

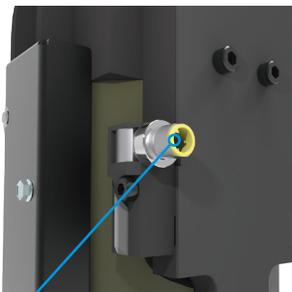
# SERIES PNC IDENTIFICATION STAMPING CLAMP

# PNC

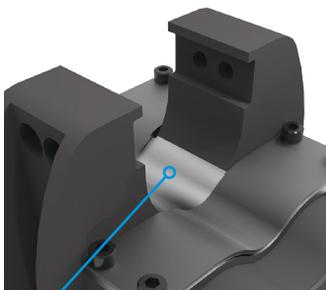
# NUMBER<sup>®</sup> CRUNCHER

## Major Benefits

- Provides cost-effective solution for identification stamping, staking, crimping, and forming.
- High clamp force produces characters in draw quality steel at only 70 psi [4.8 bar]
- Eliminates downtime associated with changing or replacing characters
- Three sizes available to fit your application requirements
- Quiet operation



optional switches allow for open and close sensing



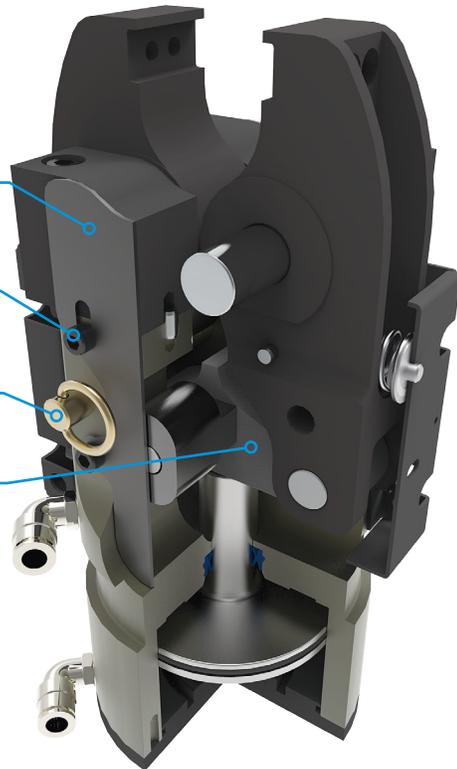
welding slag shield option protects internal mechanisms from flying sparks and debris

two hardened steel plates eliminate damage from panel impact

locking threads on body eliminate the need for adhesive thread locker

lock-out pin included for safety during tooling changes

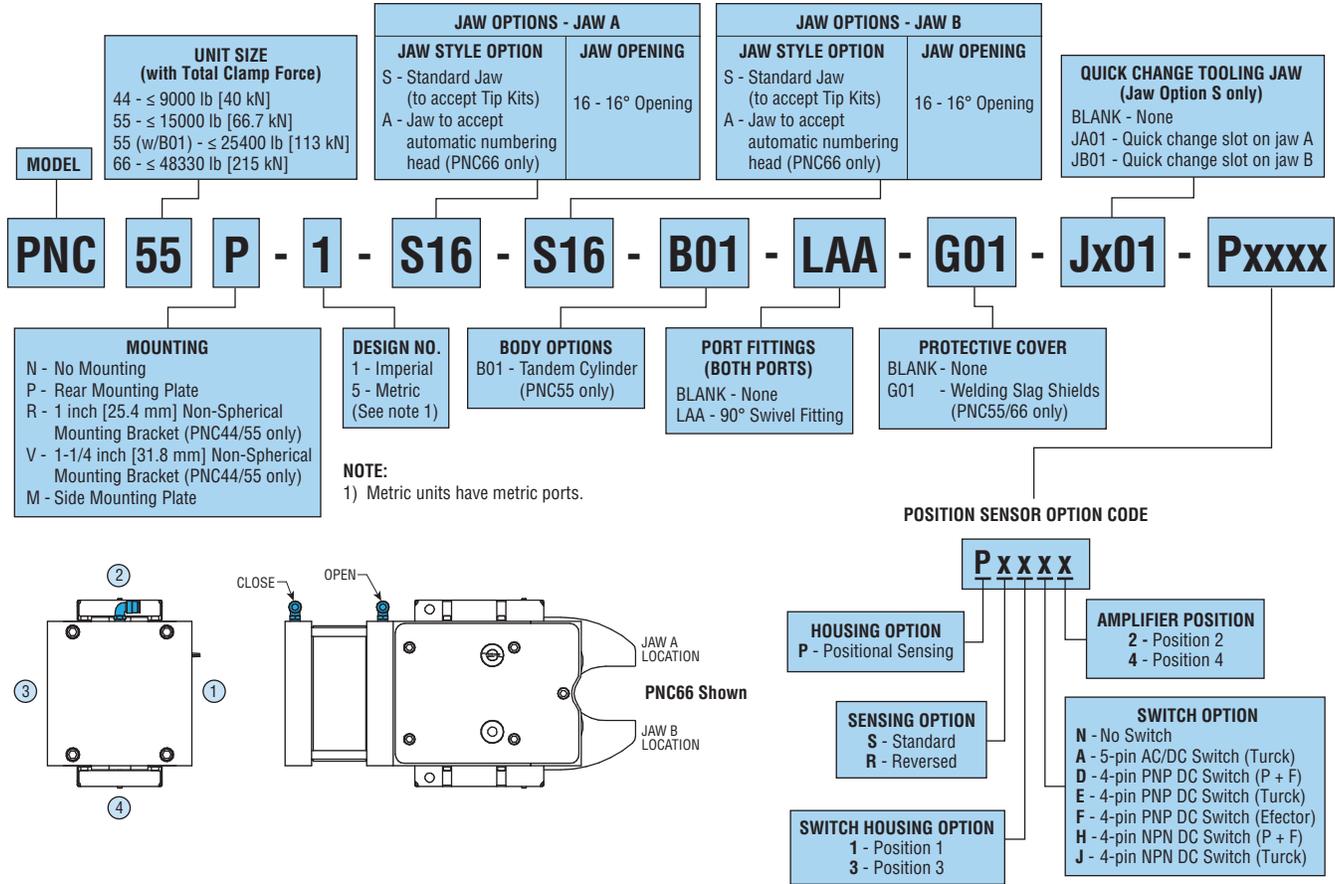
patented cam mechanism produces high forces at normal pneumatic pressures



# ORDERING DATA: Series PNC

## TO ORDER SPECIFY:

Model, Unit Size, Mounting, Design No.,  
Jaw Option, Jaw Opening, and Options.



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

## CAD & Sizing Assistance

Use PHD's free online Product Sizing and  
CAD Configurator at [phdinc.com/myphd](http://phdinc.com/myphd)

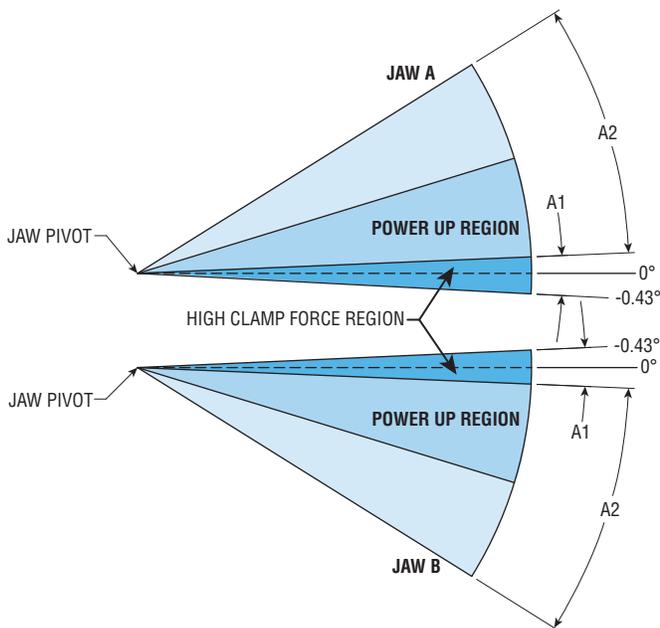
SPECIFICATIONS	PNC44/55	PNC66
WORKING PRESSURE	30 psi min - 100 psi max* [2 bar min - 7 bar max]	30 psi min - 87 psi max [2 bar min - 6 bar max]
BODY	Hardcoat Aluminum	
JAWS	Steel	
SEALS	Bidirectional Piston Seal Lip Type Rod Seal with Integral Rod Wiper	Lip Seal & Wear Ring on Piston Lip Type Rod Seal Rod Wiper
LUBRICATION	Permanent for Non-Lube Air	
OPERATING TEMPERATURE	-20° to 180°F [-30° to 82°C]	

\*90 psi max [6.2 bar max] for B01 option

MODEL	UNIT WEIGHT		TOTAL CLAMP FORCE AT 87 psi [6 bar]		CLOSE OR OPEN TIME 87 psi [6 bar]	DISPLACEMENT				HIGH FORCE REGION		JAW OPENING REGION			
						OPEN		CLOSE		ANGULAR DISPLACEMENT (A1)	CLAMP FORCE FACTOR (Cf)		ANGULAR DISPLACEMENT (A2)	CLAMP FORCE FACTOR (Cf)	
	lb	kg	lb	kN	sec	in <sup>3</sup>	cm <sup>3</sup>	in <sup>3</sup>	cm <sup>3</sup>		Imperial	Metric		Imperial	Metric
PNC44	19.0	8.62	9000	40.0	0.4	19.60	321	20.87	342	1.2°	103.4	6667	14.8°	5.0	322
PNC55	22.2	10.1	15000	66.7	0.4	19.60	321	20.87	342		172.4	11117		5.0	322
PNC55-B01	27.6	12.5	25400	113.0	0.6	19.60	321	41.74	684		292.0	18833		9.0	580
PNC66N-x-S16-S16	112	50.8	48330	215.0	1.5	86.10	1411	89.55	1468	0.7°	555.52	35833	15.3°	12.80	824
PNC66N-x-A16-S16	116	52.6													

MOUNTING CODE	MOUNTING BRACKET DESCRIPTION	WEIGHT			
		PNC44/55		PNC66	
		lb	kg	lb	kg
M	Side Mounting Plate	3.0	1.4	14.4	6.53
P	Rear Mounting Plate	3.4	1.5	2.0	0.91
R	1" [25.4] Non-Spherical Mounting Bracket	2.1	1.0	—	—
V	1-1/4" [31.8] Non-Spherical Mounting Bracket	2.1	1.0	—	—

## CALCULATING TOTAL CLAMP FORCE



TCF = Cf x P  
 TCF = Total Clamp Force, lb [N]  
 Cf = Clamp Force Factor  
 P = Working Pressure, psi [bar]

### Example:

Your air line pressure: 72 psi [5 bar]

PNC55, High Force Region

TCF = 172.4 x 72 = 12,413 lb [11117 x 5 = 55,585 N]

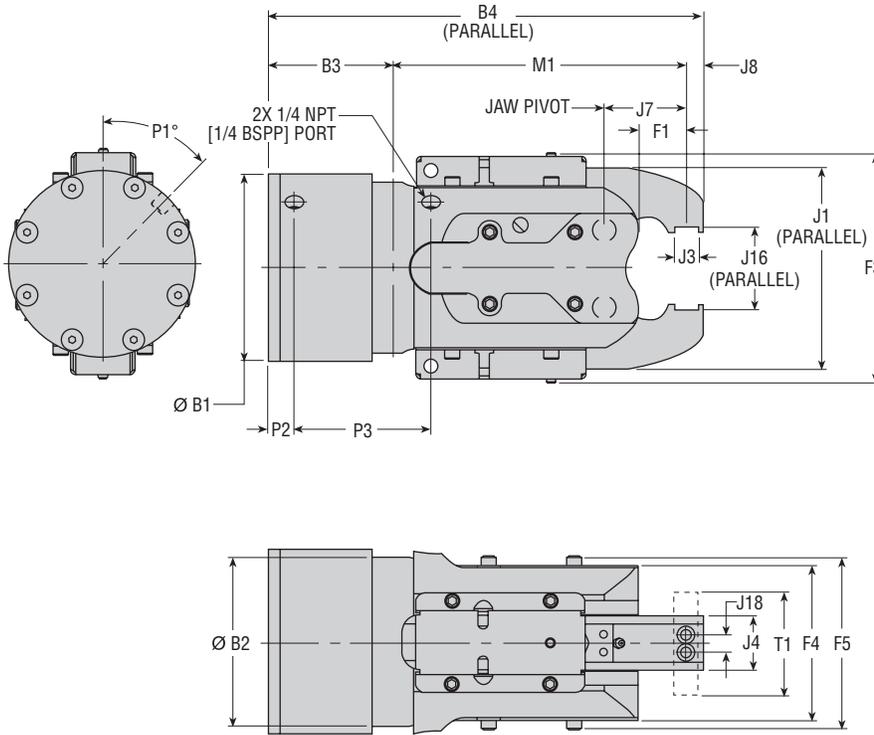
PNC66, High Force Region

TCF = 555.52 x 72 = 39,997 lb [35833 x 5 = 179,165 N]

### NOTES:

- 1) The Series PNC Number Cruncher® is designed for external clamping only. **Do not use the PNC for internal clamping.** Consult PHD for special applications.
- 2) Angular measurements are in degrees.
- 3) To achieve maximum clamp force, custom tooling must close on the part in the high force region of jaw travel. Refer to the diagram and table for effective stamping range.

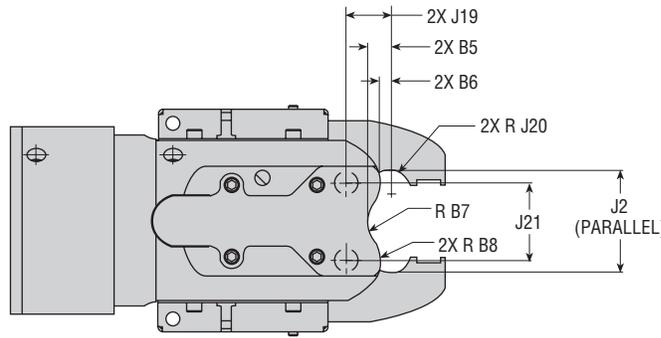
# DIMENSIONS: Series PNC - Sizes 44 & 55



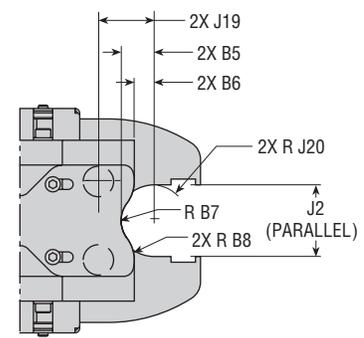
LETTER DIM	MODEL NUMBER			
	PNC44		PNC55	
	in	mm	in	mm
B1	4.902	124.5	4.902	124.5
B2	4.500	114.3	4.500	114.3
B3	3.300	83.8	3.300	83.8
B4 (PARALLEL)	11.540	293.1	11.540	293.1
B5	0.590	15.0	1.078	27.4
B6	0.247	6.3	0.735	18.7
B7	0.750	19.1	0.750	19.1
B8	0.932	23.7	0.932	23.7
F1	1.269	32.2	1.269	32.2
F3	5.990	152.1	5.990	152.1
F4	4.085	103.8	4.085	103.8
F5	4.557	115.7	4.557	115.7
J1 (PARALLEL)	5.284	134.2	5.284	134.2
J2 (PARALLEL)	2.698	68.5	1.862	47.3
J3*	0.635	16.1	0.635	16.1
J4	1.440	36.6	1.440	36.6
J7	2.201	55.9	2.201	55.9
J8	0.448	11.4	0.448	11.4
J16 (PARALLEL)	2.162	54.9	2.162	54.9
J18	0.472	12.0	0.472	12.0
J19	1.179	29.9	1.667	42.3
J20	0.580	14.7	1.000	25.4
J21	2.036	51.7	2.036	51.7
P1	45°	45°	45°	45°
P2	0.682	17.3	0.682	17.3
P3	3.602	91.5	3.602	91.5
M1	7.792	197.9	7.792	197.9
T1	2.760	70.1	2.760	70.1

\* TOLERANCE FOR J3 = ± 0.003 [0.076]

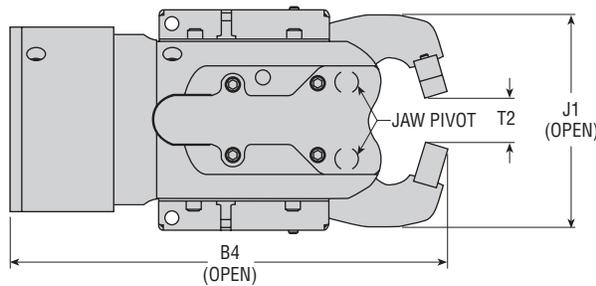
**NOTE:** FOR MOUNTING BRACKET INFORMATION SEE PAGES 70 TO 72.



**PNC44 UNITS ONLY**



**PNC55 UNITS ONLY**



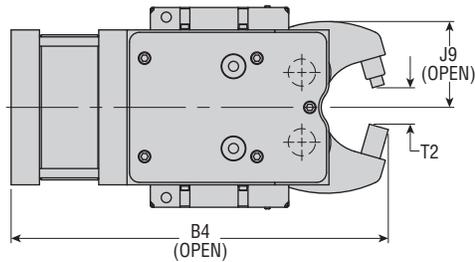
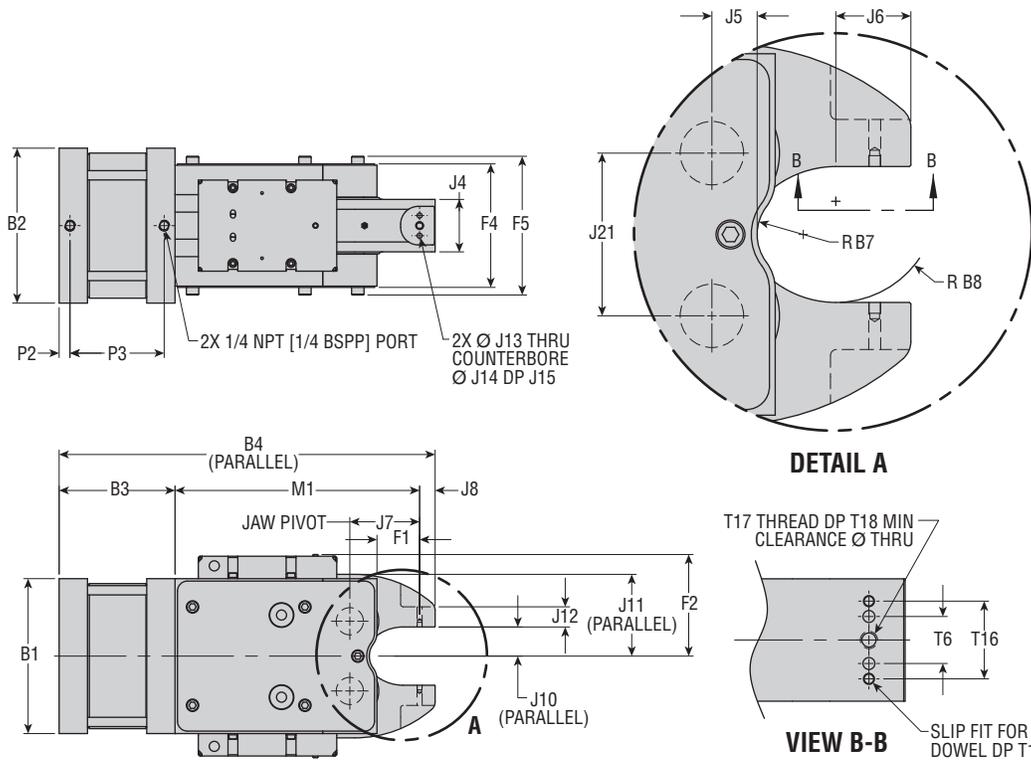
LETTER DIM	MODEL NUMBER			
	PNC44		PNC55	
	in	mm	in	mm
J1 (OPEN)	5.614	142.6	5.614	142.6
T2	1.149	29.2	1.149	29.2
B4 (OPEN)	11.590	294.4	11.590	294.4

## CAD & Sizing Assistance

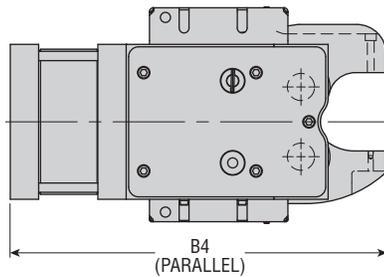
Use PHD's free online Product Sizing and CAD Configurator at [phdinc.com/myphd](http://phdinc.com/myphd)

All dimensions are reference only unless specifically tolerated.

# DIMENSIONS: Series PNC - Size 66



**PNC66-x-S16-S16**



**PNC66-x-A16-S16**

**NOTE:** FOR MOUNTING BRACKET INFORMATION SEE PAGES 70 AND 71.

## CAD & Sizing Assistance

Use PHD's free online Product Sizing and CAD Configurator at [phdinc.com/myphd](http://phdinc.com/myphd)

All dimensions are reference only unless specifically toleranced.

LETTER DIM	MODEL NUMBER			
	PNC66			
	"S" STYLE JAW		"A" STYLE JAW	
	in	mm	in	mm
B1	7.874	200.0	7.874	200.0
B2	7.874	200.0	7.874	200.0
B3	5.886	149.5	5.886	149.5
B4 (PARALLEL)	19.094	485.0	19.094	485.0
B4 (OPEN)	19.155	486.5	—	—
B7	1.004	25.5	1.004	25.5
B8	2.203	56.0	1.356	34.4
F1	2.165	55.0	2.165	55.0
F2	5.164	131.2	5.842	148.4
F4	6.276	159.4	6.276	159.4
F5	7.063	179.4	7.063	179.4
J4	2.665	67.7	2.665	67.7
J5	0.984	25.0	0.984	25.0
J6	1.634	41.5	1.575	40.0
J7	3.543	90.0	3.543	90.0
J8	0.787	20.0	0.787	20.0
J9 (OPEN)	4.364	110.9	5.665	143.9
J10 (PARALLEL)	1.480	37.6	2.500	63.5
J11 (PARALLEL)	4.155	105.5	4.950	125.7
J12	1.025	26.0	1.632	41.4
J13	0.260	6.6	0.346	8.8
J14	—	—	0.561	14.2
J15	—	—	0.340	8.6
J21	3.543	90.0	3.543	90.0
M1	12.421	315.5	12.421	315.5
P2	0.551	14.0	0.551	14.0
P3	4.783	121.5	4.783	121.5
T2	1.847	46.9	—	—
T6	1.024	26.0	1.024	26.0
T14	0.236	6.0	0.236	6.0
T15	0.236	6.0	0.236	6.0
T16	1.693	43.0	1.811	46.0
T17	3/8-16 UNC		—	—
T18	0.643	16.3	—	—



# MOUNTING BRACKET DIMENSIONS: Series PNC

## SIDE MOUNTING BRACKET

**PNC44 M**

**PNC55 M**

When a position sensor option is ordered with PNC44/55M option, the switch housing position takes precedence over the mount position.

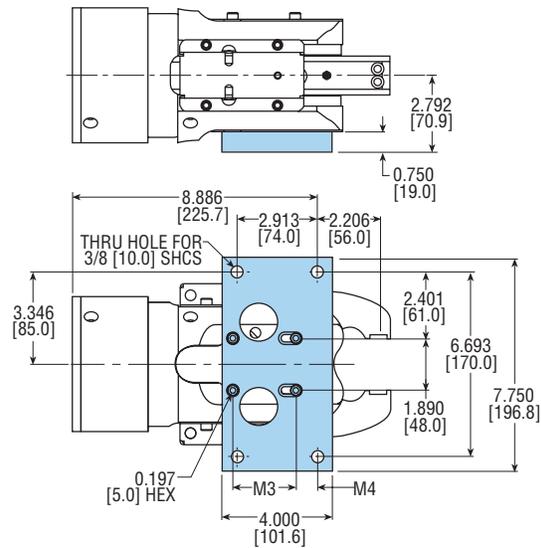
**Examples:**

PNC55M-1-S16-S16-LAA = Mount in Position 1

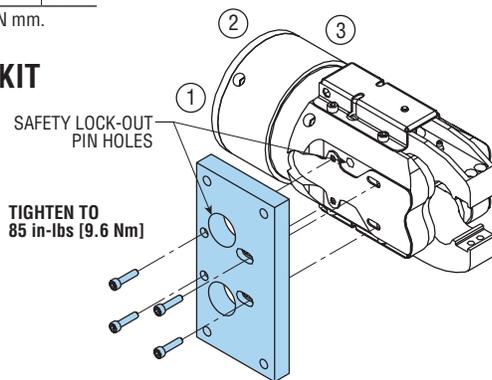
PNC55M-1-S16-S16-LAA-PS1D2 = Mount in Position 3

LETTER DIM	MODEL NUMBER			
	PNC44		PNC55	
	in	mm	in	mm
M3	2.283	58.0	1.890	48.0
M4	0.783	19.9	1.176	29.9

NOTE: NUMBERS IN [ ] ARE IN mm.



## SIDE MOUNTING KIT



TO ORDER KIT SEPARATELY:

DESCRIPTION	KIT NUMBER
SIDE MOUNTING PLATE KIT	PNC44/55M
	63099-03

NOTE: REMOVAL OF 4 IMPACT SHCS IS REQUIRED BEFORE SIDE MOUNTING PLATE ASSEMBLY.

**PNC66 M**

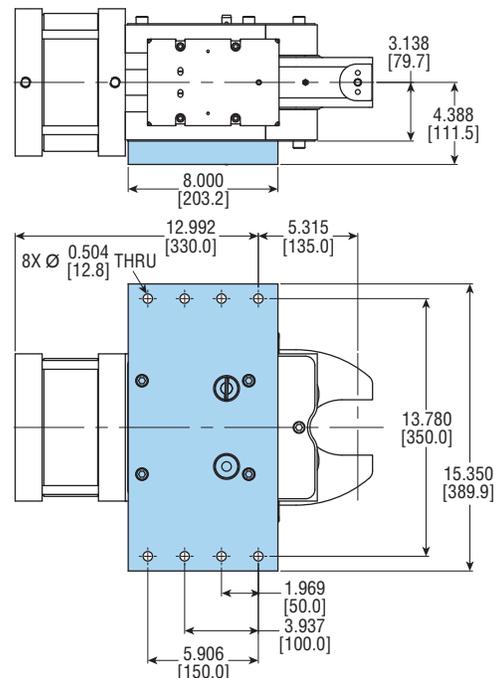
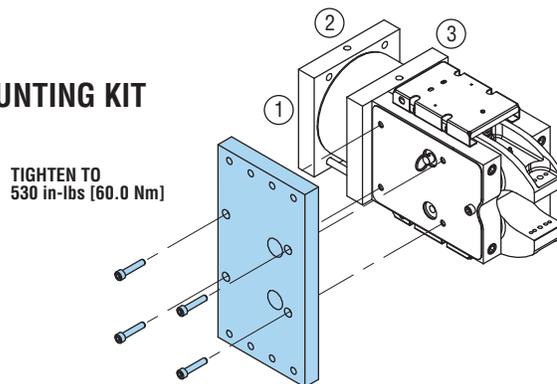
When a position sensor option is ordered with PNC66M option, the switch housing position takes precedence over the mount position.

**Examples:**

PNC66M-1-S16-S16-LAA = Mount in Position 1

PNC66M-1-S16-S16-LAA-PS1D2 = Mount in Position 3

## SIDE MOUNTING KIT



TO ORDER KIT SEPARATELY:

DESCRIPTION	KIT NUMBER
SIDE MOUNTING PLATE KIT	PNC66M
	89022

NOTE: REMOVAL OF 4 IMPACT SHCS IS REQUIRED BEFORE SIDE MOUNTING PLATE ASSEMBLY.

All dimensions are reference only unless specifically tolerated.

## NON-SPHERICAL MOUNTING BRACKET

PNC44 R

PNC55 R

PNC44 V

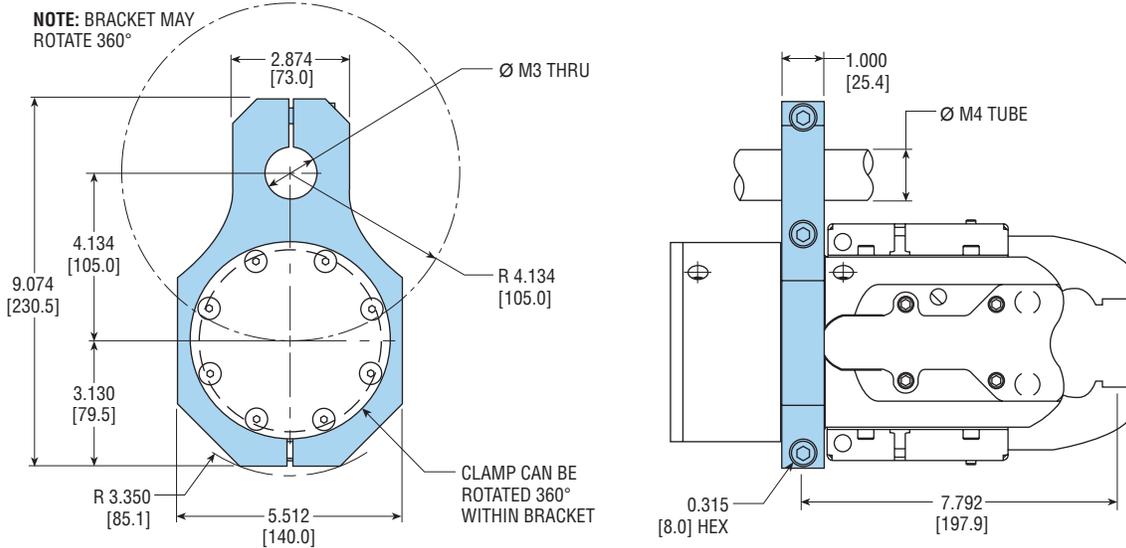
PNC55 V

LETTER DIM	MODEL NUMBER			
	PNC44/55R		PNC44/55V	
	in	mm	in	mm
M3*	1.005	25.5	1.255	31.9
M4	1.000	25.4	1.250	31.8

\*TOLERANCE FOR M3 = ± 0.002 [0.051]

**NOTES:**

- 1) NUMBERS IN [ ] ARE IN mm.
- 2) BRACKET MAY ROTATE 360° ABOUT M4 TUBE.



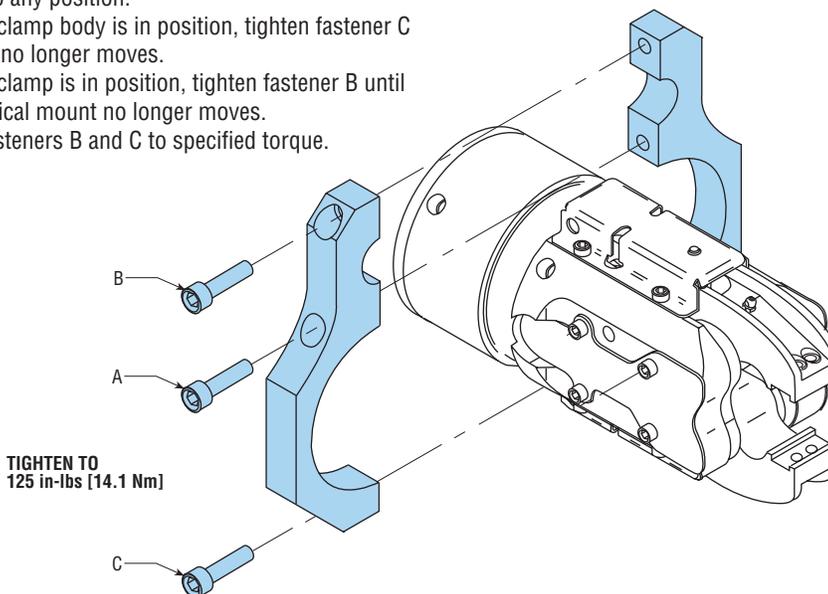
## NON-SPHERICAL MOUNTING KIT

**Installation Procedure:**

- 1) Insert body between non-spherical bracket halves.
- 2) Insert fasteners
  - A) Tighten fastener A to specified torque. This will allow for free adjustment of the clamp body and non-spherical mount into any position.
  - B) When the clamp body is in position, tighten fastener C until body no longer moves.
  - C) When the clamp is in position, tighten fastener B until non-spherical mount no longer moves.
  - D) Tighten fasteners B and C to specified torque.

**TO ORDER KIT SEPARATELY:**

DESCRIPTION	KIT NUMBER	
	PNC44/55R	PNC44/55V
NON-SPHERICAL MOUNTING KIT	63099-01	63099-04



All dimensions are reference only unless specifically toleranced.

## B01 TANDEM CYLINDER (PNC55 only)

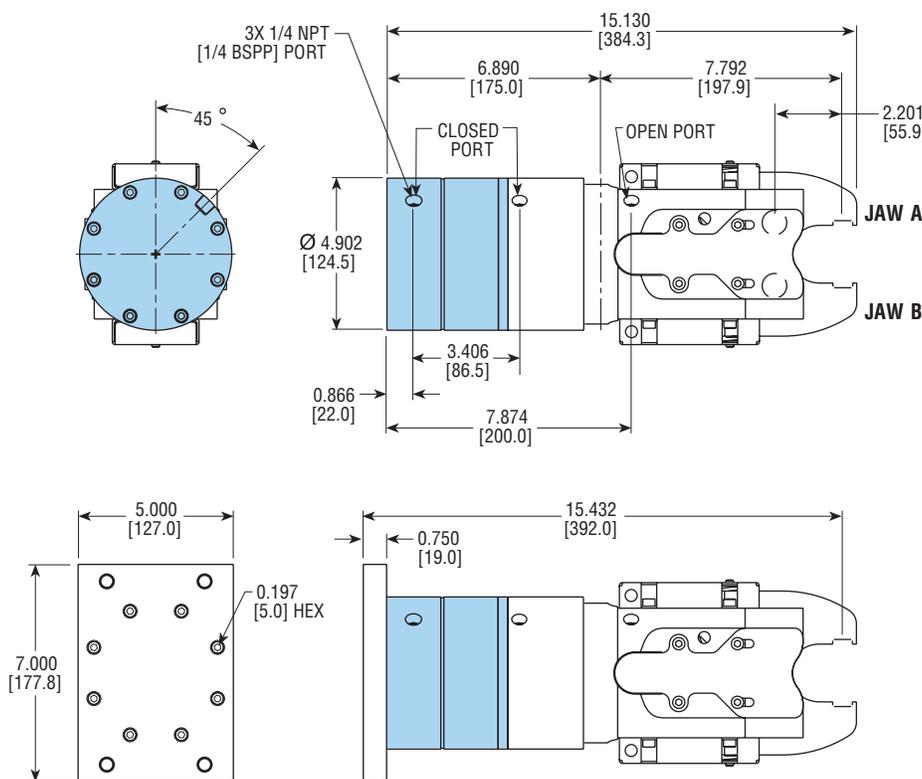
This option provides up to a 70% increase in clamp force by adding a second cylinder (tandem) on a standard PNC55 clamp. The cylinder mounts directly to the back of a PNC55 clamp body. Overall length is increased by 3.59 in [91.2 mm]. Weight is increased by 5.4 lb [2.45 kg].

This option is compatible with P, R, V, and M mounts. Length adder affects P mounting option. See below for P mounting option dimensions. This option will accommodate standard characters, retainers, and anvils.

The -LAA option provides the plumbing shown on the following page. If the -LAA option is not ordered, the customer should plumb the clamp in a similar fashion as depicted on the following page.

Fittings are ordered separately.

**NOTE:** 90 psi [6.2 bar] max. working pressure



**P MOUNTING OPTION**

**NOTE:**  
1) NUMBERS IN [ ] ARE IN mm.

### SPECIFICATIONS

CLAMP SIZE	WEIGHT ADDER		LENGTH ADDER		TOTAL CLAMP FORCE AT 87 psi [6 bar]		DISPLACEMENT			
	lb	kg	in	mm	lb	kN	OPEN		CLOSE	
55	5.4	2.45	3.59	91.2	25400	113	in <sup>3</sup>	cm <sup>3</sup>	in <sup>3</sup>	cm <sup>3</sup>
							19.60	321	41.74	684

### REPLACEMENT KIT NUMBERS IF ORDERED SEPARATELY

CLAMP SIZE & MODEL	CYLINDER ASSEMBLY NO.	
	Imperial	Metric
55x	72204-03	72204-04
55P	72204-05	72204-06

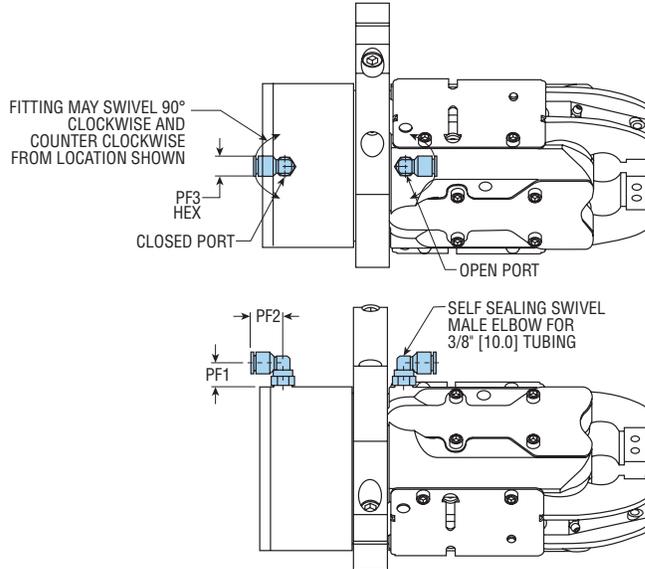
CLAMP SIZE & MODEL	MOUNTING KIT NO.
55P	72204-07

All dimensions are reference only unless specifically tolerated.

**LAA**

## OPTION (FITTINGS IN BOTH PORTS)

### PNC44/55

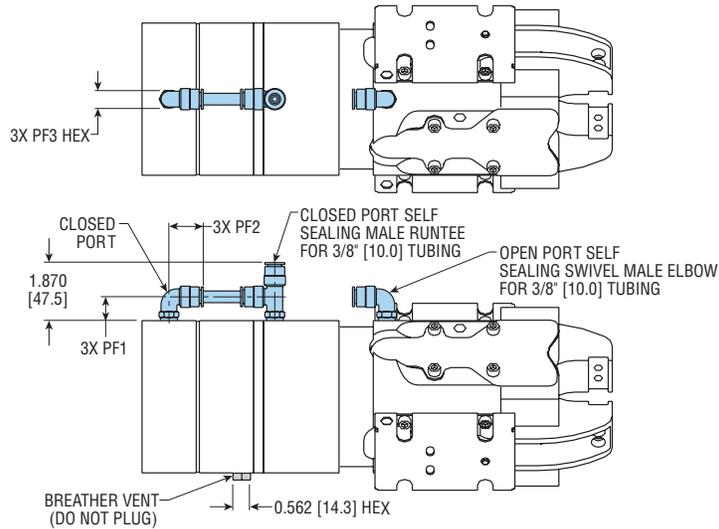


### PNC55-B01

REPLACEMENT KIT NUMBERS  
IF ORDERED SEPARATELY

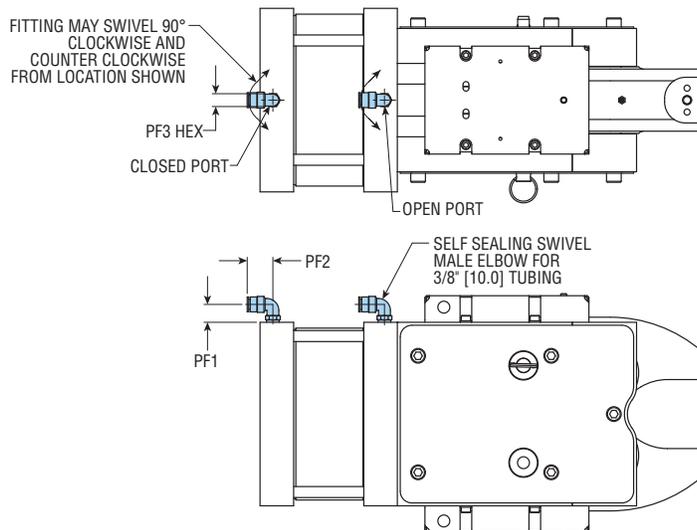
CLAMP SIZE	KIT NUMBER	
	Imperial	Metric
55	72204-11	72204-12

Kit includes: 2 swivel male elbows,  
1 male runtee, 1 tube, and  
1 breather vent



LETTER DIM	MODEL NUMBER PNCxx	
	in	mm
PF1	0.767	18.5
PF2	1.102	28.5
PF3	0.551	14.0

### PNC66

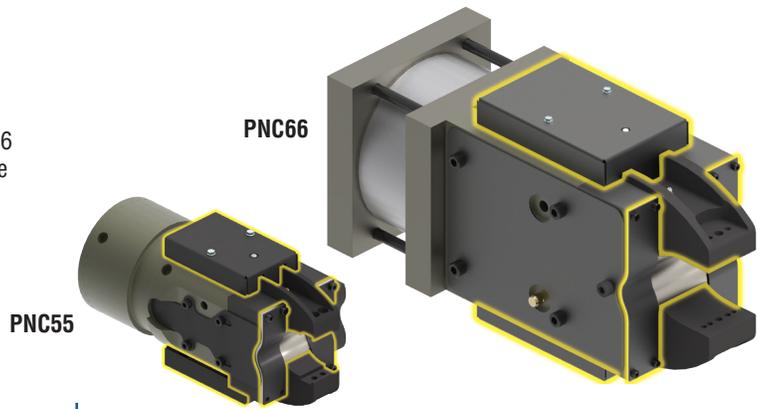


NOTE:  
1) NUMBERS IN [ ] ARE IN mm.

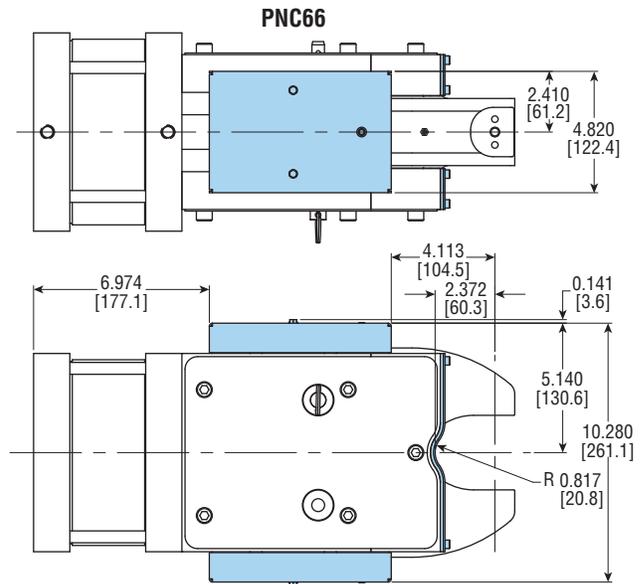
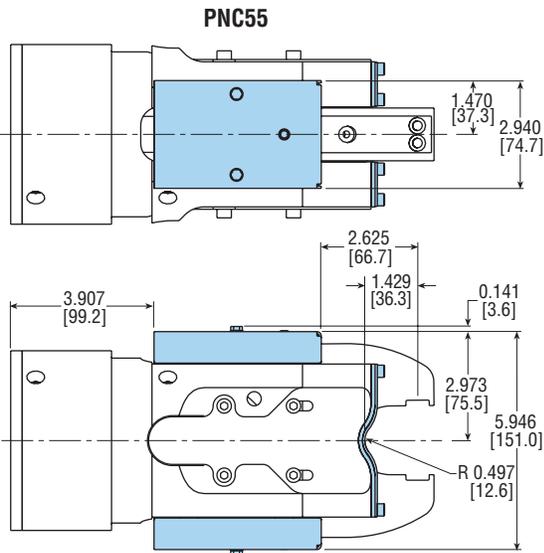
All dimensions are reference only unless specifically tolerated.

## G01 WELDING SLAG SHIELDS (PNC55 and PNC66 only)

This option provides shields that protect the PNC55 and PNC66 mechanism from flying sparks and weld slag. Metal shields are assembled over the spring covers, blocking all spring cover openings. Additionally, a urethane shield is mounted on the bushing blocks covering the opening between the jaws.



NOTE: NUMBERS IN [ ] ARE IN mm.



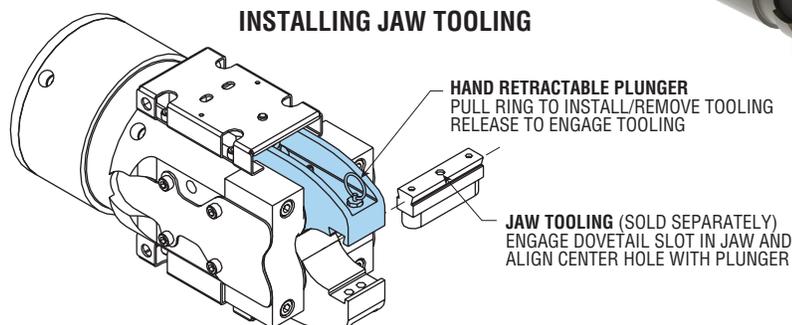
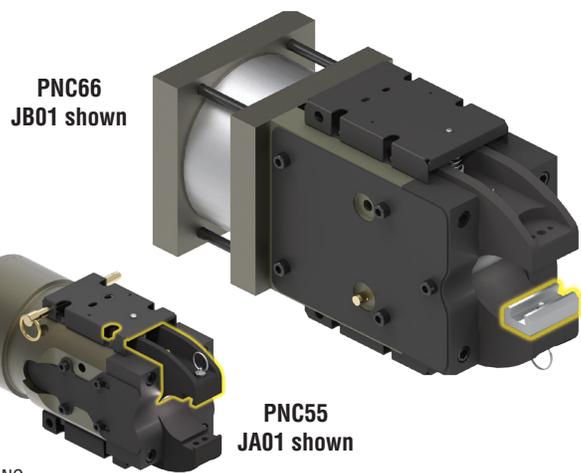
## Jx01 QUICK CHANGE TOOLING JAW (A on Jaw A, B on Jaw B)

This option provides quick change character tooling. A dovetail slot in the jaw accepts matching dovetail backing plates. A hand retractable plunger holds the character tooling in place. No fasteners or wrenches are required to mount character tooling to the jaw, thus minimizing downtime for part number/date/shift code change out.

**This option is not available for anvil tooling.**

See page 94 for character part numbers.

Available on standard jaw configurations only.



REPLACEMENT HAND RETRACTABLE  
PLUNGER KIT NUMBER  
IF ORDERED SEPARATELY

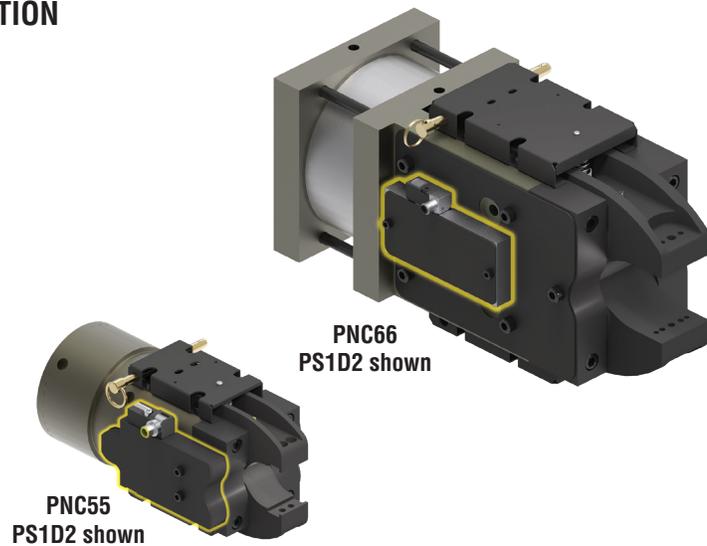
CLAMP SIZE	KIT NUMBER
44 or 55	78038-21
66	89028

All dimensions are reference only unless specifically tolerated.

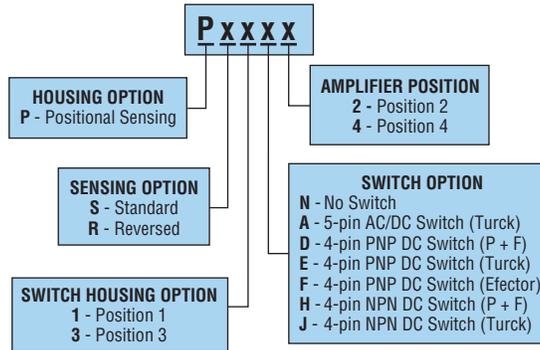
## PS(R)xxx POSITIONAL SENSING DETECTION

This option provides jaw open and jaw closed sensing by affixing an aluminum housing to the side of the clamp body. The included switches sense the position of a target on the drive pin as the clamp opens and closes (open range = 14° to full open, close range = 3° to full close).

PS positions satellite switch S02 to sense open and S01 to sense close. PR positions satellite switch S01 to sense open and S02 to sense close. See tables on switch option page for satellite switch to quick disconnect pin number relationships.

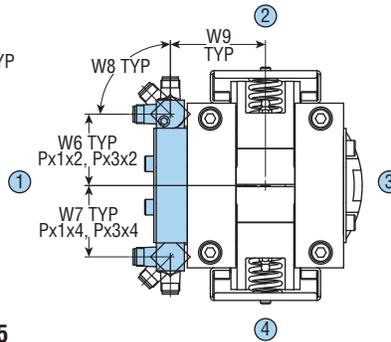
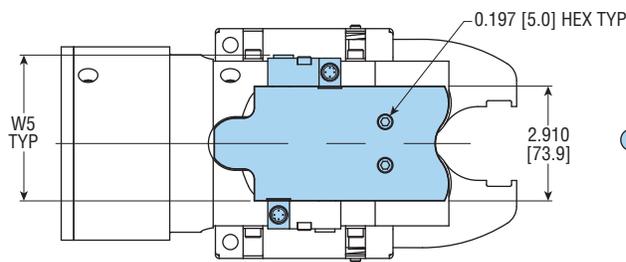
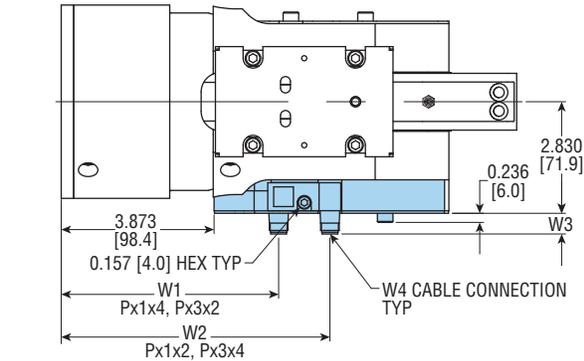


### POSITION SENSOR OPTION CODE



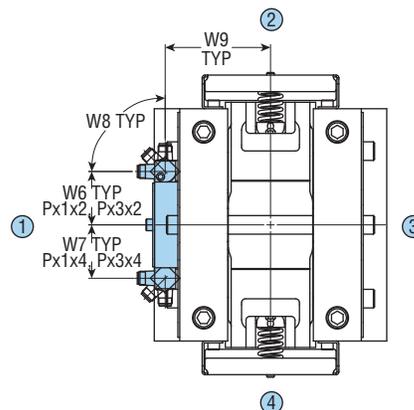
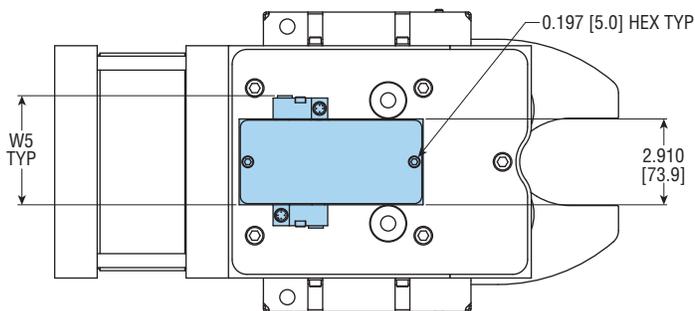
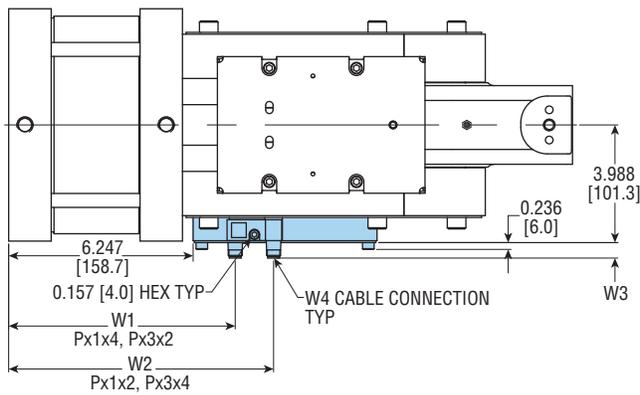
Refer to the following pages for switch option dimensions and specifications.

## PS(R)xxx POSITIONAL SENSING DETECTION (continued)



PNC44/55

LETTER DIM	MODEL NUMBER			
	PNC44/55			
	SWITCH OPTION A		SWITCH OPTION D, E, F, H, J	
	in	mm	in	mm
W1	5.548	140.9	5.509	139.9
W2	6.769	171.9	6.808	172.9
W3	0.434	11.0	0.524	13.3
W4	1/2-20 UNF		M12 x 1	
W5	3.826	97.2	3.697	93.9
W6	2.086	53.0	1.809	46.0
W7	2.086	53.0	1.809	46.0
W8	—	—	90°	
W9	—	—	2.409	61.2



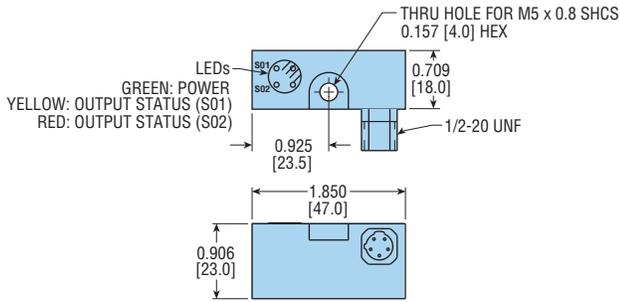
PNC66

LETTER DIM	MODEL NUMBER			
	PNC66			
	SWITCH OPTION A		SWITCH OPTION D, E, F, H, J	
	in	mm	in	mm
W1	7.711	195.9	7.672	194.9
W2	8.932	226.9	8.971	227.9
W3	0.434	11.0	0.524	13.3
W4	1/2-20 UNF		M12 x 1	
W5	3.826	97.2	3.697	93.9
W6	2.086	53.0	1.809	46.0
W7	2.086	53.0	1.809	46.0
W8	—	—	90°	
W9	—	—	3.568	90.6

All dimensions are reference only unless specifically tolerated.

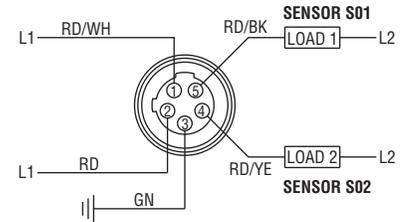
# SWITCH MOUNTING OPTIONS: Series PNC

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

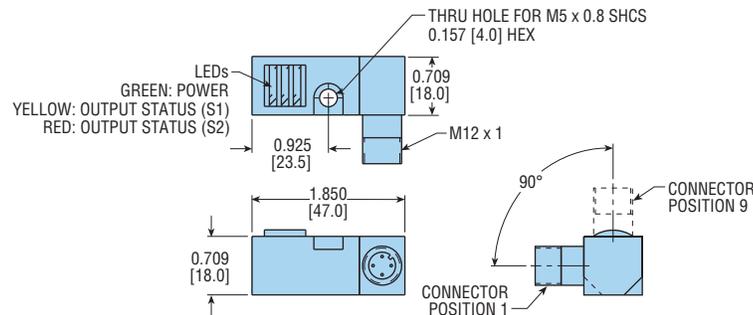


OPTION CODE	SATELLITE		QUICK DISCONNECT PIN NUMBER
	UNCLAMPED	CLAMPED	
PSxAx	S02	S01	S01 = Pin 5 S02 = Pin 4
PRxAx	S01	S02	

### 4-WIRE AC/DC

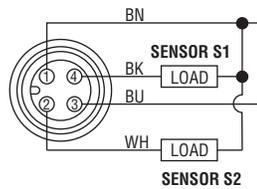


**SWITCH OPTION D**    **71483-001-PNC**    **P + F Part #: NBN2-F581-160S6-E8-V1 (PNP)**  
**SWITCH OPTION H**    **71483-005-PNC**    **P + F Part #: NBN2-F581-160S6-E10-V1 (NPN)**

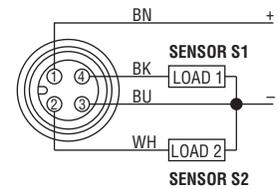


OPTION CODE	SATELLITE		QUICK DISCONNECT PIN NUMBER
	UNCLAMPED	CLAMPED	
PSxDx or PSxHx	S2	S1	S1 = Pin 4 S2 = Pin 2
PRxDx or PRxHx	S1	S2	

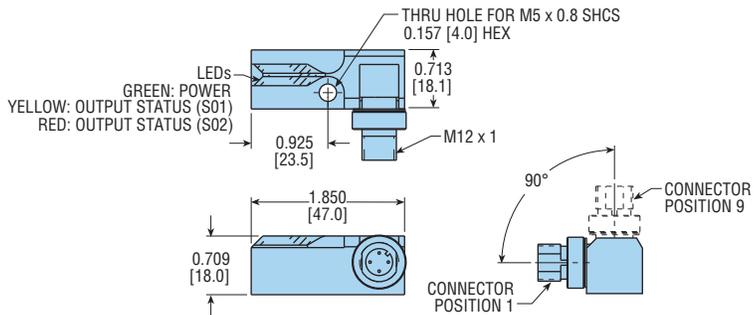
### 4-WIRE DC (V1 TYPE) NPN DUAL NORMALLY OPEN



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

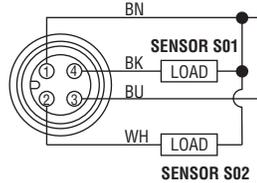


**SWITCH OPTION E**    **71483-003-PNC**    **Turck Part #: Ni 2-Q6.5-0.16-BDS-2AP6X3-H1141/S34 (PNP)**  
**SWITCH OPTION J**    **71483-006-PNC**    **Turck Part #: Ni 2-Q6.5-AN6-0.16-FS 4.4X3/S304 (NPN)**

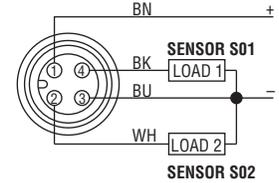


OPTION CODE	SATELLITE		QUICK DISCONNECT PIN NUMBER
	UNCLAMPED	CLAMPED	
PSxEx or PSxJx	S02	S01	S01 = Pin 4 S02 = Pin 2
PRxEx or PRxJx	S01	S02	

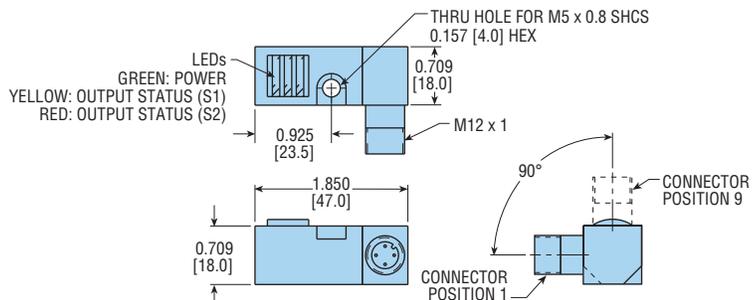
### 4-WIRE DC NPN DUAL NORMALLY OPEN



### 4-WIRE DC PNP DUAL NORMALLY OPEN

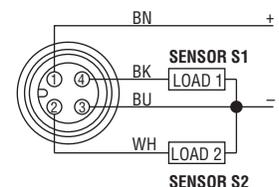


**SWITCH OPTION F**    **71483-004-PNC**    **Efector Part #: IN 5375 (PNP)**



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

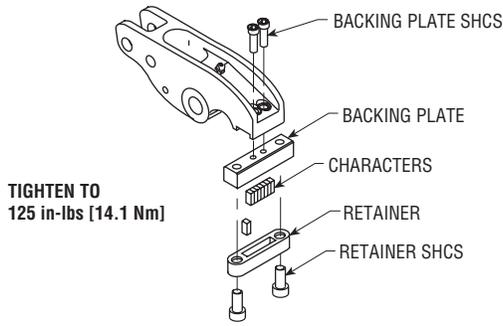
### 4-WIRE DC PNP DUAL NORMALLY OPEN



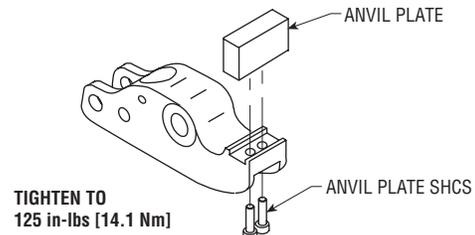
NUMBERS IN [ ] ARE IN mm.

All dimensions are reference only unless specifically tolerated.

## CHARACTER MOUNTING - JAW A



## ANVIL MOUNTING - JAW B



### TO ORDER SPECIFY:

Based on your character **HEIGHT** and **MATERIAL THICKNESS** to be stamped, order the correct anvil, backer, and retainer kit required. If you need all the components, order the anvil-backer-retainer kit. (Ex: **63140-01** for 1/8" tall char.) (Ex: **65340-01** for 3/16" tall char.) If you have a retainer, order the anvil and backer kit. (Ex: **63130-01** for 1/8" tall char.) (Ex: **65330-01** for 3/16" tall char.) Characters are ordered individually. (Ex: **63100-N6** for 1/8" tall char. number 6) (Ex: **65300-N6** for 3/16" tall char. number 6)

Retainers must be filled completely with characters to work properly. Depending on the number to be stamped, order the characters and enough blanks or hyphens to fill the retainer.

**Ex:** With 1/8" tall character (63100 series) stamp the number 1999.

Matching retainer 63110-09 holds 9 characters.  
Order: 1 of 63100-N1, 3 of 63100-N9, and 5 of 63100-BL.

**Ex:** With 3/16" tall character (65300 series) stamp the number 1999.

Matching retainer 65310-08 holds 8 characters.  
Order: 1 of 65300-N1, 3 of 65300-N9, and 4 of 65300-BL.

### CHART LEGEND

- Will not function in this range
- Ideal stamping range (high clamp force region)

### PNC44x-x-S16-S16 TIP COMBINATION

DESCRIPTION	COLOR	PANEL THICKNESS in [mm]																				
		0.000	0.010	0.020	0.030	0.039	0.049	0.059	0.069	0.079	0.089	0.098	0.108	0.118	0.128	0.138	0.148	0.157	0.167	0.177	0.187	0.197
		[0]	[0.25]	[0.50]	[0.75]	[1.00]	[1.25]	[1.50]	[1.75]	[2.00]	[2.25]	[2.50]	[2.75]	[3.00]	[3.25]	[3.50]	[3.75]	[4.00]	[4.25]	[4.50]	[4.75]	[5.00]
GREEN ANVIL	GREEN																					
BLACK ANVIL	BLACK																					
SILVER ANVIL	SILVER																					
GOLD ANVIL	GOLD																					

### PNC55x-x-S16-S16 TIP COMBINATION

DESCRIPTION	COLOR	PANEL THICKNESS in [mm]																				
		0.000	0.010	0.020	0.030	0.039	0.049	0.059	0.069	0.079	0.089	0.098	0.108	0.118	0.128	0.138	0.148	0.157	0.167	0.177	0.187	0.197
		[0]	[0.25]	[0.50]	[0.75]	[1.00]	[1.25]	[1.50]	[1.75]	[2.00]	[2.25]	[2.50]	[2.75]	[3.00]	[3.25]	[3.50]	[3.75]	[4.00]	[4.25]	[4.50]	[4.75]	[5.00]
GREEN ANVIL	GREEN																					
BLACK ANVIL	BLACK																					
SILVER ANVIL	SILVER																					
GOLD ANVIL	GOLD																					

### PNC55x-x-S16-S16-B01 TIP COMBINATION

DESCRIPTION	COLOR	PANEL THICKNESS in [mm]																				
		0.000	0.010	0.020	0.030	0.039	0.049	0.059	0.069	0.079	0.089	0.098	0.108	0.118	0.128	0.138	0.148	0.157	0.167	0.177	0.187	0.197
		[0]	[0.25]	[0.50]	[0.75]	[1.00]	[1.25]	[1.50]	[1.75]	[2.00]	[2.25]	[2.50]	[2.75]	[3.00]	[3.25]	[3.50]	[3.75]	[4.00]	[4.25]	[4.50]	[4.75]	[5.00]
GREEN ANVIL	GREEN																					
BLACK ANVIL	BLACK																					
SILVER ANVIL	SILVER																					
GOLD ANVIL	GOLD																					

### PNC66x-x-S16-S16 TIP COMBINATION

DESCRIPTION	COLOR	PANEL THICKNESS in [mm]																				
		0.000	0.010	0.020	0.030	0.039	0.049	0.059	0.069	0.079	0.089	0.098	0.108	0.118	0.128	0.138	0.148	0.157	0.167	0.177	0.187	0.197
		[0]	[0.25]	[0.50]	[0.75]	[1.00]	[1.25]	[1.50]	[1.75]	[2.00]	[2.25]	[2.50]	[2.75]	[3.00]	[3.25]	[3.50]	[3.75]	[4.00]	[4.25]	[4.50]	[4.75]	[5.00]
GREEN ANVIL	GREEN																					
BLACK ANVIL	BLACK																					
SILVER ANVIL	SILVER																					
GOLD ANVIL	GOLD																					

All dimensions are reference only unless specifically tolerated.

# ANVILS, BACKERS, RETAINERS, & CHARACTERS: PNC

## KITS FOR 1/8" TALL CHARACTERS

PNC SIZE	PANEL THICKNESS	ANVIL COLOR	KIT NUMBER ANVIL	KIT NUMBER RETAINER	STANDARD TOOLING MOUNTING			QUICK CHANGE (Jx01) TOOLING MOUNTING		
					KIT NUMBER BACKER	KIT NUMBER ANVIL & BACKER	KIT NUMBER ANVIL, BACKER & RETAINER	KIT NUMBER BACKER	KIT NUMBER ANVIL & BACKER	KIT NUMBER ANVIL, BACKER & RETAINER
PNC44	0.25 - 1.25 mm	GREEN	65500-00	63110-09	63120-09	63130-00	63140-00	78038-03	78038-04	78038-08
	1.25 - 2.50 mm	BLACK	65500-01			63130-01	63140-01		78038-05	78038-09
	2.50 - 3.75 mm	SILVER	65500-02			63130-02	63140-02		78038-06	78038-10
	3.75 - 4.75 mm	GOLD	65500-03			63130-03	63140-03		78038-07	78038-11
PNC55	0.25 - 1.50 mm	BLACK	65500-01			63130-01	63140-01		78038-05	78038-09
	1.50 - 3.00 mm	SILVER	65500-02			63130-02	63140-02		78038-06	78038-10
	3.00 - 4.25 mm	GOLD	65500-03			63130-03	63140-03		78038-07	78038-11
PNC55-B01	0.25 - 1.00 mm	GREEN	65500-00			63130-00	63140-00		78038-04	78038-08
	1.00 - 2.25 mm	BLACK	65500-01			63130-01	63140-01		78038-05	78038-09
	2.25 - 3.50 mm	SILVER	65500-02			63130-02	63140-02		78038-06	78038-10
	3.50 - 4.75 mm	GOLD	65500-03			63130-03	63140-03		78038-07	78038-11
PNC66	0.25 - 1.00 mm	GREEN	89021-01			88717	88719-01		88721-01	88718
	1.00 - 2.00 mm	BLACK	89021-02		88719-02		88721-02	88720-02	88722-02	
	2.00 - 3.00 mm	SILVER	89021-03		88719-03		88721-03	88720-03	88722-03	
	3.00 - 4.00 mm	GOLD	89021-04		88719-04		88721-04	88720-04	88722-04	

ALL KITS INCLUDE FASTENERS REQUIRED FOR INSTALLATION

## 1/8" TALL CHARACTERS

PART DESCRIPTION	PART NUMBER						
NUMBER 0	63100-N0	LETTER A	63100-LA	LETTER K	63100-LK	LETTER U	63100-LU
NUMBER 1	63100-N1	LETTER B	63100-LB	LETTER L	63100-LL	LETTER V	63100-LV
NUMBER 2	63100-N2	LETTER C	63100-LC	LETTER M	63100-LM	LETTER W	63100-LW
NUMBER 3	63100-N3	LETTER D	63100-LD	LETTER N	63100-LN	LETTER X	63100-LX
NUMBER 4	63100-N4	LETTER E	63100-LE	LETTER O	63100-LO	LETTER Y	63100-LY
NUMBER 5	63100-N5	LETTER F	63100-LF	LETTER P	63100-LP	LETTER Z	63100-LZ
NUMBER 6	63100-N6	LETTER G	63100-LG	LETTER Q	63100-LQ		
NUMBER 7	63100-N7	LETTER H	63100-LH	LETTER R	63100-LR	BLANK	63100-BL
NUMBER 8	63100-N8	LETTER I	63100-LI	LETTER S	63100-LS		
NUMBER 9	63100-N9	LETTER J	63100-LJ	LETTER T	63100-LT	HYPHEN	63100-HY

9 CHARACTERS ARE REQUIRED WHEN USING PHD RETAINER NUMBER 63110-09

## KITS FOR 3/16" TALL CHARACTERS

PNC SIZE	PANEL THICKNESS	ANVIL COLOR	KIT NUMBER ANVIL	KIT NUMBER RETAINER	STANDARD TOOLING MOUNTING			QUICK CHANGE (Jx01) TOOLING MOUNTING		
					KIT NUMBER BACKER	KIT NUMBER ANVIL & BACKER	KIT NUMBER ANVIL, BACKER & RETAINER	KIT NUMBER BACKER	KIT NUMBER ANVIL & BACKER	KIT NUMBER ANVIL, BACKER & RETAINER
PNC44	0.25 - 1.25 mm	GREEN	65500-00	65310-08	65320-08	65330-00	65340-00	78038-12	78038-13	78038-17
	1.25 - 2.50 mm	BLACK	65500-01			65330-01	65340-01		78038-14	78038-18
	2.50 - 3.75 mm	SILVER	65500-02			65330-02	65340-02		78038-15	78038-19
	3.75 - 4.75 mm	GOLD	65500-03			65330-03	65340-03		78038-16	78038-20
PNC55	0.25 - 1.50 mm	BLACK	65500-01			65330-01	65340-01		78038-14	78038-18
	1.50 - 3.00 mm	SILVER	65500-02			65330-02	65340-02		78038-15	78038-19
	3.00 - 4.25 mm	GOLD	65500-03			65330-03	65340-03		78038-16	78038-20
PNC55-B01	0.25 - 1.00 mm	GREEN	65500-00			65330-00	65340-00		78038-13	78038-17
	1.00 - 2.25 mm	BLACK	65500-01			65330-01	65340-01		78038-14	78038-18
	2.25 - 3.50 mm	SILVER	65500-02			65330-02	65340-02		78038-15	78038-19
	3.50 - 4.75 mm	GOLD	65500-03			65330-03	65340-03		78038-16	78038-20
PNC66	0.25 - 1.00 mm	GREEN	89021-01			88723	88725-01		88727-01	88724
	1.00 - 2.00 mm	BLACK	89021-02		88725-02		88727-02	88726-02	88728-02	
	2.00 - 3.00 mm	SILVER	89021-03		88725-03		88727-03	88726-03	88728-03	
	3.00 - 4.00 mm	GOLD	89021-04		88725-04		88727-04	88726-04	88728-04	

ALL KITS INCLUDE FASTENERS REQUIRED FOR INSTALLATION

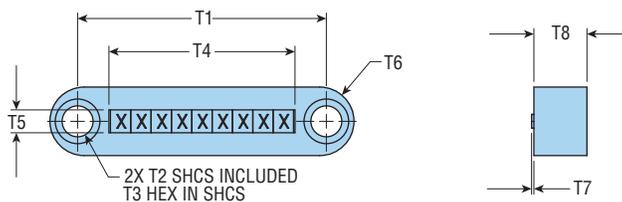
## 3/16" TALL CHARACTERS

PART DESCRIPTION	PART NUMBER						
NUMBER 0	65300-N0	LETTER A	65300-LA	LETTER K	65300-LK	LETTER U	65300-LU
NUMBER 1	65300-N1	LETTER B	65300-LB	LETTER L	65300-LL	LETTER V	65300-LV
NUMBER 2	65300-N2	LETTER C	65300-LC	LETTER M	65300-LM	LETTER W	65300-LW
NUMBER 3	65300-N3	LETTER D	65300-LD	LETTER N	65300-LN	LETTER X	65300-LX
NUMBER 4	65300-N4	LETTER E	65300-LE	LETTER O	65300-LO	LETTER Y	65300-LY
NUMBER 5	65300-N5	LETTER F	65300-LF	LETTER P	65300-LP	LETTER Z	65300-LZ
NUMBER 6	65300-N6	LETTER G	65300-LG	LETTER Q	65300-LQ		
NUMBER 7	65300-N7	LETTER H	65300-LH	LETTER R	65300-LR	BLANK	65300-BL
NUMBER 8	65300-N8	LETTER I	65300-LI	LETTER S	65300-LS		
NUMBER 9	65300-N9	LETTER J	65300-LJ	LETTER T	65300-LT	HYPHEN	65300-HY

8 CHARACTERS ARE REQUIRED WHEN USING PHD RETAINER NUMBER 65310-08

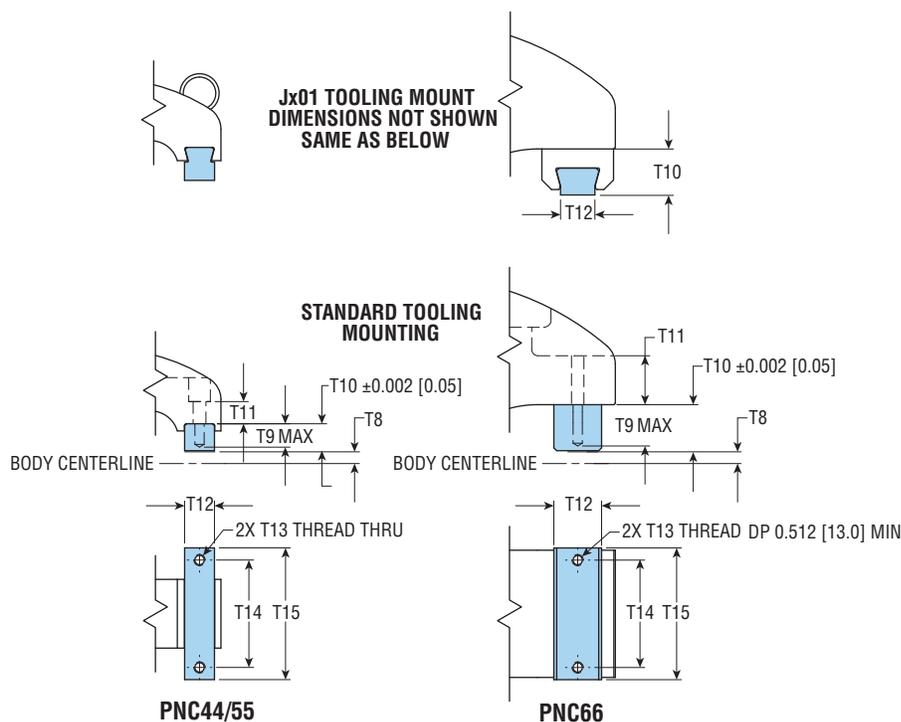
# TIP DIMENSIONS: Series PNC

## JAW A - RETAINER



RETAINER KIT NO.	LETTER DIMENSION																
	T1		T2		T3		T4		T5		T6		T7		T8		
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
63110-09	2.250	57.2	M6 x 1.0	0.197	5.0	1.683	42.7	0.220	5.6	0.310	7.9	0.021	0.5	0.480	12.2		
65310-08	2.000	50.8	M8 x 1.25	0.236	6.0	1.310	33.3	0.250	6.4	0.310	7.9	0.032	0.8	0.469	11.9		

## JAW A - BACKER

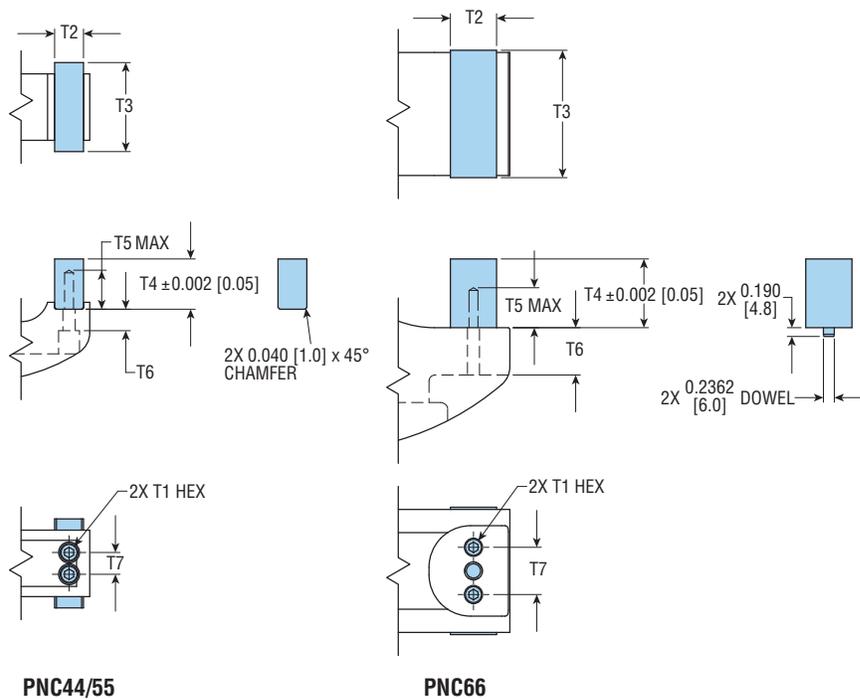


CLAMP SIZE	BACKER MOUNT	BACKER KIT NO.	LETTER DIMENSION														
			T8		T9		T10		T11		T12		T13	T14		T15	
			in	mm	in	mm	in	mm	in	mm	in	mm	mm	in	mm	in	mm
PNC44/55	STANDARD	63120-09	0.517	13.1	0.490	12.4	0.564	14.3	0.465	11.8	0.625	15.9	M6 x 1.0	2.250	57.2	2.760	70.1
	STANDARD	65320-08	0.517	13.1	0.490	12.4	0.564	14.3	0.465	11.8	0.625	15.9	M8 x 1.25	2.000	50.8	2.630	66.8
	Jx01	78038-03	0.517	13.1	—	—	—	—	—	—	0.625	15.9	M6 x 1.0	2.250	57.2	2.760	70.1
	Jx01	78038-12	0.517	13.1	—	—	—	—	—	—	0.625	15.9	M8 x 1.25	2.000	50.8	2.630	66.8
PNC66	STANDARD	88717	0.516	13.1	0.807	20.5	0.964	24.49	1.025	26.0	1.000	25.4	M6 x 1.0	2.250	57.2	2.760	70.1
	STANDARD	88723	0.516	13.1	0.807	20.5	0.964	24.49	1.025	26.0	1.000	25.4	M8 x 1.25	2.000	50.8	2.760	70.1
	Jx01	88718	0.516	13.1	—	—	0.964	24.5	—	—	0.720	18.3	M6 x 1.0	2.250	57.2	2.760	70.1
	Jx01	88724	0.516	13.1	—	—	0.964	24.5	—	—	0.720	18.3	M8 x 1.25	2.000	50.8	2.760	70.1

All dimensions are reference only unless specifically tolerated.

# TIP DIMENSIONS: Series PNC

## JAW A - ANVIL



CLAMP SIZE	ANVIL COLOR	ANVIL KIT NO.	LETTER DIMENSION													
			T1		T2		T3		T4		T5		T6		T7	
			in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
PNC44/55	GREEN	65500-00	0.197	5.0	0.625	15.9	1.929	49.0	1.138	28.91	0.850	21.6	0.465	11.8	0.472	12.0
	BLACK	65500-01							1.089	27.66						
	SILVER	65500-02							1.040	26.42						
	GOLD	65500-03							0.990	25.15						
PNC66	GREEN	89021-01	0.197	5.0	1.000	25.4	2.760	70.1	1.552	39.42	0.807	20.5	1.025	26.0	1.024	26.0
	BLACK	89021-02							1.513	38.43						
	SILVER	89021-03							1.473	37.41						
	GOLD	89021-04							1.434	36.42						

All dimensions are reference only unless specifically toleranced.

# REPLACEMENT KITS: Series PNC

## REPLACEMENT KIT NUMBERS IF ORDERED SEPARATELY

CLAMP SIZE	ACCESSORY	KIT NUMBER	DESCRIPTION
PNC44/55	PS(R)xN0	71251-04	Switch Housing Kit without Switch
	PS(R)xAx	71251-08	Switch Housing Kit with 5 pin AC/DC, (Turck) Switch
	PS(R)xDx	71251-03	Switch Housing Kit with 4 pin DC, PNP (P + F) Switch
	PS(R)xEx	71251-06	Switch Housing Kit with 4 pin DC, PNP (Turck) Switch
	PS(R)xFx	71251-10	Switch Housing Kit with 4 pin DC, PNP (Efector) Switch
	PS(R)xHx	71251-12	Switch Housing Kit with 4 pin DC, NPN (P + F) Switch
	PS(R)xJx	71251-13	Switch Housing Kit with 4 pin DC, NPN (Turck) Switch
PNC66	PS(R)xN0	89025-01	Switch Housing Kit without Switch
	PS(R)xAx	89025-02	Switch Housing Kit with 5 pin AC/DC, (Turck) Switch
	PS(R)xDx	89025-03	Switch Housing Kit with 4 pin DC, PNP (P + F) Switch
	PS(R)xEx	89025-04	Switch Housing Kit with 4 pin DC, PNP (Turck) Switch
	PS(R)xFx	89025-05	Switch Housing Kit with 4 pin DC, PNP (Efector) Switch
	PS(R)xHx	89025-06	Switch Housing Kit with 4 pin DC, NPN (P + F) Switch
	PS(R)xJx	89025-07	Switch Housing Kit with 4 pin DC, NPN (Turck) Switch

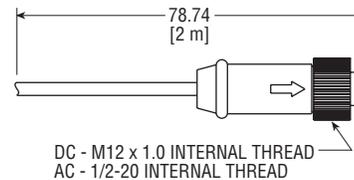
Kit includes: Housing and all pins and screws required for installation.

## REPLACEMENT SWITCH KIT NUMBERS IF ORDERED SEPARATELY

SWITCH OPTION	SWITCH TYPE	PHD SWITCH KIT NUMBER	SWITCH PART NUMBER
A	5-PIN AC/DC - N.O.	71483-002-PNC	Ni 2-Q6.5-ADZ32-0.16-FSB 5.4X4/S304
D	4-PIN DC - N.O. - PNP	71483-001-PNC	NBN2-F581-160S6-E8-V1
E	4-PIN DC - N.O. - PNP	71483-003-PNC	Ni 2-Q6.5-0.16-BDS-2AP6X3-H1141/S34
F	4-PIN DC - N.O. - PNP	71483-004-PNC	IN 5375
H	4-PIN DC - N.O. - NPN	71483-005-PNC	NBN2-F581-160S6-E10-V1
J	4-PIN DC - N.O. - NPN	71483-006-PNC	Ni 2-Q6.5-AN6-0.16-FS 4.4X3/S304

## 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



**MATING CORDSET**

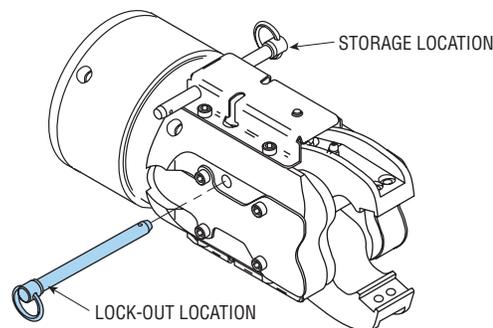
All dimensions are reference only unless specifically tolerated.

## SAFETY LOCK-OUT

The safety lock-out pin is a safety device that stops jaw motion during maintenance on the clamp.

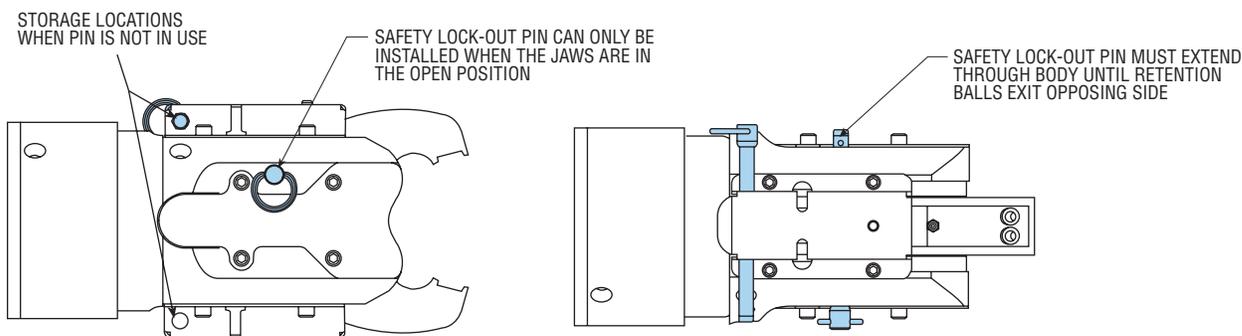
Remove the safety lock-out pin from the storage location. Re-install the safety lock-out pin in the lock-out location in the body before attempting to work on or near the stamping portion of this clamp.

No attempt should be made to service the clamp and/or remove the retainer, backing plate, or anvil before the safety lock-out pin is installed in the lock-out location.



DESCRIPTION	REPLACEMENT PART NO.	
	PNC44/55	PNC66
SAFETY LOCK-OUT PIN	63087	88699

NOTE: ONE SAFETY LOCK-OUT PIN SUPPLIED WITH UNIT



## MAINTENANCE SCHEDULE

Lubrication guidelines for the Series PNC Clamp are based on continuous operation at the following cycle speeds:  
 PNC44 and PNC55 at 30 cycles/minute  
 PNC66 at 15 cycles/minute

Variations in cycle speeds from those listed herein may require more or less frequent maintenance schedules.

Apply commercial-grade high-pressure bearing grease to the grease zerks located on the jaws. Apply until the grease starts to squeeze out between the jaw and jaw bushing. Grease should be applied to the jaws every 200,000-300,000 cycles.

Apply 30W oil to the roller bearings located beneath the spring covers. Insert the nozzle of the oil can into each spring cover slot. Apply enough oil to saturate the bearings. This allows oil to wick into the mating surfaces of the bearings and jaws, and also onto the roller bearing pins. Oil should be applied to the roller bearings every 200,000-300,000 cycles.

