



Contact



# DATA SHEET

## M12 Sensor Connector for 90° PCB Mounting Code A

### Serie: T61E165

<b>M12 Sensor Connector for 90° PCB Mounting Code A</b>	
Serie No.:	<b>T61E165</b>
Customer:	

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	16.02.2022
APPD:	Schumi			FINISH	Jamy		Sheet No.		1 from 5

# EDCON-COMPONENTS



**Contact**



## Technical Description

Sensor Connector	Size M12
Number of Position	like ordering Table
Coding	Type A
Pin-Type:	Female
Orientation:	angled
Wire Termination:	PCB Soldering
Rated current	Look number of Positions
Rated Voltage	Look number of Positions
Insulation Resistance:	≥ 100MΩ
Contact Resistance:	≤ 3mΩ
Temperature Range:	.-40°C to + 85°C
Material Connector Contacts:	Brass
Contact Plating:	Gold Plated 3μ
Material Insert / Housing:	Nylon 66 + GF or PA
Coupling Nut / screw:	Brass with nickel plated
Shielding:	Non-Shielded
Protection Degree:	IP68 in locked status
Overmould/ Shell:	Metal shell
Screw / Nut Material:	Brass C3604 w 120μ" nickel Plated CNC Parts
Material Female Contacts:	Phosphor Bronze C5441 w. 3μ gold plated on nickel base, machined sold pin
Flame retardant degree:	UL94V-0
Sealing:	O-ring ( Rubber)
Norm:	IEC 61076-2-101
Lifetime:	>200 Cycles

## Description and Applications

EDCON offer a complete line of M12 panel mount connector solutions for enclosure, panel and PCB applications. These M12 connector are offered in both versions Male & Female and are rated to IP67. These connector are designed for both front mounting and rear mounting with PG9 panel locking thread.

Standard sensor, actuator, encoder, servo motors  
 Factory automation and process control  
 Fieldbus: DeviceNet, CANopen, Profibus, Ethernet, NMEA 2000  
 Industrial instrumentation  
 Packaging, labeling and logistic devices  
 Industrial safety light curtain, light grid, switches  
 Commercial electronics PCBA  
 Power supply  
 LED display panel & outdoor LED lighting

					Tolerances unless otherwise specified (mm)					M12 Sensor Connector for 90° PCB Mounting Code A
X=	X.X=	X.XX=	X.XXX=	Angle						
±0,35	±0,25	±0,20	±0,15	±5°						Part No.: <b>T61E165</b>
DRW: Jason	CHKD Wilson	MATL: Wilson	TOLERANCE Mason	DATE 16.02.2022						Customer:
APPD: Schumi	FINISH Jamy	Sheet No.			2 from 5					

# EDCON-COMPONENTS

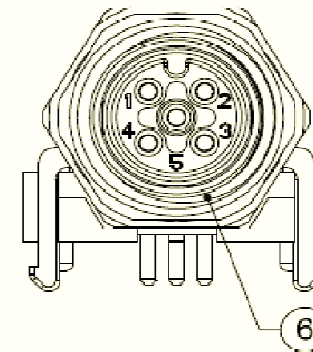
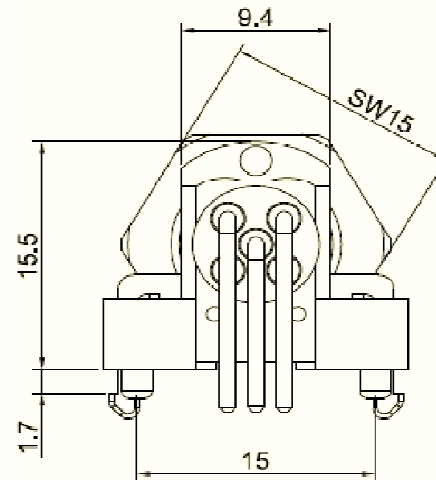
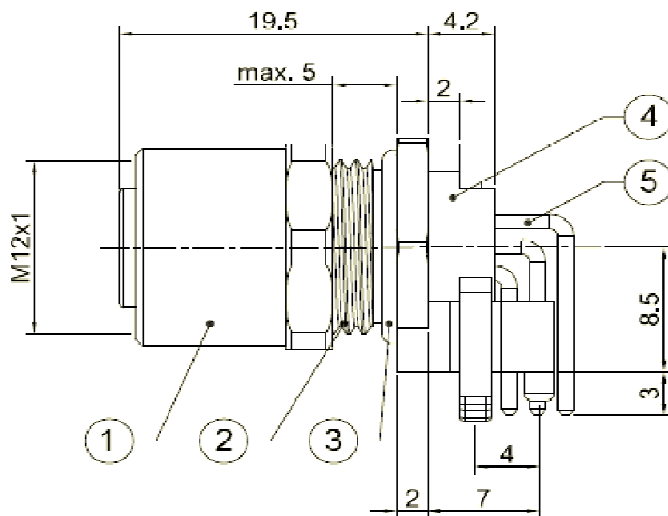
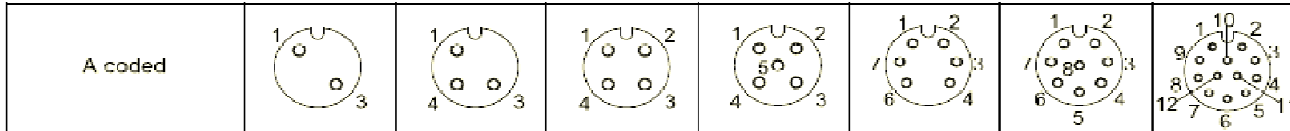


**Contact**



Number of contacts	2	3	4	5	6	8	12
Rated Voltage (V)	250			125	60	30	
Rated Current (A)	4				2	1,5	
Contact Resistance	≤3 mΩ						
Degree of Protection	IP68						
Mechanical Operation	> 200cycles						
Temp.Range	-40°C to +80°C						
Polution Degree	3						

No.	Specification	Unit	Qty.
6	Interface seal, FKM green	PCS	1
5	Contact CuSn gold plated	PCS	x
4	Contact body, PA66 + GF , black	PCS	1
3	Panel O ring, NBR, black	PCS	1
2	Base Shell, CuZn nickel plated	PCS	1
1	Coupling shell, CuZn nickel plated	PCS	1



**M12 Sensor Connector for  
90° PCB Mounting Code A**

Part No.: **T61E165**

Customer:

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	16.02.2022
APPD:	Schumi			FINISH	Jamy		Sheet No.		3 from 5

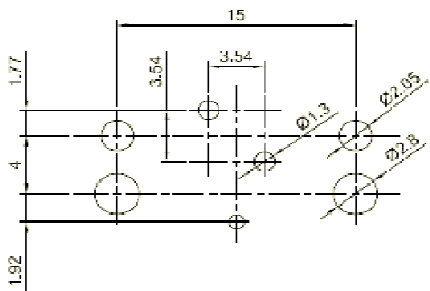
# EDCON-COMPONENTS



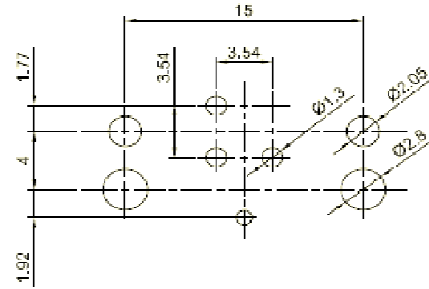
Contact



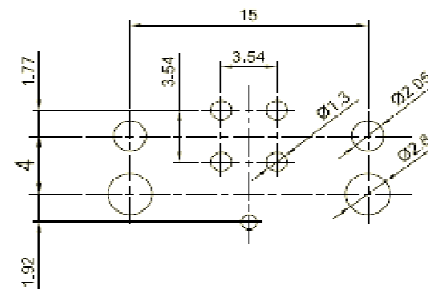
## PCB-Layout



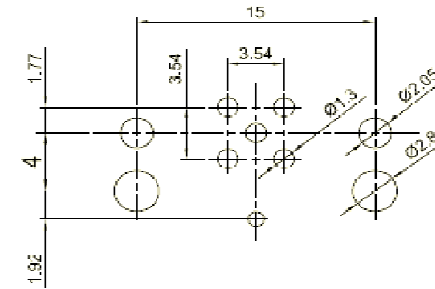
2P



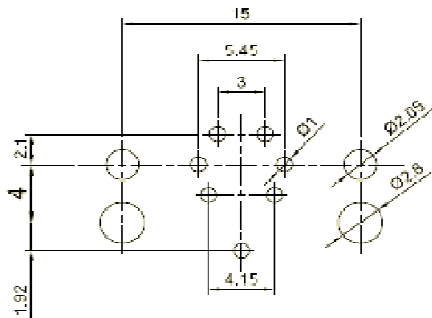
3P



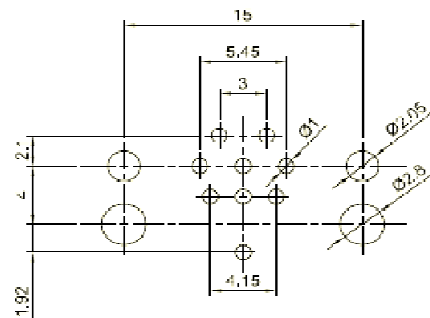
4P



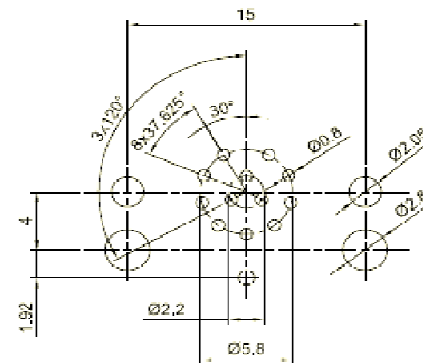
5P



6P



8P



12P

**M12 Sensor Connector for  
90° PCB Mounting Code A**

Part No.: **T61E165**

Customer:

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	16.02.2022
APPD:	Schumi			FINISH	Jamy		Sheet No.		4 from 6

[www.edcon-components.com](http://www.edcon-components.com)

email: [info@edcon-components.com](mailto:info@edcon-components.com)

Copyright by S.Tiede

# EDCON-COMPONENTS



**Contact**



## Ordering Informations

Serie	No. of Pos.	Contact Plating	Insulator Colour	Special function	Special function	ROHS	Packing Code			
<b>T61E165</b>	<b>02</b>	<b>AU</b>	<b>GN</b>	<b>NN</b>	<b>NN</b>	<b>R</b>	<b>TY</b>			
	<b>02= 2Pos.</b>	<b>AU= Gold-Plated 3μ</b>	<b>GN= Green</b>	<b>NN= No special function</b>	<b>NN= No special function</b>	<b>R= ROHS Conform</b>	<b>TY= Tray Package</b>			
	<b>03= 3Pos.</b>					<b>N= NON ROHS Conform</b>	<b>IV= Individual Package</b>			
	<b>04= 4Pos.</b>									
	<b>05= 5Pos.</b>									
	<b>06= 6Pos.</b>									
	<b>08= 8Pos.</b>									
	<b>12= 12Pos.</b>									

<b>M12 Sensor Connector for 90° PCB Mounting Code A</b>	
Part No.:	<b>T61E165</b>
Customer:	

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	16.02.2022
APPD:	Schumi		Original	FINISH	Jamy		Sheet No.		4 from 5

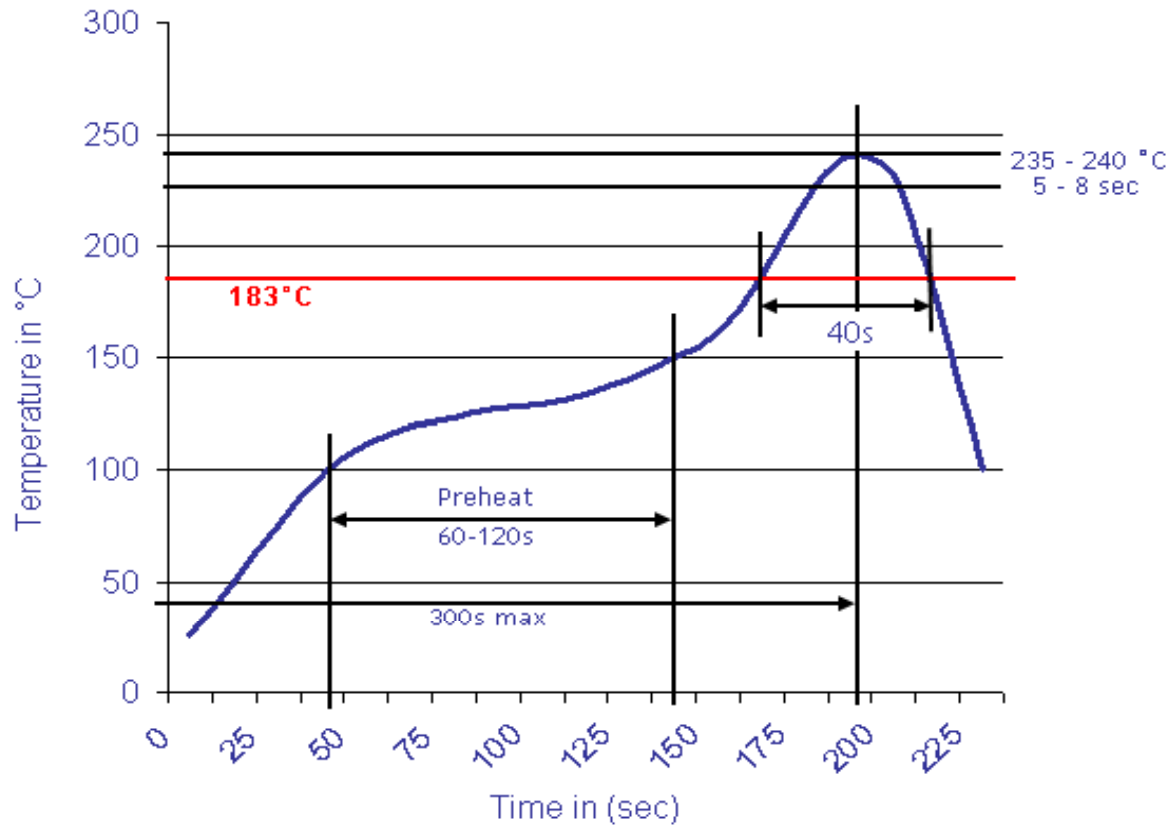


Contact



Soldering Profile Curve

Classification Reflow Profile (JEDEC J-STD-020C)



**M12 Sensor Connector for  
90° PCB Mounting Code A**

Part No.: **T61E165**

Customer:

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	16.02.2022
APPD:	Schumi			FINISH	Jamy		Sheet No.		5 from 5