

MAIN FEATURES

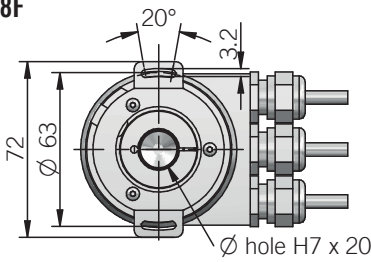
Industry standard multiturn absolute encoder for factory automation applications.

- Optical sensor technology (OptoASIC + gears)
- 25 bit total resolution (13 bit single turn (8192 ppr) + 12 bit multiturn (4096 turns))
- Power supply up to +28 V DC with Profibus DP as electrical interface
- Intelligent status leds
- Terminal box or M12 connector for fast setup
- Blind hollow shaft up to 15 mm diameter
- Mounting by stator coupling, torque stop slot or torque pin

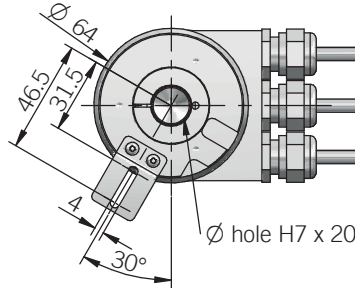


ORDERING CODE	EAM	63F	R	4096 / 4096	B	12/28	FX	15	X	3	M12R	.162	+XXX
SERIES multiturn absolute encoder EAM													
MODEL blind hollow shaft with stator coupling 58F blind hollow shaft with torque stop slot 63F blind hollow shaft with torque pin 63G													
rev. 2.0 R													
MULTITURN RESOLUTION turns 4096													
SINGLETURN RESOLUTION ppr 4096 / 8192													
CODE TYPE binary B													
POWER SUPPLY 12 ... 28 V DC 12/28													
ELECTRICAL INTERFACE PROFIBUS DP V0 CLASS 2 FX													
BORE DIAMETER mm 14 mm 15 diameters 6 / 8 / 9,52 (3/8") / 10 / 11 / 12 mm with optional shaft adapter, see Accessories													
ENCLOSURE RATING IP 54 X													
MAX ROTATION SPEED 3000 rpm 3													
OUTPUT TYPE terminal box - radial cable glands P3R radial M12 connectors M12R													
SOCKETS sockets not included .162 to be reported only with connectors output (eg. M12R.162), for sockets see Accessories													
VARIANT custom version XXX													

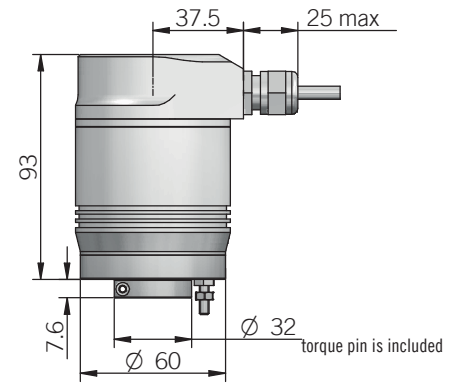
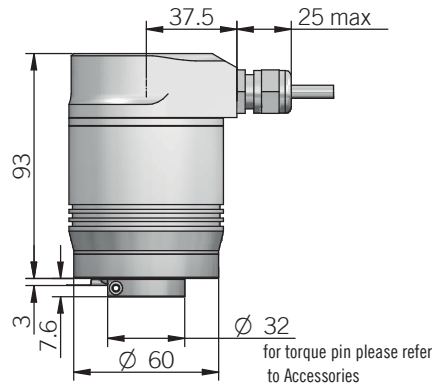
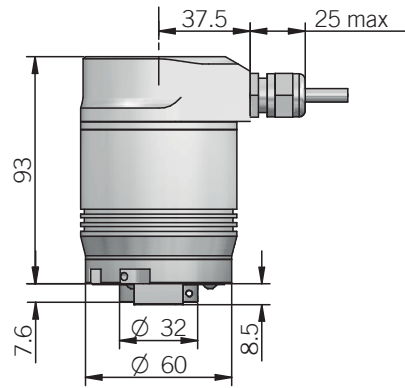
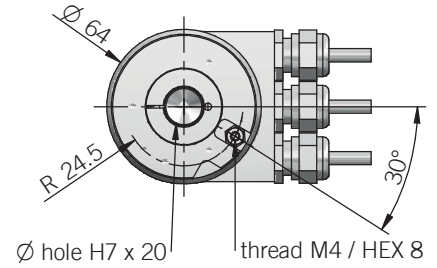
58F



63F



63G



recommended mating shaft tolerance g6

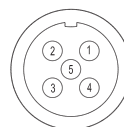
ELECTRICAL SPECIFICATIONS	
Multiturn resolution	2 ... 4096 turns programmable during commissioning
Singleturn resolution	2 ... 4096 / 2 ... 8192 ppr programmable during commissioning
Power supply ¹	11,4 ... 29,4 V DC (reverse polarity protection)
Current consumption without load	300 mA
Electrical interface ²	RS 485 galvanically isolated
Max bus frequency	12 Mbaud
Diagnostic features	frequency warning position warning / alarm please refer to installation manual for more informations
Max frequency	max 25 kHz LSB
Code type	binary
Counting direction	programmable during commissioning
Start-up time	500 ms
Accuracy	± 1/2 LSB
Mean time to dangerous failure (MTTF) _d ³ according to EN ISO 13849-1	years
Mission time (Tm) ³	20 years
Diagnostic coverage (DC) ³	0%
Electromagnetic compatibility	according to 2014/30/EU directive
RoHS	according to 2011/65/EU directive
UL / CSA	file n. E212495

MECHANICAL SPECIFICATIONS	
Bore diameter	∅ 14 / 15 mm ∅ 6* / 8* / 9,52 (3/8")* / 10* / 11* / 12* * with optional shaft adapter, please refer to Accessories
Enclosure rating	IP 54 (IEC 60529)
Max rotation speed	3000 rpm
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
Moment of inertia	5 x 10 ⁻⁶ kgm ² (119 x 10 ⁻⁶ lbf ²)
Starting torque (at +20°C / +68°F) ⁴	< 0,02 Nm (2,83 Ozin)
Bearing stage material	aluminum
Shaft material	stainless steel
Shaft adapter material	bronze
Housing material	painted aluminium
Bearings	n.2 ball bearings
Bearings life	10 ⁹ revolutions
Operating temperature ^{4, 5}	0° ... +60°C (+32° ... +140°F)
Storage temperature ⁵	-15° ... +70°C (+5° ... +158°F)
Weight	650 g (22,93 oz)

¹ as measured at the transducer without cable influences
² for further details refer to OUTPUT LEVELS on TECHNICAL BASICS section
³ this product is not a safety component, for further details refer to TECHNICAL BASICS section
⁴ measured on the transducer flange
⁵ condensation not allowed

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 - socket (5 pin)
M12 B coded
front view



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

