

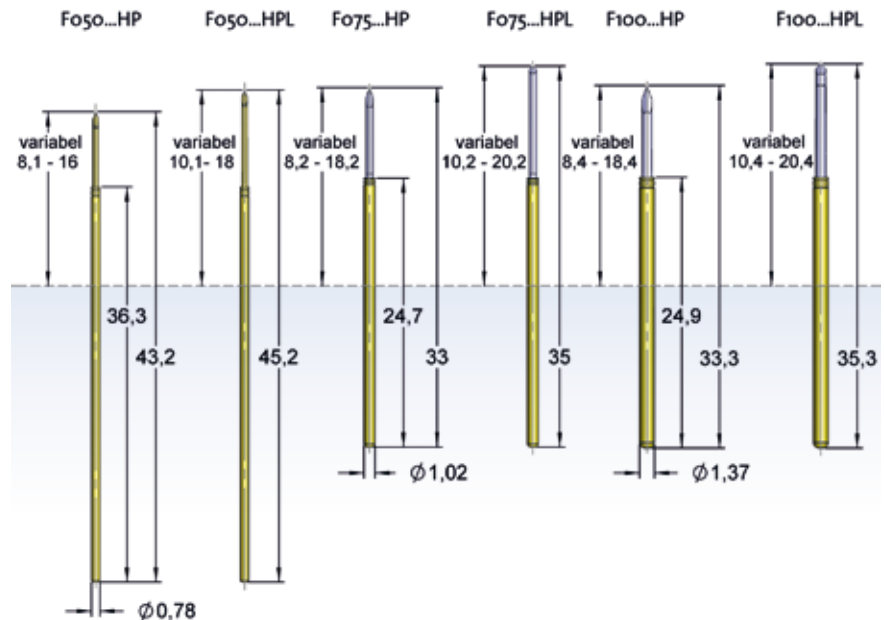
Type	Current	Temperature	R _{typically}
F050...HP	3,0 A	-20°...+80°C	<20 mOhm
F075...HP	4,0 A	-20°...+80°C	<20 mOhm
F100...HP	5,0 A	-20°...+80°C	<20 mOhm

Progressive Series

F050/F075/ F100 ... HP

The new „Progressive Series“ has been developed for rough and extreme requirements (e.g. for contacting lead free soldering or very contaminated PCB s). The Progressive Series tips are well prepared for those applications and they are more aggressive and harder than usual gold plated tips. Therefore they provide a better penetration, resulting in a excellent contact and a longer lifetime. The new progressive functional coating enhances the durability of the contact surface. At the same time it is also less sensitive for contamination, especially during soldering.

The Progressive Series has the same dimensions than the standard ICT-Probes F050, F075 and F100. Standard-length, L-Versions and Long Travel Probes are available.



Note:

applicable receptacles
see F050 / F075 / F100

Travel (mm)	F050..HP	F075/F100...
Nominal:	4,3	4,3
Maximum:	5,0	5,0

Spring Force (cN ±20%)		
	Preload	Nominal Force
F050	80	130
F050	130	200
F075	110	200
F075	150	250
F100	130	200
F100	200	300

Materials and Plating

Plunger: see Tip Styles

Barrel: Nickel Silver, Gold plated

Spring: Music wire, Gold plated

Type	Tip-Ø	Spring Force
F050	33 S	050 P 150 HP
	Tip Style	Material Finish Special Version
Material: S = Steel		
Tip-Ø: 050 = 0,50 mm (e.g.)		
Finish: P = functional coating		
Special Version: HP = Higher Preload		
HPL = Higher Preload in L-Version		
Receptacle: see drawing F050/F075/F100		

ORDER EXAMPLE

Tip Style, Material, Plating, Tip- Ø (mm)

F050...HP				
	21 Steel; P Ø 0,50	33 Steel; P Ø 0,50	43 Steel; P Ø 0,50	62 Steel; P Ø 0,50
F075...HP				
	21 Steel; P Ø 0,64	33 Steel; P Ø 0,64	43 Steel; P Ø 0,64	62 Steel; P Ø 0,64
F100...HP				
	21 Steel; P Ø 0,90	33 Steel; P Ø 0,90 L-Version available	43 Steel; P Ø 0,90	62 Steel; P Ø 0,90 L-Version available

Long Travel versions für 50 mil/75 mil/100 mil on request



Progressive Series NEW

Probes for advanced requirements and lead-free soldering pads

The subject:

Printed circuit boards, which are tested after a longer shelf time or with unclear conditions, are very difficult to contact. The surface of the solder pads exhibits viscous flux-contaminations or hard and thick oxide layers. These layers are difficult to penetrate and have a poor conductivity during the electrical test. Moreover in these applications the tips are contaminated very quickly, which again results in further contacting issues.

Solution:

The new „Progressive Series“ has been developed for these applications. The special design and the choice of material of these probes enable reliable contacting and long lifetime even under difficult conditions.

Aggressive tip style

A specific FEINMETALL longitudinal grind, the concave geometry and ultra sharp edges lead to increased penetration at the contact surface.



Standard Grind



FEINMETALL Grind

Functional „Progressive Coating“

The new progressive functional coating reduces the contamination of the contact tips and provides a remarkably longer life cycle of the probes.



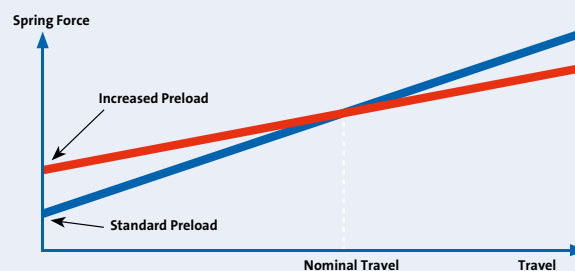
Standard Gold Coating,
Contamination after
1/2 Mio contacts



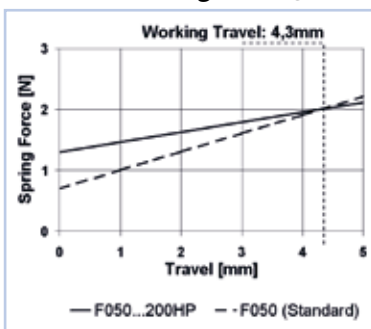
FEINMETALL
„Progressive Coating“,
Contamination after
1/2 Mio contacts

Higher Preload

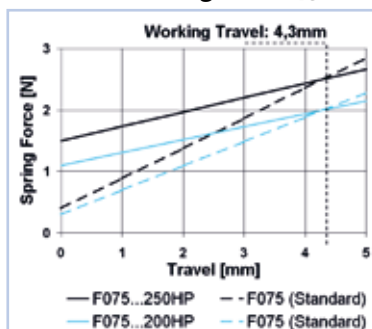
The contact force over the entire working travel up to the recommended working travel is raised by an increased preload. This increased preload is available immediately after the contacting of the DUT. The nominal force at the recommended working travel remains unchanged as standard without increasing the pressure load on the DUT.



Force-Travel Diagram F050



Force-Travel Diagram F075



Force-Travel Diagram F100

