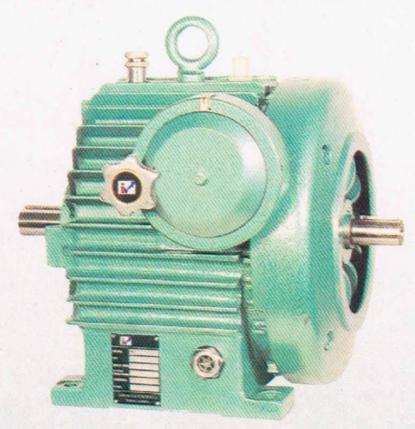


MECHANICAL VARIABLE SPEED DRIVES SUITABLE FOR WIDE RANGE OF INDUSTRIES SUCH AS

CABLE, CEMENT, COAL, FOOD, LEATHER, MACHINE TOOLS, PAPER, PHARMACEUTICAL, PLASTIC, POLYMER, PRINTING, PUMP, RAYON, RUBBER, TEXTILE, TOBACCO, WIRE & MANY OTHER INDUSTRIES.



EDENTIFYED

- High Power Capacity
- High Efficiency Of 85% To 94%
- High Reliability And Long Life
- Figh Output Torque Up To 6
 Times The Input Torque
- High Speed Holding Capacity Of 0.05% Nett.,
- Infinitely Variable Output Speed Between Lowest 1/7th Of Input Speed And Highest 1.7 Times Of Input Speed.
- Wide Speed Range to a Maximum Of 1:12
- No Slipage
- No Maintenance Except Change Of Oil
- Suitable For Dusty, Dirty, Flame Proof And Wet Environment

MANUFACTURED BY:

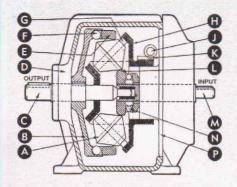
N S ENGINEERING

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Kathwada, AHMEDABAD - 382430. GUJARAT. INDIA.

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GENERAL DESCRIPTION OF VARIATOR

The design of variator has been based on our Principals' wide knowledge of mechanical friction drives and has enabled much higher horse powers to be transmitted.

The variator consists of on outer casing (D) and end cover (P) in which the co-axial shafts (C and M) are mounted. These rotate in opposite directions. Power is transmitted from the input shaft through a pressure device (N) to the drive disc (L) thence to a series of double conical drive rollers (A) which are free to rotate on fixed inclined spindles (G).

The carrier (H) in which the spindles are located is held on the end cover boss and is so arranged that it can be moved axially by means of the rack (K) and pinion (J). From the drive rollers, power is transmitted to the outer ring (E) and pressure device (F) and thence to the output shaft through the drive flange (B). Due to the geometry of the power transmitting components, the input and output shaft rotate in opposite directions.

SELECTION LIST FOR INDEQUIP VARIATORS

| PUT SPEE | D 1500 R.P.M. | MB=OUTPUT | TORQUE IN CMkg. | nB =OUTPUT | SPEED CON | STANT INPUT |
|----------|---------------|-----------------|-----------------|--|------------------|------------------|
| H.P.↓ | SIZE, | K- 1.0 | K- 2.5 | K- 6 | K- 16 | K- 30 |
| 0.5 | nB MB | 200-2200 160 | | A STATE OF THE STA | | |
| 0.75 | nB MB | 265-2200 180 | | | 1 | |
| 1.0 | nB MB | 325-2200 200 | | | | |
| 1.25 | nB MB | 380-1820 210 | | | | |
| 1.5 | nB MB | | 212-2560 365 | | | September 1 |
| 2.0 | nB MB | | 270-2500 415 | | | |
| 2.5 | nB MB | | 320-2500 460 | 220-2650 720 | | |
| 3.0 | nB MB | | 385-2345 512 | 230-2650 810 | | |
| 4.0 | nB MB | | 500-2000 515 | 270-2560 950 | | 300 |
| 5.0 | nB MB | | | 300-2560 1050 | | |
| 7.5 | nB MB | | | 400-2100 1200 | 240-2650 1870 | |
| 10.0 | nB MB | | | | 280-2650 2150 | |
| 12.0 | nB MB | | | | 310-2650 2400 | 290-2600 2660 |
| 15 | nB MB | | | | 360-2350 2650 | 320-2600 2750 |
| 20 | n8 MB | | | | 440-1800 2940 | 375-2600 3150 |
| 25 | nB MB | | | | | 440-2480 3500 |
| 30 | nB MB | | | | | 500-2000 3800 |

HP CAPACITY FOR TRANSMITTING CONSTANT TORQUE

INPUT SPEED 1400-1500 R.P.M.

| SIZE | | | | | | | | | |
|-------|----|----------|----------|----------|----------|----------|---|----------|----------|
| J | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 |
| | MB | 1210 | 1210 | 1000 | 830 | 700 | Sec. 31 | | |
| K-30 | nB | 400-1600 | 320-1600 | 320-1920 | 300-2100 | 300-2400 | | | |
| | NA | 30 | 30 | 30 | 27 | - 26 | | | |
| | MB | 930 | 930 | 670 | 670 | 580 | 480 | 370 | 320 |
| K-16 | nB | 375-1500 | 300-1500 | 300-1800 | 256-1800 | 250-2000 | 240-2200 | 240-2400 | 220-2650 |
| | NA | 22 | 22 | 19 | 19 | 18 | - 480 | 14 | 12 |
| | MB | 380 | 380 | 285 | 255 | 200 | 200 | 140 | 120 |
| K-6 | nB | 375-1500 | 300-1500 | 300-1800 | 285-2000 | 275-2200 | 240-2200 | 250-2500 | 220-2650 |
| | NA | 9 | 9 | 8 | 8 | 7 | 480 240-2200 16 200 240-2200 7 100 240-2200 , 3.5 40 217-1950 | 5.5 | 5 |
| | MB | 170 | 160 | 142 | 126 | 100 | 100 | 7.3 | 62 |
| K-2.5 | nB | 375-1500 | 320-1600 | 300-1800 | 285-2000 | 275-2200 | 240-2200 | 240-2400 | 212-2560 |
| | NA | 4 | 4 | 4 | . 4 | 3.5 | , 3.5 | 2.75 | 2.5 |
| | MB | 60 | 60 | 60 | 40 | 40 | 40 | 29 | 2.9 |
| K-1.0 | nB | 375-1500 | 300-1500 | 250-1500 | 278-1950 | 242-1950 | 217-1950 | 220-2200 | 185-2220 |
| | NA | 1.40 | 1.40 | 1.40 | 1.20 | 1.20 | 1.20 | 1.0 | 1.0 |

MB: MAX. OUTPUT TORQUE IN CM.KG

nB OUTPUT SPEED R.P.M.

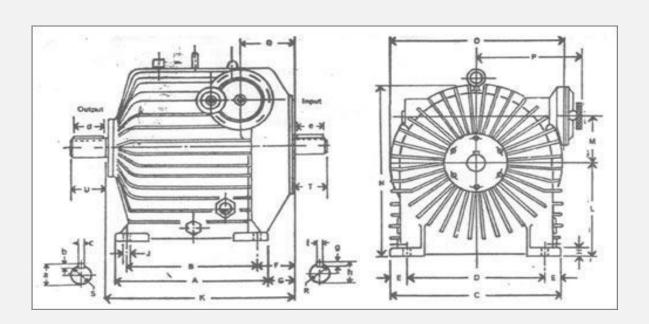
NA: MAX. INPUT H. P.





MECHANICAL SPEED VARIATOR

MOUNTING DIMENSIONS



| SIZE | | MOUNTING | | | | | | | | | | | BODY | | | | | |
|------|-----|----------|-----|-----|------|------|----|----|----|-----|-----|-----|------|-----|-----|-----|--|--|
| | Α | В | С | D | Е | F | G | Н | I | J | K | L | М | N | 0 | Р | | |
| K50 | 460 | 380 | 475 | 380 | 47.5 | 94 | 54 | 30 | 18 | 564 | 300 | 155 | 561 | 523 | 295 | 145 | | |
| K30 | 400 | 340 | 450 | 360 | 45 | 100 | 70 | 25 | 18 | 491 | 280 | 132 | 509 | 41 | 296 | 145 | | |
| K16 | 285 | 245 | 372 | 300 | 36 | 70 | 50 | 25 | 16 | 362 | 212 | 120 | 416 | 408 | 270 | 117 | | |
| K6 | 265 | 230 | 305 | 270 | 17.5 | 54.5 | 37 | 24 | 13 | 320 | 180 | 95 | 350 | 340 | 252 | 102 | | |
| K2.5 | 235 | 205 | 252 | 200 | 26 | 17 | 2 | 20 | 13 | 242 | 150 | 78 | 278 | 278 | 197 | 58 | | |
| K1.0 | 180 | 155 | 180 | 155 | 12.5 | 15 | 25 | 14 | 8 | 185 | 100 | - | 200 | 201 | 132 | 85 | | |

| SIZE | | KEY | | | | | | | | | | | |
|------|-----|-----|----|-----|------|----|----|----|----|----|----|------|------------|
| SIZE | Rh6 | Sh6 | Т | U | а | b | С | d | е | f | g | h | NET WEIGHT |
| K50 | 50 | 55 | 80 | 100 | 60 | 10 | 16 | 80 | 70 | 14 | 10 | 55 | 296 KG |
| K30 | 50 | 50 | 80 | 87 | 55 | 10 | 16 | 80 | 70 | 16 | 10 | 55 | 194 KG |
| K16 | 40 | 45 | 75 | 80 | 49 | 9 | 14 | 70 | 65 | 10 | 8 | 43.5 | 120 KG |
| K6 | 30 | 35 | 52 | 65 | 38.5 | 8 | 10 | 55 | 45 | 8 | 7 | 33 | 86 KG |
| K2.5 | 25 | 30 | 45 | 50 | 33 | 7 | 8 | 36 | 36 | 8 | 7 | 28 | 50 KG |
| K1.0 | 14 | 15 | 30 | 30 | 17 | 5 | 5 | 25 | 25 | 5 | 5 | 16 | 20 KG |