

INCREMENTAL ROTARY ENCODER

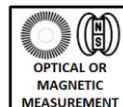
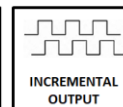
“Optical or Magnetic Measurement, 58 Body Diameter, Semi Hollow Shaft”

ARX B 58



GENERAL SPECIFICATIONS

- Incremental measurement with Optical (ARC) or Magnetic (ARS) principle
- Resolution up to 20.000 pulses for Optical (ARC) and 1024 pulses for Magnetic (ARS)
- 58 mm body diameter
- Different hollow options from 6 mm to 20 mm
- Optical (ARC): 6000 RPM, Magnetic (ARS): 3000 RPM operating speed
- 300 KHz response frequency
- High accuracy
- Robust structure, long operating life
- Connection with cable or connector
- IP54 protection class

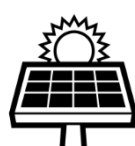


The ARX B 58 series rotary encoders measure on an optical (ARC) or magnetic (ARS) principle and operate incrementally. The ARC series operating on the optical principle offers a resolution of up to 20.000 pulses per revolution and the ARS series operating on the magnetic principle up to 1024 pulses.

Optionally, different shaft diameters, cable lengths or socket versions can be requested.

APPLICATIONS

- Wind Applications / Power Plants
- Marine or Utility Vehicle Applications
- Press or Wood and Stone Processing Machinery
- Construction Machinery
- Cranes
- Offshore Applications
- Commercial Solar Plants
- Filling Plants
- Food & Beverage Applications
- Oil & Gas - Pipe Handling and Cranes

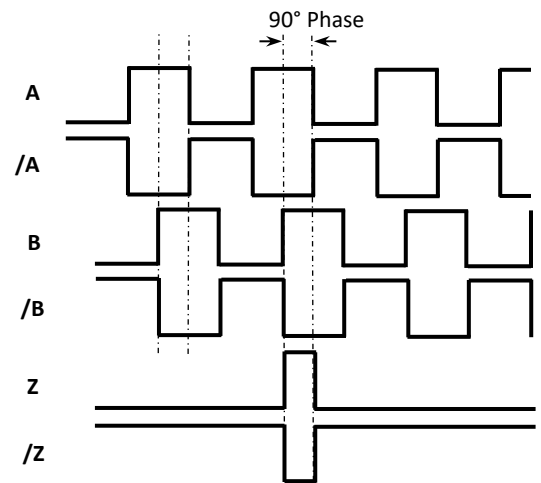


TECHNICAL SPECIFICATIONS

Resolution	ARC: Resolution options up to 20.000 pulses ARS: Resolution options between 1 and 1024 pulses						
Operating Speed	ARC: 6000 RPM, ARS: 3000 RPM max.						
Measuring Type	ARC: Optical, ARS: Magnetic						
Response Frequency	300 KHz						
Current Consumption	50 mA nominal						
Electrical Interface		PP	TTL	HTL	HPL	OCL	OCP
	Supply	10...30 VDC	5 VDC	10...30 VDC	5...30 VDC	The supply signal should not be lower than the output signal	
	Output	10...30 VDC PP	5 VDC TTL	5 VDC TTL	5...30 VDC PP	NPN Open Collector	PNP Open Collector
Output Signals	A, /A, B, /B, Z, /Z						
Output Current	100 mA max. (per channel)						
Electrical Connection	5 or 8x0,14 mm ² shielded cable, M16 / 8 pin male connector, M23 / 12 pin male connector						
Body Diameter	58 mm						
Hollow Diameter	Different hollow diameters from 6 mm to 20 mm						
Operating	-25...+85 °C						
Storage Temperature	-40...+100 °C						
IP Protection Class	IP54						
Material	Body: Aluminum						
	Shaft: Stainless Steel						

ELECTRICAL CONNECTIONS

SIGNAL	M16 (S16) MALE CONNECTOR PIN NO	M23 (S23) MALE CONNECTOR PIN NO	CABLE COLOR
A	1	5	YELLOW
/B	2	1	WHITE
+V	3	12-2	RED
0 V	4	10-11	BLACK
/A	5	6	BLUE
B	6	8	GREEN
/Z	7	4	GREY
Z	8	3	PINK

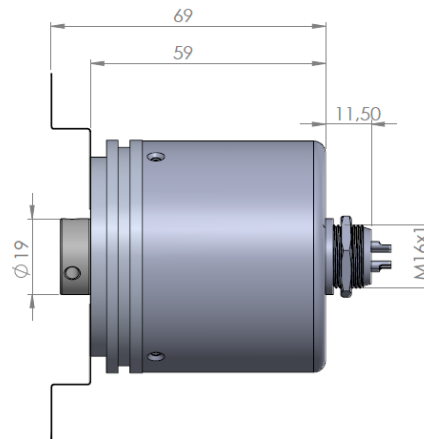
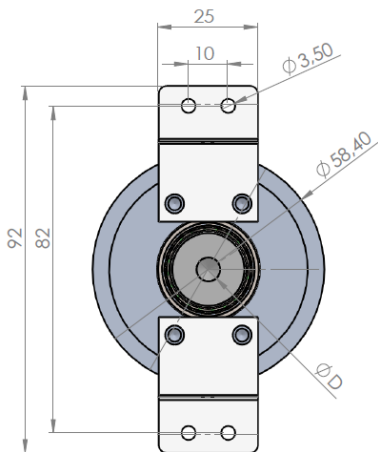


The table above shows the cable colors of the sensor output signals. If the control circuit is suitable in the Line Driver sensors of the not output signals (/A, /B, /Z) have to be added to the system. If it is not suitable /A, /B, /Z signal cables must be fixed as insulated separately. Don't forget that these edges have electricity too.

MECHANICAL DIMENSIONS (mm)

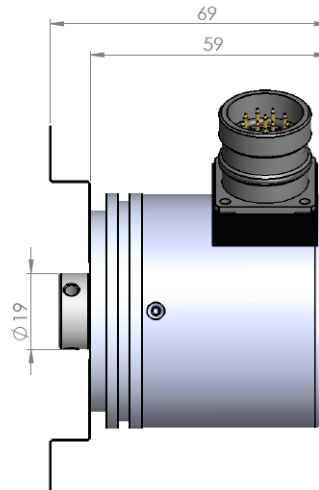
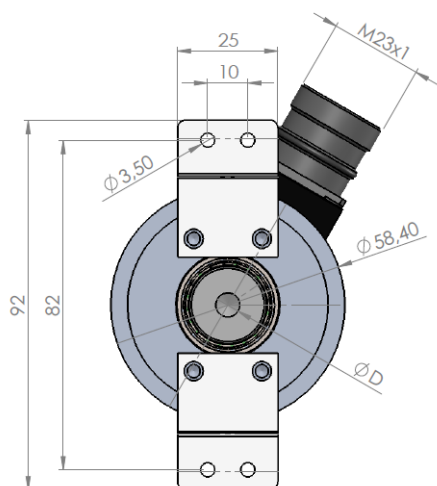
Standard Body - FZ Flange

M16 Connector From Backside



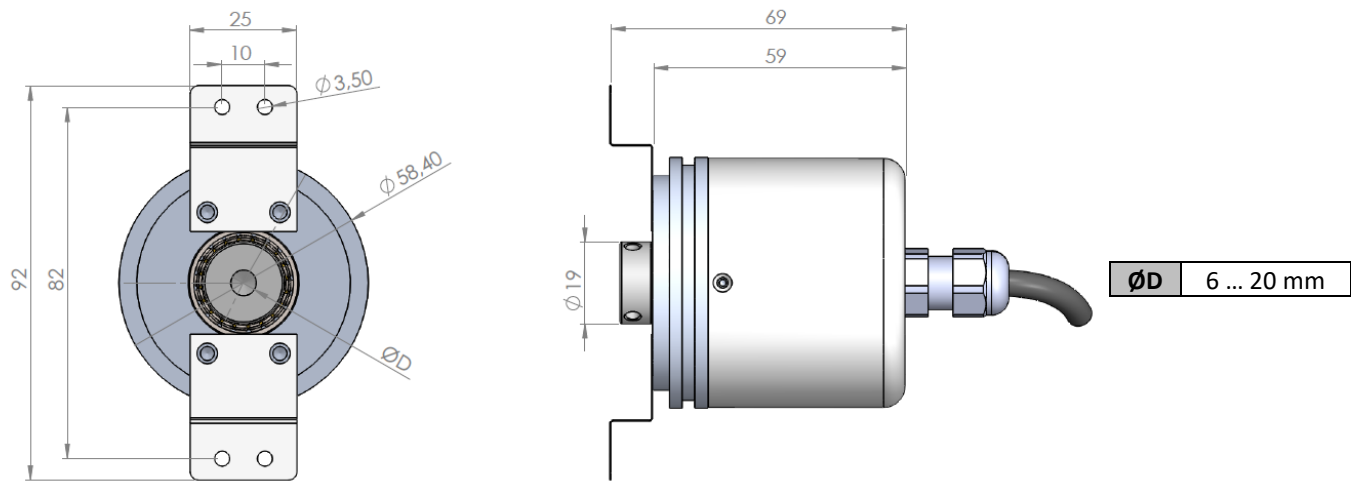
ØD 6 ... 20 mm

M23 Connector From Side

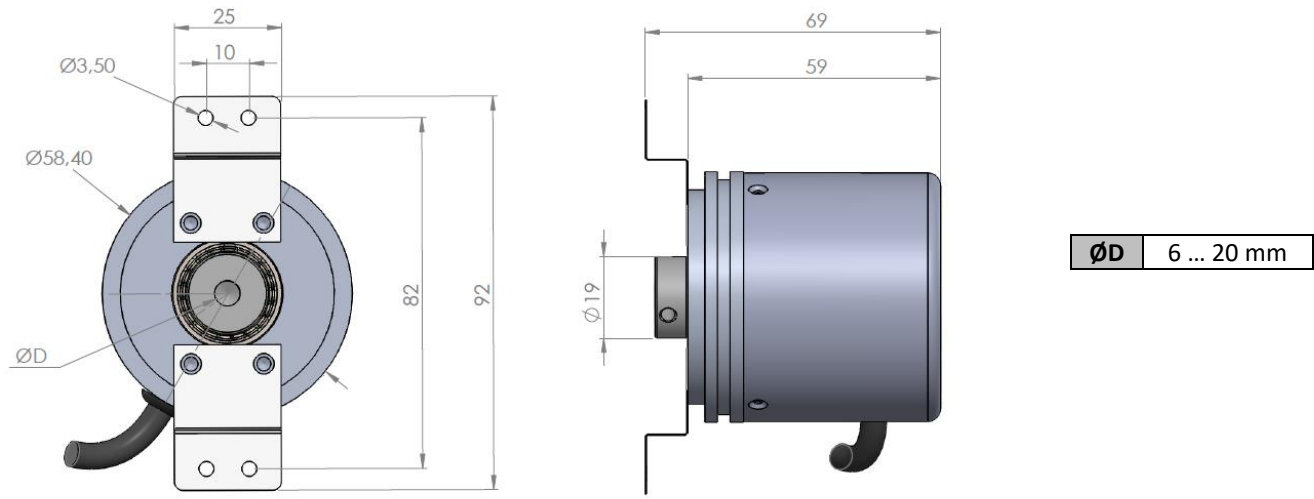


ØD 6 ... 20 mm

Cable From Backside

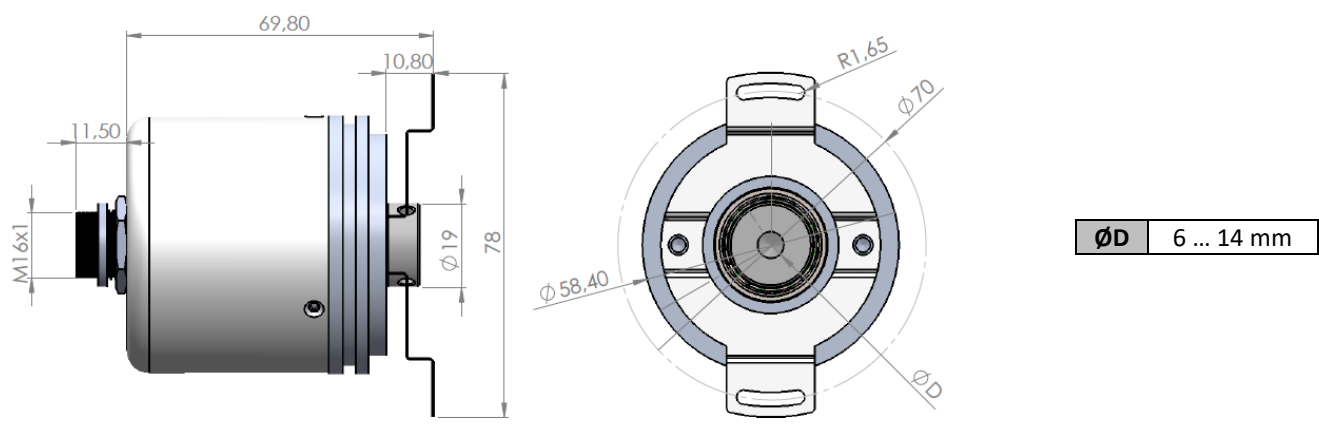


Cable From Side

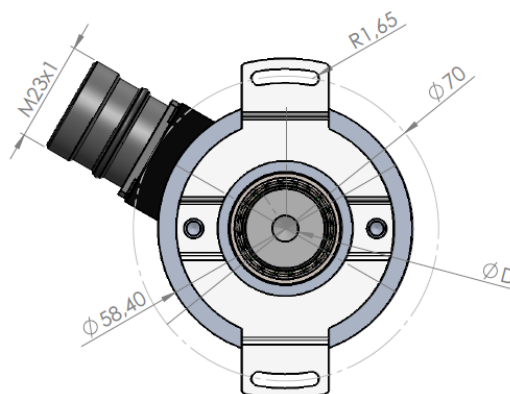
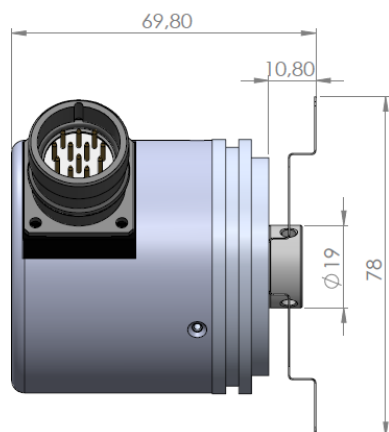


Standard Body - FC Flange

M16 Connector From Backside

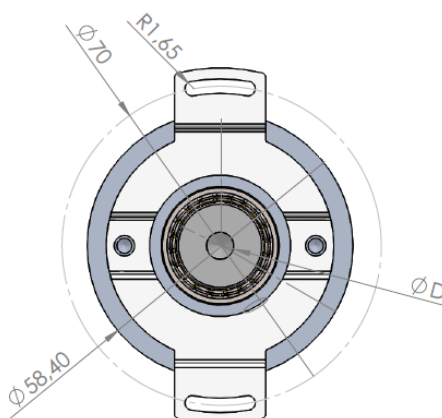
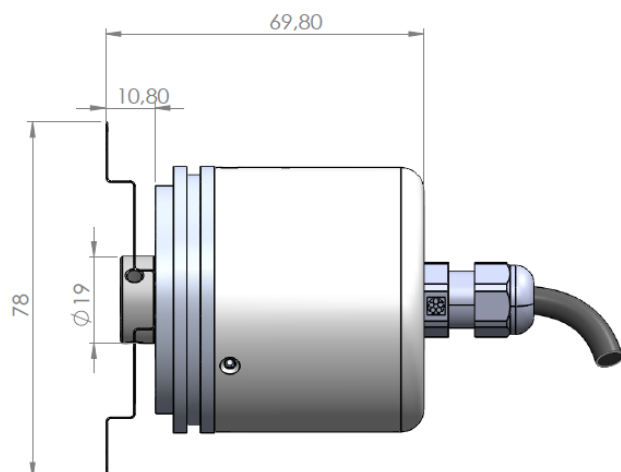


M23 Connector From Side



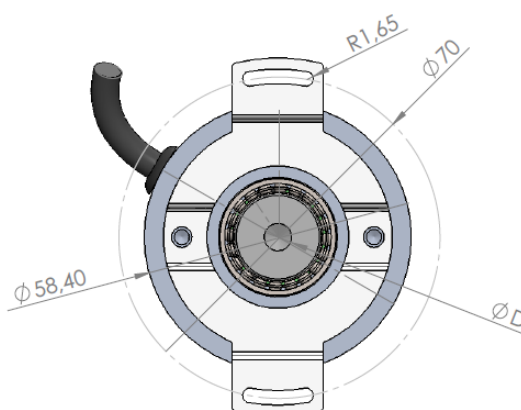
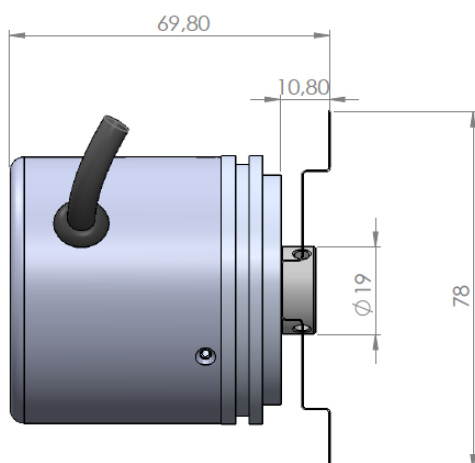
$\varnothing D$ 6 ... 14 mm

Cable From Backside



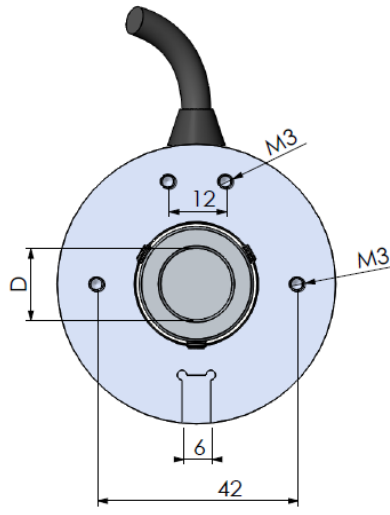
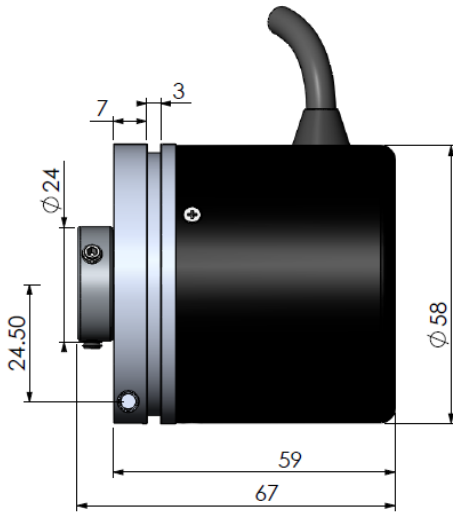
$\varnothing D$ 6 ... 14 mm

Cable From Side



$\varnothing D$ 6 ... 14 mm

E186 Body



ØD 6 ... 15 mm

PRODUCT CODE

Model		Body Diameter		Supply and Output		Electrical Connection ⁽¹⁾		Hollow Diameter ⁽³⁾	
ARC : Optical		58 : 58 mm		PP : 10...30 VDC Supply		3M : 3 m (standard)		Different diameters	
ARS : Magnetic				: 10...30VDC Output		5M : 5 m		from 6 mm to 20 mm	
				TTL : 5 VDC Supply		10M : 10 m			
				: 5 VDC TTL RS422 Line Driver Out.		S16 : M16/8 pin male conn.			
				HTL : 10...30 VDC Supply		(only from backside)			
				: 5 VDC TTL RS422 Line Driver Out.		S23 : M23/12 pin male conn.			
				HPL : 5...30 VDC Supply		(only from side)			
				: 5...30 VDC Push-Pull Output		*Ask for others.			
				OCL : NPN Open Collector					
				OCP : PNP Open Collector					
ARX	X	XX	XXXX	XXX	X	XX	XX	XX	XX
Shaft Type		Resolution		Output Signals		Cable or Connector Direction ⁽²⁾		Flange Type	
B : Semi hollow shaft		See Resolutions*		2 (A,B)		A : From backside		FZ : Z type	
				3 (A,B,Z)		Y : From side		FC : Circular	
				4 (A,/A,B,/B)		AS : Backside + spiral		E186 : Wedge	
				6 (A,/A,B,/B,Z,/Z)					

(1) Optionally, different cable lengths or connector models can be requested.

(2) Cable direction can be selected from backside or side.

PG7 gland is used when the cable direction is from the side, PG7 gland is not used when the cable direction is from the backside.

M16 (S16) connector can be selected from backside, M23 (S23) connector can be selected from side.

(3) Hollow diameter can be selected 6...20 mm for FZ flange.

Hollow diameter can be selected 6...14 mm for FC flange

Hollow diameter can be selected 6...15 mm for E186 body.

Resolutions:

Optical: 60 - 100 - 360 - 500 - 1024 - 2000 - 2048 - 2500 - 3600 - 4096 - 5000 - 8192 - 10000 - 16384 - 20000 pulse

Magnetic: All resolution options from 1 to 1024 pulses.

Sample Coding:

ARC-B-58-1024-PP-6-10M-A-8-FC

Optical, semi hollow shaft, 58 mm body diameter, 1024 pulses, Push-Pull, 6 output signals, 10 meters cable from backside, 8 mm semi hollow shaft, circular flange

Atek Elektronik Sensör Teknolojileri Sanayi ve Ticaret A.Ş.



Gebze OSB, 800. Sokak, No:814 Gebze/KOCAELİ/TÜRKİYE



Tel: +90 262 673 76 00



Fax: +90 262 673 76 08



www.ateksensor.com



info@ateksensor.com