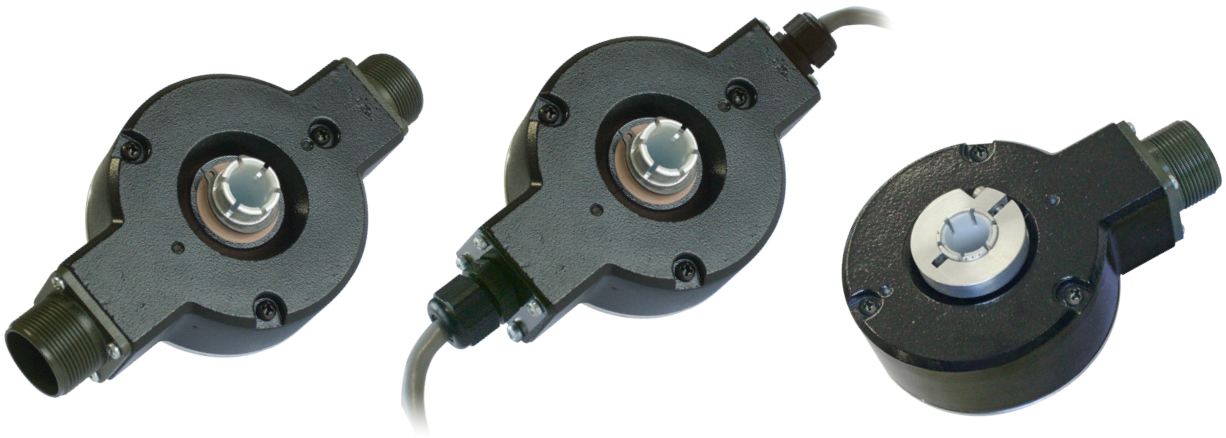
DYNAPAR™
INNOVATION - CUSTOMIZATION - DELIVERY




Hollowshaft Incremental Encoder HS35N



Accuracy, Reliability and Easy Installation

Produced in Brazil, the Hollowshaft Industrial Encoder HS35N is rugged designed with environmental protection class IP65.

It was developed for easy installation on motors or machine shafts.

His hollowshaft was also designed to eliminate the use of flexible couplings, mounting brackets, flanges and other mounting devices, facilitating and reducing installation time with an unbreakable code disk up to 5000 PPR.

Learn more about what the encoder HS35N can offer:

- 1-5000 PPR Pulses/resolution
- Unbreakable code disk up to 5000 PPR
- Standard fixing for IEC encoders
- Over-voltage, reverse polarity and short circuit between outputs/electrical immunity
- Standard Operating Temperature: 0° C to 100° C
- Storage Temperature -20 ° C to 100 ° C
- Compact with approximately 450 g
- For industrial applications
- 1 year warranty for manufacturing defects
- Delivery Time Reduced

Key Features

Maximum Shaft Load	133N Axial and 177N Radial
Shaft Speed	3600 RPM max
Bearings	80.000 hrs@3600 RPM; 128.000 hrs@1800 RPM
Starting Torque	0,35 N.cm
Runout	+/- 0,63 mm
Endplay	+/- 1,27 mm
Hollowshaft diameter:	6 mm, 8 mm, 10 mm, 12 mm, 15 mm, 16 mm, 1/4 pol, 3/8 pol, 1/2 pol, 5/8 pol, 5/16 pol
Storage Temperature	-20° C to 100° C
Weight	450 g (approximately)

Electrical Features

Power Supply	5 to 26 Vc.c.
Outputs	HTL (5 to 26 Vc.c.) or TTL (output 5 Vc.c.) maximum 40mA
Power	60 mA (not included output loads)
Frequency Response:	Typical - 125 kHz Maximun- 250 kHz
Signal Code	Incremental
Resolution	1 to 5000 PPR
Electrical Immunity	Reverse Polarity Short-circuit between outputs Over-voltage
Wave Format	Two channel quadrature (A and B), with optional Index (Z) and complementary outputs
Phase Assembly	
Standard	A leads B for CW shaft rotation viewing the shaft clamp end of the encoder
Inverse	B leads A for CCW shaft rotation viewing the shaft clamp end of the encoder
Quadrature Phasing:	Up to 1200 PPR 90° +/- 15° electricals, Above 1200 PPR 90° +/- 30° electricals
Waveforms	Squarewave with rise and fall times less than 1 micro-second into a load capacitance of 1000 pf

Environmental Features

Standard Operating Temperature:	0° C to 100° C
Storage Temperature	-20° C to 100° C
Shock	50 G´s per 11 mSec
Vibration	5 hz to 2000 hz to 2,5 G´s
Humidity:	Up to 98% without condensation
Enclosure Rating:	IP65

Ordering Information

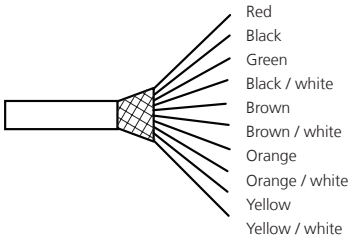
Code 1 Model	Code 2 PPR		Code 3 Shaft	Code 4 Fixing	Code 5 Output	Code 6 Connection	Code 7 Plug
HS35N	☐☐☐☐		☐	☐	☐	☐	☐
HS35N	**0001**	**0500**	**0** 6 mm	**0** None	**A** 5 V standard phase	**Cable Glands**	**0** None
	0003	**0512**	**1** 1/4"	**1** 4.5" C-face tether	**B** 5-26VDC inverse phase	**1** 1,5 m	
	0010	**0600**	**2** 5/16"	**2** 8.5" C-face tether	**C** 5-26VDC standard phase	**2** 2 m	**M23 Connector**
	0012	**0900**	**3** 8 mm	**3** Slotted tether (to fit standard AC motor fan cover)	**D** 5V inverse phase	**3** 3 m	**A** CW female
	0015	**1000**	**4** 3/8"			**4** 4 m	**B** CCW female
	0025	**1024**	**5** 10 mm		**Dual Isolated**	**5** 5 m	**S** CW male
	0050	**1200**	**6** 12 mm		**E** 5-26VDC standard phase	**6** 6 m	**T** CCW male
	0060	**1500**	**7** 1/2"		**F** 5V standard phase	**7** 7 m	
	0080	**2000**	**8** 5/8"			**8** 8 m	**10 pin MS Connector**
	0100	**2048**	**9** 15 mm			**9** 9 m	**2** Male
	0120	**2400**	**A** 16 mm			**A** 10 m	**7** Male + Plug
	0200	**4000**				**B** 15 m	**W** Male with Flange
	0240	**4096**				**C** 20 m	
	0250	**5000**				**D** 25 m	
	0300					**E** 30 m	
	0360					**F** 35 m	
						G 40 m	
						H 45 m	
						I 50 m	
						P 0,15 m	
						S 0,5 m	
						W 0,35 m	
						10 pin MS Connector	
						R Male + plug	
						V Male	

Example:

HS35N 000100A10

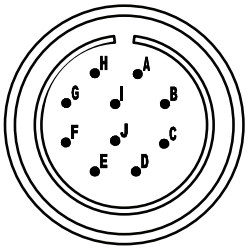
Connectors

Cable
Code: 300302-902



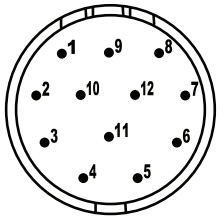
Cable	Function
Red	Voltage (+v)
Black	Common
Green	Case
Black / white	Not used
Brown	Channel A+
Brown / white	Channel A-
Orange	Channel B+
Orange / white	Channel B -
Yellow	Channel Z+
Yellow / white	Channel Z -

10 pin MS Connector
Code:300302-900



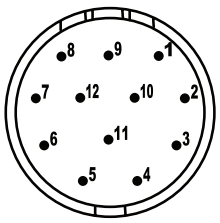
Pin	Function
A	Channel A+
B	Channel: B+
C	Channel: Z+
D	Voltage (+V)
E	Not used
F	Common
G	Case
H	Channel A -
I	Channel B -
J	Channel Z -

12 pin M23 Connector - counterclockwise
Code: CPM1045004



Pin	Function
1	Channel B -
2	Not used
3	Channel Z+
4	Channel Z -
5	Channel A+
6	Channel A -
7	Not used
8	Channel B+
9	Case
10	Common
11	Not used
12	Voltage (+V)

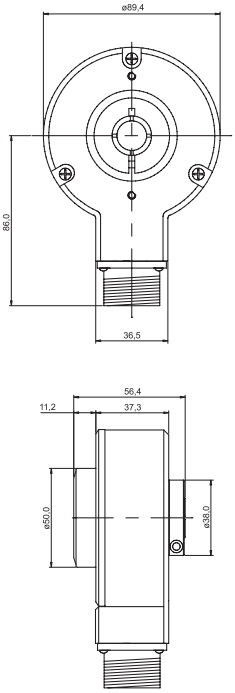
12 pin M23 Connector - clockwise
Code: CPM1046000



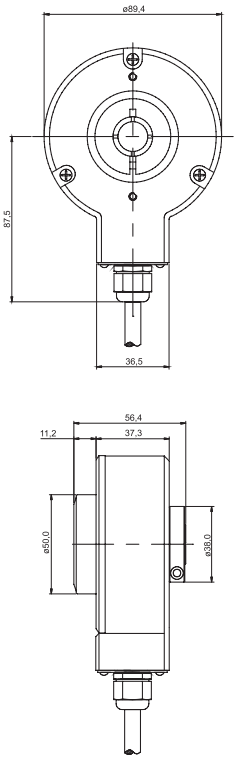
Pin	Function
1	Common
2	Voltage (+V)
3	Channel A+
4	Channel B+
5	Channel A -
6	Channel B -
7	Channel Z+
8	Channel Z -
9	Case
10	Not used
11	Not used
12	Not used

Dimensions

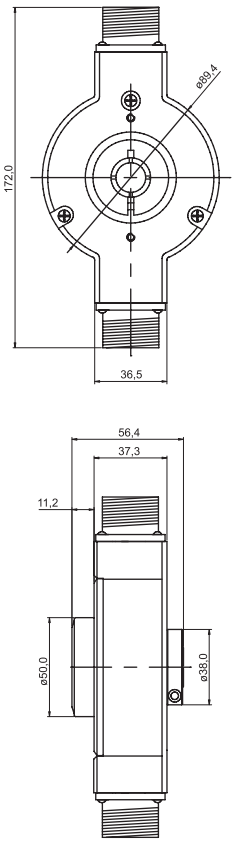
Single connector



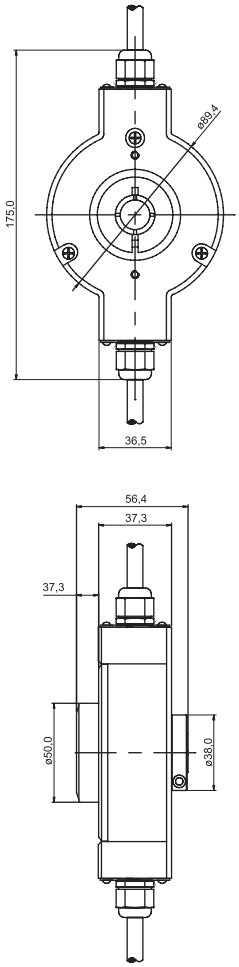
Single cable gland



Dual Connector



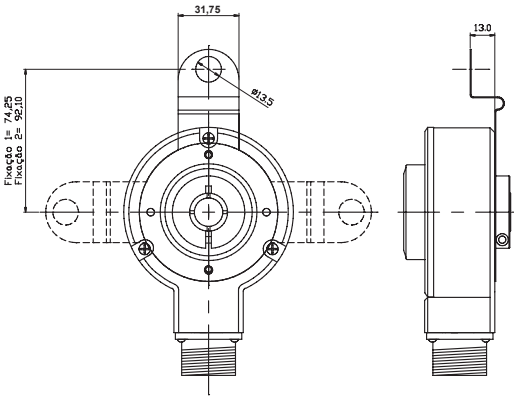
Dual cable gland



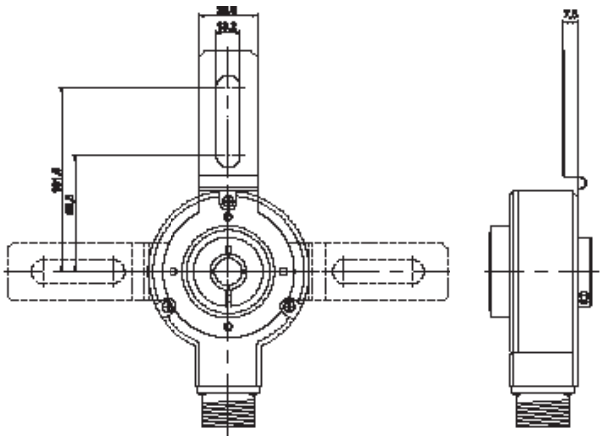
Dimensions (mm)

Fixing

Small - Fixing type 1 and 2



Large - Fixing type 3



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