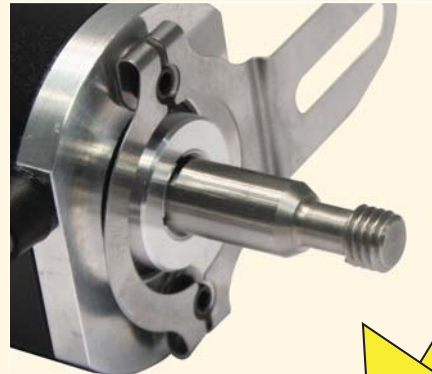


## DR686

### 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 now it is a standard order. 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; The DR686 is the perfect solution!



Order Number	CPR
DR686-01	1024
DR686-02	2048



#### The Accu-Coder™ DR686 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 100° C

#### The Accu-Coder™ Advantage

- Get this encoder **FAST!**
- **Huge savings** in price comparison!
- The accuracy, reliability, and quality that only come from an Accu-Coder™
- Industry Best **3-year** warranty!

# 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

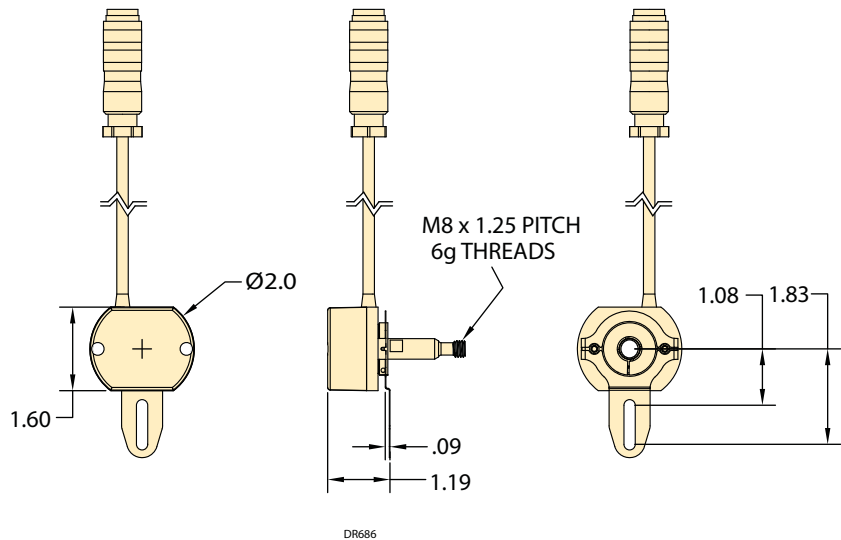
#### Mechanical

- 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<sup>-4</sup> oz-in-sec<sup>2</sup>
- Max Acceleration.... 1 X 10<sup>5</sup> rad/sec<sup>2</sup>
- 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

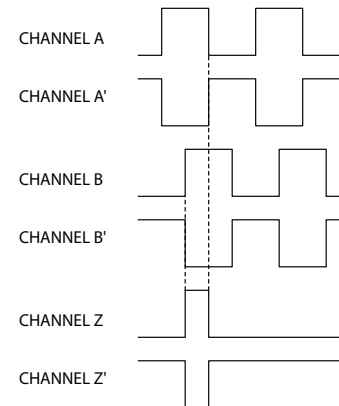
- Operating Temp..... 0° to 100°C
- Storage Temp..... -40° to +100° C
- Humidity..... 98% RH non-condensing
- Vibration..... 10 g @ 58 to 500 Hz
- Shock ..... 50 g @ 11 ms duration
- Sealing ..... IP64

### DR686 Dimensions



### DR686 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



This Direct Replacement Encoder provided by;

