

RPS SERIES

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

Features:

- Robust sealed design gripper
- Double wedge design for high impact applications
- Spring assist option for part retention in case of air pressure loss
- Inductive jaw location sensing
- Grip force range from 222N [50 lbs] to 2669N [600 lbs]
- Stroke Range from 6.4mm [0.25 in] to 31.8mm [1.25 in]

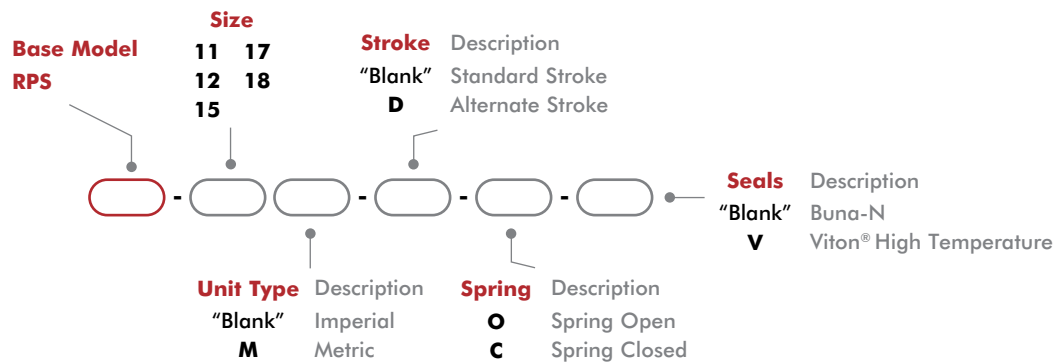
Applications:

- Automotive assembly
- Critical Part drop prevention applications
- General purpose spring assist gripping
- Packaging applications



U.S. Patent #5,125,708

How To Order



Accessories

Sensor Accessories	Model Numbers	Part Number	Qty/Unit
Sensor Mounting Kit for Imperial & Metric Units (mounts 2 sensors)	See Datasheet		1
NPN Inductive Sensor with Quick Disconnect*	11, 12, 15	OISN-019	1-2
PNP Inductive Sensor with Quick Disconnect*	11, 12, 15	OISP-019	1-2
NPN Inductive Sensor with Quick Disconnect*	17, 18	OISN-011	1-2
PNP Inductive Sensor with Quick Disconnect*	17, 18	OISP-011	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)	See Datasheet		1
Fail Safe Valve (Metric)	See Datasheet		1

* Sensor and cable sold separately.

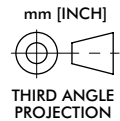
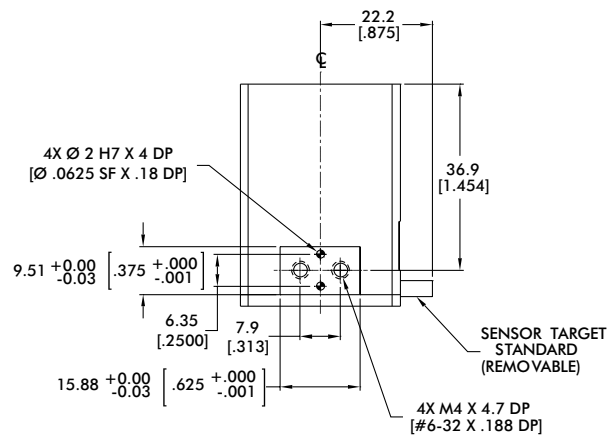
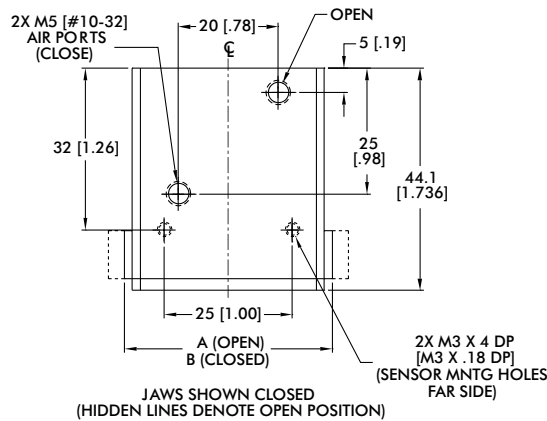
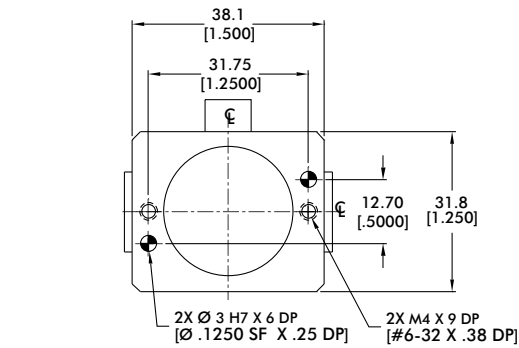
2-Jaw General Industrial Parallel Grippers | Technical Specifications

Specifications	Units	11	11-D	12	12-D	15	15-D
Total Rated Grip Force F @ 100 psi [7 bar]	N [lbs]	222 [50]	378 [85]	267 [60]	400 [90]	400 [90]	110 [489]
Total Stroke	mm [in]	6.4 [0.25]	4 [0.16]	9.5 [0.38]	6 [0.24]	12.7 [0.50]	8 [0.31]
Weight	kg [lbs]	0.16 [0.36]		0.34 [0.76]		0.65 [1.44]	
Pressure Range	bar [psi]	3.4-7 [50-100]					
Ingress Protection Class (IP)		IP43					
Displacement	cm³ [in³]	1.6 [0.098]		2.5 [0.150]		4.9 [0.300]	
Temperature Range (Buna-N seals)	°C [°F]	-35°~80° [-30°~180°]					
Temperature Range (Viton® seals)	°C [°F]	-30°~150° [-20°~300°]					
Actuation	sec	0.15				0.17	
Accuracy	mm [in]	±0.05 [±0.002]					
Repeatability	mm [in]	±0.03 [±0.001]					
Valve to Required Actuate Single Acting		3-way, 2-position					
Valve to Required Actuate Double Acting		4-way, 2-position					

Specifications	Units	17	17-D	18	18-D
Total Rated Grip Force F @ 100 psi [7 bar]	N [lbs]	1334 [300]	180 [800]	2669 [600]	380 [1690]
Total Stroke	mm [in]	19.1 [0.75]	28 [1.10]	31.8 [1.25]	43 [1.70]
Weight	kg [lbs]	1.4 [3.00]		5.0 [11.02]	
Pressure Range	bar [psi]	3-7 [40-100]			
Ingress Protection Class (IP)		IP43			
Displacement	cm³ [in³]	22.9 [1.400]		72.1 [4.400]	
Temperature Range (Buna-N seals)	°C [°F]	-35°~80° [-30°~180°]			
Temperature Range (Viton® seals)	°C [°F]	-30°~150° [-20°~300°]			
Actuation	sec	0.31		0.51	
Accuracy	mm [in]	±0.08 [±0.003]			
Repeatability	mm [in]	±0.03 [±0.001]			
Valve to Required Actuate Single Acting		3-way, 2-position			
Valve to Required Actuate Double Acting		4-way, 2-position			

RPS-11

2-Jaw General Industrial Parallel Grippers | Dimensions and Technical Specifications



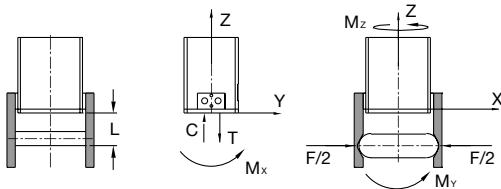
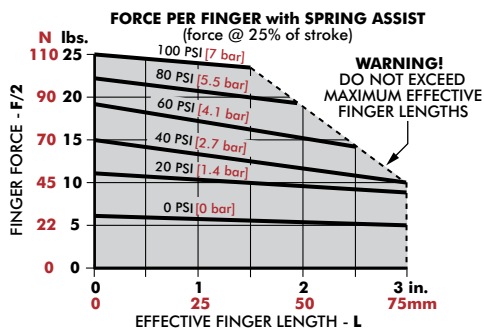
Sensor Accessories	RPS-11
Inductive Sensor Mounting Kit (mounts 2 sensors)	OSMK-003

Seal Repair Kits	RPS-11
Buna-N Seal Repair Kit	SLKT-036
Viton® Seal Repair Kit	SLKT-036V

Pneumatic Accessories	RPS-11
Fail Safe Valve (Imperial)	OFSV-001
Fail Safe Valve (Metric)	OFSV-004

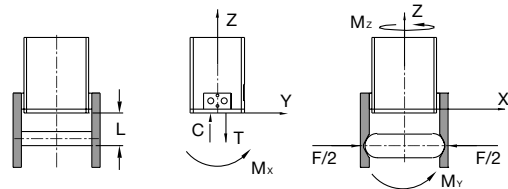
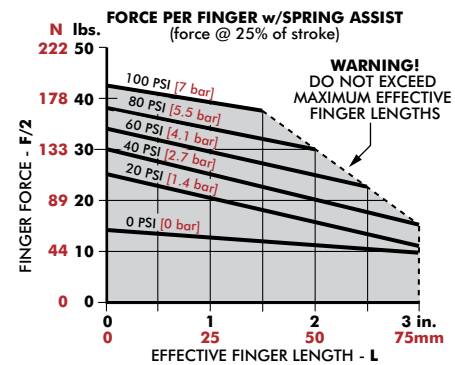
Model	A	B
RPS-11	48 [1.88]	41 [1.63]
RPS-11-D	45 [1.79]	

Loading Information



RPS-11	Static	Dynamic
Maximum Tensile T	445 N [100 lbs]	111 N [25 lbs]
Maximum Compressive C	890 N [200 lbs]	111 N [25 lbs]
Maximum Moment M_x	11 Nm [100 in-lbs]	3 Nm [25 in-lbs]
Maximum Moment M_y	11 Nm [100 in-lbs]	3 Nm [25 in-lbs]
Maximum Moment M_z	11 Nm [100 in-lbs]	3 Nm [25 in-lbs]

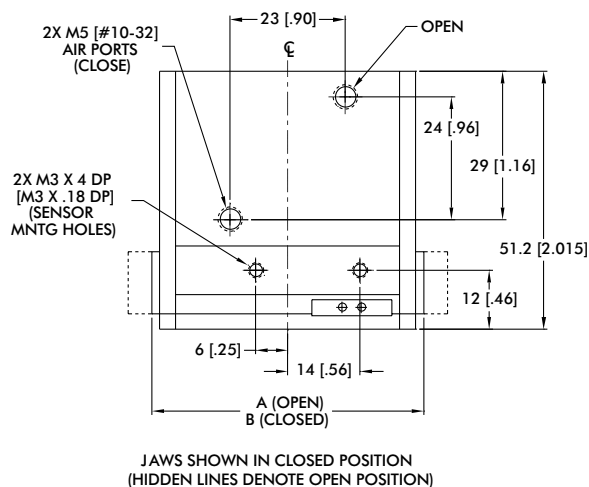
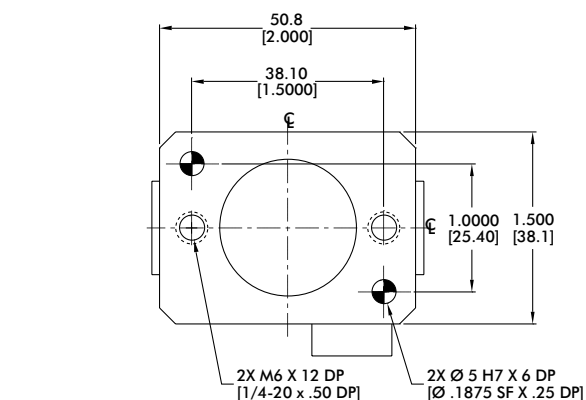
*Capacities are per set of jaws and are not simultaneous



RPS-11-D	Static	Dynamic
Maximum Tensile T	445 N [100 lbs]	111 N [25 lbs]
Maximum Compressive C	890 N [200 lbs]	111 N [25 lbs]
Maximum Moment M_x	11 Nm [100 in-lbs]	3 Nm [25 in-lbs]
Maximum Moment M_y	11 Nm [100 in-lbs]	3 Nm [25 in-lbs]
Maximum Moment M_z	11 Nm [100 in-lbs]	3 Nm [25 in-lbs]

*Capacities are per set of jaws and are not simultaneous

2-Jaw General Industrial Parallel Grippers | Dimensions and Technical Specifications

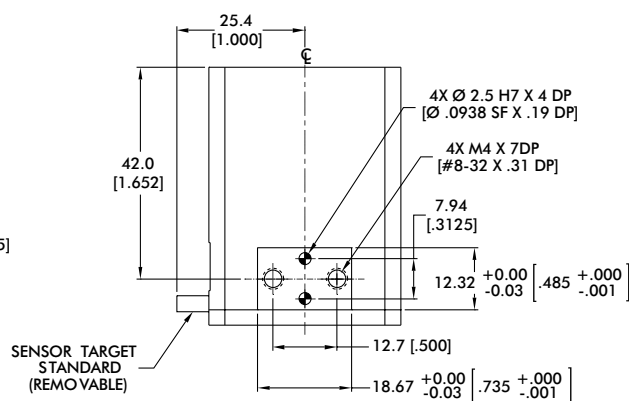
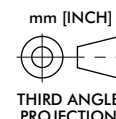


Sensor Accessories	RPS-12
Inductive Sensor Mounting Kit (mounts 2 sensors)	OSMK-003

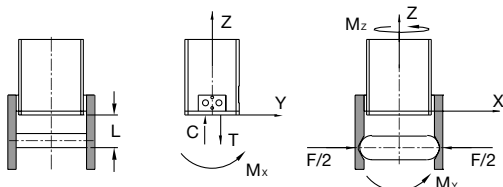
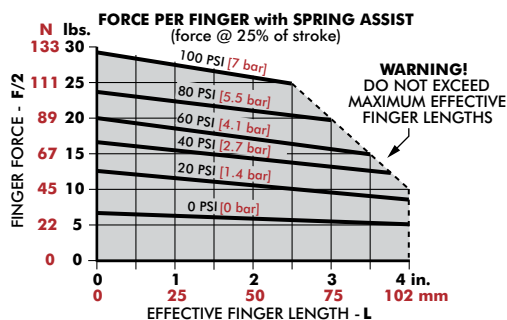
Seal Repair Kits	RPS-12
Buna-N Seal Repair Kit	SLKT-040
Viton® Seal Repair Kit	SLKT-040V

Pneumatic Accessories	RPS-12
Fail Safe Valve (Imperial)	OFSV-001
Fail Safe Valve (Metric)	OFSV-004

Model	A	B
RPS-12	63 [2.50]	54 [2.13]
RPS-12-D	60 [2.37]	

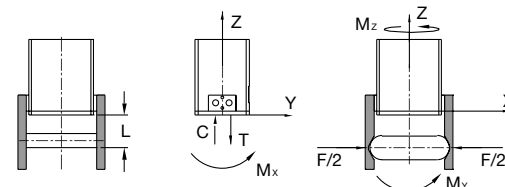
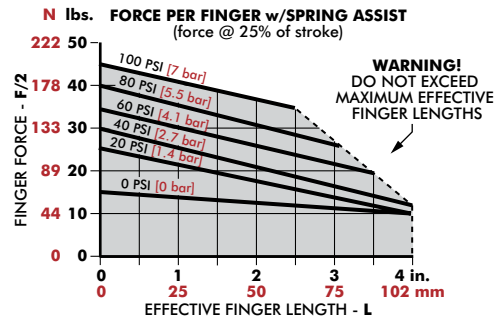


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RPS-12	Static	Dynamic
Maximum Tensile T	890 N [200 lbs]	222 N [50 lbs]
Maximum Compressive C	1779 N [400 lbs]	222 N [50 lbs]
Maximum Moment M_x	17 Nm [150 in-lbs]	6 Nm [50 in-lbs]
Maximum Moment M_y	17 Nm [150 in-lbs]	6 Nm [50 in-lbs]
Maximum Moment M_z	17 Nm [150 in-lbs]	6 Nm [50 in-lbs]

*Capacities are per set of jaws and are not simultaneous

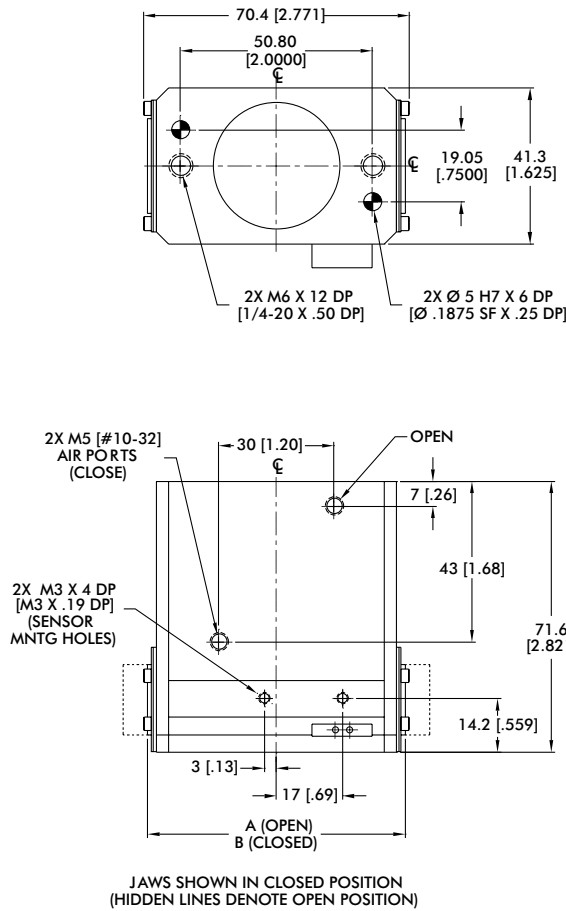


RPS-12-D	Static	Dynamic
Maximum Tensile T	890 N [200 lbs]	222 N [50 lbs]
Maximum Compressive C	1779 N [400 lbs]	222 N [50 lbs]
Maximum Moment M_x	17 Nm [150 in-lbs]	6 Nm [50 in-lbs]
Maximum Moment M_y	17 Nm [150 in-lbs]	6 Nm [50 in-lbs]
Maximum Moment M_z	17 Nm [150 in-lbs]	6 Nm [50 in-lbs]

*Capacities are per set of jaws and are not simultaneous

RPS-15

2-Jaw General Industrial Parallel Grippers | Dimensions and Technical Specifications

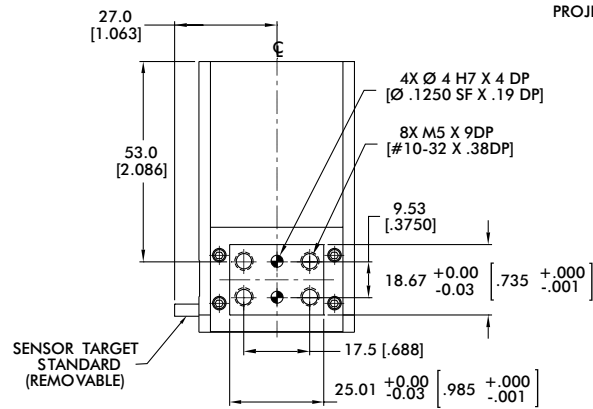
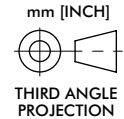


Sensor Accessories	RPS-15
Inductive Sensor Mounting Kit (mounts 2 sensors)	OSMK-003

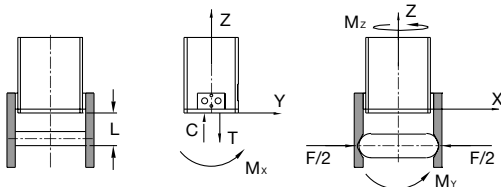
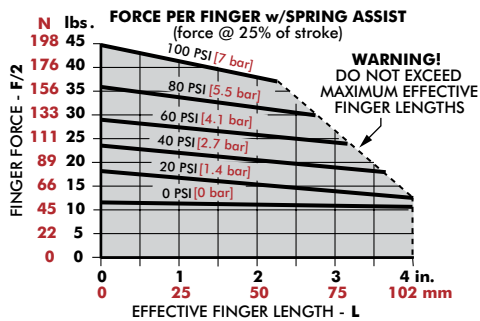
Seal Repair Kits	RPS-15
Buna-N Seal Repair Kit	SLKT-041
Viton® Seal Repair Kit	SLKT-041V

Pneumatic Accessories	RPS-15
Fail Safe Valve (Imperial)	OFSV-001
Fail Safe Valve (Metric)	OFSV-004

Model	A	B
RPS-15	81 [3.19]	68 [2.69]
RPS-15-D	76 [3.00]	

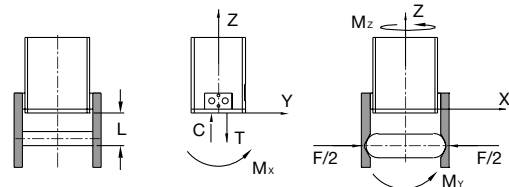
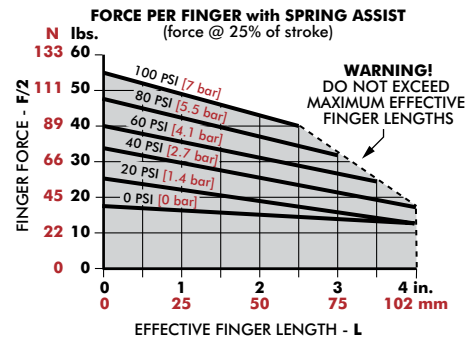


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RPS-15	Static	Dynamic
Maximum Tensile T	1779 N [400 lbs]	445 N [100 lbs]
Maximum Compressive C	3336 N [750 lbs]	445 N [100 lbs]
Maximum Moment M_x	34 Nm [300 in-lbs]	11 Nm [100 in-lbs]
Maximum Moment M_y	34 Nm [300 in-lbs]	11 Nm [100 in-lbs]
Maximum Moment M_z	34 Nm [300 in-lbs]	11 Nm [100 in-lbs]

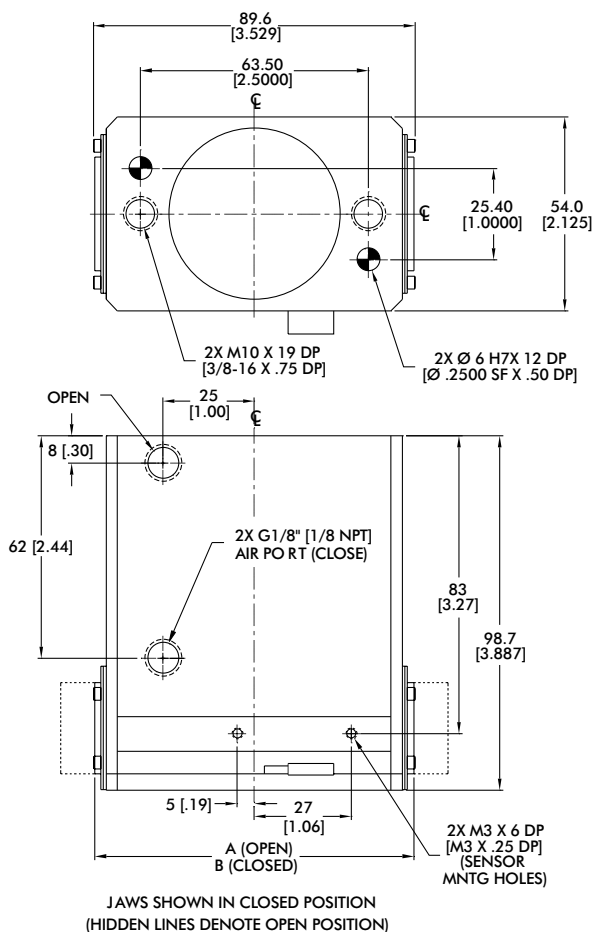
*Capacities are per set of jaws and are not simultaneous



RPS-15-D	Static	Dynamic
Maximum Tensile T	1779 N [400 lbs]	445 N [100 lbs]
Maximum Compressive C	3336 N [750 lbs]	445 N [100 lbs]
Maximum Moment M_x	34 Nm [300 in-lbs]	11 Nm [100 in-lbs]
Maximum Moment M_y	34 Nm [300 in-lbs]	11 Nm [100 in-lbs]
Maximum Moment M_z	34 Nm [300 in-lbs]	11 Nm [100 in-lbs]

*Capacities are per set of jaws and are not simultaneous

2-Jaw General Industrial Parallel Grippers | Dimensions and Technical Specifications

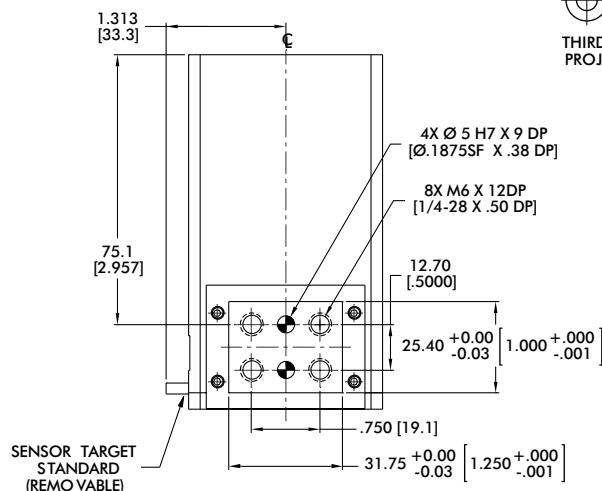
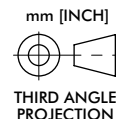


Sensor Accessories	RPS-17
Inductive Sensor Mounting Kit (mounts 2 sensors)	OSMK-072

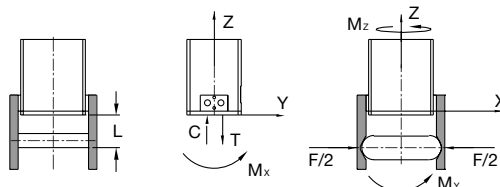
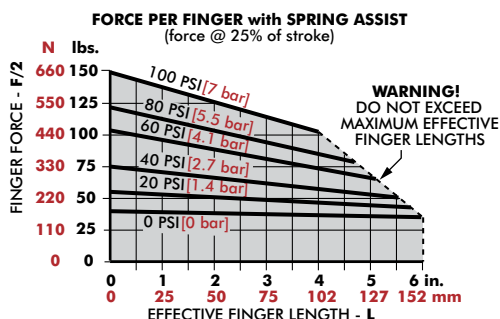
Seal Repair Kits	RPS-17
Buna-N Seal Repair Kit	SLKT-042
Viton® Seal Repair Kit	SLKT-042V

Pneumatic Accessories	RPS-17
Fail Safe Valve (Imperial)	OFSV-002
Fail Safe Valve (Metric)	OFSV-005

Model	A	B
RPS-17	107 [4.25]	89 [3.50]
RPS-17-D	117 [4.60]	

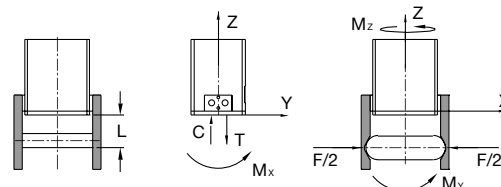
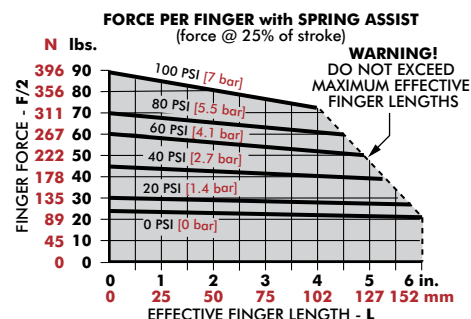


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RPS-17	Static	Dynamic
Maximum Tensile T	3336 N [750 lbs]	890 N [200 lbs]
Maximum Compressive C	6672 N [1500 lbs]	890 N [200 lbs]
Maximum Moment M_x	85 Nm [750 in-lbs]	28 Nm [250 in-lbs]
Maximum Moment M_y	85 Nm [750 in-lbs]	28 Nm [250 in-lbs]
Maximum Moment M_z	85 Nm [750 in-lbs]	28 Nm [250 in-lbs]

¹Capacities are per set of jaws and are not simultaneous

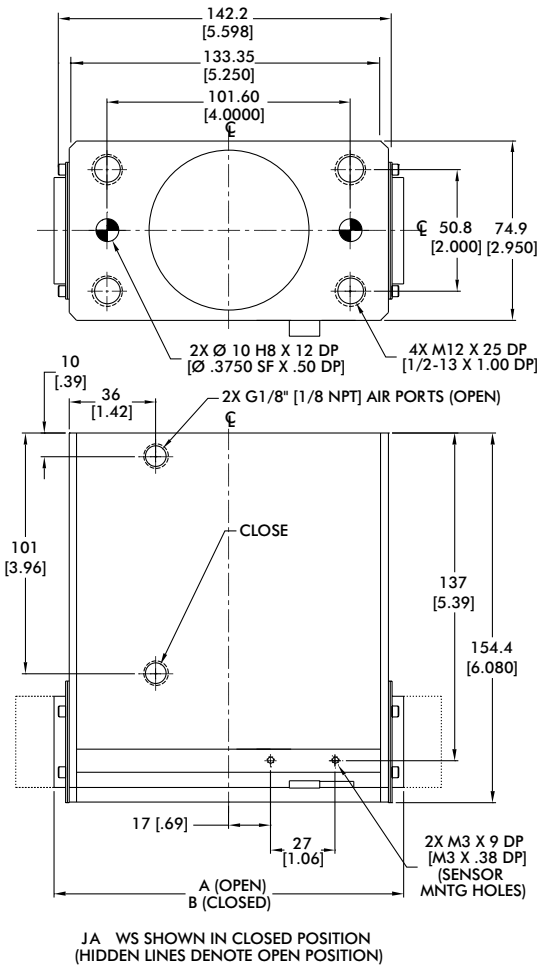


RPS-17-D	Static	Dynamic
Maximum Tensile T	3336 N [750 lbs]	890 N [200 lbs]
Maximum Compressive C	6672 N [1500 lbs]	890 N [200 lbs]
Maximum Moment M_x	85 Nm [750 in-lbs]	28 Nm [250 in-lbs]
Maximum Moment M_y	85 Nm [750 in-lbs]	28 Nm [250 in-lbs]
Maximum Moment M_z	85 Nm [750 in-lbs]	28 Nm [250 in-lbs]

¹Capacities are per set of jaws and are not simultaneous

RPS-18

2-Jaw General Industrial Parallel Grippers | Dimensions and Technical Specifications

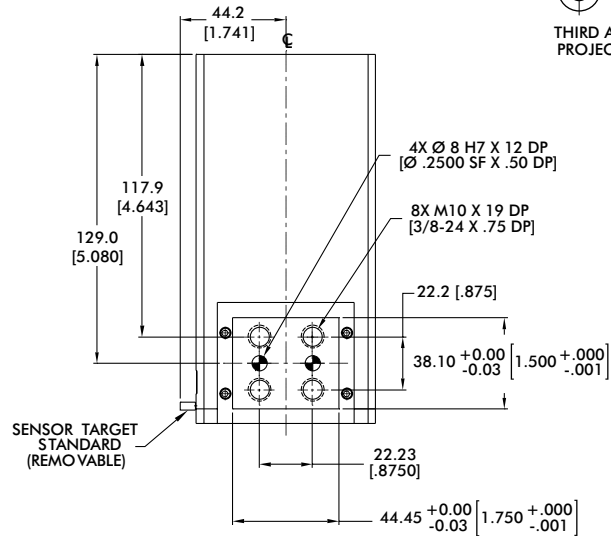
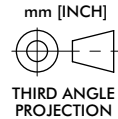


Sensor Accessories	RPS-18
Inductive Sensor Mounting Kit (mounts 2 sensors)	OSMK-072

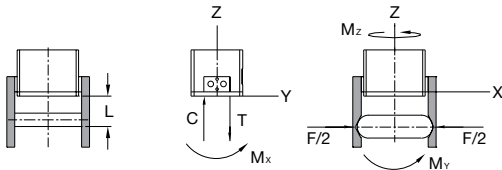
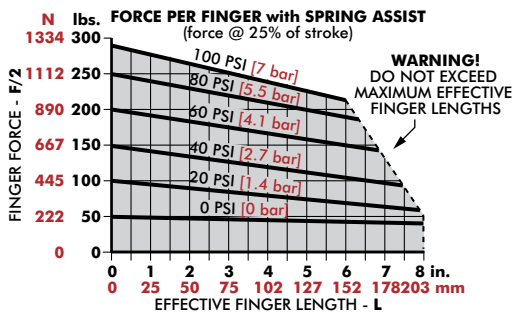
Seal Repair Kits	RPS-18
Buna-N Seal Repair Kit	SLKT-043
Viton® Seal Repair Kit	SLKT-043V

Pneumatic Accessories	RPS-18
Fail Safe Valve (Imperial)	OFSV-002
Fail Safe Valve (Metric)	OFSV-005

Model	A	B
RPS-18	177 [7.00]	146 [5.75]
RPS-18-D	190 [7.45]	

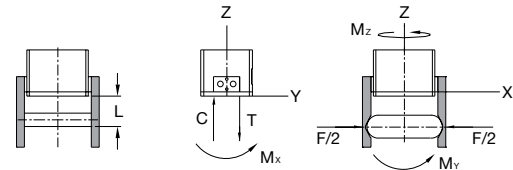
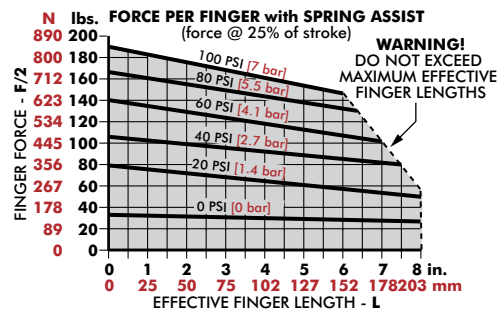


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RPS-18	Static	Dynamic
Maximum Tensile T	6672 N [1500 lbs]	2224 N [500 lbs]
Maximum Compressive C	13345 N [3000 lbs]	2224 N [500 lbs]
Maximum Moment M_x	170 Nm [1500 in-lbs]	57 Nm [500 in-lbs]
Maximum Moment M_y	170 Nm [1500 in-lbs]	57 Nm [500 in-lbs]
Maximum Moment M_z	170 Nm [1500 in-lbs]	57 Nm [500 in-lbs]

*Capacities are per set of jaws and are not simultaneous



RPS-18-D	Static	Dynamic
Maximum Tensile T	6672 N [1500 lbs]	2224 N [500 lbs]
Maximum Compressive C	13345 N [3000 lbs]	2224 N [500 lbs]
Maximum Moment M_x	170 Nm [1500 in-lbs]	57 Nm [500 in-lbs]
Maximum Moment M_y	170 Nm [1500 in-lbs]	57 Nm [500 in-lbs]
Maximum Moment M_z	170 Nm [1500 in-lbs]	57 Nm [500 in-lbs]

*Capacities are per set of jaws and are not simultaneous