

DPDS SERIES

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

Features:

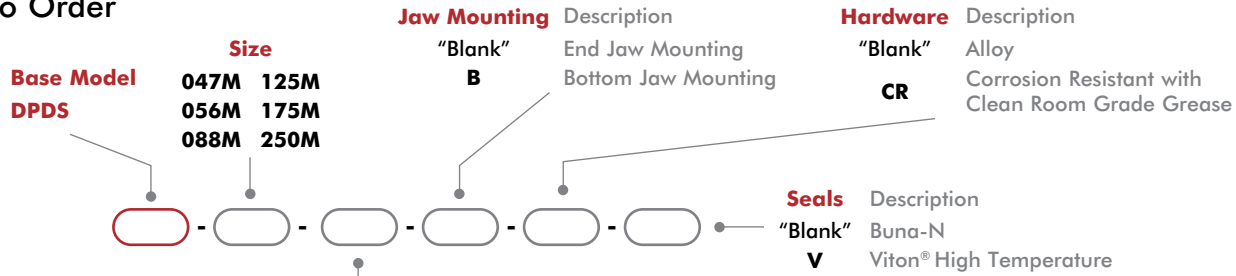
- Rugged general purpose modular gripper
- High impact resistant with double wedge design
- Finger mounting on end or bottom of jaws
- Thru-body mounting and multiple mounting features simplifies installation
- Multiple air ports support manifold interface using O-rings
- Purge/scavenge ports for harsh & clean environments
- Corrosion resistance hardware option

Applications:

- Compact, robust gripper for use in confined spaces requiring a high grip force
- Multiple part gripping using manifold feature to create gripper arrays
- Long finger gripping applications



How To Order



Stroke Stroke varies with size of gripper

047M	006, 009 or 013	125M	019, 025 or 038
056M	009, 013 or 019	175M	025, 038 or 050
088M	013, 019 or 025	250M	038, 050 or 075

Stroke dimensions

006	1.6mm [0.06]	019	4.8mm [0.19]	050	12.7mm [0.50]
009	2.4mm [0.09]	025	6.4mm [0.25]	075	19.1mm [0.75]
013	3.2mm [0.13]	038	9.5mm [0.38]		

Accessories

Sensor Accessories	Model Numbers	Part Number	Qty/Unit
PNP Magneto Resistive Sensor with Quick Disconnect*	047M, 056M, 088M, 125M	OHSP-017	1-2
NPN Magneto Resistive Sensor with Quick Disconnect*	047M, 056M, 088M, 125M	OHSN-017	1-2
PNP Magneto Resistive Sensor with Quick Disconnect*	175M, 250M	OHSP-015	1-2
NPN Magneto Resistive Sensor with Quick Disconnect*	175M, 250M	OHSN-015	1-2
PNP Magneto Resistive Sensor (90° barrel) w/Qk. Disc.*	047M, 056M, 088M, 125M	OHSP-011	1-2
NPN Magneto Resistive Sensor (90° barrel) w/Qk. Disc.*	047M, 056M, 088M, 125M	OHSN-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
Plumbing Fitting - M3 male to 3mm OD Tube Push-in Style	047M, 056M	PLFT-021	1-2
Plumbing Fitting - M3 male to 2mm ID Tube Barb Style	047M, 056M	PLFT-022	1-2
Plumbing Fitting - 1/8 NPT Male to 1/8 BSPP Female	125M, 250M	PLFT-028	1-2
Adjustable Flow Control G 1/8 Elbow - 6mm OD Push-in	125M, 250M	VLVF-005	1-2
Adjustable Flow Control M5 Elbow - 6mm OD Push-in	088M, 125M	VLVF-008	1-2
Fail Safe Valve M5	088M, 125M	OFSV-004	1
Fail Safe Valve G 1/8 (1/8 BSPP)	175M, 250M	OFSV-005	1

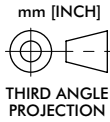
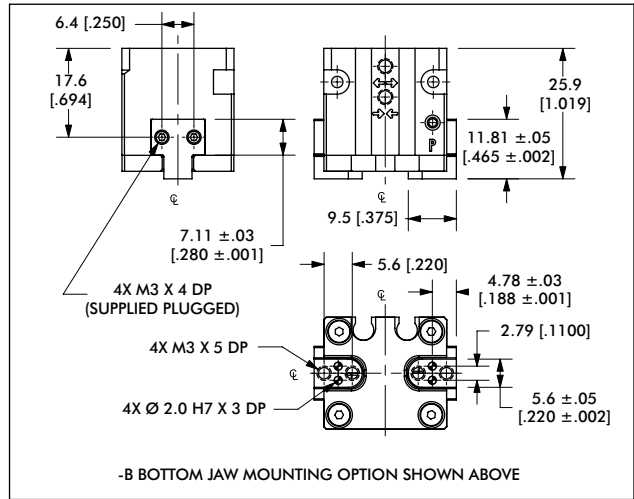
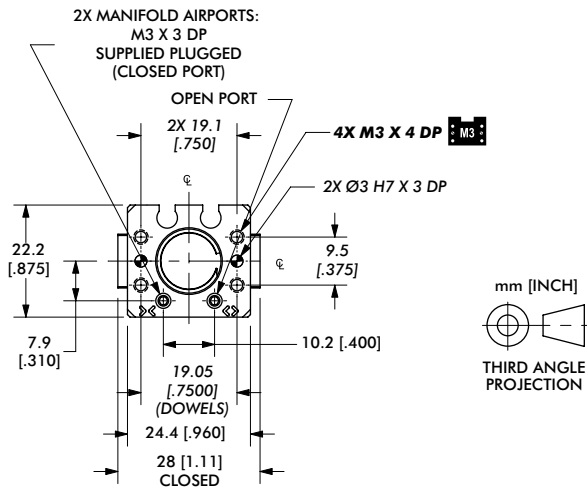
* Sensor and cable sold separately.

2-Jaw General Industrial Grippers | Technical Specifications

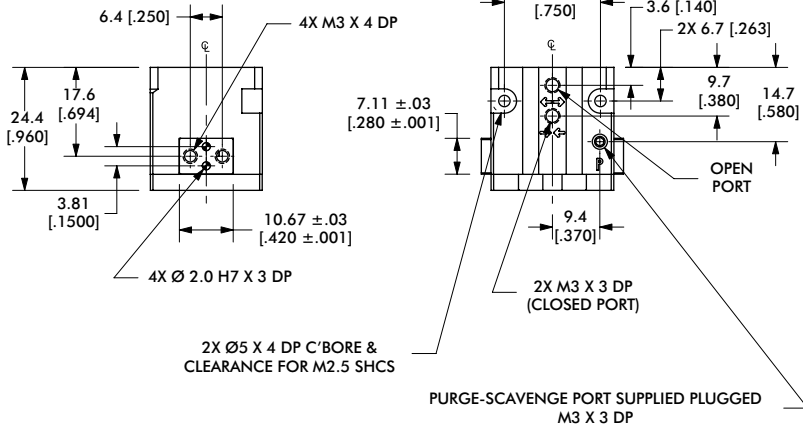
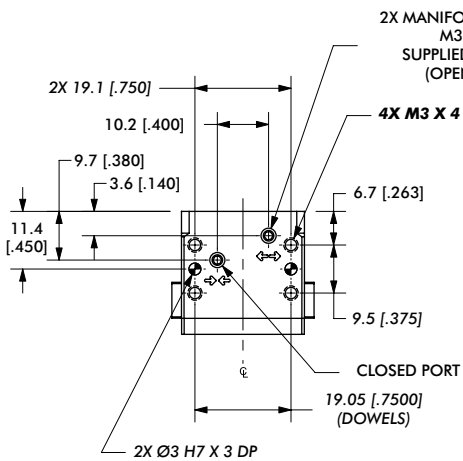
Specifications	Units	047M	056M	088M
Total Rated Grip Force F @ 100 psi	N [lbs]	62 [14]	98 [22]	222 [50]
Total Stroke	mm [in]	3.2 [0.13]	4.8 [0.19]	6.4 [0.25]
Weight	kg [lbs]	0.086 [0.04]	0.155 [0.07]	0.23 [0.51]
Pressure Range	bar [psi]	1.5-7 [20-100]		
Max. Vacuum for Scavenge Port	mm Hg [in. Hg]	200 [8]		
Max. Pressure for Purge Port	bar [psi]	1.4 [20]		
Ingress Protection Class (IP)		IP54		
Displacement	cm ³ [in ³]	0.2 [0.013]	0.5 [0.028]	1.5 [0.090]
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	0.16	0.20
Accuracy	mm [in]	±0.05 [±0.002]		
Repeatability	mm [in]	±0.03 [±0.001]		
Valve to Actuate Double Acting		4-way, 2-position		

Specifications	Units	125M	175M	250M
Total Rated Grip Force F @ 100 psi	N [lbs]	445 [100]	890 [200]	1779 [400]
Total Stroke	mm [in]	9.5 [0.38]	12.7 [0.50]	19.1 [0.75]
Weight	kg [lbs]	0.46 [1.03]	1.68 [3.70]	2.76 [6.08]
Pressure Range	bar [psi]	1.5-7 [20-100]		
Max. Vacuum for Scavenge Port	mm Hg [in. Hg]	200 [8]		
Max. Pressure for Purge Port	bar [psi]	1.4 [20]		
Ingress Protection Class (IP)		IP54		
Displacement	cm ³ [in ³]	4.5 [0.274]	11.7 [0.717]	36.0 [2.194]
Temperature Range (Buna-N seals)	°C [°F]	-35°~80° [-30°~180°]		
Temperature Range (Viton® seals)	°C [°F]	-30°~150° [-20°~300°]		
Actuation	sec	0.30	0.40	0.50
Accuracy	mm [in]	±0.08 [±0.003]		
Repeatability	mm [in]	±0.03 [±0.001]		
Valve to Actuate Double Acting		4-way, 2-position		

2-Jaw General Industrial Grippers | Dimensions and Technical Specifications

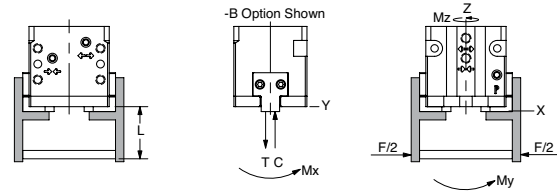
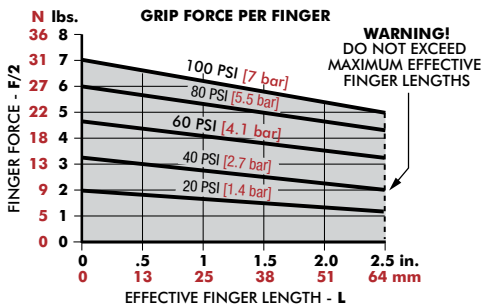


-B BOTTOM JAW MOUNTING OPTION SHOWN ABOVE



Seal Repair Kits	047M
Buna-N Seal Repair Kit	SLKT-185
Viton® Seal Repair Kit	SLKT-185V
Manifold Seal Kit (Viton® only)	SLKT-197V

Loading Information



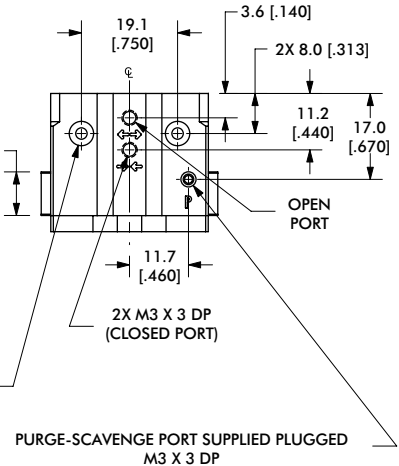
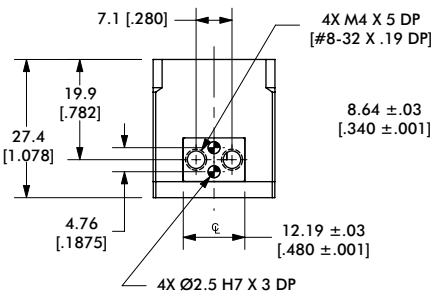
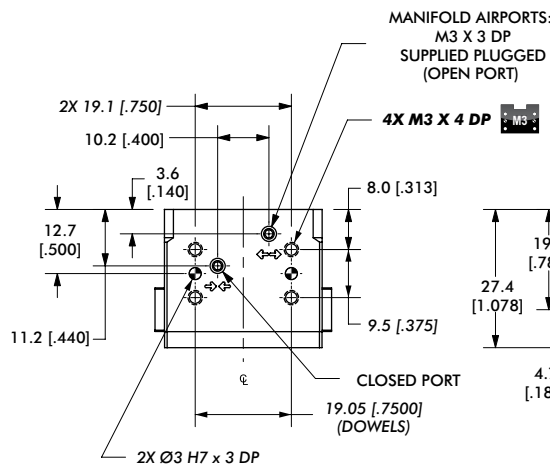
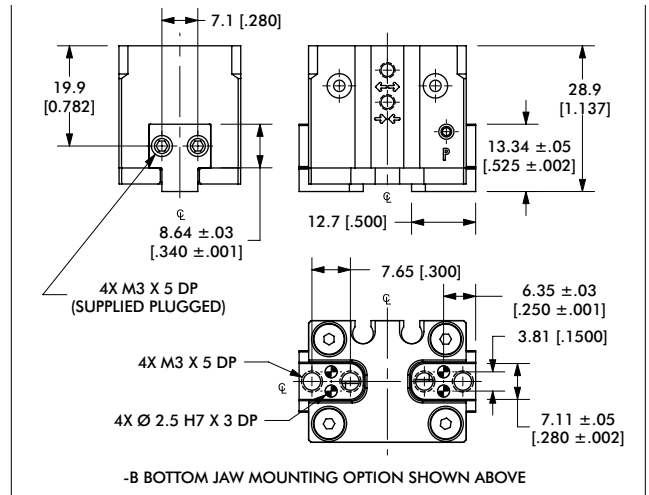
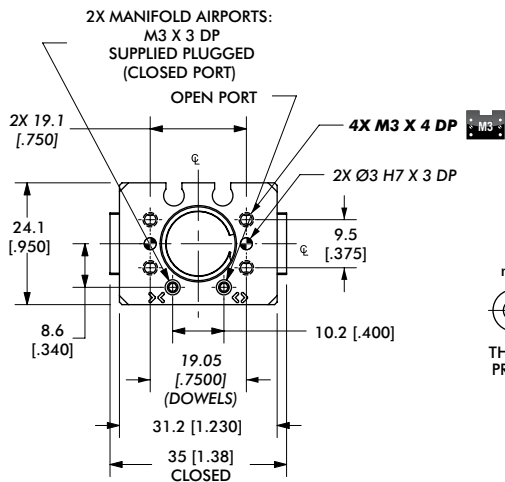
DPDS-047M	Static	Dynamic
Maximum Tensile T	134 N [30 lbs]	27 N [6 lbs]
Maximum Compressive C	223 N [50 lbs]	45 N [10 lbs]
Maximum Moment M_x	2 Nm [20 in-lbs]	0.6 Nm [5 in-lbs]
Maximum Moment M_y	2 Nm [20 in-lbs]	0.6 Nm [5 in-lbs]
Maximum Moment M_z	2 Nm [20 in-lbs]	0.6 Nm [5 in-lbs]

*Capacities are per set of jaws and are not simultaneous

DPDS-047M-B	Static	Dynamic
Maximum Tensile T	107 N [24 lbs]	22 N [5 lbs]
Maximum Compressive C	178 N [40 lbs]	36 N [8 lbs]
Maximum Moment M_x	2 Nm [16 in-lbs]	0.5 Nm [4 in-lbs]
Maximum Moment M_y	2 Nm [16 in-lbs]	0.5 Nm [4 in-lbs]
Maximum Moment M_z	2 Nm [16 in-lbs]	0.5 Nm [4 in-lbs]

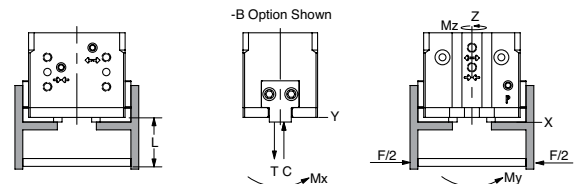
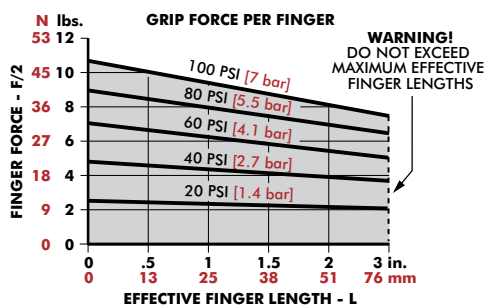
*Capacities are per set of jaws and are not simultaneous

2-Jaw General Industrial Grippers | Dimensions and Technical Specifications



Seal Repair Kits	056M
Buna-N Seal Repair Kit	SLKT-186
Viton® Seal Repair Kit	SLKT-186V
Manifold Seal Kit (Viton® only)	SLKT-197V

Loading Information



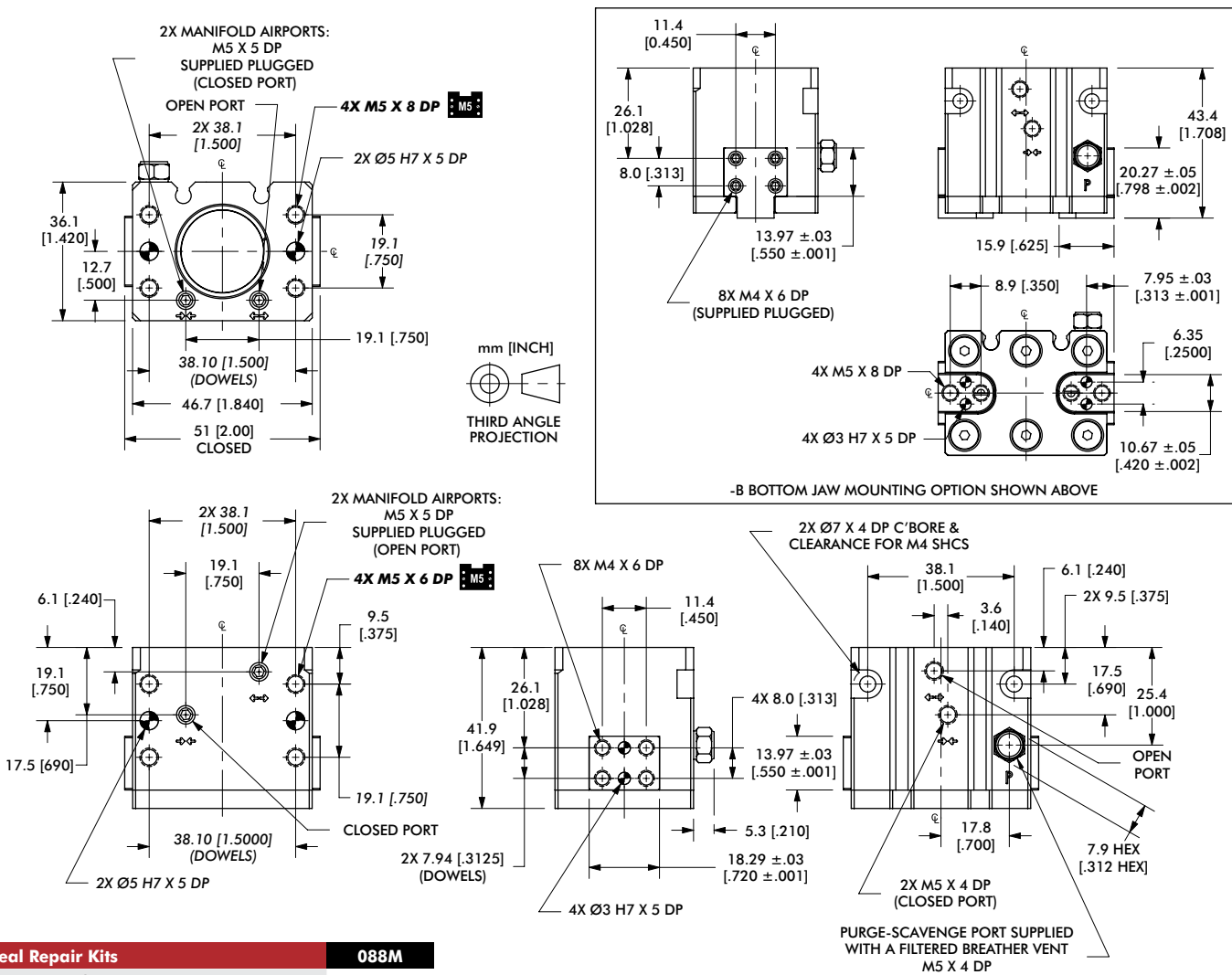
DPDS-056M	Static	Dynamic
Maximum Tensile T	267 N [60 lbs]	45 N [10 lbs]
Maximum Compressive C	401 N [90 lbs]	67 N [15 lbs]
Maximum Moment M_x	5 Nm [40 in-lbs]	0.8 Nm [7 in-lbs]
Maximum Moment M_y	5 Nm [40 in-lbs]	0.8 Nm [7 in-lbs]
Maximum Moment M_z	5 Nm [40 in-lbs]	0.8 Nm [7 in-lbs]

†Capacities are per set of jaws and are not simultaneous

DPDS-056M-B	Static	Dynamic
Maximum Tensile T	214 N [48 lbs]	36 N [8 lbs]
Maximum Compressive C	320 N [72 lbs]	53 N [12 lbs]
Maximum Moment M_x	4 Nm [32 in-lbs]	1 Nm [6 in-lbs]
Maximum Moment M_y	4 Nm [32 in-lbs]	1 Nm [6 in-lbs]
Maximum Moment M_z	4 Nm [32 in-lbs]	1 Nm [6 in-lbs]

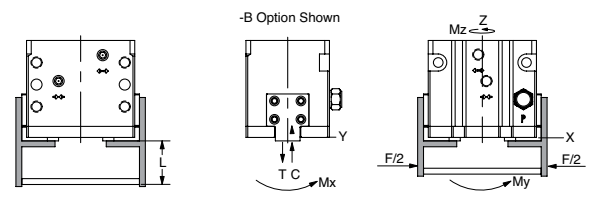
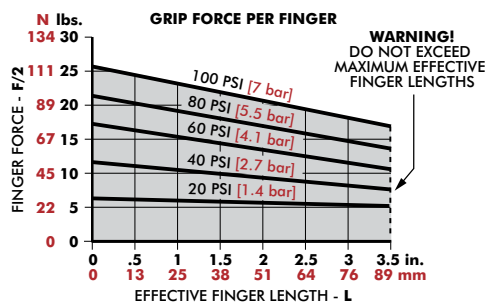
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2-Jaw General Industrial Grippers | Dimensions and Technical Specifications



Seal Repair Kits	088M
Buna-N Seal Repair Kit	SLKT-187
Viton® Seal Repair Kit	SLKT-187V
Manifold Seal Kit (Viton® only)	SLKT-199V

Loading Information



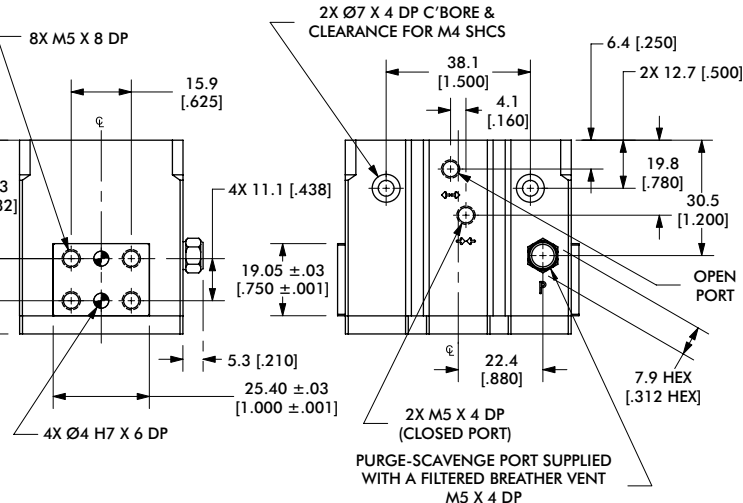
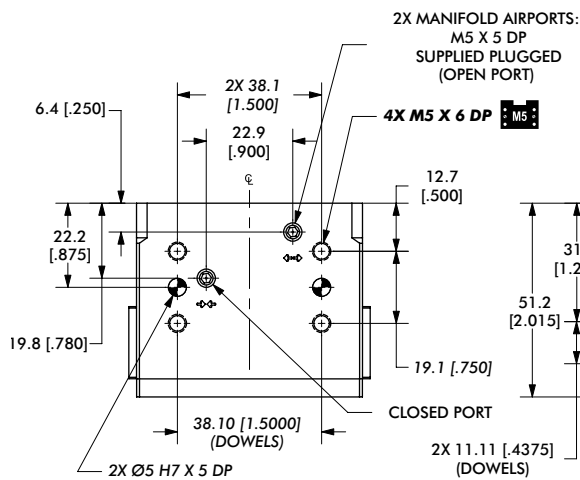
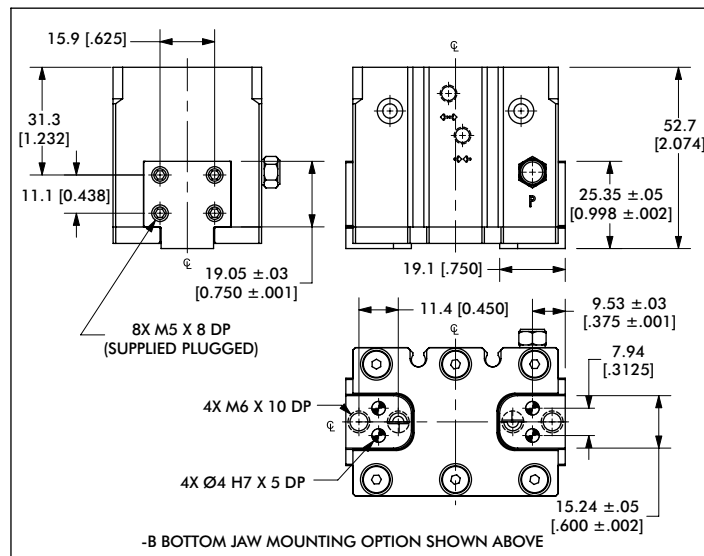
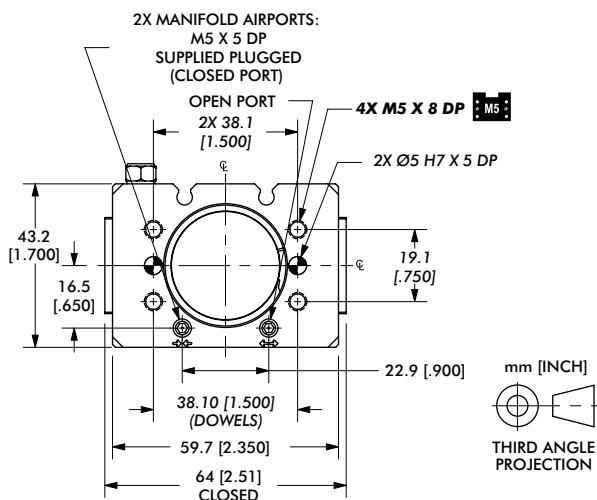
DPDS-088M	Static	Dynamic
Maximum Tensile T	614 N [138 lbs]	111 N [25 lbs]
Maximum Compressive C	1224 N [275 lbs]	111 N [25 lbs]
Maximum Moment M_x	14 Nm [120 in-lbs]	2 Nm [20 in-lbs]
Maximum Moment M_y	14 Nm [120 in-lbs]	2 Nm [20 in-lbs]
Maximum Moment M_z	14 Nm [120 in-lbs]	2 Nm [20 in-lbs]

DPDS-088M-B	Static	Dynamic
Maximum Tensile T	490 N [110 lbs]	89 N [20 lbs]
Maximum Compressive C	979 N [220 lbs]	89 N [20 lbs]
Maximum Moment M_x	11 Nm [96 in-lbs]	2 Nm [16 in-lbs]
Maximum Moment M_y	11 Nm [96 in-lbs]	2 Nm [16 in-lbs]
Maximum Moment M_z	11 Nm [96 in-lbs]	2 Nm [16 in-lbs]

*Capacities are per set of jaws and are not simultaneous

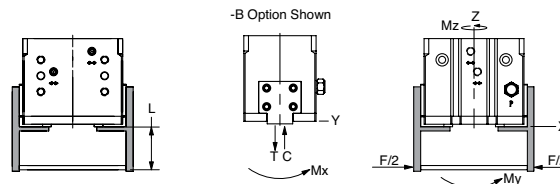
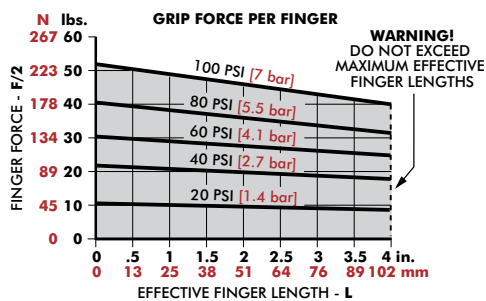
*Capacities are per set of jaws and are not simultaneous

2-Jaw General Industrial Grippers | Dimensions and Technical Specifications



Seal Repair Kits	056M
Buna-N Seal Repair Kit	SLKT-188
Viton® Seal Repair Kit	SLKT-188V
Manifold Seal Kit (Viton® only)	SLKT-199V

Loading Information



DPDS-125M	Static	Dynamic
Maximum Tensile T	2225 N [500 lbs]	289 N [65 lbs]
Maximum Compressive C	4228 N [950 lbs]	289 N [65 lbs]
Maximum Moment M_x	48 Nm [425 in-lbs]	8 Nm [70 in-lbs]
Maximum Moment M_y	48 Nm [425 in-lbs]	8 Nm [70 in-lbs]
Maximum Moment M_z	48 Nm [425 in-lbs]	8 Nm [70 in-lbs]

†Capacities are per set of jaws and are not simultaneous

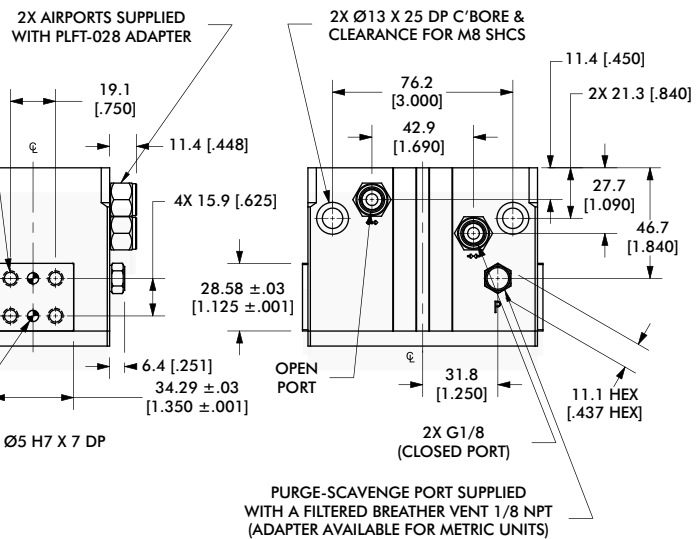
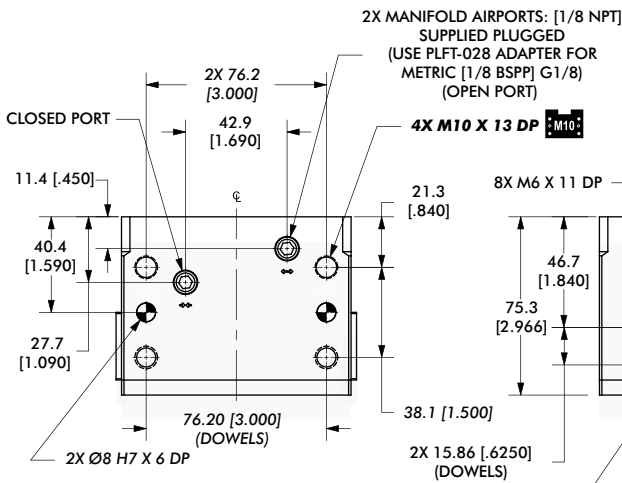
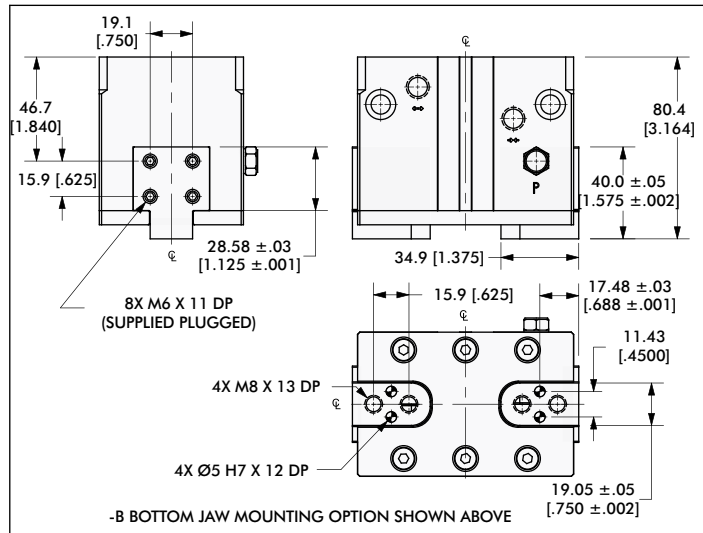
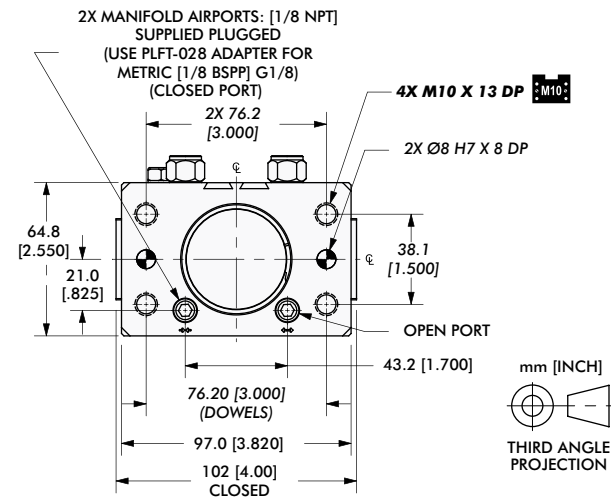
DPDS-125M-B	Static	Dynamic
Maximum Tensile T	1780 N [400 lbs]	231 N [52 lbs]
Maximum Compressive C	3382 N [760 lbs]	231 N [52 lbs]
Maximum Moment M_x	8 Nm [340 in-lbs]	6 Nm [56 in-lbs]
Maximum Moment M_y	38 Nm [340 in-lbs]	6 Nm [56 in-lbs]
Maximum Moment M_z	38 Nm [340 in-lbs]	6 Nm [56 in-lbs]

†Capacities are per set of jaws and are not simultaneous

DPDS-175M, 175M-B

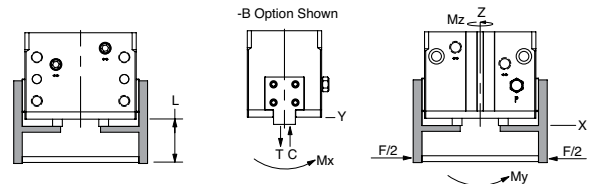
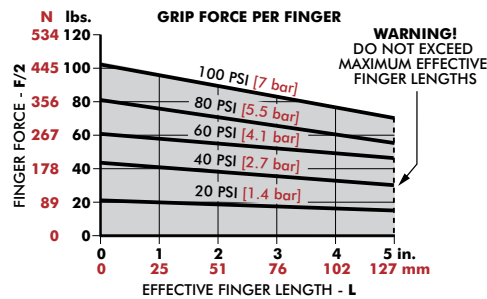


2-Jaw General Industrial Grippers | Dimensions and Technical Specifications



Seal Repair Kits	175M
Buna-N Seal Repair Kit	SLKT-189
Viton® Seal Repair Kit	SLKT-189V
Manifold Seal Kit (Viton® only)	SLKT-201V

Loading Information



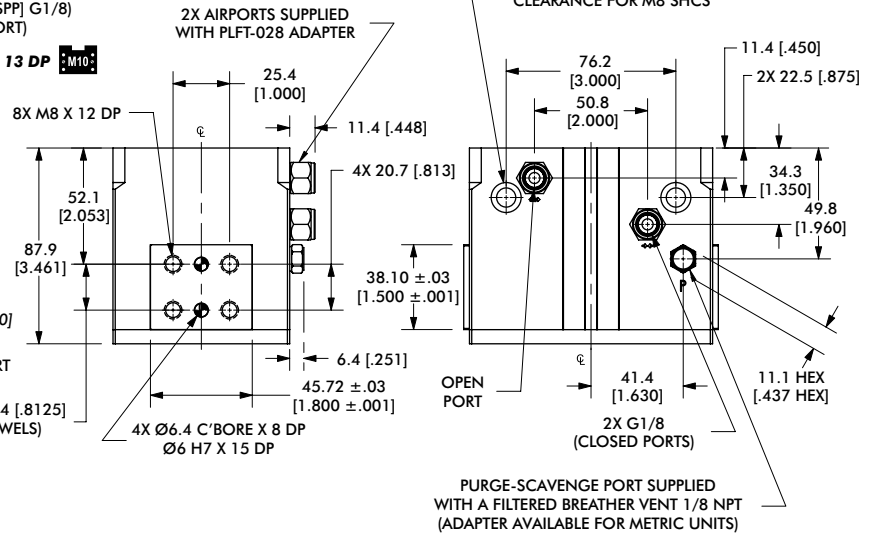
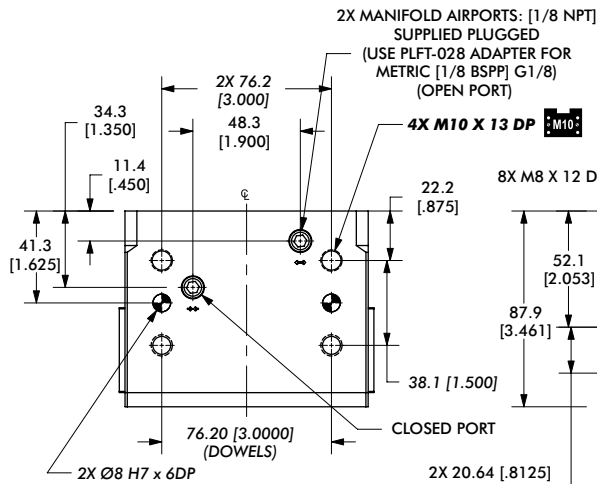
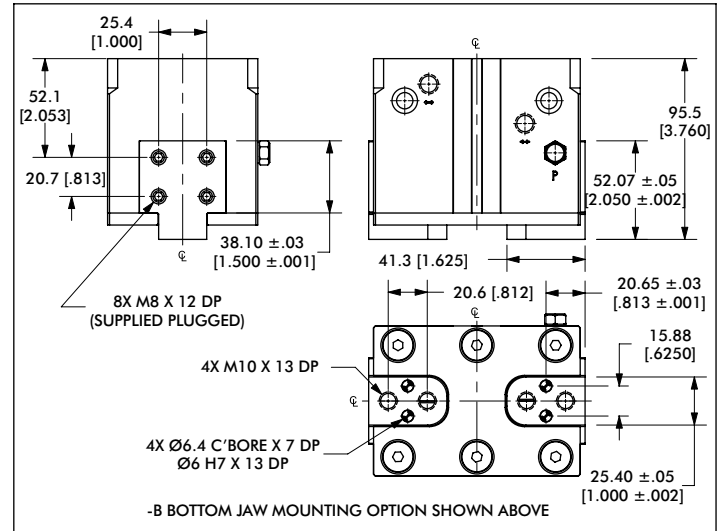
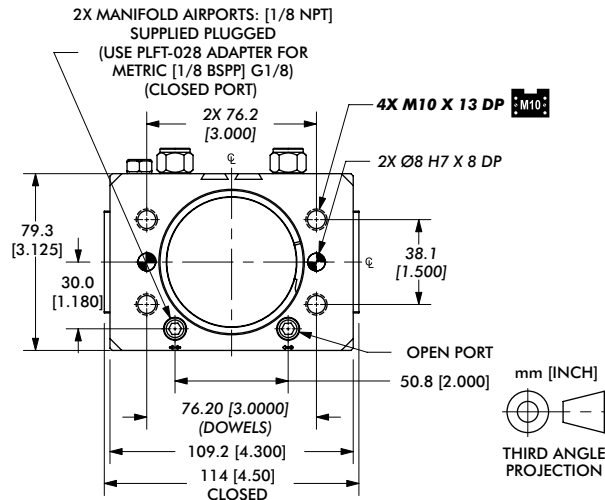
DPDS-175M	Static	Dynamic
Maximum Tensile T	4450 N [1000 lbs]	668 N [150 lbs]
Maximum Compressive C	8900 N [2000 lbs]	668 N [150 lbs]
Maximum Moment M_x	113 Nm [1000 in-lbs]	20 Nm [175 in-lbs]
Maximum Moment M_y	113 Nm [1000 in-lbs]	20 Nm [175 in-lbs]
Maximum Moment M_z	113 Nm [1000 in-lbs]	20 Nm [175 in-lbs]

*Capacities are per set of jaws and are not simultaneous

DPDS-175M-B	Static	Dynamic
Maximum Tensile T	3560 N [800 lbs]	534 N [120 lbs]
Maximum Compressive C	7120 N [1600 lbs]	534 N [120 lbs]
Maximum Moment M_x	90 Nm [800 in-lbs]	16 Nm [140 in-lbs]
Maximum Moment M_y	90 Nm [800 in-lbs]	16 Nm [140 in-lbs]
Maximum Moment M_z	90 Nm [800 in-lbs]	16 Nm [140 in-lbs]

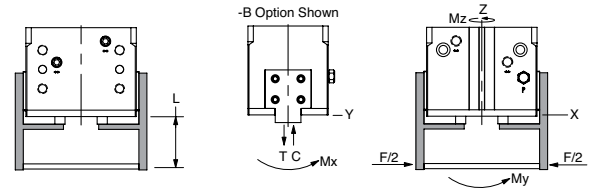
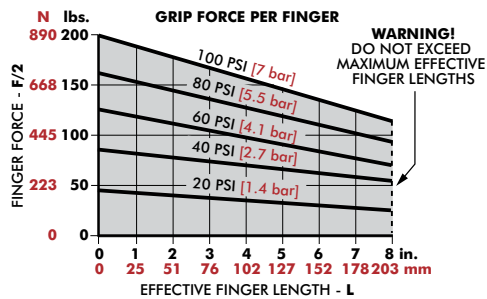
*Capacities are per set of jaws and are not simultaneous

2-Jaw General Industrial Grippers | Dimensions and Technical Specifications



Seal Repair Kits	250M
Buna-N Seal Repair Kit	SLKT-190
Viton® Seal Repair Kit	SLKT-190V
Manifold Seal Kit (Viton® only)	SLKT-201V

Loading Information



DPDS-250M	Static	Dynamic
Maximum Tensile T	5785 N [1300 lbs]	979 N [220 lbs]
Maximum Compressive C	12015 N [2700 lbs]	979 N [220 lbs]
Maximum Moment M_x	153 Nm [1350 in-lbs]	25 Nm [225 in-lbs]
Maximum Moment M_y	153 Nm [1350 in-lbs]	25 Nm [225 in-lbs]
Maximum Moment M_z	153 Nm [1350 in-lbs]	25 Nm [225 in-lbs]

*Capacities are per set of jaws and are not simultaneous

DPDS-250M-B	Static	Dynamic
Maximum Tensile T	4628 N [1040 lbs]	783 N [176 lbs]
Maximum Compressive C	9612 N [2160 lbs]	783 N [176 lbs]
Maximum Moment M_x	122 Nm [1080 in-lbs]	20 Nm [180 in-lbs]
Maximum Moment M_y	122 Nm [1080 in-lbs]	20 Nm [180 in-lbs]
Maximum Moment M_z	122 Nm [1080 in-lbs]	20 Nm [180 in-lbs]

*Capacities are per set of jaws and are not simultaneous