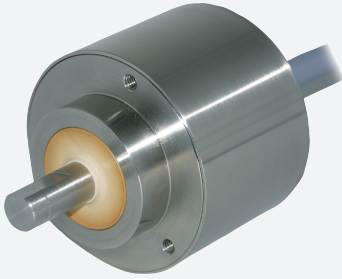


Incremental rotary encoder

RVI58L



- Stainless steel version, especially suitable for applications in the food industry
- Cleaning compatible according to EHEDG (European Hygienic Engineering & Design Group)
- Approval for ECOLAB detergents
- IP69K Protected
- Industrial standard housing $\varnothing 58$ mm
- Clamping flange

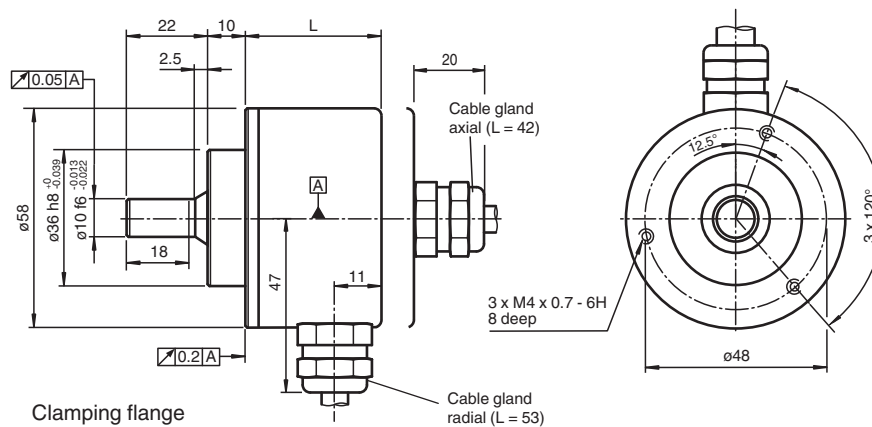


Function

Due to its extremely high protection degree IP69K, this stainless steel incremental encoder is best suitable for all areas of food industry. By means of the used material and the superior design, this encoder is certified according to EHEDG (European Hygienic Engineering & Design Group) and ECOLAB (resistance against agents and disinfectants).

Typical applications for this encoder can be found in food production, food machinery, filling and packaging machines. The fixation of this encoder can be carried out by either clamping at the flange or screw fixation using the frontal bore holes. For the electrical connection the RVI58L is provided with a fixed cable.

Dimensions



Technical Data

General specifications

Detection type	photoelectric sampling
Pulse count	max. 25000 , see table

Functional safety related parameters

MTTF _d	200 a
Mission Time (T _M)	25 a
L ₁₀	70 E+9 at 6000 rpm
Diagnostic Coverage (DC)	0 %

Electrical specifications

Operating voltage	U _B	10 ... 30 V DC or 5 V DC
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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 PEPPERL+FUCHS

Technical Data

No-load supply current	I_0	max. 100 mA
Output		
Output type		push-pull, incremental or RS 422, incremental
Load current		max. per channel 40 mA , short-circuit prtected (not with U_b), reverse polarity protected
Output frequency		max. 600 kHz
Rise time		170 ns
Connection		
Cable		2 m fixed cable
Approvals and certificates		
ECOLAB		material compatibility attested for: P3-topactive DES P3-topax 19 P3-topax 56 P3-topax 66 P3-topax 91 de-mineralized water as zero value
Ambient conditions		
Operating temperature		-20 ... 80 °C (-4 ... 176 °F)
Storage temperature		-20 ... 80 °C (-4 ... 176 °F)
Mechanical specifications		
Degree of protection		IP67 / IP69K
Material		
Housing		stainless steel V4A
Flange		stainless steel V4A
Shaft		stainless steel V4A
Mass		approx. 600 g
Rotational speed		max. 3600 min ⁻¹
Starting torque		approx. 1 Ncm at room temperature
Shaft load		
Axial		max. 100 N
Radial		max. 100 N
Life span		≥ 1 x 10 ⁹ revolutions (max. shaft loading)

Accessories

	9401 10*10	Spring steel coupling
	9401 10*12	Spring steel coupling
	9404 10*10	Spring disk coupling
	9409 10*10	Bellows coupling
	9410 10*10	Precision coupling
	KW-10/10	Helical coupling
	9203	Angled flange

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Accessories

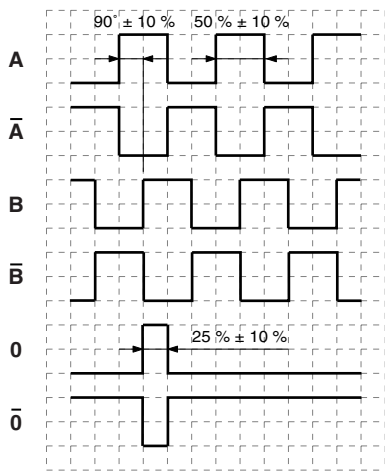
	9101, 10	Measuring wheel for shaft diameter 10 mm
	9102, 10	Measuring wheel for shaft diameter 10 mm
	9103, 10	Measuring wheel for shaft diameter 10 mm
	9108, 10	Measuring wheel for shaft diameter 10 mm
	9109, 10	Measuring wheel for shaft diameter 10 mm
	9110, 10	Measuring wheel for shaft diameter 10 mm
	9112, 10	Measuring wheel for shaft diameter 10 mm
	9113, 10	Measuring wheel for shaft diameter 10 mm

Connection

Signal	Cable, conductor coloring
GND	White
+U _b	Brown
A	Green
B	Yellow
\bar{A}	Red
\bar{B}	Blue
0	Gray
$\bar{0}$	Violet

Operation

Signal outputs



↻ cw - with view onto the shaft

Technical Features

Pulse count

2	5	10	15	20
24	25	30	36	40
48	50	60	64	72
87	90	100	120	125
127	128	150	160	180
200	216	236	240	250
254	256	300	314	320
360	400	500	512	571
600	625	720	750	768
800	810	900	1000	1024
1200	1250	1270	1440	1500
1800	2000	2048	2400	2500
3000	3600	4000	4096	4685
5000	10000	12500	20000	25000

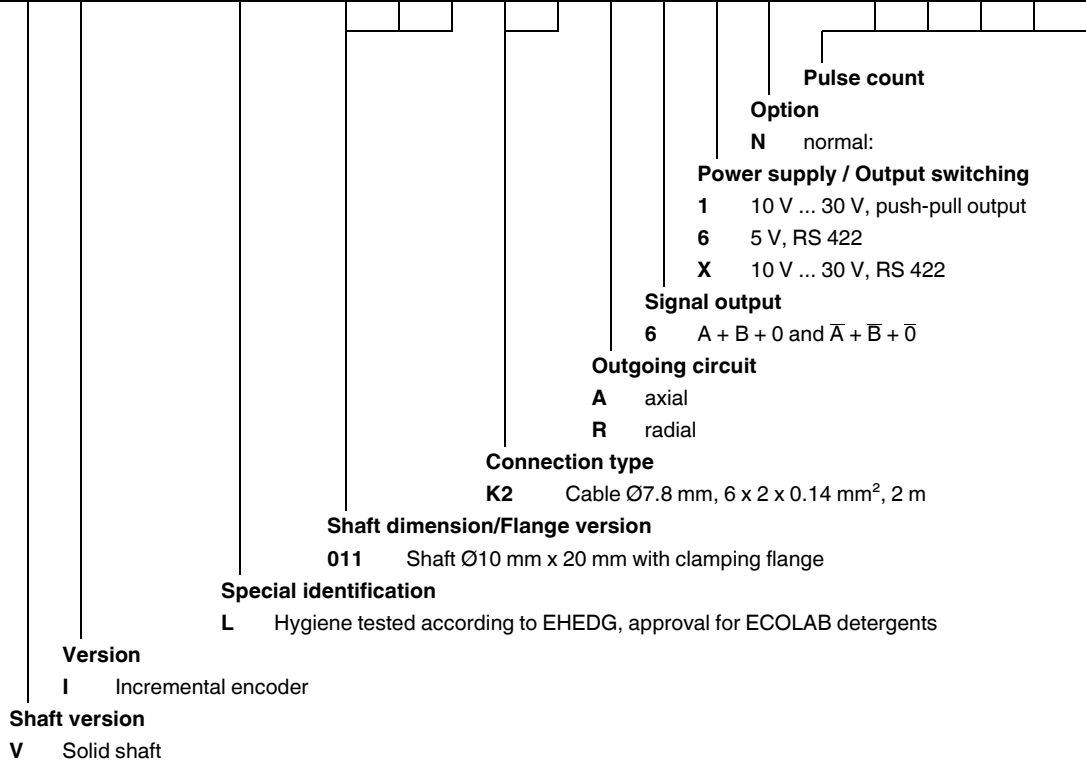
1 Vss sin/cos only for 1024, 2048

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Type Code

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

R	V	I	5	8	L	-	0	1	1	K	2		6		N	-				
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Pulse count

Option

N normal:

Power supply / Output switching

1 10 V ... 30 V, push-pull output

6 5 V, RS 422

X 10 V ... 30 V, RS 422

Signal output

6 A + B + 0 and $\bar{A} + \bar{B} + \bar{0}$

Outgoing circuit

A axial

R radial

Connection type

K2 Cable Ø7.8 mm, 6 x 2 x 0.14 mm², 2 m

Shaft dimension/Flange version

011 Shaft Ø10 mm x 20 mm with clamping flange

Special identification

L Hygiene tested according to EHEDG, approval for ECOLAB detergents

Version

I Incremental encoder

Shaft version

V Solid shaft