

# CUBE HOUSINGS

## INDUSTRIAL CUBE HOUSING (IND12)

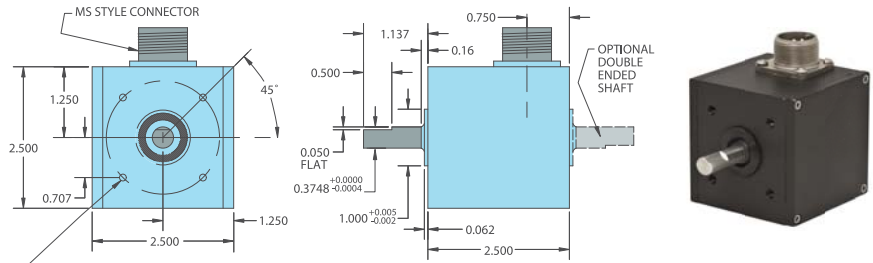
This more robust unit meets requirements between Standard and Heavy Duty housings while retaining the Cube design. The Industrial 12 (IND12) model features an IP65 shaft seal. The tough, sealed aluminum housing has a wall thickness of 0.187" and offers greater protection from wash down, sprays, dust, 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  
 Radial Loading.....40 lb Maximum  
 Axial Loading.....30 lb Maximum  
 Starting Torque.....3 oz-in Starting Torque w/IP65 Shaft Seal



10-32 UNF-2B 0.350 DEEP  
 4X 90° Ø2.000 B.C.  
 SAME MOUNTING HOLE PATTERN IS ALSO  
 PROVIDED ON THE OPPOSITE END AND BASE

All dimensions are in inches with a tolerance of  $\pm 0.005"$  or  $\pm 0.01"$  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

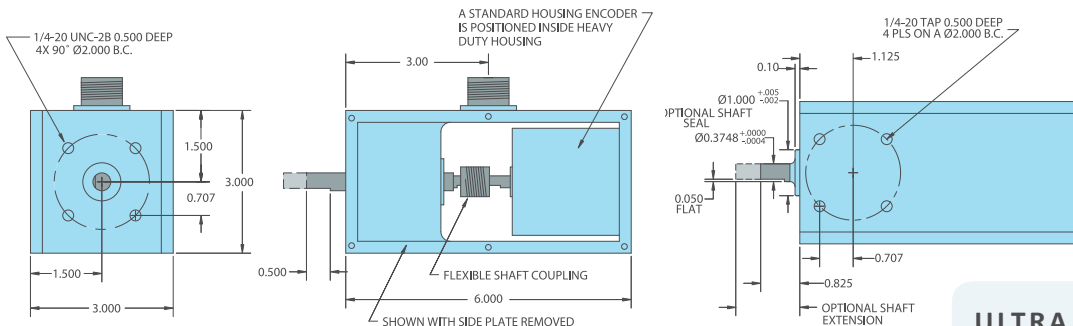
- HD 1 Heavy Duty 3" x 6" housing
  - HD 3 Heavy Duty w/conduit connector (threaded for 0.500" NPT Conduit) and terminal strip
  - HD 5 Heavy Duty w/10 mm outer bearing
  - HD 12\* Heavy Duty w/IP65 rated outer shaft seal
  - HD 14\* Heavy Duty w/IP65 rated outer shaft seal, conduit connector (threaded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

### HEAVY DUTY CUBE HOUSING (HD12) SPECIFICATIONS

Refer to all cube specifications except as follows:

#### Mechanical

Max Speed.....6000 RPM  
 Shaft Size.....0.375"  
 Rotation.....Either direction  
 Radial Loading.....40 lb maximum (50 lb for HD 5)  
 Axial Loading.....30 lb maximum (35 lb for HD 5)  
 Bearings.....Precision ABEC ball bearings  
 Starting Torque.....1 oz-in; 3 oz-in w/IP65 seal  
 Mounting.....Tapped holes face and base  
 Weight.....3.25 lb



## ULTRA HEAVY DUTY CUBE HOUSING (HD10)

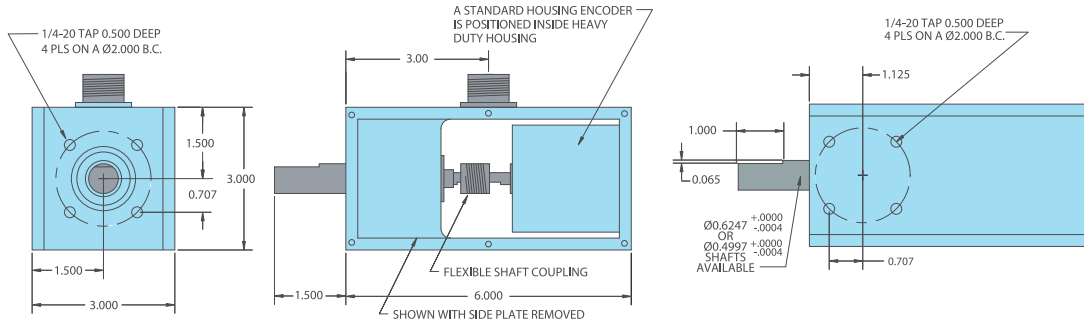
The HD 10 Ultra Heavy Duty encoder is designed for use in applications with severe shaft loading conditions. The HD 10 offers two shaft sizes: 0.500" and 0.625". Shaft material is 303 stainless steel. Bearings are conservatively rated at 95 lb radial and 60 lb axial shaft loading. IP65 shaft seal is 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 (HD 10) 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

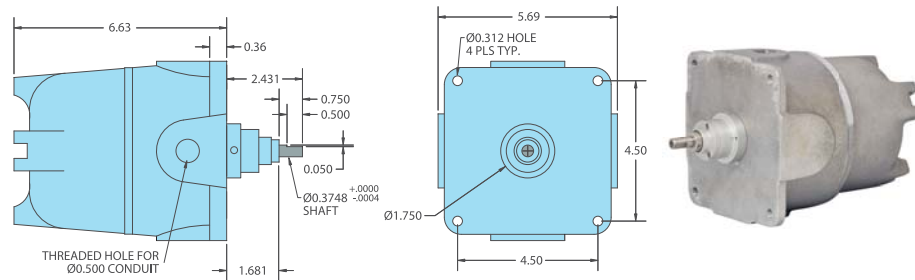
## ULTRA HEAVY DUTY CUBE HOUSING (HD10)—CONT'D



All dimensions are in inches with a tolerance of  $\pm 0.005$ " or  $\pm 0.01$ " unless otherwise specified

## 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.



### EXPLOSION-PROOF HOUSING (EX) 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

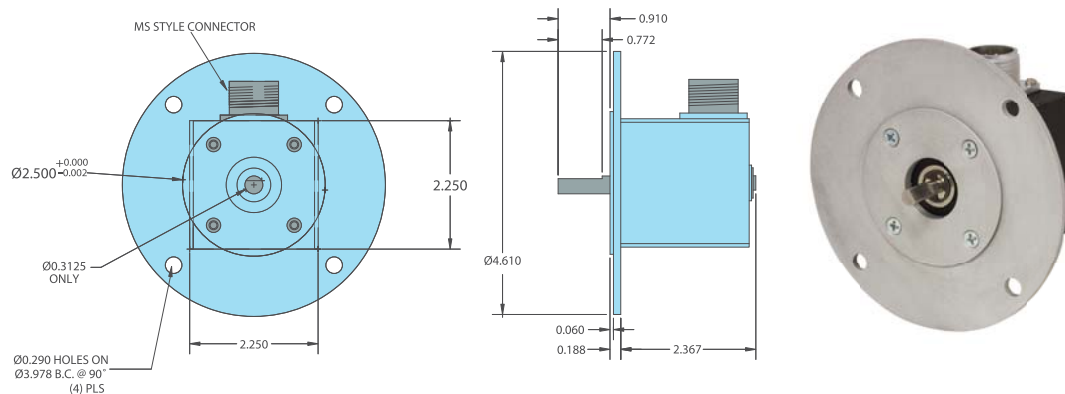
Refer to all cube specifications except as follows:

#### 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.



All dimensions are in inches with a tolerance of  $\pm 0.005$ " or  $\pm 0.01$ " unless otherwise specified.

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