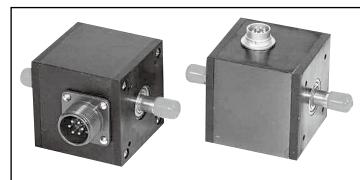


### **QUBE 2.25**" SERIES RS INCREMENTAL SHAFT ENCODER



Starting at US \$410.00 S.R.P. List Price (A ch only) with Double 3/8" shaft & 6 pin connector

#### Electrical

| Up to 1200 P/R                       |
|--------------------------------------|
| Single Ended (A ch.)                 |
| Dual Square Wave in Quadrature       |
| (A & B ch.)                          |
| Dual Square Wave in Quadrature       |
| with Index (A, B, Z ch.)             |
| out Circuit                          |
| Pull-up Resistor TTL current sinking |
| (Max. 50mA)                          |
| Open Collector 7273 (Max. 50mA)      |
| Diff. Line Driver 7272 (Max. 100mA)  |
| Push-Pull Resistor 7272 (Max. 50mA)  |
| 100kHz                               |
| 50±25%                               |
| 25±12.5%                             |
| 100±50%                              |
|                                      |

#### Outputs

- Pull Up Resistor (Currnet Sinking) An NPN transistor with a pull-up resistor and capable of sinking 50ma of current per output. This type of encoder output is used with a PLC or other control device that sources current. Current flows out of the PLC to the encoder, which uses the NPN transistor to represent binary logic by optionally switching the current source to ground.
- **<u>7273 Open Collector (NPN)</u>** For applications requiring an uncommitted output. The output voltage level can be pulled up with an external resistor to a maximum of 30vdc. Maximum sink current is 50ma. per output.
- Differential Line Driver (7272) An 7272 differential line driver that generates complimentary outputs: A / -A, B / -B, and Z / -Z as needed. The encoder must be operated at 5-26 vdc, input and output.
- **Push-Pull (7272)** This general purpose output functions as a PNP transistor for applications requiring a current sourcing output. It functions as an NPN transistor with 3.3K pull-up for applications requiring a current sinking output. This output is TTL compatible when used with a 5vdc supply. Maximum source / sink current is 50 ma. per output.

### FEATURES

### WORLD ENCODERS

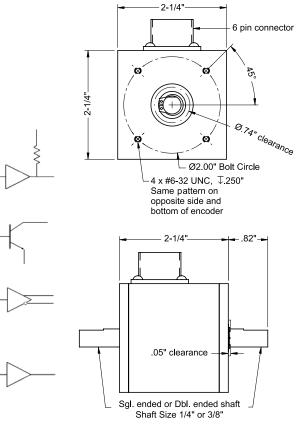
brand, Made in USA

- Qube 2.25" series RS is designed for application in industrial environments such as Measuring, Cut-to-Length, Size for Textile, Metal, Lumber and Rubber Industries.
- Tracking, Storage and Retrieval, Pick and Place, Conveying and Elevating for Material Handling applications.
- Environmentally IP54/NEMA 12 enclosure
- Up to 1200 P/R

#### Mechanical

| 1/4", 5/16", 3/8", 1/2"        |
|--------------------------------|
| Sgl. ended, Dbl. ended         |
| Axial: 15 lbs. Radial: 25 lbs. |
| Axial: 35 lbs. Radial: 45 lbs. |
| 6000 RPM                       |
| Aluminum Case (Anodized)       |
| Shaft: 303 Stainless           |
| 13 oz.                         |
|                                |

### DIMENSIONS



## **QUBE 2.25**" SERIES RS INCREMENTAL SHAFT ENCODER

### Environmental

| Temperature        | Operating: 0 ~ 70°C         |
|--------------------|-----------------------------|
|                    | Storage: -10 ~ 85°C         |
| Operation Humidity | 35-85% without condensation |
| Vibration          | Max 10g (58 to 500 Hz)      |
| Shock              | 50g (11 ms duration)        |
| Enclosure          | IP-54/NEMA 12               |

### Wiring Diagram

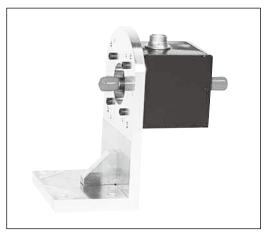
| PIN #    | 6 Pin          | Same        |                                | 6 pin Diff.               | Same       |  |
|----------|----------------|-------------|--------------------------------|---------------------------|------------|--|
|          | Sgle-ended     | Wire Color  |                                | Line Driver               | Wire Color |  |
| Α        | Common         | Black       |                                | Common                    | Black      |  |
| В        | Supply Voltage | Red         |                                | Supply Voltage            | Red        |  |
| С        | N/C            | —           |                                | A ch.                     | White      |  |
| D        | A ch.          | White       |                                | A not ch.                 | Blue       |  |
| E        | N/C            | —           |                                | B ch.                     | Green      |  |
| F        | N/C            | —           |                                | B not ch.                 | Brown      |  |
|          | Connector      |             | MS 3106A (Shell), 14S-6S (Inse |                           |            |  |
|          |                |             |                                |                           |            |  |
| 10 ft Ca | ble Ass'y      | A, B, Z ch. |                                | Part #C6-6-10CF (6 wires) |            |  |

| PIN #    | 8 Pi             | n                                 | Same       |  |
|----------|------------------|-----------------------------------|------------|--|
|          | Diff. Line Drive | er w/Index Z                      | Wire Color |  |
| 1        | A cł             | ۱.                                | White      |  |
| 2        | B cł             | ۱.                                | Green      |  |
| 3        | Z cł             | ۱.                                | Yellow     |  |
| 4        | Supply Voltage   |                                   | Red        |  |
| 5        | Common           |                                   | Black      |  |
| 6        | A not ch.        |                                   | Blue       |  |
| 7        | B not ch.        |                                   | Brown      |  |
| 8        | Z not ch.        |                                   | Orange     |  |
|          | Connector        | 8 pin 16 mm Metric Circular Conn. |            |  |
| Mating   | Connector with   | Part #D8-8-10 (8 wires)           |            |  |
| 10 ft Ca | ble Ass'y        |                                   |            |  |

### **Measuring Wheels**



3.5" Center Hgt Foot Bracket #LM-001



### Mating Connector with 10 ft cable ass'y





# WORLD ENCODERS

# **QUBE 2.25" Series RS Incremental Shaft Encoder**

| RS  |  |  | Shaft Style | Channels | Resc | olution | Anti-Jitter | Voltage/Output |  |
|-----|--|--|-------------|----------|------|---------|-------------|----------------|--|
| 110 |  |  |             | -        |      |         |             |                |  |
|     | ORDERING INFORMATION   |  |             |          |      |         |             |                |  |
| RS  | RSB: 3/8" (Std.)Blank: Std.Blank: Sgl-ended<br>ShaftBlank: Sgl-ended<br>(A ch. Only)60500Blank: Std.8-30 = Pull-up Resistor TTL<br>Current Sinking 8-30vdcC: 1/4" (Std.)P: ProgrammableP: ProgrammableMarking 8-30vdc120600*AJ: Anti-jitter605-26C = Open Collector 526vdc<br>(NPN w/o resistor) 7273A: 5/16" (Opt.)A: 5/16" (Opt.) |  |             |          |      |         |             |                |  |
|     | PRICING INFORMATION  |  |             |          |      |         |             |                |  |

| Model                   | Shaft Size             | Prog.                    | Shaft Style      | Channels                                | Resolution                         | Anti-Jitter            | Voltage/                   | Output      |
|-------------------------|------------------------|--------------------------|------------------|---|------------------------------------|------------------------|----------------------------|-------------|
| <b>RS</b><br>Base Price | <b>B:</b> 3/8"<br>N/   | Bland: Std.              | Blank: Sgl-ended | Blank:<br>A Ch. Only N/C                |                                    |                        | 8-30:<br>(Pull-up)         | N/C         |
| \$410.00                | <b>C:</b> 1/4"         | – <b>P:</b> Programmable |                  | * <b>Q:</b><br>A & B Ch.<br>Add \$30.00 | Thru N/C<br>600                    | Blank: Std.            | 5-26C:<br>(Open Collector) | Add \$25.00 |
|                         | .5: 1/2" Ac            | Add \$30.00<br>d         | Shaft<br>N/C     | * <b>QZ:</b><br>A, B & Z Ch.            | <b>720</b> Add <b>Thru</b> \$25.00 | <b>AJ:</b> Add \$40.00 | 5-26D<br>(Line Driver)     | Add \$25.00 |
|                         | <b>A:</b> 5/16" \$10.0 | U                        |                  | Add \$80.00                             | 1200                               |                        | 5-26PP<br>(Push-Pull)      | Add \$25.00 |

Standard Stock Items: Shipped immediately. \*Lead Time: 7 - 10 days to ship.

| PART NUMBER  | LIST PRICE           | PART NUMBER  | LIST PRICE |  |  |
|--|----------------------|--|------------|--|--|
| RSB60/8-30   | \$410.00             | Mating Connector with 10-20 Ft. Cable  | Assembly   |  |  |
| RSB120/8-30  | \$410.00             | #C6-3-10CF (A ch. Only-Sgl.ended)<br>MS 6pin Mating w/10ft cable (3 wires)                         | \$35.00    |  |  |
| RSB360/8-30  | \$410.00             | #C6-4-10CF (A,B ch-Sgl.ended)  | \$40.00    |  |  |
| RSB500/8-30  | \$410.00             | MS 6pin Mating w/10ft cable (4 wires)  | \$ 10.00   |  |  |
| RSB600/8-30  | \$410.00             | #C6-6-10CF (A,B & Z chs.) or (A, Ā, B, B, chs.)  | \$40.00    |  |  |
| RSB1000/8-30   | \$435.00             | MS 6pin Mating w/10ft cable (6 wires)  |            |  |  |
| RSBQ-1056/5-26C  | \$640.00             | #C6-6-20CF MS 6 pin mating w/20ft cable (6 wires)  | \$80.00    |  |  |
| RSBDQ-250/8-30   | \$440.00             | #D8-8-10 (A, Ā, B, Ē, Z, Z̄ chsLinedriver)<br>Amphenol 16mm Circular Mating w/10ft cable (8 wires) | \$50.00    |  |  |
| Best Selling Models for Co                               | nveyors              | #D8-8-20   | \$80.00    |  |  |
| RSBQ-500/8-30  | \$440.00             | M16 conn. 8 pin mating w/20ft cable (8 wires)  | φ00.00     |  |  |
| RSBQ-600/8-30  | \$440.00             | Mounting Flange  |            |  |  |
| RSBQ-1000/8-30   | \$465.00             | #MB-FL3 Rectangular Flange   | \$18.00    |  |  |
| RSBQ-1200/8-30   | \$465.00             | 2.25" W x 3.25" L x 0.25" T with 1" hole in center.  |            |  |  |
| RSB-5AJ/8-30   | \$450.00             | #LM-001 3.5" Center Height Ft. Mounting Bracket  | \$90.00    |  |  |
| RSB-P64AJ/8-30   | \$510.00             | 5.25" H x 3.2" W x 2.5" L w/1.25" hole   |            |  |  |
|  |                      | Measuring Wheels   |            |  |  |
| Standard Stock Items: Shipped immediately. *Lead Time: 7 | 7 - 10 days to ship. | #MW-1-B  | \$50.00    |  |  |
|  |                      | 3" Dia,12" Circumference 3/8" wide, 3/8" Hub I.D.  |            |  |  |
|  |                      | #MW-1W-B   | \$50.00    |  |  |
|  |                      | 3" Dia,12" Circumference 1" wide, 3/8" Hub I.D.  |            |  |  |
|  |                      | #MW-30-B   | \$50.00    |  |  |
|  |                      | 30cm Circumference 3/8" wide, 3/8" Hub I.D.  |            |  |  |

\$50.00

#MW-30W-B

30cm Circumference 1" wide, 3/8" Hub I.D.