

## FKHC Series High Closing Force Angular Grippers

### Features

1. Magnetic piston is standard feature.
2. Unique design includes the use of a second moveable part (piston), applying additional force to the gripper jaw when pressurized to close.
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. Adjustable needle valve to control speed of jaw motion.



### Specifications

Model	FKHC			
Action	Double acting			
Bore (mm)	ø10	ø16	ø20	ø25
Media	Compressed air			
Min.operating pressure	30 psi			
Max.operating pressure	0.6 MPa (6 kgf/cm <sup>2</sup> ) 87 psi			
Ambient & media temperature	-10°C(14°F) ~ +60°C(140°F) Use filtered dry air			
Lubrication	None required or use ISO VG32			
Port size	M3x0.5	M5x0.8		
Opening	-10° to 30°			
Effective gripping force (lbf)*	1.1	4.5	8.3	15.7
Weight g (ounce)	39(1.37)	91(3.21)	180(6.34)	311(11.0)

### How to Order

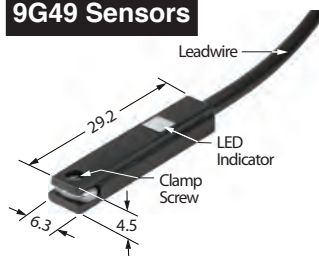
Please order sensors and female cordsets separately. See selection guide below.

<b>FKHC</b>	<b>16</b>	<b>D</b>	
<b>Series</b>	<b>Bore</b>	<b>Action</b>	<b>Price</b>
	ø10	D Double acting	-
	ø16		-
	ø20		-
	ø25		-

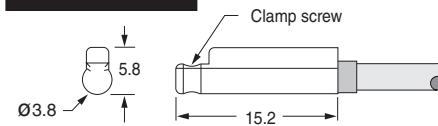
\*Note: Grip force at 72 psi and gripping point 20mm from jaw pivot. See page 2 holding force charts.

### Sensors

#### 9G49 Sensors



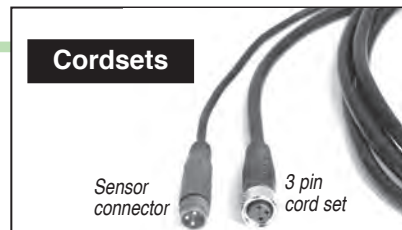
#### 9C49 Sensors



All 9C49 sensors feature surge protection, polarity protection, LED indicator, and extremely fast switching speeds.

\*Note: All quick disconnect style sensors are supplied with 6 inch pigtail with male connector.

#### Cordsets



Female Cord Sets	Part No.	Price
1 Meter	CFC-1M	-
2 Meters	CFC-2M	-
5 Meters	CFC-5M	-

6.3 mm wide	9G49 Sensor Selection Guide for all bore sizes ø10 ~ ø25		Prewired 9 ft. Leadwire	Quick Disconnect*
	Sensor Type	Electrical Characteristics	Part No.	Part No.
	Reed (LED)	5-120 VDC/VAC, 0.03 Amp max, 0.005 AMP min, 4 Watt max., 2.0 voltage drop	9G49-000-002	9G49-000-302
	Electronic (LED)	Sourcing PNP 5-28 VDC, 0.20 Amp max current, 0.5 voltage drop	9G49-000-031	9G49-000-331
	Electronic (LED)	Sinking NPN 5-28 VDC, 0.20 Amp max current, 0.5 voltage drop	9G49-000-032	9G49-000-332

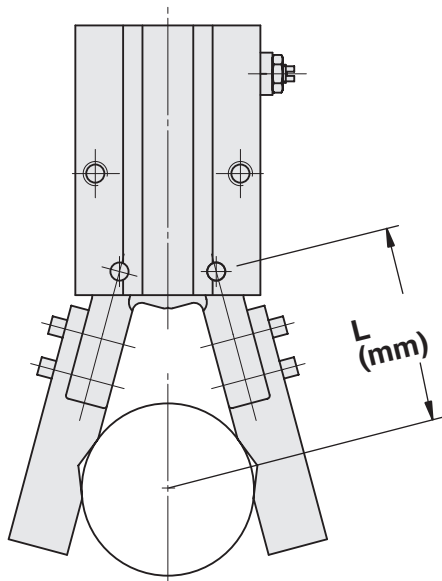
4 mm round	9C49 Sensor Selection Guide for bore sizes ø16 ~ ø25		Prewired 9 ft. Leadwire	Quick Disconnect*
	Sensor Type	Electrical Characteristics	Part No.	Part No.
	Reed (LED)	5-120 VDC/VAC, 0.04 Amp max, 0.005 Amp min current, 4 Watt max., 2.5 voltage drop	9C49-000-002	9C49-000-302
	Electronic (LED)	Sourcing PNP 6-30 VDC, 0.2 Amp max current, 6 Watt max., 1.5 voltage drop	9C49-000-031	9C49-000-331
	Electronic (LED)	Sinking NPN 6-30 VDC, 0.2 Amp max current, 6 Watt max., 1.5 voltage drop	9C49-000-032	9C49-000-332

■ 3716 N.E. 49th Avenue ■ Gainesville, FL 32609-1699  
 ■ Telephone (352) 373-3578 ■ Fax (352) 375-8024 ■ E-Mail service@fabco-air.com  
 ■ Web Site <http://www.fabco-air.com>

Please visit <http://portal.fabco-air.com/configure.php> for current pricing. Specifications and prices subject to change without notice or incurring obligation

**Effective holding forces on external workpiece surfaces.**

• Work holding point should be within the range indicated in the graphs at the right.

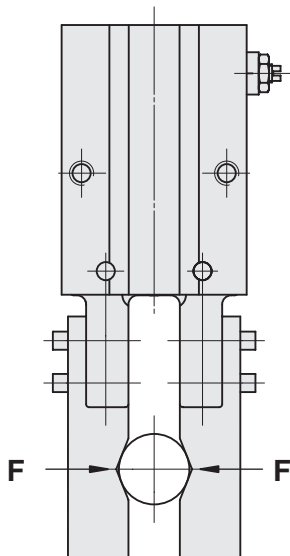


**Selecting the proper gripper considering component weight**

- Selection of the correct model depends upon the component weight, the coefficient of friction between the finger attachment and the component, and respective configurations. A model should be selected with a holding force of 10 to 20 times that of the component weight.
- If high acceleration, deceleration or impact forces are encountered during component transfer, a further margin of safety should be considered.

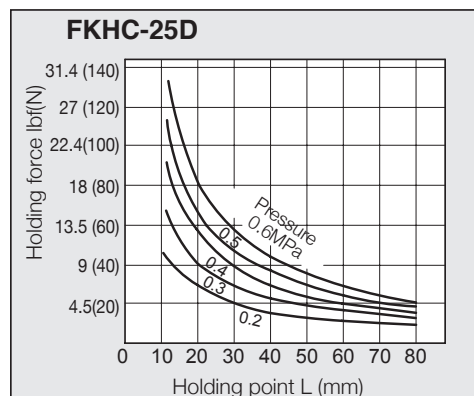
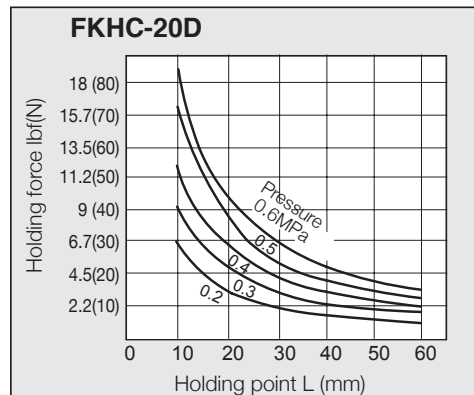
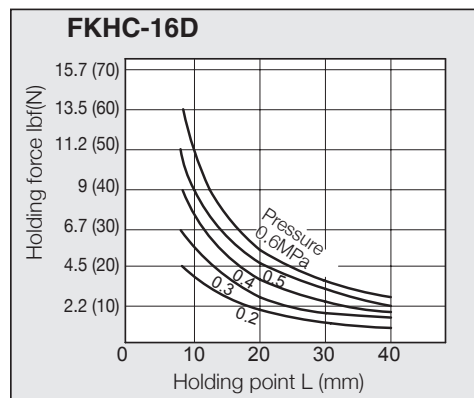
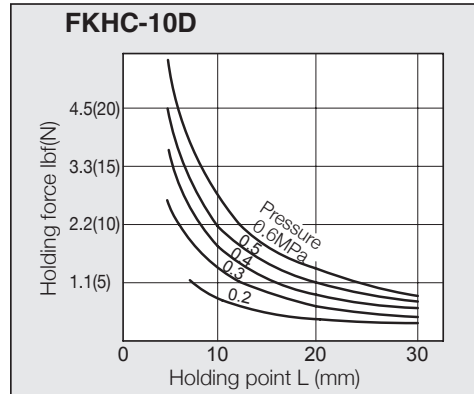
**Effective holding force**

- The holding force shown in the tables represents the holding force of one finger when all fingers and attachments are in contact with the work. F = one finger thrust as shown below.

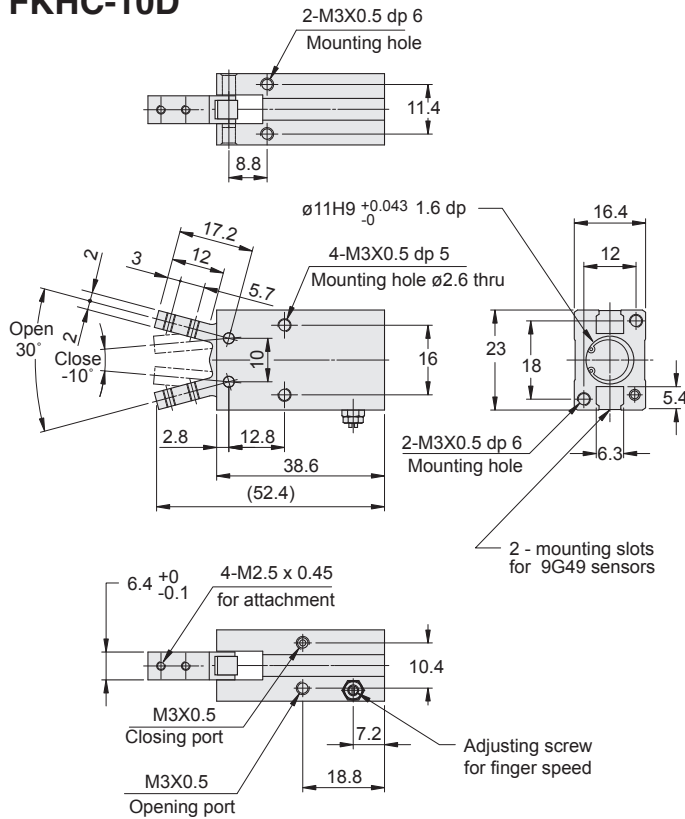


**Conversions**

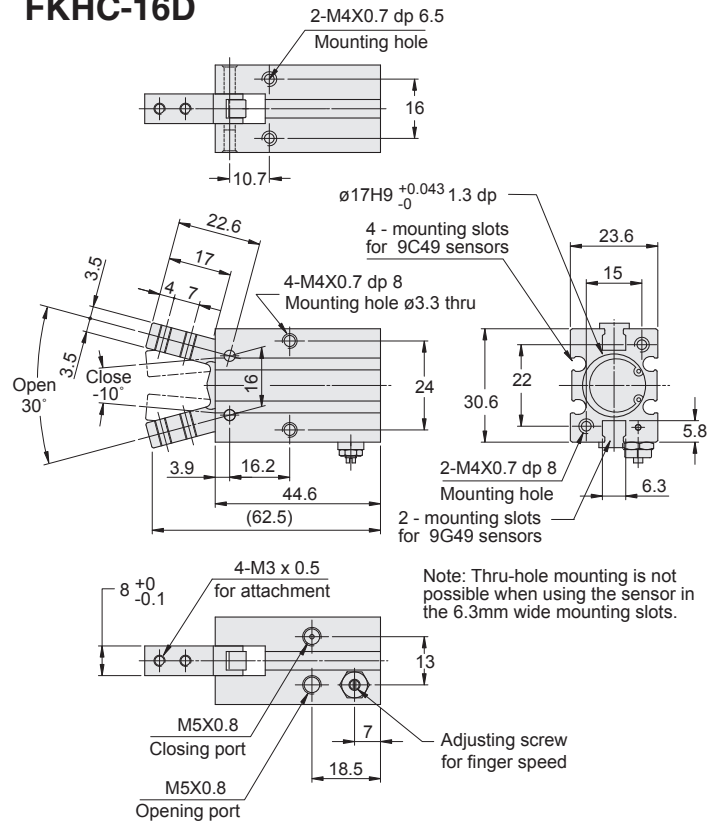
- lbf = N x 0.224
- 0.2 MPa = 29 psi
- 0.3 MPa = 43 psi
- 0.4 MPa = 58 psi
- 0.5 MPa = 72 psi
- 0.6 MPa = 87 psi



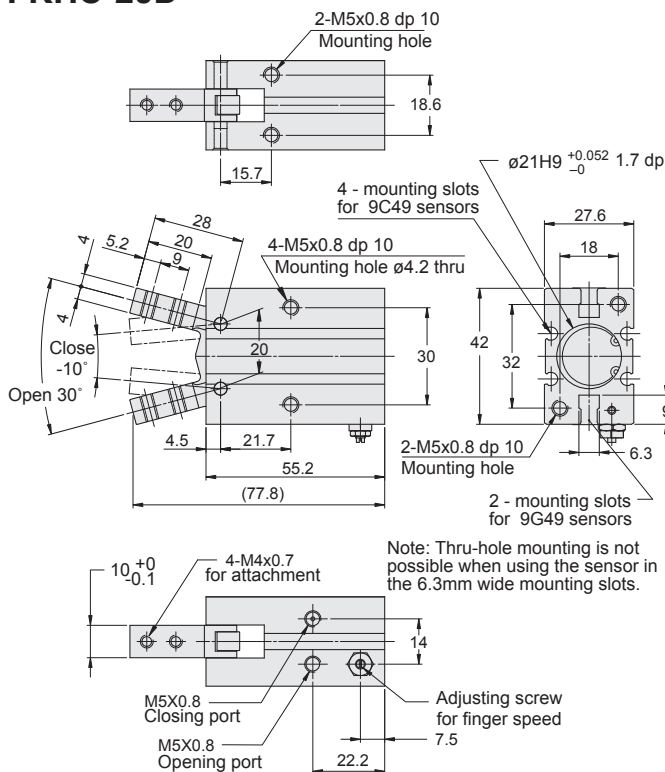
### FKHC-10D



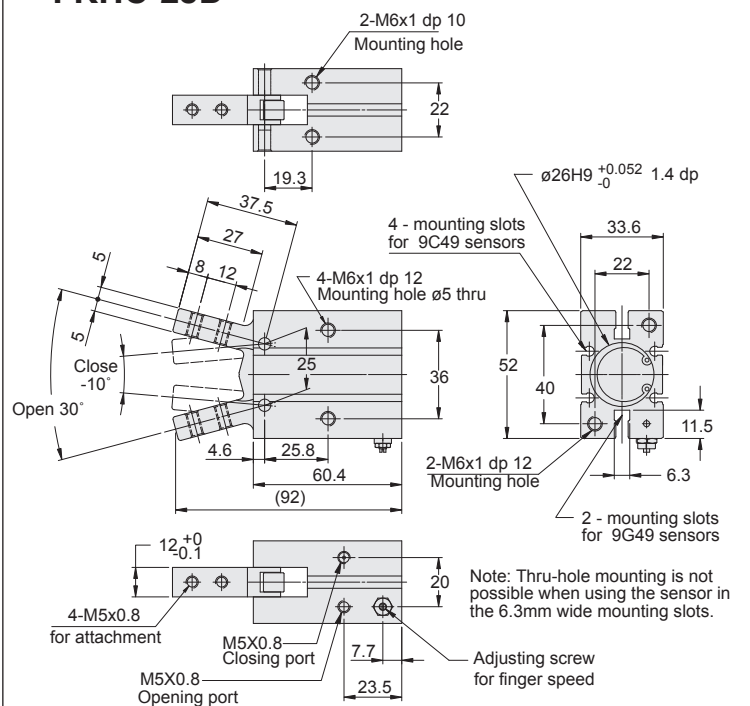
### FKHC-16D



### FKHC-20D



### FKHC-25D





**Cylinders, Valves and Accessories**  
Catalog #CV9



**Pancake® II Air Cylinders**  
Catalog Pan2-2



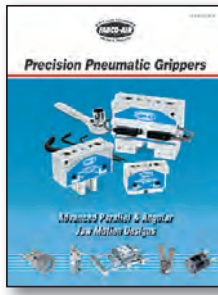
**Square Pancake® II Air Cylinders**  
Catalog # SqPan2



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



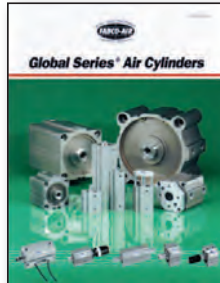
**Linear Slides - 6 Families**  
Catalog # LS-03



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



**NFPA Interchangeable Air Cylinders** – Catalog # NF-6



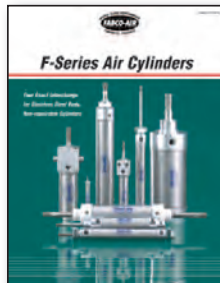
**Global Series™ Metric Air Cylinders** - Catalog # GC-15



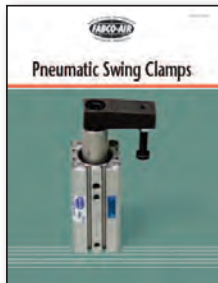
**Stopper Cylinders**  
Catalog # ST-SC



**Modular Air Preparation System - FRLs**  
Catalog # FRL-06



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

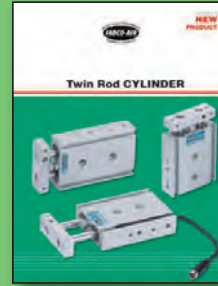


**Swing Clamps**  
Catalog # SC-DB04

### Check out these new product lines today !



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



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



**Pneumatic Finger Slides**  
Catalog # FDH-10



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



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



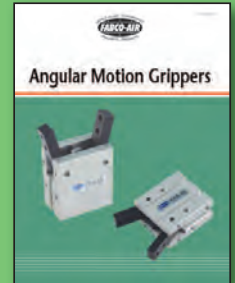
**Parallel Grippers**  
Catalog # FKHQ-10 and Catalog # FKHZ-10



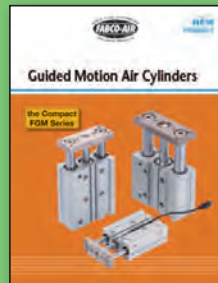
**Toggle Type Angular Grippers** - Catalog # FKHT-10



**Air Table Slides**  
Catalog # FGXS-10



**Angular Grippers**  
Catalog # FKA-09



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



**Pneumatic & Hydraulic Swing Clamps**  
Catalog # FML.H



**Wide Opening Parallel Grippers** - Catalog # FKHL-10