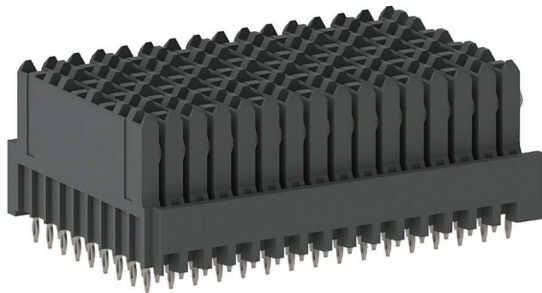


# Product Data Sheet

Velox center,  
Part No. 308-50100-42



### Bestückplan / pin arrangement

X = bestückt / loaded  
= nicht bestückt / not loaded

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X



Illustration similar



Perpendicular



Press-fit



High Speed



Rugged

- plating Press-fit Zone: Sn (RoHS compliant)
- fully loaded (144 contacts)
- termination technology: Press-fit
- pitch 1.8 mm
- data transfer rate 10 Gbit/s



» to product on [www.ept.de](http://www.ept.de)



» to product group Velox Highspeed Backplane

# Product Data Sheet

Velox center,  
Part No. 308-50100-42



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## Technical Specifications

### Basics

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Specification	VITA 46
No. of Contacts	144
Termination Technology	Press-fit
Termination Length	1.62 mm
Operating Temperature Range	-55°C to +105°C

### Material

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Insulator Material	LCP, UL 94 V-0
Contact Material	Phosphor Bronze
Plating	1.27 µm Au over Ni on contact area, Sn on Press-fit zone

### Mechanical

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Pitch	1.8 mm
Mating Force per Pin	max. 0.75 N
Separating Force per Pin	min. 0.15 N
Durability	200 mating cycles

### Electrical

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Operational Current	1.0 A (<30°C)
Operational Voltage	50 VAC Peak or DC
Contact Resistance	max. 80 mΩ
Clearance and Creepage	≥ 0.7 mm
Insulation Resistance	min. 1000 MΩ
Test Voltage	500 V (AC/DC)
Data Transfer Rate	10 Gbit/s

### Approval / Compliance

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UL file	E130314
Environment	RoHS compliant

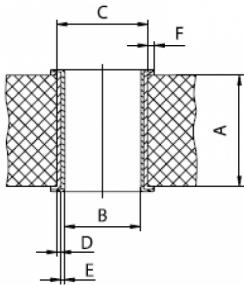
# Product Data Sheet

Velox center,  
Part No. 308-50100-42



## Hole Specifications

Plated through-hole according to IEC 60352-5



Material	imm. Sn printed circuit boards
<b>Nominal Hole</b>	<b>Ø 0.56 mm</b>
<b>A PCB Thickness</b>	min 1.44 mm
<b>B Plated Hole</b>	Ø 0.56 ±0.05 mm
<b>C Drill Hole</b>	0.65 ±0.02 mm
<b>D Cu Plating</b>	min. 25 µm
<b>E Surface</b>	imm. Sn plating, max. 1.5 µm
<b>F Annular Ring</b>	min. 0.1 mm

Material	Ni, Au printed circuit boards
<b>Nominal Hole</b>	<b>Ø 0.56 mm</b>
<b>A PCB Thickness</b>	min 1.44 mm
<b>B Plated Hole</b>	Ø 0.56 ±0.05 mm
<b>C Drill Hole</b>	0.65 ±0.02 mm
<b>D Cu Plating</b>	min. 25 µm
<b>E Surface</b>	Ni, Au plating, 0.05 - 0.2 µm Au over 2.5 - 5 µm Ni
<b>F Annular Ring</b>	min. 0.1 mm

# Product Data Sheet

Velox center,  
Part No. 308-50100-42

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## Modifications

Available on request

- different custom loaded versions

## Accessories

» Velox Guiding front / rear side  
Part Number 308-61013

» Velox Guiding / Keying; front side  
Part Number 308-62113

» Velox Guiding / Keying; front side  
Part Number 308-62123

## Drawings

Component data in 2D and 3D format you can download here:

[» PDF](#)

[» 3D IGES](#)

[» 3D STEP](#)

[» 3D PDF](#)