



This product has been discontinued.
Please contact Dynapar for assistance.
1-800-873-8731
www.dynapar.com

- For motor or shaft assembly mounting
- Up to 5000 PPR with optional marker
- Coupling & flange provide thermal and electrical isolation for the encoder
- Couplings are field replaceable

Compumotor Equivalent Model:
For Size 42 Stepper Motor: 526C-1000-2B05

The Series 526 is designed for rugged industrial and commercial applications. The integral shaft coupling and mounting flange allow the user to install the 526 on the end of a motor or shaft assembly without the addition of a bracket or coupling. A high impact fiber reinforced integral housing provides thermal and electrical isolation for the encoder. The coupling includes an insulator at the encoder for equal isolation through the shaft. This has made the Series 526 encoder the preferred encoder by many Dynapar customers.

Optional differential line driver electrical outputs allow for longer cable runs (hundreds of feet) and higher electrical noise immunity.

Typical Applications

- Servo and stepper motor mounting
- Machine tools
- Position tables
- Robotics

SPECIFICATIONS

Electrical

Resolution: See Ordering Information; other counts available; contact factory.

Code: Incremental

Power Supply:

Open Collector, TTL Totem Pole or TTL Line Driver outputs: 5 to 26 VDC; 120 mA max.
CMOS Line Driver: 5 to 15 VDC; 70 mA max.

Output Current:

Open Collector: 7406; 40 mA sink at 0.5V
TTL Totem Pole: 7404
TTL Line Driver: TC4428; 40 mA sink/source
CMOS Line Driver: TC4428; 40 mA sink/source

Output Format: Two channel quadrature with optional zero reference and complementary outputs.

Quadrature Phasing: $90^\circ \pm 18^\circ$

Symmetry: $180^\circ \pm 9^\circ$

Phase Sense: A leads B for CCW rotation as viewed from the shaft end of the encoder

Zero Reference: .5 cycles wide

Waveforms: Squarewave with rise and fall times less than 1 microsecond into a load capacitance of 1000 pf

Frequency Response: Count channel 100 kHz. Zero reference 75 kHz relative to count channel; 250 kHz available, see Ordering Information table, Code 5

Illumination: Single gallium-aluminum-arsenide LED

Connector: 7 pin: style MS3102E-16S-1P
10 pin: style MS3102E-18-1P

Mating Connector:

7 pin: style MS3106A-16S-1S
(Dynapar No. MCN-N5);
10 pin: style MS3106A-18-1S
(Dynapar No. MCN-N6)

Mechanical

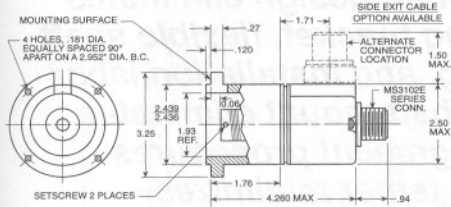
Bearings: Sealed ABEC precision bearings
Starting Torque: 2.0 oz-in max.
Moment of Inertia: 3.7×10^{-4} oz-in-sec² max.
Weight: 13 oz. max.
Slew Speed: 5000 RPM max.

Environmental

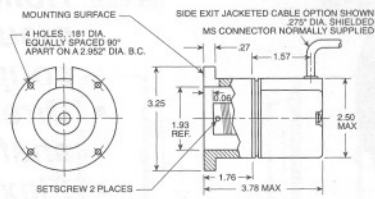
Operating Temperature Range: 0° to $+70^\circ\text{C}$
Storage Temperature Range: -40° to $+90^\circ\text{C}$
Shock: 50 G's for 11 milliseconds duration
Vibration: 5 to 2000 Hz @ 2 G's
Humidity: to 98% without condensation
Enclosure Rating: NEMA 12 / IP54

Approximate Dimensions (in inches)

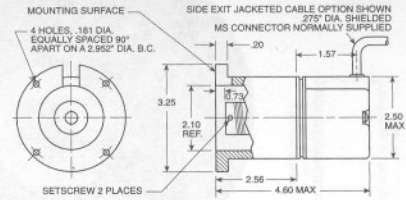
SERIES 526A (with flange pilot)



SERIES 526B (without flange pilot)



SERIES 526C (NEMA 42 flange)



User shaft lengths: Typically: 0.5" max. available into the coupling as measured from the Series 526A/B mounting surface.
1.3" max. available into the coupling as measured from the Series 526C mounting surface.

Electrical Connections

Table 1 - Single Ended

Pin	Function (If Used)	Wire Color Code	Dyn. #14004310010* Cable Accessory Color Code
A	Signal A	BRN	RED
B	Signal B	ORN	BLUE
C	Signal Z	YEL	YEL
D	Power Source	RED	WHT
E	No Connection	—	GRN
F	Common	BLK	BLK
G	Case	GRN	SHIELD

*This is a mating connector/cable assembly described in the Encoder Accessories section of this catalog. Color-coding information is provided here for reference.

Note: Wire color codes are referenced here for models that are specified with pre-wired cable.

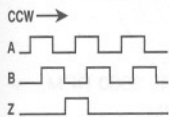
Table 2 - Differential Line Driver

Pin	Function (If Used)	Wire Color Code	Dyn. #14006350010* Cable Accessory Color Code
A	Signal A	BRN	BRN
B	Signal B	ORN	ORN
C	Signal Z	YEL	YEL
D	Power Source	RED	RED
E	No Connection	—	—
F	Common	BLK	BLK
G	Case	GRN	GRN
H	Signal Ā	BRN/WH	BRN/WH
I	Signal B̄	ORN/WH	ORN/WH
J	Signal Z̄	YEL/WH	YEL/WH

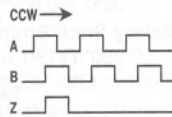
DB25 Connector

Pin No.	Wire Color	Function
23	Red	Power Source
14	Black	Common
1	Brown	Signal A
3	Orange	Signal B
4	Orange/White	Signal B̄
2	Brown/White	Signal Ā
8	Green	Case
5	Yellow	Signal Z (if used)
6	Yellow/White	Signal Z̄ (if used)
7	Shield	Shield

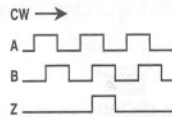
Format A



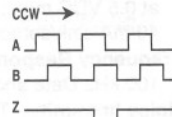
Format B



Format C



Format D



Couplings Only

For Shaft Dia.	Model No.
1/4" dia.	CPLX1250375
3/8" dia.	CPLX1250375
1/2" dia.	CPLX1250375

Ordering Information

To order, complete the model number with code numbers from the table below:

Code 1: Model	Code 2: Pulses/Rev	Code 3: Mechanical	Code 4: Output	Code 5: Electrical	Code 6: Termination
526 <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Ordering Information

<p>A Integral Coupling and Flange Adapter with Pilot</p> <p>B Integral Coupling and Flange Adapter without Pilot</p> <p>C Integral Coupling and Flange Adapter for NEMA Size 42 Motors</p>	<p>For Resolutions below 3000, see Series H26</p> <p>3000</p> <p>3600</p> <p>4096</p> <p>5000</p>	<p>0 For 1/4" Motor Shaft</p> <p>1 For 3/8" Motor Shaft</p> <p>2 For 1/2" Motor Shaft</p>	<p>0 Single Ended, no Index, Table 1, Format A</p> <p>1 Single Ended, with index, Format A, Table 1</p> <p>2 Differential, no Index, Table 2, Format A</p> <p>3 Differential, with index, Format A, Table 2</p> <p>4 Single Ended, with index, Format B, Table 1</p> <p>5 Differential, with index, Format B, Table 2</p> <p>A Single Ended, with index, Format C, Table 1, CW</p> <p>B Differential, with index, Format C, Table 2, CW</p> <p>C Single Ended, no Index, Format C, Table 1, CW</p> <p>D Differential, no index, Format C, Table 2, CW</p> <p>G Single Ended, with Index, Format D, Table 1</p>	<p>0 5-26 VDC in; 7406 Open Collector with 2.2kΩ Pullup out</p> <p>1 5-26 VDC in; 7406 Open Collector out</p> <p>2 5-26 VDC in; 7404 TTL Totem Pole out</p> <p>3 5-26 VDC in; 5 Volt TTL Line Driver out</p> <p>4 5-15 VDC in; 5-15 Volt CMOS Line Driver out</p> <p>5 5-26 VDC in; 250kHz, 5 Volt TTL Line Driver out</p> <p>6 5-15 VDC in; 250kHz, CMOS Line Driver out</p>	<p>0 End Mount Connector</p> <p>1 Side Mount Connector</p> <p>2 18" Cable</p> <p>3 3' Cable</p> <p>4 6' Cable</p> <p>5 10' Cable</p> <p>6 15' Cable</p> <p>available when code 4 = B</p> <p>9 10' Cable and DB25 Connector</p> <p>A 50' Cable and DB25 Connector</p>
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