

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.

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
- IP64 sealing

Contact Customer Service for pricing. Discounts available for volume orders.

ORDER NUMBER	CPR
DR686-01	1024
DR686-02	2048

The Accu-Coder® Advantage

- US-based since 1969
- Industry-best 3-year warranty
- Exceptional customer service
- Fast lead times – contact us for lead times and expedite options

ACCU»»CODER®
by Encoder Products Company

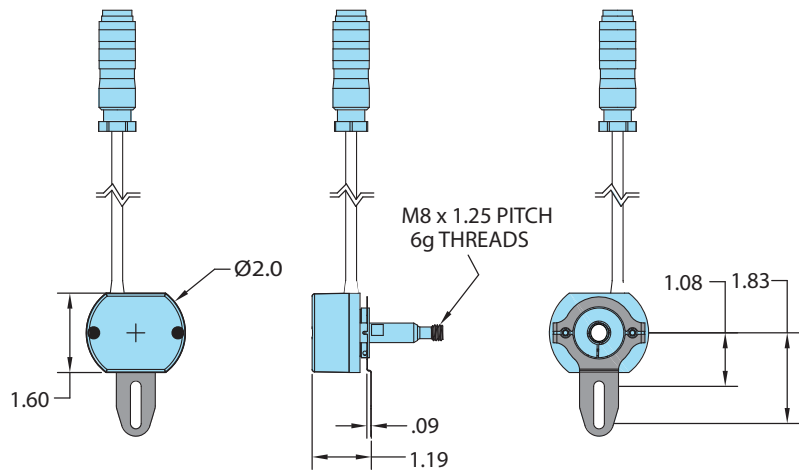
DR686

Direct replacement encoder for Siemens 1XP8001

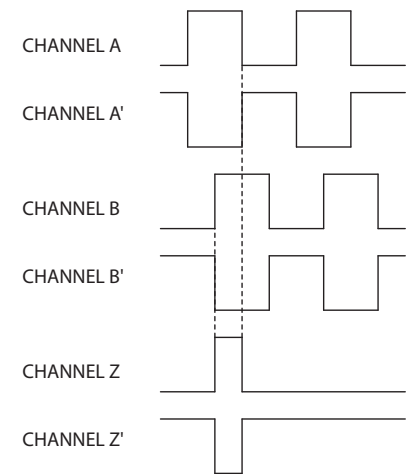


MODEL DR686 SPECIFICATIONS	
Electrical	
Input Voltage.....	4.75 to 28 VDC (16 VDC Max at 100° C)
Input Current.....	100 mA max with no output load
Output Format.....	Incremental – Two square waves in quadrature with channel A leading B for clockwise shaft rotation, as viewed from the mounting face. See 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-sec ²
Max Acceleration.....	1 X 10 ⁵ rad/sec ²
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

Don't see the exact encoder you need?

Call **(800) 366-5412** and our Technical Sales Department will cross-reference your encoder to the correct EPC model.