

SCV



SCV

**IDEAL FOR NON-ROTATING
VERTICAL OR LIGHT DUTY
HORIZONTAL APPLICATIONS**



Rodlok® can be added to securely hold a static tool plate in place at any point of travel desired

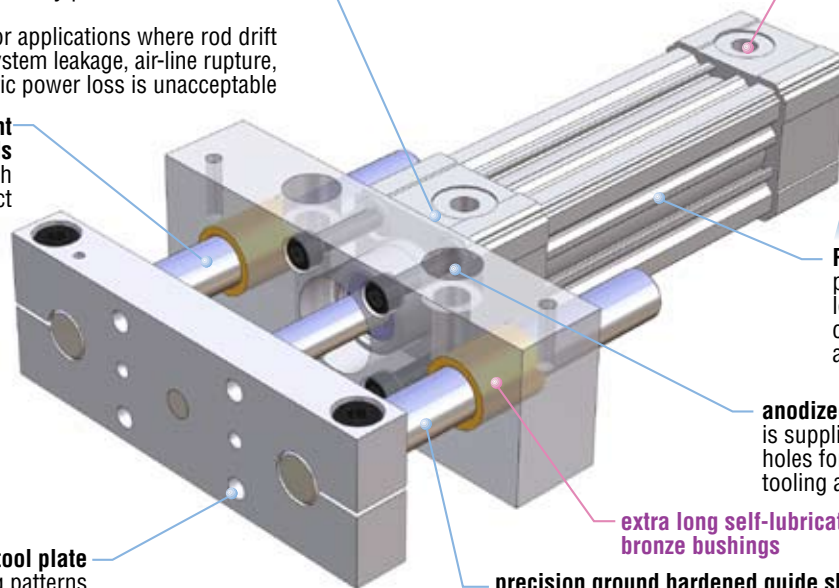
ideal for applications where rod drift due to system leakage, air-line rupture, or electric power loss is unacceptable

optional stroke adjustment collars with shock pads are available on both extend and retract

anodized aluminum tool plate has modular mounting patterns to allow the attachment of other sizes of Series SCV Slides for 2-axis movement



optional cushions and port controls available



IMPROVED

PHD's Series CV Cylinder powers this unit for extra long life with a wide range of control and switch accessories

anodized aluminum alloy body is supplied with counterbored holes for easy mounting of tooling and fixturing

extra long self-lubricating bronze bushings

precision ground hardened guide shafts provide smooth, precise linear motion

Major Benefits

- Oversize guide rods
- Simple design
- Ideal for non-rotating applications
- Easy tooling mounting to tool plate
- 8 bore sizes
- Units are powered by PHD's rugged Series CV Cylinder, now with improved seal & bearing support

Industry Uses

- Material handling/conveyors
- Snack foods
- Assembly machine builders
- General assembly

TO ORDER, SPECIFY:
Product, Cylinder, Type, Design No.,
Slide Size, Slide Travel, Tool Plate
Extension, and Options.

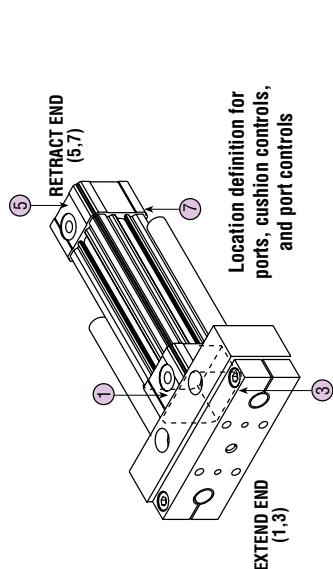
SLIDE TRAVEL	
SIZE	TRAVEL
2	1-6 in 25-150 mm
3	1-6 in 25-150 mm
4	1-8 in 25-200 mm
5	1-8 in 25-200 mm
6	1-10 in 25-250 mm
7	1-10 in 25-250 mm
8	1-12 in 25-300 mm
9	1-12 in 25-300 mm

Available in 1" [25 mm] increments.
Minimum travel required for all Series SCV Slides is 1" [25 mm]. Consult PHD for other stroke lengths.

DESIGN NO. 2 - Imperial 6 - Metric	PRODUCT S - Slide
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SLIDE OPTIONS
AE - Travel adjustment and shock pads on extension **
AR - Travel adjustment and shock pads on retraction **
Z1 - Corrosion resistant; guide shafts are hard chrome plated stainless steel or specially coated hardened steel, and appropriate coating on ferrous parts.

TOOL PLATE EXTENSION
Additional distance between tool plate and bearing body in 1" [25 mm] increments. Leave blank if additional extension is not required.



PORT CONTROL OPTIONS
-P X X X
Port Control Locations
B - Both ends
E - Extend end only
R - Retract end only
Retract Location (5 & 7)
Omit if -PEx

PORT LOCATION OPTIONS
-UB X X
Extend Location (Head) (1 & 3)
Retract Location (Cap) (5 & 7)

SLIDES WITH LIGHT DUTY BUSHINGS			
TYPE	SLIDE SIZE	BORE in	SHAFT SIZE in
V	2	0.787	20 0.394
V	3	0.984	25 0.472
V	4	1.260	32 0.630
V	5	1.575	40 0.787
V	6	1.969	50 0.984
V	7	2.480	63 0.984
V	8	3.150	80 1.181
V	9	3.937	100 1.181

WITH CYLINDER OPTIONS
*DB - Cushion controls on both ends (locations 1 & 5)
*DE - Cushion controls on extend only (location 1)
*DR - Cushion control retract only (location 5)
H4 - Slide ready cylinder (CVXS cylinder only) replacement (see note 5)
H47 - Rodlok® unit includes rodlok, adaptor, cylinder, and slide preassembled (see note 5)
L9 - NPT Ports (NPT-standard on imperial units)
M - BSP-standard on metric units
M - Magnetic piston for use with PHD Reed and Solid State Switches
*PB - Port controls on both ends (locations 1 & 5)
*PE - Port controls on extend only (location 1)
*PR - Port control on retract only (location 5)
UBxx - Optional port location

WITHOUT CYLINDER OPTIONS
H1 - No cylinder, slide section only
Sizes 2 and 3 require a Series CVB Cylinder only.
Sizes 4 through 9 use an ISO 6432/VDMA 24562 compliant cylinder.

- NOTES:**
- **Affects unit length. See option drawings for complete details. Options may decrease effective cushion length depending on position of stop collars.
 - Z1 option may have reduced cylinder performance due to chrome-plated stainless steel rod in place of chrome-plated alloy steel.
 - H4 and -H47 are not available in -Z1.
 - ***Rodlok® locking device is not available with -Z1.
 - Rodlok must be ordered separately when a replacement cylinder (-H4) is ordered with -H47 unit.
 - *Standard ports, cushion controls, and port controls are in locations 1 & 5. See diagram above. Sizes 2 and 3 use 10-32 [M5] ports when combined with port controls on the same surface.

CUSHION CONTROL OPTIONS
-D X X X
Cushion Control Locations
B - Both ends
E - Extend end only
R - Retract end only
Retract Location (5 & 7)
Omit if -DEx

Extend Location (1 & 3)
Omit if -DRx

SERIES 6250 SOLID STATE SWITCHES

PART NO.	DESCRIPTION	COLOR
62505-1-02	NPN (Sink) DC Magnetoresistive, 2 m cable	Brown
62506-1-02	PNP (Source) DC Magnetoresistive, 2 m cable	Tan
62515-1	NPN (Sink) DC Magnetoresistive, Quick Connect	Brown
62516-1	PNP (Source) DC Magnetoresistive, Quick Connect	Tan

SERIES 6250 REED SWITCHES

PART NO.	DESCRIPTION	COLOR
62507-1-02	AC/DC Reed, 2 m cable	Silver
62517-1	AC/DC Reed, Quick Connect	Silver

SPECIFICATIONS	SERIES SCV
OPERATING PRESSURE	35 psi min to 150 psi max [2.4 bar min to 10 bar max] air
OPERATING TEMPERATURE	-20° to +180°F [-29° to +82°C]
TRAVEL TOLERANCE	See table below
REPEATABILITY	±0.001 in [±.025 mm] of original position
VELOCITY	80 in/sec [2 m/sec] max., zero load at 87 psi [6.9 bar]
LUBRICATION	Factory lubricated for rated life
MAINTENANCE	Field repairable

UNIT SIZE	GUIDE SHAFT DIAMETER		BORE DIAMETER		CYLINDER ROD DIAMETER		SLIDE DIRECTION	EFFECTIVE AREA		BASE WEIGHT		TYPICAL DYNAMIC LOAD	
	in	mm	in	mm	in	mm		in²	mm²	lb	kg	lb	N
2	0.394	10	0.787	20	0.315	8	EXTEND RETRACT	0.49 0.41	314 264	1.75 + (.17 x T)	0.80 + (.003 x T)	8	36
3	0.472	12	0.984	25	0.394	10	EXTEND RETRACT	0.76 0.64	491 412	2.38 + (.22 x T)	1.08 + (.004 x T)	15	67
4	0.630	16	1.260	32	0.472	12	EXTEND RETRACT	1.25 1.07	804 691	3.95 + (.35 x T)	1.79 + (.006 x T)	25	111
5	0.787	20	1.575	40	0.630	16	EXTEND RETRACT	1.95 1.64	1257 1056	6.26 + (.50 x T)	2.84 + (.009 x T)	35	156
6	0.984	25	1.969	50	0.787	20	EXTEND RETRACT	3.04 2.56	1963 1649	11.37 + (.75 x T)	5.16 + (.013 x T)	50	222
7	0.984	25	2.480	63	0.787	20	EXTEND RETRACT	4.83 4.34	3117 2803	14.30 + (.79 x T)	6.49 + (.014 x T)	75	334
8	1.181	30	3.150	80	0.984	25	EXTEND RETRACT	7.79 7.03	5027 4536	26.67 + (1.14 x T)	12.11 + (.020 x T)	100	445
9	1.181	30	3.937	100	0.984	25	EXTEND RETRACT	12.17 11.41	7854 7363	35.83 + (1.22 x T)	16.27 + (.022 x T)	150	667

NOTES: 1) T=Travel length inches [mm].
 2) Thrust capacity, allowable mass and dynamic moment capacity must be considered when selecting a slide.
 3) For additional speed information, consult PHD's Series CV Cylinder pages.

TOTAL TRAVEL TOLERANCES

Tolerance on nominal travel length is shown in the following table:

UNIT SIZE	NOMINAL TRAVEL		NOMINAL TRAVEL TOLERANCE*	
	in	mm	in	mm
2 & 3	L ≤ 4	L ≤ 100	+0.059/-0.000	+1.50/-0.000
	L > 4	L > 100	+0.079/-0.000	+2.00/-0.000
4, 5, & 6	L ≤ 20	L ≤ 500	+0.079/-0.000	+2.00/-0.000
	L > 20	L > 500	+0.126/-0.000	+3.20/-0.000
7, 8, & 9	L ≤ 20	L ≤ 500	+0.098/-0.000	+2.50/-0.000
	L > 20	L > 500	+0.157/-0.000	+4.00/-0.000

*NOTE: Travel tolerance values measured at 60 ±4 psi, due to impact seal design.

CYLINDER FORCE CALCULATIONS

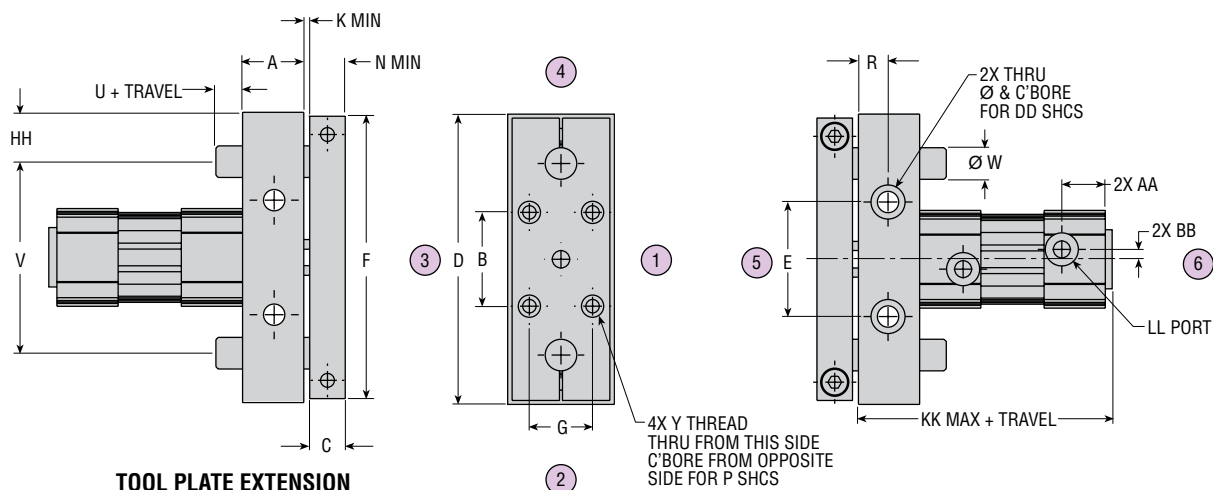
	IMPERIAL	METRIC
	$F = P \times A$	$F = 0.1 \times P \times A$
F = Cylinder Force	lbs	N
P = Operating Pressure	psi	bar
A = Effective Area	in²	mm²
(Extend or Retract)		

SIZING AND APPLICATION ASSISTANCE

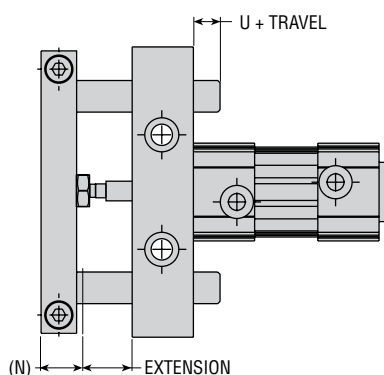
See PHD Product Sizing Catalog for specific and complete sizing information.
 Online sizing assistance is available at: www.phdinc.com/apps/sizing

DIMENSIONS: SERIES SCV SLIDES

SCV



TOOL PLATE EXTENSION



NOTES:

- 1) FOR OPTION DIMENSIONS AND DETAILS, SEE OPTION PAGES
- 2) ALL DIMENSIONS ARE CENTERED ON CENTERLINE OF UNIT UNLESS OTHERWISE SPECIFIED
- 3) UNIT TRAVEL = STROKE + TOOL PLATE EXTENSION. THE TOTAL UNIT TRAVEL SHOULD NOT EXCEED THE MAXIMUM RECOMMENDED TRAVEL.
- 4) *PORTS MAY APPEAR ON EITHER SIDE OF THE SLIDE CENTERLINE BASED ON OPTION COMBINATIONS.
- 5) **ALL UNITS, EXCEPT PORT WITH PORT CONTROL ON SAME SIDE, COMPLY WITH DIN 3852 PART 2 PORT SPECIFICATIONS FOR SHORT STUD AND LARGE SEALING SURFACE.

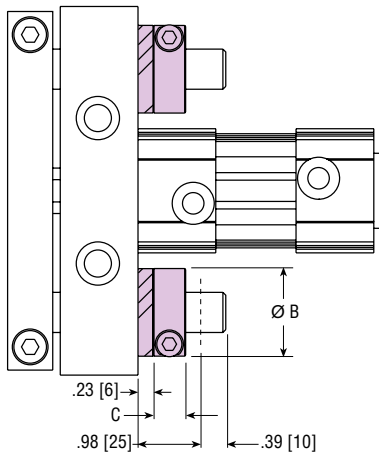
LETTER DIM	MODEL NUMBER															
	SCVx2		SCVx3		SCVx4		SCVx5		SCVx6		SCVx7		SCVx8		SCVx9	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
PHD CYL. BORE	0.787	20.0	0.984	25.0	1.260	32.0	1.575	40.0	1.969	50.0	2.480	63.0	3.150	80.0	3.937	100.0
A	1.102	28.0	1.299	33.0	1.220	31.0	1.417	36.0	1.772	45.0	1.772	45.0	2.205	56.0	2.402	61.0
B	1.516	38.5	1.969	50.0	1.870	47.5	2.283	58.0	2.559	65.0	3.150	80.0	3.543	90.0	4.724	120.0
C	0.630	16.0	0.669	17.0	0.709	18.0	0.906	23.0	1.220	31.0	1.220	31.0	1.732	44.0	1.732	44.0
D	4.409	112.0	4.783	121.5	5.787	147.0	6.929	176.0	8.563	217.5	8.563	217.5	10.748	273.0	11.339	288.0
E	1.969	50.0	1.870	47.5	2.283	58.0	2.559	65.0	3.150	80.0	3.543	90.0	4.724	120.0	5.315	135.0
F	4.252	108.0	4.626	117.5	5.630	143.0	6.772	172.0	8.406	213.5	8.406	213.5	10.591	269.0	11.181	284.0
G	0.906	23.0	1.181	30.0	1.260	32.0	1.417	36.0	1.772	45.0	1.417	36.0	1.496	38.0	1.969	50.0
H	1.417	36.0	1.614	41.0	1.890	48.0	2.283	58.0	2.717	69.0	3.386	86.0	3.937	100.0	4.921	125.0
K MIN	0.098	2.5	0.098	2.5	0.118	3.0	0.118	3.0	0.118	3.0	0.118	3.0	0.118	3.0	0.118	3.0
L	1.575	40.0	1.772	45.0	2.047	52.0	2.441	62.0	2.874	73.0	3.543	90.0	4.331	110.0	5.315	135.0
M	0.079	2.0	0.079	2.0	0.079	2.0	0.079	2.0	0.079	2.0	0.079	2.0	0.197	5.0	0.197	5.0
N MIN	0.728	18.5	0.768	19.5	0.827	21.0	1.024	26.0	1.339	34.0	1.339	34.0	1.850	47.0	1.850	47.0
P	#8	M4	#10	M5	1/4	M6	5/16	M8	3/8	M10	3/8	M10	7/16	M12	7/16	M12
R	0.630	16.0	0.709	18.0	0.709	18.0	0.906	23.0	1.063	27.0	1.063	27.0	1.299	33.0	1.299	33.0
U	0.394	10.0	0.394	10.0	0.394	10.0	0.394	10.0	0.394	10.0	0.394	10.0	0.394	10.0	0.394	10.0
V	2.992	76.0	3.189	81.0	3.819	97.0	4.606	117.0	5.630	143.0	5.630	143.0	7.283	185.0	7.874	200.0
W	0.394	10.0	0.472	12.0	0.630	16.0	0.787	20.0	0.984	25.0	0.984	25.0	1.181	30.0	1.181	30.0
Y	10-32	M5 x 0.8	1/4-20	M6 x 1	5/16-24	M8 x 1.25	3/8-24	M10 x 1.5	7/16-20	M12 x 1.75	7/16-20	M12 x 1.75	5/8-18	M16 x 2.0	5/8-18	M16 x 2.0
AA*	0.354	9.0	0.354	9.0	0.630	16.0	0.728	18.5	.728	18.5	0.787	20.0	0.709	18.0	0.866	22.0
BB*	0.167	4.2	0.177	4.5	0.197	5.0	0.236	6.0	0.236	6.0	0.394	10.0	0.394	10.0	0.472	12.0
DD	1/4	M6	5/16	M8	3/8	M10	7/16	M12	7/16	M12	5/8	M16	3/4	M20	3/4	M20
HH	0.709	18.0	0.797	20.25	0.984	25.0	1.161	29.5	1.467	37.3	1.467	37.3	1.732	44.0	1.732	44.0
KK	3.819	97.0	4.134	105.0	5.079	129.0	5.709	145.0	6.102	155.0	6.693	170.0	7.402	188.0	7.992	203.0
LL**	1/8	G 1/8	1/8	G 1/8	1/8	G 1/8	1/4	G 1/4	1/4	G 1/4	3/8	G 3/8	3/8	G 3/8	1/2	G 1/2

OPTIONS: SERIES SCV SLIDES

AE TRAVEL ADJUSTMENT AND SHOCK PADS ON EXTENSION

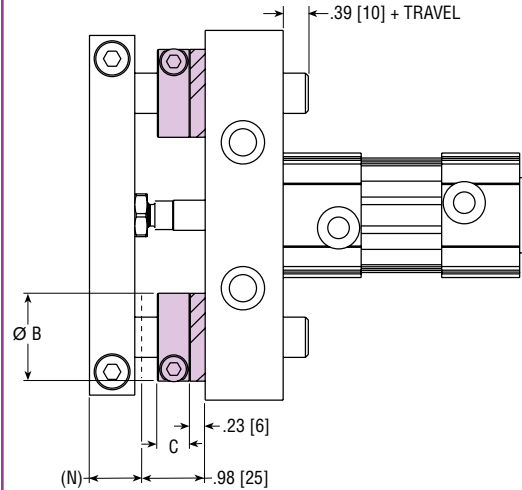
Two travel adjustment stop collars with polyurethane shock pads are used for adjustment of slide extension. The travel adjustment stop collars allow precise adjustment while the shock pads eliminate metal to metal contact, thereby reducing noise levels.

(SHOWN WITH ZERO TRAVEL)



AR TRAVEL ADJUSTMENT AND SHOCK PADS ON RETRACTION

Two travel adjustment stop collars with polyurethane shock pads are used for adjustment of slide retraction. The travel adjustment stop collars allow precise adjustment while the shock pads eliminate metal to metal contact, thereby reducing noise levels.



LETTER DIM	MODEL NUMBER															
	SCVx2		SCVx3		SCVx4		SCVx5		SCVx6		SCVx7		SCVx8		SCVx9	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
Ø B	0.984	25	1.102	28	1.378	35	1.654	42	1.890	48	1.890	48	2.165	55	2.165	55
C	0.394	10	0.433	11	0.512	13	0.591	15	0.591	15	0.591	15	0.591	15	0.591	15
N	0.728	18.5	0.768	19.5	0.827	21	1.024	26	1.339	34	1.339	34	1.850	47	1.850	47

NOTE: -AE and -AR options may decrease effective cushion length depending on position of stop collars.

L9 NPT PORTS

This option provides NPT ports on metric (SCV6x) units instead of the standard BSPP ports. The NPT ports are located in the same location as the BSPP ports.

MODEL	OPTIONAL NPT PORT	STANDARD BSPP PORT
SCVx2	1/8*	G 1/8*
SCVx3	1/8*	G 1/8*
SCVx4	1/8	G 1/8
SCVx5	1/4	G 1/4
SCVx6	1/4	G 1/4
SCVx7	3/8	G 3/8
SCVx8	3/8	G 3/8
SCVx9	1/2	G 1/2

*When port controls are specified on the same face as ports, the standard metric port is M5 and the -L9 option provides a 10-32 port.

Z1 CORROSION RESISTANT

This option provides a stainless steel piston rod with hard chrome plating in place of the standard hard chrome plated steel material. Guide shafts are hard chrome plated stainless steel or coated hardened steel in place of the standard material. An appropriate corrosion resistant treatment is applied to ferrous parts.

OPTIONS: SERIES SCV SLIDES



CUSHION CONTROL IN BOTH DIRECTIONS

(standard location 1 & 5)



CUSHION CONTROL ON EXTEND ONLY

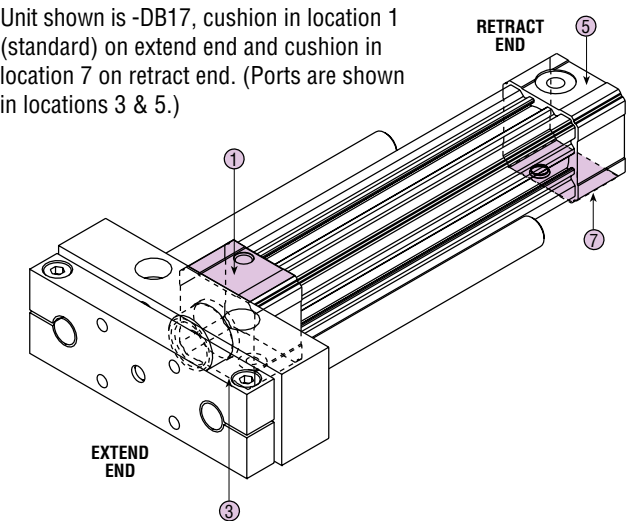
(standard location 1)



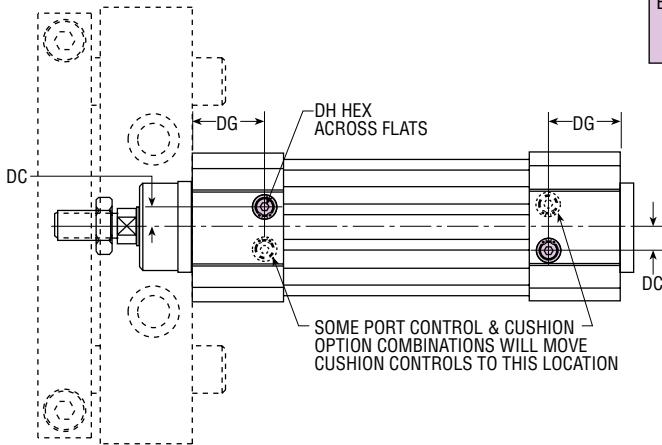
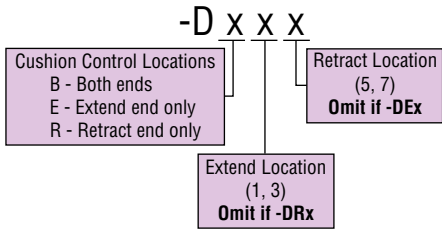
CUSHION CONTROL ON RETRACT ONLY

(standard location 5)

PHD cushions are designed for smooth deceleration at the ends of cylinder stroke. When the cushion is activated, the remaining volume in the cylinder must exhaust past an adjustable needle valve which controls the amount of deceleration. The effective cushion length for each bore size is shown in the table below. To specify alternative cushion control locations on the head or cap, see the option code below right.



CUSHION CONTROL OPTIONS



LETTER DIM	MODEL NUMBER															
	SCVx2		SCVx3		SCVx4		SCVx5		SCVx6		SCVx7		SCVx8		SCVx9	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
DC	.190	4.8	.226	5.7	.276	7.0	.374	9.5	.394	10.0	.354	9.0	.591	15.0	.630	16.0
DG	.581	14.8	.561	14.2	.965	24.5	1.083	27.5	1.043	26.5	1.201	30.5	1.181	30.0	1.339	34.0
DH	—	2.5	—	2.5	—	2.5	—	2.5	—	2.5	—	2.5	—	3.0	—	3.0
EFFECTIVE CUSHION LENGTH*	.441	11.2	.468	11.9	.599	15.2	.808	20.5	.871	22.1	.805	20.4	.892	22.7	1.190	30.2

*-AE and -AR options may decrease effective cushion length depending on position of stop collars.

OPTIONS: SERIES SCV SLIDES

H47

RODLOK® SLIDE & RODLOK®

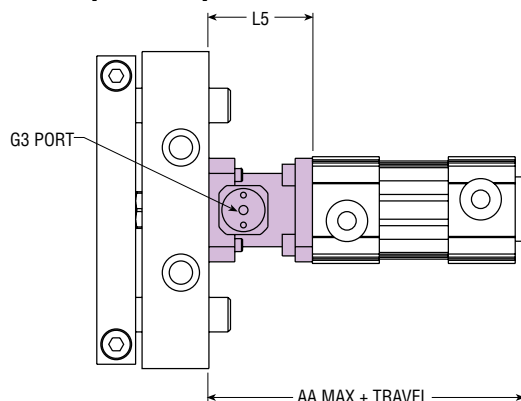
PHD's Rodlok® is ideal for locking the tool plate while in a static/stationary position. When the pressure is removed from the port of the Rodlok®, the mechanism will grip the piston rod of the cylinder and prevent it from moving. The loads are held indefinitely without power. Rodlok® performance is application and environment sensitive (Cleanliness of rod or Rodlok® will also affect performance). THE RODLOK® IS NOT DESIGNED TO BE USED AS A PERSONNEL SAFETY DEVICE.

SIZE	STATIC LOCKING FORCE*	
	lb	N
2	79	350
3	90	400
4	135	600
5	225	1000
6	337	1500
7	495	2200
8	674	3000
9	1124	5000

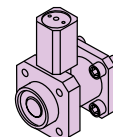
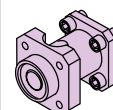
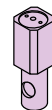
NOTE: *Locking force indicated above is the actual locking force with a dry clean rod and does not include any safety factor.

OPERATING PRESSURE

The operating pressure for the locking device is different than the operating pressure for the slide to which it is attached. The locking device of the Rodlok® is designed with an operating pressure range of 60 psi minimum to 150 psi maximum [4 to 10 bar]. The Series SCV Slide with a Rodlok® attached has an operating pressure range of 45 psi minimum to 150 psi maximum [3 to 10 bar].



RODLOK® KITS



SIZE	LOCKING DEVICE KIT	ADAPTOR KIT*	COMPLETE RODLOK®*	IMPERIAL PORT ADAPTOR
2	63459-07-1	63460-07-1	63461-07-1	—
3	63459-08-1	63460-08-1	63461-08-1	—
4	63459-01-1	63460-01-1	63461-01-1	—
5	63459-02-1	63460-02-1	63461-02-1	63465-1
6	63459-03-1	63460-03-1	63461-03-1	63465-1
7	63459-04-1	63460-04-1	63461-04-1	63465-1
8	63459-05-1	63460-05-1	63461-05-1	63465-1
9	63459-06-1	63460-06-1	63461-06-1	63465-1

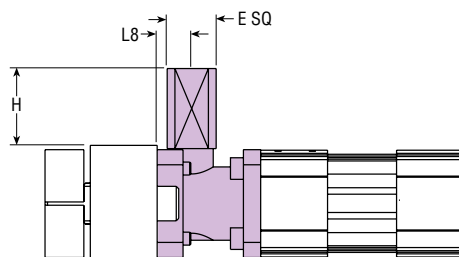
NOTES:

- *Kits ship with cylinder mounting hardware.
- Part numbers listed above are intended for replacement purposes only and are to be used specifically on slides with the -H47 option.
- Imperial port adaptor converts port from G 1/8 to 1/8 NPT.
- When ordering a replacement cylinder (-H4), Rodlok® must be ordered separately.

SIZE	DEVICE WEIGHT		ADAPTOR WEIGHT		TOTAL WEIGHT	
	lb	kg	lb	kg	lb	kg
2	0.14	0.06	0.14	0.06	0.31	0.14
3	0.14	0.06	0.16	0.07	0.36	0.16
4	0.20	0.09	0.28	0.13	0.57	0.26
5	0.30	0.14	0.44	0.20	0.93	0.42
6	0.54	0.24	0.84	0.38	1.76	0.80
7	0.88	0.40	1.3	0.59	2.56	1.16
8	1.40	0.64	2.88	1.31	5.04	2.29
9	2.12	0.96	4.76	2.16	7.66	3.47

NOTE: Total weight includes rod adder for -H46/-H47 cylinder.

The Rodlok® locking device and adaptor can be purchased separately as kits. See chart above. The locking device and adaptor are not available with a corrosion resistant (-Z1 option) finish.



LETTER DIM	MODEL NUMBER															
	SCVx2		SCVx3		SCVx4		SCVx5		SCVx6		SCVx7		SCVx8		SCVx9	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
H	1.280	32.5	1.181	30.0	1.339	34.0	1.476	37.5	1.811	46.0	1.811	46.0	2.520	64.0	2.224	56.5
E	.807	20.5	.807	20.5	.984	25.0	1.083	27.5	1.280	32.5	1.614	41.0	1.929	49.0	2.087	53.0
G3	M5	M5	M5	M5	1/8	G 1/8	1/8	G 1/8	1/8	G 1/8	1/8	G 1/8	1/8	G 1/8	1/8	G 1/8
L5	1.575	40	1.732	44	1.890	48	2.165	55	2.756	70	2.756	70	3.543	90	3.622	92
L8	0.512	13	0.512	13	0.630	16	0.768	19.5	0.827	21	0.827	21	1.102	28	1.063	27
AA	4.291	109	4.567	116	6.969	177	7.874	200	8.858	225	9.449	240	10.945	278	1.1614	295

All dimensions are reference only unless specifically toleranced.

OPTIONS: SERIES SCV SLIDES



PORT CONTROLS® ON BOTH ENDS

(standard location 1 & 5)



PORT CONTROLS® ON EXTEND ONLY

(standard location 1)



PORT CONTROLS® ON RETRACT ONLY

(standard location 5)

PHD's Port Control® is a built-in flow control for regulating the speed of the slide through its entire stroke. The Port Control operates on the "meter-out" principle and features an adjustable needle in a cartridge with a check seal. The self-locking needle has micrometer threads and is adjustable under pressure. The needle determines the orifice size which controls the exhaust flow rate of the actuator. The check seal expands while air is exhausting from the actuator, forcing the air to exhaust past the adjustable needle. The check seal collapses to allow a free flow of incoming air. The PHD Port Control saves space and eliminates the cost of fittings and installation for external flow control valves. Refer to option code below left to specify port control locations.

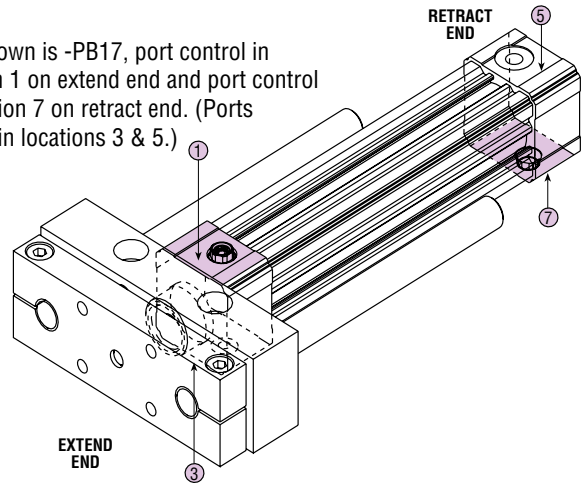
PORT CONTROL OPTIONS

-P X X X

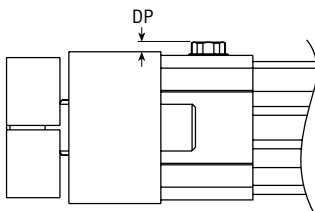
Port Control Locations
B - Both ends
E - Extend end only
R - Retract end only

Retract Location
(5, 7)
Omit if -PEX

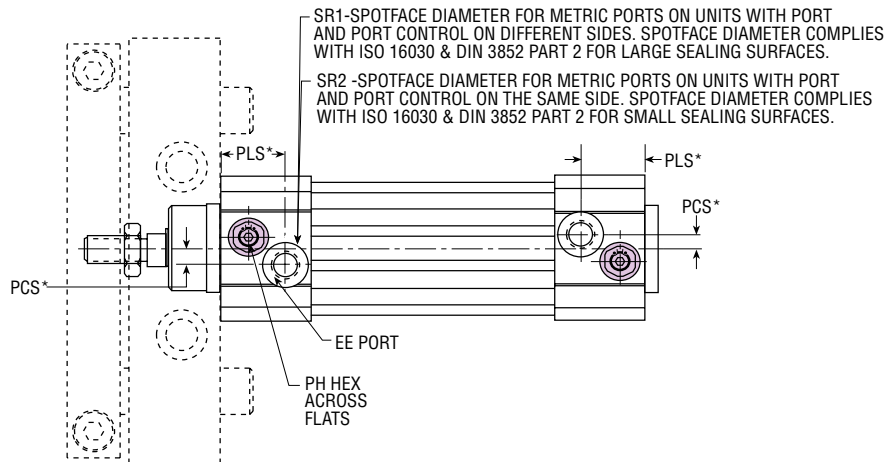
Extend Location
(1, 3)
Omit if -PRx



Unit shown is -PB17, port control in location 1 on extend end and port control in location 7 on retract end. (Ports shown in locations 3 & 5.)



SIDE VIEW



SR1 - SPOTFACE DIAMETER FOR METRIC PORTS ON UNITS WITH PORT AND PORT CONTROL ON DIFFERENT SIDES. SPOTFACE DIAMETER COMPLIES WITH ISO 16030 & DIN 3852 PART 2 FOR LARGE SEALING SURFACES.

SR2 - SPOTFACE DIAMETER FOR METRIC PORTS ON UNITS WITH PORT AND PORT CONTROL ON THE SAME SIDE. SPOTFACE DIAMETER COMPLIES WITH ISO 16030 & DIN 3852 PART 2 FOR SMALL SEALING SURFACES.

LETTER DIM	MODEL NUMBER															
	SCVx2		SCVx3		SCVx4		SCVx5		SCVx6		SCVx7		SCVx8		SCVx9	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
EE*	10-32	M5	10-32	M5	1/8 NPT	G 1/8	1/4 NPT	G 1/4	1/4 NPT	G 1/4	3/8 NPT	G 3/8	3/8 NPT	G 3/8	1/2 NPT	G 1/2
PCS*	.276	7.0	.276	7.0	.197	5.0	.236	6.0	.236	6.0	.450	11.4	.512	13.0	.906	23.0
PH	—	2.5	—	2.5	—	2.5	—	2.5	—	2.5	—	3.0	—	3.0	—	6.0
PLS*	.571	14.5	.571	14.5	.867	22.0	.925	23.5	.905	23.0	.984	25.0	1.024	26.0	1.142	29.0
SR1*	—	16.5	—	16.5	—	19.0	—	25.0	—	25.0	—	28.0	—	28.0	—	34.0
SR2	.354	9.0	.354	9.0	—	16.5	—	19.0	—	19.0	—	23.0	—	23.0	—	27.0
DP*	.066	1.7	.026	0.7	.209	5.3	.122	3.1	.024	0.6	.004	0.1	-.201	-5.1	-.189	-4.8

*Dimensions shown are for units with port and port control in the same location. For units with other port and port control combinations, standard port location dimensions apply. Ports may be located on either side of the slide centerline depending on port control and cushion option combinations.

in = Table information for imperial units mm = Table information for metric units

OPTIONS: SERIES SCV SLIDES



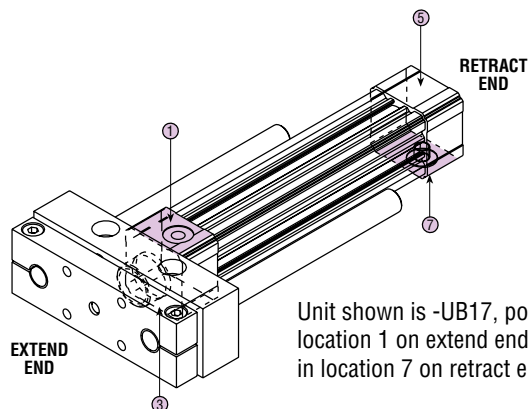
ALTERNATE PORT LOCATION

With this option, alternate port locations can be specified, providing increased flexibility and customer convenience. See option code below to specify port locations.

PORT LOCATION OPTIONS

-UB x x

Extend Location (Head) (1, 3)	Retract Location (Cap) (5, 7)
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Unit shown is -UB17, port in location 1 on extend end and port in location 7 on retract end.

SCV



MAGNET FOR PHD REED AND SOLID STATE SWITCHES

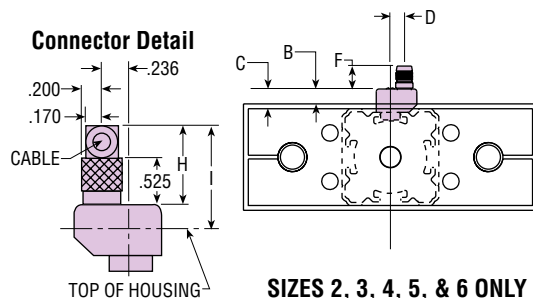
This option equips the cylinder with a magnetic band on the piston for use with PHD Reed and Solid State Switches listed below. These switches mount easily to the cylinder using "T" slots in the body. See the Switch section for complete switch information.

SERIES 6250 SOLID STATE SWITCHES

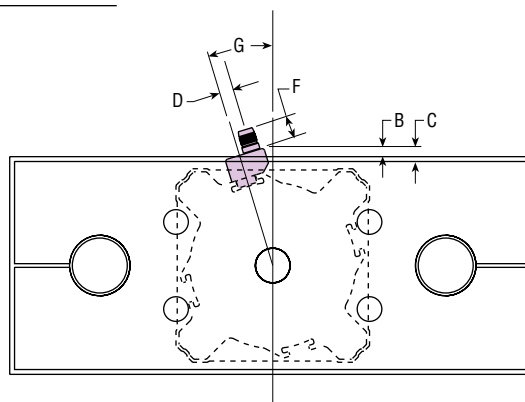
PART NO.	DESCRIPTION	COLOR
62505-1-02	NPN (Sink) DC Solid State, 2 m cable	Brown
62506-1-02	PNP (Source) DC Solid State, 2 m cable	Tan
62515-1	NPN (Sink) DC Solid State, Quick Connect	Brown
62516-1	PNP (Source) DC Solid State, Quick Connect	Tan

SERIES 6250 REED SWITCHES

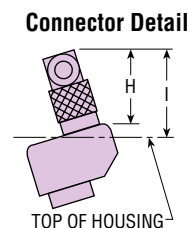
PART NO.	DESCRIPTION	COLOR
62507-1-02	AC/DC Reed, 2 m cable	Silver
62517-1	AC/DC Reed, Quick Connect	Silver



SIZES 2, 3, 4, 5, & 6 ONLY



SIZES 7, 8, & 9 ONLY



LETTER DIM	MODEL NUMBER															
	SCVx2		SCVx3		SCVx4		SCVx5		SCVx6		SCVx7		SCVx8		SCVx9	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
B	.223	5.7	.223	5.7	.187	4.8	.138	3.5	.187	4.8	.138	3.5	.059	1.5	-.079*	-2.0*
C	.302	7.7	.302	7.7	.266	6.8	.217	5.5	.266	6.8	.217	5.5	.256	6.5	.000	0.0
D	.228	5.8	.228	5.8	.228	5.8	.228	5.8	.228	5.8	.228	5.8	.228	5.8	.228	5.8
F	.373	9.5	.373	9.5	.373	9.5	.373	9.5	.373	9.5	.373	9.5	.373	9.5	.373	9.5
G	—	—	—	—	—	—	—	—	—	—	17°	17°	20°	20°	24°	24°
H	.870	22.1	.870	22.1	.870	22.1	.870	22.1	.870	22.1	.831	21.1	.819	20.8	.795	20.2
I	1.113	28.3	1.113	28.3	1.077	27.3	1.008	25.6	1.037	26.3	.969	24.6	.878	22.3	.717	18.2

*Dimension is below the indicated surface.

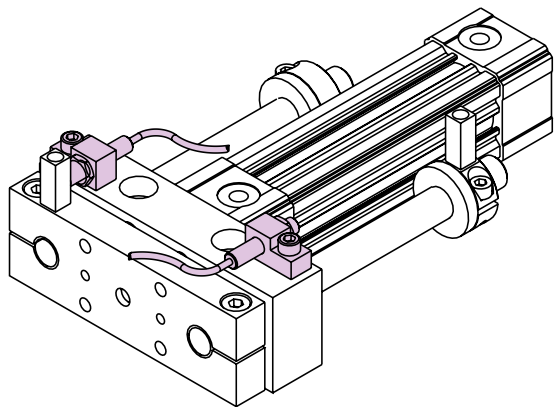
All dimensions are reference only unless specifically toleranced.

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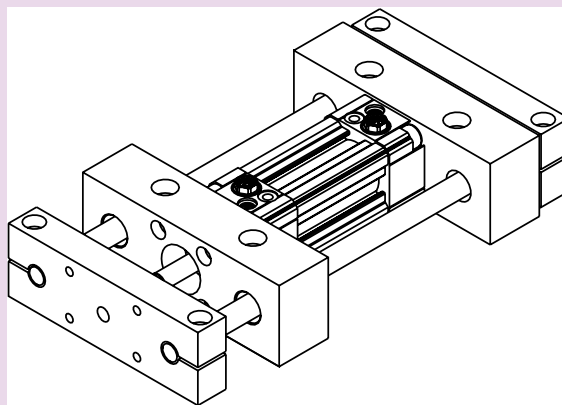
PRODUCT VARIATIONS: SERIES SCV SLIDES

The following are examples of Series SCV Slide variations which can be easily configured. Contact PHD for additional information on these or other configurations.

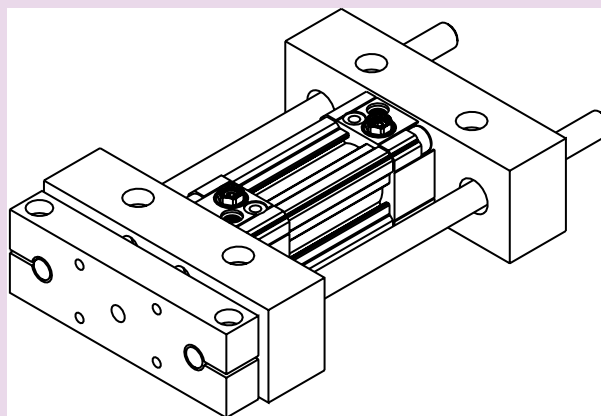
SCV



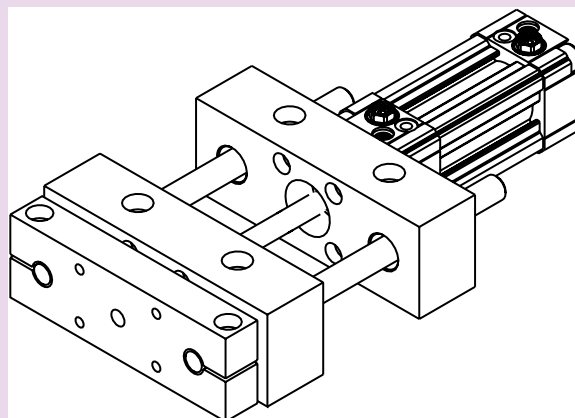
This Series SCV Slide is fitted with travel adjustment on extend and metal sensing proximity switches in both directions of travel. These switches can easily be adapted to the SCV Slide in place of PHD's Series 6250 Switches.



Shown is a version that produces a base type slide. The cylinder, bearing housings, and base plate move and the two tool plates remain fixed.



This Series SCV Slide has extended guide shafts and a second bearing housing attached to the cylinder cap. This configuration provides a higher load carrying capability while reducing wear.



This is another variation where a second bearing housing is combined with a tool plate extension. This also provides a more rigid bearing base for higher load carrying capability.