

# RP-P SERIES

## 2-Jaw Precision Parallel Grippers | Features and Benefits | How To Order

### Features:

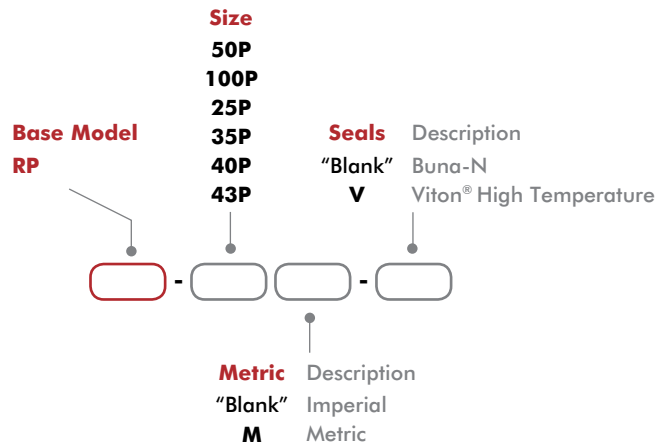
- Precision gripper with excellent part position repeatability
- Rack and pinion design for precise jaw synchronization
- Low friction and smooth operation with Dual-V roller bearings
- Maintenance free lubricated cylinder and drive mechanism
- Zero side play and maximum jaw support with preloaded bearings
- Supports up to two sensing positions

### Applications:

- Delicate part handling applications
- Highly repeatable and precise gripping
- Clean application environments



## How To Order



## Accessories

Sensor Accessories	Model Numbers	Part Number	Qty/Unit
3mm NPN Inductive Sensor with Quick Disconnect*	RP-50P	OISN-019	1-2
3mm PNP Inductive Sensor with Quick Disconnect*	RP-50P	OISP-019	1-2
3mm NPN Inductive Sensor with Quick Disconnect*	RP-100P, -25P, RP-50P, -110P, -25P	OISN-014	1-2
3mm PNP Inductive Sensor with Quick Disconnect*	RP-100P, -25P, RP-50P, -110P, -25P	OISP-014	1-2
Inductive Sensor Mounting Kit for (mounts 2 sensors)	See Datasheet		1
Quick Disconnect 2 Meter Cable Length*	All Models	CABL-010	1-2
Quick Disconnect 5 Meter Cable Length*	All Models	CABL-013	1-2

Pneumatic Accessories	Model Numbers	Part Number	Qty/Unit
Fail Safe Valve (Imperial)	RP-50P, -110P, -25P	OFSV-001	1
Fail Safe Valve (Metric)	RP-50P, -110P, -25P	OFSV-004	1
Fail Safe Valve (Imperial)	RP-35P, -40P, -43P	OFSV-002	1
Fail Safe Valve (Metric)	RP-50P, -110P, -25P	OFSV-005	1
Stroke Limited Opening Valve (LTD)	RP-35P, -40P, -43P	OLTD-001	1
Stroke Limited Opening Valve (LTD)	RP-50P, -110P, -25P	OLTD-002	1

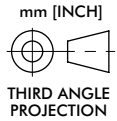
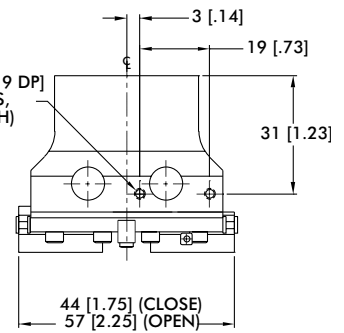
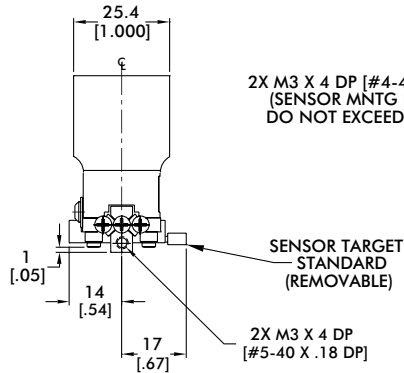
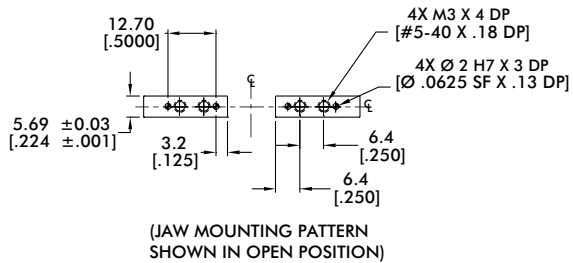
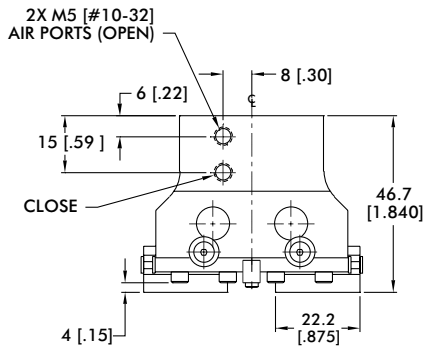
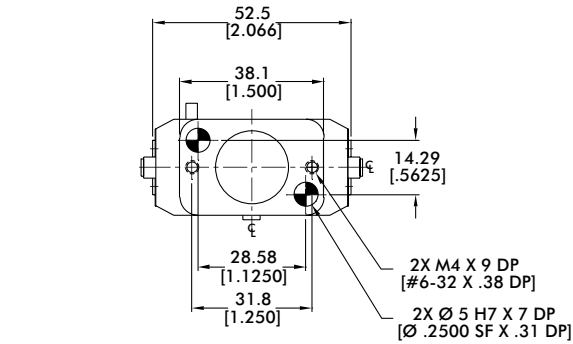
\*Sensor and cable sold separately.

## 2-Jaw Precision Parallel Grippers | Technical Specifications

Specifications	Units	50P	100P	25P	35P	40P	43P
Total Rated Grip Force <b>F</b> @ 100 psi [7 bar]	N [lb]	107 [24]	160 [36]	356 [80]	778 [175]	890 [200]	2224 [500]
Total Stroke	mm [in]	12.7 [0.50]	25.4 [1.00]	28.7 [1.13]	25.4 [1.00]	50.8 [2.00]	76.2 [3.00]
Weight	kg [lbs]	0.14 [0.31]	0.23 [0.50]	0.45 [1.0]	1.6 [3.5]	2.7 [6.0]	7.3 [16]
Pressure Range	bar [psi]	0.3-7 [5-100]					
Ingress Protection Class (IP)		IP 33					
Displacement	cm <sup>3</sup> [in <sup>3</sup> ]	1.64 [0.100]	3.6 [0.220]	8.2 [0.500]	17.0 [1.036]	28.0 [1.710]	120.6 [7.360]
Temperature Range (Buna-N seals)	°C [°F]	-35°~80° [-30°~180°]					
Temperature Range (Viton® seals)	°C [°F]	-30°~120° [-20°~250°]					
Actuation (open/close)	sec	0.14	0.18	0.20	0.33	0.39	0.59
Accuracy	mm [in]	±0.03 [±0.001]				±0.05 [±0.002]	
Repeatability	mm [in]	±0.01 [±0.0005]				±0.03 [±0.001]	
Valve to Actuate Double Acting		4-way, 2-position					

# RP-50P

## 2-Jaw Precision Parallel Grippers | Dimensions and Technical Specifications



### Sensor Accessories RP-50P

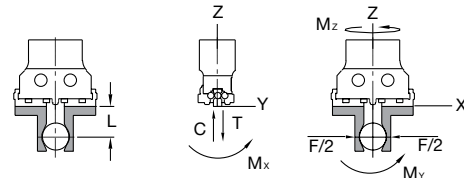
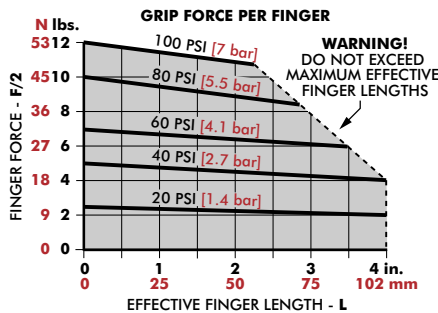
Inductive Sensor Mounting Kit for (mounts 2 sensors) OSMK-003

### Seal Repair Kits RP-50P

Buna-N Seal Repair Kit SLKT-053

Viton® Seal Repair Kit SLKT-053V

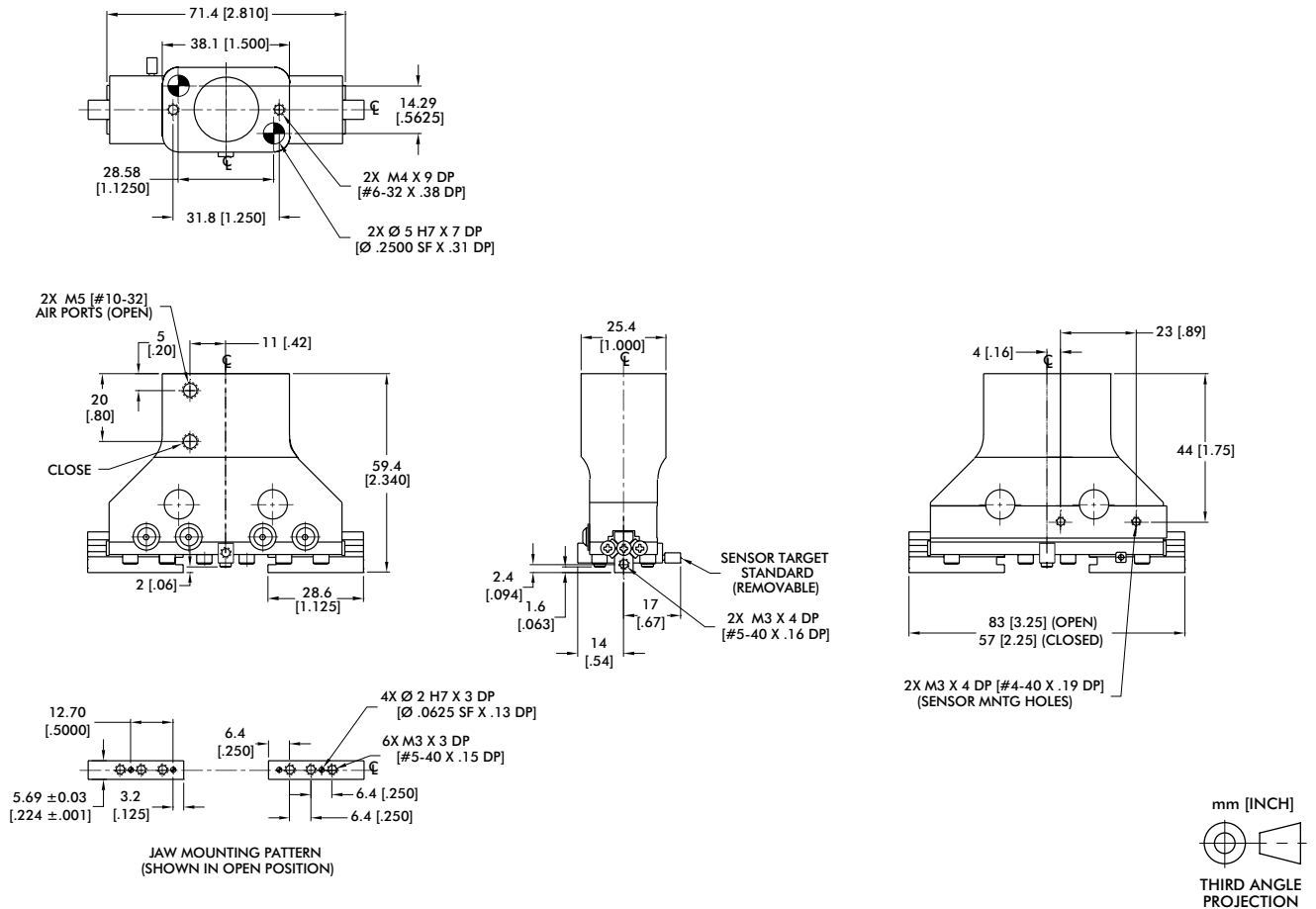
## Loading Information



RP-50P	Static	Dynamic
Maximum Tensile <b>T</b>	222 N [50 lbs]	67 N [15 lbs]
Maximum Compressive <b>C</b>	222 N [50 lbs]	67 N [15 lbs]
Maximum Moment <b>M<sub>x</sub></b>	6 Nm [50 in-lbs]	1 Nm [12 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	7 Nm [60 in-lbs]	2 Nm [15 in-lbs]
Maximum Moment <b>M<sub>z</sub></b>	6 Nm [50 in-lbs]	1 Nm [12 in-lbs]

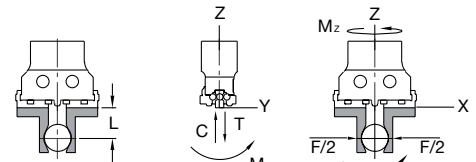
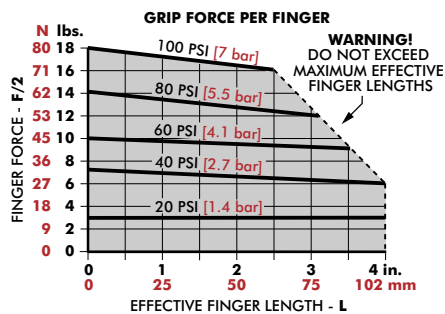
\*Capacities are per set of jaws and are not simultaneous

## 2-Jaw Precision Parallel Grippers | Dimensions and Technical Specifications



Sensor Accessories	RP-100P
Inductive Sensor Mounting Kit for (mounts 2 sensors)	OSMK-004
Seal Repair Kits	RP-50P
Buna-N Seal Repair Kit	SLKT-037
Viton® Seal Repair Kit	SLKT-037V

### Loading Information

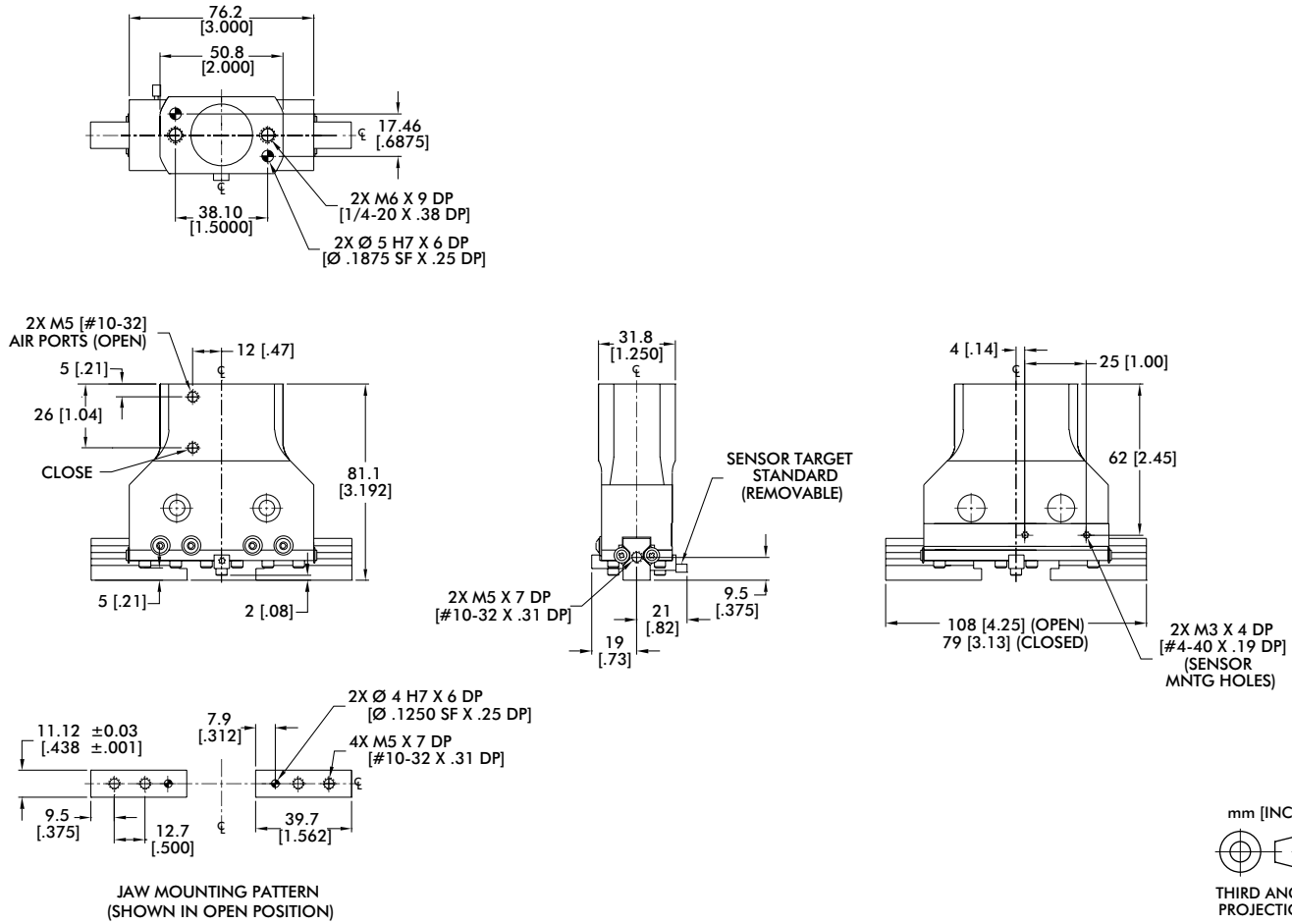


RP-100P	Static	Dynamic
Maximum Tensile <b>T</b>	267 N [60 lb]	89 N [20 lb]
Maximum Compressive <b>C</b>	267 N [60 lb]	89 N [20 lb]
Maximum Moment <b>M<sub>x</sub></b>	11 Nm [100 in-lb]	3 Nm [25 in-lb]
Maximum Moment <b>M<sub>y</sub></b>	14 Nm [120 in-lb]	3 Nm [30 in-lb]
Maximum Moment <b>M<sub>z</sub></b>	11 Nm [100 in-lb]	3 Nm [25 in-lb]

\*Capacities are per set of jaws and are not simultaneous

# RP-25P

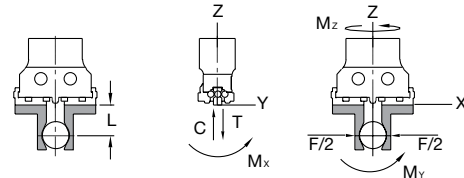
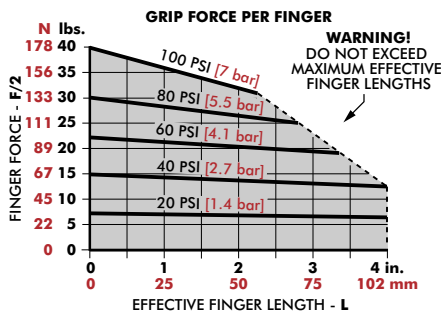
## 2-Jaw Precision Parallel Grippers | Dimensions and Technical Specifications



Sensor Accessories	RP-25P
Inductive Sensor Mounting Kit for (mounts 2 sensors)	OSMK-004

Seal Repair Kits	RP-25P
Buna-N Seal Repair Kit	SLKT-046
Viton® Seal Repair Kit	SLKT-046V

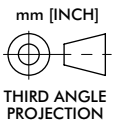
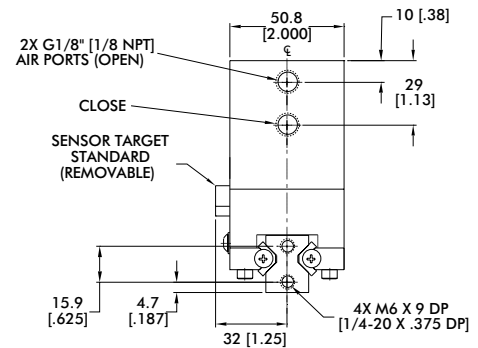
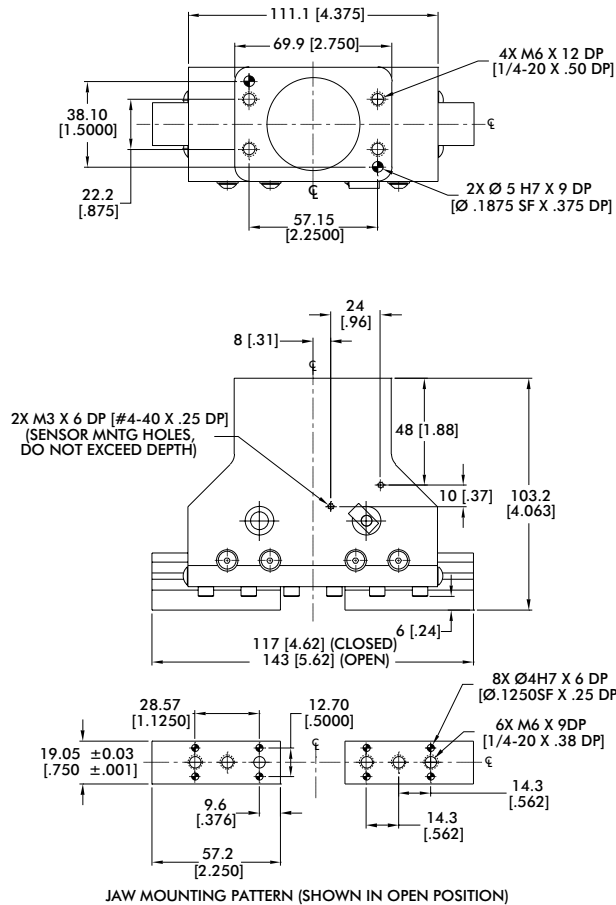
### Loading Information



RP-25P	Static	Dynamic
Maximum Tensile <b>T</b>	445 N [100 lbs]	133 N [30 lbs]
Maximum Compressive <b>C</b>	445 N [100 lbs]	133 N [30 lbs]
Maximum Moment <b>M<sub>x</sub></b>	23 Nm [200 in-lbs]	6 Nm [50 in-lb]
Maximum Moment <b>M<sub>y</sub></b>	28 Nm [250 in-lbs]	7 Nm [60 in-lbs]
Maximum Moment <b>M<sub>z</sub></b>	23 Nm [200 in-lbs]	6 Nm [50 in-lbs]

<sup>c</sup>Capacities are per set of jaws and are not simultaneous

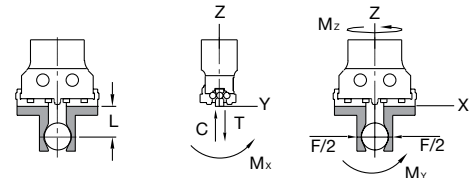
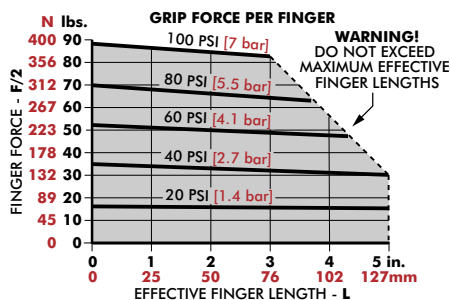
## 2-Jaw Precision Parallel Grippers | Dimensions and Technical Specifications



<b>Sensor Accessories</b>	<b>RP-35P</b>
Inductive Sensor Mounting Kit for (mounts 2 sensors)	OSMK-023

<b>Seal Repair Kits</b>	<b>RP-35P</b>
Buna-N Seal Repair Kit	SLKT-049
Viton® Seal Repair Kit	SLKT-049V

### Loading Information

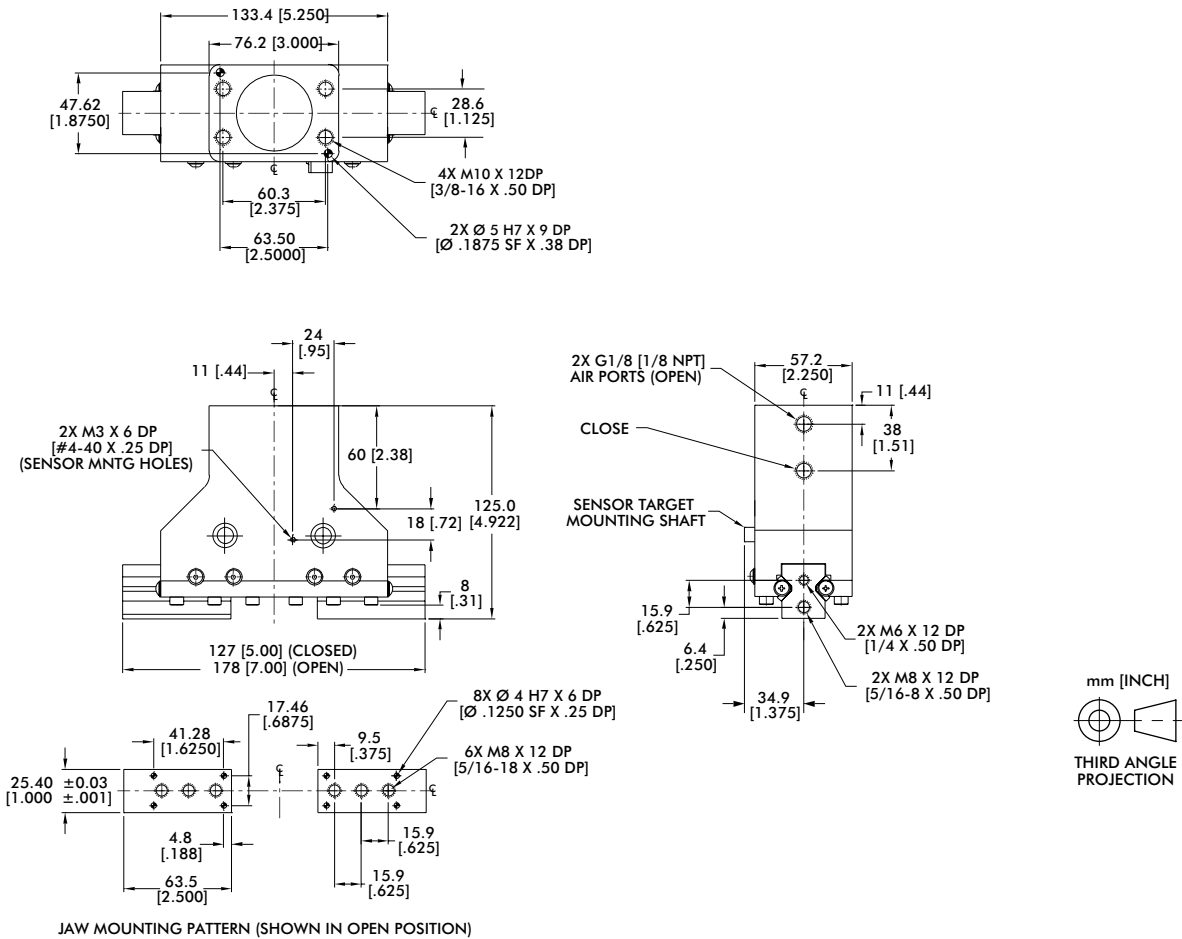


RP-35P	Static	Dynamic
Maximum Tensile <b>T</b>	890 N [200 lb]	334 N [75 lb]
Maximum Compressive <b>C</b>	890 N [200 lb]	334 N [75 lb]
Maximum Moment <b>M<sub>x</sub></b>	57 Nm [500 in-lb]	14 Nm [125 in-lb]
Maximum Moment <b>M<sub>y</sub></b>	68 Nm [600 in-lb]	17 Nm [150 in-lb]
Maximum Moment <b>M<sub>z</sub></b>	57 Nm [500 in-lb]	14 Nm [125 in-lb]

\*Capacities are per set of jaws and are not simultaneous

# RP-40P

## 2-Jaw Precision Parallel Grippers | Dimensions and Technical Specifications

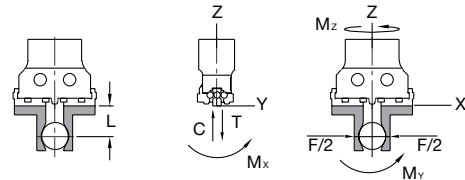
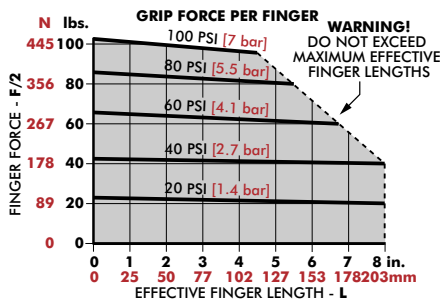


JAW MOUNTING PATTERN (SHOWN IN OPEN POSITION)

Sensor Accessories	RP-40P
Inductive Sensor Mounting Kit for (mounts 2 sensors)	OSMK-023

Seal Repair Kits	RP-40P
Buna-N Seal Repair Kit	SLKT-050
Viton® Seal Repair Kit	SLKT-050V

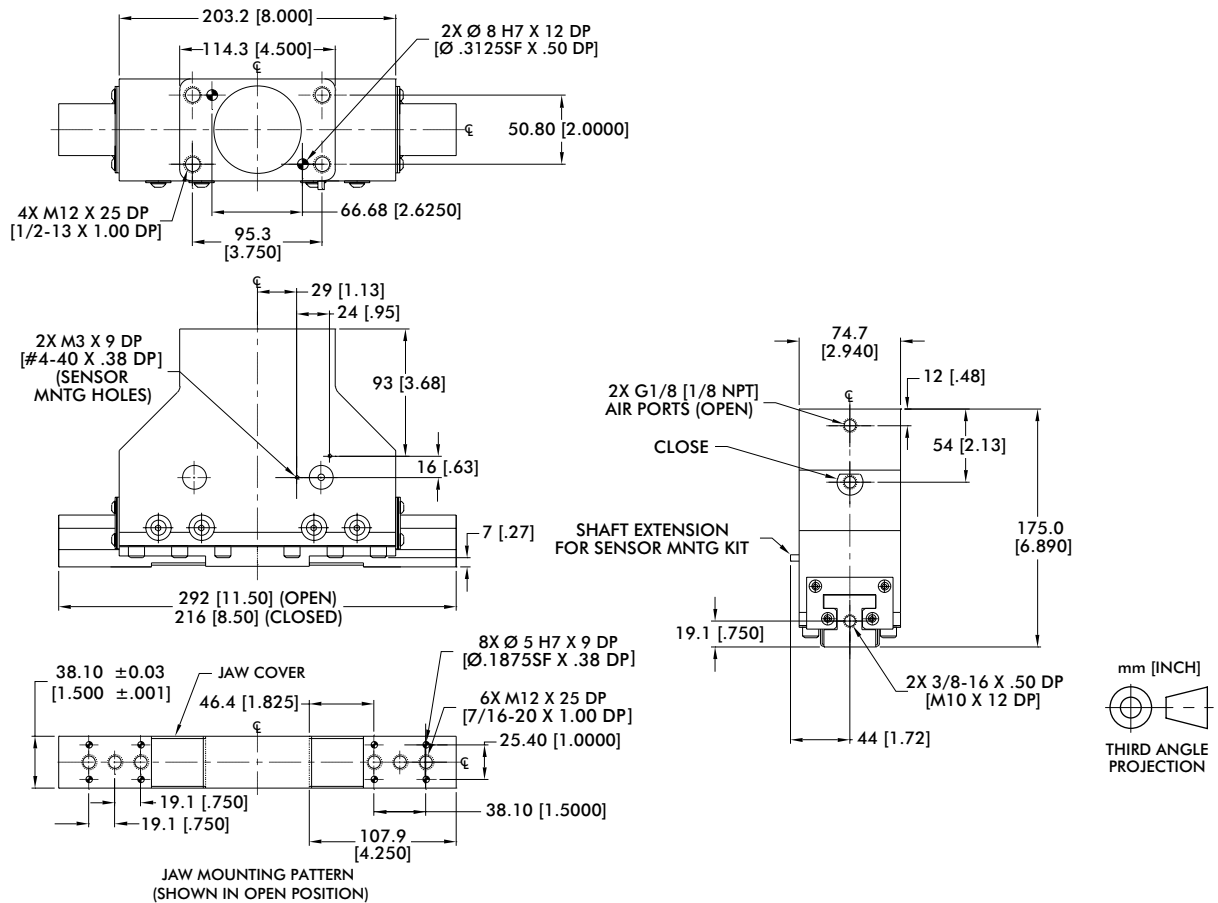
## Loading Information



RP-40P	Static	Dynamic
Maximum Tensile <b>T</b>	1779 N [400 lb]	667 N [150 lb]
Maximum Compressive <b>C</b>	1779 N [400 lb]	667 N [150 lb]
Maximum Moment <b>M<sub>x</sub></b>	113 Nm [1000 in-lb]	28 Nm [250 in-lb]
Maximum Moment <b>M<sub>y</sub></b>	136 Nm [1200 in-lb]	34 Nm [300 in-lb]
Maximum Moment <b>M<sub>z</sub></b>	113 Nm [1000 in-lb]	28 Nm [250 in-lb]

\*Capacities are per set of jaws and are not simultaneous

## 2-Jaw Precision Parallel Grippers | Dimensions and Technical Specifications



### Sensor Accessories

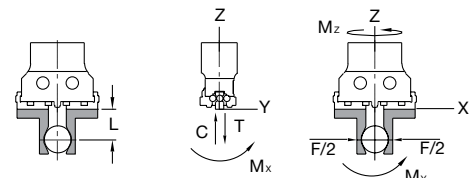
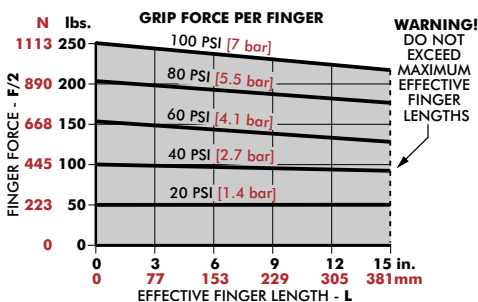
Inductive Sensor Mounting Kit for (mounts 2 sensors) **OSMK-023**

### Seal Repair Kits

Buna-N Seal Repair Kit **SLKT-051**

Viton® Seal Repair Kit **SLKT-051V**

## Loading Information



RP-43P	Static	Dynamic
Maximum Tensile <b>T</b>	4448 N [1000 lb]	1557 N [350 lb]
Maximum Compressive <b>C</b>	4448 N [1000 lb]	1557 N [350 lb]
Maximum Moment <b>M<sub>x</sub></b>	283 Nm [2500 in-lb]	57 Nm [500 in-lb]
Maximum Moment <b>M<sub>y</sub></b>	339 Nm [3000 in-lb]	68 Nm [600 in-lb]
Maximum Moment <b>M<sub>x</sub></b>	283 Nm [2500 in-lb]	57 Nm [500 in-lb]

\*Capacities are per set of jaws and are not simultaneous