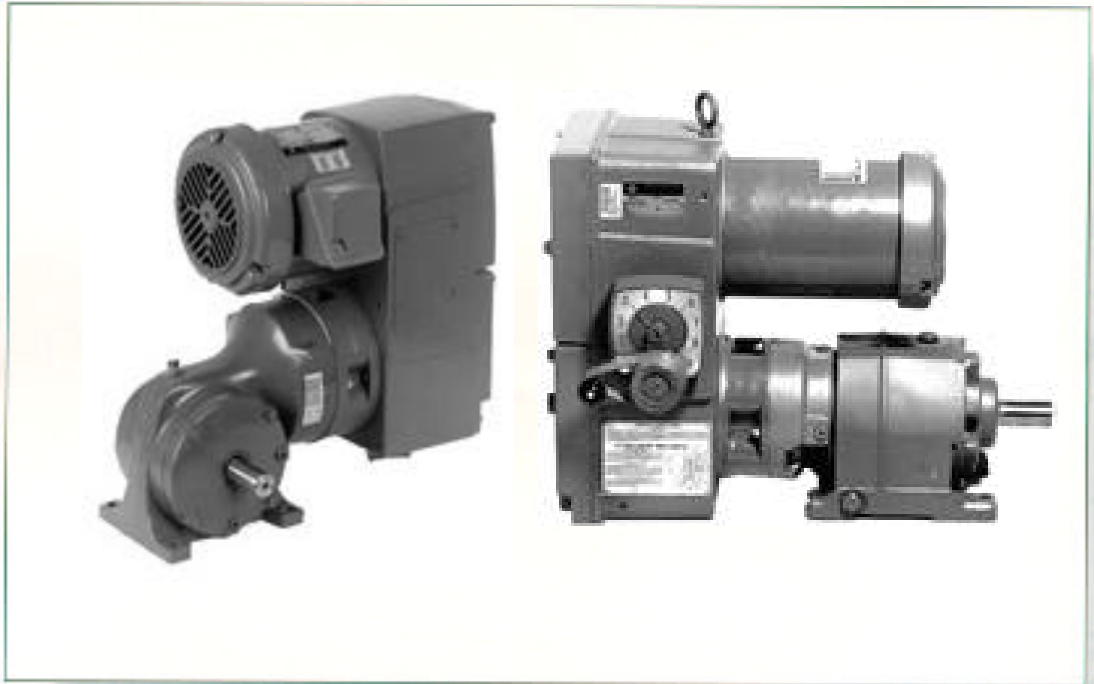


Product Data Sheet

Mechanical Variable Speed Drives

Varidrive®



- A mechanical belt variable speed transmission package with modular construction
- Available as gearless drives or as a combined motor and mechanical belt/gear variable speed transmission
- Six case sizes for motor frames 56 through 250T
- Manual handwheel speed changer standard, with options for various remote signed followers
- Constructed with Endolube III



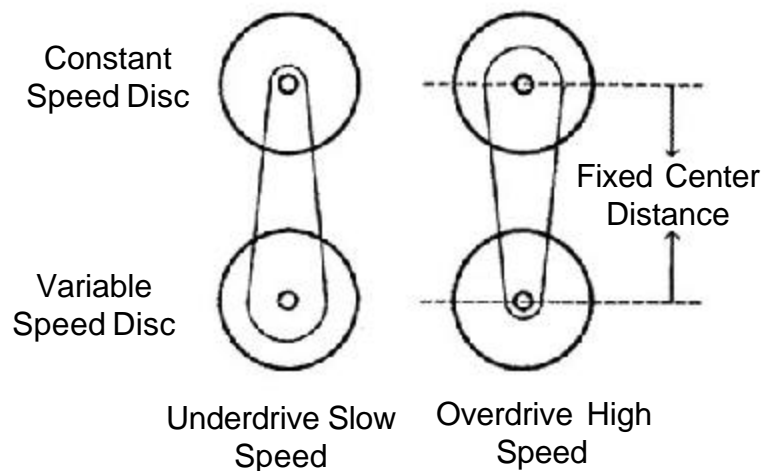
Product Overview

The Varidrive is a 'packaged' variable speed belt transmission. Packaged means that the belt transmission, drive motor, and if required, the gear reducer are constructed as a single power transmission drive assembly. These variable speed drives are employed where the operating speed of the driven component must vary over a range that can not be provided by a fixed driver-driven relationship.

Types VAP, VEUP and VEP modules are used with motors to produce gearless Varidrives. Type VAM modules are used with a motor and gear reducer. A variety of accessory kits are available for the Varidrive, including a number of remote control kits, number of analog speed indicators, as well as a solid state speed control that works in conjunction with an actuator called Varitrol.

Principles of Operation

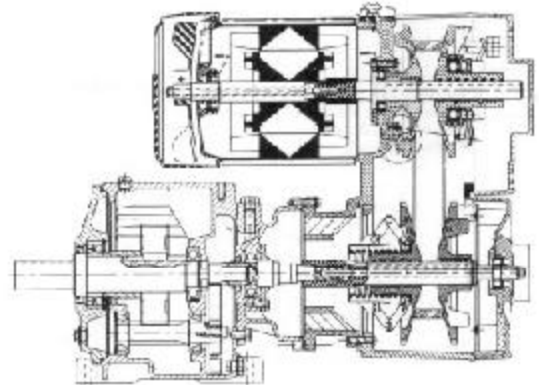
- The Varidrive provides variable output speed by means of variable pitch sheaves (Varidiscs) which are moved axially on the driver (motor) and driven shafts
- The driver pitch diameter is established by either manually or automatically positioning the adjustable motor Varidisc axially on the motor shaft
- Driven pitch diameter is correspondingly and inversely adjusted by means of a spring loaded adjustable driven Varidisc



Varidrive Combinations

CbN Varidrive

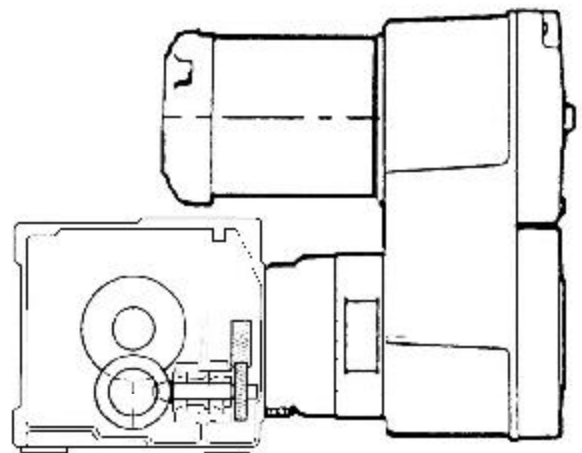
The CbN Varidrive provides a simple and reliable means of adjustable speed by combining a rugged AC motor and a mechanical belt/gear variable speed transmission. These pre-engineered packages are offered in a variety of speed ranges, motor enclosures and forms of speed changing methods. This wide variety will allow the proper matching for the diverse needs of both constant and variable torque applications across most industrial markets. The CbN Varidrive uses high efficiency helical gearing.



The CbN Varidrive includes selection of six beltcases, ranges of 4:1, 6:1 and 8:1; output torque to 145,000 in. lbs. and ratios from 1.6 to 6300:1. Motor available include single and three phase TEFC motors, CORRO-DUTY motors and explosionproof motors.

OtN Varidrive

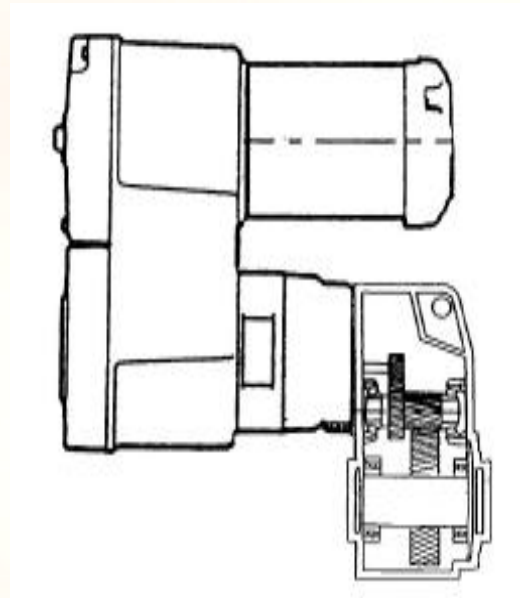
The OtN Varidrive uses a helical spiral bevel gear insuring a compact envelope typical of right angle worm gearing, while delivering the energy efficiency of helical gears. Speed ranges include 4:1, 6:1 and 8:1, with output torque to 88,000 in. lbs. Ratios of 12.5 to 7100:1 from six beltcases. Motor available include TEFC single and three phase motors, CORRO-DUTY motors and explosionproof motors.



Varidrive Combinations

MbN Varidrive

The MbN Varidrive combines a shaft mount reducer, a simple mechanical variable speed transmission and a reliable, rugged AC motor. The MbN Varidrive is available with both tapered bushing and straight bore hollow output configurations. The unique tapered bushing design simplifies mounting and removal. Ranges of 4:1, 6:1 and 8:1 in five beltcases, with output torque to 28,000 in. lbs.



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