

**MAIN FEATURES**

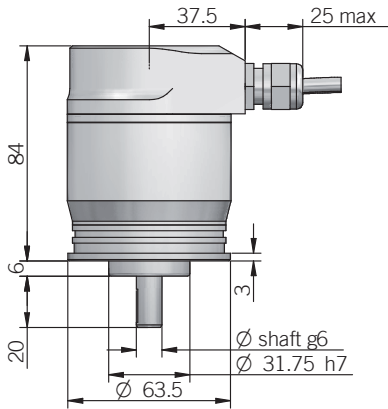
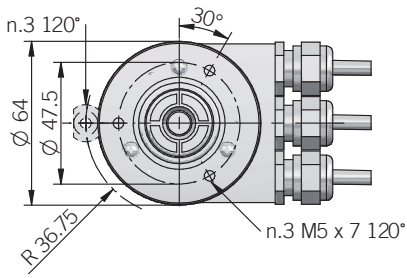
Industry standard singleturn absolute encoder for factory automation applications.

- Optical sensor technology (OptoASIC)
- Resolution up to 13 bit (8192 ppr)
- Power supply up to +28 V DC with Profibus DP as electrical interface
- Cable gland or M12 connector output
- Solid shaft diameter up to 10 mm
- Mounting by synchronous, clamping or centering 2,5" square flange



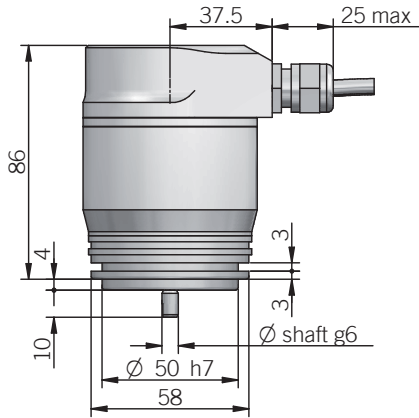
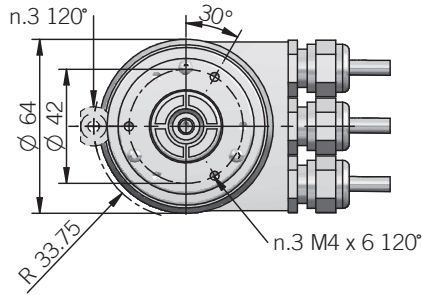
ORDERING CODE	EA	63A	4096	B	12/28	FX	10	X	6	M12R	.162	+XXX
<b>SERIES</b> singleturn absolute encoder EA												
<b>MODEL</b> synchronous flange ø 31.75 mm synchronous flange ø 50 mm clamping flange ø 36 mm centering square flange ø 31.75 mm centering square flange ø 50 mm		63A 58B 58C 63D 63E										
<b>RESOLUTION</b> ppr			4096 / 8192									
<b>CODE TYPE</b> binary				B								
<b>POWER SUPPLY</b> 12 ... 28 V DC					12/28							
<b>ELECTRICAL INTERFACE</b> PROFIBUS DP V0 CLASS 2						FX						
<b>SHAFT DIAMETER</b> (mod. 58 B) mm (mod. 63 A / D) (9,52mm 3/8") mm (mod. 58 C - 63 A / D / E) mm												
<b>ENCLOSURE RATING</b> IP 54 IP 66												
<b>MAX ROTATION SPEED</b> (IP 66) 3000 rpm (IP 54) 6000 rpm												
<b>OUTPUT TYPE</b> terminal box - radial cable glands radial M12 connectors												
<b>MATING CONNECTORS</b> mating connectors not included												
to be reported only with connector output (eg. M12R.162), for mating connectors see Accessories												
<b>VARIANT</b> custom version												XXX

**63 A**



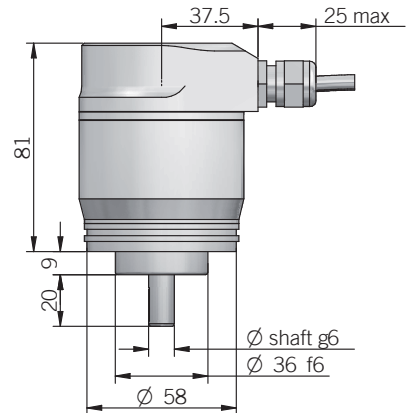
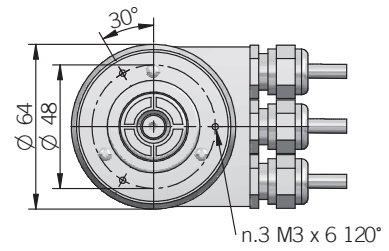
fixing clamps not included, please refer to Accessories

**58 B**

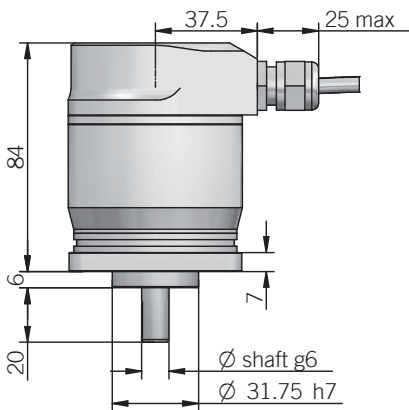
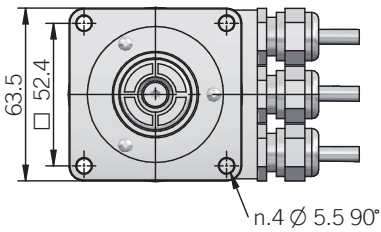


fixing clamps not included, please refer to Accessories

**58 C**

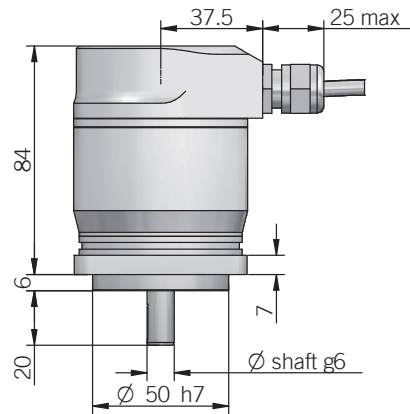
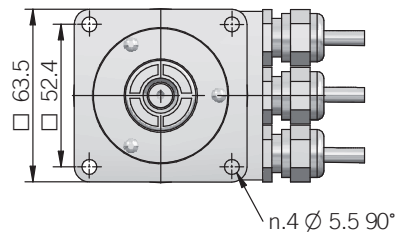


**63 D**



recommended mating shaft tolerance H7  
dimensions in mm

**63 E**



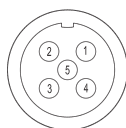
### ELECTRICAL SPECIFICATIONS

<b>Resolution</b>	2 ... 4096 / 2 ... 8192 ppr programmable during commissioning
<b>Power supply<sup>1</sup></b>	11,4 ... 29,4 V DC (reverse polarity protection)
<b>Current consumption without load</b>	300 mA
<b>Electrical interface<sup>2</sup></b>	RS 485 galvanically isolated
<b>Max bus frequency</b>	12 Mbaud
<b>Diagnostic features</b>	frequency warning position warning / alarm please refer to installation manual for more informations
<b>Max frequency</b>	max 25 kHz LSB
<b>Code type</b>	binary
<b>Counting direction</b>	programmable during commissioning
<b>Start-up time</b>	500 ms
<b>Accuracy</b>	± 1/2 LSB
<b>Electromagnetic compatibility</b>	according to 2014/30/EU directive
<b>RoHS</b>	according to 2011/65/EU directive
<b>UL / CSA</b>	certificate n. E212495

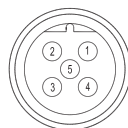
### CONNECTIONS

Function	POWER	BUS OUT	BUS IN
+ V DC	2		
0 V	4		
A		2	
B		4	
A			2
B			4

POWER connector (5 pin)  
M12 A coded  
view solder side FV



BUS OUT - female (5 pin)  
M12 B coded  
solder side view FV



BUS IN - male (5 pin)  
M12 B coded  
solder side view MV



### MECHANICAL SPECIFICATIONS

<b>Shaft diameter</b>	∅ 6 / 9,52 (3/8") / 10 mm
<b>Enclosure rating</b>	X = IP 54 (IEC 60529) S = IP 66 (IEC 60529)
<b>Max rotation speed</b>	IP 54 - 6000 rpm IP 66 - 3000 rpm
<b>Max shaft load<sup>3</sup></b>	10 N axial / 20 N radial with ∅6 shaft 100 N axial / radial
<b>Shock</b>	50 G, 11 ms (IEC 60068-2-27)
<b>Vibration</b>	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
<b>Moment of inertia</b>	1,5 x 10 <sup>-6</sup> kgm <sup>2</sup> (36 x 10 <sup>-6</sup> lbf <sup>2</sup> )
<b>Starting torque (at +20°C / +68°F)</b>	< 0,02 Nm (2,83 Ozin) IP 54 < 0,06 Nm (8,50 Ozin) IP 66
<b>Bearing stage material</b>	EN-AW 2011 aluminum
<b>Shaft material</b>	1.4305 / AISI 303 stainless steel
<b>Housing material</b>	painted aluminium
<b>Bearings</b>	n.2 ball bearings
<b>Bearings life</b>	10 <sup>9</sup> revolutions
<b>Operating temperature<sup>4, 5</sup></b>	0° ... +60°C (+32° ... +140°F)
<b>Storage temperature<sup>5</sup></b>	-15° ... +70°C (+5° ... +158°F)
<b>Weight</b>	650 g (22,93 oz)

<sup>1</sup> as measured at the transducer without cable influences

<sup>2</sup> for further details refer to OUTPUT LEVELS on TECHNICAL BASICS section

<sup>3</sup> maximum load for static usage

<sup>4</sup> measured on the transducer flange

<sup>5</sup> condensation not allowed