

Features and applications:

- Solid shaft or Blind shaft with diameter of Ø15 Max.
- High resistance to Shock and vibration
- Available resolution up to 16 bits
- Power supply from 10 to 30 Vdc
- Widely applied in a variety of industries



Model	PNA58J	PNA58T	PNA58H
Housing diameter	Ø 58mm		
Shaft diameter	Solid with clamp flange Ø10 mm	Solid with synchro flange Ø6 mm	Blind hollow shaft Ø8 / 10 / 12 / 14 / 15 mm
Output signal	Parallel push-pull		
Supply voltage	10....30 Vdc or 5 Vdc		
Resolution per turn	Standard 12-bit 4096 and 13-bit 8192, ma. 16-bit 65536 (128 , 256 , 512 , 1024 , 2048 , 4096 , 8192 , 65536 option available)		
Rotation turn no.	1 / 64..128..256..1024..2048..4096		
Repeat-ability accuracy	±2BIT		
Current consumption	< 50mA ( at 24Vdc) without load		
Signal adjustment	Direction adjustment available. External reset		
Code	Gray or Binary		
Max.speed	6000 r/min		
Shaft load	Radial 80N, Axial 40N		
Protection class	IP65 or IP68		
Starting torque	≤3 Ncm		
Operating temperature	-30°C....85°C ( <-40°C Special make )		
Shock resistance	1000 m/s <sup>2</sup> , 6 ms ( 100g )		
Vibration resistance	20g		
Connection type	Cable or Aviation plug		
Connection position	Radial / Axial		

## Connection

Color	White	Brown	Green	Yellow	Gray	Pink	Blue	Red	Black	Purple	Gray-Pink
Signal	Bit1	Bit2	Bit3	Bit4	Bit5	Bit6	Bit7	Bit8	Bit9	Bit10	Bit11
Color	Blue-Red	White-Green	Brown-Green	White-Yellow	Yellow-Brown	Pink-Brown	Brown-Blue	White-Blue	White-Red	Brown-Red	
Signal	Bit12	Bit13	Bit14	Bit15	Bit16	Preset value	Locked	Direction code	10-30V	0V	

### Input, counting direction selection (V/R)

The counting direction of absolute value encoder is defined by clockwise rotation counting increase and counterclockwise rotation counting decrease. The counting direction selection can be changed by the input signal V/R. If the input signal is not used, the counting direction is defined as the standard. The input class is "1" and the pulse width is  $T > 10\text{ms}$ .

Input class "1" or not used = count increases when rotating clockwise.

Input class "0" = count decreases when rotating clockwise.

### Input, temporarily latched (LATCH)

When the LATCH input is valid, the parallel interface data is "frozen", which can prevent data changes during the reading and reduce data errors (especially for binary codes). Pulse width  $T > 100\mu\text{s}$ .

Input class "1" = position data is latched and output at this value unchanged.

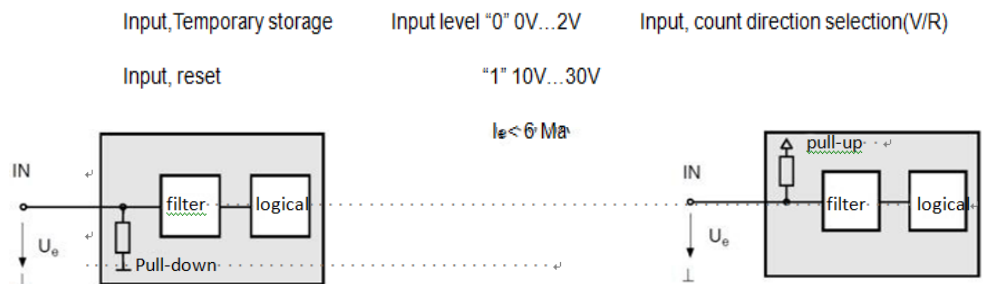
Input class "0" or not used = real-time free output of position data.

### Input preset "0" (preset function)

The preset zero position is actually the encoder presets the electrical zero position through the input signal, and the pulse width  $T > 10\text{ms}$ .

Input class "0" or not used = no effect.

Input class "1" = set to 0.



**Order Reference:**

	1	2	3	4	5	6	7	8	9	
	Single-	multi-	XXX	XXX	XX	XXX	X	X	XX	XX
	PNK58J	PNKM58J								
<b>1. Spec.and series</b>	PNK58T	PNKM58T								
	PNA58H	PNKM58H								
<b>2. Output signal</b>										
PG	Parallel Gray									
PB	Parallel Binary									
<b>3. Number of turn</b>										
B01	1									
B12	4096	12bit								
<b>4. Resolution per turn</b>										
12	12 bit (4096 resolution)	ST								
13	13 bit (8192 resolution)									
<b>5. Mechanical mounting dimension</b>										
For details, please refer to the order code for mechanical dimension of 58series single-& multi-turn absolute encoder										
<b>6. Protection class and body material</b>										
0	Protection class IP65, Aluminum	body								0
S	Protection class IP68, Aluminum	body (work under water available)								S
V	Protection class IP66, Stainless steel	heavy-duty body								V
W	Protection class IP68, Stainless steel	heavy-duty body (work under water available)								W
H	Protection class IP66, Aluminum	body for low Temp.								H
<b>7. Connection position</b>										
A	Axial									A
R	Radial									R
<b>8.Connection type</b>										
A1	Cable Ø6.8mm, 8x2x0.35mm <sup>2</sup> ,	1m (ST)								A1
AC	Connector 8 pins									AC
AB	Connector M23									AB
<b>9.EX explosion-proof</b>										
EX explosion-proof encoder EX II 2G Ex ib IIB T4 Gb										EX