

Series 925 8-14 bit Absolute Encoder



Design Features

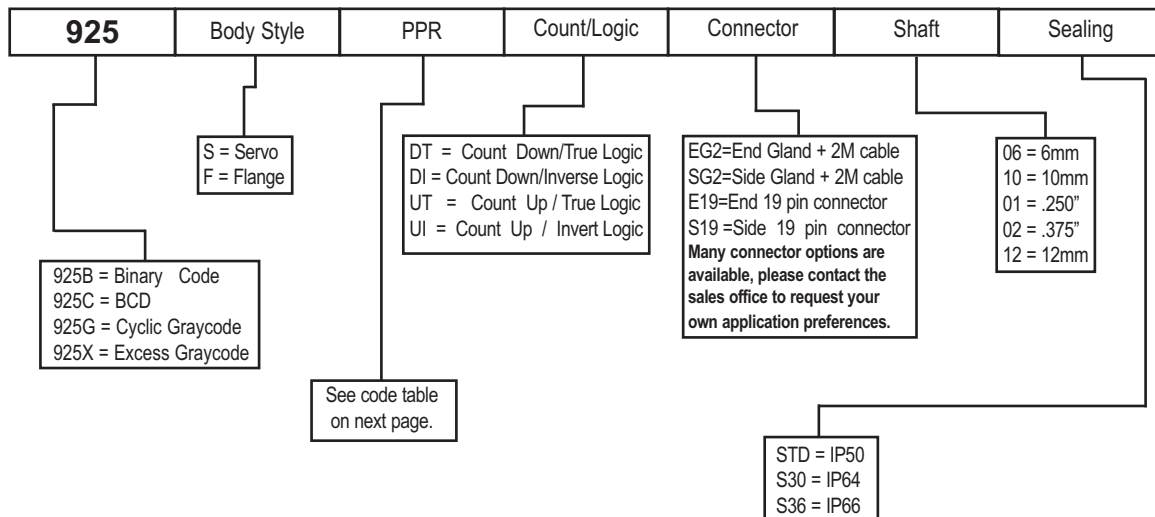
The 925 provides an absolute version of the industry standard size 25 encoder, and uses a well-proven opto-asic differential reader to generate the absolute codes. With resolution to 14* bits, in a variety of codes, the encoder has a Push-Pull output circuit, and will operate through the range of 4.75V to 26V.

Specifications

Input Voltage range	4.75V/26V	Starting torque	0.002 Nm (0.02 with seal)
Regulation, for 5V operation	5%, with 2% maximum ripple	Radial loading	80 N operating
Current consumption	100mA. No external load	Axial loading	60 N operating
Output circuits, per channel	20mA (max) Push-Pull	Moment of inertia	100g/cm
Frequency response (LSB)	50 KHz	Acceleration	10 ⁵ radians/sec ²
Output codes	Cyclic or XS Graycode, Binary, or BCD	Weight	0.45 kg
Repeatability	within 0.01°	Housing	Aluminum w/Mazak cover
Error limit/accuracy	0.04°	Operating temperature	0°C to +70°C
Rise time	Less than 1 microsecond	Storage temperature	-20°C to +85°C
Resolution (maximum)	Up to 14* bits (bin/grey), 15 bits BCD	Humidity	98% RHNC
LED life	100,000 hrs typical	Vibration	10 G's @ 58 to 500 Hz
Pulses per revolution	See Ordering Information	Shock	50 G's for 11 mSec
Max shaft speed	6,000 rpm continuous	Protection	IP50 standard
Shaft sizes and types	See ordering information		IP 64 with seal (S30)
Shaft tolerance	g6 sliding fit for H7		IP66 w/ seal (S36)
Bearings	Double Sealed ABEC 3		

*12 bits at the time of publication, 14 bits due for a late 2003 release.

Ordering Information



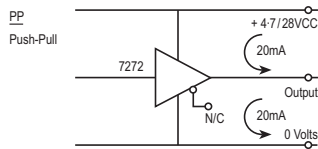
Code Tables



CODE TABLE

925B = Binary	925C = BCD	925G = Gray	925X = XS Gray
			0180
0250			0250
0256	0256	0256	
0360	0360		0360
0500	0500		0500
0512	0512	0512	
0720	0720		0720
1000	1000		1000
1024	1024	1024	
1440	1440		1440
2000	2000		2000
2048	2048	2048	
2880	2880		2880
4000	4000		4000
4096	4096	4096	
8192	8192	8192	
16384		16384	

Output Circuits

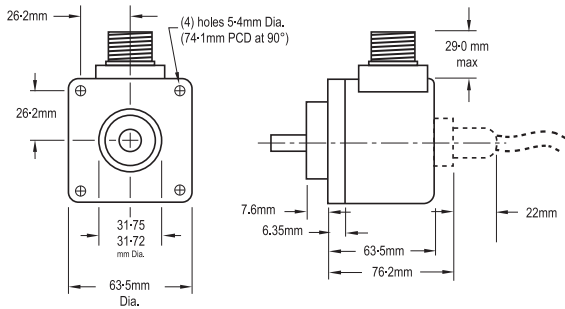


Termination

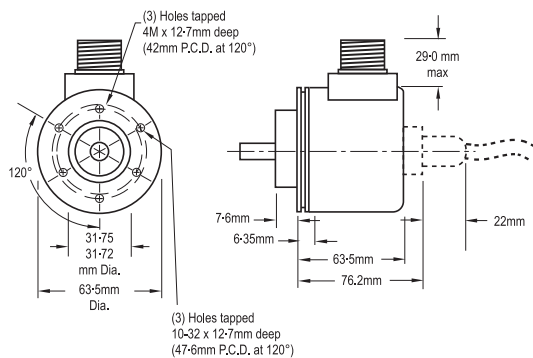
Function	Pin No (19 Pin)	25 Core Cable Colours
S1 MSB	A	Brown
S2	B	White
S3	C	Green
S4	D	Orange
S5	E	Blue
S6	F	Violet
S7	G	Grey
S8 - 8 bit LSB	H	Pink
S9 - 9 bit LSB	J	Red/Green
S10 - 10 Bit LSB	K	Red/Yellow
S11 - 11 Bit LSB	L	Turquoise
S12 - 12 Bit LSB	M	Yellow
S13 - 13 Bit LSB	N	Red/Brown
S14 - 14 Bit LSB	P	Yellow/Blue
CW/CCW	R	Red/Blue
Case Ground	S	Drain/Screen
0V Common	T	Black
*Special	U	White/Red
5/24VCC	V	Red

*Where fitted

Dimensions



Flange Mount



Servo Mount

Many connector options and pin-outs are available, please contact the sales office to request your own application preferences.

