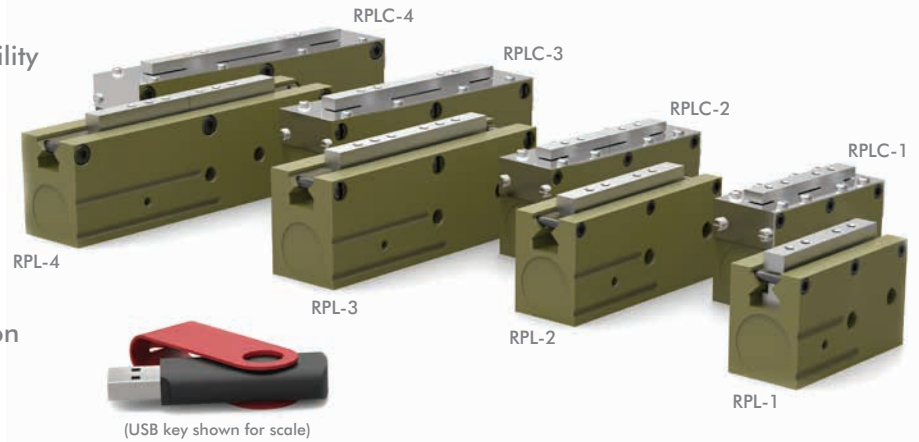


# RPL/RPLC SERIES

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

### Features:

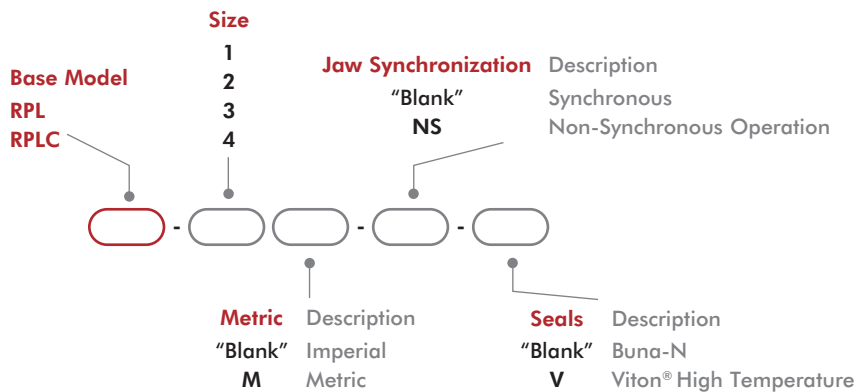
- Excellent part positioning and repeatability
- Zero side play using low friction Dual-V roller bearings
- Class 10 rated clean-room (RPLC) fits life Sciences applications
- Low friction for operation in low pressure applications, corrosion resistant design (RPLC)
- Optional non-synchronous jaw operation
- 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.

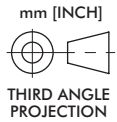
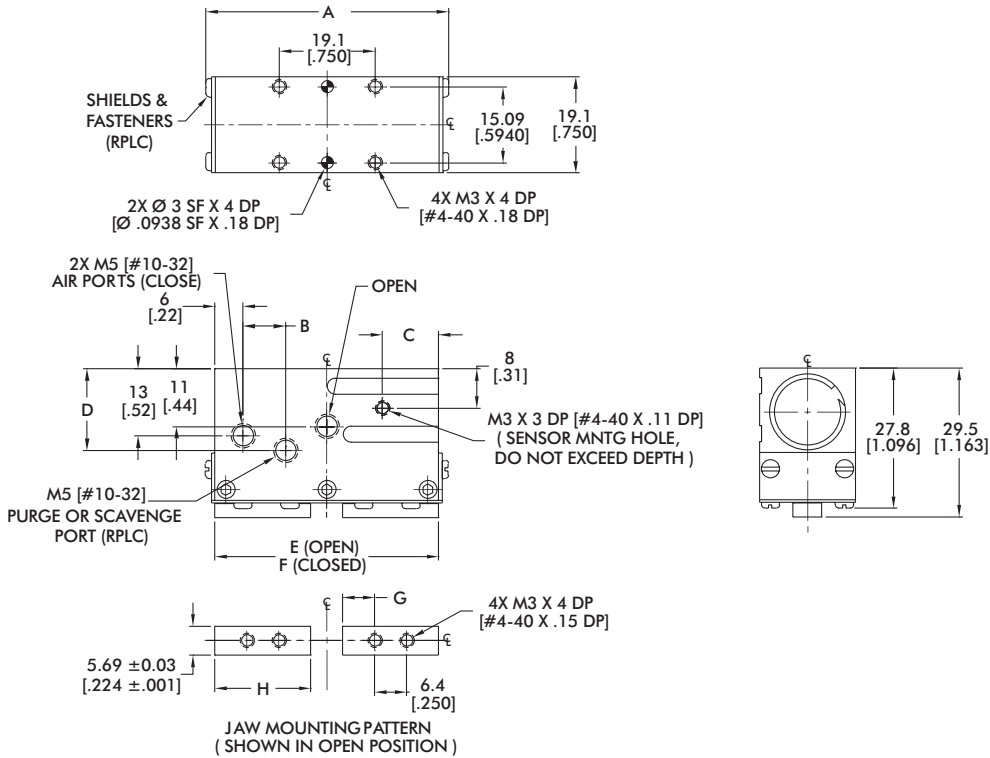
# RPL/RPLC SERIES

## 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



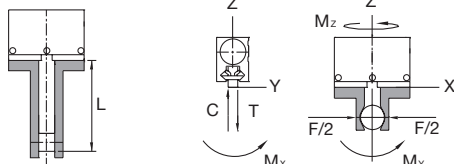
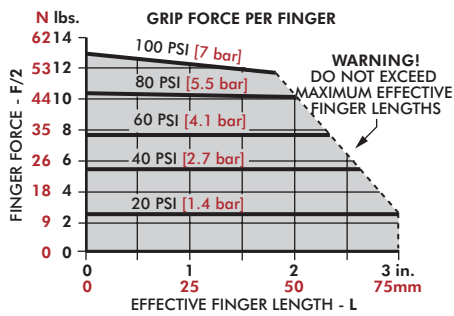
Model	A	B	C	D	E	F	G	H
RPL-1	44.5 [1.750]	--	11 [0.45]	--	44 [1.75]	38 [1.50]	6.4 [0.250]	19.1 [0.750]
RPL-2	59.5 [2.344]	--	16 [0.62]	--	57 [2.25]	44 [1.75]	6.4 [0.250]	22.2 [0.875]

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]

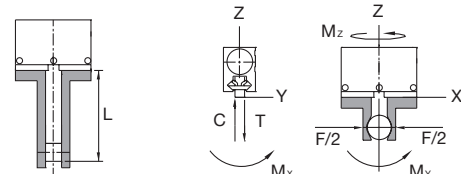
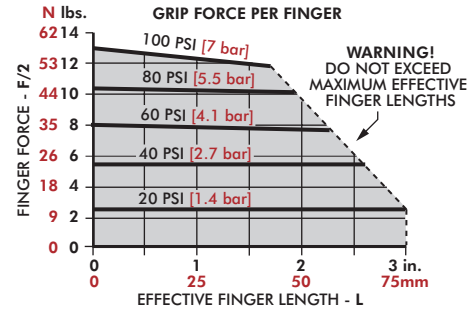
Seal Repair Kits	1, 2
Buna-N Seal Repair Kit	SLKT-010
Viton® Seal Repair Kit	SLKT-010V

## Loading Information



RPL-1	Static	Dynamic
Maximum Tensile T	222 N [50 lbs]	67 N [15 lbs]
Maximum Compressive C	222 N [50 lbs]	67 N [15 lbs]
Maximum Moment $M_x$	3.4 Nm [30 in-lbs]	1.1 Nm [10 in-lbs]
Maximum Moment $M_y$	4.5 Nm [40 in-lbs]	1.4 Nm [12 in-lbs]
Maximum Moment $M_z$	3.4 Nm [30 in-lbs]	1.1 Nm [10 in-lbs]

†Capacities are per set of jaws and are not simultaneous

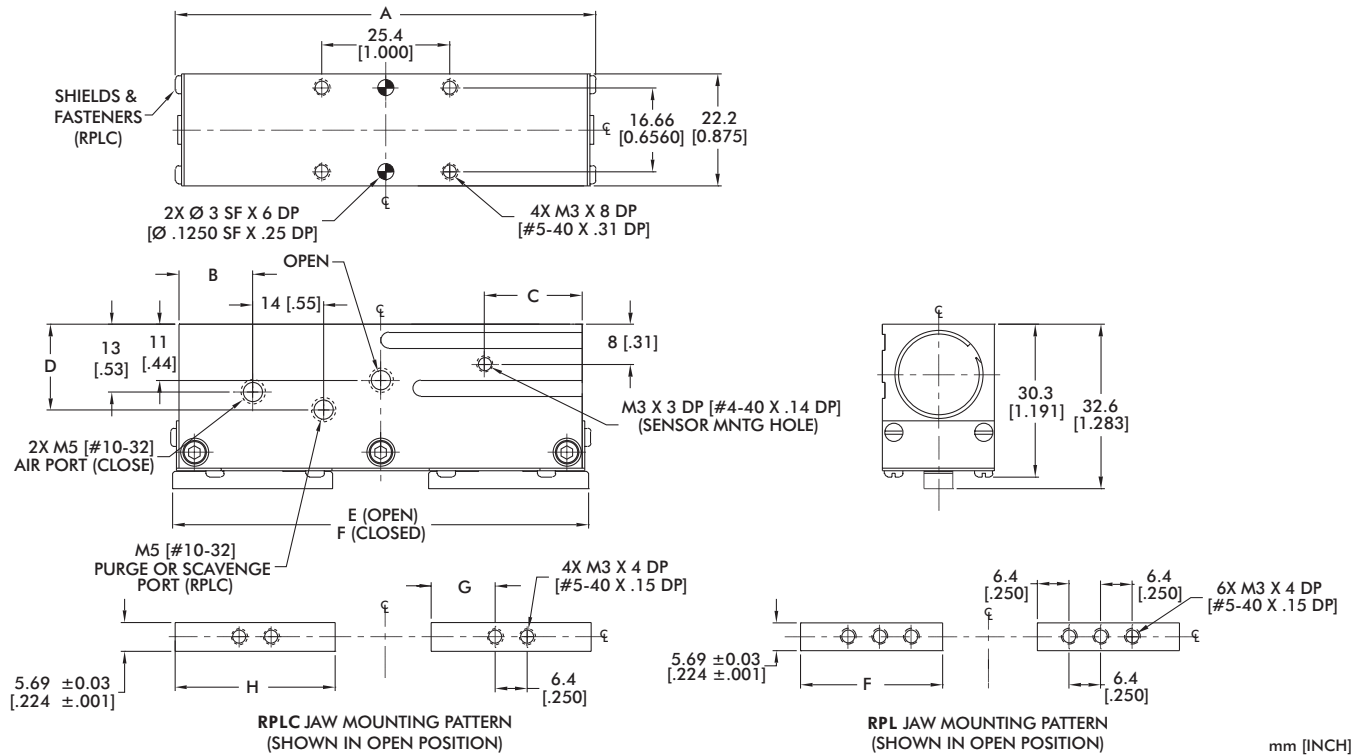


RPL-2	Static	Dynamic
Maximum Tensile T	289 N [65 lbs]	89 N [20 lbs]
Maximum Compressive C	289 N [65 lbs]	89 N [20 lbs]
Maximum Moment $M_x$	5.1 Nm [45 in-lbs]	1.7 Nm [15 in-lbs]
Maximum Moment $M_y$	6.8 Nm [60 in-lbs]	2.3 Nm [20 in-lbs]
Maximum Moment $M_z$	5.1 Nm [45 in-lbs]	1.7 Nm [15 in-lbs]

†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



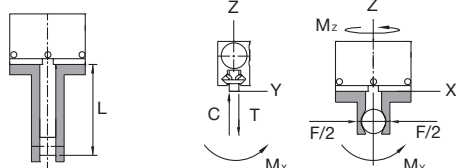
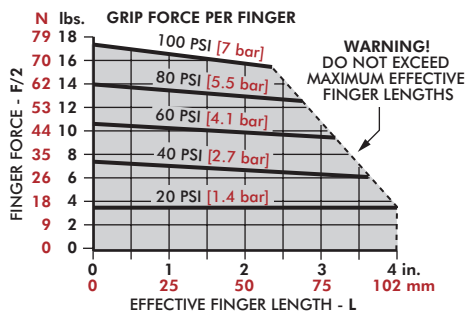
Model	A	B	C	D	E	F	G	H
RPL-3	80 [3.150]	15 [0.58]	19 [0.76]	--	76 [3.00]	57 [2.25]	--	28.6 [1.125]
RPL-4	98.4 [3.875]	30 [1.19]	25 [1.00]	--	92 [3.63]	66 [2.63]	--	33.3 [1.313]

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]

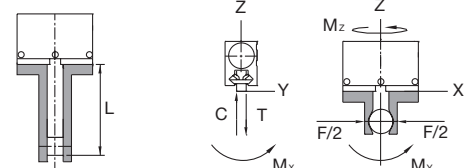
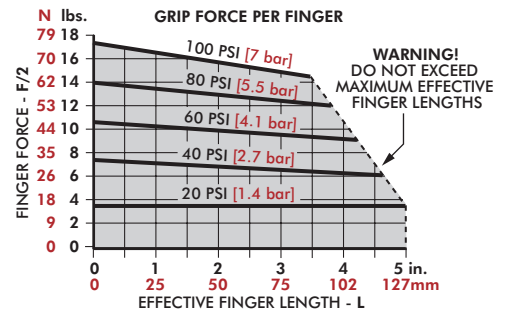
Seal Repair Kits	3, 4
Buna-N Seal Repair Kit	SLKT-012
Viton® Seal Repair Kit	SLKT-012V

## Loading Information



RPL-3	Static	Dynamic
Maximum Tensile T	400 N [90 lbs]	133 N [30 lbs]
Maximum Compressive C	400 N [90 lbs]	133 N [30 lbs]
Maximum Moment $M_x$	6.8 Nm [60 in-lbs]	2.3 Nm [20 in-lbs]
Maximum Moment $M_y$	9.0 Nm [80 in-lbs]	2.8 Nm [25 in-lbs]
Maximum Moment $M_z$	6.8 Nm [60 in-lbs]	2.3 Nm [20 in-lbs]

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



RPL-4	Static	Dynamic
Maximum Tensile T	534 N [120 lbs]	178 N [40 lbs]
Maximum Compressive C	534 N [120 lbs]	178 N [40 lbs]
Maximum Moment $M_x$	8.5 Nm [75 in-lbs]	2.8 Nm [25 in-lbs]
Maximum Moment $M_y$	11.3 Nm [100 in-lbs]	4.0 Nm [35 in-lbs]
Maximum Moment $M_z$	8.5 Nm [75 in-lbs]	2.8 Nm [25 in-lbs]

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

# PNEUMATIC INDUSTRIAL GRIPPERS

## 2-Jaw General Industrial Grippers | Product Overview

	Model	Stroke mm [in]	Grip Force N [lbs]	Operating Environment	Special Features	Page GR-GEN-#
CP		4-32 [0.16-1.26]	60-2749 [13-618]	IP54	Compact Design with High Grip Force.	3
DPDL		3.2-19.1 [0.13-0.75]	62-1779 [14-400]	IP66 Using Purge Port & Boot Option. Clean Room Class 100, ISO 5 Using Scavenge Port	Sealed Gripper. Dirty and Caustic Environments. Wide Range of Sizes. <b>DIRECTCONNECT</b>	11
DPDS		4.8-50.8 [0.188-2]	62-1779 [14-400]	IP54 Using Purge Port. Clean Room Class 10, ISO 4 Using Scavenge Port	Rugged General Purpose Applications. Wide Range of Sizes. <b>DIRECTCONNECT</b>	19
DPG		6.35-25.4 [0.25-1.0]	222-249 [50-56]	IP54. Clean Room Class 100, ISO 5	8 Position Sensing General Purpose Gripper. Multiple Mounting/Porting Options. <b>DIRECTCONNECT</b>	27
RDH		4-70 [0.16-2.73]	361-28002 [81-6300]	IP55 Using Purge Port. Clean Room Class 100, ISO 5 Using Scavenge Port	Highest Force vs. Size & Weight. Wide Range of Sizes. High Precision. Long Fingers. Rugged Applications	31
REP2		10-30 [0.39-1.181]	480-3268 [108-753]	IP55. Class 100, ISO 5 Using Scavenge Port	Spring Assist. Rugged and Harsh Environments. High Precision.	41
RP		4.0-50.8 [0.16-2]	156-3336 [35-750]	IP43	Small General Purpose. Rugged Applications. Wide Range of Sizes. Cost Effective	47, 51
RPM		3.2-6.3 [0.13-0.25]	36 [8]	IP33	Smallest Gripper, Low Friction, Small Parts Handling.	59
RPMC		3.2-6.3 [0.13-0.25]	36 [8]	IP64 Using Purge Port. Clean Room Class 10, ISO 4 Using Scavenge Port	Smallest Shielded Gripper for Clean or Harsh Environments. Small Delicate Parts Handling.	59
RPS		4-43 [0.16-1.7]	222-2669 [50-600]	IP43	Spring Assist, General Purpose Gripper. Rugged Applications. Wide Range of Sizes. Cost Effective	63

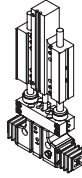
# PNEUMATIC INDUSTRIAL GRIPPERS

## 2-Jaw General Industrial Grippers | DIRECTCONNECT™ Mounting Compatibility Chart

### **DIRECTCONNECT** Modular Direct Mounting System without Adapter Plates

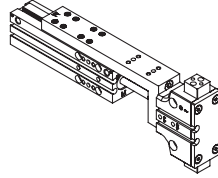
Products can be mounted in multiple positions. Refer to datasheet for complete info.

#### Slide to Gripper



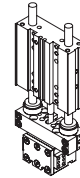
DLT Thruster Slide to DPDL Parallel Gripper

#### Slide to Gripper



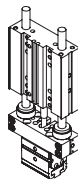
DLM Thruster Slide to DPDL Parallel Gripper

#### Slide to Gripper



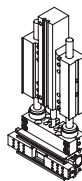
DLT Thruster Slide to DPDS Parallel Gripper

#### Slide to Gripper



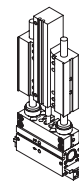
DLT Thruster Slide to DPDS Parallel Gripper

#### Slide to Gripper



DLT Thruster Slide to DPG Parallel Gripper

#### Slide to Gripper



DLT Thruster Slide to DPG Parallel Gripper

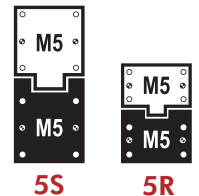
## **DIRECTCONNECT**

## Mounting Compatibility Chart

DESTACO's DIRECTCONNECT™ technology, allows all components of the system—grippers and slides—to be mounted together directly. Look for matching icons on product datasheets for mounting compatibility.

**Note:** The numbers in the cell represent the metric screw size and basic mounting pattern.

S=Square, R=Rectangle. ie; 5S = M5 Screw with square mounting pattern.



Catalog Models		DPDS-047, 056	DPDS-088, 125	DPDS-175, 250	DPDL-047, 056	DPDL-088, 125	DPDL-175, 250	DPG
Base Slides	DLB-06,08		3R			3R		
	DLB-10,12,16	5R		5R			5R	5R
	DLB-20,25				10R			
Thruster Slides	DLT-06,08		3R			3R		
	DLT-10,12,16	5R	3R	5R		3R	5R	5R
	DLT-20,25	5R		5R	10R		5R	5R
	DLM-07		3R			3R		
	DLM-9,12	5R	3R	5R		3R	5R	5R