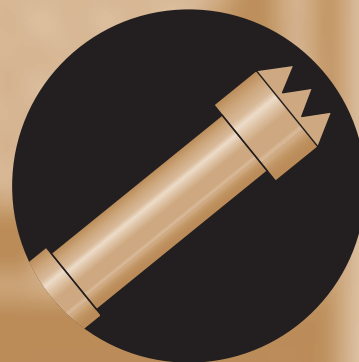
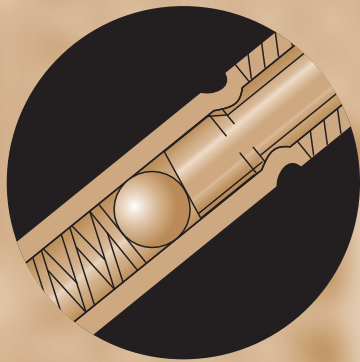


# P Y L O N P O G O<sup>®</sup> C O N T A C T S



**Pogo Contacts for Board Test, Battery Interconnects,  
Medical Devices and other Momentary Electrical Contacts**

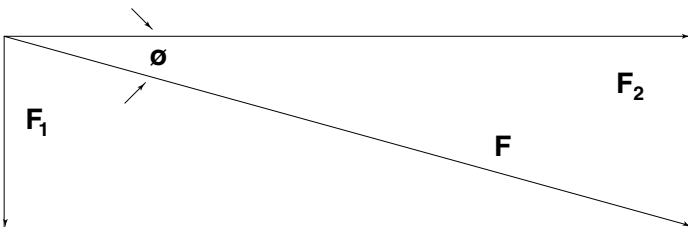
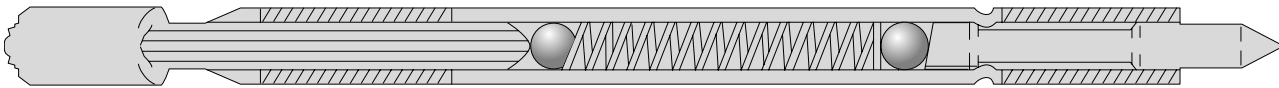


# The Pylon® Advantage

The Pylon Pogo® Contact advantage comes in two unique design features that enable our Pogo Contacts to achieve the lowest, most consistent contact resistance available in the marketplace.

These features are:

- The biasing ball construction of the Pogo Plunger
- Gold lined nickel silver tubing material for the Pogo body on selected series



The figure above depicts the biasing angle ( $\theta$ ), spring force ( $F$ ), radial or side force ( $F_1$ ) and plunger force ( $F_2$ ) of Biasing-Ball Pogo Contacts.

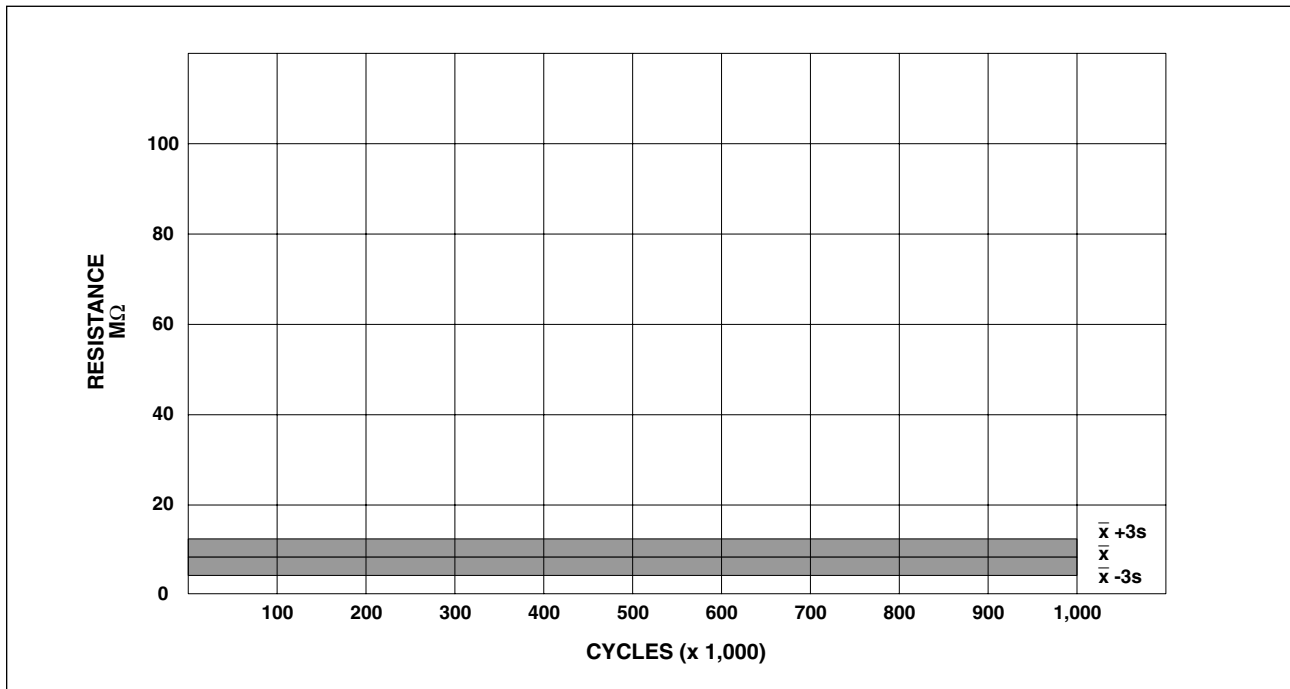
## Pylon's Biasing Ball Plungers

Biasing-Ball Construction\* creates a radial component force insuring a positive and uniform electrical junction between the contact plunger and gold-alloy lining of the contact body.

## Contact Resistance

In evaluating contact resistance, low levels of resistance are important. However, the more critical performance measurement is the consistency of the low contact resistance. Resistance measured as 8 milliohms at 1000 cycles must

also measure 8 milliohms at 200K, 500K and 1,000,000 cycles. The Biasing Ball design ensures that our Pogo Contacts achieve consistent, low contact resistance. The graph below plots the resistance of our P2663 Pogo series. Note the consistency even to 3 sigma.



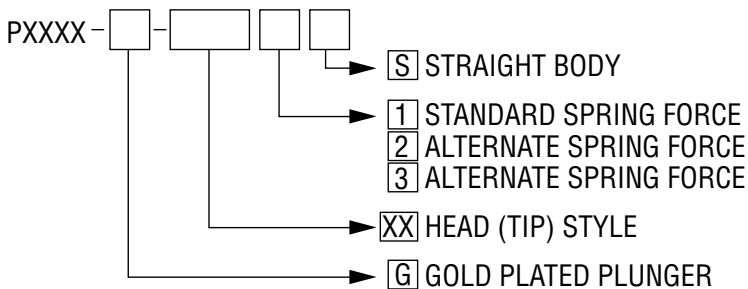
## Considerations When Specifying Pogo Contacts

The following list details common mechanical, electrical and economic considerations when specifying Pogo Contacts and Receptacles:

- Centerline spacing
- Plunger shape
- Plunger travel
- Plunger force
- Cleanliness of surface to be contacted
- What the Pogo will contact
- Resistance
- Current to be carried
- Materials and plating
- Replaceable or nonreplaceable
- Temperature
- Termination method
- Life required
- Quantity
- Cost
- Other ambient conditions

## Part Numbering Scheme

As a means to allow our customers to easily specify Pogo Contacts that meet specific application requirements, a new part number scheme has been adopted. The scheme is easy to follow and utilizes the long-standing Pylon numerical Pogo family design.



### Example: P2663G-1P1S

This would be a P2663 Series probe, gold-plated plunger, with a chisel tip, having a standard spring, and a straight body configuration.

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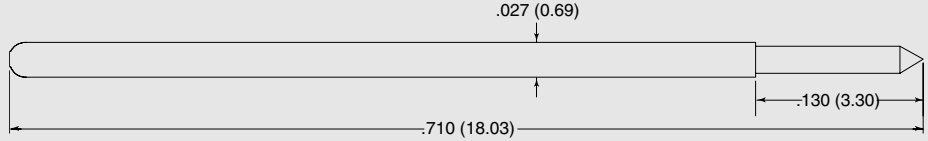
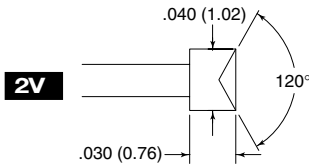
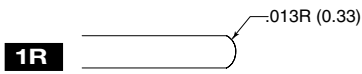
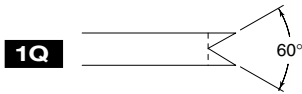
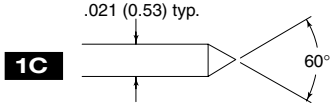
P2662A Series - .050 (1.27) centers	2
P2662B Series - .050 (1.27) centers	3
P2663 Series - .075 (1.91) centers	4
P2664 Series - .100 (2.54) centers	5
P3158 Series - .100 (2.54) centers	6
P5160 Series - .100 (2.54) centers	7
P2665 Series - .125 (3.18) centers	8
P2757 Series - .187 (4.75) centers	9
Nonreplaceable Pogo Contacts	10
Pogo Contact A-A-S/A-S Series	11
Pogo Contact C-S/E-S Series	12
Pogo Contact F/G Series	13
Pogo Contact P2550/P2532 Series	14
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Pogo Contact P3325 Series/P4301-1F	16
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## Custom-designed Pogo Contacts and Sockets

Pylon has been designing custom Pogo contacts for more than 25 years. Pogo contacts have been designed to withstand harsh environmental conditions.

Put our dedicated engineering team to work on your custom requirements.

# P2662A Series



## Specifications

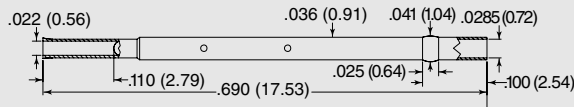
Plunger .....	Hardened BeCu
Body .....	Gold-plated phosphorous bronze
Spring .....	Silver-plated BeCu
Ball .....	Stainless steel
Electrical Resistance .....	<30mΩ
Maximum Current .....	3 amps
Working Travel .....	.067" (1.7)

Spring Force in oz. (grams)	Initial	Working
Standard: .....	0.7 (20)	1.7 (48)
Alternate: .....	0.6 (17)	2.5 (72)

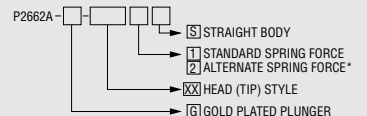
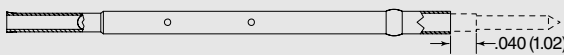
## Pogo® Receptacle

The P2662A Series is designed to be used with the S2662A Series receptacle below. The recommended mounting hole is .0395/.0380.

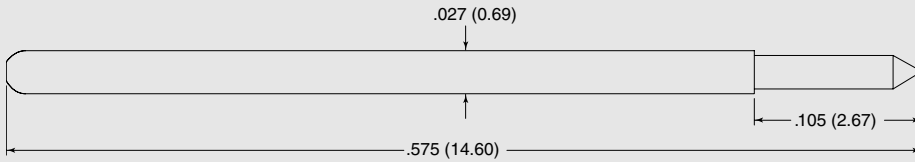
### S2662A-3ED



### Receptacle with Probe



# P2662B Series



## Specifications

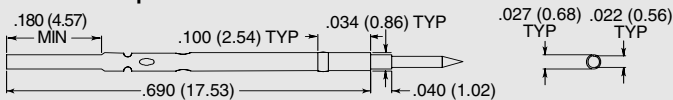
Plunger	.....	Hardened BeCu
Body	.....	Gold-plated phosphorous bronze
Spring	.....	Silver-plated BeCu
Ball	.....	Stainless steel
Electrical Resistance	.....	<30mΩ
Maximum Current	.....	3 amps
Working Travel	.....	.050" (1.27)

Spring Force in oz. (grams)	Initial	Working
Standard:	1.0 (28)	1.8 (51)
Alternate:	0.5 (14)	2.5 (71)

## Pogo® Receptacle

The P2662B Series is designed to be used with the PR261 Series receptacles below. The recommended mounting hole is .035/.0365 (0.89/0.93mm). The recommended drill is a #64 or 0.92mm. Use tool T261-0 for installation.

### PR261-0 Crimp

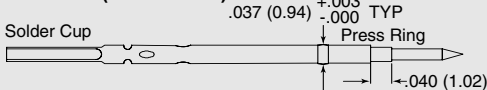


### PR261-0F (Flush Mount)

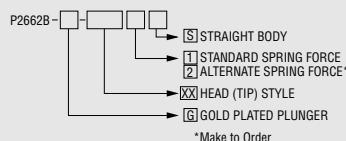
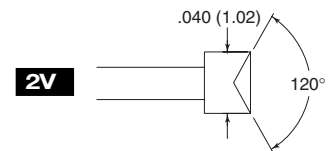
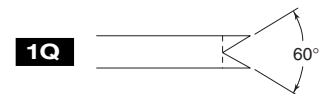
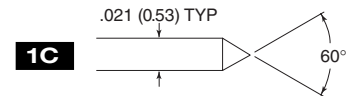
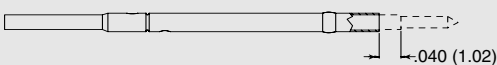


### PR261-1 Solder

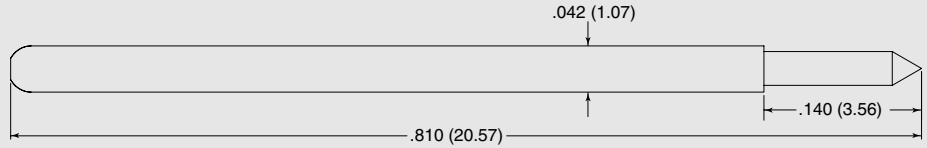
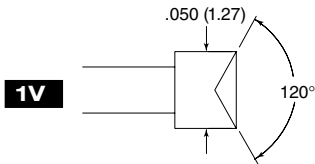
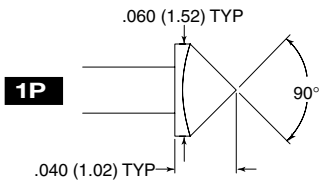
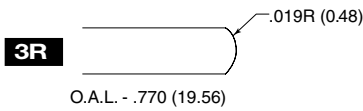
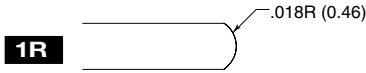
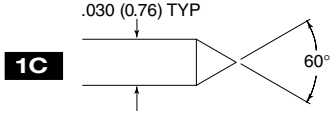
### PR261-1F (Flush Mount)



## Receptacle with Probe



# P2663 Series



## Specifications

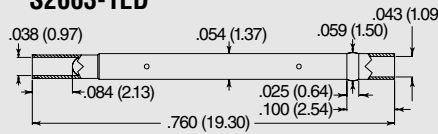
Plunger	.....	Hardened BeCu
Body	.....	Gold-plated phosphorous bronze
Spring	.....	Stainless steel
Ball	.....	Stainless steel
Electrical Resistance	.....	<10mΩ
Maximum Current	.....	3 amps
Working Travel	.....	.067" (1.70)

Spring Force in oz. (grams)	Initial	Working
Standard:	1.5 (42)	3.3 (94)
Alternate:	1.0 (28)	2.0 (57)

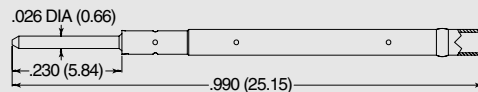
## Pogo® Receptacle

The P2663 Series is designed to be used with the S2663 Series receptacles below. The recommended mounting hole is .0576/.0561.

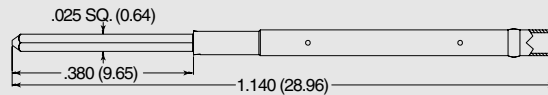
### S2663-1ED



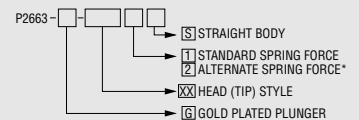
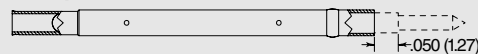
### S2663-1ETD



### S2663-1EWWD

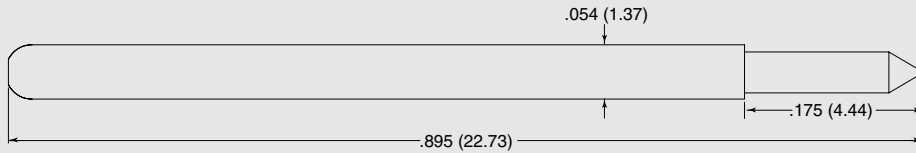


### Receptacle with Probe



\*Make to Order

# P2664 Series



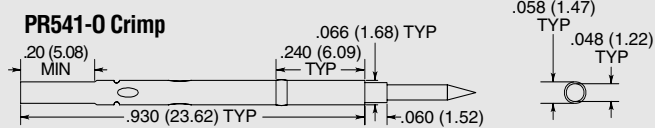
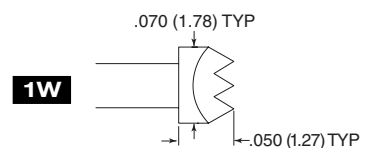
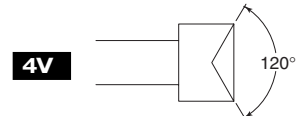
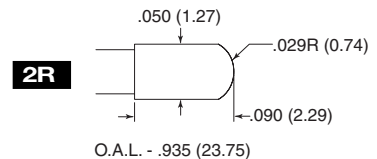
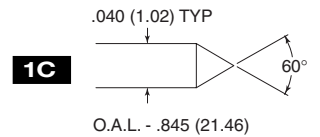
## Specifications

Plunger	.....	Hardened BeCu
Body	.....	Gold-plated phosphorous bronze
Spring	.....	Stainless steel
Ball	.....	Stainless steel
Electrical Resistance	.....	<10mΩ
Maximum Current	.....	5 amps
Working Travel	.....	.084" (2.13)

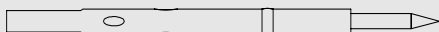
Spring Force in oz. (grams)	Initial	Working
Standard:	2.0 (57)	3.6 (102)
Alternate:	3.0 (85)	5.7 (162)

## Pogo® Receptacle

The P2664 Series is designed to be used with the PR541 Series receptacles below. The recommended mounting hole is .069 (1.75mm). The recommended drill is 1.75mm. Use ARIT54 tool for installation.

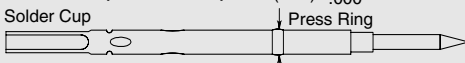


### PR541-0F (Flush Mount)



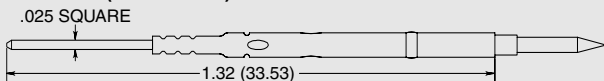
### PR541-1 Solder

#### PR541-1F (Flush Mount) .070 (1.78) <sup>+0.004</sup> <sub>-0.000</sub> TYP



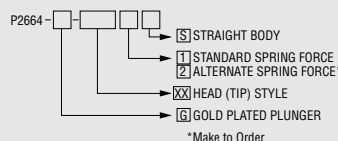
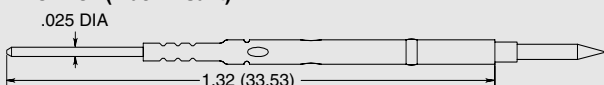
### PR541-2 Wire Wrap

#### PR541-2F (Flush Mount)

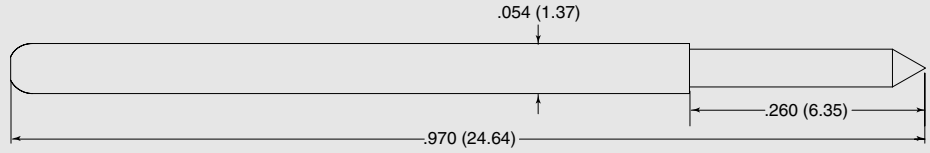
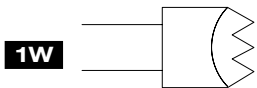
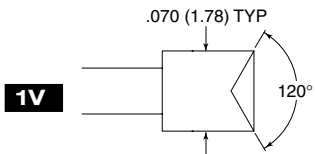
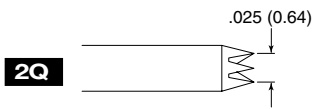
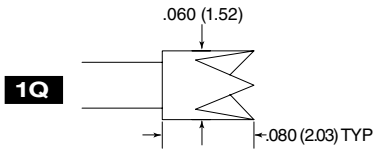
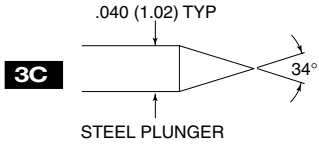


### PR541-3 Round Post

#### PR541-3F (Flush Mount)



# P3158 Series



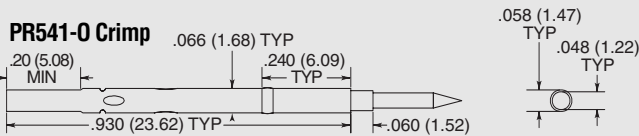
## Specifications

Plunger .....	Hardened BeCu (except as noted)
Body .....	Gold-plated phosphorous bronze
Spring .....	Music wire
Ball .....	Stainless steel
Electrical Resistance .....	<10mΩ
Maximum Current .....	8 amps
Working Travel .....	.114" (2.90)

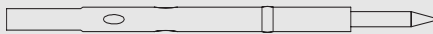
Spring Force in oz. (grams)	Initial	Working
Standard: .....	2.7 (77)	6.9 (196)
Alternate: .....	1.3 (37)	2.8 (79)

## Pogo® Receptacle

The P3158 Series is designed to be used with the PR541 Series receptacles below. The recommended mounting hole is .069 (1.75mm). The recommended drill is 1.75mm. Use ARIT54 tool for installation.

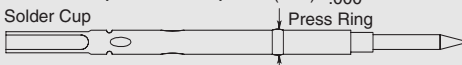


### PR541-0F (Flush Mount)



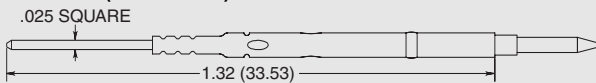
### PR541-1 Solder

#### PR541-1F (Flush Mount) .070 (1.78) <sup>+0.004</sup> <sub>-.000</sub> TYP



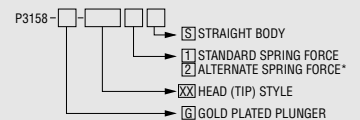
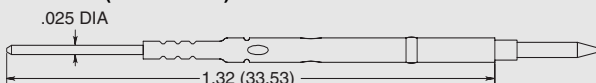
### PR541-2 Wire Wrap

#### PR541-2F (Flush Mount)



### PR541-3 Round Post

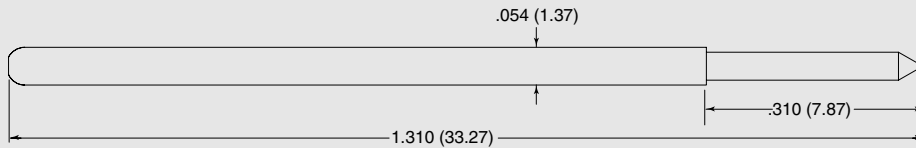
#### PR541-3F (Flush Mount)



\*Make to Order



# P5160 Series



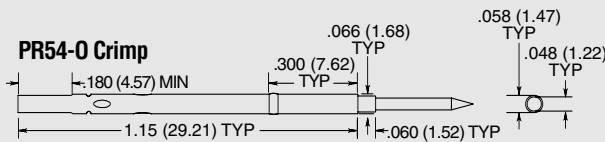
## Specifications

Plunger	.....	Hardened BeCu
Body	.....	Gold-plated phosphorous bronze
Spring	.....	Music wire
Ball	.....	Stainless steel
Electrical Resistance	.....	<10mΩ
Maximum Current	.....	8 amps
Working Travel	.....	.167" (4.24)

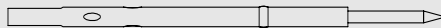
Spring Force in oz. (grams)	Initial	Working
Standard (-1):	2.5 (71)	6.5 (184)
Alternate (-2):	1.7 (48)	3.5 (99)
Alternate (-3):	2.5 (71)	8.2 (232)

## Pogo® Receptacle

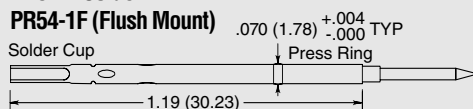
The P5160 Series is designed to be used with the PR54 Series receptacles below. The recommended mounting hole is .069 (1.75mm). The recommended drill is 1.75mm. Use ARIT54 tool for installation.



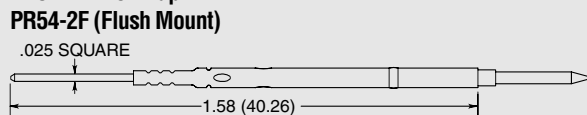
### PR54-0F (Flush Mount)



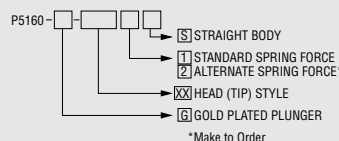
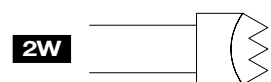
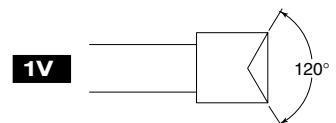
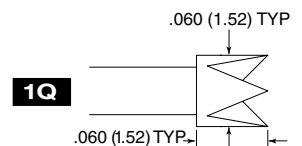
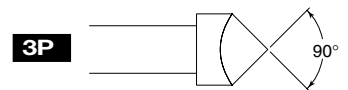
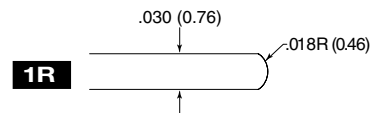
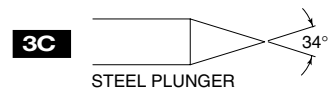
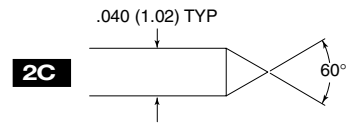
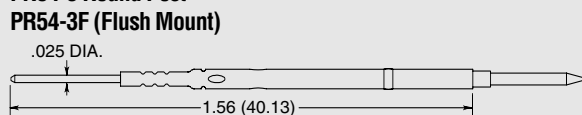
### PR54-1 Solder



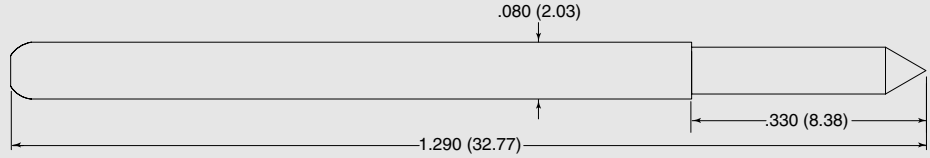
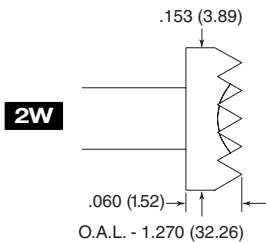
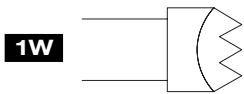
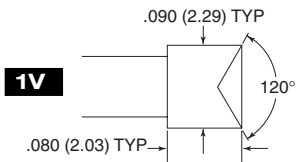
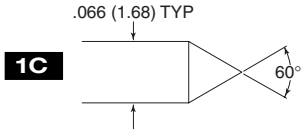
### PR54-2 Wire Wrap



### PR54-3 Round Post



# P2665 Series



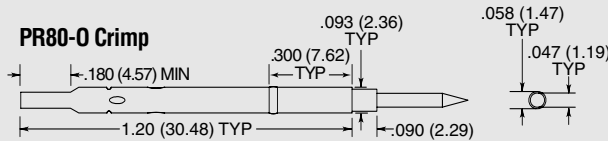
## Specifications

Plunger .....	Hardened BeCu
Body .....	Gold-plated phosphorous bronze
Spring .....	Stainless steel
Ball .....	Stainless steel
Electrical Resistance .....	<10mΩ
Maximum Current .....	15 amps
Working Travel .....	.167" (4.24)

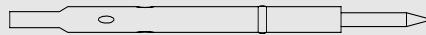
Spring Force in oz. (grams)	Initial	Working
Standard: .....	1.5 (43)	3.0 (85)
Alternate: .....	2.5 (71)	5.8 (164)

## Pogo® Receptacle

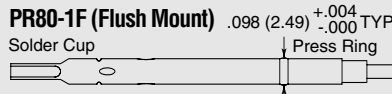
The P2665 Series is designed to be used with the PR80 Series receptacles below. The recommended mounting hole is .094/.096 (2.39/2.44mm). The recommended drill is a #41 or 2.4mm. Use tool T80-0 for installation.



### PR80-0F (Flush Mount)

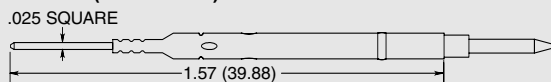


### PR80-1 Solder



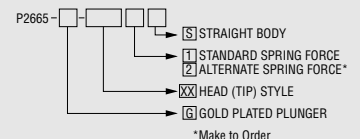
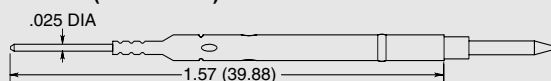
### PR80-2 Wire Wrap

#### PR80-2F (Flush Mount)

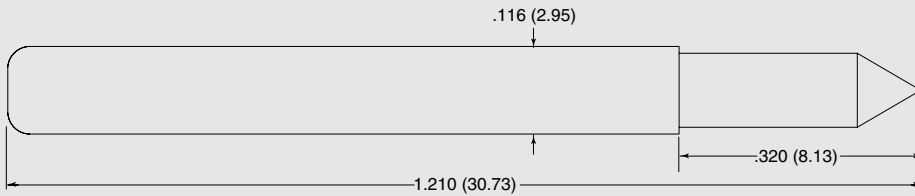


### PR80-3 Round Post

#### PR80-3F (Flush Mount)



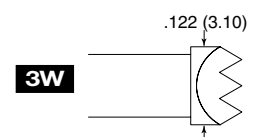
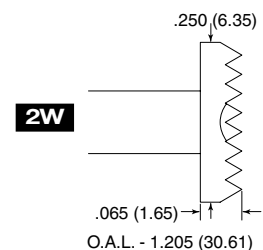
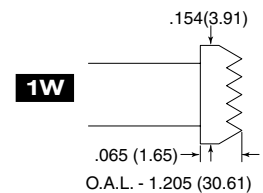
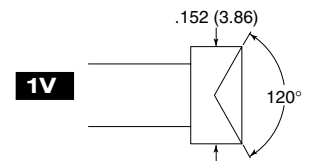
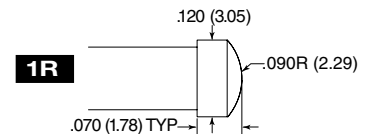
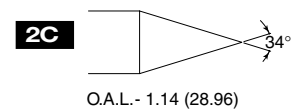
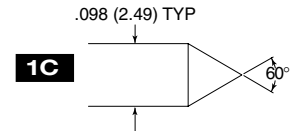
# P2757 Series



## Specifications

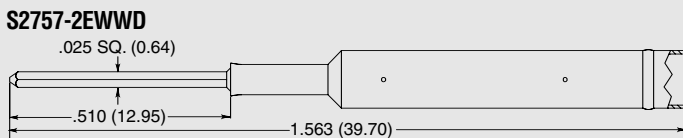
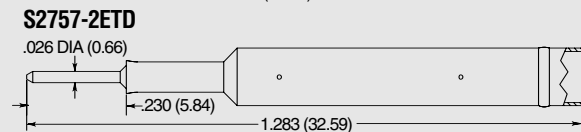
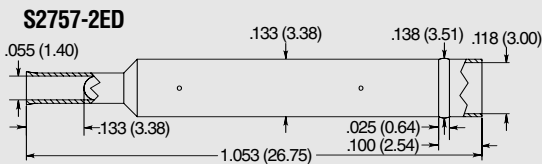
Plunger	.....	Hardened BeCu
Body	.....	Gold-plated phosphorous bronze
Spring	.....	Stainless steel
Ball	.....	Stainless steel
Electrical Resistance	.....	<10mΩ
Maximum Current	.....	20 amps
Working Travel	.....	.167" (4.24)

Spring Force in oz. (grams)	Initial	Working
Standard:	2 (57)	4.0 (113)
Alternate (Stainless steel):	3.5 (99)	6.85 (194)

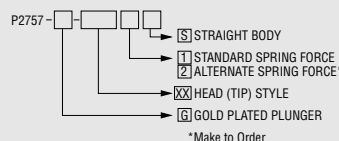
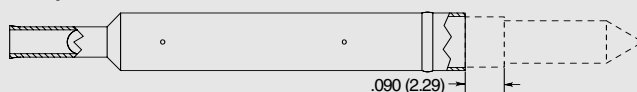


## Pogo® Receptacle

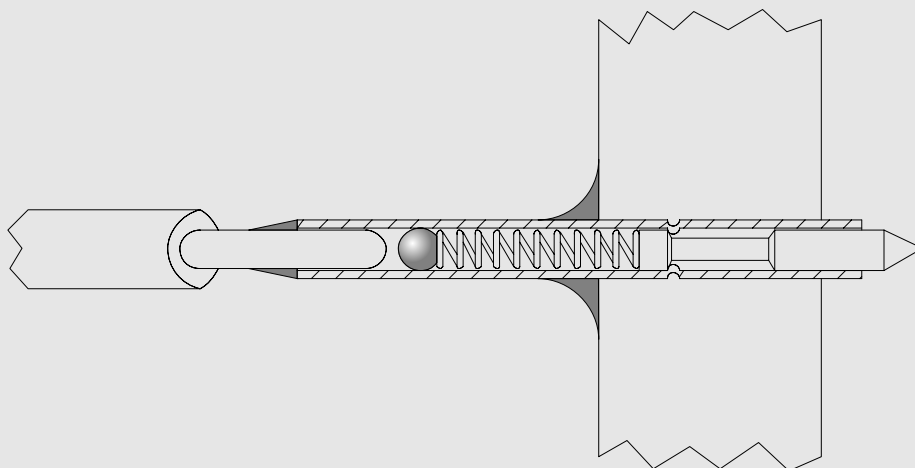
The P2757 Series is designed to be used with the S2757 Series receptacles below. The recommended mounting hole is .1365/.1350.



### Receptacle with Probe



## Nonreplaceable Pogo® Contacts

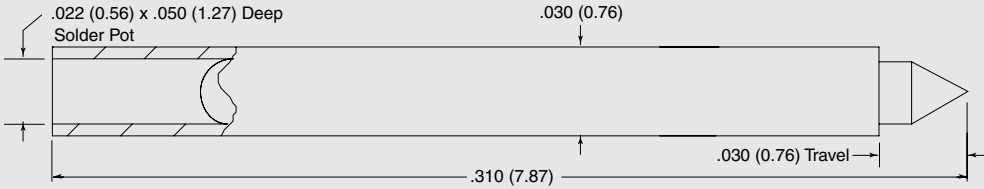


The Pylon line of standard products include nonreplaceable Pogo Contacts. They differ from the replaceable contacts in that they do not require a socket. The nonreplaceable line is designed to be permanently mounted. Solder pots are incorporated for a reliable electrical connection.

The construction is typically gold-plated brass bodies, combined with gold-plated springs and plungers. This ensures the user of excellent electrical contact.

Available in body diameters from .030" to .187", nonreplaceable Pogo Contacts are another example of Pylon's quality and innovation and how it can work for you.

# A-A-S/A-S Series

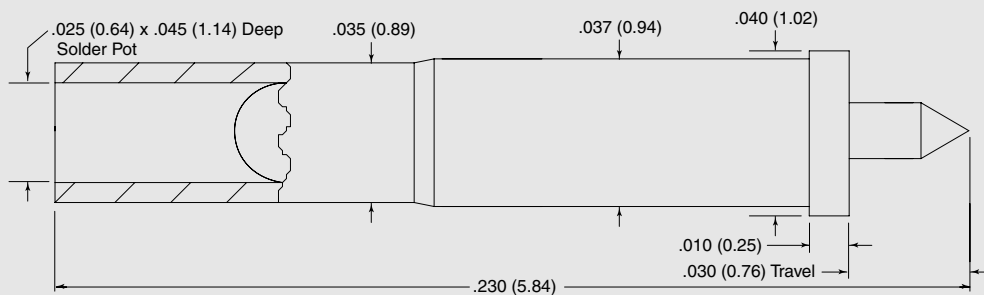
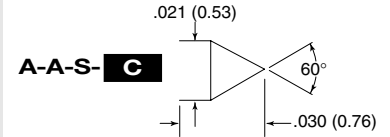


## A-A-S Series Specifications

Plunger .....	Gold-plated hardened BeCu
Body .....	Gold-plated phosphorous bronze
Spring .....	Gold-plated stainless steel
Ball .....	Gold-plated stainless steel
Electrical Resistance .....	<30mΩ
Maximum Current .....	2 amps
Working Travel .....	.020 (0.51)

<b>Spring Force in oz. (grams)</b>	<u>Initial</u>	<u>Working</u>
Standard: .....	0.5 (14)	2.0 (57)

The recommended hole is .0315 (#68 drill) for epoxy mounting.

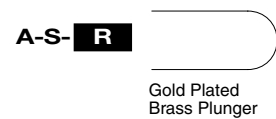
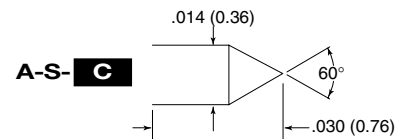


## A-S Series Specifications

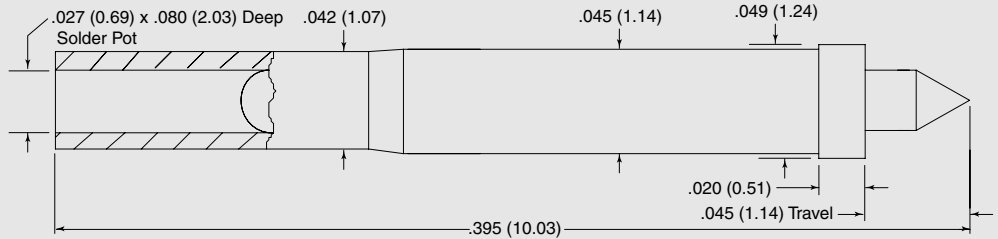
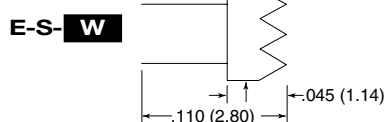
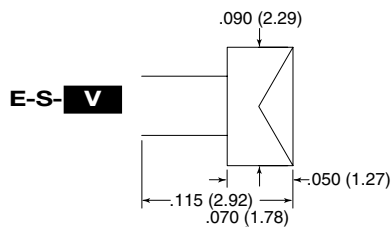
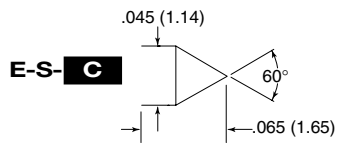
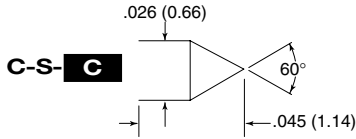
Plunger .....	Gold-plated hardened BeCu
Body .....	Gold-plated brass
Spring .....	Gold-plated stainless steel
Ball .....	Gold-plated stainless steel
Electrical Resistance .....	<30mΩ
Maximum Current .....	2 amps
Working Travel .....	.020 (0.51)

<b>Spring Force in oz. (grams)</b>	<u>Initial</u>	<u>Working</u>
Standard: .....	0.7 (20)	1.3 (37)

The recommended hole is .0380 (#62 drill) for epoxy mounting.



# C-S/E-S Series

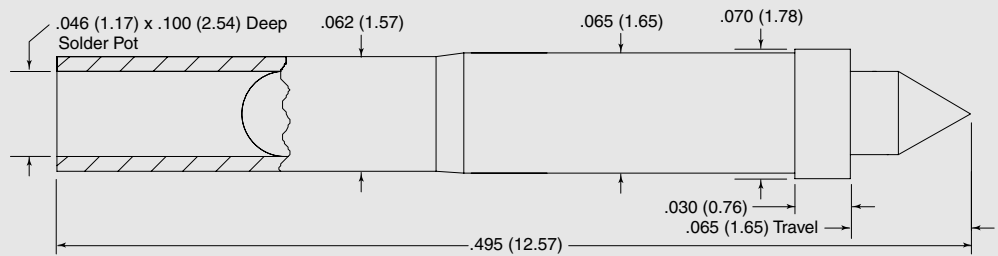


## C-S Series Specifications

Plunger .....	Gold-plated hardened BeCu
Body .....	Gold-plated brass
Spring .....	Gold-plated stainless steel
Ball .....	Gold-plated stainless steel
Electrical Resistance .....	<30mΩ
Maximum Current .....	5 amps
Working Travel .....	.030 (0.76)

Spring Force in oz. (grams)	Initial	Working
Standard: .....	.5 (14)	3.4 (96)

The recommended hole is .0465 (#56 drill) for epoxy mounting.



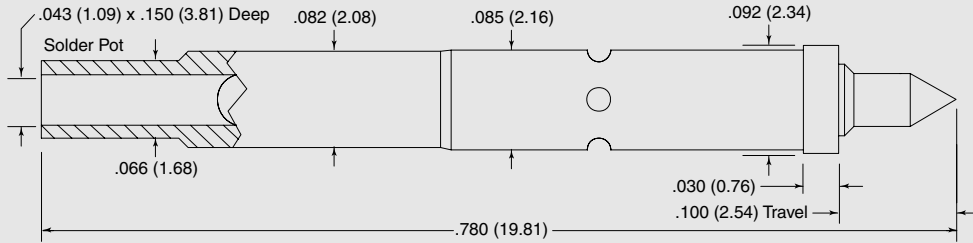
## E-S Series Specifications

Plunger .....	Gold-plated hardened BeCu
Body .....	Gold-plated brass
Spring .....	Gold-plated stainless steel
Ball .....	Gold-plated stainless steel
Electrical Resistance .....	<30mΩ
Maximum Current .....	5 amps
Working Travel .....	.043 (1.09)

Spring Force in oz. (grams)	Initial	Working
Standard: .....	1.0 (29)	2.75 (78)

The recommended hole is .0670 (#51 drill) for epoxy mounting.

# F-S/G-S Series

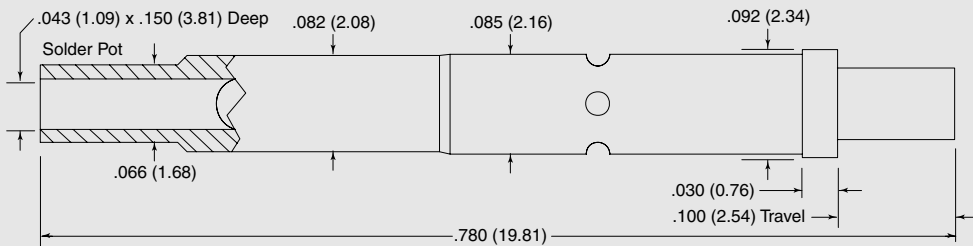


## F-S Series Specifications

Plunger .....	Gold-plated hardened BeCu
Body .....	Gold-plated brass
Spring .....	Gold-plated stainless steel
Ball .....	Gold-plated stainless steel
Electrical Resistance .....	<30mΩ
Maximum Current .....	5 amps
Working Travel .....	.066 (1.68)

<b>Spring Force in oz. (grams)</b>	<u>Initial</u>	<u>Working</u>
Standard: .....	2.0 (57)	6.0 (170)

The recommended hole is .0860 (#44 drill) for epoxy mounting.

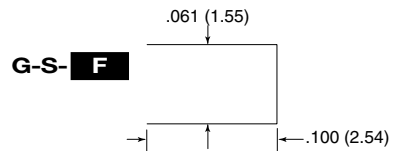
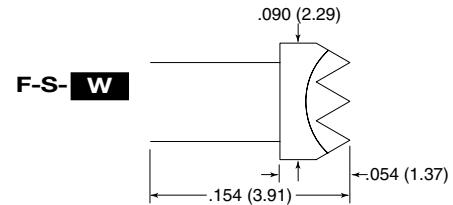
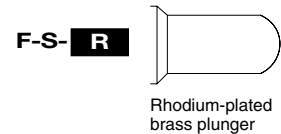
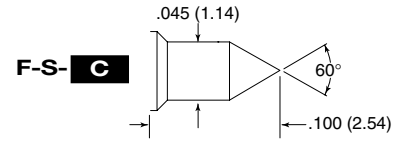


## G-S Series Specifications

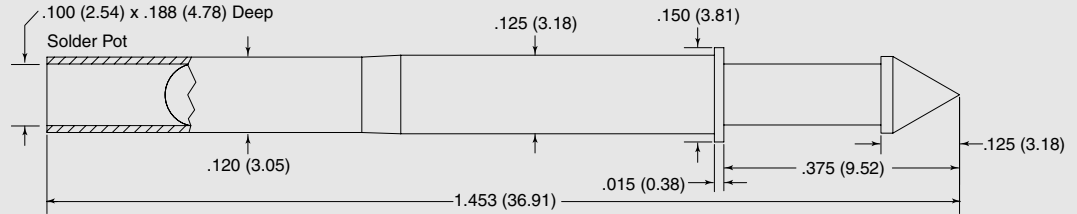
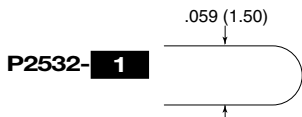
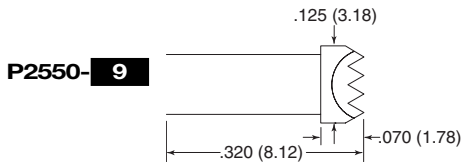
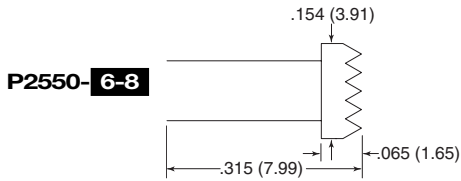
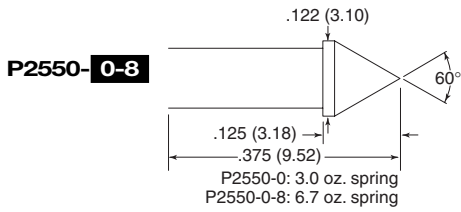
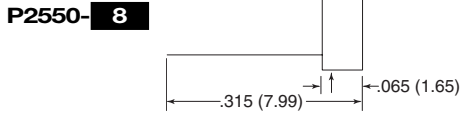
Plunger .....	Gold-plated hardened BeCu
Body .....	Gold-plated brass
Spring .....	Gold-plated stainless steel
Ball .....	Gold-plated stainless steel
Electrical Resistance .....	<30mΩ
Maximum Current .....	5 amps
Working Travel .....	.067 (1.68)

<b>Spring Force in oz. (grams)</b>	<u>Initial</u>	<u>Working</u>
Standard: .....	3.0 (85)	6.0 (170)

The recommended hole is .0860 (#44 drill) for epoxy mounting.



# P2550/2532 Series\*

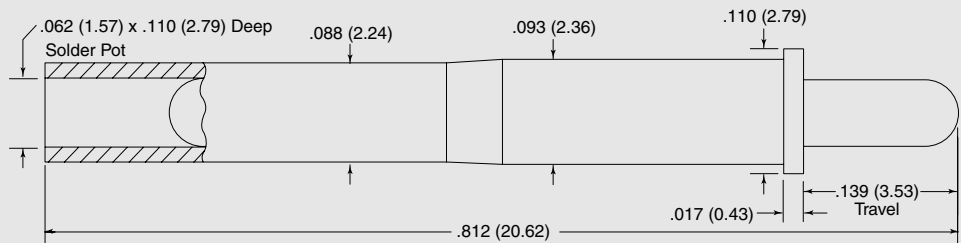


## P2550 Series Specifications

Plunger .....	Gold-plated hardened BeCu
Body .....	Gold-plated brass
Spring .....	Stainless steel
Ball .....	Gold-plated stainless steel
Electrical Resistance .....	<30mΩ
Maximum Current .....	5 amps
Working Travel .....	.167 (4.24)

Spring Force in oz. (grams)	Initial	Working
Standard: .....	1.20 (34)	3.10 (88)

The recommended hole is .1260 (3.2mm) for epoxy mounting.



## P2532 Series Specifications

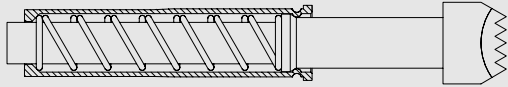
Plunger .....	Gold-plated hardened BeCu
Body .....	Gold-plated brass
Spring .....	Stainless steel
Ball .....	Gold-plated stainless steel
Electrical Resistance .....	<30mΩ
Maximum Current .....	5 amps
Working Travel .....	.093 (2.36)

Spring Force in oz. (grams)	Initial	Working
Standard: .....	1.0 (28)	2.3 (65)

The recommended hole is .0945 (2.4mm) for epoxy mounting.

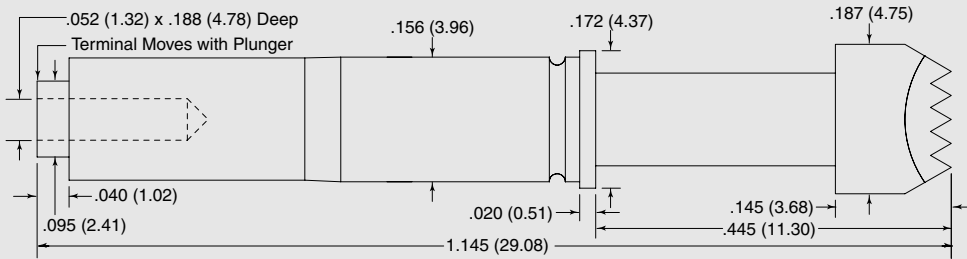


# Low $\Omega$ /P2447/HC125A-TT



Low resistance Pogo Contacts are designed for applications requiring minimum internal resistance and/or high current-carrying capacity.

These objectives are achieved by making the Pogo plunger and terminal as a single unit. This construction method eliminates the resistance of the spring and body.

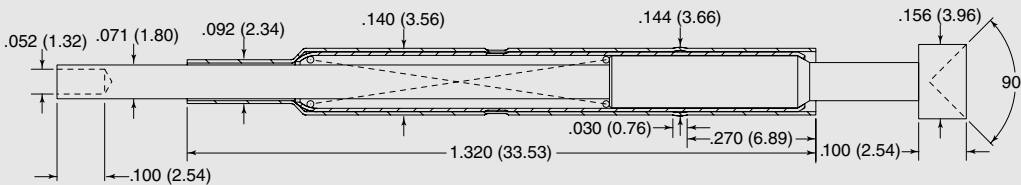


## P2447 Specifications

Plunger .....	Nickel-plated hardened BeCu
Body .....	Brass
Spring .....	Stainless steel
Terminal .....	Nickel-plated brass
Electrical Resistance .....	<10m $\Omega$
Maximum Current .....	10 amps
Working Travel .....	.200 (5.08)

<b>Spring Force in oz. (grams)</b>	<u>Initial</u>	<u>Working</u>
Standard: .....	6.0 (170)	14.0 (397)

The recommended hole is .1570 (#22 drill) for epoxy mounting.



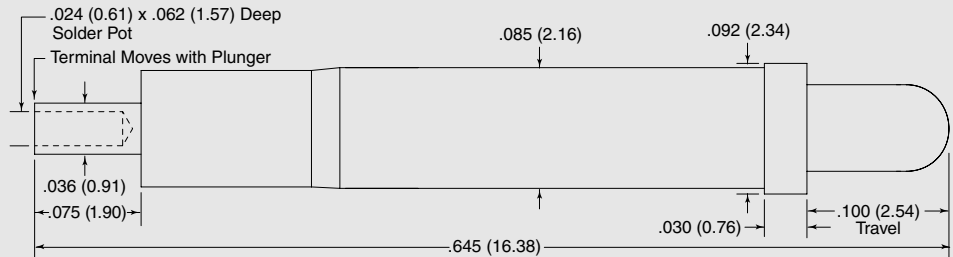
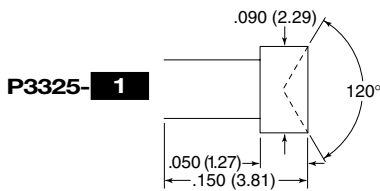
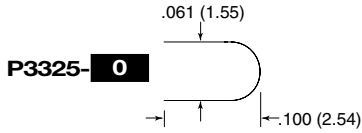
## HC125A-TT (replaceable probe) Specifications

Plunger .....	Gold-plated hardened BeCu
Body .....	Gold-plated nickel silver
Spring .....	Silver-plated stainless steel
Electrical Resistance .....	<20m $\Omega$
Maximum Current .....	45 amps
Plunger Travel (Full) .....	.250 (6.35)

The HC125A-TT is designed to be used with the SR125 receptacle. The recommended mounting hole is .141/.143 (3.58/3.63mm). The recommended drill is a 3.6mm. Use tool T125-0 for installation.

<b>Spring Force in oz. (grams)</b>	<u>Initial</u>	<u>Working</u>
Standard: .....	6.0 (170)	16.0 (454)

# P3325 Series/P4301-1F

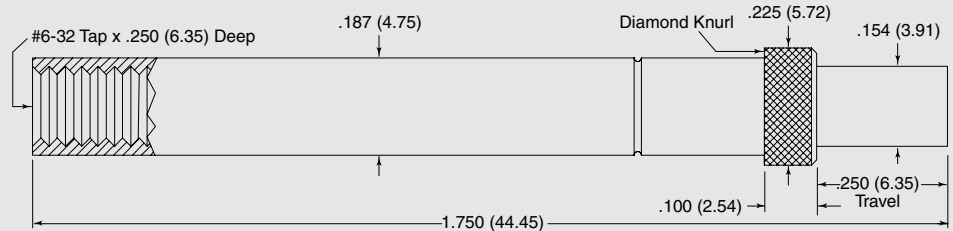


## P3325 Series Specifications

Plunger .....	Gold-plated hardened BeCu
Body .....	Brass
Spring .....	Music wire
Electrical Resistance .....	<10mΩ
Maximum Current .....	10 amps
Working Travel .....	.066 (1.68)

<b>Spring Force in oz. (grams)</b>	<u>Initial</u>	<u>Working</u>
Standard: .....	5.0 (142)	8.3 (235)

The recommended hole is .0680 (#44 drill) for epoxy mounting.



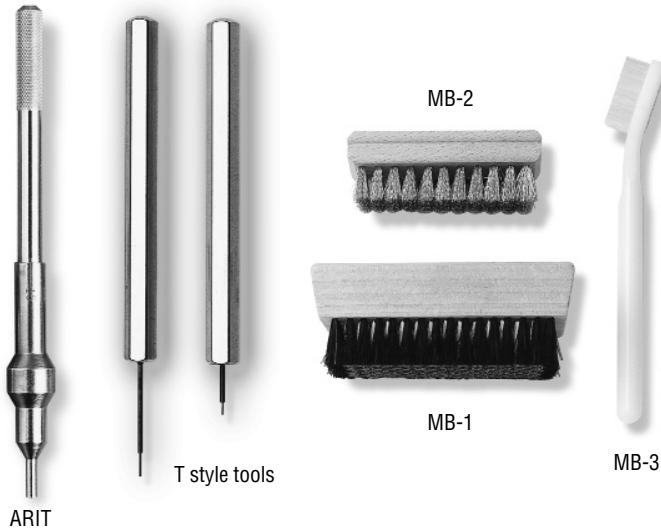
## P4301-1F "The Brute" Specifications

Plunger .....	Gold-plated tellurium copper
Body .....	Gold-plated tellurium copper
Spring .....	Stainless steel
Ball .....	Stainless steel
Electrical Resistance .....	<5mΩ
Maximum Current .....	45 amps
Working Travel .....	.167 (4.24)

<b>Spring Force in oz. (grams)</b>	<u>Initial</u>	<u>Working</u>
Standard: .....	16.0 (454)	25.7 (729)

The recommended hole is .1890 (#12 drill) for epoxy mounting.

# Tools



## Receptacle Installation (Press fit type only)

The receptacle is inserted into the drilled hole and tapped into place using a plastic mallet and a receptacle insertion tool. Several "taps" (3-5) with the mallet is recommended to provide maximum receptacle retention. Epoxy is not required. The receptacle is held in place by the press ring, which collapses into the hole during insertion, forming a tight fit.

While some insertion tools are designed to mount the receptacles flush with the probe plate, the ARIT series (Adjustable Tool) allows various mounting heights as required by the test fixture manufacturer. The press ring should be positioned for maximum retention in probe plates that are 3/8 inch thick or more. If the probe plate is too thin, the receptacle may fall through during insertion. In this case you can drill a smaller hole and use the press ring as a stop. However, you will need to secure receptacle with epoxy.

Once the receptacle is installed, insert the probe until the top of the probe barrel is flush with the top of the receptacle. The probe is held in place with 4 retention detents.

### Receptacle Insertion Tools

Model #	Mounting Height	Receptacle Series
ARIT54	Flush-.125"	SR541
ARIT54	Flush-.220"	SR54
T80-0	Flush	SR80
T125-0	Flush	SR125

### Adjustable Tool (ARIT) Instructions

1. Loosen set screws.
2. Rotate thimble to desired receptacle mounting height.
3. Lock both set screws.

### Maintenance Brushes

Model #	Description
MB-1	Brass bristle brush (4-1/4" x 2-1/2")
MB-2	4 row brass brush (3-1/4" x 1-1/8")
MB-3	Nylon brush (6-1/4")

Specifications subject to change without notice.  
Drawings not to scale.  
Optional tip styles, spring pressures, and materials available, contact factory for more information.



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