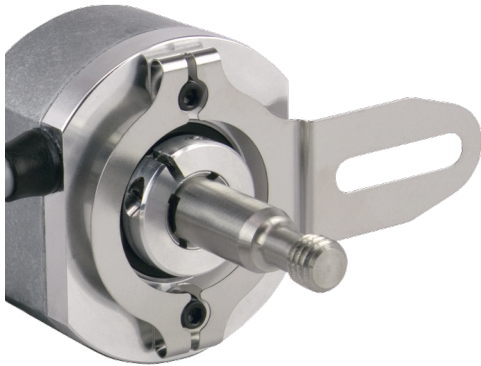


DR686

Direct Replacement Encoder for Siemens 1XP8001



Designed as a drop in replacement for the Siemens 1XP8001 encoder, the DR686 is ready for delivery. The unique threaded shaft made this encoder hard to find, but it is a standard order at EPC.

Configurations can be ordered with either 1024 or 2048 CPR, with a 12 pin connector at the end of 18" of cable. Save time and money looking for a replacement encoder with the DR686 – the perfect solution!

Features:

- Low profile (1.19") encoder body
- 2 piece construction; shaft screws into motor, then encoder attaches to shaft
- 1024 and 2048 CPR available
- Line Driver output
- Flex Arm mounting system makes installation easy and allows for insulation and isolation from vibration
- 12-pin connector at the end of 18" of cable
- Advanced Opto-ASIC technology for superior noise immunity
- Withstands temperatures up to 100⁰ C
- Sealing of IP64

Typical Price: for Comparable Encoder: \$575 - \$1500

DR686 Price: \$565

Additional discounts available for volume orders.

| Order Number | CPR |
|--------------|------|
| DR686-01 | 1024 |
| DR686-02 | 2048 |

The Accu-Coder™ Advantage

- ✓ Get this encoder FAST – you'll get your encoders in days, not weeks.
- ✓ Huge savings in price comparison – the DR686 is your economical solution
- ✓ The accuracy, reliability, and quality that only come from an Accu-Coder™
- ✓ Industry leading 3-year warranty!

ACCU-CODER™
by Encoder Products Company

DR686

Direct Replacement Encoder for Siemens 1XP8001

Model DR686 Specifications

Electrical

- Input Voltage..... 4.75 to 28 VDC (16 VDC Max at 100° C)
- Input Current..... 100 mA max with no output load
- Output Format..... Incremental – Two square waves in quadrature with channel A leading B for clockwise shaft rotation, as viewed from the mounting face. See Waveform Diagram below.
- Output Types..... Line Driver – 20 mA max per channel (Meets RS 422 at 5 VDC supply)
- Freq. Response 200 kHz standard
- Noise Immunity..... Tested to BS EN61000-6-2; BS EN50081-2; BS EN61000-4-2; BS EN61000-4-3; BS EN61000-4-6, BS EN55011
- Quadrature 67.5° electrical or better is typical, 54°
- Edge Separation electrical minimum at temperatures > 99° C
- Accuracy Within 0.01° mechanical from one cycle to any other cycle, or 0.6 arc minutes

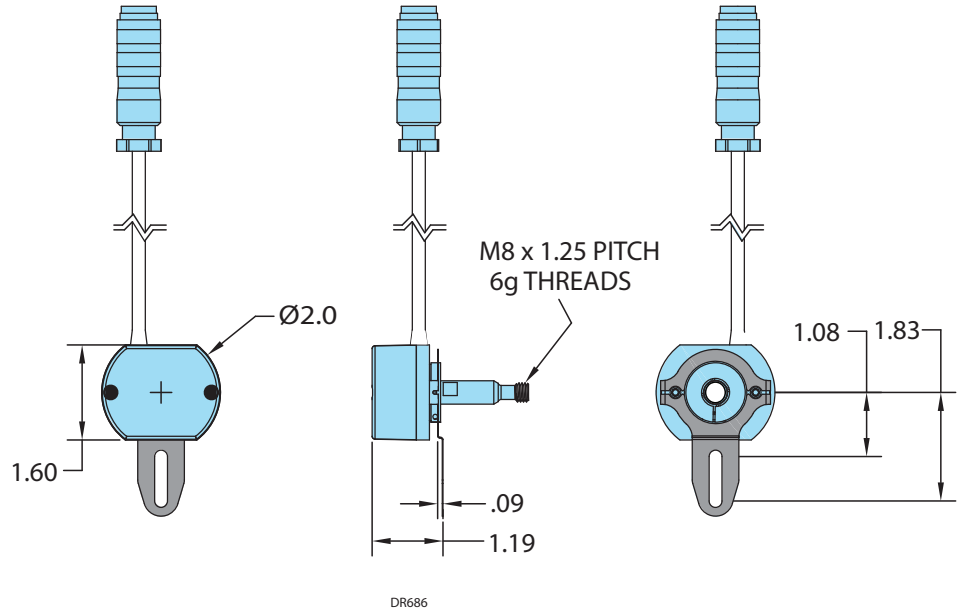
Mechanical

- Max Shaft Speed..... 7500 RPM
- User Shaft Tolerances
 - Radial Runout 0.007" max
 - Axial Endplay ±0.030" max
- Starting Torque..... 0.50 oz-in
- Moment of Inertia 3.9 X 10⁻⁴ oz-in-sec²
- Max Acceleration..... 1 X 10⁵ rad/sec²
- Electrical Conn..... 18" cable (foil and braid shield, 24 AWG conductors) with 12-pin connector
- Housing..... Black non-corrosive finish
- Mounting..... Flex Arm Mount standard
- Weight..... 3.5 oz typical

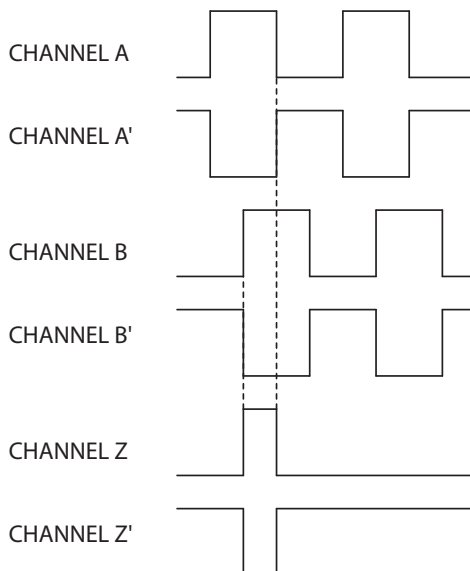
Environmental

- Operating Temp..... 0° to 100°C
- Storage Temp..... -40° to 100° C
- Humidity 98% RH non-condensing
- Vibration..... 10 g @ 58 to 500 Hz
- Shock..... 50 g @ 11 ms duration
- Sealing IP64

DR686 Dimensions



DR686 Waveform Diagram



DR686 Wiring Table

| DR686 WIRING | |
|--------------|------------|
| PIN | FUNCTION |
| A | CHANNEL B' |
| B | +VDC |
| C | CHANNEL Z |
| D | CHANNEL Z' |
| E | CHANNEL A |
| F | CHANNEL A' |
| G | +VDC |
| H | CHANNEL B |
| J | N/C |
| K | COMMON |
| L | COMMON |
| M | +VDC |