

RP SERIES

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

Features:

- Widely used robust sealed design gripper
- Double wedge design for high impact applications
- Hardened steel bottom for part pressing applications
- Inductive jaw location sensing
- Grip force range from 178N [40 lbs] to 2669N [600 lbs]
- Stroke Range from 6.4mm [0.25 in] to 50.8mm [2.00 in]

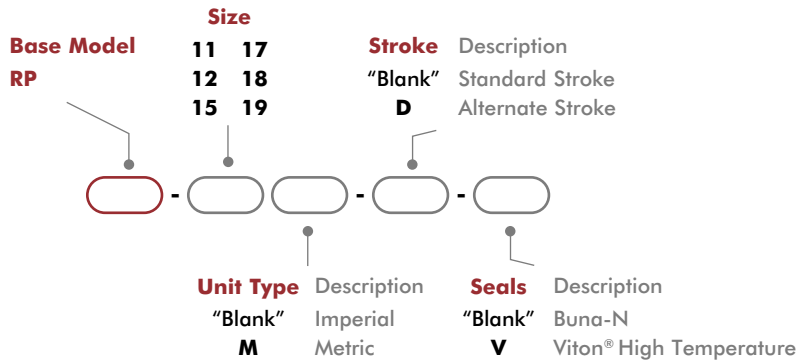
Applications:

- Inline part pressing applications
- OEM machine pick and place
- Packaging applications
- Automotive assembly



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, 19	OISN-011	1-2
PNP Inductive Sensor with Quick Disconnect*	17, 18, 19	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.

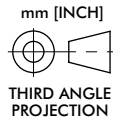
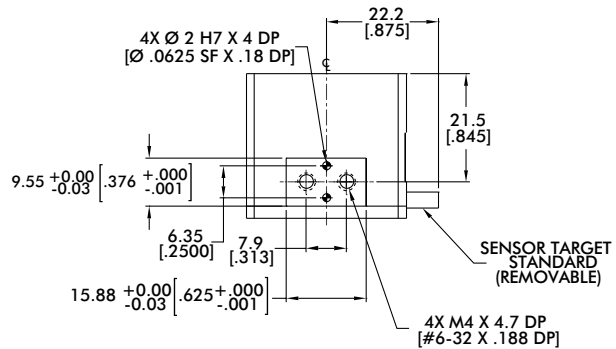
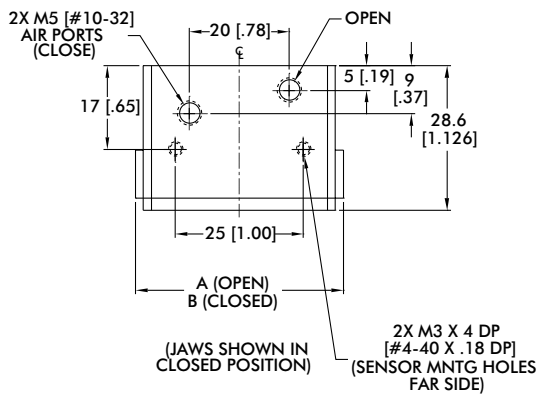
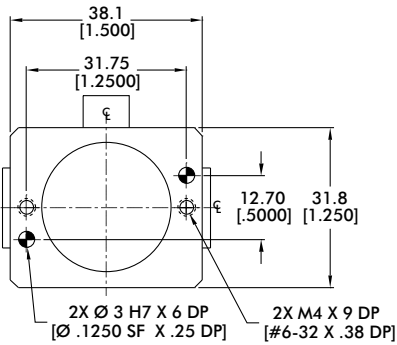
2-Jaw General Industrial Parallel Grippers | Technical Specifications

Specifications	Units	11	11-D	12	12-D	15	15-D
Total Rated Grip Force F @ 100 psi [7 bar]	N [lbs]	178 [40]	312 [70]	178 [40]	267 [60]	310 [70]	445 [100]
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]	0.12 [0.26]		0.25 [0.56]		0.57 [1.25]	
Pressure Range	bar [psi]	3-7 [40-100]					
Ingress Protection Class (IP)		IP43					
Displacement	cm ³ [in ³]	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	0.13				0.20	
Accuracy	mm [in]	±0.05 [±0.002]					
Repeatability	mm [in]	±0.03 [±0.001]					
Valve to Actuate		4-way, 2-position					

Specifications	Units	17	17-D	18	18-D	19	19-D
Total Rated Grip Force F @ 100 psi [7 bar]	N [lbs]	979 [220]	578 [130]	1779 [400]	1112 [250]	2669 [600]	3336 [750]
Total Stroke	mm [in]	19.1 [0.75]	28 [1.10]	31.8 [1.25]	43 [1.70]	50.8 [2.00]	38.1 [1.50]
Weight	kg [lbs]	1.0 [2.2]		3.5 [7.7]		9.5 [21]	
Pressure Range	bar [psi]	3-7 [40-100]					
Ingress Protection Class (IP)		IP43					
Displacement	cm ³ [in ³]	22.9 [1.400]		72.1 [4.400]		157.3 [9.600]	
Temperature Range (Buna-N seals)	°C [°F]	-35°~80° [-30°~180°]					
Temperature Range (Viton® seals)	°C [°F]	-30°~150° [-20°~300°]					
Actuation	sec	0.18		0.22		0.50	
Accuracy	mm [in]	±0.08 [±0.003]					
Repeatability	mm [in]	±0.03 [±0.001]					
Valve to Actuate		4-way, 2-position					

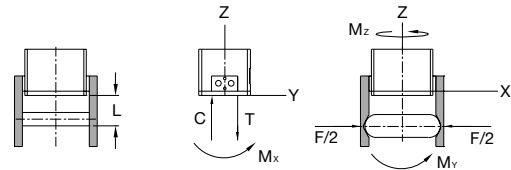
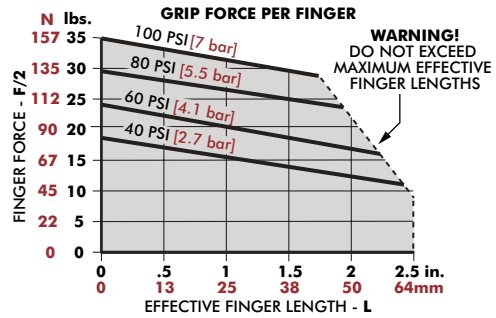
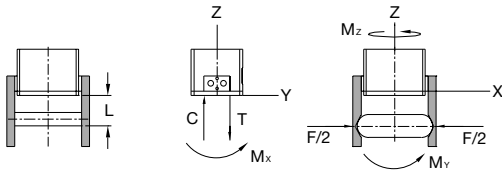
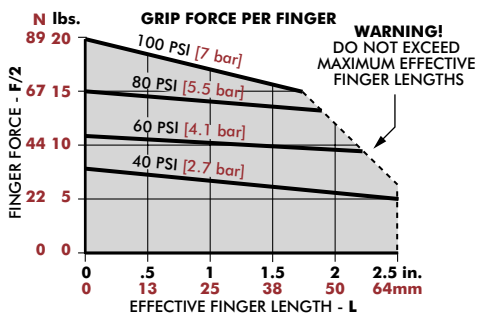
RP-11

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



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

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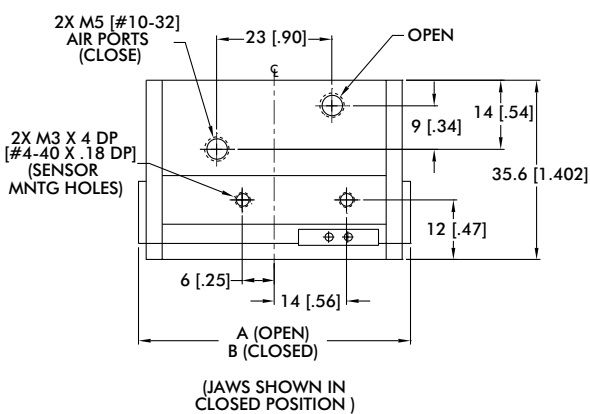
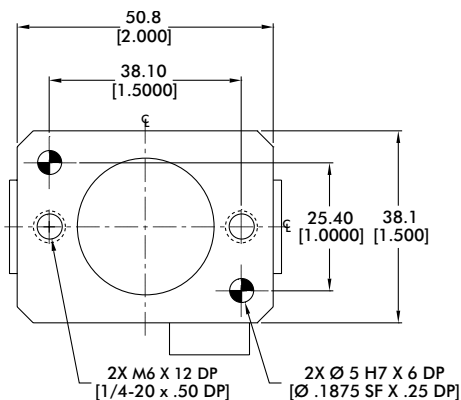
RP-11	Static	Dynamic
Maximum Tensile T	445 N [100 lbs]	111 N [25 lbs]
Maximum Compressive C	890 N [200 lbs]	111 N [25 lbs]
Maximum Moment M_x	11 Nm [100 in-lbs]	2 Nm [17 in-lbs]
Maximum Moment M_y	11 Nm [100 in-lbs]	2 Nm [17 in-lbs]
Maximum Moment M_z	11 Nm [100 in-lbs]	2 Nm [17 in-lbs]

*Capacities are per set of jaws and are not simultaneous

RP-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]	2 Nm [17 in-lbs]
Maximum Moment M_y	11 Nm [100 in-lbs]	2 Nm [17 in-lbs]
Maximum Moment M_z	11 Nm [100 in-lbs]	2 Nm [17 in-lbs]

*Capacities are per set of jaws and are not simultaneous

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

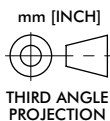
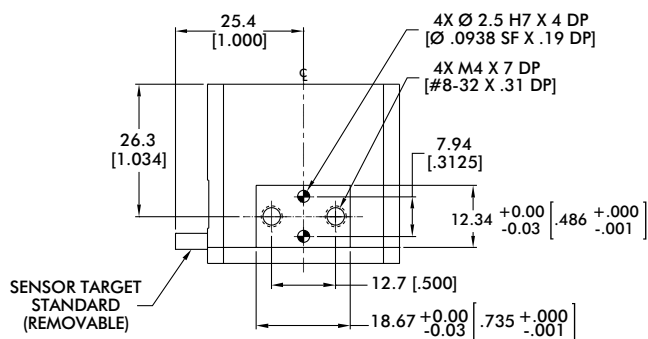


Model	A	B
RP-12	63 [2.50]	54 [2.13]
RP-12-D	60 [2.37]	

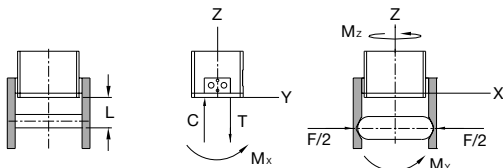
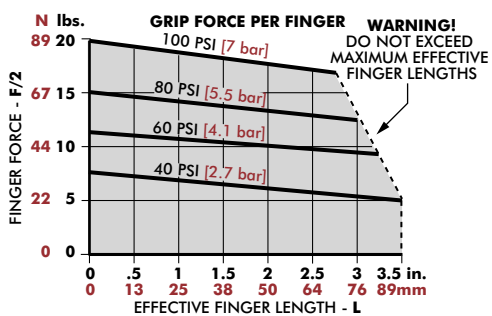
Sensor Accessories	RP-12
Inductive Sensor Mounting Kit (mounts 2 sensors)	OSMK-003

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

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

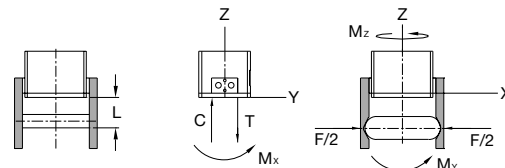
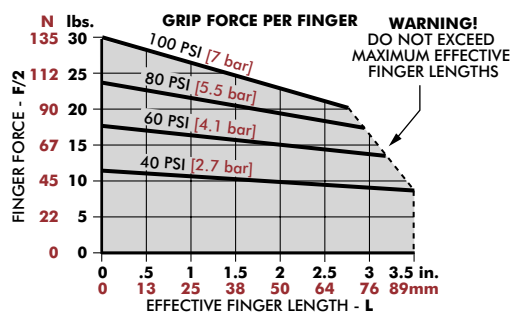


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RP-12	Static	Dynamic
Maximum Tensile T	890 N [200 lbs]	111 N [25 lbs]
Maximum Compressive C	1779 N [400 lbs]	111 N [25 lbs]
Maximum Moment M_x	17 Nm [150 in-lbs]	3 Nm [25 in-lbs]
Maximum Moment M_y	17 Nm [150 in-lbs]	3 Nm [25 in-lbs]
Maximum Moment M_z	17 Nm [150 in-lbs]	3 Nm [25 in-lbs]

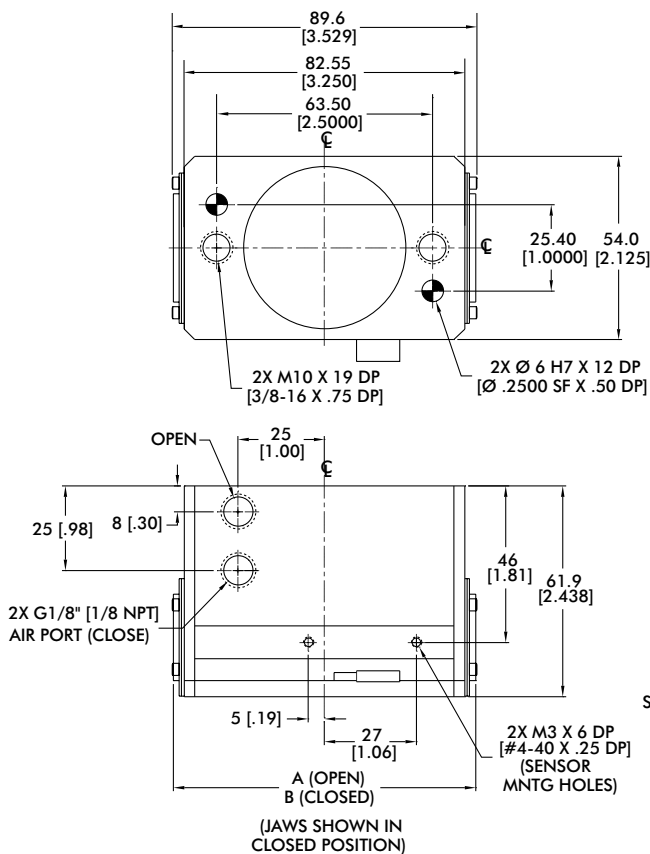
Capacities are per set of jaws and are not simultaneous



RP-12-D	Static	Dynamic
Maximum Tensile T	890 N [200 lbs]	111 N [25 lbs]
Maximum Compressive C	1779 N [400 lbs]	111 N [25 lbs]
Maximum Moment M_x	17 Nm [150 in-lbs]	3 Nm [25 in-lbs]
Maximum Moment M_y	17 Nm [150 in-lbs]	3 Nm [25 in-lbs]
Maximum Moment M_z	17 Nm [150 in-lbs]	3 Nm [25 in-lbs]

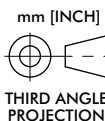
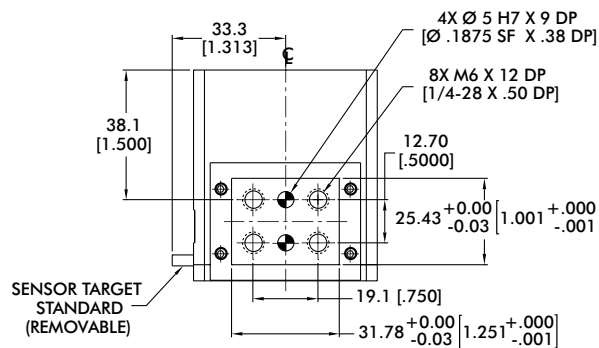
Capacities are per set of jaws and are not simultaneous

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

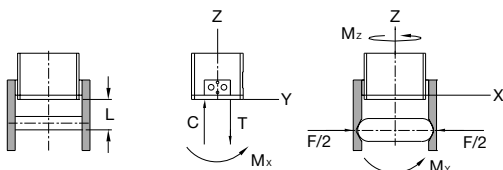
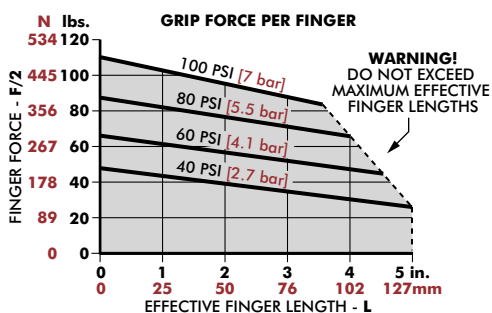


Model	A	B
RP-17	107 [4.25]	89 [3.50]
RP-17-D	117 [4.60]	89 [3.50]

Sensor Accessories	RP-17
Inductive Sensor Mounting Kit (mounts 2 sensors)	OSMK-072
Seal Repair Kits	RP-17
Buna-N Seal Repair Kit	SLKT-042
Viton® Seal Repair Kit	SLKT-042V
Pneumatic Accessories	RP-17
Fail Safe Valve (Imperial)	OFSV-002
Fail Safe Valve (Metric)	OFSV-005

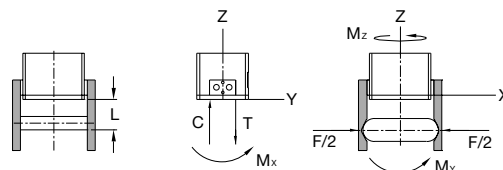
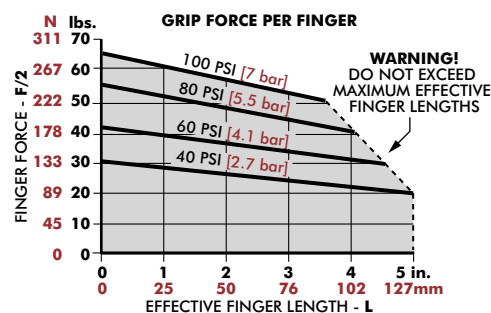


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RP-17	Static	Dynamic
Maximum Tensile T	3336 N [750 lbs]	445 N [100 lbs]
Maximum Compressive C	6672 N [1500 lbs]	445 N [100 lbs]
Maximum Moment M_x	85 Nm [750 in-lbs]	14 Nm [125 in-lbs]
Maximum Moment M_y	85 Nm [750 in-lbs]	14 Nm [125 in-lbs]
Maximum Moment M_z	85 Nm [750 in-lbs]	14 Nm [125 in-lbs]

¹Capacities are per set of jaws and are not simultaneous

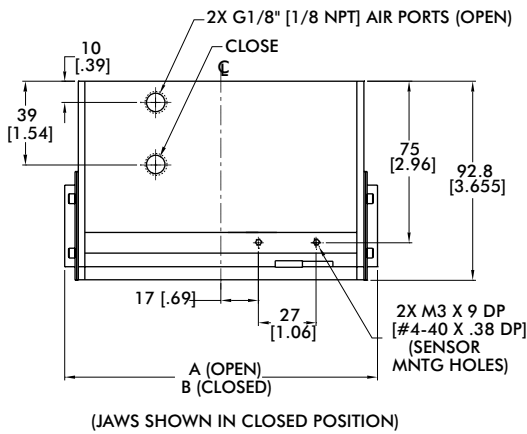
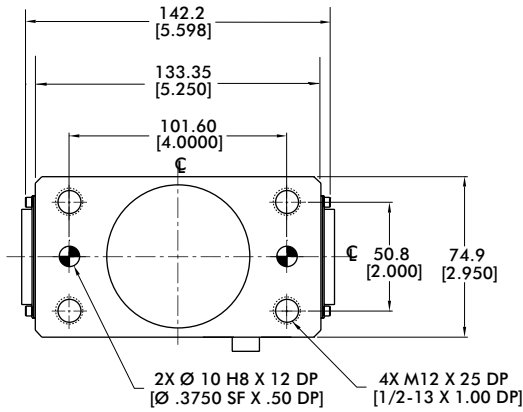


RP-17-D	Static	Dynamic
Maximum Tensile T	3336 N [750 lbs]	445 N [100 lbs]
Maximum Compressive C	6672 N [1500 lbs]	445 N [100 lbs]
Maximum Moment M_x	85 Nm [750 in-lbs]	14 Nm [125 in-lbs]
Maximum Moment M_y	85 Nm [750 in-lbs]	14 Nm [125 in-lbs]
Maximum Moment M_z	85 Nm [750 in-lbs]	14 Nm [125 in-lbs]

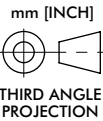
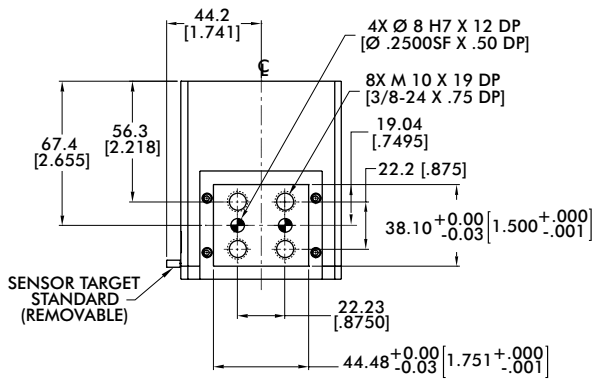
¹Capacities are per set of jaws and are not simultaneous

RP-18

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



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

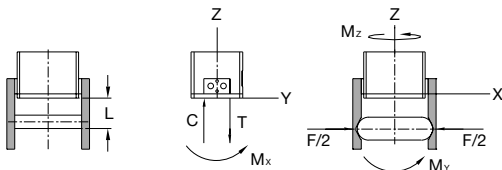
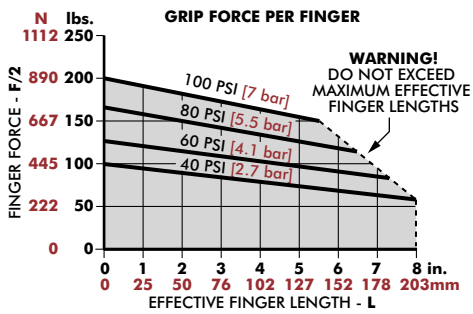


Sensor Accessories	RP-18
Inductive Sensor Mounting Kit (mounts 2 sensors)	OSMK-072

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

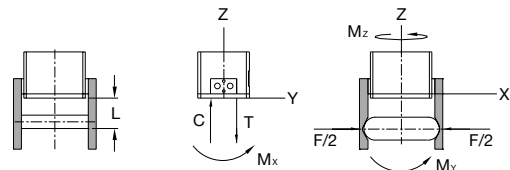
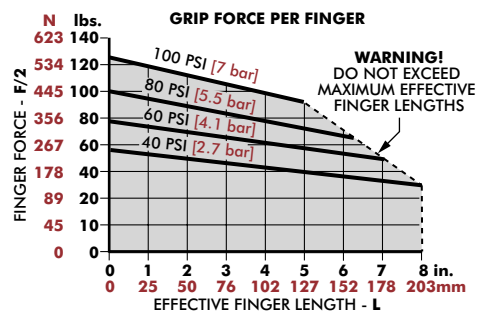
Pneumatic Accessories	RP-18
Fail Safe Valve (Imperial)	OFSV-002
Fail Safe Valve (Metric)	OFSV-005

Loading Information



RP-18	Static	Dynamic
Maximum Tensile T	6672 N [1500 lbs]	1112 N [250 lbs]
Maximum Compressive C	13345 N [3000 lbs]	1112 N [250 lbs]
Maximum Moment M_x	170 Nm [1500 in-lbs]	28 Nm [250 in-lbs]
Maximum Moment M_y	170 Nm [1500 in-lbs]	28 Nm [250 in-lbs]
Maximum Moment M_z	170 Nm [1500 in-lbs]	28 Nm [250 in-lbs]

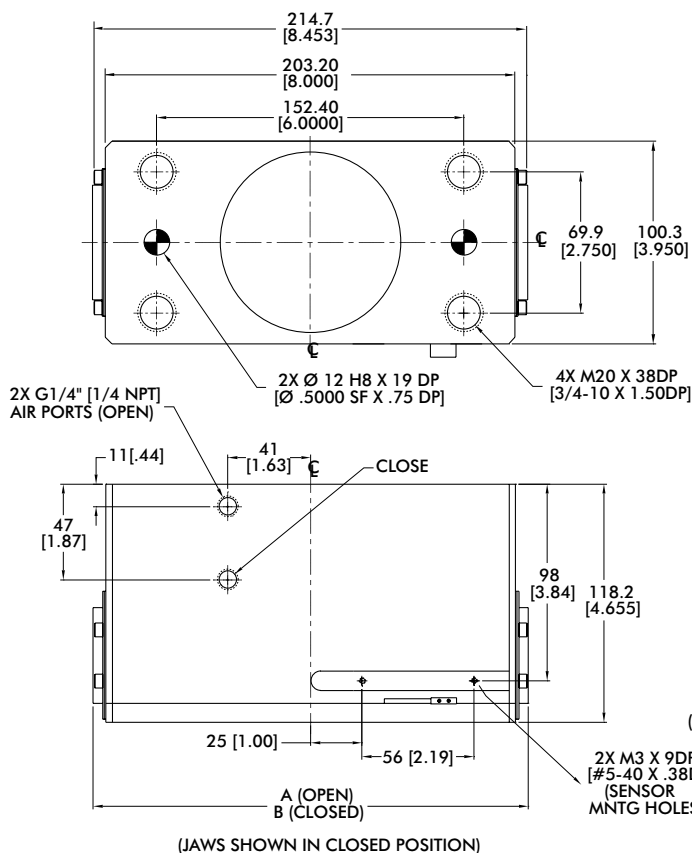
*Capacities are per set of jaws and are not simultaneous



RP-18-D	Static	Dynamic
Maximum Tensile T	6672 N [1500 lbs]	1112 N [250 lbs]
Maximum Compressive C	13345 N [3000 lbs]	1112 N [250 lbs]
Maximum Moment M_x	170 Nm [1500 in-lbs]	28 Nm [250 in-lbs]
Maximum Moment M_y	170 Nm [1500 in-lbs]	28 Nm [250 in-lbs]
Maximum Moment M_z	170 Nm [1500 in-lbs]	28 Nm [250 in-lbs]

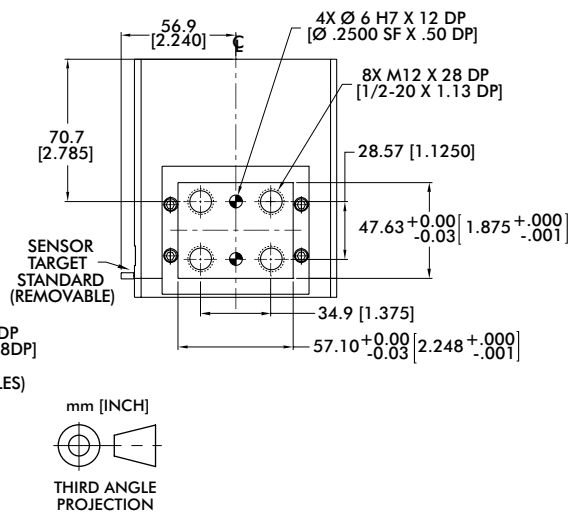
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2-Jaw General Industrial Parallel Grippers | Dimensions and Technical Specifications

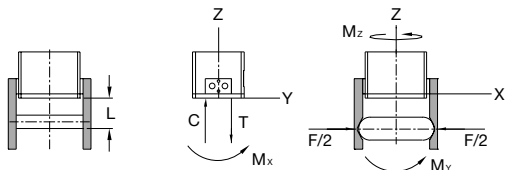
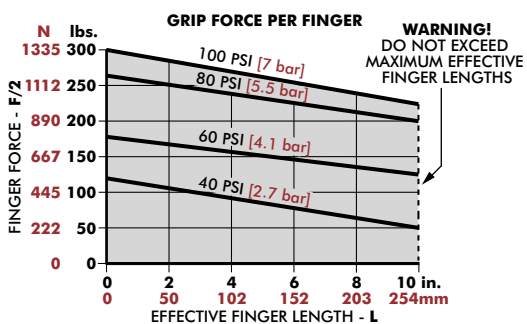


Model	A	B
RP-19	266 [10.50]	216 [8.50]
RP-19-D	254 [10.00]	

Sensor Accessories	RP-19
Inductive Sensor Mounting Kit (mounts 2 sensors)	OSMK-073
Seal Repair Kits	RP-19
Buna-N Seal Repair Kit	SLKT-044
Viton® Seal Repair Kit	SLKT-044V
Pneumatic Accessories	RP-19
Fail Safe Valve (Imperial)	OFSV-003
Fail Safe Valve (Metric)	OFSV-006

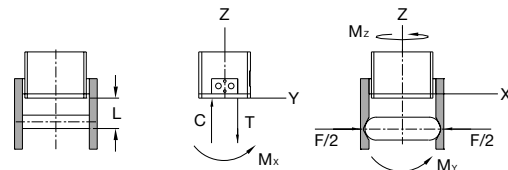
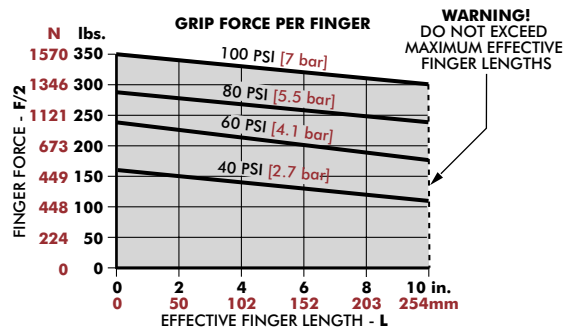


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RP-19	Static	Dynamic
Maximum Tensile T	13345 N [3000 lbs]	1334 N [300 lbs]
Maximum Compressive C	26689 N [6000 lbs]	1334 N [300 lbs]
Maximum Moment M_x	565 Nm [5000 in-lbs]	56 Nm [500 in-lbs]
Maximum Moment M_y	565 Nm [5000 in-lbs]	56 Nm [500 in-lbs]
Maximum Moment M_z	565 Nm [5000 in-lbs]	56 Nm [500 in-lbs]

[†]Capacities are per set of jaws and are not simultaneous



RP-19-D	Static	Dynamic
Maximum Tensile T	13345 N [3000 lbs]	1334 N [300 lbs]
Maximum Compressive C	26689 N [6000 lbs]	1334 N [300 lbs]
Maximum Moment M_x	565 Nm [5000 in-lbs]	56 Nm [500 in-lbs]
Maximum Moment M_y	565 Nm [5000 in-lbs]	56 Nm [500 in-lbs]
Maximum Moment M_z	565 Nm [5000 in-lbs]	56 Nm [500 in-lbs]

[†]Capacities are per set of jaws and are not simultaneous