



# EH 99 P

## BLIND HOLLOW SHAFT INCREMENTAL ENCODER

### Specifications



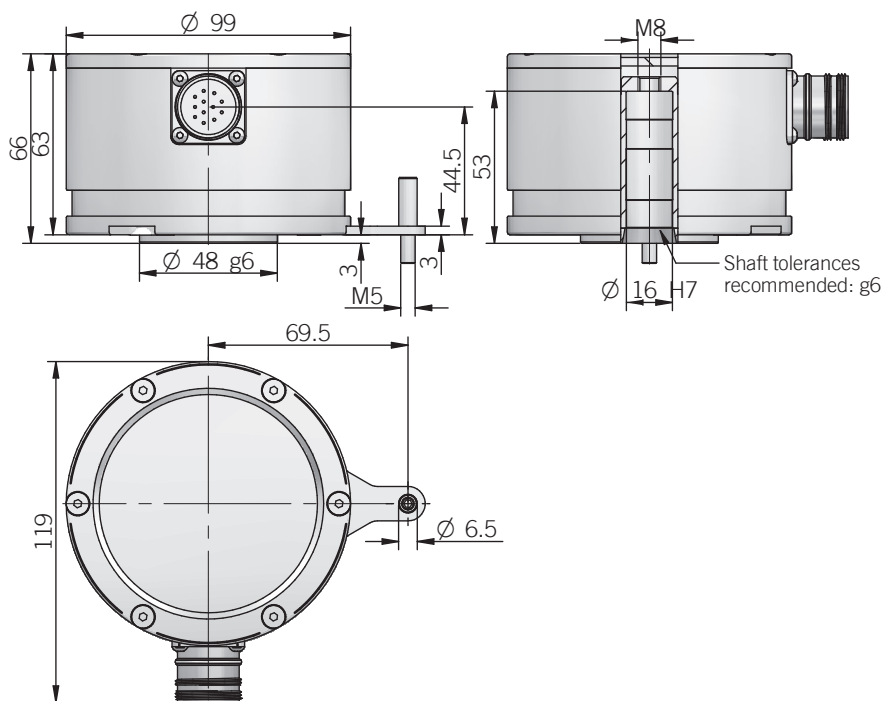
Encoder suitable for heavy duty applications like windmill generators, paper mills, rubber machines, cranes.

- 3 channel encoder (A / B / Z) up to 2048 ppr
- Power supply up to +30 VDC
- Up to 105 kHz output frequency
- Sturdy mechanic with anodized housing
- Up to IP 67 as enclosure rating
- Insulated bearings
- Blind hollow shaft with straight or tapered shaft
- Installation by tether or torque arm
- Operating temperature -40° ... +85°C (-40° ... +185°F)

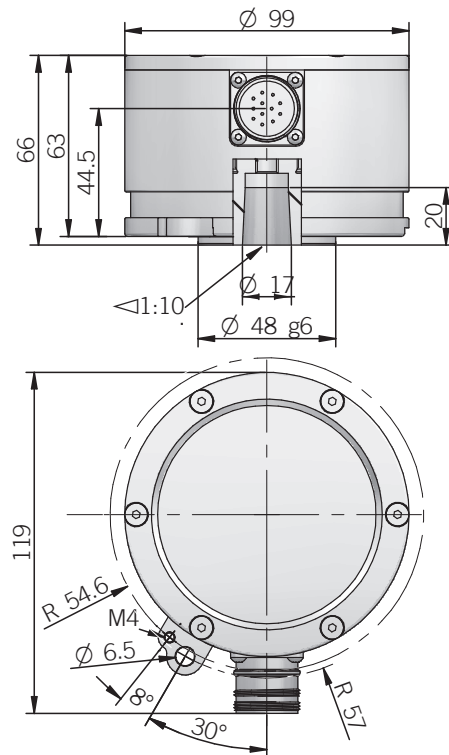
ORDERING CODE	EH	99P	F	1024	Z	5	L	16	X	3	PR	.XXX
<b>SERIES</b> incremental encoder series <b>EH</b>												
<b>MODEL</b> blind hollow shaft <b>99P</b>												
<b>TYPE</b> tether fixing <b>F</b> for torque arm fixing <b>T</b>												
<b>RESOLUTION</b> ppr <b>1000 / 1024 / 2000 / 2048</b> <i>please directly contact our offices for pulses availability</i>												
<b>ZERO PULSE</b> without zero pulse <b>S</b> with zero pulse <b>Z</b>												
<b>POWER SUPPLY</b> 5 V DC <b>5</b> 8 ... 30 V DC <b>8/30</b>												
<b>ELECTRONIC INTERFACE</b> push-pull <b>P</b> line driver <b>L</b>												
<b>BORE DIAMETER</b> mm <b>12</b> mm <b>16</b> tapered mm <b>T17</b>												
<b>ENCLOSURE RATING</b> IP 66 <b>X</b> IP 67 <b>S</b>												
<b>MAX ROTATION SPEED</b> 3000 rpm <b>3</b>												
<b>OUTPUT TYPE</b> radial cable (standard length 0,5 m) <b>PR</b> M23 radial connector <b>HR</b> radial with terminal block <b>PGR</b> <i>female connector included, without female please add 162 as variant code</i>												
<b>VARIANT</b> custom version <b>XXX</b>												



**EH 99 PF**



**EH 99 PT**



**ELECTRICAL SPECIFICATIONS**

<b>Resolution</b>	from 1000 to 2048 ppr
<b>Power supply</b>	5 = 4,5 ... 5,5 V DC 8/30 = 7,6 ... 30 V DC (reverse polarity protection)
<b>Power draw without load</b>	800 mW
<b>Max load current</b>	20 mA / channel
<b>Output type*</b>	push-pull / line driver
<b>Max output frequency</b>	105 kHz
<b>Counting direction</b>	A leads B clockwise (shaft view)
<b>Electromagnetic compatibility</b>	IEC 61000-6-2 IEC 61000-6-4

\*output levels according to power supply, for further details please see under Technical basics section

H connector (12 pin) - M23 CCW  
Hummel 7.410.000000 -  
7.002.912.603  
solder side view FV



**MECHANICAL SPECIFICATIONS**

<b>Bore diameter</b>	$\varnothing 12 / 16 / T17$ (tapered hollow shaft)
<b>Enclosure rating</b>	X = IP 66 (IEC 60529) S = IP 67 (IEC 60529)
<b>Max rotation speed</b>	3000 rpm
<b>Shock</b>	50 G, 11 ms (IEC 60068-2-27)
<b>Vibration</b>	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
<b>Body material</b>	EN-AW 6026 anodized anticorrosion aluminum
<b>Shaft material</b>	1.4305 / AISI 303 stainless steel
<b>Housing material</b>	EN-AW 6026 anodized anticorrosion aluminum
<b>Bearings</b>	2 ball bearings
<b>Bearings life</b>	$10^9$ revolutions
<b>Operating temperature</b>	$-40^\circ \dots +85^\circ\text{C}$ ( $-40^\circ \dots +185^\circ\text{F}$ )
<b>Storage temperature</b>	$-40^\circ \dots +85^\circ\text{C}$ ( $-40^\circ \dots +185^\circ\text{F}$ )
<b>Weight</b>	1200 g (42,33 oz)

**CONNECTIONS**

Function	Cable output	12 pin H output (CCW)
+V DC	red	12
0 V	grey	10
Ch. A	green	5
Ch. A-	brown	6
Ch. B	yellow	8
Ch. B-	pink	1
Ch. Z	blue	3
Ch. Z-	white	4
⊥	shield	9