



Tools and Accessories

For installation and maintenance of contact probes and receptacles FEINMETALL offers a great variety of tools. For the mounting of standard probes practical insertion- and screw-in tools are useful. For a simple and effective mounting of switch probes tools with integrated functions are ideal, for example to adjust the correct position of the switch point. A spring force gauge additionally enables the measurement of spring forces, for example to identify inserted contact probes in existing modules or fixtures.

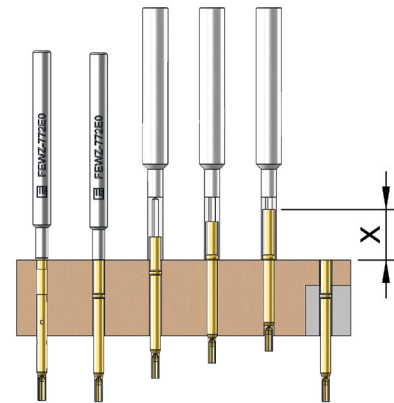
FEWZ	184
FAWZ	184
FDWZ	184
FWZ	185
FWZ...SA	186
FK50	187



Insertion tool for receptacles with fixed stop (collar or press ring on top)

Receptacle	Insertion Height (mm)	PIN-Ø (mm)	Insertion Tool
H050, H787	0,0	0,8	FEWZ-787E0
H075, H703	0,0	0,9	FEWZ-075E0
H100, H585	0,0	1,3	FEWZ-100E0
H109	0,0	0,5	FEWZ-109E0
H111, H511	0,0	0,6	FEWZ-511E0
H563	0,0	2,0	FEWZ-563E0
H564	0,0	2,4	FEWZ-564E0
H735	0,0	3,5	FEWZ-735E0
H772	0,0	1,6	FEWZ-772E0
H774, H566	0,0	2,6	FEWZ-774E0

All receptacles with dead stop (collar or press ring on top) can be inserted with tool FEWZ-...E0. The guiding pin of the tool helps to stabilize and properly mount the receptacle.



Insertion tool for receptacles with fixed stop (press ring inserted)

Receptacle	Insertion Height XX (mm)	I-Ø (mm)	Insertion Tool
H050, H787	xx	1,1	FEWZ-050Exx
H075	xx	1,5	FEWZ-075Exx
H100	xx	1,83	FEWZ-100Exx

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.



Variable insertion tool for receptacles

Receptacle	Insertion Height X (mm)	Insertion Tool
H050, H787	0 - 10	FEWZ-050EV
H075, H073	0 - 12	FEWZ-075EV
H100, H585	0 - 12	FEWZ-100EV
H772	0 - 10	FEWZ-772EV

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



Insertion tool for plug-in contact probes

Insertion Tool	Shank-Ø (mm)	Length (mm)
FDWZ-050	1,5	100,0
FDWZ-075	2,5	100,0
FDWZ-100	3,5	100,0

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.



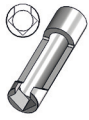
Mounting tool for twist proof receptacles

Receptacle	(BIT + Handle)	BIT	Handle
H756...	FAWZ756	AS756	GSFAWZ500
H757...	FAWZ756	AS756	GSFAWZ500
H760...	FAWZ761	AS761	GSFAWZ500
H761...	FAWZ761	AS761	GSFAWZ500
HVF3...	FAWZVF3	ASVF3	GSFAWZ500
HVF4...	FAWZVF4	ASVF4	GSFAWZ500
HVF100...	FAWZVF100	ASVF100	GSFAWZ500

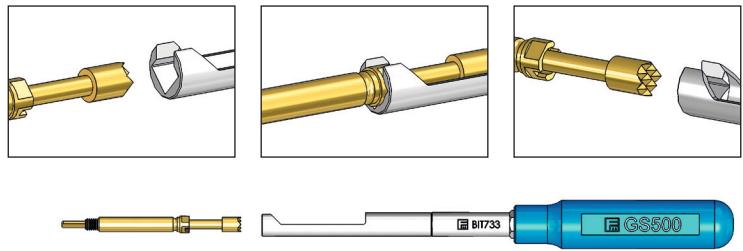


Receptacles for twist proof probes need to be mounted well aligned into the fixture or module. This can be done with the alignment tool FAWZ. This tool can be chucked into a lever press.

Hook Wrench



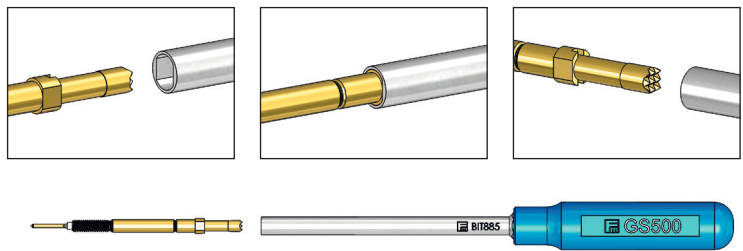
The hook wrench is the standard tool for all probes with square wrench sizes even if the head diameter is larger than the wrench size.



Socket Wrench



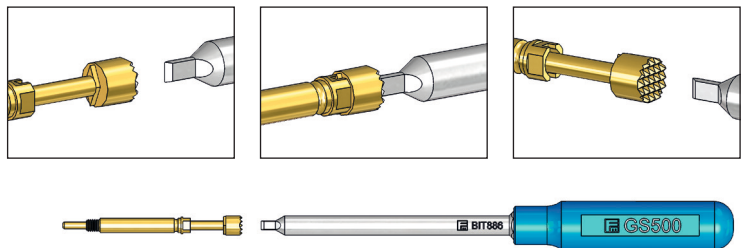
The socket wrench can be used for square wrench sizes if the head diameter is smaller than the wrench size. The tool helps to assemble probes within small centers.



Screw Driver



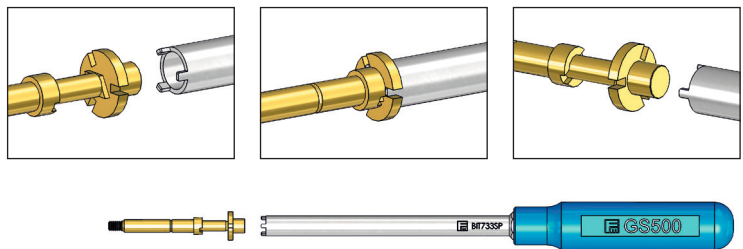
Screw drivers can be used if the contact area has any support (e.g. serrated honeycomb or slit) and the head has an integrated locking system.



Tool for Step Probes



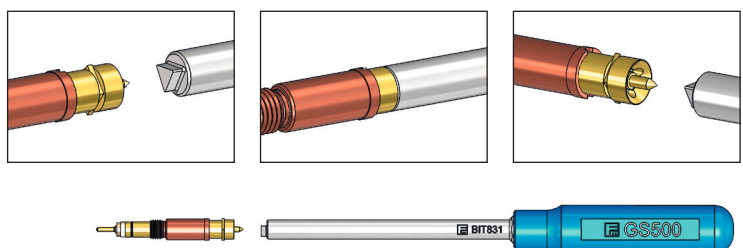
For assembly of oversized step probes FEINMETALL has developed a special tool for applications with very limited space between the probes.



Tool for Coaxial Probes



For the mounting of large outer conductors FEINMETALL has developed a special tool that enables applications with limited space between the probes.





Screw-In-Tools

max. tip- ϕ				Shank ϕ A	SW						
	Hook--	Socket-	Triangle			FWZ	BIT	Handle	FWZ...T	BIT	Handle
0,9	x			1,6	1,0	FWZ730	BIT730	GS300	FWZ730T	BIT730	GS300T
1,5	x			2,0	1,0	FWZ730S1	BIT730S1	GS300	FWZ730T1	BIT730S1	GS300T
1,3		x		2,4	1,4	FWZ731S1	BIT731S1	GS400	FWZ731T1	BIT731S1	GS400T
2,0	x			2,8	1,4	FWZ731	BIT731	GS400	FWZ731T	BIT731	GS400T
1,6		x		2,7	1,7	FWZ732S2	BIT732S2	GS400	FWZ732T2	BIT732S2	GS400T
2,0	x			2,8	1,7	FWZ732	BIT732	GS400	FWZ732T	BIT732	GS400T
2,7	x			3,5	1,7	FWZ732S1	BIT732S1	GS400	FWZ732T1	BIT732S1	GS400T
2,0		x		2,8	1,8	FWZVF100	BITVF100	GS400	FWZVF100T	BITVF100	GS400T
2,7	x			3,5	1,8	FWZVF100S1	BITVF100S1	GS400	FWZVF100T1	BITVF100S1	GS400T
2,7	x			3,5	2,2	FWZVF3	BITVF3	GS500	FWZVF3T	BITVF3	GS500T
3,1	x			4,0	2,2	FWZVF3S1	BITVF3S1	GS500	FWZVF3T1	BITVF3S1	GS500T
2,3		x		3,5	2,2	FWZVF3S2	BITVF3S2	GS500	FWZVF3T2	BITVF3S2	GS500T
4,0	x			5,0	2,2	FWZVF3S3	BITVF3S3	GS500	FWZVF3T3	BITVF3S3	GS500T
3,1	x			4,0	2,5	FWZVF4S1	BITVF4S1	GS500	FWZVF4T1	BITVF4S1	GS500T
4,0	x			5,0	2,5	FWZVF4	BITVF4	GS500	FWZVF4T	BITVF4	GS500T
2,5		x		3,8	2,6	FWZ885	BIT885	GS500	FWZ885T	BIT885	GS500T
3,1	x			4,0	2,6	FWZ885S1	BIT885S1	GS500	FWZ885T1	BIT885S1	GS500T
4,0	x			5,0	2,6	FWZ760S1	BIT760S1	GS500	FWZ760T1	BIT760S1	GS500T
4,9	x			6,5	2,6	FWZ760S2	BIT760S2	GS500	FWZ760T2	BIT760S2	GS500T
3,0		x		5,0	3,0	FWZ733S1	BIT733S1	GS500	FWZ733T1	BIT733S1	GS500T
4,0	x			5,0	3,0	FWZ733	BIT733	GS500	FWZ733T	BIT733	GS500T
-	x			8,0	5,0	FWZ888	BIT888	GS500	FWZ888T	BIT888	GS500T
-			x	4,0	-	FWZ831	BIT831	GS500	FWZ831T	BIT831	GS500T
-			x	4,0	-	FWZ831	BIT831	GS500	FWZ831T	BIT831	GS500T

Screw-In-Tools for F886

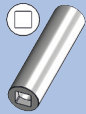

Probe							
		(BIT+Handle)	BIT	Handle	(BIT+Handle)	BIT	Handle
F88606...	FWZ886S1 / FWZ886S2	FWZ886	BIT886	GS500	FWZ886T	BIT886	GS500T
F88617K...	FWZ886S1	FWZ886	BIT886	GS500	FWZ886T	BIT886	GS500T
F88617H...	FWZ886S1	FWZ886	BIT886	GS500	FWZ886T	BIT886	GS500T
F88617T...	FWZ886S2	FWZ886	BIT886	GS500	FWZ886T	BIT886	GS500T
F88617B...	FWZ886S2	FWZ886	BIT886	GS500	FWZ886T	BIT886	GS500T

Screw-In-Tools for Step Probes

Probe	Plate ϕ	Tip- ϕ				Shank ϕ A						
			(BIT+Handle)	BIT	Handle		(BIT+Handle)	BIT	Handle			
F730...SP	0,4 - 1,0	0,3 - 0,8			x	1,5	FWZ730	BIT730	GS300	FWZ730T	BIT730	GS300T
F731...SP	0,4 - 1,3	0,3 - 1,1			x	2,4	FWZ731S1	BIT731S1	GS400	FWZ731T1	BIT731S1	GS400T
	0,4 - 1,7	0,3 - 0,8	x			2,8	FWZ731	BIT731	GS400	FWZ731T	BIT731	GS400T
	1,8 - 3,0	0,3 - 1,0		x		1,85	FWZ731SP	BIT731SP	GS400	FWZ731SPT	BIT731SP	GS400T
F732...SP	1,0 - 2,0	0,3 - 1,5	x			2,8	FWZ732	BIT732	GS400	FWZ732T	BIT732	GS400T
	1,0 - 2,7	0,3 - 1,5		x		3,5	FWZ732S1	BIT732S1	GS400	FWZ732T1	BIT732S1	GS400T
	2,1 - 6,0	0,3 - 1,5			x	2,4	FWZ732SP	BIT732SP	GS400	FWZ732SPT	BIT732SP	GS400T
F732...SP1	2,8 - 6,0	1,51 - 2,2			x	3,1	FWZ732SP1	BIT732SP1	GS400	FWZ732SPT1	BIT732SP1	GS400T
F733...SP	2,2 - 2,9	0,3 - 2,7	x			5	FWZ733	BIT733	GS500	FWZ733T	BIT733	GS500T
	2,2 - 2,9	0,3 - 2,7			x	5	FWZ733S1	BIT733S1	GS500	FWZ733T1	BIT733S1	GS500T
	3,5 - 7,0	3,31 - 6,8			x	2,4	FWZ732SP	BIT732SP	GS400	FWZ732SPT	BIT732SP	GS400T
	4,01 - 7,0	0,3 - 3,3			x	4,2	FWZ733SP	BIT733SP	GS500	FWZ733SPT	BIT733SP	GS500T
F733...SP1	3,0 - 4,0	0,3 - 2,2			x	3,1	FWZ732SP1	BIT732SP1	GS400	FWZ732SPT1	BIT732SP1	GS400T

Bits and handles can be ordered separately. Handles are colour marked depending on wrench size.

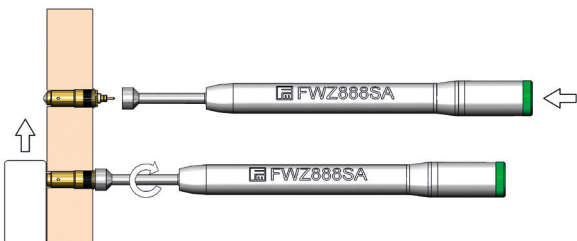
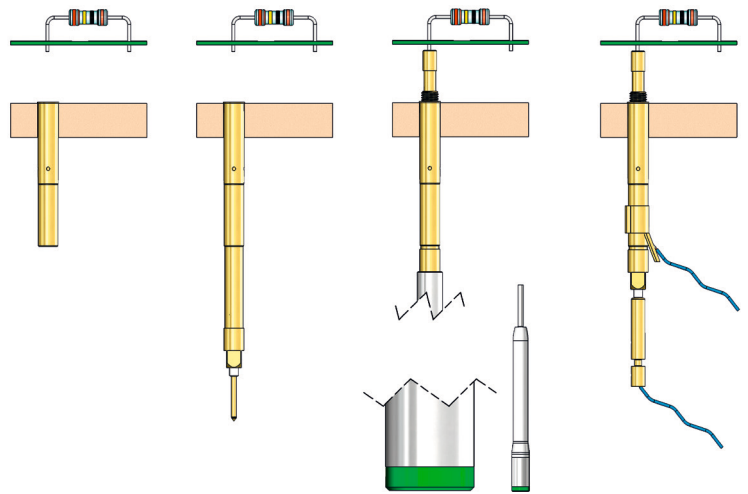


Probe		SW	Overall Length	Shank ØA	Batteries	
F880...	x	2,2	147,0	3,7	2 x AAAA 1,5V	FWZ880SA
F88890S1101U200S05	x	5,0	147,0	8,0	2 x AAAA 1,5V	FWZ888SA
F88890S1102U100S07	x	5,0	146,0	8,0	2 x AAAA 1,5V	FWZ888SA1

Batteries non included in delivery

LED tool for adjusting the optimum switch point of switch probes

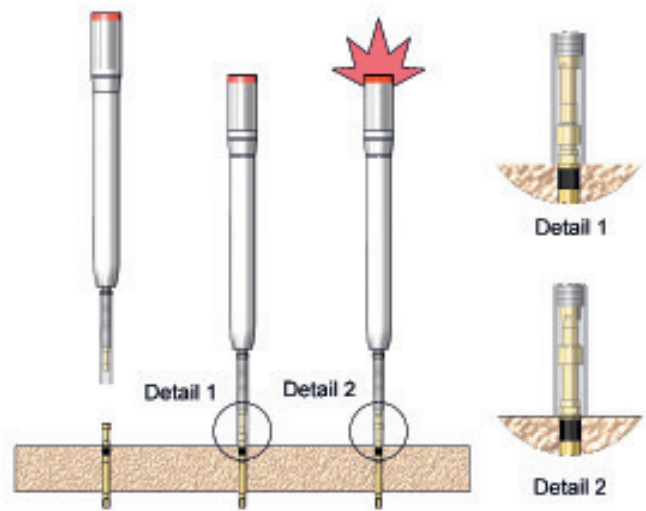
The tool FWZ...SA enables the mounting and correct positioning of switch probes before the final electrical connections are made. The exact switching position can be adjusted by help of the integrated LED signal which is illuminated as soon as the switch circuit is closed.



Tool for detection of blocked or tight plungers

With this tool the correct function of contact probes built in at test modules or fixtures can be tested very fast and simple (max. spring force 600 cN). Thereby a potential damage of connector elements can be avoided.

- simple tool with integrated switch probe (F885) and LED-display
- test height (nominal travel) adjustable by threaded sleeve
- spring force adjustment possible by exchange of the integrated switch probe



Order Code 32001



Spring Force Gauge FK50

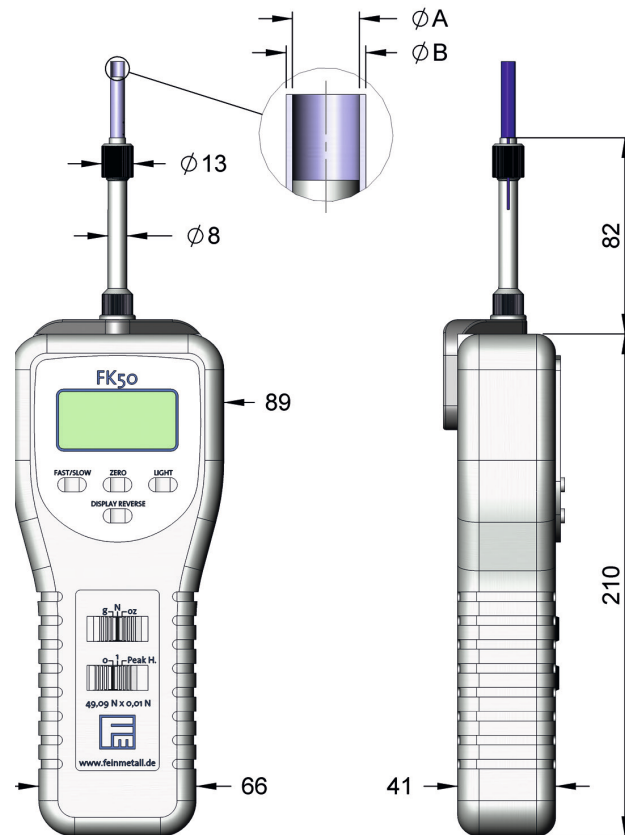
The Spring Force Gauge allows force measurement at all types of spring contact probes up to 50N. This instrument allows in a very simple way to verify, if a probe is still intact and to determine the spring force of the probe. The measuring results are displayed at the instrument and the display can 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
- power supply: 6 x 1,5V AA (UM-3 batteries)
(Batteries non included in delivery)

Included in Delivery:

- Spring Force Gauge with receptacle for measuring sleeve
- measuring sleeve \varnothing 5,0mm
- operating manual
- calibration certificate
- carrying case



Article	Order Code
Spring Force Gauge FK50	FK50
Measuring Sleeve \varnothing 3,0 mm	MS30
Measuring Sleeve \varnothing 4,0 mm	MS40
Measuring Sleeve \varnothing 5,0 mm	MS50
Data Cable RS232	2111810

Dimensions of adjustable measuring sleeves			
	Outer- \varnothing B	Inner- \varnothing A	Height Adjustability
MS30	4 mm	3 mm	0-40,5 mm
MS40	5 mm	4 mm	0-40,5 mm
MS50	6 mm	5 mm	0-40,5 mm

Rigid measuring sleeves with fixed stop

Rigid measuring sleeves for repeat measurements at probes with fixed projection height are available with different diameters.

Example for height adjustment at measuring sleeve

projection height of the probe, e.g. F732: = 10,50 mm
 Nominal Travel: = 4,00 mm
 Projection height - Nominal Travel: = 10,50-4,00 mm
 Height to fix: = 6,50 mm



Measuring Sleeve	Order Code	for Probe	inner \varnothing A	outer \varnothing B	Projection Height Probe	Nominal Travel
measuring sleeve F732	MS230E065	F732	2,30 mm	2,70 mm	10,50 mm	4,00 mm
measuring sleeve F733	MS360E065	F733	3,60 mm	4,00 mm	10,50 mm	4,00 mm
measuring sleeve VF3	MS270E355	VF3	2,70 mm	3,20 mm	40,50 mm	5,00 mm
measuring sleeve VF4	MS370E355	VF4	3,70 mm	4,20 mm	40,50 mm	5,00 mm
measuring sleeve VF5	MS460E315	VF5	4,60 mm	5,00 mm	36,50 mm	4,80 mm