

# Series 21

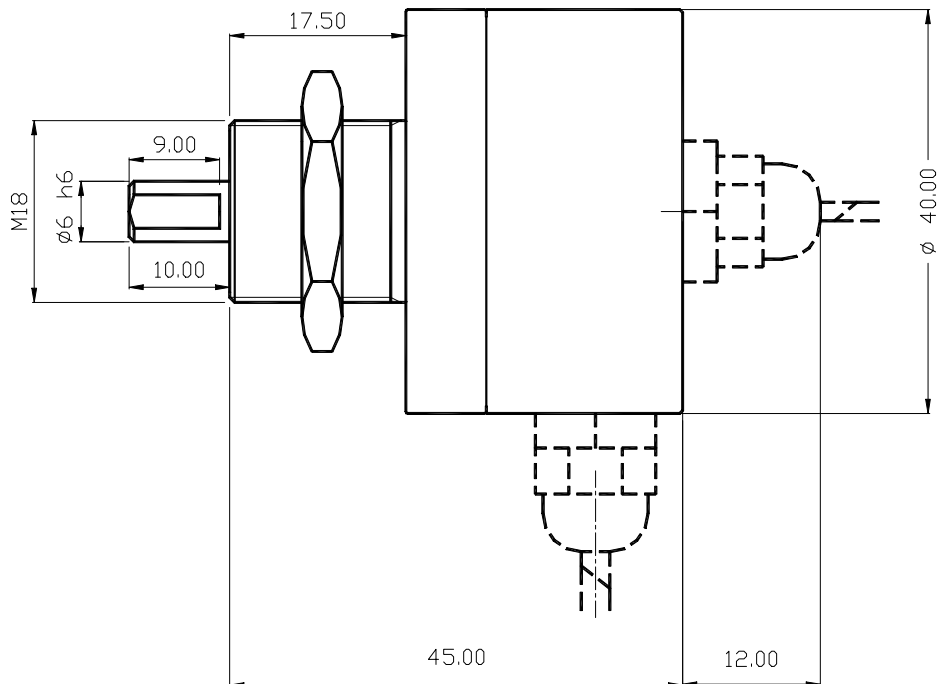
Very compact incremental shaft encoder,  
light-weight



## Mechanics Data

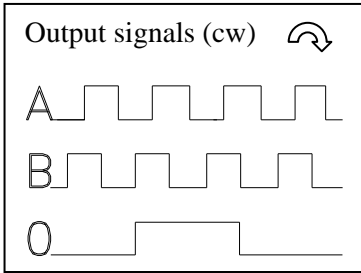
Cover :	ABS nickel-plated
Body :	Zn+Al+Mg alloy
Shaft:	Stainless steel
Bearings:	2, ballraces
Weight:	Approx.150gr.
Protection:	IP65
Rpm:	6000 Max
Torque:	3Ncm
Inertia:	5gcm <sup>2</sup>
Shaft loading:	Axial 30N - Radial 30N (max. value)
Tightening torque lockring:	250Ncm

Dimension in mm.



# Series 21

## Electronics Data



Power supply: from 5 to 24V depends on the electronics circuit  
 Current consumption: 40/80mA depends on the electronics circuit  
 Permissible load: 20mA  
 Frequency: 100KHz  
 Protections: Against short circuit, reversal polarity  
 Operating Temp.: -20/+60°C

### Ordering code

Series **2 1** - **2 1 \* \* \*** . **\*\*** / **Pulses** (Max 1250)  
 See pulses page

#### Outputs

7 0	= AB	NPN	5..24V	
0 0	= AB0	NPN	5..24V	
7 A	= AB	Open C.	5..24V	Max 1024 pulses
0 A	= AB0	Open C.	5..24V	
2 B	= AB+AB	PP	8..24V	
1 B	= AB0+AB0	PP	8..24V	
6 0	= AB+ $\overline{AB}$	LD	5V	
8 0	= AB0+ $\overline{AB0}$	LD	5V	
8 Z	= AB0+ $\overline{AB0}$	LD	5V	(0 hooked at 180°)
8 W	= AB0+ $\overline{AB0}$	LD	5V	(0 hooked at 90°)
K W	= AB0+ $\overline{AB0}$	LD	In 11/24V/ Out 5V	(0 hooked at 90°) MAX 1024 pulse
E 0	= AB+ $\overline{AB}$	LD/PP	5..28V	
F 0	= AB0+ $\overline{AB0}$	LD/PP	5..28V	
F Z	= AB+ $\overline{AB}$	LD/PP	5..28V	(0 hooked at 180°)
F W	= AB0+ $\overline{AB0}$	LD/PP	5..28V	(0 hooked at 90°)

#### Connections

- 0 = Cable 5P Axial
- R = Cable 5P Radial
- 3 = 9414 5P Axial
- 1 = 9415 9P Axial
- 7 = 9415 9P Radial
- 2 = Cable 8P Axial
- 8 = Cable 8P Radial

#### Variant

Field for special execution

Version E0,F0, FZ e FW: outputs level TTL compatible · Low level output <0.5V · High level output > +VCC-1,9V

### Connections

	0 Volt	+ Volt	A	B	$\overline{A}$	$\overline{B}$	0	$\overline{0}$
<b>Cable 5 Way</b>	White	Brown	Green	Yellow			Gray	
<b>Cable 8 Way</b>	Black	Blue	Brown	Beige	Green	Yellow	Pink	Violet
<b>Connector 9415</b>	Pin1	Pin2	Pin3	Pin4	Pin5	Pin6	Pin7	Pin8
<b>Connector 9414</b>	Pin1	Pin2	Pin3	Pin4			Pin5	