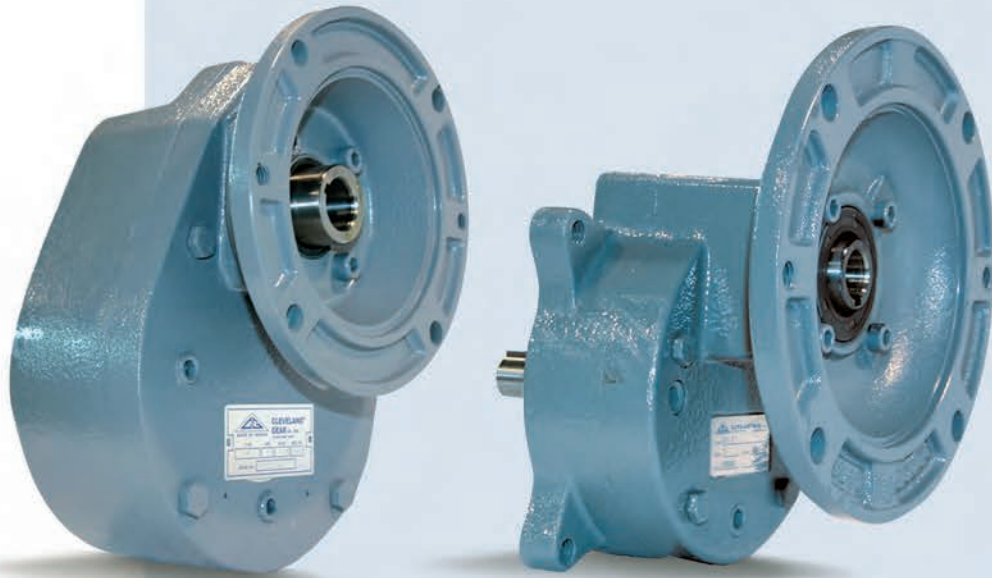


# HELICAL RATIO MULTIPLIERS

# Cleveland



# Helical RATIO MULTIPLIERS



## CLEVELAND "RM" SERIES HELICAL RATIO MULTIPLIERS

### FEATURES:

- 3 Case Sizes - 1, 2 and 3
- 5 Ratios Available - 1.5:1, 2:1, 3:1, 4:1 and 5:1
- Rugged Cast Iron Housings
- Helical Surface Hardened and Finished Steel Gears
- NEMA Input Flanges and NEMA C-Face Output Adaptors - 56C, 140TC, 180TC and 210TC
- Used with "M" Series Worm Gear Units to Create Double Reduction Helical-Worm Reducers from Stock\*
- Supplied Without Oil as Standard or Oil Filled Upon Request



[www.ClevelandModular.com](http://www.ClevelandModular.com)

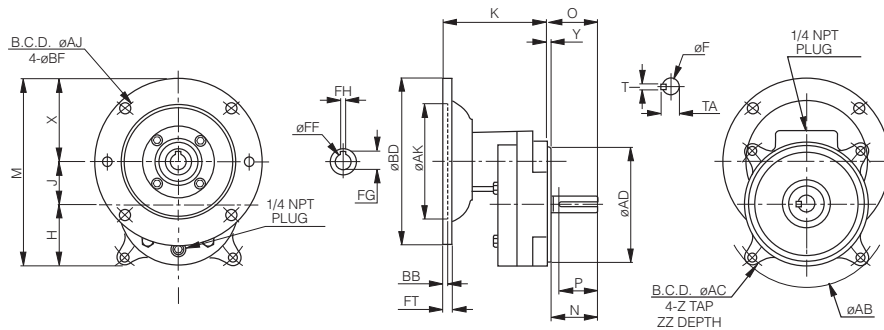


\* Please consult your modular customer service representative or local sales representative for proper selection.

# RATIO MULTIPLIERS

| 1750 INPUT RPM |         | SIZE 1 |        |         | SIZE 2 |        |         | SIZE 3 |        |         |
|----------------|---------|--------|--------|---------|--------|--------|---------|--------|--------|---------|
| RATIO          | RPM OUT | HP IN  | HP OUT | TORQUE* | HP IN  | HP OUT | TORQUE* | HP IN  | HP OUT | TORQUE* |
| 1.5            | 1167    | 2.00   | 1.95   | 105     | 6.68   | 6.55   | 354     | 14.50  | 14.21  | 768     |
| 2              | 875     | 1.80   | 1.76   | 127     | 5.76   | 5.65   | 407     | 12.50  | 12.25  | 882     |
| 3              | 583     | 1.50   | 1.46   | 158     | 3.83   | 3.76   | 406     | 10.00  | 9.80   | 1059    |
| 4              | 438     | 1.25   | 1.22   | 176     | 2.87   | 2.82   | 406     | 7.20   | 7.06   | 1017    |
| 5              | 350     | 1.00   | 0.98   | 176     | 2.30   | 2.26   | 407     | 6.10   | 5.98   | 1077    |

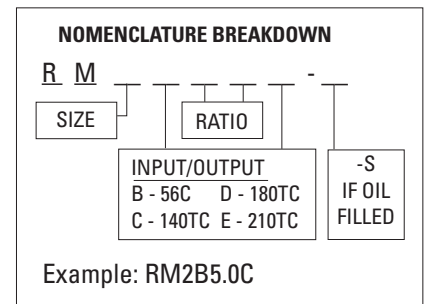
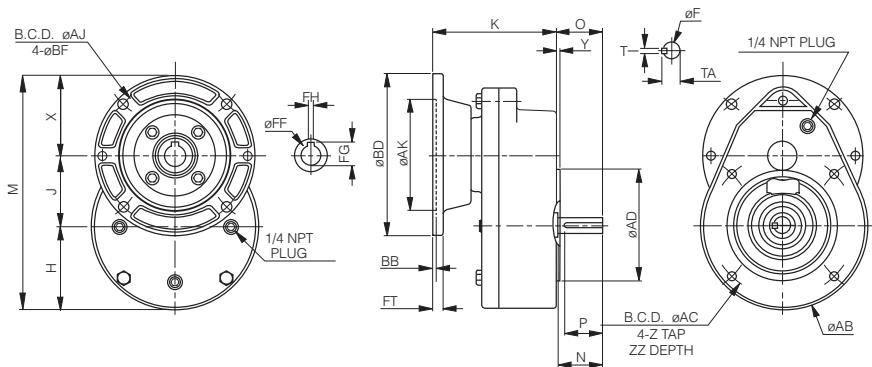
\*TORQUE = IN-LB



## DIMENSIONS

| SIZE | INPUT | F     | H    | J     | K    | M    | N    | O    | P    | T    | TA    | TR   | X    | Y    |
|------|-------|-------|------|-------|------|------|------|------|------|------|-------|------|------|------|
| 1    | 56C   | 0.625 | 2.39 | 1.675 | 4.19 | 7.31 | 1.89 | 2.04 | 1.57 | 3/16 | 0.704 | 0.71 | 3.25 | 0.16 |

| INPUT FLANGE |       |       |     |      |      |      |       |       |      | OUTPUT FLANGE |        |      |       |     |          |       |
|--------------|-------|-------|-----|------|------|------|-------|-------|------|---------------|--------|------|-------|-----|----------|-------|
| SIZE         | INPUT | AJ    | AK  | BB   | BD   | BF   | FF    | FG    | FH   | FT            | OUTPUT | AB   | AC    | AD  | Z        | ZZ    |
| 1            | 56C   | 5.875 | 4.5 | 0.16 | 6.50 | 0.43 | 0.625 | 0.716 | 3/16 | 0.35          | 56C    | 6.50 | 5.875 | 4.5 | 3/8 - 16 | 19/32 |



## DIMENSIONS

| SIZE | INPUT | F     | H    | J     | K    | M     | N    | O    | P    | T    | TA    | TR   | X    | Y    |
|------|-------|-------|------|-------|------|-------|------|------|------|------|-------|------|------|------|
| 2    | 56C   | 0.625 | 3.37 | 2.875 | 5.00 | 9.49  | 1.84 | 1.90 | 1.57 | 3/16 | 0.704 | 0.70 | 3.25 | 0.16 |
| 2    | 140TC | 0.875 | 3.37 | 2.875 | 5.00 | 9.49  | 1.84 | 1.90 | 1.57 | 3/16 | 0.958 | 0.70 | 3.25 | 0.16 |
| 3    | 180TC | 1.125 | 4.25 | 2.875 | 6.44 | 11.63 | 2.50 | 3.31 | 1.97 | 1/4  | 1.236 | 1.24 | 4.50 | 0.31 |
| 3    | 210TC | 1.375 | 4.25 | 2.875 | 6.44 | 11.63 | 2.50 | 3.31 | 1.97 | 5/16 | 1.513 | 1.51 | 1.50 | 0.31 |

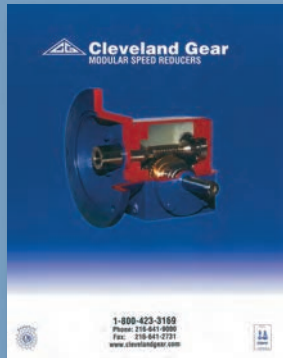
| INPUT FLANGE |       |       |     |      |      |      |       |      |       | OUTPUT FLANGE |        |      |       |     |          |       |
|--------------|-------|-------|-----|------|------|------|-------|------|-------|---------------|--------|------|-------|-----|----------|-------|
| SIZE         | INPUT | AJ    | AK  | BB   | BD   | BF   | FF    | FH   | FG    | FT            | OUTPUT | AB   | AC    | AD  | Z        | ZZ    |
| 2            | 56C   | 5.875 | 4.5 | 0.16 | 6.50 | 0.41 | 0.625 | 3/16 | 0.716 | 0.43          | 56C    | 6.50 | 5.875 | 4.5 | 3/8 - 16 | 29/32 |
| 2            | 56C   | 5.875 | 4.5 | 0.16 | 6.50 | 0.41 | 0.625 | 3/16 | 0.716 | 0.43          | 140TC  | 6.50 | 5.875 | 4.5 | 3/8 - 16 | 29/32 |
| 2            | 140TC | 5.875 | 4.5 | 0.16 | 6.50 | 0.41 | 0.875 | 3/16 | 0.716 | 0.43          | 140TC  | 6.50 | 5.875 | 4.5 | 3/8 - 16 | 29/32 |
| 3            | 180TC | 7.25  | 8.5 | 0.24 | 9.00 | 0.41 | 1.125 | 1/4  | 1.240 | 0.59          | 180TC  | 8.50 | 7.250 | 8.5 | 1/2 - 13 | 29/32 |
| 3            | 210TC | 7.25  | 8.5 | 0.24 | 9.00 | 0.41 | 1.375 | 5/16 | 1.524 | 0.59          | 210TC  | 8.50 | 7.250 | 8.5 | 1/2 - 13 | 29/32 |

Note: Dimensions are for reference purposes only. Certified dimensions furnished upon request.



# CLEVELAND GEAR'S LIBRARY OF INFORMATION

"MUSTS" FOR YOUR ENGINEERING DEPARTMENT

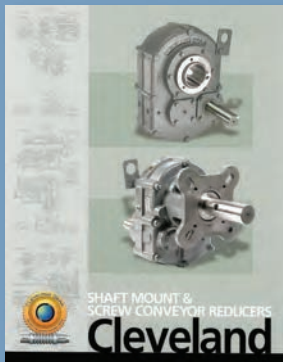


## Catalog #400 – "M" Series Modular Speed Reducers

Rating and dimensional data for the 1.33"-4.25" center distance drives in solid, C-face quill worms, with solid and hollow shaft outputs. Part numbering and configuration data is provided.

## Catalog #810 – "WG" Series Speed Reducers

Metric center distances with worm over, worm under, and universal configurations in single and double reductions. Rating and dimensional data is provided for all types.

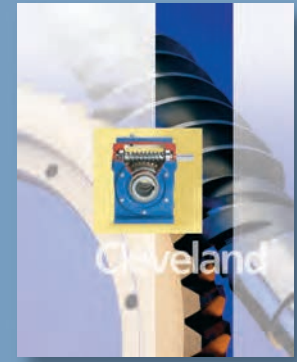


## Catalog #SMCG – Helical Shaft Mount and Screw Conveyor Reducers

Shaft mount reducers available in sizes 2-9. Size 2-6 designed for Screw Conveyor applications with CEMA adapter kits/shafts. Suitable for AGMA Class I, II or III applications.

## Catalog #700 – Millennium Gear Drives

Catalog provides data on ratings, dimensions, and design configurations for 5"-12" C.D. drives. Universal mounting with motor adapters & helical attachments.



## Catalog #900 – General Capabilities Brochure

Information on CGC history, current design services, production capabilities and products.

## 100th Anniversary Brochure

Provides a pictorial history of Cleveland Gear's first 100 years designing and producing worm gearing, worm gear reducers and the development of its design and production capabilities for helical gearing/custom drives.



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