

High Resolution Resolver Interface Card for A-B SLC500 I/O Chassis

The Series 1746R Resolver Interface Card is a resolver based unit that incorporates Allen-Bradley licensed technology for complete compatibility with A-B Series 1746 I/O chassis. The unit monitors machine position and delivers continuous absolute position data at 12 bit (4,096 count) resolution and RPM data to the SLC processor.

The Series 1746R Resolver Interface Card is available in two versions. 1746R-1 is for single axis applications and uses a single turn resolver. Standard “Turns Counting” software allows a single turn resolver to be used in multi-turn applications. The Series 1746R-2 is for dual axis applications and can use two, single turn resolvers to monitor each axis independently, or is field configurable for use with a single, multi-turn dual resolver to monitor a single axis for absolute positioning over multiple revolutions.

Each channel has an auxiliary input that can be field configured to operate in one of two ways:

- 1. Reset to Preset.** This feature allows you to continuously synchronize position data to the leading edge of the product or to automatically compensate for process drift.
- 2. Brake monitoring in metal stamping applications.** In this configuration, automatic calculation of stop time and stop angle is transferred to the I/O image table. In addition, two programmable time limits are available to monitor maximum stop values: the first as a potential maintenance warning, and the second as an error if the press exceeds the programmed maximum acceptable stop time.

■ This product incorporates patented technology which is licensed by Allen-Bradley Company, Inc. A-B has not technically approved, nor does it warrant or support this product. All warranty and support for this product and its application is provided solely by Ametek Patriot Sensors.

■ Allen-Bradley is a registered trademark of Rockwell Corporation

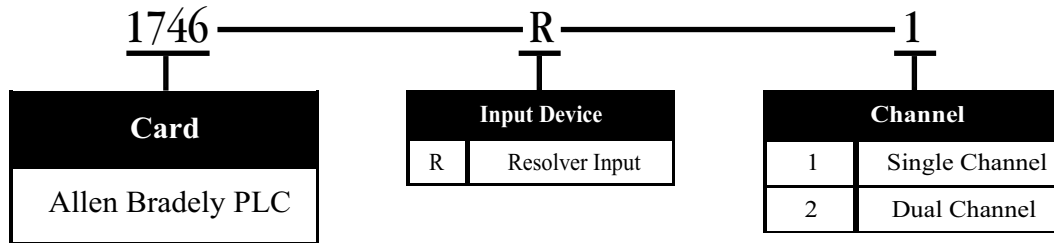
■ Gemco is a trademark of Ametek Patriot Sensors.



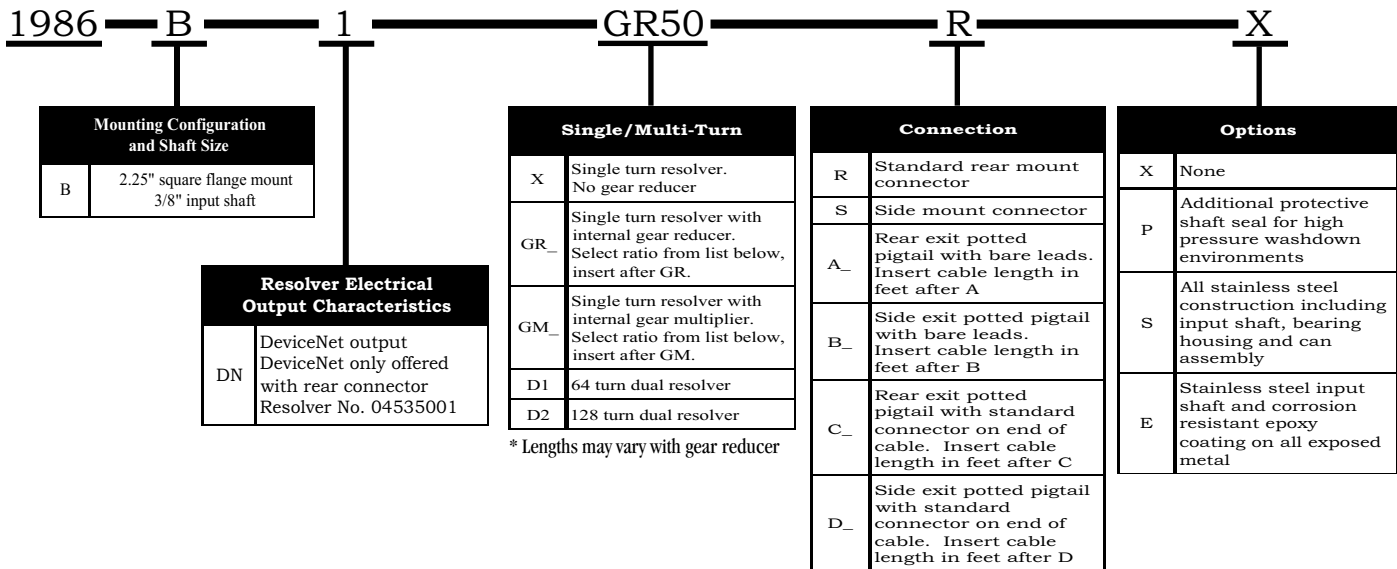
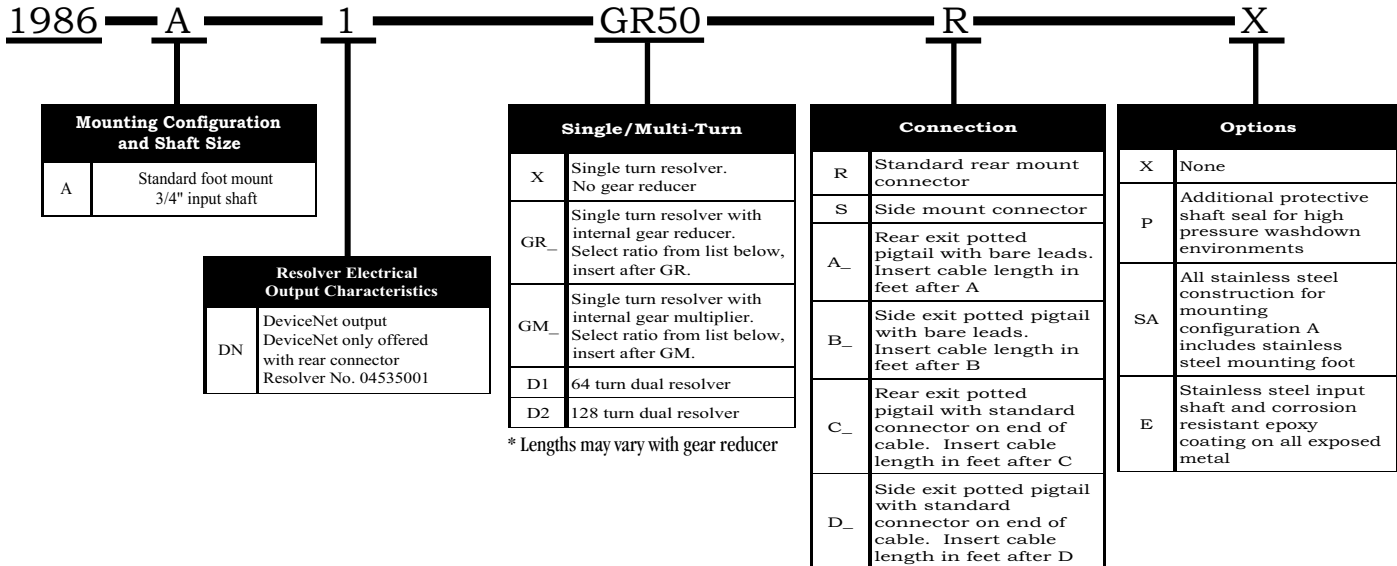
1746R-1 Single Axis
 1746R-2 Dual Axis

Reference Specifications	
Power Requirements	0.250A max. @ 5VDC 0.0A max. @ 24VDC
Resolution	12 bit (for standard resolver) 18 bit (for 64:1 multi-turn dual resolver) 19 bit (for 128:1 multi-turn dual resolver)
RPM	2048 maximum
Resolver Cable Length	1000 ft. maximum
Temperature Rating	Operating: 32° to 131°F (0° to 55°C) Storage: 0° to 150°F (-17° to 65°C)
Position Update Time	300µs single resolver position 600µs dual resolvers or multi-turn resolver position 800µs for multi-turn dual resolvers
RPM Update Time	14.68ms for RPM
Auxiliary Inputs	10-30VDC max. @ 3 mA Brake Monitor: active (timing starts) when contact opens (1 millisecond resolution) Reset to Preset: active when contact closes
Module ID Code	3535 (reserves 8 input words and 8 output words in I / O image table)
I/O Isolation	500VAC
Specifications may change without notice. Order Resolver separately.	

Series 1746R High Resolution Resolver Interface Card



Compatible Resolvers



AMETEK®

PATRIOT SENSORS

1080 NORTH CROOKS ROAD • CLAWSON, MI 48017 USA
 800-635-0289 • 248-435-0700 • Fax 248-435-8120
 www.patriotsensors.com • www.ametek.com