INCREMENTAL ROTARY ENCODERS

"Semi Hollow Shaft, 50 mm Body Diameter"

ARC B 50
ARS B 50



- Optical or magnetic principle
- Incremental measurement
- 6, 8, 10 mm hole diameters
- Resolution up to 20,000 pulse for ARC (Optical), up to 1024 pulse for ARS (Magnetic)
- 300 KHz response frequency

TECHNICAL SPECIFICATIONS

Operating Temperature	- 25 to 85 °C
Stock Temperature	- 40 to 100 °C
Protection Class	IP54
Response Frequency	300 Khz
Operating Speed	Optical: 6.000 RPM max. Magnetic: 3.000 RPM max.
Hole Diameter	6 mm, 8 mm, 10 mm

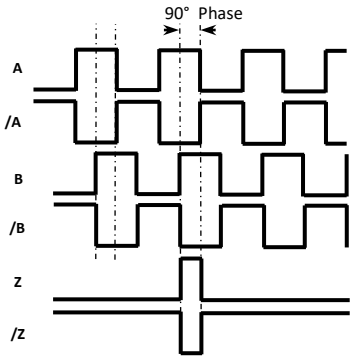
ELECTRICAL SPECIFICATIONS

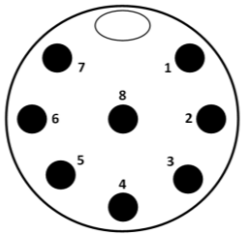
Supply Voltage	+5 VDC, +10VDC...30VDC
Supply Current	50mA Nominal
Output Type	Push Pull, TTL Line Driver, Open Collector (Optical)
Output Signals	A, /A, B, /B, Z, /Z
Output Current	100mA max. (Every Channel)
Connection	5 or 8 x 0,14 mm² Cable with shield

OUTPUT SIGNALS

PIN NO	SIGNAL	CABLE COLOR
1	A	YELLOW
2	/B	WHITE
3	+V	RED
4	0 V	BLACK
5	/A	BLUE
6	B	GREEN
7	/Z	GREY
8	Z	PINK
9	GROUND	SHIELD

In the left tablet he cable colors of sensors output signals are given. 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.

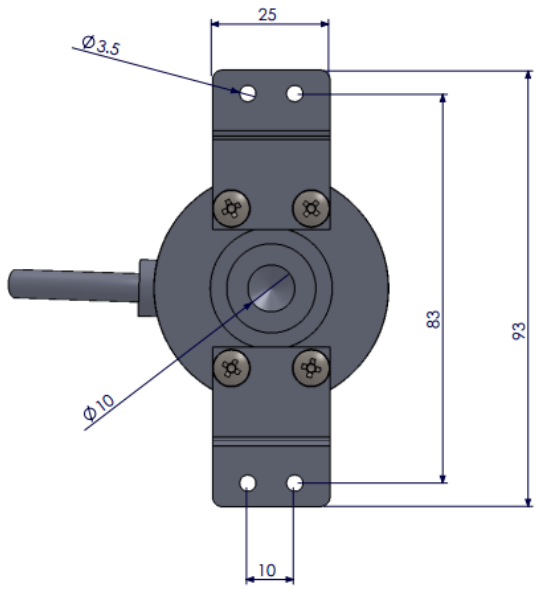


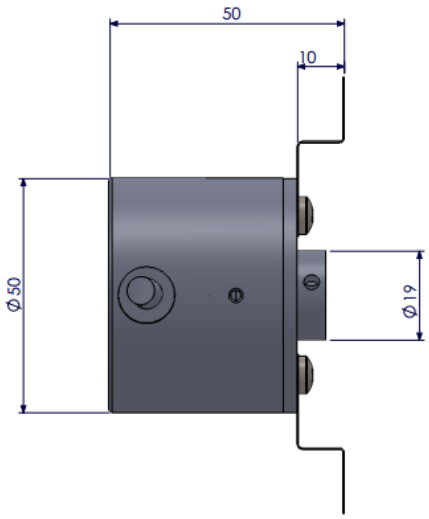


S16 PIN NO	SIGNAL	CABLE COLOR
1	A	YELLOW
2	/B	WHITE
3	+V	RED
4	0 V	BLACK
5	/A	BLUE
6	B	GREEN
7	/Z	GREY
8	Z	PINK
	GROUND	SHIELD

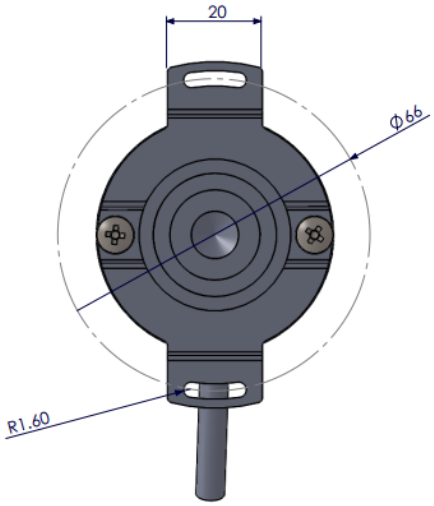
MECHANICAL DIMENSIONS

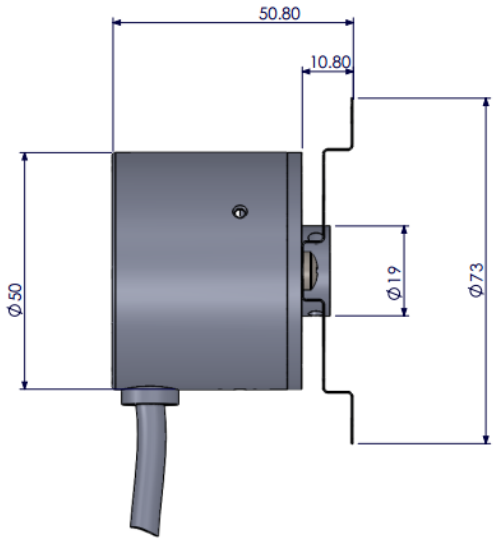
FZ – "Z" Type Flange



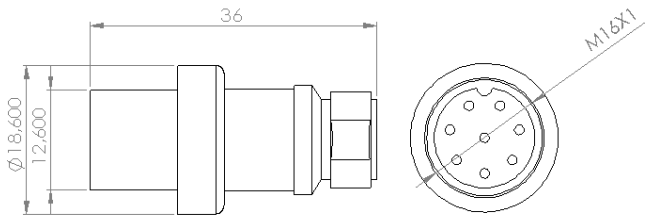


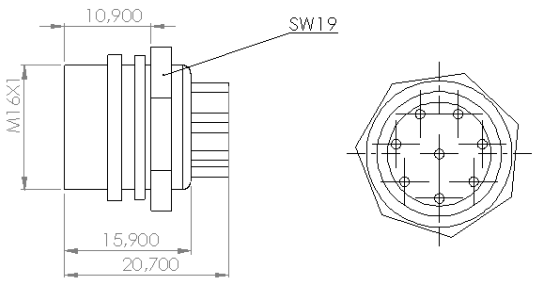
FC – Circular Flange





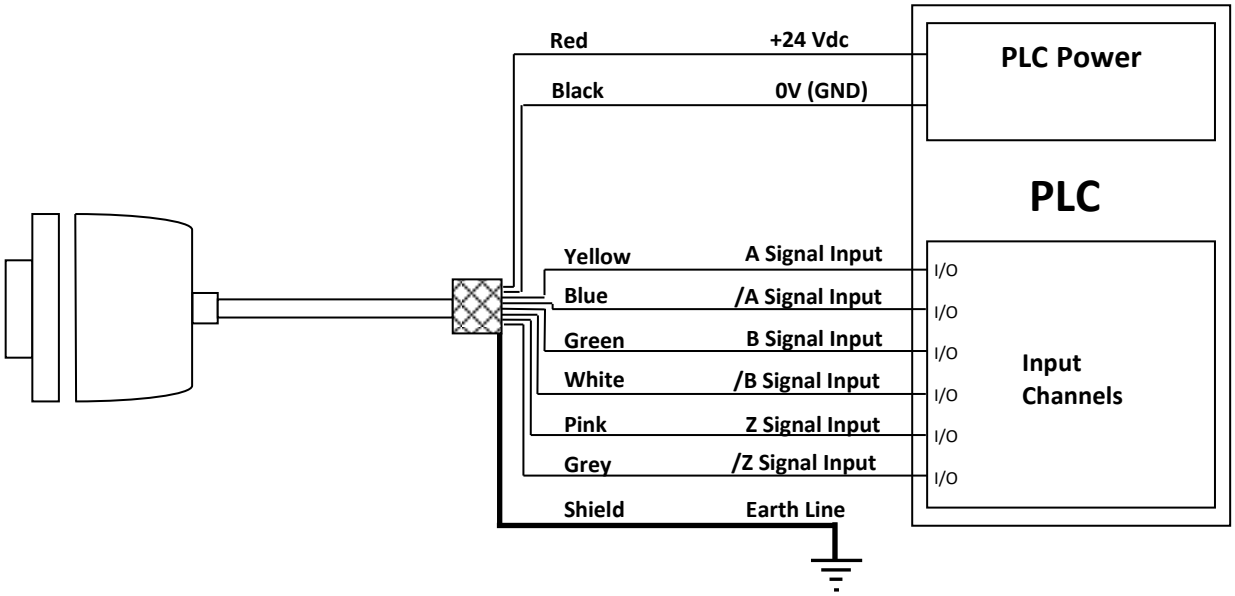
S16 Socket Dimensions





Hole Depth: 20 mm (Standard) – Ask us for the other options

SAMPLE APPLICATION





FZ - "Z" Type Flange



FC – Circular Flange



S16 (M16, 8Pin)
Socket Connector



Backside Poliemid
Spiral

ORDER CODING

Series
ARC : Optical
ARS : Magnetic

Body Diameter
50 : 50 mm

Power Supply and Output
PP : 10...30 VDC Supply
: 10...30VDC Output
TTL : 5 VDC Supply
: 5 VDC TTL Output
HTL : 10...30 VDC Supply
: 5 VDC TTL Output
HPL : 5...24 VDC Supply
: 5...24 VDC Push-Pull Output
OCL : Open Collector (Only Optical)

Cable Length
3M : 3M (Standard)
5M : 5M
8M : 8M
10M : 10M
S16 : M16, 8 Pin Socket (Only Backside)
*Optional up to 35 meters

Hole Diameter
6 : 6 mm
8 : 8 mm
10 : 10 mm

XXX	–	B	–	50	–	XXX	–	XXX	–	X	–	XM	–	X	–	X	–	X

Shaft Type
B : Blind (Semi) Hollow Shaft

Resolution
See: Resolutions*

Output Signals
3 : A, B, Z
6 : A, /A, B, /B, Z, /Z

Cable Direction
A : Backside
Y : Sidewise
AS : Backside + Spiral

Flange Type
FZ : "Z" Type Flange
FC : Circular Flange

*__Resolutions__:

__Optic:__ 60 - 100 - 360 - 500 - 1024 – 1250 - 2000 - 2048 - 2500 – 3600 – 4096 – 5000 – 8192 – 10000 – 16384 - 20000 (Optional)

__Magnetic:__ From 1 to 1024 pulse

__Example Coding:__
ARC-B-50-1024-PP-6-10M-A-10-FZ

Optical, Semi Hollow Shaft, 50 mm body diameter, 1024 pulse, Push-Pull, 6 Output Signals, Backside 10 meters cable, 10 mm hole diameter, Z type flange rotary encoder

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