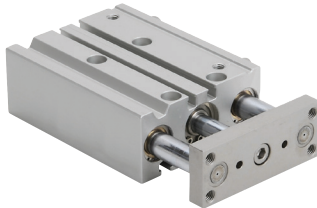




E-Series Dual Guide Rod Cylinders

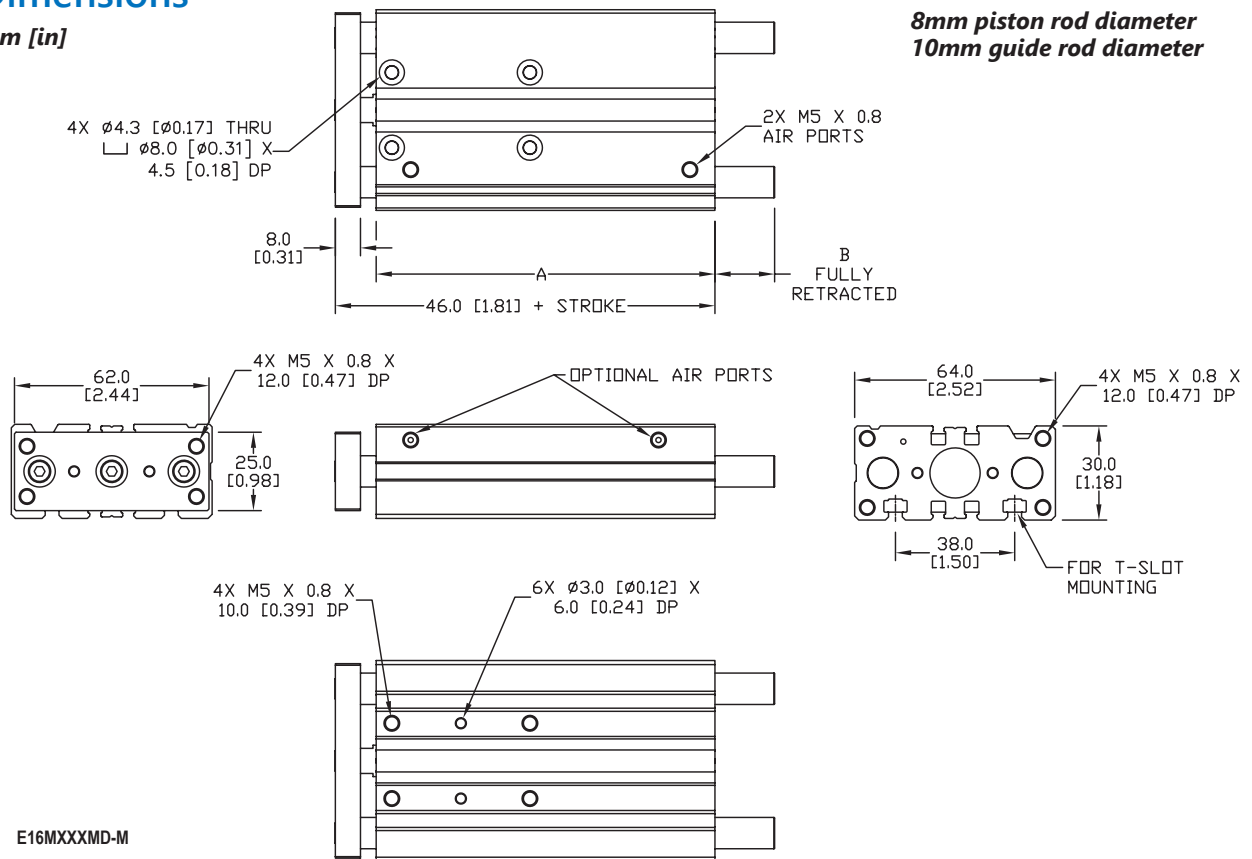
16 mm Bore, Double Acting



| 16 mm Bore E-Series Dual Guide Rod Cylinders - Double Acting | | | | | |
|--------------------------------------------------------------|--------------------|---------------|---------------|--------------|----------|
| Part Number | Stroke Length (mm) | "A" (mm [in]) | "B" (mm [in]) | Weight (lbs) | Price |
| E16M010MD-M | 10 | 43.0 [1.69] | -3.0 [-0.12] | 0.8 | \$226.00 |
| E16M020MD-M | 20 | 53.0 [2.09] | -3.0 [-0.12] | 0.9 | \$209.00 |
| E16M025MD-M | 25 | 58.0 [2.28] | -3.0 [-0.12] | 1.0 | \$225.00 |
| E16M030MD-M | 30 | 63.0 [2.48] | -3.0 [-0.12] | 1.0 | \$225.00 |
| E16M040MD-M | 40 | 73.0 [2.87] | -3.0 [-0.12] | 1.2 | \$225.00 |
| E16M050MD-M | 50 | 83.0 [3.27] | -3.0 [-0.12] | 1.3 | \$225.00 |
| E16M075MD-M | 75 | 108.0 [4.25] | 19.0 [0.75] | 1.7 | \$237.00 |
| E16M100MD-M | 100 | 133.0 [5.27] | 19.0 [0.75] | 2.0 | \$261.00 |
| E16M125MD-M | 125 | 158.0 [6.22] | 49.0 [1.93] | 2.3 | \$281.00 |
| E16M150MD-M | 150 | 183.0 [7.20] | 49.0 [1.93] | 2.6 | \$227.00 |
| E16M175MD-M | 175 | 208.0 [8.19] | 49.0 [1.93] | 2.9 | \$305.00 |
| E16M200MD-M | 200 | 233.0 [9.17] | 49.0 [1.93] | 3.2 | \$308.00 |

Dimensions

mm [in]



8mm piston rod diameter
10mm guide rod diameter

See our website 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 |

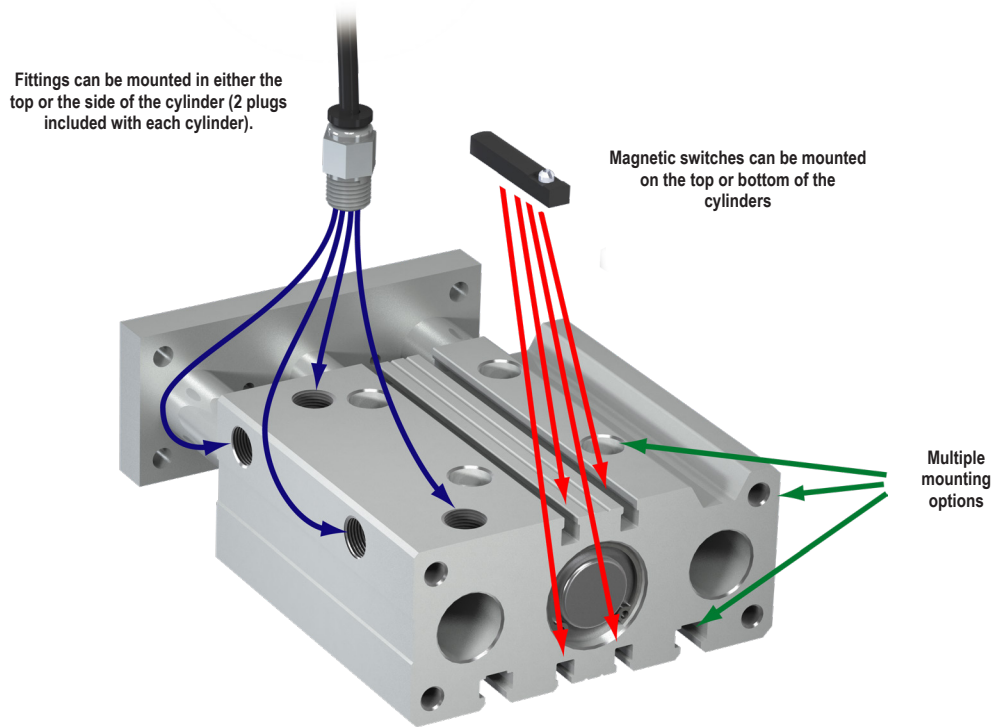
Conversion: 1 lb = 4.45 N

| 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 CPSF | NITRA A-Series NITRA D-Series NITRA F-Series | | |
| CPS9C | DE-STA-CO Robohand SMC Compact Air Bimba Fabco | | |
| CPS9D | NITRA L-Series Fabco Numatics Rotomation | | |
| CPS9E | NITRA L-Series Fabco Numatics Rotomation | | |
| CPS9F | NITRA G-Series Fabco Festo Numatics Rotomation | | |
| CPS9H | NITRA E-Series NITRA H-Series | | |
| CPS9M | Norgren | | |
| CPS9Q | NITRA L-Series NITRA G-Series Parker Fabco Festo Numatics Rotomation | | |