



## RSL 58

### Incremental encoder

- shockproof up to 200 g
- not through hollow shaft from 4 to 12 mm
- up to 100.000 pulses/turn
- pulse frequency up to 4 MHz
- expanded temperature range up to + 110° C

### Technical data

Pulse/Turn	up to 10.000 P/T (see Standard-Pulse-Numbers)
Number of channels	3 or 6
Pulse frequency	up to 4 MHz
Output driver	5 V Line-Driver or push-pull

### Electrical data

Operating voltage	UB = 5 VDC ± 5 % or UB = 10...30 VDC
Current consumption	60...200 mA
Output current	20 mA...1A
Output signals	Channel A, B, N + inverted

### Mechanical data

Speed	≤ 6.000 min <sup>-1</sup>
Moment of inertia	< 0,3 Ncm (20° C)
Shaft loading	≤ 20 N radial, 10 N axial
Angular acceleration	10 <sup>4</sup> rad/s <sup>2</sup>

### Material

Housing	Steel
Flange	Aluminium
Weight	< 0,4 kg

### Ambient conditions

Vibration	≤ 10 g (20...2000 Hz)
Shock	≤ 100 g (11 ms)
Operating temperature	0...+ 80° C or upgrade to - 42 ...+ 110° C
Storage temperature	- 30 ... + 90° C
Humidity	< 85 % r. h.
Protection type	IP 64 (DIN 40050/IEC 529)
EMV	IEC 801

## PIN - assignment RSL 58

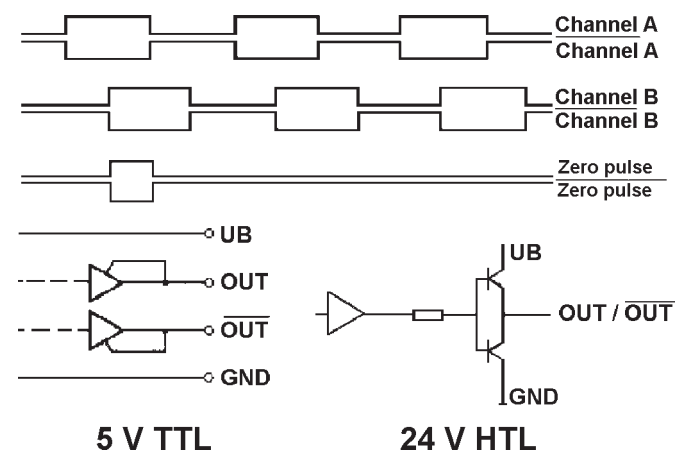
Signal	PIN	Cable colour
Channel B inverted	1	pink
not in use	2	-
Zero pulse	3	red
Zero pulse inverted 4		black
Channel A	5	brown
Channel A inverted	6	green
not in use	7	-
Channel B	8	gray
Shield	9	transparent
GND	10	white0,5
not in use	11	-
UB	12	brown 0,5

### Instructions:

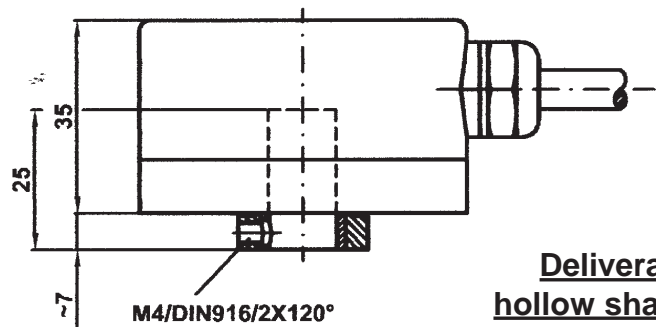
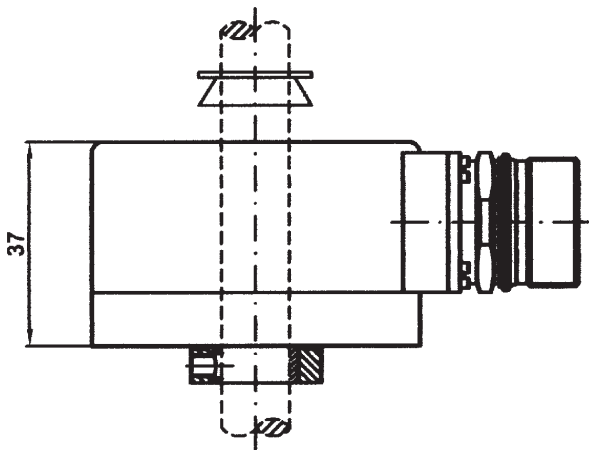
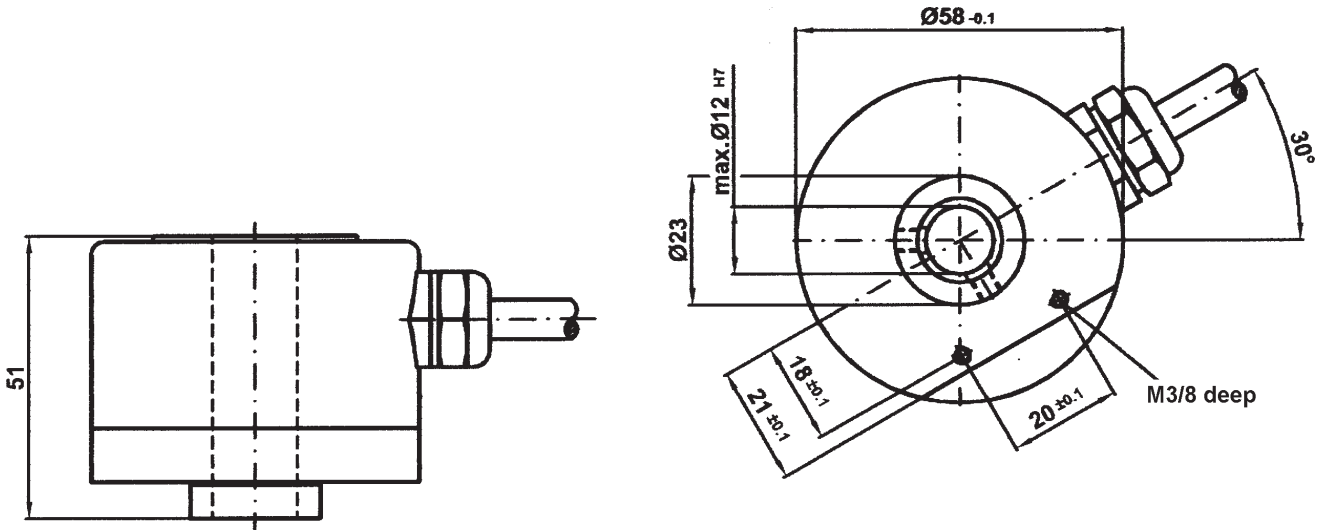
Not used out put channels before putting into operation.

Please note that for major conductor lengths, the conductor ends must be terminated with a characteristic impedance.

### Circuit principle



# Dimension and cutout RSL 58



**Deliverable hollow shafts:**

- 4 mm
- 6 mm
- 10 mm
- 12 mm

## Type key of encoder

Encoder type	Pulse/T	Channels	Voltage	Driver	Flange	Output	Option
RSL 58	See Standard-Pulse-Numbers	X = 3channelled	5 = 5 VDC	S = TTL	hollow shaft dimension in mm		T = temperature-resistant up to + 110°C
RSL 58		Y = 6channelled	3 = 10 - 30 VDC	G = push-pull	look at the dimension and cutout	KS = Cable radial	
RSL 58					deliverable hollow shafts	SS = 12pol. plug radial	
RSL 58							
RSL 58	_____	_____	_____	_____	_____	_____	_____

### Standard-Pulse-Numbers:

10 - 50 - 100 - 125 - 150 - 180 - 200 - 250 - 256 - 300 - 314 - 360 - 400 - 500 - 512 - 600 - 625 - 720 - 750 - 800 - 900 - 1000 - 1024 - 1200 - 1250 - 1375 - 1500 - 1800 - 2000 - 2048 - 2500 - 3600 - 4096 - 5000 - 6000 - 10000

**Other pulse numbers on request**