

PSP

SERIES PSP SHOT PIN

*Superior part locating and positioning.
Provides the best repeatability in its class.*



Port Fittings Option



Switch Options



Weld Cover Option



**ISO-9001
CERTIFIED**

Quality Management
System Certified

Patent Pending

PSP01



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ORDERING DATA: SERIES PSP SHOT PINS

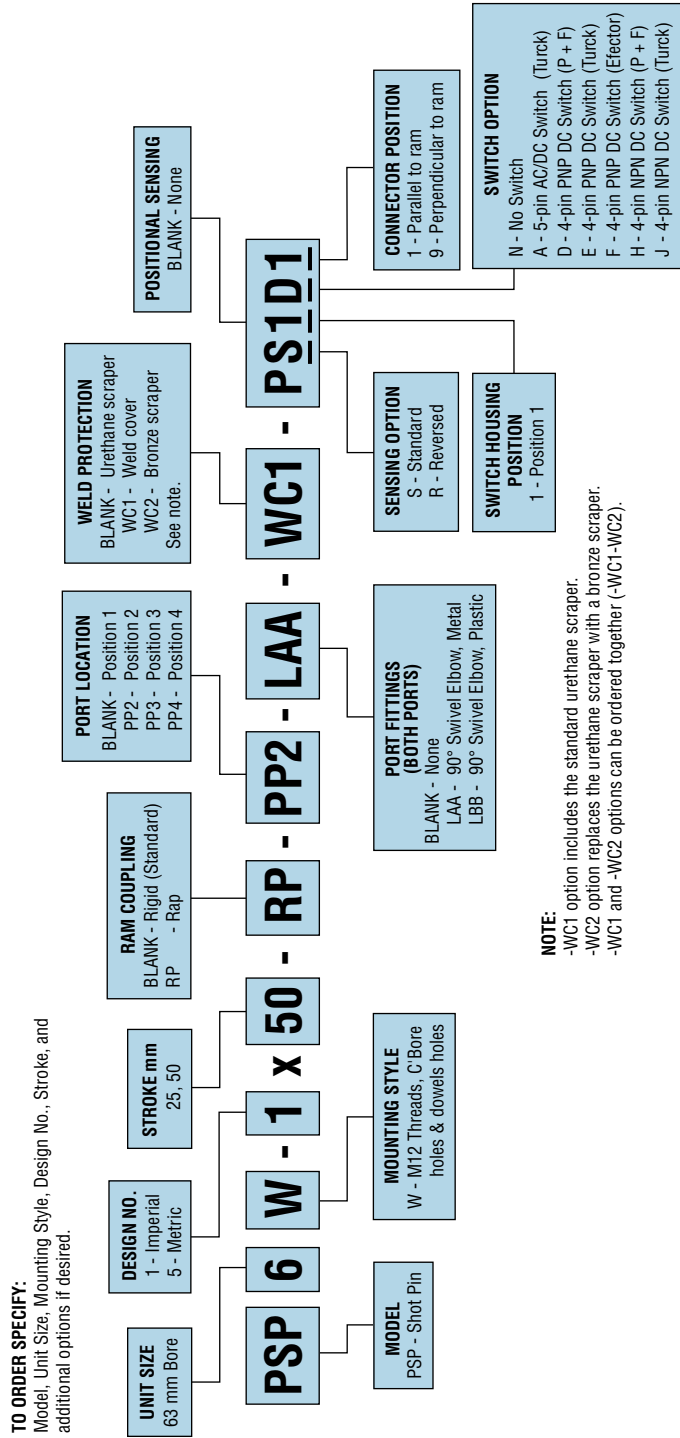
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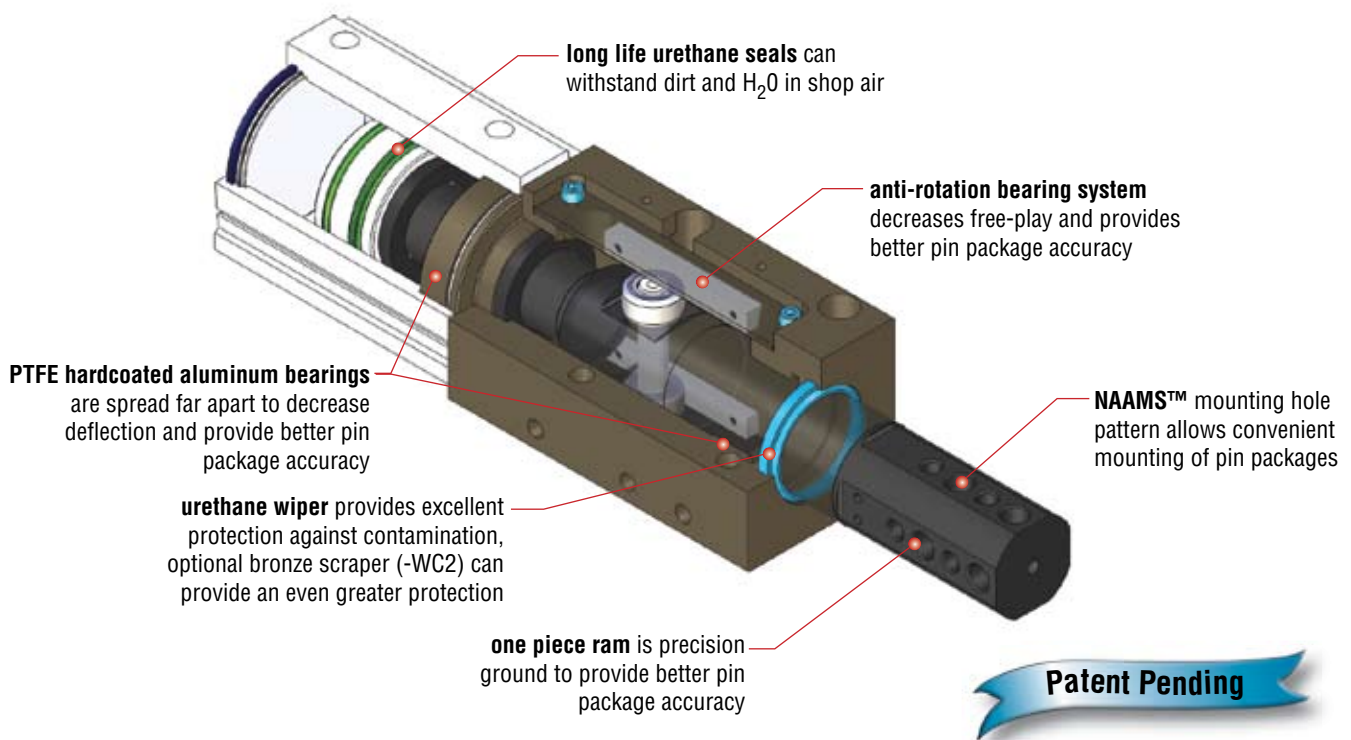
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Major Benefits

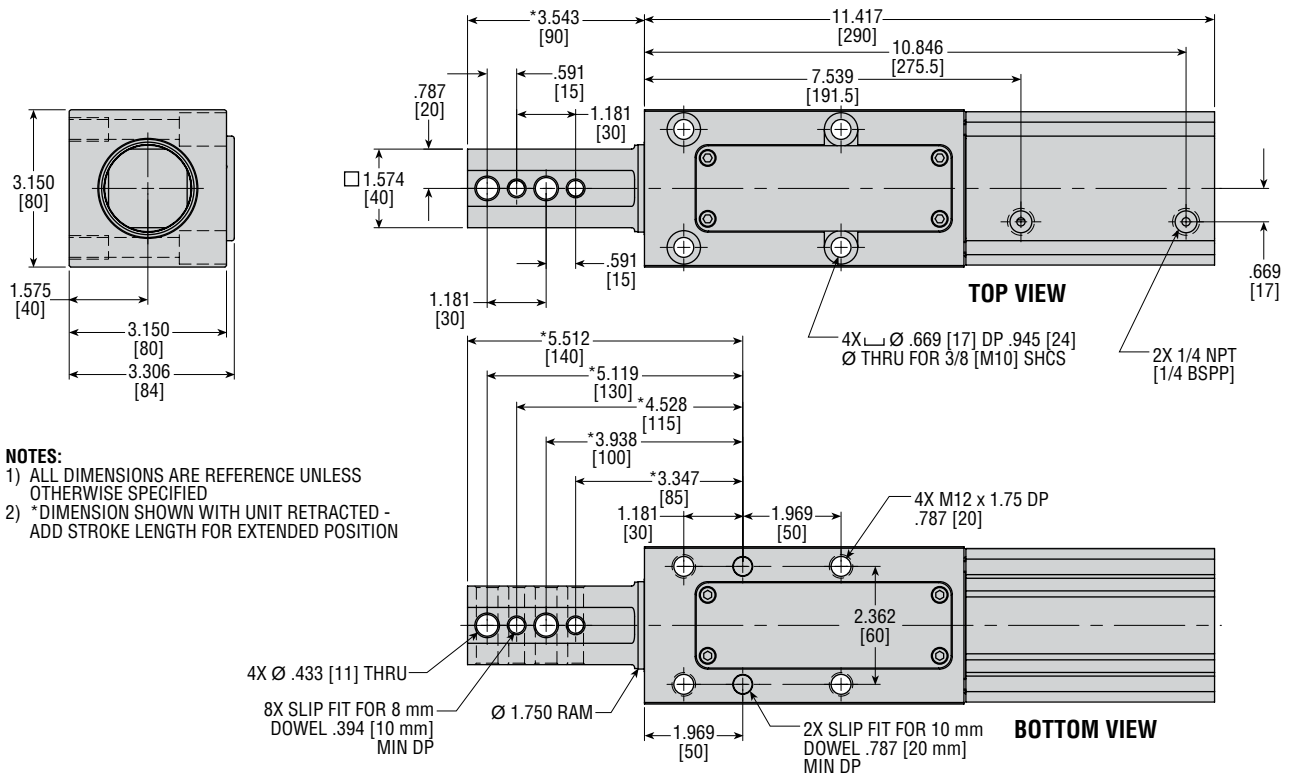
- Smaller, more compact design
- After millions of cycles, adjustable bearing system can be used to make worn-in units “like-new” providing better accuracy over a much longer period of time
- Internal porting and shock absorption eliminates the need to adjust air cushions or flow controls and still provide quick cycle rates
- Self-locking internal threads throughout eliminate need for thread locking adhesives or additional locking components
- 24 hour delivery

Industry Uses

- Assembly and Welding



DIMENSIONS: SERIES PSP SHOT PINS



ENGINEERING DATA: SERIES PSP SHOT PINS

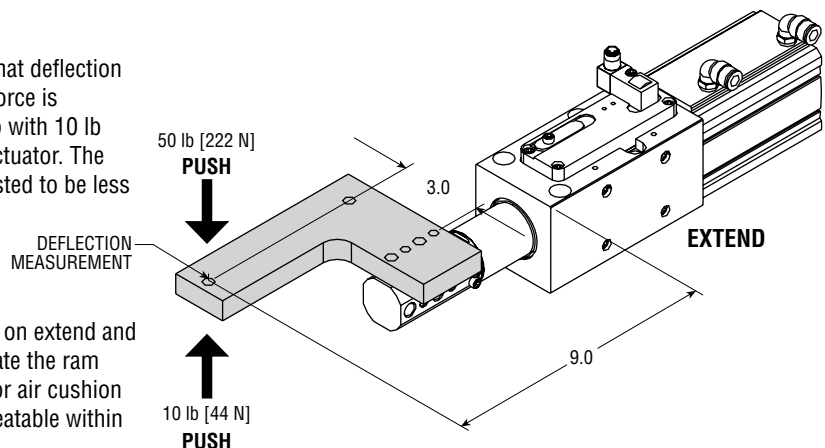
SPECIFICATIONS	SERIES PSP
SEALS	Polyurethane
WORKING PRESSURE	40 psi min. - 100 psi max.
OPERATING TEMPERATURE	-20° to +180° F [-28° to +82° C]
LUBRICATION	Factory lubricated for life

SPECIFICATIONS

MODEL SIZE	STROKE mm	BORE mm	UNIT WEIGHT		THEORETICAL CYLINDER FORCE 87 psi [6 bar]				EXTEND AND RETRACT TIME sec	DISPLACEMENT				MIN. VALVE RATING Cv
			lb	kg	EXTEND lb	RETRACT lb	EXTEND in ³	RETRACT in ³		EXTEND cm ³	RETRACT cm ³			
PSP6	25	63	14	6.4	387	44	287	32	0.15	9.6	157	5.9	97	0.5
PSP6	50	63	14	6.4	387	44	287	32	0.20	11.4	187	7.7	126	1.0

DEFLECTION

The Series PSP shot pin cylinder is adjusted so that deflection is less than .008" [.20 mm] at the load point. A 50 lb force is pushed down on the ram as shown and then pulled up with 10 lb to determine the total deflection and free play of the actuator. The change in deflection after 3 million cycles has been tested to be less than .003" [.08mm] at the load point.



REPEATABILITY

The Series PSP shot pin cylinder has shock pads on extend and retract of the actuator. These shock pads help decelerate the ram and eliminate the need for external flow controls and/or air cushion adjustments. Testing has shown that the stroke is repeatable within .005" [.13mm] after 3 million cycles.

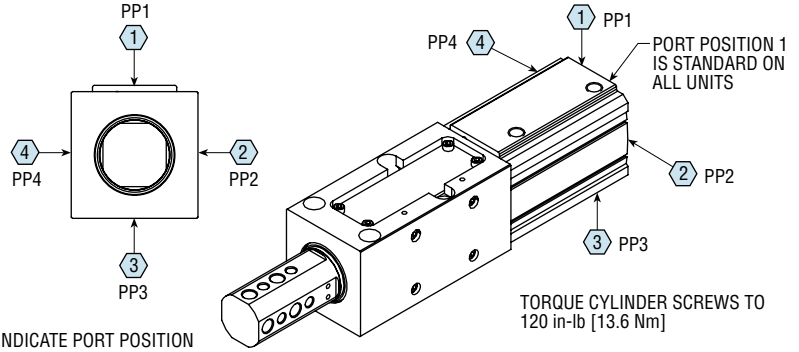
OPTIONS & KITS: SERIES PSP SHOT PINS

RP RAP COUPLING

Allows the piston to move before moving the ram. The impact helps free tooling from a bound condition. This option does not reduce the stroke of the unit.

PPx PORT LOCATION

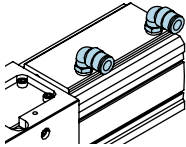
This option specifies alternate port location for the cylinder providing flexibility and customer convenience. The port position can be changed by removing the cylinder bolts and rotating the cylinder body.



NOTE: NUMBERS ENCLOSED IN HEX INDICATE PORT POSITION

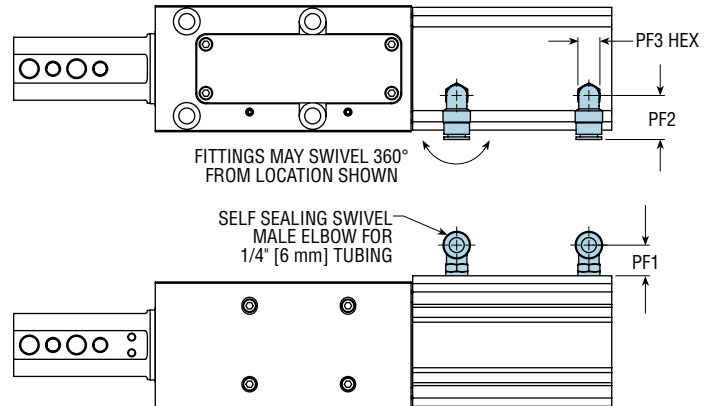
Lxx PORT FITTINGS

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



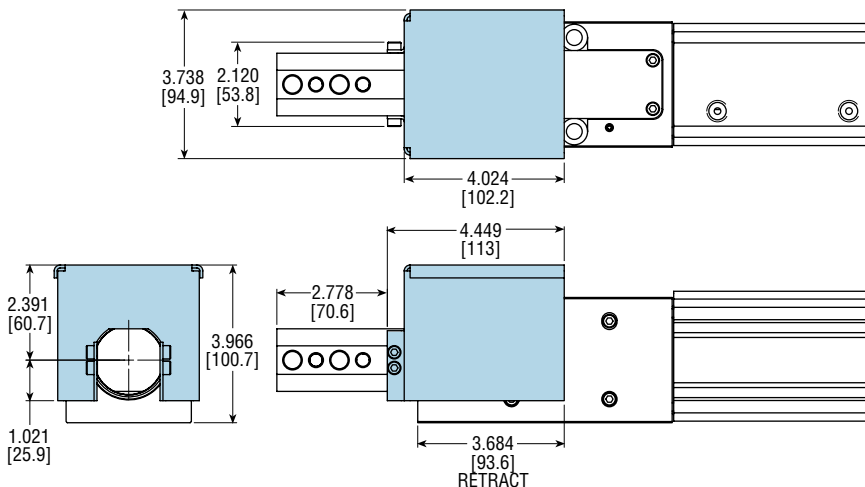
OPTION CODE	PART NUMBER	
	IMPERIAL	METRIC
LAA	62178-010	62195-010
LBB	71120-002	71121-002

LETTER DIM	MODEL NUMBER	
	PSP6	
PORT	in	mm
PF1 (MIN)	.767	20.5
PF2	1.102	28.0
PF3	.551	14.0



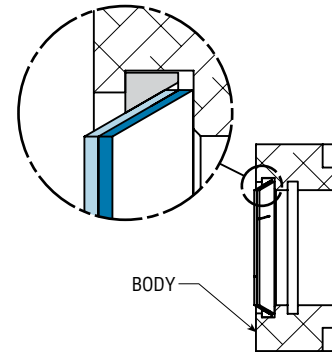
WC1 WELD COVER

–WC1 provides an additional weld cover that surrounds the ram and helps prevent weld slag from damaging the wiper and bushing area.



WC2 BRONZE SCRAPER

–WC2 provides a metallic bronze scraper to help remove excess contamination better than the standard urethane wiper. This option can be used when there is not enough room for a weld cover.



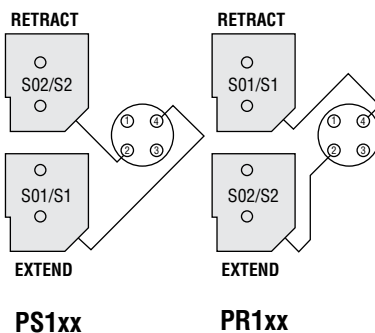
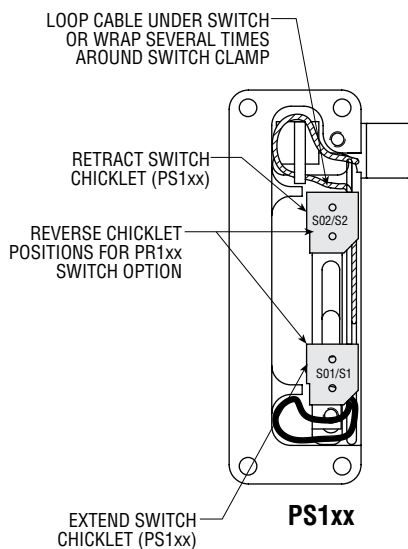
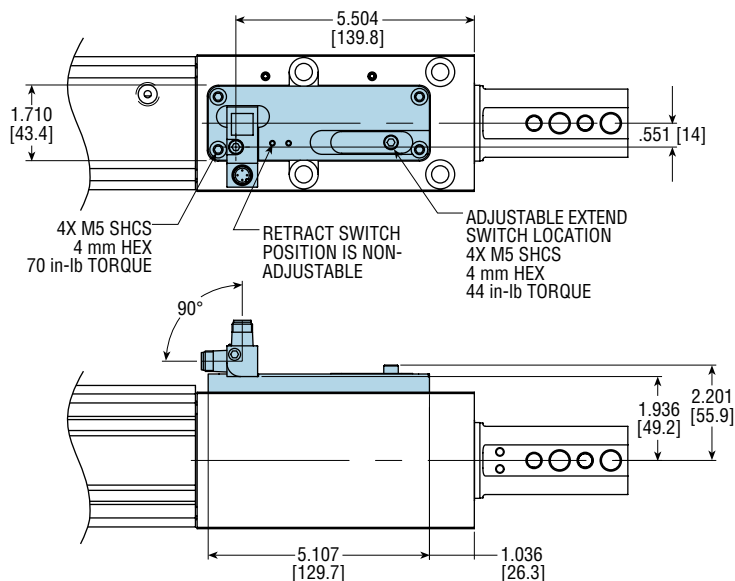
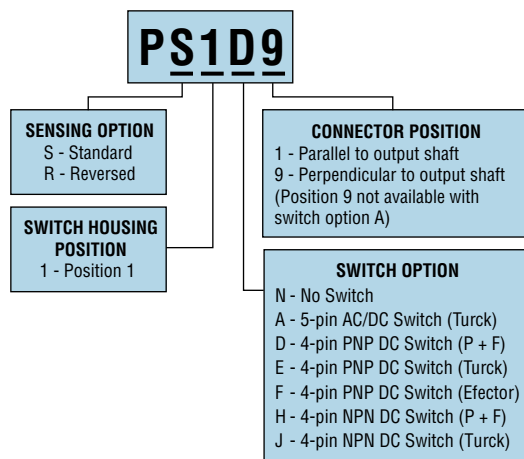
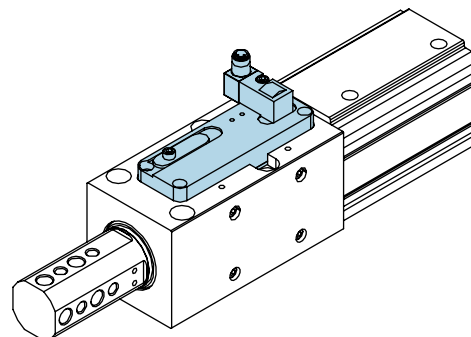
All dimensions are reference only unless specifically tolerated.

SWITCH OPTION: SERIES PSP SHOT PINS

PSxxx STANDARD POSITION SENSING

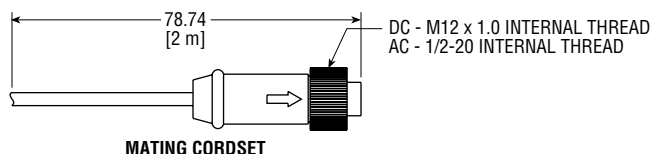
PRxxx REVERSED POSITION SENSING

This option provides extend and retract sensing by affixing an aluminum housing to the top of the ram body. The retract switch is fixed needing no adjustment. The extend switch is adjustable at the end of stroke to sense either the leading or trailing edge of the target and has about 3/8" of adjustment. Loosening the M5 screw and sliding it up or down adjusts the extend switch position. PS positions the S01/S1 switch to sense the extend position and S02/S2 switch to sense the retract position. PR positions the S01/S1 switch to sense the retract position and S02/S2 to sense the extend position.



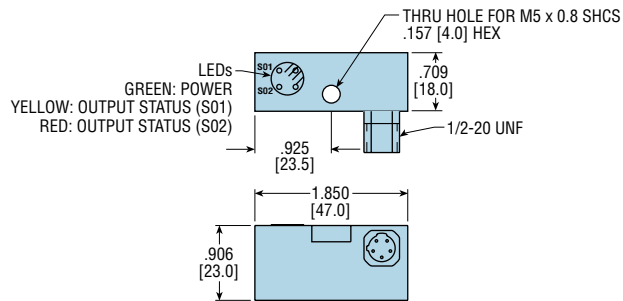
MATCHING CORDSETS 2 METERS LONG

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



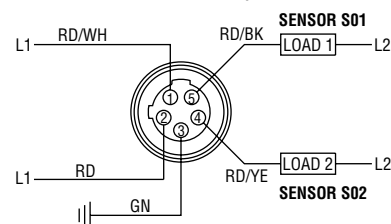
SWITCH OPTION: SERIES PSP SHOT PINS

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



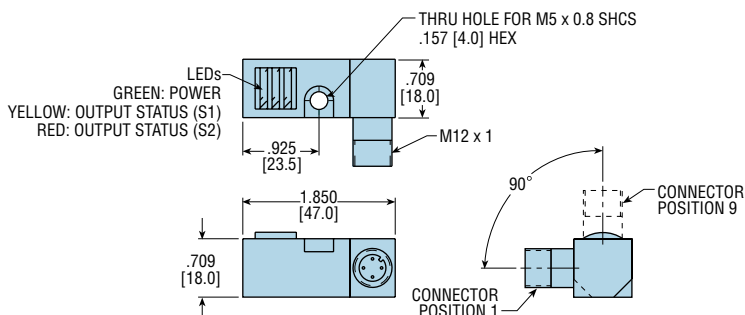
OPTION CODE	SATELLITE		QUICK DISCONNECT PIN NUMBER
	UNCLAMPED	CLAMPED	
PSxAx	S02	S01	S01 = PIN 5 S02 = PIN 4
PRxAx	S01	S02	

4-WIRE AC/DC



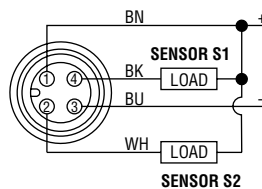
SWITCH OPTION D 71483-001-PSP P + F Part #: NBN2-F581-160S6-E8-V1 (PNP)

SWITCH OPTION H 71483-005-PSP P + F Part #: NBN2-F581-160S6-E10-V1 (NPN)

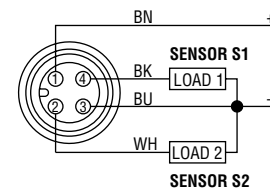


OPTION CODE	SATELLITE		QUICK DISCONNECT PIN NUMBER
	UNCLAMPED	CLAMPED	
PSxDx	S2	S1	S1 = PIN 4 S2 = PIN 2
PRxDx	S1	S2	

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

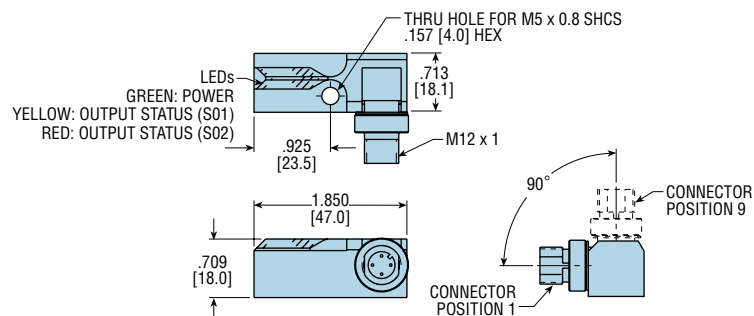


4-WIRE DC (V1 TYPE) PNP DUAL NORMALLY OPEN



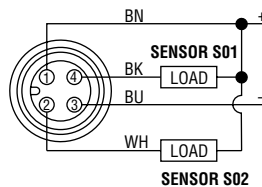
SWITCH OPTION E 71483-003-PSP Turck Part #: Ni 2-Q6.5-0.16-BDS-2AP6X3-H1141/S34 (PNP)

SWITCH OPTION J 71483-006-PSP Turck Part #: Ni-2-Q6.5-AN6-0.16-FS 4.4X3/S304 (NPN)

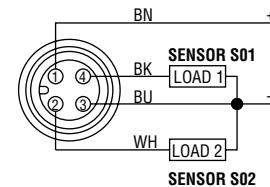


OPTION CODE	SATELLITE		QUICK DISCONNECT PIN NUMBER
	UNCLAMPED	CLAMPED	
PSxEx	S02	S01	S01 = PIN 4 S02 = PIN 2
PRxEx	S01	S02	

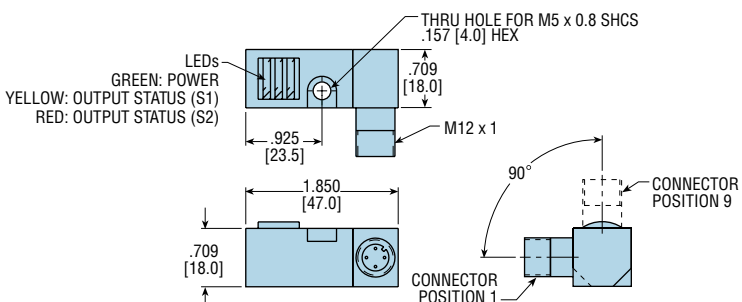
4-WIRE DC (V1 TYPE) NPN DUAL NORMALLY OPEN



4-WIRE DC PNP DUAL NORMALLY OPEN

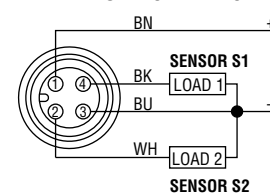


SWITCH OPTION F 71483-004-PSP Efector Part #: IN 5375 (PNP)



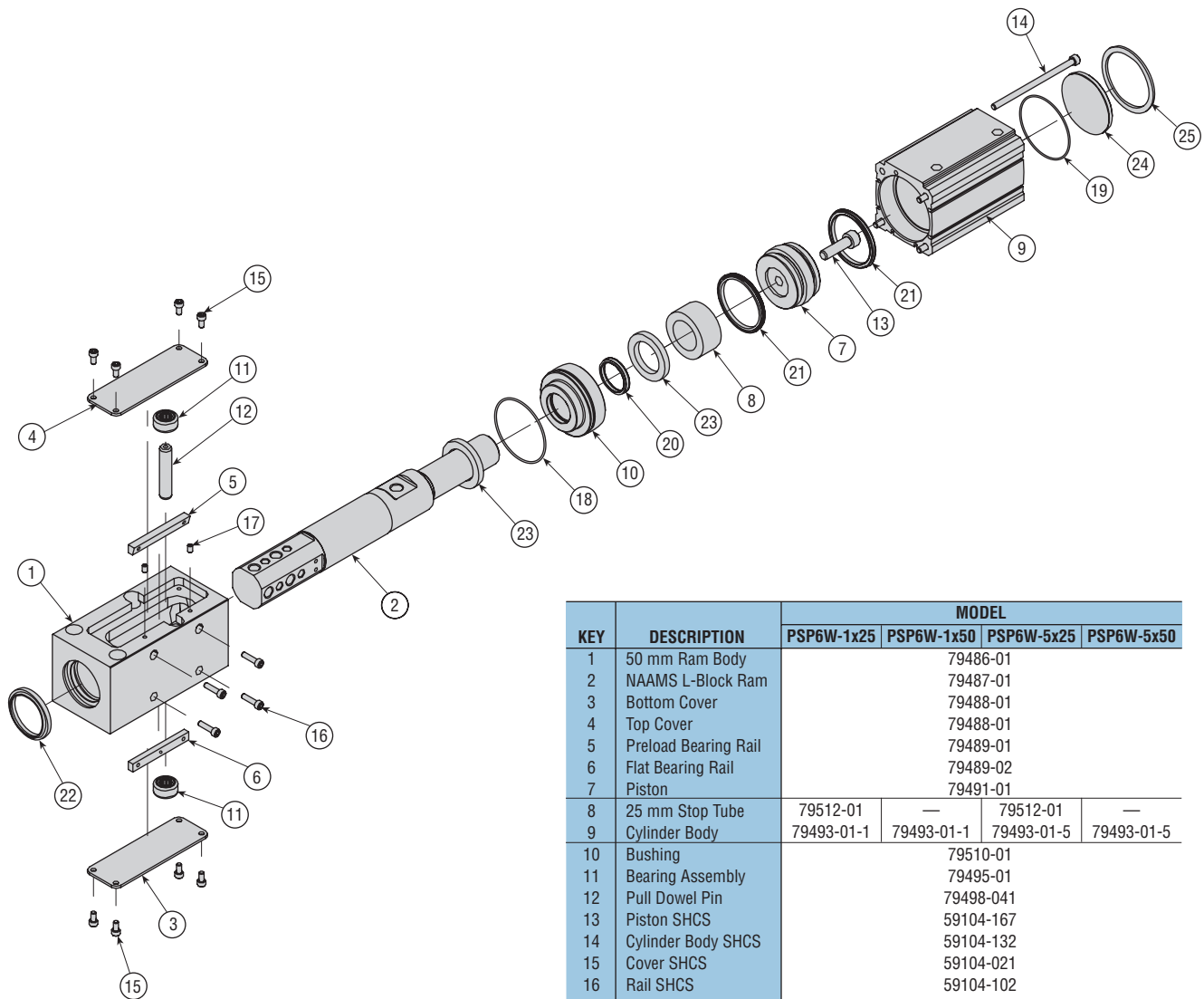
OPTION CODE	SATELLITE		QUICK DISCONNECT PIN NUMBER
	UNCLAMPED	CLAMPED	
PSxFx	S2	S1	S1 = PIN 4 S2 = PIN 2
PRxFx	S1	S2	

4-WIRE DC PNP DUAL NORMALLY OPEN

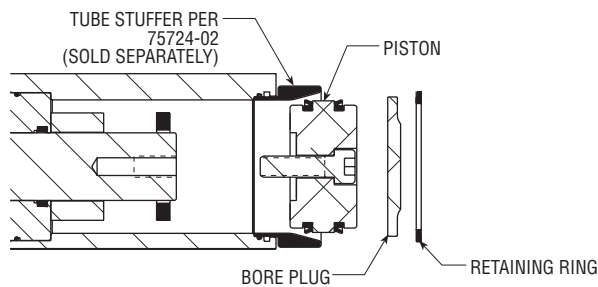


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EXPLODED VIEW & PARTS LIST: SERIES PSP SHOT PINS



KEY	DESCRIPTION	MODEL			
		PSP6W-1x25	PSP6W-1x50	PSP6W-5x25	PSP6W-5x50
1	50 mm Ram Body			79486-01	
2	NAAMS L-Block Ram			79487-01	
3	Bottom Cover			79488-01	
4	Top Cover			79488-01	
5	Preload Bearing Rail			79489-01	
6	Flat Bearing Rail			79489-02	
7	Piston			79491-01	
8	25 mm Stop Tube	79512-01	—	79512-01	—
9	Cylinder Body	79493-01-1	79493-01-1	79493-01-5	79493-01-5
10	Bushing			79510-01	
11	Bearing Assembly			79495-01	
12	Pull Dowel Pin			79498-041	
13	Piston SHCS			59104-167	
14	Cylinder Body SHCS			59104-132	
15	Cover SHCS			59104-021	
16	Rail SHCS			59104-102	
17	SHSS			17424-065	
18	Body O-Ring Seal			1950-038-1	
19	Plug O-Rng Seal			3642-083-1	
20	Rod Seal			67156-15-1	
21	Piston Seal			63624-014-1	
22	Rod Wiper			79499-012	
23	Shock Pad			52992	
24	Bore Plug			73882	
25	Retaining Ring			1980-646	



KIT DESCRIPTION	PART NO.
Cylinder Repair Kit	79513-01*
Rap Coupling Kit	79514-01*
Rod Wiper Kit	79515-01
Rod Scraper Kit	79516-01
Positional Sensing Kit	79517-01

* = Kit requires tube stuffer 75724-02 (sold separately)

TUBE STUFFER REQUIRED TO ASSEMBLE PISTON/SEALS INTO BORE