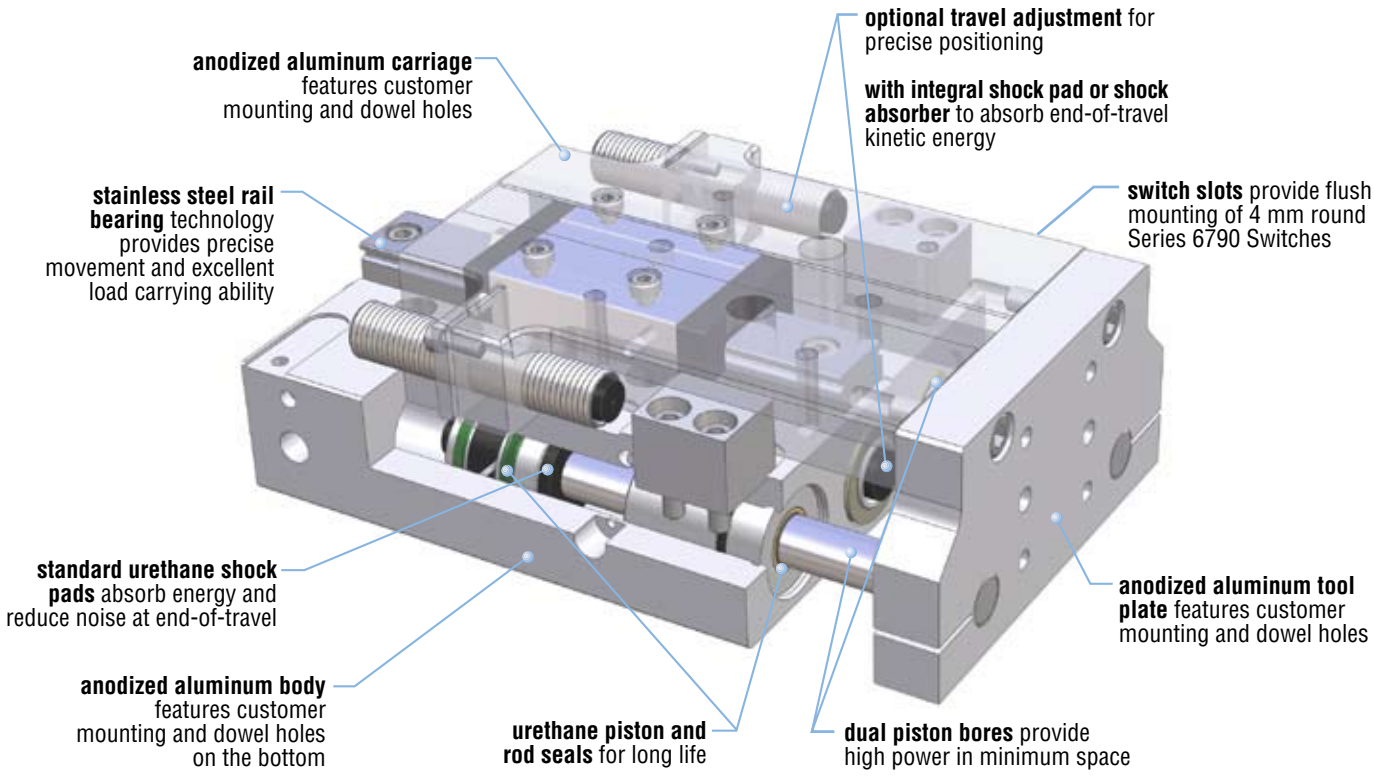
STP

COMPACT PRECISION RAIL BEARING TECHNOLOGY



Major Benefits

- Built for high speed, high accuracy, and high load applications
- Precision movement
- All adjustments made from rear of slide
- Travel adjustments stop load evenly, eliminating internal side loads for maximum life and position accuracy
- Five bore sizes with three travel lengths per bore size
- Direct mounting of same bore sizes without tool plates
- Two day delivery

Industry Uses

- High speed automation
- Precision assembly
- Semiconductor
- Assembly machine builders
- Optical
- Automotive
- Material Handling
- Medical

ORDERING DATA: SERIES STP SLIDES WITH RAIL BEARING

TO ORDER SPECIFY:
Product, Series, Bearing Type, Carriage Style, Design No., Size, Travel, Travel Adjustment, Shock Absorber Installed, and Miscellaneous Options.

PRODUCT
S - Slide

BEARING TYPE
P - Profile rail

DESIGN NO.
1 - Imperial
5 - Metric

BORE SIZE	TRAVEL IMPERIAL (in)	TRAVEL METRIC (mm)
08	1, 2, 3	25, 50, 75
12	1, 2-1/2, 4	25, 60, 100
16	1-1/2, 3, 5	38, 75, 125
20	2, 4, 6	50, 100, 150
25	2, 4, 6	50, 100, 150

SHOCK ABSORBER INSTALLED OPTION
NE1x - Shock absorber installed on extend, position 1
NE2x - Shock absorber installed on extend, position 2
NRx - Shock absorber installed on retract
"x" indicates shock absorber dampening constant (2 or 3) which must be specified by the customer.

S T P D 5 25 x 50 – AR – NE1x – M – Q6

SERIES
T - Compact Thruster

CARRIAGE STYLE
D - Dual stop

BORE SIZE
08
12
16
20
25

TRAVEL ADJUSTMENT OPTION
AE1 - Travel adjustment and shock pad on extend, position 1
AE2 - Travel adjustment and shock pad on extend, position 2
AR - Travel adjustment and shock pad on retract

MISCELLANEOUS OPTIONS
J3 - Transitional fit dowel holes
J8 - Precision fit dowel holes
M - Magnetic piston for use with PHD Series 6790 Switches
Q6 - Complete corrosion resistant guide shafts

SERIES 6790 SWITCHES

PART NO.	DESCRIPTION
67902-1-02	NPN (Sink) or PNP (Source) DC Reed, 2 m cable
67902-1-05	NPN (Sink) or PNP (Source) DC Reed, 5 m cable
67903-1-02	NPN (Sink) DC Solid State, 2 m cable
67903-1-05	NPN (Sink) DC Solid State, 5 m cable
67904-1-02	PNP (Source) DC Solid State, 2 m cable
67904-1-05	PNP (Source) DC Solid State, 5 m cable
67922-1	NPN (Sink) or PNP (Source) DC Reed, Quick Connect
67929-2	AC Reed, Current Limited, Quick Connect
67923-1	NPN (Sink) DC Solid State, Quick Connect
67924-1	PNP (Source) DC Solid State, Quick Connect
63549-02	2 m Cordset with Quick Connect
63549-05	5 m Cordset with Quick Connect

SHOCK ABSORBER REPLACEMENTS

BORE SIZE	PART NO.
08	68149-01-x
12	68149-01-x
16	68015-01-x
20	70861-01-x
25	67127-01-x

"x" indicates shock absorber dampening constant (2 or 3) which must be specified by the customer.

SPECIFICATIONS	SERIES STP
OPERATING PRESSURE	20 psi min to 150 psi [1.4 bar min to 10 bar max] air
OPERATING TEMPERATURE	20° to 180°F [-6° to 82°C]
TRAVEL TOLERANCE	+.098/-.000 [+2.5/-0.0 mm]
REPEATABILITY	±0.001 of original position
VELOCITY	30 to 36 in/sec [0.75 m/sec] extend, 24 in/sec [0.61 m/sec] retract, (zero load at 87 psi [6 bar])
LUBRICATION	Factory lubricated for life
MAINTENANCE	Field repairable

SIZE	TRAVEL in	TRAVEL mm	SHAFT DIAMETER in	SHAFT DIAMETER mm	BORE DIAMETER in	BORE DIAMETER mm	EXTEND PISTON AREA in²	EXTEND PISTON AREA mm²	RETRACT PISTON AREA in²	RETRACT PISTON AREA mm²	BASE WEIGHT lb	BASE WEIGHT kg	TYPICAL DYNAMIC LOAD lb	TYPICAL DYNAMIC LOAD N
08	1	25	.157	4	.315	8	.16	101	.12	75	0.55	0.25	0-2	0-9
	2	50									0.81	0.37		
	3	75									1.01	0.46		
12	1	25	.236	6	.472	12	.35	229	.27	172	1.12	0.51	2-4	8-18
	2-1/2	60									1.71	0.78		
	4	100									2.26	1.03		
16	1-1/2	38	.315	8	.630	16	.62	402	.47	302	2.10	0.95	4-8	18-36
	3	75									2.68	1.22		
	5	125									3.63	1.65		
20	2	50	.394	10	.787	20	.97	628	.73	470	3.62	1.64	8-16	36-71
	4	100									5.24	2.38		
	6	150									6.64	3.01		
25	2	50	.472	12	.984	25	1.52	982	1.17	756	5.46	2.48	16-32	71-142
	4	100									7.55	3.43		
	6	150									9.55	4.34		

NOTE: Thrust capacity, allowable mass, and dynamic moment capacity must be considered when selecting a slide. Refer to PHD's sizing software or the product sizing catalog for complete sizing and selection information.

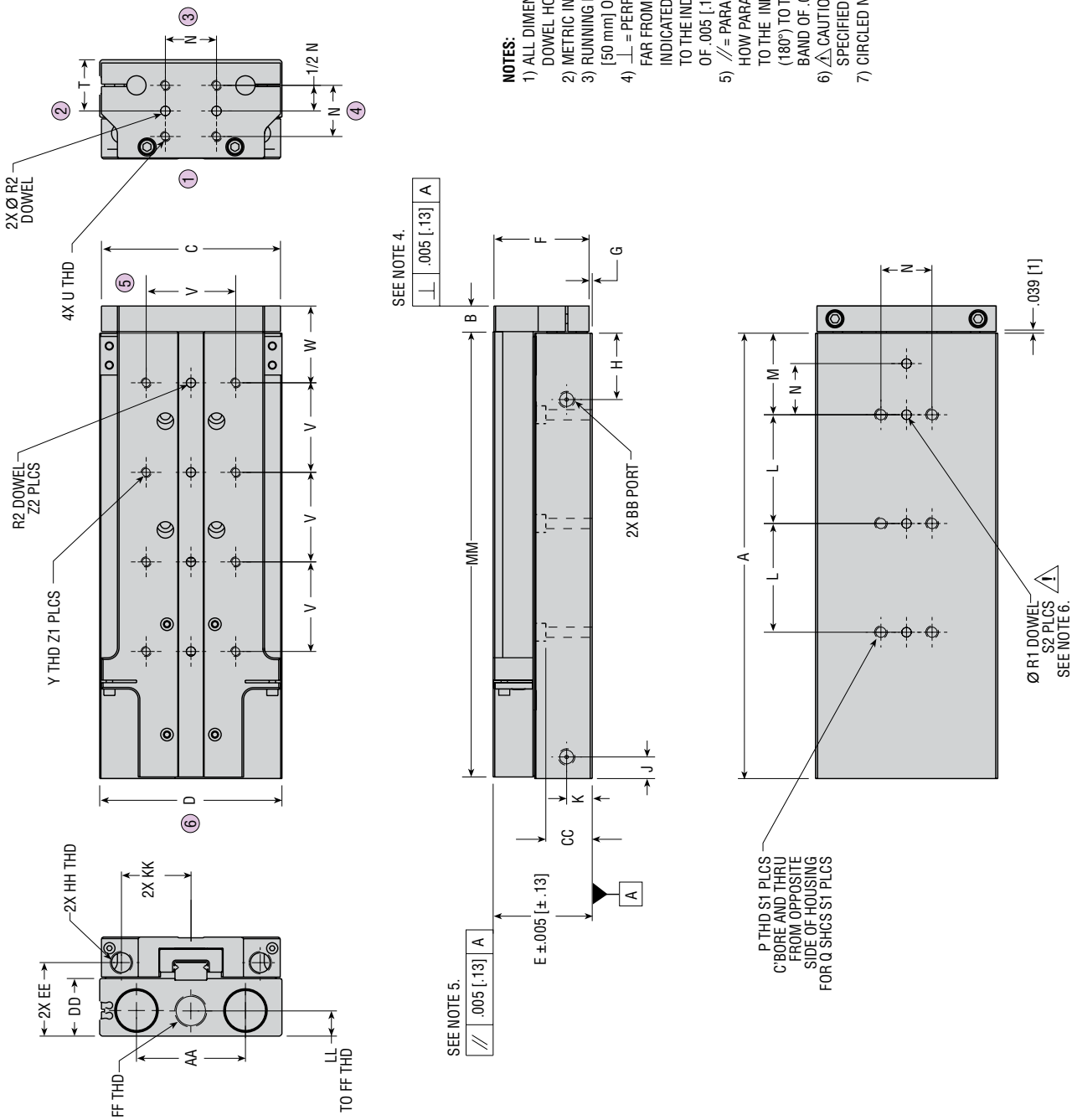
CYLINDER FORCE CALCULATIONS

	IMPERIAL F = P x A	METRIC F = 0.1 x P x A
F = Cylinder Force	lbs	N
P = Operating Pressure	psi	bar
A = Effective Area (Extend or Retract)	in²	mm²

SIZE	TRAVEL in	TRAVEL mm	OPTION ADDERS -AR lb	-AR kg	-NRx lb	-NRx kg	-AEx OR NEx lb	-AEx OR NEx kg
08	1	25	0.03	0.014	0.11	0.05	0.06	0.03
	2	50	0.04	0.018	0.11	0.05		
	3	75	0.05	0.023	0.11	0.05		
12	1	25	0.10	0.05	0.09	0.04	0.09	0.04
	2-1/2	60	0.15	0.07	0.178	0.08		
	4	100	0.20	0.09	0.298	0.14		
16	1-1/2	38	0.22	0.10	0.19	0.09	0.13	0.06
	3	75	0.29	0.13	0.26	0.12		
	5	125	0.40	0.18	0.37	0.17		
20	2	50	0.65	0.30	0.32	0.15	0.27	0.12
	4	100	0.85	0.39	0.512	0.23		
	6	150	1.03	0.47	0.687	0.31		
25	2	50	0.57	0.26	0.42	0.19	0.29	0.13
	4	100	0.87	0.39	0.73	0.33		
	6	150	1.16	0.53	1.02	0.46		

SIZING AND APPLICATION ASSISTANCE
See PHD Product Sizing Catalog for specific and complete sizing information.
Online sizing assistance is available at: ***www.phdinc.com/apps/sizing***

NOTES:
1) ALL DIMENSIONS ARE SYMMETRICAL ABOUT CENTERLINE OF DOWEL HOLES UNLESS OTHERWISE SPECIFIED.
2) METRIC INFORMATION SHOWN IN [ ].
3) RUNNING PARALLELISM TO DATUM A IS .002 in [.05 mm] AT 2 in [50 mm] OF TRAVEL.
4) ⊥ = PERPENDICULARITY TOLERANCE, THIS DETERMINES HOW FAR FROM 90° THAT THE INDICATED FEATURES CAN BE TO THE INDICATED DATUM FEATURES. THIS SURFACE IS ORIENTED (90°) TO THE INDICATED DATUM SURFACES WITHIN A TOLERANCE BAND OF .005 [.13].
5) // = PARALLELISM TOLERANCE, THIS TOLERANCE DETERMINES HOW PARALLEL (180°) THAT THE INDICATED FEATURES CAN BE TO THE INDICATED DATUM FEATURES. THE SURFACE IS PARALLEL (180°) TO THE INDICATED DATUM SURFACES WITHIN A TOLERANCE BAND OF .005 [.13].
6) ⚠ CAUTION: PRESSING DOWEL PINS DEEPER THAN DEPTH SPECIFIED MAY CAUSE INTERNAL DAMAGE ON -AR OPTION.
7) CIRCLED NUMBERS INDICATE POSITIONS.



All dimensions are reference only unless specifically toleranced.

LETTER DIM.	BORE SIZE 08						12						16						20						25					
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
TRAVEL	1	25	2	50	3	75	1	25	2.5	60	4	100	1-1/2	38	3	75	5	125	2	50	4	100	6	150	2	50	4	100	6	150
A	2.953	75.0	4.587	116.5	5.866	149.0	3.544	90.0	5.671	144.0	7.795	198.0	4.528	115.0	6.024	153.0	8.544	217.0	5.433	138.0	8.327	211.5	10.965	278.5	5.531	140.5	8.327	211.5	10.965	278.5
B	0.315	8.0					0.394	10.0					0.433	11.0					0.512	13.0					0.630	16.0				
C	2.087	53.0					2.559	65.0					3.425	87.0					3.7	94.0					4.409	112.0				
D	2.165	55.0					2.638	67.0					3.504	89.0					3.779	96.0					4.488	114.0				
E	0.983	25.0					1.37	34.8					1.574	40.0					1.969	50.0					2.440	62.0				
F	0.924	23.5					1.271	32.3					1.476	37.5					1.87	47.5					2.341	59.5				
G	0.039	1.0					0.079	2.0					0.079	2.0					0.079	2.0					0.079	2.0				
H	0.924	23.5					0.797	20.2					1.437	36.5					1.2	30.5					1.634	41.5				
J	0.492	12.5					0.797	20.2					0.531	13.5					1.2	30.5					0.532	13.5				
K	0.217	5.5					0.378	9.6					0.453	11.5					0.566	14.4					0.630	16.0				
L	1.102	28.0					1.496	38.0					1.929	49.0					2.205	56.0					2.677	68.0				
M	1.142	29.0					1.024	26.0					1.713	43.5					1.613	41.0					2.008	51.0				
N	0.551	14.0					0.67	17.0					0.905	23.0					1.024	26.0					1.260	32.0				
P	8-32 x .394 [M4 x 0.7 x 10]						10-24 x .632 [M5 x 0.8 x 16]						1/4-20 x .689 [M6 x 1.0 x 17.5]						1/4-20 x .910 [M6 x 1.0 x 23]						5/16-18 x 1.142 [M8 x 1.25 x 29]					
Q	#5 [M3]						#6 [M4]						#10 [M5]						#10 [M5]						1/4 [M6]					
R1	3 mm x 2.5 mm DP						4 mm x 2.5 mm DP						5 mm x 3 mm DP						5 mm x 3 mm DP						6 mm x 5.5 mm DP					
R2	3 mm x 3 mm DP						4 mm x 4 mm DP						5 mm x 5 mm DP						5 mm x 5 mm DP						6 mm x 6 mm DP					
S1	4		4		6		4		4		6		4		4		6		4		4		6		4		4		6	
S2	3		3		4		3		3		4		3		3		4		3		3		4		3		3		4	
T	0.5315	13.5					0.713	18.1					0.9055	23.0					1.078	27.4					1.260	32.0				
U	5-40 x .315 DP [M3 x 8 DP]						6-32 x .394 DP [M4 x 10 DP]						10-24 x .433 DP [M5 x 11 DP]						10-24 x .512 DP [M5 x 13 DP]						1/4-20 x .630 DP [M6 x 16 DP]					
V	0.866	22.0					1.102	28.0					1.496	38.0					1.654	42.0					2.205	56.0				
W	1.102	28.0					1.300	33.0					1.378	35.0					1.85	47.0					1.890	48.0				
Y	5-40 x .275 DP [M3 x 7 DP]						8-32 x .375 DP [M4 x 9.5 DP]						10-24 x .375 DP [M5 x 9.5 DP]						10-24 x .375 DP [M5 x 9.5 DP]						1/4-20 x .500 DP [M6 x 13 DP]					
Z1	4		6		8		4		6		8		4		6		8		4		6		8		4		6		8	
Z2	2		3		4		2		3		4		2		3		4		2		3		4		2		3		4	
AA	1.142	29.0					1.496	38.0					1.969	50.0					2.264	57.5					2.684	68.2				
BB	10-32 PORT [M5 x 0.8 PORT]						10-32 PORT [M5 x 0.8 PORT]						10-32 PORT [M5 x 0.8 PORT]						1/8 NPT PORT [1/8 BSPP PORT]						1/8 NPT PORT [1/8 BSPP PORT]					
CC	0.401	10.2					0.612	15.5					0.684	17.4					0.91	23.1					1.143	29.0				
DD	0.551	14.0					0.795	20.2					0.906	23.0					1.132	28.8					1.418	36.0				
EE	0.752	19.1					1.022	26.0					1.181	30.0					1.447	36.8					1.810	46.0				
FF	M6 x 1.0 x 32 DP						7/16-20 x 1.800 DP						M14 x 1.5 x 55 DP						M16 x 1.5 x 57 DP						M20 x 1.5 x 60 DP					
HH	M8 x 1.0 x 12.5 DP						M8 x 1.0 x 12.5 DP						M10 x 1.0 x 18.5 DP						M12 x 1.0 x 19 DP						M14 x 1.5 x 19.5 DP					
KK	0.743	18.9					0.955	24.3					1.26	32.0					1.417	36.0					1.712	43.5				
LL	0.217	5.5					0.319	8.1					0.394	10.0					0.566	14.4					0.620	15.7				
MM	2.953	75.0	4.587	116.5	5.866	149.0	3.377	85.8	5.671	144.0	7.795	198.0	4.528	115.0	6.024	153.0	8.544	217.0	5.433	138.0	8.327	211.5	10.965	278.5	5.531	140.5	8.327	211.5	10.965	278.5

METRIC INFORMATION SHOWN IN [ ].

All dimensions are reference only unless specifically toleranced.

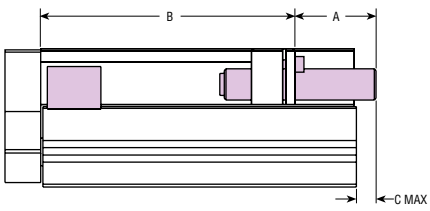
AE1 TRAVEL ADJUSTMENT AND SHOCK PAD ON EXTEND IN POSITION 1

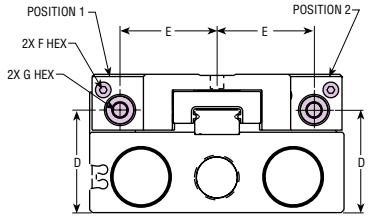
This option provides travel adjustment with a shock pad on extend in position 1. Shock pads provide excellent noise reduction and energy absorption capability. Travel on extend can be reduced by a maximum of 'A' shown in the table below. Adjust travel adjustment screw to the required position using 'G' hex wrench and lock into place using 'F' hex wrench. See PHD Product Sizing Catalog for stopping capacity of the shock pad. Online sizing assistance is available at: www.phdinc.com/apps/sizing.

AE2 TRAVEL ADJUSTMENT AND SHOCK PAD ON EXTEND IN POSITION 2

This option provides travel adjustment with a shock pad on extend in position 2. Shock pads provide excellent noise reduction and energy absorption capability. By using -AE1 and -AE2 options together, yaw moments are greatly reduced and may eliminate the need for a shock absorber. Travel on extend can be reduced by a maximum of 'A' shown in the table below. Adjust travel adjustment screw to the required position using 'G' hex wrench and lock into place using 'F' hex wrench. See PHD Product Sizing Catalog for stopping capacity of the shock pad.

SIZE	TRAVEL in	TRAVEL mm	A in	A mm	B in	B mm	C in	C mm	D in	D mm	E in	E mm	F HEX	G HEX
08	1	25	.650	16.5	2.953	75.0	.591	15.0	.752	19.1	0.74	18.9	2 mm	3 mm
	2	50	.827	21.0	3.779	96.0	–	–						
	3	75	.827	21.0	4.783	121.5	–	–						
12	1	25	.749	19.0	2.755	70.0	.120	3.0	1.022	26.0	0.96	24.3	2.5 mm	3 mm
	2-1/2	60	.944	24.0	4.490	114.0	–	–						
	4	100	1.122	28.5	6.081	154.5	–	–						
16	1-1/2	38	.945	24.0	3.662	93.0	.039	1.0	1.181	30.0	1.260	32	2.5 mm	5 mm
	3	75	1.122	28.5	4.981	126.5	–	–						
	5	125	1.102	28.0	6.989	177.5	–	–						
20	2	50	1.281	32.5	4.152	105.5	–	–	1.447	36.8	1.42	36	2.5 mm	6 mm
	4	100	1.654	42.0	6.576	167.0	–	–						
	6	150	1.299	33.0	8.896	226.0	–	–						
25	2	50	1.437	36.5	4.487	114.0	.354	9.0	1.810	46.0	1.71	43.5	3 mm	6 mm
	4	100	1.181	30.0	6.732	171.0	–	–						
	6	150	1.122	28.5	8.800	223.5	–	–						

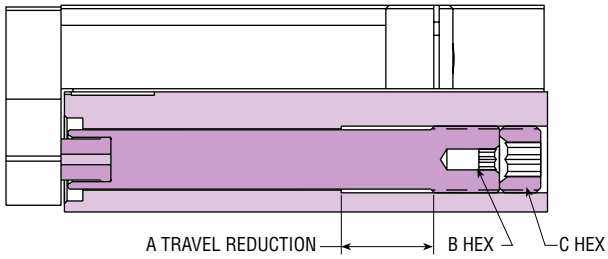


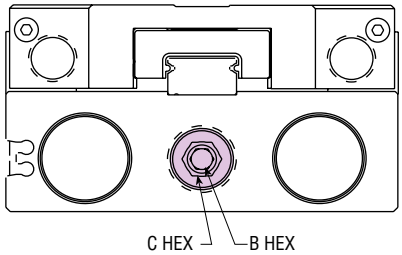


AR TRAVEL ADJUSTMENT AND SHOCK PAD ON RETRACT

This option provides travel adjustment with a shock pad on retract. Shock pads provide excellent noise reduction and energy absorption capability. Travel on retract can be reduced by a maximum of 'A' shown in the table below. Adjust travel adjustment screw to the required position using 'B' hex wrench and lock into place using 'C' hex wrench. See PHD Product Sizing Catalog for stopping capacity of the shock pad. **Caution:** When using dowel pins, do not exceed depth noted on dimensional page. Internal damage to screw may occur.

SIZE	A in	A mm	B HEX	C HEX
08	.512	13.0	2.5 mm	3 mm
12	.669	17.0	4 mm	5 mm
16	.984	25.0	5 mm	6 mm
20	1.063	27.0	6 mm	8 mm
25	1.063	27.0	6 mm	10 mm





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J3 TRANSITIONAL FIT DOWEL PIN HOLES

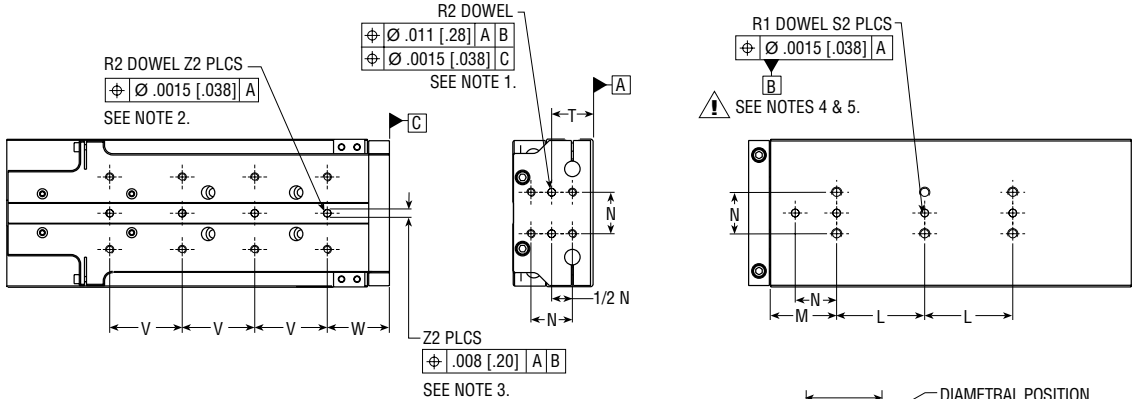
This option provides a compromise fit between clearance and interference. Transitional fits are used where accuracy of location is important, but a small amount of clearance is permissible.

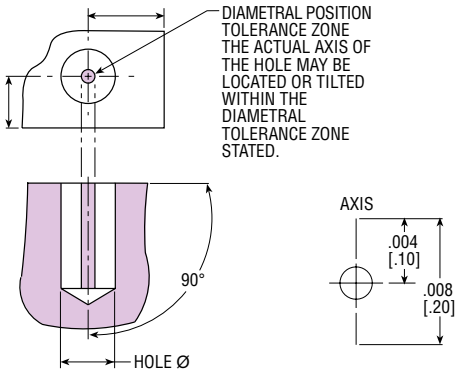
J8 PRECISION FIT DOWEL PIN HOLES

This option provides H7 tolerance precision fit with dowel pins. Precision fits are used where accuracy of location is of prime importance and for parts requiring rigidity and alignment.

LETTER DIM	SIZE 08						SIZE 12						SIZE 16						SIZE 20						SIZE 25					
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
TRAVEL	1	25	2	50	3	75	1	25	2.5	60	4	100	1-1/2	38	3	75	5	125	2	50	4	100	6	150	2	50	4	100	6	150
L			1.102	28.0					1.496	38.0					1.929	49.0					2.205	56.0					2.677	68.0		
N			.551	14.0					.670	17.0					.905	23.0					1.024	26.0					1.260	32.0		
R1			3 mm x 2.5 mm DP						4 mm x 2.5 mm DP						5 mm x 3 mm DP						5 mm x 3 mm DP						6 mm x 5.5 mm DP			
R2			3 mm x 3 mm DP						4 mm x 4 mm DP						5 mm x 5 mm DP						5 mm x 5 mm DP						6 mm x 6 mm DP			
S2	3		3		4		3		3		4		3		3		4		3		3		4		3		3		4	
T			.532	13.5					.713	18.1					.906	23.0					1.078	27.4					1.260	32.0		
V			.866	22.0					1.102	28.0					1.496	38.0					1.654	42.0					2.205	56.0		
W			1.102	28.0					1.300	33.0					1.378	35.0					1.851	47.0					1.890	48.0		
Z2	2		3		4		2		3		4		2		3		4		2		3		4		2		3		4	

Ø R DOWEL HOLE	TOLERANCE		
	STANDARD	J3 OPTION	J8 OPTION
3 mm	+.0004/-.0009 [+.010/-.024]	+.0013/+.0003 [+.033/+.008]	+.0004/-.0000 [+.010/-.000]
4 mm	+.0004/-.0009 [+.010/-.024]	+.0015/+.0005] [+.033/+.008]	+.0005/-.0000 [+.010/-.000]
5 mm	+.0004/-.0009 [+.010/-.024]	+.0015/+.0004] [+.038/+.010]	+.0005/-.0000 [+.012/-.000]
6 mm	+.0004/-.0009 [+.010/-.024]	+.0015/+.0005] [+.038/+.013]	+.0005/-.0000 [+.012/-.000]





DIAMETRAL ZONE **BILATERAL ZONE**

NOTES:
1) THE AXIS OF THESE DOWEL HOLES ARE LOCATED TO SURFACE A (DATUM) AND DOWEL HOLE PATTERN B (DATUM) WITHIN A .011 DIAMETRAL TOLERANCE ZONE. ADDITIONALLY THE AXIS OF THE HOLES ARE LOCATED TO EACH OTHER AND PERPENDICULAR TO SURFACE C (DATUM) WITHIN A .0015 DIAMETRAL TOLERANCE ZONE.
2) THE AXIS OF THE DOWEL HOLES ARE LOCATED TO EACH OTHER AND PERPENDICULAR TO SURFACE A (DATUM) WITHIN A .0015 [.038] DIAMETRAL TOLERANCE ZONE.
3) THE AXIS OF THESE HOLES ARE LOCATED TO SURFACE A (DATUM) AND DOWEL HOLE PATTERN B (DATUM) WITHIN .008 BILATERAL TOLERANCE ZONE.
4) THE AXIS OF THESE DOWEL HOLES ARE LOCATED TO EACH OTHER AND PERPENDICULAR TO SURFACE A (DATUM) WITHIN A .0015 [.038] DIAMETRAL TOLERANCE ZONE.
5) ⚠ CAUTION: DO NOT EXCEED DOWEL HOLE DEPTH WHEN INSTALLING DOWEL PINS. INTERNAL DAMAGE MAY OCCUR.
6) ⌖ = POSITION TOLERANCE, THIS TOLERANCE DETERMINES THE LOCATION OF THE HOLES AND THE PERPENDICULARITY TO THE INDICATED DATUM FEATURES.

M MAGNET FOR PHD SERIES 6790 MINIATURE REED AND SOLID STATE SWITCHES

This option equips the unit with a magnetic piston for use with PHD's Series 6790 Switch. The switch housing is completely contained by the slide housing and provides a very compact switch design. The switches mount easily into two small grooves located on the side of the slide housing and are locked into place with a set screw. See Switches and Sensors section for complete switch information.

PART NO.	DESCRIPTION
67902-1-02	NPN (Sink) or PNP (Source) DC Reed, 2 m cable
67902-1-05	NPN (Sink) or PNP (Source) DC Reed, 5 m cable
67903-1-02	NPN (Sink) DC Solid State, 2 m cable
67903-1-05	NPN (Sink) DC Solid State, 5 m cable
67904-1-02	PNP (Source) DC Solid State, 2 m cable
67904-1-05	PNP (Source) DC Solid State, 5 m cable
67922-1	NPN (Sink) or PNP (Source) DC Reed, Quick Connect
67929-2	AC Reed, Current Limited, Quick Connect
67923-1	NPN (Sink) DC Solid State, Quick Connect
67924-1	PNP (Source) DC Solid State, Quick Connect
63549-02	2 m Cordset with Quick Connect
63549-05	5 m Cordset with Quick Connect

NOTES:
1) Switch set screw torque to 16 in-oz [.11 Nm] max.
2) See Switches and Sensors section for additional switch information and complete specification.

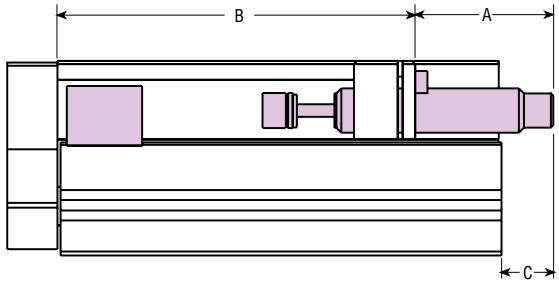
NE1x SHOCK ABSORBER INSTALLED ON EXTEND IN POSITION 1

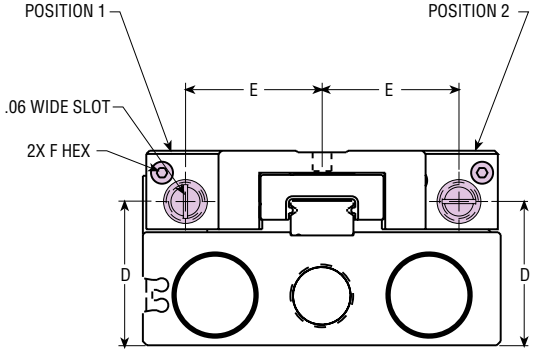
This option provides shock absorbers and travel adjustment on extend in position 1. Travel on extend can be reduced by a maximum of 'A' shown in the table below. Adjust shock absorber screw to the required position using a large screwdriver and lock into place using 'F' hex wrench. **NOTE:** The "x" indicates shock absorber damping constant which must be specified by customer. (See PHD Product Sizing Catalog for shock absorber selection requirements.)

NE2x SHOCK ABSORBER INSTALLED ON EXTEND IN POSITION 2

This option provides shock absorbers and travel adjustment on extend in position 2. Travel on extend can be reduced by a maximum of 'A' shown in the table below. Adjust shock absorber screw to the required position using a large screwdriver and lock into place using 'F' hex wrench. **NOTE:** The "x" indicates shock absorber damping constant which must be specified by customer. (See PHD Product Sizing Catalog for shock absorber selection requirements.)

SIZE	TRAVEL in	TRAVEL mm	A in	A mm	B in	B mm	C in	C mm	D in	D mm	E in	E mm	F HEX
08	1	25	.650	16.5	2.953	75.0	.591	15.0	.752	19.1	0.743	18.9	2 mm
	2	50	.827	21.0	3.779	96.0	–	–					
	3	75	.827	21.0	4.783	121.5	–	–					
12	1	25	1.064	27.0	2.755	70.0	.433	11.0	1.022	26.0	0.96	24.4	2.5 mm
	2-1/2	60	0.828	21.0	4.490	114.0	–	–					
	4	100	0.866	22.5	6.081	154.5	–	–					
16	1-1/2	38	.945	24.0	3.662	93.0	.039	1.0	1.181	30.0	1.260	32	2.5 mm
	3	75	1.122	28.5	4.981	126.5	–	–					
	5	125	1.102	28.0	6.989	177.5	–	–					
20	2	50	1.280	32.5	4.152	105.5	–	–	1.447	36.8	1.42	36	2.5 mm
	4	100	1.280	32.5	6.576	167.0	–	–					
	6	150	1.280	32.5	8.896	226.0	–	–					
25	2	50	1.772	45.0	4.487	114.0	.669	17.0	1.810	46.0	1.712	43.5	3 mm
	4	100	1.516	38.5	6.732	171.0	–	–					
	6	150	1.457	37.0	8.800	223.5	–	–					





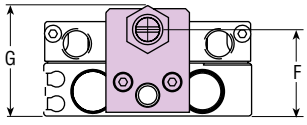
All dimensions are reference only unless specifically toleranced.

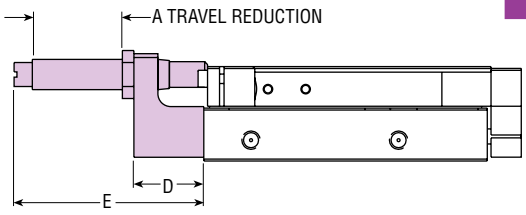
FOR SIZE 08 ONLY

NRx SHOCK ABSORBER INSTALLED ON RETRACT

This option provides shock absorbers and travel adjustment on retract. Travel on retract can be reduced by a maximum of 'A' shown in the table at right. Adjust travel to the required position using a large screwdriver and lock into place using 11 mm hex wrench. **NOTE:** The "x" indicates shock absorber damping constant which must be specified by customer. (See PHD Product Sizing Catalog for shock absorber selection requirements.)

A		D		E		F		G	
in	mm	in	mm	in	mm	in	mm	in	mm
.905	23.0	.728	18.5	2.008	51.0	.901	22.9	1.151	29.2



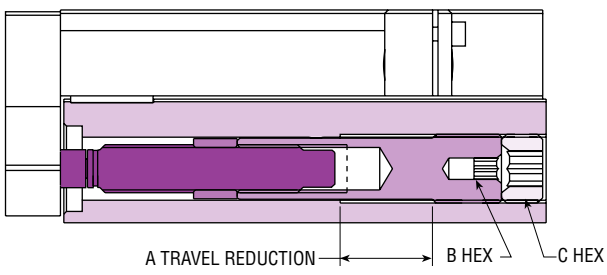


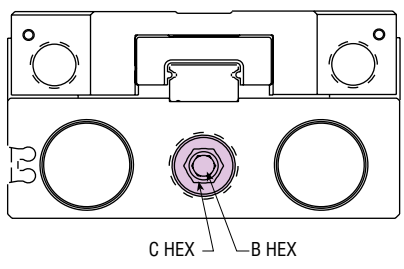
FOR SIZES 12, 16, 20, & 25

NRx SHOCK ABSORBER INSTALLED ON RETRACT

This option provides shock absorbers and travel adjustment on retract. Travel on retract can be reduced by a maximum of 'A' shown in the table. Adjust travel to the required position using 'B' hex wrench and lock into place using 'C' hex wrench. **NOTE:** The "x" indicates shock absorber damping constant which must be specified by customer. (See PHD Product Sizing Catalog for shock absorber selection requirements.)

MODEL	A in	A mm	B HEX	C HEX
STPxx12	.512	13.0	4 mm	5 mm
STPxx16	.984	25.0	5 mm	6 mm
STPxx20	1.063	27.0	6 mm	8 mm
STPxx25	1.063	27.0	6 mm	10 mm



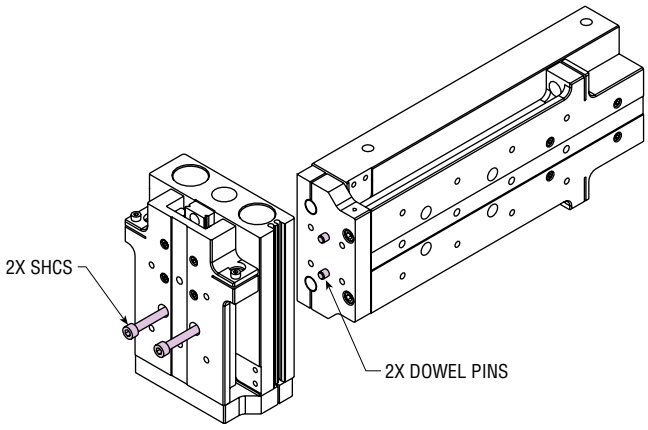


Q6 CORROSION RESISTANT GUIDE SHAFTS

This option provides stainless steel guide shafts with hard chrome plating, for use in applications where the standard shaft ends may corrode.

MODULAR MOUNTING KITS

Modular design of the Series STP housings and tool plates allow slide units to bolt and dowel together without the need for a transition plate. See chart for slide compatibility and hardware kits required. Each kit contains 2 dowel pins and 2 SHCS to mount the units together. PHD recommends that a -J3 option (transitional fit) be specified with the slide ordering data to allow the units to dowel together properly. Both units have -J3 dowel hole option as shown.



		KIT NUMBERS	
PRIMARY	SECONDARY	IMPERIAL	METRIC
STPDx08	STPDx08	68125-01	68125-02
STPDx12	STPDx12	70770-01	70770-02
STPDx16	STPDx16	68053-01	68053-02
STPDx20	STPDx20	70870-01	70870-02
STPDx25	STPDx25	68043-01	68043-02