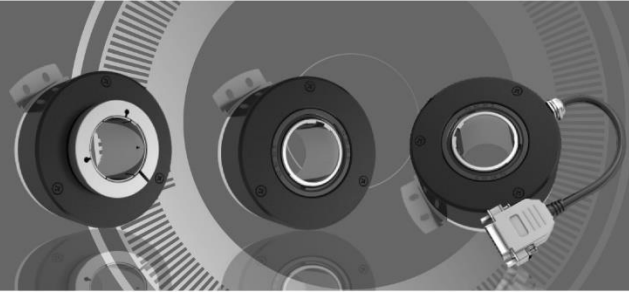


**Programmable  
 Incremental encoders**

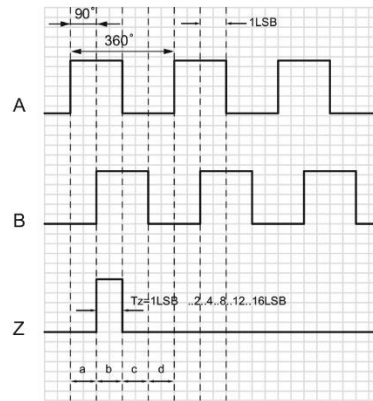
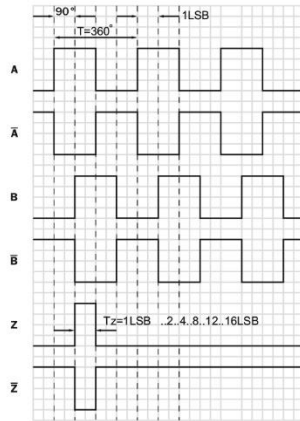
- Programmable incremental encoder from 1 to 4096ppr
- Programming via USB is quick and easy
- Wide 4.5V to 24V Operating Input Range
- Programmable without powering up the encoder



Product family	BS4	BH4	BS5	BS5
Sensing method	Magnetic	Magnetic	Magnetic	Magnetic
Housing size	Φ40mm	Φ40mm	Φ50mm	Φ58mm
Voltage supply	5VDC 12-24VDC 5-24VDC	5VDC 12-24VDC 5-24VDC	5VDC 12-24VDC 5-24VDC	5VDC 12-24VDC 5-24VDC
Output stage	RS422/TTL Push-Pull NPN Open Collector	RS422/TTL Push-Pull NPN Open Collector	RS422/TTL Push-Pull NPN Open Collector	RS422/TTL Push-Pull NPN Open Collector
Installation	Solid shaft	Hollow shaft	Solid shaft	Solid shaft
Shaft	Φ6, 6.35, 8mm	Φ6, 8, 10mm	Φ6, 8, 10mm	Φ6, 8, 10, 15mm
Pulse/ring	1~4096 PPR	1~4096 PPR	1~4096 PPR	1~4096 PPR
Operating temperature	-20°C~+80°C	-20°C~+80°C	-20°C~+80°C	-20°C~+80°C
Protection	IP54~IP67	IP54~IP67	IP54~IP67	IP54~IP67
Maximum speed	5000RPM	5000RPM	5000RPM	5000RPM
Shaft load	25N Axial; 50N Radial	25N Axial; 50N Radial	40N Axial; 80N Radial	40N Axial; 80N Radial
Features	Housing size 40mm , shaft	Housing size 40mm , blind hollow shaft, elastic wings Bracket mounting	Housing size 30mm , shaft	Housing size 58, industrial encoder solid shaft, Multiple ways of fixing flange

This is a high-resolution incremental encoder with a diameter of 40 to 58mm. It offers a wide variety of mechanical and electric interfaces and can also be programmed by the customer if required. Programming of the output signal and zero pulse is a unique feature for the market. Variety of shafts for customers to choose from. Can Be used with a variety of receivers and counters.

## Signal outputs



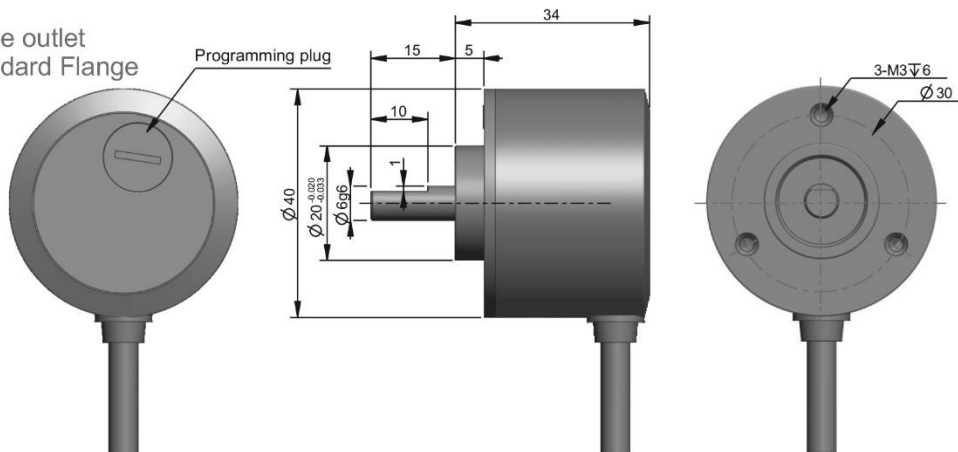
CW means clockwise rotation viewed from the shaft  
a,b,c,d =  $(25 \pm 12.5\%)T$

## Dimensioned drawing

BS4

Cable outlet

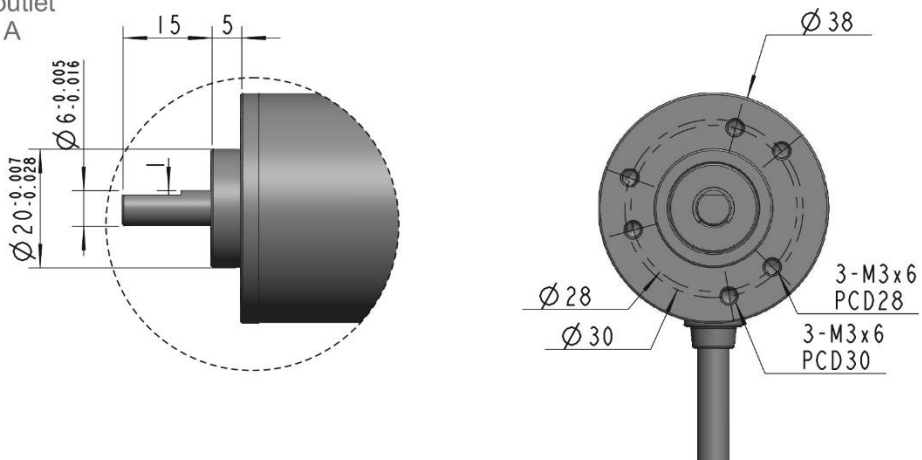
Standard Flange



BS4

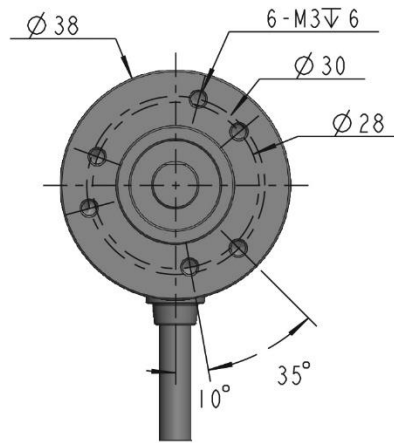
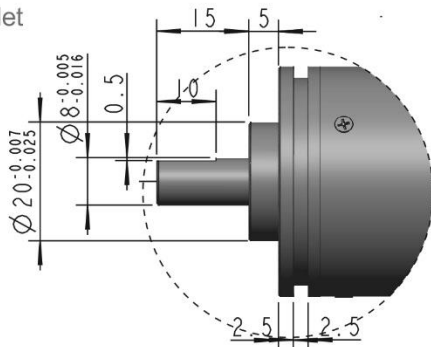
Cable outlet

Flange A

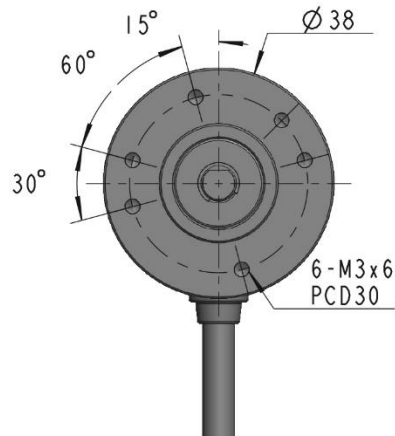
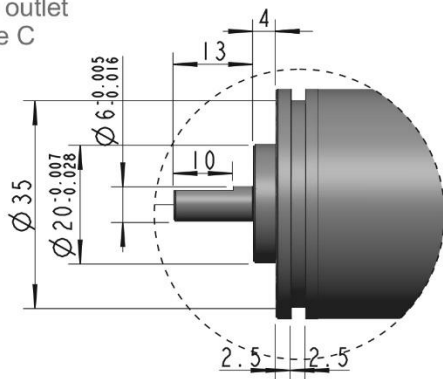


Dimensioned drawing

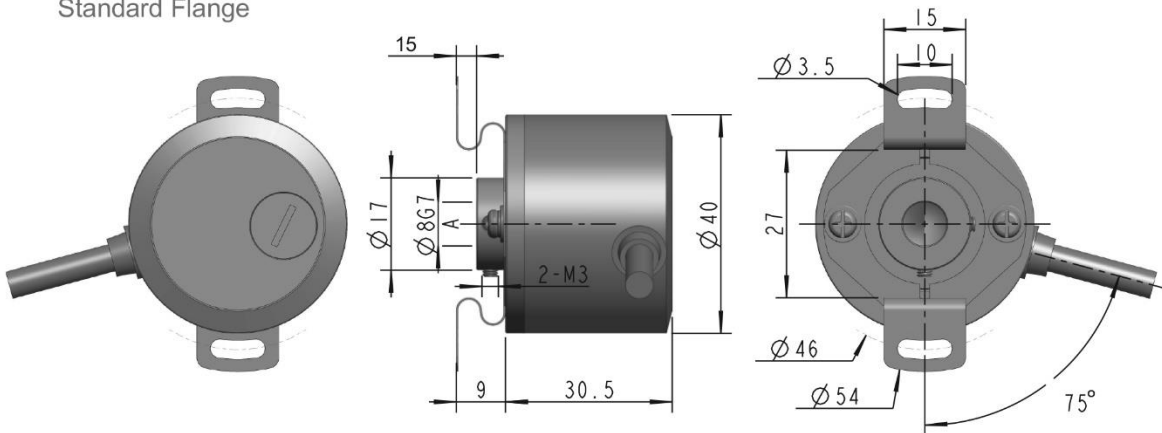
BS4 :  
Cable outlet  
Flange B



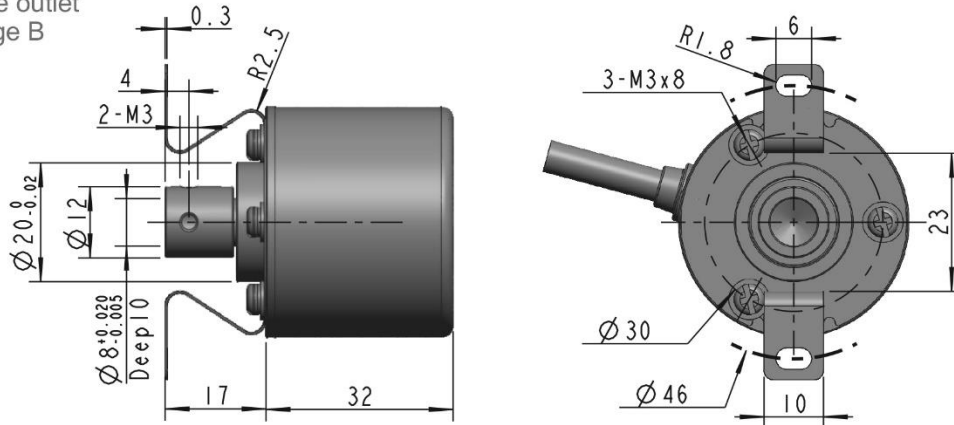
BS4 :  
Cable outlet  
Flange C



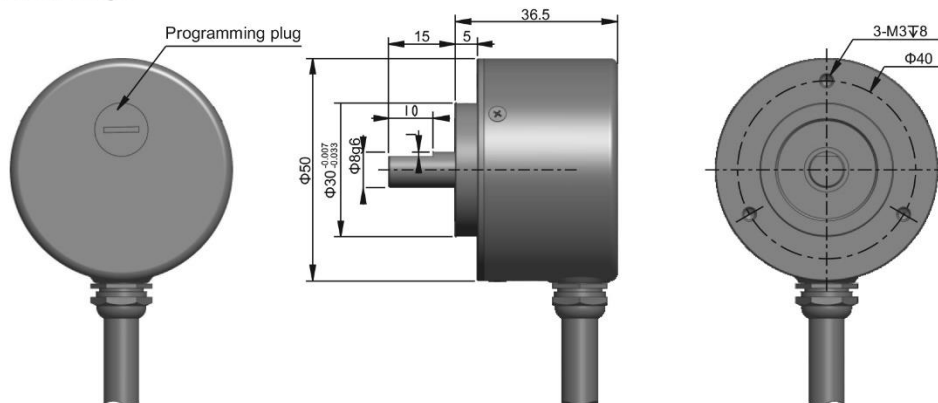
BH4 :  
Cable outlet  
Standard Flange



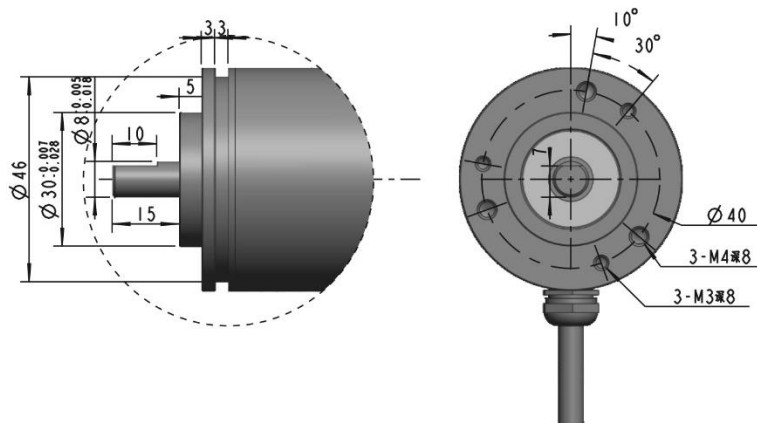
BH4 :  
Cable outlet  
Flange B



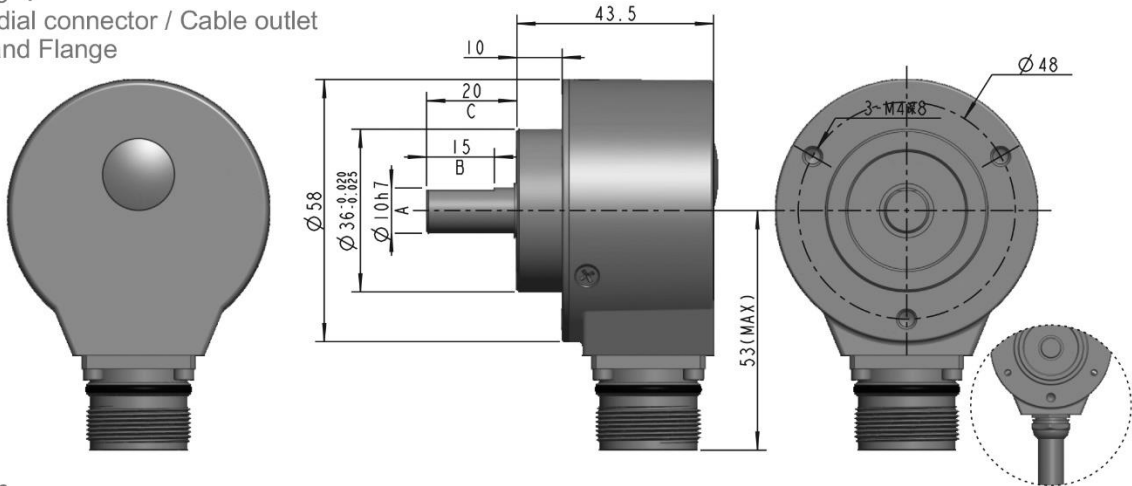
BS5 :  
Cable outlet  
Standard Flange



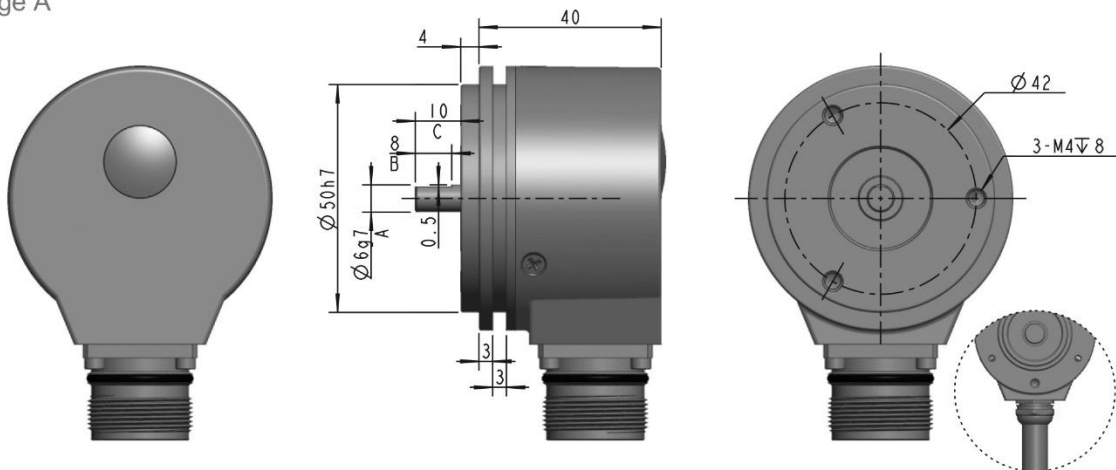
BS5 :  
Cable outlet  
Flange A



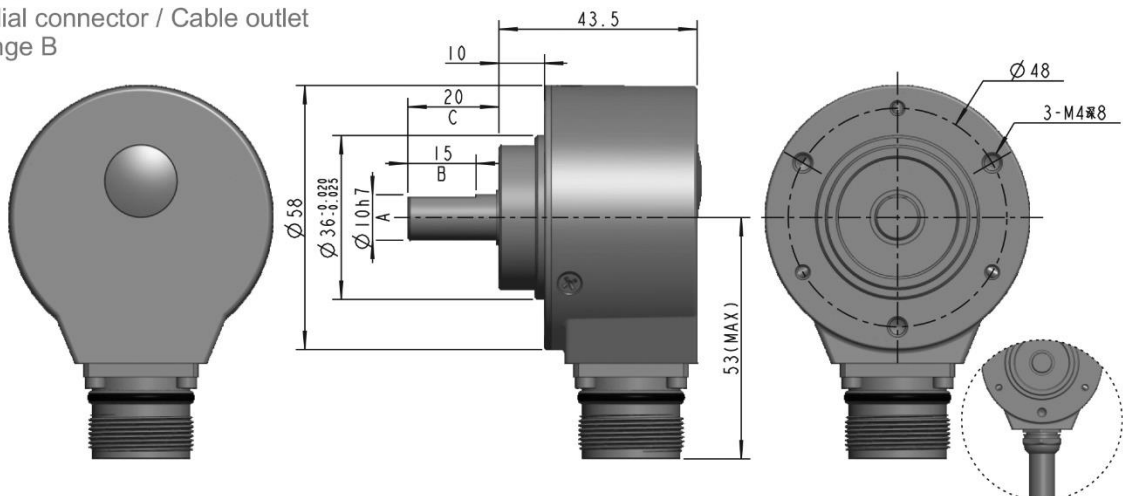
BS6 :  
Radial connector / Cable outlet  
Stand Flange



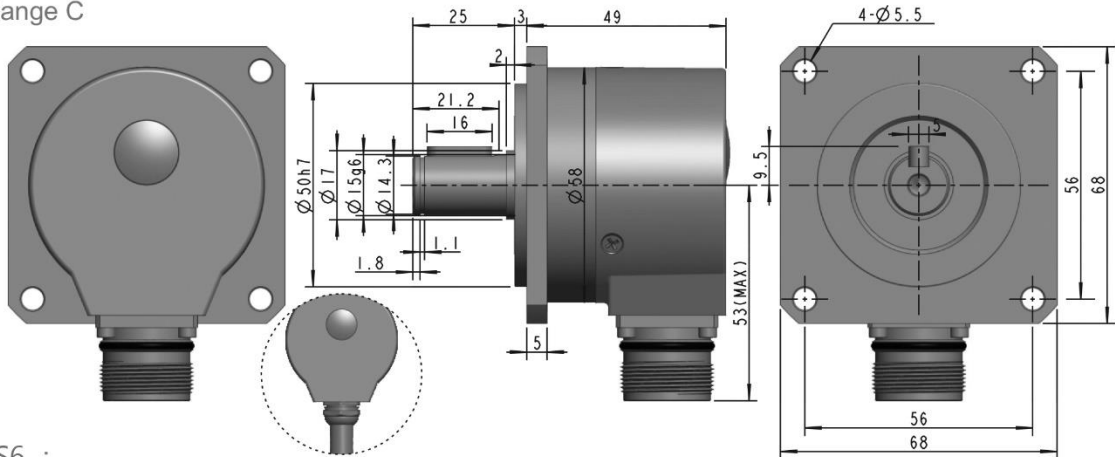
BS6 :  
Radial connector / Cable outlet  
Flange A



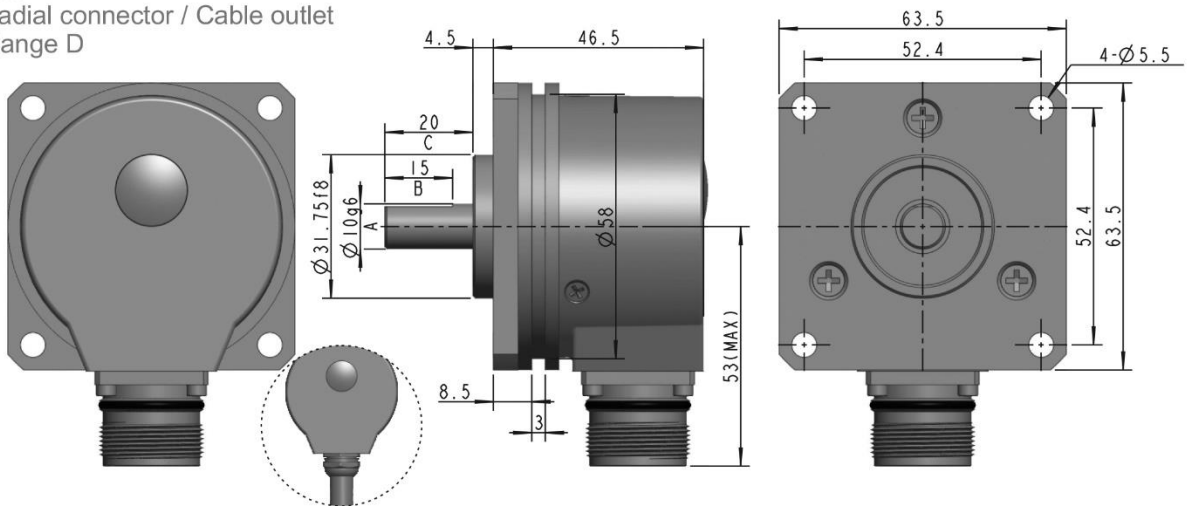
BS6 :  
Radial connector / Cable outlet  
Flange B



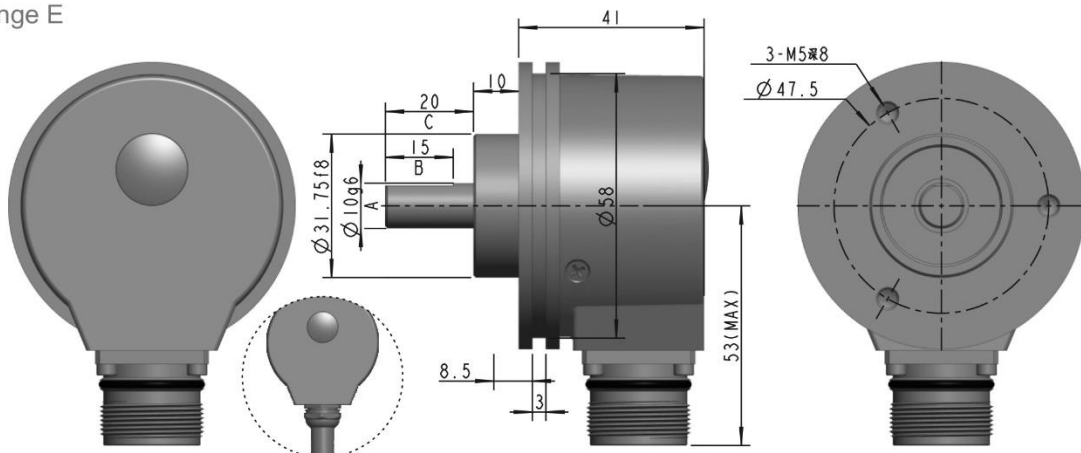
BS6 :  
Radial connector / Cable outlet  
Flange C



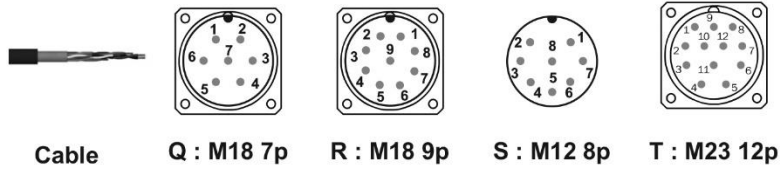
BS6 :  
Radial connector / Cable outlet  
Flange D



BS6 :  
Radial connector / Cable outlet  
Flange E



### Connection



	Cable	Q : M18 7p	R : M18 9p	S : M12 8p	T : M23 12p
<b>GND</b>	Black	Pin 4	Pin 4	Pin 7	Pin 10
<b>Vcc</b>	Red	Pin 1	Pin 1	Pin 8	Pin 12
<b>A</b>	Green	Pin 3	Pin 5	Pin 2	Pin 5
<b>B</b>	White	Pin 5	Pin 3	Pin 4	Pin 8
<b>A/</b>	Brown	/	Pin 7	Pin 1	Pin 6
<b>B/</b>	Grey	/	Pin 6	Pin 3	Pin 1
<b>Z</b>	Yellow	Pin 2	Pin 2	Pin 6	Pin 3
<b>Z/</b>	Orange	/	Pin 8	Pin 5	Pin 4

Shield connected to the housing

### Type code

