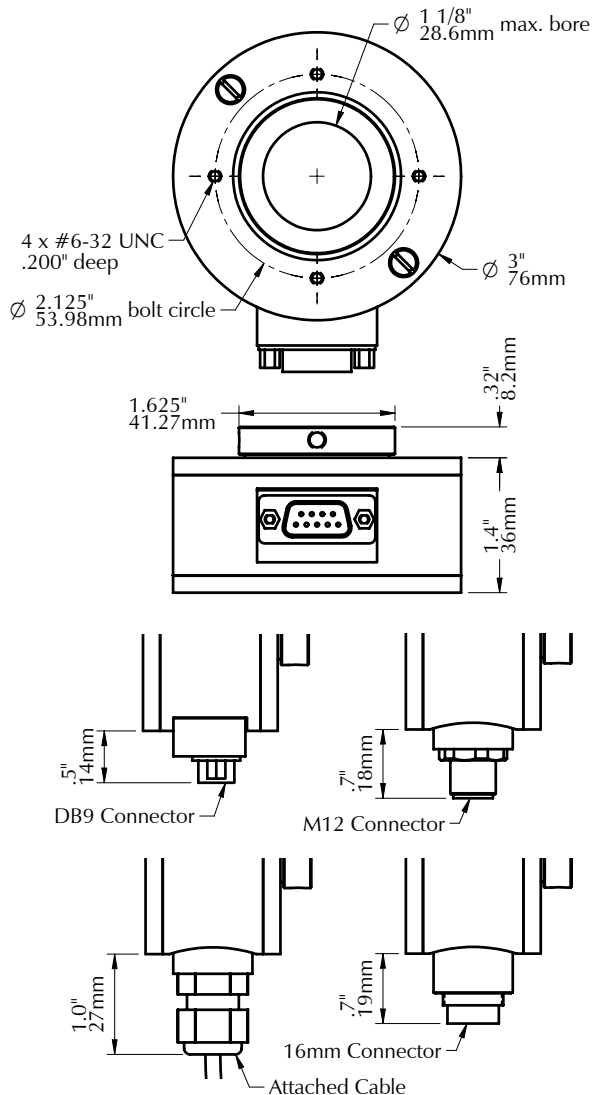


FEATURES

- Up to 1-1/8" or 28.6mm shaft bore diameter
- Heavy Duty bearings
- Unbreakable code disk
- Size 30 housing
- Short circuit and ESD protected
- Up to 1200 pulses per revolution
- Attached cable, or DB9, 16mm or M12 connector
- IP65 protection available - see Model HS31
- Programmable model available - see Model HS30-P

DIMENSIONS

(shown with DB9 connector, 1-1/8" / 28.6mm shaft bore)



**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 1-1/8" / 28.6mm**Maximum Speed:** 6,000 rpm**Shaft Loading:**

— Radial: 30 lbs. / 13.6 kg

— Axial: 20 lbs. / 9.1 kg

*A flexible mounting bracket is recommended.***Bearing Life:** 44 x 1,000,000/rpm = hours**Materials:**

— Case: Aluminum, anodized

— Shaft: Aluminum

Weight: 10.5 - 12.5 oz. (298 - 355 grams)**Enclosure rating:** IP50**Electrical Connections****Single Ended Outputs:**

Function	Wire Color	Optional Connector
Common	Black	DB9 1 16mm 3 M12 3
Supply voltage	Red	2 2 1
Output A	White	3 4 4
Output B	Green	4 5 2
Output Z	Brown	5 3 -
not used	-	6-9 6 -

Differential Line Driver Outputs:

Function	Wire Color	Optional Connector
Common	Black	DB9 1 16mm 5
Supply voltage	Red	2 4
Output +A	White	3 1
Output +B	Green	4 2
Output +Z	Yellow	5 3
Output -A	Blue or Green	6 6
Output -B	Brown	7 7
Output -Z	Orange	8 8
not used	-	9 -

Connectors:

DB9: D-Sub 9-pin.

16mm: Amphenol T3402000 (6-pin) or

T3506000 (8-pin) or equivalent.

M12: 4-pin Turck FS4.4/18.25 or equivalent.

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

5 VDC or 8-30 VDC

Current: 50 mA max (no load)

100 mA max (line driver)

Pulse Rate: 0 - 30 kHz**Pulses per Revolution:** (specify when ordering)

1 to 1200

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

(30 VDC max, 50 mA max)

— 7272 Push-Pull

(50 mA max source or sink)

Differential Line Driver:

— 7272 differential line driver

(also with optional 5vdc output level)

Output Wavehape:

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. Output A leads B by 90° for clockwise rotation viewed from shaft collar end.

— Pulse symmetry: 180° ± 30%

— Pulse interval jitter: 30% max

— Quadrature: 90° ± 30% max

— Phase jitter: 30% max

Anti-jitter: (single output models only)

Increases the pulse hysteresis to 1/2 of a pulse width, eliminating the effects of mechanical vibration and possible false output pulses. For example a 10 pulse per revolution output has 18° hysteresis (i.e. 360° ÷ 10 × 1/2).

Accessories

See our website or contact us for more information about Cables, Mounting Brackets and other accessories.

MODEL NUMBER

HS30	Model Number	Shaft Bore: 1 = 1", .75 = 3/4", .875 = 7/8", M25 = 25mm, others are available	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 1200 <i>A one-time charge may apply for non-stock values.</i>	Anti-jitter option: leave blank for no anti-jitter, AJ = anti-jitter option (single output models only)	Supply Voltage: 5 or 8-30	Output Circuit: leave blank for 7272 Push/Pull, C = 7273 open collector, D = 7272 line driver, DL = 7272 line driver with 5vdc output level	Cable/Connector: leave blank for attached 10-ft. / 3-meter cable (other lengths are available) S = 16mm, S1 = DB9, S3 = 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: HS301QZ-1024/8-30DS1 - 1" shaft bore, quadrature and index outputs, 1024 ppr, 8-30 vdc, 7272 differential line driver, DB9 connector