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Data Sheet

August 15, 2026

DYNAPAR

Dynapar H5820480101X019 Shafted Encoder

Dynapar H5820480101X019 Series H58 Incremental Shaft Encoder Queue model H5820480101X019 isaDynapar Series H58 58 mm incremental shaft encoder. H582048 in the part marks 2048 PPR (greater than 1024 PPR glass-disk class). OEM H58 datasheet 701880-0002 rates 1 to 2540 PPR, quadrature AB with optional Z, A leads BCCW from shaft end, phasing 90 plus or minus 22.5 deg electrical, symmetry 180 plus or minus 18 deg, index 180 plus or minus 18 deg gated with Blow, rise/fall less than 1 us into 1000 pF, 5 to 26 VDC at 80 mA max excluding loads, 7272 push-pull or differential 40 mA, 4469 differential 100 mA, 100 kHz min (index 75 kHz min extended temp), EN61326-1, reverse-polarity and short-circuit protection. Mechanical: 6 mm or 10 mm shaft, loading at 6 mm from face 178 N radial/axial for resolutions greater than 1024 PPR, 5,000 RPM max above 1024 PPR (10,000 RPM at or below 1024 PPR), starting torque 0.007 N-m unsealed / 0.014 N-m sealed at 25 C, inertia 21.2 g-cm², aluminum housing, stainless shaft, glass disc, 283 g max. Environment: 0 to plus 70 C standard (0 to plus 85 C extended), store minus 40 to plus 90 C, 50 G 11 ms, 5 to 2000 Hz at 20 G, 98 percent RH, NEMA12/IP54 or NEMA4/IP66 with shaft seal and M12 or watertight cable. Accuracy greater than 1024 PPR glass: plus or minus 2.5 arc-min worst-case edge to edge. Queue model H5820480101X019 isaDynapar Series H58 58 mm incremental



MODEL Dynapar H5820480101X019	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU H5820480101X019	LISTING https://aumictechlabs.com/products/h5820480101x019-3/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Dynapar H5820480101X019 is an industrial-duty, optical, incremental, shafted encoder designed for precise rotary position feedback in automation systems, robotics, and motor control applications. Its rugged construction and long-life bearings make it suitable for use in harsh industrial environments. This encoder offers a standard 58mm mounting size, providing a compact solution for equipment with limited space while meeting requirements. It features bidirectional operation with two channels (A, B) and an optional index (Z) with complementary outputs, delivering quadrature phasing of $90^\circ \pm 22.5^\circ$ electrical. The H5820480101X019 supports resolutions from 1 to 2540 pulses per revolution (PPR), with specific accuracy depending on whether a metal or glass disk is used. It can handle shaft speeds up to 10,000 RPM for resolutions up to 1024 PPR and 5,000 RPM for resolutions above 1024 PPR. The encoder operates with an input power range of 5 to 26 VDC and provides various output options, including differential line driver outputs. It is built to withstand shock and vibration, with an enclosure rating of NEMA12/IP54, ensuring reliable performance in demanding conditions.

Technical Specifications

General Product Type: Shafted Encoder **Series:** H58 **Feedback Type:** Incremental **Technology:** Optical **Mounting Configuration:** Industry Standard 58mm Mounting **Manufacturer:** Dynapar

Resolutions and Accuracy Resolution: 1 to 2540 Pulses Per Revolution (PPR) Accuracy (Worst case any edge to any other edge): * ≤ 1024 PPR (metal disk): ± 7.5 arc-min * > 1024 PPR (glass disk): ± 2.5 arc-min

Electrical Specifications Input Power: 5 to 26 VDC at 80 mA maximum (excluding output loads) Output Type: Two channel quadrature (AB) with optional Index (Z) and complementary outputs. Output Signal Format: Squarewave with specified rise and fall times. Output Options: Push-Pull, Differential Line Driver (DLD 7272, DLD 4469) Frequency Response: 100 kHz minimum (for index) Electrical Immunity: Reverse polarity and short-circuit protection. Noise Immunity: Tested to EN61326-1.

Mechanical Specifications Shaft Diameter: 6 mm, 10 mm Shaft Material: Stainless Steel Housing and Cover Material: Aluminum Disc Material: Glass Weight: Approximately 283 g (10 oz) maximum Enclosure Rating: NEMA12/IP54 (dirt tight) IP66 also listed for H58 series Shaft Loading (at 6 mm from encoder face): * Resolutions ≤ 1024 PPR: 356 N radial, 356 N axial * Resolutions > 1024 PPR: 178 N radial, 178 N axial Starting Torque (max at 25 °C): * Without shaft seal: 0.007 N-m * With shaft seal: 0.014 N-m Moment of Inertia: 21.2 g-cm²

Performance Specifications Maximum Shaft Speed: * Resolutions ≤ 1024 PPR: 10,000 RPM * Resolutions > 1024 PPR: 5,000 RPM Quadrature Phasing: $90^\circ \pm 22.5^\circ$ electrical Symmetry: $180^\circ \pm 18^\circ$ electrical Index Pulse: $180^\circ \pm 18^\circ$ electrical (gated with B low) Phase Sense: A leads B for Counter-Clockwise (CCW) shaft rotation.

Environmental Specifications Operating Temperature Range: * Standard: 0 to +70 °C * Extended: 0 to +85 °C Storage Temperature: -40 to +90 °C Shock Resistance: 50 G's for 11 milliseconds duration Vibration Resistance: 5 to 2000 Hz at 20 G's Humidity: Up to 98% (non-condensing) Interfaces and Connectivity Termination Options: MS Connector, M12 Connector, M23 Connector, Cable Exit Specific Connector Configurations: 7-pin MS connector, 10-pin MS connector, 12-pin MS connector, 5-pin M12 connector, 8-pin M12 connector. Cable Assemblies: Available with MS Connectors (e.g., 7-pin MS, Cable Assy for Single Ended w/Index Outputs) Part Number Configuration Examples Model: H5820480101X019 signifies:

- * H58 Series
- * Bidirectional with Index (Channels A, B, and Z)
- * 2048 Pulses Per Revolution (PPR)
- * Electrical Output: 5-26V In, 5-26V Differential Line Driver Out (7272)
- * Shaft: 10 mm Diameter
- Shaft * Shaft Seal: No Shaft Seal

Why Choose Aumictech for Dynapar H5820480101X019? At

Aumictech, we specialize in supplying industrial automation components. Whether you require precise rotary

H5820480101X019 Characteristics / Specifications

PARAMETER	VALUE
Model	H5820480101X019
Instrument Type	incremental shaft encoder
Family	Dynapar Series H58 58 mm
Resolution	2048 PPR (H582048 code)
Accuracy Glass	plus or minus 2.5 arc-min worst-case any edge to any other edge (greater than 1024 PPR glass)
Format	two-channel quadrature AB with optional indexZand complements
Phase Sense	A leadsBfor CCW rotation viewed from shaft end
Quadrature Phasing	90 deg plus or minus 22.5 deg electrical
Symmetry	180 deg plus or minus 18 deg electrical
Index	180 deg plus or minus 18 deg electrical, gated withBlow
Waveforms	squarewave, rise/fall less than 1 us into 1000 pF
Input Power	5 to 26 VDC at 80 mA max, not including output loads
Push Pull	7272, 40 mA sink or source
Line Driver	7272 differential 40 mA; 4469 differential 100 mA
Frequency Response	100 kHz min (index 75 kHz min extended temperature)
Shaft Sizes	6 mm or 10 mm
Shaft Loading	178 N radial and axial at 6 mm from face (resolutions greater than 1024 PPR)
Shaft Speed	5,000 RPM max (resolutions greater than 1024 PPR)
Starting Torque	0.007 N-m without seal; 0.014 N-m with shaft seal, at 25 C
Inertia	21.2 g-cm ²
Mass	283 g (10 oz) maximum
Housing	aluminum cover, stainless steel shaft, glass disc
Operating Temperature	0 to plus 70 C standard; 0 to plus 85 C extended
Storage Temperature	minus 40 to plus 90 C

PARAMETER	VALUE
Shock	50 G for 11 ms
Vibration	5 to 2000 Hz at 20 G
Humidity	up to 98 percent non-condensing
Enclosure	NEMA12/IP54; NEMA4/IP66 with shaft seal and M12 or watertight cable
Noise Immunity	tested to EN61326-1
Manufacturer	Dynapar (Danaher)
Literature	Dynapar Series H58 datasheet 701880-0002
Form Factor	58 mm European standard encoder
System Role	incremental motion feedback

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 40 to plus 90 C
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Noise Immunity	tested to EN61326-1
Manufacturer	Dynapar (Danaher)
Literature	Dynapar Series H58 datasheet 701880-0002
Form Factor	58 mm European standard encoder
System Role	incremental motion feedback Notes From Dynapar H58 datasheet 701880-0002 (2048 PPR glass class, 5 to 26 VDC 80 mA, 100 kHz, 178 N / 5000 RPM above 1024 PPR, 283 g, IP54/IP66). Exact output/connector digits in H5820480101X019 beyond 2048 PPR belong on the H58 configurator.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Notes

From Dynapar H58 datasheet 701880-0002 (2048 PPR glass class, 5 to 26 VDC 80 mA, 100 kHz, 178 N / 5000 RPM above 1024 PPR, 283 g, IP54/IP66). Exact output/connector digits in H5820480101X019 beyond 2048 PPR belong on the H58 configurator.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.