

# DPDL SERIES

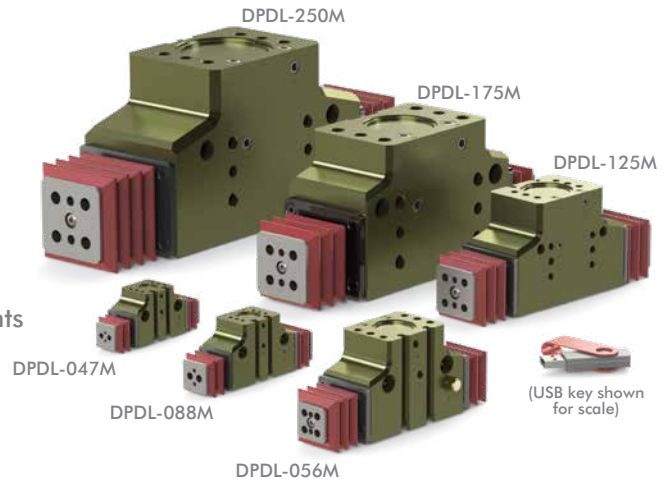
## 2-Jaw General Industrial Grippers | Features and Benefits | How To Order

### Features:

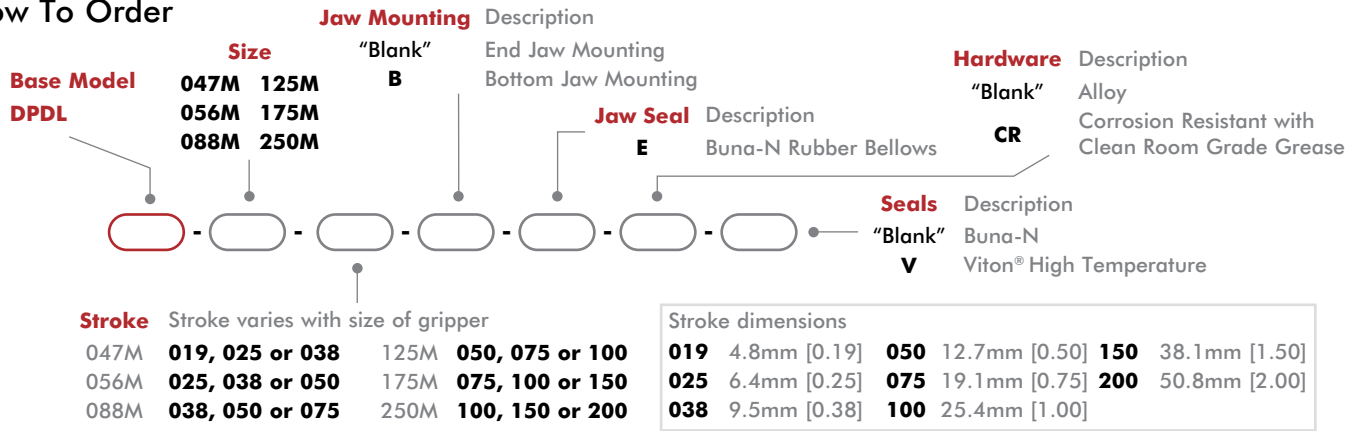
- Rugged general purpose modular gripper
- High impact resistance with double wedge design
- Harsh environments with sealed rubber boot jaw option
- Thru-body mounting and multiple mounting features simplifies installation
- Multiple air ports support manifold interface using O-rings
- Purge and scavenge ports for harsh & clean environments

### Applications:

- Use in machine coolant and metal chip environment applications
- High impact applications
- Paintbooths, sandblasting applications



### How To Order



### 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

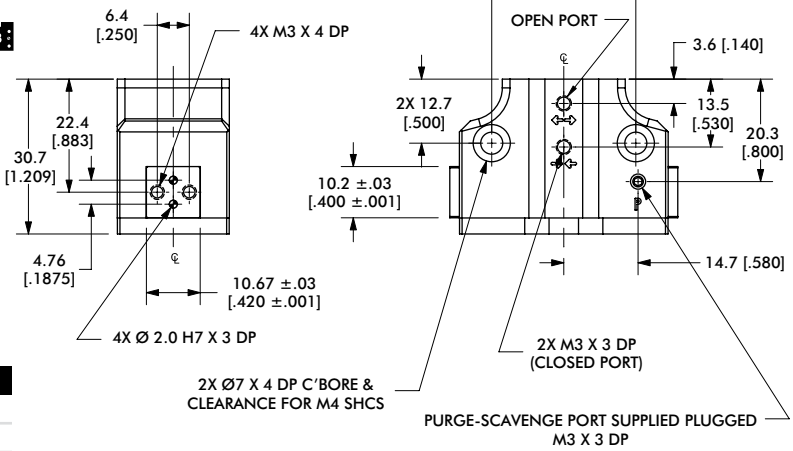
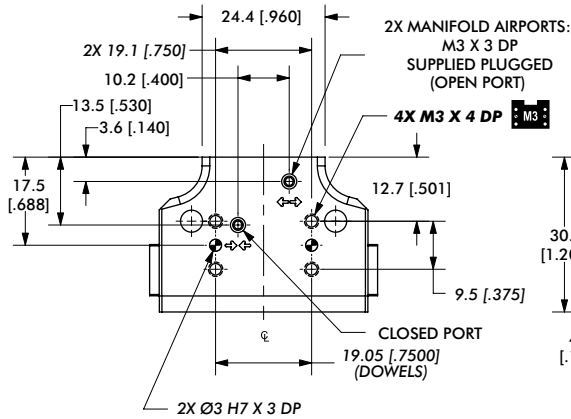
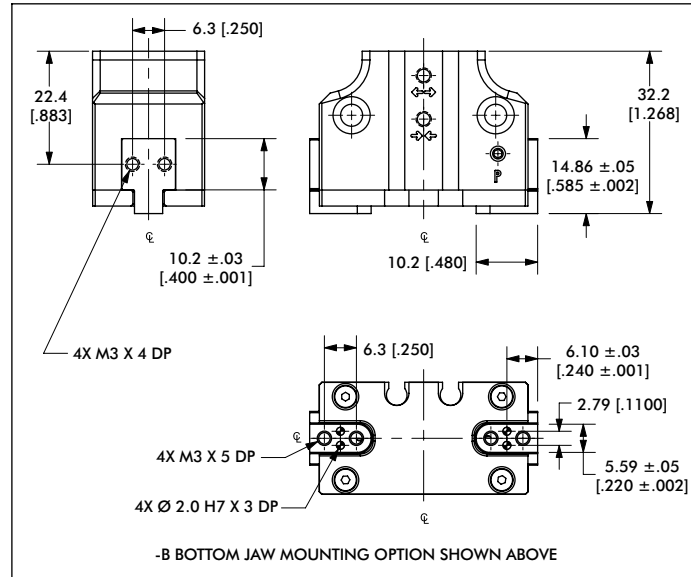
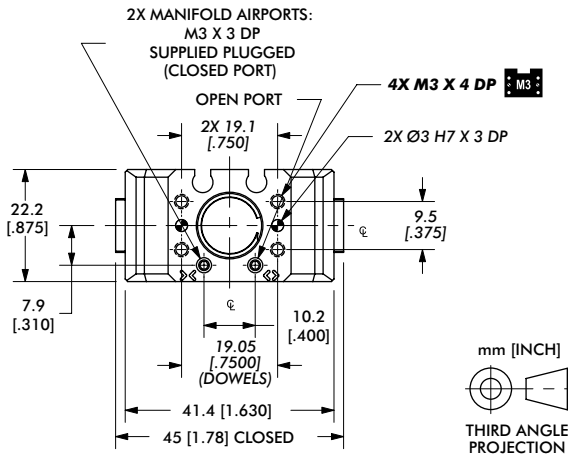
Specifications	Units	047M	056M	088M
Total Rated Grip Force <b>F</b> @ 100 psi	N [lbs]	62 [14]	98 [22]	222 [50]
Total Stroke	mm [in]	9.5 [0.38]	12.7 [0.50]	19.1 [0.75]
Weight	kg [lbs]	0.08 [0.19]	0.14 [0.32]	0.43 [0.95]
Pressure Range	bar [psi]	1.5-7 [20-100]		
Max. Vacuum for Scavenge Port	mm Hg [in. Hg]	200 [8]		
Max. Pressure for Purge Port	bar [psi]	1.4 [20]		
with <b>-E</b> Jaw Boot	bar [psi]	0.25 [4]		
Ingress Protection Class (IP)		IP66		
Displacement	cm <sup>3</sup> [in <sup>3</sup> ]	0.6 [0.038]	1.2 [0.074]	4.4 [0.269]
Temperature Range (Buna-N seals)	°C [°F]	-35°~80° [-30°~180°]		
Temperature Range (Viton® seals)	°C [°F]	-30°~150° [-20°~300°]		
Actuation	sec	0.20	0.25	0.30
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 <b>F</b> @ 100 psi	N [lbs]	445 [100]	890 [200]	1779 [400]
Total Stroke	mm [in]	25.4 [1.00]	38.1 [1.50]	50.8 [2.00]
Weight	kg [lbs]	0.90 [1.99]	2.73 [6.02]	5.46 [12.04]
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]		
with <b>-E</b> Jaw Boot	bar [psi]	0.25 [4]		
Ingress Protection Class (IP)		IP66		
Displacement	cm <sup>3</sup> [in <sup>3</sup> ]	12.0 [0.730]	35.2 [2.150]	95.9 [5.850]
Temperature Range (Buna-N seals)	°C [°F]	-35°~80° [-30°~180°]		
Temperature Range (Viton® seals)	°C [°F]	-30°~150° [-20°~300°]		
Actuation	sec	0.50	0.70	0.90
Accuracy	mm [in]	±0.08 [±0.003]		
Repeatability	mm [in]	±0.03 [±0.001]		
Valve to Actuate Double Acting		4-way, 2-position		

# DPDL-047M, 047M-B

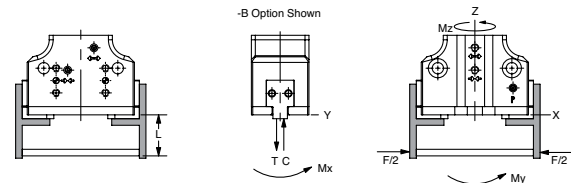
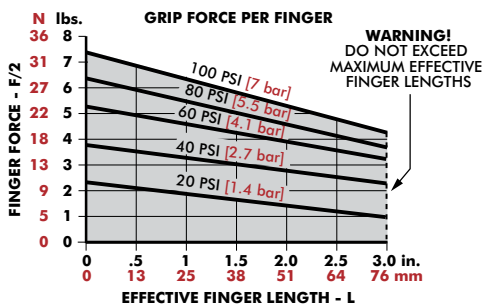


## 2-Jaw General Industrial Grippers | Dimensions and Technical Specifications



Seal Repair Kits	047M
Buna-N Seal Repair Kit	SLKT-185
Viton® Seal Repair Kit	SLKT-185V
Manifold Seal Kit (Viton® only)	SLKT-197V
Sealed Jaw Boot Replacement (1 Buna-N Boot only)	SLKT-191

## Loading Information



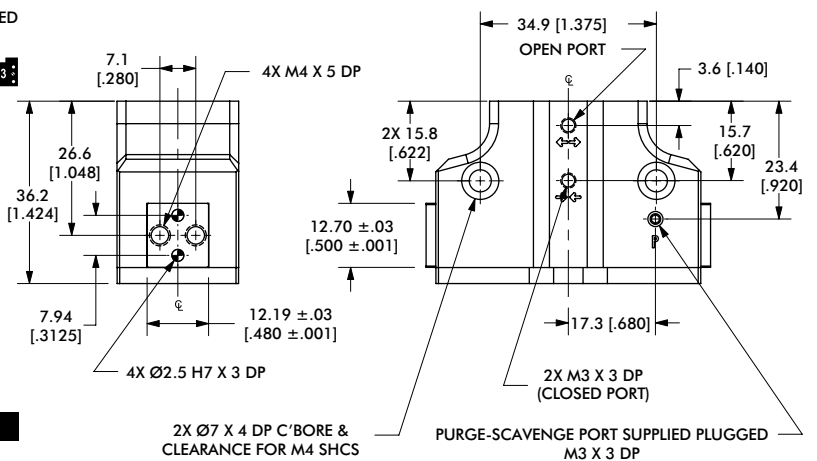
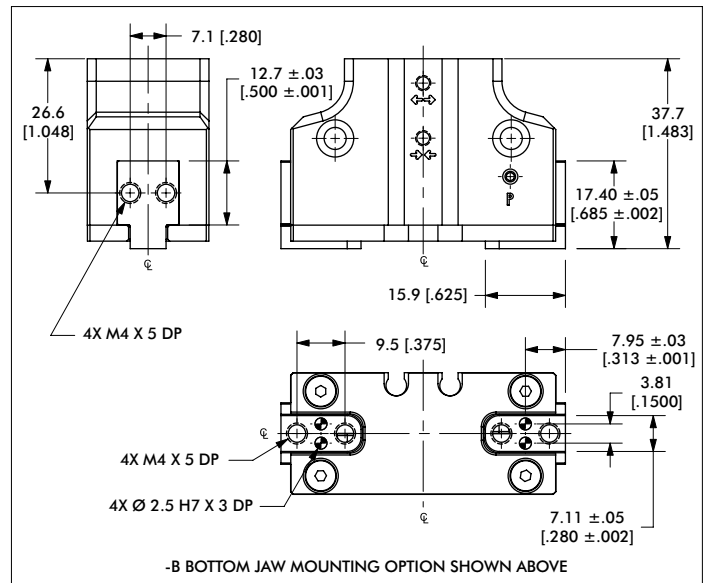
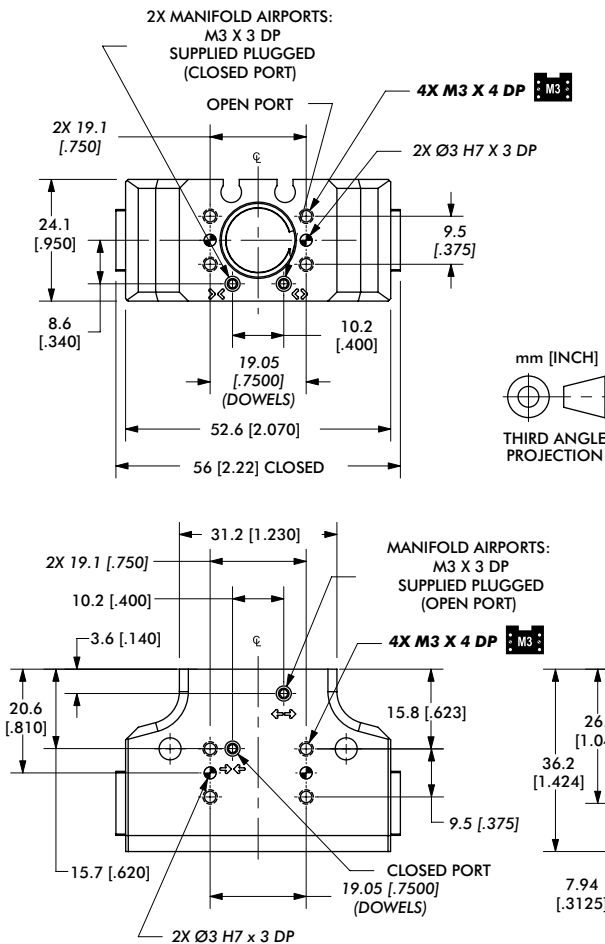
DPDL-047M	Static	Dynamic
Maximum Tensile <b>T</b>	445 N [100 lbs]	67 N [15 lbs]
Maximum Compressive <b>C</b>	668 N [150 lbs]	111 N [25 lbs]
Maximum Moment <b>M<sub>x</sub></b>	10 Nm [90 in-lbs]	2 Nm [15 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	10 Nm [90 in-lbs]	2 Nm [15 in-lbs]
Maximum Moment <b>M<sub>x</sub></b>	10 Nm [90 in-lbs]	2 Nm [15 in-lbs]

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

DPDL-047M-B	Static	Dynamic
Maximum Tensile <b>T</b>	356 N [80 lbs]	53 N [12 lbs]
Maximum Compressive <b>C</b>	534 N [120 lbs]	89 N [20 lbs]
Maximum Moment <b>M<sub>x</sub></b>	8 Nm [72 in-lbs]	1 Nm [12 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	8 Nm [72 in-lbs]	1 Nm [12 in-lbs]
Maximum Moment <b>M<sub>x</sub></b>	8 Nm [72 in-lbs]	1 Nm [12 in-lbs]

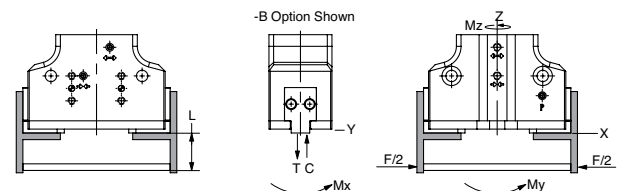
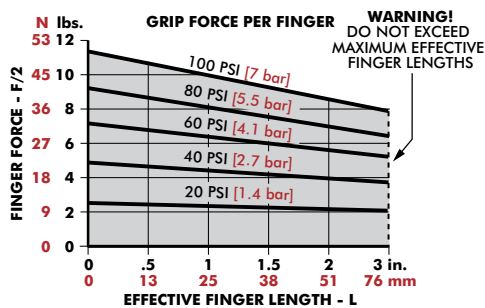
<sup>†</sup>Capacities are per set of jaws and are not simultaneous

## 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
Sealed Jaw Boot Replacement (1 Buna-N Boot only)	SLKT-192

### Loading Information



DPDL-056M	Static	Dynamic
Maximum Tensile <b>T</b>	556 N [125 lbs]	111 N [25 lbs]
Maximum Compressive <b>C</b>	1113 N [250 lbs]	111 N [25 lbs]
Maximum Moment <b>M<sub>x</sub></b>	13 Nm [115 in-lbs]	2 Nm [20 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	13 Nm [115 in-lbs]	2 Nm [20 in-lbs]
Maximum Moment <b>M<sub>z</sub></b>	13 Nm [115 in-lbs]	2 Nm [20 in-lbs]

DPDL-056M-B	Static	Dynamic
Maximum Tensile <b>T</b>	445 N [100 lbs]	89 N [20 lbs]
Maximum Compressive <b>C</b>	890 N [200 lbs]	89 N [20 lbs]
Maximum Moment <b>M<sub>x</sub></b>	10 Nm [92 in-lbs]	2 Nm [16 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	10 Nm [92 in-lbs]	2 Nm [16 in-lbs]
Maximum Moment <b>M<sub>z</sub></b>	10 Nm [92 in-lbs]	2 Nm [16 in-lbs]

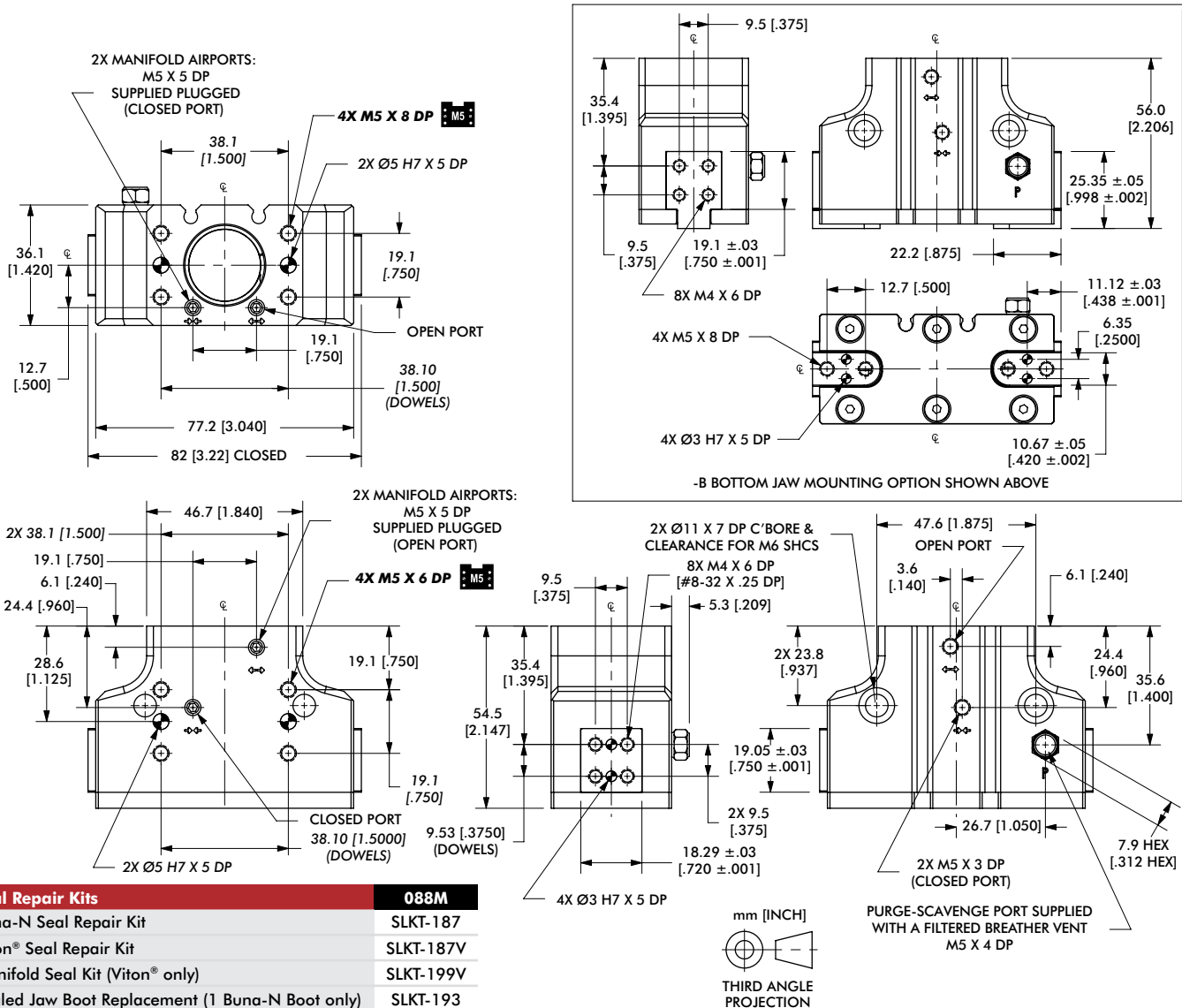
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# DPDL-088M, 088M-B

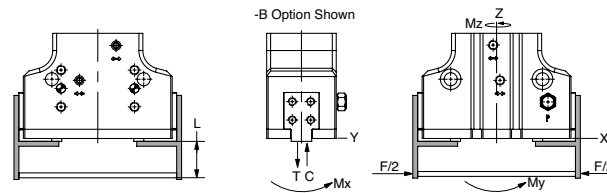
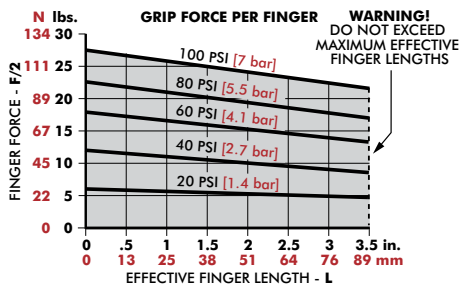


## 2-Jaw General Industrial Grippers | Dimensions and Technical Specifications



Seal Repair Kits	088M
Buna-N Seal Repair Kit	SLKT-187
Viton® Seal Repair Kit	SLKT-187V
Manifold Seal Kit (Viton® only)	SLKT-199V
Sealed Jaw Boot Replacement (1 Buna-N Boot only)	SLKT-193

## Loading Information



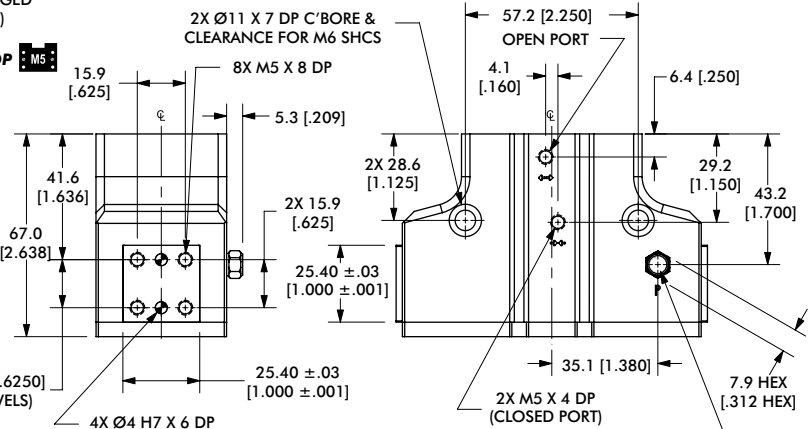
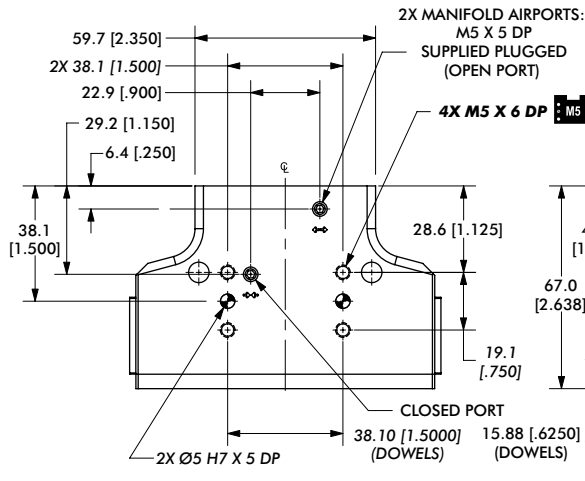
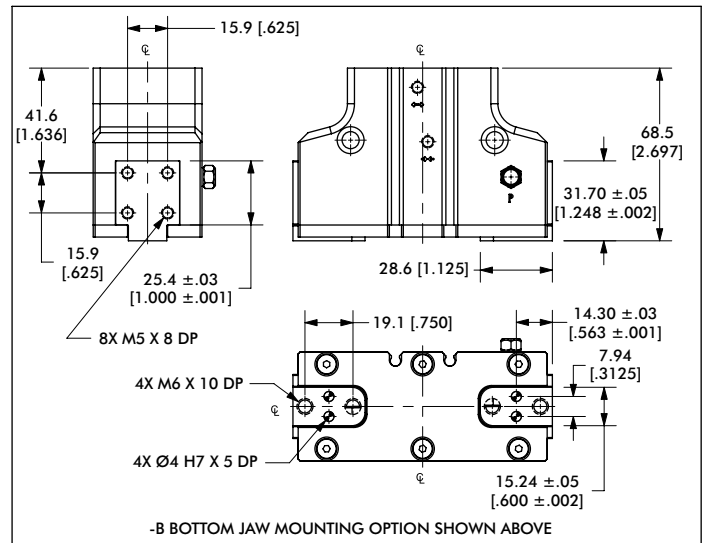
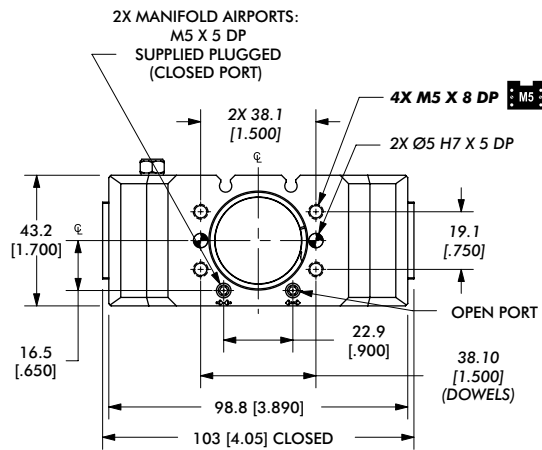
DPDL-088M	Static	Dynamic
Maximum Tensile <b>T</b>	1558 N [350 lbs]	178 N [40 lbs]
Maximum Compressive <b>C</b>	2893 N [650 lbs]	178 N [40 lbs]
Maximum Moment <b>M<sub>x</sub></b>	28 Nm [250 in-lbs]	5 Nm [40 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	28 Nm [250 in-lbs]	5 Nm [40 in-lbs]
Maximum Moment <b>M<sub>z</sub></b>	28 Nm [250 in-lbs]	5 Nm [40 in-lbs]

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

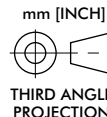
DPDL-088M-B	Static	Dynamic
Maximum Tensile <b>T</b>	1246 N [280 lbs]	142 N [32 lbs]
Maximum Compressive <b>C</b>	2314 N [520 lbs]	142 N [32 lbs]
Maximum Moment <b>M<sub>x</sub></b>	23 Nm [200 in-lbs]	4 Nm [32 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	23 Nm [200 in-lbs]	4 Nm [32 in-lbs]
Maximum Moment <b>M<sub>z</sub></b>	23 Nm [200 in-lbs]	4 Nm [32 in-lbs]

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

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

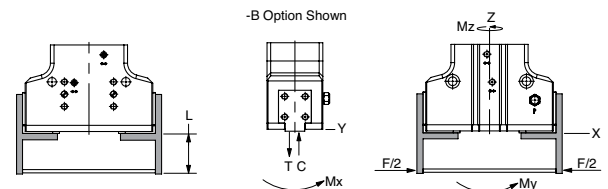
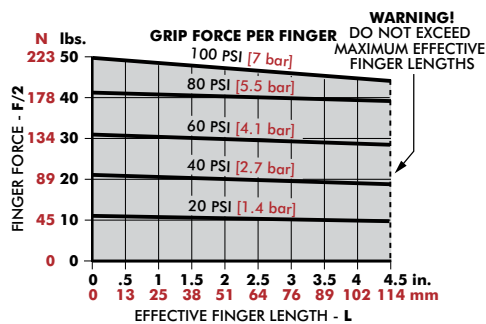


Seal Repair Kits	125M
Buna-N Seal Repair Kit	SLKT-188
Viton® Seal Repair Kit	SLKT-188V
Manifold Seal Kit (Viton® only)	SLKT-199V
Sealed Jaw Boot Replacement (1 Buna-N Boot only)	SLKT-194



PURGE-SCAVENGE PORT SUPPLIED WITH A FILTERED BREATHER VENT M5 X 4 DP

### Loading Information



DPDL-125M	Static	Dynamic
Maximum Tensile <b>T</b>	3004 N [675 lbs]	401 N [90 lbs]
Maximum Compressive <b>C</b>	5785 N [1300 lbs]	401 N [90 lbs]
Maximum Moment <b>M<sub>x</sub></b>	73 Nm [650 in-lbs]	12 Nm [110 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	73 Nm [650 in-lbs]	12 Nm [110 in-lbs]
Maximum Moment <b>M<sub>x</sub></b>	73 Nm [650 in-lbs]	12 Nm [110 in-lbs]

DPDL-125M-B	Static	Dynamic
Maximum Tensile <b>T</b>	2403 N [540 lbs]	320 N [72 lbs]
Maximum Compressive <b>C</b>	4628 N [1040 lbs]	320 N [72 lbs]
Maximum Moment <b>M<sub>x</sub></b>	59 Nm [520 in-lbs]	10 Nm [88 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	59 Nm [520 in-lbs]	10 Nm [88 in-lbs]
Maximum Moment <b>M<sub>x</sub></b>	59 Nm [520 in-lbs]	10 Nm [88 in-lbs]

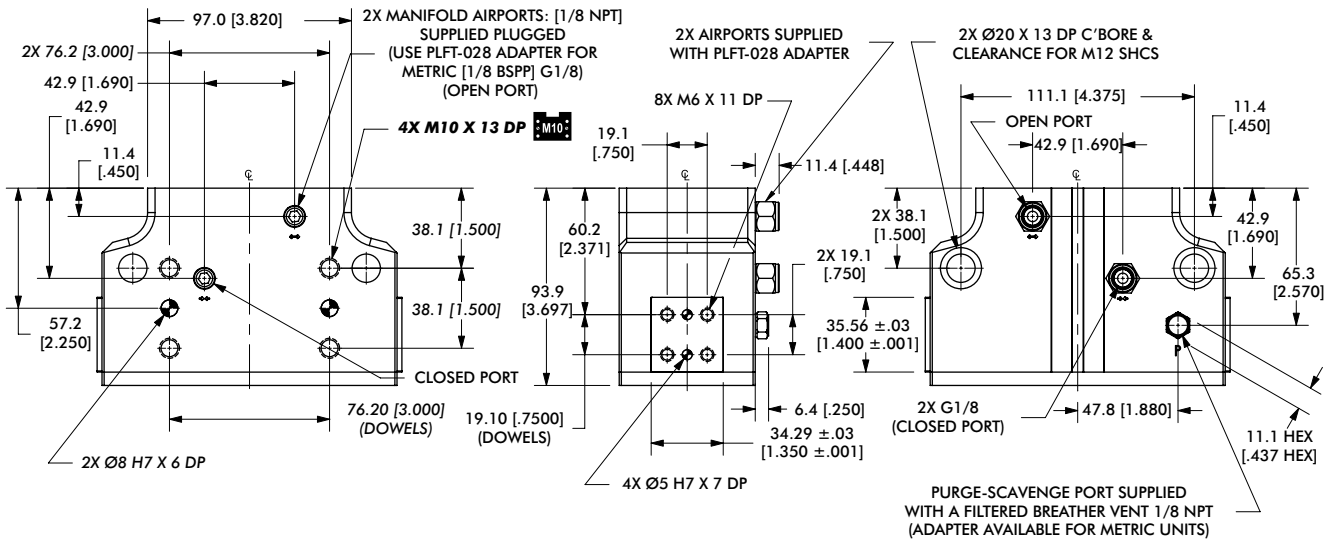
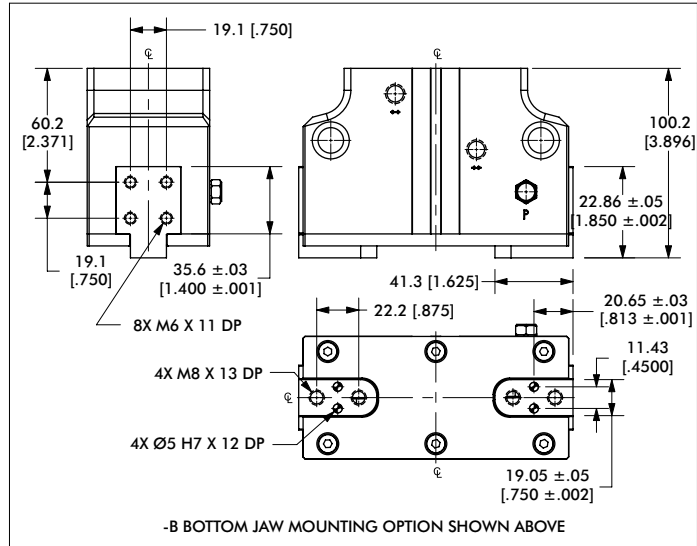
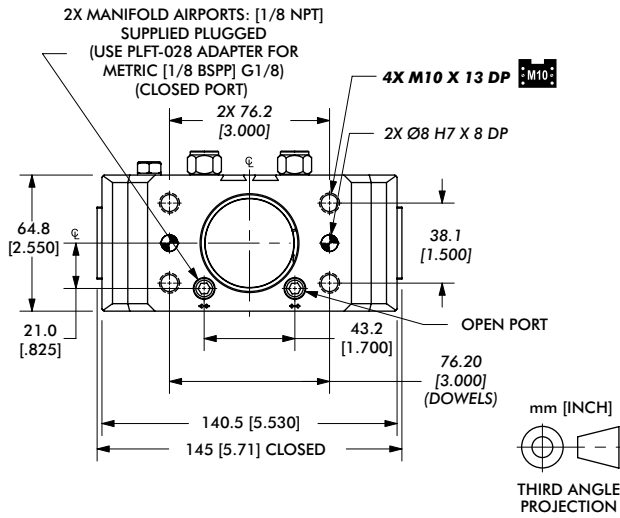
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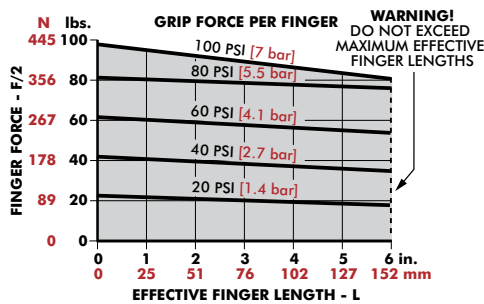
# DPDL-175M, 175M-B



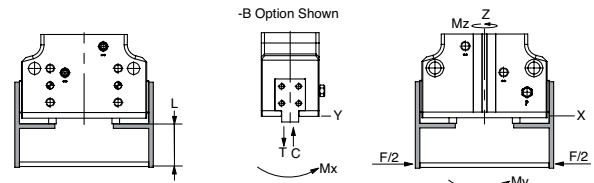
## 2-Jaw General Industrial Grippers | Dimensions and Technical Specifications



### Loading Information



Seal Repair Kits	175M
Buna-N Seal Repair Kit	SLKT-189
Viton® Seal Repair Kit	SLKT-189V
Manifold Seal Kit (Viton® only)	SLKT-201V
Sealed Jaw Boot Replacement (1 Buna-N Boot only)	SLKT-195



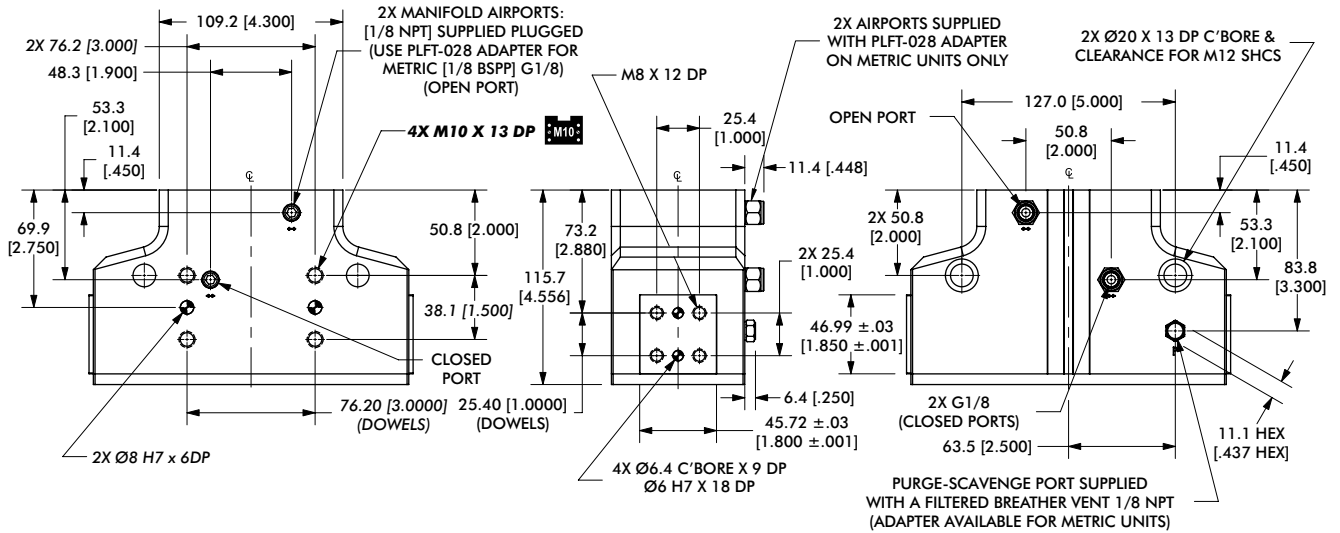
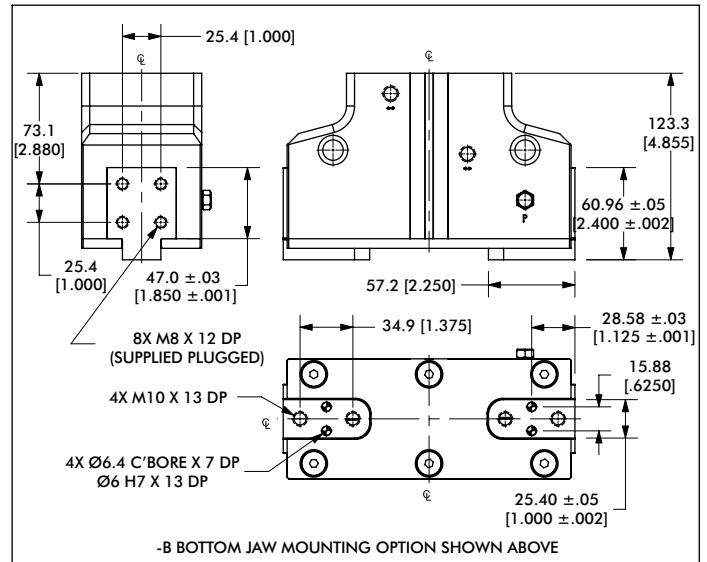
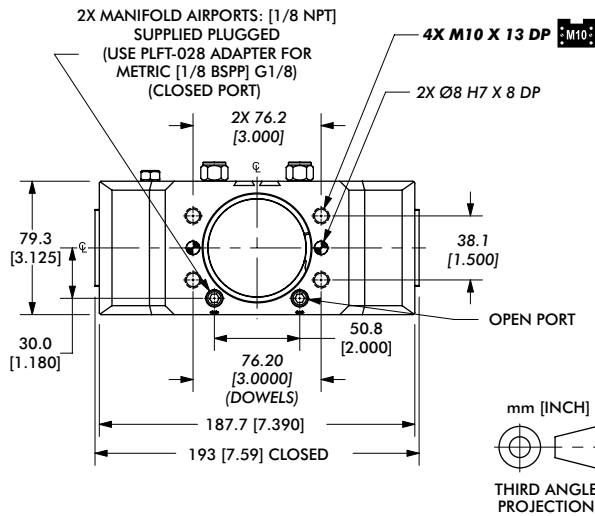
DPDL-175M	Static	Dynamic
Maximum Tensile <b>T</b>	5118 N [1150 lbs]	779 N [175 lbs]
Maximum Compressive <b>C</b>	10235 N [2300 lbs]	779 N [175 lbs]
Maximum Moment <b>M<sub>x</sub></b>	130 Nm [1150 in-lbs]	22 Nm [190 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	130 Nm [1150 in-lbs]	22 Nm [190 in-lbs]
Maximum Moment <b>M<sub>z</sub></b>	130 Nm [1150 in-lbs]	22 Nm [190 in-lbs]

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

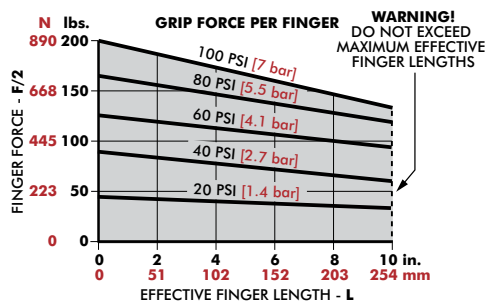
DPDL-175M-B	Static	Dynamic
Maximum Tensile <b>T</b>	4094 N [920 lbs]	623 N [140 lbs]
Maximum Compressive <b>C</b>	8188 N [1840 lbs]	623 N [140 lbs]
Maximum Moment <b>M<sub>x</sub></b>	104 Nm [920 in-lbs]	17 Nm [152 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	104 Nm [920 in-lbs]	17 Nm [152 in-lbs]
Maximum Moment <b>M<sub>z</sub></b>	104 Nm [920 in-lbs]	17 Nm [152 in-lbs]

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

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



### Loading Information

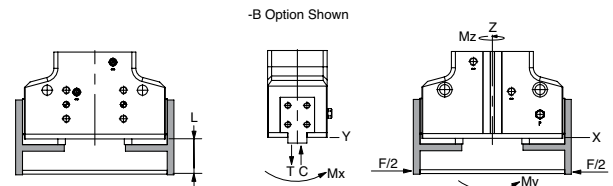


DPDL-250M	Static	Dynamic
Maximum Tensile <b>T</b>	9568 N [2150 lbs]	1224 N [275 lbs]
Maximum Compressive <b>C</b>	19135 N [4300 lbs]	1224 N [275 lbs]
Maximum Moment <b>M<sub>x</sub></b>	339 Nm [3000 in-lbs]	40 Nm [350 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	339 Nm [3000 in-lbs]	40 Nm [350 in-lbs]
Maximum Moment <b>M<sub>z</sub></b>	339 Nm [3000 in-lbs]	40 Nm [350 in-lbs]

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

### Seal Repair Kits

	250M
Buna-N Seal Repair Kit	SLKT-190
Viton® Seal Repair Kit	SLKT-190V
Manifold Seal Kit (Viton® only)	SLKT-201V
Sealed Jaw Boot Replacement (1 Buna-N Boot only)	SLKT-196



DPDL-250M-B	Static	Dynamic
Maximum Tensile <b>T</b>	7654 N [1720 lbs]	979 N [220 lbs]
Maximum Compressive <b>C</b>	15308 N [3440 lbs]	979 N [220 lbs]
Maximum Moment <b>M<sub>x</sub></b>	271 Nm [2400 in-lbs]	32 Nm [280 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	271 Nm [2400 in-lbs]	32 Nm [280 in-lbs]
Maximum Moment <b>M<sub>z</sub></b>	271 Nm [2400 in-lbs]	32 Nm [280 in-lbs]

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