

## RJ45C5 R1U 2.8N4N RL

Weidmüller Interface GmbH & Co. KG

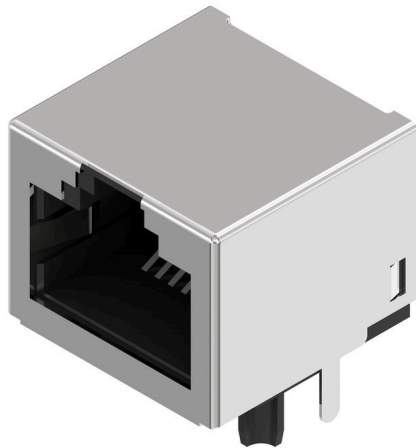
Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

### Product image



The product range encompasses the following designs:

- 90°, lying (horizontal) and 180°, standing (vertical)
- latch up / latch down
- THT, THR or SMD soldering processes
- Wide range of different design types, also with integrated LEDs and shield contact tabs
- Performance category Cat. 3 to Cat. 6
- Packed either in a tray (TY) or on a roll (tape-on-reel, RL)
- Compatible with modular RJ45 connector according to ANSI / TIA-1096-A and IEC 60603
- Dielectric strength  $\geq 1500$  V AC RMS (2250 V AC peak value) according to IEEE 802.3
- Dielectric strength  $\geq 1500$  V AC (peak value) or  $\geq 1500$  V DC according to IEC 60603

Properties and advantages:

- Extended temperature range of  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$  for maximum performance
- Reinforced gold layer ( $30\mu\text{m}$ ) for improved corrosion protection
- At least 0.3mm stand-off ensures a perfect soldering result

### General ordering data

Version	OMNIMATE Data - RJ45 modular jack, PCB plug-in connector, Cat. 5, THT/THR solder connection, 90°, top, none, No, Plugging cycles: 750, Number of poles: 8, PA 9T, 30..80 $\mu\text{m}$ / $\geq 30$ $\mu\text{m}$ , Tape
Order No.	<a href="#">2638490000</a>
Type	RJ45C5 R1U 2.8N4N RL
GTIN (EAN)	4050118657104
Qty.	200 items
Packaging	Tape

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## Technical data

## Approvals

Approvals	CURUS
ROHS	Conform
UL File Number Search	<a href="#">UL Website</a>
Certificate No. (cURus)	E471884

## Dimensions and weights

Depth	15.7 mm	Depth (inches)	0.6181 inch
Height	13.11 mm	Height (inches)	0.5161 inch
Width	16.4 mm	Width (inches)	0.6457 inch
Net weight	7.09 g		

## Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

## System specifications

Number of poles	8	LED	No
Solder pin length (l)	2.8 mm	Mounting onto the PCB	THT/THR solder connection
Pitch in inches (P)	0.050 "	Shielding material	Brass
Shielding	Yes	Side termination, characteristic	Solder flange
Solder eyelet hole diameter tolerance (D)±	0.1 mm	Number of solder pins per pole	1
Type of connection	Solder connection	Category	Cat. 5
Product family	OMNIMATE Data - RJ45 modular jack	Pitch in mm (P)	1.02 mm
Protection degree	IP20	Plugging cycles	750
Outgoing elbow	90°	Shield surface	nickel-plated
Shield tabs	none	Performance-Category	Cat. 5
Soldering process	Reflow soldering, Manual soldering, Wave soldering	Latch option	top
Solder pin dimensions	Octagonal	Tolerance of solder pin position	± 0.1 mm

## Electrical properties

Dielectric strength, contact / shield	1500 V DC	Dielectric strength, contact / contact	1000 V DC
Volume resistance	<25 mΩ	Insulation resistance	≥ 500 MΩ
Nominal voltage	125 V	Rated current	1.5 A
PoE / PoE+	conforming to IEEE 802.3at		

## Standards

Connector standard	IEC 60603-7
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## Material data

Insulating material	PA 9T	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 500	Insulation resistance	≥ 500 MΩ
Moisture Level (MSL)	1	UL 94 flammability rating	V-0
Contact base material	Phosphor bronze alloy	Contact material	Cu-alloy
Contact surface	Gold over nickel	Layer structure of solder connection	30...80 μ"

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## Technical data

Layer structure of plug contact	30...80 $\mu$ " / $\geq$ 30 $\mu$ "	Storage temperature, min.	-40 °C
Storage temperature, max.	85 °C	Operating temperature, min.	-40 °C
Operating temperature, max.	85 °C		

## Packing

Packaging	Tape	VPE length	357.00 mm
VPE width	354.00 mm	VPE height	126.00 mm

## Important note

Notes

## Classifications

ETIM 8.0	EC002637	ETIM 9.0	EC002637
ETIM 10.0	EC002637	ECLASS 14.0	27-46-02-01
ECLASS 15.0	27-46-02-01		

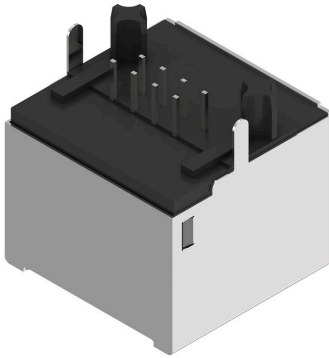
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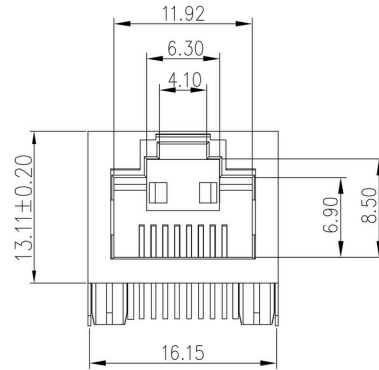
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Drawings

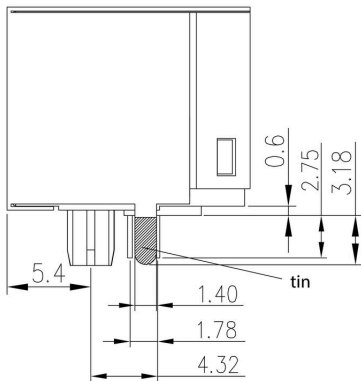
Product image



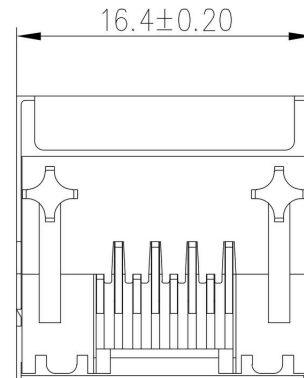
Dimensioned drawing



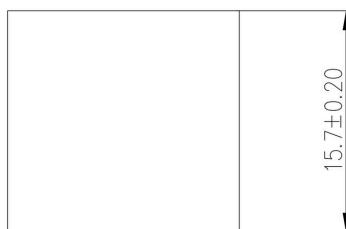
Dimensioned drawing



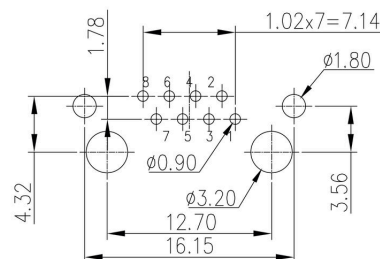
Dimensioned drawing



Dimensioned drawing



PCB design



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Drawings

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Code	Value	Description								
RJ45	G1	R	1	U	3.2	E	4	GY/GY	TY	RJ45G1 R1U 3.2E4GY/GY TY
<b>Packaging</b>	<b>TY</b>	Tray in box (manual assembly)								
	<b>RL</b>	Tape on Reel (automated assembly)								
<b>LED</b>	<b>Y/G</b>	Yellow/Green								
	<b>G/Y</b>	Green/Yellow (standard)								
	<b>GY/GY</b>	Green-Yellow/Green-Yellow								
	<b>O/G</b>	Orange/Green								
	<b>R/O</b>	Red/Orange								
	<b>...</b>	... (further combinations possible)								
	<b>N</b>	without LED								
<b>Contact surface thickness</b>	<b>4</b>	1 = 3µ", 2 = 6µ", 3 = 15µ", 4 = 30µ", 5 = 50µ"								
<b>EMI tabs (ground fingers)</b>	<b>E</b>	E = with EMI tabs								
	<b>N</b>	N = without EMI tabs								
<b>Solder Pin length</b>	<b>3.2</b>	3.2 mm								
	<b>1.6</b>	1.6 mm								
	<b>D</b>	SMD								
<b>Direction, latch style</b>	<b>U</b>	Horizontal (90°, side entry), latch up								
	<b>D</b>	Horizontal (90°, side entry), latch down								
	<b>V</b>	Vertical (180°, top entry)								
	<b>Y</b>	Diagonal (45°), latch up								
<b>Number of Ports</b>	<b>1</b>	1 Port								
	<b>12; 14; ...</b>	multi ports side by side, Multiport								
	<b>21; 41; ...</b>	multi ports about each other, Multilevel								
<b>Assembly on PCB</b>	<b>R</b>	Through Hole Reflow - THR								
	<b>S</b>	Soldering process: Wave or Reflow soldering								
	<b>T</b>	Surface Mount Technology - SMT								
	<b>T</b>	Soldering process: Reflow soldering								
	<b>T</b>	Through Hole Technology - THT								
	<b>T</b>	Soldering process: Wave								
<b>Performance Category</b>	<b>C5</b>	Category 5								
	<b>C6</b>	Category 6								
	<b>C6A</b>	Category 6A								
	<b>C6e</b>	Category 6e								
	<b>M</b>	10/100 Mbit								
	<b>G1</b>	10/100/1000 Mbit								
	<b>G10</b>	10 Gbit								
	<b>U</b>	Unshielded								
	<b>MP</b>	10/100 Mbit with POE								
	<b>MP+</b>	10/100 Mbit with POE+								

Legend