

PowerElements



Original size PowerElement male thread M5

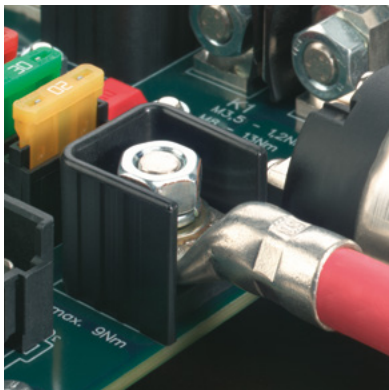
ED. 05 | 07.2019

Catalog E 074634

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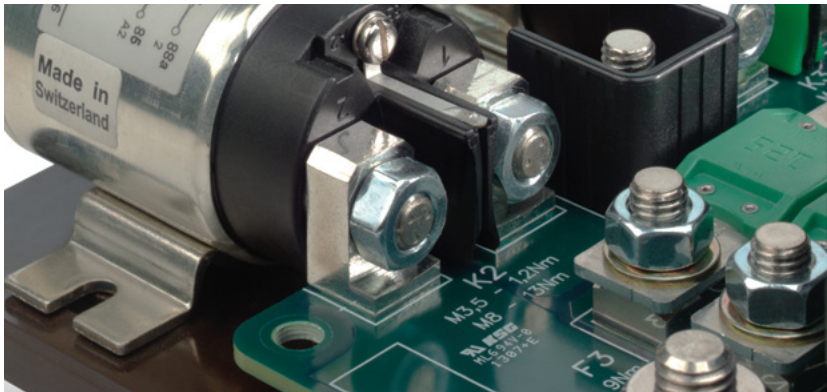
CHARACTERISTICS —

APPLICATION EXAMPLES



Attaching a cable to a M8 male thread PowerElement with twist protection (top left)

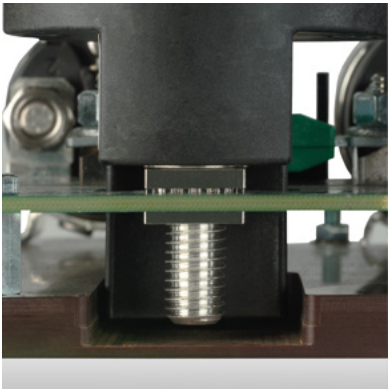
Attaching a megafuse on two M8 male thread PowerElements (top right)



Attaching a high-current relay onto an angled PowerElement (centre)

Attaching a battery disconnecting switch on two piece PowerElements (bottom centre)

Attaching a midifuse onto two M5 male thread PowerElements (below right)



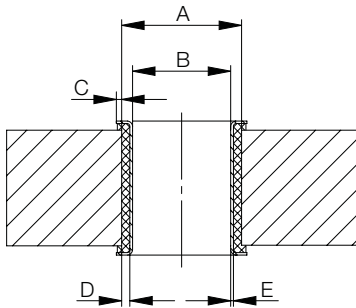
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MASSIVE PRESSFIT ZONE / CHARACTERISTICS

GENERAL TECHNICAL DATA

Current carrying capability per PowerElement	Approx. 10 A per pin
Tightening torque M3/M4/M5/M6/M8/M10/M12	0.5 Nm / 1.2 Nm / 2.2 Nm / 3.9 Nm / 9.0 Nm / 17.0 Nm / 35.0 Nm
Operating temperature	-40°C to +135°C

DRILL HOLE SPECIFICATIONS



	Surface	A	B	C	D	E
Massive pressfit zone	Immersion tin	$\varnothing 1.6 -0.03$	$\varnothing 1.475 \pm 0.05$	0.1 min.	Cu 25 μm min. Cu 60 μm max.	Sn 15 μm max.
	HAL lead free	$\varnothing 1.6 -0.03$	$\varnothing 1.45 \pm 0.05$	0.1 min.	Cu 25 μm min. Cu 60 μm max.	Sn 15 μm max.









CAUTION:

It is essential that both the drill diameter and final diameter are complied with in order to guarantee the specified characteristics.

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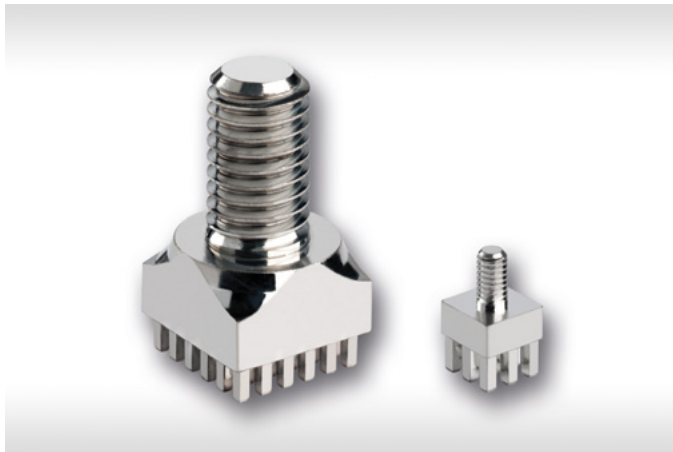
OVERVIEW

PRODUCT MATRIX PRESSFIT TECHNOLOGY

	Number of pins	6	8	9	10	12	16	20	25	36	49
	Male thread, full pin population			M3 M4 M5			M4 M5		M6 M8	M10	
	Female thread, full pin population			M3			M4 M5 M6		M8	M10	
	Female thread, two rows pin population	M3	M4 M5 M6		M8	M10					
	Female thread, circular pin population		M2,5			M4 M5	M6 M8	M10			
	Angled, full pin population			M3 ø3.2			M4, M5 ø4.2 ø5.2		M6, M8 ø6.2 ø8.2	M10 ø10.2	
	Angled, two rows pin population	M3 ø3.2	M4, M5 ø4.2 ø5.2		M6, M8 ø6.2 ø8.2	M10 ø10.2					
	Angled, U-profile, full pin population								ø5.2	ø8.2 ø10.2	
	Protection for PowerElements with male thread	Suitable for M3, M4, M5, M6, M8, M10									

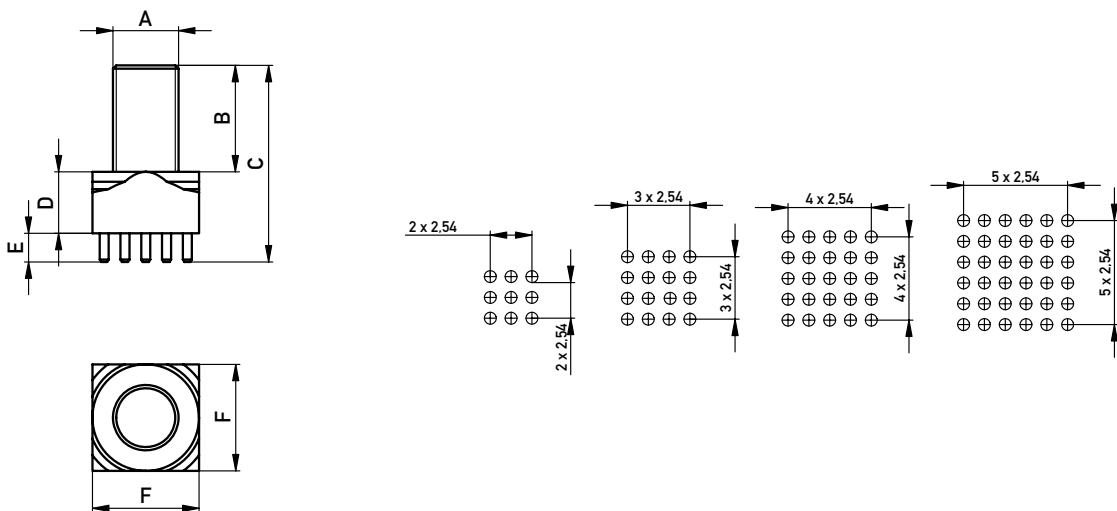
MASSIVE PRESSFIT ZONE, MALE THREAD AND FULL PIN POPULATION

PRODUCT SPECIFICATION



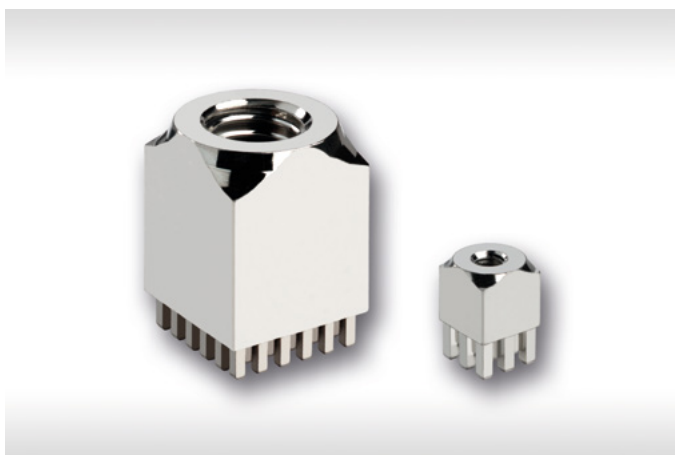
- PCB connection for fixing cable lugs
- Fixing midi or mega fuses on the PCB
- UNC thread or customer specific modifications on demand

DIMENSIONAL DRAWINGS



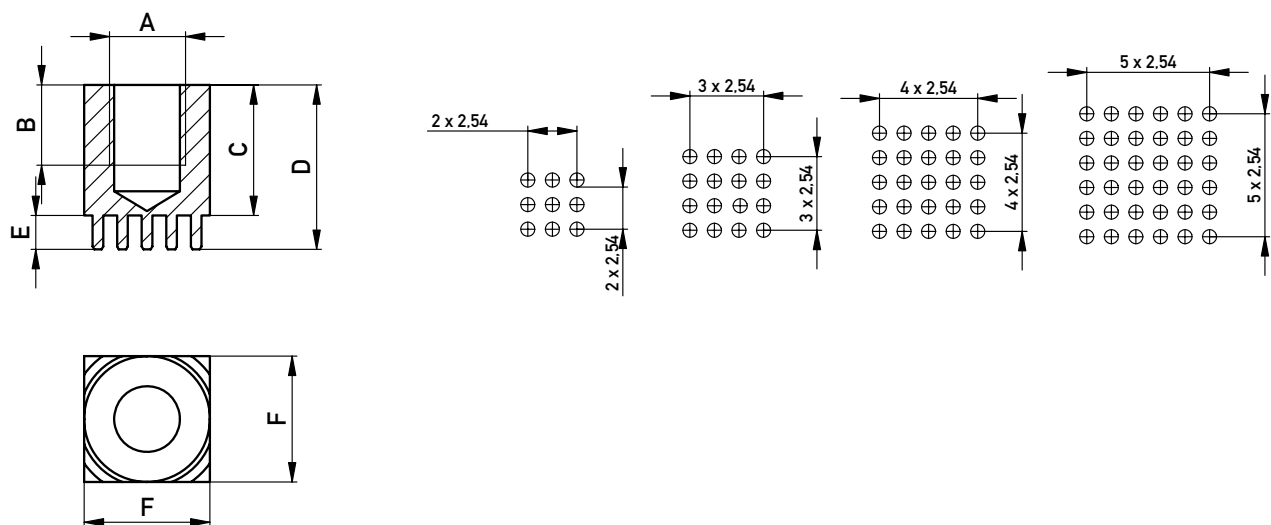
FEMALE THREAD AND FULL PIN POPULATION

PRODUCT SPECIFICATION



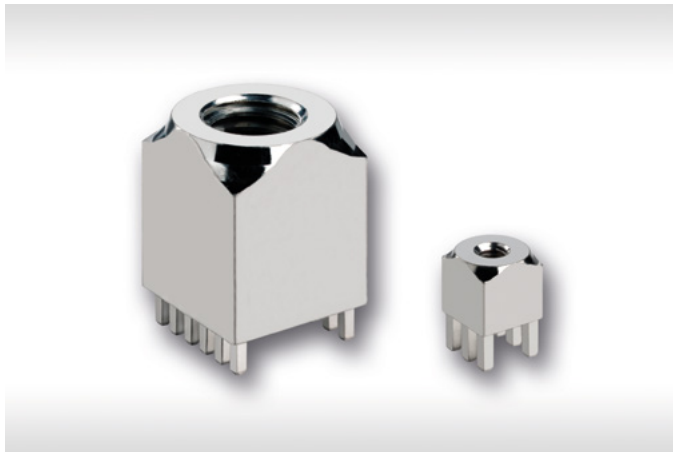
- PCB connection for fixing cable lugs
- Fixing midi or mega fuses on the PCB
- UNC thread or customer specific modifications on demand

DIMENSIONAL DRAWINGS



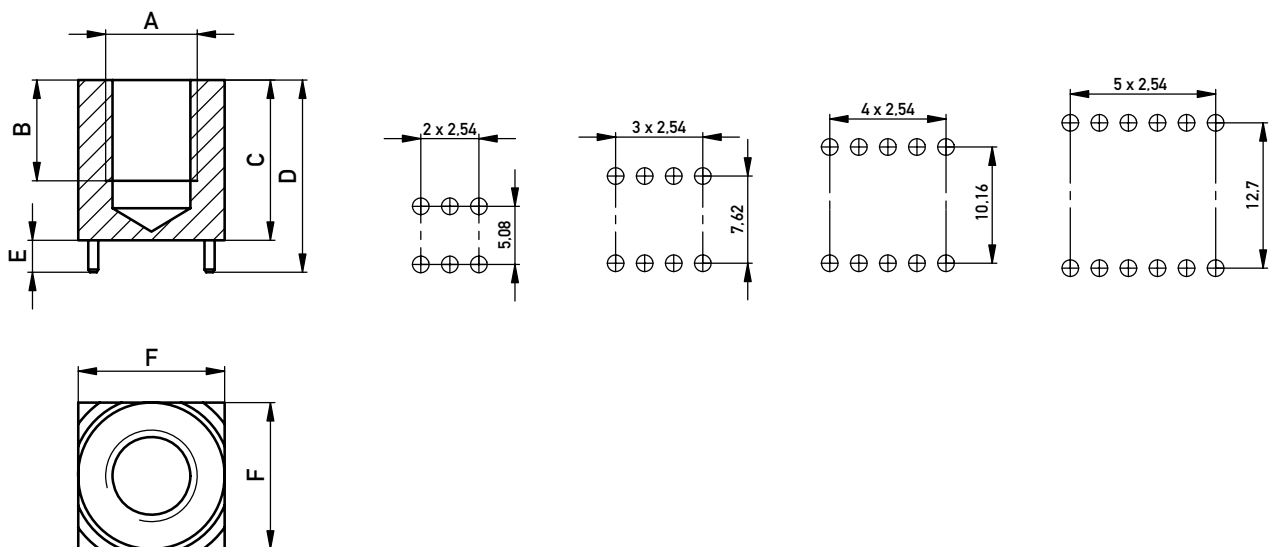
FEMALE THREAD AND TWO ROWS PIN POPULATION

PRODUCT SPECIFICATION



- PCB connection for fixing cable lugs
- Available with continuous thread
- Fixing midi or mega fuses on the PCB
- When smaller pressfit forces are required
- When the layout does not permit full pin population
- UNC thread or customer specific modifications on demand

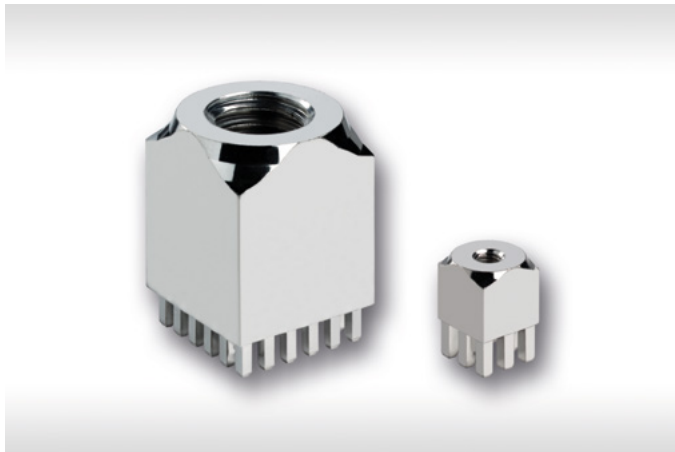
DIMENSIONAL DRAWINGS



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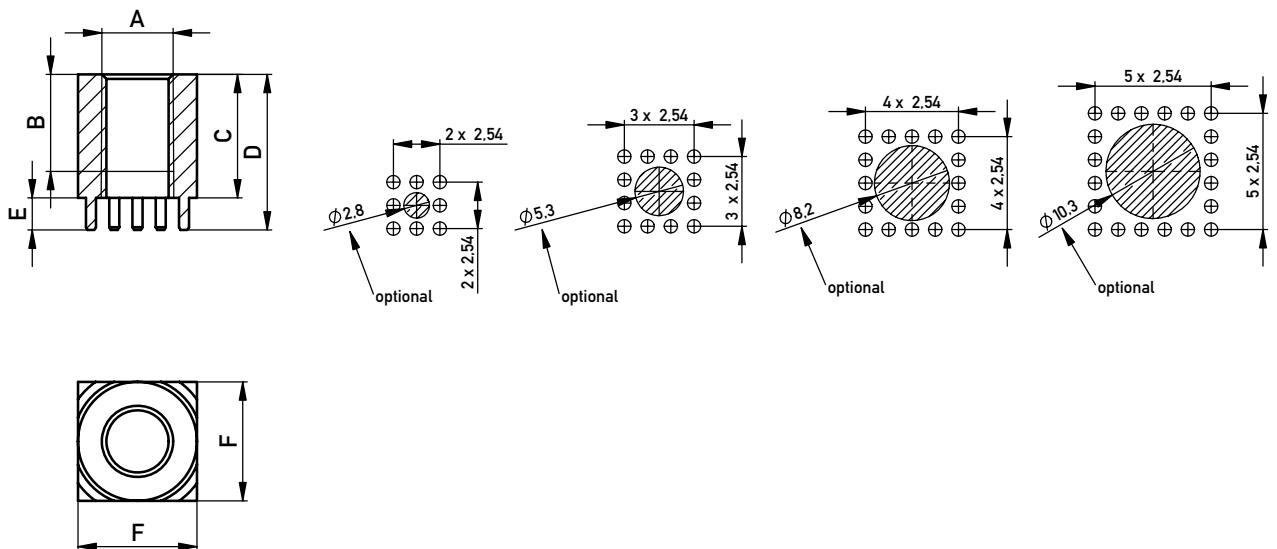
FEMALE THREAD AND CIRCULAR PIN POPULATION

PRODUCT SPECIFICATION



- PCB connection for fixing cable lugs
- Available with continuous thread
- Fixing midi or mega fuses on the PCB
- When smaller pressfit forces are required
- When the layout does not permit full pin population
- UNC thread or customer specific modifications on demand

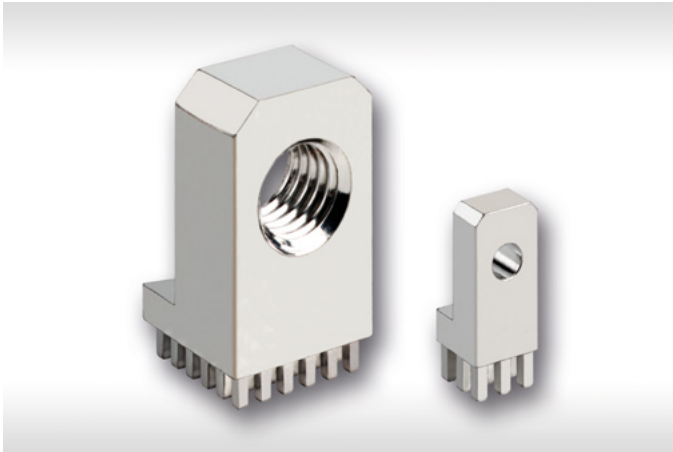
DIMENSIONAL DRAWINGS



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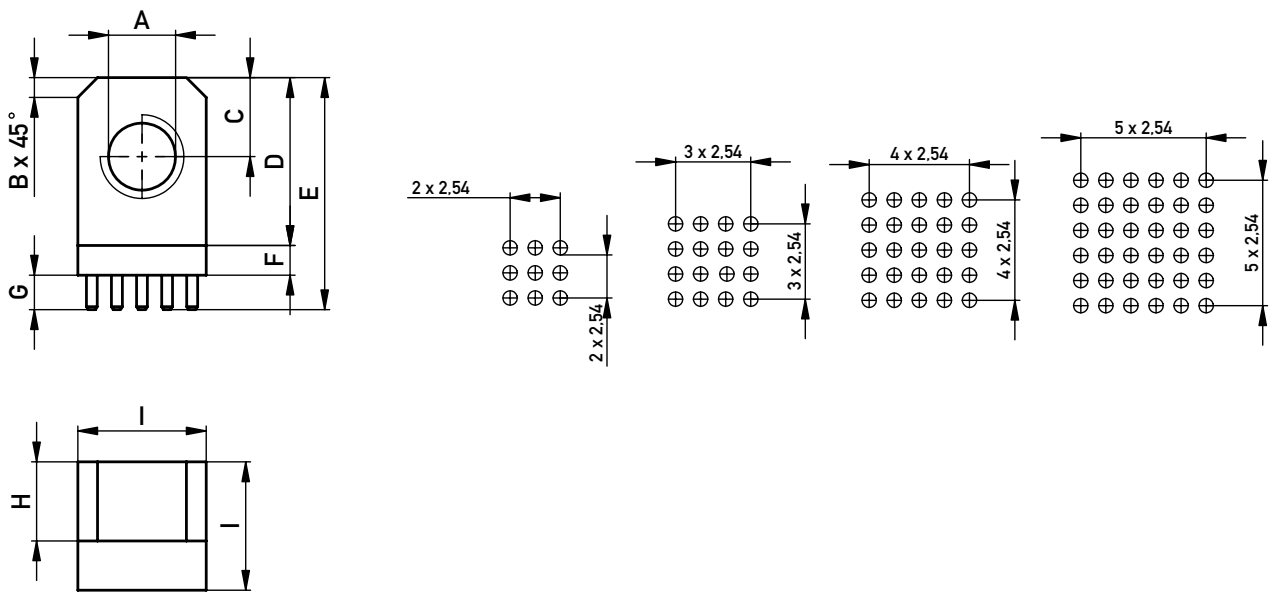
ANGLED, FULL PIN POPULATION

PRODUCT SPECIFICATION



- PCB connection for fixing cable lugs
- Connection 90°
- Available with thread or through hole
- UNC thread or customer specific modifications on demand
- As a fixing element for assembly onto housing etc.
- E.g. for the connection of high current relays

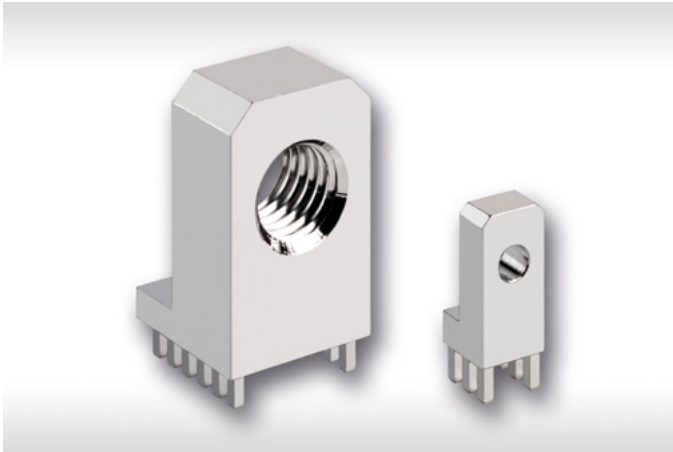
DIMENSIONAL DRAWINGS



PowerElements

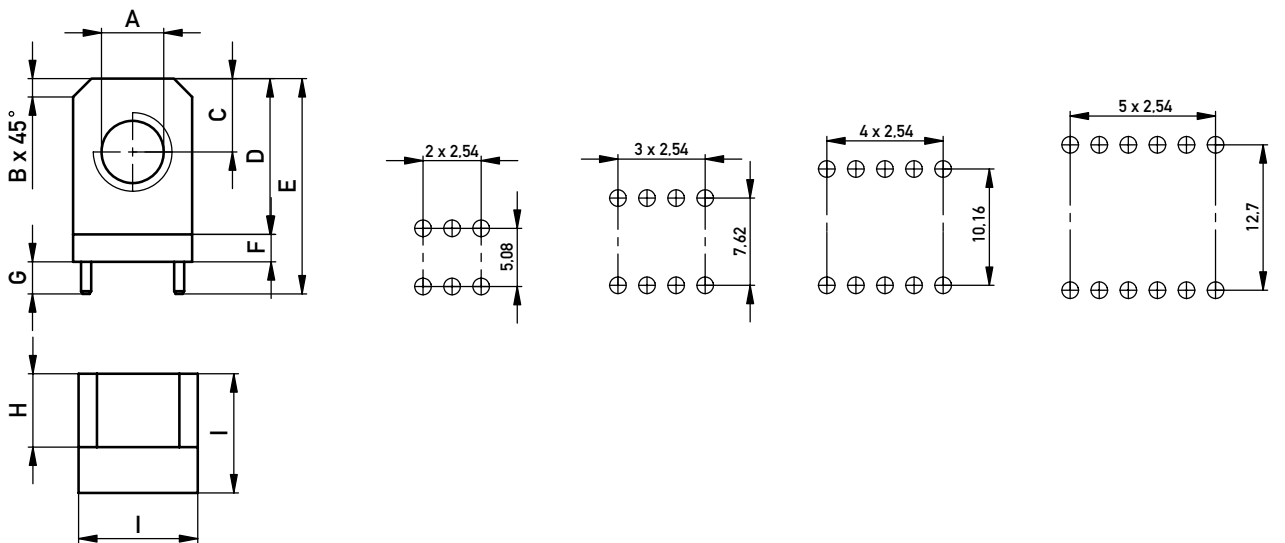
ANGLED, TWO ROW PIN POPULATION

PRODUCT SPECIFICATION



- PCB connection for fixing cable lugs
- Connection 90°
- Available with thread or through hole
- UNC thread or customer specific modifications on demand
- When smaller pressfit forces are required
- When the layout does not permit full pin population
- E.g. for the connection of high current relays

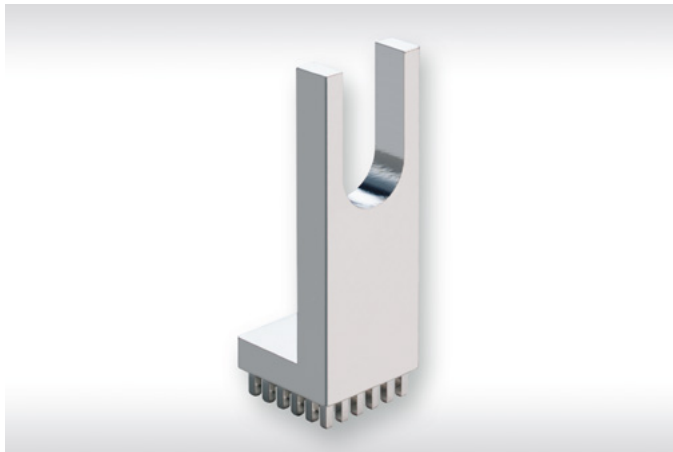
DIMENSIONAL DRAWINGS



PowerElements

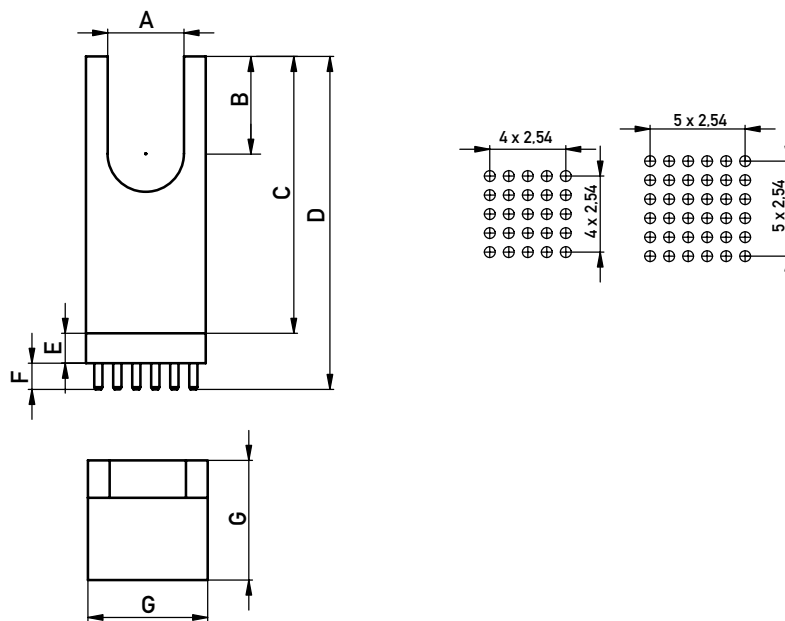
ANGLED, U-PROFILE, FULL PIN POPULATION

PRODUCT SPECIFICATION



- PCB connection for fixing cable lugs
- Connection 90°
- Due to the u-profile ensures a simple processing of the mounting bolt
- Compensation of greater height tolerances possible
- As a fixing element for assembly onto housing etc.
- E.g. for the connection of high current relays

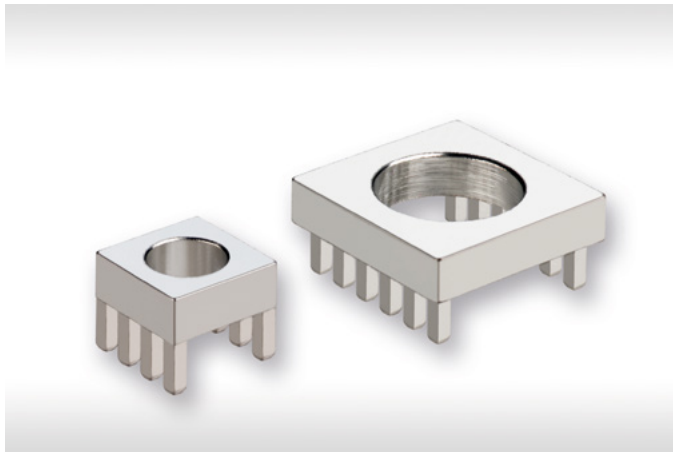
DIMENSIONAL DRAWINGS



PowerElements

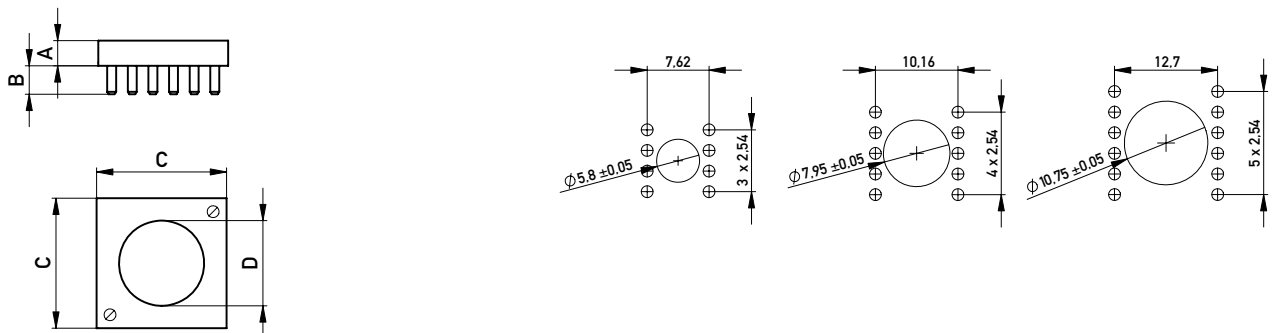
TWO-PART, BASE-PART, TWO ROW PIN POPULATION

PRODUCT SPECIFICATION



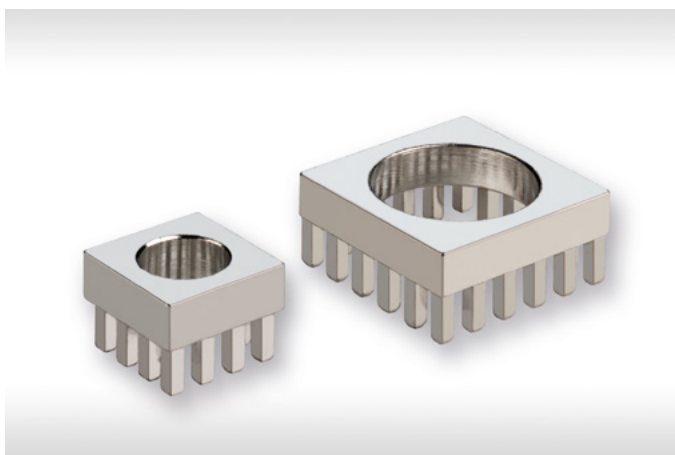
- PCB connection for fixing cable lugs
- Fixing of large heavy components (e.g. battery disconnection switch)
- Protecting PCB from mechanical stress
- Pitch 2.54 mm

DIMENSIONAL DRAWINGS



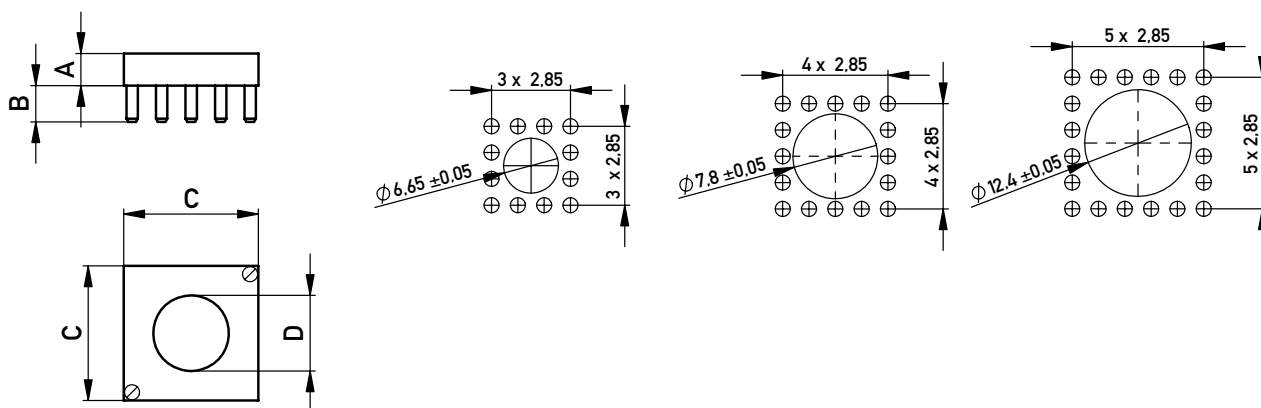
TWO-PART, BASE-PART, CIRCULAR PIN POPULATION

PRODUCT SPECIFICATION



- PCB connection for fixing cable lugs
- Fixing of large heavy components (e.g. battery disconnection switch)
- Protecting PCB from mechanical stress
- Pitch 2,85 mm

DIMENSIONAL DRAWINGS



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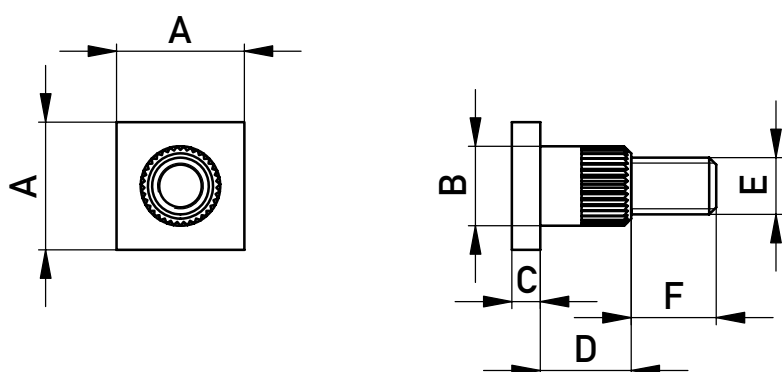
TWO-PART, MALE THREAD

PRODUCT SPECIFICATION



- For pressing in base body
- PCB connection for fixing cable lugs
- Fixing of large heavy components
- UNC thread or customer specific modifications on demand

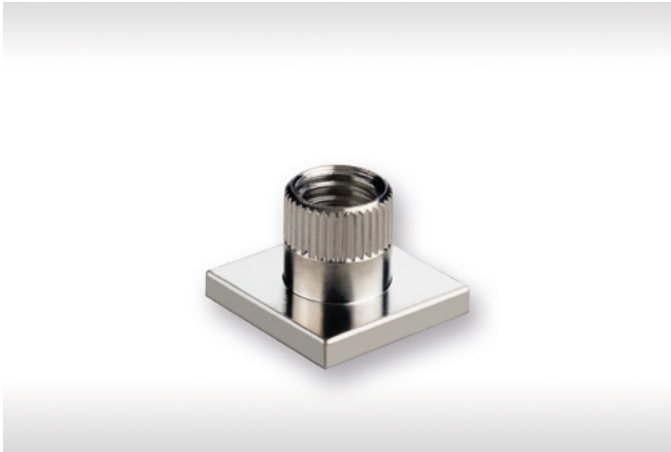
DIMENSIONAL DRAWINGS



PowerElements

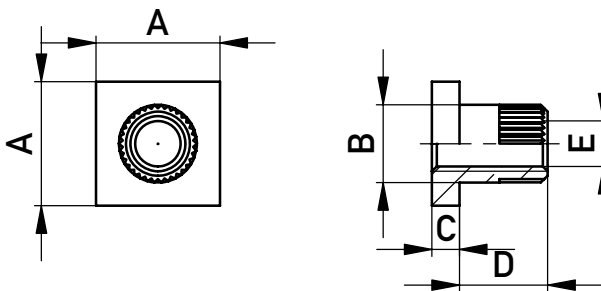
TWO-PART, FEMALE THREAD

PRODUCT SPECIFICATION



- For pressing in base body
- PCB connection for fixing cable lugs
- Fixing of large heavy components
- UNC thread or customer specific modifications on demand

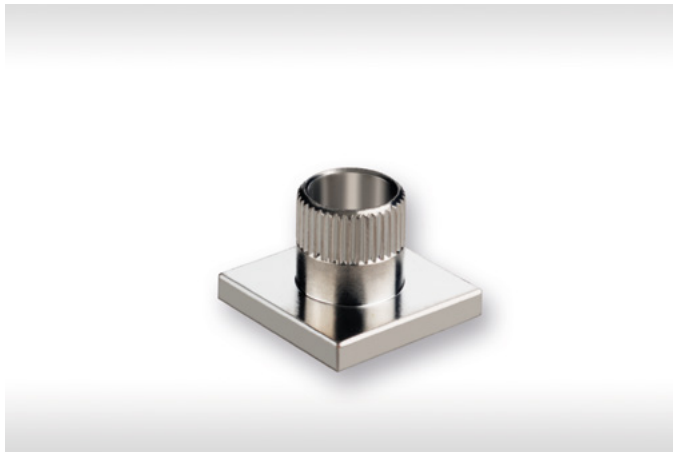
DIMENSIONAL DRAWINGS



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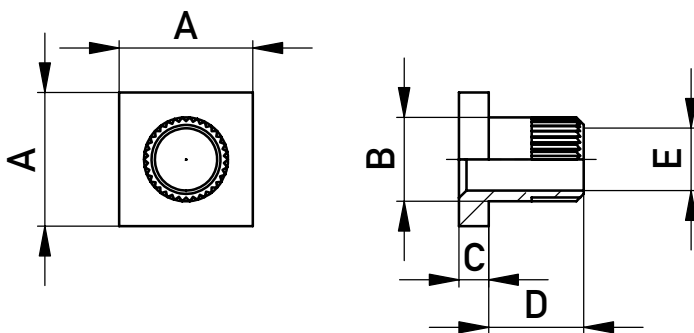
TWO-PART, FEMALE THROUGH-HOLE

PRODUCT SPECIFICATION



- For pressing in base body
- PCB connection for fixing cable lugs
- Fixing of large heavy components
- UNC thread or customer specific modifications on demand

DIMENSIONAL DRAWINGS



PowerElements

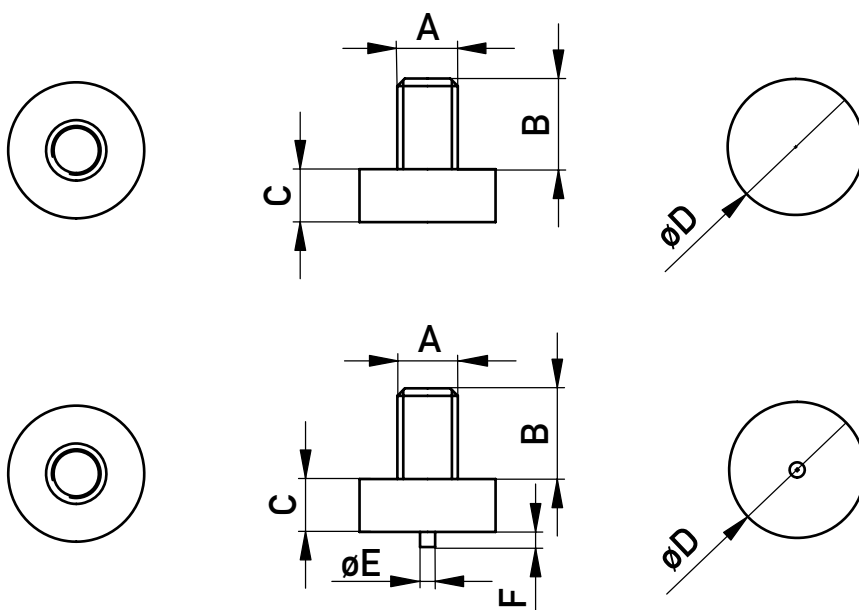
SMD, MALE THREAD

PRODUCT SPECIFICATION



- For soldering in SMT
- Available with and without peg
- Blistered for fully automated assembly
- PCB connection for fixing cable lugs
- UNC thread or customer specific modifications on demand

DIMENSIONAL DRAWINGS



PowerElements

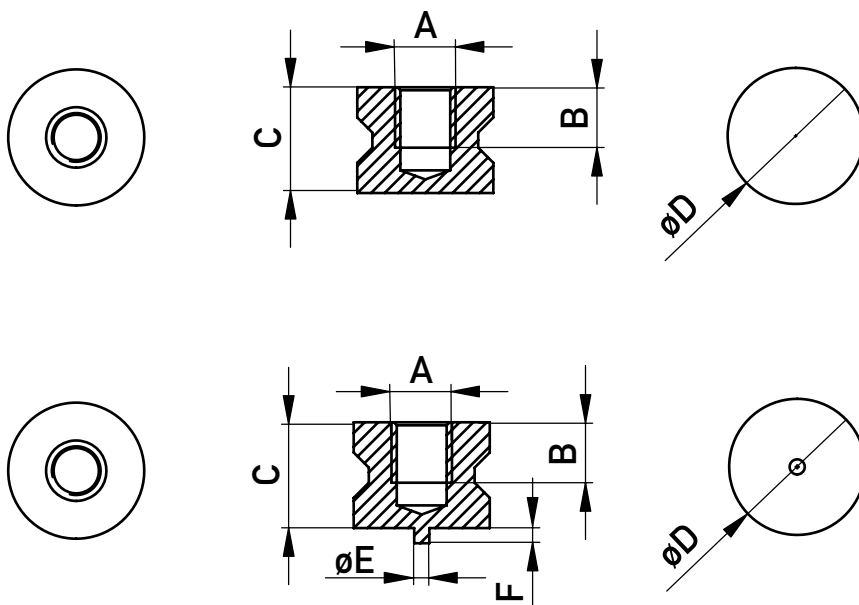
SMD, FEMALE THREAD

PRODUCT SPECIFICATION



- For soldering in SMT
- Available with and without peg
- Partially blistered for fully automated assembly
- PCB connection for fixing cable lugs
- UNC thread or customer specific modifications on demand

DIMENSIONAL DRAWINGS



PowerElements

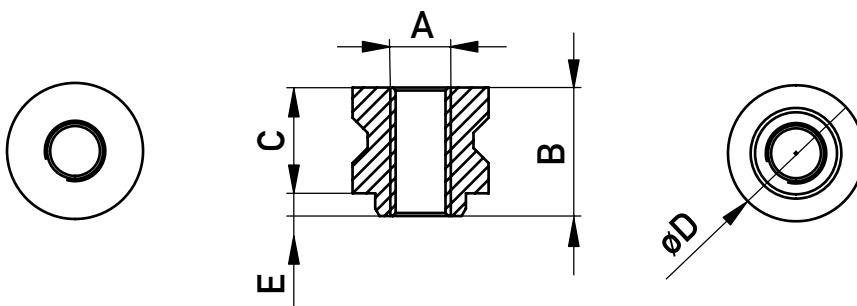
SMD, FEMALE THREAD THROUGHOUT —

PRODUCT SPECIFICATION



- For soldering in SMT
- Available with and without peg
- Blistered for fully automated assembly
- PCB connection for fixing cable lugs
- UNC thread or customer specific modifications on demand

DIMENSIONAL DRAWINGS



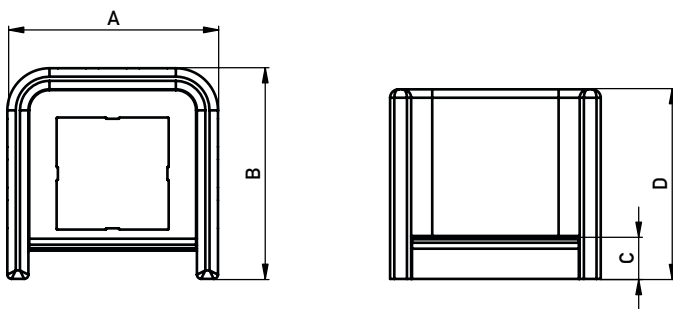
TWISTED AND CONTACT PROTECTION FOR MALE POWER ELEMENTS

PRODUCT SPECIFICATION



- For placement particularly on the PowerElement pins
- To prevent short circuits to nearby components
- As protection against contact
- Smaller distances between two power elements in layout is feasible

DIMENSIONAL DRAWINGS





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