

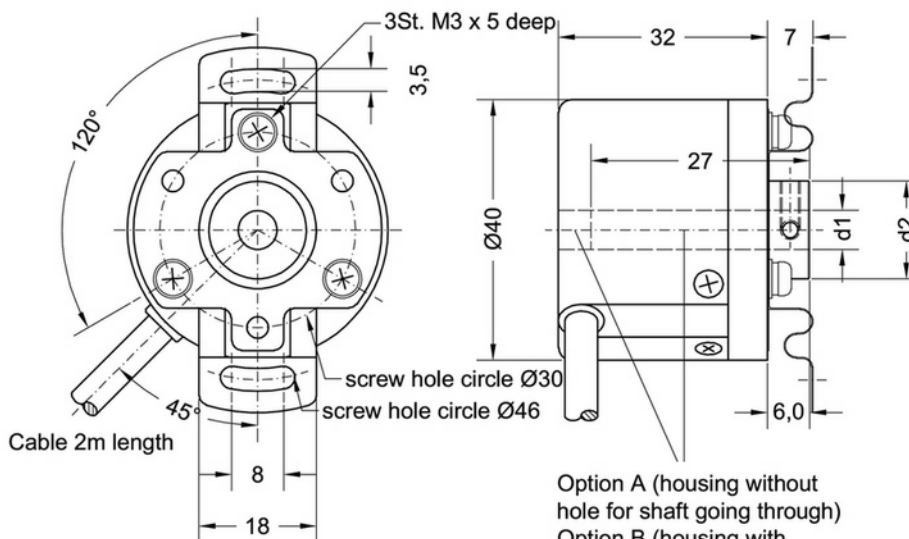
Series MHL40 / Optoelectronic Incremental Encoder

- Housing \varnothing 40mm
- 10 to 3600 ppr
- 2 channels + index
- Operating voltage 5V, 12 to 24V
- Through hole optional
- Standard versions from stock

The MHL40 is an universal hollow-shaft encoder for many applications. Available output types are Push-Pull, Open Collector, Voltage and Linedriver.



Drawing and Interfaces

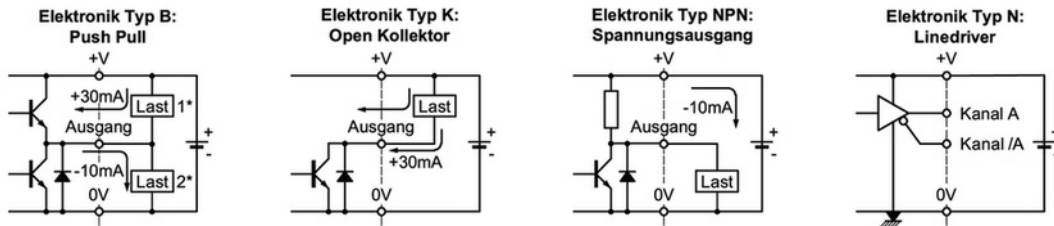


Colours of lead wires
(The shield is connected with the encoder housing)

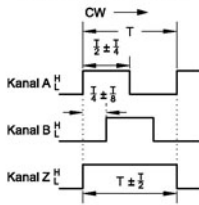
Elektronik: K, NPN, B		Elektronik Type N	
Brown	UB	Brown	UB (5V)
Black	Channel A	Black	Channel A
White	Channel B	Red	Channel /A
Orange	Channel Z	White	Channel B
Blue	GND	Grey	Channel /B
Shield		Orange	Channel Z
		Yellow	Channel /Z
		Blue	GND
		Shield	

d1	$\varnothing 6$	$\varnothing 8$	$\varnothing 10$	$\varnothing 12$
d2	$\varnothing 15$		$\varnothing 17$	
Tolerance	+0,015 -0			

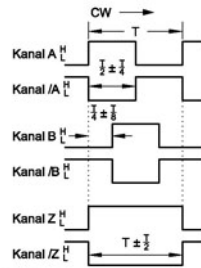
Series MHL40 / Optoelectronic Incremental Encoder



Timing und Spannungspegel
Elektronik Typen: B, K, NPN



Elektronik Typ N



Rechtsdrehende Achse (Blickrichtung auf Welle)

Elektronik	Flankenanstieg
B, K	1µs bei Isink 20mA und 2m Kabel
NPN	12-24V bei 820 Ohm
	5V bei 4,7 kOhm
N	0,5µs bei Isink 20mA und 2m Kabel

Elektronik	Signalpegel
B	Low bei 30mA max 0,4VDC
	High bei 10mA min Ub-1,5VDC
K	Low bei 30mA max 0,4VDC
NPN	Low bei 10mA max 0,4VDC
	Low bei 20mA max 0,5V
N	High bei -20mA min Ub 2,5V

Electrical Data	NPN, K, B	N
Revolution	10 to 3600 ppr	
Channels	A, B, Z	A / A, B / BZ / Z
Frequency Response	300 kHz	
Supply Voltage	5 VDC $\pm 5\%$ / 11,4 - 25,2 VDC	5 VDC $\pm 5\%$
Supply Current (no load)	60 mA	50 mA

Mechanical Data	
Maximum Speed	5000 rpm
Angular Momentum	2×10^6 kg m ²
Starting Torque	0,5 Ncm

Other Data	
Protection Class	IP50 / IP40
Operating Temperature	-10 .. +70° C
Storage Temperature	-25 .. +85° C
Housing Material	Aluminium
Disc Material	Plastic
Vibration	1,5mm Amplitude 10-55Hz in X, Y, Z Richtung 2 h
Shock	50 g max.
Weight	120 g

Series MHL40 / Optoelectronic Incremental Encoder

Order Code and Options

Series MHL40	MHL40				
<u>Hollow shaft diameter</u>					
6 mm		6 (*)			
8 mm		8			
10 mm		10 (*)			
12 mm		12 (*)			
<u>Resolution [Pulses per revolution]</u>					
			10 (*)		
			60 (*)		
			100 (*)		
			256 (*)		
			360 (*)		
			500 (*)		
			1000		
			1024 (*)		
			1200 (*)		
			1500 (*)		
			1800 (*)		
			2000 (*)		
			2048 (*)		
			2500 (*)		
			3000 (*)		
			3600		
<u>Supply voltage</u>					
5 V				5 (*)	
12-24 V				1224	
2 channels with index					BZ
<u>Electronics:</u>					
Push Pull					B
Open Collector					K
Voltage output					NPN
Linedriver					N
<u>Housing:</u>					
Without through hole					A
With through hole					B

"bold print = standard option"

short-term stock types can be found on: <http://www.megatron.de/en/stocklists/angle-sensors/lagerliste.html>

(*) = on request available for projects

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