

## PKBZ 1551

13039.1

PKBZ 1551/3.81/2 2P PLUG VERT

- female socket terminals
- Screw Connection
- Conductors from 0.14 mm<sup>2</sup> to 1.5 mm<sup>2</sup>



### PRODUCT DESCRIPTION

The PKBZ 1551 connector series by CONTA-CLIP comprises pluggable female socket terminal blocks designed for PCB integration using a screw-connection principle. Available in variants with two to twelve poles, all spaced on a 3.81 mm pitch, they share robust ratings: 160 V nominal voltage, 8 A current, and 2.5 kV impulse voltage under overvoltage category III and contamination degree 3. Each pole accepts conductors from 0.14 mm<sup>2</sup> to 1.5 mm<sup>2</sup> (AWG 28–16) or stranded wire up to 1 mm<sup>2</sup> with ferrules, using an M2 screw tightened to 0.25 Nm torque and a stripping length of 7 mm. Constructed with a polyamide 6.6 housing rated UL 94 V-0, bronze contact springs and brass clamp elements, the series withstands -30 °C to +105 °C operating temperature and meets UL, cUL, and VDE safety approvals, with explicit VDE rating of 160 V/8 A and UL/cUL use-group voltage up to 300 V. It is also rated for creepage resistance (CTI 600), insulation resistance  $\geq 1 \times 10^{13} \Omega \cdot \text{cm}$ , and glow-wire performance: GWFI 850 °C with 30 s after-glow and GWIT 775 °C exposure time 5 s.

The PKBZ 1551 series is ideal for modular PCB-mounted connection systems in industrial automation, machinery control electronics, and switchgear interfaces where removable connectors support flexible wiring layouts and maintenance. The pluggable female sockets allow fast mating with corresponding PKB plug headers for secure detachable interconnects. Designers commonly choose the 6-pole (Art.-Nr. 13043.1), 9-pole (14067.1) or 12-pole (13049.1) versions depending on signal density and board space constraints, with widths ranging from approximately 22.9 mm to 45.7 mm accordingly. With vertical-upward wire entry at 90°, these connectors facilitate tidy cable routing in tight enclosures, while UL and VDE approvals make them suitable for global export applications. They perform reliably in harsh environments demanding high safety margins and enable up to 100 plug/unplug cycles plus 5 connection cycles per terminal, supporting regular service and reconfiguration with minimal wear.

## TECHNICAL DATA

### GENERAL DATA

Type	Plug-in connector
Pitch	3.81 mm
Colour	Green
Number of poles	2
Approvals	UL, cUL, VDE

### RATINGS

Rated current	8 A
Rated voltage	160 V
Rated cross section	1.5 mm <sup>2</sup>
Rated impulse voltage	2.5 kV
Overvoltage category	III

Contamination degree	3
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## DIMENSIONS

Length	10.4 mm
Width	7.62 mm
Height	19.1 mm
Width left	1.905 mm
Width right	1.905 mm

## CONNECTION DATA

Connector type/principle	Screw
Contact version	Female connector
Connector version	Pluggable
Number of plugin rows	1
Cross section single wire from	0.14 mm <sup>2</sup>
Cross section single wire to	1.5 mm <sup>2</sup>
Cross section stranded wire from	0.14 mm <sup>2</sup>
Cross section stranded with ferrule to	1 mm <sup>2</sup>
Cross section stranded wire to	1.5 mm <sup>2</sup>
Cross section stranded with ferrule from	0.25 mm <sup>2</sup>
Rated wire cross section to (AWG)	16
Rated wire cross section from (AWG)	28
Stripping length	7 mm
Screw size	M 2
Torque	0.25

## MATERIALS

Housing material	Polyamide 6.6
Flammability class	UL94-V0
Operating temperature from	-30 °C
Operating temperature to	105 °C
Contact spring	Bronze
Screw material	Bronze
Clamp material	Brass

## APPROVALS

<b>UL test standard</b>	UL 1059
<b>Rated voltage UL</b>	300 V
<b>Rated current UL</b>	8 A
<b>cUL test standard</b>	CSA 22.2 No.158
<b>Rated voltage cUL</b>	300 V
<b>Rated current cUL</b>	8 A
<b>VDE test standard</b>	DIN EN 61984
<b>Rated voltage VDE</b>	160 V
<b>Rated current VDE</b>	8 A

<b>Plug-in cycles acc. to standard</b>	100
<b>Tariff code</b>	85366990
<b>Pack size</b>	50
<b>Weight</b>	1.5 g
<b>Angle of wire connection/contact</b>	90° (vertically upwards)
<b>Connection cycles acc. to standard</b>	5
<b>Country of origin</b>	QU
<b>Current creepage resistance</b>	CTI 600
<b>Glow wire flammability index (GWFI)</b>	GWFI 850
<b>Glow wire ignition temperature (GWIT)</b>	GWIT 775
<b>GWFI after-glow time</b>	30 s
<b>GWIT exposure time</b>	5 s
<b>Insulation resistance</b>	1*10 <sup>13</sup> Ω x cm



