

Model 925 Heavy Duty Single Turn Absolute



Features

- Standard Size 25 Package (63.5mm)
- Resolutions up to 12 Bit (4096 Counts)
- Incorporates Opto-ASIC Technology
- Industrial Grade, Heavy Duty Housing
- Wide Range of Operating Voltages (4.75 to 24 Vcc)

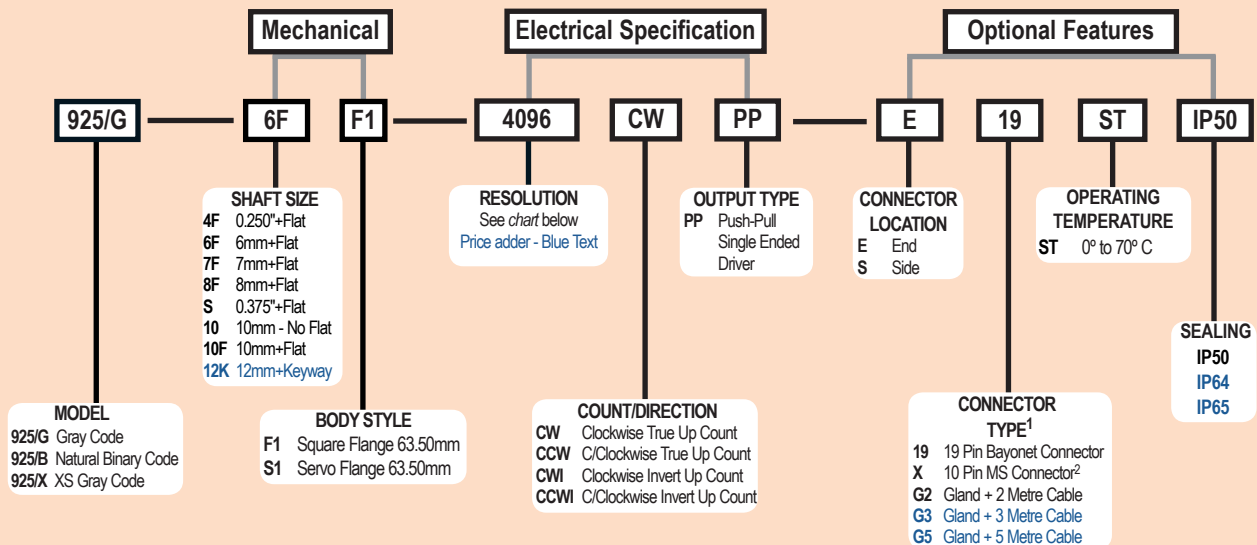
The Model 925 Single Turn Absolute is ideal for a wide variety of industrial applications that require an encoder with the capability of absolute positioning output. Its fully digital output and innovative use of Opto-ASIC technology make the model 925 an excellent choice for all applications, especially ones with a high presence of noise. Available with either a round servo or square flange mounting, and a variety of connector and cable options, the model 925 is easily designed into a variety of application requirements. The model 925, with its wide selection of shaft sizes supported by industrial grade, heavy duty bearings, is ideal for rough environments.

Common Applications

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

Model 925 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 925 PPR Options

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

NOTES:

- 1 For non-standard cable lengths - contact the sales office for availability
- 2 Only available with 8 bit resolution encoder.

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Model 925 Specifications

Electrical

Input Voltage4.75 to 24 Vcc max
 Regulation.....100 mV peak-to-peak, max ripple at 0 to 10 kHz
 Input Current.....100 mA max with no external load
 Output FormatAbsolute- Parallel Outputs
 Output TypePush-Pull- 20 mA max per channel
 CodeGray Code, Natural Binary Code, Excess Gray Code
 Max Frequency.....50 kHz (LSB)
 Rise Time.....Less than 1 microsecond
 Resolution.....Up to 12 bit
 Accuracy.....±1/2 LSB

Control

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

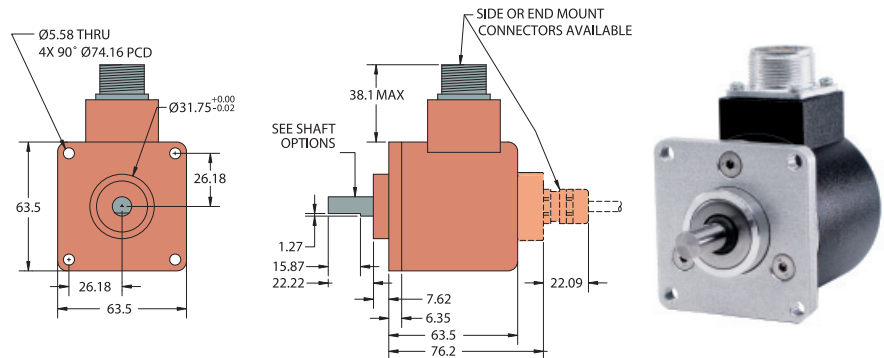
Mechanical

Max Shaft Speed.....6000 RPM continuous
 Shaft Size0.250", 0.375", 6 mm, 8 mm, 10mm, 12mm
 Radial Shaft Load.....15 Kg max
 Axial Shaft Load.....20 Kg max
 Starting Torque7.061 x 10⁻³ Nm typical for no seal
 1.412 x 10⁻² Nm with IP64 shaft seal
 Electrical ConnGland with 2M cable (braid shield, 30 AWG conductors), 10-, 16-, and 19-pin
 Housing.....Aluminium
 Mounting.....Flange or servo type
 Weight.....630 grams typical

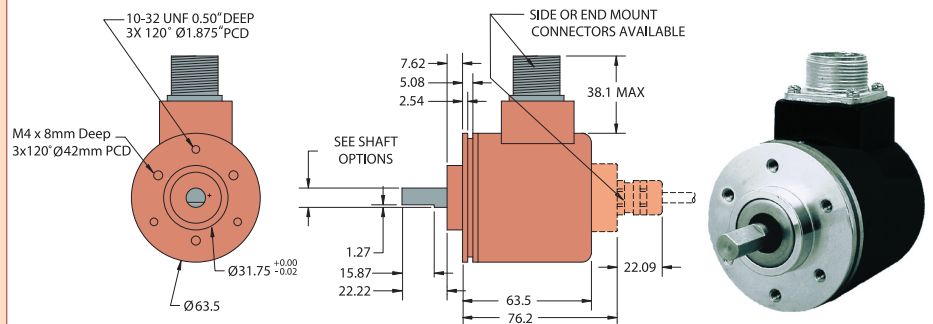
Environmental

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, or IP65 optional

Model 925 Flange Mount (F1)



Model 925 Servo Mount (S1)



Wiring Table

	19-PIN KPT02E14-49P	10-PIN* MS	Gland Cable or Mating Conn.	Wire Color
Function	Pin	Pin		
S1 MSB	A	A		Brown
S2	B	B		White
S3	C	C		Green
S4	D	D		Orange
S5	E	E		Blue
S6	F	F		Violet
S7	G	G		Grey
S8 LSB 8-bit	H	H		Pink
S9 LSB 9-bit	J	—		Red/Green
S10 LSB 10-bit	K	—		Red/Yellow
S11 LSB 11-bit	L	—		Turquoise
S12 LSB 12-bit	M	—		Yellow
Direction***	R	—		Red/Blue
Case Ground	S	—		Drain/Screen
0V Common	T	J		Black
Special**	U	—		White/Red
+Vcc	V	I		Red

NOTES:

* Only available with 8-bit resolution encoders
 ** 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.