Features

1. Magnetic piston is standard feature.
2. Adding optional sensors enables "open" and "close" position sensing.
3. Compact design make grippers ideal for handling small parts in confined areas.
4. Gripper body is hardcoated aluminum ensuring abrasion and corrosion resistance.
5. No extra lubrication required.

Specifications

100 psi max.

<table>
<thead>
<tr>
<th>Model</th>
<th>FKA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action</td>
<td>Double acting</td>
</tr>
<tr>
<td>Bore (mm)</td>
<td>ø10 ø16 ø20 ø25</td>
</tr>
<tr>
<td>Media</td>
<td>Compressed air</td>
</tr>
<tr>
<td>Min. operating pressure</td>
<td>15 psi</td>
</tr>
<tr>
<td>Max. operating pressure</td>
<td>0.7 MPa (7 kgl/cm²) 100 psi</td>
</tr>
<tr>
<td>Ambient &amp; media temperature</td>
<td>–10°C(14°F) ~ +70°C(158°F) Use filtered dry air</td>
</tr>
<tr>
<td>Lubrication</td>
<td>None required or use ISO VG32</td>
</tr>
<tr>
<td>Port size M</td>
<td>M3x0.5 M5x0.8</td>
</tr>
<tr>
<td>Opening approx.</td>
<td>-10° ~ +30°</td>
</tr>
<tr>
<td>M</td>
<td>.12 x P .31 x P .49 x P .76 x P</td>
</tr>
<tr>
<td>Close</td>
<td>.077 x P .23 x P .37 x P .59 x P</td>
</tr>
<tr>
<td>Max tooling length (in.)</td>
<td>1.18 1.57 2.36 2.75</td>
</tr>
<tr>
<td>Effective gripping force (F) lbf</td>
<td>F = M/L x 0.0332</td>
</tr>
<tr>
<td>Weight g (ounce)</td>
<td>40(1.41) 96(3.38) 180(6.34) 313(11.0)</td>
</tr>
</tbody>
</table>

How to Order

See sensor specifications, selection guide and pricing on page 3. Please order sensors and female cordsets separately.

Parts List

<table>
<thead>
<tr>
<th>NO</th>
<th>Description</th>
<th>Material</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Finger</td>
<td>Nitrided carbon steel</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Rear end cover</td>
<td>Anodized aluminum alloy</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Body</td>
<td>Hard anodized aluminum alloy</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Piston rod</td>
<td>Hard chrome carbon steel</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Piston</td>
<td>Aluminum alloy</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Magnet</td>
<td>Rubber bonded barium ferrite</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Snap ring</td>
<td>Stainless steel</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Piston seal</td>
<td>Nitrile - Buna N</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Piston rod seal</td>
<td>Nitrile - Buna N</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>End cover seal</td>
<td>Nitrile - Buna N</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Finger pivot</td>
<td>Steel alloy</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Finger pivot</td>
<td>Steel alloy</td>
<td>1</td>
</tr>
</tbody>
</table>
FKA Series
Pneumatic Angular Grippers

Dimensions (mm)

FKA-10

FKA-16

FKA-20
FKA Series
Pneumatic Angular Grippers

Dimensions (mm)

**Sensors**

Sensors fit into mating slots in the gripper housing. The low profile and in-line wire outlet provides minimal intrusion for close mounting of adjacent components.

9Q49 Sensors

9B49 Sensors

All 9B49 sensors feature surge protection, polarity protection, LED indicator, and extremely fast switching speeds. The 9B49 series has an amplifier module (with LED) approximately 18 inches away from the sensor housing. Total length of the pre-wired type is approximately 10.5 feet. The quick connect version is roughly 19 inches overall length with the amplifier and LED integrated into the connector.

9Q49 Sensors

9B49 Sensor Selection Guide for bore sizes ø10 & ø20

<table>
<thead>
<tr>
<th>Sensor Type</th>
<th>Electrical Characteristics</th>
<th>Pre-wired Leadwire Part No.</th>
<th>Price</th>
<th>Quick Disconnect Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic (LED)</td>
<td>Sourcing PNP 6-24 VDC, 0.2 Amp Max current, 6 Watt max., 1.0 voltage drop</td>
<td>9B49-000-031</td>
<td>......</td>
<td>9B49-000-331</td>
<td>......</td>
</tr>
<tr>
<td>Electronic (LED)</td>
<td>Sinking NPN 6-24 VDC, 0.2 Amp Max current, 6 Watt max., 1.0 voltage drop</td>
<td>9B49-000-032</td>
<td>......</td>
<td>9B49-000-332</td>
<td>......</td>
</tr>
</tbody>
</table>

9Q49 Sensor Selection Guide for bore sizes ø16 ~ ø25

<table>
<thead>
<tr>
<th>Sensor Type</th>
<th>Electrical Characteristics</th>
<th>Prewired 9 ft. Leadwire Part No.</th>
<th>Price</th>
<th>Quick Disconnect* Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic (LED)</td>
<td>Sourcing PNP 5-28 VDC, 0.20 Amp Max current, 0.5 Voltage Drop</td>
<td>9Q49-000-031</td>
<td>......</td>
<td>9Q49-000-331</td>
<td>......</td>
</tr>
<tr>
<td>Electronic (LED)</td>
<td>Sinking NPN 5-28 VDC, 0.20 Amp Max current, 0.5 Voltage Drop</td>
<td>9Q49-000-032</td>
<td>......</td>
<td>9Q49-000-332</td>
<td>......</td>
</tr>
</tbody>
</table>

*Note: 6.3mm oval quick disconnect style sensors are supplied with 6 inch pigtail with male connector.

Please order sensors and female cordsets separately.

9Q49 Sensors

Please order sensors and female cordsets separately.

Female Cord Sets | Part No. | Price |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Meter</td>
<td>CFC-1M</td>
<td>-</td>
</tr>
<tr>
<td>2 Meters</td>
<td>CFC-2M</td>
<td>-</td>
</tr>
<tr>
<td>5 Meters</td>
<td>CFC-5M</td>
<td>-</td>
</tr>
</tbody>
</table>

*Note: 6.3mm oval quick disconnect style sensors are supplied with 6 inch pigtail with male connector.

Specifications and prices subject to change without notice or incurring obligation.
Check out these new product lines today!

- **Multi-Power® Air Presses**
  - Catalog # FP16

- **Linear Slides - 6 Families**
  - Catalog # LS-03

- **Pneumatic Grippers, Parallel Jaw and Angular Motion**
  - Catalog # GR-8

- **Pneumatic Grippers, Parallel Jaw and Angular Motion – Catalog # GR-8**

- **Stainless Steel Body Air Cylinders**
  - Catalog # SSB-03

- **Guided Motion Air Cylinders**
  - Catalog # FGM-10

- **Stopper Cylinders**
  - Catalog # ST-SC

- **Solenoid & Pilot Valves**
  - Catalog # FVA.E-09

- **Rotary Actuators, Pneumatic**
  - Catalog # FRA.C-09

- **Swing Clamps**
  - Bulletin # SC-DB04

- **Air Pilot & Solenoid Valves**
  - Catalog # FML.H

- **ISO 6431 Cylinders**
  - Catalog # FAQR-09

- **ISO 6432 Cylinders**
  - Catalog # FAE-09

- **Twin Rod, Non-Rotating Air Cylinders**
  - Catalog # FDF-09 and Catalog # FDXS-09

- **Air Pilot & Solenoid Valves**
  - Catalog # FVS.Y-09

- **Manifold Solenoid Valves**
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- **Global Series™ Metric Air Cylinders**
  - Catalog # GC-15

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