

HID40S Incremental Encoder



Main Features

- Up to 2000 PPR
- Highly interference-resistant when used with frequency converters
- Robust and economical encoder with small dimensions
Maximum mechanical and electrical safety
- High noise immunity
- With control output
- Execrable environment
- With shaft $\Phi 6\text{mm}$
- Industrial standard encoder
- Protection IP65

Electrical Data

Resolution	1~2000 P/R
Output circuit model	Difference line driver 26LS31 TTL Complementary Voltage Open collector
Voltage supply	Line driver: DC5V \pm 0.25 Complementary: DC5V, DC10...30V Voltage/ Open collector: DC5V, DC10...30V
Current	Line driver: 150mA
consumptions	Complementary: 60mA Voltage/ Open collector: 60mA
Output frequency	100 KHz
Load current	Line driver: 20mA Complementary: 30mA Voltage/ Open collector: 30mA
High level signal	Line driver: 2.5V Complementary: VccX70% Voltage/ Open collector: VccX70%
Low level signal	Line driver: 0.5V Complementary: 1V Voltage/ Open collector: 0.5V
Rise/fall time t_r / t_f	Line driver: 100ns Complementary: 1us Voltage/ Open collector: 1us
EMC	DIN EN 61000-6-2 DIN EN 55011

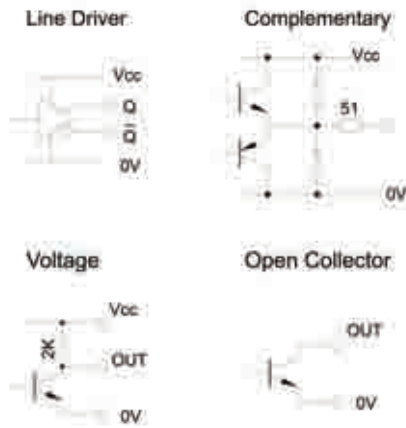
Mechanical Data

Max. rotational speed	6000r/min
Axial shaft load	30N
Radial shaft load	20N
Weight	150g (Without cable)
Starting torque(25°C)	5X10 ⁻³ N.m
Bearing life	10 ⁹ RPM
Protection	IP65
Material	Bearing: Stainless steel Housing: Cast aluminum Main body: Aluminum alloy
Connection	Cable axial, Cable radial, Connector 7 pin

Environmental Data

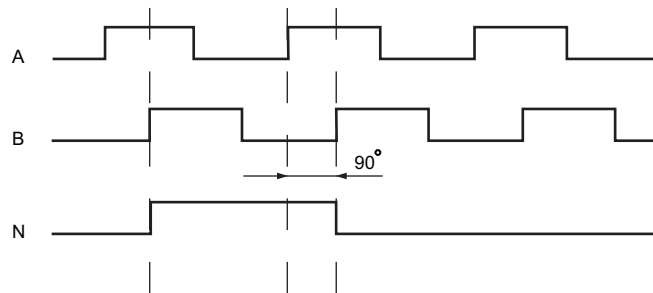
Operating temperature	-10°C ... 70°C
Storage temperature	-20°C ... 80°C
Humidity	98% RH
Shock	1000m/s ² , 6ms
Vibration	100m/s ² , 10 ... 200Hz

Output Circuit

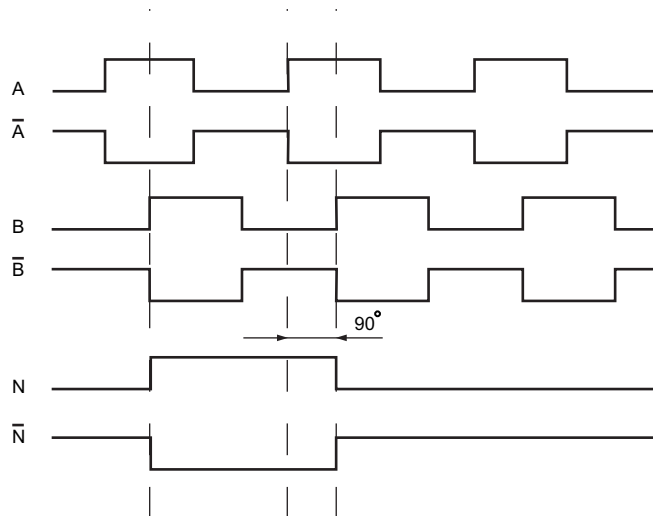


Output Signals

Track A,B,N



Track A,B,N and inv.

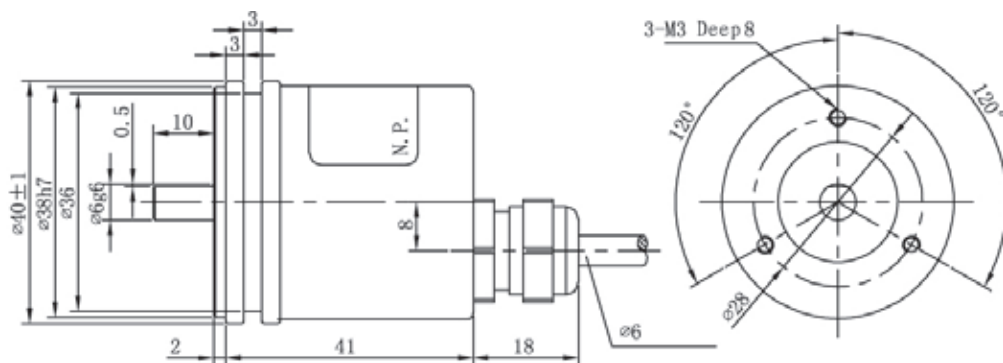


Connection diagrams

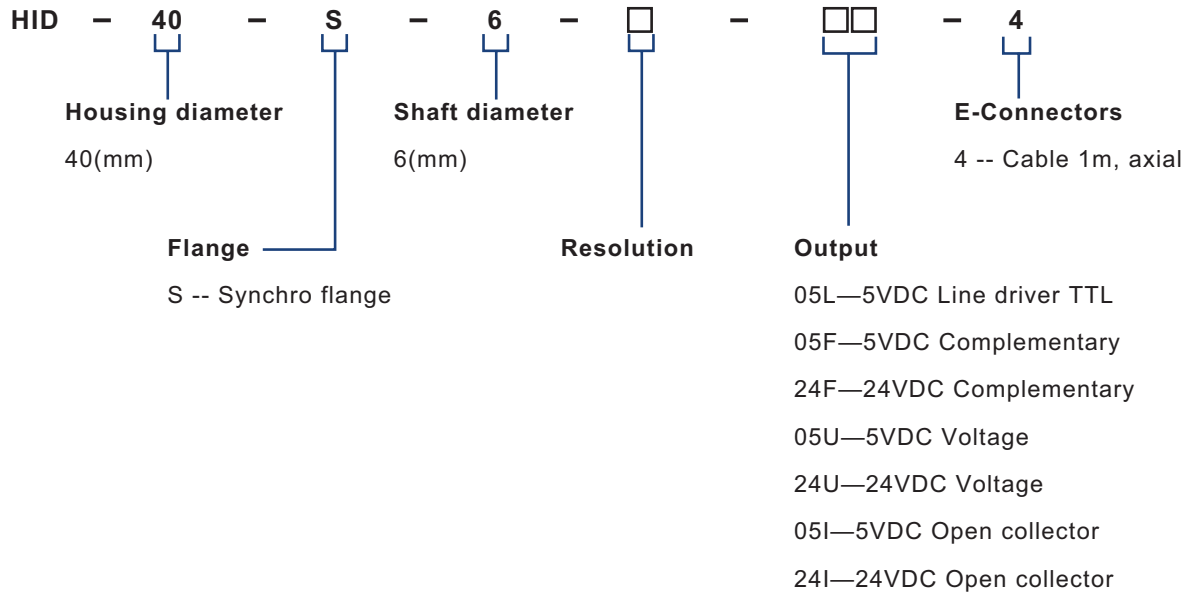
Cable Color	Cable
Brown	Vcc
White	0V
Green	A
Yellow	B
Gray	N
Red	\bar{A}
Black	\bar{B}
Purple	\bar{N}

Dimensions

Cable axial:



Ordering Information



Resolution

50 (5)	58 (128)	23 (1000)
37 (10)	07 (200)	24 (1024)
51 (25)	10 (250)	25 (1250)
40 (50)	14 (360)	27 (1500)
41 (60)	15 (400)	29 (2000)
42 (100)	16 (500)	

Example: Ordering key 58 = 128 pulses.
Other pulse numbers on request.