

# RPL/RPLC SERIES

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

### Features:

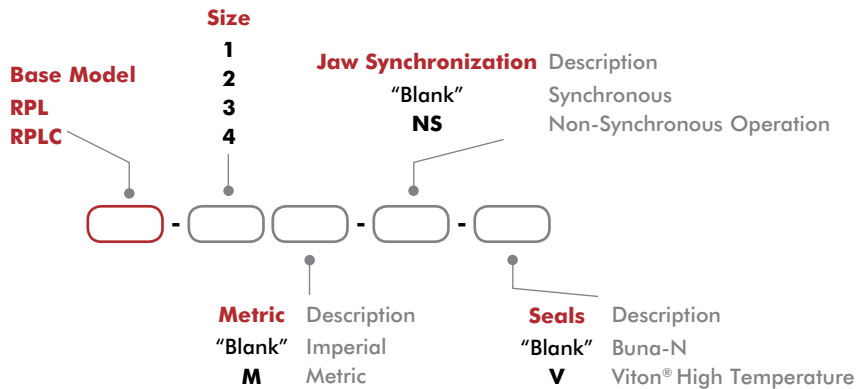
- Excellent part positioning and repeatability
- Zero side play using low friction Dual-V roller bearings
- Class 10 rated clean-room (RPLC) fits life Sciences applications
- Low friction for operation in low pressure applications, corrosion resistant design (RPLC)
- Optional non-synchronous jaw operation
- 30°C to +150°C [-20°F to +300°F] operating environment using Viton® seals option
- Purge port (RPLC) to prevent contaminants entering gripper
- Scavenge port (RPLC) prevents gripper grease from contaminating working environment



### Applications:

- Clean room and harsh environments (RPLC)
- Delicate part handling with valve controls
- Long gripper finger requirements with precision
- High temperature applications using Viton® seals

### How To Order



### Accessories

Sensor Accessories	Model Numbers	Part Number	Qty/Unit
Sensor Mounting Kit for Imperial & Metric Units (mounts 2 sensors)	All Models	OSMK-008	1
NPN Magneto Resistive Sensor with Quick Disconnect*	All Models	OHSN-017	1-2
PNP Magneto Resistive Sensor with Quick Disconnect*	All Models	OHSP-017	1-2
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)	All Models	OFSV-001	1
Fail Safe Valve (Metric)	All Models	OFSV-004	1

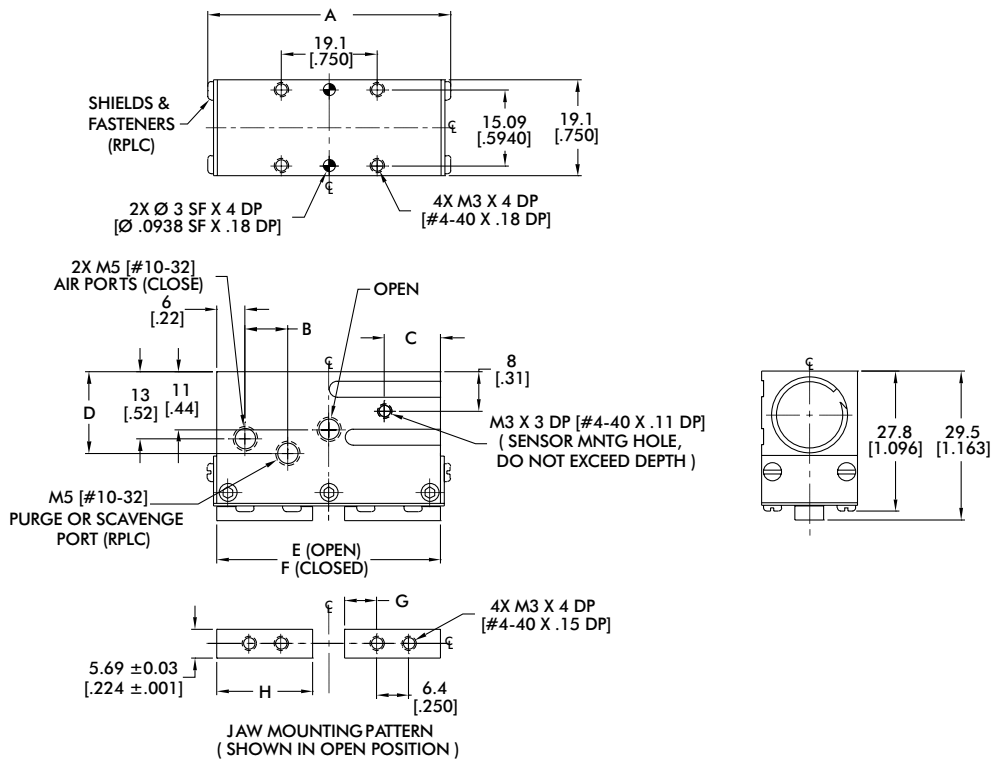
\*Sensor and cable sold separately.

## 2-Jaw Precision Parallel Grippers | Technical Specifications

Specifications	Units	1	2	3	4
Total Rated Grip Force <b>F</b> @ 100 psi [7 bar]	N [lb]	116 [26]		160 [36]	
Total Stroke	mm [in]	6.4 [0.25]	12.7 [0.50]	19.1 [0.75]	25.4 [1.00]
Weight	kg [lbs]	0.07 [0.16]	0.09 [0.20]	0.15 [0.32]	0.17 [0.38]
Pressure Range	bar [psi]	0.3-7 [5-100]			
Ingress Protection Class (IP)		IP 33 (RPL) / IP64 (RPLC)			
Displacement	cm <sup>3</sup> [in <sup>3</sup> ]	0.6 [0.038]	1.2 [0.075]	2.4 [0.147]	3.2 [0.196]
Temperature Range (Buna-N seals)	°C [°F]	-35°~80° C [-30°~180° F]			
Temperature Range (Viton® seals)	°C [°F]	-30°~120° C [-20°~250° F]			
Actuation (open/close)	sec	0.10	0.13	0.14	0.19
Accuracy	mm [in]	±0.05 [±0.002]			
Repeatability	mm [in]	±0.03 [±0.001]			
Valve to Actuate		4-way, 2-position			

# RPL/RPLC-1, RPL/RPLC-2

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

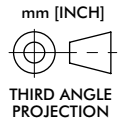


Model	A	B	C	D	E	F	G	H
RPL-1	44.5 [1.750]	--	11 [0.45]	--	44 [1.75]	38 [1.50]	6.4 [0.250]	19.1 [0.750]
RPL-2	59.5 [2.344]	--	16 [0.62]	--	57 [2.25]	44 [1.75]	6.4 [0.250]	22.2 [0.875]

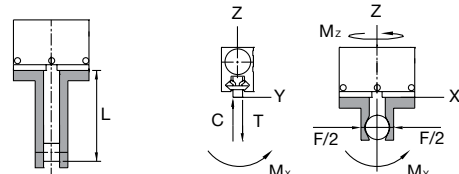
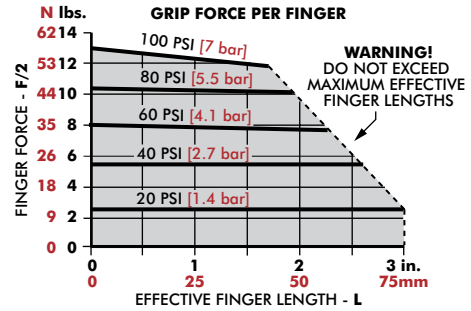
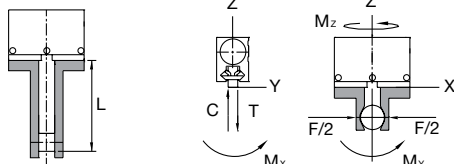
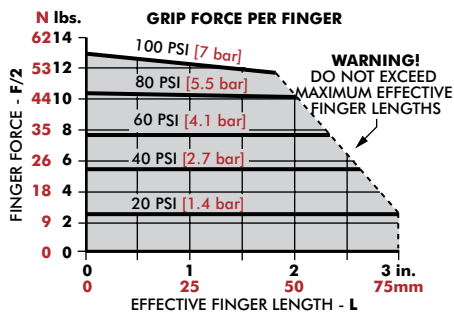
Model	A	B	C	D	E	F	G	H
RPLC-1	48.3 [1.900]	8 [0.33]	11 [0.44]	17.3 [0.68]	44 [1.75]	38 [1.50]	6.4 [0.250]	19.1 [0.750]
RPLC-2	62.9 [2.476]	13 [0.50]	16 [0.62]	17.3 [0.68]	59 [2.33]	46 [1.83]	8.3 [0.328]	23.2 [0.913]

Dimensions in mm [in]

Seal Repair Kits	1, 2
Buna-N Seal Repair Kit	SLKT-010
Viton® Seal Repair Kit	SLKT-010V



## Loading Information



RPL-1	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>	3.4 Nm [30 in-lbs]	1.1 Nm [10 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	4.5 Nm [40 in-lbs]	1.4 Nm [12 in-lbs]
Maximum Moment <b>M<sub>z</sub></b>	3.4 Nm [30 in-lbs]	1.1 Nm [10 in-lbs]

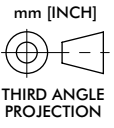
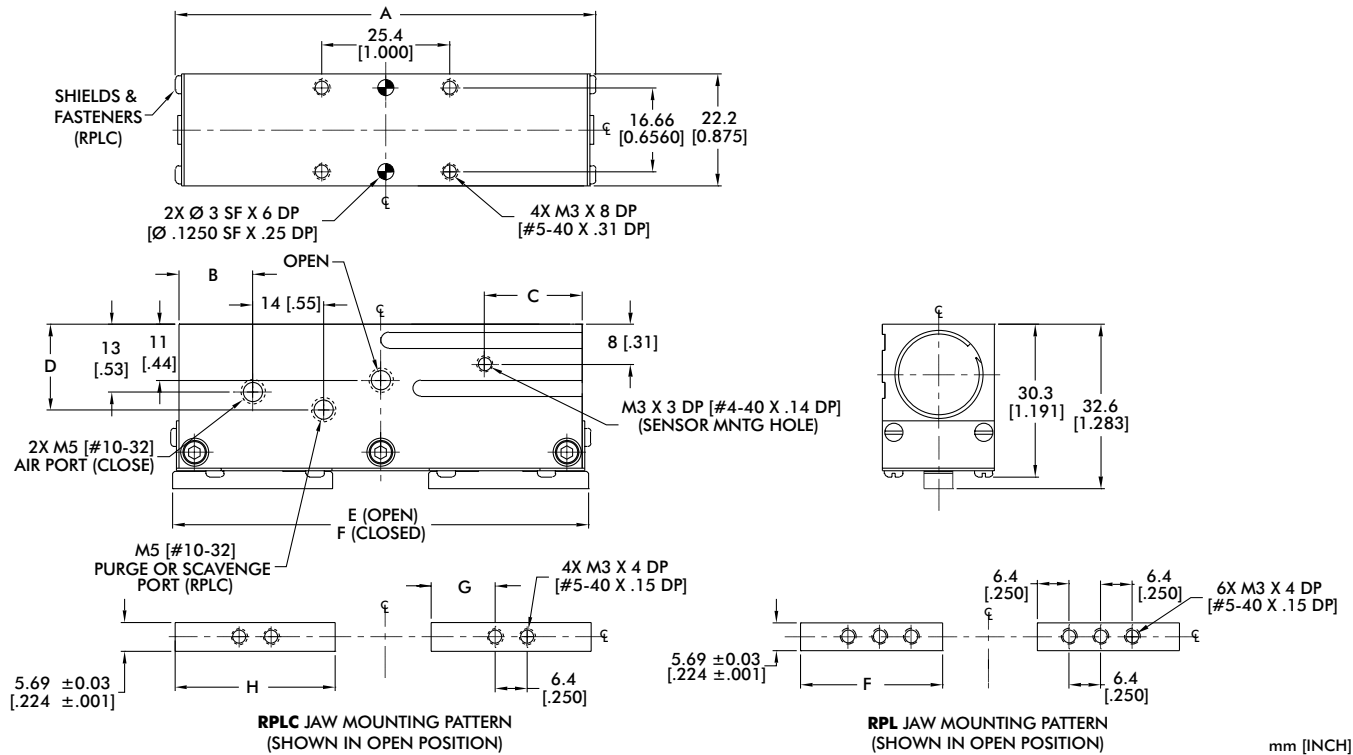
†Capacities are per set of jaws and are not simultaneous

RPL-2	Static	Dynamic
Maximum Tensile <b>T</b>	289 N [65 lbs]	89 N [20 lbs]
Maximum Compressive <b>C</b>	289 N [65 lbs]	89 N [20 lbs]
Maximum Moment <b>M<sub>x</sub></b>	5.1 Nm [45 in-lbs]	1.7 Nm [15 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	6.8 Nm [60 in-lbs]	2.3 Nm [20 in-lbs]
Maximum Moment <b>M<sub>z</sub></b>	5.1 Nm [45 in-lbs]	1.7 Nm [15 in-lbs]

†Capacities are per set of jaws and are not simultaneous

# RPL/RPLC-3, RPL/RPLC-4

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



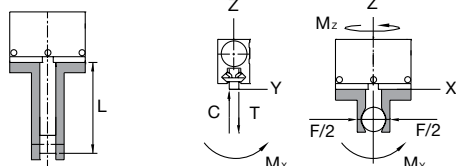
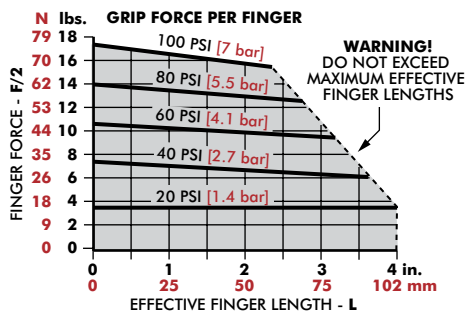
Model	A	B	C	D	E	F	G	H
RPL-3	80 [3.150]	15 [0.58]	19 [0.76]	--	76 [3.00]	57 [2.25]	--	28.6 [1.125]
RPL-4	98.4 [3.875]	30 [1.19]	25 [1.00]	--	92 [3.63]	66 [2.63]	--	33.3 [1.313]

Model	A	B	C	D	E	F	G	H
RPLC-3	83.4 [3.282]	15 [1.58]	19 [0.76]	18 [0.74]	83 [3.25]	63 [2.50]	12.7 [0.500]	31.8 [1.250]
RPLC-4	101.8 [4.007]	24 [0.94]	25 [1.00]	18 [0.74]	101 [4.00]	76 [3.00]	15.9 [0.625]	38.1 [1.50]

Dimensions in mm [in]

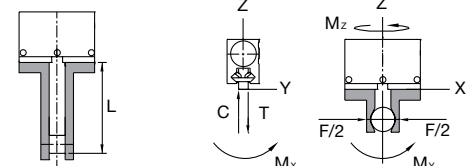
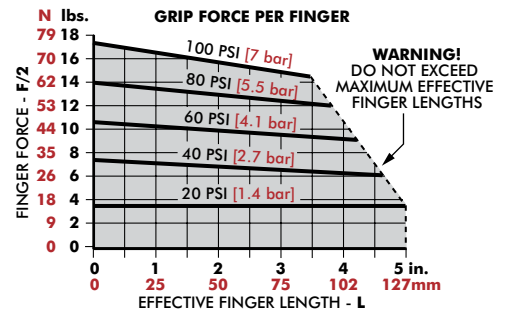
Seal Repair Kits	3, 4
Buna-N Seal Repair Kit	SLKT-012
Viton® Seal Repair Kit	SLKT-012V

## Loading Information



RPL-3	Static	Dynamic
Maximum Tensile <b>T</b>	400 N [90 lbs]	133 N [30 lbs]
Maximum Compressive <b>C</b>	400 N [90 lbs]	133 N [30 lbs]
Maximum Moment <b>M<sub>x</sub></b>	6.8 Nm [60 in-lbs]	2.3 Nm [20 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	9.0 Nm [80 in-lbs]	2.8 Nm [25 in-lbs]
Maximum Moment <b>M<sub>z</sub></b>	6.8 Nm [60 in-lbs]	2.3 Nm [20 in-lbs]

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



RPL-4	Static	Dynamic
Maximum Tensile <b>T</b>	534 N [120 lbs]	178 N [40 lbs]
Maximum Compressive <b>C</b>	534 N [120 lbs]	178 N [40 lbs]
Maximum Moment <b>M<sub>x</sub></b>	8.5 Nm [75 in-lbs]	2.8 Nm [25 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	11.3 Nm [100 in-lbs]	4.0 Nm [35 in-lbs]
Maximum Moment <b>M<sub>z</sub></b>	8.5 Nm [75 in-lbs]	2.8 Nm [25 in-lbs]

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