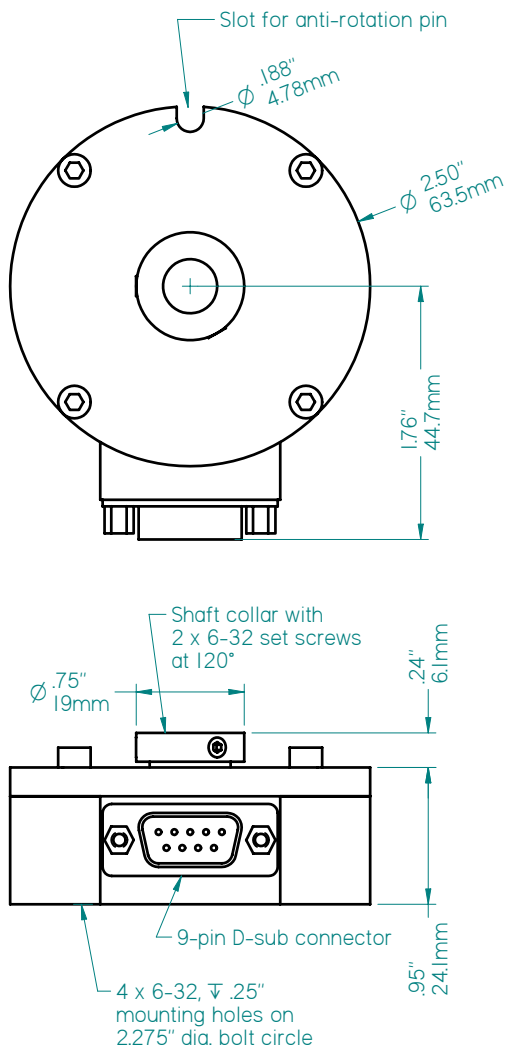


FEATURES

- Up to 3/8" or 10mm shaft bore diameter
- Up to 600 pulses per revolution
- Single, quadrature, and index outputs
- Direction indicator output option
- Anti-jitter feature option
- ESD and short circuit protection on most models
- 5 vdc, 8 to 30 vdc, and other supply voltages
- 9-pin D-Sub or 4-pin M12 connector
- Programmable model available - see Model HS25-P

DIMENSIONS

(shown with 3/8" shaft bore and 9-pin D-sub connector)



OVER 35 YEARS OF MATERIAL HANDLING AND INDUSTRIAL EXPERIENCE

HOTOCRAFT INC

602 E. North Street **630-365-7148**
 Elburn, IL 60119, USA Fax: 630-365-7149
www.photocraftencoders.com

SPECIFICATIONS

Mechanical

Shaft Bore: Any up to 3/8", 10mm diameter
Maximum Speed: 3,000 rpm
Shaft Loading:
 — Radial: 5.5 lbs. / 2.5 kg max.
 — Axial: 2.2 lbs. / 1 kg max.
A flexible mounting bracket is recommended.

Bearing Life: 42 x 1,000,000/rpm = hours
Materials:
 — Case: Aluminum, anodized
 — Shaft: 303 Stainless steel

Weight: 5.5 oz. (156 grams)

Electrical Connections

9-pin D-sub Pin No.	4-pin M12 Pin No.	Function	Wire Color
1	3	Common	Black
2	1	+vdc	Red
3	4	Output A	White
4	2	Output B	Green
5	-	Output Z	Brown*
6-9	-	not used	-

* Output Z is green if Output B is not used.

Installation Notes

1. Slide the HS25 onto the shaft and tighten set screws. Be sure to maintain clearance around the entire encoder body.
2. Use the anti-rotation screw, flexible mounting bracket, or other means to prevent the encoder from rotating.
3. Attach the cable leads to the control device (e.g. PLC) ensuring that the power supply meets specifications.
4. Attach the cable to the encoder.

Accessories

See our website or contact us for more information about Cables, Flexible Mounting Brackets, and the Anti-Rotation Pin

Electrical

Supply Voltages: (specify when ordering)
 — 5 ± 5% VDC
 — 12, 15, or 24 ± 10% VDC
 — 8-30 VDC

Current: 50 mA max (no load)

Pulse Rate: 0 - 30 kHz

Pulses per Revolution: 1 to 600 (specify when ordering)

Operating Temperature: 0° to 70° C

Output Circuit: (specify when ordering)
 — Push/Pull (combined sourcing/sinking)
 — Current sinking NPN transistor with built in pull-up resistor
 — NPN open collector (Vcc=30 vdc max)
 — Current sourcing PNP transistor

Output Current: 50ma max source/sink

Output Waveshape:
 Square wave outputs A and B are 50/50 duty cycle nominal. Output Z (index output) is approximately the width of one cycle on outputs A or B. A leads B by 90° for clockwise rotation when viewed from shaft collar end.
 — Pulse symmetry: 180°±30%
 — Pulse interval jitter: 30% max
 — Quadrature: 90°±30% max
 — Phase jitter: 30% max

Anti-jitter option: (single output models only)
 Increases the pulse hysteresis to 1/2 of a pulse width, eliminating the effects of mechanical vibration and the possible dither that results in false output pulses.

Direction Output option: (single output models only)
 Indicates direction of rotation: "high" for clockwise rotation; "low" for counter clockwise. Initially "low" when powered on.

MODEL NUMBER

HS25									
Model Number									
Shaft Bore: A = 5/16", B = 3/8", C = 1/4", .188 = 3/16", M6 = 6mm, M8 = 8mm, M10 = 10mm									
Output Type: leave blank for single output on A, Q = quadrature outputs on A and B									
Index Output: leave blank for no index, Z = index output									
Pulses Per Revolution: a number from 1 to 600									
Anti-jitter option: leave blank for no anti-jitter, AJ = anti-jitter option (single output models only)									
Direction option: leave blank for no direction, B = direction output (single output models only)									
Supply Voltage: 5 = 5vdc, 8-30 = 8 to 30 vdc, 12 = 12vdc, 15 = 15vdc, 24 = 24vdc									
Output Circuit: leave blank for current sinking, P = sourcing, C = open collector, NP = push/pull									
Connector: leave blank for 9-pin D-Sub, S3 = 4-pin M12 connector									
Modification Number: optional modification or special feature ID. Call or see our website.									
Accessories: leave blank for no accessories. Call or see our website for more information.									

Example: **HS25B-270AJB/8-30** - 3/8" shaft bore, single pulse output on A, 270 ppr, anti-jitter option, direction output option, 8-30 vdc, 9-pin D-Sub connector