**Split Collar Pulser Wraps**

Custom made for your application, built to your specifications
- No machinery tear-down required for mounting
- Five types of wraps fit most applications
- Custom number of pulses per revolution
- PVC, aluminum, or stainless steel
- High temperature wraps available

**Description**

Pulser Wraps are PVC, aluminum, or stainless steel split collars with magnets mounted on the outside circumference. The magnets serve as targets for Hall-Effect and Magnetoresistive sensors that switch when exposed to magnetic fields. All wraps are custom machined to the diameter of the monitored shaft and are split into halves. This splitting process allows the wrap to clamp tightly onto the shaft without tearing down any equipment to install them. The halves are secured around the shaft with recessed Allen-head socket screws supplied. Pulser Wraps provide magnetic targets that are strong enough to allow large gap distances (up to 1/2-inch) between the wrap and the sensor. The wrap and sensor system forgives slight misalignment of the sensor, machinery vibration, dirty, wet, or greasy environments, and shaft end-play.

**Special Wraps**

Wraps purchased for use with standard Electro-Sensors systems are typically provided with 16 magnets of alternating polarity. Using a standard Hall-Effect sensing system, this provides 8 pulses per revolution from the sensor. Special wraps can be provided to suit particular application requirements. This often includes adding magnets to the wraps to increase the number of pulses per revolution generated by the sensing system. Adding magnets will usually require an increase in the outside diameter of the wrap. Standard and miniature wraps are typically selected when more magnets are required because the magnets may be added without large increases in the outside diameter, particularly if the 1/4" diameter magnets are used. Wraps can be manufactured from PVC, aluminum, or stainless steel, and have the option of a keyway where required. Steel inserts can be substituted for magnets when using proximity or mag sensors. An Electro-Sensors Application Specialist can assist in the design of wraps to meet specific or special needs.

**Dimensional Drawings**

![Standard Wrap](image)

![Miniature Wrap](image)

![Narrow Wrap](image)

![Slotted Wrap](image)

![High Speed Wrap](image)
Installation
Pulser Wraps are custom manufactured to fit the shaft they will be mounted on. When the wrap is shipped, four Allen-head cap screws hold the two halves of the wrap together. These screws must be removed so that the wrap is in two halves. Place the halves around the shaft, reinsert the screws and torque them evenly to 5 foot pounds. After installation, a small gap between the two halves is normal.

To correctly specify the size, type and material of wrap you require, please answer the following questions and forward the information to the sales department at Electro-Sensors. Please review the specifications and differences between the various wraps before submitting this information.

Before ordering, please check all wrap dimensions carefully. Wraps are custom made and are non-returnable items.

1. Exact shaft diameter (in inches)
2. Type of wrap (Standard, Miniature, Narrow, Slotted, High Speed)
3. Max shaft RPM
4. Wrap material (PVC, Aluminum, Stainless Steel)
5. Ambient temperature
6. Are there corrosive elements present?
7. Additional application information

You can also contact an Electro-Sensors application specialist for assistance:
Toll-Free: 800-328-6170 • 952-930-0100 • sales@electro-sensors.com

The formulas below show the maximum number of magnets that can be mounted on the Standard or Miniature Wraps with respect to magnet diameter and the outside diameter of the Wrap.

\[
\text{(Wrap Outside Diameter - \frac{1}{2})} \times 3.14
\]

### Specifications - Split Collar Pulser Wraps

#### All Wraps - Temperature Range

- **PVC Material**: -40°C to +60°C (-40°F to +150°F)
- **Aluminum Material**: -40°C to +150°C (-40°F to +302°F)
- **Stainless Steel**: -40°C to +150°C (-40°F to +302°F)

Consult factory for higher temperature ranges.

#### Wrap Types

**Standard - Under 3,000 rpm**
- **Width**: 1-1/2"
- **Inside diameter**: Custom to shaft size
- **Outside diameter**: I.D. + 3"
- **Min. outside diameter**: 4"
- **Material**: PVC std., aluminum optional
- **Standard magnet size**: 1/2" diameter
- **Standard no. of magnets**: 16 (8 or 16 pulses/revolution)

**Miniature - Under 3,000 rpm**
- **Width**: 1-1/4"
- **Inside diameter**: Custom to shaft size
- **Outside diameter**: I.D. + 1"
- **Min. outside diameter**: 4"
- **Material**: PVC std., aluminum optional
- **Standard magnet size**: 1/4" diameter
- **Standard no. of magnets**: 16 (8 or 16 pulses/revolution)

**Narrow - Under 3,000 rpm**
- **Width**: 5/8"
- **Inside diameter**: Custom to shaft size
- **Outside diameter**: I.D. + 3"
- **Min. outside diameter**: 7"
- **Material**: PVC std., aluminum optional
- **Standard magnet size**: 1/2" diameter
- **Standard no. of magnets**: 16 (8 or 16 pulses/revolution)

**Slotted - Under 3,000 rpm**
- **Width**: 1-1/2"
- **Inside diameter**: Custom to shaft size
- **Outside diameter**: I.D. + 3"
- **Min. outside diameter**: 7"
- **Material**: PVC std., aluminum optional
- **Standard magnet size**: 1/2" x 1-1/2" bar
- **Standard no. of magnets**: 16 (8 or 16 pulses/revolution)

**High Speed - Over 3,000 rpm**
- **Width**: 1-1/2"
- **Inside diameter**: Custom to shaft size
- **Outside diameter**: I.D. + 1"
- **Min. outside diameter**: 2"
- **Material**: Aluminum
- **Standard magnet size**: 1/2" diameter
- **Standard no. of magnets**: 2 (1 or 2 pulses/revolution)

Specifications subject to change without notice.

**Split Collar Pulser Wraps**

ES-102 Rev F

Visit Us Online:
www.electro-sensors.com

Free Catalog and Application Assistance
1-800-328-6170