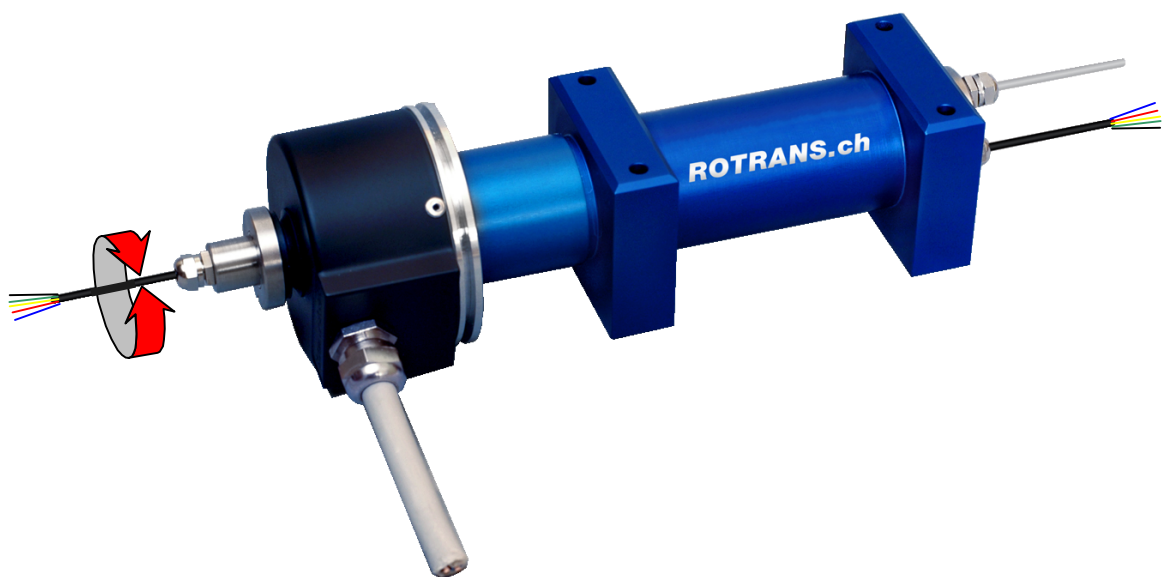


Distributed by

ROTRANS & ENCODER for Rotary signal transmitters

SWISS MADE

➔ R & D
➔ Labo



- 20'000 rpm (limit of the encoder)
ROTRANS alone(42'000 rpm)
- 10- 10'000 impulses (according
rpm / Fz)
- Incremental
- IP 42 / IP 64 (< 6'000 rpm)
- Choice of input /output
- Absolute available
- Multiturn available

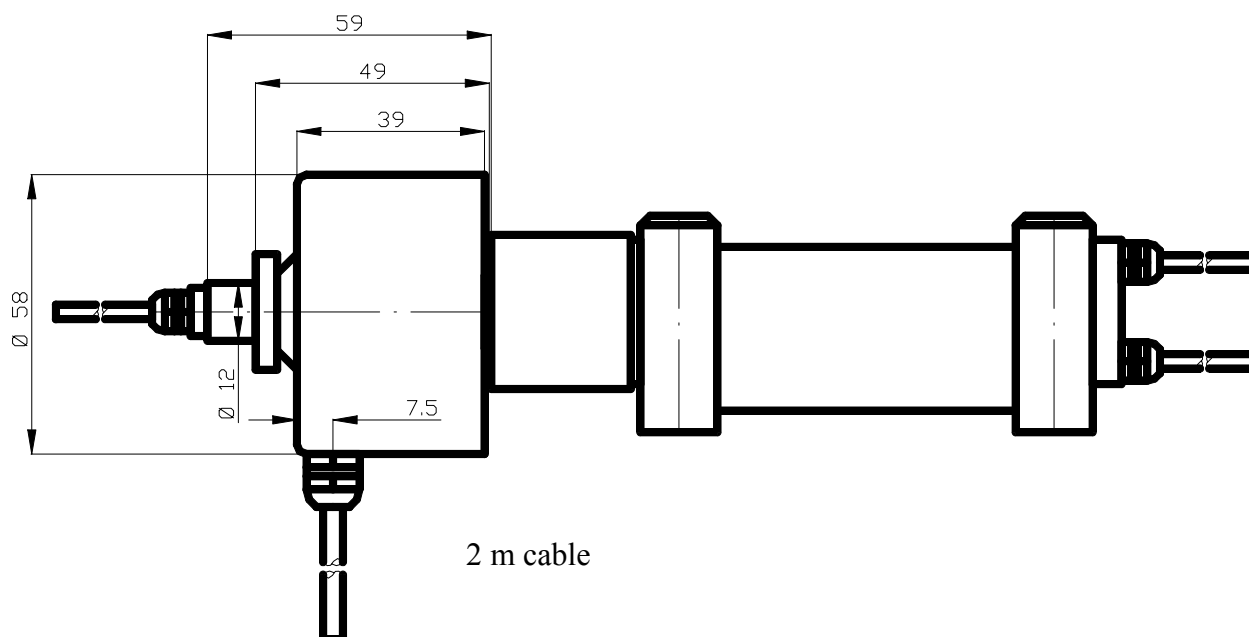
The Rotational Transmitter **ROTRANS** could be associate to an encoder.

The proposed encoder is a very high speed encoder typically in the line of ROTRANS, it run till 12'000 rpm and can reach 20'000 rpm during short term. This cover a large part of the application, and specially in the automotive industry and formula 1.

A large choice of possibility is naturally available, but we want to propose you a standard version in order to be as quick as ROTRANS by delivery time and to attractive conditions for you.

Please let us know your specific needs. We are looking forward to discussing your application with you.

Dimensions (mm)



On this drawing are presented all dimensions concerning the encoder, and the dimensions and technical data are in the datasheet concerning ROTRANS 04, 08, 12.

Technical data - Encoder only

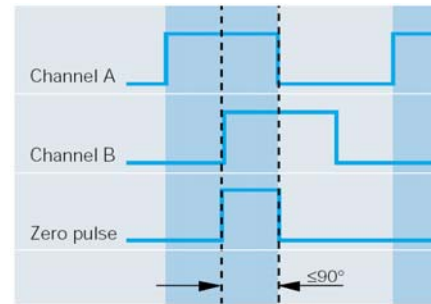
Speed ranges	12'000 rpm guaranty and 20'000 rpm according application during short term operation (ROTRANS alone : 42'000 rpm)
Voltage Supply	5 VDC \pm 10 % (05A)
	4,5 – 30 VDC (25W)
	10-30 VDC (24K)
Switching frequency max	200 kHz (24K)
	300 kHz (05A / 25W)
	750 kHz (05A > 5'000 impulses)
Output signal	05A : 5 VDC complementary (TTL compatible)
	24K : 10 –30 VDC push-pull, short-circuit protection
	25W : 4,5 – 30 VDC push-pull, complementary short-circuit protection
IP Specification	IP 42 (20'000 rpm), (version IP 64 is also available till 6'000 rpm)
Temperature range	- 20 to + 85 °C (for other temperature, please contact us)
Connections	Cable 2 m, screened connected to the body

Frequency calculation

$$f_{\max} \text{ (Hz)} = \frac{\text{Speed (rpm)} \times \text{number of impulses}}{60}$$

The impulses number given below, could be multiply:

- by 2 when using channel A
- by 4 when using channels A & B



Ordering information

ENC.1.aaa.bbbbb

aaa = voltage supply

.05A 5 VDC complementary

.24K 10-30 VDC push-pull, short-circuit protection

.25W 4,5 – 30 VDC push-pull, complementary short-circuit protection

bbbb = number of impulses :

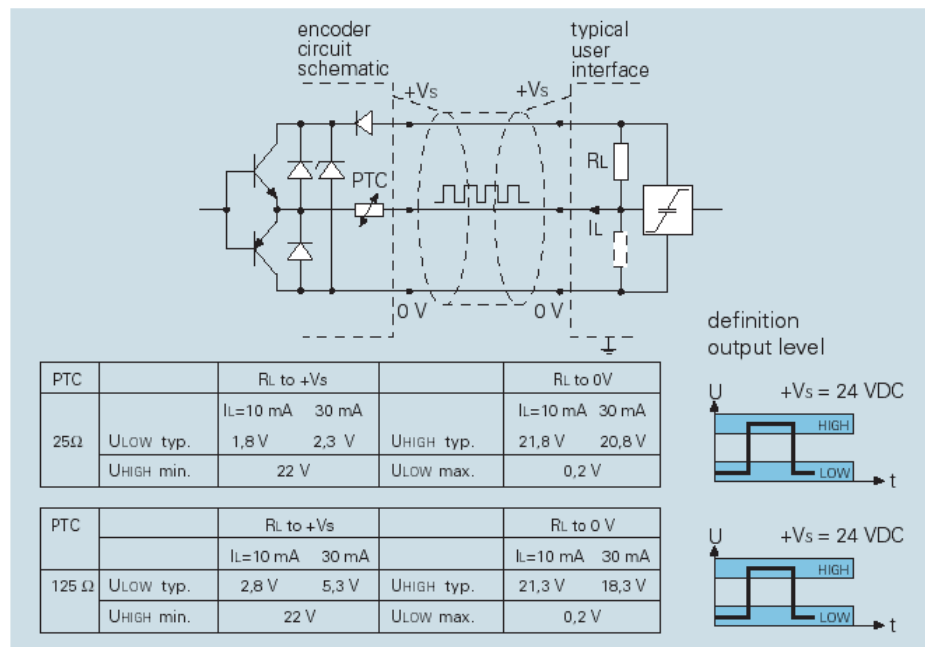
10	120	1000	3600
30	200	1024	5000
50	250	1250	7200*
60	360	2000	8192*
100	500	2500	10000*

* available with the proposed output **05A** or **24K** only

Other impulse possibility on request

Circuit diagrams

24K

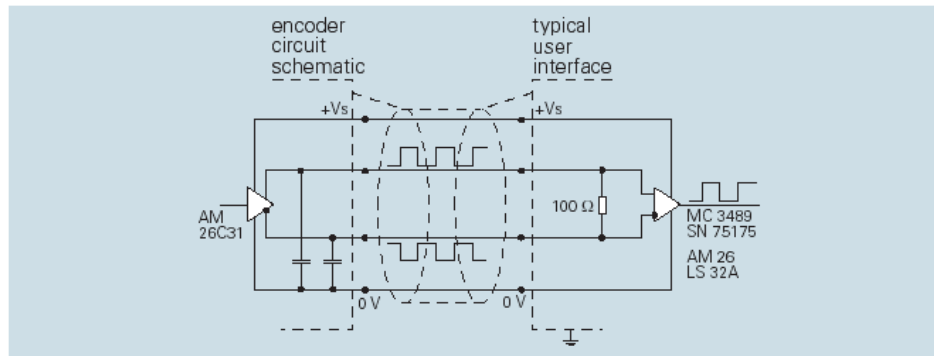


voltage supply 10 - 30 VDC reverse polarity protective

output current max. 30 mA at 85 °C

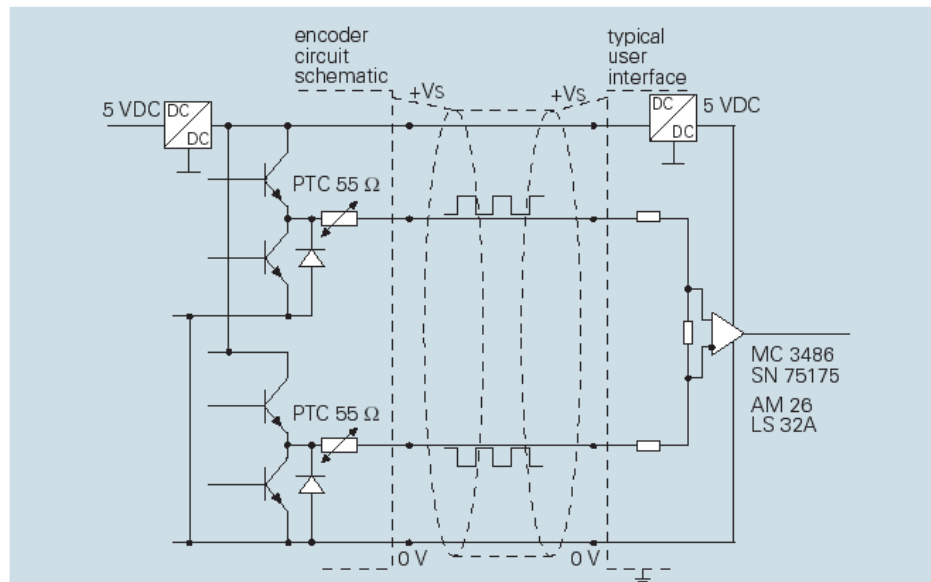
PTC-resistance 25 Ω (BDK, BHK 125 Ω)

05A

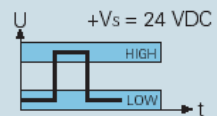


voltage supply	5 VDC \pm 10%
level of signal	$U_{High} \geq 3,8 \text{ V}$ at $-I_{High} = 20 \text{ mA}$ $U_{Low} \leq 0,4 \text{ V}$ at $I_{Low} = 20 \text{ mA}$
special features	EIA-standard RS-422
preferred application	when EMI is present and with long cable lengths

25W



PTC	RL to +Vs		RL to 0V			
	$I_L=10 \text{ mA}$	30 mA	$I_L=10 \text{ mA}$	30 mA		
55Ω	$U_{LOW} \text{ typ.}$	1 V	2,1 V	$U_{HIGH} \text{ typ.}$	21,4 V	20,3 V
	$U_{HIGH} \text{ min.}$	22 V		$U_{LOW} \text{ max.}$	0,2 V	



voltage supply	4,5 - 30 VDC
output current	max. 40 mA (85 °C)
preferred application	when EMI is present and with long cable lengths

i Due to the continual development of our products, the specification may be modified without forewarning.