

RP-P SERIES

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

Features:

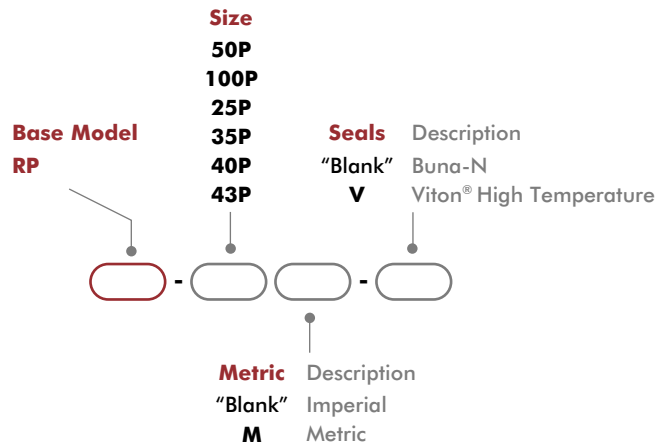
- Precision gripper with excellent part position repeatability
- Rack and pinion design for precise jaw synchronization
- Low friction and smooth operation with Dual-V roller bearings
- Maintenance free lubricated cylinder and drive mechanism
- Zero side play and maximum jaw support with preloaded bearings
- 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
4mm NPN Inductive Sensor with Quick Disconnect*	RP-100P, -25P, RP-50P, -110P, -25P	OISN-014	1-2
4mm 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

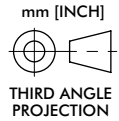
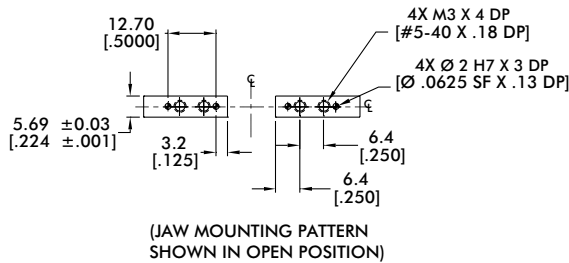
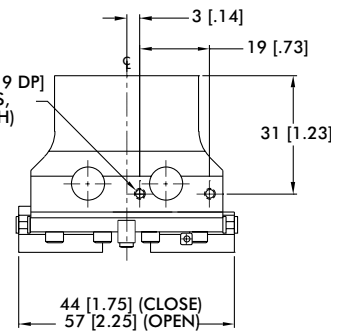
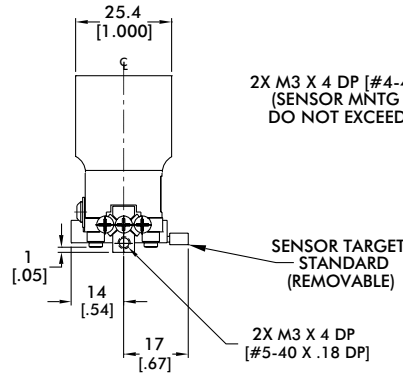
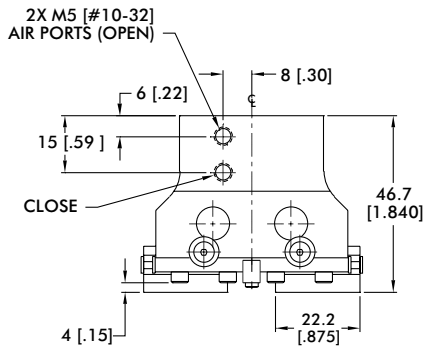
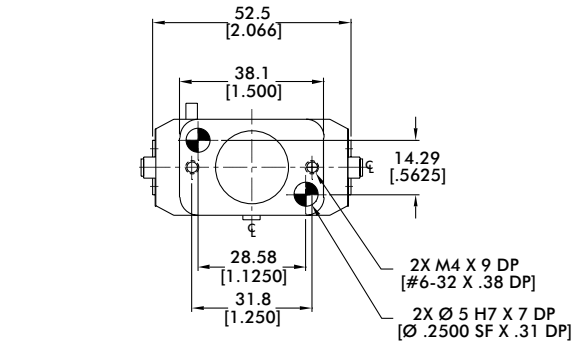
*Sensor and cable sold separately.

2-Jaw Precision Parallel Grippers | Technical Specifications

Specifications	Units	50P	100P	25P	35P	40P	43P
Total Rated Grip Force F @ 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 ³ [in ³]	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					

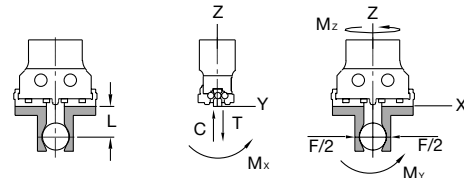
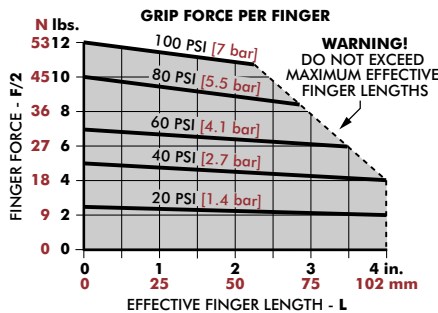
RP-50P

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

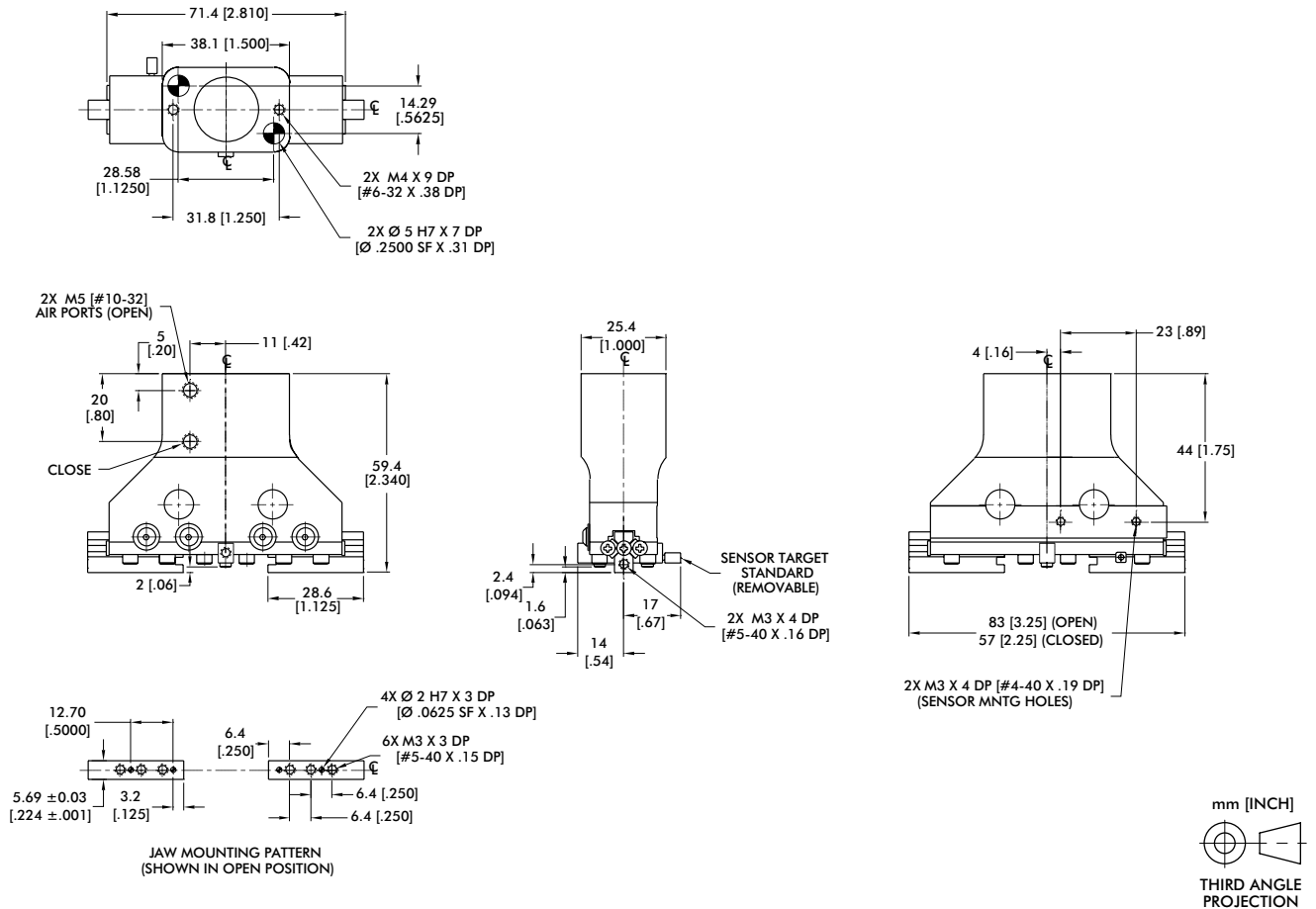
Loading Information



RP-50P	Static	Dynamic
Maximum Tensile T	222 N [50 lbs]	67 N [15 lbs]
Maximum Compressive C	222 N [50 lbs]	67 N [15 lbs]
Maximum Moment M_x	6 Nm [50 in-lbs]	1 Nm [12 in-lbs]
Maximum Moment M_y	7 Nm [60 in-lbs]	2 Nm [15 in-lbs]
Maximum Moment M_z	6 Nm [50 in-lbs]	1 Nm [12 in-lbs]

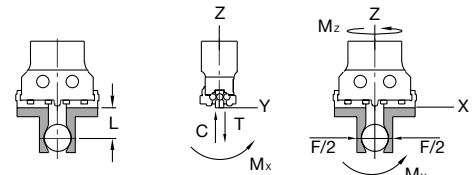
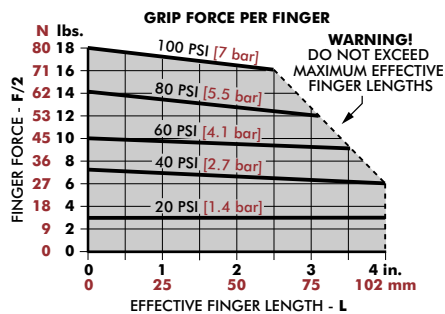
*Capacities are per set of jaws and are not simultaneous

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

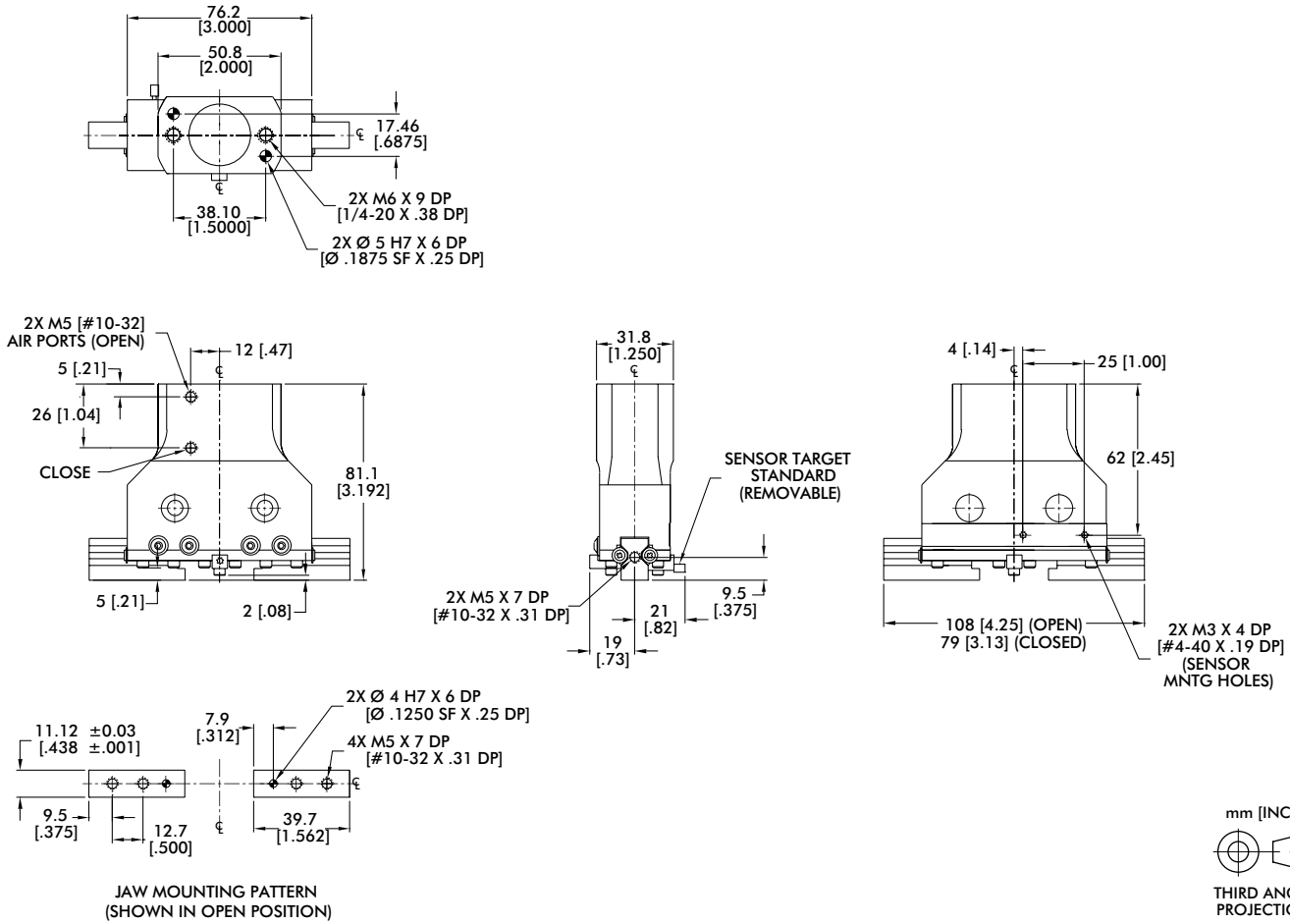


RP-100P	Static	Dynamic
Maximum Tensile T	267 N [60 lb]	89 N [20 lb]
Maximum Compressive C	267 N [60 lb]	89 N [20 lb]
Maximum Moment M_x	11 Nm [100 in-lb]	3 Nm [25 in-lb]
Maximum Moment M_y	14 Nm [120 in-lb]	3 Nm [30 in-lb]
Maximum Moment M_z	11 Nm [100 in-lb]	3 Nm [25 in-lb]

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RP-25P

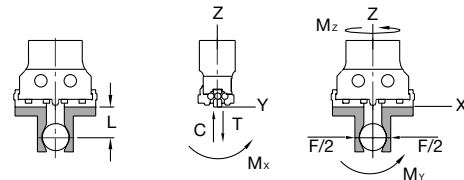
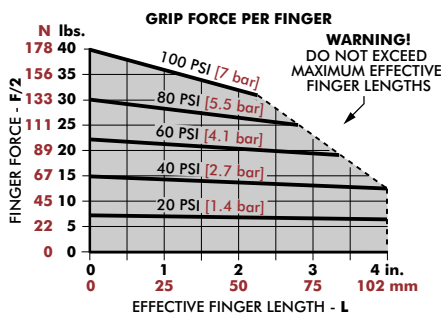
2-Jaw Precision Parallel Grippers | Dimensions and Technical Specifications



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

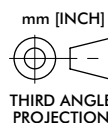
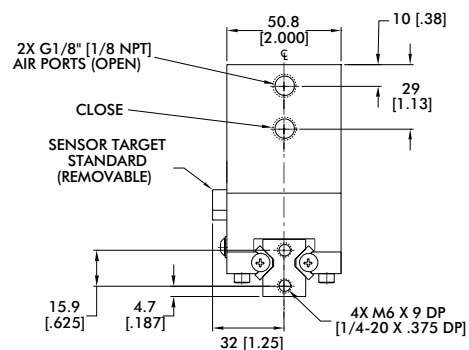
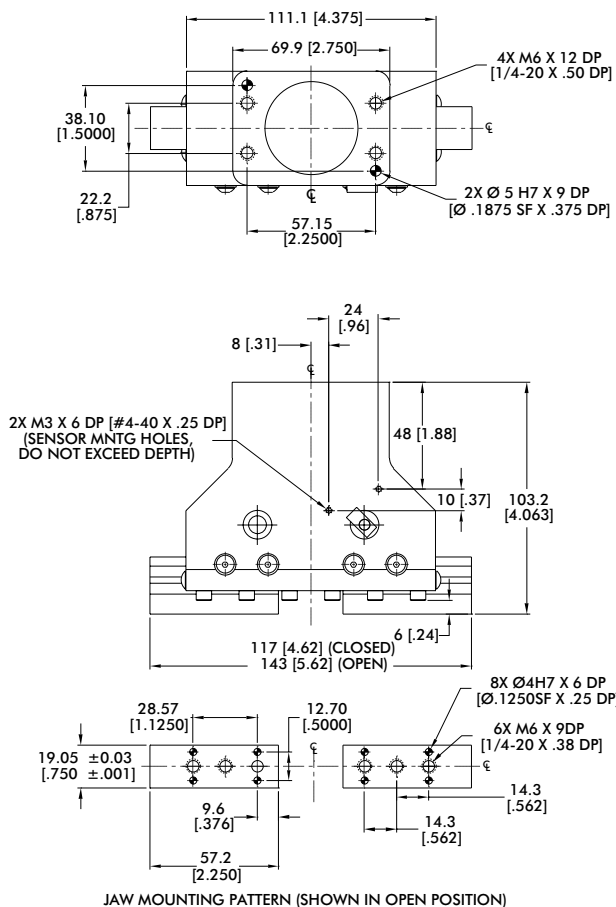
Loading Information



RP-25P	Static	Dynamic
Maximum Tensile T	445 N [100 lbs]	133 N [30 lbs]
Maximum Compressive C	445 N [100 lbs]	133 N [30 lbs]
Maximum Moment M_x	23 Nm [200 in-lbs]	6 Nm [50 in-lb]
Maximum Moment M_y	28 Nm [250 in-lbs]	7 Nm [60 in-lbs]
Maximum Moment M_z	23 Nm [200 in-lbs]	6 Nm [50 in-lbs]

^cCapacities are per set of jaws and are not simultaneous

2-Jaw Precision Parallel Grippers | Dimensions and Technical Specifications



Sensor Accessories

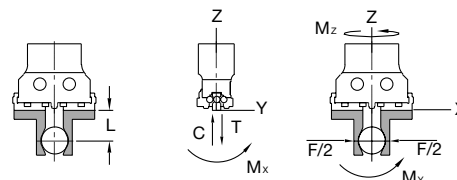
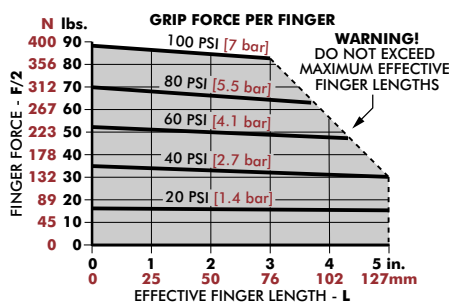
Inductive Sensor Mounting Kit for (mounts 2 sensors) OSMK-023

Seal Repair Kits

Buna-N Seal Repair Kit SLKT-049

Viton® Seal Repair Kit SLKT-049V

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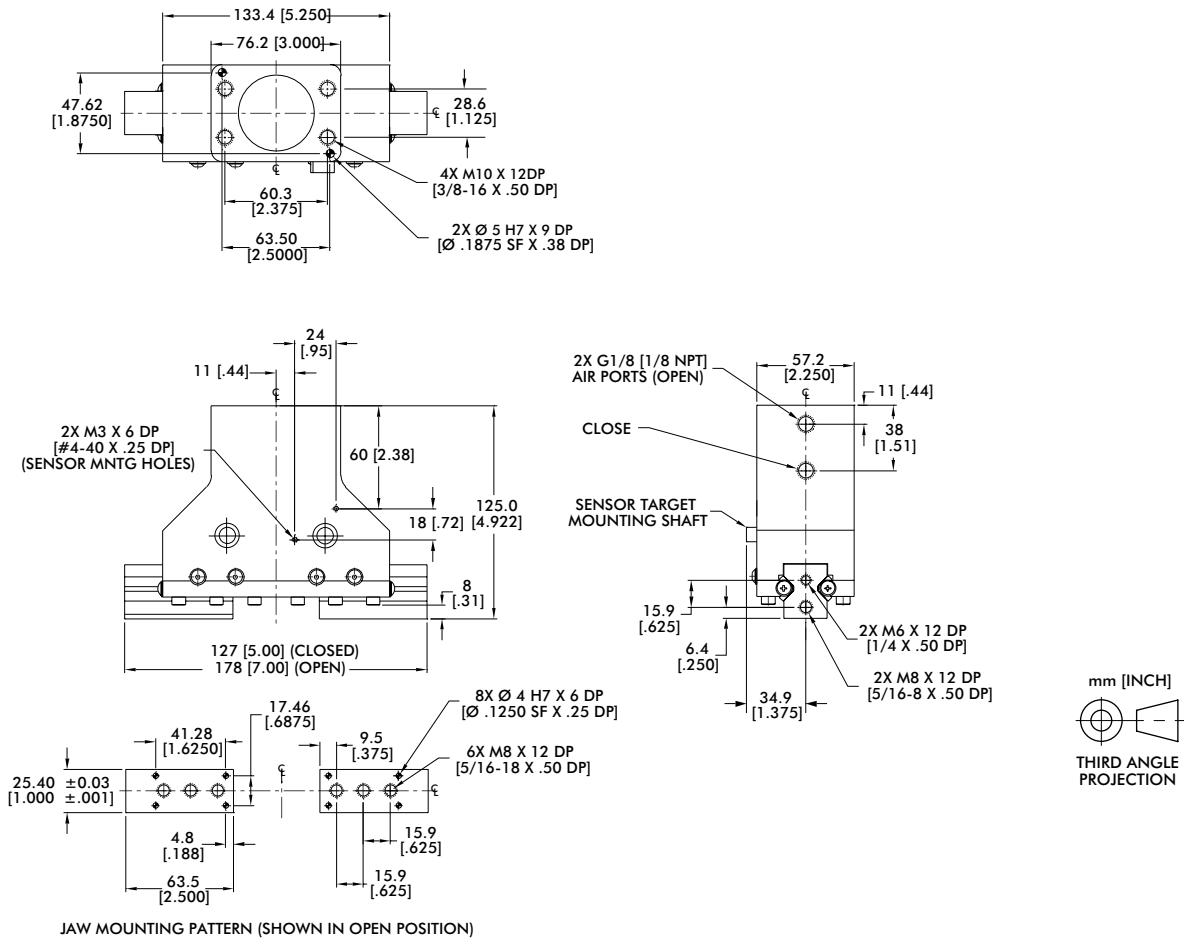


RP-35P	Static	Dynamic
Maximum Tensile T	890 N [200 lb]	334 N [75 lb]
Maximum Compressive C	890 N [200 lb]	334 N [75 lb]
Maximum Moment M_x	57 Nm [500 in-lb]	14 Nm [125 in-lb]
Maximum Moment M_y	68 Nm [600 in-lb]	17 Nm [150 in-lb]
Maximum Moment M_z	57 Nm [500 in-lb]	14 Nm [125 in-lb]

*Capacities are per set of jaws and are not simultaneous

RP-40P

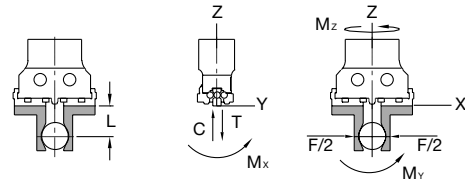
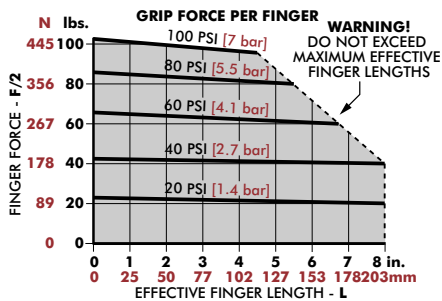
2-Jaw Precision Parallel Grippers | Dimensions and Technical Specifications



JAW MOUNTING PATTERN (SHOWN IN OPEN POSITION)

Accessory	Part Number
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

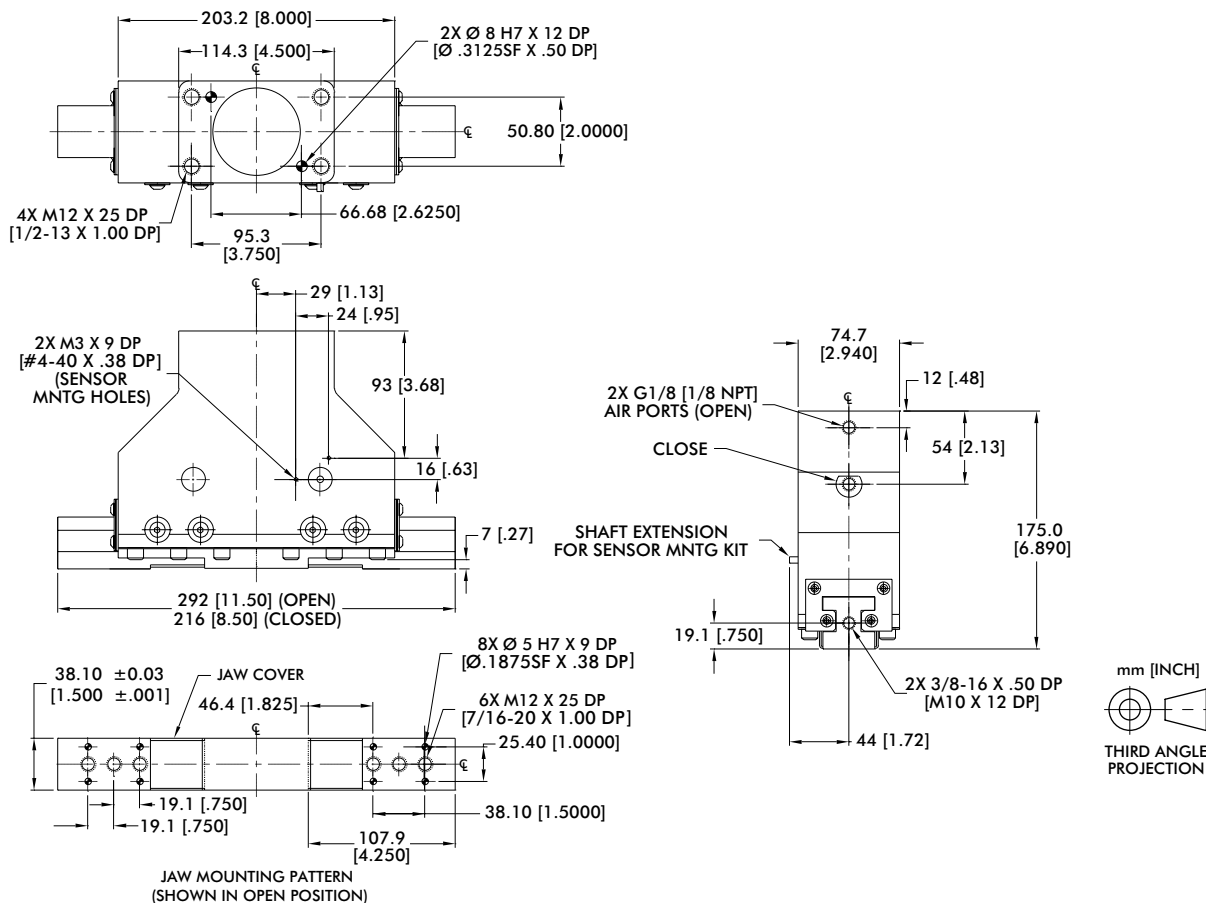
Loading Information



RP-40P	Static	Dynamic
Maximum Tensile T	1779 N [400 lb]	667 N [150 lb]
Maximum Compressive C	1779 N [400 lb]	667 N [150 lb]
Maximum Moment M_x	113 Nm [1000 in-lb]	28 Nm [250 in-lb]
Maximum Moment M_y	136 Nm [1200 in-lb]	34 Nm [300 in-lb]
Maximum Moment M_z	113 Nm [1000 in-lb]	28 Nm [250 in-lb]

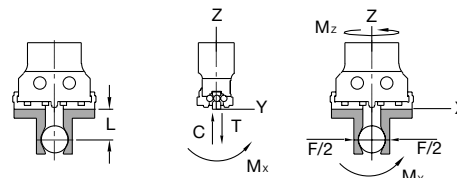
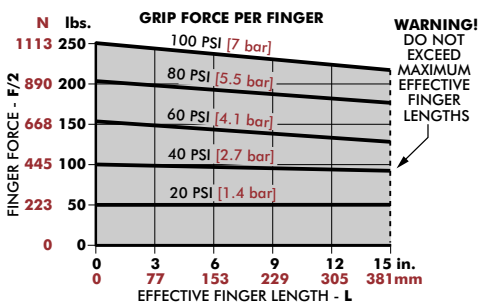
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2-Jaw Precision Parallel Grippers | Dimensions and Technical Specifications



Sensor Accessories	RP-43P
Inductive Sensor Mounting Kit for (mounts 2 sensors)	OSMK-023
Seal Repair Kits	RP-43P
Buna-N Seal Repair Kit	SLKT-051
Viton® Seal Repair Kit	SLKT-051V

Loading Information



RP-43P	Static	Dynamic
Maximum Tensile T	4448 N [1000 lb]	1557 N [350 lb]
Maximum Compressive C	4448 N [1000 lb]	1557 N [350 lb]
Maximum Moment M_x	283 Nm [2500 in-lb]	57 Nm [500 in-lb]
Maximum Moment M_y	339 Nm [3000 in-lb]	68 Nm [600 in-lb]
Maximum Moment M_z	283 Nm [2500 in-lb]	57 Nm [500 in-lb]

*Capacities are per set of jaws and are not simultaneous