DLT SERIES - INTERNAL AIR CYLINDER

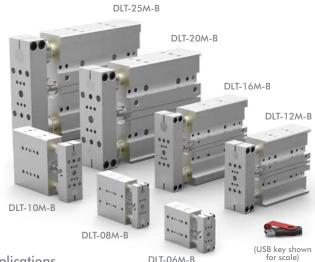
Internal Air Cylinder Linear Thruster Slides | Features and Benefits | How To Order

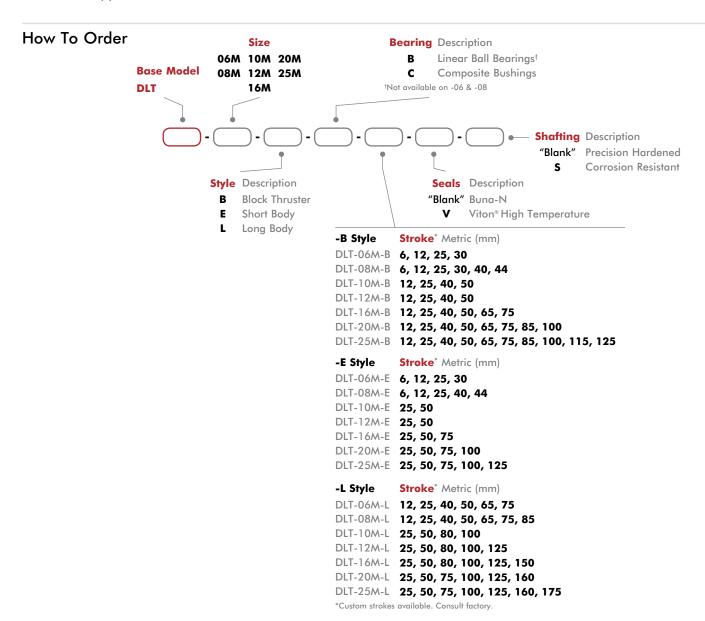
Features:

- 3 Models: -B block style, -E short body & -L long body
- Bearing system for smooth operation
- Rugged design produces very reliable long life operation
- Internal air cylinder for space-limited applications
- · Urethane bumpers, hardened pads, oil wick
- Optional telescopic airlines transfers air to tooling
- DIRECTCONNECT™ mounting pattern
- Corrosion resistant shafting for corrosive environments
- · Position sensing using inductive or magneto resistive sensors
- Viton® seals for high temperature applications

Applications:

- Machining, harsh environment, pick-and-place automation applications
- Lift table applications







DLT SERIES - INTERNAL AIR CYLINDER

Internal Air Cylinder Linear Thruster Slides | Accessories

Shock/Stop & Mounting Accessories	Model Numbers	Style	Part Number	Qty/Unit
Hairanal Marratia a Kit (Stan (Shaala)	06		OSAK-069	
Universal Mounting Kit (Stop/Shock)	08		OSAK-070	
	10		OSAK-055	
	12		OSAK-057	
Universal Mounting Kit (Stop/Shock/Sensor)	16		OSAK-059	
	20		OSAK-061	1-2 on -B
	25	All	OSAK-063	
	06, 08		SHOK-030	1-4 on -E, -L
Shock Absorber	10		SHOK-028] " =, =
Snock Absorber	12, 16,		SHOK-010	
	20, 25		SHOK-029	
A.P. ostabla Hand Chan	06, 08		DLT-0623	
Adjustable Hard Stop	10, 12, 16, 20, 25		DLT-1023	
	06		OSAK-067	
	08		OSAK-068	
	10		OSAK-065	
Urethane Bumper/Stop Collar Kit	12	E, L	OSAK-066	1 .
	16		OSAK-060	'
	20		OSAK-062	
	25		OSAK-064	
Base Flange Kit	See Datasheet	В		

Sensor Accessories	Model Numbers	Style	Part Number	Qty/Unit
Indicative Concer Maxima Vit	06		OSMK-076	
Inductive Sensor Mounting Kit	08		OSMK-077	1
PNP Inductive Sensor with Quick Disconnect*	04 09		OISP-014	on -B
NPN Inductive Sensor with Quick Disconnect*	06, 08		OISN-014	1-2
PNP Inductive Sensor with Quick Disconnect*	10 12 1/ 20 25		OISP-011	on -E, -L
NPN Inductive Sensor with Quick Disconnect*	10, 12, 16, 20, 25	All	OISN-011	
PNP Magneto Resistive with Quick Disconnect*	All Models		OHSP-017	
NPN Magneto Resistive with Quick Disconnect*	All Models		OHSN-017	1,
Quick Disconnect 2 Meter Cable Length*	All Ada dala		CABL-010	1-2
Quick Disconnect 5 Meter Cable Length*	All Models		CABL-013	

^{*} Sensor and cable sold separately.

Pneumatic Accessories	Model Numbers	Style	Part Number	Qty/Unit	
G1/8 Telescopic Airlines (up to 50mm)	10 12 14	B, E	OTAL-043		
G1/8 Telescopic Airlines (up to 80mm)	10, 12, 16	B, E, L	OTAL-044		
G1/8 Telescopic Airlines (up to 100mm)	20. 25		OTAL-051	1-4	
G1/8 Telescopic Airlines (up to 125mm)	20, 25	B, E	OTAL-052	1-4	
G1/8 Telescopic Airlines (up to 160mm)	10, 12, 16		OTAL-045		
G1/8 Telescopic Airlines (up to 300mm)	20, 25		OTAL-046		
M5 Adjustable Flow Control	06, 08, 10, 12, 16	A 11	VLVF-008	1,,	
G1/8 Adjustable Flow Control	20, 25	All	VLVF-005	1-2	
Seal Kits	See Datasheets				

See page GR-LIN-36 for Accessory Mounting Technical Data.



DLT SERIES - INTERNAL AIR CYLINDER

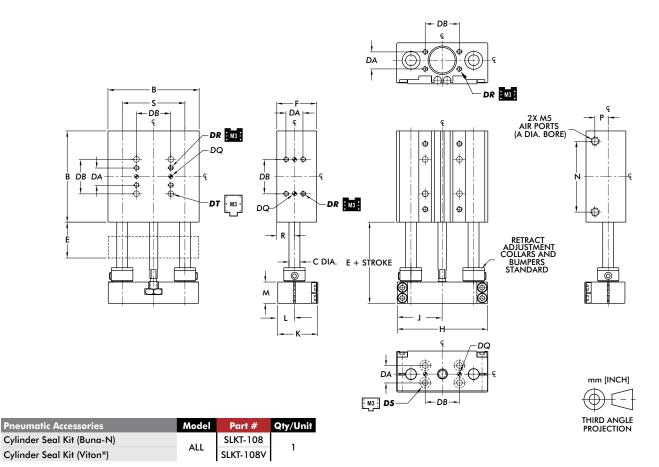
Internal Air Cylinder Linear Thruster Slides | Technical Specifications

Specifications	Units	06-B, E	06-L	08-B, E	08-L	10-B, E	10-L	12-B, E	12-L	
Max. Air Pressure	bar [psi]				7 [100]	00]			
Thrust Force @ 5.5 bar [80psi]	N [lbs]		89 [20] 155				[35]	[35] 275 [62]		
Weight -B (basic unit)	kg [lb]	0.15		0.30		0.82 [1.81]		1.31 [2.88]		
Weight -E, L (basic unit)	kg [lb]	[0.34]	0.28 [0.61]	[0.65]	0.44 [0.96]	0.84 [1.87]	0.88 [1.95]	1.35 [2.98]	1.46 [3.21]	
Cylinder Bore Ø	mm [in]		14.3 [0.563]		19 [0	0.75]	25	[1.0]	
Shaft Ø	mm [in]	6 [0.	236]	8 [0.	315]	9.5 [0).375]	12 [0	.472]	
Max (M) Vertical Motion	Nm [in-lbs]	0.6	[5]	1.1	[10]	2.8	[25]	5.6 [50]		

Specifications	Units	16-B, E	16-L	20-B, E	20-L	25-B, E	25-L
Max. Air Pressure	bar [psi]	7 [100]					
Thrust Force @ 5.5 bar [80psi]	N [lbs]	275	[62]	622 [140]			
Weight -B (basic unit)	kg [lb]	1.99 [4.38]		5.1 [11.6]		7.2 [15.7]	
Weight -E, L (basic unit)	kg [lb]	2.07 [4.56]	2.03 [4.81]	5.2 [11.6]	5.5 [12.0]	7.4 [16.4]	7.9 [17.4]
Cylinder Bore Ø	mm [in]	25 [[1.0]		38	[1.5]	
Shaft Ø	mm [in]	16 [0.630]		20 [0	.787]	25 [0.984]	
Max (M) Vertical Motion	Nm [in-lbs]	11.3	[100]	28.2 [250] 56			[500]



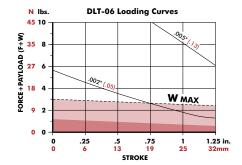


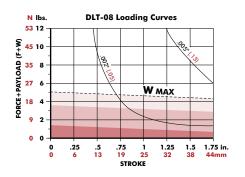


	DIRECTCONNECT™ Mounting Pattern Dimensions (all sizes)											
DA	DB	DQ	DR	DS	DT							
9.5 [0.375]	19.1 [0.750]	3H7 X 2 DP	M3 x 6 DP	CLR & C'BORE FOR M3	CLR & C'BORE FOR M3							

Model	Bore Ø	Body Size	Shaft Ø		Basic Unit Dimensions									
Model	Α	В	С	E	F	Н	J	K	L	M	N	P	R	S
DLT-06M	14	50.8 [2.00]	6.0 [0.236]	19.9	22.4	50.3 [1.980]	25.1 [0.990]	22.2	9.3	11.9	39.4 [1.55]	7.4	9.9	34.93 [1.375]
DLT-08M	[0.563]	63.5 [2.50]	8.0 [0.315]	[0.783]	[0.88]	62.7 [2.470]	31.0 [1.235]	[0.875]	[0.365]	[0.470]	52.1 [2.05]	[0.29]	[0.390]	44.45 [1.75]
Dimensions in mi	m [in]													

Loading Information





F=Externally applied force
W=Weight of payload
F+W=Total force
M=Maximum moment (in-lb. or N-m)

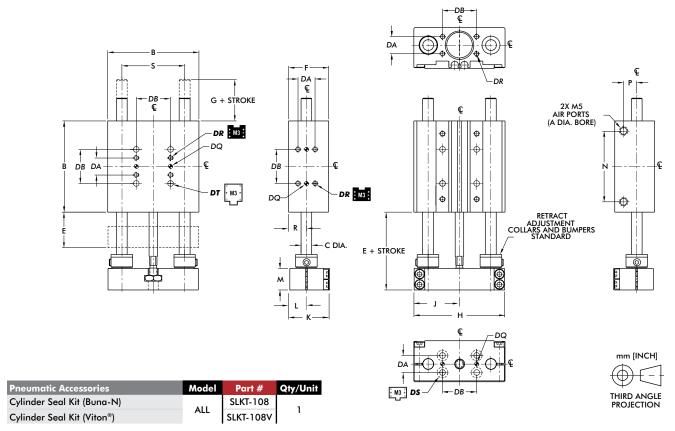
Shock Absorbers and Flow Controls are recommended for all applications



DLT-06/08M-E



Internal Air Cylinder Linear Thruster Slides | Dimensions and Technical Specifications

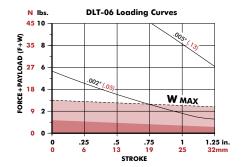


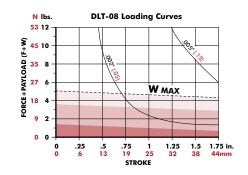
	DIRECTCONNECT™ Mounting Pattern Dimensions (all sizes)											
DA	DB	DQ	DR	DS	DT							
9.5 [0.375]	19.1 [0.750]	3H7 X 2 DP	M3 x 6 DP	CLR & C'BORE FOR M3	CLR & C'BORE FOR M3							

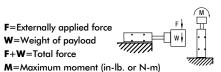
Model	Bore Ø	Body Size	Shaft Ø		Basic Unit Dimensions										
Model	A	В	С	E	F	G	н	J	K	L	M	N	P	R	S
DLT-06M	14	50.8 [2.00]	6.0 [0.236]	19.9	22.4	16.8 [0.66]	50.3 [1.980]	25.1 [0.990]	22.2	9.3	11.9	39.4 [1.55]	7.4	9.9	34.93 [1.375]
DLT-08M	[0.563]	63.5 [2.50]	8.0 [0.315]	[0.783]	[0.88]	10.4 [0.41]	62.7 [2.470]	31.0 [1.235]	[0.875]	[0.365]	[0.470]	52.1 [2.05]	[0.29]	[0.390]	44.45 [1.750]

Dimensions in mm [in]

Loading Information



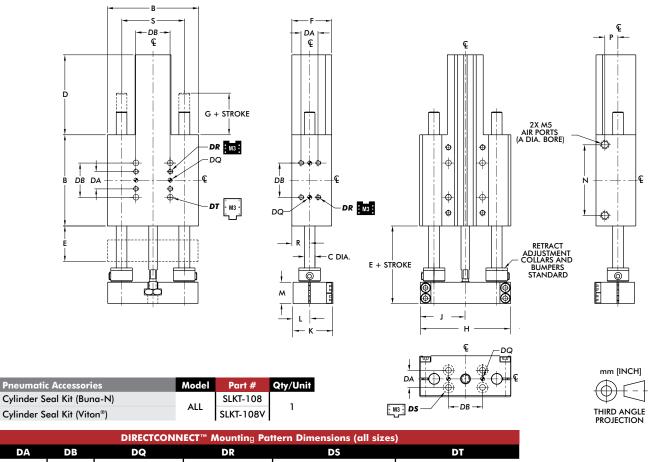




Shock Absorbers and Flow Controls are recommended for all applications



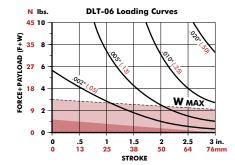


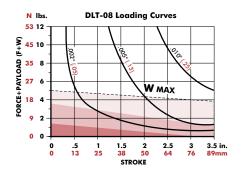


	DIRECTCONNECT Mounting Pattern Dimensions (all sizes)											
DA	DB	DQ	DR	DS	DT							
9.5 [0.375]	19.1 [0.750]	3H7 X 2 DP	M3 x 6 DP	CLR & C'BORE FOR M3	CLR & C'BORE FOR M3							

88 - 4 - 1	Bore Ø	Body Size	Shaft Ø		Basic Unit Dimensions											
Model	Α	В	С	D	E	F	G	Н	J	K	L	M	N	P	R	S
DLT-06M	14	50.8 [2.00]	6.0 [0.236]	44.4	19.9	22.4	16.8 [0.66]	50.3 [1.980]	25.1 [0.990]	22.2	9.3	11.9	39.4 [1.55]	5.4	9.9	34.93 [1.375]
DLT-08M	[0.563]	63.5 [2.50]	8.0 [0.315]	[1.75]	[0.783]	[0.88]	10.4 [0.41]	62.7 [2.470]	31.0 [1.235]	[0.875]	[0.365]	[0.470]	52.1 [2.05]	[0.21]	[0.390]	44.45 [1.750]
Dimensions in m	m [in]			•	•	•	•	•			•	•	•		•	•

Loading Information





F=Externally applied force W=Weight of payload F+W=Total force M=Maximum moment (in-lb. or N-m)

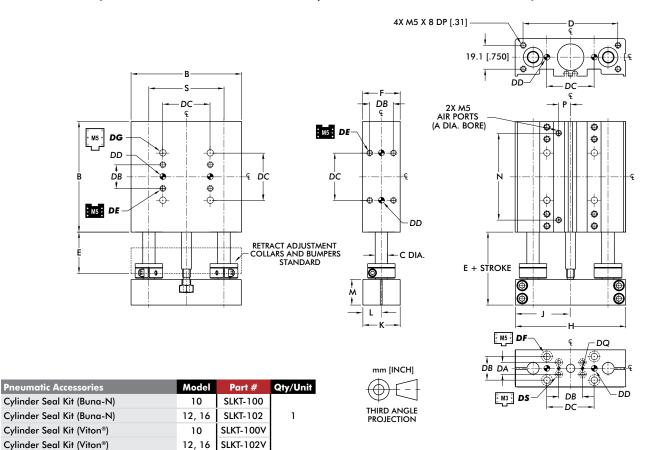
Shock Absorbers and Flow Controls are recommended for all applications



DLT-10/12/16M-B



Internal Air Cylinder Linear Thruster Slides | Dimensions and Technical Specifications

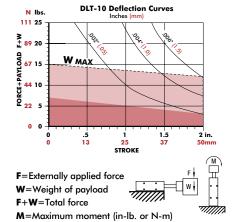


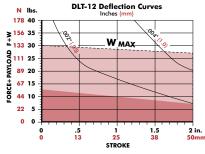
	DIRECTCONNECT™ Mounting Pattern Dimensions (all sizes)												
DA	DB	DC	DD	DE	DF	DG	DQ	DS					
9.5 [0.375]	19.1 [0.750]	38.1 [1.500]	5mm H7 X 6 DP	M5 X 8.5 DP	CLEARANG	CE FOR M5	3H7 X 2 DP	CLR & C'BORE FOR M3					
Mada	Bore	ions											

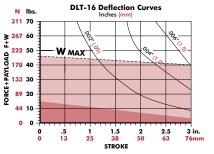
Model	Bore Ø	Body Size	Shaft Ø				В	asic Unit	Dimensio	ns				
Model	Α	В	С	D	E	F	н	J	K	L	M	N	P	S
DLB-10M	19 [0.75]	88.9 [3.50]	9.5 [0.375]	76.2 [3.000]	33.4	30.2 [1.19]	88.6 [3.490]	44.2 [1.740]	29.9 [1.178]	14.8 [0.584]		69.7 [2.75]		60.33 [2.375]
DLB-12M	25	101.6 [4.00]	12.0 [0.472]	92.1 [3.625]	[1.313]	41.4	101.2 [3.985]	50.4 [1.985]	41.0	20.4	20.7 [0.813]	83.3 [3.28]	9.4 [0.37]	69.85 [2.750]
DLB-16M	[0.98]	120.7 [4.75]	16.0 [0.630]	111.1 [4.375]	34.9 [1.375]	[1.63]	120.3 [4.735]	59.9 [2.360]	[1.615]	[0.802]		102.4 [4.03]		82.55 [3.250]

Dimensions in mm [in]

Loading Information

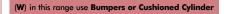






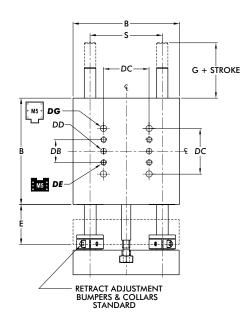
Shock Absorbers and Flow Controls are recommended for all applications

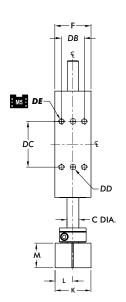
(W) in this range use Single Shock in retract directions

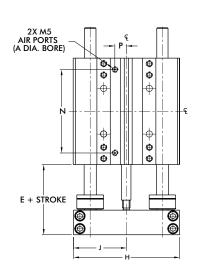






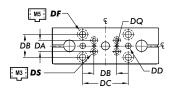






Pneumatic Accessories	Model	Part #	Qty/Unit
Cylinder Seal Kit (Buna-N)	10	SLKT-100	
Cylinder Seal Kit (Buna-N)		SLKT-102	1
Cylinder Seal Kit (Viton®)	10	SLKT-100V	
Cylinder Seal Kit (Viton®)	12, 16	SLKT-102V	



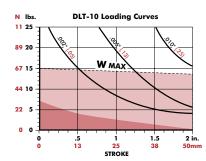


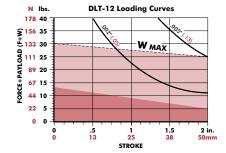
	DIRECTCONNECT™ Mounting Pattern Dimensions (all sizes)														
DA	DB	DC	DD	DE	DF	DG	DQ	DS							
9.5 [0.375]	19.1 [0.750]	38.1 [1.500]	5mm H7 X 6 DP	M5 X 8.5 DP	CLEARANG	CE FOR M5	3H7 X 2 DP	CLR & C'BORE FOR M3							

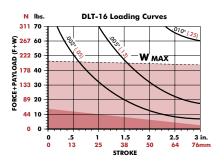
Model	Bore Ø	Body Size	Shaft Ø				В	asic Unit I	Dimensior	is				
Model	Α	В	С	E	F	G	Н	J	K	L	M	N	Р	S
DLB-10M	19 [3/4]	88.9 [3.50]	9.5 [0.375]	33.4	30.2 [1.19]	20.8	88.6 [3.490]	44.2 [1.740]	29.9 [1.178]	14.8 [0.584]		69.7 [2.75]		60.33 [2.375]
DLB-12M	25	101.6 [4.00]	12.0 [0.472]	[1.313]	41.4	[0.82]	101.2 [3.985]	50.4 [1.985]	41.0	20.4	20.7 [0.813]	83.3 [3.28]	9.4 [0.37]	69.85 [2.750]
DLB-16M	[1]	120.7 [4.75]	16.0 [0.630]	34.9 [1.375]	[1.63]	19.3 [0.76]	120.3 [4.735]	59.9 [2.360]	[1.615]	[0.802]		102.4 [4.03]		82.55 [3.250]

Dimensions in mm [in]

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F=Externally applied force W=Weight of payload F+W=Total force M=Maximum moment (in-lb. or N-m)

Shock Absorbers and Flow Controls are recommended for all applications

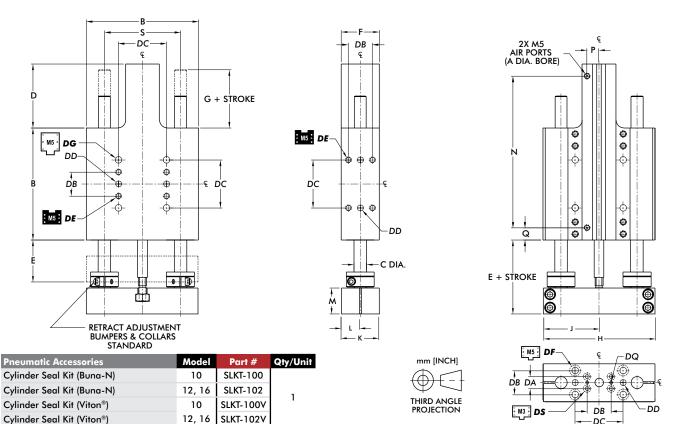
(W) in this range use Single Shock in retract directions

(W) in this range use Bumpers or Cushioned Cylinder

DLT-10/12/16M-L



Internal Air Cylinder Linear Thruster Slides | Dimensions and Technical Specifications

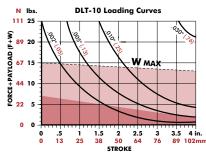


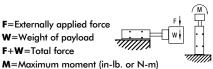
	DIRECTCONNECT™ Mounting Pattern Dimensions (all sizes)													
DA	DB	DC	DD	DE	DF	DG	DQ	DS						
9.5 [0.375]	19.1 [0.750]	38.1 [1.500]	5mm H7 X 6 DP	M5 X 8.5 DP	CLEARANC	CE FOR M5	3H7 X 2 DP	CLR & C'BORE FOR M3						

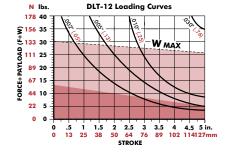
Model	Bore Ø	Body Size	Shaft Ø					Basic	Unit Dir	nensions						
Model	Α	В	С	D	E	F	G	н	J	К	L	M	N	P	Q	S
DLB-10M	19 [3/4]	88.9 [3.50]	9.5 [0.375]	50.8 [2.00]	33.4	30.2 [1.19]	20.8	88.6 [3.490]	44.2 [1.740]	29.9 [1.178]	14.8 [0.584]		120.7 [4.75]	9.6 [0.38]	9.6 [0.38]	60.33 [2.375]
DLB-12M	25	101.6 [4.00]	12.0 [0.472]	63.5 [2.50]	[1.313]	41.4	[0.82]	101.2 [3.985]	50.4 [1.985]	41.0	20.4	20.7 [0.813]	146.8 [5.78]	9.4	9.1	69.85 [2.750]
DLB-16M	[1]	120.7 [4.75]	16.0 [0.630]	69.9 [2.75]	34.9 [1.375]	[1.63]	19.3 [0.76]	120.3 [4.735]	59.9 [2.360]	[1.615]	[0.802]		172.2 [6.78]	[0.37]	[0.36]	82.55 [3.250]
-	r. 1															

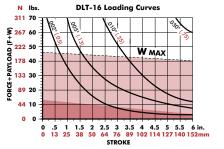
Dimensions in mm [in]

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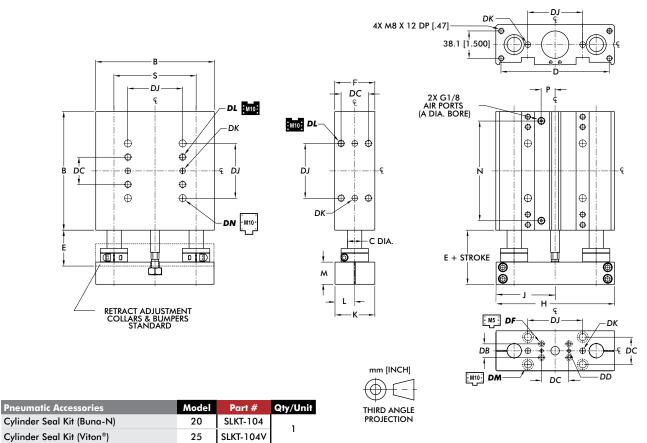


Shock Absorbers and Flow Controls are recommended for all applications

(W) in this range use **Single Shock** in retract directions (W) in this range use Bumpers or Cushioned Cylinder



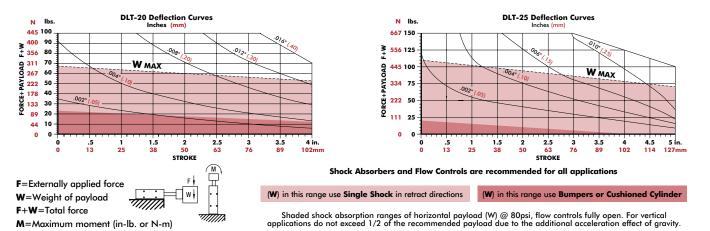




	DIRECTCONNECT™ Mounting Pattern Dimensions (all sizes)														
DB	DC	DD		DF		DJ		DK		DL		DM		DN	
	.500] 5	mm H7 X 6 DP	CLEA	RANCE F	OR M5	76.2 [3.000]	1 8mm H / v 0 / 11P			M10 x 14.2 DP			CLR & C'BORE FOR		
Madal	Bore Ø	Body Size	Shaft Ø	aft Ø Basic Unit Dimensions											
Model	Α	В	С	D	E	F	н	J	K	L	M	N	P	S	
DLB-20M	38	165.1 [6.50]	20 [0.787]	150.8 [5.938]	49.8 [1.960]	55.9	164.6 [6.480]	82.0 [3.230]	55.4	27.4	30.7 [1.210]	138.9 [5.47]	19.5	114.30 [4.500]	
DLB-25M	[1 1/2]	190.5 [7.50]	25 [0.984]	176.2 [6.938]	55.1 [2.170]	[2.20]	190.0 [7.480]	94.7 [3.730]	[2.180]	[1.080]	36.1 [1.420]	164.3 [6.47]	[0.77]	133.35 [5.250]	

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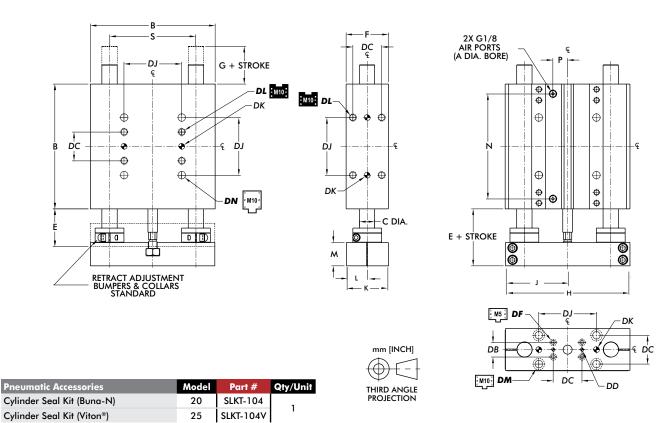
Dimensions in mm [in]



DLT-20/25M-E

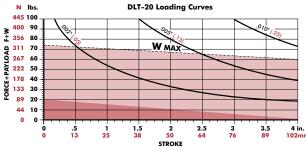


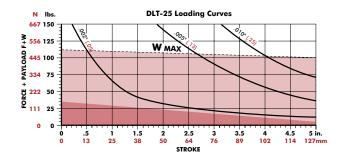
Internal Air Cylinder Linear Thruster Slides | Dimensions and Technical Specifications

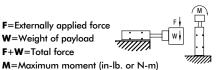


	DIRECTCONNECT™ Mounting Pattern Dimensions (all sizes)													
DB	DC	DD		DF		DJ	DJ DK			DL		DM		DN
19.1 38.1 5mm H7 X 6 DP			OP CI	EARANCE	FOR M5	76.2 [3.000	I Xmn	n H7 x 9.4	DP	M10 x 14	.2 DP	CLR & C'BORE FO		OR M10
Marilal.	Bore Ø	Body Size	Shaft Ø	Basic Unit Dimensions										
Model	Α	В	С	E	F	G	н	J	K	L	M	N	P	S
DLT-20M	38	165.1 [6.50]	20 [0.787]	49.8 [1.960]	55.9	24.4 [0.960]	164.6 [6.480]	82.0 [3.230]	55.4	27.4	30.7 [1.210]	138.9 [5.47]	19.5	114.30 [4.300]
DLT-25M	[1 1/2]	190.5 [7.50]	25 [0.984]	55.1 [2.170]	[2.20]	29.7 [1.170]	190.0 [7.480]	94.7 [3.730]	[2.180]	[1.080]	36.1 [1.420]	164.3 [6.47]	[0.77]	133.35 [5.250]
Dimensions in	mm [in]	•		•		•		•	1	•	•		•	•

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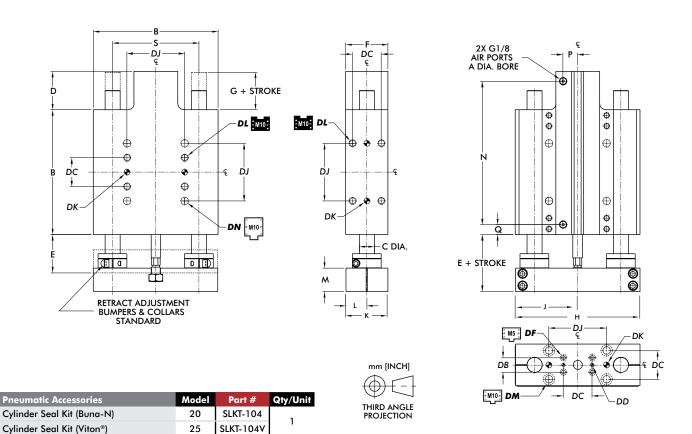


Shock Absorbers and Flow Controls are recommended for all applications

(W) in this range use Single Shock in retract directions (W) in this range use Bumpers or Cushioned Cylinder







				DIRECTO	ONNECT	™ Moun	nting Pat	tern Din	nensions	(all siz	es)					
DB	DC	DD		D	F		DJ		DK			L		DM		DN
19.1 [0.750] [38.1 [1.500]	5mm H7 X 6 [OP CI	LEARANCE FOR M5 76.2 [3.000] 8mm H7 x 9.4 DP					DP	M10 x 14.2 DP CLR & C'BC					ORE FOR M10	
Model	Bore Ø	Body Size	Shaft Ø	aft Ø					Basic Unit Dimensions							
Model	Α	В	С	D	E	F	G	н	J	К	L	M	N	P	Q	S
DLT-20M	38	165.1 [6.50]	20 [0.787]	50.8	49.8 [1.960]		24.4 [0.960]	164.6 [6.480]	82.0 [3.230]	55.4	27.4	30.7 [1.210]	189.7 [7.469]	19.4	13.1	114.30 [4.500]
DLT-25M	[1 1/2]	190.5 [7.50]	25 [0.984]	[2.00]	55.1 [2.170]	[2.20]	29.7 [1.170]	190.0 [7.480]	94.7 [3.730]		[1.080]	36.1 [1.420]	215.1 [8.468]	[0.77]	[0.52]	133.35 [5.250]
Dimensions in	mm [in]	•	•	•	•		•	•	•	•	•	•	'		•	•

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