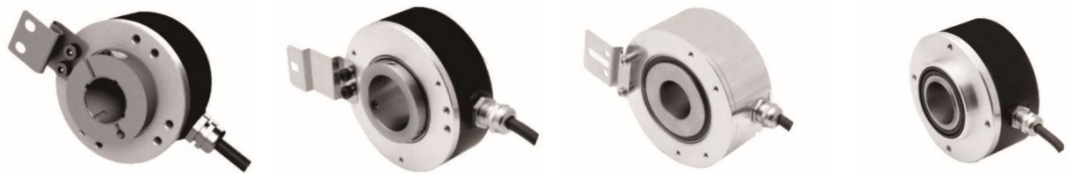


## Features and applications

- Robust and Heavy-duty incremental encoder with max. shaft diameter of Ø45 mm
- Hollow shaft encoder, Customization available
- Resolution Max. 8192 ppr.
- Excellent shock and vibration resistance
- Widely applied all industries, **Explosion-proof available**



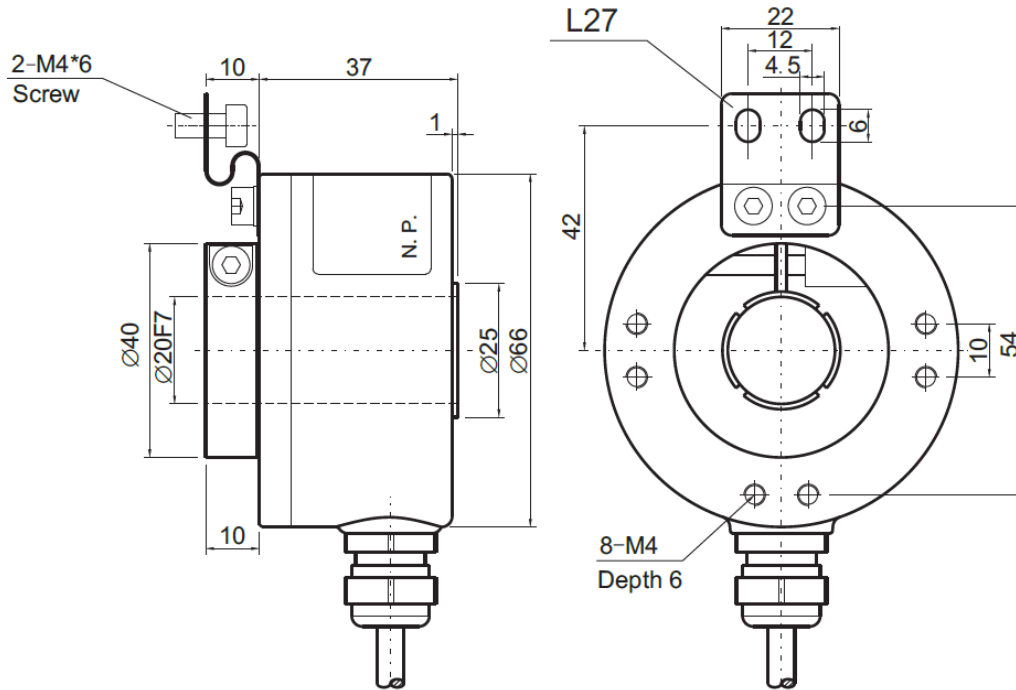
<b>Model</b>	PIN66H	PIN80H	PIN90N	PIN90H
<b>Housing diameter</b>	Ø 66mm	Ø 80mm	Ø 90mm	Ø 90mm
<b>Shaft diameter</b>	Hollow shaft Ø12 / 15 / 18 / 20 mm	Hollow shaft Ø20 / 25 / 28 / 30 mm	Hollow shaft Ø 20 / 25 / 28 / 30 / 35 / 38 / 40 / 45 mm	
<b>Working principle</b>	Opto-electronic			
<b>Power supply</b>	5±0.25 Vdc or 10....30Vdc			
<b>Output circuit</b>	HTL/push-pull , TTL/RS422, Voltage output, Current output			
<b>Output signal</b>	A B , A B Z or A B Z + A/ B/ Z/			
<b>Zero signal</b>	Zsignal width1T (0.5T or 0.25T for option)			
<b>Current consumption</b>	80mA, (HTL/TTL 150mA max.)			
<b>Response frequency</b>	100KHz, 150KHz, 300KHz			
<b>Connection type</b>	Cable or Connector			
<b>Connection position</b>	Radial			
<b>Max. speed</b>	6000 r/min			
<b>Shaft load</b>	Radial 40N, Axial 20N			
<b>Protection class</b>	IP64	IP65	IP65, IP66	IP65, IP66
<b>Starting torque</b>	3x10 <sup>-2</sup> N.m Max.			
<b>Operating temperature</b>	-25°C....85°C (-40°C....100°C special make)			
<b>Storage temperature</b>	-35°C....100°C	-35°C....80°C	-35°C....100°C	-35°C....100°C
<b>Shock resistance</b>	1000 m/s <sup>2</sup> , 6 ms			
<b>Vibration resistance</b>	100 m/s <sup>2</sup> , 10....200Hz			
<b>Resolution</b>	Common pulse: 100, 120, 125, 200, 250, 256, 300, 360, 400, 500, 512, 600, 1000, 1024, 1200, 1250, 1500, 1800, 2000, 2048, 2500, 3000, 3600, 4000, 4096, 5000, 8192			

## Wiring table

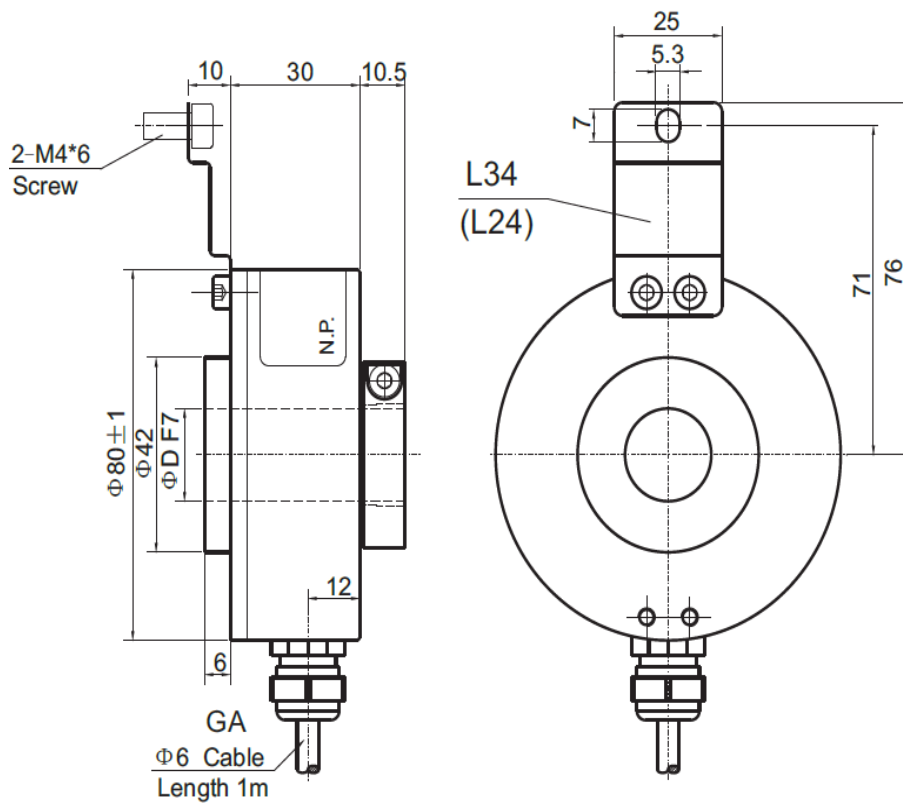
<b>Color</b>	White	Black	Red	Green	Yellow	Pink	Blue	Orange	Shield
<b>Signal</b>	Vcc	0V	A	B	Z	-	-	-	- <sup>1)</sup>
<b>Signal</b>	Vcc	0V	A	B	Z	A/	B/	Z/	- <sup>1)</sup>

## Dimension drawing

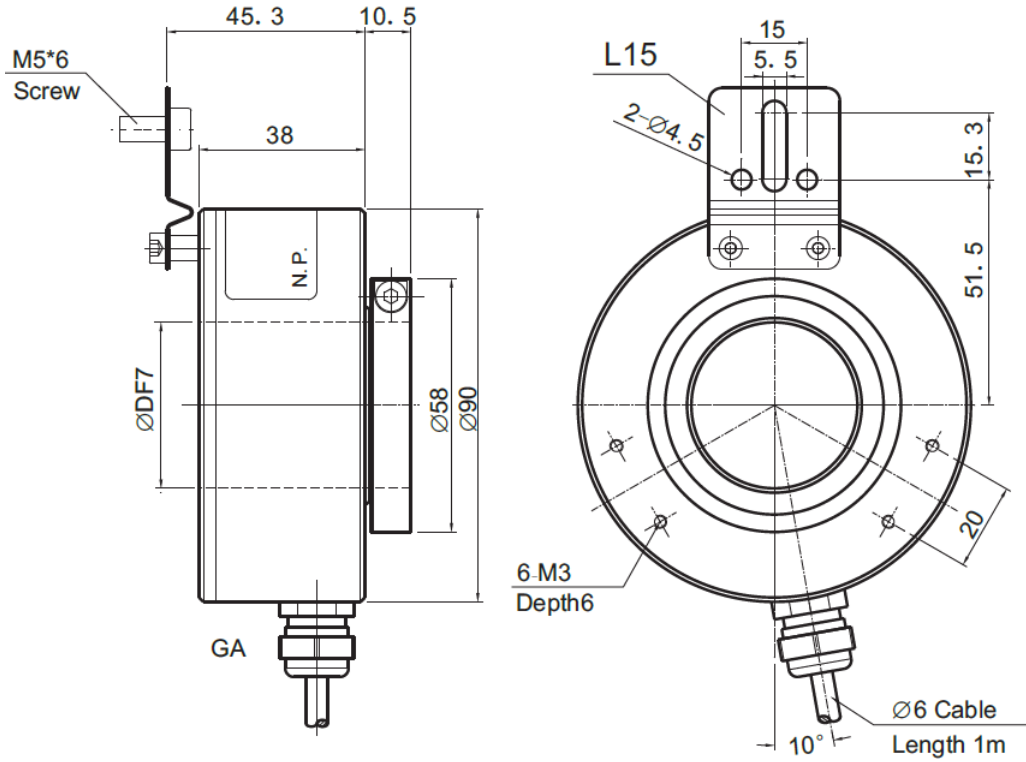
Series PIN66H:



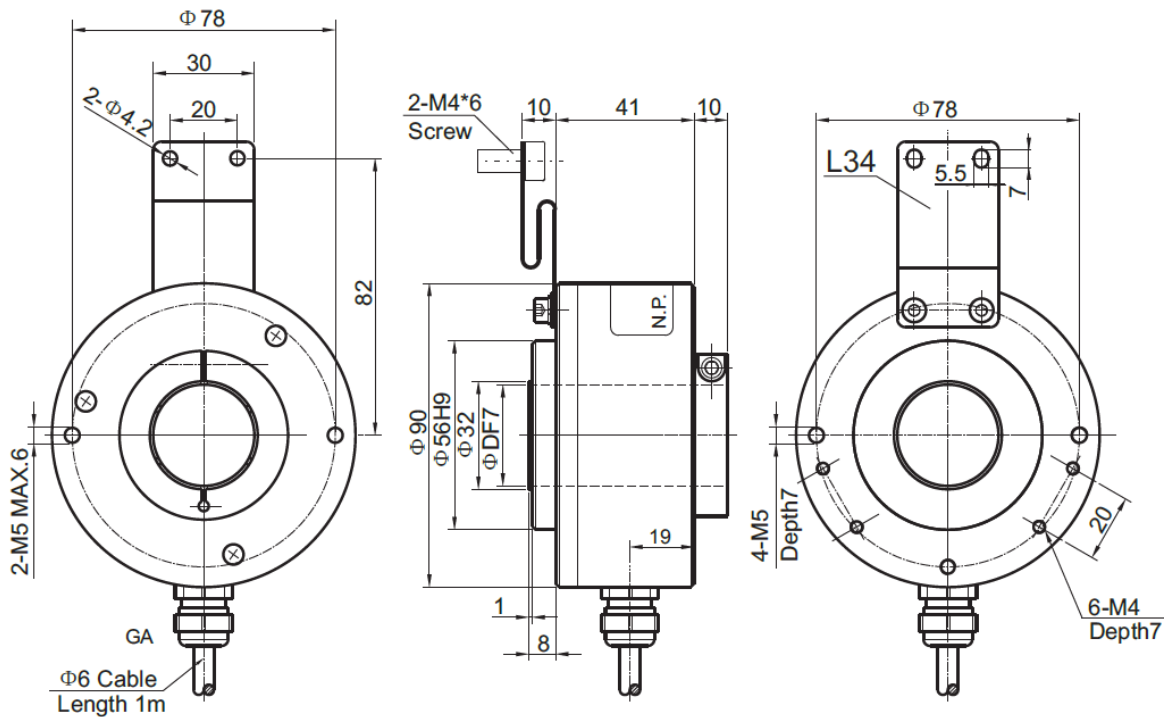
Series PIN80H:



Series PIN90N:



Series PIN90H:



## Order Reference:

	1	2	3	4	5	6	7	8
<b>1. Spec. and series</b>	PIN66H - PIN80H - PIN90N - PIN90H -	XXX	XX	X	X	X	XXXXX	XX
<b>2. Shaft diameter</b>								
012 Ø12mm	012							
015 Ø15mm	015							
018 Ø18mm	018							
020 Ø20mm	020							
025 Ø25mm	025							
028 Ø28mm	028							
030 Ø30mm	030							
035 Ø35mm	035							
038 Ø38mm	038							
040 Ø40mm	040							
045 Ø45mm	045							
<b>3. Connection type</b>			A1 AC AB					
A1 Cable Ø6mm, 8x2x0.14mm <sup>2</sup> , 1m								
AC Connector								
AB Connector M23								
<b>4. Connection position</b>				R				
R Radial								
<b>5. Signal output</b>								
6 A+ B+ Z+ and A- B- Z-					6			
3 A B Z					3			
<b>6. Output circuit</b>								
T 10-30V, HTLpush-pull						T		
E 5V, TTLdriver						E		
F 5-30V, HTLpush-pull						F		
<b>7. Number of pulses:</b>							01024	
10, 15, 50, 100, 120, 125, 200, 250, 256, 300, 360, 400, 500, 512, 600, 1000, 1024, 1200, 1250, 1500, 1800, 2000, 2048, 2500, 3000, 3600, 4000, 4096, 5000, 8192								
<b>8. EX explosion-proof</b>								
EX explosion-proof type encoder EX II 2G Ex ib IIB T4 Gb								EX