

SERIE 10K INOX

HIGH RESOLUTION INCREMENTAL SOLID SHAFT
ENCODER FOR HEAVY DUTY INDUSTRIAL
APPLICATIONS



- Resolution up to 50000 pulses per turn
- External diameter 58 mm
- Shaft Ø 10 mm
- Specially designed for the food and pharmaceutical industry
- Protection class IP69K according to DIN EN 60529
- Connection by cable (other cable length available) or M12 connector appropriate for the food and pharmaceutical industry
- ECOLAB certification
- Designed according to EHEDG criteria
- Laser engraved label



Optical
Encoder



Incremental
Encoder



High shaft
load capacity



Vibration
and shock
resistant



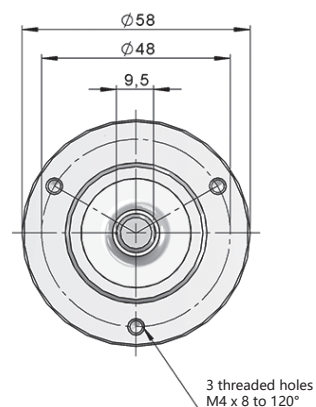
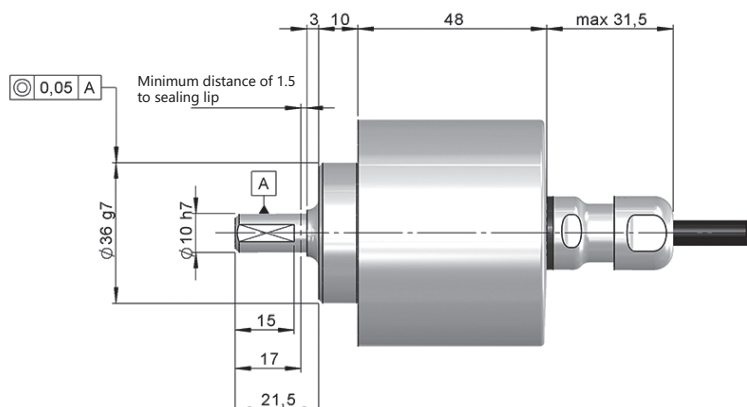
IP 69K



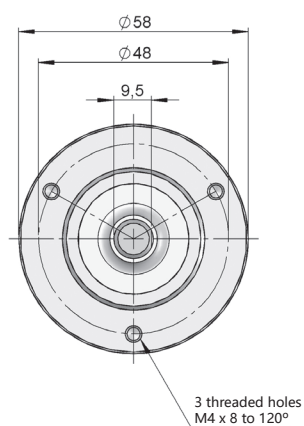
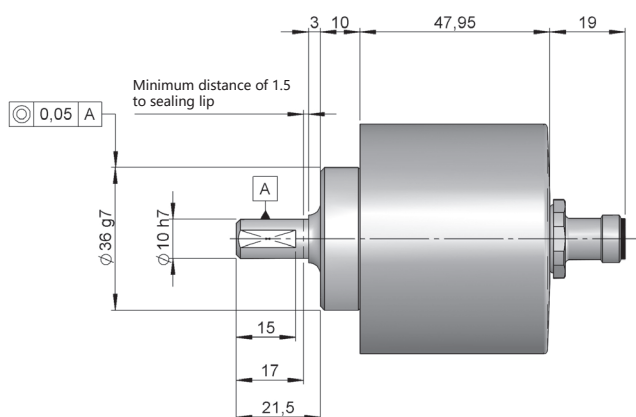
Stainless Steel
AISI 316



Express
Delivery



Drawing shaft type 1, connection type 8, without flange



Drawing shaft type 1, connection type K, without flange



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IP69K

REFERENCE								Reference example: 10K-11289-1024			
Serie	Solid shaft	Flange	Output signals	Connection	Power Supply / Electronic output	Pulses number	Special customer				
10K -	☐	☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐				
10K. Stainless Steel	1. Ø 10x20 mm (*)	1. None	1. ABZ, $\overline{ABZ}$ 2. AB, $\overline{AB}$	8. Axial cable (**) K. Axial M12 8p CCW (***)	0. 11...30 VDC / NPN Open collector 11...30 VDC 6. 11...30 VDC / RS422 5 VDC (compatible TTL) 7. 5 VDC / RS422 5 VDC (compatible TTL) 9. 11...30 VDC / Line driver differential Push-Pull 11...30 VDC	(****)	AT00. -40°C				

Order your reference Step file 3D

info@encoderhohner.com
service available in 24 h

(*) Useful shaft surface, max. 17 mm.

(**) Standard cable length 2m, other length available on order.

(***) Female connector not included. Code to order in accessories.

(****) 10000 to 50000 pulses with interpolation. Available 10000 direct optical pulses without interpolating upon request.

MECHANICAL SPECIFICATIONS

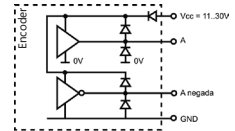
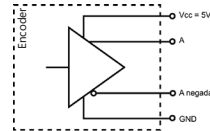
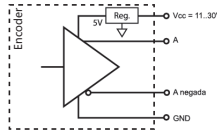
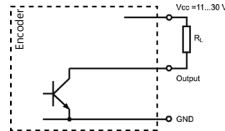
Materials	Cover: Stainless Steel AISI316 Housing: Stainless Steel AISI316 Shaft: Stainless Steel AISI316 Cable: TPE
Bearings	Ballraces
Bearings lifetime	1x10 ¹⁰ rev.
Maximum number of revolutions permitted mechanically	3600 rpm
Protection against dust and splashes according to DIN EN 60529	IP69K
Rotor inertia moment	30 gcm ²
Starting torque at 20°C (68°F)	≤ 0.02 Nm aprox.
Maximum load permitted on axial shaft	100 N
Maximum load permitted on radial shaft	100 N
Weight aprox.	0,7 Kg
Operating temperature range	-20°C to +80°C - Standard -40°C to +80°C - Special Customer AT00
Vibration according to DIN EN 60068-2-6	100 m/s ² (10Hz...2000Hz)
Shock according to DIN EN 60068-2-27	1000 m/s ² (6ms)
Maximum pulses per turn	50000
Axial connection	2 meters cable (other cable lengths available on order) or Industrial connector M12 8p CCW. Female connector not included.

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IP69K

OUTPUT SIGNALS

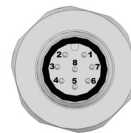


OUTPUT CIRCUIT	NPN Open Collector	RS422 (TTL compatible)	RS422 (TTL compatible)	Push-Pull Differential
Reference code	0	6	7	9
Power supply	11...30 VDC	11...30 VDC	5 VDC ±5%	11...30 VDC
Output voltage	11...30 VDC	5 VDC	5 VDC	11...30 VDC
Consumption	40 mA	Typical: 80 mA Max: 160 mA	Typical: 70 mA Max: 150 mA	Typical: 45 mA Max: 150 mA
Max. load capability / channel	40 mA	±20 mA	±20 mA	±30 mA
Length of cable allowed	50 m (24 VDC)	1200 m	1200 m	100 m
"Low" signal level	VOL < 0.4 VDC (24 VDC)	VOL < 0.5 VDC	VOL < 0.5 VDC	VOL < 2.5 VDC
"High" signal level	VOH > 22 VDC (24 VDC)	VOH > 2.5 VDC	VOH > 2.5 VDC	VOH > VCC – 3 VDC
Frequency	100 kHz	300 kHz	300 kHz	200 kHz
Short circuit protection	Not permanent	Yes	Yes	Yes
Protection polarity inversion	Yes	Yes	No	Yes

Channel B leads (90° electric) channel A, view from the shaft, shaft rotating clockwise

CONNECTION

Female connector not included



	Cable TPE 4x2x0.14 95.0008069	Connector M12 8p CCW
GND	Brown (BN)-White (WH)	1
+UB	Brown (BN)	2
A	Green (GN)	3
$\bar{A}$	Green (GN)-White (WH)	5
B	Blue (BU)	4
$\bar{B}$	Blue (BU)-White (WH)	6
Z	Orange (OG)	7
$\bar{Z}$	Orange (OG)-White (WH)	8
Case	Shield	Case

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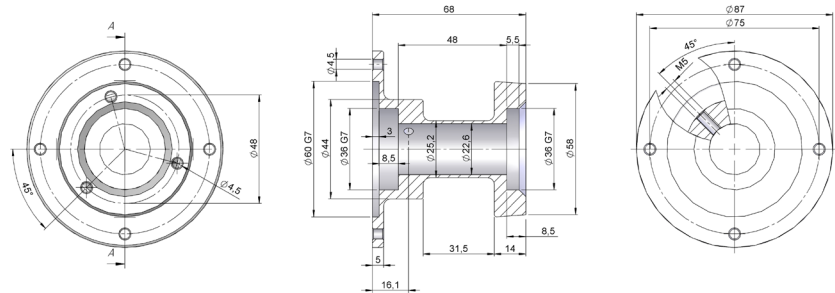
ACCESSORIES

not included



Coupling bell 90.1610

Hygienically designed to be in compliance with EHEDG criteria.



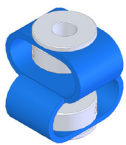
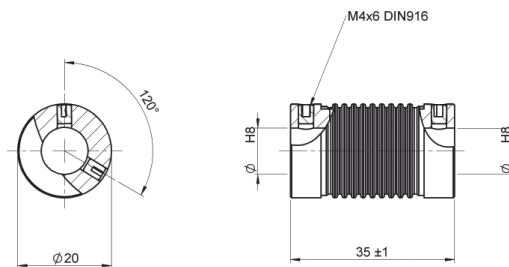
Mounting kit included: Flat seal D8 (1u) Cap M5 (1u), Flat seal Ø87 (1u), Flat seal Ø58 (1u), Sealing washer M4 EHEDG (7u), Screw EHEDG (7u).

* Send us your 3D and we will design the bell for your application.



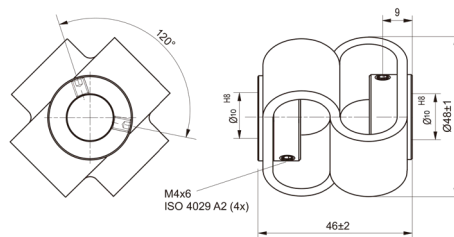
Coupling BFP-2035 10/10

Recommended coupling for 90.1610 coupling bell.



Coupling GFPI 20 10/10

Double loop stainless steel coupling, not compatible with coupling bell 90.1610.



Female connector 95.0007571

For M12 8p CCW connector
1,5 m cable.

Female connector 95.0007573

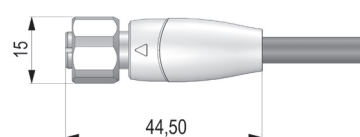
For M12 8p CCW connector
3 m cable.

Female connector 95.0007574

For M12 8p CCW connector
5 m cable.

Female connector 95.0007575

For M12 8p CCW connector
10 m cable.



* other length available on order