



Built on the same rugged design as the incremental model, the HS35 Absolute Encoder is available with various output options including Gray Code and Natural Binary. Designed with a cast aluminum housing, a sealed connector and shaft seals, it carries an IP65 environmental rating. With the optional insulating inserts, it can be mounted on smaller diameter shafts. It is designed for either a through shaft mounting or blind shaft mounting with a closed cover to maintain its environmental rating.

The H25 Incremental Encoder is available with the following certification:

EN 55011 and EN 61000-6-2

Electrical Specifications

Code: 12 or 13 bits NB or GC
Counts Per Shaft Turn: 4096 or 8192 (with S3 option only)
Count Transition Accuracy: $\pm 1/2$ bit maximum
Supply Voltage: 5–28 VDC
Current Requirements: 120 mA typical
Output Formats: **Parallel:** Gray Code, Natural Binary
Voltage/Output: (see note 2)
 28V/V: Line Driver, 5–28 VDC in, $V_{out} = V_{in}$
 28V/5: Line Driver, 5–28 VDC in, $V_{out} = 5$ VDC
 28V/OC: Open Collector, 5–28 VDC in, OC_{out}
 SSI: 5–28 VDC in/5 V_{out} (consult factory for more information)
Protection Level: Reverse, overvoltage and output short circuit protection
Frequency Response: 100kHz (1200 RPM for 12-bits)
Output Termination Pinouts: see tables, back page

Mechanical & Environmental Specs

Shaft Bore: 1.000, 0.875, 0.750, 0.625, 0.500. Diameters under 0.875 are supplied with insulated sleeves.
Allowable Misalignment: 0.005" T.I.R. on mating shaft 0.75" from shaft end
Bore Runout: 0.001 T.I.R. maximum
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: 416 Stainless Steel
Bearing Housing: Die cast aluminum with protective finish
Cover: Die cast aluminum with protective finish
Bearing Life: 7.5 X 10⁹ revs (50,000 hours @ 2500 RPM)
Maximum RPM: 6,000 mechanical (see frequency response, above)
Moment of Inertia: 0.019 oz-in-sec²
Weight: 18oz typical

Connector

MS3112E14-19P, 19-pin connector on encoder body, mates to MS3116J14-19S (or equivalent)

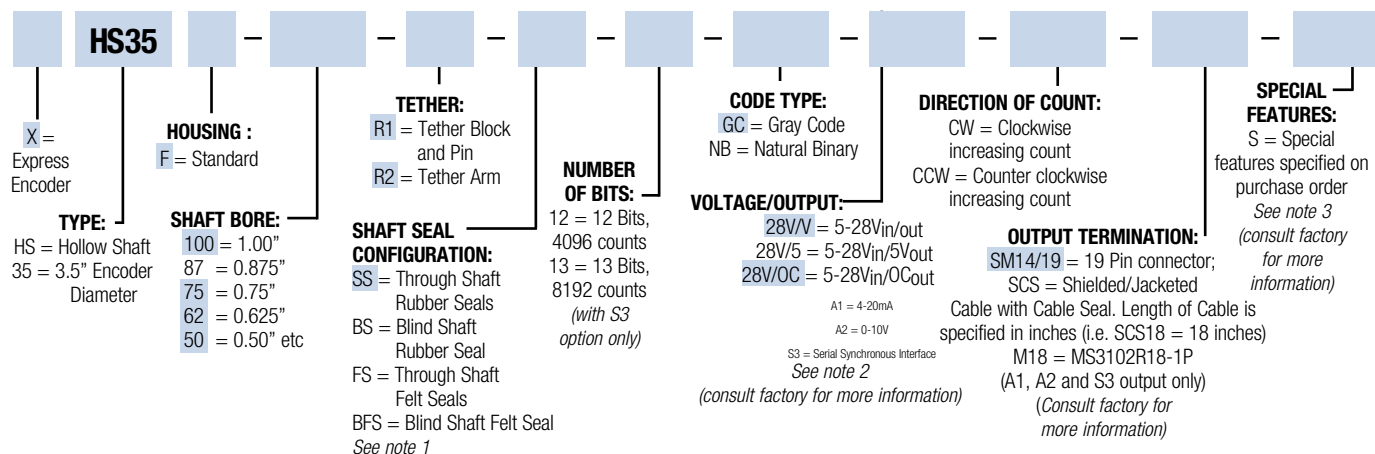
NOTES & TABLES: All notes and tables referred to in the text can be found on the back of this page.

HS35 Absolute Encoder Ordering Options

FOR ASSISTANCE CALL 800-350-2727

Use this diagram, working from left to right to construct your model number (example: HS35F-100-R1-SS-12GC-28V/V-CW-SM14/19).

All notes and tables referred to can be found on the back of this page.



EXPRESS ENCODERS: Items highlighted with are standard Express Encoders and ship in one to three days.

BEI SENSORS

Tel: 805-968-0782 / 800-350-2727 | Fax: 805-968-3154 / 800-960-2726 | 7230 Hollister Ave., Goleta, CA 93117-2807
www.beisensors.com