



Standard No Shaft Encoder EDH 120

Optical incremental encoder
Encoder with hollow shaft up to \varnothing 55 mm

Resolution

Resolution (Pulses/Revolution):

1024	1250	2500	3600
10000			

Every other resolution up to 500 000 on request

Type explanation

EDH 120-6-2500-05-D-S/ \varnothing 55

Encoder type	Incremental
Hollow shaft	Yes
Flange diameter	\varnothing 120 mm
Case diameter	\varnothing 120 mm
Number of channels	3 = A + B + M 6 = AA + BB + MM
Resolutions	xxxx = Impulse pro Umdrehung
Supply voltage	05 = 5 VDC \pm 5% 30 = 10..30 VDC
Output driver	D-RS422 P S
Position of connection	S
Shaft diameter	\varnothing 55 mm

Technical data

Mechanical data

Rotational speed	? 4000 min ⁻¹
Torque	? 34 Ncm
Breakaway torque	? 45 Ncm
Loading of bearings	20 N radial 10 N axial
Weight	? 1,5 kg

Environmental conditions

Vibration	200 ms ⁻² (20 ... 2000 Hz)
Shock	2000 ms ⁻² (11 ms)
Operating temperature	0 .. +80°C standard -20 .. +110°C optional
Atmospheric humidity	? 85% r.h.
Protection class	IP 52 (DIN 40050/IEC144)

Electrical data

Scanning type	Optical, without contact
Transmitter, infrared	LED
Receiver	Photo-Transistor
Measurement accuracy	± 1' standard ± 5" optional
Supply voltage	Vcc = 5 VDC ±5% Vcc = 10...30 VDC
Power consumption	200 mA max.
Output frequency	? 300 kHz (Output D) ? 160 kHz (Output P, S)
Signal level	High > Vcc -2 V (Output D, P) Low < 0,5 V (Output D, P) Analog 1 Vss (Output S)
Load capacity of the outputs	30 mA

Cable

Wire colour

Brown 0,5 mm²

Brown

White 0,5 mm²

White

Brown

Green

Grey

Pink

Red

Black

Shield

Signal

+Vcc

+Vcc Sense ¹⁾

0 V GND

0 V Sense

Signal A+

Signal A- ²⁾

Signal B+

Signal B- ²⁾

Signal M+

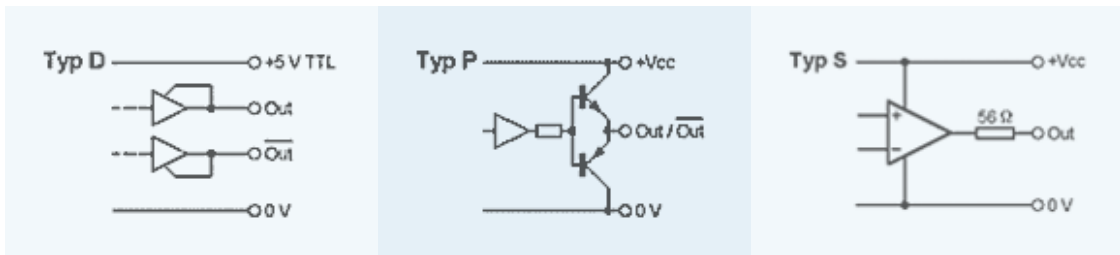
Signal M- ²⁾

N.C.

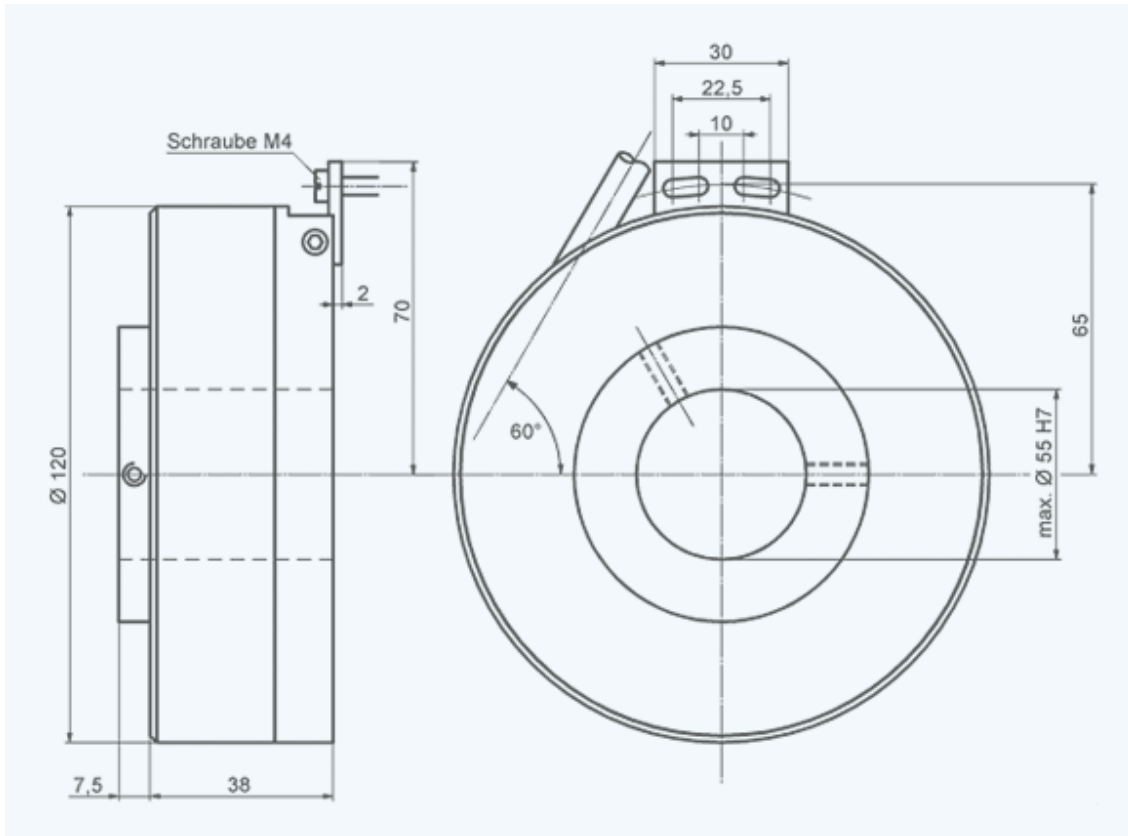
1) nur bei Vcc = 5 VDC TTL

2) nur bei 6 Ausgangskanälen

Output driver



Outline drawing



Version E 610-505 · Subject to change

[Go back](#)

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