 and NEMA 9

Refer to all cube specifications except as follows:

- Mechanical
  - Max Speed ............... 4000 RPM
  - Radial Loading........... 30 lb operating
  - Axial Loading............ 10 lb operating
  - Weight ..................... 6 lb
  - Finish .................... Unpainted Aluminum

CUBE SERIES OPTIONAL 5PY ADAPTER (175443)

The all aluminum optional 5PY adapter allows any standard housing Cube Series encoder to replace DC tachometer technology. The 5PY adapter is interchangeable with any 5PY tach generator.

Order standard housing Cube Series Accu-Coder™ with 5/16” shaft and specify part #175443.

All dimensions are in inches with a tolerance of ±0.005” or ±0.01” unless otherwise specified.