

PLG/ PLG-140 SERIES

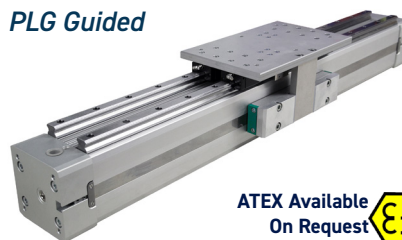


GUIDED RODLESS PNEUMATIC CYLINDER-(Formerly PL-AMT /HSR /LGW)

As Origa OSP-PS & Powerslide (Available with Brake & Shock Absorber)

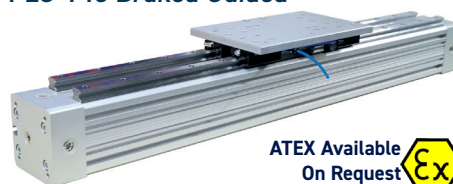
Design	Rodless cylinder, double acting, direct load transmission
Strokes	
ø 25-63 mm	100-5700mm, in increments of 1mm (longer strokes on request)
ø 16 mm	100-3300mm, in increments of 1mm
Air connection	(M5, G 1/8", G 1/4", G 3/8")
Mounting	free
Forces + moments	see Forces and moments
Support Forces	see Deflection Diagram
Temperatures	(-10°C bis +80°C) other temperatures on request
Materials	
Barrel	High-strength anodized aluminum
Guide	Steel/ Stainless steel
End caps	High-strength anodized aluminum
Piston axle	High-strength anodized aluminum
Seals	Oilproof synthetic material (V < 1m/s (NBR)(V > = 1m/s (VITON)
Sealing bands	Stainless steel
Piston caps	Wear proof synthetic material
Sliding parts	Wear proof synthetic material
Pressure range	0.5-8.0 bar
Medium	compressed air, filtered max. 50µm

PLG Guided



ATEX Available
On Request 

PLG-140 Braked Guided



ATEX Available
On Request 

- High loading characteristics
- High static loading in all directions
- Quiet and smooth running
- Robust bearing housing
- Easy access to grease nipple
- Hardened and grinded guiderail
- Low friction bearing
- Easy interchangeability

PLG order example

PLG – 25 – MSB15 – 1 – S2 – 0100 – SSG – SSS – VS – 3636

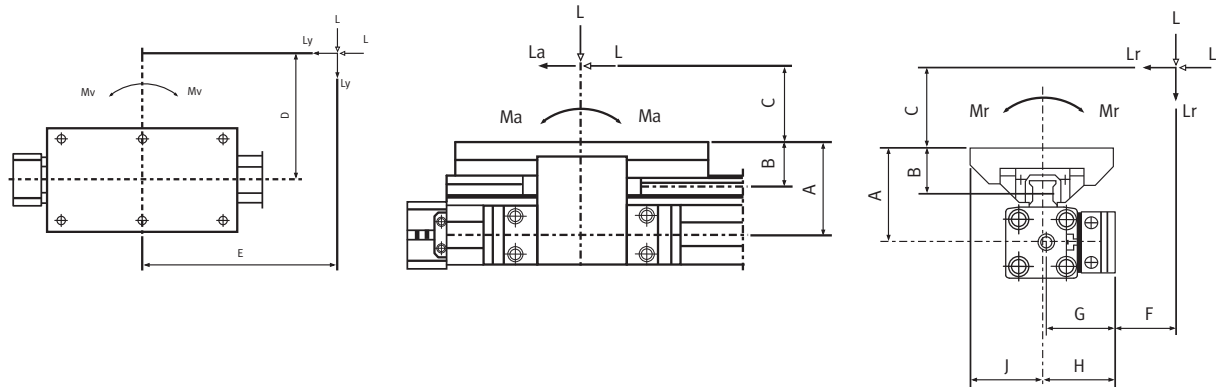
MODEL	BORE Ø	RAIL SIZE	QTY OF RAILS	CARRIAGE TYPE AND QUANTITY	STROKE	GREASE TYPE	SCREW TYPE	SEAL TYPE	3636 ENDCAPS
Guided	16	MSC15	1	M2	10-5800mm	Blank: Standard Grease SSG: Slow Speed Grease	Blank: Standard Screws SSS: Stainless Steel Screws	Blank: Nitrile Seals VS: Viton Seals	Blank: Standard 3636: 3636 Endcaps (Only available on Ø32)
	25	MSB15	1	S2					
	32	MSA15	1	S2					
	40	MSB15	2	TS4					
	50	MSA20	2	S4					
	63	MSA20	2	S4					

PLG-140 order example

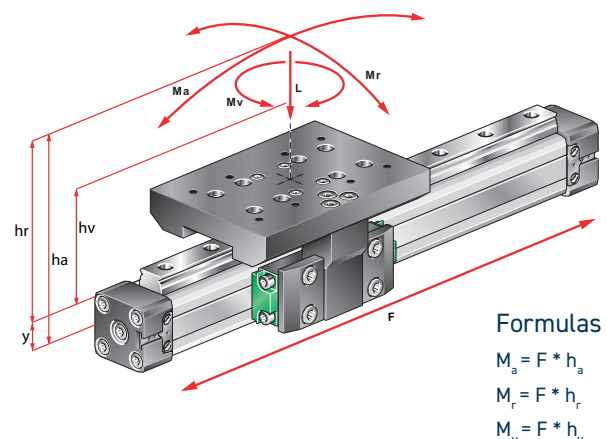
PLG – 140 – A – 25 – MSB15 – 1 – S2 – 0100 – SSG – SSS – VS – 3636

MODEL	MODEL	BORE Ø	RAIL SIZE	QTY OF RAILS	CARRIAGE TYPE AND QUANTITY	STROKE	GREASE TYPE	SEAL TYPE	SCREW TYPE	3636 ENDCAPS
Braked Guided Type	Brake Options A: Passive Brake, Air Fail Brake On Blank: Air On Brake On	16	MSC15	1	M2	10-5800mm	Blank: Standard Grease SSG: Slow Speed Grease	Blank: Nitrile Seals VS: Viton Seals	Blank: Standard Screws SSS: Stainless Steel Screws	Blank: Standard 3636: 3636 Endcaps (Only available on Ø32)
		25	MSB15	1	S2					
		32	MSA15	1	S2					
		40	MSB15	2	TS4					
		50	MSA20	2	S4					
		63	MSA20	2	S4					

PLG/ PLG-140 SERIES Forces and Moments



Characteristics	16	25	32	40	50	63
effect force (6 bar) (N)	110	250	420	640	1000	1550
cushioning (mm)	15	21	26	32	32	40
A (mm)	35.0	53.0	64.0	69	90	102
B (mm)	19.0	26.0	29.7	29.7	40	38.5
C/D/E/F (mm)	Dimensions according design					
G (mm)	30.3	38.0	55.0	54.5	65	75
H (mm)	31.5	40.0	57.5	57.5	68.5	85
J (mm)	31.5	40.0	57.5	57.5	65	85
Load forces max L (N)	500	1500	3000	3000	4000	4000
Moment forces max La, Lr, Lv (N)	500	1500	3000	3000	4000	4000
Axial moments max Ma (Nm)	8	40	58	58	200	200
Radial moments max Mr (Nm)	4	15	23	23	70	70
torsion moments max Mv (Nm)	8	40	58	58	200	200



Formulas

$$M_a = F \cdot h_a$$

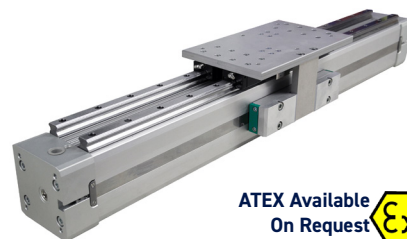
$$M_r = F \cdot h_r$$

$$M_v = F \cdot h_v$$

- 1. The above mentioned moments (Ma max, Mr max, Mv max) are related to the guide rail centre. The load force (L) is the summary of all single forces related to the common centre of the mass. The centre of the mass can be placed inside or outside the surface area of the carriage.
 - 2. Normally the carriage would experience a dynamic load, which has to be considered with the calculation of needed piston force (F) and capacity of the ballguided system.
- Use the following calculation formula:




$$\frac{M_a}{M_{a \max}} + \frac{M_r}{M_{r \max}} + \frac{M_v}{M_{v \max}} + \frac{L}{L_{\max}} \leq 1$$

PLG SERIES


SAMEDAY BUILD
 PREMIUM AVAILABLE

 ATEX Available
 On Request 

GUIDED RODLESS PNEUMATIC CYLINDER-(Formerly PL-AMT /HSR /LGW)

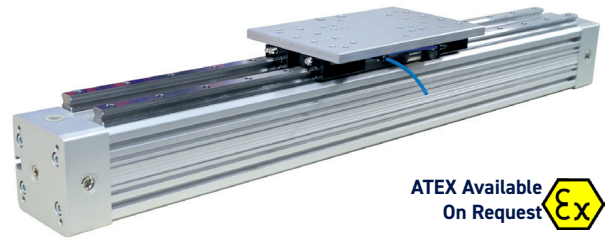
As Origa OSP-PS & Powerslide (Available with Brake & Shock Absorber)

Bore Ø / Stroke	Ø16	Ø25	Ø32	Ø40	Ø50	Ø63
100 mm	£463.32	£487.71	£594.44	£750.09	£1,032.99	£1,219.55
200 mm	£499.92	£526.23	£641.92	£799.65	£1,093.92	£1,290.56
300 mm	£536.52	£564.75	£689.40	£849.21	£1,154.86	£1,361.56
400 mm	£573.11	£603.28	£736.88	£898.76	£1,215.80	£1,432.57
500 mm	£609.71	£641.80	£784.35	£948.32	£1,276.74	£1,503.57
600 mm	£646.31	£680.32	£831.83	£997.88	£1,337.67	£1,574.57
700 mm	£682.90	£718.84	£879.31	£1,047.44	£1,398.61	£1,645.58
800 mm	£719.50	£757.37	£926.78	£1,096.99	£1,459.55	£1,716.58
900 mm	£756.09	£795.89	£974.26	£1,146.55	£1,520.49	£1,787.59
1000 mm	£792.69	£834.41	£1,021.74	£1,196.11	£1,581.42	£1,858.59
1100 mm	£829.29	£872.93	£1,069.22	£1,245.67	£1,642.36	£1,929.60
1200 mm	£865.88	£911.46	£1,116.69	£1,295.22	£1,703.30	£2,000.60
1300 mm	£902.48	£949.98	£1,164.17	£1,344.78	£1,764.23	£2,071.61
1400 mm	£939.08	£988.50	£1,211.65	£1,394.34	£1,825.17	£2,142.61
1500 mm	£975.67	£1,027.02	£1,259.13	£1,443.90	£1,886.11	£2,213.61
1600 mm	£1,012.27	£1,065.55	£1,306.60	£1,493.45	£1,947.05	£2,284.62
1700 mm	£1,048.86	£1,104.07	£1,354.08	£1,543.01	£2,007.98	£2,355.62
1800 mm	£1,085.46	£1,142.59	£1,401.56	£1,592.57	£2,068.92	£2,426.63
1900 mm	£1,122.06	£1,181.11	£1,449.03	£1,642.12	£2,129.86	£2,497.63
2000 mm	£1,158.65	£1,219.64	£1,496.51	£1,691.68	£2,190.80	£2,568.64
Additional 100mm	£33.73	£39.63	£48.59	£50.67	£63.16	£73.23
Passive Brake Unit (Air Off = Brake On)		£460.95	£460.95	£460.95	£536.55	£536.55
Pair Shock Absorbers & Mounting Brackets	£297.00	£318.60	£365.04	£365.04	£502.20	£502.20
3636 Endcaps (Pair Fitted PL00 / PLF 32)			£151.20			
End Supports (Pair) 	24-1	24-2	24-3	24-4	24-5	24-6
	£34.56	£41.04	£51.84	£51.84	£62.64	£62.64
Mid Section Support 	25-1	25-2	25-3	25-4	25-5	25-6
	£32.62	£36.94	£34.26	£51.84	£51.84	£51.84
Adjustable Clamp Support (Preferred Stock) 	25-1-3	25-2-3	25-3-3			
	£58.61	£68.97	£73.57			
Slow Speed Grease (SSG)	£7.30	£8.83	£10.08	£11.47	£12.46	£14.09
Stainless Screws (SSS)	£19.80	£25.36	£27.59	£29.81	£32.04	£33.15
Viton Seals (VS)	£35.00	£50.83	£54.76	£75.64	£98.98	£114.58
RCAL-3M Reed Switch		£16.93				
RCAL-EQD		£16.93				
RCI-3M Reed Switch					£18.09	
RCI-EQD					£20.45	
RNA-3M Inductive Switch		£33.16				
RNA-EQD		£22.72				
RPA-3M Inductive Switch		£23.55				
RPA-EQD		£39.42				
RNI-3M Inductive Switch					£31.41	
RNI-EQD					£30.51	
RPI-3M Inductive Switch					£31.41	
RPI-QD					£31.86	
M83RPVC-5M (QR Lead)				£17.63		
Switch Clamp (Use With RCAL / NA / PA)	HPL	HPL				
	£4.22	£4.22				
Switch Clamp (Use With RCI / RNI / RPI) 25Ø Only		DC1				
		£4.31				

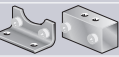


PLG-140 SERIES

SAMEDAY BUILD
PREMIUM AVAILABLE

GUIDED AND BRAKED RODLESS PNEUMATIC CYLINDER (Active)



ATEX Available
On Request 

Bore Ø / Stroke	Ø25	Ø32	Ø40	Ø50	Ø63
100 mm	£827.60	£923.88	£1,423.01	£1,814.25	£2,194.14
200 mm	£865.00	£969.98	£1,471.13	£1,873.41	£2,263.08
300 mm	£902.40	£1,016.07	£1,519.24	£1,932.57	£2,332.01
400 mm	£939.80	£1,062.17	£1,567.36	£1,991.73	£2,400.95
500 mm	£977.20	£1,108.26	£1,561.47	£2,050.90	£2,469.89
600 mm	£1,014.60	£1,154.36	£1,609.58	£2,110.06	£2,538.82
700 mm	£1,052.00	£1,200.45	£1,657.70	£2,169.22	£2,607.76
800 mm	£1,089.40	£1,246.54	£1,705.81	£2,228.38	£2,676.70
900 mm	£1,126.80	£1,292.64	£1,753.93	£2,287.55	£2,745.63
1000 mm	£1,164.20	£1,338.73	£1,802.04	£2,346.71	£2,814.57
1100 mm	£1,201.60	£1,384.83	£1,850.15	£2,405.87	£2,883.51
1200 mm	£1,239.00	£1,430.92	£1,898.27	£2,465.03	£2,952.44
1300 mm	£1,276.40	£1,477.02	£1,946.38	£2,524.20	£3,021.38
1400 mm	£1,313.80	£1,523.11	£1,994.50	£2,583.36	£3,090.32
1500 mm	£1,351.20	£1,569.21	£2,042.61	£2,642.52	£3,159.25
1600 mm	£1,388.60	£1,615.30	£2,090.72	£2,701.68	£3,228.19
1700 mm	£1,426.00	£1,661.39	£2,138.84	£2,760.85	£3,297.12
1800 mm	£1,463.40	£1,707.49	£2,186.95	£2,820.01	£3,366.06
1900 mm	£1,500.80	£1,753.58	£2,235.07	£2,879.17	£3,435.00
2000 mm	£1,538.20	£1,799.68	£2,283.18	£2,938.33	£3,503.93
Additional 100mm	£40.40	£50.67	£52.79	£63.25	£74.65
3636 Endcaps (Pair Fitted PL00 / PLF 32)		£151.20			
Pair Shock Absorbers & Mounting Brackets	£318.60	£365.04	£365.04	£502.20	£502.20
End Supports (Pair) 	24-2 £41.04	24-3 £51.84	24-4 £51.84	24-5 £62.64	24-6 £62.64
Mid Section Support 	25-2 £36.94	25-3 £34.26	25-4 £51.84	25-5 £51.84	25-6 £51.84
Adjustable Clamp Support (Preferred Stock) 	25-2-3 £68.97	25-3-3 £73.57			
	£8.83	£10.08	£11.47	£12.46	£14.09
Stainless Screws (SS)	£16.46	£19.80	£19.80	£20.91	£23.14
Viton Seals (VS)	£81.44	£97.82	£107.37	£121.46	£145.69
RCAL-3M Reed Switch	£16.93				
RCAL-EQD	£16.93				
RCI-3M Reed Switch			£18.09		
RCI-EQD			£20.45		
RNA-3M Inductive Switch	£33.16				
RNA-EQD	£22.72				
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RPI-QD			£31.86		
M83RPVC-5M (QR Lead)			£17.63		
Switch Clamp	HPL				
(Use With RCAL / NA / PA)	£4.22				
Switch Clamp	DC1				
(Use With RCI / RNI / RPI) 25ø Only	£4.31				

Air Preparation

Solenoid Valves

Pilot & Mechanical Valves

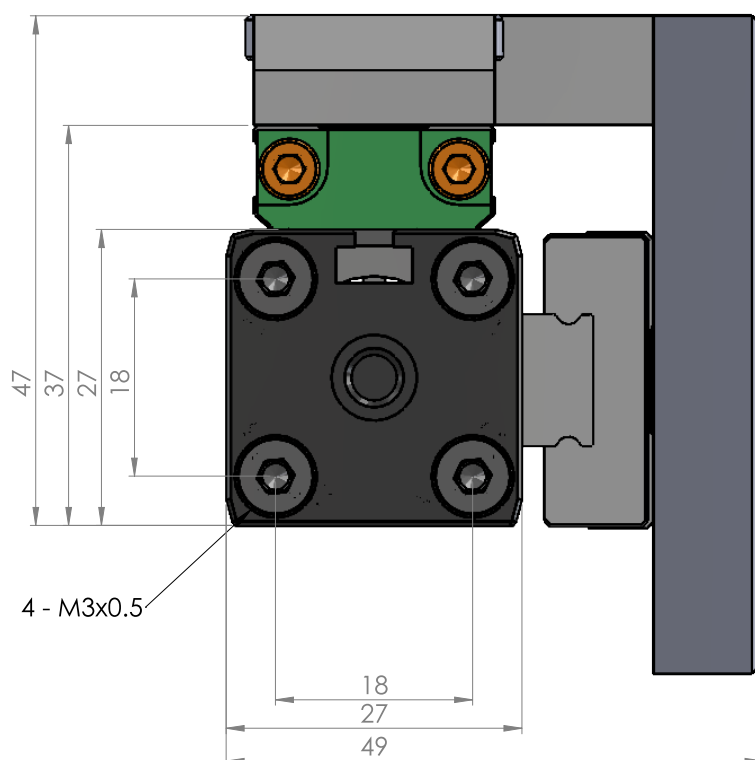
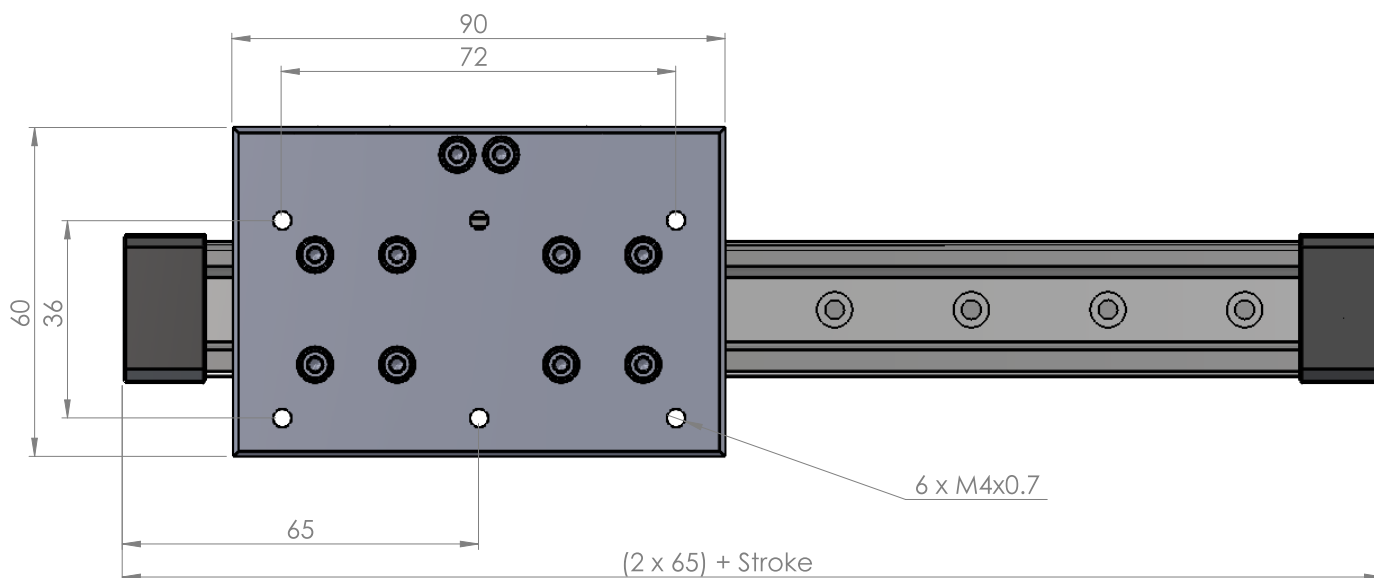
Pneumatic Cylinders

Rodless Cylinders

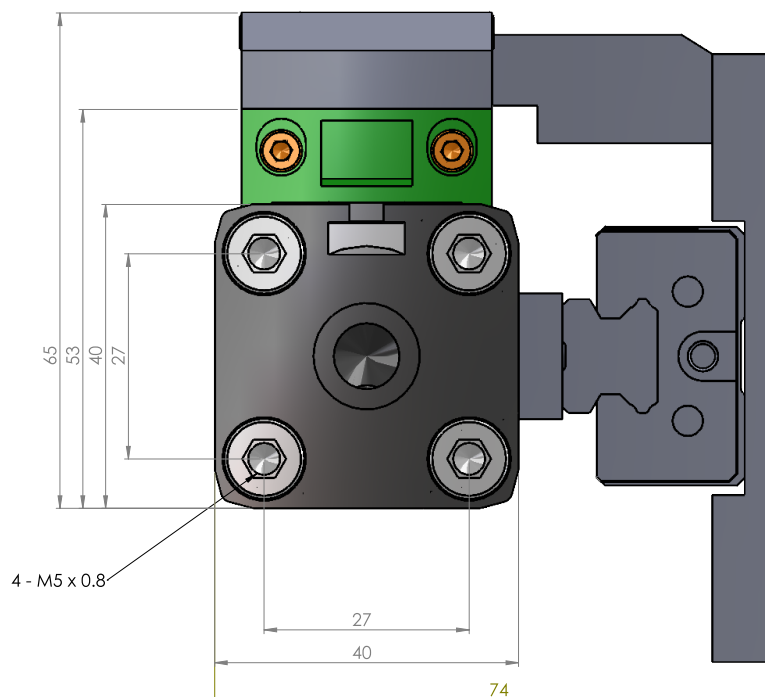
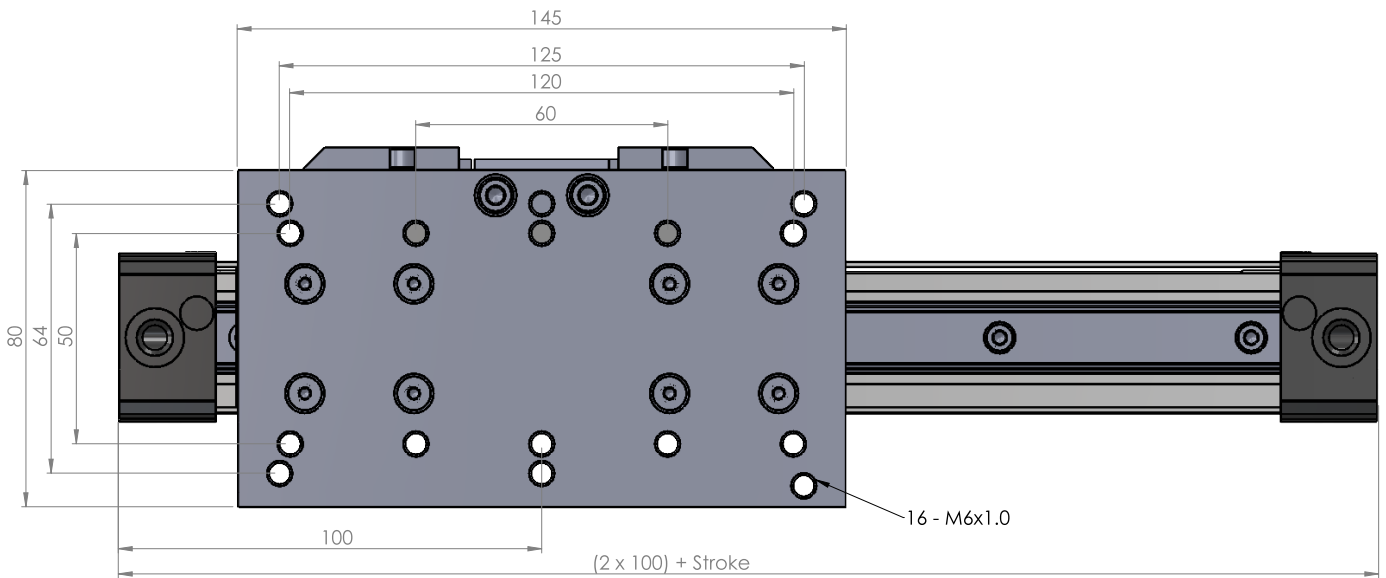
Grippers

Auxiliary Equipment

PLG/ PLG-140 16 Bore Dimensions



PLG/ PLG-140 25 Bore Dimensions



Air Preparation

Solenoid Valves

Pilot & Mechanical Valves

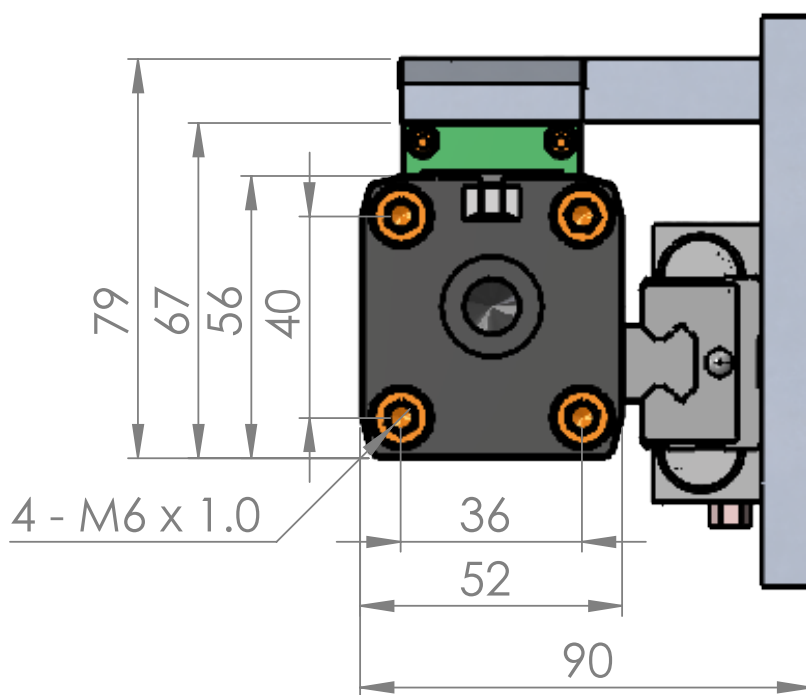
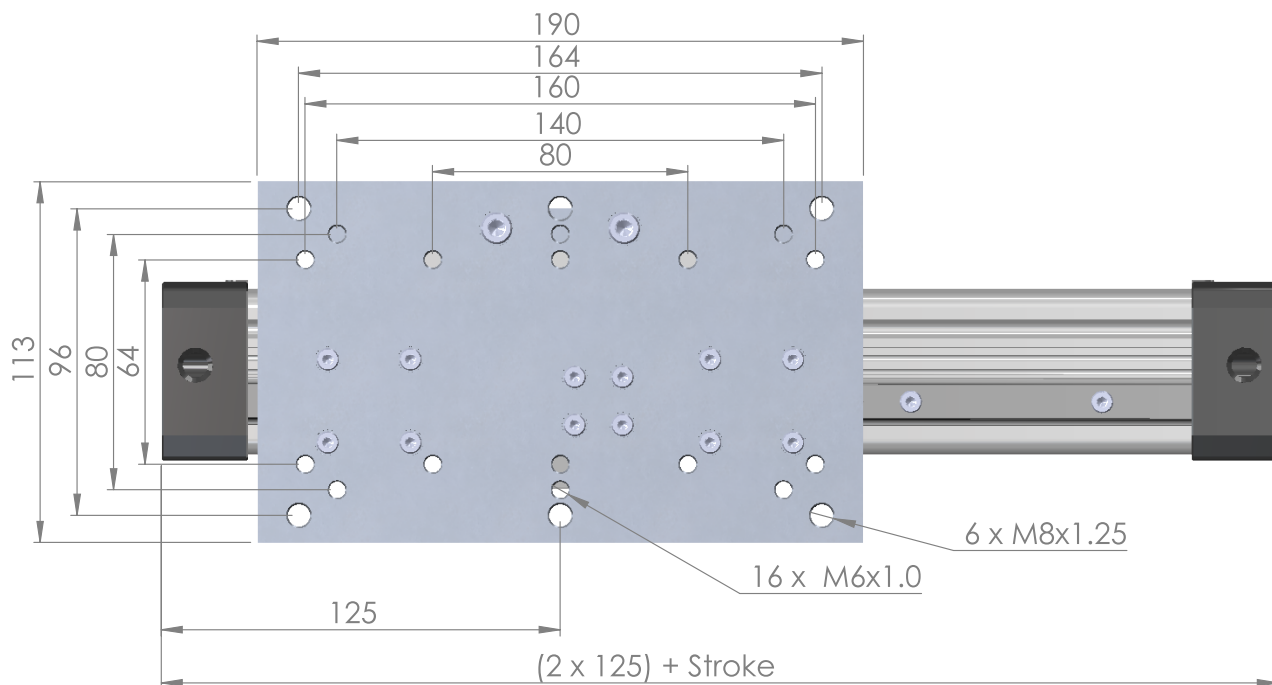
Pneumatic Cylinders

Rodless Cylinders

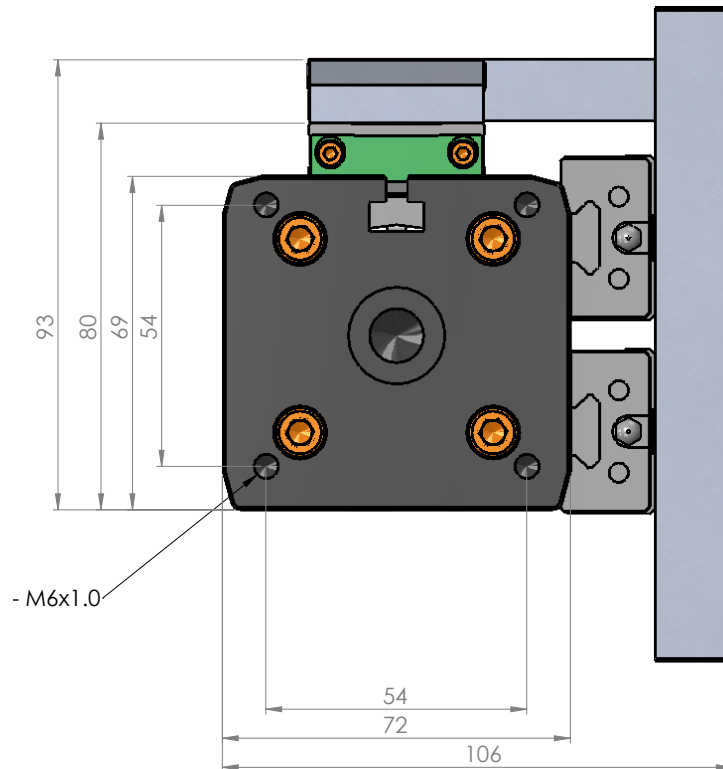
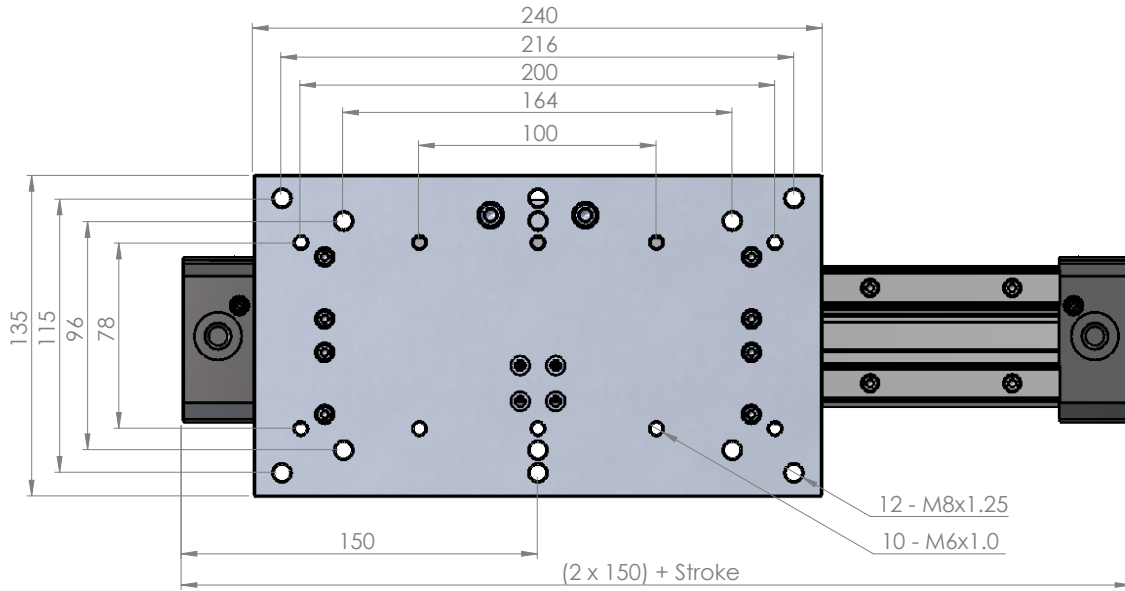
Grippers

Ancillary Equipment

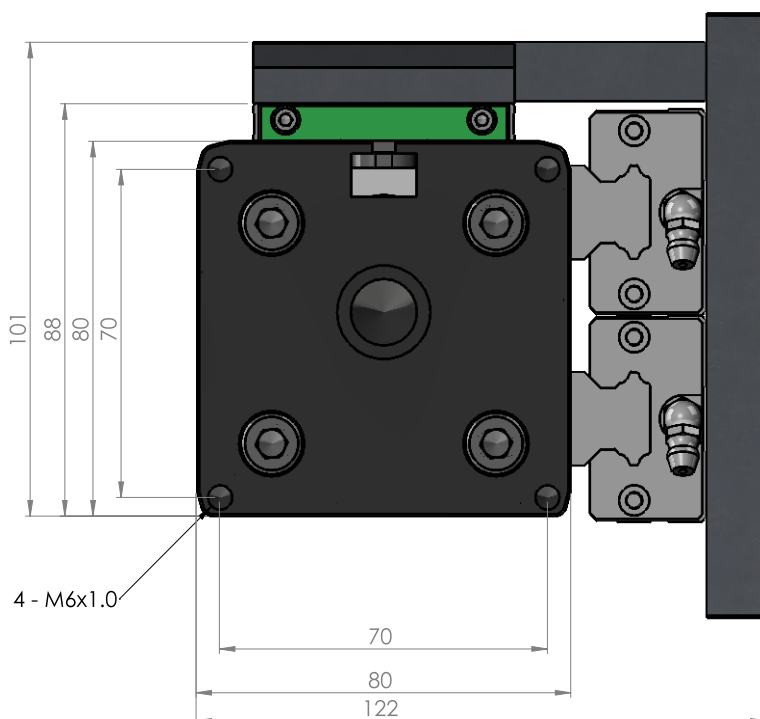
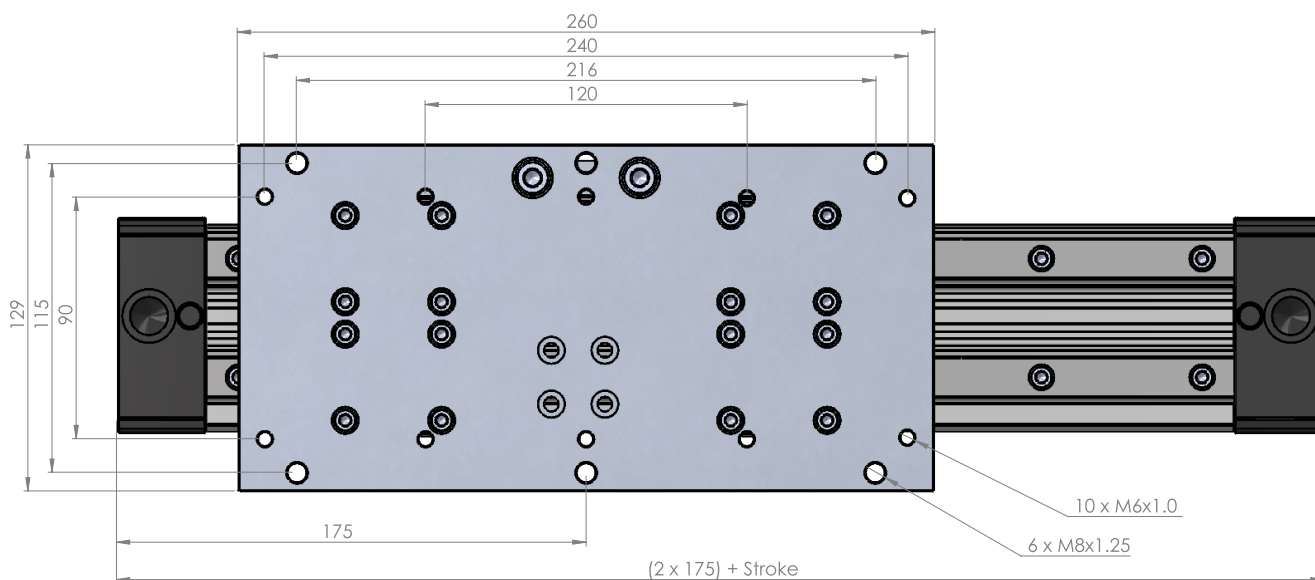
PLG/ PLG-140 32 Bore Dimensions



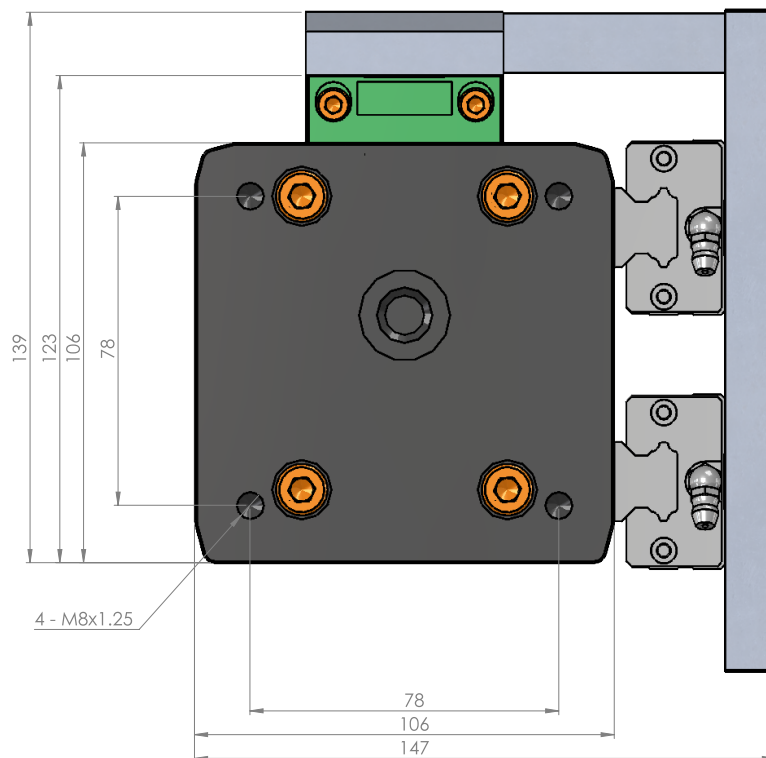
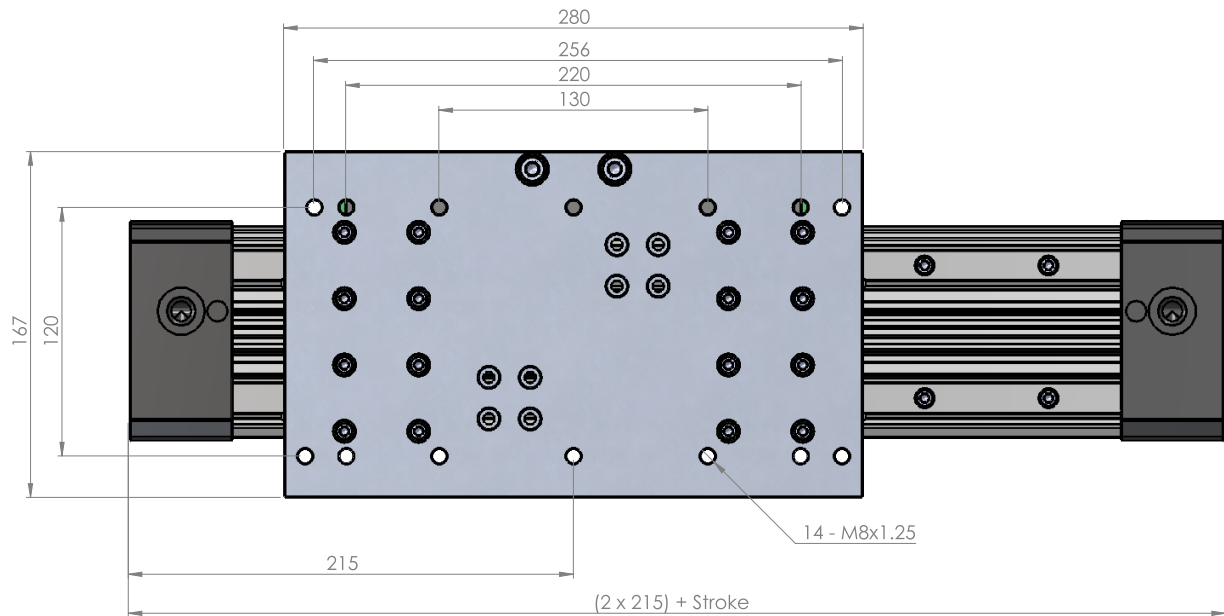
PLG/ PLG-140 40 Bore Dimensions



PLG/ PLG-140 50 Bore Dimensions



PLG/ PLG-140 63 Bore Dimensions



Air Preparation

Solenoid Valves

Pilot & Mechanical Valves

Pneumatic Cylinders

Rodless Cylinders

Grippers

Ancillary Equipment