

DLM SERIES

Miniature Rail Thruster Slide | Features and Benefits | How To Order

Features:

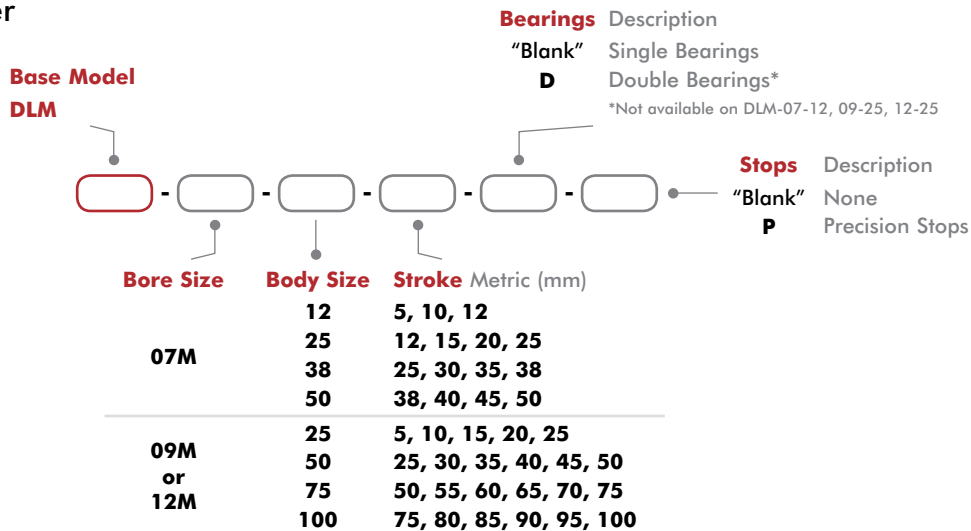
- Compact high reliability bearing design
- Excellent part position repeatability
- Double bearings -**D** for longer strokes, greater load and moment capacity
- Internal Delrin® extend and retract stops -**P** for increased repeatability
- Sense up to 8 positions with 4 adjustable magneto resistive sensors
- Multiple tapped air ports on each side, rear and bottom of body
- Thru-body mounting and DIRECTCONNECT™ thru tapped and dowel mounting, on tool plate and body
- Viton® seals for operation in high temperature environments



Applications:

- Precision applications
- Small parts handling

How To Order



Accessories

Sensor Accessories	Model Numbers	Part Number	Qty/Unit
PNP Magneto Resistive Sensor Short Barrel (with Qk. Disc.)*	All Models	OHSP-017	1-4
NPN Magneto Resistive Sensor Short Barrel (with Qk. Disc.)*	All Models	OHSN-017	1-4
PNP Magneto Resistive Sensor 90° Barrel (with Qk. Disc.)*	All Models	OHSP-011	1-4
NPN Magneto Resistive Sensor 90° Barrel (with Qk. Disc.)*	All Models	OHSN-011	1-4
Quick Disconnect 2 Meter Cable Length*	All Models	CABL-010	1-4
Quick Disconnect 5 Meter Cable Length*	All Models	CABL-013	1-4

Pneumatic Accessories	Model Numbers	Part Number	Qty/Unit
Adjustable Flow Control	All Models	VLFL-008	1-2
Seal Kits	See Datasheets		1

* Sensor and cable sold separately.

Miniature Rail Thruster Slide | Technical Specifications

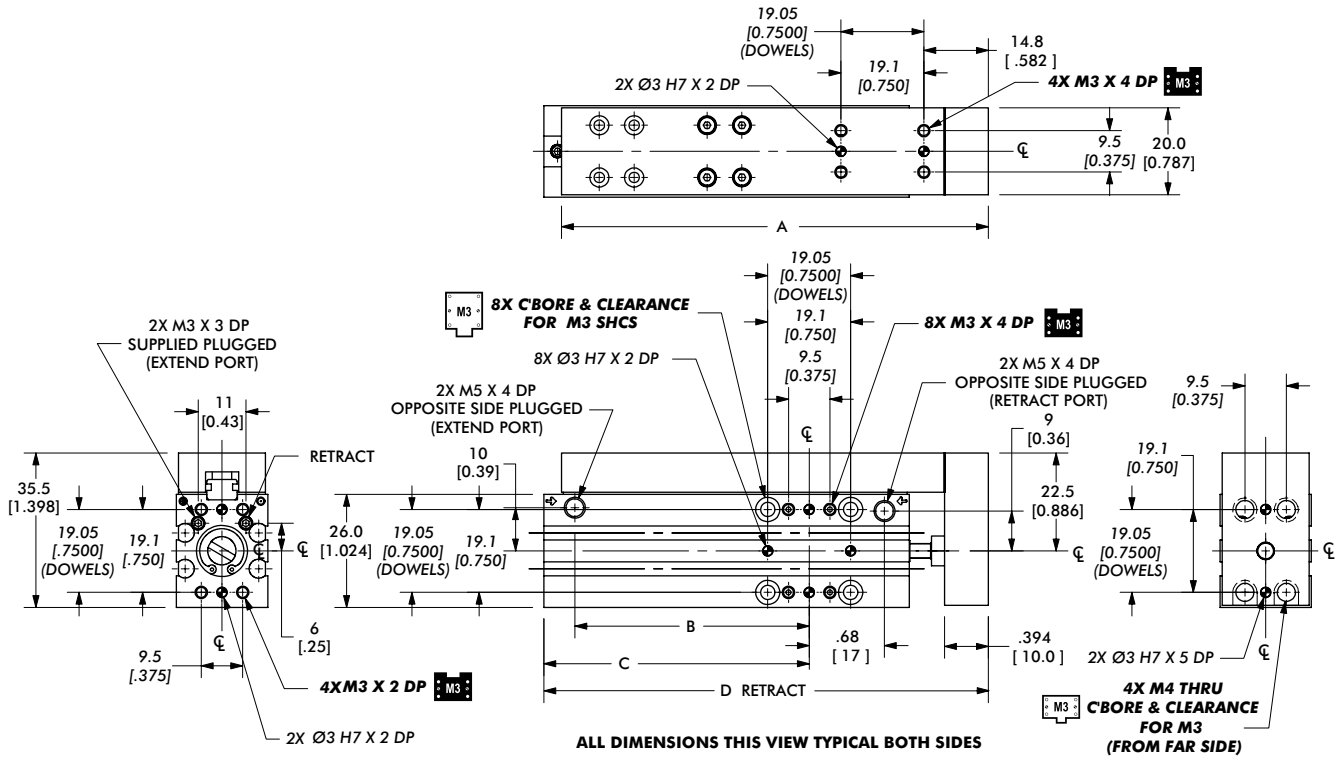
Specifications	Units	DLM-07M-12	DLM-07M-25	DLM-07M-38	DLM-07M-50
Thrust Force F @ 7 bar [100 psi]	N [lbs]	66 [15]			
Max. Stroke	mm [in]	12 [0.50]	25 [1.00]	38 [1.50]	50 [2.00]
Stroke Reduction (return)	mm [in]	5 [0.19]			
Weight	kg [lbs]	0.13 [0.28]	0.16 [0.35]	0.20 [0.43]	0.23 [0.50]
Max. Payload W	kg [lbs]	0.45 [1.0]			
Max. Payload W (-P option)	kg [lbs]	0.23 [0.5]			
Cylinder Bore \varnothing	mm [in]	0.11 [0.437]			
Temperature Range	°C [°F]	-35°~80° [-30°~180°]			
Actuation (per 25mm of travel)	sec	0.07			
Linear Accuracy (per 25mm of travel)	mm [in]	±0.005 [±0.0001]			
Repeatability (-P option)	mm [in]	±0.08 [±0.003]			
Pressure Range	bar [psi]	1.4-7 [20-100]			
Valve to Actuate Double Acting		4-way, 2-position			

Specifications	Units	DLM-09M-25	DLM-09M-50	DLM-09M-75	DLM-09M-100
Thrust Force F @ 7 bar [100 psi]	N [lbs]	138 N [31 lbs]			
Max. Stroke	mm [in]	25 [1.00]	50 [2.00]	75 [3.00]	100 [4.00]
Stroke Reduction (return)	mm [in]	5 [0.19]			
Weight	kg [lbs]	0.49 [1.08]	0.64 [1.41]	0.81 [1.78]	0.97 [2.13]
Max. Payload W	kg [lbs]	0.90 [2.0]			
Max. Payload W (-P option)	kg [lbs]	0.45 [1.0]			
Cylinder Bore \varnothing	mm [in]	16 [0.630]			
Temperature Range	°C [°F]	-35°~80° [-30°~180°]			
Actuation (per 25mm of travel)	sec	0.10			
Linear Accuracy (per 25mm of travel)	mm [in]	±0.005 [±0.0001]			
Repeatability (-P option)	mm [in]	±0.08 [±0.003]			
Pressure Range	bar [psi]	1.4-7 [20-100]			
Valve to Actuate Double Acting		4-way, 2-position			

Specifications	Units	DLM-12M-25	DLM-12M-50	DLM-12M-75	DLM-12M-100
Thrust Force F @ 7 bar [100 psi]	N [lbs]	230 [51]			
Max. Stroke	mm [in]	25 [1.00]	50 [2.00]	75 [3.00]	100 [4.00]
Stroke Reduction (return)	mm [in]	5 [0.19]			
Weight	kg [lbs]	0.54 [1.18]	0.65 [1.43]	1.82 [1.80]	1.02 [2.25]
Max. Payload W	kg [lbs]	1.81 [4.0]			
Max. Payload W (-P option)	kg [lbs]	0.90 [2.0]			
Cylinder Bore \varnothing	mm [in]	22 [0.813]			
Temperature Range	°C [°F]	-35°~80° [-30°~180°]			
Actuation (per 25mm of travel)	sec	0.14			
Linear Accuracy (per 25mm of travel)	mm [in]	±0.005 [±0.0001]			
Repeatability (-P option)	mm [in]	±0.08 [±0.003]			
Pressure Range	bar [psi]	1.4-7 [20-100]			
Valve to Actuate Double Acting		4-way, 2-position			

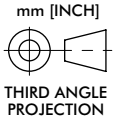
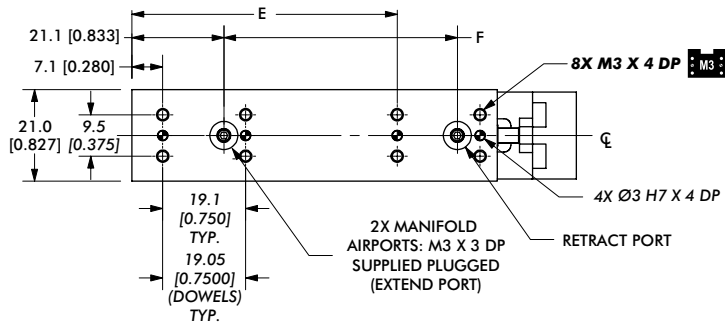
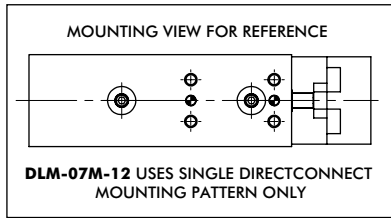


Miniature Rail Thruster Slide | Dimensions and Technical Specifications



ALL DIMENSIONS THIS VIEW TYPICAL BOTH SIDES

4X M4 THRU CBORE & CLEARANCE FOR M3 (FROM FAR SIDE)



Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-236
Manifold Seal Repair Kit	SLKT-239

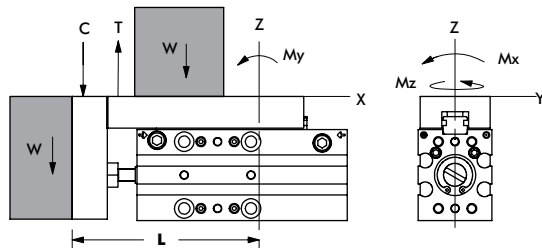
Model	A	B	C	D	E	F	L (single bearing)	L (double bearing)
DLM-07M-12	66.0 [2.599]	30 [1.18]	37.0 [1.456]	78 [3.08]	37.0 [1.456]	29.6 [1.167]	53 [2.10]	--
DLM-07M-25	98.0 [3.859]	54 [2.12]	61.0 [2.401]	102 [4.02]	60.9 [2.401]	53.6 [2.112]	61 [2.39]	73 [2.87]
DLM-07M-38	111.0 [4.370]	67 [2.63]	74.0 [2.913]	115 [4.53]	74.0 [2.913]	66.6 [2.624]	74 [2.90]	86 [3.38]
DLM-07M-50	123.0 [4.843]	79 [3.10]	86.0 [3.385]	127 [5.00]	86.0 [3.385]	78.6 [3.096]	86 [3.37]	98 [3.86]

Dimensions in mm [in]

Loading Information

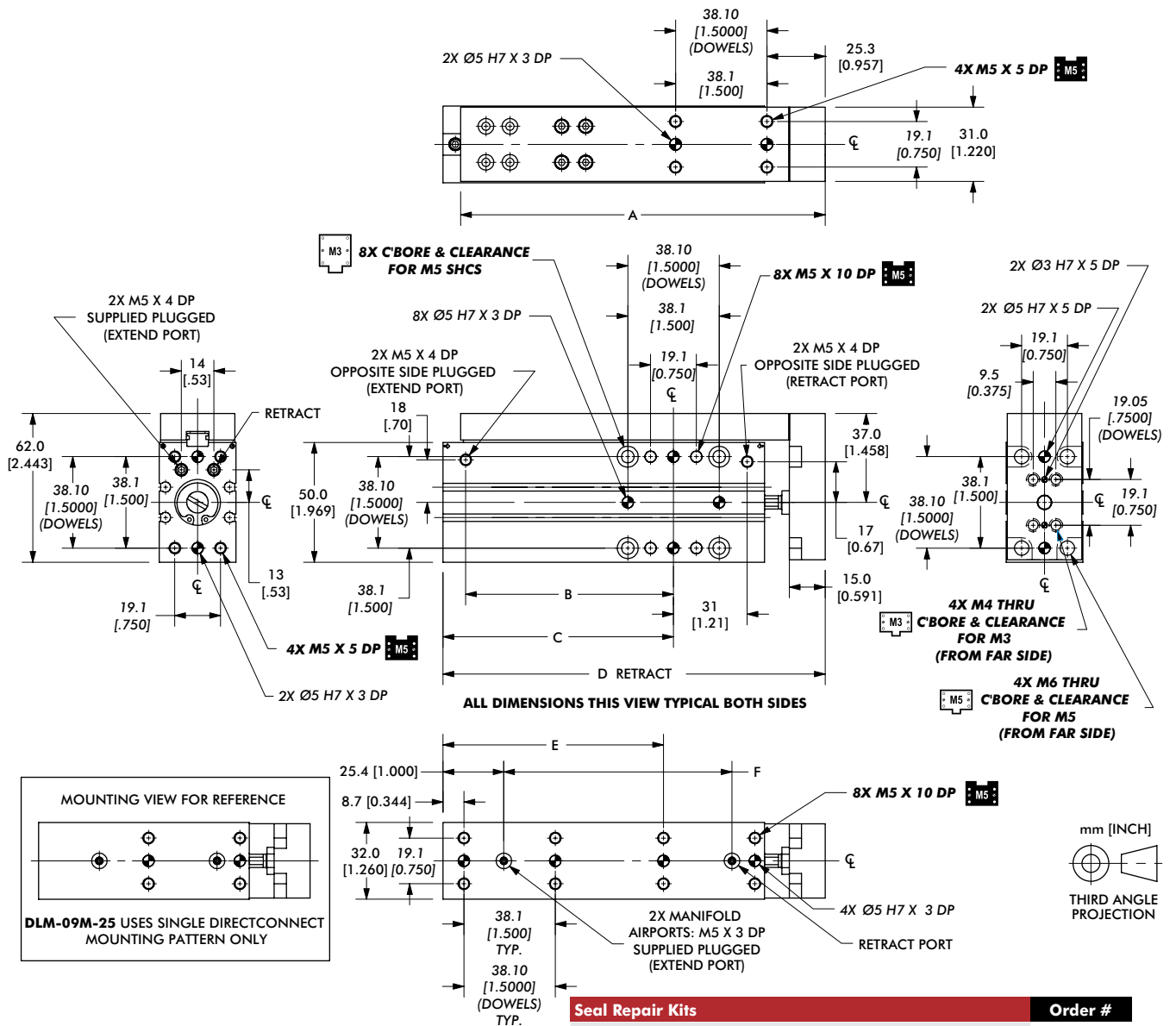
Forces shown for single bearing units. Values 2X for double bearings -D option.

DLM-07	Static
Maximum Tensile T	490 N [110 lbs]
Maximum Compressive C	490 N [110 lbs]
Maximum Moment M_x	5.1 Nm [45 in-lbs]
Maximum Moment M_y	3.2 Nm [28 in-lbs]
Maximum Payload W	3.2 Nm [28 in-lbs]
Distance to Bearing Centerline	L (see chart above)



Flow Controls are recommended for all applications

Miniature Rail Thruster Slide | Dimensions and Technical Specifications



Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-237
Manifold Seal Repair Kit	SLKT-240

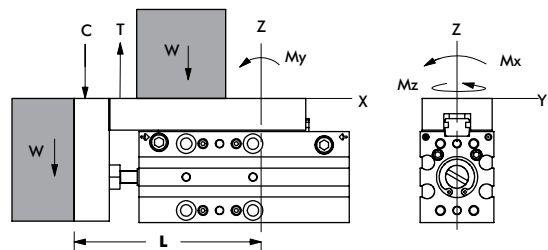
Model	A	B	C	D	E	F	L (single bearing)	L (double bearing)
DLM-09M-25	102.0 [4.016]	41 [1.60]	50.1 [1.973]	113 [4.46]	45.9 [1.809]	49.1 [1.934]	86 [3.40]	--
DLM-09M-50	152.0 [5.985]	87 [3.41]	96.1 [3.784]	159 [6.27]	91.9 [3.620]	95.1 [3.745]	105 [4.13]	121 [4.75]
DLM-09M-75	173.0 [6.811]	112 [4.39]	121.1 [4.768]	184 [7.26]	116.9 [4.604]	120.1 [4.729]	126 [4.95]	142 [5.58]
DLM-09M-100	202.0 [7.953]	137 [5.38]	146.1 [5.752]	209 [8.24]	138.9 [5.557]	145.1 [5.713]	155 [6.10]	171 [6.72]

Dimensions in mm [in]

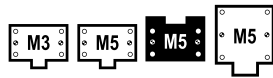
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Forces shown for single bearing units. Values 2X for double bearings -D option.

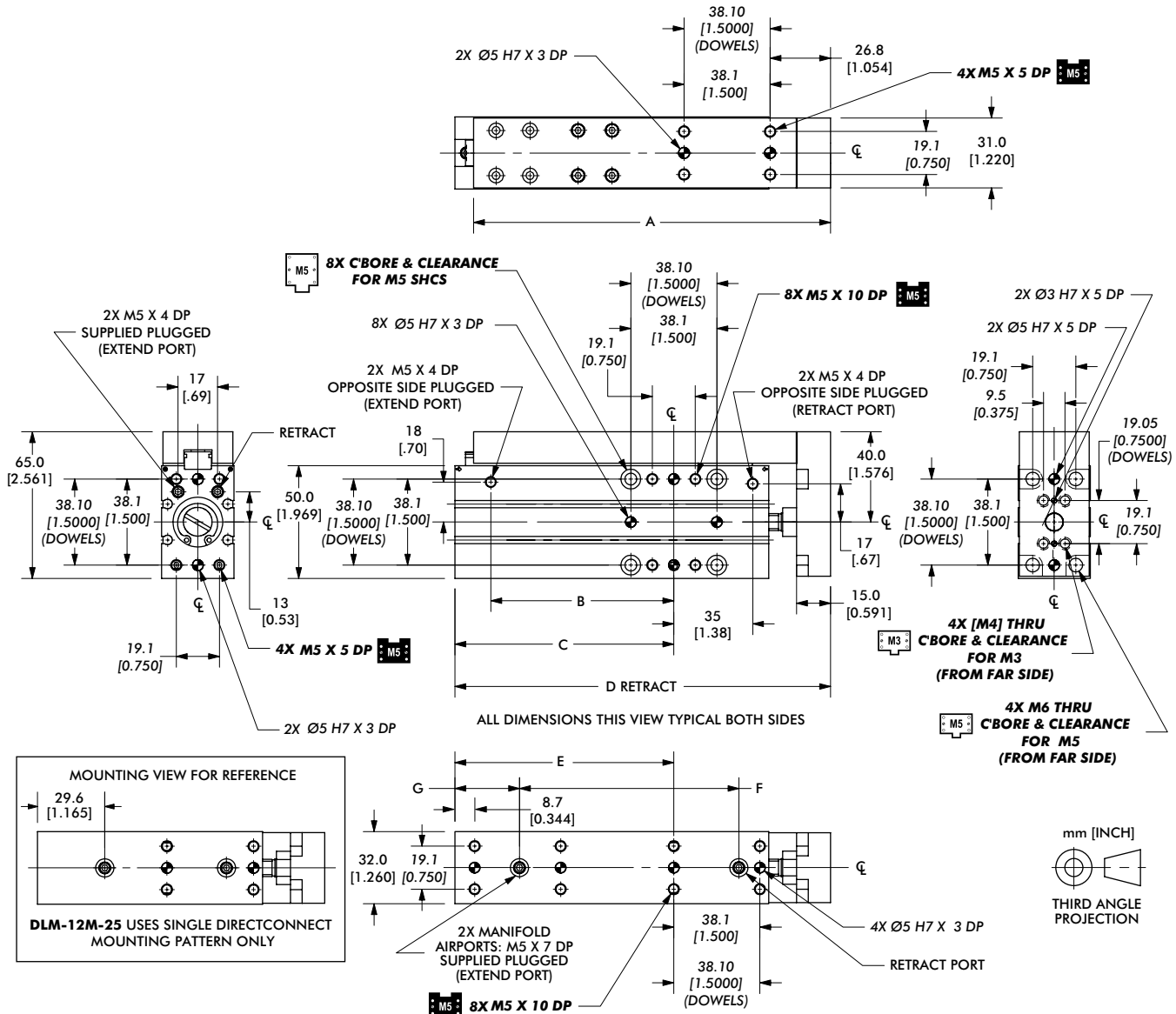
DLM-09	Static
Maximum Tensile T	735 N [165 lbs]
Maximum Compressive C	735 N [165 lbs]
Maximum Moment M_x	9.6 Nm [84 in-lbs]
Maximum Moment M_y	6.4 Nm [56 in-lbs]
Maximum Payload W	6.4 Nm [56 in-lbs]
Distance to Bearing Centerline	L (see chart above)



Flow Controls are recommended for all applications



Miniature Rail Thruster Slide | Dimensions and Technical Specifications



Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-238
Manifold Seal Repair Kit	SLKT-240

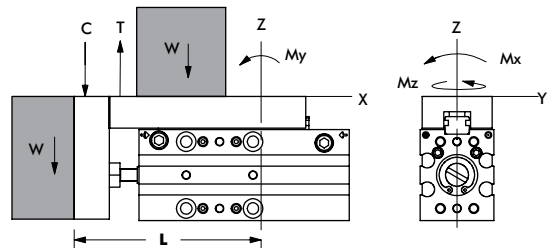
Model	A	B	C	D	E	F	G	L (single bearing)	L (double bearing)
DLM-12M-25	105.0 [4.134]	41 [1.62]	56.9 [2.242]	126 [4.97]	56.9 [2.242]	53.5 [2.108]	29.6 [1.165]	88 [3.45]	--
DLM-12M-50	158.0 [6.221]	81 [3.19]	96.9 [3.816]	166 [6.55]	96.9 [3.816]	97.1 [3.824]		104 [4.10]	122 [4.82]
DLM-12M-75	186.0 [7.323]	108 [4.25]	123.9 [4.879]	193 [7.61]	123.9 [4.879]	124.1 [4.887]	28.6 [1.125]	132 [5.21]	150 [5.92]
DLM-12M-100	208.0 [8.189]	133 [5.24]	148.9 [5.864]	218 [8.60]	148.9 [5.864]	149.1 [5.872]		154 [6.07]	172 [6.79]

Dimensions in mm [in]

Loading Information

Forces shown for single bearing units. Values 2X for double bearings -D option.

DLM-12M	Static
Maximum Tensile T	1214 N [273 lbs]
Maximum Compressive C	1214 N [273 lbs]
Maximum Moment M_x	20.6 Nm [182 in-lbs]
Maximum Moment M_y	11.8 Nm [104 in-lbs]
Maximum Payload W	11.8 Nm [104 in-lbs]
Distance to Bearing Centerline	L (see chart above)



Flow Controls are recommended for all applications