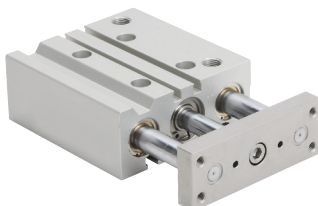




# E-Series Dual Guide Rod Cylinders

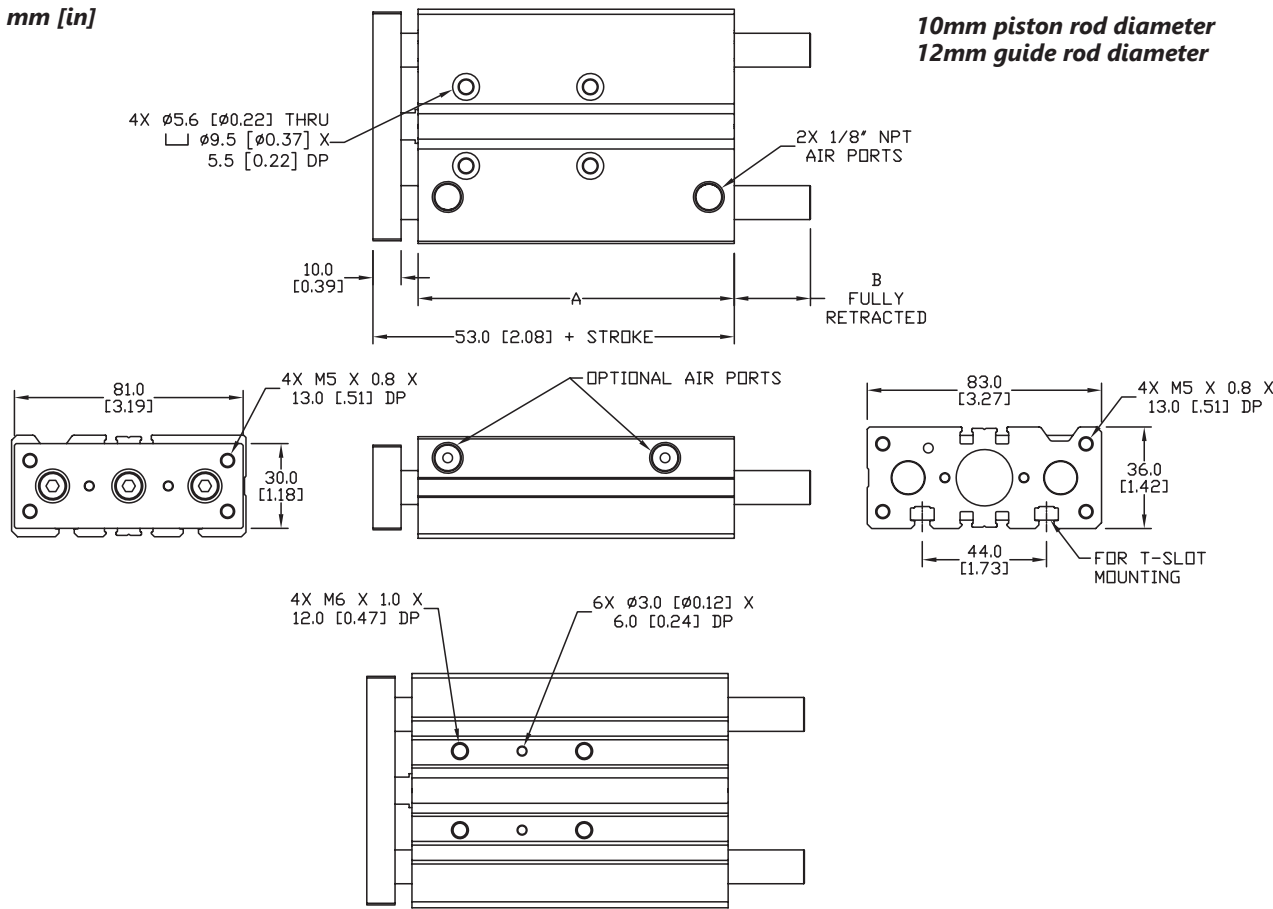
## 20 mm Bore, Double Acting



| 20 mm Bore E-Series Dual Guide Rod Cylinders - Double Acting |                    |               |               |              |          |
|--|--------------------|---------------|---------------|--------------|----------|
| Part Number  | Stroke Length (mm) | "A" (mm [in]) | "B" (mm [in]) | Weight (lbs) | Price    |
| <a href="#">E20M020MD-M</a>                                  | 20                 | 57.0 [2.24]   | -2.0 [-0.079] | 1.6          | \$254.00 |
| <a href="#">E20M025MD-M</a>                                  | 25                 | 62.0 [2.44]   | -2.0 [-0.079] | 1.7          | \$268.00 |
| <a href="#">E20M030MD-M</a>                                  | 30                 | 67.0 [2.64]   | -2.0 [-0.079] | 1.8          | \$268.00 |
| <a href="#">E20M040MD-M</a>                                  | 40                 | 77.0 [3.03]   | -2.0 [-0.079] | 2.0          | \$210.00 |
| <a href="#">E20M050MD-M</a>                                  | 50                 | 87.0 [3.43]   | -2.0 [-0.079] | 2.1          | \$268.00 |
| <a href="#">E20M075MD-M</a>                                  | 75                 | 112.0 [4.41]  | 27.0 [1.06]   | 2.8          | \$290.00 |
| <a href="#">E20M100MD-M</a>                                  | 100                | 137.0 [5.39]  | 27.0 [1.06]   | 3.2          | \$300.00 |
| <a href="#">E20M125MD-M</a>                                  | 125                | 162.0 [6.38]  | 51.0 [2.01]   | 3.8          | \$319.00 |
| <a href="#">E20M150MD-M</a>                                  | 150                | 187.0 [7.36]  | 51.0 [2.01]   | 4.2          | \$340.00 |
| <a href="#">E20M175MD-M</a>                                  | 175                | 212.0 [8.35]  | 51.0 [2.01]   | 4.6          | \$357.00 |
| <a href="#">E20M200MD-M</a>                                  | 200                | 237.0 [9.33]  | 51.0 [2.01]   | 5.1          | \$378.00 |
| <a href="#">E20M250MD-M</a>                                  | 250                | 287.0 [11.30] | 69.0 [2.72]   | 6.0          | \$320.00 |

### Dimensions

mm [in]



E20MXXMD-M

See our website [www.AutomationDirect.com](http://www.AutomationDirect.com) for complete Engineering drawings.



# E-Series Dual Guide Rod Cylinders - Load and Torque Ratings

| Cylinder Max Side Load Ratings (lbs) |             |     |     |     |     |     |     |     |     |     |     |     |     |
|--------------------------------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Bore Size (mm)                       | Stroke (mm) |     |     |     |     |     |     |     |     |     |     |     |     |
|                                      | 10          | 20  | 25  | 30  | 40  | 50  | 75  | 100 | 125 | 150 | 175 | 200 | 250 |
| 12                                   | 9.9         | 7.4 | 6.5 | 5.9 | 9.2 | 8.1 | 5.9 | 5.0 | 4.3 | 3.8 | -   | -   | -   |
| 16                                   | 15          | 11  | 9.5 | 8.3 | 14  | 13  | 8.3 | 7.2 | 6.1 | 5.4 | 5.0 | 4.5 | -   |
| 20                                   | -           | 18  | 14  | 13  | 28  | 25  | 20  | 17  | 15  | 13  | 12  | 11  | 9.5 |
| 25                                   | -           | 21  | 20  | 17  | 32  | 29  | 23  | 19  | 20  | 18  | 16  | 15  | 12  |
| 32                                   | -           | -   | 46  | 43  | 40  | 37  | 41  | 35  | 32  | 29  | 26  | 24  | 20  |
| 40                                   | -           | -   | 46  | 43  | 40  | 37  | 41  | 35  | 32  | 29  | 26  | 24  | 20  |
| 50                                   | -           | -   | 67  | 64  | 60  | 55  | 61  | 54  | 49  | 44  | 40  | 37  | 32  |
| 63                                   | -           | -   | 67  | 64  | 60  | 55  | 61  | 54  | 49  | 44  | 40  | 37  | 32  |

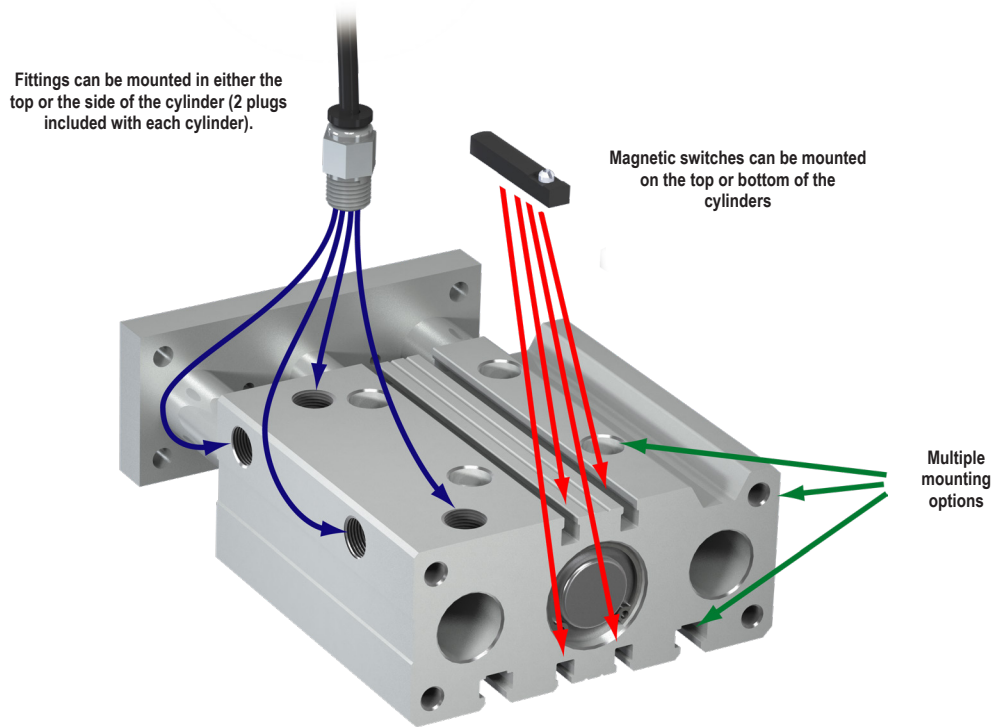
Conversion: 1 lb = 4.45 N

| Cylinder Max Torque Ratings (in-lb) |             |      |      |      |       |      |      |      |      |      |      |      |      |
|-------------------------------------|-------------|------|------|------|-------|------|------|------|------|------|------|------|------|
| Bore Size (mm)                      | Stroke (mm) |      |      |      |       |      |      |      |      |      |      |      |      |
|                                     | 10          | 20   | 25   | 30   | 40    | 50   | 75   | 100  | 125  | 150  | 175  | 200  | 250  |
| 12                                  | 7.97        | 6.99 | 6.28 | 5.75 | 6.82  | 6.37 | 4.43 | 3.19 | 2.74 | 2.39 | -    | -    | -    |
| 16                                  | 10.7        | 9.20 | 8.32 | 7.79 | 10.89 | 9.82 | 6.11 | 5.13 | 4.43 | 3.89 | 3.54 | 3.19 | -    |
| 20                                  | -           | 13.9 | 12.6 | 11.6 | 21.2  | 19.0 | 16.6 | 14.4 | 12.7 | 11.3 | 10.3 | 9.38 | 7.97 |
| 25                                  | -           | 21.2 | 19.6 | 17.8 | 32.4  | 29.7 | 26.2 | 22.7 | 20.0 | 17.9 | 16.2 | 14.8 | 12.6 |
| 32                                  | -           | -    | 56.2 | 53.1 | 50.7  | 45.4 | 50.4 | 44.0 | 39.1 | 35.2 | 32.0 | 29.3 | 25.1 |
| 40                                  | -           | -    | 62.0 | 58.4 | 54.1  | 50.1 | 55.5 | 48.5 | 43.1 | 38.8 | 35.2 | 32.3 | 27.7 |
| 50                                  | -           | -    | 115  | 112  | 97.4  | 95.6 | 106  | 93.8 | 84.1 | 76.1 | 69.6 | 64.1 | 55.2 |
| 63                                  | -           | -    | 130  | 120  | 114   | 107  | 119  | 105  | 94.7 | 85.8 | 78.4 | 72.2 | 62.3 |

Conversion: 1 in-lb = 0.113 N-m



# E-Series Dual Guide Rod Cylinders



NITRA pneumatic guided actuator with dual guide rods, bronze bushings, extruded aluminum housing and switch mounting tracks.

- Mild steel tooling plate
- Nitrile / Buna-N O-rings

- Eight bore sizes
- Interchangeable with other popular brands
- Work with 4mm square T-slot cylinder switches
- Chrome plated stainless steel guide rods



| E-Series Dual Guide Rod Cylinder Specifications |                          |      |         |      |        |       |         |       |
|---|--------------------------|------|---------|------|--------|-------|---------|-------|
| Bore Size (mm)                                  | 12                       | 16   | 20      | 25   | 32     | 40    | 50      | 63    |
| Action  | Double acting            |      |         |      |        |       |         |       |
| Fluid   | Air (clean/dry)          |      |         |      |        |       |         |       |
| Temperature Range                               | 23 to 158°F (-5 to 70°C) |      |         |      |        |       |         |       |
| Pressure Range                                  | 18-142 psi (1.2-10 bar)  |      |         |      |        |       |         |       |
| Proof Pressure                                  | 213 psi (15 bar)         |      |         |      |        |       |         |       |
| Lubrication                                     | Not required             |      |         |      |        |       |         |       |
| Cushion Type                                    | Urethane Bumper          |      |         |      |        |       |         |       |
| Non-Rotate Tolerance                            | ±0.10°                   |      | ±0.09°  |      | ±0.08° |       | ±0.06°  |       |
| Port Size                                       | M5x0.8                   |      | 1/8-NPT |      |        |       | 1/4-NPT |       |
| Extend Force @ 100 psi (lbs.)                   | 17.5                     | 31.2 | 48.7    | 76.1 | 124.7  | 194.8 | 304.3   | 483.2 |
| Retract Force @ 100 psi (lbs.)                  | 9.7                      | 19.0 | 31.2    | 44.9 | 76.0   | 146.1 | 255.6   | 434.5 |



# CPS Series Cylinder Position Switches

| Position Switch Cross Reference Chart |  |               |                     |
|---------------------------------------|--|---------------|---------------------|
| NITRA Switch Type                     | Cylinder Brand (may fit some of these cylinders)                                       | Photo Example | Groove Illustration |
| CPS<br>CPSF                           | NITRA A-Series<br>NITRA D-Series<br>NITRA F-Series                                     |               |                     |
| CPS9C                                 | DE-STA-CO<br>Robohand<br>SMC<br>Compact Air<br>Bimba<br>Fabco                          |               |                     |
| CPS9D                                 | NITRA L-Series<br>Fabco<br>Numatics<br>Rotomation                                      |               |                     |
| CPS9E                                 | NITRA L-Series<br>Fabco<br>Numatics<br>Rotomation                                      |               |                     |
| CPS9F                                 | NITRA G-Series<br>Fabco<br>Festo<br>Numatics<br>Rotomation                             |               |                     |
| CPS9H                                 | NITRA E-Series<br>NITRA H-Series   |               |                     |
| CPS9M                                 | Norgren  |               |                     |
| CPS9Q                                 | NITRA L-Series<br>NITRA G-Series<br>Parker<br>Fabco<br>Festo<br>Numatics<br>Rotomation |               |                     |