MPS SERIES

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

Features:

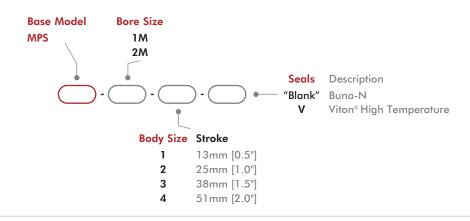
- · Compact high reliability bearing design
- Excellent part position repeatability
- Zero side play with patented preloaded "Dual-V" roller bearings
- Adjustable extend/retract hard stops
- Two Position sensing with hall effect sensors
- Viton® seals for operation in high temperature environments

Applications:

- Precision applications
- Small parts handling
- OEM packaging machines



How To Order



Accessories

Sensor Accessories	Model Numbers	Part Number	Qty/Unit
Magneto Resistive Sensor with Quick. Disconnect*		OHSN-006	1-2
Magneto Resistive Sensor with Quick. Disconnect*	All Models	OHSP-006	
Quick Disconnect 2 Meter Cable Length*		CABL-010	
Quick Disconnect 5 Meter Cable Length*		CABL-013	

Pneumatic Accessories	Model Numbers	Part Number	Qty/Unit
M5 Adjustable Flow Control	All Models	VLVF-008	1-2
M2.5 Barbed Fitting	All Models	PLFT-005	2
Seal Kit (Buna-N)	-1M	SLKT-090	
Seal Kit (Viton®)	-1M	SLKT-090V	,
Seal Kit (Buna-N)	-2M	SLKT-091	'
Seal Kit (Viton®)	-2M	SLKT-091V	

^{*}Sensor and cable sold separately.



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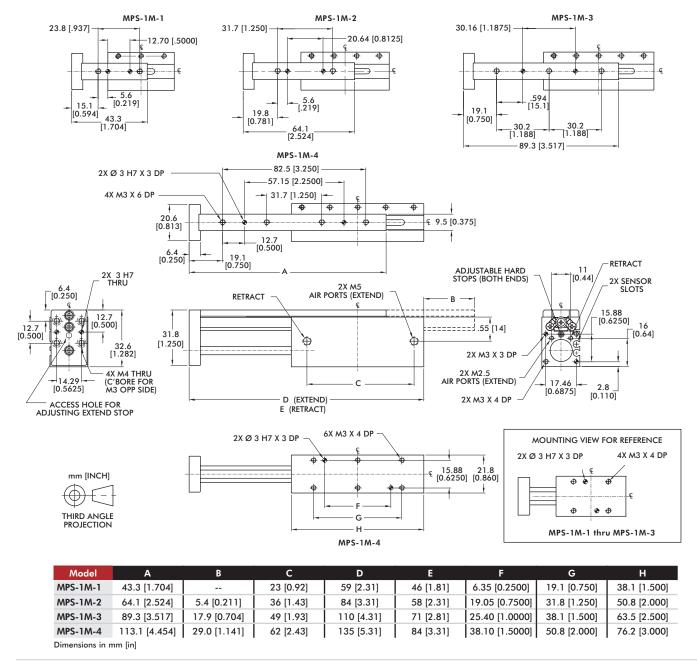
Miniature Rail Thruster Slide | Technical Specifications

Specifications	Units	1M-1	1M-2	1M-3	1M-4
Thrust Force F @ 7 bar [100 psi]	N [lbs]		67	[15]	
Max. Stroke	mm [in]	13 [0.50]	25 [1.00]	38 [1.50]	51 [2.00]
Stroke Adjustability (each end)	mm [in]	3 [0	.12]	6 [0	.25]
Weight	kg [lb]	0.08 [0.18]	0.10 [0.22]	0.13 [0.28]	0.14 [0.32]
Max. Payload W	kg [lb]	0.14 [0.30]	0.32 [0.70]	0.45 [1.00]	0.59 [1.30]
Pressure Range	bar [psi]		1.5-7 [2	20-100]	
Cylinder Bore Ø	mm [in]	11.1 [0.438]			
Temperature Range (Buna-N seals)	°C [°F]	-35°~80° [-30°~180°]			
Temperature Range (Viton® seals)	°C [°F]		-30°~120°	[-20°~250°]	
Actuation	sec	0.10	0.11	0.13	0.14
Linear Accuracy (per 25mm of travel)	mm [in]	±0.003 [±0.0001]			
Repeatability (-P option)	mm [in]	±0.03 [±0.010]			
Valve to Actuate Double Acting			4-way, 2	-position	

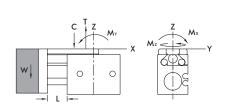
Specifications	Units	2M-1	2M-2	2M-3	2M-4
Thrust Force F @ 7 bar [100 psi]	N [lbs]		196	[44]	
Max. Stroke	mm [in]	13 [0.50]	25 [1.00]	38 [1.50]	51 [2.00]
Stroke Adjustability (each end)	mm [in]	3 [0	.12]	6 [0	.25]
Weight	kg [lb]	0.12 [0.26]	0.14 [0.32]	0.18 [0.40]	0.21 [0.46]
Max. Payload W	kg [lb]	0.23 [0.50]	0.45 [1.00]	0.91 [2.00]	1.36 [3.00]
Pressure Range	bar [psi]		1.5-7 [2	20-100]	
Cylinder Bore Ø	mm [in]	19.1 [0.750]			
Temperature Range (Buna-N seals)	°C [°F]	-35°~80° [-30°~180°]			
Temperature Range (Viton® seals)	°C [°F]		-30°~120°	[-20°~250°]	
Actuation	sec	0.12	0.16	0.19	0.24
Linear Accuracy (per 25mm of travel)	mm [in]	±0.003 [±0.0001]			
Repeatability (-P option)	mm [in]	±0.03 [±0.010]			
Valve to Actuate Double Acting			4-way, 2	-position	

MPS-1M

Miniature Rail Thruster Slide | Dimensions and Technical Specifications



Loading Information



MPS-1M-1	Static
Maximum Tensile T	111 N [25 lbs]
Maximum Compressive C	111 N [25 lbs]
Maximum Moment M_X	3.4 Nm [30 in-lbs]
Maximum Moment My	2.3 Nm [20 in-lbs]
Maximum Moment Mz	2.3 Nm [20 in-lbs]

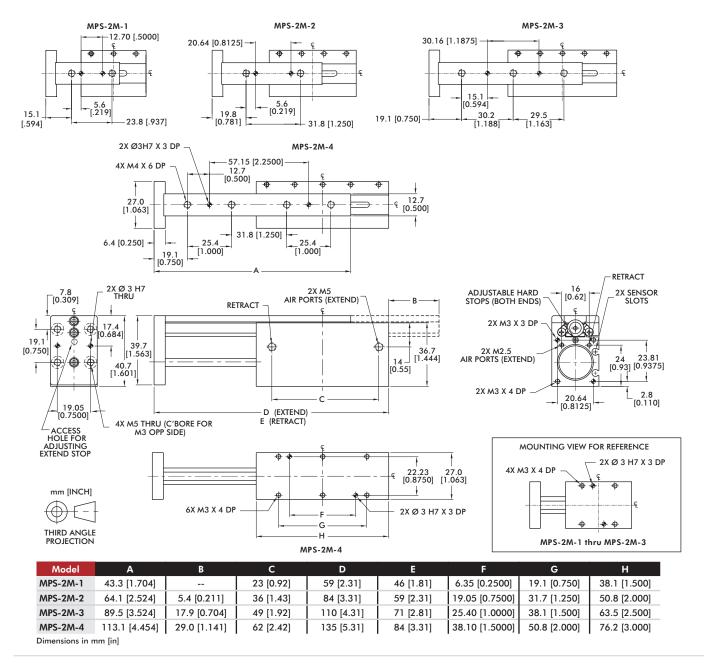
MPS-1M-2	Static
Maximum Tensile T	156 N [35 lbs]
Maximum Compressive C	156 N [35 lbs]
Maximum Moment M _X	4.5 Nm [40 in-lbs]
Maximum Moment My	3.4 Nm [30 in-lbs]
Maximum Moment Mz	3.4 Nm [30 in-lbs]

MPS-1M-3	Static
Maximum Tensile T	222 N [50 lbs]
Maximum Compressive C	222 N [50 lbs]
Maximum Moment M_X	6.8 Nm [60 in-lbs]
Maximum Moment My	4.5 Nm [40 in-lbs]
Maximum Moment Mz	4.5 Nm [40 in-lbs]

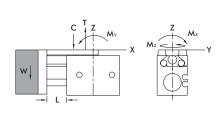
MPS-1M-4	Static
Maximum Tensile T	311 N [70 lbs]
Maximum Compressive C	311 N [70 lbs]
Maximum Moment M_X	9.0 Nm [80 in-lbs]
Maximum Moment My	5.7 Nm [50 in-lbs]
Maximum Moment M ₇	5.7 Nm [50 in-lbs]



Miniature Rail Thruster Slide | Dimensions and Technical Specifications



Loading Information



MPS-2M-1	Static
Maximum Tensile T	111 N [25 lbs]
Maximum Compressive C	111 N [25 lbs]
Maximum Moment M _X	3.4 Nm [30 in-lbs]
Maximum Moment My	2.3 Nm [20 in-lbs]
Maximum Moment Mz	2.3 Nm [20 in-lbs]

MPS-2M-2	Static
Maximum Tensile T	156 N [35 lbs]
Maximum Compressive C	156 N [35 lbs]
Maximum Moment M_X	4.5 Nm [40 in-lbs]
Maximum Moment My	3.4 Nm [30 in-lbs]
Maximum Moment Mz	3.4 Nm [30 in-lbs]

MPS-2M-3	Static
Maximum Tensile T	222 N [50 lbs]
Maximum Compressive C	222 N [50 lbs]
Maximum Moment M _X	6.8 Nm [60 in-lbs]
Maximum Moment My	4.5 Nm [40 in-lbs]
Maximum Moment Mz	4 5 Nm [40 in-lhs]

MPS-2M-4	Static
Maximum Tensile T	311 N [70 lbs]
Maximum Compressive C	311 N [70 lbs]
Maximum Moment M_X	9.0 Nm [80 in-lbs]
Maximum Moment My	5.7 Nm [50 in-lbs]
Maximum Moment Mz	5.7 Nm [50 in-lbs]

FEED ESCAPEMENTS

Grippers, Rotates, and Linear Slide Solutions

Model		Stroke Range	Thrust Range	Operating Environment	Special Features	Page GR-ESC-#
RFE		16-32mm [0.625-1.25 in]	111N - 400 N [25 lbs - 90 lbs]	IP54	Conveying part accumulator, part separator and staging. Failsafe finger locking	3
RN		16-32mm [0.625-1.25 in]	111N - 400 N [25 lbs - 90 lbs]	IP54	In-line part ejector and part staging. Conveying part accumulator or part separator.	7



FEED ESCAPEMENTS

Product Overview



Global Automation Solutions

DESTACO's Robohand products are engineered for reliability and long life to ensure maximum production uptime. These products are designed and machined for precise repeatability with minimal maintenance.





























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End Effectors | Grippers | Indexers | Manual Clamps | Power Clamps | Remote Handling