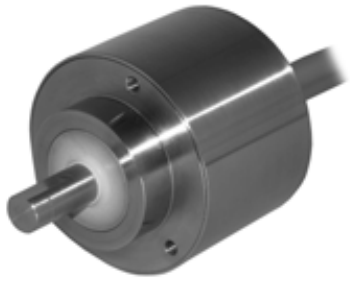

Model Number

RVI58L

Features

- **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 Ø58 mm**
- **Clamping flange**

Description

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 desinfectants).

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.

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_{10h}	70 E+9 at 6000 rpm
Diagnostic Coverage (DC)	0 %
Electrical specifications	
Operating voltage U_B	10 ... 30 V DC or 5 V DC
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
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)

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

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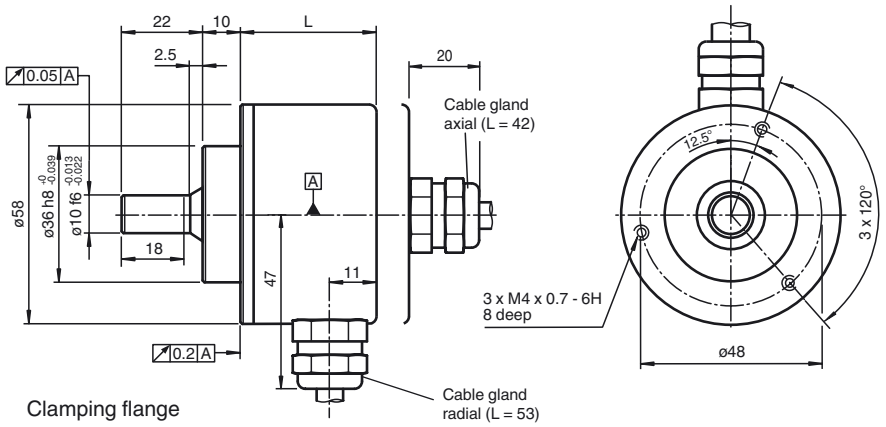
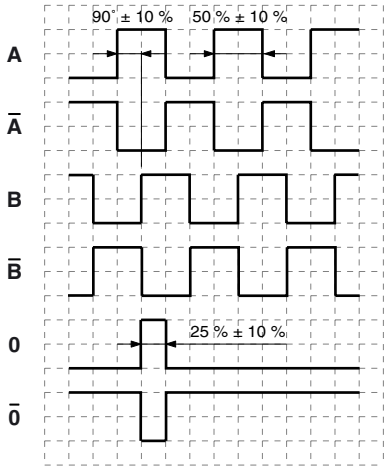
Dimensions



Electrical connection

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

Signal outputs



↻ cw - with view onto the shaft

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".
Pepperl+Fuchs Group www.pepperl-fuchs.com
USA: +1 330 486 0001 fa-info@us.pepperl-fuchs.com
Germany: +49 621 776 4411 fa-info@de.pepperl-fuchs.com
Singapore: +65 6779 9091 fa-info@sg.pepperl-fuchs.com
PEPPERL+FUCHS SENSING YOUR NEEDS

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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Order code

R	V	I	5	8	L	–	0	1	1	K	2		6		N	–					

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 $\overline{A}$ + $\overline{B}$ + $\overline{0}$

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

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