

Series 755

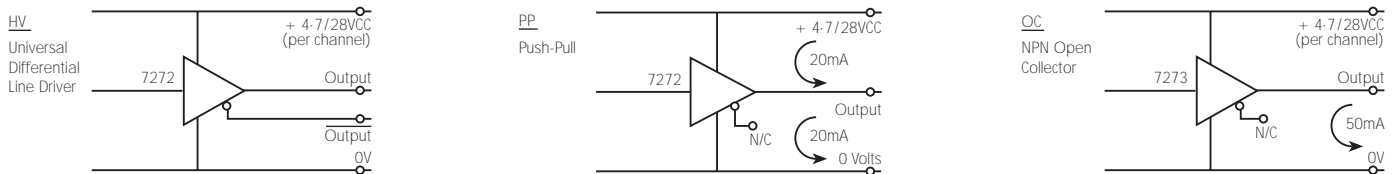
Design Features

The Series 755 encoder is ideal for applications requiring a miniature, high precision, low cost encoder. One version has a flexible mounting and a blind hollow shaft, with bore sizes from 4 mm to 10 mm, for mounting directly onto motors. The second type has a normal shaft and servo flange. A high temperature option is available for PPRs existing between 0100 and 1024, for which a small surcharge will be made. Further resolution options are now available to 30,000 PPR.

Specifications

Input voltage range	5/24V (see output circuits)	Starting torque	0.001 Nm (normal or hollow shaft)
Regulation, for 5V operation	5%, with 2% maximum ripple	Radial loading (normal shaft)	8N operating
Current consumption	80 mA typical	Axial loading (normal shaft)	4.5N operating
Output circuits	See ordering Information	Radial loading (hollow shaft)	Being the mass of the encoder
Frequency response	125 KHz standard, 200 KHz special	Axial loading (hollow shaft)	Being the mass of the encoder
Symmetry	180° electrical, ±5% (±9°e)	Host shaft max. TIR	0.15 mm
Quadrature phasing	90° electrical, ±10% (±9°e)	Host shaft max. endplay	±0.70 mm
Minimum edge separation	72° electrical	Moment of inertia	20 g/cm
Reference marker pulse	Gated (A•B•Z=F) [A•Z=F optional]	Acceleration	10 ⁵ radians/sec ²
Rise time	Less than 1 microsecond	Weight	0.2 Kg
Accuracy (cycle to cycle)	±0.017° or 1 Arc/Min	Housing	Aluminium with protective finish
LED life	100,000 hrs typical	Operating temperature	0°C to +70°C
Pulses per revolution	See ordering information	High Temperature option	0100 to 1024 PPR only 0°C to +100°C
Max shaft speed	7,500 rpm continuous	Storage temperature	-25°C to +85°C
Shaft sizes and types	See ordering information	Humidity	98% RHNC
Shaft tolerances	Hollow: H7, sliding fit for g6 Standard: g6, sliding fit for H7	Vibration	10 G's @ 58 to 500 Hz
Bearings	ABEC 3	Shock	50 G's for 11 mSec
		Protection	IP54

Output Circuits



For terminating information please see pages 34 & 35

Ordering Information

755	Range	Shaft	VCC / Output Circuit	Pulses per Revolution	
	1 = 0001 - 1000 PPR 2 = 1024 - 2000 PPR 3 = 2048 - 3000 PPR 4 = 3600 - 10000 PPR 5 = 10240 - 20000 PPR 6 = 20480 - 30000 PPR	1 = 0.250" hollow 2 = 0.375" hollow 3 = 4mm hollow 4 = 6mm hollow 5 = 10mm hollow 6 = 6mm shaft, 10mm long 7 = 0.250" shaft, 0.270" long 8 = 5mm shaft, 10mm long A = 8mm hollow B = 9mm hollow	HV = 5/24V RS422 Differential Driver PP = 5/24V Push/Pull OC = 5/24V NPN Open Collector	See page 46	Add "328" for slotted flex-mount Add "HTO" for High Temp option* *HTO: 0100 - 1024 PPR only

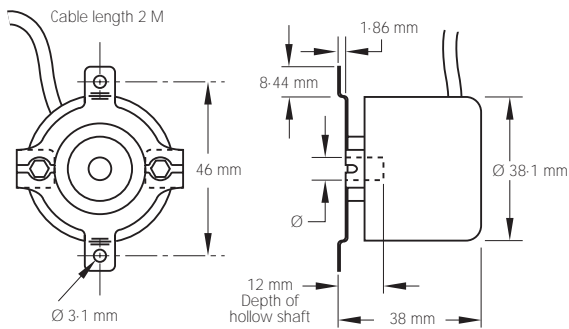


Price Guide

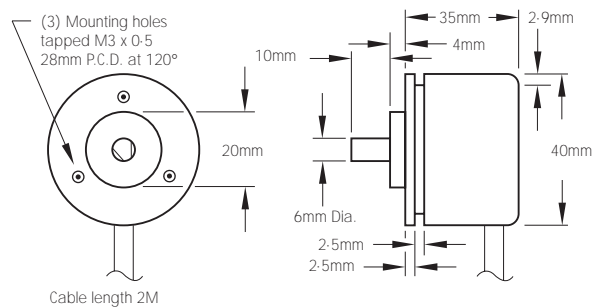
755/1	0001 – 1000 PPR	£110.00
755/2	1024 – 2000 PPR	£130.00
755/3	2048 – 3000 PPR	£150.00
755/4	3600 – 10000 PPR	£225.00
755/5	10240 – 20000 PPR	£300.00
755/6	20480 – 30000 PPR	£400.00
Mounting Flange	M - 1	£5.00
Parvex Mounting Flange	M - 9	£10.00
Square Flange	M - A	£5.00
High Temperature option surcharge	H T O	£10.00



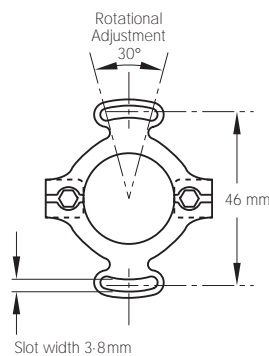
Dimensions



Hollow Shaft / Flexible Mount



Servo Mount



Optional Slotted Flex Mount 328