

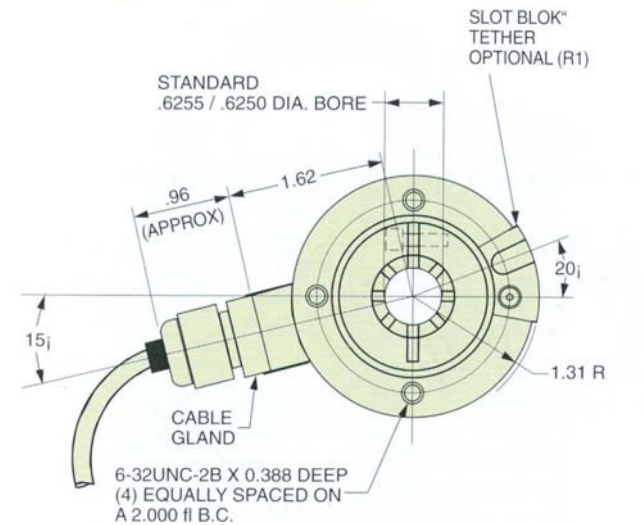
INCREMENTAL ENCODERS, HS25 RANGE



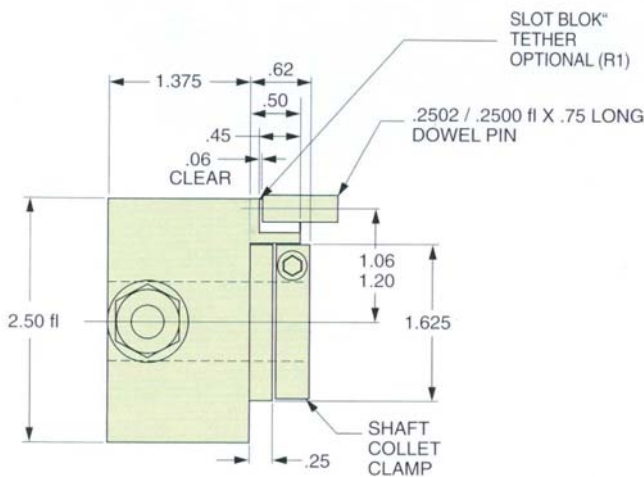
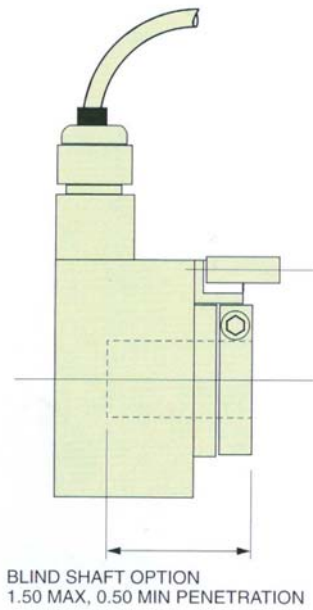
The HS25 combines the rugged, heavy duty features usually associated with shafted encoders into a hollow-shaft style. It's design includes dual bearings and shaft seal for NEMA 4, 13 and IP65 environmental ratings, a rugged metal housing, and a cable gland. This low-profile design, just 2" deep, is easily mounted on a shaft. Securing the encoder to the shaft is simple with a collet-style single screw clamp. The optional anti-rotation tether block maintains housing stability during operation. The HS25 is designed to accommodate shafts up to 3/4" in diameter. With optional insulating inserts, it can be mounted on smaller diameter shafts. Applications include motor feedback and vector control, paper converting and printing industries, robotic control, web process control along with many other applications



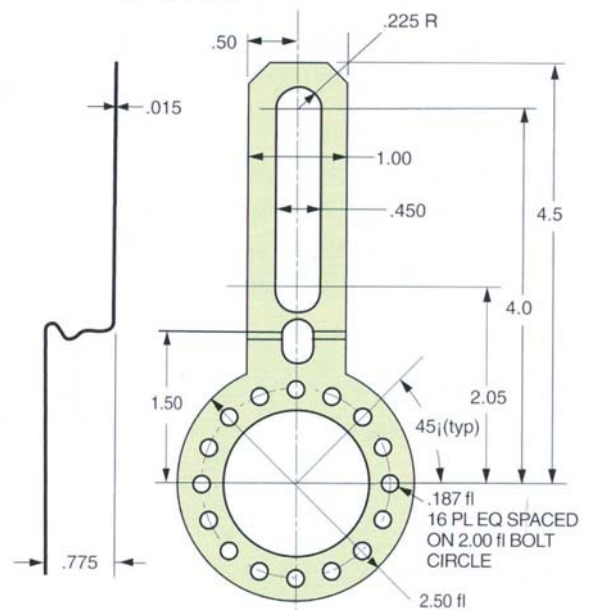
Thru Shaft Version



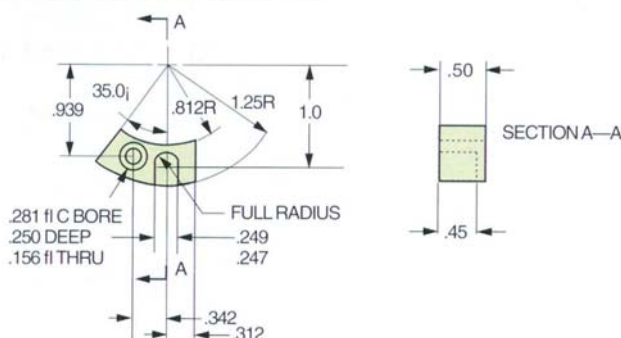
Blind Shaft Version



R2 Tether Arm



R1 Tether Block and Pin



TOLERANCES: .XX = ± 0.01 , .XXX = ± 0.005

INCREMENTAL ENCODERS, HS25 RANGE



SPECIFICATIONS

Shaft Bore: 0.750", 0.625", 0.500", dia 0.625" and under are Supplied with insulatin sleeves

Allowable Misalignment: 0.005: T.I.R. on mating shaft 0.75"

From shaft end

Bore Runout: 0.001" T.I.R.

Starting Torque at 25°C: Through shaft version (SS) = 7 in-oz (max); Blind shaft version (BS) = 4 in-oz (max)

Bearings: 52100 SAE high carbon steel

Shaft material: 6061-T6 aluminium alloy

Bearing Housing: Die cast aluminium with iridite finish

Cover: Die cast aluminium with iridite finish

Bearing Life: 7.5 x 10⁹ revs (25,000 hrs at 2500 RPM)

Maximum RPM: 6,000 RPM (see Frequency Response)

Moment of Inertia: 17 x 10⁻⁴ oz-in-sec²

Weight: 9 oz typical

Code: Incremental

Output Format: 2 channels in quadrature, 1/2 cycle index gated with negative B channel

Cycles per shaft Turn: up to 2048

Supply voltage: 5 to 24Vdc available

Current requirements: 100mA typical+output load,250mA (max)

Output Device:

4469:: Line Driver, 5-15Vdc, Vout = Vin

7272: Line Driver, 5 – 28Vdc, Vout = Vin

7272: Line Driver, 5 – 28Vdc, Vout = 5Vdc (special feature)

7273: Open Collector, accepts 5 – 28Vdc

Protection Level: Reverse, overvoltage and output short circuit

Frequency Response: 100kHz

Output Terminations: see Table 1

Note: Consult our factory for other electrical options

Enclosure rating: NEMA 4 & 13 (IP65) when ordered with shaft Seal and a cable gland

Temperature: Operating, 0° to 70°C; extended temperature Testing up to 105°C available; storage –25°C to 90°C unless extended temperature option called out

Shock: 50g's for 11msec duration

Vibration: 5 to 2000Hz @ 20 g's

Humidity: 98% RH non-condensing

OUTPUT FUNCTION – TABLE 1

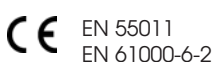
WIRE COLOR 22 AWG	CHANNELS DESIGNATED		
	ABZ	ABC	ABZC
YEL	A	A	A
BLUE	B	B	B
ORN	Z	-	Z
W-Yel	-	A/	A/
W-Blu	-	B/	B/
W-Orn	-	-	Z/
RED	+V (SUPPLY VOLTAGE)		
BLK	0V (CIRCUIT GROUND)		
GRN	CASE GROUND (CG)		
WHITE	SHIELD DRAIN (Shielded cable only)		

SCS18-M18 CONNECTOR on end of cable	
PIN	CHANNEL
A	A
B	B
C	Z
D	+V
E	-
F	0V
G	CG
H	A/
I	B/
J	Z/

ORDERING REFERENCE (Special features: consult us)

Type	Housing	Shaft bore	Tether	Shaft Seal	Cycles per Turn	Channels / Complements		Output IC	Termination
HS25	H S= Hollow shaft F = standard 25 = 2.5" Dia	75 = 0.750" 62 = 0.625" 50 = 0.50" 37 = 0.375"	R1 = Tether block and Pin R2= Tether arm Blank = none	SS = Dual shaft seals BS = Blind Shaft with single seal and cover	Max 2 048	A = single channel AB = Dual quad ABZ = Dual with index AZ = single with index	C = complementary output Blank = None	4469: multi-voltage line driver 100mA, 5 to 15Vdc 7272: multi-voltage line -driver 100mA, 5 to 24Vdc 7273: Open collector current sink of 80mA	SCS = Shielded, Jacketed cable with cable gland seal and cable length in inch (SCS18 = 18 inches) SCS18-M18 = SM18 connector on end of cable with length specified in inches (ex: SCS18-M18)
Ex: H25	F	62	R1	SS	1024	ABZ	C	4469	SCS18

Interpolation option available: x2, x4, x5, x10, x20 consult us



CENELEC EEX ia IIC T4



U.S. Standards Class I, Group C & D; Class II Group E, F & G



Canadian Standards Class 1 Zone 0, Group IIC