

DuraLIFE-33 CLUTCH

TECHNICAL BULLETIN



DL-33 offered in two configurations: headed coil or flying leads

Applications

The DL-33 is suitable for high load, tight-fitting applications requiring quick response, rapid acceleration and high torque.

OFFICE AUTOMATION: copiers, printers, paper feed systems, collators, sorters, mailing equipment, ticket and receipt dispensers

PACKAGING: labeller, dispensing machines, conveyors

AUTOMOTIVE: cruise control, power lift gate, trunk cinch actuator systems and trunk power door closer

Application Considerations

Single Direction

Wrap spring clutches provide torque only in the direction in which they wrap down. This allows for overrunning.

Relative High Shock

Due to the DL-33's rapid acceleration, system inertia effects can be significant. In some applications an in-line slip device may be used for shock absorption.

Engagement Relative to Speed

The DL-33 relies on relative motion between the input and output for engagement. Thus the slower the speed, the longer the time until engagement.

Features

- Wrap spring technology
- High torque, small package
- Rapid acceleration
- Consistent performance
- Low wattage required

The DuraLIFE™ model clutch (DL-33) is an electromechanical wrap spring clutch which combines high torque, reliability and rapid acceleration into one small package at a very competitive cost.

Wrap spring technology allows for very fast response to bring loads up to speeds in less than 3 milliseconds (after spring wrap-down and depending on rpm).

The DL-33 is a drop-in alternative for high cost clutches used in office automation applications such as printers and copiers. The long life and reliable performance makes the DL-33 an ideal clutch for many packaging and automotive applications.

General Specifications

Operating Parameters:

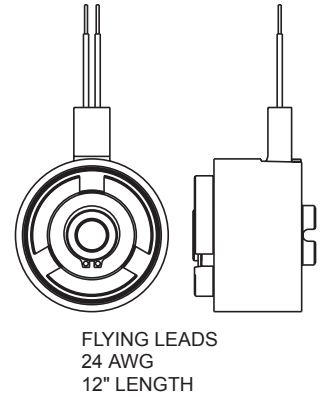
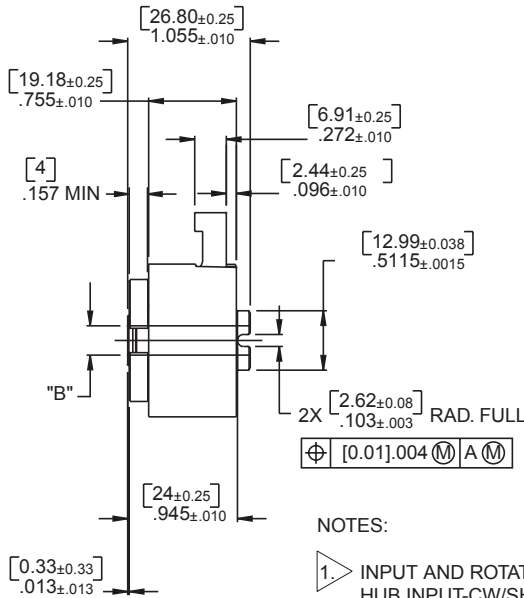
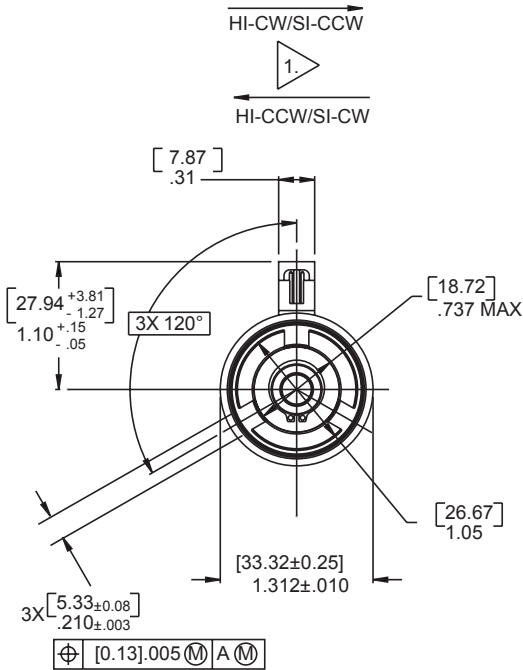
Speed	1200 rpm max
Cycle Life	1 × 10 ⁶ @ 30 lb-in
Static Torque	30 lb-in (3.4 Nm)
Power	3.5 watts nominal
Temperature	32°-140°F (0 -60°C)

Options:

Input Configuration	Hub input or shaft input
Rotation Direction	Clockwise or Counterclockwise
Coil Voltage*	12 VDC Resistance [Ω] 45.0±10% 24 VDC Resistance [Ω] 185.0±10% 90 VDC Resistance [Ω] 2670.0±10%
Bore	6mm; 8mm; 1/4 inch or 5/16 inch
Shaft	Cross pin or "D" Bore
Elec. Connections	Molded connector or 12" flying leads
Accessories	3-dog drive adapter, flexible coupling

*Custom voltages available

Dimensions



NOTES:

1. INPUT AND ROTATION (VIEWED THIS END):
HUB INPUT-CW/SHAFT INPUT-CCW OR
HUB INPUT-CCW/SHAFT INPUT-CW

RECOMMENDED MATING CONNECTORS:
TERMINAL - POLARIZED LATCHING
CRIMP ON CONTACTS

HOUSING: AMP NO 104257-1

CONTACTS:

LOOSE: AMP NO 1-530151-0

STRIP: AMP NO 530151-9

ALTERNATE TERMINAL-

INSUL. DISPLACEMENT CONTACTS

ASSEMBLY - AMP NO 103956-1

ASSEMBLY - MOLEX NO 70400-0141

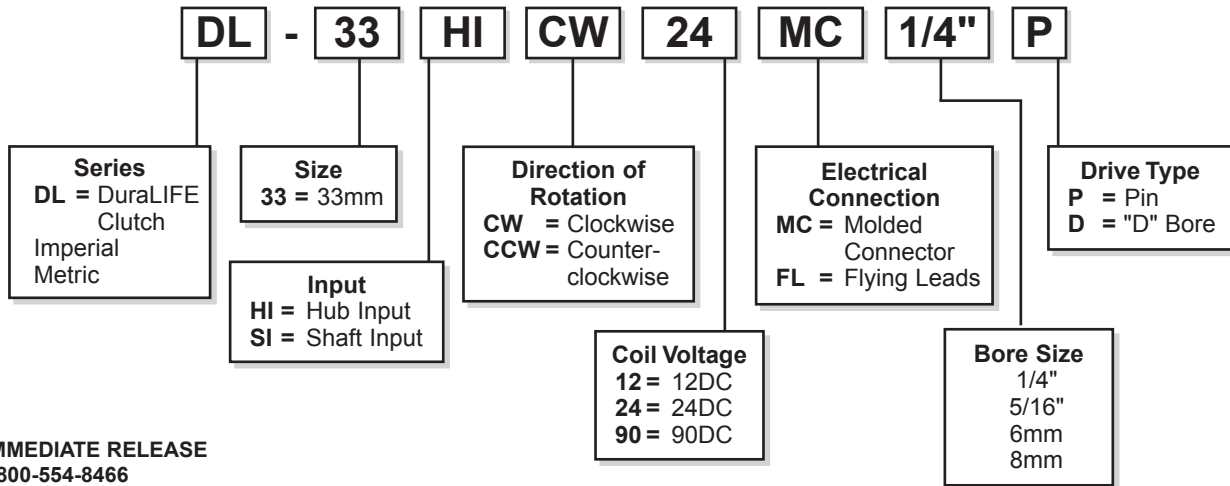
in [mm]

SPECIFICATIONS SUBJECT TO CHANGE

Bore Sizes	"B"
8mm	(8.01-8.09) .315-.318
6mm	(6.01-6.09) .237-.239
5/16 inch	(7.950-8.090) .3130-.3185
1/4 inch	(6.362-6.427) .2505-.2530

"D" Bores also available

DL Series - How to order



FOR IMMEDIATE RELEASE
Call 1-800-554-8466
Website: www.DeltranPT.com

Deltran PT

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