



- Optical or magnetic principle measurement
- Incremental measurement
- 6, 8 or 10 mm shaft diameters
- Resolution up to 20,000 pulse for ARC (Optical), up to 4096 pulse for ARS (Magnetic)
- 300 KHz replying frequency

### TECHNICAL SPECIFICATIONS

Process Temperature	- 25 to 85 °C
Stock Temperature	- 40 to 100 °C
Body	50 mm Diameter
Response Frequency	300 KHz
Operating Speed	Optical: 6.000 RPM max. Magnetic: 3.000 RPM max.
Shaft Diameter	6 mm, 8 mm, 10 mm

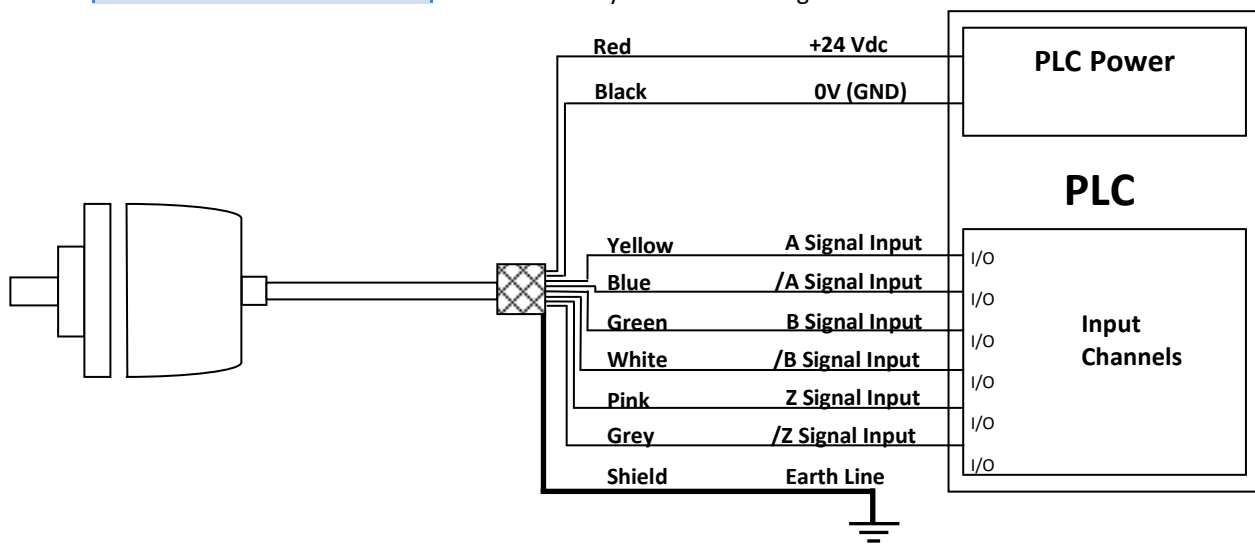
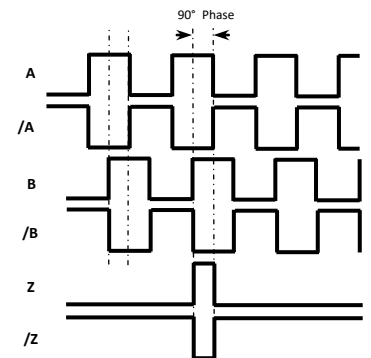
### ELECTRICAL SPECIFICATIONS

Supply Voltage	+5 VDC, +10VDC...30VDC
Supply Current	50mA Nominal
Output Type	Push Pull, TTL Line Driver, Open Collector (Only Optical)
Output Signals	A, /A, B, /B, Z, /Z
Output Current	100mA max. (Every Channel)
Connection	5 or 8 x 0,14 mm <sup>2</sup> Cable with shield

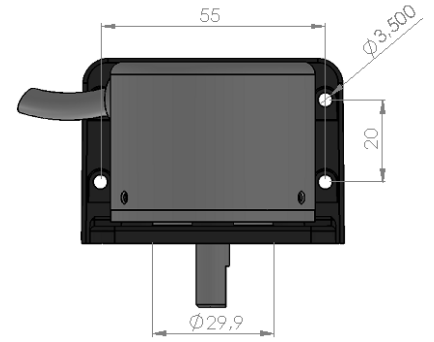
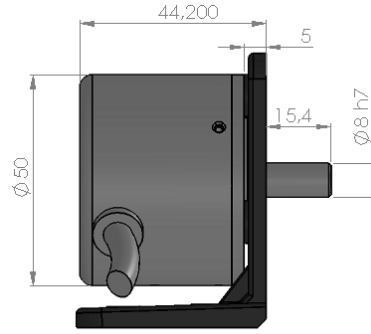
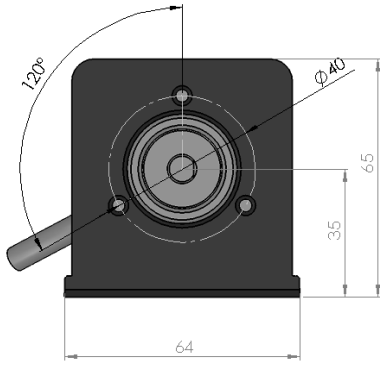
### OUTPUT SIGNALS

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

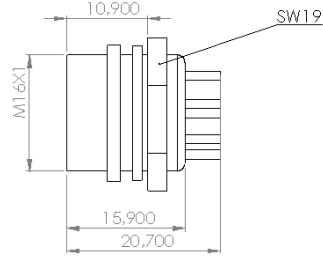
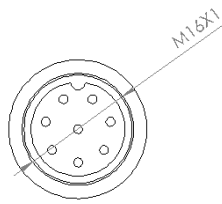
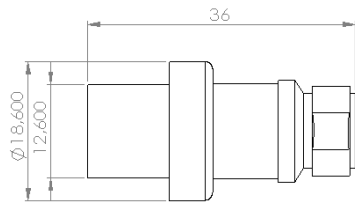
The cable colors of the output signals of the left table sensor are given. If the control circuit is available, the output signals (/ A, / B, / Z) of the Line Driver sensors must be included in the system. If the control circuit is not available, the wires of the A, / B, / Z signals must be fixed separately. It should not be forgotten that there is electricity also at these edges.



**SAMPLE APPLICATION**



**S16 Socket Connector**



Clamping Flange



S16 (M16, 8 Pin) Socket Connector



Backside Polyimide Spiral

**ORDER CODING**

<p><b>Series</b> ARC : Optical ARS : Magnetic</p>	<p><b>Body Size</b> 50 : 50 mm</p>	<p><b>Power Supply and Output</b> 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)</p>	<p><b>Cable Length</b> 3M : 3M (Standard) 5M : 5M 8M : 8M 10M : 10M S16 : M16 8Pin Socket Connector (Only Backside) *Optional up to 35 meters</p>	<p><b>Shaft Diameter</b> 6 : 6 mm 8 : 8 mm 10 : 10 mm</p>	
<p>XXX - S - 50 - XXX - XXX - X - XM - X - X - C</p>	<p><b>Shaft Type</b> S : Shafted</p>	<p><b>Resolution</b> See resolutions*</p>	<p><b>Output Signals</b> 3 : A, B, Z 6 : A, /A, B, /B, Z, /Z</p>	<p><b>Cable Direction</b> A : Backside Y : Sidewise AS : Backside + Spiral</p>	<p><b>Flange Type</b> C : Clamping</p>

**\*Resolutions:**

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

**Magnetic:** 4 - 8 - 16 - 20 - 25 - 32 - 40 - 50 - 64 - 80 - 100 - 125 - 128 - 200 - 250 - 256 - 400 - 500 - 512 - 800 - 1000 - 1024 - 2048 - 3600 - 4096 (Optional)

**Example Order Coding:**

**ARC-S-50-1024-PP-6-10M-A-8-C**

Optical, Shafted, 50 mm body diameter, 1024 pulse, Push-Pull, 6 Output Signals, Backside 10 meter cable, 8 mm shaft diameter, clamping flange rotary encoder

**Atek Sensor Technology A.S.**

Tuzla Kimya Sanayicileri Org. San. Bolg. Melek Aras Bulvari, No:67 34956 Tuzla - Istanbul / TURKEY

Tel: +90 216 399 44 04

Fax: +90 216 399 44 02

[www.ateksensor.com](http://www.ateksensor.com)

[info@ateksensor.com](mailto:info@ateksensor.com)

