Standard Probe 100 mil

F100

Centers (mm/mil)	2,54 / 100
Current	5,0 A
Temperature	-20°C...+80°C,
R typically	30 mOhm

Spring Force (cN ±20%)

Preload	Nominal Force
30	60
80	100 HP
40	100
80	150
110	150 HP
80	200
130	200 HP
150	300
200	300 HP

Travel (mm)

Nominal	Maximum
4,3	6,4
Pointing Accuracy	±0,08 mm

Materials and Plating

Plunger	see Tip Style
Barrel	Nickel silver, gold plated
Spring	Music wire, silver plated
Receptable	Nickel silver, Gold plated

Accessories

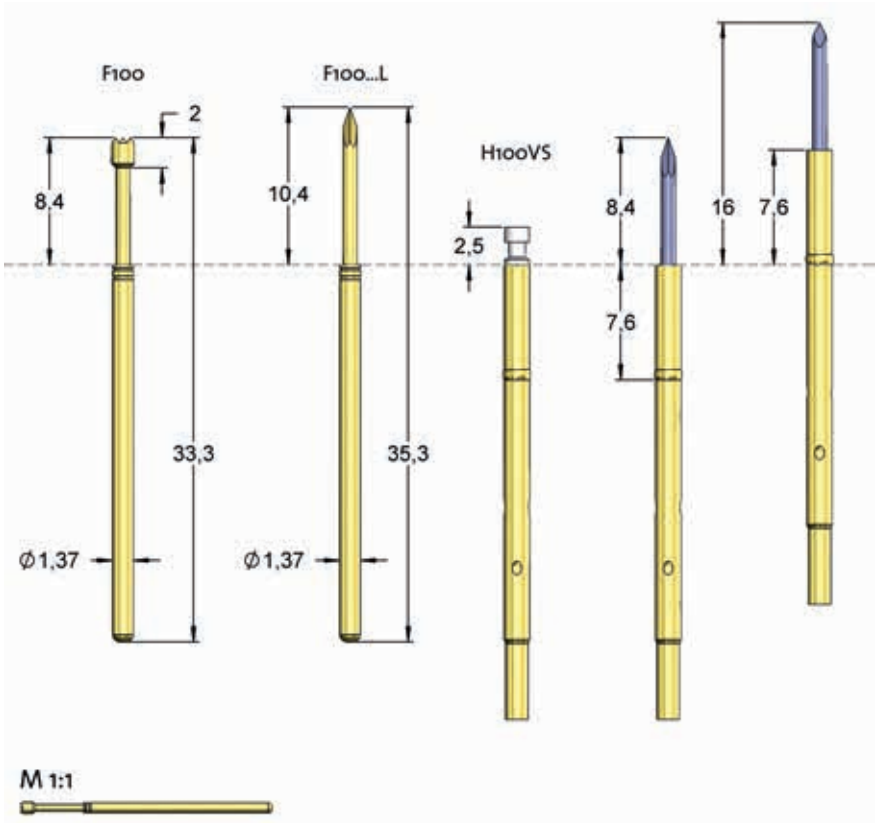
Insertion tool probe	FDWZ-100
Insertion tool receptacle	FEWZ-100EV
Insertion tool receptacle	FEWZ-100E0
Plug lock	H100VS

Drill Size [mm]

Press ring as stop	1,67 - 1,68
Press ring inserted	1,70 - 1,75

Projection Height

(F100) H100.../10.0	8,4 - 18,4
(F100) H100.../7.6	8,4 - 16,0
(F100) H100.../2.0	8,4 - 10,4
(F100) H100WW10/2.0S1	11,4 - 13,4
(F100) H100WW10/2.0S2	16,4 - 18,4
(F100...L) H100.../10.0	10,4 - 20,4
(F100...L) H100.../7.6	10,4 - 18,0
(F100...L) H100.../2.0	10,4 - 12,4
(F100...L) H100WW10/2.0S1	13,4 - 15,4
(F100...L) H100WW10/2.0S2	18,4 - 20,4



The F100 is the most common probe for 100 mil applications. Further receptacles see „Receptacles H100“. For contacting OSP coated boards the tip style 32 in Progressive Series version has been well established.

Tip Style	Number	Material	Plating	Ø in mm	Version
	05	B	G	1,5	-
	06	B	G	1,5	-
	06	B	P	2,0	HP
	06	B	G	2,5	-
	06	B	G	3,1	Mint-Pin
	07	S	L	1,5	-
	10	S	L	0,6	RP
	10	S	L	0,6	-
	10	S	P	0,6	HPRP
	11	B	G	0,5	-
	11	B	G	0,64	-
	11	B	G	0,9	-
	14	B	G	1,5	-
	14	S	L	1,3	-
	14	S	P	1,5	HP / HPL
	15	B	G	1,9	-
	18	B	G	0,9	-
	21	S	L	0,9	-
	21	S	L	0,9	L
	21	S	P	0,9	HP / HPL

Standard Probe 100 mil

F100

Centers (mm/mil)	2,54 / 100
Current	5,0 A
Temperature	-20°C...+80°C,
R typically	30 mOhm

Type			Tip-Ø		Spring Force	
F 100	33	S	090	P	300	HP
	Tip Style	Material		Finish		Special Version

Material:	B = BeCu, S = Steel
Tip-Ø:	090 = 0,9 mm (e.g.)
Finish:	G = Gold, L = Longtime Gold plated, P = Functional coating, N = Nickel, R = Rhodium
Special Version:	B = „Banana Shaped", H = High Temperatur, HP = Progressive Series, IK = Insulating cap, L = Long Version, RP = „Wobbling Plunger"
Switch Travel:	35 = 3,5 mm (deviating from standard)
Receptacle:	Order Code according drawing

ORDER EXAMPLE

Tip Style	Number	Material	Plating	Ø in mm	Version
	30	B	G	0,9	-
	32	S	P	0,9	HP / HPL
	33	S	L	0,9	L
	33	S	P	0,9	HP / HPL
	33	S	L	0,9	-
	35	S	L	1,5	-
	37	S	L	0,5	-
	37	S	L	0,5	L
	37	S	P	0,5	HP
	38	S	L	0,9	-
	38	S	L	0,9	L
	43	S	P	0,9	HP / HPL
	43	S	L	0,9	-
	55	B	G	1,8	-
	62	B	G	0,9	-
	62	S	P	0,9	HP / HPL

Wobbling Plunger for Contacting Soldered Pins

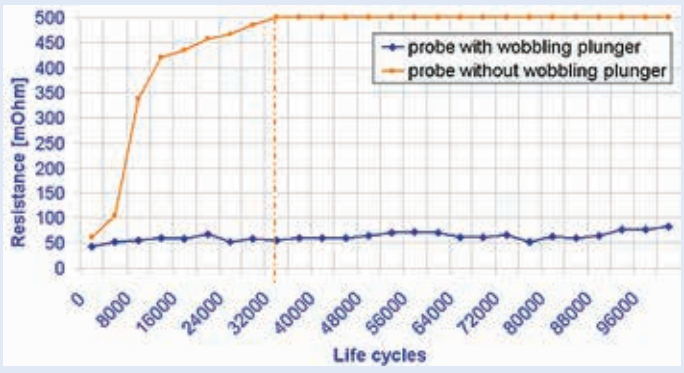
F100...RP

Centers (mm/mil)	2,54 / 100
Current	5,0 A
Temperature	-20°C...+80°C
R typically	30 mOhm

Type			Tip-Ø		Spring Force	
F 100	10	S	060	P	150	HPRP
	Tip Style	Material		Finish		Special Version

Material:	S = Steel
Tip-Ø:	060 = 0,6 mm (e.g.)
Finish:	L = Longtime Gold plated, P = Functional coating
Special Version:	RP = „Wobbling Plunger", HP = Progressive Series

ORDER EXAMPLE

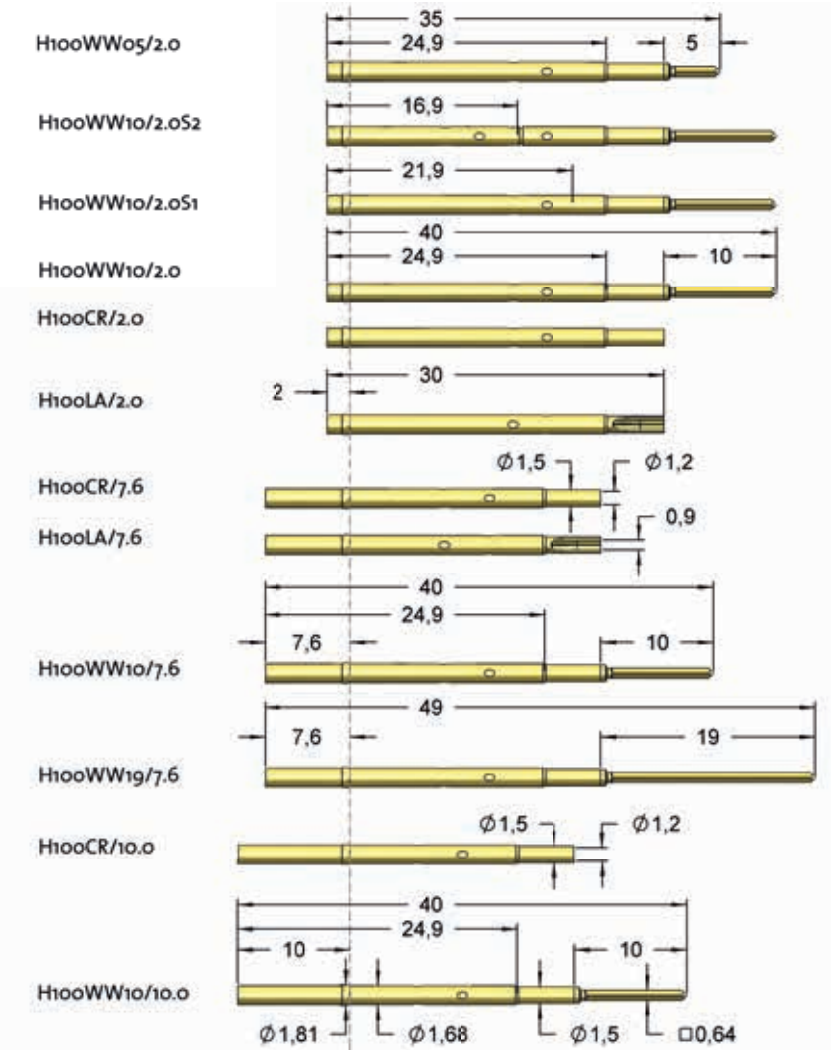


The deflection of a wobbling plunger substantially exceeds the function of the flexible needle. The special design of the plunger enables plunger deflections without notable abrasion. High level stress tests with plunger deflexion up to 0.8 mm have resulted in outstanding electrical performance and life time of the probe. The diagram shows the comparison to a conventional probe without wobbling plunger.

Receptacles for 100 mil Centers

H100

For probes F100, F588 and F585 different receptacles are available with different connection types (e.g. LA, CR, WW), different press ring positions and different wire-wrap posts.
Adequate insertion tools are available. The right tool for flush insertion is **FEWZ-585E0**. The tools for fix projection heights are **FEWZ-100Exx**. For variable projection heights the tool **FEWZ-100EV** is appropriate.
Plug locks **H100VS** can be used to close empty receptacles in order to prevent false assemblies and to avoid contamination.
A special receptacle with spring loaded contact pin (**H100WL11/7.6**) enables wireless contacting of conductor paths.
Additionally a receptacle with preassembled wire AWG26 is available as H100LI/7.6.



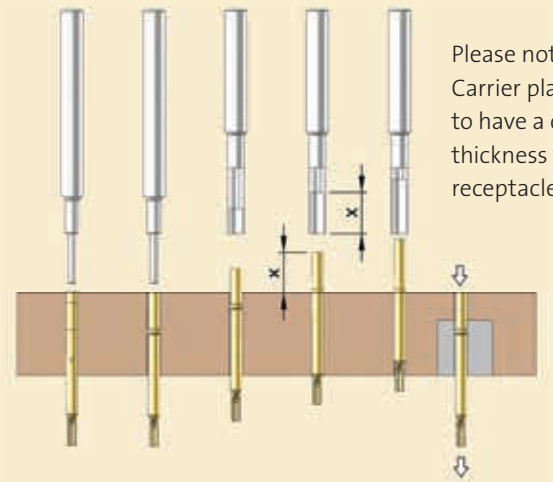
Material and Plating

Nickel silver, gold plated

Drill Size H100 (mm)

Material	press ring as stop	press ring inserted
EP 105 (CEM1, Trolitax)	1,67-1,68	1,70-1,75
HGW 2372.1 (FR4)	1,68-1,69	

Appropriate tools are available for each type of receptacle.



Please note:
Carrier plates need to have a certain thickness to hold receptacles tight.

Type — Length of Wire Wrap Pin

H100 WW 10 / 7.6

Connection Type — Press Ring Position

Connection Type: CR = Crimp connection
LA = Solder connection
WW = Wire Wrap connection
LI = Stranded wire
WL = Spring loaded connection

Length of Wire Wrap Pin: e.g. 10 = 10,0mm

Press Ring Position: e.g. 7.6 = 7,6mm

ORDER EXAMPLE

Projection Height (mm)

	H100.../10.0	H100.../7.6	H100.../2.0	H100WW10/2.0S1	H100WW10/2.0S2
F100 / F585	8,4 - 18,4	8,4 - 16,0	8,4 - 10,4	11,4 - 13,4	16,4 - 18,4
F100...L / F585...L	10,4 - 20,4	10,4 - 18,0	10,4 - 12,4	13,4 - 15,4	18,4 - 20,4
F588...S	12,4 - 22,4	12,4 - 20,0	12,4 - 14,4	15,4 - 17,4	20,4 - 22,4
F588	14,1 - 24,1	14,1 - 21,7	14,1 - 16,1	17,1 - 19,1	22,1 - 24,1