50 A Contact Clamp for High Current

The 50 A Contact Clamp series for contacting of flat contacts has the following features:

Contacting manually or automatically

Contact surface protective

High current capacitance

Low transition resistance

Long service life

Modular and easy maintenance

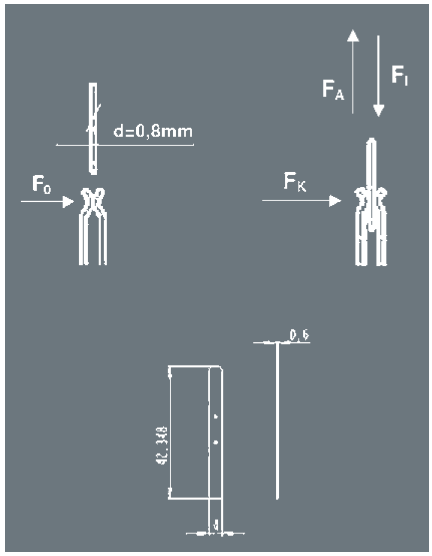
Can be combined with alternative test contacts

Mountable irrespective of its position

Little required space

The 50 A Contacting Clamp made of tempered copper-beryllium alloy has been developed for the contacting of conducting flat contacts. Via large contact surfaces currents of up to 50 A can be transmitted safely and without damage to the contact surfaces, for example, on Faston flat contacts 2.8 until 4.8 x 0.8 mm. It also can be used for automatically contacting in automated test systems or rigs. For various applications the 50 A Contacting Clamp can be adapted. Custom made products and further information are available upon request.

50 A Contact Clamb
Utility patent DE 20 206 006 957 U1



50 A Contact Clamp force diagram above (not contacted and contacted state) and front and side view below

Mechanical Specifications

Camber

F_0 = 4 N (w/o plugged contact clamp)

Spring rate

D = 5000 N/m

Contact force

$F_K = F_0 + D \cdot d/2$

Maximum contact thickness

d_{max} = 1.5 mm

Insertion force

F_I = 5 - 6 N (ref. contact d = 0.8 mm)

Drawing force

F_A = 3.2 - 3.6 N (ref. contact d = 0.8 mm

Electrical Specifications (contact spring incl. soldered joint)

Maximum allowable continuous current

50 A (cross section gripper tot. 4.8 mm²)

Typical transfer resistance

1 mΩ (ref. 0.8 mm Faston tinned)

Contact cycles

Max. 500,000 (dependent upon the inserted contact)

Contacting mode

Manual or automatic

Caution

Do not plug or remove contacts under load.

Material and Surface

Contact clamb made of copper-beryllium alloy

Bolt made of steel

Housingmade of polymer plastic