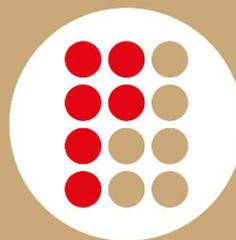
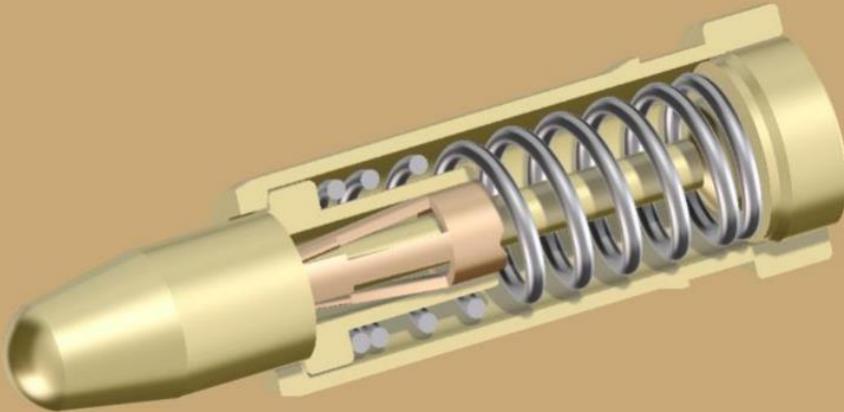


# SERIES 0900-CLIP

## SPRING LOADED CONNECTIONS

PRECISE, RELIABLE, AND COST EFFECTIVE STANDARD SOLUTIONS

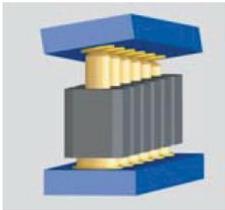


**preci-dip**

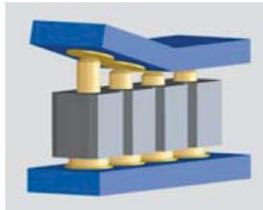
swiss world connects

## ADVANTAGES OF SPRING LOADED CONTACTS

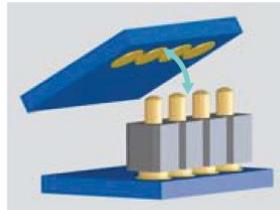
Spring Loaded Contacts facilitate blind mating requirements, are more tolerant to misaligned and non-coplanar mating conditions, and capable of achieving up to one million mating cycles.



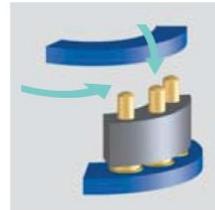
Connects surfaces non-perpendicular to the contact axis



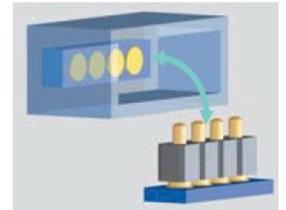
Compensates for errors of parallelism and flatness



Connects pivoting or rotating elements



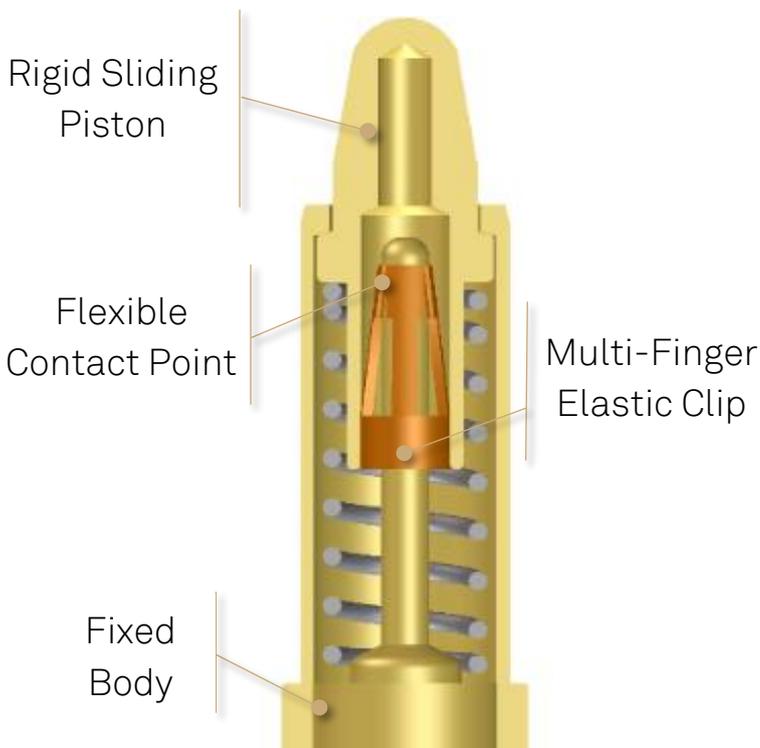
Connects with sliding mating action (e.g. bayonet connection)



Integrates well in blind mating applications.

## CLIP TECHNOLOGY IN SPRING LOADED CONTACTS

With many years of experience in Spring Loaded Contact manufacturing, PRECI-DIP has developed a patented design with an integrated multi-finger clip, which establishes high-reliability and electrical continuity between body and piston. This solution ensures low, stable electrical resistance without micro-discontinuities, even when the piston is moving or exposed to intensive shocks and vibrations.



A CLIP establishes a reliable and efficient connection between the body and piston.



Compliant to:

- Shock and vibration up to 2000Hz
- Current up to 25A



Want to know more about series 0900-CLIP? Watch the video

## DESIGN RULES

PRECI-DIP Spring Loaded Contact Solutions are designed to connect various types of mating surfaces:

- A gold-plated surface on a printed circuit board.
- A gold-plated target pad.



**PRINTED CIRCUIT BOARD**

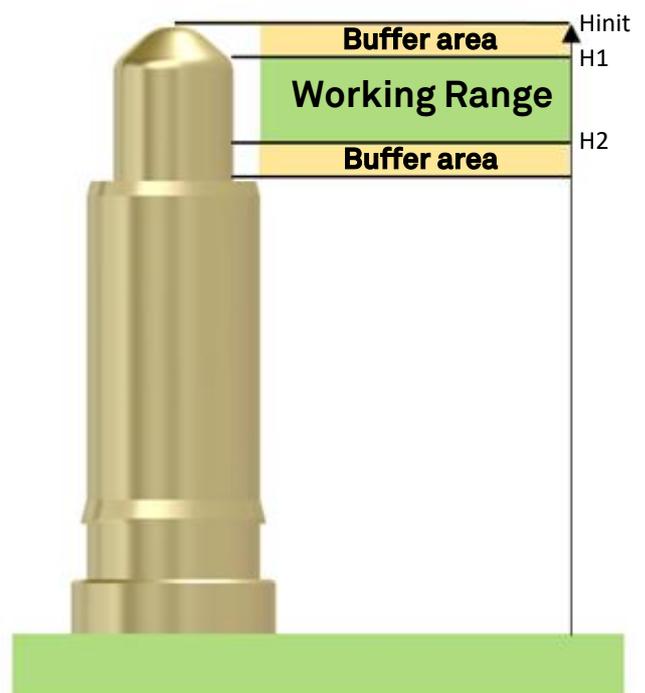


**A TARGET PAD**

## KEY DATA OF A SPRING PINS (H1, H2, WORKING RANGE ...)

Spring Loaded Contacts are used to make reliable connections where there are large tolerances between the two mating surfaces. There are three key characteristics: Working Range, Height, and Operating Force:

- The Working Range is equal to the tolerance present between the two mating surfaces, a standard working range is 1.4 mm (.055”).
- The Height of a Spring Loaded Contact is a little bit bigger than the maximum distance between the two mating surfaces, to have a buffer area to guarantee operational contact in all cases.
- The Operating Force must be larger than 0.5N to guarantee the reliability of the connection.



To increase its line of catalogue products, PRECI-DIP has created a new line of spring-loaded contacts with an integrated multi-finger clip:

**Series 0900-CLIP**

**TECHNICAL SPECIFICATIONS:**

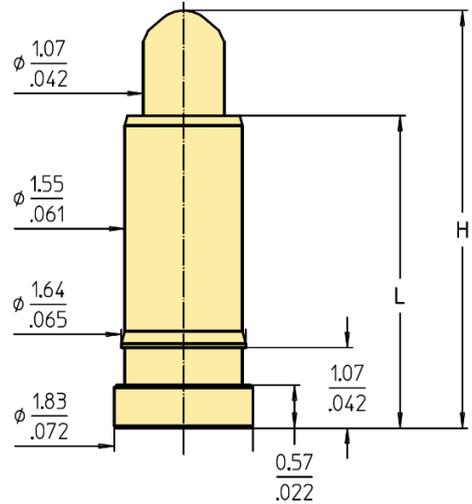
- OPERATING CURRENT:** Max 5 A
- DYNAMIC CONTACT RESISTANCE:** 20mΩ
- OPERATING TEMPERATURE RANGE:** -55/+125 °C
- DURABILITY:** 20'000 cycles
- PRESS-IN MOUNT:** Dia 1.58 mm hole insulator

**MATERIALS / PLATINGS:**

- Body :** Copper alloys - 0.125 μm Au / 2.5 μm Ni
- Piston :** Copper alloys - 0.5 μm Au / 2.5 μm Ni
- Spring:** Stainless steel DIN 17224

**ORDERING NUMBER:**

- BULK:** **090X-X-CLIP:**
- T&R PACKAGING :** **090X-X-CLIP-02:**



See table below for final ordering number according to height and working range specifications

Ordering Number	Barrel Length (L)		Total Height (H init)		Initial Force	Working Range Characteristic					
						Start height (H1)		Start Force (F1)	End Height (H2)		End force (F2)
0900-1-CLIP	3.4	.13'	4.55	.179'	0.35 N	4.35	.171'	0.45 N	3.75	.148'	0.85 N
0900-2-CLIP	3.9	.15'	5.05	.199'	0.40 N	4.85	.191'	0.5 N	4	.157'	0.90 N
0900-3-CLIP	4.15	.16'	5.55	.219'	0.50 N	5.35	.211'	0.57N	4.25	.163'	1.0N
0900-4-CLIP	4.15	.16'	6	.236'	0.50 N	5.8	.228'	0.57 N	4.4	.173'	1.0N
0907-0-CLIP	5	.20'	6.55	.258'	0.50 N	6.35	.250'	0.57 N	5.15	.195'	1.0 N
0907-1-CLIP			7	.276'		6.8	.268'		5.45	.215'	
0907-2-CLIP			7.5	.295'		7.3	.287'		5.95	.234'	
0907-3-CLIP			8	.315'		7.8	.307'		6.45	.254'	
0907-4-CLIP			8.5	.335'		8.3	.327'		6.95	.274'	

Options available:

- Other plating options are available on request
- For other height or termination, please consult

Spring Loaded Contacts can be customized if required for specific needs. For any technical questions, do not hesitate to contact us at: sales@precidip.com .

# Series 811/813-CLIP

## TECHNICAL SPECIFICATION



**INSULATOR:** Black glass filled polyester PCT-GF30-FR

**DYNAMIC CONTACT RESISTANCE:** 20mΩ

**OPERATING TEMPERATURE RANGE:** -55/+125 °C

**COPLANARITY SMD:** 0.1 mm (on 25 mm long)

**DURABILITY:** 20'000 cycles

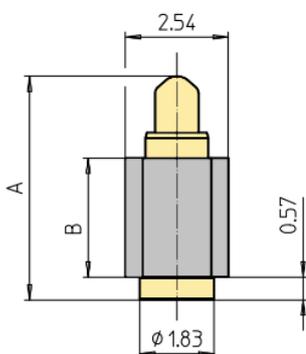
**OPERATING CURRENT:** Max 5 A

## ORDERING NUMBER

### Single row:

Bulk: **811-SS-NNN-30-6XX101-CLIP**

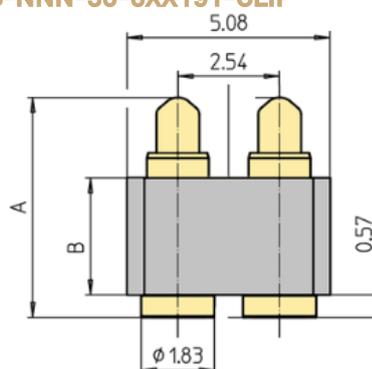
T&R: **811-SS-NNN-30-6XX191-CLIP**



### Double row:

Bulk: **813-SS-NNN-30-6XX101-CLIP**

T&R: **813-SS-NNN-30-6XX191-CLIP**



Replace NNN by the number of poles, standard number of contacts 2 to 20 contacts. See table below for ordering number according to height and working range.

6XX Code	Plastic Height (B)		Total Height (A)		Initial Force	Working Range Characteristic					
						Start height (H1)		Start Force (F1)	End Height (H2)		End force (F2)
675	1.8	.070'	4.55	.179'	0.35 N	4.35	.171'	0.45 N	3.75	.148'	0.85 N
676	2.95	.116'	5.05	.199'	0.40 N	4.85	.191'	0.5 N	4	.157'	0.90 N
677			5.55	.219'	0.50 N	5.35	.211'	0.57N	4.25	.163'	1.0N
678	4.00	.157'	6	.236'	0.50 N	5.8	.228'	0.57 N	4.4	.173'	1.0N
679			6.55	.258'	0.50 N	6.35	.250'	0.57 N	5.15	.195'	1.0 N
680			7	.276'		6.8	.268'		5.45	.215'	
681	7.5	.295'	7.3	.287'		5.95	.234'				
682	8	.315'	7.8	.307'	6.45	.254'					
683	8.5	.335'	8.3	.327'	6.95	.274'					

Example: For a 5.55 mm height connector, single row with 4 poles ordering number will be: 811-SS-004-30-677101-CLIP.

Options available:

- Tape and reel available on request; replace suffixes 101 by 191 on the Ordering Number
- Other plating options are available on request.

# PRECI-DIP

## Connection Technology

Custom design is our main strength, and your advantage when your ideas need a development partner. Vast experience with countless standard products and more than 20,000 references. Everything under one roof worldwide: We master all key processes in-house, from raw materials to finished goods.

As a global company we comply with internationally recognized certifications, including ML-STD-790, ISO 9001, Aviasecure Cert, IATF 16949, ISO 14001, EN AS JIQS 9100, UL (E174442), Renewable Energy Certification and the Certificate Act-Energy Efficiency and Climate Protection, just to name a few.

## Connected to Our End of the World.

PRECI-DIP is represented by dealers in 111 countries around the world. Contact us for detailed information.



**preci-dip**

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