

slides

PS Series
Linear Slide



NUMATICS

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Air-Oil Systems, Inc. www.airoil.com



Compact, light weight, durable linear motion slide with solid block body.

A. Body:

Anodized aluminum for reduced weight
Multiple mounting surfaces with dowel location holes standard
Compact size for added space savings

B. Air Cylinder:

Standard stainless steel body and rod for corrosion resistance
Permanently lubricated for non-lube service

C. Alignment Coupler:

Isolates piston rod from side loading, increasing service life

D. Optional Shock Absorbers:

Recommended for high cycle applications to absorb shock loading
Provides end of stroke adjustment

E. Optional Proximity Switch Sensing:

For applications requiring end of stroke verification
Available for extend and retract positions

F. Rear Tooling Plate:

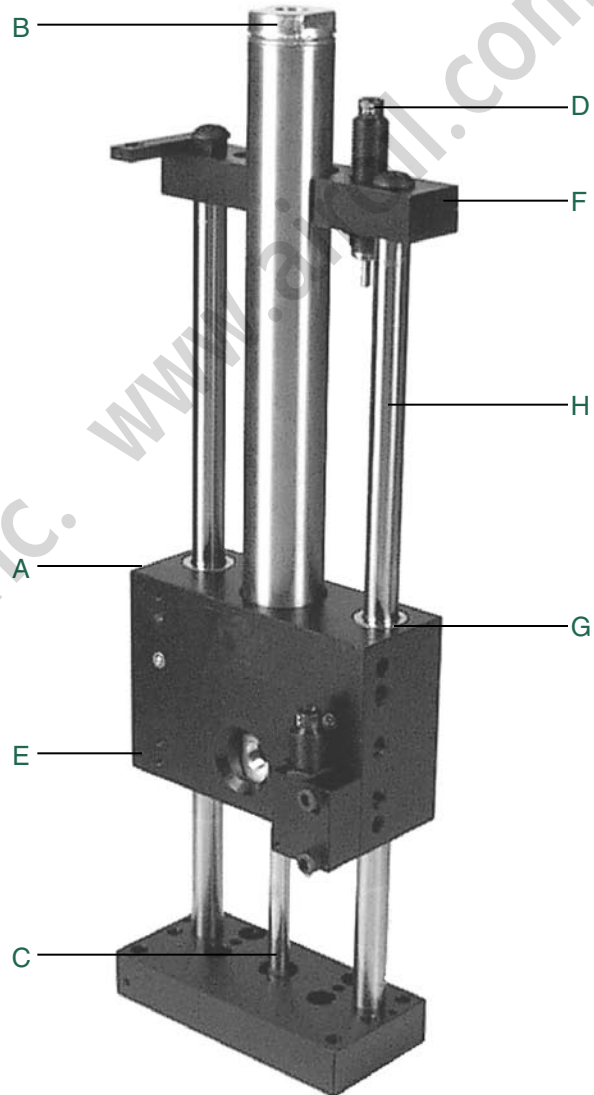
Dampens guide rod vibration for smooth operation
Houses shock absorber for extend position

G. Bearings:

Four recirculating linear ball bearing for maximum load capacity
Sealed from contamination
Self-aligning for maximum guide rod support

H. Guide Rods:

Hardened steel to Rc60-65, precision ground and polished



Technical Specifications

	PS075	PS106	PS150
Max. Air Pressure	120 psi	120 psi	120 psi
Extend Force (factor x input pressure)	0.44	0.88	1.76
Retract Force (factor x input pressure)	0.39	0.81	1.61
Cylinder Bore Dia.	3/4	1-1/16	1-1/2
Max. Stroke	6 inch	8 inch	12 inch
Max. Speed	40 in/sec	40 in/sec	40 in/sec
Unit Weight	1.5 lbs + 2 oz./inch of stk.	3.75 lbs + 3 oz./inch of stk.	7.0 lbs + 6.7 oz./inch of stk.
Guide Rod Diameter	0.375	0.500	0.750



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How to Order

PS 075 03 LB 1 4 C 4

Bore Sizes

075 = 3/4 Inch
106 = 1-1/16 Inches
150 = 1-1/2 Inches

Standard Stroke

01 = 1" 07 = 7"
02 = 2" 08 = 8"
03 = 3" 09 = 9"
04 = 4" 10 = 10"
05 = 5" 11 = 11"
06 = 6" 12 = 12"
3/4 bore 6" stk. Max
1 bore 8" stk. Max
1-1/2" bore 12" stk. Max

Bearing Option

LB = Linear Ball

Cylinder Type

1 = Buna-N Seals
2 = Viton Seals
3* = Buna-N with Cushions (factory set)
*11/16 and 1-1/2" bores only.

Shock Absorbers

Shock Hardware Only

1 = Extend
2 = Retract
3 = Extend/Retract
4 = No Shocks

Hardware and Shocks

A = Extend
B = Retract
C = Extend/Retract

Sensing Position

A = Single Position Extend
B = Single Position Retract
C = Two Position Sensing
D = No Sensing

Sensing Type

Standard Cord Set

4 = Prox Switch - PNP (sourcing)
5 = Prox Switch - NPN (sinking)
6 = No Sensing
9 = Switch Mounting Hardware Only

Quick Disconnect Cord Set

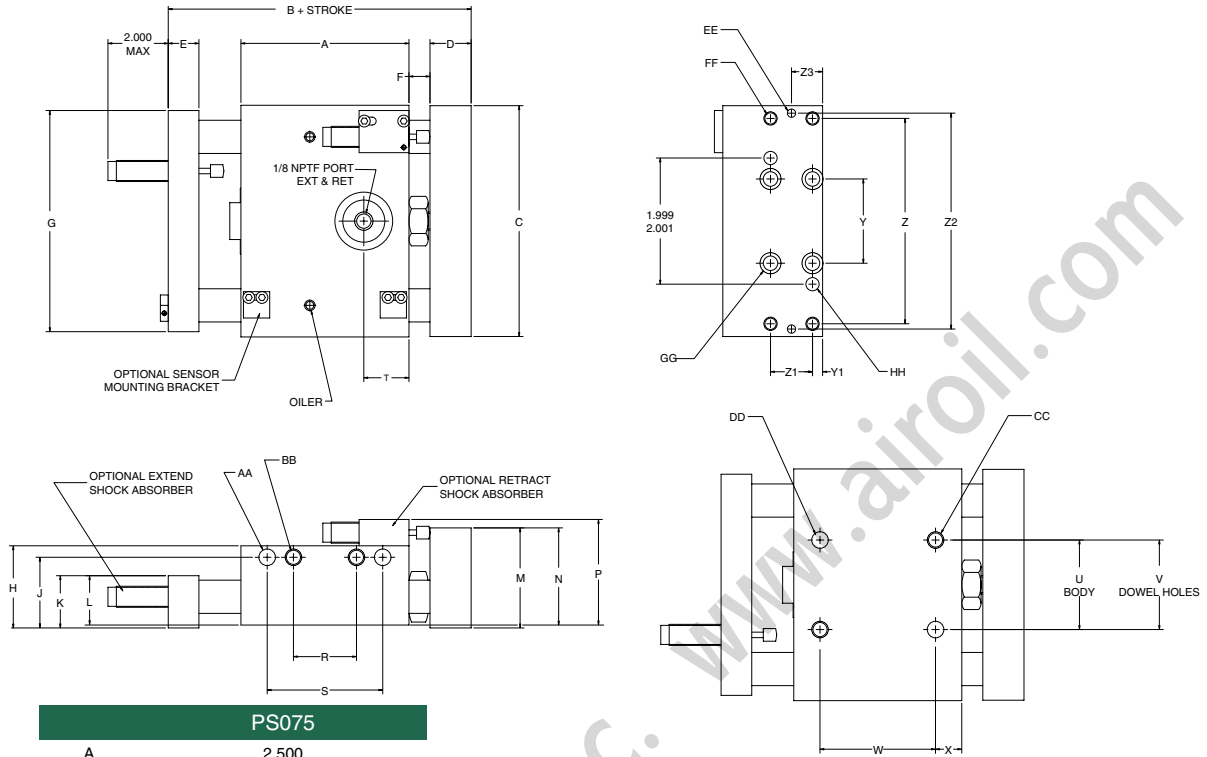
W = Prox Switch - PNP (sourcing) Straight
V = Prox Switch - NPN (sinking) Straight
U = Prox Switch - PNP (sourcing) 90 Deg.
T = Prox Switch - NPN (sinking) 90 Deg.

When ordering additional switches:

SWITCH DESCRIPTION	STANDARD PART NO.	QUICK DISCONNECT PART NO.
Prox Switch-PNP (Sourcing)	PX65PS	PX65PQ
Prox Switch-NPN (Sinking)	PX65NS	PX65NQ
Quick Disconnect Cable		PXCST
90° 5 meter cable	-	PXC90



PS075 Dimensions



PS075

A	2.500
B	3.800
C	3.355
D	0.480
E	0.500
F	0.375
G	3.355
H	1.230
J	1.000
K	1.000
L	0.750
M	1.500
N	1.510
P	1.670
R	0.750
S	1.499 / 1.501
T	0.650
U	1.500
V	1.499 / 1.501
W	1.500
X	0.500
Y	1.437
Y1	0.240
Z	3.000
Z1	0.500
Z2	3.125
Z3	0.490
AA	0.2505 / 0.2510 x 0.25 Deep
BB	1/4-20 x 0.45 Deep
CC	1/4-20 x 0.45 Deep
DD	0.2505 / 0.2510 x 0.25 Deep
EE	0.1255 / 0.1260 Thru
FF	#10-32 Thru
GG	Clearance for #10 SHCS C'bored from Opposite Side
HH	0.1877 / 0.1892 Thru

PS075

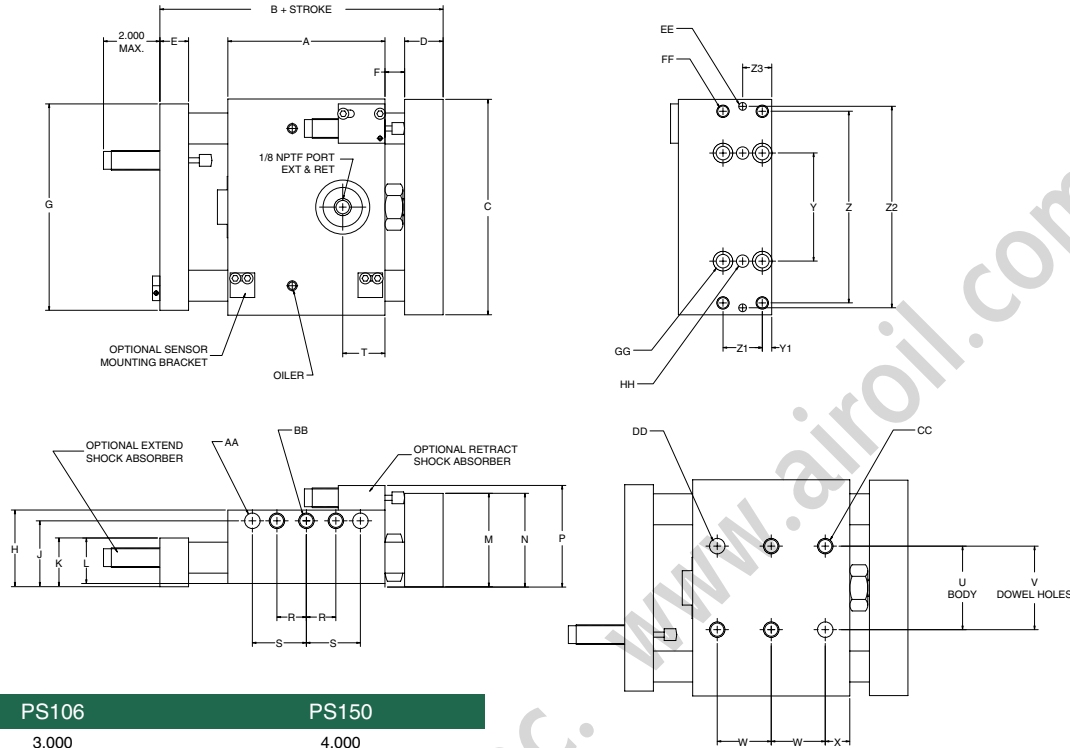
STROKE	MAX. LOAD A&B (LBS)	DEFLECTION A (INCHES)	DEFLECTION B (INCHES)	MAX. LOAD C (IN/LBS)
1	27.1	0.001	0.001	28
2	22.4	0.001	0.001	22
3	17.6	0.002	0.002	18
4	13.5	0.005	0.004	15
5	8.0	0.009	0.006	13
6	7.7	0.012	0.010	11



PS Series Power Slides

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PS106 and PS150 Dimensions

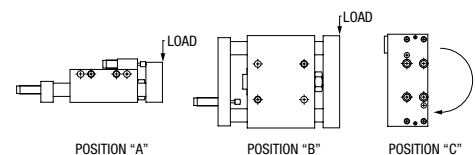


	PS106	PS150
A	3.000	4.000
B	4.720	6.210
C	4.250	5.480
D	0.730	0.980
E	0.615	0.730
F	0.375	0.500
G	4.250	5.250
H	1.625	1.960
J	1.281	1.688
K	1.625	1.250
L	1.615	1.240
M	2.000	2.375
N	2.010	2.385
P	2.250	2.585
R	0.750	0.750
S	1.125	1.375
T	0.750	1.075
U	1.750	2.125
V	1.749 / 1.751	2.127 / 2.126
W	1.125	1.375
X	0.375	0.625
Y	2.000	2.750
Y1	0.240	0.240
Z	3.750	4.875
Z1	0.750	1.000
Z2	3.999 / 4.001	5.124 / 5.126
Z3	0.615	0.740
AA	0.3130 / 0.3135 x 0.50 Deep	0.3755 / 0.3760 x 0.62 Deep
BB	5/16-18 x 0.50 Deep	3/8-16 x 0.50 Deep
CC	5/16-18 x 0.50 Deep	5/16-18 x 0.50 Deep
DD	0.3130 / 0.3135 x 0.50 Deep	0.3755 / 0.3760 x 0.62 Deep
EE	0.1255 / 0.1260 Thru	0.1880 / 0.1885 Thru
FF	1/4-20 Thru	5/16-18 Thru
GG	Clearance for 1/4 SHCS C'bored from Opposite Side	Clearance for 5/16 SHCS C'bored from Opposite Side
HH	0.1255 / 0.1260 Thru	0.3130 / 0.3135 Thru

PS106				
STROKE	MAX. LOAD A&B (LBS)	DEFLECTION A (INCHES)	DEFLECTION B (INCHES)	MAX. LOAD C (IN/LBS)
1	50.1	0.001	0.001	95
2	43.6	0.002	0.001	75
3	37.3	0.004	0.002	60
4	32.4	0.006	0.005	53
5	29.1	0.008	0.007	46
6	26.2	0.014	0.011	40
7	28.0	0.018	0.016	36
8	25.0	0.022	0.018	33

PS150				
STROKE	MAX. LOAD A&B (LBS)	DEFLECTION A (INCHES)	DEFLECTION B (INCHES)	MAX. LOAD C (IN/LBS)
1	98.3	0.001	0.001	240
2	87.7	0.001	0.001	205
3	80.2	0.003	0.002	176
4	73.1	0.004	0.003	155
5	66.4	0.007	0.006	137
6	60.4	0.009	0.007	120
7	54.5	0.012	0.010	110
8	49.6	0.016	0.013	100
9	45.7	0.019	0.016	93
10	40.2	0.022	0.018	86
11	34.0	0.024	0.020	80
12	27.0	0.025	0.021	75

Load and Moment Loading



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