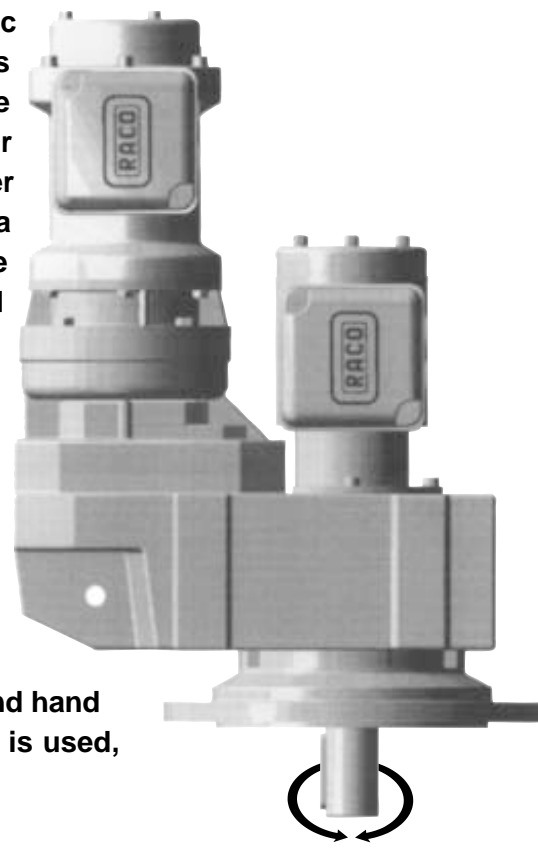


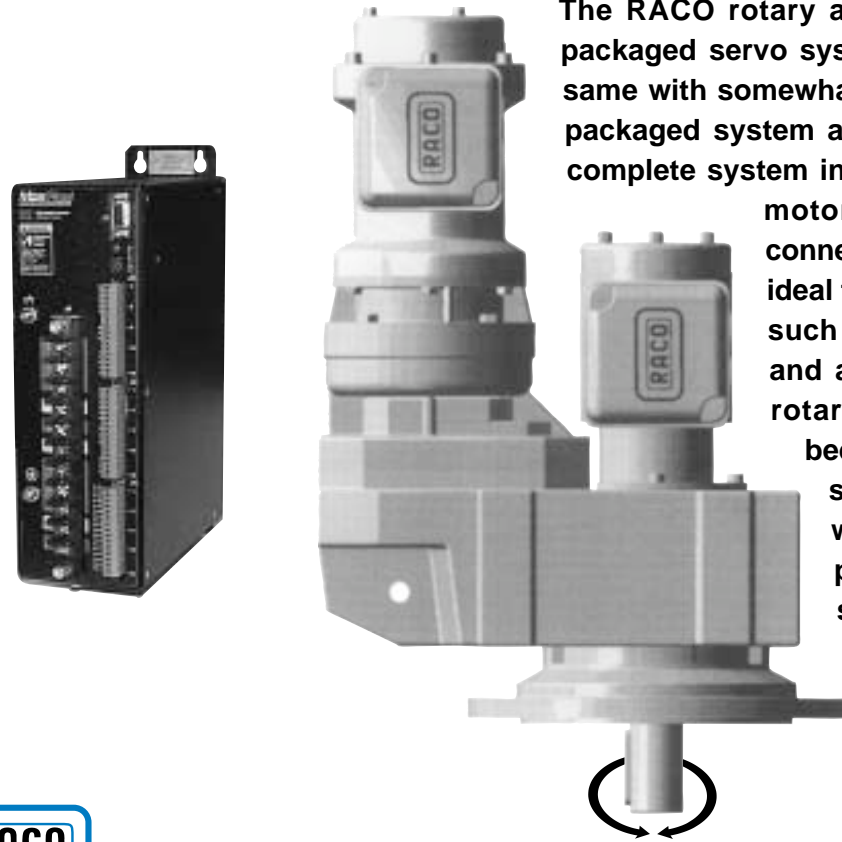
RACO ROTARY ACTUATOR

The RM rotary actuator is designed for automatic operation of valves, gates and other applications requiring rotary motion. The product line follows the RACO modular principle, well known in the linear actuator line. The modular system allows RACO to offer a custom made rotary unit optimized and built for a given application, at a competitive price. The RM line consists of three basic components; gears, motor and accessories. The helical gear design provides high levels of efficiency with low noise levels. The gear compartment is permanently lubricated. Output is available as hollow or solid shaft. The RACO motor has high starting torque and low rotor inertia making it ideal for most rotary applications. The motor is fully sealed to IP65 and is thermally protected with a thermal switch. The accessories are added in the same way as the RACO MA actuator. Accessories include: adjustable limit switches, potentiometer, motor brake and hand wheel. If the RACO electronic motor protection device is used, the motor warranty is extended to four years.



RACO SRM SERVO ROTARY ACTUATOR

The RACO rotary actuator is also available in a packaged servo system. Ratings are basically the same with somewhat higher speeds available. The packaged system approach gives the customer a complete system including: rotary actuator, servo motor, servo controller and inter-connect cables. The servo actuator is ideal for high duty cycle applications such as modulating control valves and also for precise positioning of rotary motion. Each package has been pre engineered for selected speed and load capabilities, as well as a proper inertia match to provide a stable and robust system. Contact a RACO sales engineer for more information or assistance on your application.



RACO ELECTRIC LINEAR CYLINDERS FOR TODAY'S INDUSTRY

Other Products Offered By RACO

RACO LM RACO 2060

RODLESS CYLINDERS

- Acme, Ballscrew or Synchronous Belt Type
- Carriage on Slides or Wheels
- Speeds up to 400 in/sec.
- Strokes in excess of 40 ft.
- Thrust up to 4500 lb.
- Servo, Stepper, AC or DC Motor Driven
- Custom Controls and Systems

RACO MA

- Largest installed base in the world
- Thrust capacities to 200,000 lbs.
- Standard stroke lengths to 80 inches
- Ball or acme power screw thread configuration
- Multiple screw leads available in every size to optimize motor / gearhead / output speed capability
- Complete line of standard controls and options
- ISO 9001 Manufacturing
- Typical delivery 2-3 weeks

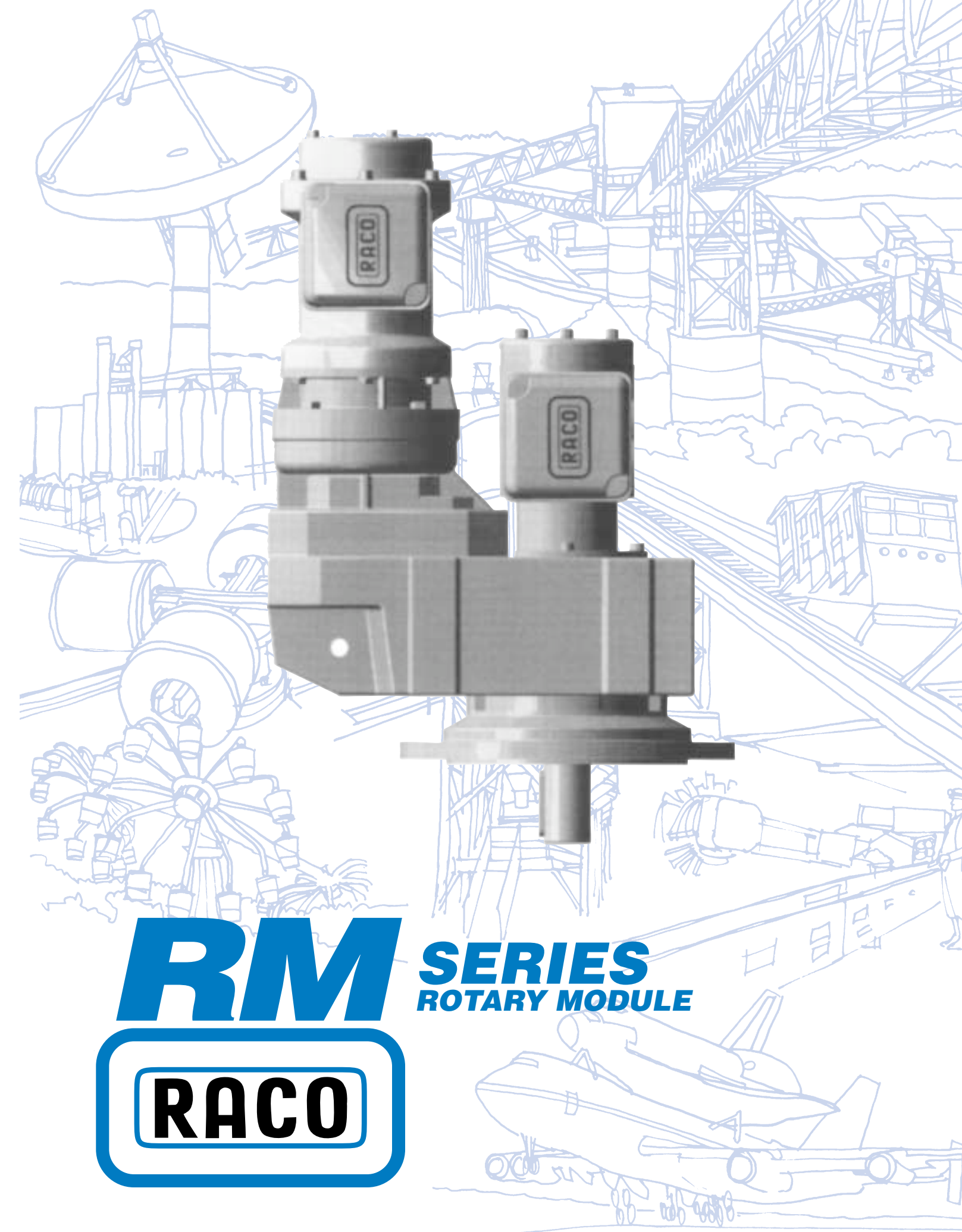


RACO International, Inc.

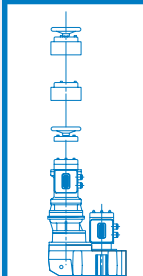
3350 Industrial Blvd.
Bethel Park, PA 15102
(888) BUY-RACO (888) 289-7226
Ph: (412) 835-5744
Fx: (412) 835-0338
email: raco@racointernational.com
Home page: www.racointernational.com

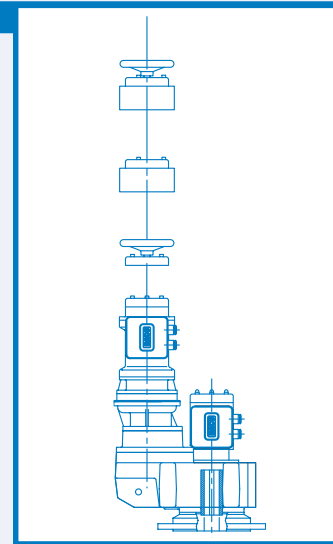
1-02

© 2002 RACO International, Inc.

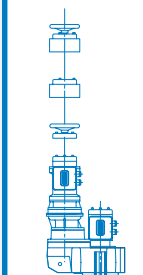


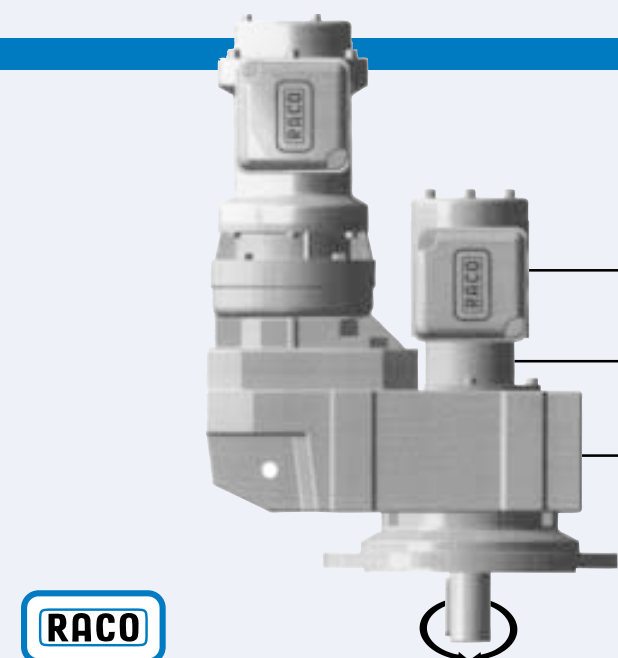
RM Rotary Actuator Selector Chart (1 sec.)

| 90 Degree Rotation in 1 Second | | | | | |
|--|-------|-------|-------|--------|-------|
| Output Torque (lb-ft) | 300 | 400 | 700 | 1200 | |
| RM part number | 300-1 | 400-1 | 700-1 | 1200-1 | |
| Output Speed (rpm) | 15 | 15 | 15 | 15 | |
| Motor Size (kW) | 1.1 | 1.7 | 3 | 4.8 | |
| Weight (lbs.) | 66 | 88 | 150 | 200 | |
|  | L1 | 19.13 | 22.52 | 23.31 | 24.72 |
| | L3 | 13.86 | 14.76 | 15.43 | 18.19 |
| | L4 | 1.34 | 1.73 | 1.73 | 1.73 |
| | L5 | 2.52 | 3.03 | 3.03 | 3.03 |
| | L6 | 3.9 | 4.96 | 4.96 | 4.96 |
| | D1 | 9.84 | 9.84 | 9.84 | 11.81 |
| | D3 | 1.378 | 1.378 | 1.575 | 1.969 |
| D4 | 1.378 | 1.378 | 1.575 | 1.969 | |



RM Rotary Actuator Selector Chart (5 sec.)

| 90 Degree Rotation in 5 Seconds | | | | | | | |
|---|-------|-------|--------|--------|--------|--------|-------|
| Output Torque (lb-ft) | 400 | 700 | 1200 | 2200 | 3700 | 5900 | |
| RM part number | 400-5 | 700-5 | 1200-5 | 2200-5 | 3700-5 | 5900-5 | |
| Output Speed (rpm) | 3 | 3 | 3 | 3 | 3 | 3 | |
| Motor Size (kW) | 0.4 | 0.7 | 1.1 | 2 | 4 | 5.7 | |
| Weight (lbs.) | 66 | 132 | 187 | 297 | 436 | 656 | |
|  | L1 | 19.13 | 22.36 | 24.02 | 28.78 | 31.42 | 34.21 |
| | L3 | 13.86 | 14.53 | 16.85 | 22.32 | 26.57 | 29.76 |
| | L4 | 1.34 | 1.34 | 1.34 | 1.73 | 1.73 | 1.73 |
| | L5 | 2.52 | 2.52 | 2.52 | 3.03 | 3.03 | 3.03 |
| | L6 | 3.9 | 3.9 | 3.9 | 4.96 | 4.96 | 4.96 |
| | D1 | 9.84 | 9.84 | 11.81 | 13.78 | 17.72 | 17.72 |
| | D3 | 1.378 | 1.575 | 1.969 | 2.362 | 3.15 | 3.543 |
| D4 | 1.378 | 1.575 | 1.969 | 2.362 | 3.15 | 3.543 | |



TYPICAL APPLICATIONS

**Rack and Pinion Operator
for Bin Bottom Gates**

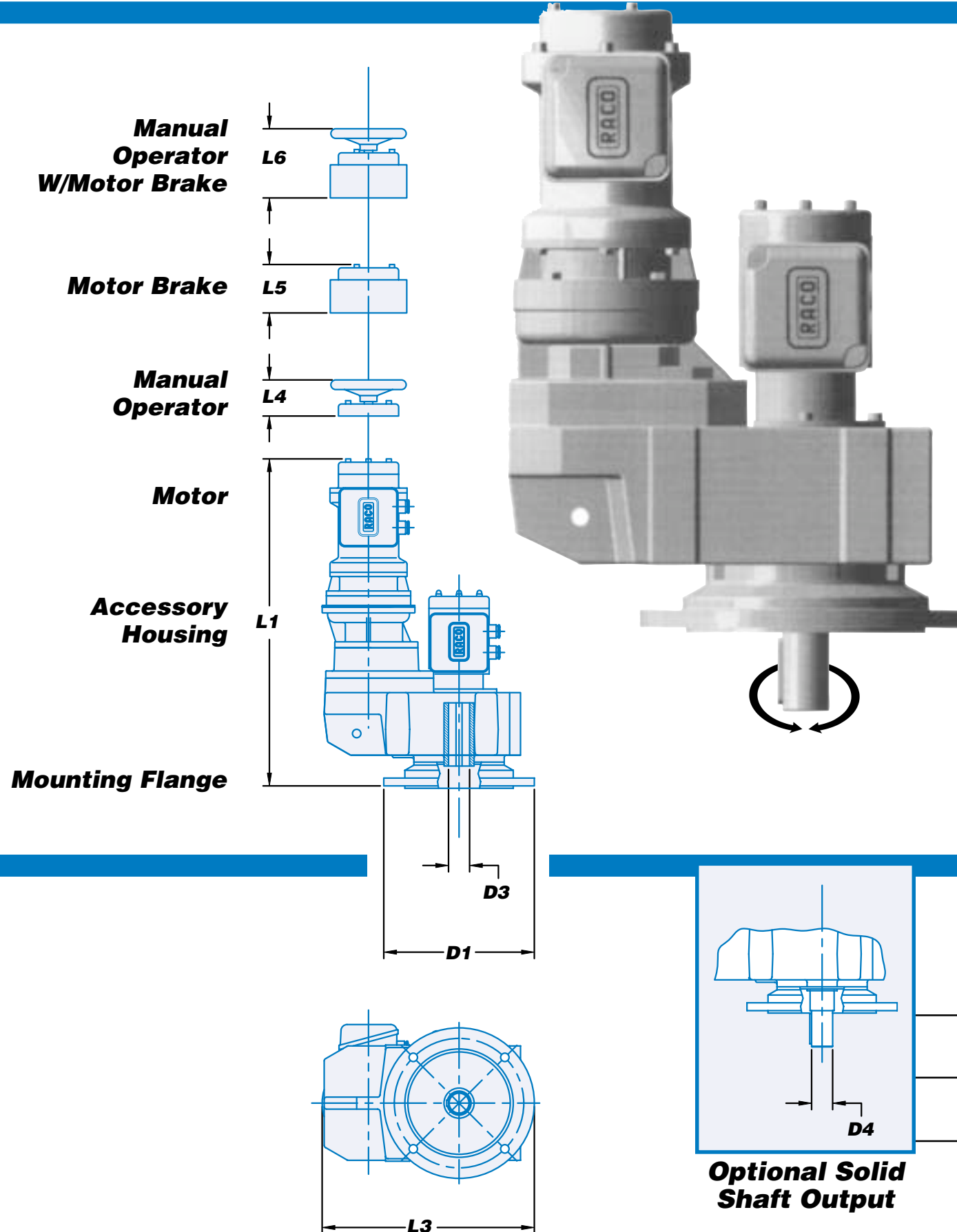
**Butterfly Control Valve
for Flow Control Operation**

**Secondary Air Damper Control
for Power Plant Combustion Control**

**Diverter Gate Operator
for Coal or Grain Distribution**

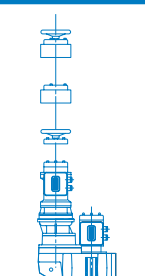
RACO

RACO RM Rotary Actuator

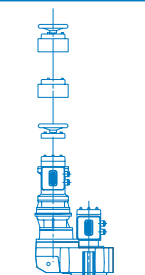


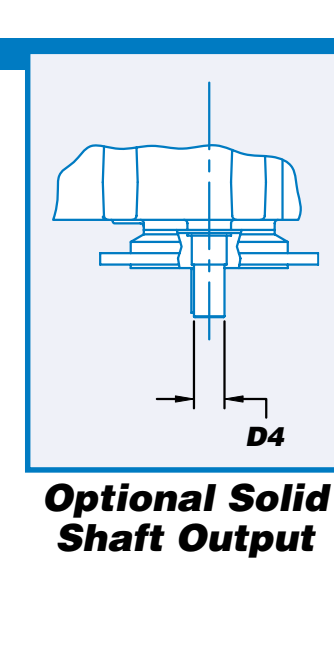
RACO

RM Rotary Actuator Selector Chart (10 sec.)

| 90 Degree Rotation in 10 Seconds | | | | | | | | |
|---|--------|--------|---------|---------|---------|---------|----------|-------|
| Output Torque (lb-ft) | 400 | 700 | 1200 | 2200 | 3700 | 5900 | 10300 | |
| RM part number | 400-10 | 700-10 | 1200-10 | 2200-10 | 3700-10 | 5900-10 | 10300-10 | |
| Output Speed (rpm) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Motor Size (kW) | 0.2 | 0.3 | 0.7 | 1.1 | 1.7 | 3 | 4.8 | |
| Weight (lbs.) | 68 | 132 | 187 | 273 | 436 | 656 | 1056 | |
|  | L1 | 21.42 | 22.36 | 24.02 | 25.39 | 31.42 | 34.21 | 38.23 |
| | L3 | 13.86 | 14.53 | 16.85 | 22.32 | 26.57 | 29.76 | 35.87 |
| | L4 | 1.34 | 1.34 | 1.34 | 1.34 | 1.73 | 1.73 | 1.73 |
| | L5 | 2.52 | 2.52 | 2.52 | 2.52 | 3.03 | 3.03 | 3.03 |
| | L6 | 3.9 | 3.9 | 3.9 | 3.9 | 4.96 | 4.96 | 4.96 |
| | D1 | 9.84 | 9.84 | 11.81 | 13.78 | 17.72 | 17.72 | 21.65 |
| | D3 | 1.378 | 1.575 | 1.969 | 2.362 | 3.15 | 3.543 | 3.937 |
| D4 | 1.378 | 1.575 | 1.969 | 2.362 | 3.15 | 3.543 | 3.937 | |

RM Rotary Actuator Selector Chart (30 sec.)

| 90 Degree Rotation in 30 Seconds | | | | | | | | |
|--|--------|--------|---------|---------|---------|---------|----------|-------|
| Output Torque (lb-ft) | 400 | 700 | 1200 | 2200 | 3700 | 5900 | 10300 | |
| RM part number | 400-30 | 700-30 | 1200-30 | 2200-30 | 3700-30 | 5900-30 | 10300-30 | |
| Output Speed (rpm) | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | |
| Motor Size (kW) | 0.06 | 0.12 | 0.2 | 0.4 | 0.7 | 1.1 | 1.7 | |
| Weight (lbs.) | 92 | 158 | 202 | 299 | 436 | 656 | 1056 | |
|  | L1 | 23.94 | 25.31 | 26.73 | 28.94 | 33.62 | 36.38 | 38.23 |
| | L3 | 15.31 | 16.34 | 18.74 | 22.32 | 26.57 | 29.76 | 35.87 |
| | L4 | 1.34 | 1.34 | 1.34 | 1.34 | 1.34 | 1.34 | 1.73 |
| | L5 | 2.52 | 2.52 | 2.52 | 2.52 | 2.52 | 2.52 | 3.03 |
| | L6 | 3.9 | 3.9 | 3.9 | 3.9 | 3.9 | 3.9 | 4.96 |
| | D1 | 9.84 | 9.84 | 11.81 | 13.78 | 17.72 | 17.72 | 21.65 |
| | D3 | 1.378 | 1.575 | 1.969 | 2.362 | 3.15 | 3.543 | 3.937 |
| D4 | 1.378 | 1.575 | 1.969 | 2.362 | 3.15 | 3.543 | 3.937 | |



**Optional Solid
Shaft Output**

TYPICAL APPLICATIONS

**Vertical Gate Operator
for Flow Control**

**Rotary Control
of Spreading Conveyor**

**Plug Valve Control
for Flow Control Operation**

**Rotary Indexing Table
for Parts Positioning**

RACO