

Model 958 Single Turn 58mm Absolute



Features

- 58 mm Package
- Resolutions Up To 12 Bit (4096 PPR equivalent)
- Incorporates Opto-ASIC Technology
- Industrial Grade, Heavy Duty Housing
- Wide Range of Operating Voltages (4.75 to 24 VCC)

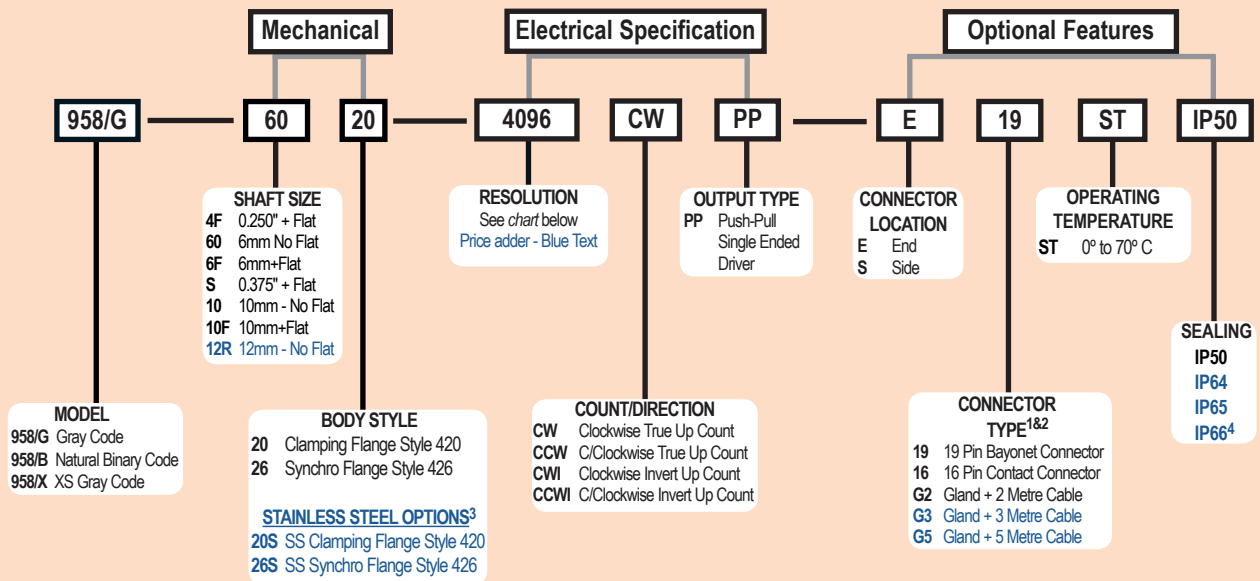
The Model 958 Single Turn Absolute is ideal for a wide variety of industrial applications requiring an encoder with Size 58 mm mounting and absolute positioning output. A rugged, industrial grade housing allows the Model 958 to be used in a wide variety of applications calling for a reliable, heavy-duty encoder. In addition, its innovative Opto-ASIC circuitry coupled with its digital output make it an excellent choice in those applications plagued by unusually high levels of electrical noise. Available with a choice of either type 20 or type 26 servo mounting, and a variety of connector and cabling options, the Model 958 is easily designed into a variety of applications. The Model 958 can also be ordered with stainless steel housing, heavy duty bearings and an IP66 seal. With so many options that make the Model 958 ultra-durable, this absolute encoder can tolerate the worst environments!

Common Applications

Machine Tools, Robotics, Telescopes, Antennas, Rotary & X-Y Positioning Tables, Medical Scanners

Model 958 Ordering Guide

Blue type indicates price adder options. Not all configuration combinations may be available. Contact Customer Service for details.



For specification assistance call
Customer Service at
+44 (0)1978 262100

Model 958 PPR Options

	Output Code	Pulses Per Resolution				
958/G Gray Code		0256	0512	1024	2048	4096
958/B Natural Binary		0250	0256	0360	0500	0512
		1000	1024	1440	2000	2048
		4000	4096			2880
958/X Excess Gray		0180	0250	0360	0500	0720
		1440	2000	2880	4000	1000

NOTES:

- 1 For additional connector styles - contact the sales office for availability.
- 2 For non-standard cable lengths - contact the sales office.
- 3 For stainless steel options - contact the sales office.
- 4 IP66 has significantly increased torque.

Model 958 Single Turn 58mm Absolute



Model 958 Specifications

Electrical

Input Voltage.....4.75 to 24 VCC max
 Regulation.....100 mV peak-to-peak, max ripple at 0 to 100 kHz
 Input Current.....100 mA max with no external load
 Output Format.....Absolute- Parallel Outputs
 Output Type.....Push-Pull- 20 mA max per channel
 Code.....Gray Code, Natural Binary Code, Excess Gray Code
 Max Frequency.....50 kHz (LSB)
 Rise Time.....Less than 1 microsecond
 Resolution.....Up to 12 bit
 Accuracy.....+1/6th LSB

Control

Directional Control....Field selectable for increasing counts (CW or CCW)

Mechanical

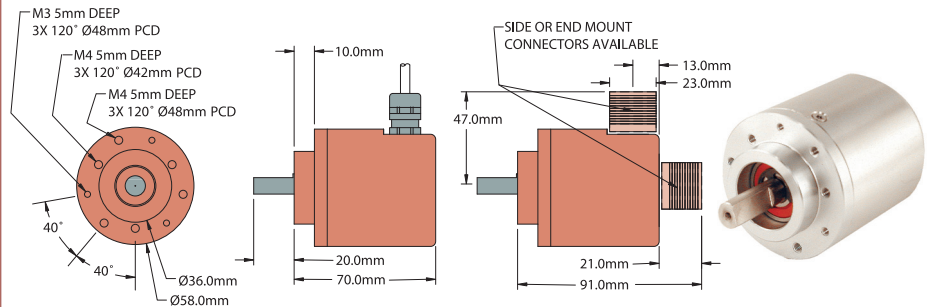
Max Shaft Speed.....6000 RPM continuous
 Shaft Size.....6mm, 10mm, 12mm
 Radial Shaft Load.....15Kg max
 Axial Shaft Load.....20Kg max
 Starting Torque..... 7.061×10^{-3} Nm typical for no seal or IP64
 2.118×10^{-2} Nm typical with IP65 shaft seal
 Electrical Conn.....Gland with 2M cable (braid shield, 30 AWG conductors), 16 Pin, or 19-pin connector
 Housing.....Aluminium / Stainless Steel on request
 Mounting.....European Standard Clamping Flange (20 Type) and Synchro Flange (26 Type)
 Weight.....750 grams typical

Environmental

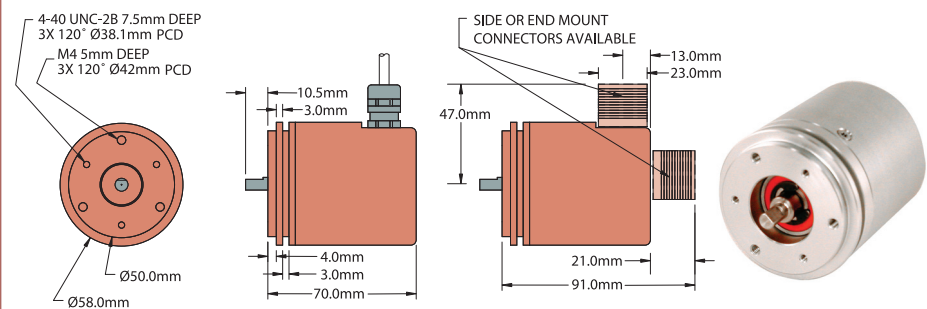
Operating Temp.....0° to 70° C
 Storage Temp.....-20° to +85° C
 Humidity.....98% RH non-condensing
 Vibration.....10 g @ 58 to 500 Hz
 Shock.....20 g @ 11 ms duration
 Sealing.....IP50 (standard)
 IP64, IP65 or IP66**

** IP66 Significantly increased torque.

Model 958 Clamping Flange 20 Type (20)



Model 958 Synchro Flange 26 Type (26)



Wiring Table

Function	19-PIN	16-PIN	Gland Cable or Mating Conn.	NOTES:
	KPT02E14-19P	Pin	Wire Color	
S1 MSB	A	3	Brown	* Where Fitted ** Direction Control- Standard is CW increasing when viewed from the shaft end. Direction pin is pulled high normally to 5V internally. Direction pin must be pulled low (GND, Common) to reverse count direction. 0V only should be applied to the direction pin.
S2	B	5	White	
S3	C	6	Green	
S4	D	7	Orange	
S5	E	8	Blue	
S6	F	9	Violet	
S7	G	10	Grey	
S8 LSB 8-bit	H	11	Pink	
S9 LSB 9-bit	J	12	Red/Green	
S10 LSB 10-bit	K	13	Red/Yellow	
S11 LSB 11-bit	L	14	Turquoise	
S12 LSB 12-bit	M	15	Yellow	
Direction **	R	4	Red/Blue	
Case Ground	S	16	Drain/Screen	
0V Common	T	1	Black	
Special *	U	--	White/Red	
+VCC	V	2	Red	

Absolute Encoders