

HVR[®]50

HVR[®]50 connectors have been developed in straight and angled variants. The additional slide locking mechanism (CPA – Connector Position Assurance) prevents the connection from unmating accidentally. Despite their small size, they achieve a current intensity of around 60 A at a temperature of 85 °C. HVR[®]50 connectors are mainly used in ancillary units; for example in electrical heating systems, air-conditioning units or DC/DC converters, and for charging batteries.

Technical Properties

- Current capacity (6 mm²): 60 A at 85 °C
- Working voltage 1000 V DC, test voltage 2700 V DC
- Cross sections 4 - 6 mm²
- High temperature range from -40 °C to +140 °C
- IP code mated acc. to IP6K9K / IPX8 / IPXXD
- IP code unmated acc. to IPXXD
- Vibration class II acc. to LV215, PG17

Applications

- Electrical heater
- Electrical air condition
- Battery charger

Cables

- FHLR2G2GCB2G 4 mm² / 0.31 mm / LV216-2
- FHLR2G2GCB2G 6 mm² / 0.31 mm / LV216-2

Features and Benefits

- Minimal dimensions
- Excellent shielding
- With HVIL
- Straight and right angle cable connectors, header

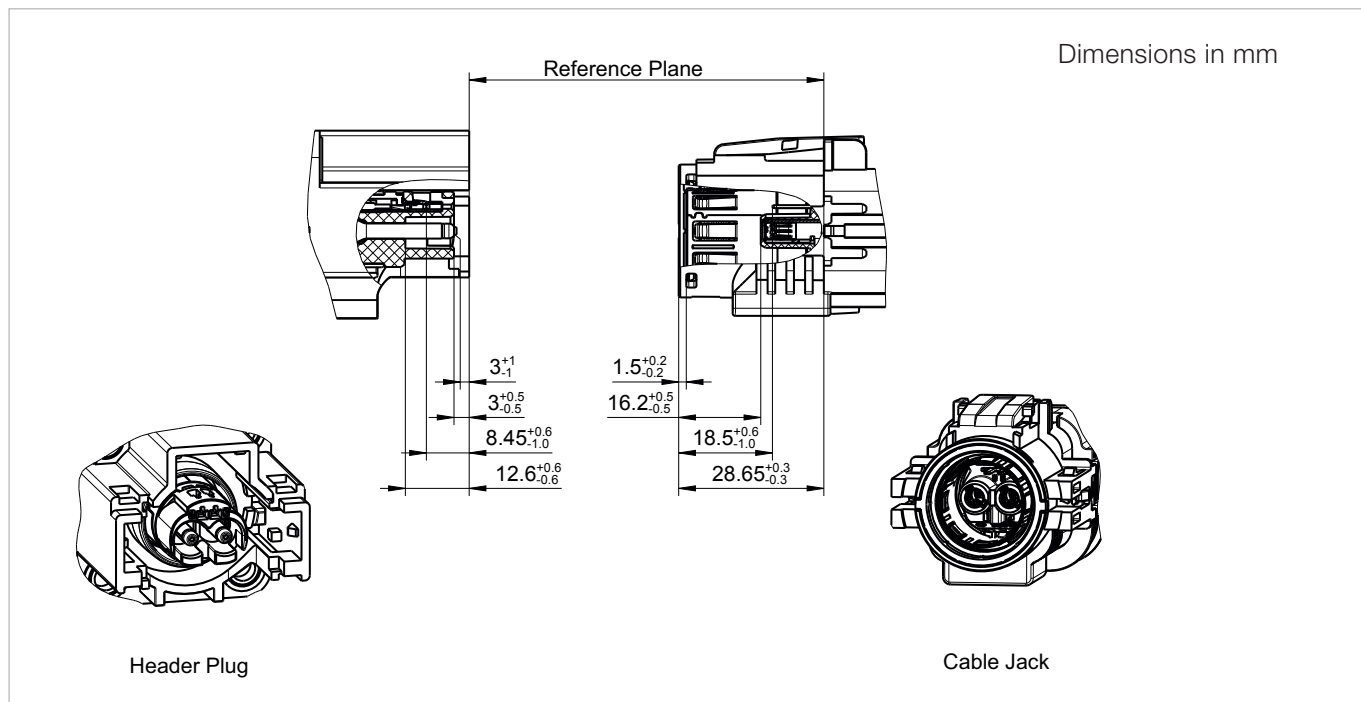


Coding HVR[®]50

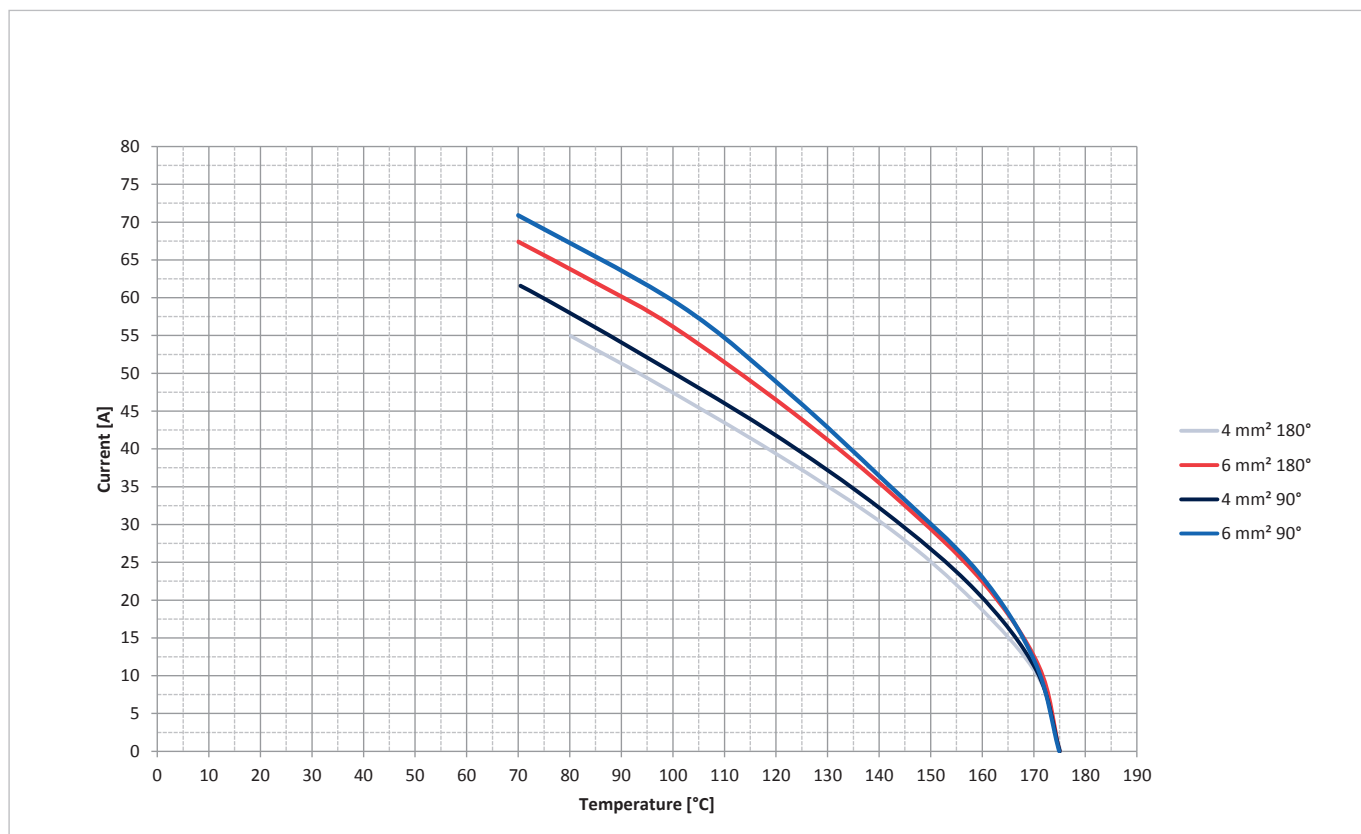
Coding	Slider Jack Color/RAL-No. (Similar)	Jack	Plug
A	Black/ 2005		
B	White/ 9010		
C	Blue/ 5012		
D	Violet/ 4004		
E	Green/ 6017		
F	Brown/ 8011		
Z	Waterblue/ 5021		

Colors of the plastic housings are in accordance with the listed RAL colors, minor color differences during manufacturing are possible.

Interface Dimensions HVR[®]50 (Code H6)



Derating Graph HVR[®]50 acc. to DIN EN 60512-5-2



Technical Data HVR[®]50 (Code H6)

Applicable Standards

Interface according to	Rosenberger RN_111-01
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Electrical Data

Insulation resistance	≥ 200 MΩ at 1000 V DC
Voltage class	B 60 V DC < U ≤ 1500 V DC 30 V AC < U ≤ 1000 V AC
Center contact resistance	≤ 1.36 mΩ
Outer contact resistance	≤ 10 mΩ
Current capacity for 6 mm ²	60 A at 85 °C
Test voltage	2700 V DC
Working voltage	1000 V DC
High-Voltage Interlock (HVIL)	yes Power pins min. 1 mm advanced

Mechanical Data

Mating cycles	≥ 50
Engagement force	≤ 75 N
Coding efficiency	≥ 300 N
Cable cross sections	4 mm ² , 6 mm ²
Cable connection angle	90°, 180°
Vibration class	LV215 PG17- II
IP class (mated)	IP6K9K / IPX8 / IPXXD
IP class (unmated)	IPXXB

Environmental Data

Temperature range	-40 °C to +140 °C
RoHS	compliant

Rosenberger connectors fulfill in principle the indicated data of the technical data. Individual values of connectors may deviate depending upon application, design, type of cable, assembly method and execution. Specific data sheets for particular products can be provided on request from your Rosenberger sales partner.