



- **Mechanically and environmentally rugged**
- **Unbreakable disk**
- **56C face and foot mounting**
- **Up to 2500 PPR with optional marker**
- **Interchangeable (bolt-for-bolt) with "C" face mount tachs BC42 & 46**

The Series 60P Mill-Duty Rotopulser® is the most rugged incremental encoder package available. It is designed to provide long-term, precision, digital measurements. The Series 60P is constructed to maintain transducer alignments and measurements isolated from external shaft loads.

Easier and more convenient installations are provided with NEMA 56C face or foot mounting options. These units are provided with line driver outputs as a standard feature for longer cable lengths (hundreds of feet) and/or higher electrical noise immunity.

Typical Applications

- Motor drive speed feedback
- Back-gage positioning
- PLC and electronic counter inputs
- Speed, draw and length controls
- Winding and roll monitoring
- Finishing equipment, extruders, and test equipment
- Precision, economical replacement for DC tach when used with a Dynapar frequency-to-voltage converter
- The drive manufacturer's standard.

SPECIFICATIONS

Electrical

Power Requirements: 5 to 15 VDC max.
115 mA max. plus load requirements

Output: TC1428 Differential Line Driver,
40 mA Sink/Source

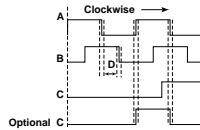
Frequency Response: 50 kHz

Minimum Free Path: Between any A and B transition (Distance D) will not be less than 12.5% of one full electrical cycle. This includes effects of jitter, phase and symmetry shifts.

Mating Connector: 10-pin; style MS3106A-18-1S, Dynapar Part No. MCN-N6

Electrical Output

Note: Signal C (Marker) is low for the first 180° of shaft rotation clockwise (as viewed from shaft end), and is high for the next 180°.



Typical Starting Torque: 15 oz-in

Bearings: Motor Duty Bearings

Weight: 10 lbs.

Shaft Loading: Radial: 45 lbs. overhung;
Axial: 15 lbs.

Operating Temp. Range: 0 to 54°C

Enclosure Rating: NEMA 12 / IP54;
NEMA 4 / IP66 with optional shaft seals

Mechanical & Environmental

Slew Speed: 3600 RPM

Shaft Diameter: 5/8"

Inertia: 285 gm-cm² max.

Here's what makes the 60P so rugged and reliable . . .

Precision die-cast aluminum housing with external and internal surfaces plated, painted and baked for good corrosion resistance.

Shaft seals (optional).

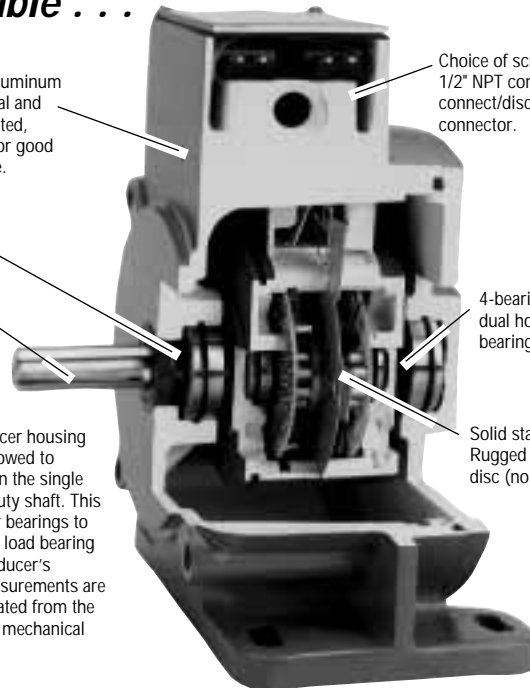
Heavy-duty 5/8" diameter shafts.

The internal transducer housing and bearings are allowed to mechanically float on the single continuous heavy-duty shaft. This allows the two outer bearings to become the primary load bearing elements. The transducer's alignments and measurements are therefore better isolated from the effects of long-term mechanical wear and abuse.

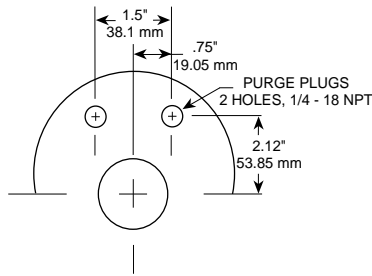
Choice of screw terminals with 1/2" NPT conduit entry or quick connect/disconnect MS pin connector.

4-bearing construction with dual housing and extra wide bearing span.

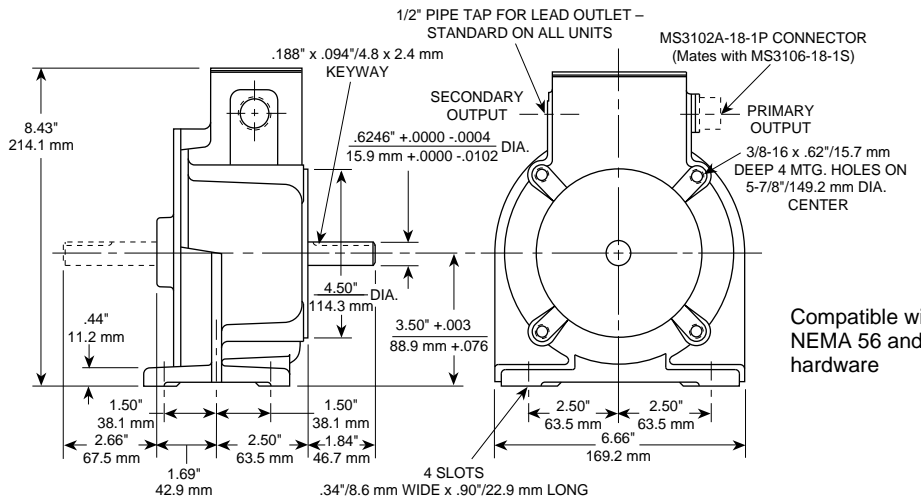
Solid state LED's standard. Rugged mylar or photoplast disc (no glass disc).



Purge Plug Location



Approximate Dimensions



Compatible with NEMA 56 and 56C hardware

Electrical Connections

Single-Ended Output

Function (If Used)	Cable #14002090010* 6 PIN Single-Ended		Twisted Pairs Cable #14004190010* 10 PIN Differential		Terminal Strip Connector No.
	Pin	Color	Pin	Color	
Signal A	B	RED	B	RED	1
Signal \bar{A}	-	-	G	BLK	12
Signal B	D	BLU	D	BLU	3
Signal \bar{B}	-	-	H	BLK	11
Signal C (Marker)	A	GRN	A	GRN	4
Signal \bar{C}	-	-	I	BLK	10
+V	E	WHT	E	WHT	5
Common	C	BLK	C	BLK	2
Shield	F	SHIELD	F	SHIELD	6
Not Used	-	-	J	-	7, 8, 9

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

Dual Isolated Output

Function (If Used)	Code 4 is K or L			Code 4 is M*	
	6 PIN Primary	10 PIN Primary	7 PIN Secondary	10 PIN Primary	10 PIN Secondary
Signal A	B	B	A	B	B
Signal \bar{A}	-	G	C	G	G
Signal B	D	D	B	D	D
Signal \bar{B}	-	H	E	H	H
Signal C	A	A	(No Marker)	-	(No Marker)
Signal \bar{C}	-	I	(No Marker)	-	(No Marker)
Primary Power	E	E	D	E	E
Primary Common	C	C	F	C	C
Secondary Power	-	-	-	-	J
Secondary Common	-	-	-	-	I
Shield	F	F	G	F	F
Not Used	-	J	-	A,I,J	A

*To provide quick backup, jumper cable assembly pins E & J and C & I; then, if the primary output fails, move the connection from the primary to secondary connector.

Ordering Information

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

Code 1: Model	Code 2: Housing	Code 3: Shaft	Code 4: Output	Code 5: Voltage	Code 6: Pulses/Rev	Code 7: Wiring	Code 8: Misc
6 □	P □	□	□	F □	□ □ □ □	□	□
2 Bidirectional, Heavy Duty 3 Bidirectional with Marker, Heavy Duty	P Mill Duty	M 5/8" Dia, Single Shaft with Keyway N 5/8" Dia, Double Shaft with Keyway	D Differential E Single Ended K Single Ended, Dual Isolated, 6 and 7 pin connectors L Differential, Dual Isolated, 10 and 7 Pin Connectors Available when Code 1 is 62: M Differential, Dual Isolated, 10 and 10 Pin Connectors	F 5 to 15 VDC	0001 0096 0360 0750 0002 0100 0375 0800 0004 0120 0382 0805 0005 0125 0384 0833 0006 0127 0390 0900 0010 0128 0400 1000 0012 0150 0402 1024 0015 0180 0430 1200 0018 0192 0450 1250 0020 0200 0500 1270 0025 0203 0508 1500 0040 0240 0512 1800 0045 0250 0530 2000 0050 0256 0550 2160 0060 0300 0600 2250 0064 0306 0625 2400 0090 0315 0720 2500	A MS Connector Available when Code 4 is D or E: T Terminal Strip	O No Purge Plugs, No Shaft Seals A Purge Plugs, No Shaft Seals B No Purge Plugs, Shaft Seals C Purge Plugs and Shaft Seals