

## Features

- 300-1250 ppr. Resolution
- Incremental encoder output: Push-Pull, TTL, Linedriver or HLD output
- 40 mm case diameter
- 6-8 mm rod diameter  
3500 rpm max.

## RS PRO Motion Control Sensor

### Optic Rotary Incremental Encoder

Stock No.. 100487, 100489, 100491, 100433,  
100435, 100436, 100437, 100439, 100441,  
100423, 100442, 100429



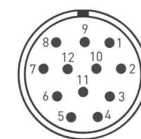
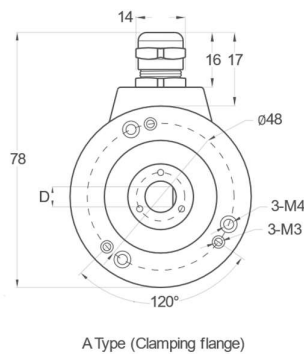
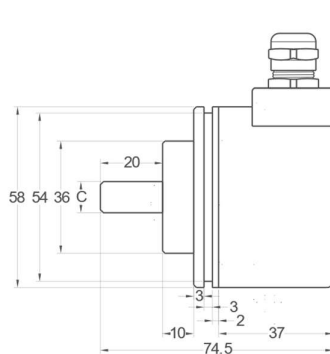
RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has

been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

Series designed as compact, highly robust, rotary motion control sensors, using incremental optic measuring technology, up to 5000 ppr. resolution. Series provides angular speed & displacement feedback for wide range of industrial applications.

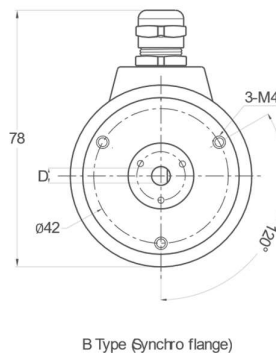
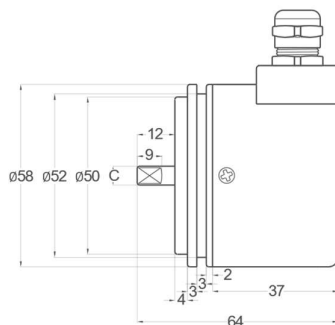
## Mechanical Specifications



C12 Type connector  
Please ask for connection details

Push-Pull Cable Output  
+V : Brown  
0V : White  
GND : Shield  
Ch A : Yellow  
Ch B : Green  
Ch Z : Gray

TTL - HLD - Linediver Cable Output  
+V : Brown  
0V : White  
GND : Shield  
Ch A : Yellow  
Ch B : Green  
Ch Z : Gray  
Ch A inv: Blue  
Ch B inv: Red  
Ch Z inv: Pink



| PRI 58 | A (shaft) |     | B (shaft) |     |
|--------|-----------|-----|-----------|-----|
|        | C         | D   | C         | D   |
|        | Ø6mm      | 5mm | Ø6mm      | 5mm |
|        | Ø8mm      | 7mm | Ø8mm      | 7mm |
|        | Ø10mm     | 9mm | Ø10mm     | 9mm |

## General Specifications

|                                   |                                                                                                       |
|-----------------------------------|-------------------------------------------------------------------------------------------------------|
| Resolution                        | 100-5000 ppr.                                                                                         |
| Output channels                   | A,B,Z or AA,BB, ZZ                                                                                    |
| Output type                       | TTL, Linedriver, Push-Pull, HLD                                                                       |
| Power supply                      | 5 VDC, 5-24 VDC or 8-24 VDC                                                                           |
| Power consumption(without load)   | <40 mA (24 VDC)                                                                                       |
| Cable                             | 2.5 meter (standard) 5 wire + shield (Push-Pull)<br>2.5 meter (standard) 8 wire + shield (Linedriver) |
| Maximum permissible shaft loading | Radial: 60 N<br>Axial: 40 N                                                                           |
| Displacement speed                | 3500 rpm                                                                                              |
| Rod diameter                      | Ø6-8-10 mm                                                                                            |
| Rod material                      | Stainless steel                                                                                       |
| Case dimension                    | Ø58 mm                                                                                                |
| Case material                     | Aluminium and painted steel                                                                           |
| Protection level                  | IP 54                                                                                                 |
| Operating temperature             | -20°C ... +80°C                                                                                       |
| Storage temperature               | -30°C ... +90°C                                                                                       |

## Approvals

|              |                       |
|--------------|-----------------------|
| Declarations | CE, UKCA, ROHS, REACH |
|--------------|-----------------------|

## Articles In Series

| RS PRO Part Number | MPN     | Shaft Diameter | Output                                 | Resolution | Power Supply | Connector / Cable |
|--------------------|---------|----------------|----------------------------------------|------------|--------------|-------------------|
|                    | 0100487 | 10             | High Line driver<br>A, A', B, B' Z, Z' | 1000 ppr.  | 8-24 VDC     | 2,5 meter cable   |
|                    | 0100489 | 10             | High Line driver<br>A, A', B, B' Z, Z' | 5000 ppr.  | 8-24 VDC     | 2,5 meter cable   |
|                    | 0100491 | 10             | Line driver<br>A, A', B, B' Z, Z'      | 5000 ppr.  | 5 VDC        | 2,5 meter cable   |
|                    | 0100433 | 10             | Push Pull<br>A, B, Z                   | 1000 ppr.  | 8-24 VDC     | 2,5 meter cable   |
|                    | 0100435 | 10             | Push Pull<br>A, B, Z                   | 1000 ppr.  | 5-24 VDC     | 2,5 meter cable   |
|                    | 0100436 | 10             | Push Pull<br>A, B, Z                   | 1024 ppr.  | 5-24 VDC     | 2,5 meter cable   |
|                    | 0100437 | 10             | Push Pull<br>A, B, Z                   | 2500 ppr.  | 5-24 VDC     | 2,5 meter cable   |
|                    | 0100439 | 10             | Push Pull<br>A, B, Z                   | 500 ppr.   | 5-24 VDC     | 2,5 meter cable   |
|                    | 0100441 | 10             | Push Pull<br>A, B, Z                   | 5000 ppr.  | 5-24 VDC     | 2,5 meter cable   |
|                    | 0100423 | 6              | Line driver<br>A, A', B, B' Z, Z'      | 5000 ppr.  | 5 VDC        | 2,5 meter cable   |
|                    | 0100442 | 6              | Push Pull<br>A, B, Z                   | 100 ppr.   | 5-24 VDC     | 2,5 meter cable   |
|                    | 0100429 | 10             | High Line driver<br>A, A', B, B' Z, Z' | 5000 ppr.  | 5-24 VDC     | 2,5 meter cable   |