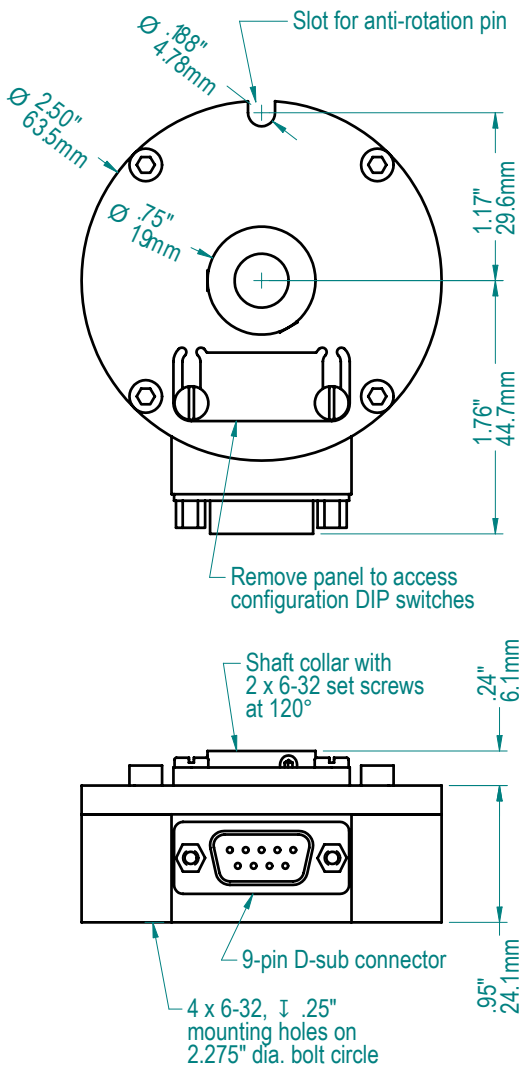


FEATURES

- Up to 3/8" or 10mm shaft bore diameter
- DIP switch selectable pulses per revolution
- Quadrature (A and B) pulse outputs
- CE and RoHS compliant available
- ESD and short circuit protection
- 5 vdc and 8 to 30 vdc supply voltages
- 9-pin D-Sub or 4-pin M12 connector
- Non-programmable models available - see HS25

DIMENSIONS

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



PO Box 25135 813-886-4000
Tampa FL 33622-5135, USA 800-237-0946
tco.com • photocraftencoders.com

SPECIFICATIONS**Mechanical****Shaft Bore:** Any up to 3/8", 10mm diameter**Maximum Speed:** 2,500 rpm**Shaft Loading:**

— Radial: 5.5 lbs. / 2.5 kg max.

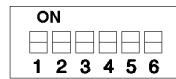
— Axial: 2.2 lbs. / 1 kg max.

*A flexible mounting bracket is required.***Bearing Life:** 42 x 1,000,000/rpm = hours*If the encoder is rigidly attached to the machine frame, the bearings **will** fail.***Materials:**

— Case: Aluminum, anodized

— Shaft: 303 Stainless steel

— Switch cover: ABS plastic

Weight: 5.5 oz. (156 grams)**Enclosure Rating:** IP50**Configuration Switches****Switch definitions:**

■ On (up)

□ Off (down)

Pulses per Revolution Selection

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72
88	92	96	100	104	108	112	116	120	124	128	132	136	140	144	148	152	156
160	164	168	172	176	180	184	188	192	196	200	204	208	212	216	220	224	228
232	236	240	244	248	252	256											

MODEL NUMBER

HS25	P	256Q					
Model Number	Programmable model	name of factory configured program.	Supply Voltage: 5=5vdc, 8-30=8 to 30 vdc	Output Circuit: leave blank for push/pull C=NPN open collector, DH=7272 line driver DL=RS422 line driver	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-P256Q/8-30 - 3/8" shaft bore, programmable model factory configured with the 256Q program, 8-30 vdc, push/pull output, 9-pin D-Sub connector

Electrical**Supply Voltages:** (specify when ordering)

5 ± 5% VDC or 8-30 VDC

Current: 50 mA max (no load)**Pulse Rate:** 0 - 30 kHz**Operating Temperature:** 0° to 70° C**Output Circuit:** (specify when ordering)

Output voltage level is approximately the same as the input voltage level.

Single Ended:

— 7273 open collector (30vdc/50mA max)

— 7272 Push/Pull (50mA max source/sink)

Differential Line Driver:

— 7272 line driver (output same as input volts)

— RS422 line driver (regulated 5vdc output)

Output Waveshape:

Square wave outputs A and B are 50/50 duty cycle nominal. 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

Electrical Connections**Single Ended Outputs:**

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
5-9		not used	-

Differential Line Driver Outputs:

9-pin D-sub Pin No.	Function	Wire Color
1	Common	Black
2	+vdc	Red
3	Output +A	White
4	Output +B	Green
6	Output -A	Blue
7	Output -B	Brown
5, 8, 9	not used	-