

## HID58H Incremental Encoder



### Main Features

- Up to 2500 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
- Hollow shaft
- With hollow shaft  $\Phi 8\text{mm}$ ,  $\Phi 10\text{mm}$ ,  $\Phi 12\text{mm}$
- Industrial standard encoder
- Protection IP65

### Electrical Data

Resolution	1...1200PPR,2500PPR
Output circuit model	Difference line driver TTL/HTL (not adapted to Connector 7 pin ) Complementary Voltage Open collector
Voltage supply	Line driver 26LS31 TTL: DC5V $\pm$ 0.25 Line driver 26ET31 HTL: DC10...30V Complementary: DC5V,DC10...30V Voltage/ Open collector: DC5V, DC10...30V
Current consumptions	Line driver(TTL,HTL): 150mA Complementary: 60mA Voltage/ Open collector: 60mA
Output frequency	100 KHz
Load current	Line driver(TTL,HTL): 20mA Complementary: 30mA Voltage/ Open collector: 30mA
High level signal	Line driver TTL: 2.5V Line driver HTL: VccX70% 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

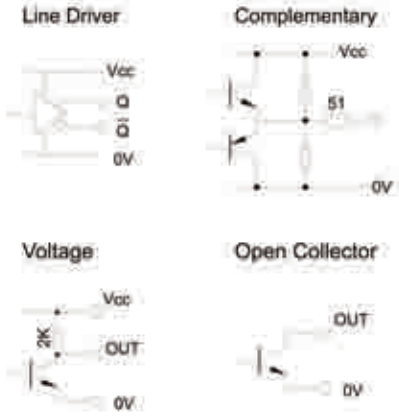
### Mechanical Data

Max. rotational speed	6000r/min
Axial shaft load	40N
Radial shaft load	20N
Weight	200g (Without cable)
Starting torque(25°C)	5X10 <sup>-2</sup> N.m
Bearing life	10 <sup>9</sup> RPM
Protection	IP65
Material	Bearing: Stainless steel Housing: Cast aluminum Main body: Aluminum alloy
Connection	Cable axial / radial, Connector 7 pin axial / radial, Connector 12 pin axial / radial

### Environmental Data

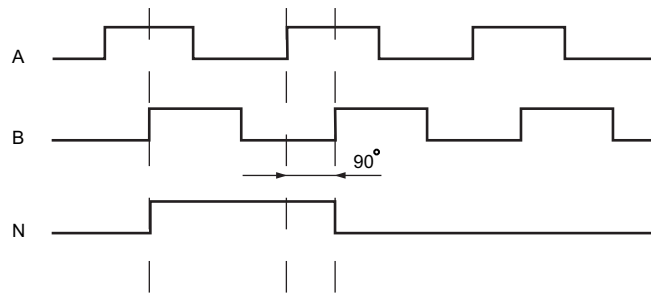
Operating temperature	-10°C ... 70°C
Storage temperature	-20°C ... 80°C
Humidity	98% RH
Shock	1000m/s <sup>2</sup> , 6ms
Vibration	100m/s <sup>2</sup> , 10 ... 200Hz

Output Circuit

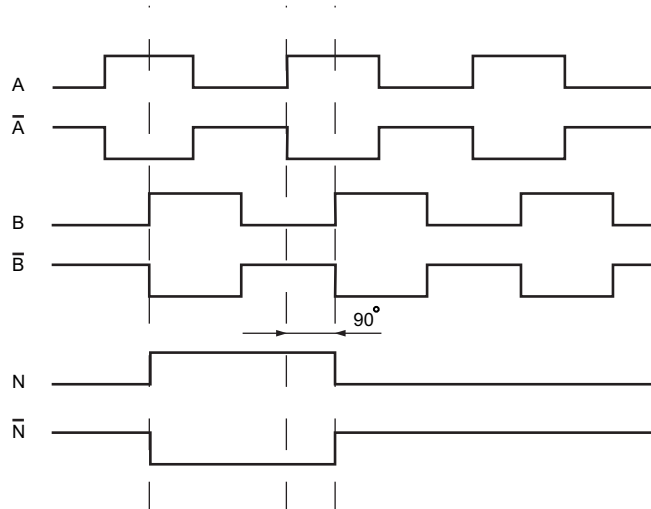


Output Signals

Track A,B,N



Track A,B,N and inv.

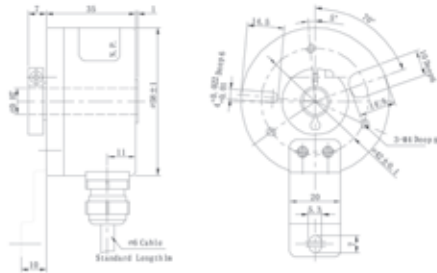


### Connection diagrams

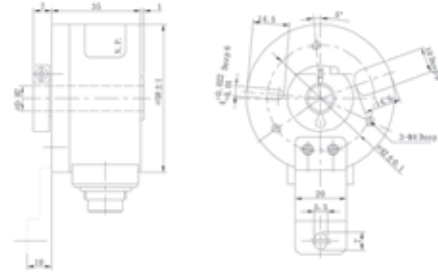
Cable Color	Cable	Connector 7 pin	Connector 12 pin
Brown	Vcc	Vcc Pin 2	Vcc Pin 12
White	0V	0V Pin 1	0V Pin 10
Green	A	A Pin 3	A Pin 5
Yellow	B	B Pin 4	B Pin 8
Gray	N	N Pin 5	N Pin 3
Red	$\bar{A}$		$\bar{A}$ Pin 6
Black	$\bar{B}$		$\bar{B}$ Pin 1
Purple	$\bar{N}$		$\bar{N}$ Pin 4

### Dimensions

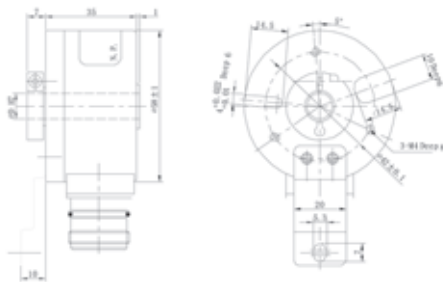
Cable radial:



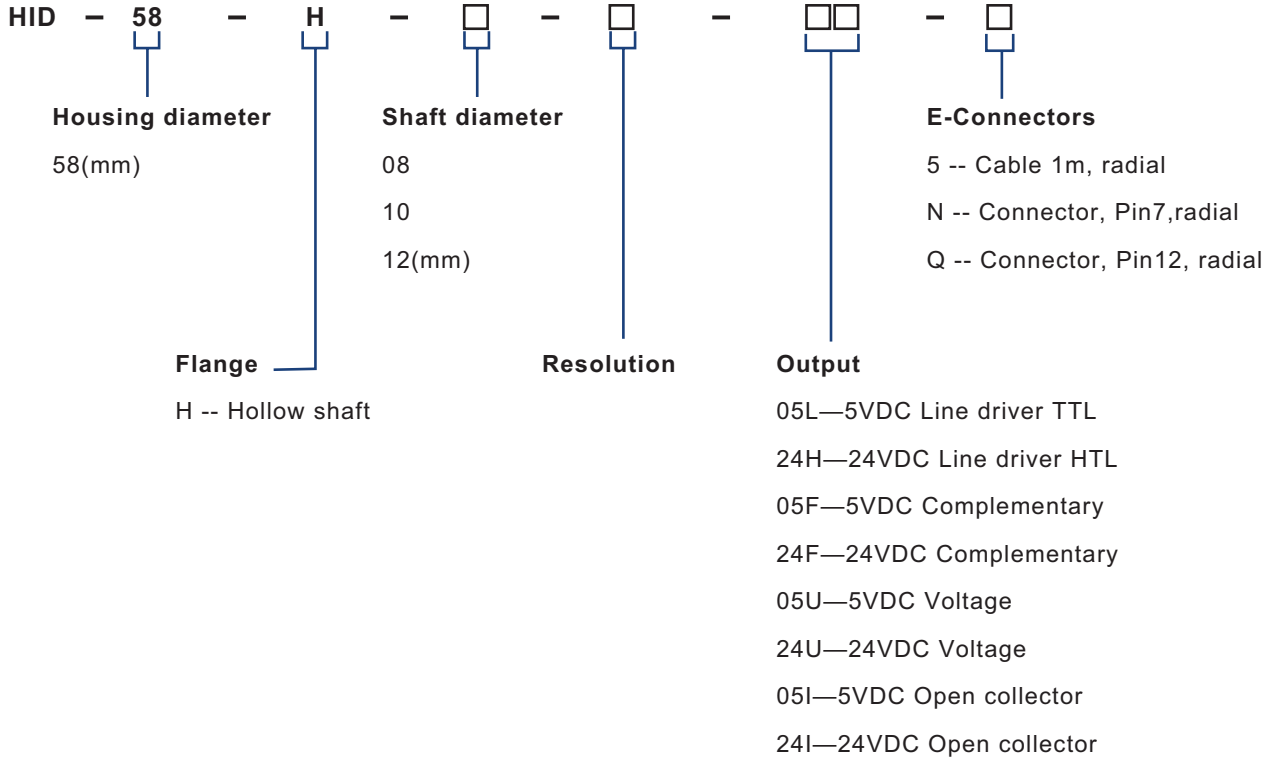
Connector 7 pin radial:



Connector 12 pin radial:



### Ordering Information



#### Resolution

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

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