

Model 775 Slim Thru-Bore Encoder



Ø109.22mm

Features

- Thru-Bore Design For Easy Mounting
- Bore Options to 1.375"
- Incorporates Opto-ASIC Technology
- Resolutions to 4096 PPR
- 100°C Operating Temperature Available

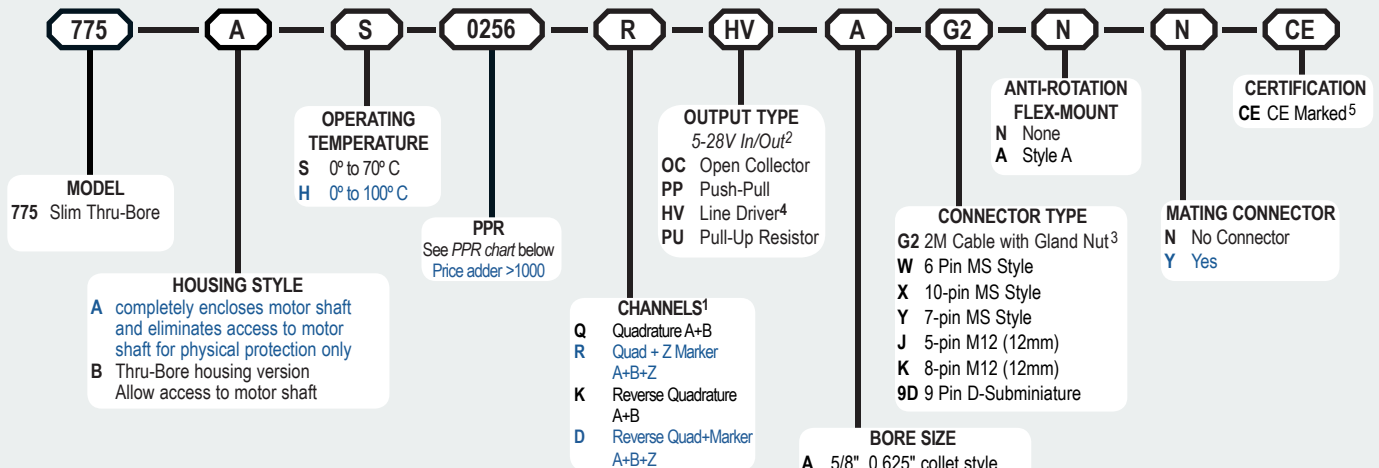
The sleek design of the Model 775 Thru-Bore Series makes form and function a successful reality. The slim profile and Thru-Bore design, makes installation easy by simply slipping the bore over motor shafts up to 1.375" in diameter. The advanced Opto-ASIC based electronics provide the superior noise immunity necessary in many industrial applications. With a variety of bore sizes, resolutions, and connector types, application possibilities are endless.

Common Applications

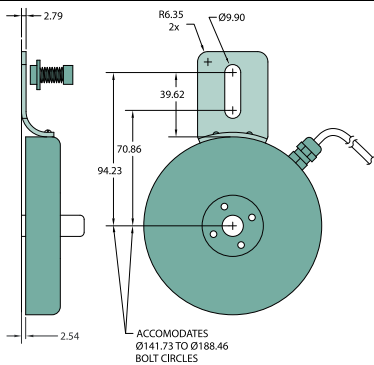
Motor Feedback, Velocity & Position Control, Food Processing, Robotics, Material Handling

Model 775 Ordering Guide

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



Model 775 Shown with Anti-Rotation flex-Mount



Model 775 PPR Options

0060	0100	0120	0240	0250	0256
0500	0512	1000	1024	2048	2500
4096					

Contact Customer Service for other disk resolutions; not all disk resolutions available with all output types

BORE SIZE

- A 5/8", 0.625" collet style
- B 3/4", 0.750" collet style
- C 7/8", 0.875" collet style
- D 1", 1.000" collet style
- O 1-1/8", 1.125" clamp style
- T 1-1/4", 1.250" clamp style
- V 1-3/8", 1.375" clamp style
- H 14 mm collet style
- I 19 mm collet style
- K 24 mm collet style
- M 25 mm clamp style
- L 28 mm clamp style
- Q 30 mm clamp style
- R 32 mm clamp style

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

NOTES:

- 1 Contact Customer Service for index/Marker gating options.
- 2 5 to 24 VCC max for high temperature option.
- 3 For non-standard cable lengths, Please contact the sales office.
- 4 Not available with 5-pin M12 or 6-pin MS connector. Available with 7-pin MS connector only without Index Z.
- 5 For 4096ppr - Please be aware that CE is not available if choosing High Temp option and over 2 Metre Cable Length.

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Model 775 Specifications

Electrical

Input Voltage.....4.75 to 28 VCC max for temperatures up to 70° C
 4.75 to 24 VCC for temperatures between 70° C to 100° C
 Input Current.....100 mA max with no output load
 Input Ripple100 mV peak-to-peak at 0 to 100 kHz
 Output FormatIncremental- Two square waves in quadrature with channel A leading B for clockwise shaft rotation, as viewed from the mounting face. See *Waveform Diagrams* below.
 Output TypesOpen Collector- 100 mA max per channel
 Pull-Up- 100 mA max per channel
 Push-Pull- 20 mA max per channel
 Line Driver- 20 mA max per channel (Meets RS 422 at 5 VCC supply)
 IndexOnce per revolution.
 0513 to 4096 PPR: Gated to output A
 0001 to 0512 PPR: Ungated
 See *Waveform Diagrams* below.
 Max Frequency.....200 kHz
 Noise Immunity.....Tested to BS EN61000-4-2; IEC801-3; BS EN61000-4-4; DDENV 50141; DDENV 50204; BS EN55022 (with European compliance option); BS EN61000-6-2; BS EN50081-2
 Quadrature67.5° electrical or better is typical, 54°
 Edge Separationelectrical minimum at temperatures > 99° C
 Rise Time.....Less than 1 microsecond

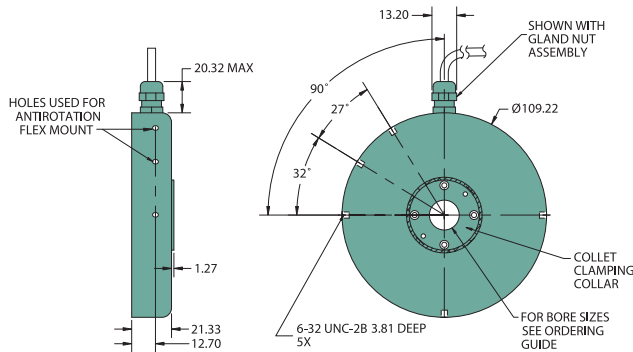
Mechanical

Max Shaft Speed.....6000 RPM. Higher shaft speeds may be achievable, contact Customer Service.
 Bore Size0.625", 0.750", 0.875", 1.000", 14 mm, 19 mm, 24 mm, 1.125", 1.250", 1.375", 25 mm, 28 mm, 30 mm, 32 mm
 Note: Bore sizes 1.125", 1.250", 1.375", 25 mm, 28 mm, 30 mm, 32 mm are clamp style.
 User Shaft Tolerances
 Radial Runout.....0.15mm
 Axial Endplay.....±0.70mm with appropriate flex mount
 Electrical ConnGland nut with 2M cable (foil and braid shield, 24 AWG conductors), 6-, 7-, or 10-pin MS Style, 5- or 8-pin M12 (12 mm), 9-pin D-subminiature
 Housing.....All metal construction
 Mounting.....Thru-Bore with collet clamp or single-screw clamp mount
 Weight.....450 grams with gland nut or D-sub connector option / 680 grams with MS connector options - Note: All weights typical -

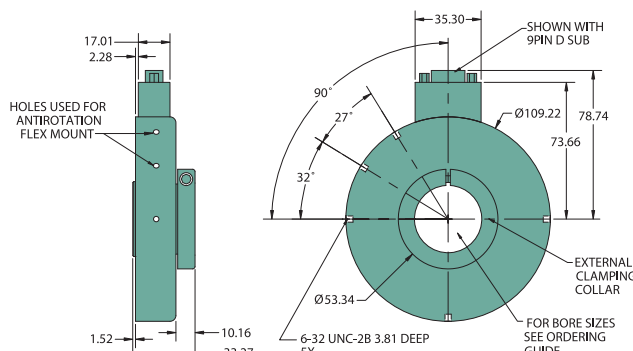
Environmental

Operating Temp.....0° to 70° C for standard models
 0° to 100° C for high temperature option
 Storage Temp.....-25° to 100° C
 Humidity.....98% RH non-condensing
 Vibration.....10 g @ 58 to 500 Hz
 Shock.....50 g @ 11 ms duration
 Sealing.....IP50

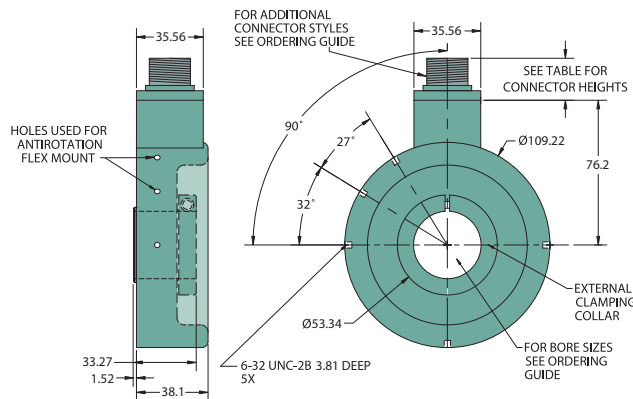
Model 775 Collet Clamp (A, B, C, D, H, I, K)



Model 775 Clamp Style (O, T, V, M, L, Q, R)



Model 775 Extended Housing (W, X, Y, J, K)

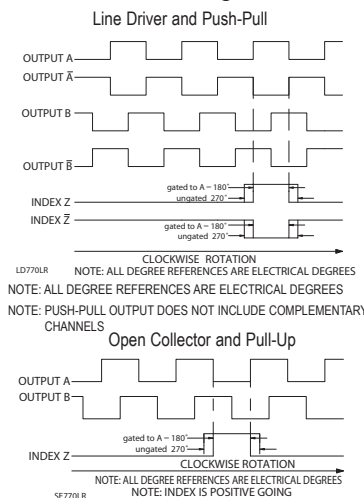


CONNECTOR TYPE	HEIGHT
6- or 7-PIN MS	17.00
10-PIN MS	22.86
5- or 8-PIN M12	12.70



All dimensions are in mm with a tolerance of ±0.254 unless otherwise specified.

Waveform Diagrams



Wiring Table

Function	Gland Cable†	5-pin M12**	8-pin M12**	8-pin M12**	7 Pin MS**	7 Pin MS**	10 Pin MS**	6 Pin MS**	9-Pin D-Sub
	Wire Color	PRC,PU	WLS	OC,PPU	HW	PU,OC,CP	HW	HW	
0 Volts	Black	3	7	7	F	F	F	F	A, F 9
+VCC	Red	1	2	2	D	D	D	D	B 1
A	White	4	1	1	A	A	A	A	D 2
A'	Brown	--	3	--	C	--	H	--	-- 3
B	Blue	2	4	4	B	B	B	B	E 4
B'	Violet	--	5	--	E	--	I	--	-- 5
Z	Orange	5	6	6	C	C	C	C	6
Z'	Yellow	--	8	--	--	J	--	--	7
Shield	Bare*	Case	Case	8	G	G	G	G	Case 8

*CE: Cable shield (bare wire) is connected to internal case.
 †Standard cable is 24 AWG conductors with foil and braid shield.
 **CE: Shield is connected to connector case unless otherwise specified.