

# ICT/FCT Standard Probes



The ICT (In-Circuit Test) and the FCT (Functional Circuit Test) allow to detect the main faults that can be found on a PCB (Printed Circuit Board), such as short circuit or a defective component and to measure the values of resistance and capacity. Dimensions, the correct head shape, the perfect spring load or the most suitable base material and galvanic finish are the characteristics that make a Spring Contact Probe suitable for the various types of testing conditions and surfaces to be tested.

## Recommended minimum center (grid-pitch)

Our standard range of Spring Contact Probes for ICT/FCT can be used within various installation distances ranging from 1.27 mm to 5.08 mm.

## Current rating

The standard current of Tecon Spring Contact Probes ranges from 2 to 12 A, depending on the type of material used and the technical specifications adopted during manufacturing. For higher current tests, High Current Probes are recommended.

## Typical contact resistance

Depending on the various types of Spring Contact Probes, the typical contact resistance ranges from 14 m $\Omega$  to 50m $\Omega$ .

## Materials and plating

The Spring Contact Probe for ICT/FCT is made of three components: a barrel, a spring and a plunger.

The barrel can be made of:

- Bronze, material with good hardness and good malleability
- Brass, material with excellent electrical conductivity and malleability, but not as hard as bronze
- Nickel silver, this alloy is widely used for its workability with punching techniques and for its good electrical characteristics.

The barrel can be gold plated.

The spring is made of:

- music wire (harmonic steel), a hard steel, excellent for the construction of springs due to its elastic properties and strength. The standard spring force ranges from 100 to 400 gr, but it can vary accordingly to the customer's specifications.

The spring can be plated in gold to improve the electrical conductivity.

The plunger can be made of:

- Beryllium-Copper (Be-Cu)
- Steel
- Brass

The plunger can be plated in gold or nickel.

## Receptacle

It can be of various types:

- Solder, to solder the wire directly on the receptacle
- Crimp, for crimping the wire inside the receptacle
- Wire-Wrap, to wrap the wire around the square end of the receptacle
- Round Post, to insert the end of the receptacle directly in the housing hole

The height of the swelling on the receptacle (that determines the height of installation) and the position of the retaining marks or imprints (which allow for perfect and firm insertion) can be customized according to the project requirements.












## Head shape

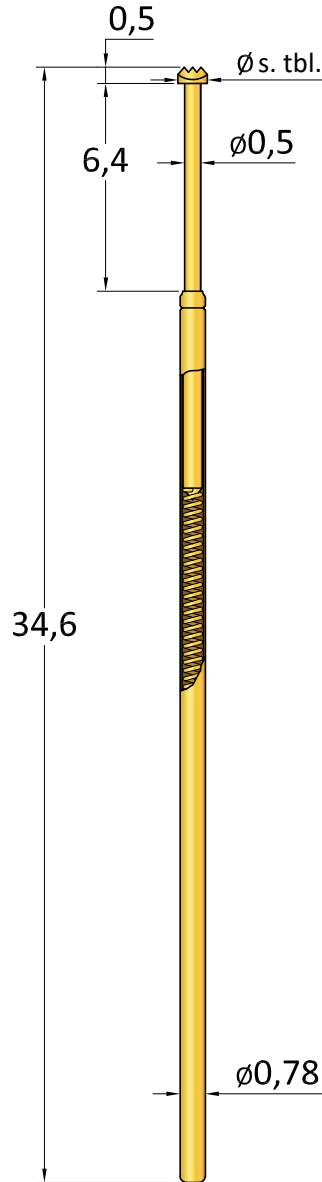
There are many standard Spring Contact Probes tip styles to choose from, according to the application, size, diameter and surface condition of the tested device.

## Summary of Standard Probes

Test probes version	Series	Pitch size (≥mm)	Working stroke (mm)	Max. stroke (mm)	Current rating (A)	Spring force (g)		Installation heights (mm) v = variable			Page
						min	max	min	max	v	
Standard stroke	GLP 030	1,27	4,30	6,35	2 - 3	100	150	8,10	16,00	v	25
	GLP 050	1,27	4,30	6,35	2 - 3	80	200	8,10	16,00	v	26
	GLP 0	1,27	1,78	2,60	3	40	100	3,60	6,30	v	28
	GLP 20	1,27	4,25	6,35	3	100	200	8,50	16,00	v	29
	GLP 1	1,91	1,78	2,54	3	80	100	4,00	8,00	v	30
	GLP 17	1,91	2,40	3,00	3 - 4	80	100	4,55	8,55	v	31
	GLP 1L	1,91	4,30	6,35	3	40	200	8,40	16,02	v	32
	GLP 101	1,91	4,00	5,30	3 - 4	50	200	-	12,50	-	34
	GLP 25	2,54	4,30	6,35	2 - 3	60	300	8,38	16,00	v	35
	GLP 26	2,54	4,30	6,35	2 - 3	100	300	10,60	18,22	v	37
	GLP 100	2,54	1,27	1,52	3	70	100	-	1,53	-	39
	GLP 2	2,54	2,70	4,06	2 - 3	100	200	6,10	11,95	v	40
	GLP 104	2,54	2,60	3,50	3	30	400	5,80	7,60	-	41
	GLP 3	3,18	4,30	6,30	5	120	300	8,30	15,92	v	49
	GLP 3C	3,18	4,30	6,30	5	120	300	8,65	18,77	v	51
	GLP 3F	3,18	4,30	6,30	5	120	300	8,40	16,02	v	52
	GLP 4	4,75	4,30	6,35	7 - 8	100	300	8,89	16,51	v	62
	GLP 5	4,75	4,30	6,35	10	200	600	8,89	16,51	v	63
Long stroke	GLP 050L	1,27	4,30	6,35	2 - 3	60	200	13,40	21,30	v	27
	GLP 1LL	1,91	8,00	11,00	3	100	200	12,60	20,22	v	33
	GLP 25L	2,54	9,30	11,80	2 - 3	150	300	13,83	21,45	v	36
	GLP 3L	3,18	8,00	10,00	5	120	300	12,00	19,62	v	50
	GLP 5L	4,75	8,00	10,00	10	200	600	12,50	20,12	v	64
Metric standard	GLP 102	2,54	4,80	6,50	5 - 8	150	500	12,50	18,50	-	41
	GLP 112	2,54	4,00	5,30	5 - 8	100	300	10,30	31,30	v	43
	GLP 912	2,54	4,00	5,00	5 - 8	100	300	10,00	31,00	v	44
	GLP 212	2,54	8,00	10,00	5 - 8	100	300	15,00	36,00	v	45
	GLP 422	2,54	6,40	8,00	5 - 8	100	300	16,00	32,00	v	46
	GLP 103	4,00	4,80	6,00	5 - 8	80	500	12,30	17,50	-	53
	GLP 113	4,00	4,00	5,30	5 - 8	150	500	10,30	15,50	-	54
	GLP 114	4,00	4,00	5,50	5 - 8	150	500	10,50	15,70	-	55
	GLP 133/16	4,00	9,00	11,00	5 - 8	150	500	16,00	16,20	-	56
	GLP 133/19	4,00	12,00	14,00	5 - 8	150	500	19,00	19,20	-	57
	GLP 133/23	4,00	15,00	17,50	5 - 8	150	500	23,00	23,20	-	58
	GLP 133/27	4,00	15,00	17,50	5 - 8	150	500	27,00	27,20	-	59
	GLP 133/37	4,00	15,00	17,50	5 - 8	150	500	37,00	37,20	-	60
Non-rotating probes	GLP 416	4,00	9,2	11,50	-	-	500	18,00	23,20	-	61
	GLP 150	5,08	4,40	5,50	10 - 12	300	500	10,50	10,80	-	65
Non-rotating probes	GLP 610	2,54	4,00	5,00	5	150	300	16,00	16,20	-	48
	GLP 614	5,08	4,00	4,50	10	300	500	16,00	16,20	-	66

## Available Tip Styles

Material	Tip Style	∅ mm
B	01 	0,50 0,90
B S	02 	0,50
B	03 	0,50 0,90
B	04 	0,50 0,90
B	05 	0,50 0,90
B	08 	0,50 0,90
B	11 	0,50 0,90
B	13 	0,50 0,90
S	14 	0,50
S	15 	0,50
B	21 	0,50 0,90



## Technical Data

Recommended minimum centers:	1,27 mm
Recommended working stroke:	4,30 mm
Maximum stroke:	6,35 mm
Current rating:	2,0 - 3,0 A
Typical contact resistance:	<20 mΩ
Operating temperature range:	-50° up to +100°

## Materials

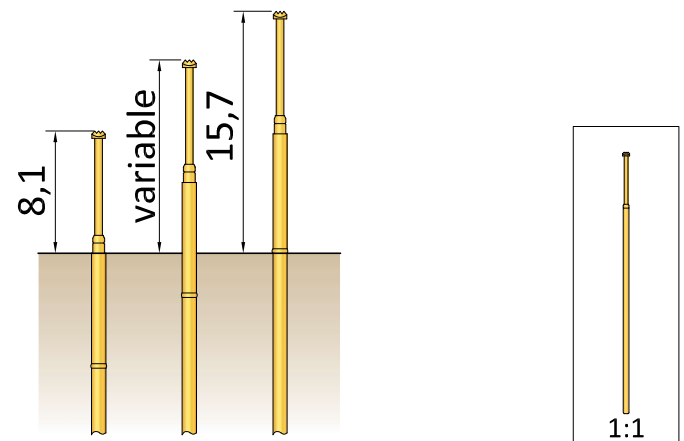
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Nickel-silver or Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

## Spring Force ( g ±20%)

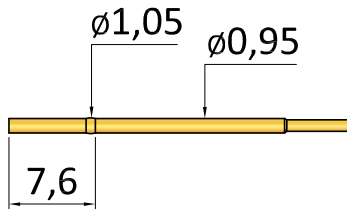
Spring force:	100 g
Alternative:	150 g

## Hole size for receptacle

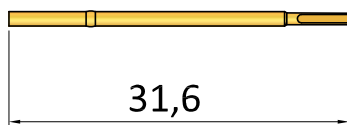
Drills for press ring as a stop:	∅0,95 - ∅0,96
Drills for press ring insert:	∅0,98 - ∅1,00



GLR 030C  
crimp



GLR 030S  
solder cup



## Ordering example:

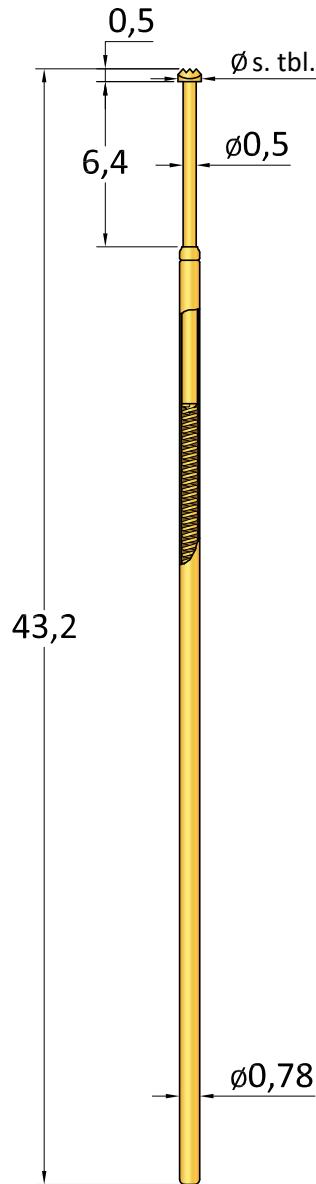
Series	Material	Tip Style	Tip ∅ mm	Spring Force	Plating
GLP 030	B	08	090	100	G
	B=BeCu S=Steel				G=Gold N=Nickel

# GLP 050

ICT/FCT Standard Probes  $\geq 1,27$  mm /  $\geq 50$  mil

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01	0,50 0,90
B S	02	0,50
B	03	0,50 0,90
B	04	0,50 0,90
B	05	0,50 0,90
B	08	0,50 0,90
B	11	0,50 0,90
B	13	0,50 0,90
S	14	0,50
S	15	0,50
B	21	0,50 0,90



## Technical Data

Recommended minimum centers:	1,27 mm
Recommended working stroke:	4,30 mm
Maximum stroke:	6,35 mm
Current rating:	2,0 - 3,0 A
Typical contact resistance:	<20 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

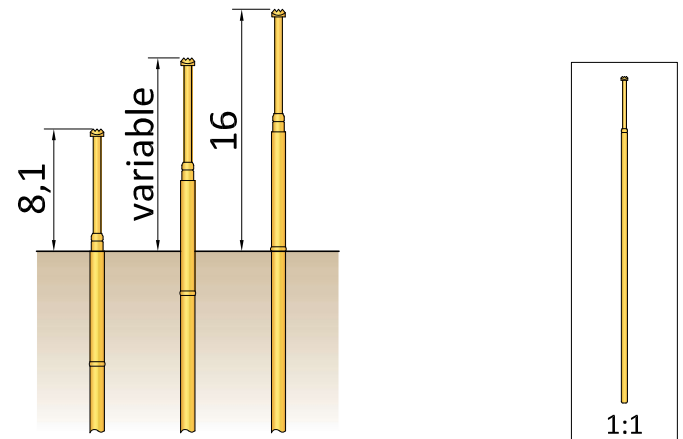
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Nickel-silver or Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

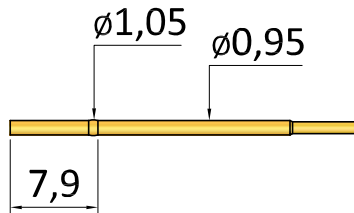
Spring force:	100 g
Alternative:	80 g 200 g

## Hole size for receptacle

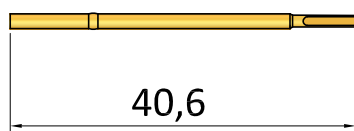
Drills for press ring as a stop:	$\phi 0,95$ - $\phi 0,96$
Drills for press ring insert:	$\phi 0,98$ - $\phi 1,00$



GLR 050C  
crimp



GLR 050S  
solder cup













GLR 050SW  
pre-wired

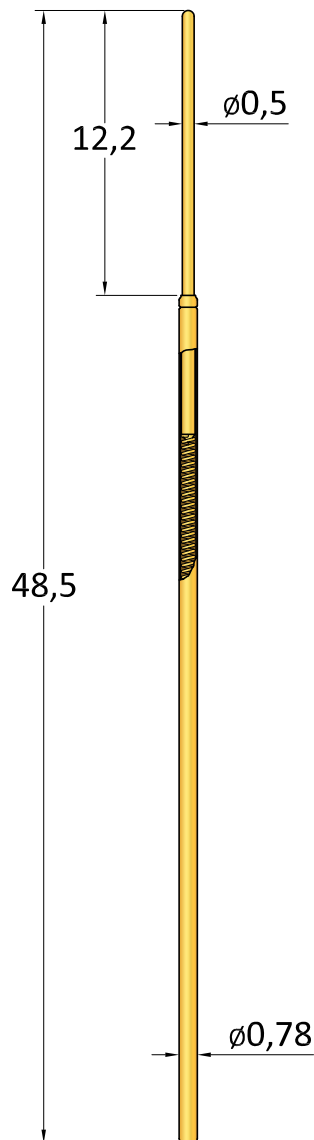


## Ordering example:

Series	Tip Style	Spring Force
GLP 050	B 04	050 200
	Material	Tip $\phi$ mm
	B=BeCu S=Steel	
		Plating
		G=Gold N=Nickel

## Available Tip Styles

Material	Tip Style	∅ mm
B	01 	0,50 0,90
B S	02 	0,50
B	03 	0,50 0,90
B	04 	0,50 0,90
B	05 	0,50 0,90
B	08 	0,50 0,90
B	11 	0,50 0,90
B	13 	0,50 0,90
S	14 	0,50
B	21 	0,50 0,90



## Technical Data

Recommended minimum centers:	1,27 mm
Recommended working stroke:	8,00 mm
Maximum stroke:	10,00 mm
Current rating:	2,0 - 3,0 A
Typical contact resistance:	<40 mΩ
Operating temperature range:	-50° up to +100°

## Materials

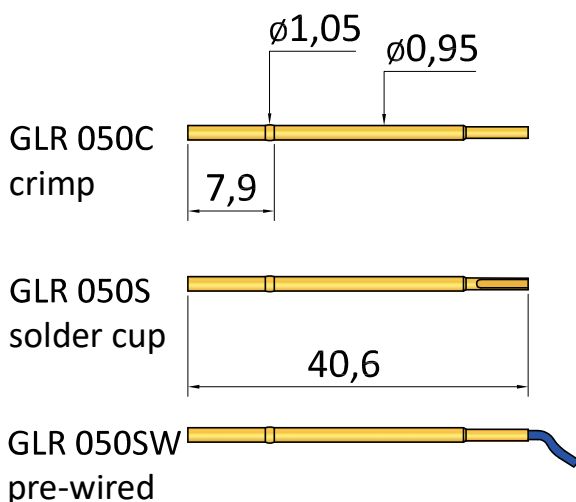
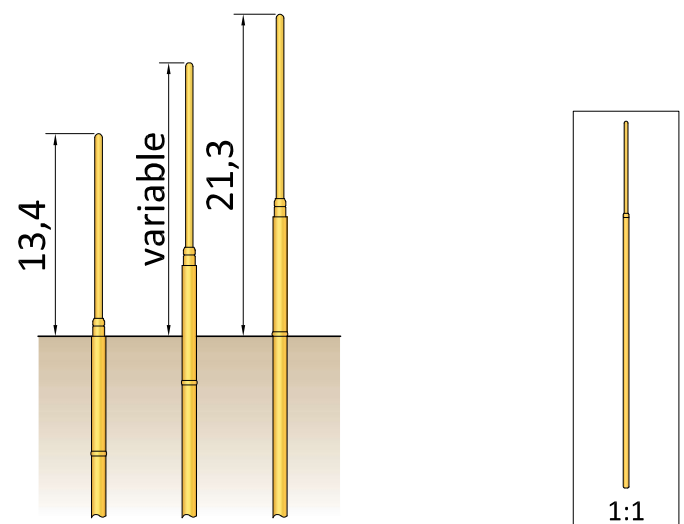
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

## Spring Force ( g ±20%)

Spring force:	100 g
Alternative:	60 g
	80 g
	200 g

## Hole size for receptacle

Drills for press ring as a stop:	∅0,95 - ∅0,96
Drills for press ring insert:	∅0,98 - ∅1,00



## Ordering example:

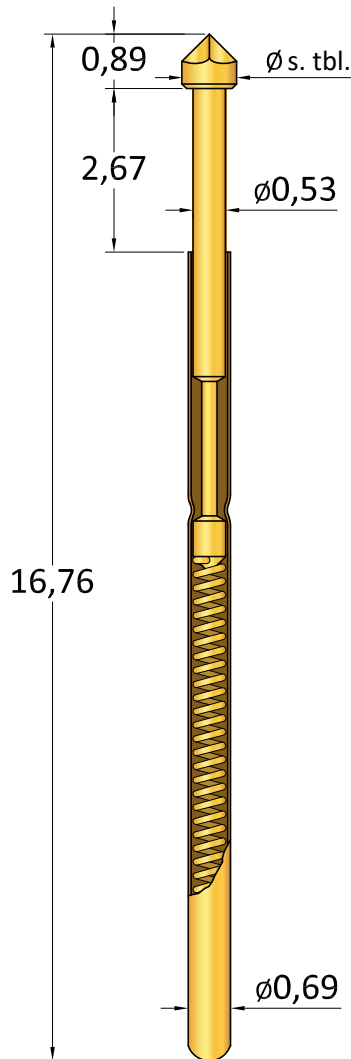
Series	Tip Style	Spring Force
GLP 050L	B 04	050 80
	Material	Tip ∅ mm
	B=BeCu	
	S=Steel	
		Plating
		G=Gold
		N=Nickel

# GLP 0

ICT/FCT Standard Probes  $\geq 1,27$  mm /  $\geq 50$  mil

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01	0,53 0,89
B S	02	0,53
B	03	0,53 0,89
B	04	0,53 0,89
B S	05	0,53 0,89
B	06	0,53
B	08	0,89
S	09	0,53
B S	11	0,89
S	15	0,53
B S	21	0,53 0,89



## Technical Data

Recommended minimum centers:	1,27 mm
Recommended working stroke:	1,78 mm
Maximum stroke:	2,60 mm
Current rating:	3,0 A
Typical contact resistance:	<30 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Nickel-silver or Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

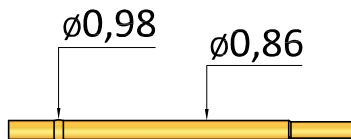
## Spring Force ( g $\pm 20\%$ )

Spring force:	100 g
Alternative:	40 g 60 g 80 g

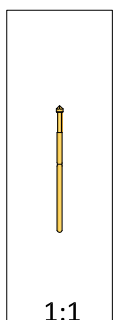
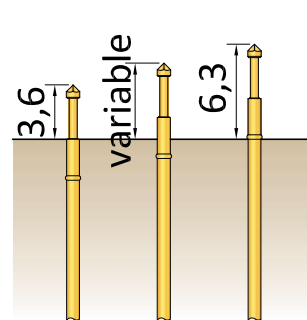
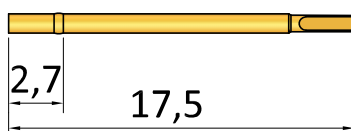
## Hole size for receptacle

Drills for press ring as a stop:	$\phi 0,86 - \phi 0,87$
Drills for press ring insert:	$\phi 0,89 - \phi 0,93$

GLR 0C  
crimp













GLR 0S  
solder cup

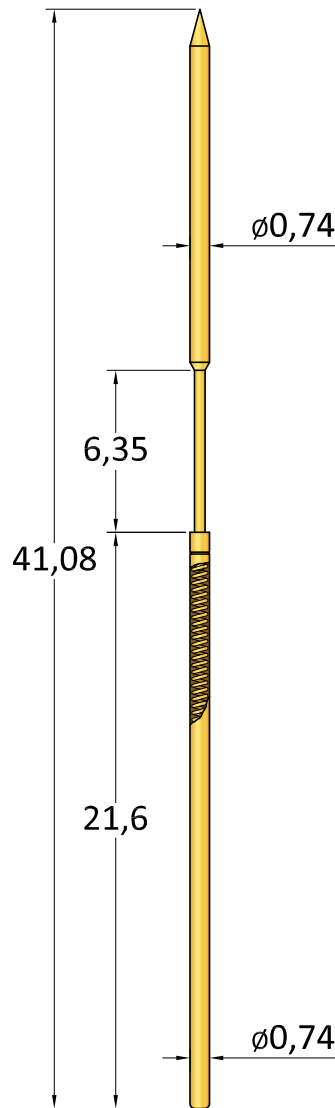


## Ordering example:

Series	Material	Tip Style	Tip $\phi$ mm	Spring Force	Plating
GLP 0	B	11	089	100	G
	B=BeCu S=Steel				G=Gold N=Nickel

## Available Tip Styles

Material	Tip Style	Ø mm
B S	02 	0,74
B	03 	0,74 0,89
B	04 	0,74 0,89
S	12 	0,74
B S	13 	0,89
S	14 	0,74
S	15 	0,74
B S	21 	0,74 0,89
B	27 	0,40
B	30 	0,74



## Technical Data

Recommended minimum centers:	1,27 mm
Recommended working stroke:	4,25 mm
Maximum stroke:	6,35 mm
Current rating:	3,0 A
Typical contact resistance:	<20 mΩ
Operating temperature range:	-50° up to +100°

## Materials

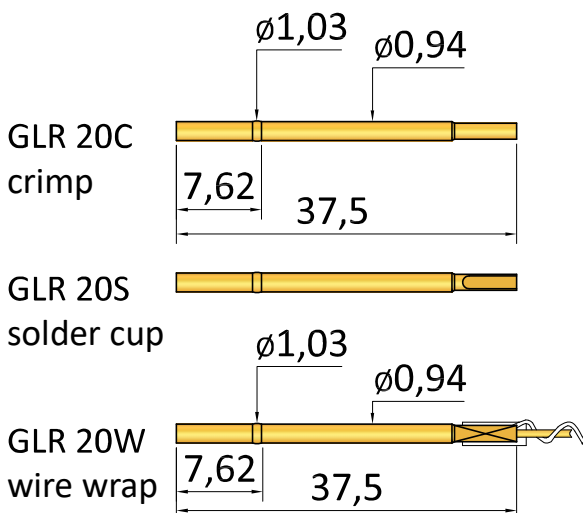
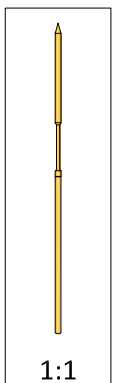
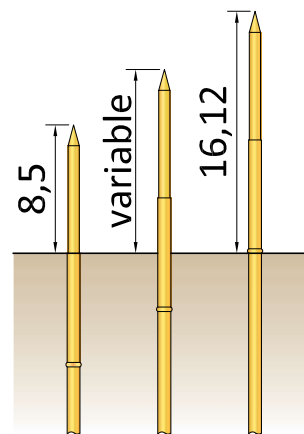
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Brass, gold plated

## Spring Force ( g ±20%)

Spring force:	100 g
Alternative:	200 g

## Hole size for receptacle

Drills for press ring as a stop:	Ø0,94 - Ø0,95
Drills for press ring insert:	Ø0,98 - Ø1,00



## Ordering example:

Series	Material	Tip Style	Tip Ø mm	Spring Force	Plating
GLP 20	B	02	074	100	G
	B=BeCu S=Steel				G=Gold N=Nickel

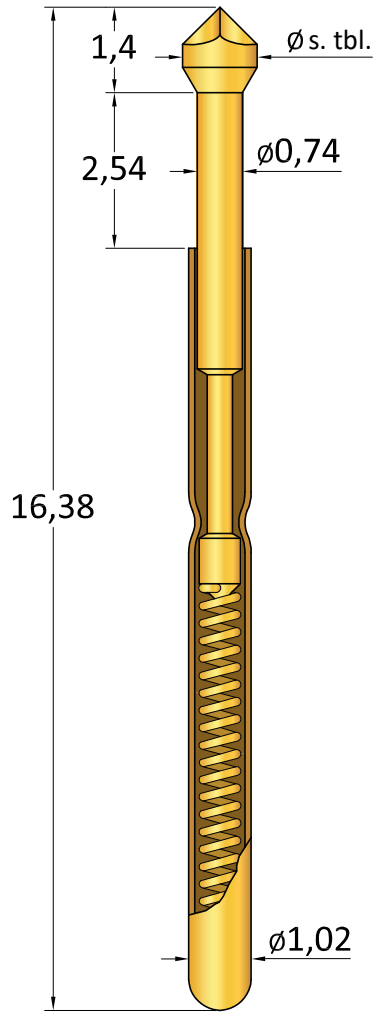


# GLP 1

ICT/FCT Standard Probes  $\geq 1,91$  mm /  $\geq 75$  mil

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01	0,74 1,40
B S	02	0,74
B	03	0,74 1,02 1,22
B	04	0,74 1,02 1,22
B S	05	1,22
B	06	0,74
B S	07	0,53
B S	08	0,74 1,02 1,22
S	09	0,74
B	10	1,22 1,40
B	11	1,22
S	15	0,74
B	21	0,74 1,02 1,22



## Technical Data

Recommended minimum centers:	1,91 mm
Recommended working stroke:	1,78 mm
Maximum stroke:	2,54 mm
Current rating:	3,0 A
Typical contact resistance:	<20 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

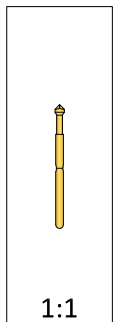
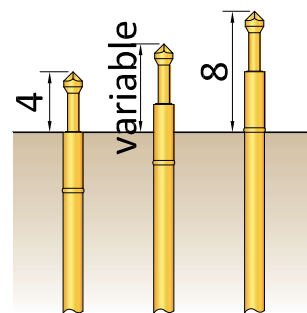
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Nickel-silver or Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

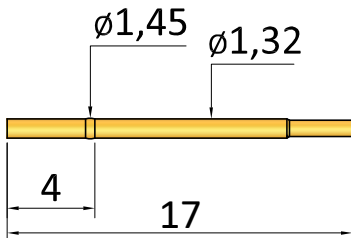
Spring force:	100 g
Alternative:	80 g

## Hole size for receptacle

Drills for press ring as a stop:	$\phi 1,32 - \phi 1,33$
Drills for press ring insert:	$\phi 1,39 - \phi 1,40$



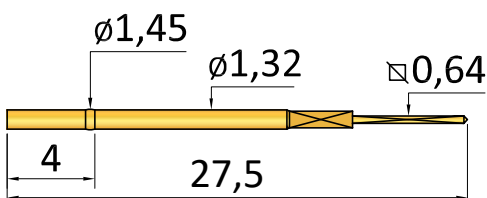
GLR 1C  
crimp



GLR 1S  
solder cup










GLR 1W  
wire wrap

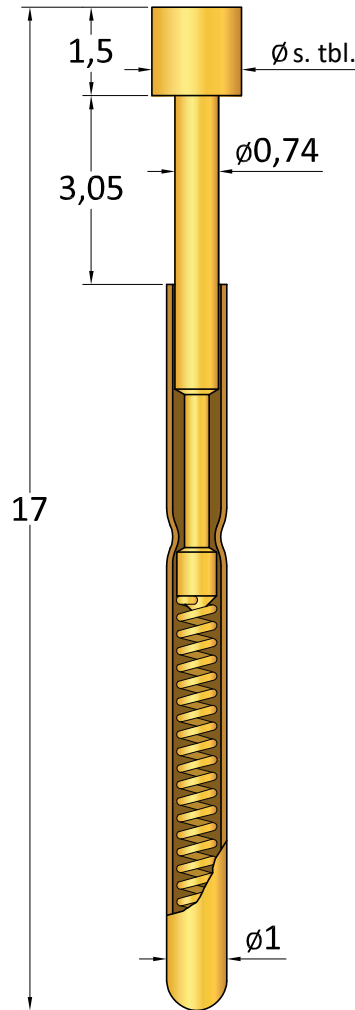


## Ordering example:

Series	Tip Style	Spring Force
GLP 1	B 11 122	100
	Material	Tip $\phi$ mm
	B=BeCu S=Steel	
		Plating
		G=Gold N=Nickel

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01 	0,74 1,52
B S	02 	0,74
B	03 	0,74 1,52
B	04 	0,74 1,02 1,22
B	08 	0,74 1,02 1,22
B	11 	1,52
B	21 	0,74 1,02 1,52



## Technical Data

Recommended minimum centers:	1,91 mm
Recommended working stroke:	2,40 mm
Maximum stroke:	3,00 mm
Current rating:	3,0 - 4,0 A
Typical contact resistance:	<math>< 20 \text{ m}\Omega</math>
Operating temperature range:	-50° up to +100°

## Materials

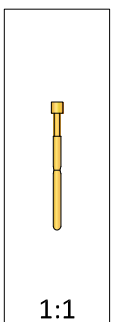
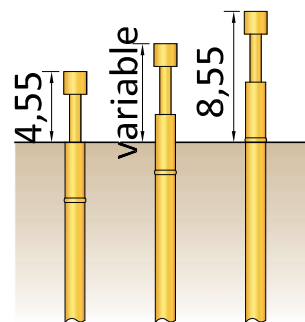
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Nickel-silver or Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

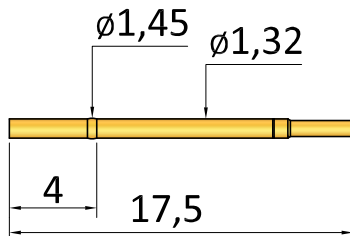
Spring force:	100 g
Alternative:	80 g

## Hole size for receptacle

Drills for press ring as a stop:	$\phi 1,32 - \phi 1,33$
Drills for press ring insert:	$\phi 1,39 - \phi 1,40$



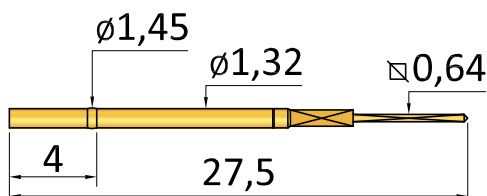
GLR 17C  
crimp



GLR 17S  
solder cup



GLR 17W  
wire wrap



## Ordering example:

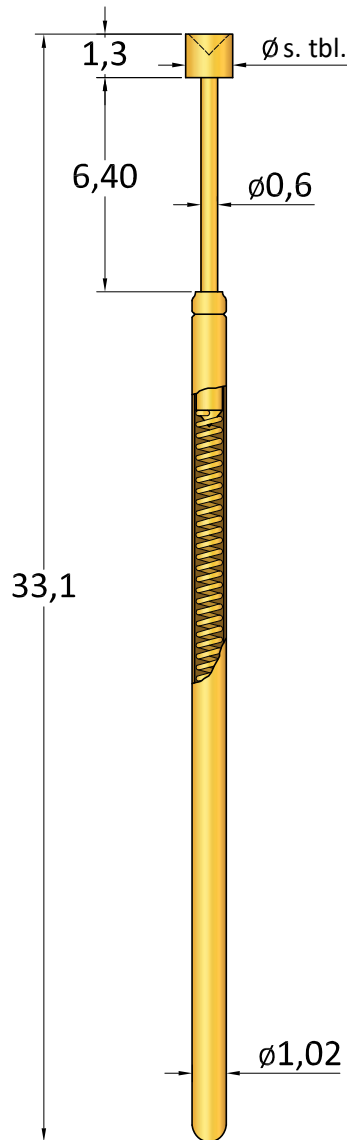
Series	Tip Style	Spring Force			
GLP 17	B	03	152	100	G
	Material	Tip $\phi$ mm			Plating
	B=BeCu				G=Gold
	S=Steel				N=Nickel

# GLP 1L

ICT/FCT Standard Probes  $\geq 1,91$  mm /  $\geq 75$  mil

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01	0,60 1,22 1,40
B S	02	0,60
B	03	0,60 1,22 1,40
B	04	0,60 1,02 1,22
B S	05	0,60 1,22
B S	08	0,60 1,02 1,22
B S	11	1,22
B S	13	0,60 1,22
S	14	0,60
S	15	0,60
B S	21	0,60 1,22 1,40
B S	22	1,22
B S	25	1,22
B	88	0,80 1,22



## Technical Data

Recommended minimum centers:	1,91 mm
Recommended working stroke:	4,30 mm
Maximum stroke:	6,35 mm
Current rating:	3,0 A
Typical contact resistance:	<20 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

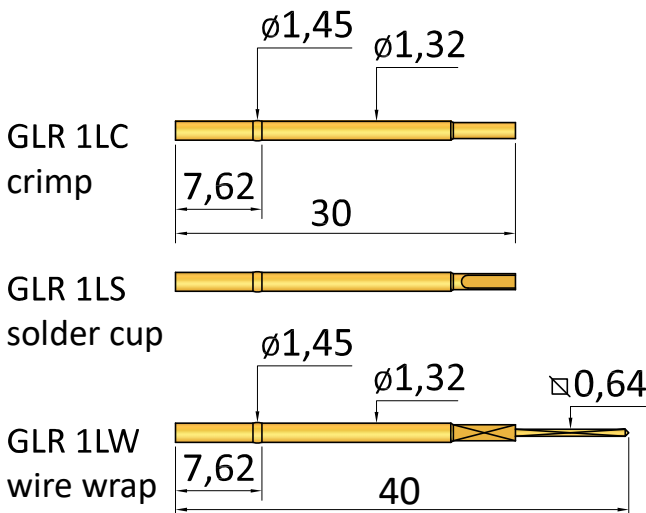
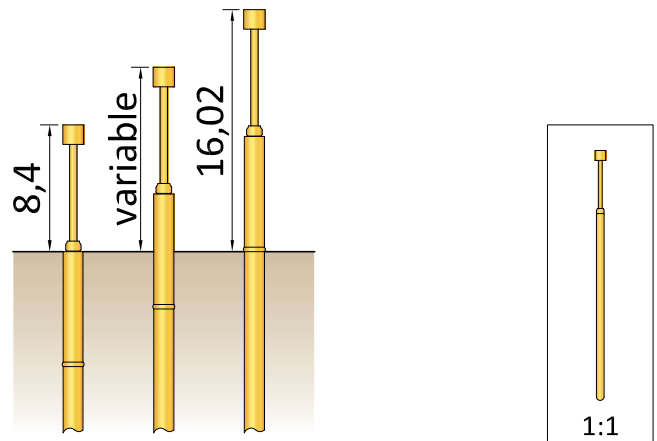
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Nickel-silver or Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

Spring force:	100 g
Alternative:	40 g 60 g 150 g 200 g

## Hole size for receptacle

Drills for press ring as a stop:	$\phi 1,32 - \phi 1,33$
Drills for press ring insert:	$\phi 1,39 - \phi 1,40$

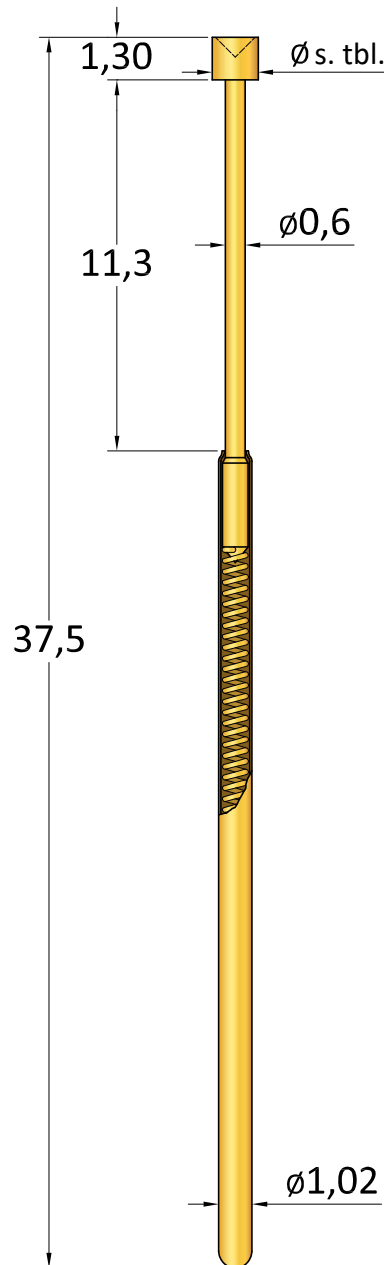


## Ordering example:

Series	Material	Tip Style	Tip $\phi$ mm	Spring Force	Plating
GLP 1L	B	01	140	100	G
	B=BeCu S=Steel				G=Gold N=Nickel G+=Gold Plus

## Available Tip Styles

Material	Tip Style	∅ mm
B	01	0,60 1,40
B S	02	0,60
B	03	0,60 1,40
B	04	0,60 1,02 1,22
B	05	0,60 1,22
B	08	0,60 1,02 1,22
B	11	1,22
B	13	0,60
S	14	0,60
B	21	0,60 1,02 1,22



## Technical Data

Recommended minimum centers:	1,91 mm
Recommended working stroke:	8,00 mm
Maximum stroke:	11,00 mm
Current rating:	3,0 A
Typical contact resistance:	<20 mΩ
Operating temperature range:	-50° up to +100°

## Materials

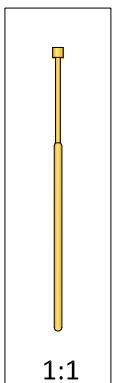
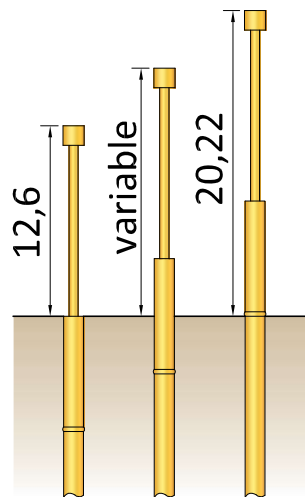
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Nickel-silver or Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

## Spring Force ( g ±20%)

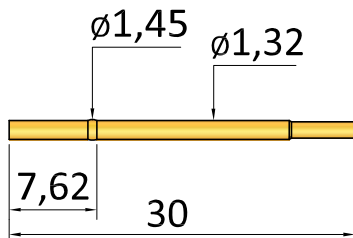
Spring force:	100 g
Alternative:	150 g 200 g

## Hole size for receptacle

Drills for press ring as a stop:	∅1,32 - ∅1,33
Drills for press ring insert:	∅1,39 - ∅1,40



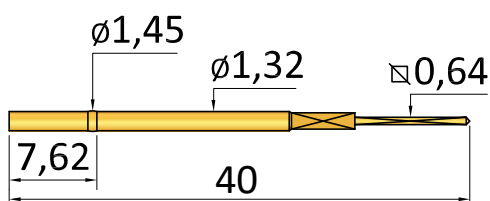
GLR 1LC  
crimp



GLR 1LS  
solder cup



GLR 1LW  
wire wrap













## Ordering example:

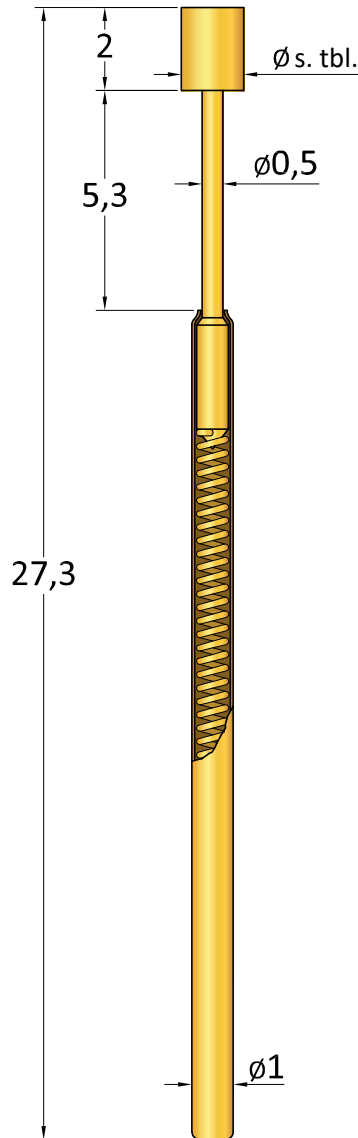
Series	Tip Style	Spring Force
GLP 1LL	B 01	140 100
	Material	Tip ∅ mm
	B=BeCu S=Steel	
		Plating
		G=Gold N=Nickel

# GLP 101

ICT/FCT Standard Probes  $\geq 1,91$  mm /  $\geq 75$  mil

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01 	1,15 1,50
B S	02 	0,50
B	03 	1,15 1,50
B	04 	0,50 1,15
B	05 	1,15
B	08 	1,15 1,50
B	11 	1,30
B	13 	1,15
B	21 	0,50 1,15
B	21 	1,15



## Technical Data

Recommended minimum centers:	1,91 mm
Recommended working stroke:	4,00 mm
Maximum stroke:	5,30 mm
Current rating:	3,0 - 4,0 A
Typical contact resistance:	<20 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

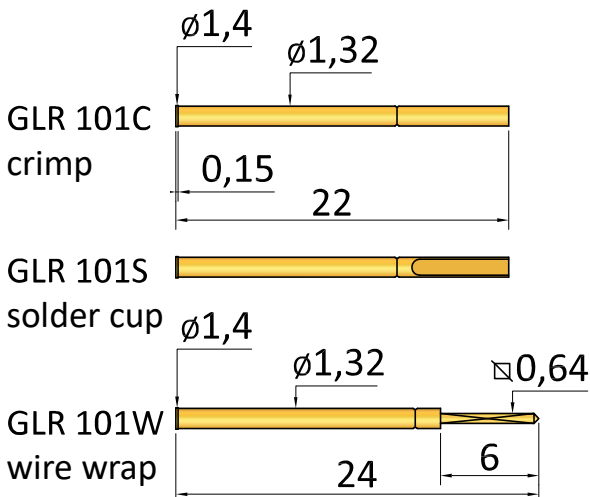
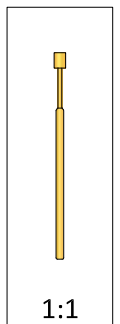
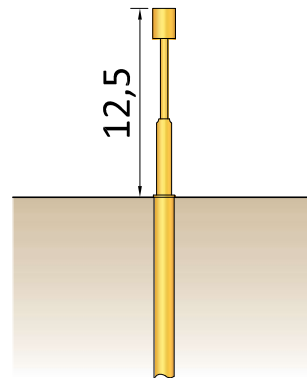
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Nickel-silver or Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

Spring force:	150 g
Alternative:	50 g 100 g 200 g

## Hole size for receptacle

Drills:  $\phi 1,31 - \phi 1,32$

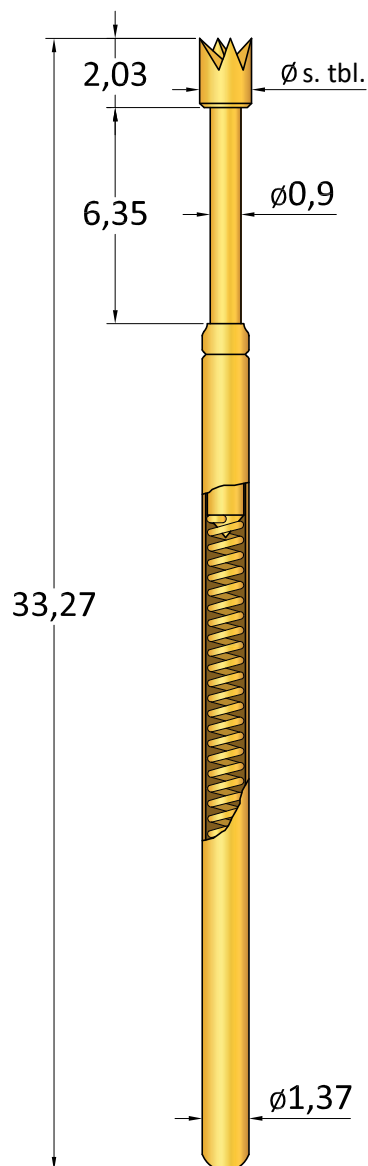


## Ordering example:

Series	Material	Tip Style	Tip $\phi$ mm	Spring Force	Plating
GLP 101	B	03	150	150	G
	B=BeCu S=Steel				G=Gold N=Nickel

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01	0,90 1,52
B S	02	0,90
B P	03	0,90 1,52
B	04	0,90 1,27 1,52
B S	05	0,90 1,52
B	07	0,50 0,60
B	08	0,90 1,52
S	09	0,60 0,90
B	10	1,52
B	11	1,52
B	13	1,52 1,70
S	14	0,90
B	19	1,80
B S	21	0,90 1,27 1,52
B	22	1,52 2,00
B	24	0,50
B S	25	1,40
B	27	0,50 0,60
B	30	0,90
B	88	1,52 2,00
S	97	0,90



## Technical Data

Recommended minimum centers:	2,54 mm
Recommended working stroke:	4,30 mm
Maximum stroke:	6,35 mm
Current rating:	2,0 - 3,0 A
Typical contact resistance:	<20 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

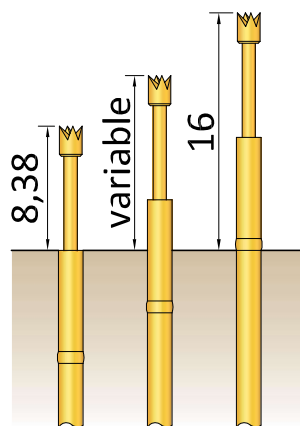
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Nickel-silver or Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

Spring force:	200 g
Alternative:	60 g
	100 g
	150 g
	300 g

## Hole size for receptacle (see page 38)

Drills for press ring as a stop:	$\phi 1,67 - \phi 1,68$
Drills for press ring insert:	$\phi 1,70 - \phi 1,75$



## Ordering example:

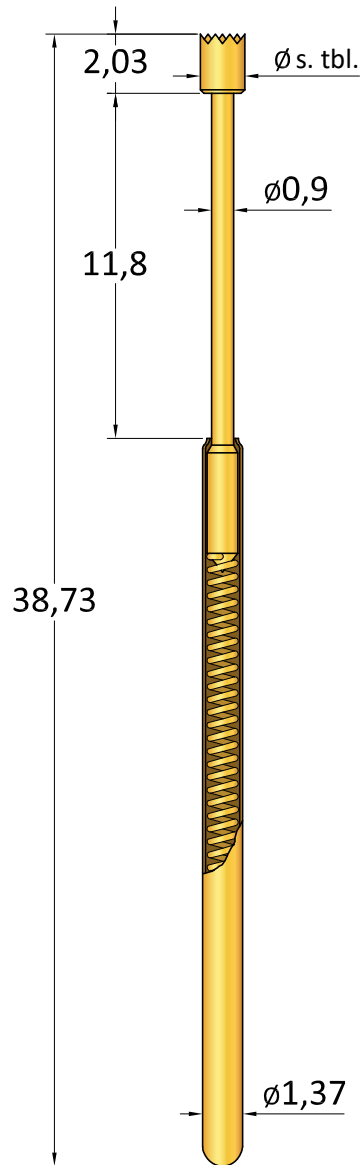
Series	Tip Style	Spring Force
GLP 25	B	21
	152	200
	G	
Material		Tip $\phi$ mm
B=BeCu		
S=Steel		
P=Plastic		
Plating		
G=Gold		
N=Nickel		
G+=Gold Plus		

# GLP 25L

ICT/FCT Standard Probes  $\geq 2,54$  mm /  $\geq 100$  mil

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01	0,90 1,52
B S	02	0,90
B	03	0,90 1,52
B	04	0,90 1,27 1,52
B S	05	0,90 1,52
B	07	0,50 0,60
B	08	0,90 1,52
S	09	0,60 0,90
B	10	1,52
B	11	1,52
B	13	1,52
S	14	0,90
B S	21	0,90 1,27 1,52
B S	25	1,40
B	27	0,50 0,60
S	97	0,90



## Technical Data

Recommended minimum centers: 2,54 mm  
 Recommended working stroke: 9,30 mm  
 Maximum stroke: 11,80 mm  
 Current rating: 2,0 - 3,0 A  
 Typical contact resistance:  $<20$  m $\Omega$   
 Operating temperature range:  $-50^\circ$  up to  $+100^\circ$

## Materials

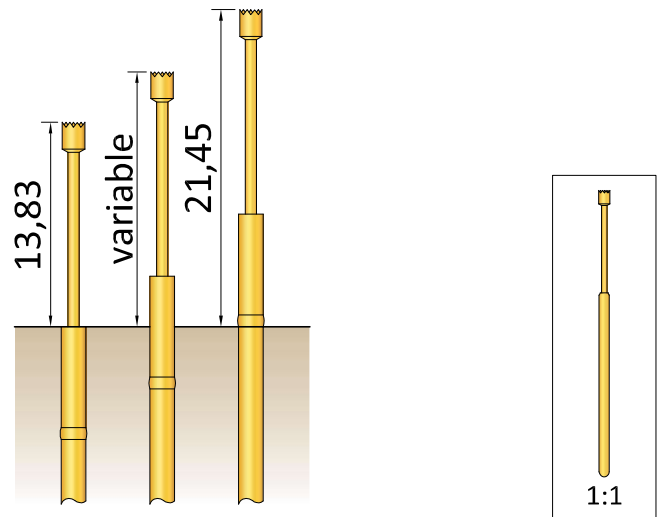
Plunger: BeCu or Steel, nickel or gold plated  
 Barrel: Nickel-silver or Brass, gold plated  
 Spring: Music wire, gold plated  
 Receptacle: Nickel-silver or Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

Spring force: 200 g  
 Alternative: 150 g  
 300 g

## Hole size for receptacle (see page 38)










Drills for press ring as a stop:  $\phi 1,67$  -  $\phi 1,68$   
 Drills for press ring insert:  $\phi 1,70$  -  $\phi 1,75$

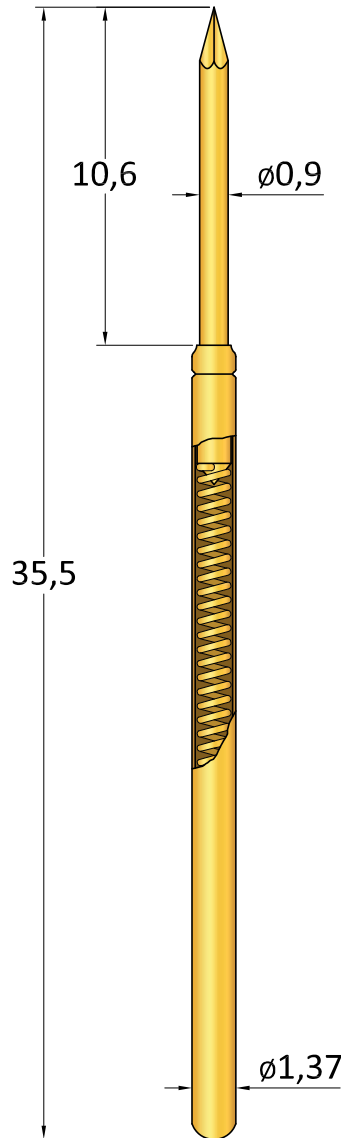


## Ordering example:

Series	Material	Tip Style	Tip $\phi$ mm	Spring Force	Plating
GLP 25L	B	10	152	200	G
	B=BeCu S=Steel				G=Gold N=Nickel G+=Gold Plus

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B S	02 	0,90
B	03 	0,90 1,52
B	05 	0,90 1,52
B	08 	0,90 1,52
B	11 	0,90 1,52
S	14 	0,90
S	15 	0,90
B	21 	0,90 1,52
S	97 	0,90



## Technical Data

Recommended minimum centers:	2,54 mm
Recommended working stroke:	4,30 mm
Maximum stroke:	6,35 mm
Current rating:	2,0 - 3,0 A
Typical contact resistance:	<20 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

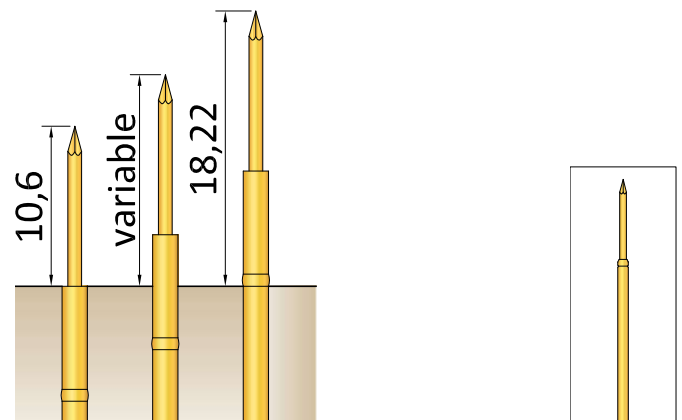
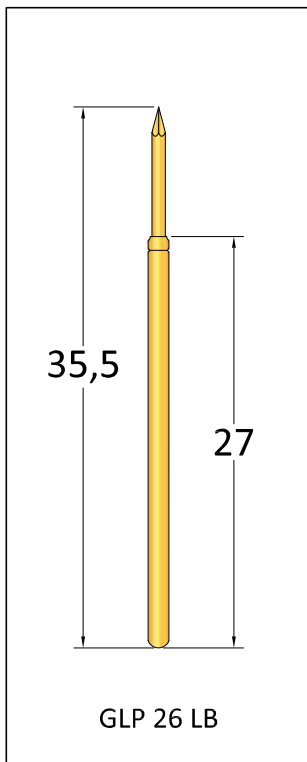
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Nickel-silver or Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

Spring force:	200 g
Alternative:	100 g
	150 g
	300 g

## Hole size for receptacle (see page 38)

Drills for press ring as a stop:	$\phi 1,67$ - $\phi 1,68$
Drills for press ring insert:	$\phi 1,70$ - $\phi 1,75$



## Ordering example:

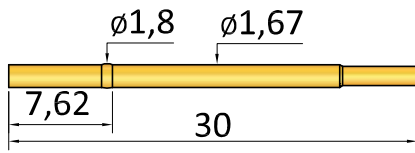
Series	Tip Style	Spring Force			
GLP 26	S	14	090	200	G
	Material		Tip $\phi$ mm		Plating
	B=BeCu S=Steel				G=Gold N=Nickel G+=Gold Plus



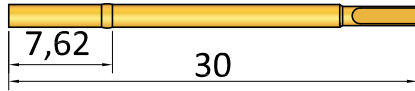
# GLR 25

Receptacles for GLP 25 - GLP 25L - GLP 26  $\geq 2,54$  mm /  $\geq 100$  mil

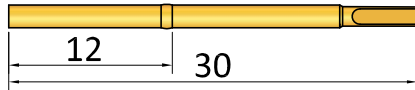
GLR 25C  
crimp



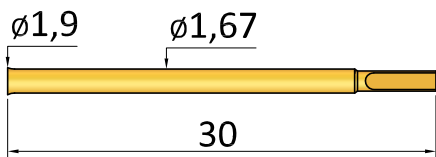
GLR 25S  
solder cup



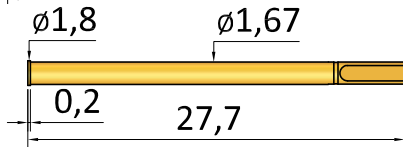
GLR 25S -12  
solder cup



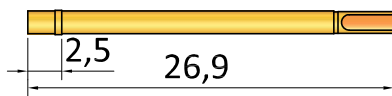
GLR 25S -BO  
solder cup



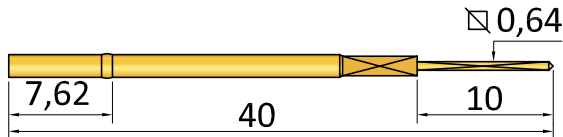
GLR 25S -0,2  
solder cup



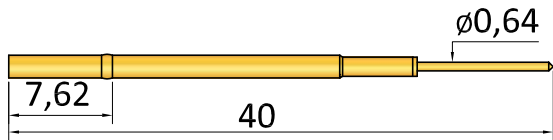
GLR 25S -2,5  
solder cup



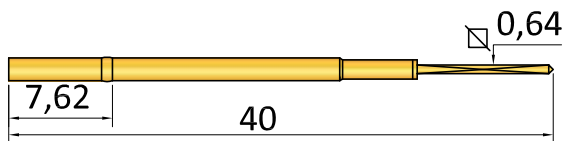
GLR 25W  
wire wrap



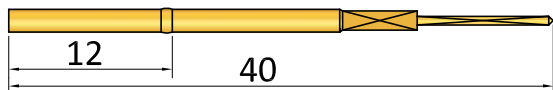
GLR 25R  
round post  
vacuum-sealed



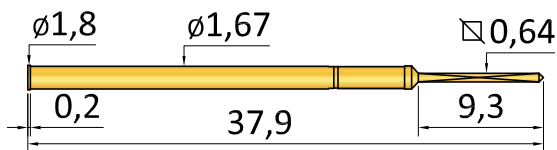
GLR 25WV  
wire wrap  
vacuum-sealed



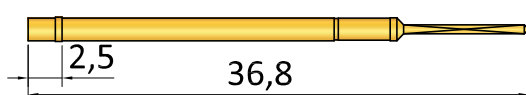
GLR 25W -12  
wire wrap



GLR 25W -0,2  
wire wrap  
vacuum-sealed



GLR 25W -2,5  
wire wrap  
vacuum-sealed



## Materials

Receptacle: Nickel-silver or Brass, gold plated

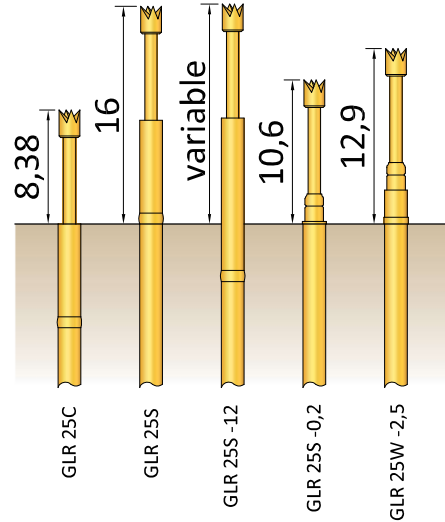
## Hole size for receptacle

Drills for press ring as a stop:

$\varnothing 1,67 - \varnothing 1,68$

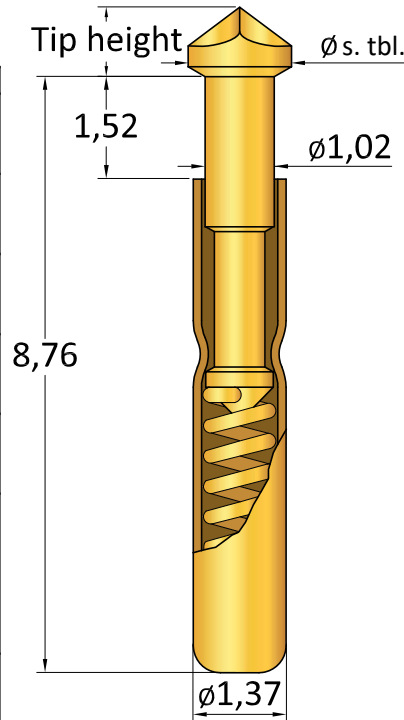
Drills for press ring insert:

$\varnothing 1,70 - \varnothing 1,75$



## Available Tip Styles

Mat.	Tip Style	ø mm	Tip Height
B	01	1,02 1,96	1,52
B	03	1,02 1,96	1,27
B	04	1,02 1,96	0,71
B	05	1,96	1,02
B	08	1,02 1,96	1,52
B	11	1,52 1,96 2,49 3,30 3,96	1,02
B	21	1,02 1,96	1,52
B	33	1,96	0,71



## Technical Data

Recommended minimum centers:	2,54 mm
Recommended working stroke:	1,27 mm
Maximum stroke:	1,52 mm
Current rating:	3,0 A
Typical contact resistance:	<30 mΩ
Operating temperature range:	-50° up to +100°

## Materials

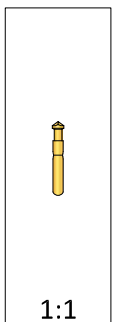
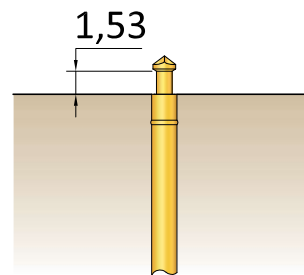
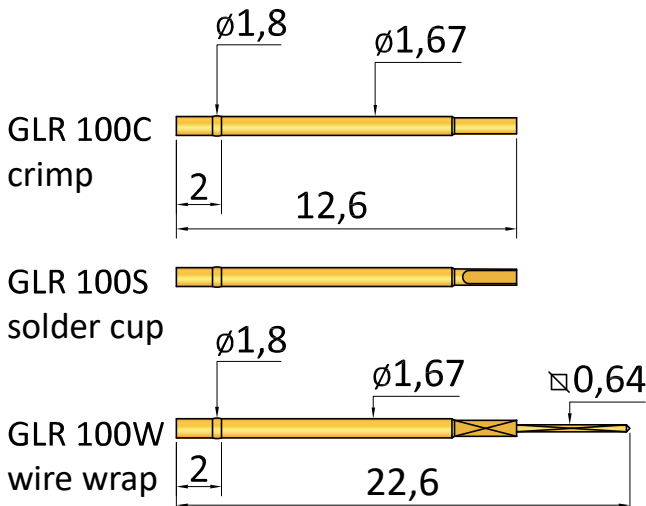
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Nickel-silver or Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

## Spring Force ( g ±20%)

Spring force:	100 g
Alternative:	70 g

## Hole size for receptacle

Drills for press ring as a stop:	Ø1,67 - Ø1,68
Drills for press ring insert:	Ø1,70 - Ø1,75



## Ordering example:

Series	Material	Tip Style	Tip ø mm	Tip Height	Spring Force	Plating
GLP 100	B	11	152	102	100	G

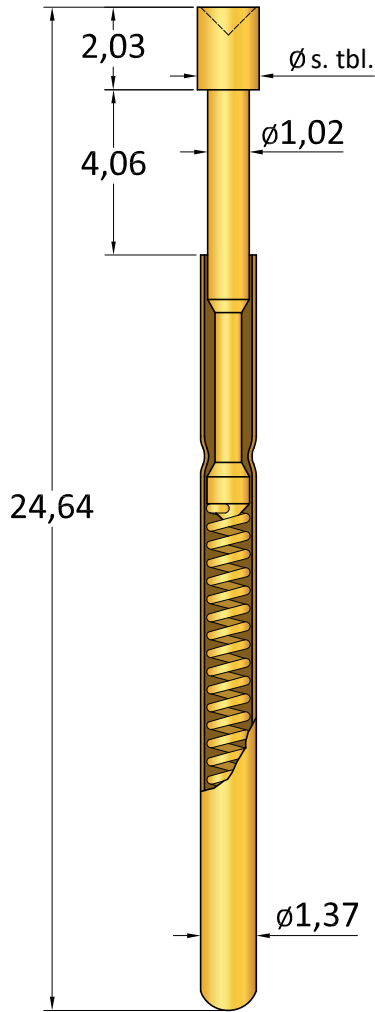
B=BeCu  
S=Steel

# GLP 2

ICT/FCT Standard Probes  $\geq 2,54$  mm /  $\geq 100$  mil

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01	1,02 1,52
B S	02	1,02
B	03	1,02 1,52
B	04	1,02 1,27 1,52
B S	05	1,02 1,52
B	07	0,60
B	08	1,02 1,52
S	09	0,60 0,80 1,02
B	10	1,91
B	11	1,52
B	13	1,52
S	14	0,80 1,02
B S	21	1,02 1,27 1,52
B S	25	1,02



## Technical Data

Recommended minimum centers:	2,54 mm
Recommended working stroke:	2,70 mm
Maximum stroke:	4,06 mm
Current rating:	2,0 - 3,0 A
Typical contact resistance:	<20 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

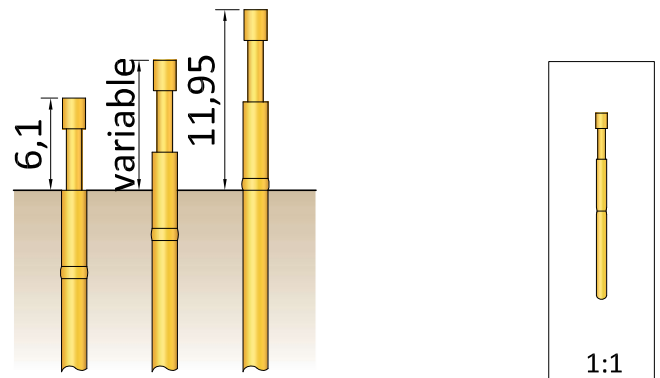
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Nickel-silver or Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

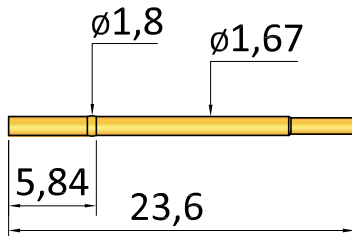
Spring force:	200 g
Alternative:	100 g

## Hole size for receptacle

Drills for press ring as a stop:	$\phi 1,67$ - $\phi 1,68$
Drills for press ring insert:	$\phi 1,70$ - $\phi 1,75$



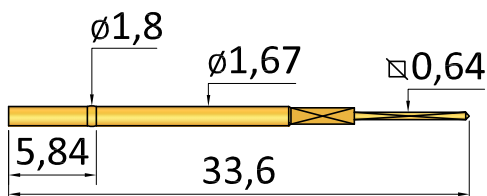
GLR 2C  
crimp



GLR 2S  
solder cup











GLR 2W  
wire wrap

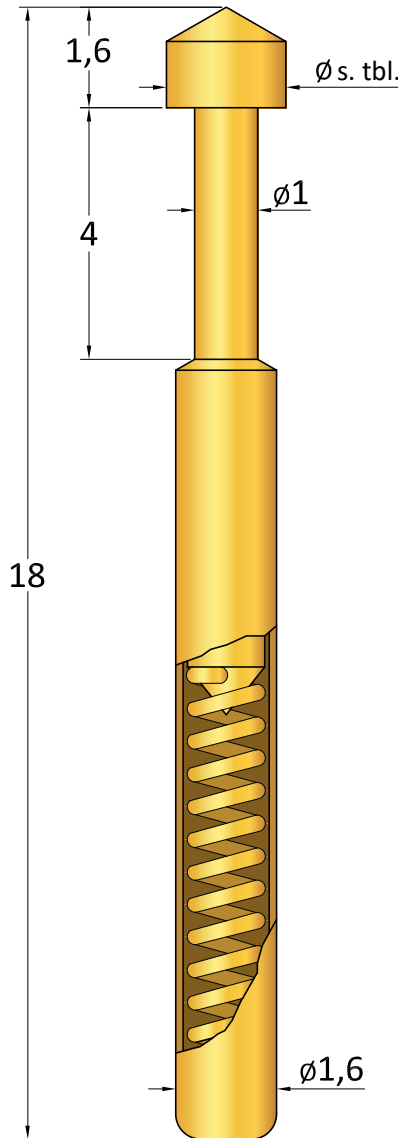


## Ordering example:

Series	Material	Tip Style	Tip $\phi$ mm	Spring Force	Plating
GLP 2	B	01	152	200	G
	B=BeCu S=Steel				G=Gold N=Nickel

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01 	1,90
B S	02 	1,00
B	03 	1,90 3,00
B	04 	1,90
B	05 	1,90
B	08 	1,90 3,00
B	13 	1,90
B	21 	1,90



## Technical Data

Recommended minimum centers:	2,54 mm
Recommended working stroke:	2,60 mm
Maximum stroke:	3,50 mm
Current rating:	3,0 A
Typical contact resistance:	<20 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

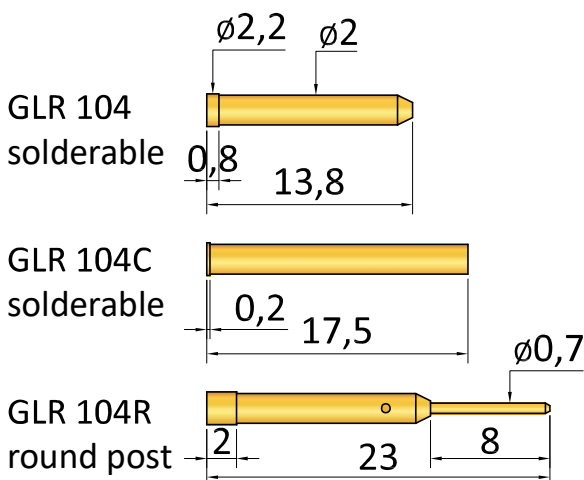
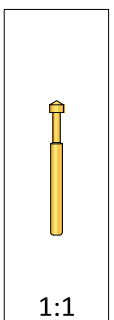
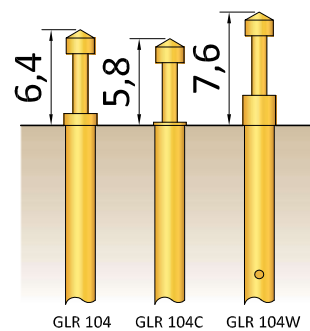
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

Spring force:	30 g
Alternative:	80 g
	150 g
	300 g
	400 g

## Hole size for receptacle

Drills:  $\phi 2,00 - \phi 2,01$



## Ordering example:







Series	Tip Style	Spring Force	Material	Tip $\phi$ mm	Plating
GLP 104	B 05	190	B=BeCu S=Steel	30	G

G=Gold  
N=Nickel

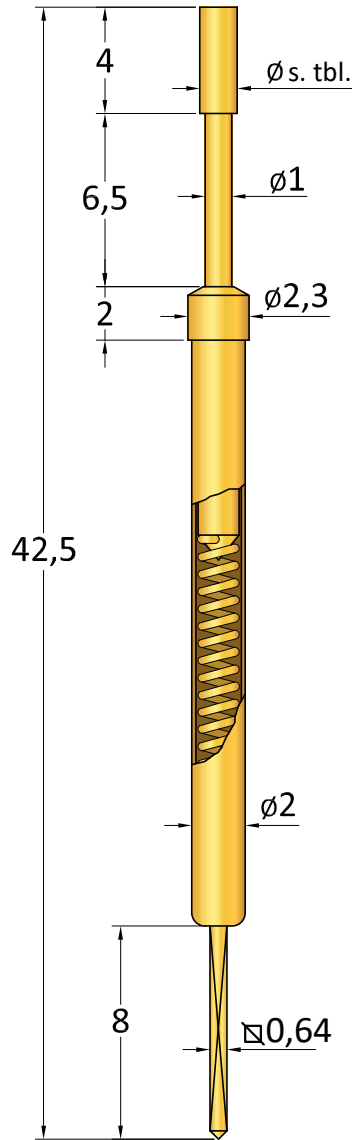
# GLP 102

ICT/FCT Standard Probes  $\geq 2,54$  mm /  $\geq 100$  mil

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01 	1,40 2,30
B S	02 	1,00
B P*	03 	1,40 2,30 4,00
B	04 	1,40 2,30
B	08 	1,40 2,30
B	21 	1,40 2,30

\*Insulated tip to support PCB. Total length 43,5 mm



## Technical Data

Recommended minimum centers:	2,54 mm
Recommended working stroke:	4,80 mm
Maximum stroke:	6,50 mm
Current rating:	5,0 - 8,0 A
Typical contact resistance:	<20 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

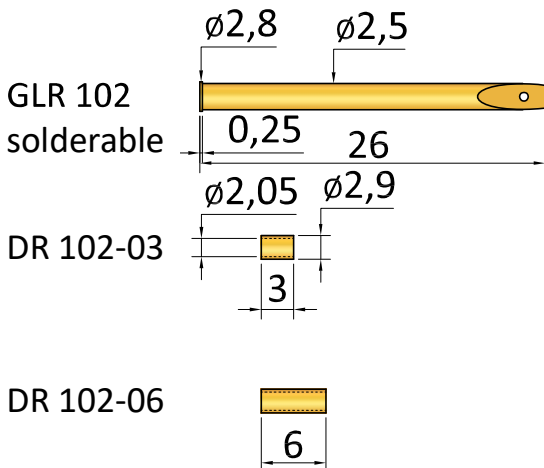
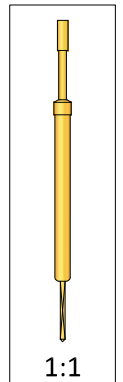
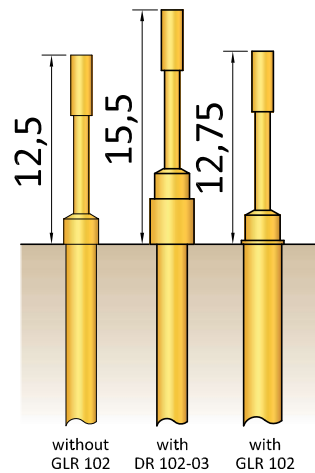
Spring force:	150 g
Alternative:	300 g 500 g

## Hole size without receptacle

Drills:  $\phi 2,00 - \phi 2,01$

## Hole size with receptacle














Drills:  $\phi 2,50 - \phi 2,51$

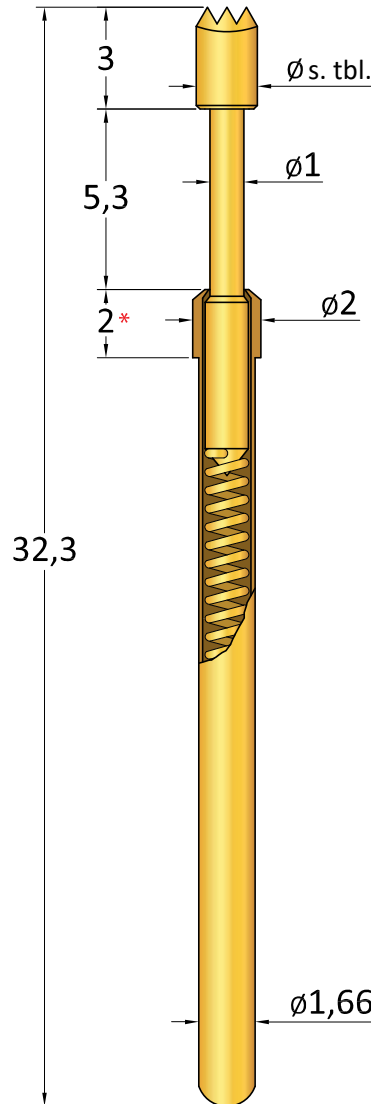


## Ordering example:

Series	Tip Style	Spring Force
GLP 102	B 03	140 150
Material		Tip $\phi$ mm
B=BeCu		
S=Steel		
P=Plastic		
		Plating
		G=Gold
		N=Nickel

## Available Tip Styles

Material	Tip Style	Ø mm
B	01 	1,00 1,80 2,00
B S	02 	1,00
B	03 	1,00 1,80 2,00
B	04 	1,00 1,80 2,00
B S	05 	1,80 2,00
B	08 	1,00 1,80 2,00
B	10 	2,00
B	11 	2,00
B	13 	1,00 1,80 2,00
S	14 	1,00
S	15 	1,00
B S	21 	1,00 1,80 2,00
B S	25 	1,00 1,80 2,00



## Technical Data

Recommended minimum centers:	2,54 mm
Recommended working stroke:	4,00 mm
Maximum stroke:	5,30 mm
Current rating:	5,0 - 8,0 A
Typical contact resistance:	<20 mΩ
Operating temperature range:	-50° up to +100°

## Materials

Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Brass, gold plated

## Spring Force ( g ±20%)

Spring force:	200 g
Alternative:	100 g
	150 g
	250 g
	300 g

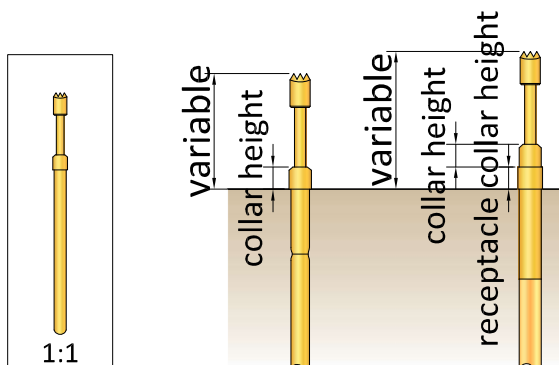
## Hole size without receptacle

Drills: Ø1,66 - Ø1,67

## Hole size with receptacle (see page 47)

Drills: Ø1,99 - Ø2,00

* Collar Height	Total Length	
2	32,3	Different collar heights and spacers (DR) are available to vary the total installation height of the probe.
3	33,3	
5	35,3	
7	37,3	
8	38,3	
10	40,3	



## Ordering example:

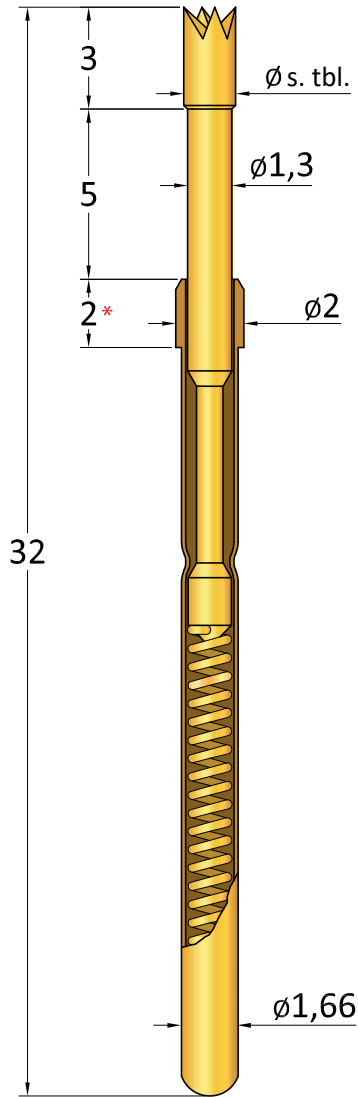
Series	Collar Height	Material B=BeCu S=Steel	Tip Style	Tip Ø mm	Spring Force	Plating G=Gold N=Nickel
GLP 112	-2	B	08	180	200	G

# GLP 912

ICT/FCT Standard Probes  $\geq 2,54$  mm /  $\geq 100$  mil

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01	1,30 1,80 2,00
B S	02	1,30
B	03	1,30 1,80 2,00
B	04	1,30 1,80 2,00
B S	05	1,80 2,00
B	08	1,30 1,80 2,00
B	10	2,00
B	11	2,00
B	13	1,30 1,80 2,00
S	14	1,30
B S	21	1,30 1,80 2,00
B S	25	1,30 1,80 2,00
B	88	1,80



## Technical Data

Recommended minimum centers:	2,54 mm
Recommended working stroke:	4,00 mm
Maximum stroke:	5,00 mm
Current rating:	5,0 - 8,0 A
Typical contact resistance:	<20 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

Spring force:	200 g
Alternative:	100 g
	150 g
	250 g
	300 g

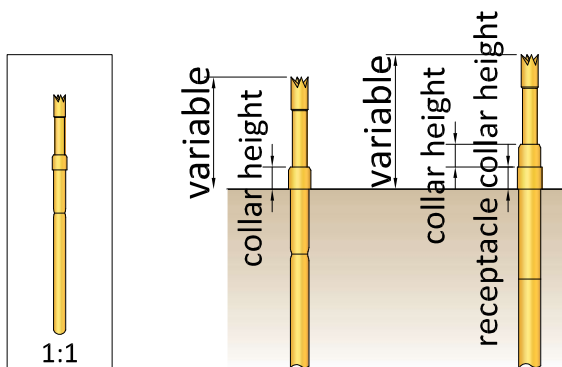
## Hole size without receptacle

Drills:  $\phi 1,66 - \phi 1,67$

## Hole size with receptacle (see page 47)

Drills:  $\phi 1,99 - \phi 2,00$

* Collar Height	Total Length	Different collar heights and spacers (DR) are available to vary the total installation height of the probe.
2	32	
3	33	
5	35	
7	37	
10	40	

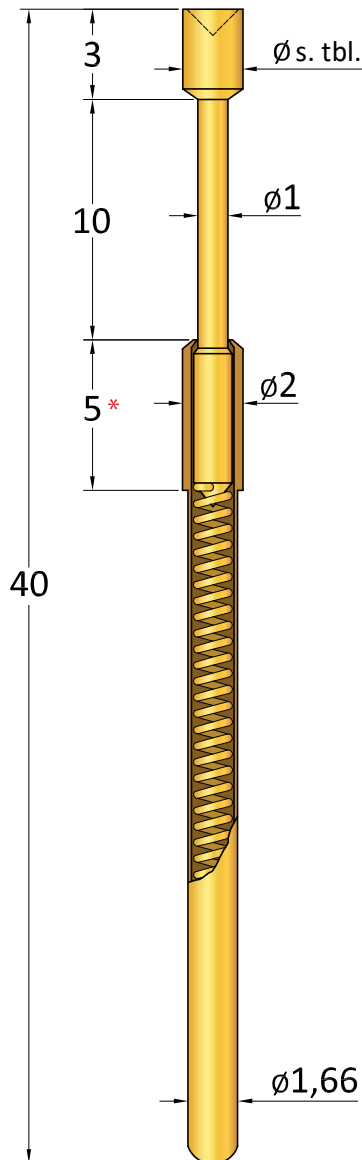


## Ordering example:

Series	Collar Height	Material B=BeCu S=Steel	Tip Style	Tip $\phi$ mm	Spring Force	Plating G=Gold N=Nickel
GLP 912	-2	B	21	152	200	G

## Available Tip Styles

Material	Tip Style	Ø mm
B	01	1,00 1,80 2,00
B S	02	1,00
B	03	1,00 1,80 2,00
B	04	1,00 1,80 2,00
B S	05	1,80 2,00
B	08	1,00 1,80 2,00
B	10	2,00
B	11	2,00
B	13	1,00 1,80 2,00
S	14	1,00
S	15	1,00
B S	21	1,00 1,80 2,00
B S	25	1,00 1,80 2,00



## Technical Data

Recommended minimum centers:	2,54 mm
Recommended working stroke:	8,00 mm
Maximum stroke:	10,00 mm
Current rating:	5,0 - 8,0 A
Typical contact resistance:	<20 mΩ
Operating temperature range:	-50° up to +100°

## Materials

Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Brass, gold plated

## Spring Force ( g ±20%)

Spring force:	200 g
Alternative:	100 g
	150 g
	250 g
	300 g

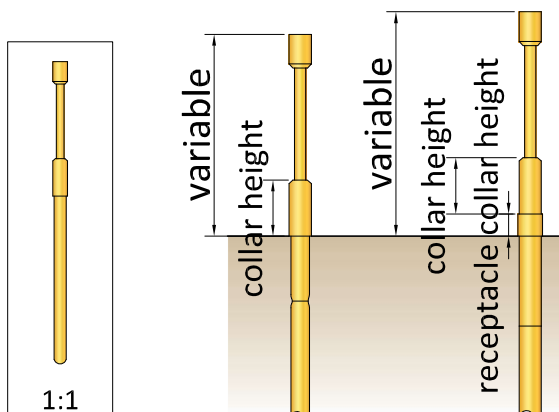
## Hole size without receptacle

Drills: Ø1,66 - Ø1,67

## Hole size with receptacle (see page 47)

Drills: Ø1,99 - Ø2,00

* Collar Height	Total Length	Different collar heights and spacers (DR) are available to vary the total installation height of the probe.
2	37	
3	38	
5	40	
7	42	
10	45	



## Ordering example:

Series	Collar Height	Material B=BeCu S=Steel	Tip Style	Tip Ø mm	Spring Force	Plating G=Gold N=Nickel
GLP 212	-5	B	01	200	200	G

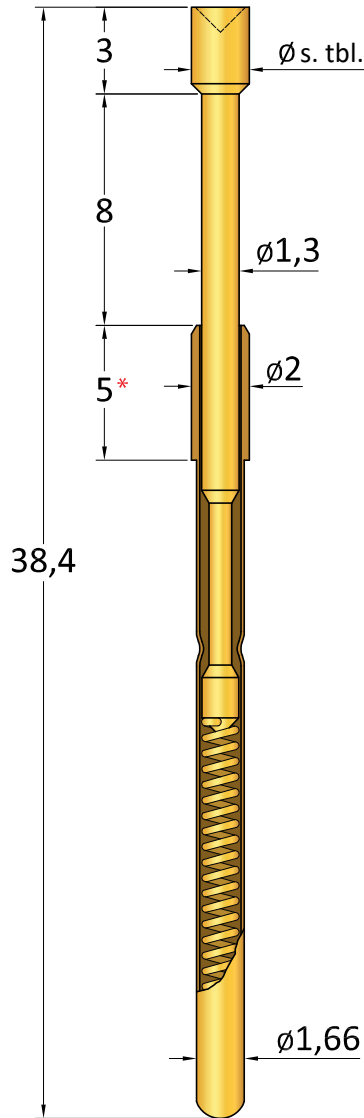


# GLP 422

ICT/FCT Standard Probes ≥ 2,54 mm / ≥ 100 mil

## Available Tip Styles

Material	Tip Style	Ø mm
B	01	1,30 1,80 2,00
B S	02	1,30
B	03	1,30 1,80 2,00
B	04	1,30 1,80 2,00
B S	05	1,80 2,00
B	08	1,30 1,80 2,00
B	10	2,00
B	11	2,00
B	13	1,30 1,80 2,00
S	14	1,30
S	15	1,30
B S	21	1,30 1,80 2,00
B S	25	1,30 1,80 2,00



## Technical Data

Recommended minimum centers:	2,54 mm
Recommended working stroke:	6,40 mm
Maximum stroke:	8,00 mm
Current rating:	5,0 - 8,0 A
Typical contact resistance:	<20 mΩ
Operating temperature range:	-50° up to +100°

## Materials

Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Brass, gold plated

## Spring Force ( g ±20%)

Spring force:	200 g
Alternative:	100 g
	150 g
	250 g
	300 g

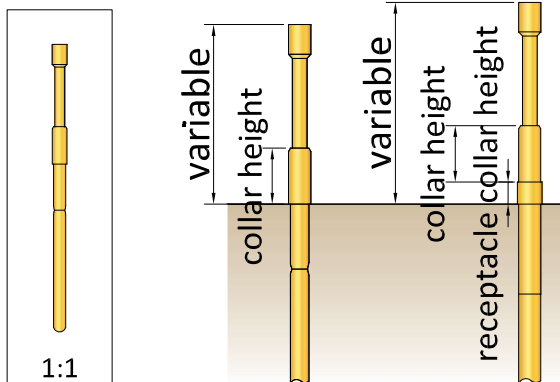
## Hole size without receptacle

Drills: Ø1,66 - Ø1,67

## Hole size with receptacle (see page 47)

Drills: Ø1,99 - Ø2,00

* Collar Height	Total Length	Barrel Length	Different collar heights and spacers (DR) are available to vary the total installation height of the probe.
5	38,4	27,4	
8	38,4	30,4	

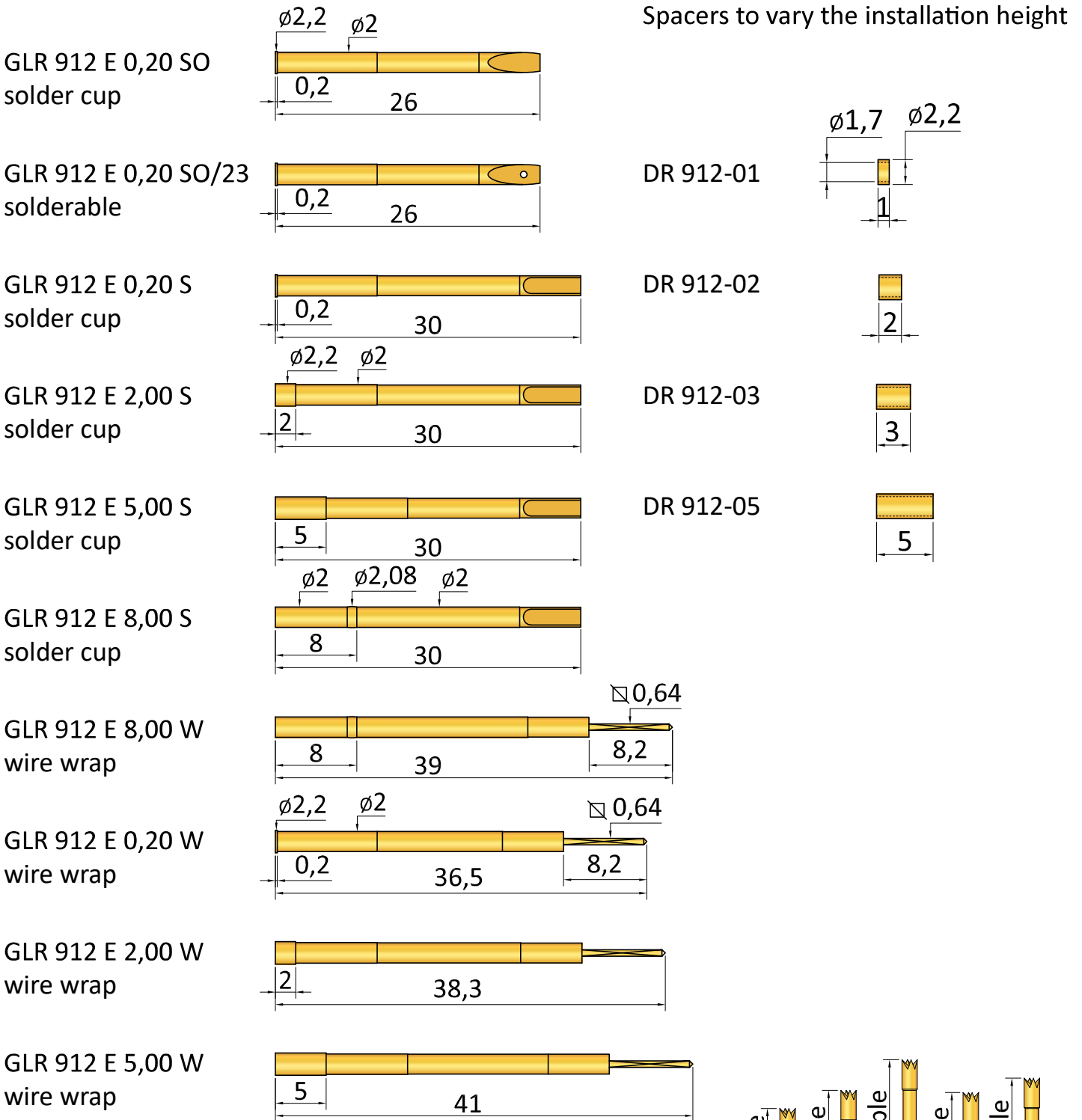


## Ordering example:

Series	Collar Height	Material B=BeCu S=Steel	Tip Style	Tip Ø mm	Spring Force	Plating G=Gold N=Nickel
GLP 422	-5	B	01	200	200	G

# GLR 912

Receptacles for GLP 112 - GLP 912 - GLP 212 - GLP 422  $\geq 2,54$  mm /  $\geq 100$  mil

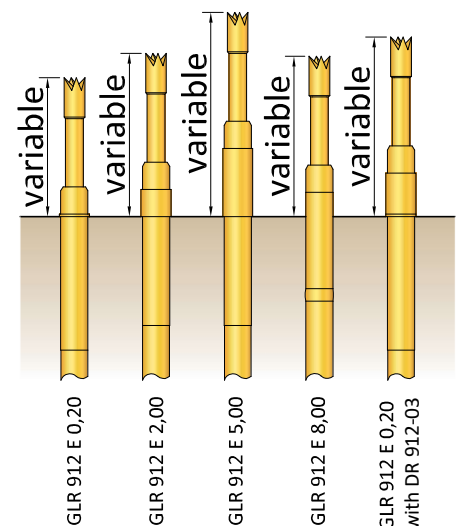


## Materials

Receptacle: Brass, gold plated

## Hole size for receptacle

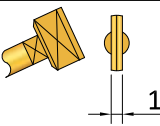
Drills for press ring as a stop:  $\phi 1,99 - \phi 2,00$   
 Drills for press ring insert:  $\phi 2,03 - \phi 2,05$

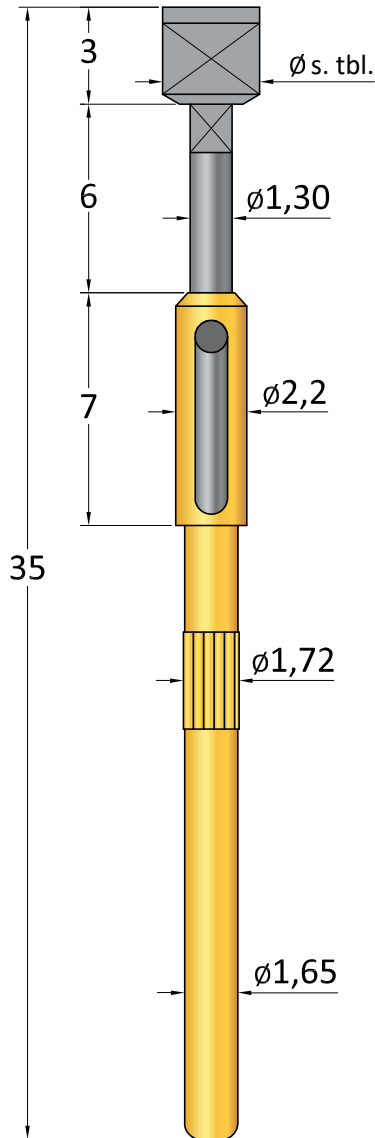


# GLP 610

ICT/FCT Standard Probes  $\geq 2,54$  mm /  $\geq 100$  mil

## Available Tip Styles

Mat.	Tip Style	$\phi$ mm
B		1,50
		2,00
S		3,00



## Technical Data

Recommended minimum centers:	2,54 mm
Recommended working stroke:	4,00 mm
Maximum stroke:	5,00 mm
Current rating:	5,0 A
Typical contact resistance:	<20 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

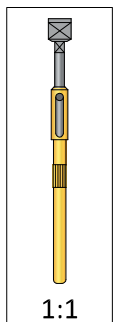
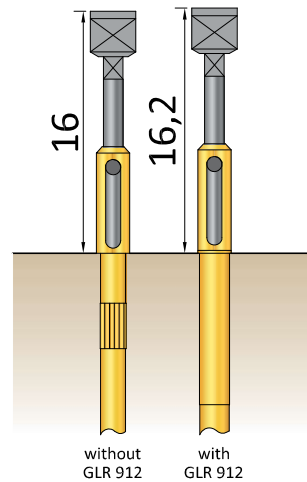
Spring force:	150 g
Alternative:	300 g

## Hole size without receptacle

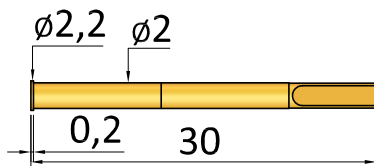
Drills:  $\phi 1,66 - \phi 1,67$

## Hole size with receptacle

Drills:  $\phi 1,99 - \phi 2,00$



GLR 912  
E 0,20 S  
solder cup

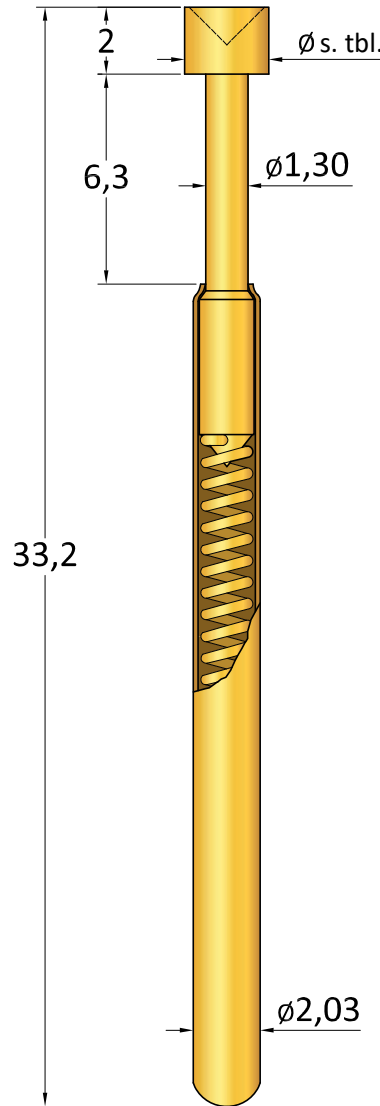


## Ordering example:

Series	Tip Style	Spring Force			
GLP 610	B	50	300	150	N
	Material	Tip $\phi$ mm			Plating
	B=BeCu S=Steel				G=Gold N=Nickel

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01	1,30 2,54
B S	02	1,30
B P	03	1,30 2,54
B	04	2,03 2,54
B S	05	2,54
B	07	1,00
B	08	1,30 2,54
B	10	2,54 4,00
B	11	2,54
S	14	1,30
B	17	1,30 2,54
B S	20	2,54
B S	21	1,30 2,54
B S	26	2,54



## Technical Data

Recommended minimum centers:	3,18 mm
Recommended working stroke:	4,30 mm
Maximum stroke:	6,30 mm
Current rating:	5,0 A
Typical contact resistance:	<20 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

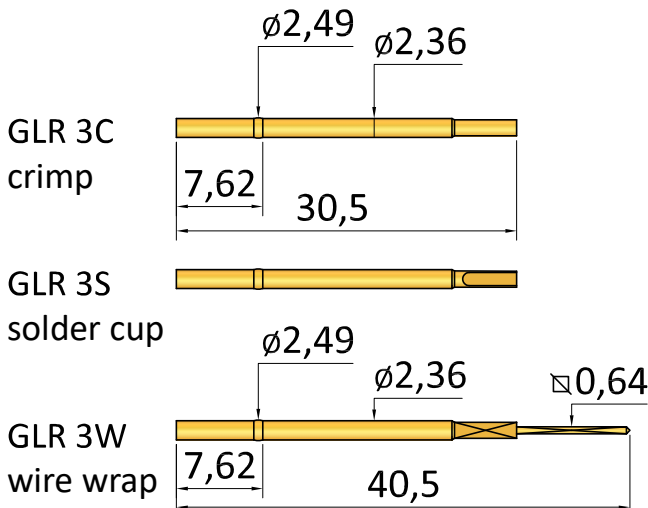
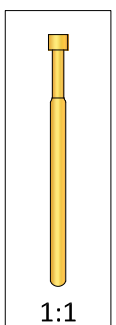
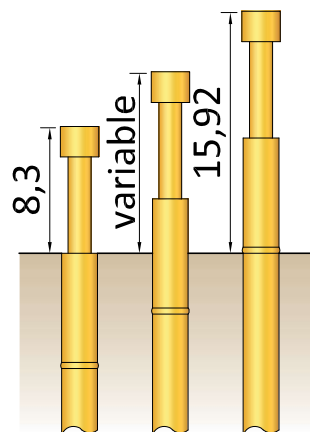
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Nickel-silver or Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

Spring force:	120 g
Alternative:	200 g 300 g

## Hole size for receptacle

Drills for press ring as a stop:	$\phi 2,36 - \phi 2,37$
Drills for press ring insert:	$\phi 2,40 - \phi 2,45$



## Ordering example:

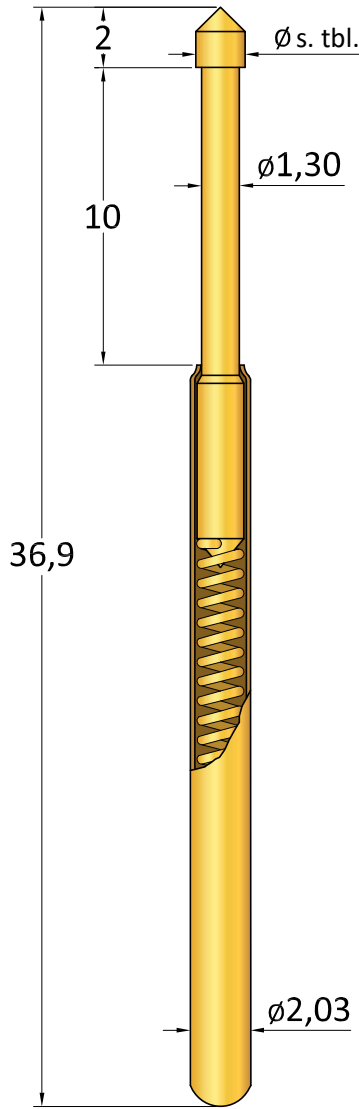
Series	Tip Style	Spring Force
GLP 3	B 01	254 120
Material		Tip $\phi$ mm
B=BeCu S=Steel P=Plastic		
		Plating
		G=Gold N=Nickel

# GLP 3L

ICT/FCT Standard Probes  $\geq 3,18$  mm /  $\geq 125$  mil

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01	1,30 1,65 2,54
B S	02	1,30
B	03	1,30 1,65 2,54
B	04	2,03 2,54
B S	05	1,65 2,54
B	07	1,00
B	08	1,30 1,65 2,54
B	10	2,54 4,00
B	11	2,54
S	14	1,30
B	17	1,65 2,54
B S	20	2,54
B S	21	1,30 1,65 2,54
B S	26	2,54



## Technical Data

Recommended minimum centers:	3,18 mm
Recommended working stroke:	8,00 mm
Maximum stroke:	10,00 mm
Current rating:	5,0 A
Typical contact resistance:	<30 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

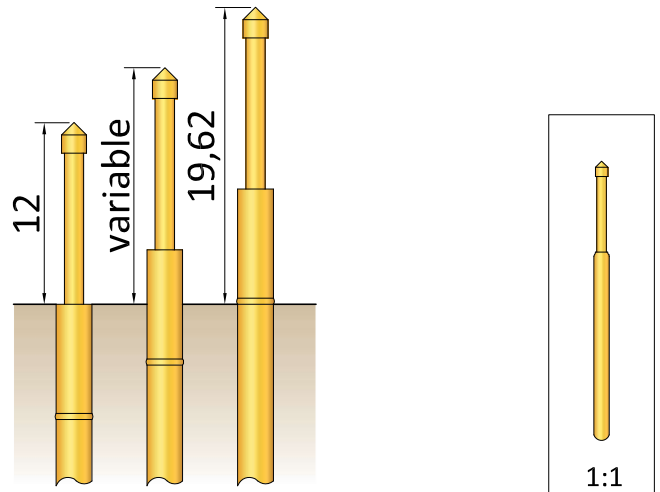
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Nickel-silver or Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

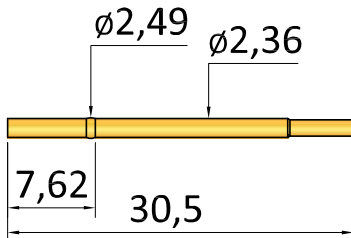
Spring force:	120 g
Alternative:	200 g 300 g

## Hole size for receptacle

Drills for press ring as a stop:	$\phi 2,36 - \phi 2,37$
Drills for press ring insert:	$\phi 2,40 - \phi 2,45$



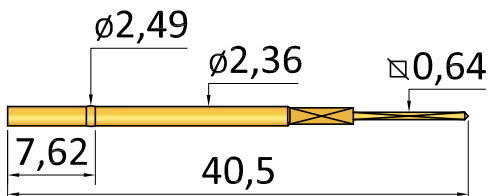
GLR 3C  
crimp



GLR 3S  
solder cup



GLR 3W  
wire wrap

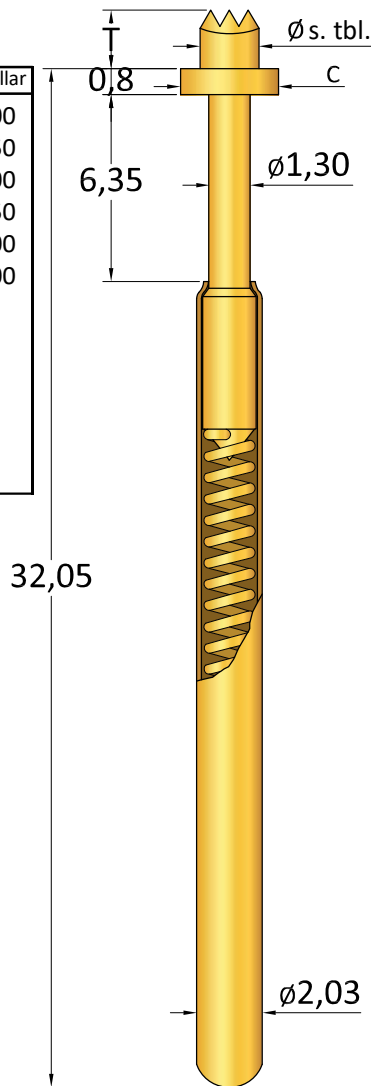


## Ordering example:

Series	Material	Tip Style	Tip $\phi$ mm	Spring Force	Plating
GLP 3L	B	05	165	120	G
	B=BeCu S=Steel				G=Gold N=Nickel

## Available Tip Styles

Mat.	Tip Style	$\phi$ mm	Tip Height	$\phi$ Collar
B	03	0,50	1,50	2,00
		0,60	1,80	2,50
		0,70	2,00	3,00
B	04	0,80	2,50	3,50
		0,90	3,20	4,00
		1,00	3,50	5,00
B	08	1,20	4,00	
		1,50		
		1,70		
		1,80		
		2,00		
		2,00		
		2,50		



## Technical Data

Recommended minimum centers:	3,18 mm
Recommended working stroke:	4,30 mm
Maximum stroke:	6,35 mm
Current rating:	5,0 A
Typical contact resistance:	<20 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

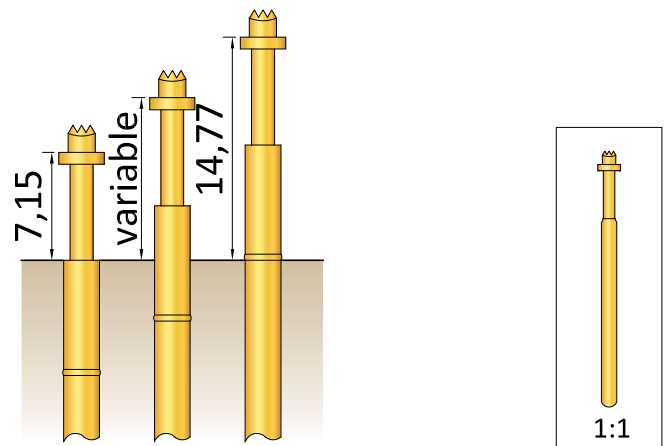
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Nickel-silver or Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

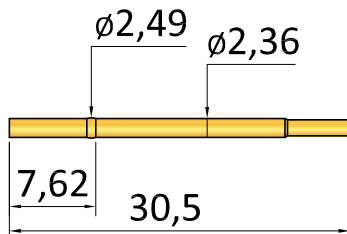
Spring force:	120 g
Alternative:	200 g
	300 g

## Hole size for receptacle

Drills for press ring as a stop:	$\phi 2,36 - \phi 2,37$
Drills for press ring insert:	$\phi 2,40 - \phi 2,45$



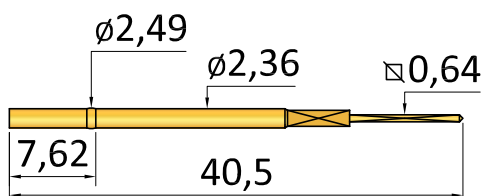
GLR 3C  
crimp



GLR 3S  
solder cup



GLR 3W  
wire wrap



## Ordering example:

Series	Tip Style	Tip Height	Spring Force
GLP 3C	B	08	180
	T18	C25	120
	G		

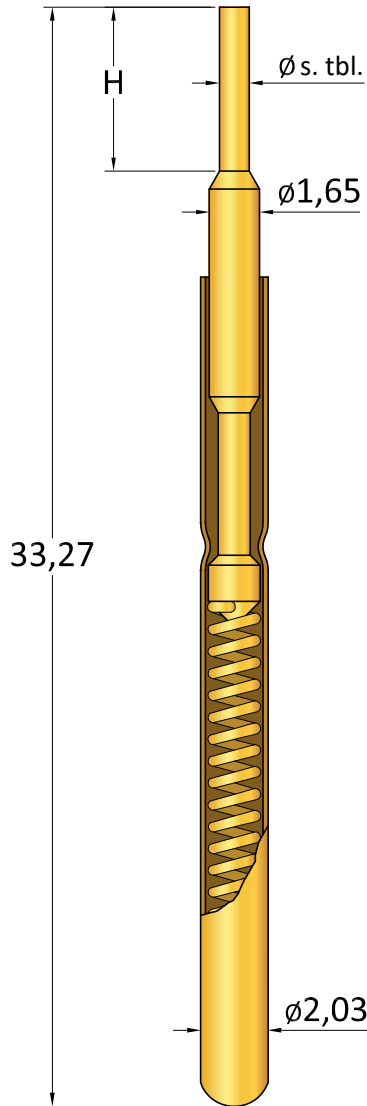
Material: B=BeCu, S=Steel  
Plating: G=Gold, N=Nickel

# GLP 3F

ICT/FCT Standard Probes  $\geq 3,18$  mm /  $\geq 125$  mil

## Available Tip Styles

Mat.	Tip Style	$\phi$ mm	Tip Height
B	03	0,50	3,00
		0,60	4,00
		0,70	5,00
B	04	0,80	6,00
		0,90	
B	05	1,00	
B	08		



## Technical Data

Recommended minimum centers: 3,18 mm  
 Recommended working stroke: 4,30 mm  
 Maximum stroke: 6,35 mm  
 Current rating: 5,0 A  
 Typical contact resistance:  $<20$  m $\Omega$   
 Operating temperature range:  $-50^\circ$  up to  $+100^\circ$

## Materials

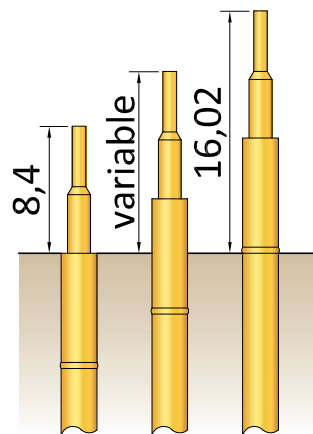
Plunger: BeCu or Steel, nickel or gold plated  
 Barrel: Nickel-silver or Brass, gold plated  
 Spring: Music wire, gold plated  
 Receptacle: Nickel-silver or Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

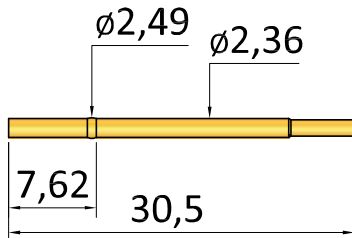
Spring force: 120 g  
 Alternative: 200 g  
 300 g

## Hole size for receptacle

Drills for press ring as a stop:  $\phi 2,36 - \phi 2,37$   
 Drills for press ring insert:  $\phi 2,40 - \phi 2,45$



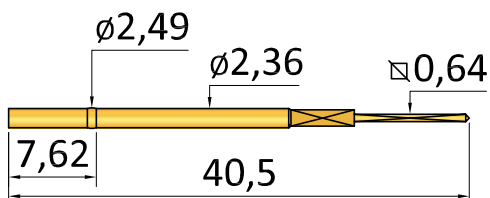
GLR 3C  
crimp



GLR 3S  
solder cup










GLR 3W  
wire wrap

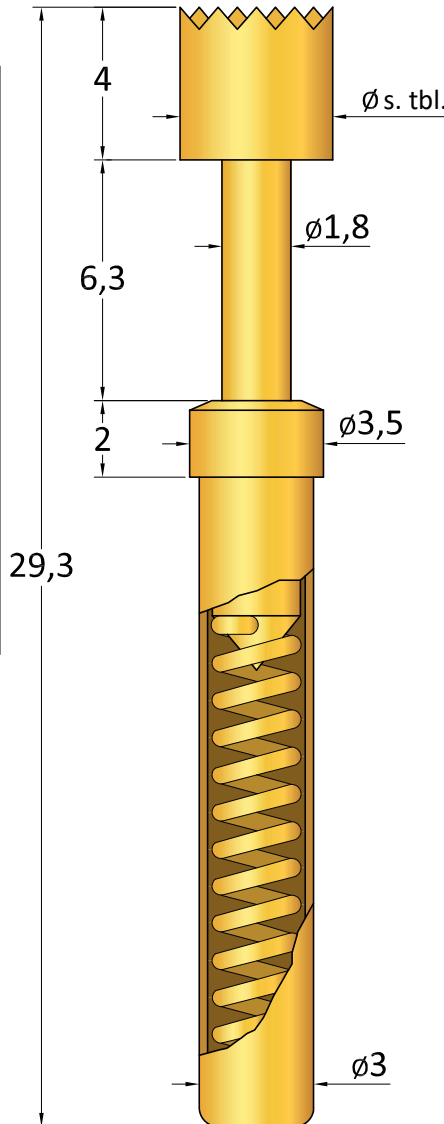


## Ordering example:

Series	Tip Style	Tip Height	Plating
GLP 3F	B 03	090 4H 120	G=Nickel
	Material	Tip $\phi$ mm	Spring Force
	B=BeCu S=Steel		

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01 	2,30 4,00
B S	02 	1,80
B	03 	1,00 1,80 2,00
B	04 	2,30 4,00
B	08 	2,30 4,00
B	10 	2,30 4,00 6,50
B	21 	2,30 4,00



## Technical Data

Recommended minimum centers:	4,00 mm
Recommended working stroke:	4,80 mm
Maximum stroke:	6,00 mm
Current rating:	5,0 - 8,0 A
Typical contact resistance:	<20 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

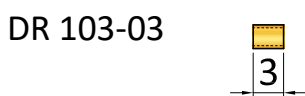
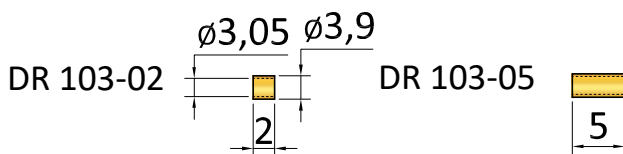
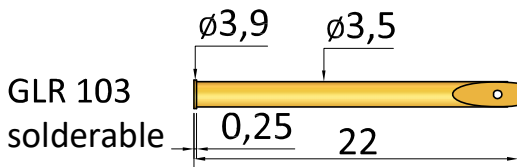
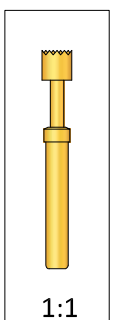
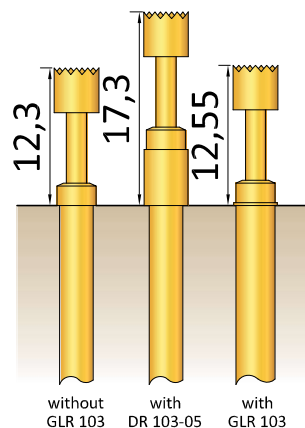
Spring force:	150 g
Alternative:	80 g 300 g 500 g

## Hole size without receptacle

Drills:  $\phi 2,99 - \phi 3,00$

## Hole size with receptacle

Drills:  $\phi 3,49 - \phi 3,50$



## Ordering example:

Series	Tip Style	Spring Force			
GLP 103	B	10	400	150	G
	Material	Tip $\phi$ mm			Plating
	B=BeCu S=Steel				G=Gold N=Nickel

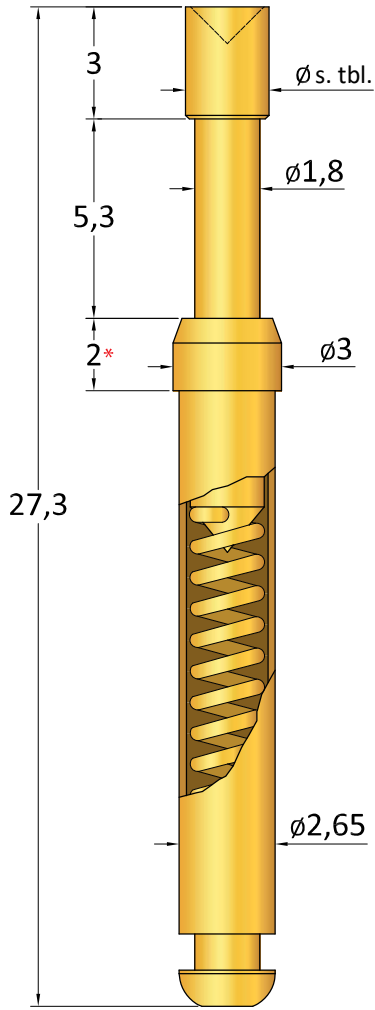


# GLP 113

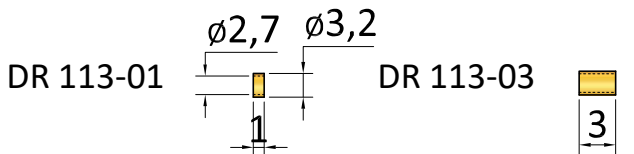
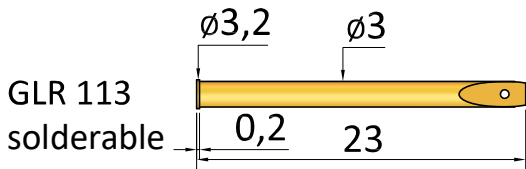
ICT/FCT Standard Probes ≥ 4,00 mm / ≥ 160 mil

## Available Tip Styles

Material	Tip Style	Ø mm
B	01	2,30
		3,00
		4,00
B S	02	1,80
B P	03	2,30
		3,00
		4,00
B	04	1,80
		2,50
		4,00
B	08	1,80
		2,50
		4,00
B	10	4,00
		6,00
B	11	2,30
		3,00
		4,00
B	21	1,80
		2,50
		4,00
B	31	1,80



*Collar Height	Total Length
2	27,3
5	30,3
10	35,3



## Technical Data

Recommended minimum centers: 4,00 mm  
 Recommended working stroke: 4,00 mm  
 Maximum stroke: 5,30 mm  
 Current rating: 5,0 - 8,0 A  
 Typical contact resistance: <30 mΩ  
 Operating temperature range: -50° up to +100°

## Materials

Plunger: BeCu or Steel, nickel or gold plated  
 Barrel: Brass, gold plated  
 Spring: Music wire, gold plated or stainless steel  
 Receptacle: Brass, gold plated

## Spring Force ( g ±20%)

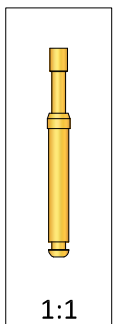
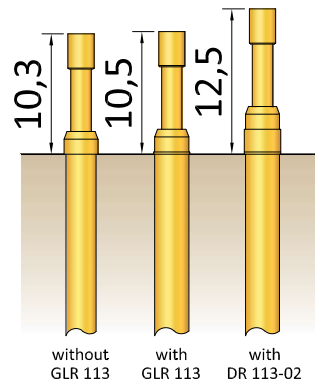
Spring force: 150 g  
 Alternative: 200 g  
 300 g  
 500 g

## Hole size without receptacle

Drills: Ø2,64 - Ø2,65

## Hole size with receptacle









Drills: Ø2,99 - Ø3,00

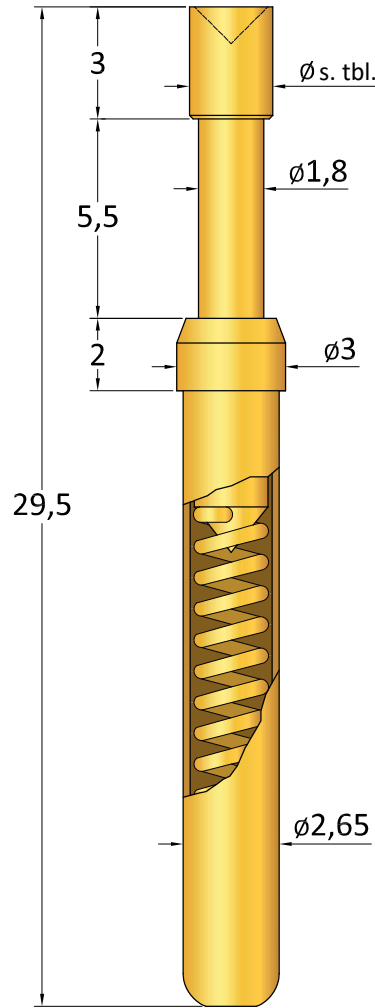


## Ordering example:

Series	Collar Height	Material	Tip Style	Tip Ø mm	Spring Force	Plating
		B=BeCu S=Steel P=Plastic				G=Gold N=Nickel
GLP 113	-2	B	01	230	150	G

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01 	2,30
		3,00
		4,00
B S	02 	1,80
B P	03 	2,30
		3,00
		4,00
B	04 	1,80
		2,50
		4,00
B	08 	1,80
		2,50
		4,00
B	10 	4,00
		6,00
B	21 	1,80
		2,50
		4,00
B	31 	1,80



## Technical Data

Recommended minimum centers:	4,00 mm
Recommended working stroke:	4,00 mm
Maximum stroke:	5,50 mm
Current rating:	5,0 - 8,0 A
Typical contact resistance:	<30 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Music wire, gold plated or stainless steel
Receptacle:	Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

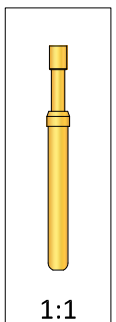
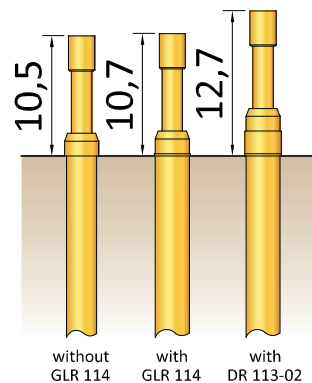
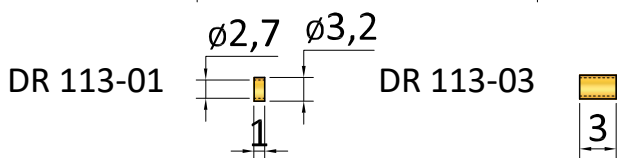
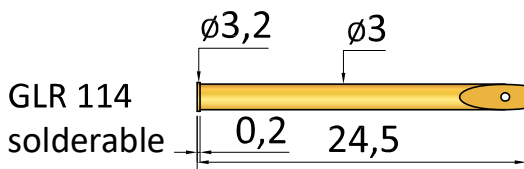
Spring force:	150 g
Alternative:	200 g
	300 g
	500 g

## Hole size without receptacle

Drills:  $\phi 2,64 - \phi 2,65$

## Hole size with receptacle

Drills:  $\phi 2,99 - \phi 3,00$











## Ordering example:

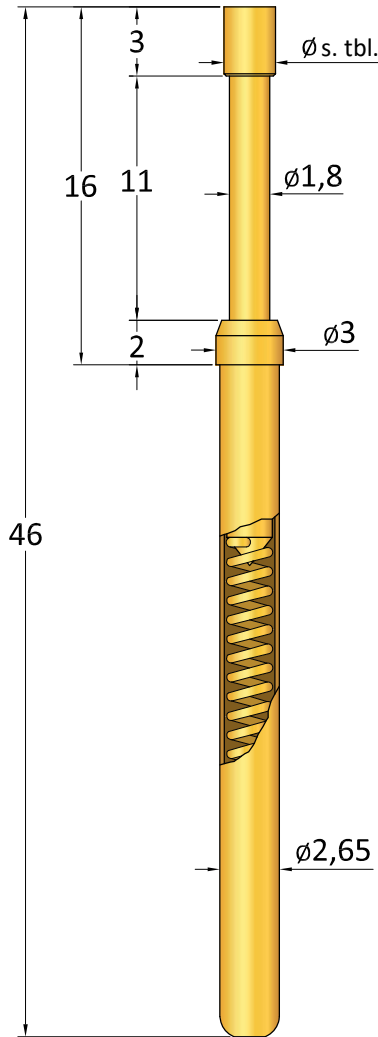
Series	Tip Style	Spring Force			
GLP 114	B	01	230	150	G
	Material		Tip $\phi$ mm		Plating
	B=BeCu				G=Gold
	S=Steel				N=Nickel
	P=Plastic				

# GLP 133/16

ICT/FCT Standard Probes  $\geq 4,00$  mm /  $\geq 160$  mil

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01 	2,30
		3,00
		4,00
B S	02 	1,80
B P	03 	2,30
		3,00
		4,00
B	04 	1,80
		2,50
		4,00
B	08 	1,80
		2,50
		4,00
B	10 	4,00
		6,00
B	21 	1,80
		2,50
B	31 	1,80



## Technical Data

Recommended minimum centers:	4,00 mm
Recommended working stroke:	9,00 mm
Maximum stroke:	11,00 mm
Current rating:	5,0 - 8,0 A
Typical contact resistance:	<30 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Stainless steel
Receptacle:	Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

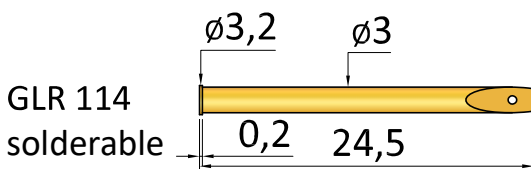
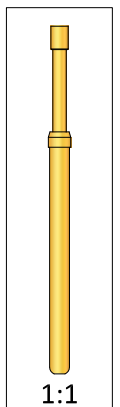
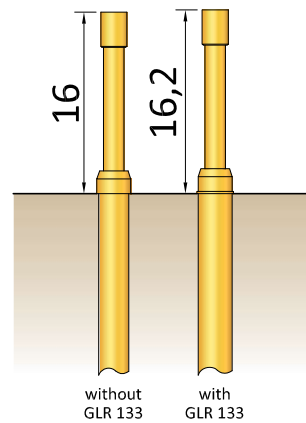
Spring force:	400 g
Alternative:	150 g
	300 g
	500 g

## Hole size without receptacle

Drills:  $\phi 2,64 - \phi 2,65$

## Hole size with receptacle









Drills:  $\phi 2,99 - \phi 3,00$

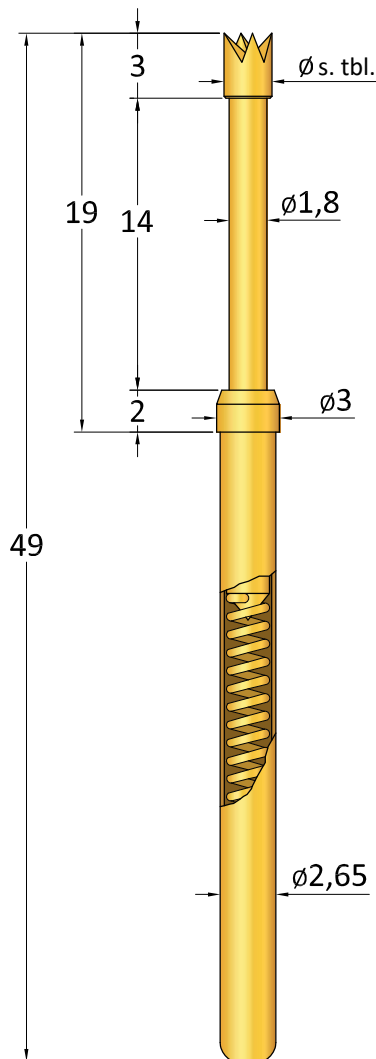


## Ordering example:

Series	Tip Style		Spring Force		
GLP 133/16	B	03	230	400	G
	Material		Tip $\phi$ mm		Plating
	B=BeCu S=Steel P=Plastic				G=Gold N=Nickel

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01 	2,30 3,00 4,00
B S	02 	1,80
B P	03 	2,30 3,00 4,00
B	04 	1,80 2,50 4,00
B	08 	1,80 2,50 4,00
B	10 	4,00 6,00
B	21 	1,80 2,50 4,00
B	31 	1,80



## Technical Data

Recommended minimum centers:	4,00 mm
Recommended working stroke:	12,00 mm
Maximum stroke:	14,00 mm
Current rating:	5,0 - 8,0 A
Typical contact resistance:	<30 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Stainless steel
Receptacle:	Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

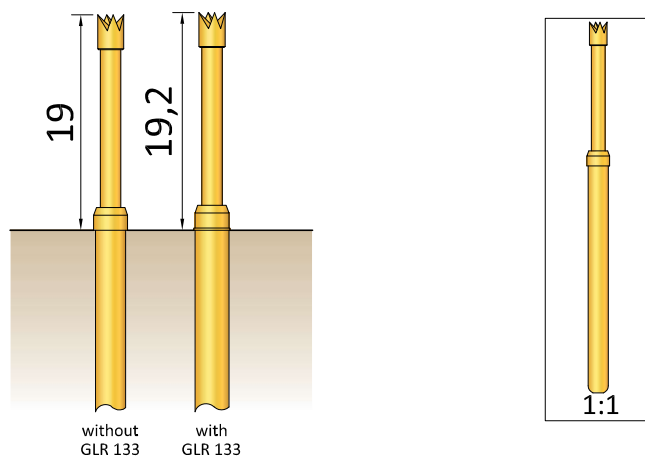
Spring force:	400 g
Alternative:	150 g 300 g 500 g

## Hole size without receptacle

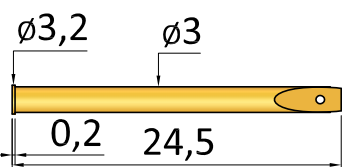
Drills:  $\phi 2,64 - \phi 2,65$

## Hole size with receptacle

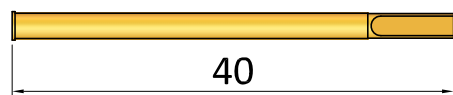
Drills:  $\phi 2,99 - \phi 3,00$



GLR 114  
solderable



GLR 133S  
solder cup











## Ordering example:

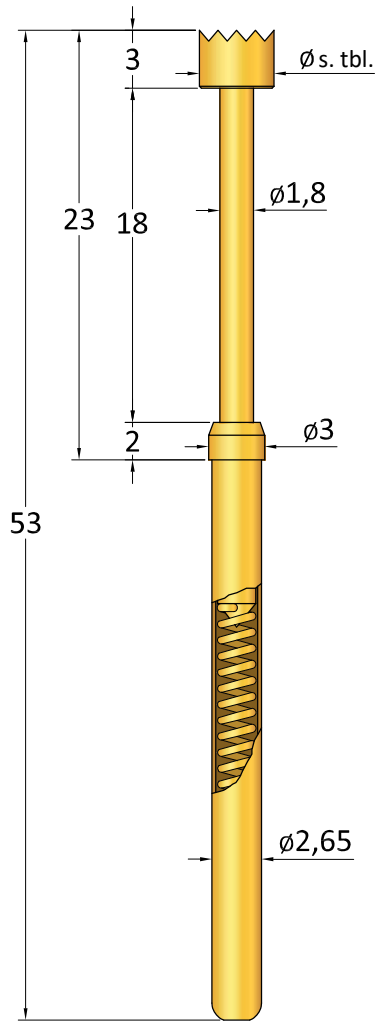
Series	Tip Style	Spring Force			
GLP 133/19	B	21	230	400	G
	Material		Tip $\phi$ mm		Plating
	B=BeCu S=Steel P=Plastic				G=Gold N=Nickel

# GLP 133/23

ICT/FCT Standard Probes  $\geq 4,00$  mm /  $\geq 160$  mil

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01 	2,30
		3,00
		4,00
B S	02 	1,80
B P	03 	2,30
		3,00
		4,00
B	04 	1,80
		2,50
		4,00
B	08 	1,80
		2,50
		4,00
B	10 	4,00
		6,00
B	21 	1,80
		2,50
		4,00
B	31 	1,80



## Technical Data

Recommended minimum centers:	4,00 mm
Recommended working stroke:	15,00 mm
Maximum stroke:	17,50 mm
Current rating:	5,0 - 8,0 A
Typical contact resistance:	<30 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Stainless steel
Receptacle:	Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

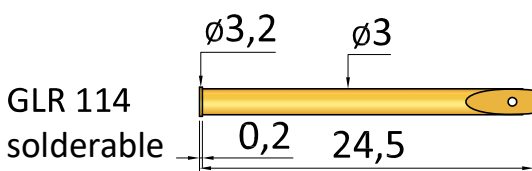
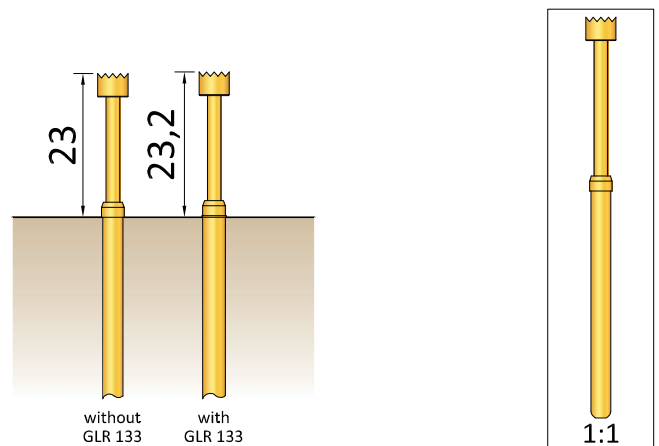
Spring force:	400 g
Alternative:	150 g
	300 g
	500 g

## Hole size without receptacle

Drills:  $\phi 2,64 - \phi 2,65$

## Hole size with receptacle









Drills:  $\phi 2,99 - \phi 3,00$

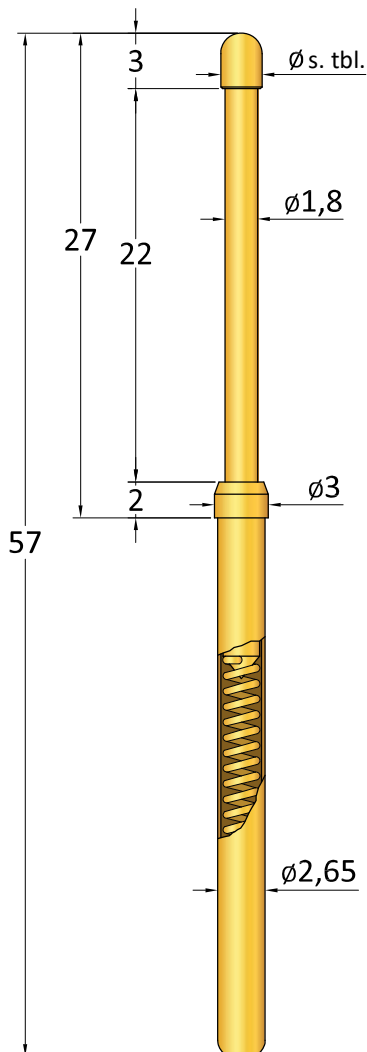


## Ordering example:

Series	Tip Style	Spring Force			
GLP 133/23	B	08	250	400	G
	Material	Tip $\phi$ mm			Plating
	B=BeCu				G=Gold
	S=Steel				N=Nickel
	P=Plastic				

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01 	2,30 3,00 4,00
B S	02 	1,80
B P	03 	2,30 3,00 4,00
B	04 	1,80 2,50 4,00
B	08 	1,80 2,50 4,00
B	10 	4,00 6,00
B	21 	1,80 2,50 4,00
B	31 	1,80



## Technical Data

Recommended minimum centers:	4,00 mm
Recommended working stroke:	15,00 mm
Maximum stroke:	17,50 mm
Current rating:	5,0 - 8,0 A
Typical contact resistance:	<30 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Stainless steel
Receptacle:	Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

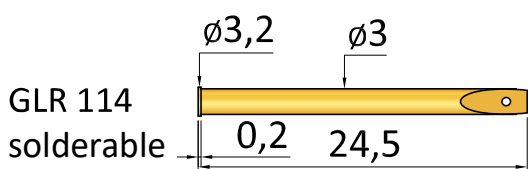
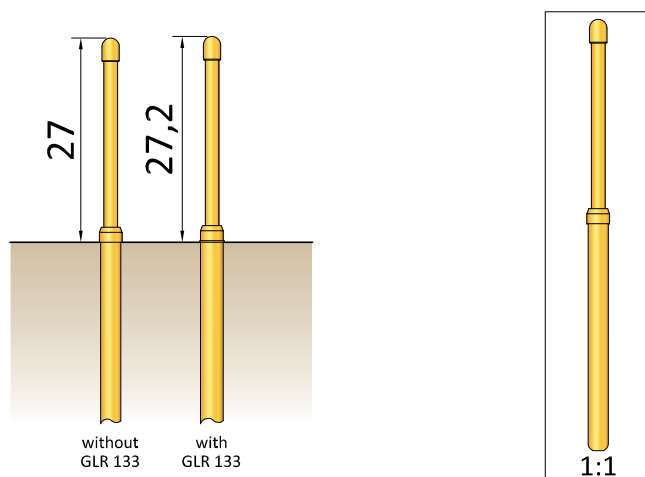
Spring force:	400 g
Alternative:	150 g 300 g 500 g

## Hole size without receptacle

Drills:  $\phi 2,64 - \phi 2,65$

## Hole size with receptacle

Drills:  $\phi 2,99 - \phi 3,00$











## Ordering example:

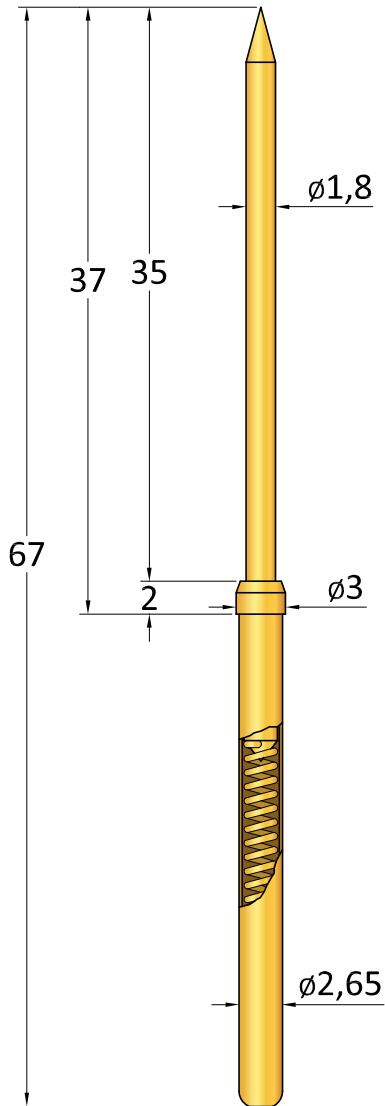
Series	Tip Style	Spring Force			
GLP 133/27	B 04	230 400	G		
	Material	Tip $\phi$ mm	Plating		
	B=BeCu S=Steel P=Plastic		G=Gold N=Nickel		

# GLP 133/37

ICT/FCT Standard Probes  $\geq 4,00$  mm /  $\geq 160$  mil

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01 	2,30
		3,00
		4,00
B S	02 	1,80
B P	03 	2,30
		3,00
		4,00
B	04 	1,80
		2,50
		4,00
B	08 	1,80
		2,50
		4,00
B	10 	4,00
		6,00
B	21 	1,80
		2,50
		4,00
B	31 	1,80



## Technical Data

Recommended minimum centers:	4,00 mm
Recommended working stroke:	15,00 mm
Maximum stroke:	17,50 mm
Current rating:	5,0 - 8,0 A
Typical contact resistance:	<30 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Stainless steel
Receptacle:	Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

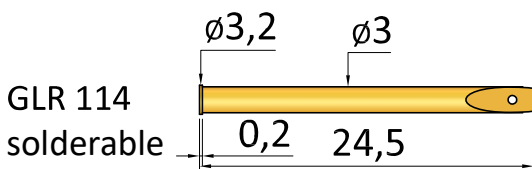
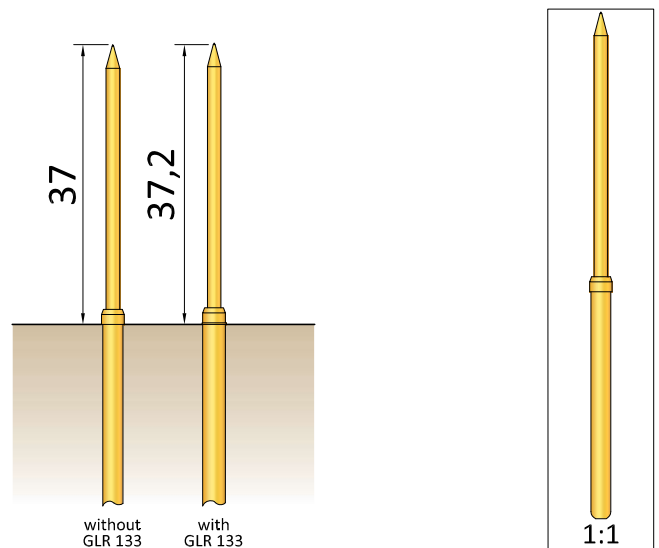
Spring force:	400 g
Alternative:	150 g
	300 g
	500 g

## Hole size without receptacle

Drills:  $\phi 2,64 - \phi 2,65$

## Hole size with receptacle


Drills:  $\phi 2,99 - \phi 3,00$

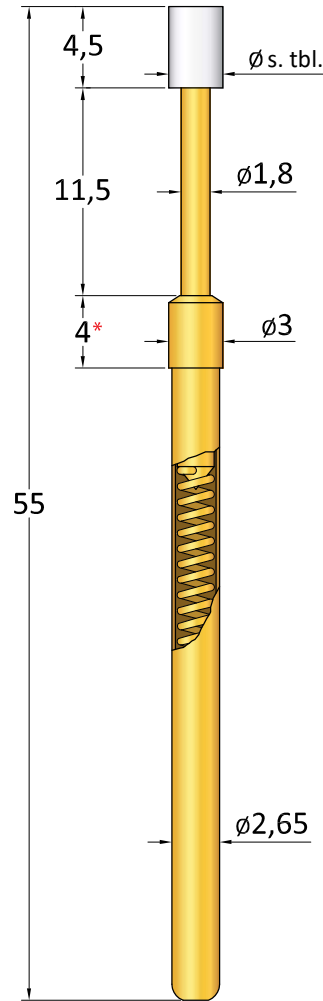


## Ordering example:

Series	Tip Style		Spring Force		
GLP 133/37	B	02	180	400	G
	Material		Tip $\phi$ mm		Plating
	B=BeCu				G=Gold
	S=Steel				N=Nickel
	P=Plastic				

## Available Tip Styles

Material	Tip Style	$\phi$ mm
P	03 	3,00



## Technical Data

Recommended minimum centers:	4,00 mm
Recommended working stroke:	9,20 mm
Maximum stroke:	11,50 mm
Operating temperature range:	-20° up to +50°

## Materials

Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Stainless steel
Receptacle:	Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

Spring force: 500 g

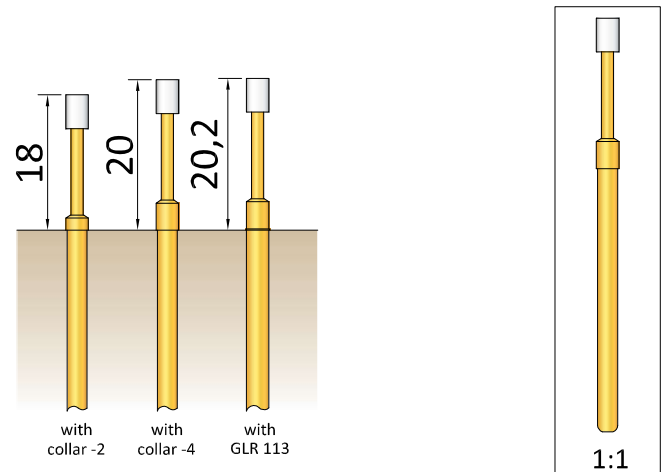
## Hole size without receptacle

Drills:  $\phi 2,64 - \phi 2,65$

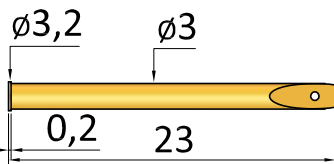
## Hole size with receptacle

Drills:  $\phi 2,99 - \phi 3,00$

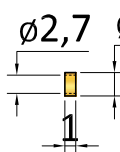
* Collar Height	Total Length
2	55
4	55



GLR 113 solderable



DR 113-01



DR 113-03



DR 113-02



DR 113-05



## Ordering example:











Series	Material	Tip $\phi$ mm	Plating
	P=Plastic		G=Gold
GLP 416	-4	P 03	G
	Collar Height	Tip Style	Spring Force

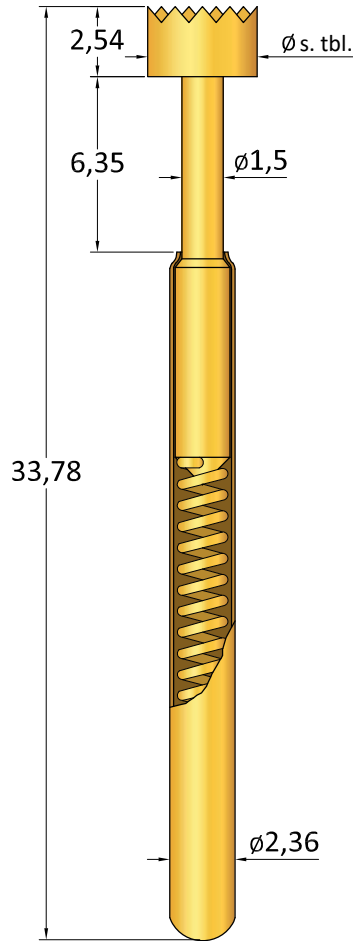


# GLP 4

ICT/FCT Standard Probes  $\geq 4,75$  mm /  $\geq 187$  mil

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01 	1,50 3,96
B S	02 	1,50
B	03 	1,50 3,96
B	04 	1,50 3,96
B	05 	1,50 3,96
B	08 	1,50 3,96
B	10 	3,96
B	11 	2,54
B	21 	1,50 2,54 3,96
B	88 	3,00



## Technical Data

Recommended minimum centers:	4,75 mm
Recommended working stroke:	4,30 mm
Maximum stroke:	6,35 mm
Current rating:	7,0 - 8,0 A
Typical contact resistance:	<math><20\text{ m}\Omega</math>
Operating temperature range:	-50° up to +100°

## Materials

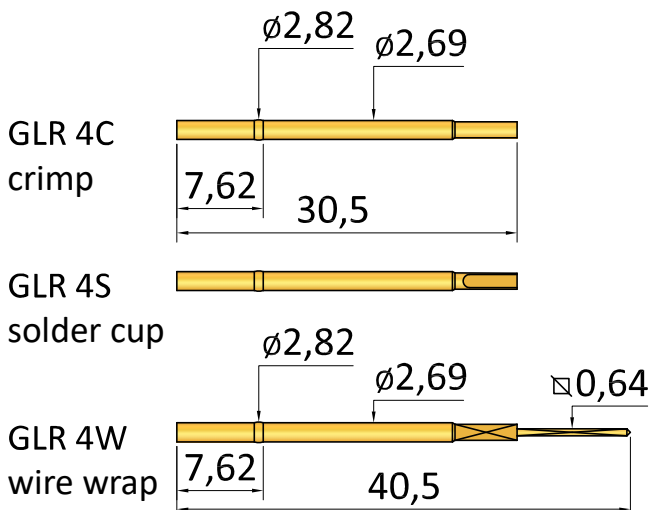
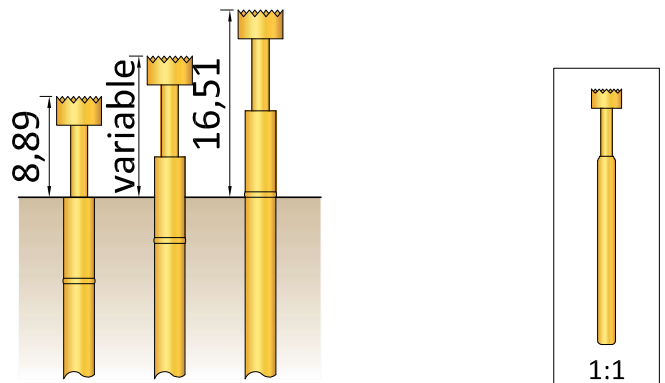
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Nickel-silver or Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

Spring force:	200 g
Alternative:	100 g 300 g

## Hole size for receptacle

Drills for press ring as a stop:	$\phi 2,69 - \phi 2,70$
Drills for press ring insert:	$\phi 2,75 - \phi 2,78$

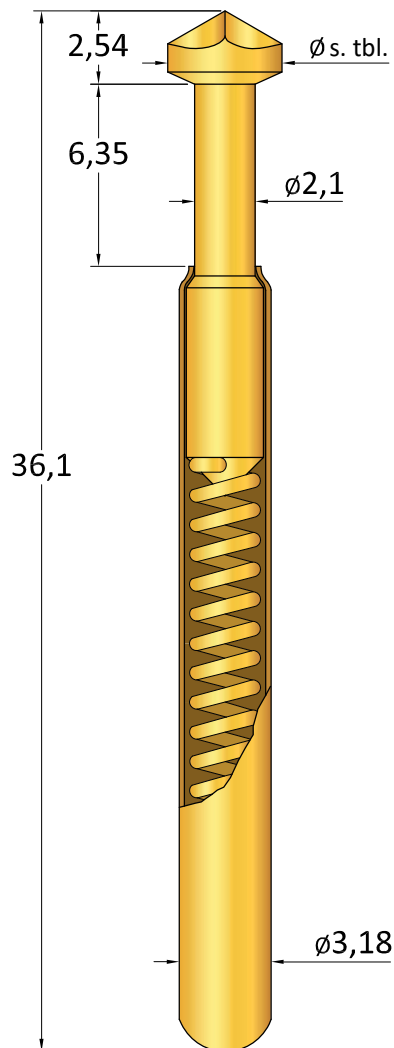


## Ordering example:

Series	Material	Tip Style	Tip $\phi$ mm	Spring Force	Plating
GLP 4	B	10	396	200	G
	B=BeCu S=Steel				G=Gold N=Nickel

## Available Tip Styles

Material	Tip Style	Ø mm
B	01	3,96
B S	02	2,10
B	03	2,10 3,96
B	04	2,10 3,96
B S	05	2,10 3,96
B	06	2,10
B	08	2,10 3,96
B	09	2,10
B	10	3,96
B	11	3,96
B	13	2,10 3,96
S	14	2,10
S	15	2,10
B S	21	2,10 3,96



## Technical Data

Recommended minimum centers:	4,75 mm
Recommended working stroke:	4,30 mm
Maximum stroke:	6,35 mm
Current rating:	10,0 A
Typical contact resistance:	<20 mΩ
Operating temperature range:	-50° up to +100°

## Materials

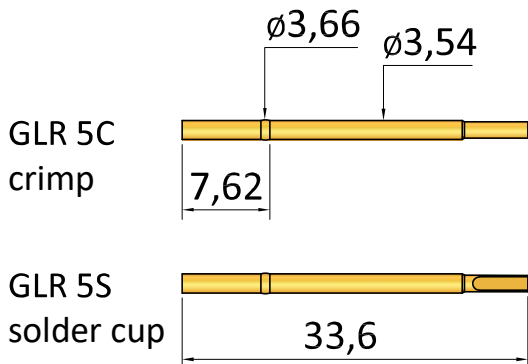
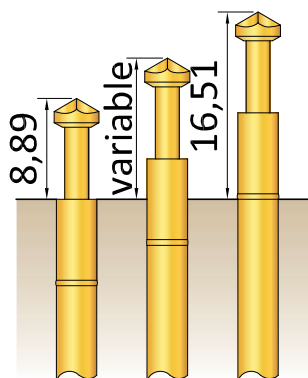
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Nickel-silver or Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

## Spring Force ( g ±20%)

Spring force:	400 g
Alternative:	200 g
	500 g
	600 g

## Hole size for receptacle

Drills for press ring as a stop:	Ø3,54 - Ø3,55
Drills for press ring insert:	Ø3,58 - Ø3,63

















## Ordering example:

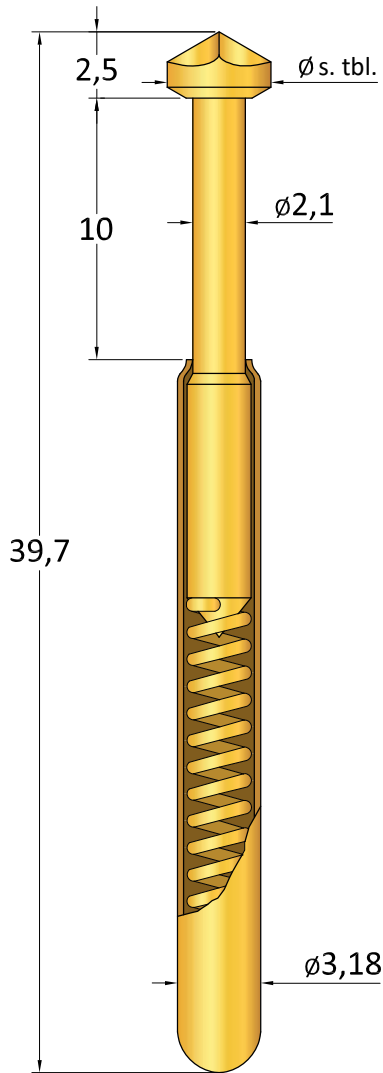
Series	Material	Tip Style	Tip Ø mm	Spring Force	Plating
GLP 5	B	11	396	200	G
	B=BeCu S=Steel				G=Gold N=Nickel

# GLP 5L

ICT/FCT Standard Probes  $\geq 4,75$  mm /  $\geq 187$ mil

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	01 	3,96
B S	02 	2,10
B	03 	2,10 3,96
B	04 	2,10 3,96
B S	05 	2,10 3,96
B	06 	2,10
B	08 	2,10 3,96
B	09 	2,10
B	10 	3,96
B	11 	3,96
B	13 	2,10 3,96
S	14 	2,10
S	15 	2,10
B S	21 	2,10 3,96



## Technical Data

Recommended minimum centers:	4,75 mm
Recommended working stroke:	8,00 mm
Maximum stroke:	10,00 mm
Current rating:	10,0 A
Typical contact resistance:	<30 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

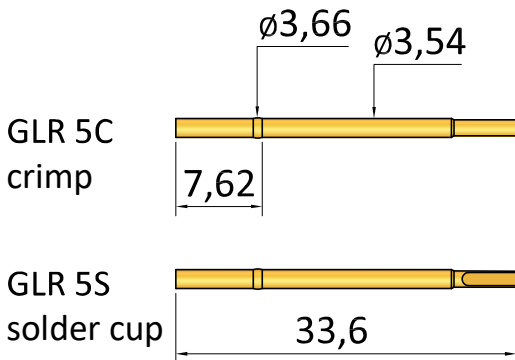
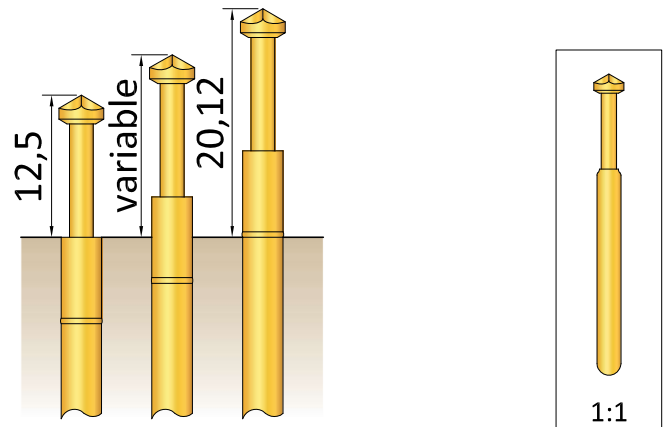
Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Nickel-silver or Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Nickel-silver or Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

Spring force:	400 g
Alternative:	200 g 500 g 600 g

## Hole size for receptacle





Drills for press ring as a stop:	$\phi 3,54$ - $\phi 3,55$
Drills for press ring insert:	$\phi 3,58$ - $\phi 3,63$

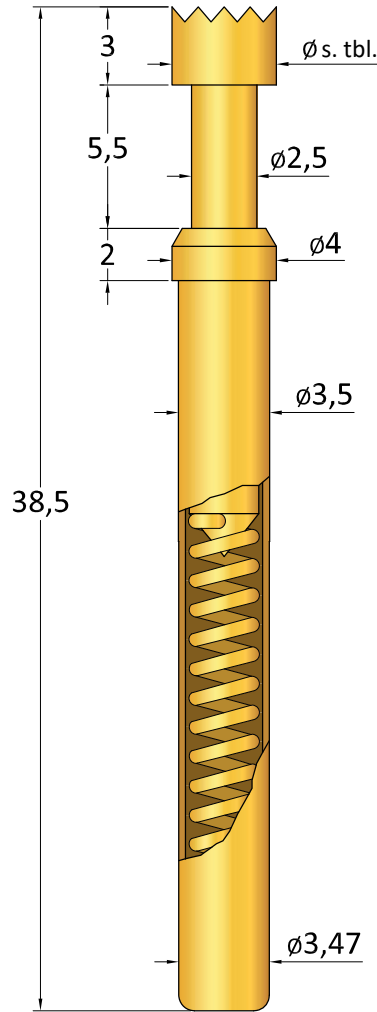


## Ordering example:

Series	Tip Style	Spring Force
GLP 5L	B 11	396 200
	Material	Tip $\phi$ mm
	B=BeCu S=Steel	
		Plating
		G=Gold N=Nickel

## Available Tip Styles

Material	Tip Style	$\phi$ mm
B	03 	2,50
		4,00
		6,50
B	04 	3,00
		4,00
B	08 	3,00
		4,00
B	10 	4,00



## Technical Data

Recommended minimum centers:	5,08 mm
Recommended working stroke:	4,40 mm
Maximum stroke:	5,50 mm
Current rating:	10,0 - 12,0 A
Typical contact resistance:	<20 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

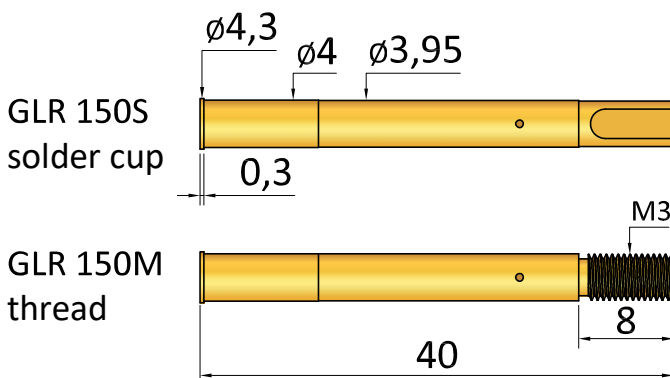
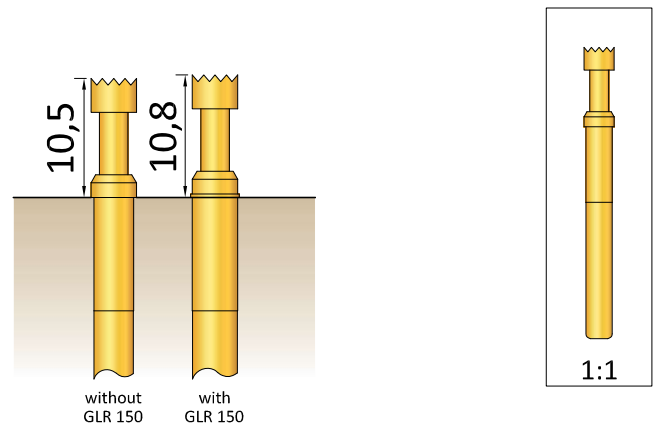
Spring force:	300 g
Alternative:	500 g

## Hole size without receptacle

Drills:	$\phi 3,49$ - $\phi 3,50$
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## Hole size with receptacle

Drills:	$\phi 3,99$ - $\phi 4,00$
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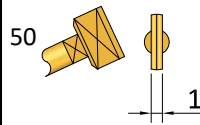
## Ordering example:

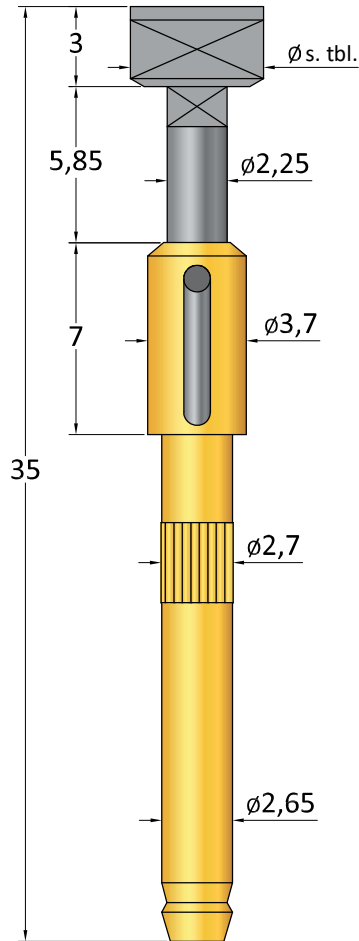
Series	Tip Style	Spring Force		
GLP 150	B	400	300	G
	Material	Tip $\phi$ mm		Plating
	B=BeCu			G=Gold
	S=Steel			N=Nickel

# GLP 614

ICT/FCT Standard Probes  $\geq 5,08$  mm /  $\geq 200$  mil

## Available Tip Styles

Mat.	Tip Style	$\phi$ mm
B		2,25
S		4,00
		5,00



## Technical Data

Recommended minimum centers:	5,08 mm
Recommended working stroke:	4,00 mm
Maximum stroke:	4,50 mm
Current rating:	10,0 A
Typical contact resistance:	<20 m $\Omega$
Operating temperature range:	-50° up to +100°

## Materials

Plunger:	BeCu or Steel, nickel or gold plated
Barrel:	Brass, gold plated
Spring:	Music wire, gold plated
Receptacle:	Brass, gold plated

## Spring Force ( g $\pm 20\%$ )

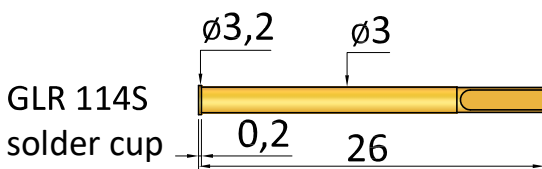
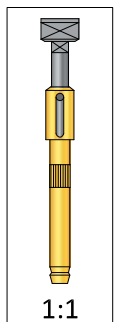
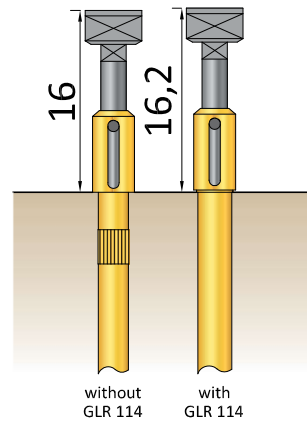
Spring force:	300 g
Alternative:	500 g

## Hole size without receptacle

Drills:  $\phi 2,66 - \phi 2,67$

## Hole size with receptacle

Drills:  $\phi 2,99 - \phi 3,00$



## Ordering example:

Series	Tip Style	Spring Force		
GLP 614	B 50	500	300	N
	Material	Tip $\phi$ mm		Plating
	B=BeCu S=Steel			G=Gold N=Nickel