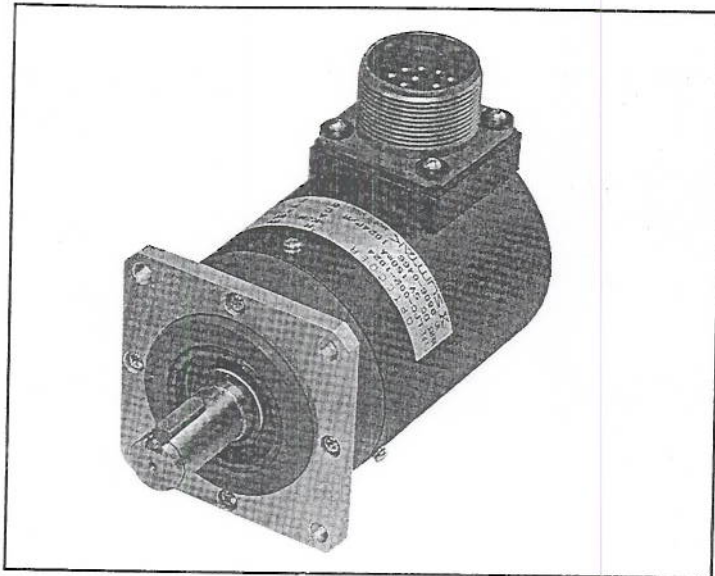


SIZE 25 SERIES LFC INCREMENTAL SHAFT ENCODER



Spindle Encoder for CNC Machine Tools
Interchangeable with Funuc, Kuroda, Tamagawa
Part #A86L-0027-0001#002 (TS 1508N91)

FEATURES:

- 1024ppr resolution.
- Cost-effective, easy to switch for system integrators.
- Always in stock items.
- Same as Sumtak LF-102.4 BMC05P.
- For Cincinnati Machine, Mazak, Hitachi Seiki, Vickers, etc.

SPECIFICATIONS

Electrical

Output	Line Driver Output	SN75183 OR Equivalent
Supply Voltage (Vcc)	CD5±0.25 V	Ripple less than 3%
Current Requirement	≤150 mA	No load
Output Level (H)	≤ 2.4 V	Vcc-5V, I oH= -0.8mA
Output Level (L)	≤ 0.4 V	Vcc=5V, I oL=+40mA
Rise Time (Typ.)	≤100 ns	Max.
Fall Time (Typ.)	≤100 ns	Max.
Frequency Response	0~102.4 kHz	
Insulation Resistance	≥ 20 MΩ	DC250V Megger (circuit-body)
By-pass Capacitor	0.01 μF	630WV (0V-body)

Mechanical

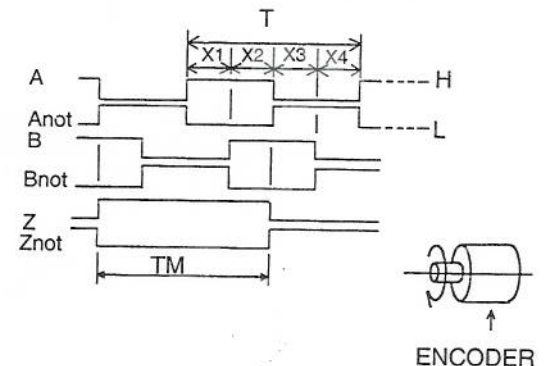
Slew Speed	6000 r/min.
Starting Torque	≤ 0.05 N·m At+25°C
Shaft Angular Acceleration	10000 rad/S ²
Moment of Inertia	1.3x10 ⁻⁵ Kg·m ²
Shaft Loading (Radial)	49 N
Shaft Loading (Axial)	49 N
Mass (Approx.)	0.7 kg
Bearing Life	10000 h*

*Axial load: 49N, Radial load: 49N, Operating speed: 6000 r/min,
Operating temperature: +25°C

Environmental

Operating Temperature	0 ~ +60°C
Storage Temperature	-20 ~ +70°C
Vibration	49 m/s ² 10 - 200Hz, 2 hours each X, Y, Z
Shock	980 m/s ² 6ms, 2 times each X, Y, Z
Construction	IP55 Equivalent

OUTPUT WAVE FORMS



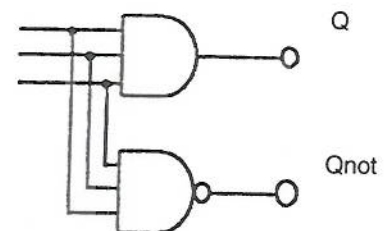
(CW rotation as viewed from encoder shaft)
SIGNAL WIDTH OF Z ch

$$TM=0.0T \pm 0.5T$$

$$T=360^\circ/N$$

N: pulse per revolution

OUTPUT CIRCUIT

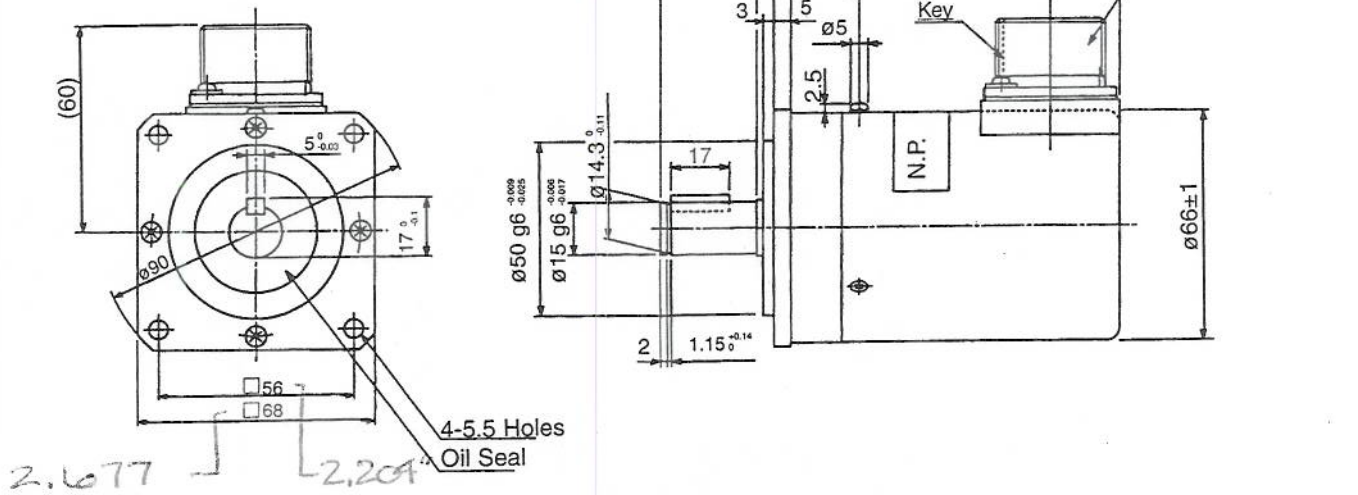


Line Driver: SN75183 or equivalent

SIZE 25 SERIES LFC

INCREMENTAL SHAFT ENCODER

OUTSIDE DIMENSIONS



ELECTRICAL CONNECTIONS

Terminal No.	Function
A	A
B	Z
C	B
D	—
E	—
F	—
G	—
H	+5V
J	—
K	0V
L	—
M	0V
N	A not
P	Z not
R	B not
S	—
T	Body

Order No.: LFC-002-1024