FEINMETALL
Contact Technologies



ELECTRONIC TESTING

Outstanding in any application

> FEINMETALL.COM

SOPHISTICATED PROBES FOR EVERY APPLICATION

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OUR EXPERTISE

Competence

FEINMETALL is your partner for the reliable contacting of electronic components. The wide range of applications for spring contact probes includes board tests with fine centers up to wire harness and connector tests or high-current applications with individual and intelligent solutions.

Innovative capacity
Since more than 60 years FEINMETALL represents a high level of innovation. Many patent-registered solutions have been mile-stones in the world of test engineering.

Broad competence in-house
The development and manufacturing of spring contact probes, special contact solutions and Semiconductor Test products in one company are a wide basis for our competence in precision technology and micro-mechanics. This combination is unique at the market and represents “German Technology” at its best.

International customer service
We are operating in a high-tech industry that presents us with constantly increasing demands. At FEINMETALL, we understand these demands and manage to adapt our processes accordingly. With 15 subsidiaries worldwide and a strong network of well trained partners we are always connected closely to the markets and to our customers, wherever they are. Local stocks and special customs certificates provide a high delivery performance (e.g. AEO - Authorised Economic Operator).

Quality

Quality controls all process steps at FEINMETALL. From product development and construction up to manufacturing and delivery all operation steps are perfectly aligned.

FEINMETALL is certified according to DIN ISO 9001. Additionally a wide range of measures like e.g. risk analysis by FMEA during the whole product development process ensure a maximum of technical as well as delivery reliability.

Environment and health protection
FEINMETALL is committed to the goals of the up-to-date legislation regarding environment as well as health protection and conformance to all necessary measures. The current statements regarding the various European environment and health regulations are available on our homepage.

Customer focus
Our engineers and technicians work closely together with our customers and have a deep knowledge of the practical applications. Our know-how is your advantage!

FM Choice

What is FM Choice?

FM Choice is our specially curated selection of the most reliable and frequently used probes in the market. Based on our expertise and experience, we have pre-selected the top-performing probes, so you don’t have to choose from hundreds of options. With FM Choice, we make your decision easier by offering the most trusted solutions that meet your needs.

One of the greatest advantages of FM Choice is high availability and fast delivery, as we can often ship directly from our stock. This enables us to meet your demands whenever you need them. Plus, FM Choice offers competitive pricing, even for smaller quantities, making it an attractive solution for all kinds of projects.

Our portfolio includes over 700 contact probes for pitches between 6 and 100 mil, covering a wide range of applications and ensuring we meet most technical requirements quickly and efficiently.

Benefits at a glance



Most trusted solutions



Competitive prices



Fast delivery & high availability

Discover FM Choice products online

With our new Product Finder, we offer you a complete overview of all FM Choice products that you can easily search through. This high-performance tool allows you to search for specific products and compare them based on their technical features.

In addition to the FM Choice products, we invite you to explore the other categories to discover our complete product portfolio. Start your selection now and experience the variety and quality of our products.

> FEINMETALL.COM/product-finder

OVERVIEW OF TIP STYLES

01 
Conical 90°

02 
Conical 90° stepped

03 
Conical 60°

04 
Conical 60° stepped

05 
Concave stepped

06 
Serrated stepped

07 
Hexagonal 90° stepped

08 
Hexagonal 60° stepped

09 
6-point crown stepped

10 
Flexible needle

11 
Spherical

12 
Spherical stepped

14 
4-point crown stepped (self-cleaning)

15 
Triangular 45° stepped

16 
Flat

17 
Flat stepped

18 
Conical 30°

19 
Flat stepped with lens

20 
4-point crown stepped (self-cleaning)

21 
4-point crown (self-cleaning)

22 
Special version for contacting into conn.-housings

27 
Conical 120° stepped

28 
4-point crown stepped

29 
4-point crown

30 
Triangular 45°

31 
Flat stepped with drill hole

32 
Rigid needle 10°

33 
Square lance 38°

34 
Rigid needle 15° stepped

35 
3-point crown stepped (self-cleaning)

36 
6-point crown stepped, middle pin longer

37 
4-point crown stepped

38 
Square lance 140°

39 
Conical flat 30°

40 
6-point crown

41 
6-point crown stepped (self-cleaning)

42 
5-point crown stepped

43 
Square lance 90°

44 
Rigid needle with eccentric-cut

45 
Conical 120° with eccentric-cut

46
W-profile

47
Square 70°

50
Concave with drill hole stepped

51
Concave Head with special type inside

52
Concave stepped & annular spring inside

53
Square lance 55°

54
Square lance stepped

55
Concave stepped (self-cleaning)

60
3-point crown stepped

61
Special Head for VG Connectors (female)

62
Triangular 30°

63
8-point crown stepped (self-cleaning)

64
Mini-serrated stepped

65
Conical 45°

66
Serrated stepped (self-cleaning)

67
3-point needle stepped

68
6-point crown stepped, with middle pin

70
Hexagonal 90° stepped

79
6-point crown flattened

90
Rolling ball

Spade versions

71
Half Moon

72
Half Crown

80
SpadeØ < plungerØ

81
SpadeØ < plungerØ stepped

82
SpadeØ = plungerØ

83
SpadeØ > plungerØ

84
SpadeØ > plungerØ stepped

85
Square Spade

86
Square Spade not centric

89
Special version of spade tips

Special versions

A
Silver alloy for high current

IK
Insulating cap

11 SP
Step Probe

12 SP
Step Probe with round plate

IP
Insulating pin

17K
Synthetic head

17K
Synthetic head with slot

17H
Synthetic head with slot and metall ring

17
Metall head with slot

17T
Metall head insulated with slot

TYPICAL APPLICATIONS FOR TIP STYLES



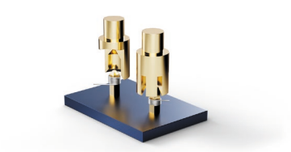
Spherical (11,12)
For testing clean contact surfaces, does not leave marks or scratches.



Flat (16,17)
Suitable for solder pads and contact pins.



Conical (01,02,03,10,18,32,34,35)
Universal tip style with different angles of 10°, 15°, 30°, 60°, 90° or 120° for contacting solder pads and vias.



Concave (05,50,55)
For a smooth contact of pins and wire wrap posts. The risk of contamination can be minimized by using a self cleaning version.



Serrated, W-profile (06,46,64,66)
Universal tip style for contacting wires, pins and wire wrap posts, even suitable for bent contacts.



Crown with inner pin (36,68)
Used for reliable contacting of plated or filled vias.



Triangular stepped (15,30,62)
For via holes and solder pads. The sharp edges penetrate flux residues and oxide layers.



Square lance (33,38,43,53)
For via holes and solder pads. The sharp edges penetrate flux residues and oxide layers.

TYPICAL APPLICATIONS FOR TIP STYLES



Hexagonal (07,08)
For testing plated vias and pads. The sharp edges penetrate contamination and oxide layers.



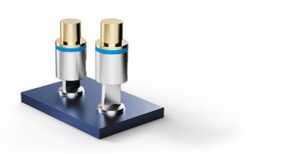
4-point crown (14,20,21,28,29,37)
For pad surfaces and soldered pins. The sharp edges penetrate flux residues and oxide layers.



Crown (09,35,40,41,42,60,63)
For wire wrap posts, even if the contacts are bent or twisted.



Insulation cap (IK) (05,06,17,41)
For detecting the correct length and straightness of pins.



Slotted insulation cap for position test (PT) (06,17)
For detecting the correct length and straightness of flat pins.



Spade (80,81,82,83,84,85,86,89)
For twist proof contacting of connector elements.



Step probe (06,11,12,16,89)
For position and presence tests of connectors.



Coaxial design
Tip styles of coaxial probes are used for contacting standard connectors or for contacting PCB test points, SMD mini coax and switch connectors.

ELECTRICAL INFORMATION

Electrical conductivity
In a contact probe the primary current flow typically leads through the plunger, the barrel and the receptacle. A secondary current flow leads through the plunger, the spring and the barrel. The transition points cause certain transfer resistances that are influenced by the following factors:

- Conductivity of the base material
- Conductivity of the plating material
- Condition of the surface of the probe
- Size of the contact surface
- Contact forces at the transition points

FEINMETALL is taking measures to guarantee a constant low contact resistance during the whole lifetime of the probes. The maximum continuous currents (referred to the FEINMETALL standard high current test) and the typical resistances of each probe are shown in the data sheets. A pulse current can be higher depending on pulse and rest time, cooling and various other influences.

Max. Operating voltage
Voltmeters must always be connected in parallel with the electrical device or component on which the voltage is to be measured. This is necessary in order to measure the voltage applied to this component, because for the parallel connection the voltage in both branches is the same.
If the user operates our probes with a higher voltage than defined by DIN VDE 0100, part 410 as low voltage not dangerous to touch, *FEINMETALL does not assume any liability. Furthermore, the user himself is obliged to determine and implement the legally required protective measures for people and equipment.*

Temperature operating range
Depending on the electrical load, self-heating occurs as a result of power loss. The permissible environmental temperature decreases accordingly (derating). Exposure to additional loads such as high humidity, rapid and extreme temperature changes (thermal shock) and extreme loads (e.g. far above nominal travel) can lead to a shortened lifetime. For high current applications where temperature can rise up to +200°, our FEINMETALL High current products are designed to withstand this challenge and remain constant performance.

Electrical protection class
According to VDE0100 part 410, our probes are only to be operated with low voltage that is not dangerous to touch (25 V rms AC, 60 V DC). These values include all occurring surge voltages, e.g. due to overvoltage, switching peaks, etc.

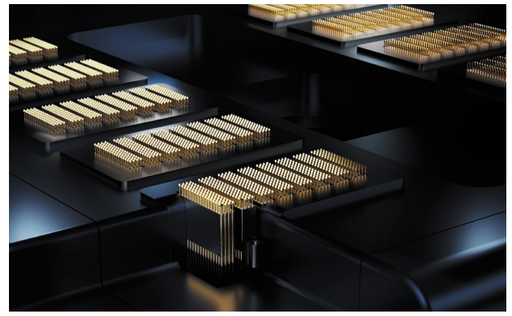
If the user operates our probes with a higher voltage than defined by DIN VDE 0100, part 410 as low voltage not dangerous to touch, FEINMETALL does not assume any liability. Furthermore, the user himself is obliged to determine and implement the legally required protective measures for people and equipment.

Dielectric / electric strength of bipolar probes
The dielectric strength (usually stated in kV/mm) of an insulator is the maximum electric field strength that may prevail in the material (including air) without a voltage breakdown (arc or spark) occurring. The creepage distances must be much longer, especially when exposed to dirt and moisture. The dielectric strength depends on the geometry of the probe, the material (dielectric), the ambient conditions and the degree of contamination. This comes into play in all our products with electrically insulating functions, e.g. switching probes, switching receptacles, combination receptacles, coaxial probes and insulating caps.

TEST APPLICATIONS

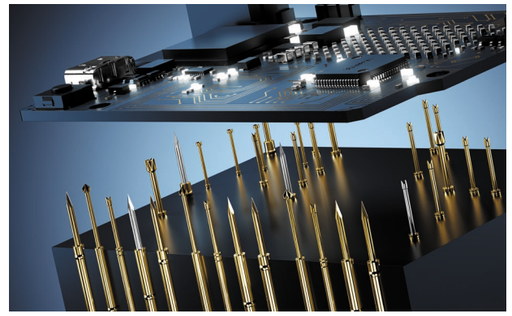
Interface Solutions

FEINMETALL offers all Interface Solutions needed for secure test signal transmission, including blocks, probes, and rigid pins.



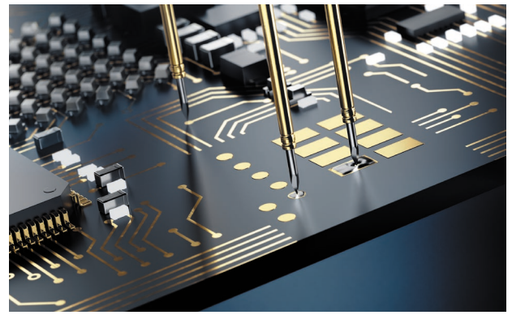
Circuit Board Testing

We offer all commercially available ICT/FCT probes for Circuit Board Testing. We also provide an innovative solution for challenging test conditions with our Progressive series.



Progressive Series

With the Progressive Series, FEINMETALL has solved the contacting problems during the in-circuit and functional test under the most difficult conditions. This was achieved by the three unique factors of the Progressive Series. The selection of the optimum coating, tip style and spring force depends on the customer's specific test requirements.



CATEGORIES OF BASIC CONTACT PROBES

BASIC CONTACT PROBES
>100MIL



BASIC CONTACT PROBES
100MIL



BASIC CONTACT PROBES
75MIL



BASIC CONTACT PROBES
50MIL



GENERAL INFORMATION

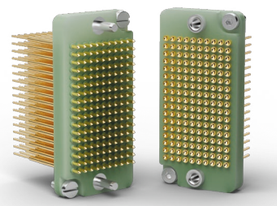
BASIC CONTACT PROBES
30-40MIL



INTERFACE PROBES



INTERFACE SOLUTIONS



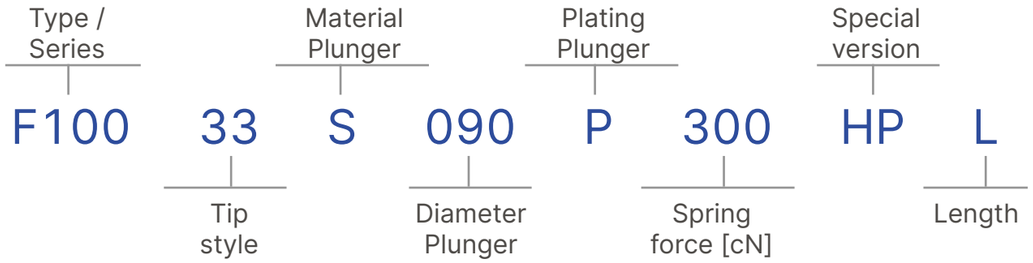
TOOLS



NUMBER CODE SYSTEM

Explanation of our product names of basic probes

In order to improve the clarity of the material designations, the self-explanatory number code has been further developed. Therefore, all Basic Contact Probes have been redefined according to the order code shown below.



Material Plunger

B = BeCu (Beryllium Copper)
S = Steel

Diameter Plunger

090 = 0.90 mm

Plating Plunger

G = Gold plating
L = Longtime gold plating
N = Nickel plating
U = Unplated
P = Functional plating progressive series
R = Rhodium plating
S = Silver plating
LX = Anodizing
M = Multiplex gold plating

Spring force

300 = 300 cN

Special Version

H = High temperature version
HP = Progressive series
IK04 = Insulation cap 0.4 mm distance

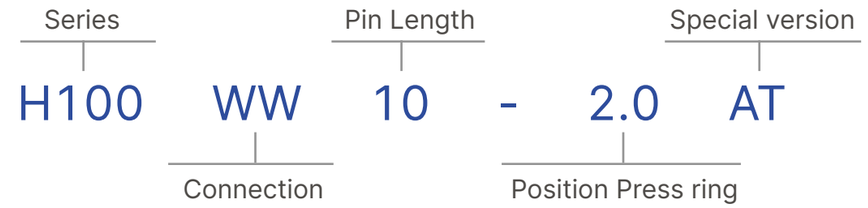
Length (Optional)

L = Long version
S = Short version
E21 = Projection height 21 mm (e.g.)

NUMBER CODE SYSTEM

Explanation of our product names of receptacles

In order to improve the clarity of the material designations, the self-explanatory number code has been further developed. Therefore, all receptacles have been redefined according to the order code shown below.



Connection

CR = Crimp
LA = Solder
WW = Wire wrap
WR = Round pin
WL = Wireless

Pin Length

10 = 10.0 mm

Press ring position

2.0 = 2.0 mm
7.6 = 7.6 mm
10.0 = 10.0 mm

Special Version

AT = Air tight
RD = With knurl
S1 = Special version 1 (Continuous numbering)

ICT & FUNCTIONAL TEST: CHALLENGES

DUT with difficult contacting conditions

→ Lead-free solder and surfaces
→ Pads or vias with heavy contamination or oxidation
→ OSP-coated printed circuit boards
→ SMD and THT circuit boards (tinned and untinned)

Dirt and contamination

Contamination can occure due to dust, grease stains, fingerprints, oils, lubricating films, insufficiently netted paints and plastics. The most challenging contact issues arise from residues of fluxes, soldering pastes, adhesives, and oxidation.



Lead-free soldering

Lead-free soldering has a corrosive effect on metallic materials, meaning that tools and equipment wear out more quickly in direct contact. Flux residues are also sticky and adhere strongly to contact probes.



OSP – Organic Surface Protection

OSP is a transparent organic dissolution which is applied to the copper like clear lacquer. It is significantly harder than conventional surface coatings and can lead to contamination at the tip of the plunger and to the degradation of the gold coating.



Empty or filled vias

Protective layers or other fillings are a problem for reliable contacting of vias. Standard tips cannot penetrate through protective lacquers or sit on non-conductive material and thus prevent an electrical contact.



TOUGH CONDITIONS, SMART SOLUTIONS

Technicial benefits of Progressive series

With the Progressive Series, FEINMETALL has solved the contacting problems during the in-circuit and functional test under the most difficult conditions. This was achieved by the three unique factors of the Progressive Series. The selection of the optimum coating, tip style and spring force depends on the customer's specific test requirements. A detailed overview can be found in our PCB test catalogue or on our homepage feinmetall.com. We are also pleased to advise you personally.

Aggressiveness of the probe tip

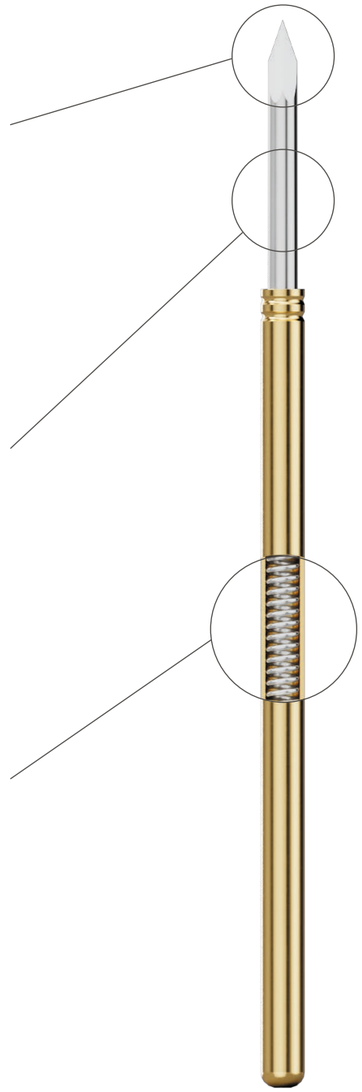
Penetration of contaminations and oxide layers
In order to reliably penetrate heavy contaminations and viscous layers, a contact probe must have a highly aggressive tip. So, the choice of tip style is essential. FEINMETALL offers a variety of different aggressive tip styles for applications with difficult contacting conditions.

Functional coating

Reduced contamination of the contact probes
The unique, special Progressive coating of the tips has a considerably lower contamination sensitivity compared to conventional gold plating. At the same time, the hardness is 3 times higher. This results in a significantly longer lifetime of the probes even with heavily contaminated contact surfaces.

Higher preload

Optimized force characteristic during contacting
Due to an increased preload of the spring, a higher spring force is realized immediately when contacting the test item whereas the nominal spring force at nominal travel remains unchanged. So, the overall load on the test item does not change, but contaminations are penetrated more effectively.

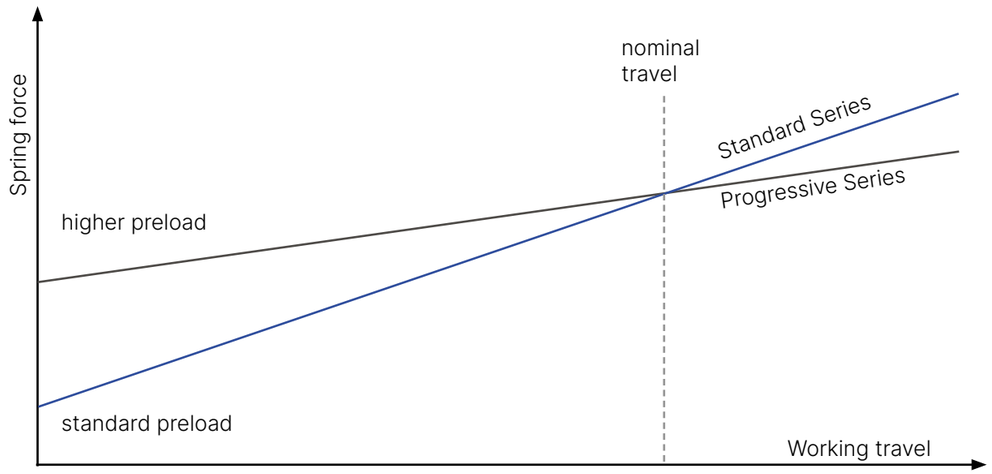


STANDARD VS. PROGRESSIVE SERIES

Spring characteristics

The increased spring preload during contact impact ensures better breaking of the surface tension and thus deeper penetration of the contaminated test points. This improves contact reliability. PCB stress is also minimized for sensitive test specimens, as lower nominal spring forces can be used while maintaining the same contact reliability. At maximum spring travel, the PCB stress for the test object is even lower.

Spring force vs. working travel



TYPICAL TIP STYLES

Made for tough conditions

The most common aggressive tip styles of the Progressive Series are shown below. These are specially designed to break up hard or dirty surfaces and ensure good electrical contact.

10 Flexible needle



14 4-point crown stepped (self-cleaning)



15 Triangular 45° stepped



21 4-point crown (self-cleaning)



32 Rigid needle 10°



33 Square lance 38°



35 3-point crown stepped (self-cleaning)



37 4-point crown stepped



38 Square lance 140°



43 Square lance 90°



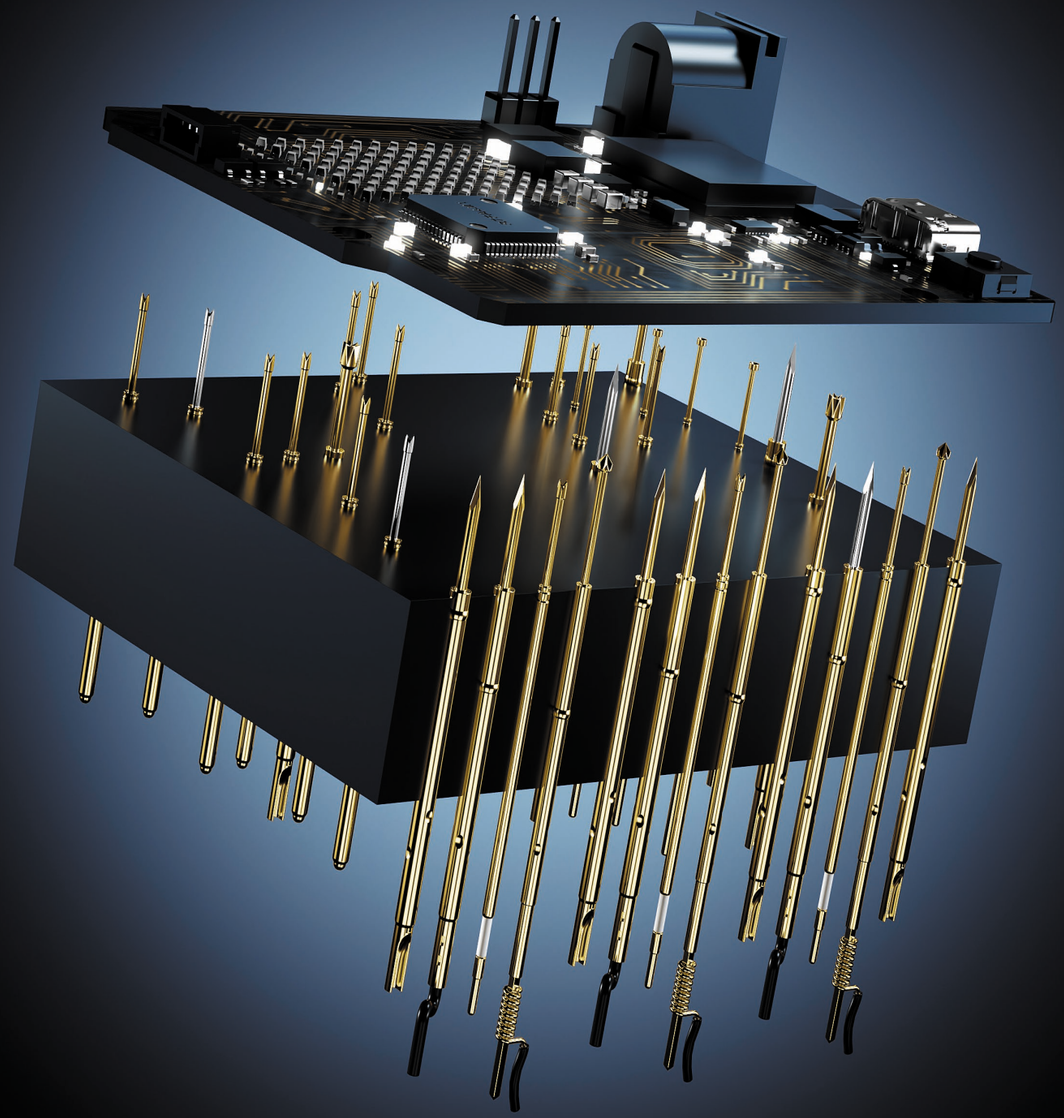
54 Square lance stepped



62 Triangular 30°



CIRCUIT BOARD TESTING





FM Choice

F796

Up to 10 A | 138 mil/3.50 mm | FCT application

Electrical specifications

Current [A]	10
R TYP [mOhm]	<25

Mechanical specifications

Temperature [°C]	-45°...+80°
Preload [cN]	80
Spring force [cN] at nt ±20%	300
Nominal travel [mm]	8.0
Maximum travel [mm]	10.0

Materials and plating

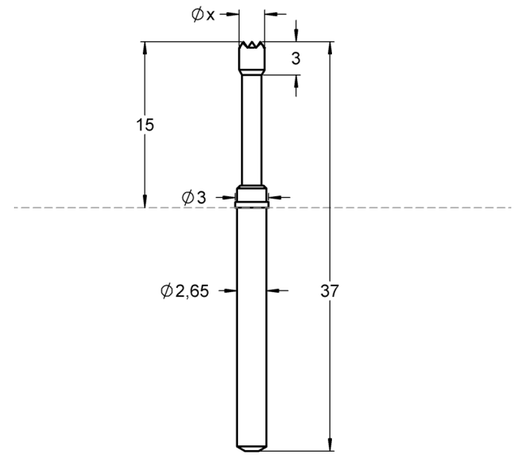
Plunger	BeCu	gold plated
Barrel	Bronze	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H774 on page 26.

Order code	Product name	Tip Style	Tip Ø [mm]	Force [cN]	Version	FM Choice
1001552	F79606B230G300	06	2.30	300	-	FM Choice
1005674	F79611B176G300	11	1.76	300	-	FM Choice
1002737	F79612B230G300	12	2.30	300	-	FM Choice
1001553	F79614B230G300	14	2.30	300	-	FM Choice



F785

Up to 10 A | 138 mil/3.50 mm | FCT application

Electrical specifications

Current [A]	10
R TYP [mOhm]	<10

Mechanical specifications

Temperature [°C]	-45°...+80°
Preload [cN]	80
Spring force [cN] at nt ±20%	300
Nominal travel [mm]	6.4
Maximum travel [mm]	8.0

Materials and plating

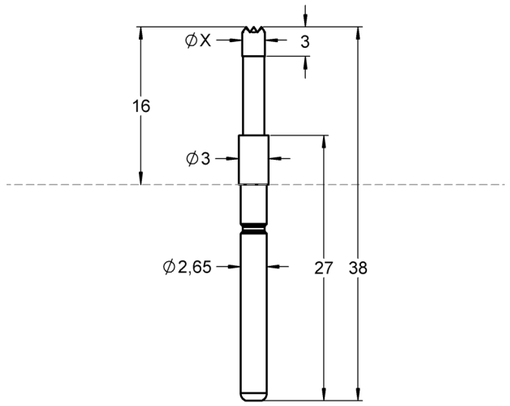
Plunger	BeCu	gold plated
	Steel	longtime gold plated
Barrel	Bronze	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H774 on page 26.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1003582	F78501S200L300	06	2.00	S / L	300	-	-	-
1001537	F78506B230G300	06	2.30	B / G	300	-	-	-
1020423	F78512B230G300E25	12	2.30	B / G	300	-	E25	-
1004466	F78514S230L300	14	2.30	S / L	300	-	-	-



F785L

Up to 10 A | 138 mil/3.50 mm | FCT application

Electrical specifications

Current [A]	10	
R TYP [mOhm]	<10	

Mechanical specifications

Temperature [°C]	-45°...+80°	
Preload [cN]	80	80
Spring force [cN] at nt ±20%	150	300
Nominal travel [mm]	6.4	6.4
Maximum travel [mm]	8.0	8.0

Materials and plating

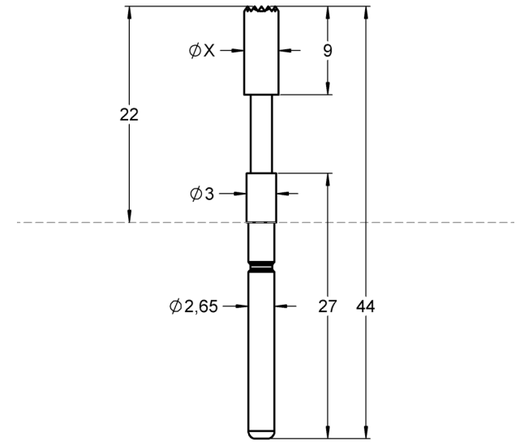
Plunger	BeCu	gold plated
	Steel	longtime gold plated
Barrel	Bronze	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H774 on page 26.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1003981	F78506B120G300L	06	1.20	B / G	300	-	L	-
1003442	F78506B250G300L	06	2.50	B / G	300	-	L	-
1015209	F78506B350G150L	06	3.50	B / G	150	-	L	-
1003069	F78506B350G300L	06	3.50	B / G	300	-	L	-
1035639	F78514S120L300L	14	1.20	S / L	300	-	L	-
1003144	F78514S230L300L	14	2.30	S / L	300	-	L	-



FM Choice

F773

Up to 10 A | 138 mil/3.50 mm | ICT application

Electrical specifications

Current [A]	10
R TYP [mOhm]	<25

Mechanical specifications

Temperature [°C]	-45°...+80°		
Preload [cN]	60	60	100
Spring force [cN] at nt ±20%	150	300	400
Nominal travel [mm]	4.0	4.0	4.0
Maximum travel [mm]	5.0	5.0	5.0

Materials and plating

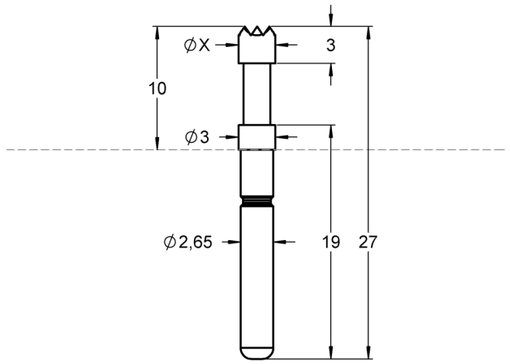
Plunger	BeCu	gold plated
	Stainless steel	unplated
Barrel	Bronze	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H774 on page 26.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1001576	F77305B230G150	05	2.30	B / G	150	-	-	-
1001577	F77305B230G300	05	2.30	B / G	300	-	-	-
1001578	F77306B230G150	06	2.30	B / G	150	-	-	-
1001579	F77306B230G300	06	2.30	B / G	300	-	-	-
1001580	F77306B230G400	06	2.30	B / G	400	-	-	-
1001581	F77306B300G150	06	3.00	B / G	150	-	-	-
1007444	F77306B300G220	06	3.00	B / G	220	-	-	-
1001582	F77306B300G300	06	3.00	B / G	300	-	-	-
1001583	F77306B300G400	06	3.00	B / G	400	-	-	-
1001584	F77306B400G150	06	4.00	B / G	150	-	-	-

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1001585	F77306B400G300	06	4.00	B / G	300	-	-	-
1001586	F77306B400G400	06	4.00	B / G	400	-	-	-
1001516	F77307S230L300	07	2.30	S / L	300	-	-	-
1003362	F77307S400L300	07	4.00	S / L	300	-	-	-
1001517	F77311B180G150	11	1.80	B / G	150	-	-	-
1001518	F77311B180G300	11	1.80	B / G	300	-	-	-
1001520	F77312B230G150	12	2.30	B / G	150	-	-	-
1001521	F77312B230G300	12	2.30	B / G	300	-	-	-
1001522	F77312B230G400	12	2.30	B / G	400	-	-	-
1001523	F77312B300G150	12	3.00	B / G	150	-	-	-
1001524	F77312B300G300	12	3.00	B / G	300	-	-	-
1014261	F77312E230U150	12	2.30	E / U	150	-	-	-
1001526	F77314S230L150	14	2.30	S / L	150	-	-	-
1001527	F77314S230L300	14	2.30	S / L	300	-	-	-
1001529	F77315B300G300	15	3.00	B / G	300	-	-	-
1001530	F77315B300G400	15	3.00	B / G	400	-	-	-
1005868	F77316B180G300	16	1.80	B / G	300	-	-	-
1004112	F77317B230G150	17	2.30	B / G	150	-	-	-
1007493	F77317B300G150	17	3.00	B / G	150	-	-	FM Choice
1009334	F77317B300G300	17	3.00	B / G	300	-	-	-
1001531	F77318B180G150	18	1.80	B / G	150	-	-	-
1001532	F77318B180G300	18	1.80	B / G	300	-	-	-
1001533	F77321S180L150	21	1.80	S / L	150	-	-	-
1001534	F77321S180L300	21	1.80	S / L	300	-	-	-
1001536	F77328B230G400	28	2.30	B / G	400	-	-	-



H774 (RECEPTACLE)

138 mil/3.50 mm | for probe types F773, F785, F796

Materials and plating

Receptacle	Nickel silver	gold plated

Accessories

1003642	FEWZ-774E0	Insertion tool receptacle

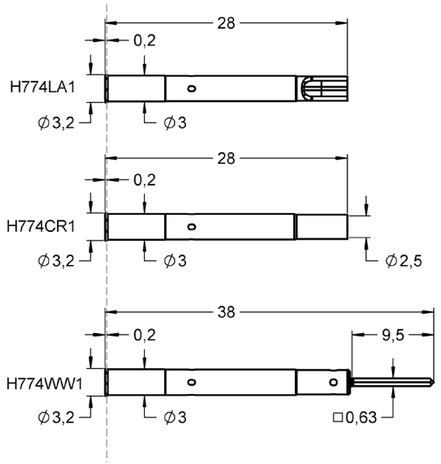
Drill size recommendation (mm)

H774...	With collar	2.98 - 2.99

Order code	Product name	Press ring position [mm]	Connection
1005112	H774LA1	0.2	LA
1005111	H774CR1	0.2	CR
1004821	H774WW1	0.2	WW

Series drawing

All measurements are in mm.





H564 (RECEPTACLE)

125 mil/3.18 mm | for probe F564

Materials and plating

Receptacle	Nickel silver	gold plated

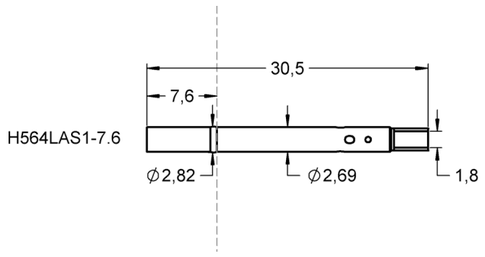
Accessories

1005041	FEWZ-563E0	Insertion tool receptacle

Order code	Product name	Press ring position [mm]	Connection
1168326	H564LAS1-7.6	7.6	LA

Series drawing

All measurements are in mm.





F564

Up to 7 A | 125 mil/3.18 mm | ICT application

Electrical specifications

Current [A]	7	
R TYP [mOhm]	<35	

Mechanical specifications

Temperature [°C]	-45°...+80°	
Preload [cN]	60	60
Spring force [cN] at nt ±20%	150	200
Nominal travel [mm]	4.3	4.3
Maximum travel [mm]	6.4	6.4

Materials and plating

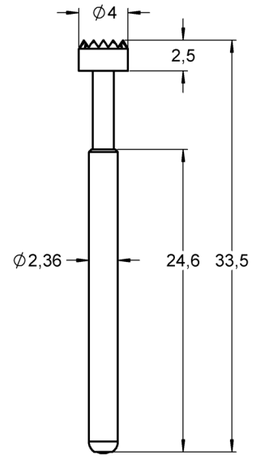
Plunger	BeCu	gold plated
Barrel	Bronze	gold plated
Spring	Stainless steel	unplated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1136266	F56406B400G135	06	4.00	B / G	135	-	-	-
1169824	F56406B400G150	06	4.00	B / G	150	-	-	-
1168576	F56406B400G200	06	4.00	B / G	200	-	-	-
1143969	F56406B400G285	06	4.00	B / G	285	-	-	-
1161992	F56411B150G200	11	1.50	B / G	200	-	-	-



F563

Up to 6 A | 118 mil/3.00 mm | ICT application

Electrical specifications

Current [A]	6
R TYP [mOhm]	<100

Mechanical specifications

Temperature [°C]	-45°...+80°		
Preload [cN]	90	180	100
Spring force [cN] at nt ±20%	180	300	330
Nominal travel [mm]	4.3	4.3	4.3
Maximum travel [mm]	6.4	6.4	6.4

Materials and plating

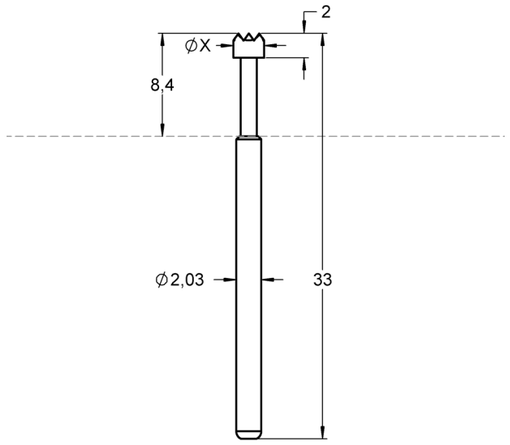
Plunger	BeCu	gold plated
Barrel	Bronze	gold plated
Spring	Stainless steel	unplated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H563 on page 30.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1005532	F56305B170G180	05	1.70	B / G	180	-	-	-
1169810	F56305B250G200 *	05	2.50	B / G	200	-	-	-
1005821	F56305B170G300	05	1.70	B / G	300	-	-	-
1007198	F56305B250G300	05	2.50	B / G	300	-	-	-
1001329	F56306B250G180	06	2.50	B / G	180	-	-	-
1169811	F56306B250G200 *	06	2.50	B / G	200	-	-	-
1005609	F56306B250G300	06	2.50	B / G	300	-	-	-
1007771	F56306B400G180	06	4.00	B / G	180	-	-	-
1053965	F56306B400G300	06	4.00	B / G	300	-	-	-

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1001330	F56311B130G180	11	1.30	B / G	180	-	-	-
1169819	F56311B130G200 *	11	1.30	B / G	200	-	-	-
1014859	F56311B130G300	11	1.30	B / G	300	-	-	-
1013737	F56312B170G180	12	1.70	B / G	180	-	-	-
1001331	F56312B250G180	12	2.50	B / G	180	-	-	-
1169822	F56315B300G330	15	3.00	B / G	330	-	-	-
1001332	F56314B250G180	14	2.50	B / G	180	-	-	-
1013032	F56314B250G300	14	2.50	B / G	300	-	-	-
1009238	F56315B300G180	15	3.00	B / G	180	-	-	-
1017181	F56316B130G180	16	1.30	B / G	180	-	-	-
1053967	F56317B170G180	17	1.70	B / G	180	-	-	-
1053968	F56318B070G180	18	0.70	B / G	180	-	-	-
1169823	F56318B130G330	18	1.30	B / G	330	-	-	-

* Materials or specifications may differ from the standard.



H563 (RECEPTACLE)

118 mil/3.00 mm | for probe types F563

Materials and plating

Receptacle	Nickel silver	gold plated

Accessories

1005041	FEWZ-563E0	Insertion tool receptacle

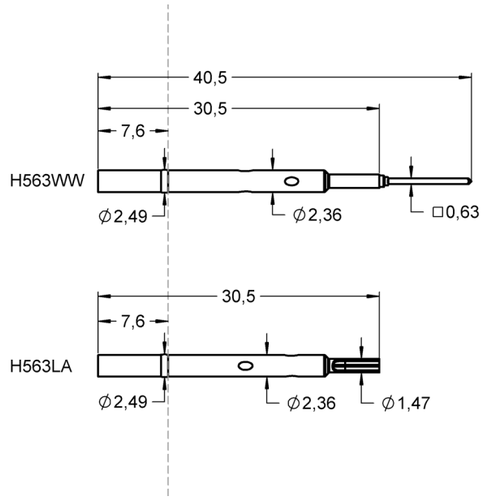
Drill size recommendation (mm)

H563...	Press ring as stop	2.34 - 2.35
H563...	Press ring inserted	2.40 - 2.45

Order code	Product name	Press ring position [mm]	CXN
1001705	H563WW	7.6	WW
1001704	H563LA	7.6	LA

Series drawing

All measurements are in mm.





FM Choice

F772

Up to 5 A | 100 mil/2.54 mm | ICT application

Electrical specifications

Current [A]	5
R TYP [mOhm]	<25

Mechanical specifications

Temperature [°C]	-45°...+80°		
	-45°...+100° (H)		
Preload [cN]	30	60	60
Spring force [cN] at nt ±20%	80	150	300
Nominal travel [mm]	4.0	4.0	4.0
Maximum travel [mm]	5.0	5.0	5.0

Materials and plating

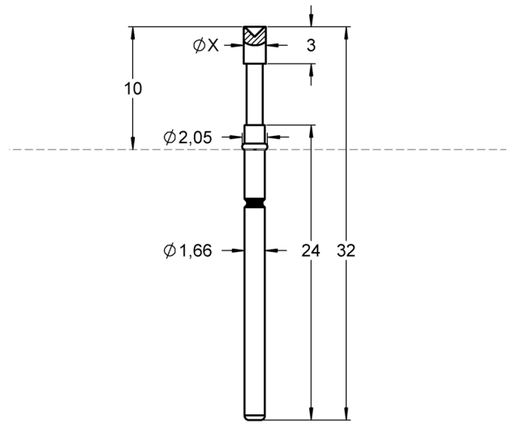
Plunger	BeCu	gold plated
	Steel	nickel plated
	Steel	longtime gold plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H772 on page 39. Materials and specifications may differ from the standard.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1005869	F77203B130G150	03	1.30	B / G	150	-	-	-
1013940	F77203B130G300	03	1.30	B / G	300	-	-	-
1004512	F77205B180G150	05	1.80	B / G	150	-	-	FM Choice
1023838	F77205B180G220 *	05	1.80	B / G	220	-	-	-
1035241	F77205B180G220E13 *	05	1.80	B / G	220	-	E13	-
1007701	F77205B180G300	05	1.80	B / G	300	-	-	-
1025309	F77205B200G080	05	2.00	B / G	80	-	-	FM Choice
1001618	F77205B200G150	05	2.00	B / G	150	-	-	FM Choice

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1001619	F77205B200G300	05	2.00	B / G	300	-	-	FM Choice
1004513	F77205B250G150	05	2.50	B / G	150	-	-	FM Choice
1172015	F77205B250G500E18 *	05	2.50	B / G	500	-	E18	-
1007735	F77205B300G150	05	3.00	B / G	150	-	-	-
1005468	F77205B400G150	05	4.00	B / G	150	-	-	-
1001620	F77206B150G150	06	1.50	B / G	150	-	-	FM Choice
1001621	F77206B150G300	06	1.50	B / G	300	-	-	FM Choice
1001622	F77206B150G300H	06	1.50	B / G	300	-	H	-
1003603	F77206B180G150	06	1.80	B / G	150	-	-	FM Choice
1009365	F77206B180G150E13	06	1.80	B / G	150	-	E13	-
1007349	F77206B180G300	06	1.80	B / G	300	-	-	FM Choice
1172016	F77206B180G220E13 *	06	1.80	B / G	220	-	E13	-
1009216	F77206B180G300E13	06	1.80	B / G	300	-	E13	-
1001623	F77206B200G150	06	2.00	B / G	150	-	-	FM Choice
1008918	F77206B200G150E15	06	2.00	B / G	150	-	E15	-
1007416	F77206B200G150IK05	06	2.00	B / G	150	-	IK05	-
1009545	F77206B200G220 *	06	2.00	B / G	220	-	-	FM Choice
1001624	F77206B200G300	06	2.00	B / G	300	-	-	FM Choice
1008337	F77206B200G300E13	06	2.00	B / G	300	-	E13	-
1001625	F77206B200G300H	06	2.00	B / G	300	-	H	-
1001626	F77206B250G150	06	2.50	B / G	150	-	-	FM Choice
1019475	F77206B250G150H	06	2.50	B / G	150	-	H	-
1001627	F77206B250G300	06	2.50	B / G	300	-	-	FM Choice
1011255	F77206B250G300E13	06	2.50	B / G	300	-	E13	-
1022677	F77206B250G400 *	06	2.50	B / G	400	-	-	FM Choice
1001628	F77207S175L150	07	1.75	S / L	150	-	-	-
1169309	F77207S180L220E15 *	07	1.80	S / L	220	-	E15	-
1001629	F77207S200L150	07	2.00	S / L	150	-	-	-
1001630	F77207S200L300	07	2.00	S / L	300	-	-	FM Choice
1001631	F77207S200L300H	07	2.00	S / L	300	-	H	-
1001559	F77210S063N150	10	0.63	S / N	150	-	-	-
1009759	F77211B064G150	11	0.64	B / G	150	-	-	-

BASIC PROBES 100 MIL / 2.54 MM

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1004514	F77211B070G150	11	0.70	B / G	150	-	-	-
1016741	F77211B100G150	11	1.00	B / G	150	-	-	-
1005870	F77211B130G150	11	1.30	B / G	150	-	-	FM Choice
1035375	F77211B130G300	11	1.30	B / G	300	-	-	-
1004515	F77212B150G150	12	1.50	B / G	150	-	-	-
1001560	F77212B200G150	12	2.00	B / G	150	-	-	FM Choice
1001561	F77212B200G300	12	2.00	B / G	300	-	-	FM Choice
1001562	F77214S200L150	14	2.00	S / L	150	-	-	-
1001563	F77214S200L300	14	2.00	S / L	300	-	-	-
1001564	F77215B200G150	15	2.00	B / G	150	-	-	-
1001565	F77215B200G300	15	2.00	B / G	300	-	-	FM Choice
1006747	F77217B200G150	17	2.00	B / G	150	-	-	FM Choice
1008821	F77217B200G300	17	2.00	B / G	300	-	-	FM Choice
1087307	F77217B300G150	17	3.00	B / G	150	-	-	-
1001566	F77218B130G150	18	1.30	B / G	150	-	-	-
1001567	F77218B130G300	18	1.30	B / G	300	-	-	-
1005871	F77218S080N150	18	0.80	S / N	150	-	-	-
1013037	F77221B130G300H	21	1.30	B / G	300	-	H	-
1001568	F77221S130L150	21	1.30	S / L	150	-	-	FM Choice
1001569	F77221S130L300	21	1.30	S / L	300	-	-	FM Choice
1001570	F77228B200G150	28	2.00	B / G	150	-	-	-
1001571	F77228B200G300	28	2.00	B / G	300	-	-	-
1003068	F77230B130G090S1 *	30	1.30	B / G	90	-	S1	-
1001572	F77230B130G150	30	1.30	B / G	150	-	-	-
1000748	F77232S080L300	32	0.80	S / L	300	-	-	-
1001574	F77233S130L150	33	1.30	S / L	150	-	-	-
1006044	F77233S130L220 *	33	1.30	S / L	220	-	-	-
1001575	F77233S130L300	33	1.30	S / L	300	-	-	-
1004354	F77233S130R300	33	1.30	S / R	300	-	-	-
1169312	F77233S130L200E15H *	33	1.30	S / L	200	-	E15H	-
1034177	F77263S230L300	63	2.30	S / L	300	-	-	-

* Materials or specifications may differ from the standard.



FM Choice

F772HP

Progressive Series | Up to 5 A | 100 mil/2.54 mm | ICT application

Electrical specifications

Current [A]	5
R TYP [mOhm]	<25

Mechanical specifications

Temperature [°C]	-45°...+80°		
Preload [cN]	60	60	200
Spring force [cN] at nt ±20%	150	200	300
Nominal travel [mm]	4.0	4.0	4.0
Maximum travel [mm]	5.0	5.0	5.0

Materials and plating

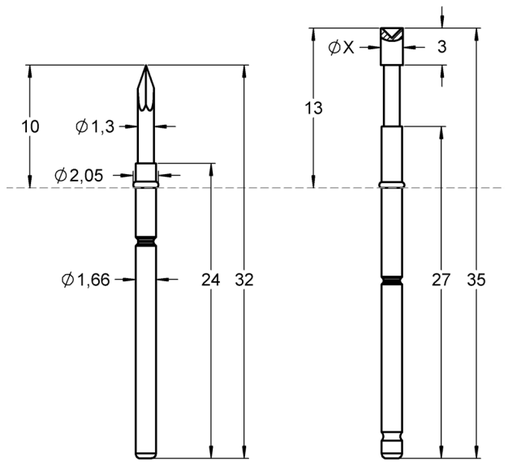
Plunger	Steel	palladium alloy plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H772 on page 39.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1148988	F77205S180P150E13	05	1.80	S / P	150	-	E13	FM Choice
1103771	F77233S130P200	33	1.30	S / P	200	-	-	-
1013335	F77233S130P300HP	33	1.30	S / P	300	-	HP	-



F786

Up to 5 A | 100 mil/2.54 mm | ICT application

Electrical specifications

Current [A]	5
R TYP [mOhm]	<25

Mechanical specifications

Temperature [°C]	-45°...+80°	
Preload [cN]	60	60
Spring force [cN] at nt ±20%	150	300
Nominal travel [mm]	6.4	6.4
Maximum travel [mm]	8.0	8.0

Materials and plating

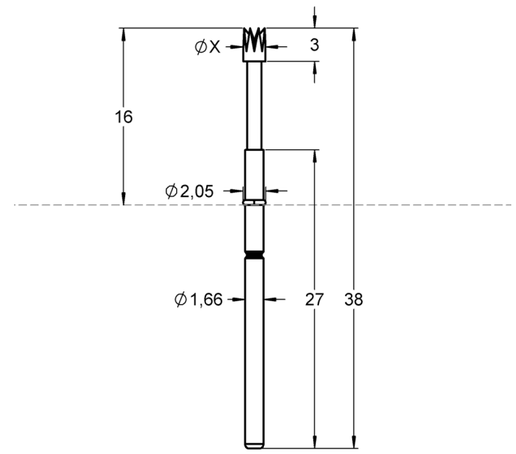
Plunger	BeCu	gold plated
	Steel	longtime gold plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H772 on page 39.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1001539	F78606B200G150	06	2.00	B / G	150	-	-	-
1001540	F78606B200G300	06	2.00	B / G	300	-	-	-
1083274	F78606B400G300IK06	06	4.00	B / G	300	-	IK06	-
1001541	F78606B450G150	06	4.50	B / G	150	-	-	-
1001542	F78606B450G300	06	4.50	B / G	300	-	-	-
1001543	F78607S200L150	07	2.00	S / L	150	-	-	-
1001544	F78607S200L300	07	2.00	S / L	300	-	-	-
1032611	F78610S080L300	10	0.80	S / L	300	-	-	-
1009223	F78611B130G300	11	1.30	B / G	300	-	-	-

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1001546	F78614S200L300	14	2.00	S / L	300	-	-	-
1001555	F78615B200G150	15	2.00	B / G	150	-	-	-
1003131	F78618B130G150	18	1.30	B / G	150	-	-	-
1003013	F78618B130G300	18	1.30	B / G	300	-	-	-
1003014	F78621S130L150	21	1.30	S / L	150	-	-	-
1003015	F78621S130L300	21	1.30	S / L	300	-	-	-
1003016	F78633S130L150	33	1.30	S / L	150	-	-	-
1003047	F78633S130L300	33	1.30	S / L	300	-	-	-
1005680	F78663S200L300	63	2.00	S / L	300	-	-	-



F786HP

Progressive Series | Up to 5 A | 100 mil/2.54 mm | ICT application

Electrical specifications

Current [A]	5
R TYP [mOhm]	<25

Mechanical specifications

Temperature [°C]	-45°...+80°	
Preload [cN]	180	180
Spring force [cN] at nt ±20%	300	500
Nominal travel [mm]	6.4	6.4
Maximum travel [mm]	8.0	8.0

Materials and plating

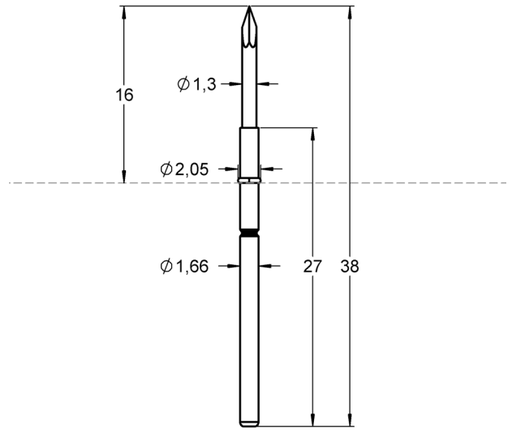
Plunger	Steel	palladium alloy plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H772 on page 39.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1032612	F78610S080P300HP	10	0.80	S / P	300	-	HP	-
1015524	F78633S130P500HP	33	1.30	S / P	500	-	HP	-
1013217	F78633S130P300HP	33	1.30	S / P	300	-	HP	-



F797

Up to 5 A | 100 mil/2.54 mm | FCT application

Electrical specifications

Current [A]	5
R TYP [mOhm]	<25

Mechanical specifications

Temperature [°C]	-45°...+80°	
Preload [cN]	60	60
Spring force [cN] at nt ±20%	150	300
Nominal travel [mm]	8.0	8.0
Maximum travel [mm]	10.0	10.0

Materials and plating

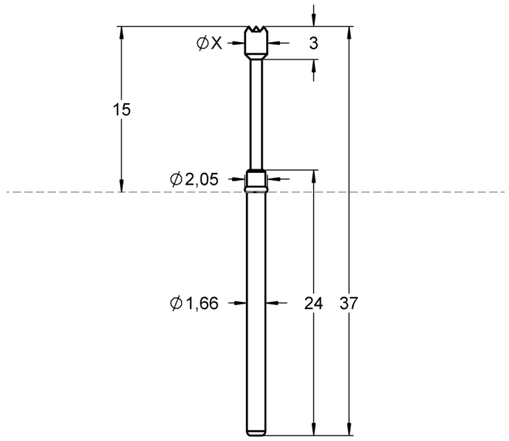
Plunger	BeCu	gold plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H772 on page 39.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1001554	F79703B100G150	03	1.00	B / G	150	-	-	-
1054000	F79706B200G150	06	2.00	B / G	150	-	-	-
1001706	F79706B200G300	06	2.00	B / G	300	-	-	-
1007277	F79716B100G150	16	1.00	B / G	150	-	-	-
1008753	F79716B100G300	16	1.00	B / G	300	-	-	-
1001708	F79718B100G150	18	1.00	B / G	150	-	-	-
1054001	F79718B100G300	18	1.00	B / G	300	-	-	-



H772 (RECEPTACLE)

100 mil/2.54 mm | for probe types F772, F786, F797

Materials and plating

Receptacle	Nickel silver	gold plated

Accessories

1008394	FEWZ-772EV	Insertion tool receptacle
1003640	FEWZ-772E0	Insertion tool receptacle

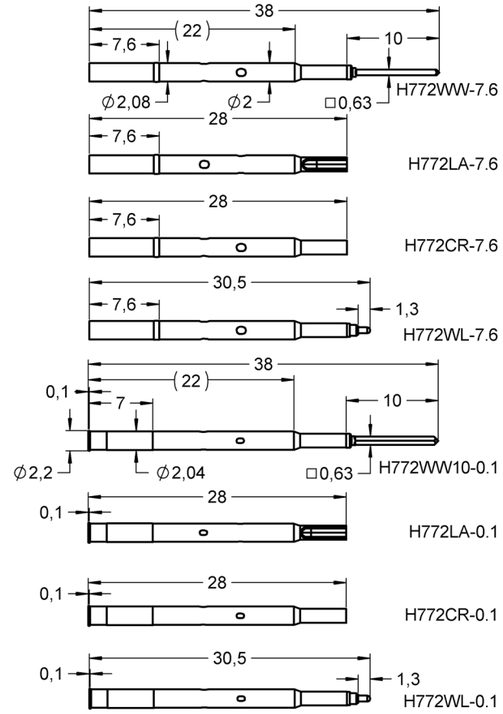
Drill size recommendation (mm)

H772...	With collar	2.02 - 2.03
H772...	Press ring as stop	1.97 - 2.00
H772...	Press ring inserted	2.03 - 2.05

Order code	Product name	Press ring position [mm]	Connection
1035995	H772WW-7.6	7.6	WW
1036005	H772LA-7.6	7.6	LA
1035994	H772CR-7.6	7.6	CR
1035103	H772WL-7.6	7.6	WL
1018331	H772WW10-0.1	0.1	WW
1018330	H772LA-0.1	0.1	LA
1018307	H772CR-0.1	0.1	CR
1018289	H772LI-0.1	0.1	LI

Series drawing

All measurements are in mm.



The insertion depth 22 mm and outer diameter 2.0 mm are the same for all receptacles shown above. Different dimensions are listed.



FM Choice

F588

Up to 5 A | 100 mil/2.54 mm | ICT application

Electrical specifications

Current [A]	5
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°		
Preload [cN]	80	75	110
Spring force [cN] at nt ±20%	180	200	300
Nominal travel [mm]	9.3	9.3	9.3
Maximum travel [mm]	11.7	11.7	11.7

Materials and plating

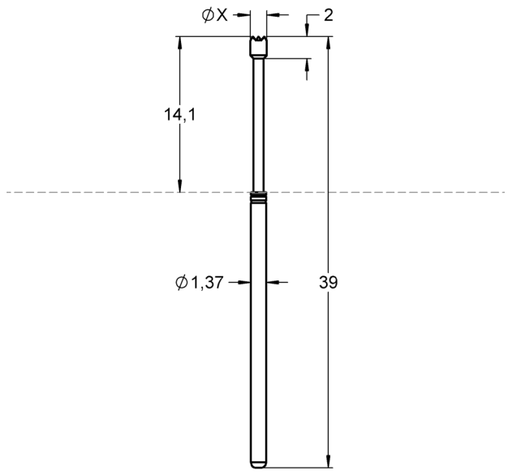
Plunger	BeCu	gold plated
	Steel	palladium alloy plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H100 on page 57-59.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1001507	F58805B150G180	05	1.50	B / G	180	-	-	FM Choice
1001508	F58806B150G180	06	1.50	B / G	180	-	-	FM Choice
1007399	F58806B150G300	06	1.50	B / G	300	-	-	FM Choice
1000110	F58811B090G180	11	0.90	B / G	180	-	-	-
1007491	F58812B150G180	12	1.50	B / G	180	-	-	-
1005813	F58815B150G180	15	1.50	B / G	180	-	-	FM Choice
1007400	F58815B150G300	15	1.50	B / G	300	-	-	FM Choice
1001509	F58818B076G180	18	0.76	B / G	180	-	-	-
1007401	F58818B076G300	18	0.76	B / G	300	-	-	-

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1001509	F58818B076G180	18	0.76	B / G	180	-	-	-
1007401	F58818B076G300	18	0.76	B / G	300	-	-	-
1001510	F58821S076L180	21	0.76	S / L	180	-	-	-
1007195	F58821S090L180	21	0.90	S / L	180	-	-	-
1012220	F58821S090L300	21	0.90	S / L	300	-	-	-
1010465	F58821S090P180	21	0.90	S / P	180	-	-	-
1170011	F58828B130G200	28	1.30	B / G	200	-	-	-
1001476	F58828B150G180	28	1.50	B / G	180	-	-	-
1007402	F58828B150G300	28	1.50	B / G	300	-	-	-
1001477	F58833S076L180	33	0.76	S / L	180	-	-	FM Choice
1005360	F58833S090L180	33	0.90	S / L	180	-	-	FM Choice
1007199	F58833S090L300	33	0.90	S / L	300	-	-	-
1010480	F58833S090P180	33	0.90	S / P	180	-	-	-
1041857	F58835S150P300	35	1.50	S / P	300	-	-	-
1001478	F58836S140L180	36	1.40	S / L	180	-	-	-
1008855	F58836S140L300	36	1.40	S / L	300	-	-	-
1169165	F58837S050L200	37	0.50	S / L	200	-	-	-
1007182	F58838S090L180	38	0.90	S / L	180	-	-	-
1169192	F58838S090L200	38	0.90	S / L	200	-	-	-
1009003	F58841B150G300IK	41	1.50	B / G	300	-	IK	-
1010469	F58843S090P180	43	0.90	S / P	180	-	-	-
1169198	F58843S090L200	43	0.90	S / L	200	-	-	-
1004197	F58863B150G180	63	1.50	B / G	180	-	-	-
1009595	F58863B150G300	63	1.50	S / L	300	-	-	-



FM Choice

F588S

Up to 5 A | 100 mil/2.54 mm | ICT application

Electrical specifications

Current [A]	5		
R TYP [mOhm]	<20		

Mechanical specifications

Temperature [°C]	-45°...+80°		
Preload [cN]	80	115	110
Spring force [cN] at nt ±20%	180	225	300
Nominal travel [mm]	7.6	7.6	7.6
Maximum travel [mm]	10.0	10.0	10.0

Materials and plating

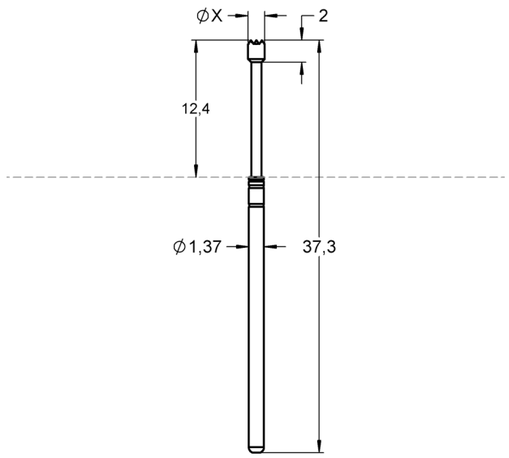
Plunger	BeCu	gold plated
	BeCu	palladium alloy plated
	Steel	longtime gold plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H100 on page 57-59.

BASIC PROBES 100 MIL / 2.54 MM

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1007536	F58805B150G180S	05	1.50	B / G	180	-	S	FM Choice
1169827	F58805B150G200S *	05	1.50	B / G	200	-	S	-
1008846	F58806B150G180S	06	1.50	B / G	180	-	S	FM Choice
1097833	F58806B150P300S	06	1.50	B / P	300	-	S	-
1170076	F58815B150G080S	15	1.50	B / G	80	-	S	-
1043610	F58815B150G180S	15	1.50	B / G	180	-	S	FM Choice
1003164	F58833S090L180S	33	0.90	S / L	180	-	S	FM Choice
1008891	F58833S090L300S	33	0.90	S / L	300	-	S	-
1016151	F58841B150G300IK04S	41	1.50	B / G	300	-	IK04S	-
1169209	F58843S090L200S *	43	0.90	S / L	200	-	S	-
1169577	F58843S090L225S	43	0.90	S / L	225	-	S	-

* Materials or specifications may differ from the standard.



FM Choice

F588HPS / F588HP

Progressive Series | Up to 5 A | 100 mil/2.54 mm | ICT application

Electrical specifications

Current [A]	5
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°		
Preload [cN]	100	110	110
Spring force [cN] at nt ±20%	280	300	300
Nominal travel [mm]	9.3	7.6	9.3
Maximum travel [mm]	11.7	10.0	11.7

Materials and plating

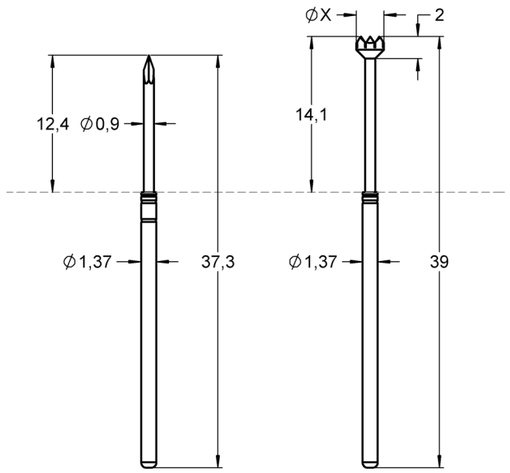
Plunger	Steel	palladium alloy plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H100 on page 57-59.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1019480	F58821S090P300HP	21	0.90	S / P	300	-	HP	-
1170012	F58833S090P280HP	33	0.90	S / P	280	-	HP	-
1013000	F58833S090P300HP	33	0.90	S / P	300	-	HP	FM Choice
1043611	F58833S090P300HPS	33	0.90	S / P	300	-	HPS	FM Choice
1019481	F58837S050P300HP	37	0.50	S / P	300	-	HP	-
1019483	F58866B250P300HP	66	2.50	S / P	300	-	HP	-

* Materials or specifications may differ from the standard.



FM Choice

F100

Up to 5 A | 100 mil/2.54 mm | ICT application

Electrical specifications

Current [A]	5
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°		
	-45°...+200° (H)		
Preload [cN]	80	80	150
Spring force [cN] at nt ±20%	150	200	300
Nominal travel [mm]	4.3	4.3	4.3
Maximum travel [mm]	6.4	6.4	6.4

Materials and plating

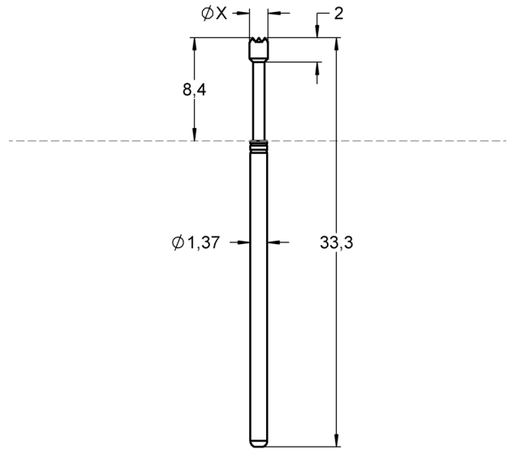
Plunger	BeCu	gold plated
	Steel	longtime gold plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H100 on page 57-59.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1043597	F10002B170G200	02	1.70	B / G	180	-	-	FM Choice
1017531	F10005B150G150	05	1.50	B / G	180	-	-	FM Choice
1011718	F10005B150G200	05	1.50	B / G	300	-	-	FM Choice
1038949	F10005B150G200H	05	1.50	B / G	180	-	H	-
1011717	F10005B150G300	05	1.50	B / G	180	-	-	FM Choice
1100496	F10005B200G200	05	2.00	B / G	200	-	-	-
1017563	F10006B130G150	06	1.30	B / G	150	-	-	FM Choice
1012285	F10006B130G200	06	1.30	B / G	200	-	-	FM Choice

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1043598	F10006B130G200H	06	1.30	B / G	200	-	H	-
1012286	F10006B130G300	06	1.30	B / G	300	-	-	FM Choice
1006750	F10006B150G150	06	1.50	B / G	150	-	-	-
1013049	F10006B150G200	06	1.50	B / G	200	-	-	FM Choice
1013692	F10006B150G200H	06	1.50	B / G	200	-	H	-
1013033	F10006B150G200IK04	06	1.50	B / G	200	-	IK04	FM Choice
1096449	F10006B150G225	06	1.50	B / G	225	-	-	-
1010698	F10006B150G300	06	1.50	B / G	300	-	-	FM Choice
1013034	F10006B150G300IK04	06	1.50	B / G	300	-	IK04	FM Choice
1018941	F10006B150P300	06	1.50	B / P	300	-	-	FM Choice
1030188	F10006B150P300IK03	06	1.50	B / P	300	-	IK03	FM Choice
1012591	F10006B200G150	06	2.00	B / G	150	-	-	FM Choice
1012592	F10006B200G200	06	2.00	B / G	200	-	-	FM Choice
1011380	F10006B200G200IK04	06	2.00	B / G	200	-	IK04	-
1012593	F10006B200G300	06	2.00	B / G	300	-	-	FM Choice
1011381	F10006B200G300IK04	06	2.00	B / G	300	-	IK04	FM Choice
1017533	F10006B250G150	06	2.50	B / G	150	-	-	FM Choice
1013012	F10006B250G200	06	2.50	B / G	200	-	-	FM Choice
1011395	F10006B250G300	06	2.50	B / G	300	-	-	FM Choice
1040167	F10006B250G400	06	2.50	B / G	400	-	-	FM Choice
1172550	F10006B300G060	06	3.00	B / G	60	-	-	-
1017163	F10006B300G200	06	3.00	B / G	200	-	-	-
1007901	F10006B300G300	06	3.00	B / G	300	-	-	-
1011177	F10006B350G300IK04	06	3.50	B / G	300	-	IK04	-
1014750	F10006B350G300IK10	06	3.50	B / G	300	-	IK10	-
1014142	F10006B370G300IK36	06	3.70	B / G	300	-	IK36	-
1017390	F10006B400G200	06	4.00	B / G	200	-	-	-
1014046	F10006B400G300	06	4.00	B / G	300	-	-	-
1011982	F10007S150L200	07	1.50	S / L	200	-	-	FM Choice
1011983	F10007S150L200H	07	1.50	S / L	200	-	H	-
1011984	F10007S150L300	07	1.50	S / L	300	-	-	FM Choice
1011853	F10007S170L200	07	1.70	S / L	200	-	-	FM Choice

BASIC PROBES 100 MIL / 2.54 MM

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1011111	F10007S170L300	07	1.70	S / L	300	-	-	FM Choice
1167703	F10007S170L300H	07	1.70	S / L	300	-	H	-
1004257	F10010S060L150	10	0.60	S / L	150	-	-	FM Choice
1017643	F10010S060L150RP	10	0.60	S / L	150	-	RP	-
1004028	F10010S060L200	10	0.60	S / L	200	-	-	FM Choice
1004175	F10010S060L300	10	0.60	S / L	300	-	-	-
1026144	F10010S060P300	10	0.60	S / P	300	-	-	FM Choice
1017164	F10011B050G200	11	0.50	B / G	200	-	-	-
1167704	F10011B064G100	11	0.64	B / G	100	-	-	-
1018364	F10011B064G150	11	0.64	B / G	150	-	-	FM Choice
1011581	F10011B064G200	11	0.64	B / G	200	-	-	FM Choice
1008017	F10011B064G300	11	0.64	B / G	300	-	-	FM Choice
1017534	F10011B090G150	11	0.90	B / G	150	-	-	FM Choice
1013006	F10011B090G200H	11	0.90	B / G	200	-	H	-
1011836	F10011B090G300	11	0.90	B / G	300	-	-	FM Choice
1017697	F10011B090G400	11	0.90	B / G	400	-	-	-
1034707	F10011B090P300	11	0.90	B / P	300	-	-	-
1092030	F10012B130G200	12	1.30	B / G	200	-	-	-
1017710	F10012B150G150	12	1.50	B / G	150	-	-	FM Choice
1016668	F10012B150G200	12	1.50	B / G	200	-	-	FM Choice
1016669	F10012B150G300	12	1.50	B / G	300	-	-	-
1017536	F10014B130G150	14	1.30	B / G	150	-	-	-
1167918	F10014B130G180	14	1.30	B / G	180	-	-	-
1011719	F10014B130G200	14	1.30	B / G	200	-	-	FM Choice
1011667	F10014B130G300	14	1.30	B / G	300	-	-	FM Choice
1011007	F10014B150G200	14	1.50	B / G	200	-	-	FM Choice
1011008	F10014B150G300	14	1.50	B / G	300	-	-	FM Choice
1017696	F10014B150G400	14	1.50	B / G	400	-	-	-
1012769	F10014S130L150	14	1.30	S / L	150	-	-	FM Choice
1012782	F10014S130L200	14	1.30	S / L	200	-	-	FM Choice
1012783	F10014S130L200H	14	1.30	S / L	200	-	H	-
1012784	F10014S130L300	14	1.30	S / L	300	-	-	FM Choice

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1057662	F10014S130L400	14	1.30	S / L	400	-	-	-
1017695	F10014S150L150	14	1.50	S / L	150	-	-	FM Choice
1013478	F10014S150L200	14	1.50	S / L	200	-	-	FM Choice
1013479	F10014S150L200H	14	1.50	S / L	200	-	H	-
1013480	F10014S150L300	14	1.50	S / L	300	-	-	FM Choice
1017757	F10014S150L300HP	14	1.50	S / L	300	-	HP	-
1017540	F10015B150G150	15	1.50	B / G	150	-	-	-
1167909	F10015S150L180	15	1.50	S / L	180	-	-	-
1013342	F10015B150G200	15	1.50	B / G	200	-	-	-
1167889	F10015S150L225	15	1.50	S / L	225	-	-	-
1013343	F10015B150G300	15	1.50	B / G	300	-	-	FM Choice
1011890	F10015B170G200	15	1.70	B / G	200	-	-	FM Choice
1026140	F10015B150P300	15	1.50	B / P	300	-	-	FM Choice
1011891	F10015B170G300	15	1.70	B / G	300	-	-	-
1014374	F10015B250G200	15	2.50	B / G	200	-	-	FM Choice
1014375	F10015B250G300	15	2.50	B / G	300	-	-	FM Choice
1043600	F10015B300G200	15	3.00	B / G	200	-	-	-
1011261	F10016B075G200	16	0.75	B / G	200	-	-	-
1167853	F10016B075G200H	16	0.75	B / G	200	-	H	-
1023670	F10017B150G300	17	1.50	B / G	300	-	-	FM Choice
1167855	F10017B150G400	17	1.50	B / G	400	-	-	-
1015133	F10017B200G200	17	2.00	B / G	200	-	-	FM Choice
1015247	F10017B200G200H	17	2.00	B / G	200	-	H	-
1017542	F10018B090G150	18	0.90	B / G	150	-	-	FM Choice
1012175	F10018B090G200	18	0.90	B / G	200	-	-	FM Choice
1011512	F10018B090G300	18	0.90	B / G	300	-	-	FM Choice
1167772	F10018S090L200	18	0.90	S / L	200	-	-	-
1172247	F10021S080L200	21	0.80	S / L	200	-	-	-
1170254	F10021B090G180	21	0.90	B / G	180	-	-	-
1044769	F10021B090G200	21	0.90	B / G	200	-	-	FM Choice
1032056	F10021B090G200H	21	0.90	B / G	200	-	H	-
1017543	F10021S090L150	21	0.90	S / L	150	-	-	-

BASIC PROBES 100 MIL / 2.54 MM

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1012135	F10021S090L200	21	0.90	S / L	200	-	-	FM Choice
1007251	F10021S090L300	21	0.90	S / L	300	-	-	-
1167777	F10028S106L100	28	1.06	S / L	100	-	-	-
1167778	F10028S106L400	28	1.06	S / L	400	-	-	-
1167932	F10030S090L100	30	0.90	B / G	100	-	-	-
1017544	F10030B090G150	30	0.90	B / G	150	-	-	-
1057663	F10030B090G200	30	0.90	B / G	200	-	-	-
1007849	F10030B090G300	30	0.90	B / G	300	-	-	FM Choice
1006272	F10033S090L150	33	0.90	S / L	150	-	-	-
1006813	F10033S090L200	33	0.90	S / L	200	-	-	FM Choice
1092045	F10033S090L225	33	0.90	S / L	225	-	-	-
1012860	F10033S090L200H	33	0.90	S / L	200	-	H	-
1001150	F10033S090L200HP	33	0.90	S / L	200	-	HP	-
1006541	F10033S090L300	33	0.90	S / L	300	-	-	FM Choice
1016732	F10033S150L300	33	1.50	S / L	300	-	-	-
1026187	F10033S090P300	33	0.90	S / P	300	-	-	FM Choice
1036218	F10035S150P300	35	1.50	S / P	300	-	-	FM Choice
1172545	F10035S050L300	35	0.50	S / L	300	-	-	-
1167609	F10035S050L400	35	0.50	S / L	400	-	-	-
1004187	F10035S150L200	35	1.50	S / L	200	-	-	FM Choice
1004276	F10035S150L300	35	1.50	S / L	300	-	-	FM Choice
1100640	F10036S130L150	36	1.30	S / L	150	-	-	FM Choice
1013145	F10036S130L200	36	1.30	S / L	200	-	-	FM Choice
1013146	F10036S130L300	36	1.30	S / L	300	-	-	FM Choice
1168541	F10036S140L180	36	1.40	S / L	180	-	-	-
1168545	F10037B030G180	37	0.30	B / G	180	-	-	-
1167781	F10037S050L150	37	0.50	S / L	150	-	-	-
1008651	F10037S050L200	37	0.50	S / L	200	-	-	FM Choice
1167782	F10037S050L225	37	0.50	S / L	225	-	-	-
1007223	F10037S050L300	37	0.50	S / L	300	-	-	FM Choice
1057664	F10038S090L150	38	0.90	S / L	150	-	-	-
1168300	F10038S090L180	38	0.90	S / L	180	-	-	-

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1006498	F10038S090L200	38	0.90	S / L	200	-	-	-
1007709	F10038S090L300	38	0.90	S / L	300	-	-	FM Choice
1012765	F10041B150G200IK04	41	1.50	B / G	200	-	IK04	-
1012770	F10041B150G300IK04	41	1.50	B / G	300	-	IK04	-
1017547	F10043S090L150	43	0.90	S / L	150	-	-	FM Choice
1167641	F10043S090L180	43	0.90	S / L	180	-	-	-
1006908	F10043S090L200	43	0.90	S / L	200	-	-	FM Choice
1168301	F10043S090L225	43	0.90	S / L	225	-	-	-
1007696	F10043S090L300	43	0.90	S / L	300	-	-	FM Choice
1036161	F10043S090L300H	43	0.90	S / L	300	-	H	-
1032170	F10053S090L300	53	0.90	S / L	300	-	-	FM Choice
1017464	F10055B180G200	55	1.80	B / G	200	-	-	-
1020072	F10055B180G200H	55	1.80	B / G	200	-	H	-
1171916	F10055B300G100	55	3.00	B / G	100	-	-	-
1014197	F10060B046G200	60	0.46	B / G	200	-	-	-
1168305	F10062S090L180	62	0.90	S / L	180	-	-	-
1013020	F10062B090G200	62	0.90	B / G	200	-	-	FM Choice
1170235	F10062S090L200	62	0.90	S / L	200	-	-	-
1013022	F10062B090G300	62	0.90	B / G	300	-	-	FM Choice
1168328	F10063S120L200	63	1.20	S / L	200	-	-	-
1017562	F10063B150G150	63	1.50	B / G	150	-	-	FM Choice
1013103	F10063B150G200	63	1.50	B / G	200	-	-	FM Choice
1166672	F10063S150L200	63	1.50	S / L	200	-	-	-
1013104	F10063B150G300	63	1.50	B / G	300	-	-	FM Choice
1168329	F10063S150L300	63	1.50	S / L	300	-	-	-
1000078	F10068S150L200	68	1.50	S / L	200	-	-	-
1091896	F10068S150L300	68	1.50	S / L	300	-	-	-
1168372	F10079B050G200	79	0.50	B / G	200	-	-	-
1168369	F10079B064G300	79	0.64	B / G	300	-	-	-
1166608	F10079B090G150	79	0.90	B / G	150	-	-	-

BASIC PROBES 100 MIL / 2.54 MM



FM Choice

F100L

Up to 5 A | 100 mil/2.54 mm | ICT application

Electrical specifications

Current [A]	5
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°		
Preload [cN]	80	80	150
Spring force [cN] at nt ±20%	150	200	300
Nominal travel [mm]	4.3	4.3	4.3
Maximum travel [mm]	6.4	6.4	6.4

Materials and plating

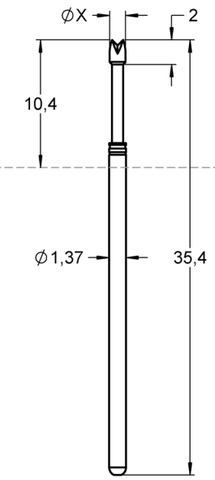
Plunger	BeCu	gold plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H100 on page 57-59.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1167700	F10006B130G150L	06	1.30	B / G	150	-	L	-
1167699	F10006B130G150ML	06	1.30	B / G	150	-	ML	-
1012204	F10006B150G150L	06	1.50	B / G	150	-	L	FM Choice
1012205	F10006B150G200L	06	1.50	B / G	200	-	L	-
1012206	F10006B150G300L	06	1.50	S / L	300	-	L	-
1167917	F10007S170L220ML	07	1.70	S / L	220	-	ML	-
1044864	F10011B064G150L	11	0.64	B / G	150	-	L	-
1017535	F10011B090G150L	11	0.90	B / G	150	-	L	FM Choice
1044635	F10011B090G200L	11	0.90	B / G	200	-	L	-
1039198	F10011B090G300L	11	0.90	B / G	300	-	L	-

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1000535	F10014S130L150L	14	1.30	S / L	150	-	L	-
1017541	F10015B150G150L	15	1.50	B / G	150	-	L	FM Choice
1015802	F10015B150G200L	15	1.50	B / G	200	-	L	FM Choice
1167882	F10015B150G220L	15	1.50	B / G	220	-	L	-
1013905	F10015B150G300L	15	1.50	B / G	300	-	L	-
1167846	F10015B250G150L	15	2.50	B / G	150	-	L	-
1167856	F10018S090L150L	18	0.90	S / L	150	-	L	-
1167774	F10018S090L300L	18	0.90	S / L	300	-	L	-
1007501	F10021S090L300L	21	0.90	S / L	300	-	L	-
1168057	F10028S106L220ML	28	1.06	S / L	220	-	ML	-
1167844	F10028S106L060L	28	1.06	S / L	60	-	L	-
1004705	F10033S090L150L	33	0.90	S / L	150	-	L	FM Choice
1004658	F10033S090L200L	33	0.90	S / L	200	-	L	FM Choice
1167852	F10033S090L200ML	33	0.90	S / L	200	-	ML	-
1006713	F10033S090L300L	33	0.90	S / L	300	-	L	FM Choice
1167857	F10033S130L150L	33	1.30	S / L	150	-	L	-
1171891	F10035S050L300L	35	0.50	S / L	300	-	L	-
1017546	F10037S050L150L	37	0.50	S / L	150	-	L	FM Choice
1007502	F10037S050L300L	37	0.50	S / L	300	-	L	FM Choice
1026472	F10053S090L300L	53	0.90	S / L	300	-	L	FM Choice
1018654	F10055B180G300HL	55	1.80	B / G	300	-	HL	-
1168303	F10062S090G300ML	62	0.90	S / G	300	-	ML	-
1172586	F10062S090L200L	62	0.90	S / L	200	-	L	-
1171850	F10062S090L300L	62	0.90	S / L	300	-	L	-
1171871	F10063S150L300L	63	1.50	S / L	300	-	L	-

BASIC PROBES 100 MIL / 2.54 MM



FM Choice

F100HP

Progressive Series | Up to 5 A | 100 mil/2.54 mm | ICT application

Electrical specifications

Current [A]	5
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°		
Preload [cN]	110	130	200
Spring force [cN] at nt ±20%	150	200	300
Nominal travel [mm]	4.3	4.3	4.3
Maximum travel [mm]	6.4	6.4	6.4

Materials and plating

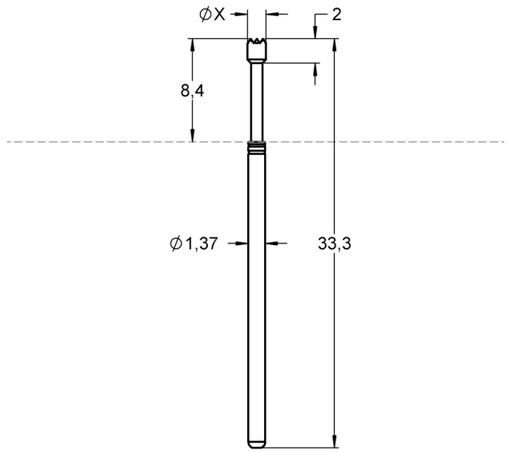
Plunger	BeCu	gold plated
	BeCu	palladium alloy plated
	Steel	palladium alloy plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H100 on page 57-59.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1135349	F10005B200P200HP	05	2.00	B / P	200	-	HP	FM Choice
1019980	F10006B200P300HP	06	2.00	B / P	300	-	HP	FM Choice
1170299	F10007S150P100HP	07	1.50	S / P	100	-	HP	
1017617	F10010S060P150HPRP	10	0.60	S / P	150	-	HPRP	-
1026144	F10010S060P300	10	0.60	S / P	300	-	-	FM Choice
1039808	F10010S060P300HP	10	0.60	S / P	300	-	HP	FM Choice
1167843	F10014S130L300HP	14	1.30	S / L	300	-	HP	-
1137199	F10014S150P200HP	14	1.50	S / P	200	-	HP	-

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1001170	F10014S150P300HP	14	1.50	S / P	300	-	HP	FM Choice
1040481	F10015B150P150HP	15	1.50	B / P	150	-	HP	FM Choice
1036642	F10015B150P300HP	15	1.50	B / P	300	-	HP	FM Choice
1010207	F10021S090P200HP	21	0.90	S / P	200	-	HP	FM Choice
1010160	F10021S090P300HP	21	0.90	S / P	300	-	HP	FM Choice
1014293	F10032S090P300HP	32	0.90	S / P	300	-	HP	-
1018693	F10033S090P150HP	33	0.90	S / P	150	-	HP	-
1010205	F10033S090P200HP	33	0.90	S / P	200	-	HP	FM Choice
1172565	F10033S090L300HP	33	0.90	S / L	300	-	HP	-
1009991	F10033S090P300HP	33	0.90	S / P	300	-	HP	FM Choice
1038017	F10035S150P200HP	35	1.50	S / P	200	-	HP	FM Choice
1036217	F10035S150P300HP	35	1.50	S / P	300	-	HP	FM Choice
1169776	F10037B030P200HP	37	0.30	B / P	200	-	HP	-
1169779	F10037S030P200HP	37	0.30	S / P	200	-	HP	-
1135612	F10037S050P200HP	37	0.50	S / P	200	-	HP	FM Choice
1014768	F10037S050P300HP	37	0.50	S / P	300	-	HP	-
1132220	F10038S090P300HP	38	0.90	S / P	300	-	HP	-
1010206	F10043S090P200HP	43	0.90	S / P	200	-	HP	FM Choice
1010165	F10043S090P300HP	43	0.90	S / P	300	-	HP	FM Choice
1172558	F10044S026P200HP	44	0.26	S / P	200	-	HP	-
1172564	F10044S026P300HP	44	0.26	S / P	300	-	HP	-
1137813	F10054S157P200HP	54	1.57	S / P	200	-	HP	-
1015552	F10062S090P150HP	62	0.90	S / P	150	-	HP	FM Choice
1010208	F10062S090P200HP	62	0.90	S / P	200	-	HP	FM Choice
1010167	F10062S090P300HP	62	0.90	S / P	300	-	HP	-
1137408	F10063B150P200HP	63	1.50	B / P	200	-	HP	FM Choice
1169674	F10079B090P150HP	79	0.90	B / P	150	-	HP	-



FM Choice

F100HPL

Progressive Series | Up to 5 A | 100 mil/2.54 mm | ICT application

Electrical specifications

Current [A]	5		
R TYP [mOhm]	<20		

Mechanical specifications

Temperature [°C]	-45°...+80°		
Preload [cN]	75	130	200
Spring force [cN] at nt ±20%	130	200	300
Nominal travel [mm]	4.3	4.3	4.3
Maximum travel [mm]	6.4	6.4	6.4

Materials and plating

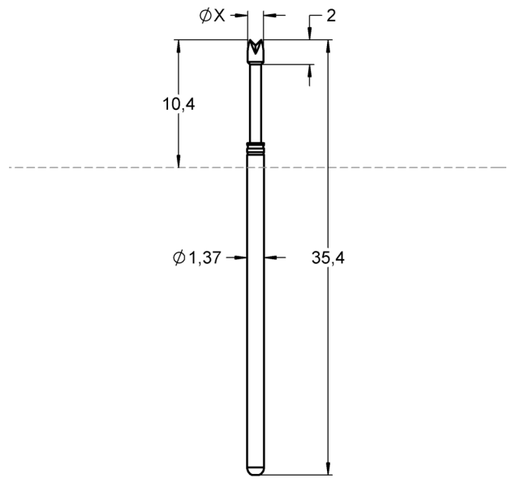
Plunger	Steel	longtime gold plated
	Steel	palladium alloy plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H100 on page 57-59.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1017051	F10014S150L200HPL	14	1.50	S / L	200	-	HPL	-
1010318	F10021S090P200HPL	21	0.90	S / P	200	-	HPL	-
1010320	F10021S090P300HPL	21	0.90	S / P	300	-	HPL	-
1014294	F10032S090P300HPL	32	0.90	S / P	300	-	HPL	-
1020073	F10033S090L200HPL	33	0.90	S / L	200	-	HPL	FM Choice
1017908	F10033S090P130HPL	33	0.90	S / P	130	-	HPL	FM Choice
1010258	F10033S090P200HPL	33	0.90	S / P	200	-	HPL	FM Choice
1010324	F10033S090P300HPL	33	0.90	S / P	300	-	HPL	FM Choice

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1010319	F10043S090P200HPL	43	0.90	S / P	200	-	HPL	-
1010325	F10062S090P300HPL	62	0.90	S / P	300	-	HPL	FM Choice



H100 (RECEPTACLE)

100 mil/2.54 mm | for probe types F100, F585, F588

Materials and plating

Receptacle	Nickel silver	gold plated

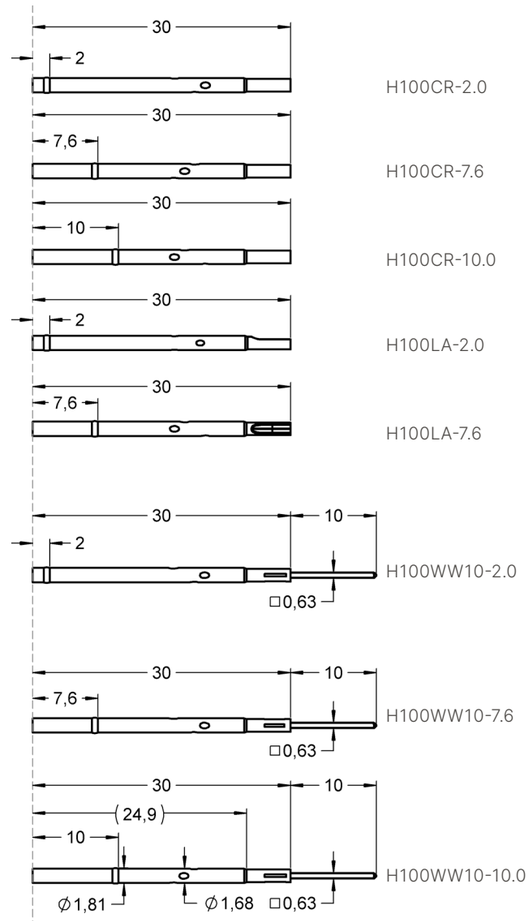
Accessories

1008392	FEWZ-100EV	Insertion tool receptacle
1014264	FEWZ-100E0	Insertion tool receptacle

Drill size recommendation (mm)

H100...	Press ring as stop	1.67 - 1.69
H100...	Press ring inserted	1.70 - 1.75

Order code	Product name	Press ring position [mm]	Connection
1010853	H100CR-2.0	2.0	CR
1010815	H100CR-7.6	7.6	CR
1010817	H100CR-10.0	10.0	CR
1010816	H100LA-2.0	2.0	LA
1010818	H100LA-7.6	7.6	LA
1010829	H100WW10-2.0	2.0	WW
1010822	H100WW10-7.6	7.6	WW
1010823	H100WW10-10.0	10.0	WW



The insertion depth 24.9 mm and outer diameter 1.68 mm are the same for all receptacles shown above. Different dimensions are listed.



H100 (RECEPTACLE)

100 mil/2.54 mm | for probe types
F100, F585, F588

Materials and plating

Receptacle	Nickel silver	gold plated

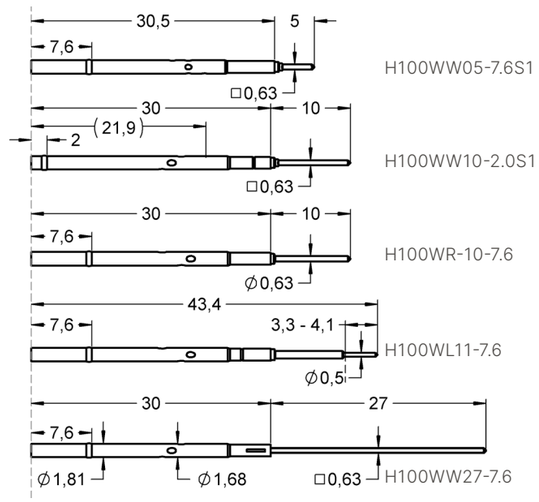
Accessories

1008392	FEWZ-100EV	Insertion tool receptacle
1014264	FEWZ-100E0	Insertion tool receptacle

Drill size recommendation (mm)

H100...	Press ring as stop	1.67 - 1.69
H100...	Press ring inserted	1.70 - 1.75

Order code	Product name	Press ring position [mm]	Connec-tion
1014852	H100WW05-2.0	2.0	WW
1010830	H100WW10-2.0S1	2.0	WW
1023581	H100WR10-7.6	7.6	WR
1012174	H100WL11-7.6	7.6	WL
1169637	H100WW27-7.6	7.6	WW



The insertion depth 24.9 mm and outer diameter 1.68 mm are the same for all receptacles shown above. Different dimensions are listed.



H100AT (RECEPTACLE)

100 mil/2.54 mm | for probe types
F100, F585, F588 | Airtight

Materials and plating

Receptacle	Nickel silver	gold plated

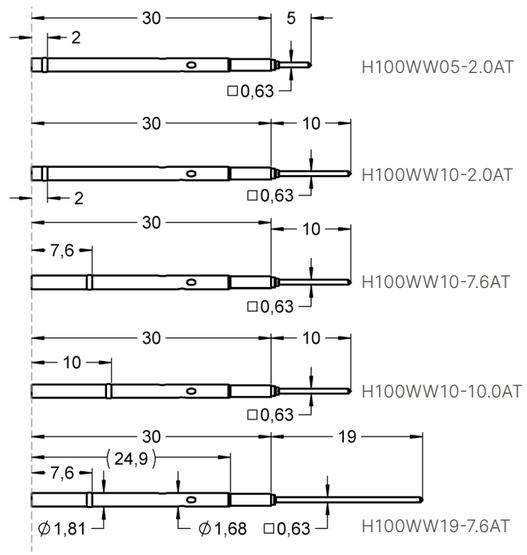
Accessories

1008392	FEWZ-100EV	Insertion tool receptacle
1014264	FEWZ-100E0	Insertion tool receptacle

Drill size recommendation (mm)

H100...	Press ring as stop	1.67 - 1.69
H100...	Press ring inserted	1.70 - 1.75

Order code	Product name	Press ring position [mm]	Connec-tion
1014852	H100WW05-2.0AT	2.0	WW
1092162	H100WW10-2.0AT	2.0	WW
1092165	H100WW10-7.6AT	7.6	WW
1092174	H100WW10-10.0AT	10.0	WW
1010831	H100WW19-7.6AT	7.6	WW



The insertion depth 24.9 mm and outer diameter 1.68 mm are the same for all receptacles shown above. Different dimensions are listed.



F771

Up to 5 A | 100 mil/2.54 mm | Limited space

Electrical specifications

Current [A]	5
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°	
Preload [cN]	50	100
Spring force [cN] at nt ±20%	150	300
Nominal travel [mm]	3.5	3.5
Maximum travel [mm]	4.4	4.4

Materials and plating

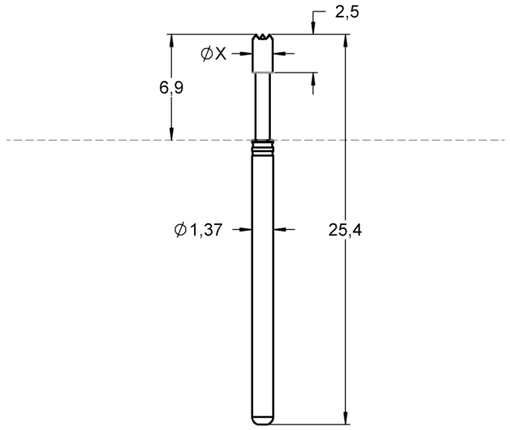
Plunger	BeCu	gold plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H502 on page 64.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1007914	F77105B180G150	05	1.80	B / G	150	-	-	-
1007530	F77106B130G150	06	1.30	B / G	150	-	-	-
1007529	F77106B180G150	06	1.80	B / G	150	-	-	-
1007527	F77111B065G150	11	0.65	B / G	150	-	-	-
1007528	F77111B075G150	11	0.75	B / G	150	-	-	-
1043630	F77111B075G300	11	0.75	B / G	300	-	-	-
1007532	F77115B180G150	15	1.80	B / G	150	-	-	-
1043631	F77117B180G150	17	1.80	B / G	150	-	-	-



F562H

Up to 5 A | 100 mil/2.54 mm | Limited space

Electrical specifications

Current [A]	5
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+200°	
Preload [cN]	60	100
Spring force [cN] at nt ±20%	150	200
Nominal travel [mm]	2.7	2.7
Maximum travel [mm]	4.1	4.1

Materials and plating

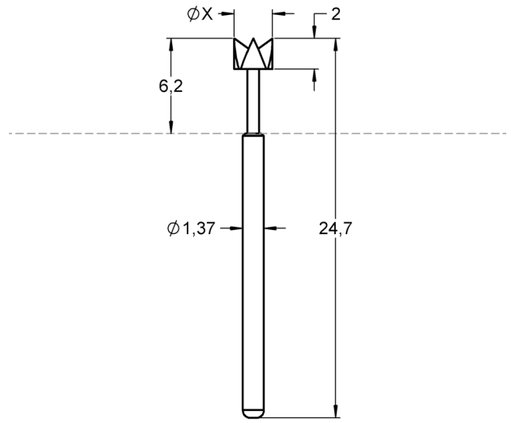
Plunger	Steel	longtime gold plated
Barrel	Nickel silver	gold plated
Spring	Stainless steel	gold plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H502 on page 64.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1027188	F56205S190L150H	05	1.90	S / L	150	-	H	-
1024575	F56214S250L200H	14	2.50	S / L	200	-	H	-
1036073	F56221S076L150H	21	0.76	S / L	150	-	H	-



F562

Up to 5 A | 100 mil/2.54 mm | Limited space

Electrical specifications

Current [A]	5
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°		
Preload [cN]	60	60	60
Spring force [cN] at nt ±20%	100	150	200
Nominal travel [mm]	2.7	2.7	2.7
Maximum travel [mm]	4.1	4.1	4.1

Materials and plating

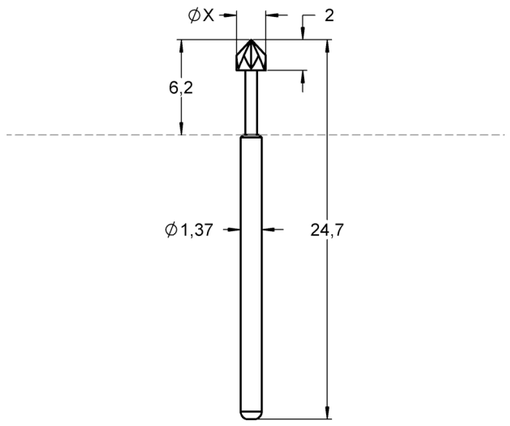
Plunger	BeCu	gold plated
	Steel	longtime gold plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H502 on page 64.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1003070	F56204B190G150	04	1.90	B / G	150	-	-	-
1016098	F56205S190L100	05	1.90	S / L	100	-	-	-
1001346	F56205S190L150	05	1.90	S / L	150	-	-	-
1001347	F56205S190L200	05	1.90	S / L	200	-	-	-
1001348	F56206B190G100	06	1.90	B / G	100	-	-	-
1001317	F56206B190G150	06	1.90	B / G	150	-	-	-
1001318	F56206B190G200	06	1.90	B / G	200	-	-	-
1001319	F56207S190L150	07	1.90	S / L	150	-	-	-
1016099	F56212B190G100	12	1.90	B / G	100	-	-	-

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1001320	F56214S190L150	14	1.90	S / L	150	-	-	-
1001321	F56214S190L200	14	1.90	S / L	200	-	-	-
1001322	F56215B190G100	15	1.90	B / G	100	-	-	-
1001323	F56215B190G150	15	1.90	B / G	150	-	-	-
1001324	F56215B190G200	15	1.90	B / G	200	-	-	-
1019610	F56218B076G100	18	0.76	B / G	100	-	-	-
1001325	F56218B076G150	18	0.76	B / G	150	-	-	-
1001326	F56218B076G200	18	0.76	B / G	200	-	-	-
1001327	F56221S076L150	21	0.76	S / L	150	-	-	-



H502 (RECEPTACLE)

100 mil/2.54 mm | for probe types F771, F562

Materials and plating

Receptacle	Nickel silver	gold plated

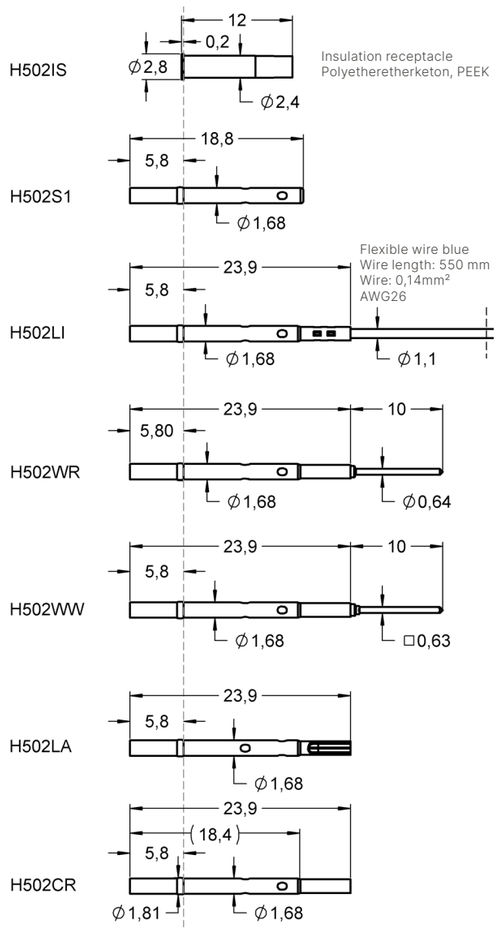
Accessories

1008392	FEWZ-100EV	Insertion tool receptacle
1014264	FEWZ-100E0	Insertion tool receptacle

Drill size recommendation (mm)

H502...	Press ring as stop	1.67 - 1.69
H502...	Press ring inserted	1.70 - 1.75

Order code	Product name	Press ring position [mm]	Connection
1001699	H502CR	5.8	CR
1001700	H502LA	5.8	LA
1001702	H502WW	5.8	WW
1018682	H502WR	5.8	WR
1001701	H502LI	5.8	LI
1003099	H502S1	5.8	-
1006520	H502IS	0.2	-



The insertion depth 18.4 mm and outer diameter are the same for all receptacles shown above. Different dimensions are listed.



F793

Up to 4 A | 75 mil/1.90 mm | FCT application

Electrical specifications

Current [A]	4
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°
Preload [cN]	20
Spring force [cN] at nt ±20%	120
Nominal travel [mm]	8.0
Maximum travel [mm]	10.0

Materials and plating

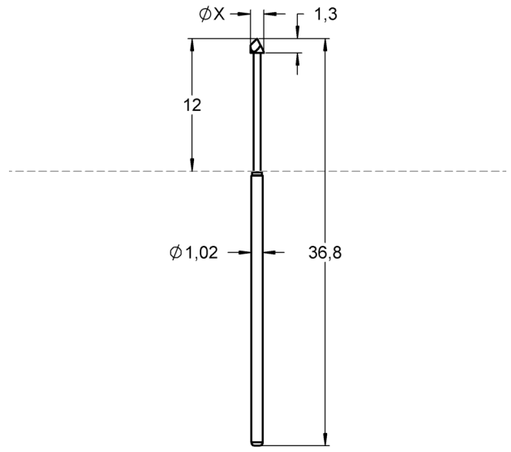
Plunger	BeCu / Steel	gold plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003587	FDWZ-075	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H075 on page 78-80.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1006533	F79306B120G120	06	1.20	B / G	120	-	-	-
1007492	F79312B120G120	12	1.20	B / G	120	-	-	-
1006535	F79314B120G120	14	1.20	B / G	120	-	-	-
1006534	F79315B120G120	15	1.20	B / G	120	-	-	-
1006383	F79321B064G120	21	0.64	B / G	120	-	-	-
1169451	F79321S064L120	21	0.64	S / L	120	-	-	-
1006898	F79330S064L120	30	0.64	S / L	120	-	-	-
1006707	F79333S064L120	33	0.64	S / L	120	-	-	-
1006536	F79338S064L120	38	0.64	S / L	120	-	-	-



FM Choice

F793L

Up to 4 A | 75 mil/1.90 mm | FCT application

Electrical specifications

Current [A]	4
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°
Preload [cN]	20
Spring force [cN] at nt ±20%	120
Nominal travel [mm]	8.0
Maximum travel [mm]	10.0

Materials and plating

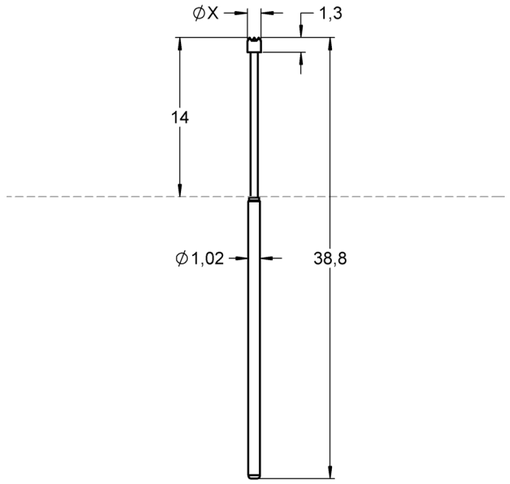
Plunger	BeCu	gold plated
	Steel	palladium alloy plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003587	FDWZ-075	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H075 on page 78-80.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1007132	F79306B120G120L	06	1.20	B / G	120	-	L	-
1035690	F79310S055P120RPL	10	0.55	S / P	120	-	RPL	-
1017853	F79312B120G120L	12	1.20	B / G	120	-	L	-
1008743	F79314B120G120L	14	1.20	B / G	120	-	L	-
1007133	F79315B120G120L	15	1.20	B / G	120	-	L	-
1007134	F79333S064L120L	33	0.64	S / L	120	-	L	FM Choice



FM Choice

F793HP / F793HPL

Progressive Series | Up to 4 A | 75 mil/1.90 mm | FCT application

Electrical specifications

Current [A]	4
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°
Preload [cN]	70
Spring force [cN] at nt ±20%	250
Nominal travel [mm]	8.0
Maximum travel [mm]	10.0

Materials and plating

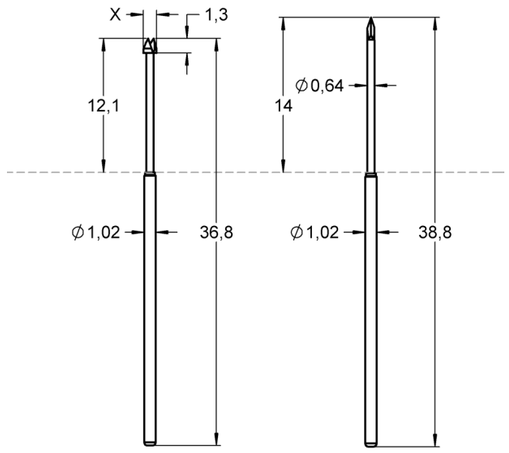
Plunger	Steel	palladium alloy plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003587	FDWZ-075	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H075 on page 78-80.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1013301	F79333S064P250HP	33	0.64	S / P	250	-	HP	FM Choice
1020550	F79333S064L250HPL	33	0.64	S / L	250	-	HPL	FM Choice
1042075	F79335S120P250HP	35	1.20	S / P	250	-	HP	FM Choice



FM Choice

F075

Up to 4 A | 75 mil/1.90 mm | ICT application

Electrical specifications

Current [A]	4
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°		
	-45°...+200° (H)		
Preload [cN]	50	70	100
Spring force [cN] at nt ±20%	100	150	280
Nominal travel [mm]	4.3	4.3	4.3
Maximum travel [mm]	6.4	6.4	6.4

Materials and plating

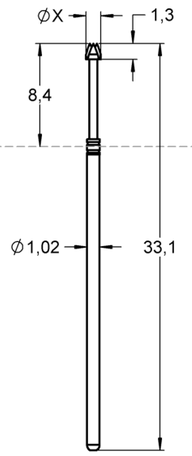
Plunger	BeCu	gold plated
	Steel	longtime gold plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003587	FDWZ-075	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H075 on page 78-80.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1170181	F07503B061G200	03	0.61	B / G	200	-	-	-
1169725	F07505B120G100	05	1.20	B / G	100	-	-	-
1017309	F07505B120G150	05	1.20	B / G	150	-	-	FM Choice
1017478	F07505B120G200	05	1.20	B / G	200	-	-	FM Choice
1010962	F07505B120G280	05	1.20	B / G	280	-	-	FM Choice
1168139	F07506B100G150	06	1.00	B / G	150	-	-	-
1018425	F07506B100G200	06	1.00	B / G	200	-	-	-
1014318	F07506B120G100	06	1.20	B / G	100	-	-	FM Choice

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1017310	F07506B120G150	06	1.20	B / G	150	-	-	FM Choice
1017504	F07506B120G200	06	1.20	B / G	200	-	-	FM Choice
1001394	F07506B120G280	06	1.20	B / G	280	-	-	FM Choice
1017337	F07506B130G150IK04	06	1.30	B / G	150	-	IK04	FM Choice
1017486	F07506B130G200IK04	06	1.30	B / G	200	-	IK04	FM Choice
1017351	F07506B130G280IK04	06	1.30	B / G	280	-	IK04	-
1018424	F07507S120L200	07	1.20	S / L	200	-	-	FM Choice
1112258	F07507S120L200H	07	1.20	S / L	200	-	H	FM Choice
1168144	F07507S120L280	07	1.20	S / L	280	-	-	-
1017451	F07510S050L100RP	10	0.50	S / L	100	-	RP	-
1017311	F07510S050L150RP	10	0.50	S / L	150	-	RP	-
1017250	F07510S064L100	10	0.64	S / L	100	-	-	-
1017312	F07510S064L150	10	0.64	S / L	150	-	-	-
1007813	F07510S064L280	10	0.64	S / L	280	-	-	-
1168145	F07511B050G060	11	0.50	B / G	60	-	-	-
1168146	F07511B050G200	11	0.50	B / G	200	-	-	-
1017251	F07511B064G100	11	0.64	B / G	100	-	-	FM Choice
1017313	F07511B064G150	11	0.64	B / G	150	-	-	-
1017515	F07511B064G200	11	0.64	B / G	200	-	-	-
1007430	F07511B064G280	11	0.64	B / G	280	-	-	FM Choice
1004062	F07514S078L280	14	0.78	S / L	280	-	-	-
1168147	F07514S100L150	14	1.00	S / L	150	-	-	-
1170184	F07514S100L200	14	1.00	S / L	200	-	-	-
1109249	F07514S120L100	14	1.20	S / L	100	-	-	-
1017288	F07514S120L150	14	1.20	S / L	150	-	-	-
1017552	F07514S120L200	14	1.20	S / L	200	-	-	FM Choice
1007434	F07514S120L280	14	1.20	S / L	280	-	-	-
1000750	F07515B090G200	15	0.90	B / G	200	-	-	-
1168153	F07515S100L200	15	1.00	S / L	200	-	-	-
1017265	F07515B120G100	15	1.20	B / G	100	-	-	-
1017299	F07515B120G150	15	1.20	B / G	150	-	-	FM Choice
1168163	F07515S120L200	15	1.20	S / L	200	-	-	-

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1017516	F07515B120G200	15	1.20	B / G	200	-	-	FM Choice
1001395	F07515B120G280	15	1.20	B / G	280	-	-	FM Choice
1017314	F07517B120G100	17	1.20	B / G	100	-	-	-
1017300	F07517B120G150	17	1.20	B / G	150	-	-	-
1017506	F07517B120G200	17	1.20	B / G	200	-	-	-
1172185	F07518S064L150	18	0.64	S / L	150	-	-	-
1014557	F07518B064G180H	18	0.64	B / G	180	-	H	-
1168164	F07518S064L200	18	0.64	S / L	200	-	-	-
1001396	F07518B078G280	18	0.78	B / G	280	-	-	-
1017297	F07521S064L100	21	0.64	S / L	100	-	-	-
1017319	F07521S064L150	21	0.64	S / L	150	-	-	FM Choice
1017502	F07521S064L200	21	0.64	S / L	200	-	-	FM Choice
1017320	F07530S064L150	30	0.64	S / L	150	-	-	-
1139344	F07530S064L200	30	0.64	S / L	200	-	-	-
1007803	F07530S064L280	30	0.64	S / L	280	-	-	-
1168169	F07532S064L150	32	0.64	S / L	150	-	-	-
1017266	F07533S064L100	33	0.64	S / L	100	-	-	FM Choice
1017283	F07533S064L150	33	0.64	S / L	150	-	-	FM Choice
1017518	F07533S064L200	33	0.64	S / L	200	-	-	FM Choice
1168171	F07533S064L200H	33	0.64	S / L	200	-	H	-
1006812	F07533S064L280	33	0.64	S / L	280	-	-	FM Choice
1001397	F07533S078L280	33	0.78	S / L	280	-	-	-
1168194	F07534S064L200	34	0.64	S / L	200	-	-	-
1167977	F07535S050L150	35	0.50	S / L	150	-	-	-
1092210	F07535S050L280	35	0.50	S / L	280	-	-	-
1169498	F07536S120L150	36	1.20	S / L	150	-	-	-
1170028	F07536S120L200	36	1.20	S / L	200	-	-	-
1170018	F07536S120L200H	36	1.20	S / L	200	-	H	-
1017551	F07536B120G200	36	1.20	B / G	200	-	-	FM Choice
1001398	F07536B120G280	36	1.20	B / G	280	-	-	FM Choice
1168129	F07537B030G150	37	0.30	B / G	150	-	-	-
1006727	F07537B050G150	37	0.50	B / G	150	-	-	-

BASIC PROBES 75 MIL / 1.90 MM

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1170038	F07537S050L150	37	0.50	S / L	150	-	-	-
1017505	F07537B050G200	37	0.50	B / G	200	-	-	-
1170042	F07537S050L200	37	0.50	S / L	200	-	-	-
1004759	F07537B050G280	37	0.50	B / G	280	-	-	-
1017415	F07538S064L150	38	0.64	S / L	150	-	-	-
1017477	F07538S064L200	38	0.64	S / L	200	-	-	-
1007799	F07538S064L280	38	0.64	S / L	280	-	-	-
1017352	F07541B130G280IK04	41	1.30	B / G	280	-	-	-
1017280	F07543S064L100	43	0.64	S / L	100	-	-	FM Choice
1017416	F07543S064L150	43	0.64	S / L	150	-	-	FM Choice
1017519	F07543S064L200	43	0.64	S / L	200	-	-	FM Choice
1007594	F07543S064L280	43	0.64	S / L	280	-	-	FM Choice
1035081	F07553S064L280	53	0.64	S / L	280	-	-	FM Choice
1168165	F07555B120G150	55	1.20	B / G	150	-	-	-
1172582	F07555B150G200	55	1.50	B / G	200	-	-	-
1168168	F07562S064L200	62	0.64	S / L	200	-	-	-
1007607	F07563S120L130	63	1.20	S / L	130	-	-	FM Choice
1017417	F07563S120L150	63	1.20	S / L	150	-	-	FM Choice
1170050	F07563B120G200	63	1.20	B / G	200	-	-	-
1017490	F07563S120L200	63	1.20	S / L	200	-	-	FM Choice
1008310	F07563S120L280	63	1.20	S / L	280	-	-	FM Choice
1017519	F07543S064L200	43	0.64	S / L	200	-	-	FM Choice
1007594	F07543S064L280	43	0.64	S / L	280	-	-	FM Choice
1035081	F07553S064L280	53	0.64	S / L	280	-	-	FM Choice
1007607	F07563S120L130	63	1.20	S / L	130	-	-	FM Choice
1017417	F07563S120L150	63	1.20	S / L	150	-	-	FM Choice
1017490	F07563S120L200	63	1.20	S / L	200	-	-	FM Choice
1008310	F07563S120L280	63	1.20	S / L	280	-	-	FM Choice
1166609	F07579B064G150	79	0.64	B / G	150	-	-	-
1168195	F07579B064G280	79	0.64	B / G	280	-	-	-



FM Choice

F075L

Up to 4 A | 75 mil/1.90 mm | ICT application

Electrical specifications

Current [A]	4	
R TYP [mOhm]	<20	

Mechanical specifications

Temperature [°C]	-45°...+80°		
Preload [cN]	70	70	100
Spring force [cN] at nt ±20%	150	200	280
Nominal travel [mm]	4.3	4.3	4.3
Maximum travel [mm]	6.4	6.4	6.4

Materials and plating

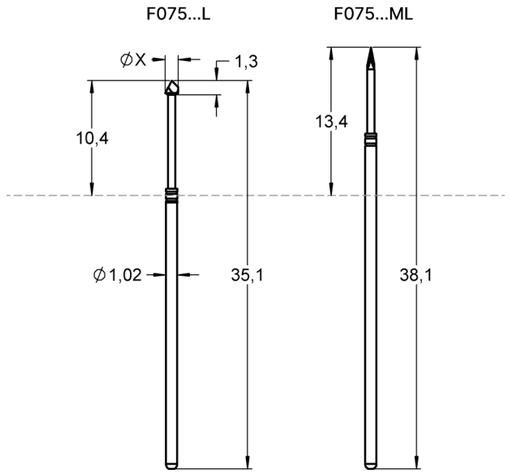
Plunger	BeCu	gold plated
	Steel	longtime gold plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003587	FDWZ-075	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H075 on page 78-80.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1169667	F07505B120G200L	05	1.20	B / G	200	-	L	-
1168143	F07506B120G150L	06	1.20	B / G	280	-	L	-
1018365	F07506B120G280L	06	1.20	B / G	280	-	L	FM Choice
1017285	F07511B064G150L	11	0.64	B / G	150	-	L	FM Choice
1017489	F07511B064G200L	11	0.64	B / G	200	-	L	FM Choice
1018423	F07515B120G200L	15	1.20	B / G	200	-	L	FM Choice
1007593	F07521S064L280L	21	0.64	S / L	280	-	L	-

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1004663	F07533S064L150L	33	0.64	S / L	150	-	L	FM Choice
1017485	F07533S064L200L	33	0.64	S / L	200	-	L	FM Choice
1006540	F07533S064L280L	33	0.64	S / L	280	-	L	FM Choice
1168192	F07533S064L200ML	33	0.64	S / L	200	-	ML	-
1005035	F07538S064L150L	38	0.64	S / L	150	-	L	-
1026475	F07553S064L280L	53	0.64	S / L	280	-	L	-
1172579	F07562S064L280L	62	0.64	S / L	280	-	L	-



FM Choice

F075HP

Progressive Series | Up to 4 A | 75 mil/1.90 mm | ICT application

Electrical specifications

Current [A]	4
R TYP [mOhm]	<40

Mechanical specifications

Temperature [°C]	-45°...+80°		
Preload [cN]	70	120	130
Spring force [cN] at nt ±20%	130	200	250
Nominal travel [mm]	4.3	4.3	4.3
Maximum travel [mm]	6.4	6.4	6.4

Materials and plating

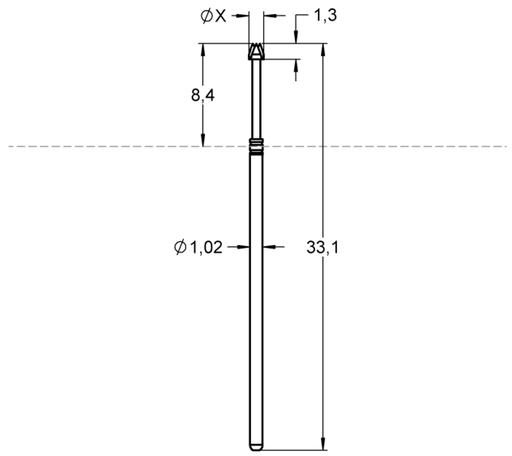
Plunger	Steel	palladium alloy plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003587	FDWZ-075	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H075 on page 78-80.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1030563	F07514S120P250HP	21	1.20	S / P	250	-	HP	FM Choice
1010210	F07521S064P200HP	21	0.64	S / P	200	-	HP	FM Choice
1010169	F07521S064P250HP	21	0.64	S / P	250	-	HP	FM Choice
1014301	F07532S064P250HP	32	1.20	S / P	250	-	HP	-
1016294	F07533S064P130HP	33	0.64	S / P	130	-	HP	-
1010209	F07533S064P200HP	33	0.64	S / P	200	-	HP	FM Choice
1010077	F07533S064P250HP	33	0.64	S / P	250	-	HP	FM Choice
1033612	F07535S120P250HP	35	1.20	S / P	250	-	HP	-
1038209	F07535S120P200HP	35	1.20	S / P	200	-	HP	-

BASIC PROBES 75 MIL / 1.90 MM

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1135611	F07537B050P200HP	37	0.50	S / P	200	-	HP	-
1169773	F07537B030P200HP	37	0.30	S / P	200	-	HP	-
1167099	F07537S030P300HP	37	0.30	S / P	300	-	HP	-
1170047	F07537S050L280HP	37	0.50	S / P	280	-	HP	-
1171946	F07538S064P280HP	38	0.64	S / P	280	-	HP	-
1010388	F07543S064P130HP	43	0.64	S / P	130	-	HP	FM Choice
1010211	F07543S064P200HP	43	0.64	S / P	200	-	HP	-
1010170	F07543S064P250HP	43	0.64	S / P	250	-	HP	FM Choice
1145256	F07543S064P300HP	43	0.64	S / P	300	-	HP	FM Choice
1171952	F07544S026P200HP	44	0.26	S / P	200	-	HP	-
1172180	F07544S026P280HP	44	0.26	S / P	280	-	HP	-
1010212	F07562S064P200HP	62	0.64	S / P	200	-	HP	FM Choice
1010171	F07562S064P250HP	62	0.64	S / P	250	-	HP	-
1169693	F07579B064P150HP	79	0.64	S / P	150	-	HP	-



FM Choice

F075HPL

Progressive Series | Up to 4 A | 75 mil/1.90 mm | ICT application

Electrical specifications

Current [A]	4
R TYP [mOhm]	<40

Mechanical specifications

Temperature [°C]	-45°...+80°	
Preload [cN]	120	130
Spring force [cN] at nt ±20%	200	250
Nominal travel [mm]	4.3	4.3
Maximum travel [mm]	6.4	6.4

Materials and plating

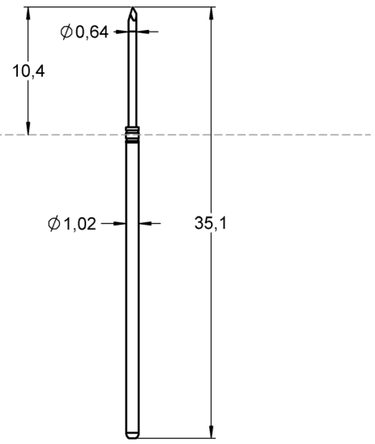
Plunger	Steel	palladium alloy plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003587	FDWZ-075	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H075 on page 78-80.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1053951	F07521S064P200HPL	21	0.64	S / P	200	-	HPL	-
1010292	F07521S064P250HPL	21	0.64	S / P	250	-	HPL	-
1014299	F07532S064P250HPL	32	0.64	S / P	250	-	HPL	-
1001149	F07533S064L200HPL	33	0.64	S / P	200	-	HPL	-
1010288	F07533S064P200HPL	33	0.64	S / P	200	-	HPL	FM Choice
1010291	F07533S064P250HPL	33	0.64	S / P	250	-	HPL	-
1010289	F07543S064P200HPL	43	0.64	S / P	200	-	HPL	FM Choice
1010290	F07562S064P200HPL	62	0.64	S / P	200	-	HPL	FM Choice



F703

Up to 4 A | 75 mil/1.90 mm | ICT application

Electrical specifications

Current [A]	4
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°
Preload [cN]	70
Spring force [cN] at nt ±20%	150
Nominal travel [mm]	4.3
Maximum travel [mm]	6.4

Materials and plating

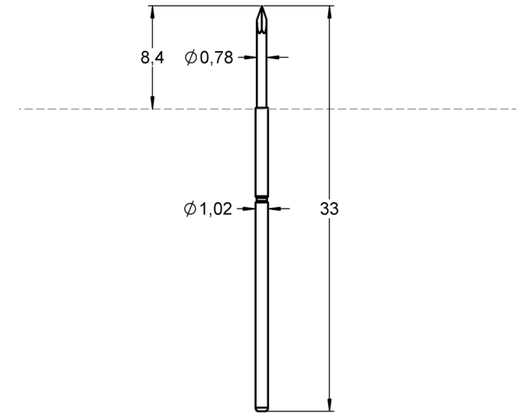
Plunger	BeCu	gold plated
	Steel	longtime gold plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003587	FDWZ-075	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H075 on page 78-80.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1017943	F70311B078G150	11	0.78	B / G	150	-	-	-
1017949	F70318B078G150	18	0.78	B / G	150	-	-	-
1017942	F70321S078L150	21	0.78	S / L	150	-	-	-
1017953	F70333S078L150	33	0.78	S / L	150	-	-	-



H075 (RECEPTACLE)

75 mil/1.90 mm | for probe types F075, F703, F793

Materials and plating

Receptacle	Brass	gold plated

Accessories

1008325	FEWZ-075EV	Insertion tool receptacle
1014311	FEWZ-075E0	Insertion tool receptacle

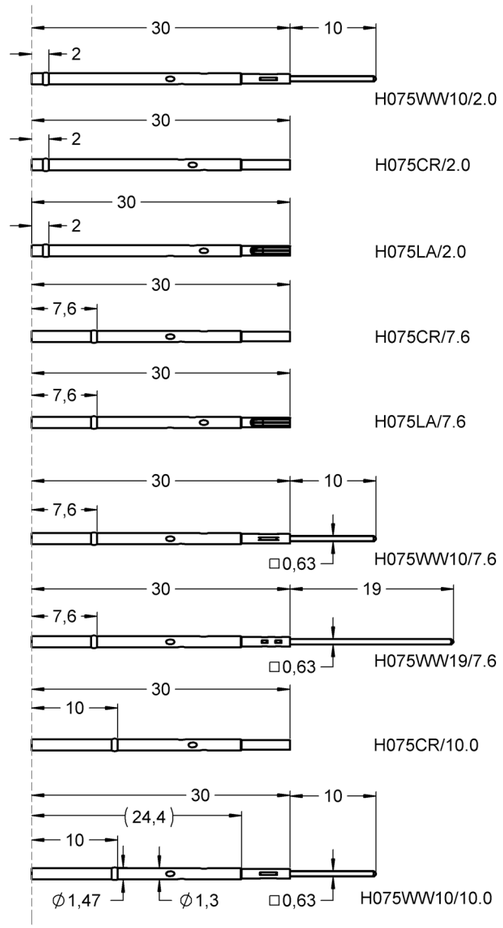
Drill size recommendation (mm)

H075...	Press ring as stop	1.29 - 1.30
H075...	Press ring inserted	1.36 - 1.40

Order code	Product name	Press ring position [mm]	Connection
1010806	H075CR-2.0	2.0	CR
1010805	H075CR-7.6	7.6	CR
1010807	H075CR-10.0	10.0	CR
1013135	H075LA-2.0	2.0	LA
1010808	H075LA-7.6	7.6	LA
1010827	H075WW10-2.0	7.6	WW
1010826	H075WW10-7.6	7.6	WW
1010836	H075WW19-7.6	10.0	WW
1010835	H075WW10-10.0	7.6	WW

Series drawing

All measurements are in mm.



The insertion depth 24.4 mm and outer diameter 1.3 mm are the same for all receptacles shown above. Different dimensions are listed.

BASIC PROBES 75 MIL / 1.90 MM



H075 (RECEPTACLE)

75 mil/1.90 mm | for probe types F075, F703, F793

Materials and plating

Receptacle	Brass	gold plated

Accessories

1008325	FEWZ-075EV	Insertion tool receptacle
1014311	FEWZ-075E0	Insertion tool receptacle

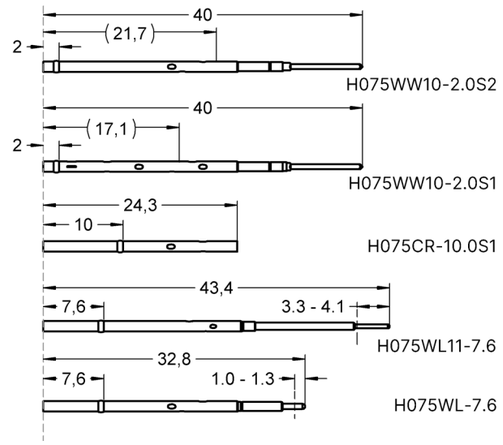
Drill size recommendation (mm)

H075...	Press ring as stop	1.29 - 1.30
H075...	Press ring inserted	1.36 - 1.40

Order code	Product name	Press ring position [mm]	Connection
1011930	H075WW10-2.0S2	2.0	WW
1010828	H075WW10-2.0S1	2.0	WW
1057693	H075CR-10.0S1	10.0	CR
1012173	H075WL11-7.6	7.6	WL
1026400	H075WL-7.6	7.6	WL

Series drawing

All measurements are in mm.



The insertion depth 24.4 mm and outer diameter 1.3 mm are the same for all receptacles shown above. Different dimensions are listed.



H075AT (RECEPTACLE)

75 mil/1.90 mm | for probe types
F075, F703, F793 | airtight

Materials and plating

Receptacle	Brass	gold plated

Accessories

1008325	FEWZ-075EV	Insertion tool receptacle
1014311	FEWZ-075E0	Insertion tool receptacle

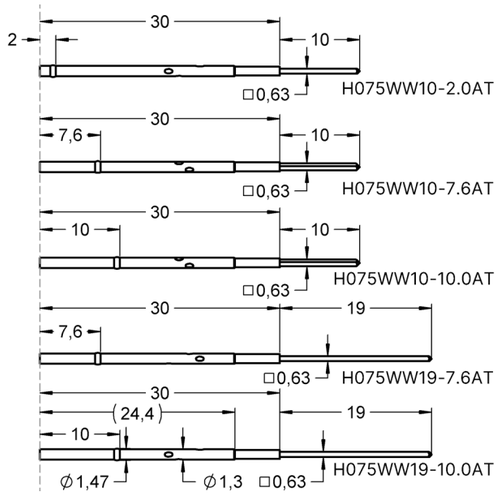
Drill size recommendation (mm)

H075...	Press ring as stop	1.29 - 1.30
H075...	Press ring inserted	1.36 - 1.40

Order code	Product name	Press ring position [mm]	Connec-tion
1092190	H075WW10-2.0AT	2.0	WW
1092208	H075WW10-7.6AT	7.6	WW
1092209	H075WW10-10.0AT	7.6	WW
1143245	H075WW19-7.6AT	10.0	WW
1133640	H075WW19-10.0AT	7.6	WW

Series drawing

All measurements are in mm.



The insertion depth 24.4 mm and outer diameter 1.3 mm are the same for all receptacles shown above. Different dimensions are listed.



H561 (RECEPTACLE)

75 mil/1.90 mm | for probe types
F561

Materials and plating

Receptacle	Nickel silver	gold plated

Accessories

1014311	FEWZ-075E0	Insertion tool receptacle

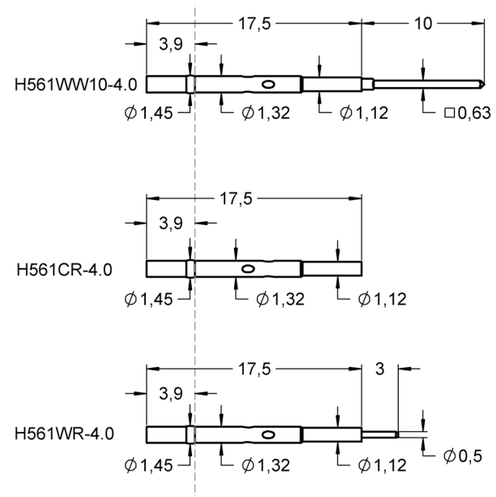
Drill size recommendation (mm)

H561...	Press ring as stop	1.29 - 1.30
H561...	Press ring inserted	1.36 - 1.40

Order code	Product name	Press ring position [mm]	CXN
1019594	H561WW10-4.0	3.9	WW
1019527	H561CR-4.0	3.9	CR
1019590	H561WR-4.0	3.9	WR

Series drawing

All measurements are in mm.



The insertion depth 12.5 mm and outer diameter 1.32 mm are the same for all receptacles shown above.



F561

Up to 4 A | 75 mil/1.90 mm | Limited space

Electrical specifications

Current [A]	4
R TYP [mOhm]	<40

Mechanical specifications

Temperature [°C]	-45°...+80°		
Preload [cN]	30	50	70
Spring force [cN] at nt ±20%	80	100	150
Nominal travel [mm]	2.4	2.4	2.4
Maximum travel [mm]	3.0	3.0	3.0

Materials and plating

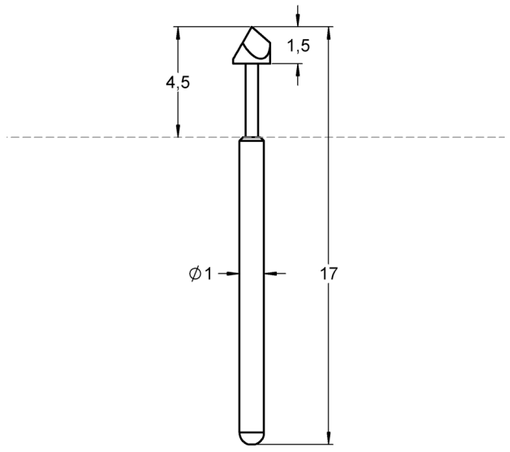
Plunger	BeCu	gold plated
Barrel	Bronze	gold plated
Spring	Spring steel	silver plated

Accessories

1003587	FDWZ-075	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H561 on page 81.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1019560	F56105B150G080	05	1.50	B / G	80	-	-	-
1019561	F56105B150G100	05	1.50	B / G	100	-	-	-
1019562	F56105B150G150	05	1.50	B / G	150	-	-	-
1171958	F56106B100G100	06	1.00	B / G	100	-	-	-
1168361	F56106B100G150	06	1.00	B / G	150	-	-	-
1019563	F56106B150G080	06	1.50	B / G	80	-	-	-
1019564	F56106B150G100	06	1.50	B / G	100	-	-	-
1019565	F56106B150G150	06	1.50	B / G	150	-	-	-

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1019566	F56111B050G080	11	0.50	B / G	80	-	-	-
1019567	F56111B050G100	11	0.50	B / G	100	-	-	-
1019568	F56111B050G150	11	0.50	B / G	150	-	-	-
1170055	F56112B100G100	12	1.00	B / G	100	-	-	-
1019526	F56115B150G080	15	1.50	B / G	80	-	-	-
1019535	F56115B150G100	15	1.50	B / G	100	-	-	-
1019536	F56115B150G150	15	1.50	B / G	150	-	-	-
1019569	F56118B050G080	18	0.50	B / G	80	-	-	-
1019571	F56118B050G150	18	0.50	B / G	150	-	-	-



F701

Up to 4 A | 75 mil/1.90 mm | Limited space

Electrical specifications

Current [A]	4
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°	
Preload [cN]	40	30
Spring force [cN] at nt ±20%	70	150
Nominal travel [mm]	4.0	4.0
Maximum travel [mm]	5.0	5.0

Materials and plating

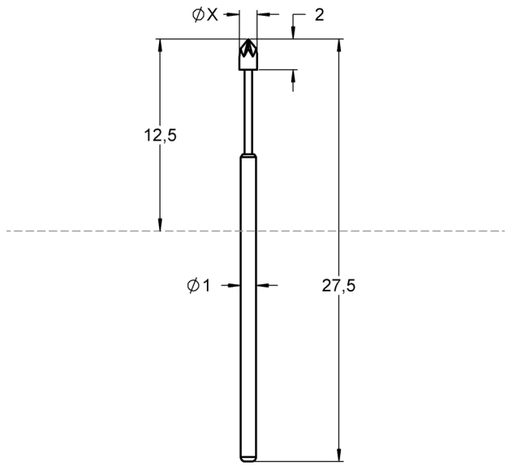
Plunger	BeCu	gold plated
	Steel	longtime gold plated
Barrel	Bronze	gold plated
Spring	Spring steel	silver plated

Accessories

1003587	FDWZ-075	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H701 on page 85.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1004844	F70105B150G150	05	1.50	B / G	150	-	-	-
1003296	F70106B115G150	06	1.15	B / G	150	-	-	-
1001491	F70107S115L150	07	1.15	S / L	150	-	-	-
1024502	F70111B050G070	11	0.50	B / G	70	-	-	-
1001493	F70114S115L150	14	1.15	S / L	150	-	-	-
1001494	F70115B130G150	15	1.30	B / G	150	-	-	-
1001495	F70118B050G150	18	0.50	B / G	150	-	-	-
1001496	F70121S050L150	21	0.50	S / L	150	-	-	-



H701 (RECEPTACLE)

75 mil/1.90 mm | for probe types F701

Materials and plating

Receptacle	Bronze	gold plated

Accessories

1014311	FEWZ-075E0	Insertion tool receptacle

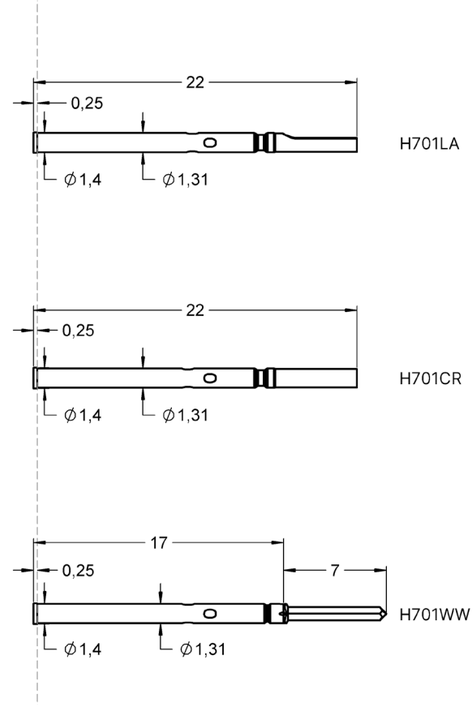
Drill size recommendation (mm)

H701...	Receptacle	1.31 - 1.32

Order code	Product name	Collar position [mm]	Connection
1001838	H701LA	0.25	CR
1001830	H701CR	0.25	CR
1001839	H701WW	0.25	CR

Series drawing

All measurements are in mm.



The insertion depth 15 mm and outer diameter 1.31 mm are the same for all receptacles shown above.



FM Choice

F050

Up to 3 A | 50 mil/1.27 mm | ICT application

Electrical specifications

Current [A]	3
R TYP [mOhm]	<10

Mechanical specifications

Temperature [°C]	-45°...+80°		
Preload [cN]	50	60	90
Spring force [cN] at nt ±20%	100	150	200
Nominal travel [mm]	4.3	4.3	4.3
Maximum travel [mm]	6.4	6.4	6.4

Materials and plating

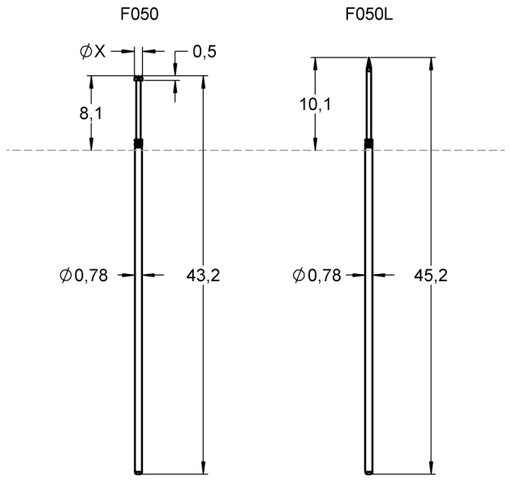
Plunger	BeCu	gold plated
	Steel	longtime gold plated
Barrel	Bronze	gold plated
Spring	BeCu	gold plated

Accessories

1003576	FDWZ-050	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H050 on page 91.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1037835	F05005B090G150	05	0.90	B / G	150	-	-	FM Choice
1017079	F05005B090G200	05	0.90	B / G	200	-	-	FM Choice
1172566	F05005B090G200H *	05	0.90	B / G	200	-	-	-
1169655	F05006B060G200	06	0.60	B / G	200	-	-	-
1010443	F05006B090G150	06	0.90	B / G	150	-	-	FM Choice
1017078	F05006B090G200	06	0.90	B / G	200	-	-	FM Choice
1010444	F05011B050G150	11	0.50	B / G	150	-	-	-
1000115	F05011B050G150L	11	0.50	B / G	150	-	L	-
1169802	F05011B050G100	11	0.50	B / G	100	-	-	-

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1169803	F05011B050G200	11	0.50	B / G	200	-	-	-
1017077	F05015B090G200	15	0.90	B / G	200	-	-	FM Choice
1169809	F05017B050G100	17	0.50	B / G	100	-	-	-
1097465	F05018S050L100	18	0.50	S / L	100	-	-	-
1010445	F05021S050L150	21	0.50	S / L	150	-	-	FM Choice
1000630	F05021S050L200	21	0.50	S / L	200	-	-	FM Choice
1010392	F05033S050L150	33	0.50	S / L	150	-	-	FM Choice
1010394	F05033S050L150L	33	0.50	S / L	150	-	L	FM Choice
1011940	F05033S050L200	33	0.50	S / L	200	-	-	FM Choice
1010393	F05038S050L150	38	0.50	S / L	150	-	-	-
1000339	F05038S050L200	38	0.50	S / L	200	-	-	-
1010865	F05043S050L150	43	0.50	S / L	150	-	-	FM Choice
1017093	F05043S050L200	43	0.50	S / L	200	-	-	FM Choice
1167610	F05062S050L200	62	0.50	S / L	200	-	-	-
1166663	F05079B050G100	79	0.50	B / G	100	-	-	-
1166650	F05079B050G150	79	0.50	B / G	150	-	-	-

* Materials or specifications may differ from the standard.



FM Choice

F050HP

Progressive Series | Up to 3 A |
50 mil/1.27 mm | ICT application

Electrical specifications

Current [A]	3
R TYP [mOhm]	<40

Mechanical specifications

Temperature [°C]	-45°...+80°	
Preload [cN]	80	125
Spring force [cN] at nt ±20%	130	200
Nominal travel [mm]	4.3	4.3
Maximum travel [mm]	6.4	6.4

Materials and plating

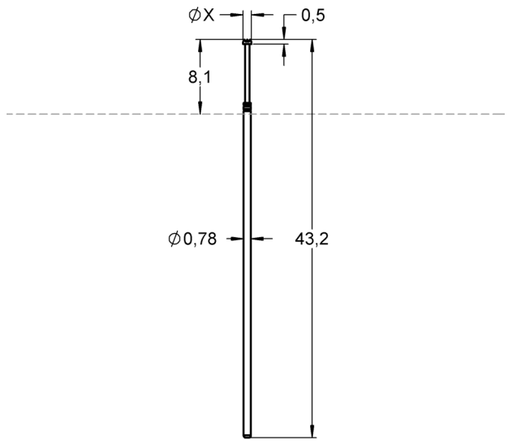
Plunger	BeCu	palladium alloy plated
	Steel	palladium alloy plated
Barrel	Bronze	gold plated
Spring	BeCu	gold plated

Accessories

1003576	FDWZ-050	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H050 on page 91.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1137414	F05006B090P200HP	06	0.90	B / P	200	-	HP	FM Choice
1010225	F05021S050P200HP	21	0.50	S / P	200	-	HP	FM Choice
1010224	F05033S050P200HP	33	0.50	S / P	200	-	HP	FM Choice
1137783	F05037B028P200HP	37	0.28	B / P	200	-	HP	-
1137239	F05037S028P200HP	37	0.28	S / P	200	-	HP	-
1010345	F05043S050P130HP	43	0.50	S / P	130	-	HP	FM Choice
1010226	F05043S050P200HP	43	0.50	S / P	200	-	HP	FM Choice
1010227	F05062S050P200HP	43	0.50	S / P	200	-	HP	FM Choice
1169713	F05079B050P100HP	79	0.50	B / P	100	-	HP	-



FM Choice

F050HPL

Progressive Series | Up to 3 A |
50 mil/1.27 mm | ICT application

Electrical specifications

Current [A]	3
R TYP [mOhm]	<10

Mechanical specifications

Temperature [°C]	-45°...+80°
Preload [cN]	120
Spring force [cN] at nt ±20%	200
Nominal travel [mm]	4.3
Maximum travel [mm]	6.4

Materials and plating

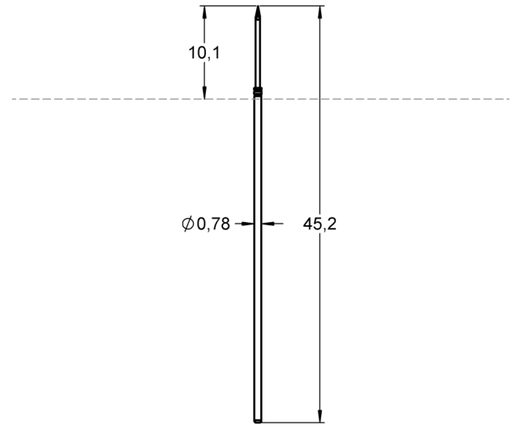
Plunger	Steel	palladium alloy plated
Barrel	Bronze	gold plated
Spring	BeCu	gold plated

Accessories

1003576	FDWZ-050	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H050 on page 91.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1019119	F05033S050P200HPL	33	0.50	S / P	200	-	HPL	FM Choice
1026814	F05043S050P200HPL	43	0.50	S / P	200	-	HPL	FM Choice



F051

Up to 3 A | 50 mil/1.27 mm | FCT application

Electrical specifications

Current [A]	3
R TYP [mOhm]	<40

Mechanical specifications

Temperature [°C]	-45°...+80°
Preload [cN]	35
Spring force [cN] at nt ±20%	150
Nominal travel [mm]	8.0
Maximum travel [mm]	10.0

Materials and plating

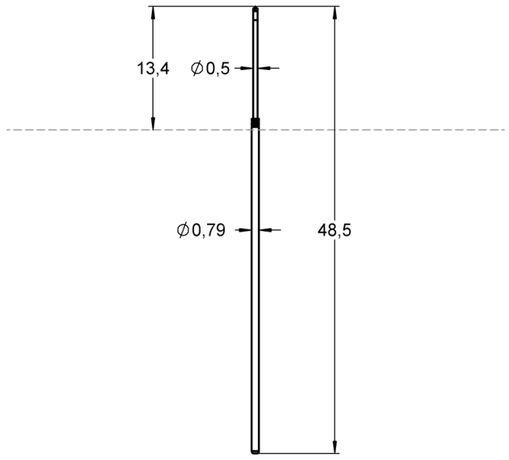
Plunger	BeCu	gold plated
	Steel	longtime gold plated
	Steel	palladium alloy plated
Barrel	Bronze	gold plated
Spring	BeCu	gold plated

Accessories

1003576	FDWZ-050	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H050 on page 91.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1000113	F05111B050G150	11	0.50	B / G	150	-	-	-
1000493	F05121S050L150	21	0.50	S / L	150	-	-	-
1011293	F05143S050L150	43	0.50	S / L	150	-	-	-
1011291	F05143S050P150	43	0.50	S / P	150	-	-	-



H050 (RECEPTACLE)

50 mil/1.27 mm | for probe types F050, F788

Materials and plating

Receptacle	Brass	gold plated

Accessories

1008393	FEWZ-050EV	Insertion tool receptacle
1014313	FEWZ-050E0	Insertion tool receptacle

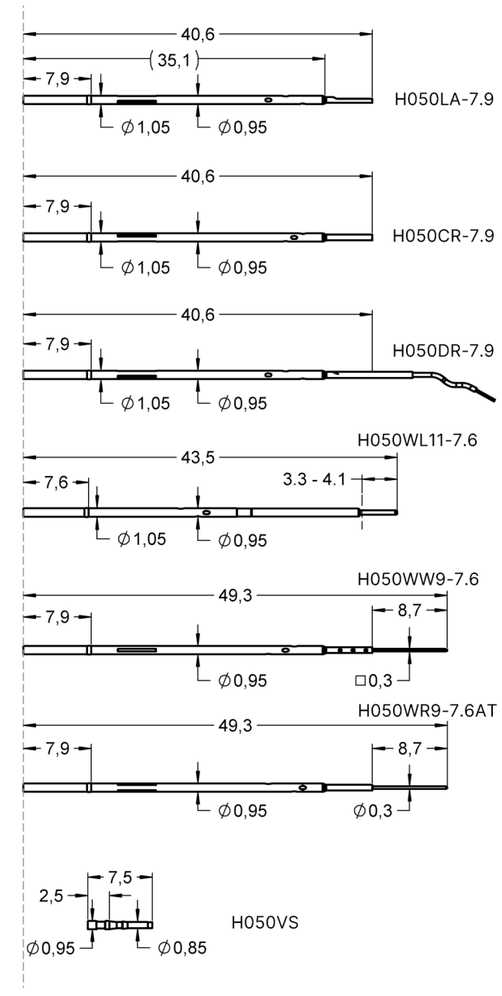
Drill size recommendation (mm)

H050...	Press ring as stop	0.95 - 0.97
H050...	Press ring inserted	0.98 - 1.01

Order code	Product name	Press ring position [mm]	Connec-tion
1010849	H050LA-7.9	7.9	LA
1010847	H050CR-7.9	7.9	CR
1010850	H050DR-7.9	7.9	DR
1012157	H050WL11-7.9	7.9	WL
1161590	H050WW9-7.9	7.9	WW
1165582	H050WR9-7.9AT	7.9	WR
1012107	H050VS	2.5	-

Series drawing

All measurements are in mm.



The insertion depth 35.1 mm and outer diameter 0.95 mm are the same for all receptacles shown above. Different dimensions are listed.



F788

Up to 3 A | 50 mil/1.27 mm | FCT application

Electrical specifications

Current [A]	3
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°	
Preload [cN]	30	30
Spring force [cN] at nt ±20%	165	180
Nominal travel [mm]	6.4	6.4
Maximum travel [mm]	7.0	7.0

Materials and plating

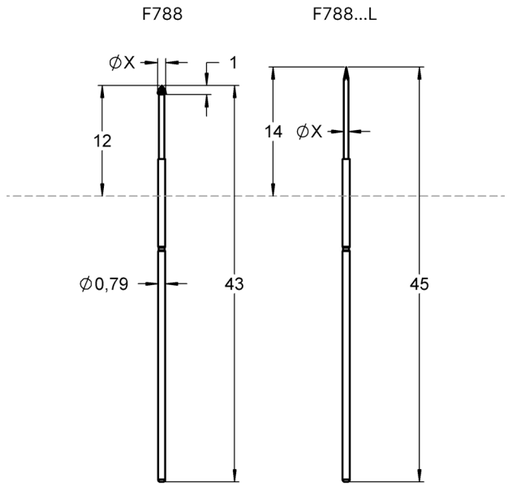
Plunger	BeCu	gold plated
	Steel	longtime gold plated
Barrel	Bronze	gold plated
Spring	Spring steel	silver plated

Accessories

1003576	FDWZ-050	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H787 on page 95.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1003732	F78805B090G165	05	0.90	B / G	165	-	-	-
1001558	F78806B090G165	06	0.90	B / G	165	-	-	-
1001547	F78807S090L165	07	0.90	S / L	165	-	-	-
1001550	F78821S060L165	21	0.60	S / L	165	-	-	-
1018641	F78833S050L165	33	0.50	S / L	165	-	-	-
1006037	F78833S050L165L	33	0.50	S / L	165	-	L	-
1001551	F78833S060L165	33	0.60	S / L	165	-	-	-
1007490	F78843S050L180	43	0.50	S / L	180			



F768

Up to 3 A | 50 mil/1.27 mm | Limited space

Electrical specifications

Current [A]	3
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°
Preload [cN]	50
Spring force [cN] at nt ±20%	130
Nominal travel [mm]	3.2
Maximum travel [mm]	4.0

Materials and plating

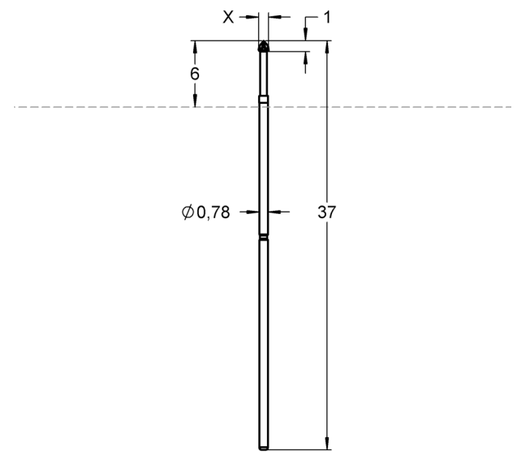
Plunger	BeCu	gold plated
	Steel	longtime gold plated
Barrel	Bronze	gold plated
Spring	Spring steel	silver plated

Accessories

1003576	FDWZ-050	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H787 on page 95.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1001610	F76806B090G130	06	0.90	B / G	130	-	-	-
1001611	F76807S090L130	07	0.90	S / L	130	-	-	-
1001612	F76811B060G130	11	0.60	B / G	130	-	-	-
1001613	F76818B060G130	18	0.60	B / G	130	-	-	-
1001614	F76821S060L130	21	0.60	S / L	130	-	-	-
1001615	F76828B090G130	28	0.90	B / G	130	-	-	-
1001617	F76833S060L130	33	0.60	S / L	130	-	-	-



F767

Up to 3 A | 50 mil/1.27 mm | ICT application

Electrical specifications

Current [A]	3
R TYP [mOhm]	<40

Mechanical specifications

Temperature [°C]	-45°...+80°	
	-45°...+200°	(H)
Preload [cN]	30	30
Spring force [cN] at nt ±20%	100	165
Nominal travel [mm]	6.4	6.4
Maximum travel [mm]	8.0	8.0

Materials and plating

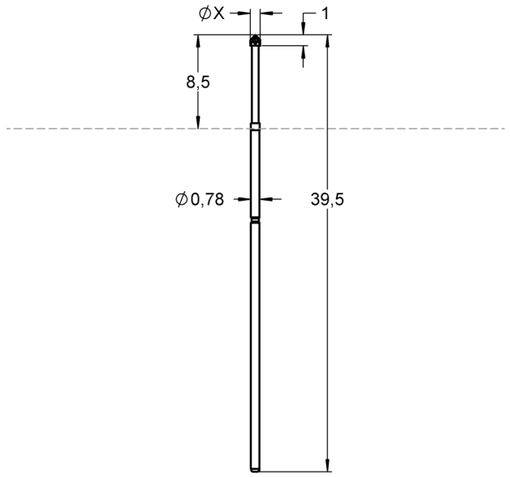
Plunger	BeCu	gold plated
	Steel	longtime gold plated
Barrel	Bronze	gold plated
Spring	BeCu	gold plated

Accessories

1003576	FDWZ-050	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H787 on page 95.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1019083	F76705B090G165	05	0.90	B / G	165	-	-	-
1004457	F76707S090L165	07	0.90	S / L	165	-	-	-
1004453	F76721S060L165	21	0.60	S / L	165	-	-	-
1031090	F76733S060L100H	33	0.60	S / L	100	-	H	-
1004447	F76733S060L165	33	0.60	S / L	165	-	-	-



H787 (RECEPTACLE)

50 mil/1.27 mm | For probe types F788, F767, F768

Materials and plating

Receptacle	Brass	gold plated

Accessories

1008393	FEWZ-050EV	Insertion tool receptacle
1014313	FEWZ-050E0	Insertion tool receptacle

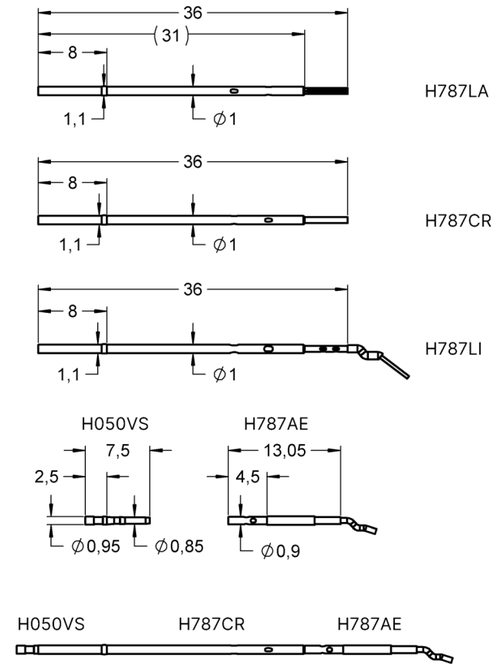
Drill size recommendation (mm)

H787...	Press ring as stop	0.99 - 1.00
H787...	Press ring inserted	1.05 - 1.07

Order code	Product name	Press ring position [mm]	CXN
1001860	H787LA	8.0	LA
1001854	H787CR	8.0	CR
1001861	H787LI	8.0	CR
1001853	H787AE	-	-
1012107	H050VS	2.5	-

Series drawing

All measurements are in mm.



The insertion depth 31 mm and outer diameter 1.0 mm are the same for all receptacles shown above. Different dimensions are listed.



F111

Up to 3 A | 50 mil/1.27 mm | Limited space

Electrical specifications

Current [A]	3
R TYP [mOhm]	<65

Mechanical specifications

Temperature [°C]	-45°...+80°	
Preload [cN]	20	20
Spring force [cN] at nt ±20%	40	85
Nominal travel [mm]	2.0	2.0
Maximum travel [mm]	2.8	2.8

Materials and plating

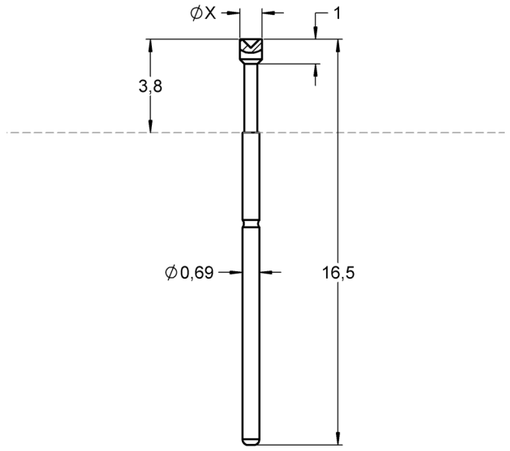
Plunger	BeCu	gold plated
	Steel	longtime gold plated
		nickel plated
		rhodium plated
Barrel	Bronze	gold plated
Spring	Spring steel	silver plated

Accessories

1003576	FDWZ-050	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H111 on page 99.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1001401	F11101S053N040	01	0.53	S / N	40	-	-	-
1001402	F11101S053N085	01	0.53	S / N	85	-	-	-
1001403	F11103S053N085	03	0.53	S / N	85	-	-	-
1085820	F11105S090L040	05	0.90	S / L	40	-	-	-
1001404	F11105S090L085	05	0.90	S / L	85	-	-	-
1003452	F11105S150L085	05	1.50	S / L	85	-	-	-
1001218	F11106B090G040	06	0.90	B / G	40	-	-	-

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1017909	F11106B090G085	07	0.90	B / G	85	-	-	-
1001406	F11107S090N040	07	0.90	S / N	40	-	-	-
1001407	F11107S090N085	07	0.90	S / N	85	-	-	-
1001408	F11109S090N040	09	0.90	S / N	40	-	-	-
1001409	F11109S090N085	09	0.90	S / N	85	-	-	-
1168432	F11111B053G100	11	0.53	B / G	100	-	-	-
1001411	F11112S090L040	12	0.90	S / L	40	-	-	-
1001412	F11112S090L085	12	0.90	S / L	85	-	-	-
1001414	F11114S090N040	14	0.90	S / N	40	-	-	-
1001415	F11114S090N085	14	0.90	S / N	85	-	-	-
1056795	F11117B090G040	17	0.90	B / G	40	-	-	-
1001350	F11118S053N040	18	0.53	S / N	40	-	-	-
1171959	F11118S053N070	18	0.53	S / N	70	-	-	-
1001351	F11118S053N085	18	0.53	S / N	85	-	-	-
1001352	F11118S053R085	18	0.53	S / R	85	-	-	-
1001354	F11121S053N040	21	0.53	S / N	40	-	-	-
1001355	F11121S053N085	21	0.53	S / N	85	-	-	-



F111H

Up to 3 A | 50 mil/1.27 mm | Limited space

Electrical specifications

Current [A]	3
R TYP [mOhm]	<65

Mechanical specifications

Temperature [°C]	-45°...+200°
Preload [cN]	40
Spring force [cN] at nt ±20%	95
Nominal travel [mm]	2.0
Maximum travel [mm]	2.8

Materials and plating

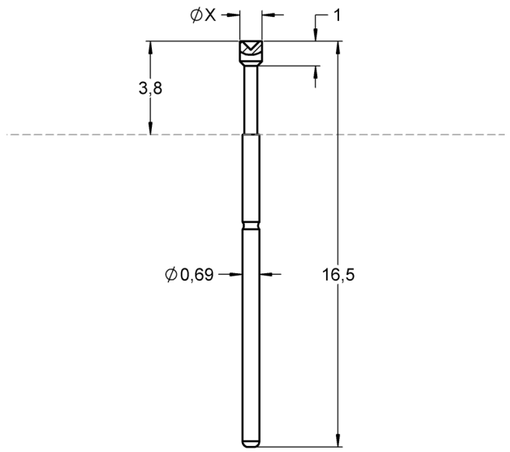
Plunger	Steel	longtime gold plated
		nickel plated
		rhodium plated
Barrel	Bronze	gold plated
Spring	Stainless steel	unplated

Accessories

1003576	FDWZ-050	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H111 on page 99.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1001405	F11105S090L095H	05	0.90	S / L	95	-	H	-
1001410	F11109S090N095H	09	0.90	S / N	95	-	H	-
1001413	F11112S090L095H	12	0.90	S / L	95	-	H	-
1013356	F11118S053L095H	18	0.53	S / L	95	-	H	-
1001353	F11118S053R095H	18	0.53	S / R	95	-	H	-
1084504	F11121S053N095H	21	0.53	S / N	95	-	H	-



H111 (RECEPTACLE)

50 mil/1.27 mm | For probe types F111, F112

Materials and plating

Receptacle	Bronze	gold plated

Accessories

1093953	FEWZ-111E25	Insertion tool receptacle
1000180	FEWZ-040E0	Insertion tool receptacle

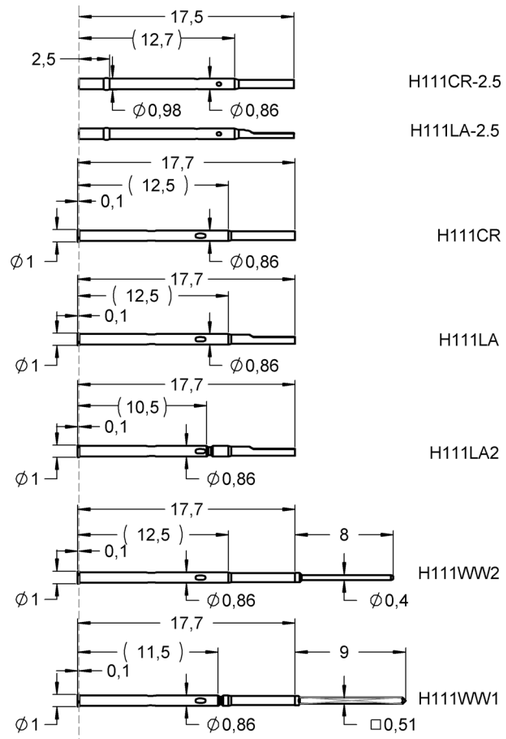
Drill size recommendation (mm)

H111...	Press ring inserted	0.88 - 0.92
H111...	With collar	0.83 - 0.84

Order code	Product name	Press ring position [mm]	CXN
1024435	H111LA/2.5	2.5	LA
1001691	H111LA	0.1	LA
1003472	H111LA1	0.1	LA
1003523	H111LA2	0.1	LA
1001690	H111CR	0.1	CR
1035075	H111CRS1	0.1	CR
1004576	H111WW1	0.1	WW
1004591	H111WW2	0.1	WW
1001692	H111LI	0.1	LI

Series drawing

All measurements are in mm.





F040

Up to 3 A | 40 mil/1.00 mm | ICT application

Electrical specifications

Current [A]	2
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°
Preload [cN]	40
Spring force [cN] at nt ±20%	80
Nominal travel [mm]	4.3
Maximum travel [mm]	6.4

Materials and plating

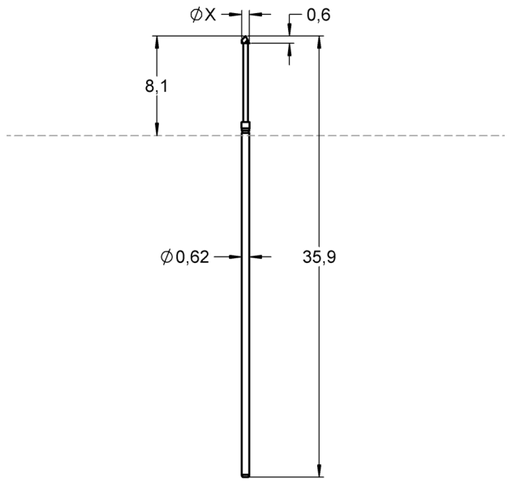
Plunger	BeCu	gold plated
	Steel	longtime gold plated
Barrel	Bronze	gold plated
Spring	Spring steel	gold plated

Accessories

1003576	FDWZ-050	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H040 on page 101.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1169648	F04011B040G080	11	0.40	B / G	80	-	-	-
1032015	F04015S060L080	15	0.60	S / L	80	-	-	-
1000144	F04018S038L080	18	0.38	S / L	80	-	-	-
1000143	F04029S038L080	29	0.38	S / L	80	-	-	-
1000145	F04033S038L080	33	0.38	S / L	80	-	-	-
1140612	F04033S038P080HP	33	0.38	S / P	80	-	HP	-
1000146	F04043S038L080	43	0.38	S / L	80	-	-	-
1124160	F04043S038P080HP	43	0.38	S / P	80	-	HP	-



H040 (RECEPTACLE)

40 mil/1.00 mm | For probe types F040

Materials and plating

Receptacle	Nickel silver	gold plated

Accessories

1000180	FEWZ-040E0	Insertion tool receptacle

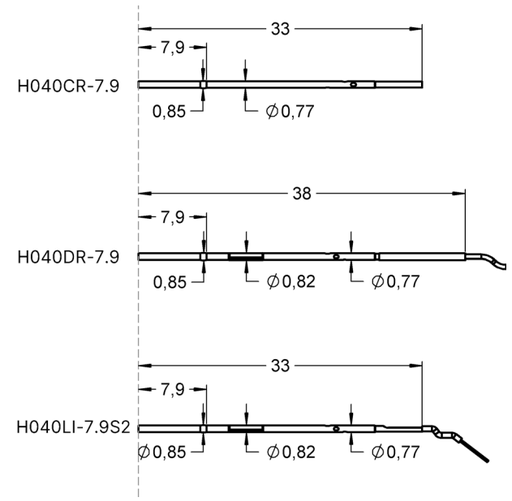
Drill size recommendation (mm)

H040...	Press ring as stop	0.80 - 0.81
H040...	Press ring inserted	0.82 - 0.83

Order code	Product name	Press ring position [mm]	CXN
1000157	H040CR-7.9/2.5	7.9	CR
1000156	H040DR-7.9	7.9	DR
1051278	H040LI-7.9S2	7.9	LI

Series drawing

All measurements are in mm.





F039

Up to 3 A | 40 mil/1.00 mm | ICT application

Electrical specifications

Current [A]	2
R TYP [mOhm]	<150

Mechanical specifications

Temperature [°C]	-45°...+80°		
Preload [cN]	10	40	60
Spring force [cN] at nt ±20%	30	80	130
Nominal travel [mm]	2.0	2.0	2.0
Maximum travel [mm]	3.7	3.7	3.7

Materials and plating

Plunger	BeCu	gold plated
	Stainless steel	gold plated
Barrel	Bronze	gold plated
Spring	Spring steel	silver plated

Accessories

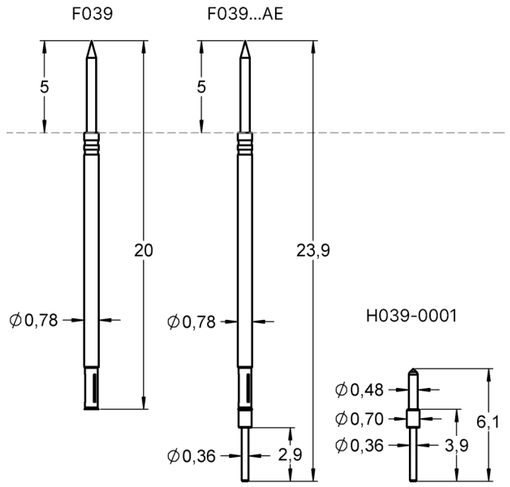
1026287	H039-0001	Connecting element
1052633	FDWZ-039	Insertion tool probe

Drill size recommendation (mm)

For barrel-Ø of probe	0.77 - 0.79

Series drawing

All measurements are in mm.



Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1031462	F03918B050G130	18	0.50	B / G	130	-	-	-
1031463	F03965B050G130AE	18	0.50	B / G	130	-	AE	-
1026456	F03918E050M030	18	0.50	E / M	30	-	-	-
1026271	F03918E050M130	18	0.50	E / M	130	-	-	-
1026272	F03918E050M130AE	18	0.50	E / M	130	-	AE	-
1029030	F03918S050L130AE	18	0.50	S / L	130	-	AE	-



F030

Up to 3 A | 30 mil/0.76 mm | ICT application

Electrical specifications

Current [A]	2
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°	
Preload [cN]	10	40
Spring force [cN] at nt ±20%	30	80
Nominal travel [mm]	4.3	4.3
Maximum travel [mm]	6.4	6.4

Materials and plating

Plunger	BeCu	gold plated
	Stainless steel	gold plated
Barrel	Bronze	gold plated
Spring	Spring steel	silver plated

Accessories

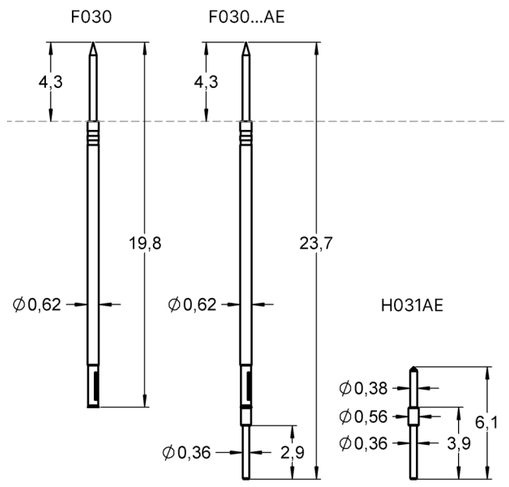
1029337	H031AE	Connecting element
1052633	FDWZ-039	Insertion tool probe

Drill size recommendation (mm)

For barrel-Ø of probe	0.61 - 0.63

Series drawing

All measurements are in mm.



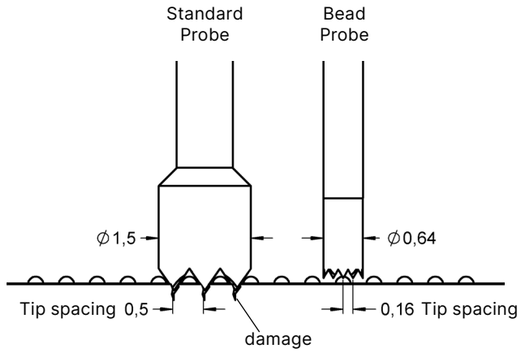
Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1043595	F03018B038G080	18	0.38	B / G	80	-	-	-
1043596	F03018B038G080AE	18	0.38	B / G	80	-	AE	-
1030195	F03018E038M030	18	0.38	E / M	30	-	-	-
1030194	F03018E038M030AE	18	0.38	E / M	30	-	AE	-
1029317	F03018E038M080	18	0.38	E / M	80	-	-	-
1029318	F03018E038M080AE	18	0.38	E / M	80	-	AE	-

CONTACTING SOLDER BEADS

Contacting solder beads

For contacting solder beads on PCBs, FEINMETALL has developed specialized spring contact probes. These applications require tip styles that ensure reliable contact without causing any damage to the board. Depending on the size and shape of the solder beads, several tip designs are available.

For heavily contaminated PCBs, the plungers of the Bead Probe Series can be plated with the functional Progressive Coating. This minimizes contamination and ensures a long life time.



Standard vs. bead probes
The image shows the contact of solder beads on an applied conductor track of a PCB. Standard contacts are usually too large and could damage the PCB.

Special versions

06 
Serrated (BP) stepped

06 
Serrated (BP)

79 
6-point crown flattened



BP100

Up to 5 A | 100 mil/2.54 mm | ICT application

Electrical specifications

Current [A]	5	
R TYP [mOhm]	<20	

Mechanical specifications

Temperature [°C]			-45°...+80°
Preload [cN]	80	80	150
Spring force [cN] at nt ±20%	150	200	300
Nominal travel [mm]	4.3	4.3	4.3
Maximum travel [mm]	6.4	6.4	6.4

Materials and plating

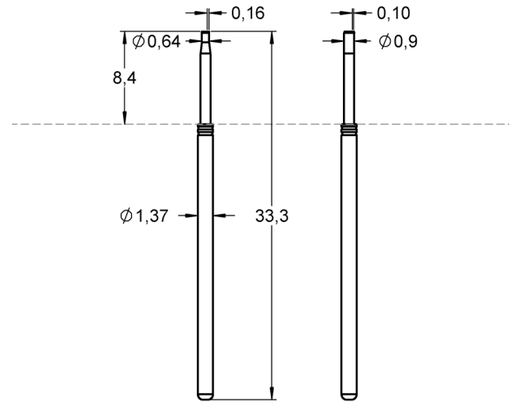
Plunger	BeCu	gold plated
	BeCu	palladium alloy plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H100 on page 57-59.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	Tip spacing [mm]
1170232	BP10006B064G200	06	0.64	B / G	200	-	-	0.16
1144505	BP10006B064P200	06	0.64	B / P	200	-	-	0.16
1172350	BP10006B090G150	06	0.90	B / G	150	-	-	0.10
1172351	BP10006B090G300	06	0.90	B / G	300	-	-	0.10
1138832	BP10006B090P150	06	0.90	B / P	150	-	-	0.10



BP075

Up to 4 A | 75 mil/1.90 mm | ICT application

Electrical specifications

Current [A]	4
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]		-45°...+80°
Preload [cN]	70	80
Spring force [cN] at nt ±20%	150	200
Nominal travel [mm]	4.3	4.3
Maximum travel [mm]	6.4	6.4

Materials and plating

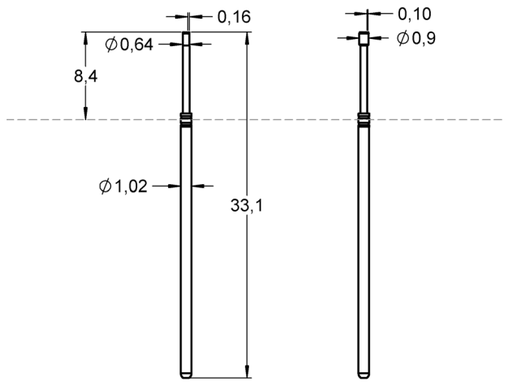
Plunger	BeCu	gold plated
	BeCu	palladium alloy plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003587	FDWZ-075	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H075 on page 78-80.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	Tip spacing [mm]
1170174	BP07506B064G200	06	0.64	B / G	200	-	-	0.16
1144470	BP07506B064P200	06	0.64	B / P	200	-	-	0.16
1138848	BP07506B090P150	06	0.90	B / P	150	-	-	0.10



BP050

Up to 3 A | 50 mil/1.27 mm | ICT application

Electrical specifications

Current [A]	3
R TYP [mOhm]	<10

Mechanical specifications

Temperature [°C]		-45°...+80°
Preload [cN]	60	90
Spring force [cN] at nt ±20%	150	200
Nominal travel [mm]	4.3	4.3
Maximum travel [mm]	6.4	6.4

Materials and plating

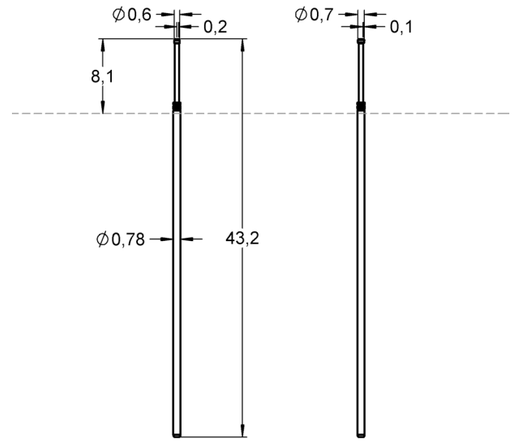
Plunger	BeCu	gold plated
	BeCu	palladium alloy plated
Barrel	Bronze	gold plated
Spring	Spring steel	gold plated

Accessories

1003576	FDWZ-050	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H050 on page 91.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	Tip spacing [mm]
1144409	BP05006B060P200	06	0.64	B / P	200	-	-	0.20
1138865	BP05006B070P150	06	0.90	B / P	150	-	-	0.10

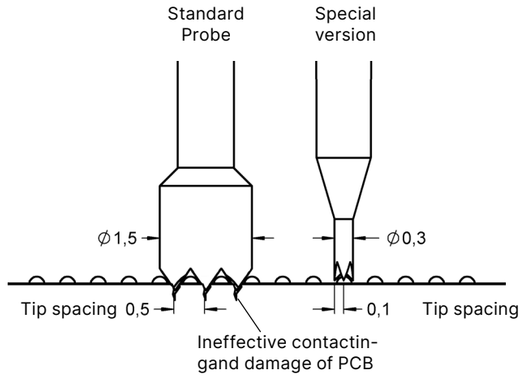
CONTACTING MINI BUMPS

Contacting mini bumps

Contacting mini-bumps on a PCB is primarily challenged by their extremely small size and high density.

By combining FEINMETALLs fine-pitch expertise with standard ICT applications, a tip design was developed that unites both fields: a standard ICT probe featuring a four-point crown tip with extremely small tip diameter of only 0.3 mm.

With a tip spacing as small as 0.1 mm, the design supports highly compact PCB geometries and ensures precise and reliable contacting of mini-bumps.



Standard tip styles vs. optimized tip styles
The image shows the contacting of mini-bumps on a PCB. Standard contact probes are typically too large for this application, which can result in unreliable testing. In many cases, the probe may fail to make contact at all, or it may touch multiple bumps simultaneously, potentially causing short circuits.

Special version

37



4-point crown
stepped

AVAILABE VARIANTS



Further information

The technical data and required accessories can be found under the relevant product families F100HP, F075HP, and F050HP.

Basic Probes 100 mil / 2.54 mm

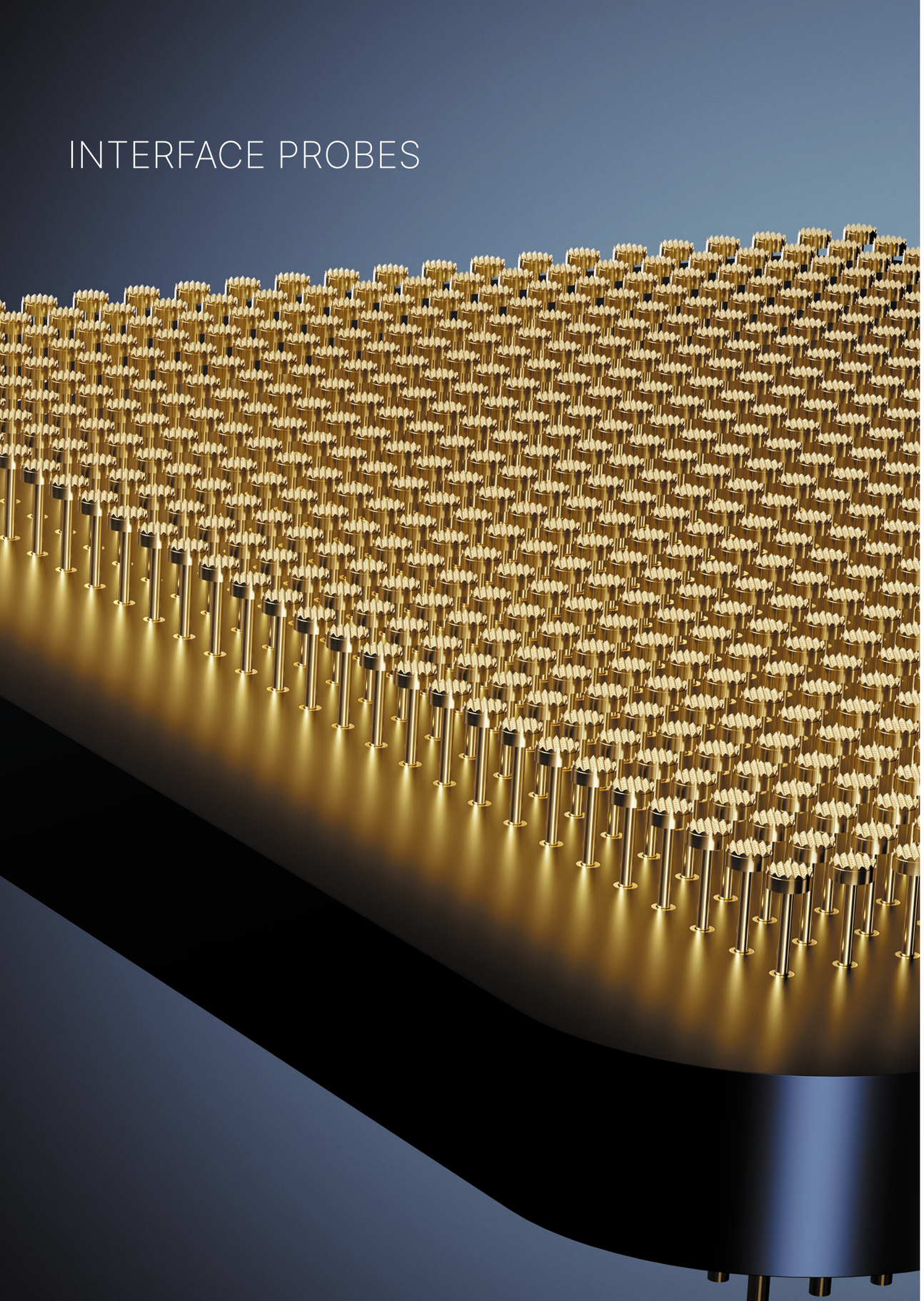
Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	Tip spacing [mm]
1169779	F10037S030P200HP	37	0.30	S / P	200	-	HP	0.16
1167096	F10037S030P300HP	37	0.30	S / P	300	-	HP	0.10

Basic Probes 75 mil / 1.90 mm

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	Tip spacing [mm]
1169778	F07537S030P200HP	37	0.30	S / P	200	-	HP	0.16
1167099	F07537S030P300HP	37	0.30	S / P	300	-	HP	0.10

Basic Probes 50 mil / 1.27 mm

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	Tip spacing [mm]
1137239	F05037S028P200HP	37	0.28	S / P	200	-	HP	0.10





FM Choice

F100

Up to 5 A | 138 mil/3.50 mm | Mint Pin for Agilent Testsystem

Electrical specifications

Current [A]	5
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°	
Preload [cN]	80	80
Spring force [cN] at nt ±20%	150	200
Nominal travel [mm]	4.3	4.3
Maximum travel [mm]	6.4	6.4

Materials and plating

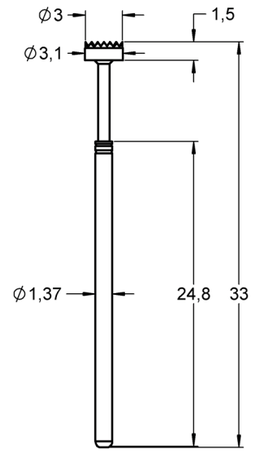
Plunger	BeCu	gold plated
Barrel	Brass	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H100 on page 57-59.

Order code	Product name	Tip style	Manufacturer	Testsystems	FM Choice
1018180	F10006B310G100	06	Agilent	HP3070; i3070; i5000	FM Choice
1018181	F10006B310G150	06	Agilent	HP3070; i3070; i5000	FM Choice
1130531	F10006B310G200	06	Agilent	HP3070; i3070; i5000	FM Choice
1018193	F10006B310G225	06	Agilent	HP3070; i3070; i5000	FM Choice



F100

Up to 5 A | 100 mil/2.54 mm | for defined Testsystems

Electrical specifications

Current [A]	5
R TYP [mOhm]	<20

Mechanical specifications

Temperature [°C]	-45°...+80°	
Preload [cN]	80	80
Spring force [cN] at nt ±20%	150	200
Nominal travel [mm]	4.3	4.3
Maximum travel [mm]	6.4	6.4

Materials and plating

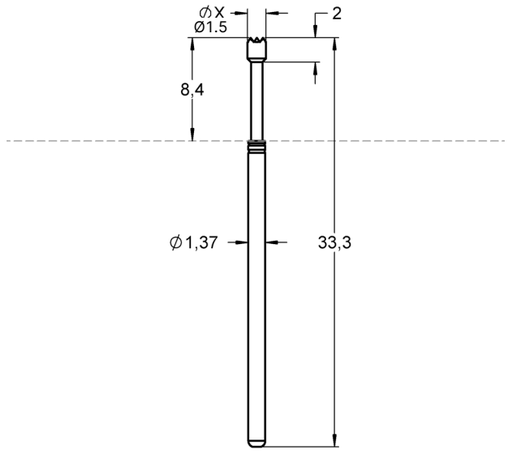
Plunger	BeCu	gold plated
Barrel	Brass	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H100 on page 57-59.

Order code	Product name	Tip style	Manufacturer	Testsystems
1011718	F10005B150G200	05	Spea	Easytest / Unitest
1013049	F10006B150G200	06	Spea	Easytest / Unitest
1017540	F10015B150G150	15	Factron	300/700 Schlumberger
1013342	F10015B150G200	15	Teradyne	Spectrum 885xx



F504

Up to 5 A | 100 mil/2.54 mm | For Testsystem Genrad 227x / 228x

Electrical specifications

Current [A]	5
R TYP [mOhm]	<35

Mechanical specifications

Temperature [°C]	-45°...+80°		
Preload [cN]	40	60	80
Spring force [cN] at nt ±20%	100	130	150
Nominal travel [mm]	2.0	2.4	2.4
Maximum travel [mm]	3.9	3.2	3.2

Materials and plating

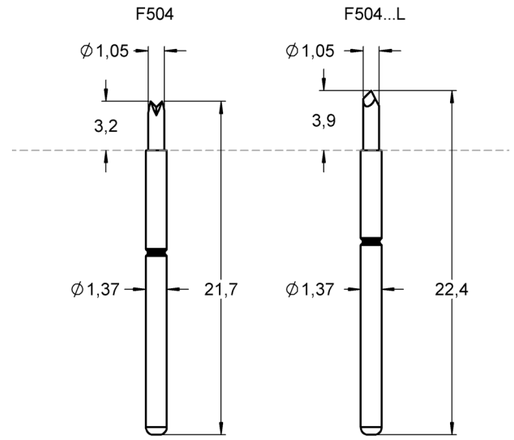
Plunger	BeCu	gold plated
Barrel	Nickel silver	gold plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H502 on page 64.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1001342	F50403B105G130L224	03	1.05	B / G	130	-	L224	-
1006323	F50418B105G100L224	18	1.05	B / G	100	-	L224	-
1013379	F50421B105G150L217	21	1.05	B / G	150	-	L217	-
1006653	F50430B105G100L224	30	1.05	B / G	100	-	L224	-



F502

Up to 5 A | 100 mil/2.54 mm | For Testsystem Luther & Maelzer

Electrical specifications

Current [A]	5
R TYP [mOhm]	<55

Mechanical specifications

Temperature [°C]	-45°...+80°
Preload [cN]	60
Spring force [cN] at nt ±20%	130
Nominal travel [mm]	2.7
Maximum travel [mm]	4.1

Materials and plating

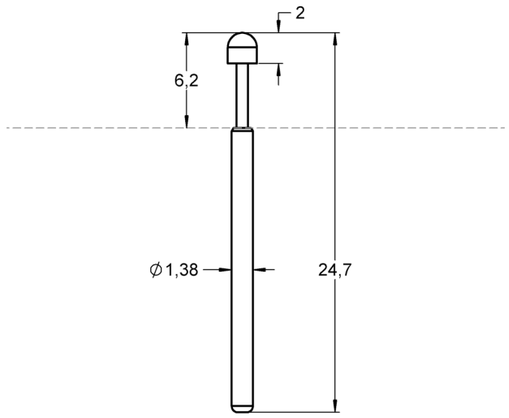
Plunger	Steel	nickel plated
Barrel	Bronze	silver plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

Series drawing

All measurements are in mm.



Overview of receptacles H502 on page 64.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1001375	F50203S076N130	03	0.76	S / N	130	-	-	-
1001377	F50209S190N130	09	1.90	S / N	130	-	-	-
1001341	F50212S190N130	12	1.90	S / N	130	-	-	-



F538

Up to 5 A | 100 mil/2.54 mm | For Testsystem Digitaltest MTS300, L&M LP1800

Electrical specifications

Current [A]	5
R TYP [mOhm]	<55

Mechanical specifications

Temperature [°C]	-45°...+80°
Preload [cN]	60
Spring force [cN] at nt ±20%	220
Nominal travel [mm]	2.7
Maximum travel [mm]	4.0

Materials and plating

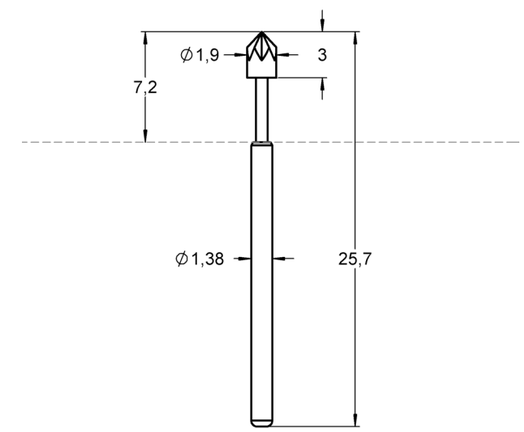
Plunger	Steel	nickel plated
Barrel	Bronze	silver plated
Spring	Spring steel	silver plated

Accessories

1003566	FDWZ-100	Insertion tool probe

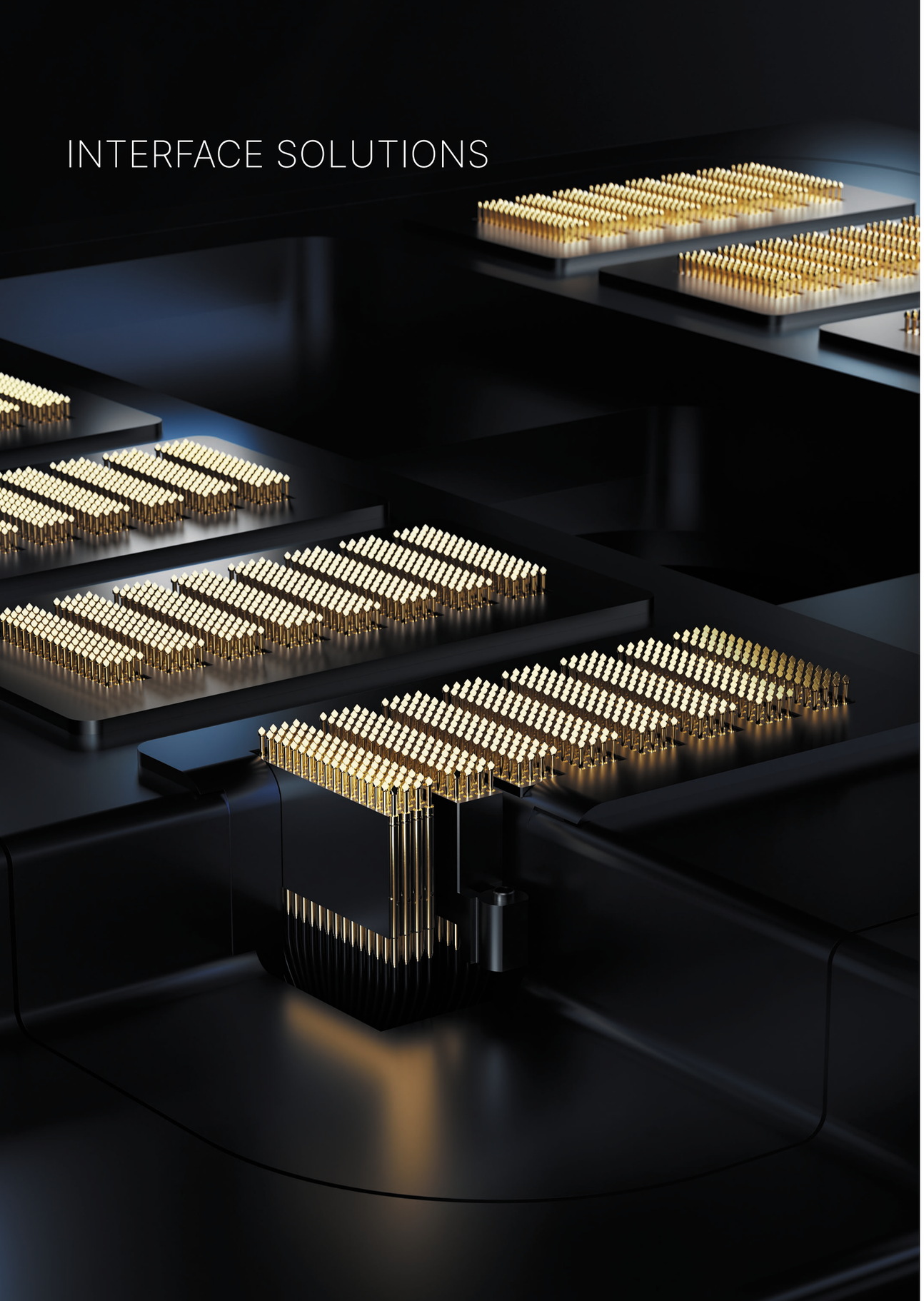
Series drawing

All measurements are in mm.



Overview of receptacles H502 on page 64.

Order code	Product name	Tip Style	Tip Ø [mm]	Material/ Plating	Force [cN]	Thread [M]	Version	FM Choice
1001344	F53807S130N220	07	1.30	S / N	220	-	-	-
1001345	F53807S190N220	07	1.30	S / N	220	-	-	-



NUMBER CODE SYSTEM

Explanation of our product names for Interface blocks

FEINMETALL Interface Blocks (Pylon blocks) are used as internal interface. The integrated spring contact probes guarantee a good signal transmission with low transfer resistances. This is only a selection of available signal blocks, further variants on request.

Series		Block type		Technical Feature		Tip Style / Connector		
IP-B	- R -		SB -	170	- 4A -	WW	- 30 -	FL
	Mounting side			Equipped contacts		Connection		Version

Mounting side

B = Both side possible
F = Fixture side
R = Receiver side

Block type

SB = Signal block
HF = High frequency block
HS = High current block
PB = Pneumatic block
BB = Blind block
MB = Mixed assembly

Equipped contacts / poles

for example:
001 = 1 Pole
030 = 30 Pole
085 = 85 Pole
170 = 170 Pole

May deviate from the maximum possible contacts.

Technical Feature

for example:
4A = 4 Ampere max. Current
6G = 6 GHz Frequency

Connection

CR = Crimp
DR = Wire
LA = Solder
WW = Wire wrap
WR = Round pin

Tip Style/Connector

05 = Concave stepped
15 = Triangular 45° stepped
17 = Flat stepped
30 = Triangular 45°

Version

FL = Floating
FX = Fixed

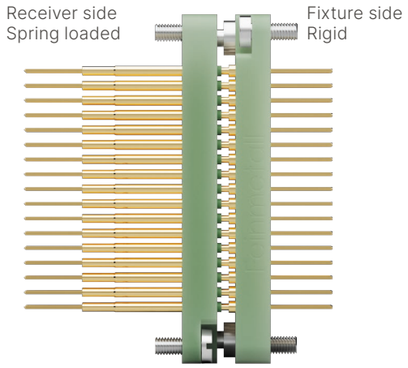
NEW INTERFACE BLOCKS

Reliable Signal Transmission with optimized Interface Block portfolio

Our newly redesigned interface blocks ensure reliable signal transmission between fixture and test systems. Designed with a self-centering range of +/- 0.3 mm, the setup ensures very good contact security and consistently low contact resistance. Uniformly aligned wire-wrap posts offer a clean and standardized interface for easy wiring.

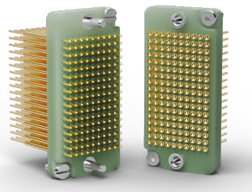
Your benefits

- → Mechanically compatible to market standard
- → Floating design, to compensate misalignments of +/- 0.3 mm
- → Uniformly aligned wire wrap posts for simplified wiring
- → Competitive pricing and short lead times, as the interface blocks will be part of FM Choice

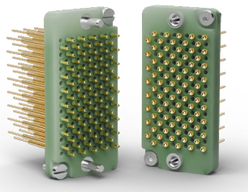


Optimized versions

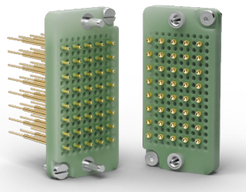
Our advanced signal blocks are available in different versions to ensure suitability for a wide range of applications in the market.



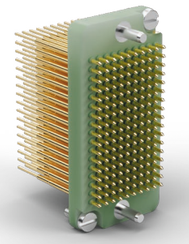
Signal block 170 pole



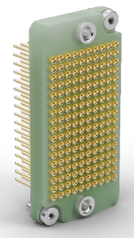
Signal block 85 pole



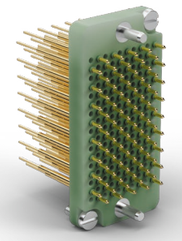
Signal block 40 pole



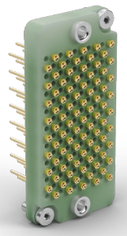
Signal Block 170 pole		(max. 4 A*)
Order Code	1163960	IB-R-SB-170-4A-WW-03-FL
Receptacle	1164687	H502WWS1
Contact Probe	1164684	F50403B105G110L224S1
Receiver side	Wire Wrap connection	



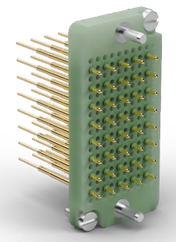
Signal Block 170 pole		(max. 4 A*)
Order Code	1163958	IB-F-SB-170-4A-WW-05-FL
Receptacle	-	-
Interface Pin	1164688	I-Z1-18WW-1.14
Fixture side	Wire Wrap connection	



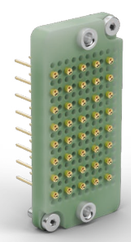
Signal Block 85 pole		(max. 4 A*)
Order Code	1170326	IB-R-SB-085-4A-WW-03-FL
Receptacle	1164687	H502WWS1
Contact Probe	1164684	F50403B105G110L224S1
Receiver side	Wire Wrap connection	



Signal Block 85 pole		(max. 4 A*)
Order Code	1170306	IB-F-SB-085-4A-WW-05-FL
Receptacle	-	-
Interface Pin	1164688	I-Z1-18WW-1.14
Fixture side	Wire Wrap connection	



Signal Block 40 pole		(max. 4 A*)
Order Code	1170327	IB-R-SB-040-4A-WW-03-FL
Receptacle	1164687	H502WWS1
Contact Probe	1164684	F50403B105G110L224S1
Receiver side	Wire Wrap connection	



Signal Block 40 pole		(max. 4 A*)
Order Code	1170307	IB-F-SB-040-4A-WW-05-FL
Receptacle	-	-
Interface Pin	1164688	I-Z1-18WW-1.14
Fixture side	Wire Wrap connection	

* The sum of the currents lead to a heating of the blocks due to power loss. The maximum allowed rise of this temperature is limited to 80 Kelvin.

INTERFACE PINS



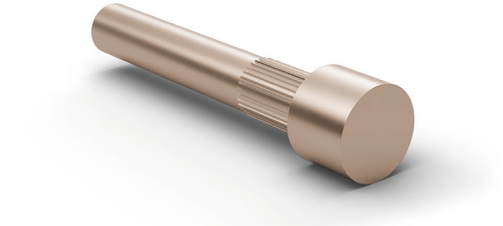
Interface pins		(max. 40 A*)
Order Code	1017929	P1S3
Material	BeCu	gold plated
Current [A]	40	
Connection	Thread M3	



Interface pins		(max. 40 A*)
Order Code	1017928	P1S2
Material	BeCu	gold plated
Current [A]	40	
Connection	Solder connection	



Interface pins		(max. 10 A*)
Order Code	1018248	I-P1S4
Material	Brass	gold plated
Current [A]	10	
Connection	Wire Wrap connection	



Interface pins		(max. 30 A*)
Order Code	1001779	I-P1
Material	Brass	rhodium plated
Current [A]	30	
Connection	Solder connection	



Interface pins		(max. 30 A*)
Order Code	1015067	I-P16LA-0.9
Material	Brass	gold plated
Current [A]	30	
Connection	Solder connection	



Interface pins		(max. 30 A*)
Order Code	1012256	I-P20LA-2.5
Material	Brass	gold plated
Current [A]	30	
Connection	Solder connection	



Interface pins		(max. 20 A*)
Order Code	1007279	I-C17LA-2
Material	Brass	gold plated
Current [A]	20	
Connection	Solder connection	



Interface pins		(max. 20 A*)
Order Code	1007282	I-D17LA-2
Material	Brass	gold plated
Current [A]	20	
Connection	Solder connection	



Interface pins		(max. 20 A*)
Order Code	1007280	I-C18LA-3
Material	Brass	gold plated
Current [A]	20	
Connection	Solder connection	



Interface pins		(max. 10 A*)
Order Code	1007284	I-D23WW-3
Material	Brass	gold plated
Current [A]	10	
Connection	Wire Wrap connection	



Interface pins		(max. 10 A*)
Order Code	1007170	I-C22WW-2
Material	Brass	gold plated
Curr10ent [A]	10	
Connection	Wire Wrap connection	



Interface pins		(max. 10 A*)
Order Code	1007302	I-D22WW-2
Material	Brass	gold plated
Current [A]	10	
Connection	Wire Wrap connection	

INTERFACE PINS



Interface pins		(max. 10 A*)
Order Code	1091862	I-D32WW-12
Material	Brass	gold plated
Current [A]	10	
Connection	Wire Wrap connection	



Interface pins		(max. 10 A*)
Order Code	1001843	I-G1RD
Material	Brass	gold plated
Current [A]	10	
Connection	Wire Wrap connection	



Interface pins		(max. 10 A*)
Order Code	1003858	I-G1S1
Material	Brass	gold plated
Current [A]	10	
Connection	Wire Wrap connection	



Interface pins		(max. 10 A*)
Order Code	1006531	I-G1S2
Material	Brass	gold plated
Current [A]	10	
Connection	Wire Wrap connection	



Interface pins		(max. 10 A*)
Order Code	1014545	I-G1S4
Material	Brass	gold plated
Current [A]	10	
Connection	Wire Wrap connection	



Interface pins		(max. 10 A*)
Order Code	1001852	I-Z1
Material	Brass	gold plated
Current [A]	10	
Connection	Wire Wrap connection	



Interface pins		(max. 10 A*)
Order Code	1016368	I-Z1WR-0.8
Material	Brass	gold plated
Current [A]	10	
Connection	Round Pin	connection



Interface pins		(max. 15 A*)
Order Code	1009768	I-Z1S2
Material	Brass	gold plated
Current [A]	15	
Connection	Round Pin	connection



Interface pins		(max. 10 A*)
Order Code	1013460	I-G1S3
Material	Brass	gold plated
Current [A]	10	
Connection	Round Pin	connection



Interface pins		(max. 10 A*)
Order Code	1014796	I-P18WR-0.8
Material	Brass	gold plated
Current [A]	10	
Connection	Round Pin	connection



Rigid probe		
Order Code	1036023	33125
Material	BeCu	gold plated
Current [A]	5.0	
Connection	Round pin	



Rigid probe		
Order Code	1053055	36080
Material	Brass	gold plated
Current [A]	25	
Connection	Thread	

PORTFOLIO TOOLS

Tools for assembly & maintainance

FEINMETALL offers a full selection of tools and accessories designed specifically for assembly and maintenance of Contact Probes and receptacles. These tools and accessories ensure effective installation and flawless contact functionality.



Insertion tool for pluggable contact probes

For inserting the probe into the receptacle tool FDWZ is helpful. After the probe is pushed into the receptacle and stopped by the pressure marks, the probe is driven into the receptacle with the FDWZ tool. The tool is made of a synthetic material to avoid any damaging of the plunger tips. Depending on the design of the contact probe, the tool can also sit on the collar of the probe.

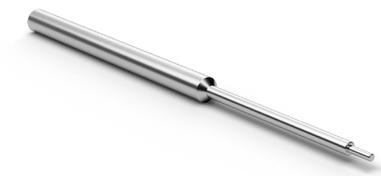
Order code	Product name	Length [mm]	Shank Ø [mm]
1052633	FDWZ-039	67.5	A-Ø=1.0; I-Ø=0.55
1003576	FDWZ-050	100.0	1.5
1003587	FDWZ-075	100.0	2.5
1003566	FDWZ-100	100.0	3.5
1020967	FDWZ-500	100.0	A-Ø= 6.0; I-Ø= 4.1



INSERTION TOOLS

Insertion tool for receptacles with fixed stop

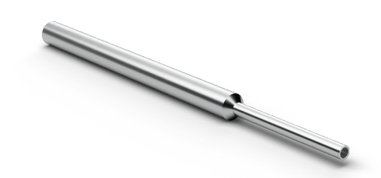
All receptacles with dead stop (collar) can be inserted with tool FEWZ-...E0. Press ring at receptacles can be used also as dead stop.
The guiding pin of the tool helps to stabilize and properly mount the receptacle.



Order code	Product name	Pin Ø [mm]	For receptacle
1000180	FEWZ-040E0	0,63	H040
1014313	FEWZ-050E0	0,80	H050, H787
1014311	FEWZ-075E0	0,90	H075, H703, H701
1014264	FEWZ-100E0	1,30	H100, H585, H502, H708
1054103	FEWZ-109E0	0,50	H109
1003643	FEWZ-511E0	0,60	H111, H511
1005041	FEWZ-563E0	2,00	H563
1003640	FEWZ-772E0	1,60	H772
1003642	FEWZ-774E0	2,60	H774, H566

Insertion tool for receptacles with press ring

All receptacles with press ring can be inserted with tool FEWZ-...Ex. In this case the x is the fix height level (see picture).
This value is required for ordering the correct tool. For often changing projection heights the variable tool below is recommended.



Order code	Product name	Insertion depth [mm]	For receptacle
1093953	FEWZ-111E25	2.5	H111-2.5
1018382	FEWZ-075E46	4.6	H075
1000746	FEWZ-075E65	6.5	H075
1014311	FEWZ-075E76	7.6	H075
1080358	FEWZ-100E10	1.0	H100
1014268	FEWZ-100E36	3.6	H100
1014265	FEWZ-100E46	4.6	H100
1001274	FEWZ-100E50	5.0	H100
1014602	FEWZ-100E53	5.3	H100
1014266	FEWZ-100E55	5.5	H100
1015433	FEWZ-100E67	6.7	H100
1014267	FEWZ-100E76	7.6	H100

Variable insertion tool for receptacles

For different height levels of the receptacles with inserted press ring, the tool FEWZ-...EV is recommended. The required height level can be adjusted at the tool..



Order code	Product name	Insertion height [mm]	For receptacle
1008393	FEWZ-050EV	0 - 10	H050; H787
1008325	FEWZ-075EV	0 - 12	H075
1008392	FEWZ-100EV	0 - 12	H100
1008394	FEWZ-772EV	0 - 10	H772



FZWZ-SET-001

Removal tool set basic equipment

With the removal tool, receptacles can be removed from a bore without damaging it. This is also possible with broken receptacles or if you do not have the possibility to knock the receptacles out from the back.

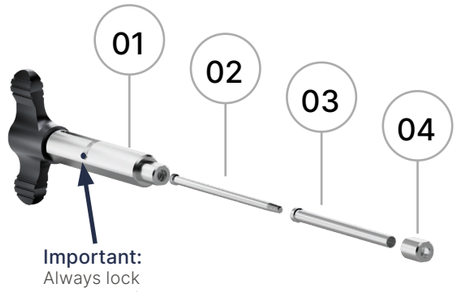
Included in delivery of basic kit FZWZ-SET-001

1030290	GSFZWZ	Handle and screw nut
1006304	1VERP0048	Box for single parts
1030237	2105149	Pliers
1030296	HZ-100-01-1	Guiding sleeve
1030295	BZ-100-01-1	Thread inserts

Order code	Product name
1147833	FZWZ-SET-001

Assembly

01 - Handle (GSFZWZ)
02 - Thread insert (BZ)
03 - Guiding sleeve (HZ)
04 - Screw-nut



Important:
Always lock the tool before mounting!

Below you will find step-by-step instructions for handling the tool.

Available guiding sleeves (HZ) and thread inserts (BZ)

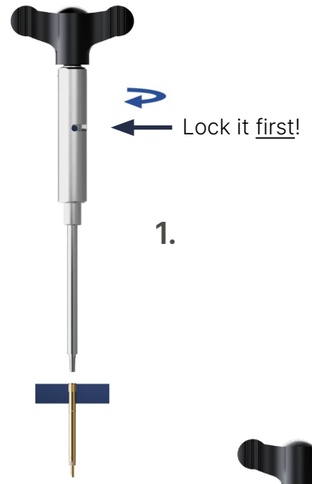
Combination Thread inserts & Guiding sleeve					For receptacles
1124669	BZ-050-01-1	&	1127507	HZ-050-01-1	H720; H730, H050, H787
1030405	BZ-075-01-1	&	1030294	HZ-075-01-1	H121; H075; H175; H176; H310; H561; H701; H863
1030295	BZ-100-01-1	&	1030296	HZ-100-01-1	H722; H727; H732; H752; H756; H757; H772; H875; H878
1030297	BZ-100-02-1	&	1030296	HZ-100-01-1	H320; H610; H865
1030297	BZ-100-02-1	&	1030298	HZ-100-02-1	H100; H502; H708; H731; H751; H805
1043575	BZ-118-01-1	&	1043745	HZ-118-01-1	H563, HVF3
1030291	BZ-157-01-1	&	1030292	HZ-157-01-1	H762; H866; H867; H887
1030291	BZ-157-01-1	&	1030293	HZ-157-01-2	H723; H733; H737; H760; H761; H773; H774; H880; H881; H884; H885, HVF4

Further variants are updated on the homepage under feinmetall.com/produktfinder

OPERATING INSTRUCTIONS FZWZ

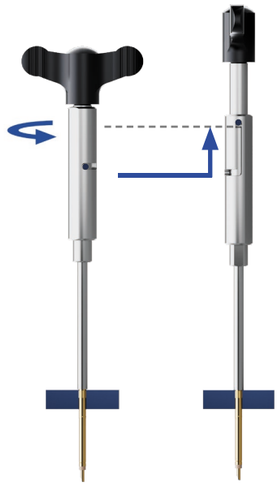
Step-by-step-Instruction

1. Make sure that the handle is locked! Screw the tool clockwise into the mounted receptacle until a few turns are cut. This is the case when the screwing in becomes stiffer or the guiding sleeve (03) touches the module.



2. Release the lock: Turn the entire tool back slightly counterclockwise so that the lock can be released more easily. Then hold the flattened surfaces and turn the handle counterclockwise.

3. Continue turning the tool clockwise. The receptacle pulls upwards from the mounting plate, into the guiding sleeve and can be removed.



4. Remove the receptacle from the tool with the nipper by screwing it counterclockwise from the tool. The sleeve can be bent by 30°- 90°.

5. For reuse, the thread insert must be screwed all the way down so that the lock can be set.





FK50

Spring force gauge up to 50N

The Spring Force Gauge allows force measurement at all types of spring contact probes up to 50 N. This instrument allows in a very simple way to verify, if a probe is still intact and to determine the spring force of the probe. The measuring results are displayed at the instrument and the display can be electrically turned by 180° if needed, e.g. for overhead applications. For the measurement just put the measuring sleeve over the probe and push it to the mounting plate. The sleeves depth can be adjusted according to the projection height of the probe. Adjustable measuring sleeves are available with three different diameters.

Technical specifications

Minimum force	3g / 0,10oz / 0,03N
Resolution	1g / 0,03oz / 0,01N
Measuring accuracy	+/- 0,5% at 25°C
Data output	via RS 232 (order code 2111810)
Power supply	6 x 1,5V AA (UM-3 batteries) (Batteries non included in delivery)

Included in delivery

1x Spring Force Gauge with receptacle for measuring sleeve
1x Measuring sleeve Ø 5,0mm
1x Calibration certificate
1x Carrying case

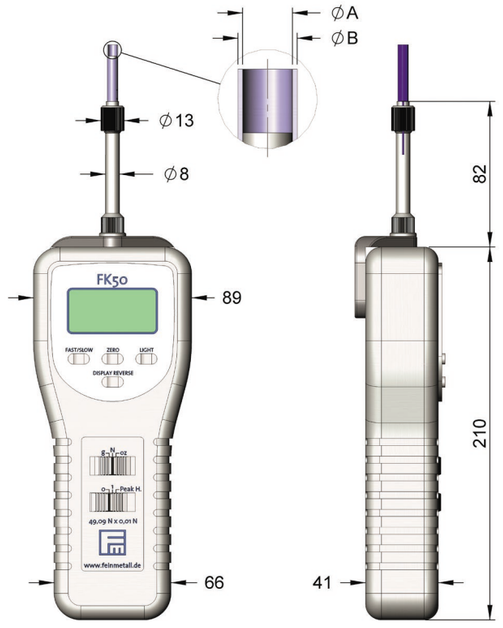
Accessories

1041981	MS300	Measuring sleeve Ø 3 mm
1041978	MS400	Measuring sleeve Ø 4 mm
1041979	MS500	Measuring sleeve Ø 5 mm
1010424	2111810	Data cable RS232

Order code	Product name
1147834	FK50-SET-001

Series drawing

All measurements are in mm.



Operating manual available on request. Further rigid measuring sleeves with different diameters and fixed projection height are available on the homepage.

Example for adjustment at measuring sleeve



Projection height of probe (e.g. F732)	=	10.5 mm
Nominal travel	=	4.0 mm
Projection height - Nominal travel	=	10.5 mm - 4.0 mm
Value of height to fix	=	6.5 mm

ACCESSORIES FOR FK50

Adjustable measuring sleeves

The adjustable measuring sleeves can be adjusted to a defined dimension using a locking screw.



Order code	Product name	Discription	Inner ØA [mm]	Outer ØB [mm]	Projection height [mm]
1041981	MS300	Measuring sleeve Ø 3 mm	3.0	4.0	0 - 40.5
1041978	MS400	Measuring sleeve Ø 4 mm	4.0	5.0	0 - 40.5
1041979	MS500	Measuring sleeve Ø 5 mm	5.0	6.0	0 - 40.5

Rigid measuring sleeves with fixed stop

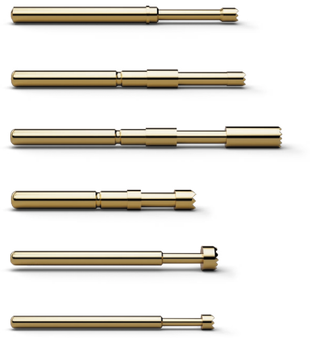
Rigid measuring sleeves for repeating measurements at probes with fixed projection heights are available with different diameters.

Order code	Product name	For series	Inner ØA [mm]	Outer ØB [mm]	Projection height [mm]	Nominal travel [mm]
1011310	MS230E065	F732	2.3	2.7	10.5	4.0
1011322	MS360E065	F733	3.6	4.0	10.5	4.0
1011323	MS270E355	VF3	2.7	3.2	40.5	5.0
1011324	MS370E355	VF4	3.7	4.2	40.5	5.0



BASIC PROBES >100 MIL / 2.54 MM

Type	Barrel-Ø [mm]	Length [mm]
F796	2.65	37.0
F785	2.65	38.0
F785L	2.65	44.0
F733	2.65	27.0
F564	2.36	33.5
F563	2.03	33.0



BASIC PROBES 100 MIL / 2.54 MM

Type	Barrel-Ø [mm]	Length [mm]
F772/F772HP	1.66	32.0
F786/F786HP	1.66	38.0
F797	1.66	37.0
F588/F588HP	1.37	39.0
F588S	1.37	37.3
F100/F100HP	1.37	33.3
F100L/ F100HPL	1.37	35.4
F771	1.37	25.4
F562	1.37	24.7



SOLAR PROBES 100 MIL / 2.54 MM

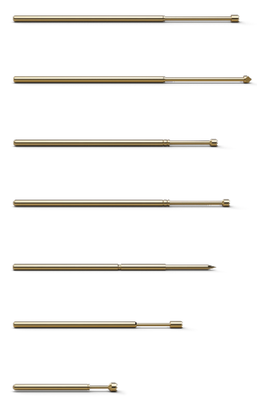
Type	Barrel-Ø [mm]	Length [mm]
L100	1.37	33.3



PRODUCT PRESENTATION ON A SCALE OF 1:1

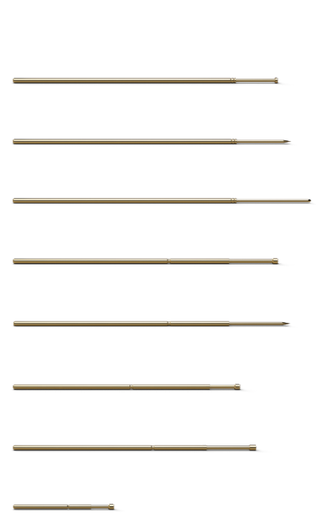
BASIC PROBES 75 MIL / 1.90 MM

Type	Barrel-Ø [mm]	Length [mm]
F793/F793HP	1.02	36.8
F793L/F793HPL	1.02	38.8
F075/F075HP	1.02	33.1
F075L/F075HPL	1.02	35.1
F703	1.02	33.0
F701	1.00	27.5
F561	1.00	17.0



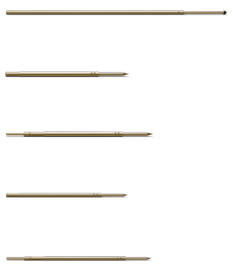
BASIC PROBES 50 MIL / 1.27 MM

Type	Barrel-Ø [mm]	Length [mm]
F050/F050HP	0.78	43.2
F050L/F050HPL	0.78	45.2
F051	0.78	48.5
F788	0.79	43.0
F788L	0.79	45.0
F768	0.78	37.0
F767	0.78	39.5
F111	0.68	16.5



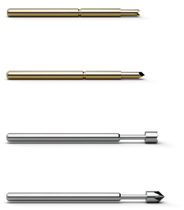
BASIC PROBES <40 MIL / <1.00 MM

Type	Barrel-Ø [mm]	Length [mm]
F040	0.62	35.9
F039	0.78	20.0
F039AE	0.78	23.9
F030	0.62	19.8
F030AE	0.62	23.7



Interface Probes

Type	Barrel-Ø [mm]	Length [mm]
F504	1.37	21.7
F504L	1.37	22.4
F502	1.38	24.7
F538	1.38	25.7





CATALOGS & FLYERS

Concentrated knowledge

All the specs and details you could need – it's all right there in our catalogs. And if you still have questions, we'll be glad to provide personalized support.

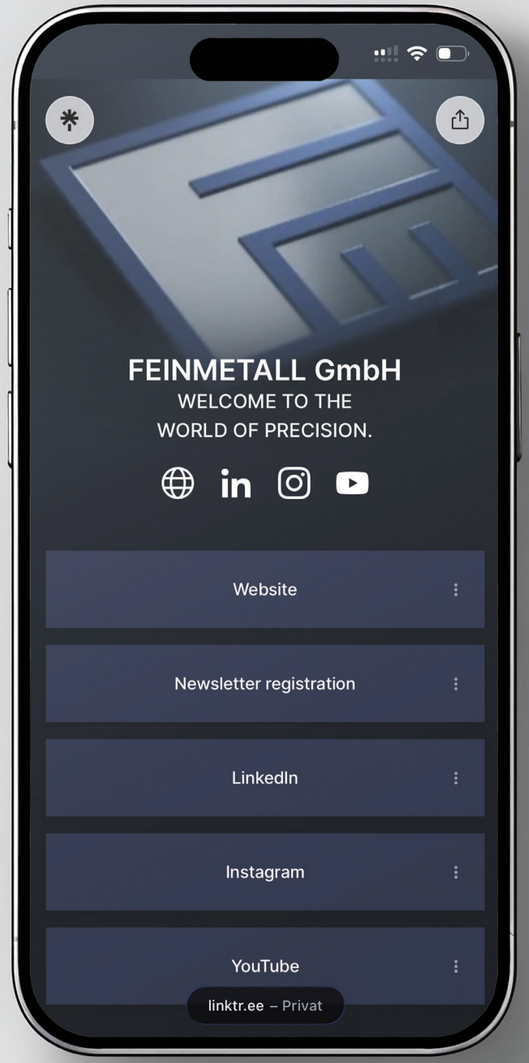
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