SERIES 0900-CLIP SPRING LOADED CONNECTIONS

PRECISE, RELIABLE, AND COST EFFECTIVE STANDARD SOLUTIONS







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.















Accepts important positioning tolerances of the

Connects Com surfaces non- erro perpendicular to para

Compensates errors of to parallelism and flatness

Connects pivoting or rotating elements

Connects with sliding mating action (push & lock)

Suitable for blind mating

CLIP TECHNOLOGY IN SPRING LOADED CONTACTS

With many years of experiences in spring loaded contacts manufacturing, PRECI-DIP has developed a unique patented design with integrated multi-finger clip, which establishes high-reliability and electrical continuity between bodies and pistons. It also ensures low, stable electrical resistance value without micro-discontinuities, even when the piston is moving or exposed to intensive shocks and vibration. Want to know more? <u>Watch the video.</u>



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DESIGN RULES

PRECI-DIP Spring loaded contact solutions are designed to mate to various kinds of surfaces:

- A gold plated surface on a printed circuit board.
- A gold target pad with a SMT, a soldering tail, a solder cup or a wire termination.





PRINTED CIRCUIT BOARD

A TARGET PAD

In all cases, a key parameter for designing a reliable connection is the distance between the mating surface and the base of the spring pin, commonly named "H". To make a reliable connection, the mating surface must be located in the working area between H1 and H2.



For each application, we always ask for working range in order to propose the best design to fit customer applications.



PRECI-DIP HIGH RELIABILITY SPRING PIN SERIES

SERIES 0900-CLIP

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SERIES 811/813-CLIP

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



This new line of products have been designed to fit with most of applications, length of the contact is adaptive according your working range from 4.5 mm up to 8.5 mm. Base diameter is only 1.83 mm which allows to implant it with pitch of 0.1' (2.54mm).



On the next page, you can see all the technical details to help you choose the best contact or connector for your application.



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:

 Barrel: CuZn36Pb3
 - 0.125 μm Au / 2.5 μm Ni

 Rod
 : CuSn4Pb4Zn4 - 0.5μm Au / 2.5 μm Ni

 Piston: CuZn36Pb3
 - 0.5 μm Au / 2.5 μm Ni

 Clip
 : BeCu C17200
 - 0.5 μm Au / 2.5 μm Ni

 Spring: Stainless steel DIN 17224

High reliability spring loaded contact (SLC) surface mount, clip design.

ORDERING NUMBER:



<u>T&R Packaging:</u>



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

Ordering Number	Barrel Length (L)	Total Height (H init)	Initial Force	WORKING RANGE CARACTERISTIC			
				Start height	Start Force	End Height	End force
				(H1)	(F1)	(H2)	(F2)
0900-1-CLIP	3.4	4.55	0.35 N	4.35	0.45 N	3.75	0.85 N
0900-2-CLIP	3.9	5.05	0.40 N	4.85	0.5 N	4	0.90 N
0900-3-CLIP	4.15	5.55	0.50 N	5.35	0.57N	4.25	1.0N
0900-4-CLIP	4.15	6	0.50 N	5.8	0.57 N	4.6	1.0N
0907-0-CLIP	5	6.55	0.50 N	6.35	0.57 N	4.95	1.0 N
0907-1-CLIP		7		6.8		5.45	
0907-2-CLIP		7.5		7.3		5.95	
0907-3-CLIP		8		7.8		6.45	
0907-4-CLIP		8.5		8.3		6.95	

Options available:

- Other plating options on request
- Other height or termination, please consult

Spring loaded contacts can be customized if required for specific needs. For any technical questions about specifications of the product, do not hesitate to contact us: sales@precidip.com.



SERIE 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 number of poles, standard number of contact 2 to 20contacts See table below for final ordering number according to height and working range specifications

AVAILABLE CONECTOR HEIGHTS				WORKING RANGE CARACTERISTIC			
6XX Code	Initial Height A (mm)	Stroke (S)	Plastic Body Height B(mm)	Start height (H1)	Start Force (F1)	End Height (H2)	End force (H2)
675	4.5	0.6	2.95	4.35	0.45 N	3.75	0.85 N
676	5	0.85		4.85	0.5 N	4	0.90 N
677	5.5	1.1		5.35	0.57N	4.25	1.0N
678	6	1.4		5.8	0.57 N	4.4	1.0N
679	6.5			6.35	0.57 N	4.95	1.0 N
680	7			6.8		5.45	
681	7.5			7.3		5.95	
682	8			7.8		6.45	
683	8.5			8.3		6.95	

Example: For a 5.5 mm height connector, single row with 4 poles ordering number will be: 811-SS-004-30-677101-CLIP.

Options available:

- Tape and real on request; replace suffixes 101 by 191 at the end of the ordering number
- Other plating options on request.