

Index Width: 180° Default  
A leads B, CW (from clamp end)

## SERIES HSD35

**NorthStar™ brand**

### ORDERING INFORMATION

To order, complete the model number with code numbers from the table below:

| Code 1: Model                         | Code 2: PPR                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Code 3: Bore Size                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Code 4: Fixing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Code 5: Output Format                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>HSD35</b>                          | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>                                                                                                                                                                                                                                                                                                                                                                                            | <input type="text"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <input type="text"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <input type="text"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| HSD35 Heavy-duty, Hollowshaft Encoder | Enter Custom PPR from 1 to 20,000<br>Examples:<br><b>0001</b> = 1 PPR<br><b>0256</b> = 256 PPR<br><b>1000</b> = 1000 PPR<br><b>9999</b> = 9999 PPR<br><b>A000</b> = 10,000 PPR<br><b>B000</b> = 11,000 PPR<br><b>C999</b> = 12,999 PPR<br>:<br>:<br><b>G000</b> = 16,000 PPR<br><b>G384</b> = 16,384 PPR<br><b>H000</b> = 17,000 PPR<br><b>J000</b> = 18,000 PPR<br><b>K000</b> = 19,000 PPR<br><b>L000</b> = 20,000 PPR<br><br><b>Note:</b> Letter "I" is skipped and not use | Electrically Isolated (Non-Metallic Insert)<br><b>0</b> 6mm<br><b>1</b> 1/4"<br><b>2</b> 5/16"<br><b>3</b> 8mm<br><b>4</b> 3/8"<br><b>5</b> 10mm<br><b>6</b> 12mm<br><b>7</b> 1/2"<br><b>8</b> 5/8"<br><b>9</b> 15mm<br><b>A</b> 16mm<br><b>C</b> 19mm<br><b>D</b> 3/4"<br><b>E</b> 20mm<br><b>F</b> 7/8"<br><b>G</b> 24mm<br><b>H</b> 1"<br><b>J</b> 1-1/8"<br><b>M</b> 14mm<br><b>N</b> 18mm<br><b>P</b> 25mm<br><b>R</b> 28mm<br><br>Not Electrically Isolated (No Insert)<br><b>K</b> 1-1/4" | Stamped Metal<br><b>0</b> None<br><b>1</b> 4.5" C-Face Tether<br><b>2</b> 8.5" C-Face Tether<br><b>3</b> Slotted Tether<br><b>4</b> Same as "1" with 56 C-Face Cover<br><b>5</b> Same as "3" with Cover<br><b>6</b> Same as "2" with 180 C-Face Cover<br><br>Swivel Rod<br><b>A</b> AC Motor Fan Cover Tether with T-bolt<br><b>B</b> 4.5" C-Face Tether with 3/8" Bolt<br><b>C</b> 8.5" C-Face Tether with 1/2" Bolt<br><b>D</b> Same as "A" with Cover Kit<br><b>E</b> Same as "B" with Cover Kit | <b>0</b> Single Ended ABZ, 5-26VDC push-pull (7272)<br><b>1</b> Single Ended ABZ, 5-26VDC O/C (7273)<br><b>2</b> Single Ended ABZ, 5-26VDC O/C w/2.2kOhm (7273)<br><b>4</b> Differential AB only, 5-26VDC in, 5-26V out (7272)<br><b>5</b> Differential AB only, 5-26VDC in, 5V out (7272)<br><b>A</b> Differential AB, 5-26VDC in, 5V out (4469)<br><b>C</b> Differential AB, 5-15VDC in, 5-15V out (4469)<br><b>6</b> Differential ABZ, 5-26VDC in, 5V out (7272)<br><b>7</b> Differential ABZ, 5-26VDC in, 5-26V out (7272)<br><b>8</b> Differential ABZ, 5-26VDC in, 5V out (4469)<br><b>9</b> Differential ABZ, 5-15VDC in, 5-15V out (4469)<br><b>D</b> Dual Isolated Outputs, same as "6"<br><b>E</b> Dual Isolated Outputs, same as "7"<br><b>F</b> Dual Isolated Outputs, same as "8"<br><b>G</b> Dual Isolated Outputs, same as "9"<br><b>H</b> Same as "0" with Extended temp range<br><b>J</b> Same as "1" with Extended temp range<br><b>K</b> Same as "2" with Extended temp range<br><b>L</b> Same as "4" with Extended temp range<br><b>M</b> Same as "5" with Extended temp range<br><b>N</b> Same as "6" with Extended temp range<br><b>P</b> Same as "7" with Extended temp range<br><b>Q</b> Same as "D" with Extended temp range<br><b>R</b> Same as "E" with Extended temp range<br><b>W</b> Differential ABZ, 10-24VDC in, 10-24VDC out (2707) |

## SERIES HSD35

**NorthStar™ brand**

### COMPATIBLE ACCESSORIES

|                    |                                                         |
|--------------------|---------------------------------------------------------|
| <b>114573-0001</b> | Tether Kit, 4.5" C-Face Single Point with 3/8" bolt     |
| <b>114574-0001</b> | Tether Kit for Standard AC Motor Fan Covers with T-bolt |
| <b>114575-0001</b> | Tether Kit, 8.5" C-Face Single Point with 1/2" bolt     |
| <b>756-042-01</b>  | Rod Tether, AC Motor Fan Cover with T-bolts             |
| <b>756-043-01</b>  | Rod Tether Kit, 4.5" C-Face with 3/8" bolt              |
| <b>756-044-01</b>  | Rod Tether Kit, 8.5" C-Face with 1/2" bolt              |
| <b>114622-0001</b> | Cover Kit, 56 C-Face (single or dual output)            |
| <b>114928-0001</b> | Cover Kit, 180 C-Face (single or dual output)           |
| <b>114623-0001</b> | Cover Kit, Fan Cover (single or dual output)            |

### ELECTRICAL CONNECTIONS

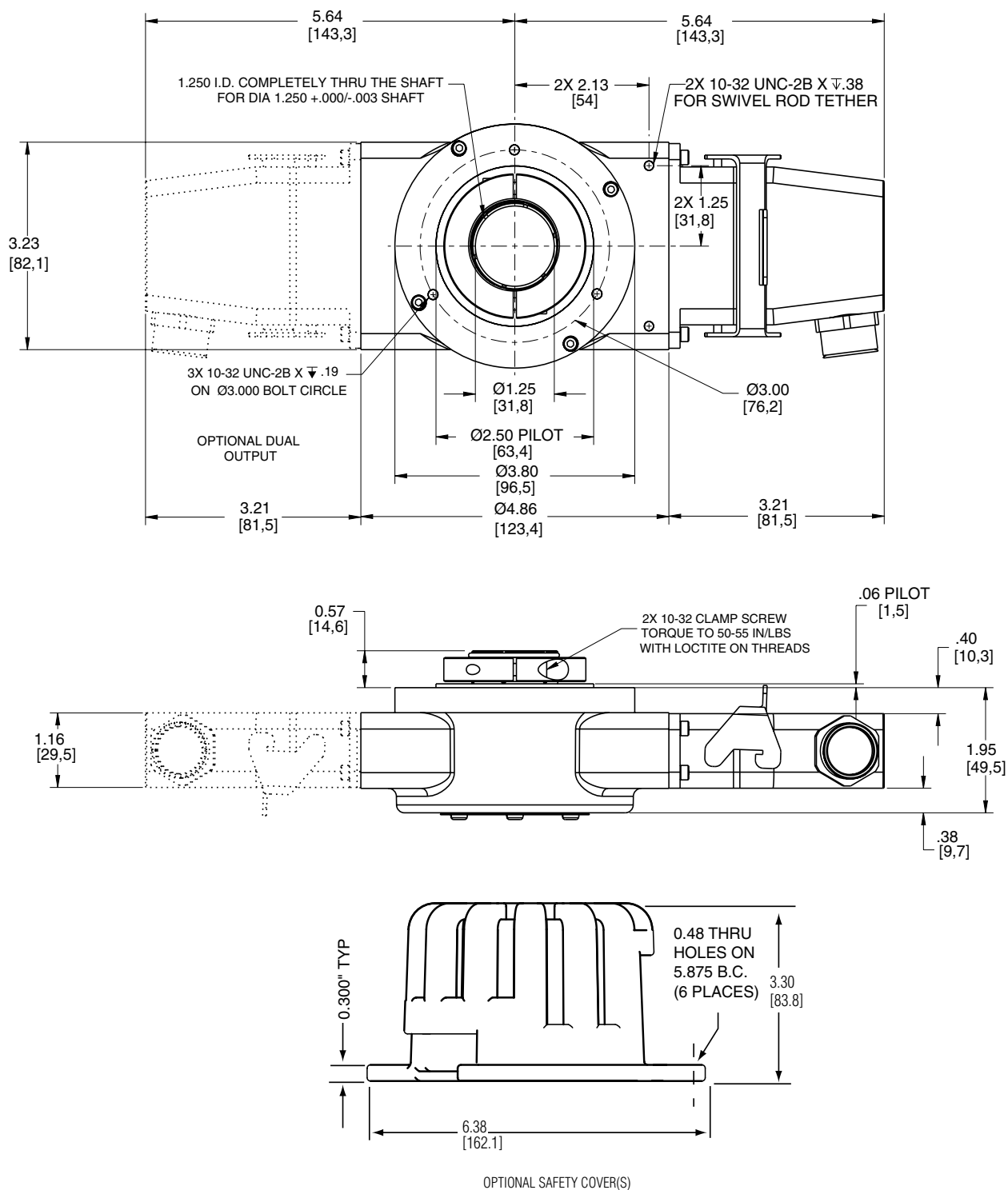
| Encoder Function | Connector Pin |
|------------------|---------------|
| Common           | 1             |
| Signal B         | 2             |
| Signal A         | 3             |
| Signal Z†        | 4             |
| Case (optional)  | 5             |
| Vcc 5-26 VDC     | 6             |
| Signal B̄        | 7             |
| Signal Ā         | 8             |
| Signal Z̄†       | 9             |
| No connection    | 10            |

† Index not provided on all models.  
See ordering information

## SERIES HSD35

**NorthStar™ brand**

Dimensions: inch [mm]

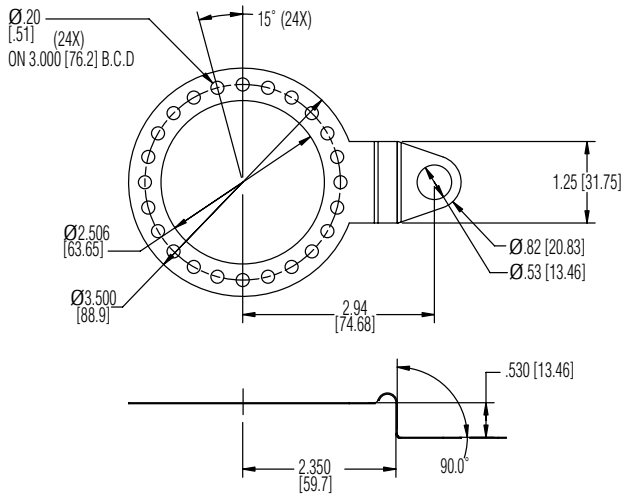


## SERIES HSD35

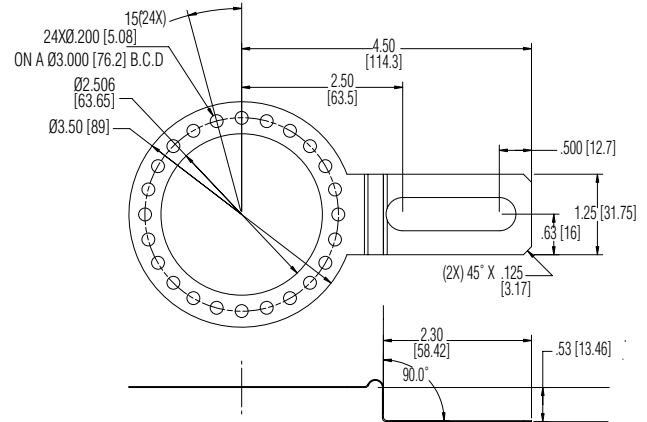
**NorthStar™ brand**

Dimensions: inch [mm]

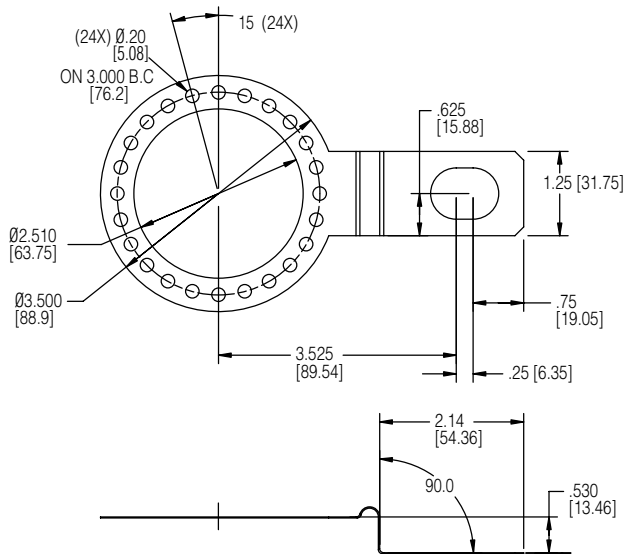
### 114573-0001 TETHER KIT (4.5" C- FACE)



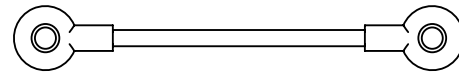
### 114574-0001 TETHER KIT (SLOTTED TETHER)



### 114575-0001 TETHER KIT (8.5" C- FACE)



### SWIVEL ROD TETHER



**Note:** See accessories section on page three for Swivel Rod Part Numbers

Worldwide Brands: NorthStar™ • Dynapar™ • Hengstler™ • Harowe™

[WWW.DYNAPAR.COM](http://WWW.DYNAPAR.COM)



**Headquarters**  
2100 West Broad St.  
Elizabethtown, NC 28337  
USA

**Customer Service:**  
Tel.: +1.800.234.8731  
custserv@dynapar.com

**Technical Support**  
Tel.: +1.800.234.8731  
support@dynapar.com

**European Sales Representative**  
Hengstler GmbH  
Uhlandstrasse 49, 78554 Aldingen  
Germany  
[www.hengstler.com](http://www.hengstler.com)