

INCREMENTAL ENCODER



Series WPI

Key-Features:

- Housing diameter 40 mm (WPI-M) or 60 mm (WPI)
- Shaft diameter 6 mm (WPI-M) or 10 mm (WPI)
- Incremental output: line driver
- Impulses 1250 or 2500
- Mechanical speed up to 7500 min⁻¹
- Impulse frequency up to 500 kHz
- Protection class up to IP67
- Operating temperature -20 to +85 °C
- Shaft: stainless steel, housing: aluminium anodised

Content:

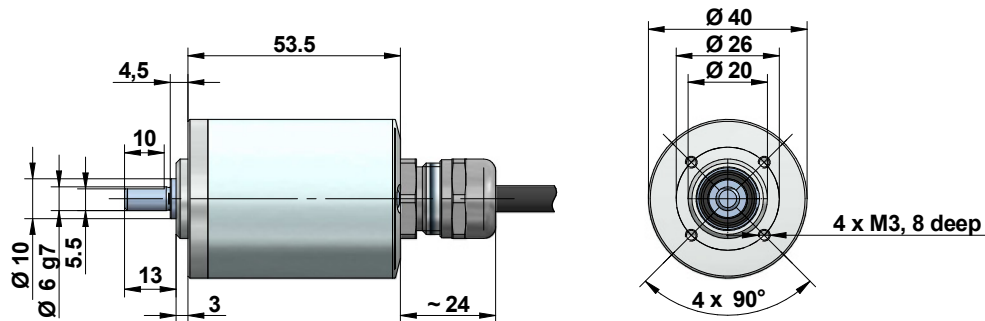
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TECHNICAL DATA

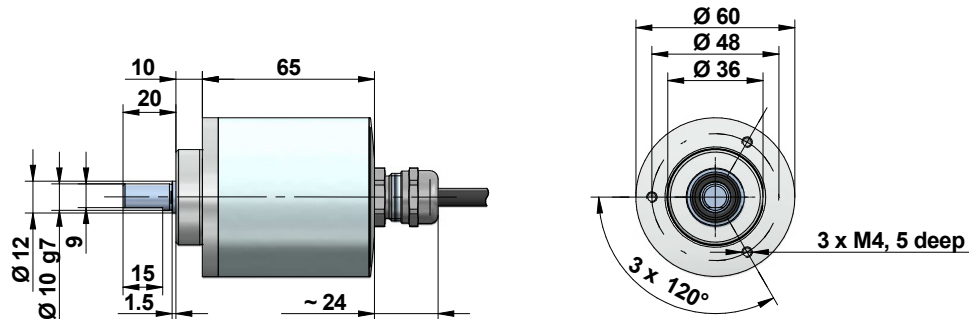
		WPI-M	WPI
Housing diameter	[mm]	40	60
Shaft diameter	[mm]	6	10
Mounting		centering collar Ø 20 mm	clamping flange Ø 36 mm
Impulses		1250 / 2500	
Output signal		line driver (ABZ, /ABZ)	
Rising edge time / falling edge time	[ns]	100	50
Impulse frequency	[kHz]	300	500
Signal level HIGH	[V]	min. 2.4	+V - 2
Signal level LOW	[V]	max. 0.4	max. 0.5
Supply	[V]	4.5...5.5	
Current consumption max.	[mA]	100	
Protection class		housing side: IP67 shaft side: IP60 (optional: IP64 or IP67)	
Humidity		max. 85 % relative, no condensation	
Operating temperature	[°C]	-20...+85	
Shock resistance		490 m/s ² , 3D, 2-times	
Vibration resistance		1.2 mm, 10...55 kHz, 3D, 30 min	
Mechanical speed	[min ⁻¹]	7500	
Starting torque	[Nm]	<0.008	
Connection		cable output, 8 poles, 0.25 m	
Shaft material		stainless steel	
Housing material		aluminium, anodised	
Weight (without cable)	[g]	approx. 130	approx. 285

TECHNICAL DRAWING

WPI-M

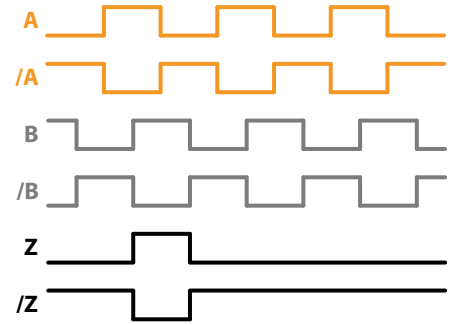
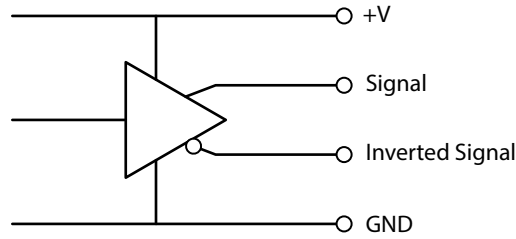


WPI



ELECTRICAL CONNECTION

Function	Cable colour
+V	RD
GND	BK
A	WH
/A	WH/BK
B	GN
/B	GN/BK
Z	YE
/Z	YE/BK
Shield	Shield



OPTIONS

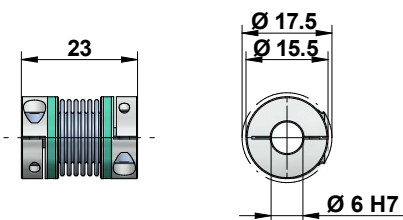
Option	Order code	Description
Protection class IP64	WP-IP64	Use this option if the sensor is used in a humid environment.
Protection class IP67	WP-IP67	Use this option if the sensor is (temporarily) immersed in water.
Corrosion protection HARTCOAT®	WP-CO	All external anodised aluminium parts of the sensor are coated with HARTCOAT®. This coating is a hard-anodic oxidation that protects the sensor from corrosion by aggressive media (e. g. sea water) with a hard ceramics-like layer.

ACCESSORIES COUPLINGS

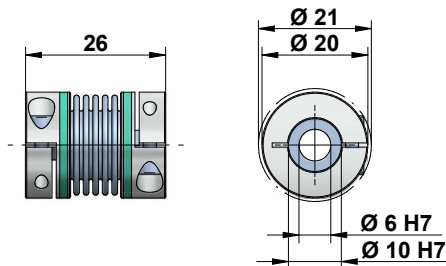
Metal bellow couplings are used for the backlash-free connection of encoders and drive shafts (e.g. motor shafts). The couplings work wear-free and compensate for axial, radial and angular misalignment. Mounting on the shafts is effected by means of frictional locking using clamping hubs.

The following couplings are available as standard accessories:

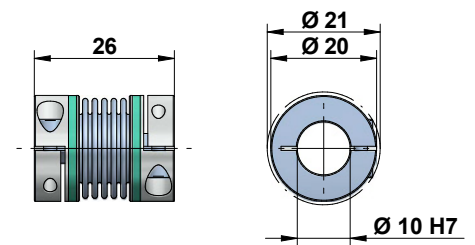
MBK-15.5-23-06-06



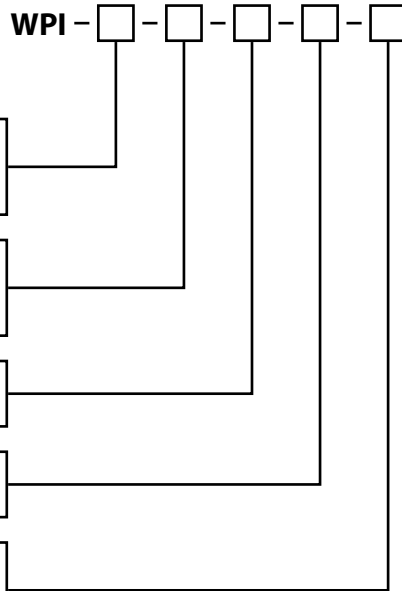
MBK-20-26-06-10



MBK-20-26-10-10



ORDER CODE



Housing diameter 40 mm, shaft diameter 6 mm 60 mm, shaft diameter 10 mm	M -
Impulses 1250 2500	1250 2500
Output Line diver (ABZ, /ABZ)	L
Connection Cable output, axial, 0.25 m	KA
Version Standard Sensor with options	- O

Option	Description
WP-IP64	Protection class shaft side IP64
WP-IP67	Protection class shaft side IP67
WP-CO	Corrosion protection

Option	not combinable with
WP-IP64	WP-IP67
WP-IP67	WP-IP64

ACCESSORIES

Couplings

MBK-15.5-23-06-06	Metal bellow coupling, 2 x Ø 6 mm
MBK-20-26-06-10	Metal bellow coupling, Ø 6 mm, Ø 10 mm
MBK-20-26-10-10	Metal bellow coupling, 2 x Ø 10 mm

Subject to change without prior notice.

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