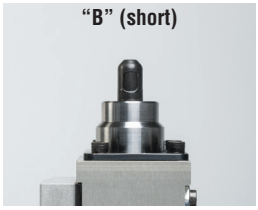
PLK

Major Benefits

- Completely enclosed fingers
- Available in pin diameters from 12.00 to 30.00 mm
- 5 or 10 mm clamping stroke
- Short, medium, and long pin top shapes
- Finger direction easily changed in the field
- Interchangeable pin sizes, styles, and heights
- Position sensing provides open and closed sensing with industry standard AC and DC weld field immune switch mounted in a protected housing
- Self-locking internal threads throughout eliminate need for thread locking adhesives or additional locking components

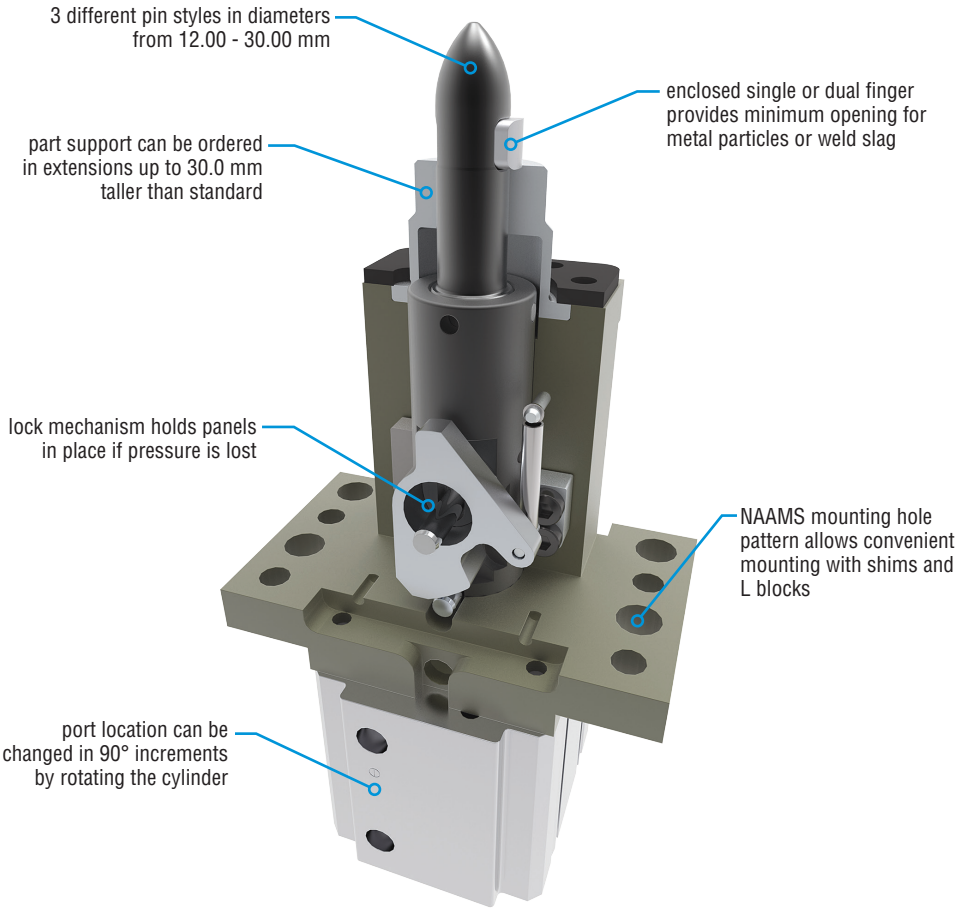
PIN STYLES

"B" (short)



"C" (medium)

"N" (long)



TO ORDER, SPECIFY:
Model, Unit Size and Stroke, Design No., Pin Size and Style and additional Options if desired.

UNIT SIZE / CLAMP STROKE
505 - 50 mm Bore, 5 mm Stroke
510 - 50 mm Bore, 10 mm Stroke

FINGER(S) DIRECTION
FD4S - Position 4 single finger (standard)
FD1S - Position 1 single finger
FD2S - Position 2 single finger
FD3S - Position 3 single finger
FD1D - Position 1/3 dual finger (see Note 4)
FD2D - Position 2/4 dual finger (see Note 4)

PORT FITTINGS (BOTH PORTS)
Blank - No fittings
LAA - 90° Swivel elbow, Metal
LBB - 90° Swivel elbow, Plastic

CYLINDER SWITCH OPTION
Blank - No Magnet (see Note 2)
SW00 - Magnet for switches installed
SW41 - 1 NPN Switch installed
SW42 - 2 NPN Switches installed
SW51 - 1 PNP Switch installed
SW52 - 2 PNP Switches installed

DESIGN NO.
2 - Imperial
6 - Metric
See Note 3

PIN STYLE
B - Short length pin
C - Medium length pin
N - Long length pin

PORT POSITION
PP1 - Position 1 (standard)
PP2 - Position 2
PP3 - Position 3
PP4 - Position 4

MISCELLANEOUS OPTIONS
(specify all that apply)
Blank - None
R01 - Sensor Flag
R02 - Double Rod

MODEL

PLK	510	-	2	-	1872	C	1	-	E000	-	FD4S	-	PP1	-	LAA	-	PS1D1	-	R01	-	SW00	-	B01	-	MT20

PIN DIAMETER
Pin diameters available from 12.00 to 30.00 in 0.01 increments.
Examples: For 18.72 mm nominal pin, specify 1872
For 25.50 mm nominal pin, specify 2550
+0.00 / -0.02 mm Pin Tolerance

PART SUPPORT EXTENSION
E000 - Standard extension
Part support extension is available up to 30 mm taller than standard in 0.5 mm increments
Example: For 30.0 mm extension, specify E300
For 25.5 mm extension, specify E255

POSITION SENSOR OPTIONS
Blank - No sensor
Px1xx- Position sensor (see Position Sensor Option Code)

ADJUSTABLE LOCK SETTING
See Note 1

OPTIONAL MOUNTING PATTERNS
Blank - Standard flange body
B01 - 45 x 30 pattern 4X M10 threads + 2X 8 mm dowel
B02 - 30 x 60 pattern 4X M10 threads + 2X 8 mm dowel
B03 - 40 x 40 pattern 4X M10 threads + 2X 8 mm dowel
B04 - 40 x 40 pattern 2X M10 threads + 2X 8 mm dowel
B05 - 30 x 30 pattern 2X M10 threads + 2X 10 mm dowel
B06 - 45 x 30 pattern 2X M12 threads + 2X 10 mm dowel

NOTES:
1) To have the lock preset for sheet metal thickness, order MT and (the thickness). Lock may be preset at factory for material thickness in 0.1 mm [0.004 in] increments. MT11 would be for 1.1 mm material, MT20 would be for 2.0 mm material. Lock range is from 0 to 4.0 mm [0 to 0.157 in]. Unless otherwise specified, factory lock default setting is MT20.
2) Magnet will be installed if cylinder switches are ordered.
3) Metric units have metric ports, imperial units have imperial ports.
4) Dual fingers are available in 15-30 mm pin diameters only.

⚠ Options may affect unit length. See dimensional pages and option information details.

POSITION SENSOR OPTION CODE

P	x	1	x	x

HOUSING OPTION
P - Positional Sensing

SENSING OPTION
S - Standard
R - Reversed

SWITCH HOUSING OPTION
1 - Position 1

CONNECTOR POSITION
1 - Parallel to main pin
9 - Perpendicular to main pin*

SWITCH OPTION
N - No Switch
A - 5-pin AC/DC Switch (Turck)
D - 4-pin PNP DC Switch (P + F)
E - 4-pin PNP DC Switch (Turck)
F - 4-pin PNP DC Switch (Efector)
H - 4-pin NPN DC Switch (P + F)
J - 4-pin NPN DC Switch (Turck)

***NOTE:**
Connector position 9 is not available with switch option A.

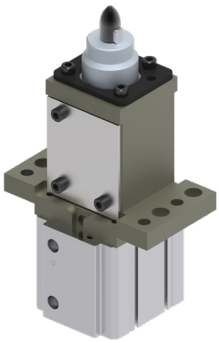
CAD & Sizing Assistance

Use PHD's free online Product Sizing and CAD Configurator at **phdinc.com/myphd**

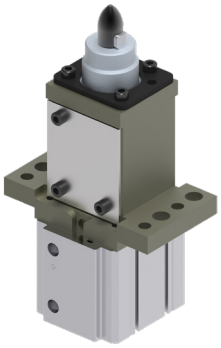
SPECIFICATIONS	SERIES PLK
SEALS	Polyurethane
OPERATING TEMPERATURE	-20° to +180°F [-28° to +82°C]
LUBRICATION	Factory lubricated for life

MODEL	UNIT WEIGHT		CLAMP FORCE 87 psi [6 bar]		CLAMP FORCE FACTOR Cf		CLOSE OR OPEN TIME 87 psi [6 bar]	DISPLACEMENT			
								CLOSE		OPEN	
	lb	kg	lb	N	Imperial	Metric	sec	in³	cm³	in³	cm³
PLK5xx-x-1250C1-E000-FD4S-PP1	4.2	1.91	223	991	2.56	165	0.5	2.47	40.5	2.95	48.3
PLK5xx-x-1250N1-E300-FD4S-PP1	4.5	2.05									
PLK5xx-x-1550C1-E000-FD4S-PP1	4.2	1.92									
PLK5xx-x-1550N1-E300-FD4S-PP1	4.6	2.09									
PLK5xx-x-1850C1-E000-FD4S-PP1	4.3	1.96									
PLK5xx-x-1850N1-E300-FD4S-PP1	4.8	2.18									
PLK5xx-x-2550C1-E000-FD4S-PP1	4.8	2.18									
PLK5xx-x-2550N1-E300-FD4S-PP1	5.5	2.51									
PLK5xx-x-2950C1-E000-FD4S-PP1	4.9	2.21									
PLK5xx-x-2950N1-E300-FD4S-PP1	5.7	2.58									

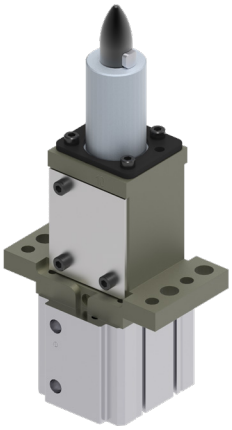
NOTE: All Series PLK model descriptions are based on the “C” or “N” style pin shape. All “B” style pin shapes will weigh the same or slightly less than the “C” style based on the same model description.



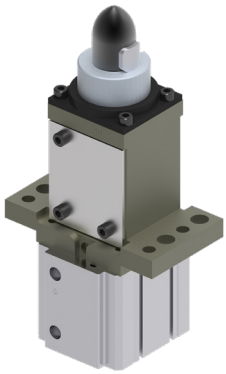
PLK510-2-1250C1-E000-FD4S-PP1



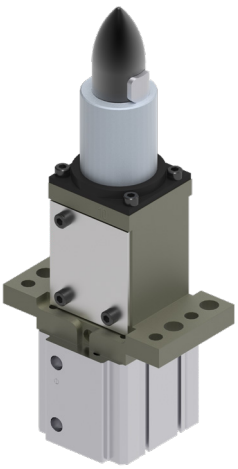
PLK510-2-1550C1-E000-FD4S-PP1



PLK510-2-1850N1-E300-FD4S-PP1

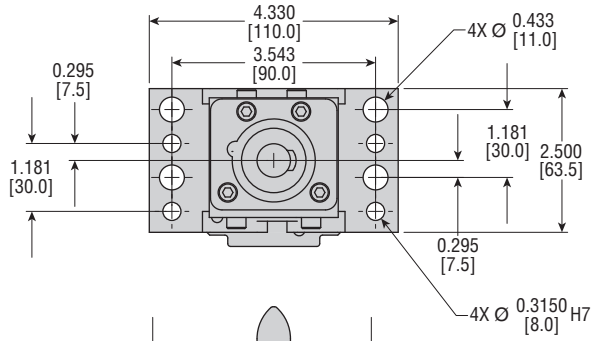


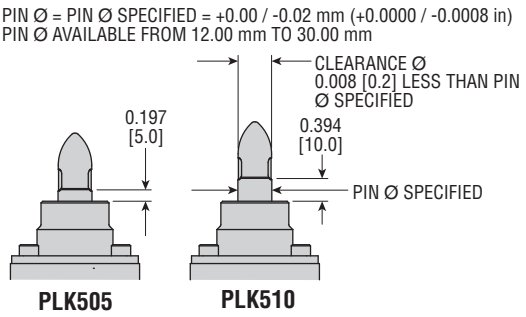
PLK510-2-2550C1-E000-FD4S-PP1

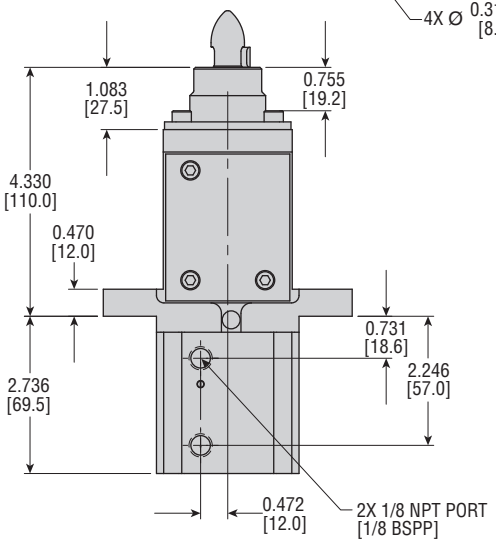


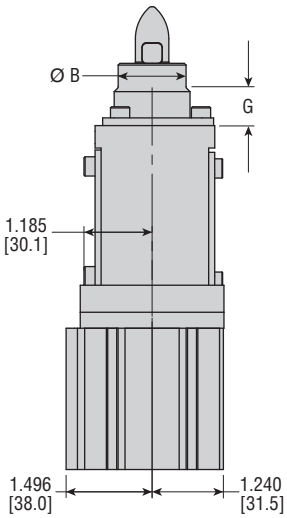
PLK510-2-2950N1-E300-FD4S-PP1

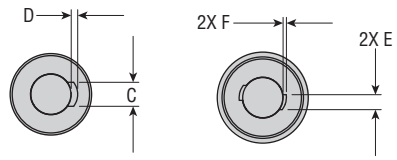
DIMENSIONS: Series PLK

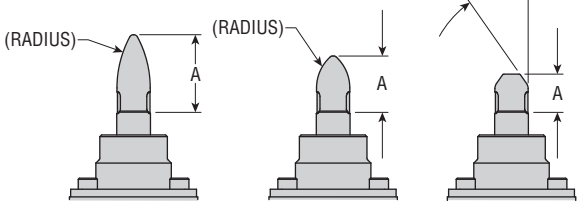












SINGLE FINGER **DUAL FINGERS** **N STYLE PIN** **C STYLE PIN** **B STYLE PIN**

LETTER DIM	MODEL NUMBER									
	PLK5xx-x-1200 thru PLK5xx-x-1249		PLK5xx-x-1250 thru PLK5xx-x-1269		PLK5xx-x-1270 thru PLK5xx-x-1499		PLK5xx-x-1500 thru PLK5xx-x-1699		PLK5xx-x-1700 thru PLK5xx-x-1799	
	in	mm	in	mm	in	mm	in	mm	in	mm
A - N STYLE	1.143	29.0	1.143	29.0	1.143	29.0	1.358	34.5	1.358	34.5
A - C STYLE	0.867	22.0	0.867	22.0	0.867	22.0	0.985	25.0	0.985	25.0
A - B STYLE	0.590	15.0	0.590	15.0	0.590	15.0	0.669	17.0	0.669	17.0
B	1.104	28.0	1.104	28.0	1.104	28.0	1.181	30.0	1.181	30.0
C	0.263	6.7	0.263	6.7	0.263	6.7	0.348	8.8	0.348	8.8
D	0.056	1.4	0.056	1.4	0.068	1.7	0.095	2.4	0.108	2.7
E	—	—	—	—	—	—	0.217	5.5	0.217	5.5
F	—	—	—	—	—	—	0.041	1.0	0.064	1.6
G (E000)	0.714	18.1	0.714	18.1	0.714	18.1	0.714	18.1	0.714	18.1

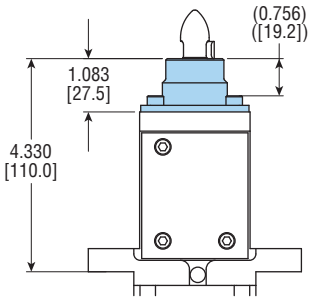
LETTER DIM	MODEL NUMBER							
	PLK5xx-x-1800 thru PLK5xx-x-1999		PLK5xx-x-2000 thru PLK5xx-x-2199		PLK5xx-x-2200 thru PLK5xx-x-2499		PLK5xx-x-2500 thru PLK5xx-x-3000	
	in	mm	in	mm	in	mm	in	mm
A - N STYLE	1.379	35.0	1.379	35.0	1.733	44.0	2.028	51.5
A - C STYLE	1.083	27.5	1.083	27.5	1.221	31.0	1.427	36.2
A - B STYLE	0.669	17.0	0.669	17.0	0.728	18.5	0.886	22.5
B	1.338	34.0	1.338	34.0	1.417	36.0	1.654	42.0
C	0.348	8.8	0.348	8.8	0.474	12.0	0.599	15.2
D	0.108	2.75	0.108	2.75	0.108	2.75	0.108	2.75
E	0.217	5.5	0.217	5.5	0.312	7.9	0.376	9.6
F	0.074	1.9	0.094	2.4	0.104	2.6	0.108	2.7
G (E000)	—	—	—	—	—	—	—	—

All dimensions are reference only unless specifically toleranced.

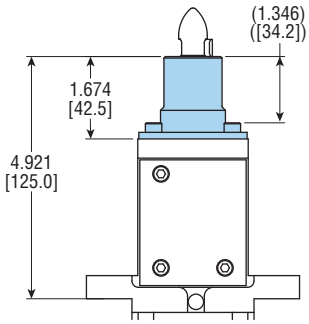
Exxx PART SUPPORT EXTENSION

The Exxx option allows for an optional part support extension. The Exxx can be ordered in 0.5 mm increments from 0.5 to 30.0 mm taller. The Exxx option is available with all bodies or pin styles.

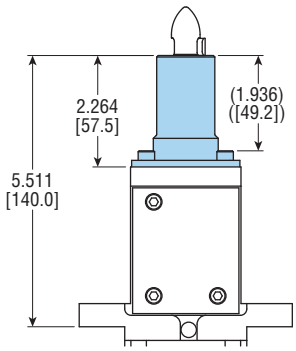
E000 is standard 27.5 mm.
E005 is 0.5 mm taller than standard or 28.00 mm.
E150 is 15.0 mm taller than standard or 42.50 mm.
E300 is 30.0 mm taller than standard or 57.50 mm.
For part support extensions greater than 30.0 mm (E300), consult PHD.



E000



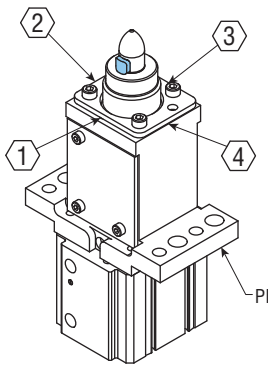
E150



E300

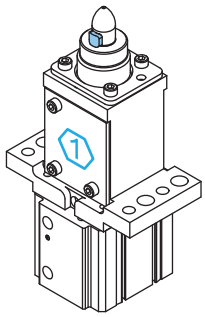
FDxx FINGER DIRECTION

The FDxx option provides alternate finger directions for flexibility and customer convenience.

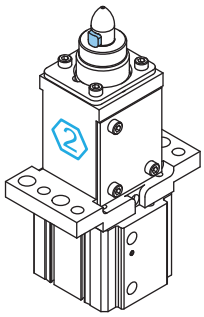


NOTE:
NUMBER IN HEX INDICATES POSITION IN RELATION TO PIN HOUSING

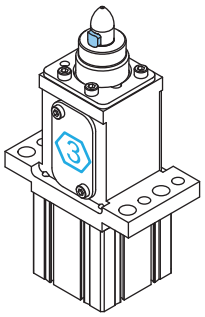
SINGLE FINGERS:



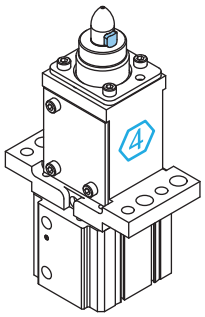
FD1S



FD2S

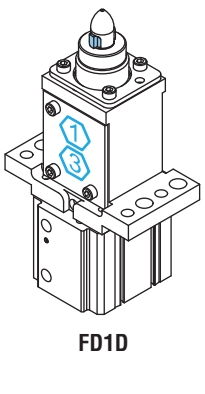


FD3S

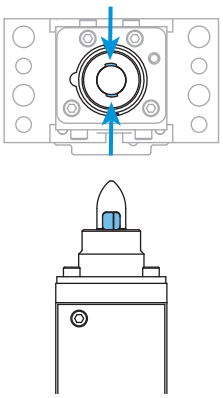


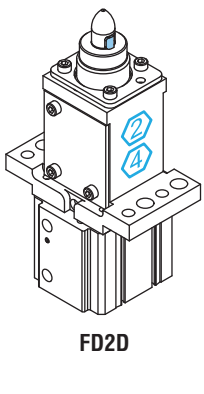
FD4S

DUAL FINGERS:

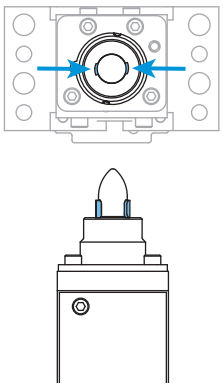


FD1D





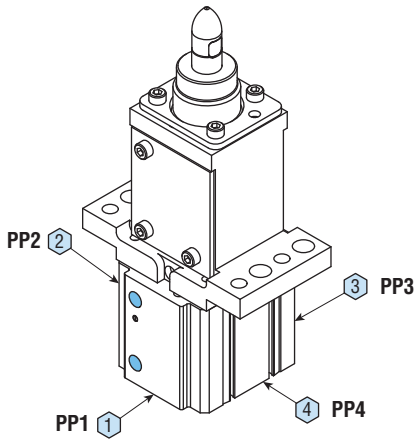
FD2D



All dimensions are reference only unless specifically toleranced.

PPx PORT LOCATION

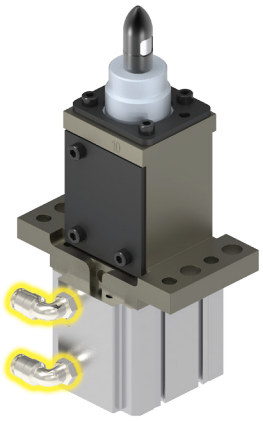
The PPx option provides alternate port locations for the cylinder providing flexibility and customer convenience. The cylinder can be rotated in the field by removing the cylinder mounting screws and rotating to the desired location in 90° increments.

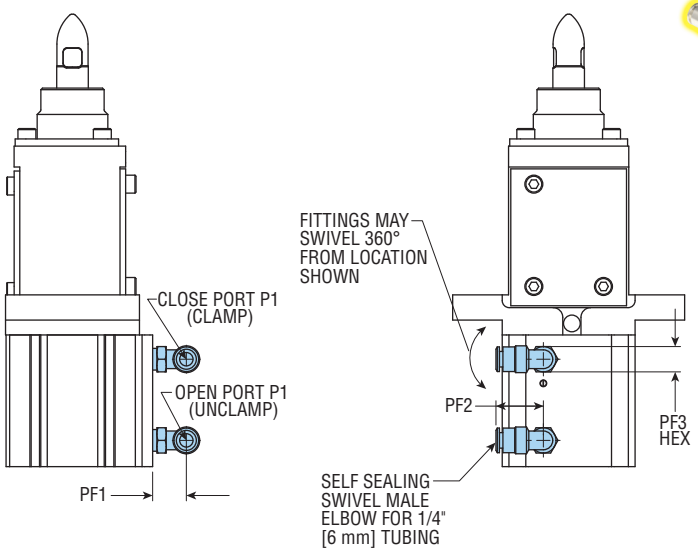


NOTE: NUMBER IN HEX INDICATES PORT POSITION IN RELATION TO PIN HOUSING

Lxx PORT FITTINGS

The LAA (metal) or LBB (plastic) accessory provides 90° swivel fittings for ease of air line hook up.





LETTER DIM	MODEL NUMBER PLK5xx	
	in	mm
P1	1/8 NPT	1/8 BSPP
PF1	0.629	16.0
PF2	0.885	22.5
PF3	0.472	12.0

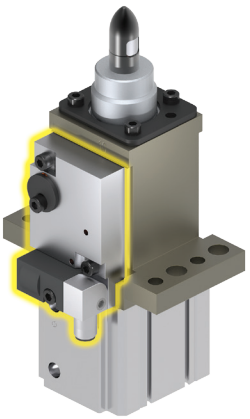
OPTION CODE	PART NUMBER	
	Imperial	Metric
LAA	62178-003	62195-005
LBB	71120-001	71121-001

All dimensions are reference only unless specifically toleranced.

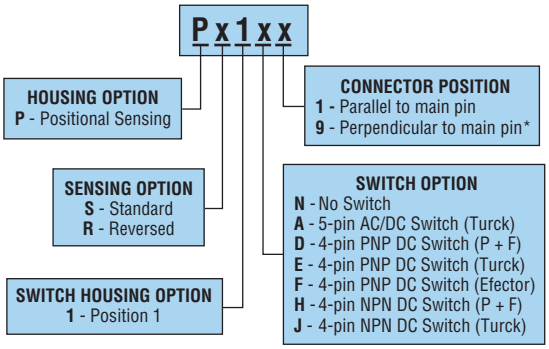
PS1xx STANDARD POSITION SENSING

PR1xx REVERSED POSITION SENSING

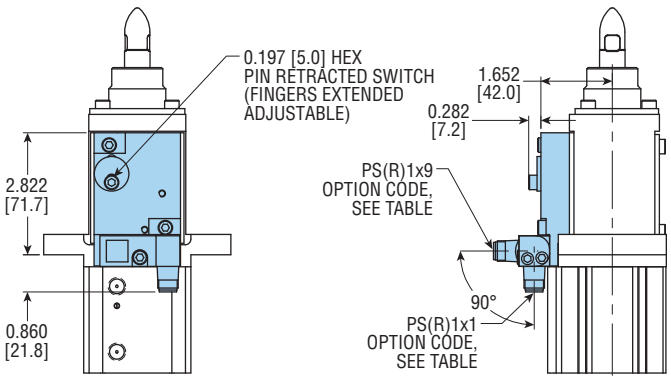
This option provides clamp and unclamp sensing by affixing an aluminum housing to the side of the clamp body. The unclamp switch is fixed needing no adjustment. The clamp switch is adjustable throughout the entire clamp stroke. Loosening the M5 screw and sliding it up or down adjusts the clamp switch position. PS positions the S02 switch to sense unclamped and the S01 switch to sense clamped. PR positions the S01 switch to sense unclamped and the S02 switch to sense clamped. See diagrams for satellite switch to quick disconnect pin number relationships on page 43.



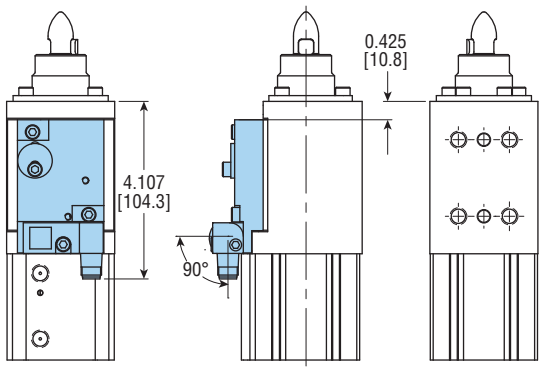
POSITION SENSOR OPTION CODE



***NOTE:**
Connector position 9 is not available with switch option A.



FLANGE STYLE BODY



THREADED BODY STYLE

OPTION CODE	CABLE CONNECTION
PS(R)1A1	1/2-20 UNF
PS(R)1D1(9)	M12 x 1
PS(R)1E1(9)	M12 x 1
PS(R)1F1(9)	M12 x 1
PS(R)1H1(9)	M12 x 1
PS(R)1J1(9)	M12 x 1

All dimensions are reference only unless specifically toleranced.

SWITCH NUMBERS IF ORDERED SEPARATELY

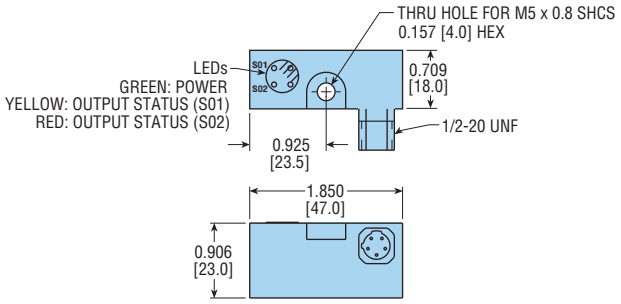
PLK HOUSING BODY STYLE	SWITCH HOUSING KIT NUMBER	SWITCH NUMBER	SWITCH OPTION	DESCRIPTION
FLANGE STYLE HOUSING PS1xx SWITCH	79092-00	No Switch	N	Switch; No Switch
	79092-01	71483-001-PLK	D	Switch; 4 Pin DC, PNP, P & F
	79092-02	71483-002-PLK	A	Switch; 5 Pin AC/DC, Turck
	79092-03	71483-003-PLK	E	Switch; 4 Pin DC, PNP, Turck
	79092-04	71483-004-PLK	F	Switch; 4 Pin DC, PNP, Efector
	79092-05	71483-005-PLK	H	Switch; 4 Pin DC, NPN, P & F
	79092-06	71483-006-PLK	J	Switch; 4 Pin DC, NPN, Turck
FLANGE STYLE HOUSING PR1xx SWITCH	79093-00	No Switch	N	Switch; No Switch
	79093-01	71483-001-PLK	D	Switch; 4 Pin DC, PNP, P & F
	79093-02	71483-002-PLK	A	Switch; 5 Pin AC/DC, Turck
	79093-03	71483-003-PLK	E	Switch; 4 Pin DC, PNP, Turck
	79093-04	71483-004-PLK	F	Switch; 4 Pin DC, PNP, Efector
	79093-05	71483-005-PLK	H	Switch; 4 Pin DC, NPN, P & F
	79093-06	71483-006-PLK	J	Switch; 4 Pin DC, NPN, Turck
THREADED BXX STYLE HOUSING PS1xx SWITCH	79094-00	No Switch	N	Switch; No Switch
	79094-01	71483-001-PLK	D	Switch; 4 Pin DC, PNP, P & F
	79094-02	71483-002-PLK	A	Switch; 5 Pin AC/DC, Turck
	79094-03	71483-003-PLK	E	Switch; 4 Pin DC, PNP, Turck
	79094-04	71483-004-PLK	F	Switch; 4 Pin DC, PNP, Efector
	79094-05	71483-005-PLK	H	Switch; 4 Pin DC, NPN, P & F
	79094-06	71483-006-PLK	J	Switch; 4 Pin DC, NPN, Turck
THREADED BXX STYLE HOUSING PR1xx SWITCH	79095-00	No Switch	N	Switch; No Switch
	79095-01	71483-001-PLK	D	Switch; 4 Pin DC, PNP, P & F
	79095-02	71483-002-PLK	A	Switch; 5 Pin AC/DC, Turck
	79095-03	71483-003-PLK	E	Switch; 4 Pin DC, PNP, Turck
	79095-04	71483-004-PLK	F	Switch; 4 Pin DC, PNP, Efector
	79095-05	71483-005-PLK	H	Switch; 4 Pin DC, NPN, P & F
	79095-06	71483-006-PLK	J	Switch; 4 Pin DC, NPN, Turck

Kit includes: Switch housing, plate, switch specified with parts pre-assembled. Mounting fasteners included.

MATCHING CORDSETS 2 METERS LONG

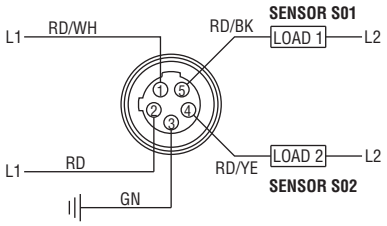
SWITCH OPTION	PHD PART NUMBER	CORDSET PART NUMBER
A	73317-00-02	KB 5T-2
D	65440-001-02	V1-G-YE2M-PVC
E	78039-00-02	RK 4.4T-2
F	65440-001-02	V1-G-YE2M-PVC
H	65440-001-02	V1-G-YE2M-PVC
J	78039-00-02	RK 4.4T-2

SWITCH OPTION A 71483-002-PLK Turck Part #: Ni 2-Q6.5-ADZ32-0.16-FSB 5.4X4/S304

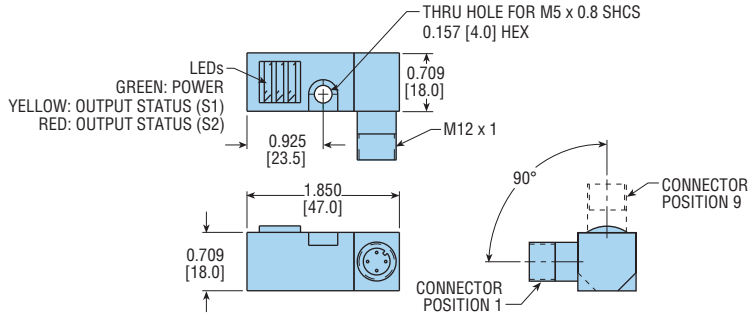


OPTION CODE	SATELLITE		QUICK DISCONNECT PIN NUMBER
	UNCLAMPED	CLAMPED	
PS1A1	S02	S01	S01 = Pin 5
PR1A1	S01	S02	S02 = Pin 4

4-WIRE AC/DC

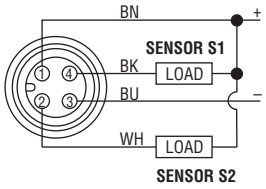


SWITCH OPTION D 71483-001-PLK P + F Part #: NBN2-F581-160S6-E8-V1 (PNP)
SWITCH OPTION H 71483-005-PLK P + F Part #: NBN2-F581-160S6-E10-V1 (NPN)

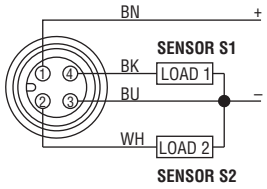


OPTION CODE	SATELLITE		QUICK DISCONNECT PIN NUMBER
	UNCLAMPED	CLAMPED	
PS1Dx or PS1Hx	S2	S1	S1 = Pin 4
PR1Dx or PR1Hx	S1	S2	S2 = Pin 2

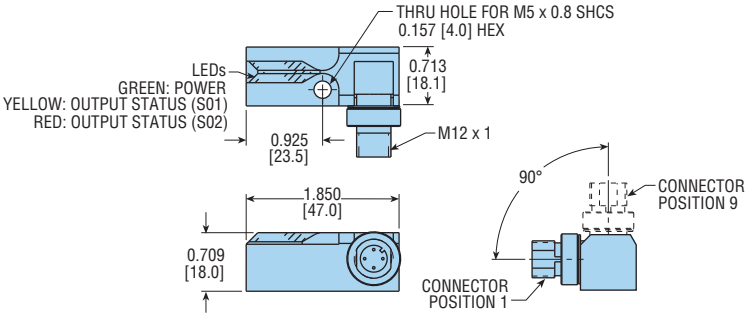
4-WIRE DC (V1 TYPE)
NPN DUAL NORMALLY OPEN



4-WIRE DC (V1 TYPE)
PNP DUAL NORMALLY OPEN

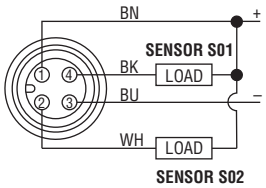


SWITCH OPTION E 71483-003-PLK Turck Part #: Ni 2-Q6.5-0.16-BDS-2AP6X3-H1141/S34 (PNP)
SWITCH OPTION J 71483-006-PLK Turck Part #: Ni 2-Q6.5-AN6-0.16-FS 4.4X3/S304 (NPN)

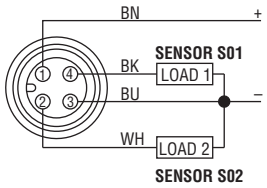


OPTION CODE	SATELLITE		QUICK DISCONNECT PIN NUMBER
	UNCLAMPED	CLAMPED	
PS1Ex or PS1Jx	S02	S01	S01 = Pin 4
PR1Ex or PR1Jx	S01	S02	S02 = Pin 2

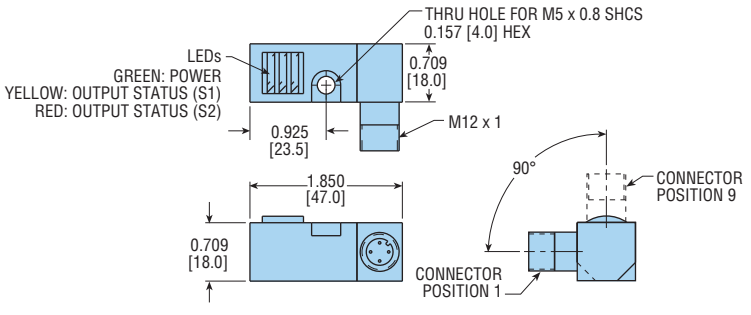
4-WIRE DC
NPN DUAL NORMALLY OPEN



4-WIRE DC
PNP DUAL NORMALLY OPEN

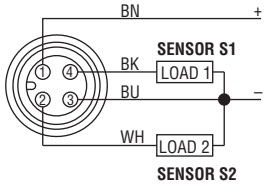


SWITCH OPTION F 71483-004-PLK Efector Part #: IN 5375 (PNP)



OPTION CODE	SATELLITE		QUICK DISCONNECT PIN NUMBER
	UNCLAMPED	CLAMPED	
PS1Fx	S2	S1	S1 = Pin 4
PR1Fx	S1	S2	S2 = Pin 2

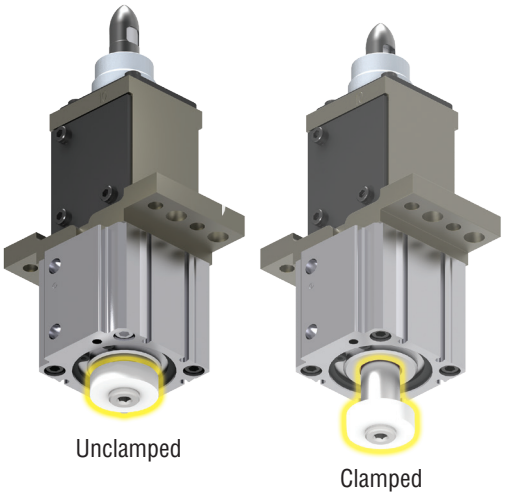
4-WIRE DC
PNP DUAL NORMALLY OPEN

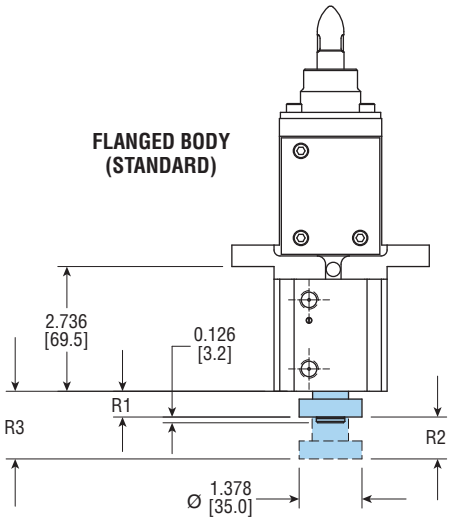


All dimensions are reference only unless specifically toleranced.

R01 SENSOR FLAG

Provides an external flag on a piston rod that extends out of the bottom of the clamp. The position of the flag indicates if the pin is extended or retracted. Flag travel varies with the panel thickness. 1 mm min. to 10 mm max. The white composite flag can be seen by optical sensing systems. Manually pushing the flag toward the clamp body will overcome the internal locking feature.

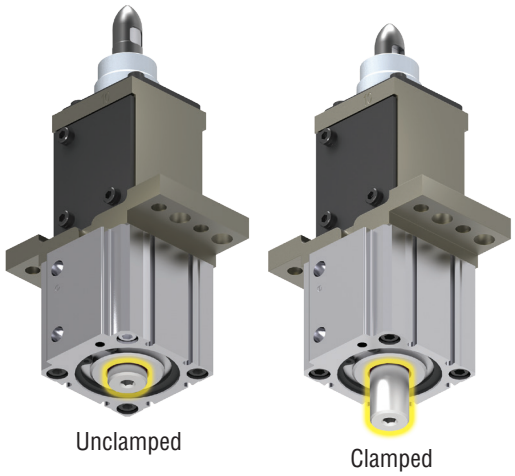


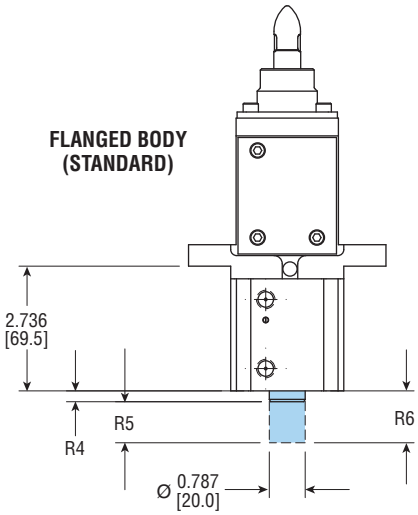


LETTER DIM	MODEL NUMBER			
	PLK505		PLK510	
	in	mm	in	mm
R1	0.762	19.4	0.565	14.4
R2	0.661	16.8	0.858	21.8
R3	1.423	36.1	1.423	36.1

R02 DOUBLE ROD

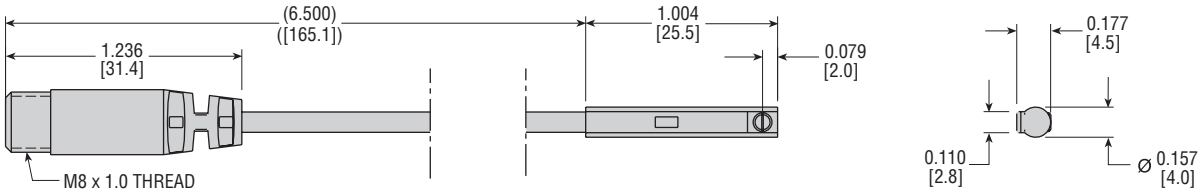
Provides manual unlocking ability from below the clamp. Manually pushing the external rod that extends out the bottom will overcome the internal lock.





LETTER DIM	MODEL NUMBER			
	PLK505		PLK510	
	in	mm	in	mm
R4	0.435	11.0	0.238	6.0
R5	0.661	16.8	0.858	21.8
R6	1.096	27.8	1.096	27.8

All dimensions are reference only unless specifically toleranced.

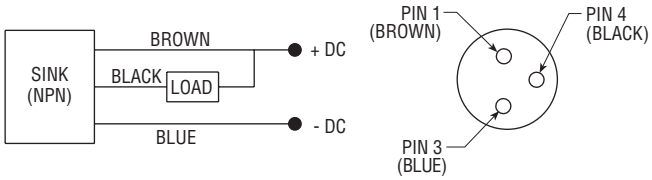


SW41 1 NPN SWITCH INSTALLED

SW42 2 NPN SWITCHES INSTALLED

PART NO.	DESCRIPTION
73360-01	Solid State NPN (Sink) 5 - 28 VDC, 165 mm Cable with Quick Disconnect

SPECIFICATIONS	73360-01
SWITCHING LOGIC	Solid State Output, Normally Open
SENSOR TYPE	NPN Current Sinking
OPERATING VOLTAGE	5 - 28 VDC
SWITCHING CURRENT	200 mA max
SWITCHING RATING	6 W max
CURRENT CONSUMPTION	20 mA @ 24V max (Switch Active)
VOLTAGE DROP	0.5V @ 200 mA max
LEAKAGE CURRENT	0.01 mA max
INDICATOR	Red LED
CABLE	Ø 2.8, 3C, PVC
SENSITIVITY	40 Gauss
TEMPERATURE RANGE	-10° to 70°C
SHOCK	50G
VIBRATION	9G
ENCLOSURE CLASSIFICATION	IP67 (NEMA 6)
PROTECTION CIRCUIT	Power Source Reverse Polarity, Surge Suppression

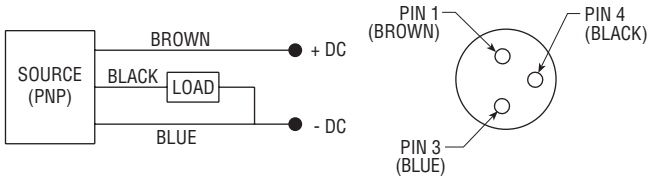


SW51 1 PNP SWITCH INSTALLED

SW52 2 PNP SWITCHES INSTALLED

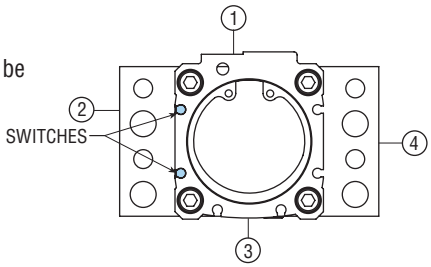
PART NO.	DESCRIPTION
73360-02	Solid State PNP (Source) 5 - 28 VDC, 165 mm Cable with Quick Disconnect

SPECIFICATIONS	73360-02
SWITCHING LOGIC	Solid State Output, Normally Open
SENSOR TYPE	PNP Current Sourcing
OPERATING VOLTAGE	5 - 28 VDC
SWITCHING CURRENT	200 mA max
SWITCHING RATING	6 W max
CURRENT CONSUMPTION	20 mA @ 24V max (Switch Active)
VOLTAGE DROP	0.5V @ 200 mA max
LEAKAGE CURRENT	0.01 mA max
INDICATOR	Green LED
CABLE	Ø 2.8, 3C, PVC
SENSITIVITY	40 Gauss
TEMPERATURE RANGE	-10° to 70°C
SHOCK	50G
VIBRATION	9G
ENCLOSURE CLASSIFICATION	IP67 (NEMA 6)
PROTECTION CIRCUIT	Power Source Reverse Polarity, Surge Suppression

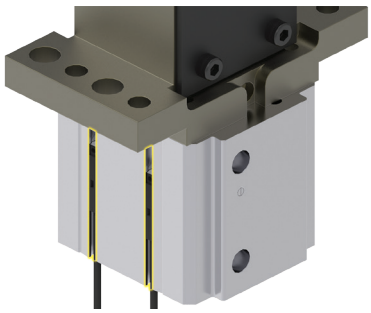


SWITCH SLOT LOCATIONS

When switches are ordered on a unit, they will be installed on side 2.



PLK5xx

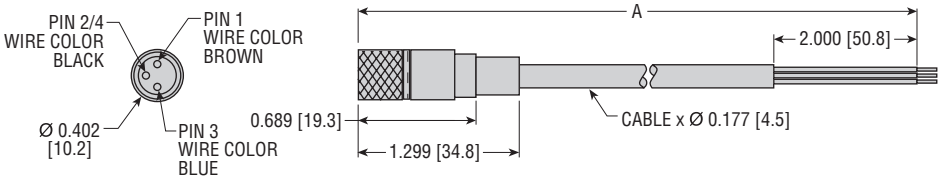


63549-xx CORDSET WITH FEMALE QUICK CONNECT

Provides a cordset with female quick connect and additional cable.

NUMBERS IN [ ] ARE IN mm. IMPERIAL EQUIVALENTS ARE PROVIDED FOR CONVENIENCE.

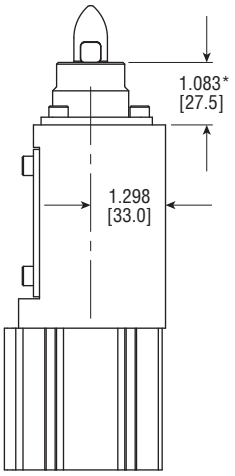
MODEL NO.	LETTER DIM A
63549-02	78.74 [2 m]
63549-05	196.85 [5 m]

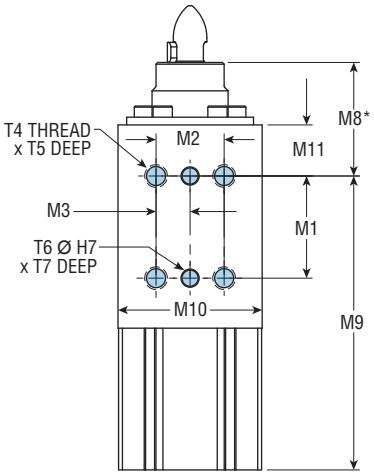


All dimensions are reference only unless specifically toleranced.

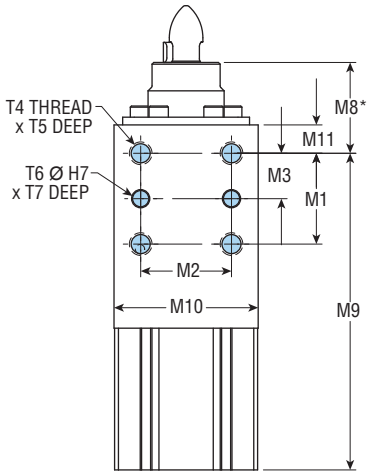
Bxx BODY MOUNTING OPTIONS

This option provides for six standard body mounting patterns to suit mounting requirements.

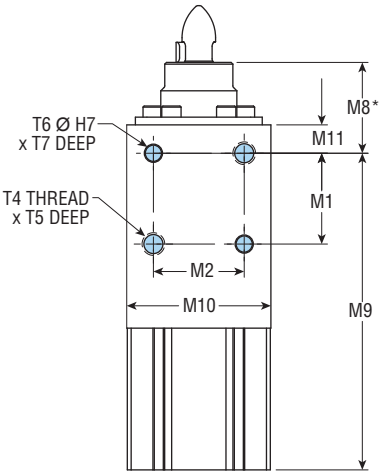




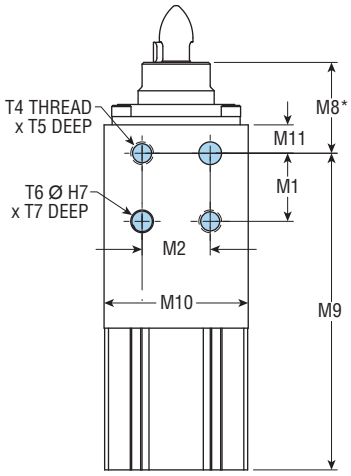
B01 & B02



B03



B04



B05 & B06

LETTER DIM	MODEL NUMBER											
	B01		B02		B03		B04		B05		B06	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
M1	1.772	45.0	2.362	60.0	1.575	40.0	1.575	40.0	1.181	30.0	1.772	45.0
M2	1.181	30.0	1.181	30.0	1.575	40.0	1.575	40.0	1.181	30.0	1.181	30.0
M3	0.591	15.0	0.591	15.0	0.787	20.0	—	—	—	—	—	—
T4	M10 x 1.5		M10 x 1.5		M10 x 1.5		M10 x 1.5		M10 x 1.5		M12 x 1.75	
T5	0.669	17.0	0.669	17.0	0.591	15.0	0.591	15.0	0.669	17.0	0.512	13.0
T6	0.315	8.0	0.315	8.0	0.315	8.0	0.315	8.0	0.394	10.0	0.394	10.0
T7	0.350	8.9	0.350	8.9	0.512	13.0	0.512	13.0	0.433	11.0	0.433	11.0
M8	1.969	50.0	1.772	45.0	1.575	40.0	1.575	40.0	1.575	40.0	1.575	40.0
M9	5.098	129.5	5.295	134.5	5.492	139.5	5.492	139.5	5.492	139.5	5.492	139.5
M10	2.500	63.5	2.500	63.5	2.500	63.5	2.500	63.5	2.500	63.5	2.500	63.5
M11	0.886	22.5	0.689	17.5	0.492	12.5	0.492	12.5	0.492	12.5	0.492	12.5

* **NOTE:** ALL M8 DIMENSIONS ARE FOR E000 PART SUPPORT STANDARD HEIGHT

All dimensions are reference only unless specifically toleranced.

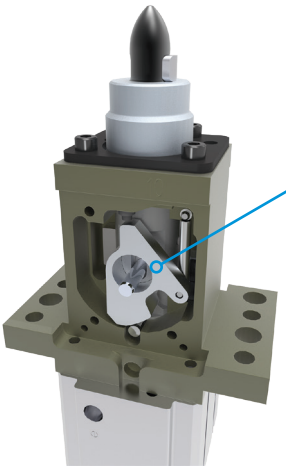
MTxx MATERIAL THICKNESS ADJUSTMENT

Provides the clamp with the adjustable lock already set for the maximum material thickness for the application. Specify the thickest material.

Example: 1.6 mm material = MT16

Specify MT16 and the clamp will arrive preset to lock at that material thickness. The sequenced design prevents the finger from retracting until the pin is fully extended. The part can move the amount of clearance between the lock bracket and adjustment screw, but the extended finger keeps the part trapped securely on the pin.

Unless otherwise specified, the factory lock default setting is MT20 = 2.0 mm material.



LOCK SETTING PROCEDURE

Adjustment procedures for PLK lock with material specified:

1) Start in the unclamped position, with the pin up, and the finger(s) retracted into the pin.
2) Install the part support (item 5) with the adjustment slot over the adjustment screw (item 8). Install the flange plate over the part support aligning the adjustment screw and two holes as shown. Hand tighten two times (item 7). (See Figures 1 and 2.)
3) Install the shims to match the panel thickness requested. Close the clamp on the shims with air pressure (87 psi [6 bar]).
4) Make sure the lock bracket (item 14) rotates counterclockwise into position under the adjustment screw (see Figure 3). Turn the adjustment screw clockwise until it contacts the top of the lock bracket (see Figure 4).
5) After touching, back the adjustment screw off one full turn to assure clearance so the lock bracket is free to rotate clockwise when the clamp opens (see Figure 5).
6) Unclamp the unit, remove the shim and two fasteners (item 7).
7) Rotate the flange plate (item 6) on the part support and align the four mounting holes as shown. (Figure 6)
8) Add the four screws (item 7) and tighten to 44 in-lbs [5 Nm].

-MT20 = 2 mm material thickness
-MT40 = 4.0 mm (max)
Lock may be preset in 0.1 mm increments

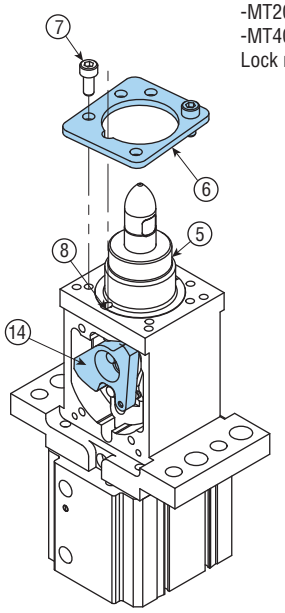


FIGURE 1

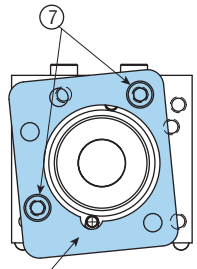


FIGURE 2

NOTE ADJUSTMENT SCREW
ALIGNED WITH PART SUPPORT
SLOT AND FLANGE SLOT

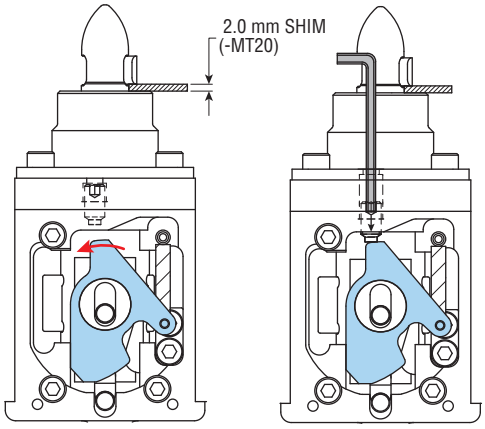


FIGURE 3

FIGURE 4

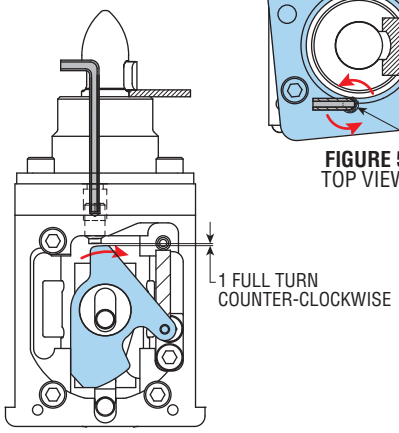


FIGURE 5

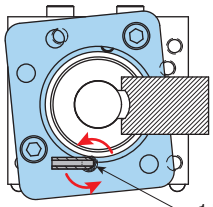


FIGURE 5
TOP VIEW

1 FULL TURN
COUNTER-CLOCKWISE

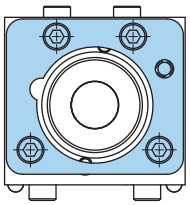
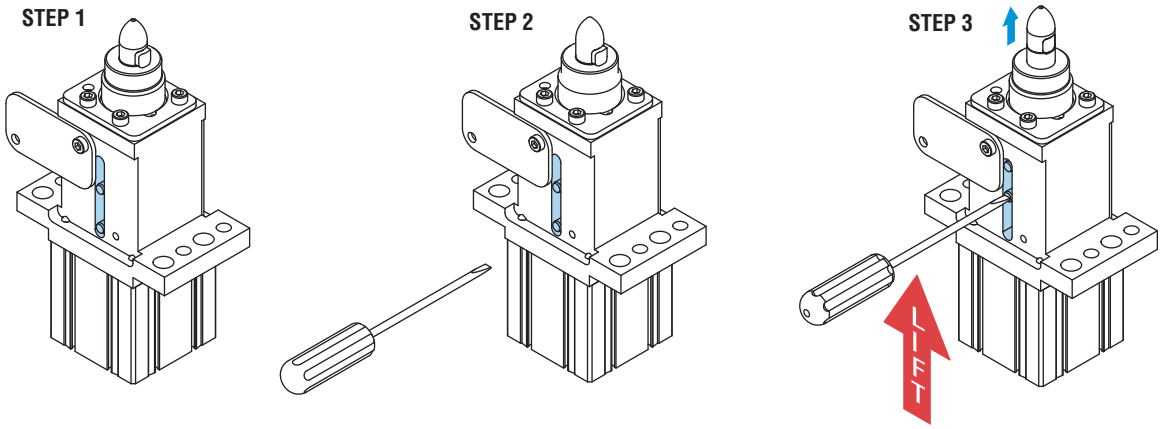


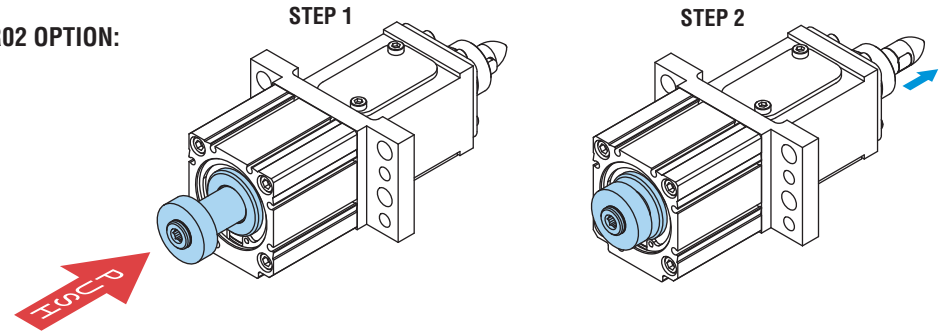
FIGURE 6

LOCKING MECHANISM & MANUAL OPENING

The Series PLK incorporates a locking mechanism that keeps the pin retracted and the finger extended so panels are trapped in position on the pin. The locking mechanism does not maintain clamp force when pressure is lost. During normal operation, air pressure moves the piston, releasing the lock, allowing the pin to extend, the finger to retract, and unclamp the part. To manually unlock the clamp, first remove air pressure, then loosen the screw and rotate the cover out of the way. Insert a small screwdriver under the dowel pin and lift it up. This will release the lock, extend the pin, and retract the finger. (See diagram.) The R01 or R02 option can also manually unlock the clamp. First, remove air pressure then push the rod into the cylinder, moving the piston. This will release the lock, extend the pin, and retract the finger. (See diagram.)



WITH R01 OR R02 OPTION:



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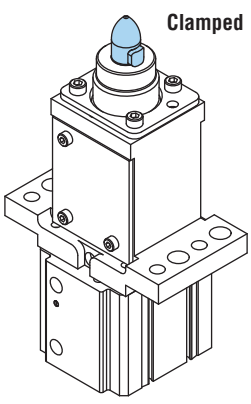
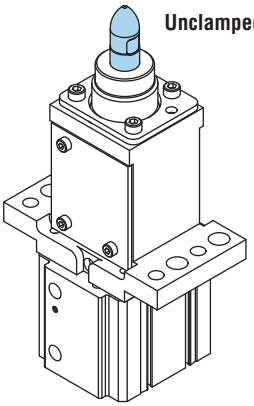
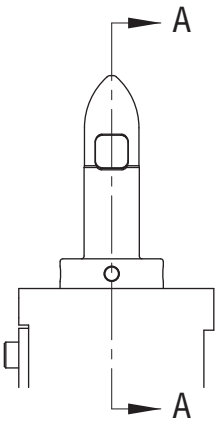
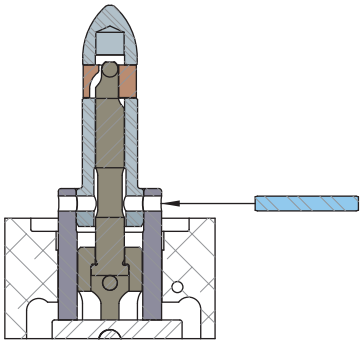
HOW TO CHANGE FINGER DIRECTION



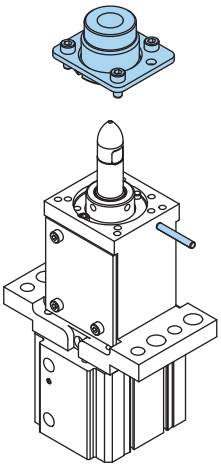






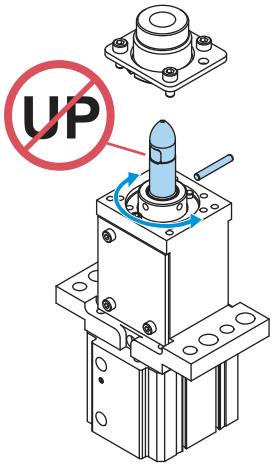
SECTION A-A

Dowel pin installs through hole in pin base, pin top, and slot in drive rod.



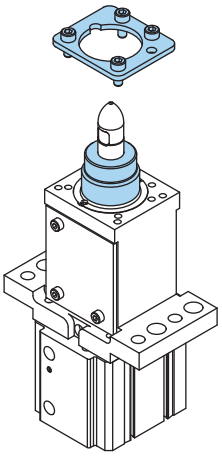
(Position 4 shown)

1) With the pin in the unclamped position, remove flange and part support. Carefully slide dowel pin out of pin assembly.



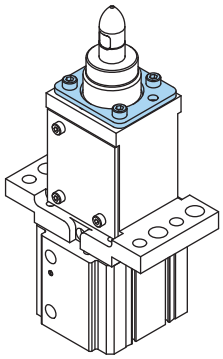
(Position 1 shown)

2) Carefully rotate pin top to desired position (90° increments). **Do not lift up on pin top.** Slide dowel pin back into pin. Dowel pin must be parallel to finger pocket.



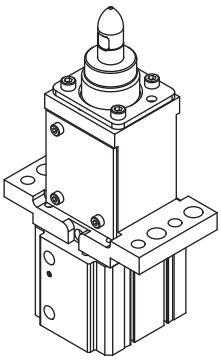
(Position 1 shown)

3) Assemble part support into counterbore in top of body. Align slot in support flange with dowel in body counterbore.



(Position 1 shown)

4) Install flange and tighten screws.



Position 1 is complete with finger direction change.