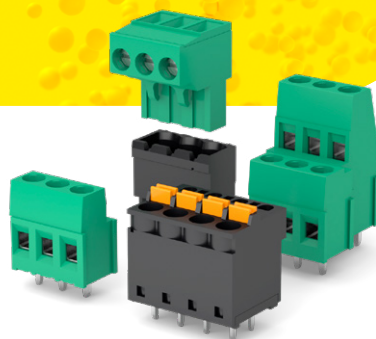**SAURO**
ELECTRONIC CONNECTORS
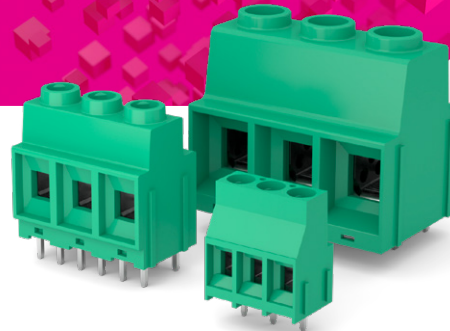— by the law —

Low Power

Wire section up to **1.5 mm²**
Rated current up to **17.5 A**

Medium Power

Wire section up to **2.5 mm²**
Rated current up to **24 A**

High Power

Wire section up to **35 mm²**
Rated current up to **135 A**

Products for
Automation

Reflow solder products ideal for
automated PCB assembly

100% engineered and manufactured in **ITALY**

Digital version

IMQ CERTIFIED
MANAGEMENT SYSTEM
ISO 9001 • ISO 14001
ISO 45001

Series	MSD		MTB		MTS		MSB		MCB			PSB		CLF		CHF		CHF DOUBLE		CTF		
Pitch mm	2.54	5.08	3.5	7	3.5	7	5	10	3.5	7	10	5	10	3.5	7	3.5	7	3.5	7	3.5/3.81	7	10
			3.81	7.62	3.81	7.62	5.08	10.16	5			5.08	10.16							5/5.08	7.62	10.16
Rated voltage	150 V	300 V	300 V	750 V	300 V	750 V	300 V	750 V	300 V	600 V	1000 V	300 V	750 V	300 V		150 V	300 V	150 V	300 V	300 V	600 V	1000 V
Wire section mm²/AWG	0.05÷1/30÷16		0.05÷1.5/28÷16		0.05÷1.5/30÷14		0.05÷1.5/30÷16		0.2÷1.5/30÷16			0.05÷1.5/30÷16		0.5÷1.5/30÷16		0.5÷1.5/24÷16		0.5÷1.5/24÷16		0.05÷1.5/30÷14		
Rated current	12 A		17.5 A		17.5 A		17.5 A		17.5 A			17.5 A		10 A		4 A		8 A		11 A		

Traditional products
for wave soldering

Wire section
up to **1.5** mm²
up to **14** AWG

Rated current
up to **17.5** A

Standard and industrial

Optimized PCB
assembly kits

Wave or manual
soldering

MSD__00_
NO Side stackable
h. 10mm

MTB__00_
Side stackable
h. 8.5mm

MTB__04_
Modular
h. 9.5mm

MTB__06_
Side stackable
h. 9.5mm

MTS__00_
Modular
h. 12.6mm

MTS__09_
Modular
h. 8.2mm

MSB__00_
Modular **h.** 10mm
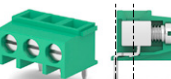
MSB__09_
Modular **h.** 8.2mm

MSB__T0_
Modular **h.** 7.5mm
MSB__TA_
Side stackable **h.** 7.5mm
Terminal aligned with
wire entry
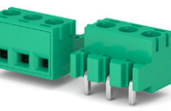
MSB__SM_
Modular **h.** 10mm
MSB__SA_
Side stackable **h.** 10mm

MSB__UM_
Modular **h.** 10mm
MSB__UA_
Side stackable **h.** 10mm

MSB__YA_
Side stackable **h.** 12mm
MSB__YM_
Modular **h.** 12mm

MCB__40_
NO Side stackable
h. 8mm

PSB__0M_
Modular **h.** 19mm

PSB__0H_
Modular **h.** 28mm

PSB__0D_
Modular **h.** 19mm

PSB__0K_
Modular **h.** 28mm

PSB__0T_
Modular **h.** 28mm

CLF__09_
Side stackable **h.** 11.1mm
Two-sided connection

CLF__0W_
Modular **h.** 11.1mm
Two-sided connection

CLF__00_
Side stackable **h.** 11.1/14.05mm
Three-sided connection

CLF__0U_
Modular **h.** 11.1/14.05mm
Three-sided connection

Connection mode

Two-sided connection

Three-sided connection
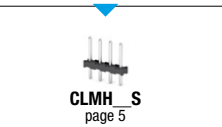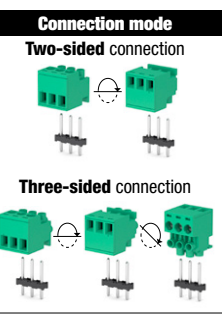
CHF__00_
NO side stackable
h. 12.5mm

CHF__00_-000E
NO side stackable
h. 12.5mm

CHF__D0_
NO side stackable
h. 16mm

CTF__00_
Side stackable
h. 15.5mm

CTF__0V_
Flanges
h. 15.5mm

Compatible products

CLMH__S
page 5

CLMH__0L
page 5

CLMH__0A
page 5

CLMH__S
page 5

CKF		CFF		CBF		CWF		CTM			CTM DOUBLE		CXF	CSF		CSFC		CSM		Colors available for wave soldering
3.5	7	3.5	7	3.5	7	3.5	7	3.5/3.81	7	10	3.5	7	5	5	10	5	10	5	10	
3.81	7.62	3.81	7.62	3.81	7.62			5/5.08	7.62	10.16										
300 V	600 V	300 V		300 V		300 V		300 V	600 V	1000 V	300 V		300 V	300 V	1000 V	300 V	600 V	300 V	1000 V	
0.05÷1.5/30÷14		0.2÷1.5/30÷16		0.14÷1.5/30÷14		0.2÷1.5/24÷16							0.2÷1.5/28÷16	0.05÷2.5/30÷14		0.2÷2.5/26÷14				
11 A		10 A		11 A		10 A		11 A			11 A		10 A	12 A		10 A		12 A		

CKF
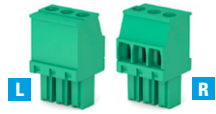
CKF__0L_ (Left)
Side stackable **h.** 19.2mm
CKF__0R_ (Right)
Side stackable **h.** 19.2mm
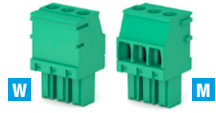
CKF__0W_ (Left)
Modular **h.** 19.2mm
CKF__0M_ (Right)
Modular **h.** 19.2mm
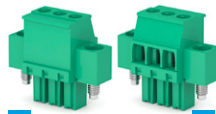
CKF__0S_ (Left)
Flanges **h.** 19.2mm
CKF__0D_ (Right)
Flanges **h.** 19.2mm

CFF

CFF__00_
NO side stackable
CFF__0A_
Side stackable
h. 22.9mm

CFF__0V_
Flanges
h. 22.9mm

CBF
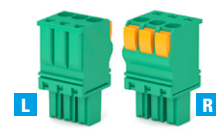
CBF__0L_ (Left)
Side stackable **h.** 20.85mm
CBF__0R_ (Right)
Side stackable **h.** 20.85mm

CBF__0S_ (Left)
Flanges **h.** 20.85mm
CBF__0D_ (Right)
Flanges **h.** 20.85mm

CWF
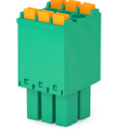
CWF__00_
NO side stackable
h. 22.9mm
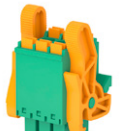
CWF__0E_
With extractors
h. 22.9mm

CTM

CTM__0P_
Polarized **h.** 9.2mm

CTM__0M_
Modular **h.** 9.2mm

CTM__9P_
Modular **h.** 7.25mm

CTM__9M_
Modular **h.** 7.25mm

CTM__0V_
Flanges **h.** 9.2mm

CTM__9V_
Flanges **h.** 7.25mm

CTM__4P_
Polarized **h.** 10.64mm

CTM DOUBLE

CTM__PP_
Polarized
h. 18.6mm

CXF

CXF__09_
NO side stackable
h. 7.95mm
Two-sided
connection

Connection mode
Two-sided connection

CSF
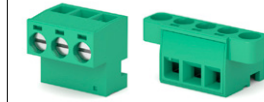
CSF__01_
Side stackable
h. 13.9mm
One-sided
connection

CSF__0F_
Flanges
h. 11.3mm
Two-sided
connection

CSF__0J_
Side stackable
h. 11.3mm
Two-sided
connection

CSF__0S_
Side stackable
with snap features
h. 11.3mm
Two-sided
connection

CSF__00_
Side stackable
h. 11.3/13.9mm
Three-sided
connection

CSF__0U_
Modular
h. 11.3/13.9mm
Three-sided
connection

Connection mode
One-sided connection   **Two-sided** connection
Three-sided connection

CSFC

CSFC__01_
Side stackable
h. 13.9mm
Two-sided
connection

CSFC__0F_
Flanges
h. 13.9mm
Two-sided
connection

CSFC__0S_
Side stackable
with snap features
h. 13.9mm
Two-sided
connection

Connection mode
Two-sided connection

CSM

CSM__0A_
NO side stackable
Ø pin = 1.3mm
h. 9mm

CSM__0S_
Side stackable
Ø pin = 1.3mm
h. 9mm

CSM__9A_
Side stackable
Ø pin = 1.3mm
h. 7.15mm

Colors available for wave soldering

Green
Similar to **RAL 6032**
Standard color

Dark Green
Similar to **RAL 6017**
Color code: **-0M**

Blue
Similar to **RAL 5012**
Color code: **-0B**

Brown
Similar to **RAL 8028**
Color code: **-0C**

Red
Similar to **RAL 3017**
Color code: **-0R**

Orange
Similar to **RAL 2003**
Color code: **-0A**

Yellow
Similar to **RAL 1018**
Color code: **-0Y**

White
Similar to **RAL 9001**
Color code: **-0W**

Light Gray
Similar to **RAL 7035**
Color code: **-0G**

Dark Gray
Similar to **RAL 7040**
Color code: **-0F**

Black
Similar to **RAL 9005**
Color code: **-0N**

3

Low Power

| Series	MBBH STH		MBBD SMD		MTBH STH		MTBD SMD		MSBH STH		MSBD SMD		MMTH STH		MCBH STH			MCBD SMD		
Pitch mm	3.81	7.62	3.81	7.62	3.5	7	3.5	7	5	10	5	10	3.5	7	3.5	7	10	3.5	7	10
					3.81	7.62	3.81	7.62	5.08	10.16			3.81	7.62	5			5		
Rated voltage	300 V	600 V	300 V	600 V	300 V	750 V	300 V	300 V	300 V	750 V	300 V	750 V	300 V	750 V	300 V	600 V	1000 V	300 V	600 V	1000 V
Wire section mm²/AWG	0.05÷0.75/28÷18		0.05÷0.75/28÷18		0.05÷1.5/28÷16		0.05÷1.5/28÷16		0.05÷1.5/30÷16		0.05÷1.5/30÷16		0.2÷1.5/30÷16		0.2÷1.5/30÷16			0.2÷1.5/30÷16		
Rated current	9 A		9 A		17.5 A		17.5 A		17.5 A		17.5 A		10 A		17.5 A			17.5 A		

STH and SMD products
for reflow soldering

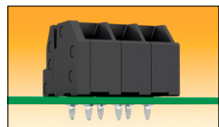**Wire section**
up to **1.5** mm²
up to **14** AWG

Rated current
up to **17.5** A

Tape on reel & cell tray packaging
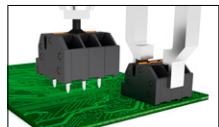
Designed to be picked up by automated picking systems

Designed for reflow soldering using a MSL1 plastic material

**For more information
go to page 14**

MBBH__9A_-ONC
Side stackable
h. 7.3mm

MBBD__0A_-ONCOP
Side stackable
Fixing & positioning pegs
h. 7.5mm

MTBH__00_-ON
Side stackable
h. 8.5mm

MTBH__06_-ON
Side stackable
h. 9.5mm

MTBD__0A_-ONCOP
Side stackable
Fixing & positioning pegs
h. 8.5mm

MSBH__00_-ON
Side stackable
h. 10mm

MSBH__04_-ON
Modular
h. 11mm

MSBH__06_-ON
Side stackable
h. 11mm

MSBH__T0_-ON
Modular
h. 7.5mm

MSBH__TA_-ON
Side stackable
h. 7.5mm

MSBD__LP_-ONC
NO Side stackable
Fixing & positioning pegs
h. 10mm

MSBD0200_-ONC
NO Side stackable
Fixing & positioning pegs
h. 10mm

MMTH__00_-ON
Side stackable
h. 15mm

MCBH__40_-ON
NO Side stackable
h. 8mm

MCBD__40_-0N00P
NO Side stackable
Fixing & positioning pegs
h. 8mm

MCCH STH			CLMH STH		CSMH STH		CSMD SMD		CTMH STH			CTMH DOUBLE STH		CWMH STH	
3.81	5.08	10.16	3.5	7	5	10	5	10	3.5/3.81	7	10	3.5	7	3.5	7
	7.62								5/5.08	7.62	10.16				
300 V	600 V	600 V	150 V	300 V	300 V	1000 V	300 V	1000 V	300 V	450 V	600 V	300 V		300 V	
0.2÷1.5/30÷16															
17.5 A			10 A		12 A		12 A		11 A			11 A		10 A	

Colors available
for reflow soldering

MCCH__40_-ON
NO Side stackable
h. 12mm

CLMH__SA_-ON
Side stackable
Ø pin = 1mm
h. 9mm

Compatible products

CLF
page 2

CHF D.
page 2

CLMH__0A_-ON
Side stackable
Ø pin = 1.3mm
h. 9mm

CLMH__0L_-ON
Side stackable
with large base
Ø pin = 1.3mm
h. 13mm

Compatible products

CHF
page 2

CSMH__0A_-ON
NO Side stackable
Ø pin = 1.3mm
h. 9mm

CSMH__0S_-ON
Side stackable
Ø pin = 1.3mm
h. 9mm

CSMH__9A_-ON
NO Side stackable
Ø pin = 1.3mm
h. 7.15mm

CSMD__0A_-ON
Side stackable
Ø pin = 1.3mm
h. 9.5mm

CSMD__0A_-ON00_
Side stackable
Ø pin = 1.3mm
h. 7mm
ideal for **CXF**

Compatible products

CXF
page 3

CSF
page 3

CSFC
page 3

CTMH__0M_-ON
Modular
h. 9.2mm

CTMH__0P_-ON
Polarized
h. 9.2mm

CTMH__0V_-ON
Flanges
h. 9.2mm

CTMH__0F_-ON
Flanges & fake pin
h. 9.2mm

CTMH__4M_-ON
Modular
h. 10.64mm

CTMH__4P_-ON
Polarized
h. 10.64mm

CTMH__4V_-ON
Flanges
h. 10.64mm

CTMH__4F_-ON
Flanges & fake pin
h. 10.64mm

CTMH__9M_-ON
Modular
h. 7.25mm

CTMH__9P_-ON
Polarized
h. 7.25mm

CTMH__9V_-ON
Flanges
h. 7.25mm

CTMH__9F_-ON
Flanges & fake pin
h. 7.25mm

CTMH__5M_-ON
Modular
h. 7.25mm

CTMH__5P_-ON
Polarized
h. 7.25mm

CTMH__5V_-ON
Flanges
h. 7.25mm

Compatible products

CTF
page 2

CKF
page 3

CFF
page 3

CBF
page 3

CTMH__PP_-ON
Polarized
h. 18.6mm

CWMH__0P_-ON
Polarized
h. 18.6mm

CWMH__0E_-ON
For extractor version
h. 18.6mm

CWMH__9P_-ON
Polarized
h. 18.6mm

CWMH__9E_-ON
For extractor version
h. 18.6mm

CWF
page 3

Black
Similar to **RAL 9005**
Standard color code: **-ON**

Green
Similar to **RAL 6032**
Color code: **-OV**

Light Gray
Similar to **RAL 7035**
Color code: **-OG**

Dark Green
Similar to **RAL 6017**
Color code: **-OM**

Orange
Similar to **RAL 2003**
Color code: **-OA**

Blue
Similar to **RAL 5012**
Color code: **-OB**

Red
Similar to **RAL 3017**
Color code: **-OR**

Medium Power

Series	MSG		MSM		MSS		MCM		MCQ		MCQ DOUBLE		PSM		CIF			CVF			CCF	
Pitch mm	5	7.5/7.62	5	7.5/7.62	5	7.5/7.62	5	7.5/7.62	5	10	5	10	5	10	5	7.5	10	5	7.5	10	5	10
	5.08	10/10.16	5.08	10/10.16	5.08	10/10.16	5.08	10/10.16	5.08	10.16			5.08	10.16	5.08	7.62	10.16	5.08	7.62	10.16	5.08	10.16
Rated voltage	300 V	750 V	300 V	750 V	300 V	750 V	300 V	750 V	300 V	750 V	300 V	750 V	300 V	750 V	300 V	600 V	1000 V	300 V	600 V	1000 V	300 V	600 V
Wire section mm²/AWG	0.05÷2.5/30÷14		0.05÷2.5/30÷12		0.05÷2.5/30÷12		0.2÷2.5/30÷12		0.2÷2.5/30÷12		0.2÷2.5/30÷12		0.05÷2.5/30÷12		0.05÷2.5/30÷12			0.05÷2.5/30÷12			0.2÷2.5/30÷12	
Rated current	24 A		24 A		24 A		16 A		16 A		16 A		24 A		16 A			16 A			12 A	

Traditional products for wave soldering

Wire section up to **2.5** mm² up to **12** AWG

Rated current up to **24** A

Standard and industrial

Optimized PCB assembly kits

Wave or manual soldering

MSG__00_ Modular **h.** 13.5mm

MSG__0A_ Side stackable **h.** 13.5mm

MSG__09_ Modular **h.** 9mm

MSG__05_ Modular **h.** 9mm

MSM__00_ Modular **h.** 15.2mm

MSM__0A_ Side stackable **h.** 15.2mm

MSM__00_-000T Modular, terminal aligned with screw **h.** 15.2mm

MSM__04_ Modular **h.** 15mm

MSM__09_ Modular **h.** 9mm

MSM__05_ Modular **h.** 9mm

zero↕gap with closed clamp

MSS__00_ Modular **h.** 15.2mm

MSS__09_ Modular **h.** 9mm

MSS__TM_ Modular **h.** 12mm

MSS__TA_ Side stackable **h.** 12mm

MSS__05_ Modular **h.** 9mm

16A even **with 1.5mm²** wire section
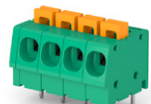
MCM__00_ **NO** Side stackable, compact **h.** 14.45mm

MCM__0A_ **NO** Side stackable **h.** 14.45mm

16A **with 2.5mm²** wire section

MCM__E0_ **NO** Side stackable, compact **h.** 14.45mm

MCM__EA_ **NO** Side stackable **h.** 14.45mm

MCQ__00_ Side stackable **h.** 17.9mm
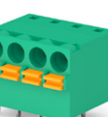
MCQ__09_ Side stackable **h.** 14mm

MCQ__D0_ Side stackable **h.** 17.9mm

PSM__0M_ Modular **h.** 25.2mm

PSM__0D_ Modular **h.** 25.2mm

PSM__0H_ Modular **h.** 35.6mm

PSM__0K_ Modular **h.** 35.6mm

PSM__0T_ Modular **h.** 35.6mm

CIF__00_ Side stackable **h.** 15.5mm

CIF__0M_ Modular **h.** 15.5mm

CIF__0V_ Flanges **h.** 15.5mm

W **M**
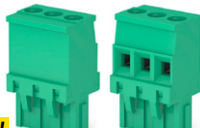
CVF__0W_ Modular (Left) **CVF__0M_** Modular (Right) **h.** 25mm

L **R**

CVF__0L_ Side stackable (Left) **CVF__0R_** Side stackable (Right) **h.** 25mm

S **D**
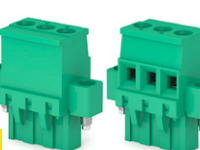
CVF__0S_ Flanges (Left) **CVF__0D_** Flanges (Right) **h.** 25mm

CCF__00_ Side stackable **h.** 25.4mm

CCF__0V_ Flanges **h.** 25.4mm

Compatible products

CIM page 7 | CIMH page 9 | CPM H. page 7 | CPM page 7 | CPMH page 9 | CRM page 7 | CIMH N. page 9 | CGM page 7
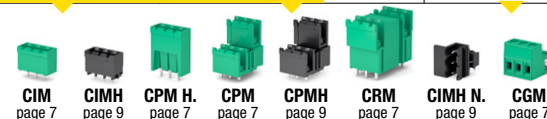
	CCFS		CCF DOUBLE		CCFS DOUBLE		CGF			CIM			CGM			CPM HIGH		CPM		CRM		CUF	
	5	10	5	10	5	10	5	7.5	10	5	7.5	10	5	7.5	10	5	10	5	10	5	10	5	10
	5.08	10.16	300	600	300	600	5.08	7.62	10.16	5.08	7.62	10.16	5.08	7.62	10.16			5.08	10.16	5.08	10.16		
	300 V	600 V	300V	600V	300V	600V	300 V	600 V	1000 V	300 V	600 V	1000 V	300V	600V	1000V	300 V	1000 V	300 V	1000 V	300 V	1000 V	300 V	750 V
	0.2÷2.5/30÷12		0.2÷2.5/30÷12		0.2÷2.5/30÷12								0.05÷2.5/30÷12									0.05÷1.5/30÷12	
	12 A		12 A		12 A		16 A			16 A			16 A			16 A		16 A		16 A		10 A	

CCFS__0A_
Side stackable
h. 25.2mm

CCF__D0_
Side stackable
h. 25.2mm

CCFS__DA_
Side stackable
h. 25.2mm

CGF__0M_
Modular
h. 18.9mm

CIM__0M_
Modular
h. 12mm

CIM__0A_
Side stackable
h. 12mm

CIM__0P_
Polarized
h. 12mm

CIM__0V_
Flanges
h. 12mm

CGM__0A_
Side stackable
h. 15mm

CPM__0P_-0_H
Polarized
h. 22.08mm

CPM__0M_
Modular
h. 22.08mm

CRM__0M_
Modular
h. 22mm

CUF__00_
Side stackable
h. 15.5mm

CCFS__0V_
Flanges
h. 25.2mm

CCF__DV_
Flanges
h. 25.2mm

CCFS__DV_
Flanges
h. 25.2mm

CGF__9M_
Modular
h. 10.2mm

CIM__4M_
Modular
h. 14.8mm

CIM__4A_
Side stackable
h. 14.8mm

CIM__4P_
Polarized
h. 14.8mm

CIM__4V_
Flanges
h. 14.8mm

CGM__0M_
Modular
h. 15mm

CPM__0P_
Polarized
h. 22.08mm

CRM__0P_
Polarized
h. 22mm

CUF__0P_
Polarized
h. 15.5mm

CIM__9M_
Modular
h. 8.35mm

CIM__9A_
Side stackable
h. 8.35mm

CIM__9P_
Polarized
h. 8.35mm

CIM__9V_
Flanges
h. 8.35mm

CGM__0P_
Polarized
h. 15mm

CPM__9M_
Modular
h. 23.47mm

CRM__9M_
Modular
h. 28.5mm

CIM__5M_
Modular
h. 8.35mm

CIM__5A_
Side stackable
h. 8.35mm

CIM__5P_
Polarized
h. 8.35mm

CIM__5V_
Flanges
h. 8.35mm

CPM__9P_
Polarized
h. 23.47mm

CRM__9P_
Polarized
h. 28.5mm

CIM__0E_
Ejectors
h. 12.8mm

CIM__9E_
Ejectors
h. 8.35mm

CIM__5E_
Ejectors
h. 8.35mm

CIM__RA_
Side stackable
h. 12.15mm

CIM__RP_
Polarized
h. 12.15mm

Not usable with CPM/H & CRM

Not usable with CPM/H & CRM

Colors available for wave soldering

Green
Similar to RAL 6032
Standard color

Dark Green
Similar to RAL 6017
Color code: -0M

Blue
Similar to RAL 5012
Color code: -0B

Brown
Similar to RAL 8028
Color code: -0C

Red
Similar to RAL 3017
Color code: -0R

Orange
Similar to RAL 2003
Color code: -0A

Yellow
Similar to RAL 1018
Color code: -0Y

White
Similar to RAL 9001
Color code: -0W

Light Gray
Similar to RAL 7035
Color code: -0G

Dark Gray
Similar to RAL 7040
Color code: -0F

Black
Similar to RAL 9005
Color code: -0N

7

Series	MSGH STH		MSMH STH		MSSH STH		MSMH NORMO-ORTH. STH	MCMH STH	MCQH STH		MCQH DOUBLE STH	
Pitch mm	5	7.5	5	7.5/7.62	5	7.5/7.62	5	5.08	5	10	5	10
	5.08	10/10.16		10		10						
Rated voltage	300 V	750 V	300 V	750 V	300 V	750 V	300 V	300 V	300 V	750 V	300 V	750 V
Wire section mm²/AWG	0.05÷2.5/30÷14		0.05÷2.5/30÷12		0.05÷2.5/30÷12		0.05÷2.5/30÷12	0.2÷2.5/30÷12	0.2÷2.5/30÷12		0.2÷2.5/30÷12	
Rated current	24 A		24 A		24 A		24 A	16 A	16 A		16 A	

STH products
for reflow soldering

Wire section
up to **2.5** mm²
up to **12** AWG

Rated current
up to **24** A

Tape on reel & cell tray
packaging
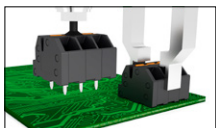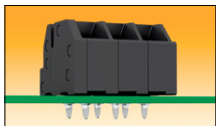
Designed to be picked up by
automated picking systems

Designed for reflow
soldering using a MSL1
plastic material

**For more information
go to page 14**

MSGH__0M_-0N
Modular
h. 13.5mm

MSGH__0A_-0N
Side stackable
h. 13.5mm

MSGH__9M_-0N
Modular
h. 9mm

MSGH__9A_-0N
Side stackable
h. 9mm

MSMH__0M_-0N
Modular
h. 15.2mm

MSMH__00_-0N
Side stackable
h. 15.2mm

MSMH__04_-0N
Modular
h. 15mm

zero↕gap
with closed clamp

MSSH__0M_-0N
Modular
h. 15.2mm

MSSH__00_-0N
Side stackable
h. 15.2mm

MSMH__NR_-0N
Right
h. 17.05mm

MSMH__NL_-0N
Left
h. 17.05mm

16A
even **with 1.5mm²**
wire section

MCMH__00_-0N
NO Side stackable
h. 14.45mm

16A
with 2.5mm²
wire section

MCMH__E0_-0N
NO Side stackable
h. 14.45mm

MCMH03E05-0NU
NO Side stackable
One push-button for 3 poles
h. 16.6mm

MCQH__00_-0N
Side stackable
h. 17.9mm

MCQH__09_-0N
Side stackable
h. 14mm

MCQH__D0_-0N
Side stackable
h. 17.9mm

CGFH STH			CIMH STH			CPMH STH		CIMH NORMO-ORTH. STH	Colors available for reflow soldering
5	7.5	10	5	7.5	10	5	10	5	
5.08	7.62	10.16	5.08	7.62	10.16	5.08	10.16		
300 V	600 V	1000 V	300 V	500 V	750 V	300 V	1000 V	300 V	
16 A			16 A			16 A		12 A	

Black
Similar to RAL 9005
Standard color code: **-0N**

Green
Similar to RAL 6032
Color code: **-0V**

Light Gray
Similar to RAL 7035
Color code: **-0G**

Dark Green
Similar to RAL 6017
Color code: **-0M**

Orange
Similar to RAL 2003
Color code: **-0A**

Blue
Similar to RAL 5012
Color code: **-0B**

Red
Similar to RAL 3017
Color code: **-0R**

CGFH__0M_-0N
Modular
h. 18.9mm

CGFH__9M_-0N
Modular
h. 10.2mm

CIMH__0M_-0N
Modular
h. 12mm

CIMH__0A_-0N
Side stackable
h. 12mm

CIMH__0P_-0N
Polarized
h. 12mm

CIMH__0V_-0N
Flanges
h. 12mm

CIMH__0F_-0N
Flanges & fake pin
h. 12mm

CPMH__0M_-0N
Modular **h.** 22.08mm

CIMH__NL_-0N
Left **h.** 16.49mm

CIMH__4M_-0N
Modular
h. 14.8mm

CIMH__4P_-0N
Polarized
h. 14.8mm

CIMH__4V_-0N
Flanges
h. 14.8mm

CPMH__0P_-0N
Polarized **h.** 22.08mm

CIMH__NR_-0N
Right **h.** 16.49mm

CIMH__9M_-0N
Modular
h. 8.65mm

CIMH__9A_-0N
Side stackable
h. 8.65mm

CIMH__9P_-0N
Polarized
h. 8.65mm

CPMH__9M_-0N
Modular **h.** 23.47mm

CIMH__9V_-0N
Flanges
h. 8.65mm

CIMH__9F_-0N
Flanges & fake pin
h. 8.65mm

CIMH__9S_-0N
Flanges & PCB
fixing screw
h. 8.65mm

CPMH__9P_-0N
Polarized **h.** 23.47mm

CIMH__5A_-0N
Side stackable
h. 8.65mm

CIMH__5P_-0N
Polarized
h. 8.65mm

CIMH__5V_-0N
Flanges
h. 8.65mm

Not usable with
CCF D. and **CCFS D.**

Compatible products

Series	MSQ		MSP			MPS	MPM	MPL	MPP	PSQ	
Pitch mm	5	7.5/7.62	6.35	9.52	12.7	10.16	10.16	12.7	15	5	10
	5.08	10/10.16		7.62				15.24		5.08	10.16
Rated voltage	300 V	750 V	450 V	750 V	600 V	1000 V	1000 V	1000 V	1000 V	300 V	750 V
Wire section mm²/AWG	0.05÷4/30÷12		0.05÷6/30÷10			0.5÷16/20÷6	1.5÷16/16÷6	1.5÷25/16÷4	0.5÷35/20÷1	0.05÷4/30÷12	
Rated current	32 A		41 A			76 A	76 A	101 A	135 A	32 A	

Traditional products
for wave soldering

Wire section
up to **35** mm²
up to **1** AWG

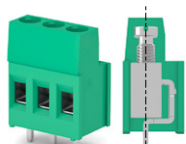**Rated current**
up to **135** A

Standard and industrial

Optimized PCB assembly kits

Wave or manual soldering

MSQ__00_
Modular **h.** 19mm

MSQ__00_-000T
Modular, terminal aligned with the screw **h.** 19mm

MSQ__09_
Modular **h.** 10mm

MSP__00_
Modular **h.** 21.5mm

MSP__04_
Modular **h.** 21.5mm

MSP__09_
Modular **h.** 12.5mm

Low ampere version 24 A

MSP__00_-000E
Modular **h.** 21.5mm

MSP__04_-000E
Modular **h.** 21.5mm

MSP__09_-000E
Modular **h.** 12.5mm

MPS__D0_
MPS__Z0_
MPS__S0_
Modular **h.** 29.3mm

MPS__DA_
MPS__ZA_
MPS__SA_
Side stackable **h.** 29.3mm

MPS__DV_
MPS__ZV_
MPS__SV_
Flanges **h.** 29.3mm

MPM__DM_
MPM__ZM_
MPM__SM_
Modular **h.** 29.3mm

MPM__DA_
MPM__ZA_
MPM__SA_
Side stackable **h.** 29.3mm

MPM__DV_
MPM__ZV_
MPM__SV_
Flanges **h.** 29.3mm
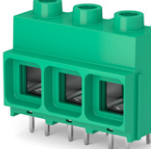
MPL__DM_
MPL__ZM_
MPL__SM_
Modular **h.** 30.8mm

MPL__DA_
MPL__ZA_
MPL__SA_
Side stackable **h.** 30.8mm

MPL__DV_
MPL__ZV_
MPL__SV_
Flanges **h.** 30.8mm

MPP__D0_
Modular **h.** 39mm

MPP__DA_
Side stackable **h.** 39mm
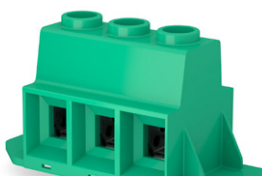
MPP__DV_
Flanges **h.** 39mm

PSQ__0M_
Modular **h.** 31.5mm

PSQ__0H_
Modular **h.** 45mm

PSQ__0D_
Modular **h.** 31.5mm

PSQ__0K_
Modular **h.** 45mm

PSQ__0T_
Modular **h.** 45mm

PCB layout
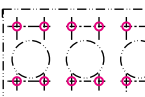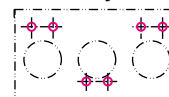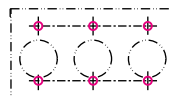
D version

Z version

S version

Colors available
for wave soldering

Green
Similar to **RAL 6032**
Standard color

Dark Green
Similar to **RAL 6017**
Color code: **-0M**

Blue
Similar to **RAL 5012**
Color code: **-0B**

Brown
Similar to **RAL 8028**
Color code: **-0C**

Red
Similar to **RAL 3017**
Color code: **-0R**

Orange
Similar to **RAL 2003**
Color code: **-0A**

Yellow
Similar to **RAL 1018**
Color code: **-0Y**

White
Similar to **RAL 9001**
Color code: **-0W**

Light Gray
Similar to **RAL 7035**
Color code: **-0G**

Dark Gray
Similar to **RAL 7040**
Color code: **-0F**

Black
Similar to **RAL 9005**
Color code: **-0N**

sauro
ELECTRONIC CONNECTORS
— by the law —

Series	MSQH STH		MSPH STH		MPSH STH	MPPH STH
Pitch mm	5.08	7.5	6.35/7.62	9.52	10.16	15
		7.62				
Rated voltage	300 V	750 V	450 V	750 V	1000 V	1000 V
Wire section mm²/AWG	0.05÷4/30÷12		0.05÷6/30÷10		0.5÷16/20÷6	0.5÷35/20÷1
Rated current	32 A		41 A		76 A	135 A

STH products
for reflow soldering

Wire section
up to **35** mm²
up to **1** AWG

Rated current
up to **135** A

Tape on reel & cell tray packaging
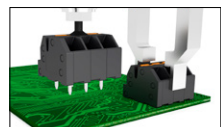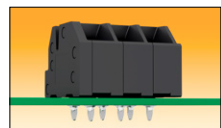
Designed to be picked up by automated picking systems

Designed for reflow soldering using a MSL1 plastic material

For more information go to page 14

MSQH__0M_-ON
Modular **h.** 19mm

MSQH__0A_-ON
Side stackable **h.** 19mm

MSPH__00_-ON
Modular **h.** 21.5mm

MSPH__04_-ON
Modular **h.** 21.5mm

MSPH__09_-ON
Modular **h.** 12.5mm

MPSH__D0_-ON
MPSH__Z0_-ON
MPSH__S0_-ON
Modular **h.** 29.3mm

MPSH__DA_-ON
MPSH__ZA_-ON
MPSH__SA_-ON
Side stackable **h.** 29.3mm

MPSH__DV_-ON
MPSH__ZV_-ON
MPSH__SV_-ON
Flanges **h.** 29.3mm

MPPH__D0_-ON
Modular **h.** 39mm

MPPH__DA_-ON
Side stackable **h.** 39mm

MPPH__DV_-ON
Flanges **h.** 39mm

Colors available
for reflow soldering

Black
Similar to **RAL 9005**
Standard color code: **-ON**

Green
Similar to **RAL 6032**
Color code: **-0V**

Light Gray
Similar to **RAL 7035**
Color code: **-0G**

Dark Green
Similar to **RAL 6017**
Color code: **-0M**

Orange
Similar to **RAL 2003**
Color code: **-0A**

Blue
Similar to **RAL 5012**
Color code: **-0B**

Red
Similar to **RAL 3017**
Color code: **-0R**

PCB layout

D version   **Z** version   **S** version

Terminal block
How to order

| Standard Code | Custom Code |

M S B _ 0 2 0 0 1 - 0 0 0 0 P _

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |

1 Series: MSD, MBBD, MBBH, MTS, MTB, MTBH, MTBD, MSB, MSBH, MSBD, MSG, MSGH, MSM, MSMH, MSMH NORMO-ORTHOGONAL, MSFH, MSS, MSSH, MSQ, MSQH, MSP, MSPH, MPS, MPM, MPL, MPP, MMTH, MCB, MCBH, MCBD, MCCH, MCM, MCMH, MCQ, MCQH, MCQ DOUBLE, MCQH DOUBLE

2 Soldering technology: H = Through Hole Reflow, **D** = Surface mounted

3 N°of poles

4 Marking: 0 = none, **A** = reverse, **B** = straight, **C** = various - **Other: MBBH: 9** = 90° - **MPS, MPM, MPL, MPP: D** = two double pins per pole, **S** = two pins per pole, **Z** = two zig-zag pins per pole - **MSBD: L** = external 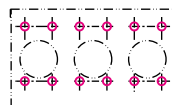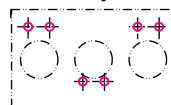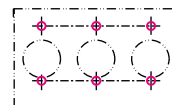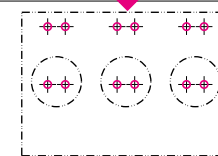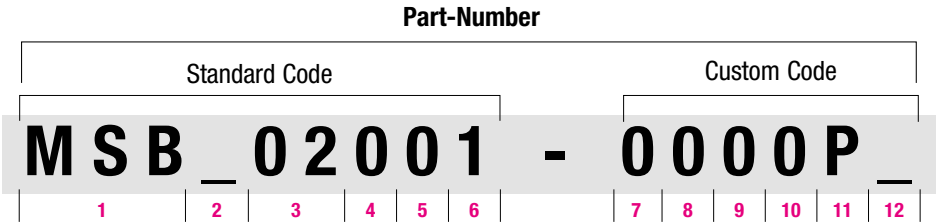terminals, **0** = internal terminals - **MSMH NORMO-ORTHOGONAL: N** = normo-orthogonal - **MSB, MSBH: T** = 90° terminal aligned with cable entry h=7,5 mm, **Y** = 90° terminal aligned with cable entry h=12 mm, **U** = 0° terminal on the same side as screw, **S** = 0° terminal displaced from screw - **MSGH: 9** = 90° - **MSS: T** = 90° terminal aligned with cable entry - **MCB, MCBH, MCBD, MCCH: 4** = 45° - **MCM, MCMH: 0** = 16 A even with 1,5 mm², **E** = 16A with 2,5 mm² - **MCQ, MCQH: D** = double pin

5 Mounting type: A = side stackable, **M** = modular, **V** = with flanges - **MSD, MCB, MCBH, MCBD, MCCH: 0** = 0°, not side stackable - **MBBD, MBBH, MTBD: A** = not side stackable - **MTS, MSB, MSG, MSM, MSS, MSQ, MSP, MSPH: 0** = 0° modular, **9** = 90° modular, **5** = 270° modular, **4** = 35° modular - **MSMH, MSSH:, 0** = 0° side stackable, **4** = 35° modular - **MTB, MTBH, MSBH: 0** = 0° side stackable - **4** = 55° modular - **6** = 55° side stackable - **MSB T, MSBH T: 0** = modular - **MPS, MPP: 0** = 0° modular - **MSBD: P** = fixing and positioning pegs - **0** = 0° not side stackable - **MSMH NORMO-ORTHOGONAL: R** = right, **L** = left - **MMTH, MCQ, MCQH, MCQ DOUBLE, MCQH DOUBLE: 0** = 90° side stackable, **9** = 0° side stackable - **MCM, MCMH: 0** = 0° not side stackable, **A** = 0° not side stackable - **MSMH, MSQ, MSP: D** = double pin

6 Pitch: 4 = 2.54 mm/.100 in, **8** = 3.50 mm/.138 in, **T** = 3.81 mm/.150 in, **1** = 5.00 mm/.197 in, **5** = 5.08 mm/.200 in, **S** = 6.35 mm/.250 in, **9** = 7.00 mm/.275 in, **3** = 7.50 mm/.295 in, **7** = 7.62 mm/.300 in, **N** = 9.52 mm/.375 in, **2** = 10.00 mm/.394 in, **6** = 10.16 mm/.400 in, **U** = 12.7 mm/.500 in, **Q** = 15 mm/.591 in, **R** = 15.24 mm/.600 in

7 Marking: 0 = standard , **A/Z** = customized

8 Colors: 0V = Green (similar to RAL 6032) only for STH and SMD products, **0N** = Black (similar to RAL 9005), **0G** = Light Gray (similar to RAL 7035), **0F** = Dark Gray (similar to RAL 7040), **0A** = Orange (similar to RAL 2003), **0B** = Blue (similar to RAL 5012, **0E** = Blue Gray (similar to RAL 7031), **0P** = Flame Red (similar to RAL 3000), **0R** = Red (similar to RAL 3017), **0C** = Brown (similar to RAL 8019), **0W** = White (similar to RAL 9001), **0Y** = Yellow (similar to RAL 1018), **0T** = Natural, **0D** = Yellow/Green

9 C = closed clamp, **U** = special MCMH with one push-button for 3 poles , **T** = plastic with RTI 115÷120 °C

10 MSG, MSQ: C = integrated short circuit bridge, **Y** = polarization peg - **MSP, MSPH, MPM, MPL: E** = low current version - **MSM, MSQ: T** = terminal aligned with screw, **L** = long pin

11 B = with base, **W** = cross-slot screw, **F** = wire entry protection - **P** = pegs - **MBBD, MTBD, MCBD: P** = fixing and positioning pegs

12 X = product with ex approval, **E** = industrial packaging, **A** = gold plating, **1/9** = special, **B** = packaging in box for those in aligned tray

Plurima® - Multi level terminal block
How to order

| Standard Code | Custom Code |

P S B _ 0 3 0 M 1 - 0 R _ _ _ _

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
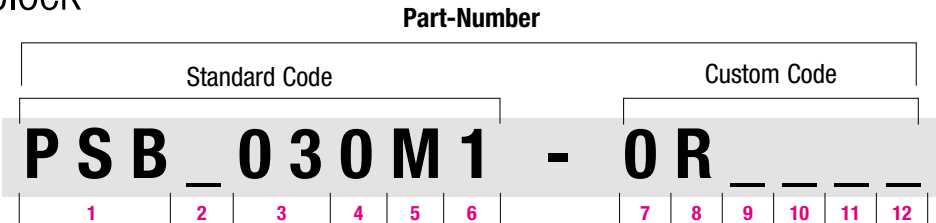
1 Series: PSB, PSM, PSQ

2 Soldering technology: H = Through Hole Reflow

3 N°of poles

4 Marking: 0 = none, **A** = reverse, **B** = straight, **C** = various

5 Mounting type: D = two low levels, **H** = one high level, **K** = two high levels, **M** = medium level, **T** = three levels

6 Pitch: 1 = 5.00 mm / .197 in, **5** = 5.08 mm / .200 in, **2** = 10.00 mm / .394 in, **6** = 10.16 mm / .400 in

7 Marking: 0 = standard, **A/Z** = customized

8 Colors: 0V = Green (similar to RAL 6032) only for STH and SMD products, **0N** = Black (similar to RAL 9005), **0G** = Light Gray (similar to RAL 7035), **0F** = Dark Gray (similar to RAL 7040), **0A** = Orange (similar to RAL 2003), **0B** = Blue (similar to RAL 5012), **0E** = Blue Gray (similar to RAL 7031), **0P** = Flame Red (similar to RAL 3000), **0R** = Red (similar to RAL 3017), **0C** = Brown (similar to RAL 8019), **0W** = White (similar to RAL 9001), **0Y** = Yellow (similar to RAL 1018), **0T** = Natural, **0D** = Yellow/Green

9 C = closed clamp, **T** = plastic with RTI 115÷120° C

11 W = cross-slot screw, **P** = VDE pegs, **1/9** = special

12 X = product with ex approval, **E** = industrial packaging, **A** = gold plating, **1/9** = special

Connector - Header
How to order

Standard Code | Custom Code

| C I F _ 1 3 A 0 2 | - | 0 G _ _ _ _ |
| 1 2 3 4 5 6 | | 7 8 9 10 11 12 |
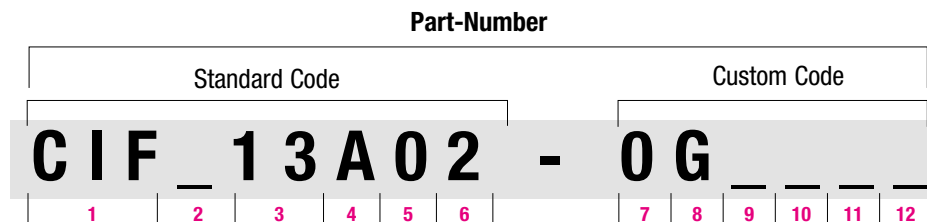
1 Series: CXF, CSF, CLF ,CHF ,CHF OUBLE, CTF, CKF, CFF, CBF, CIF, CVF, CCF, CCF DOUBLE, CGF, CUF

2 Soldering technology: H = Through Hole Reflow - **CSF: C** = spring version - **CCF: S** = slim verison

3 N°of poles

4 Marking: 0 = none, **A** = reverse, **B** = straight, **C** = various - **Other: CHF DOUBLE, CCF DOUBLE: D** = double wiring

5 Mounting type: V = with flanges, **M** = modular, **0** = side stackable - **CXF: 9** = one-way connection from below and above, not side stackable - **CSF: S** = connection from below and above, side stackable, with snap features, **F** = connection from below and above, with flanges, **J** = connection from below and above, side stackable, **1** = one-way connection, side stackable, **0** = flexible use, modular, **U** = flexible use, side stackable - **CLF: 0** = flexible use, modular, **U** = flexible use, side stackable, **W** = connection from below and above, modular, **9** = connection from below and above, side stackable - **CKF, CVF: R** = right side stackable, **M** = right modular, **D** = right with flanges, **L** = left side stackable, **W** = left modular, **S** = left with flanges - **CFF: 0** = not side stackable, **A** = side stackable - **CBF: R** = right side stackable, **D** = right with flanges, **L** = left side stackable, **S** = left with flanges - **CUF: P** = polarized, **0** = side stackable

6 Pitch: 8 = 3.50 mm/.138 in, **T** = 3.81 mm/.150 in, **1** = 5.00 mm/.197 in, **5** = 5.08 mm/.200 in, **9** = 7.00 mm/.275 in, **3** = 7.50 mm/.295 in, **7** = 7.62 mm/.300 in, **2** = 10.00 mm/.394 in, **6** = 10.16 mm/.400 in, **Q** = 15 mm/.591 in, **R** = 15.24 mm .600 in

7 Marking: 0 = standard , **A/Z** = customized

8 Colors: 0V = Green (similar to RAL 6032) only for STH and SMD products, **0N** = Black (similar to RAL 9005), **0G** = Light Gray (similar to RAL 7035), **0F** = Dark Gray (similar to RAL 7040), **0A** = Orange (similar to RAL 2003), **0B** = Blue (similar to RAL 5012), **0E** = Blue Gray (similar to RAL 7031), **0P** = Flame Red (similar to RAL 3000), **0R** = Red (similar to RAL 3017), **0C** = Brown (similar to RAL 8019), **0W** = White (similar to RAL 9001), **0Y** = Yellow (similar to RAL 1018), **0D** = Yellow/Green

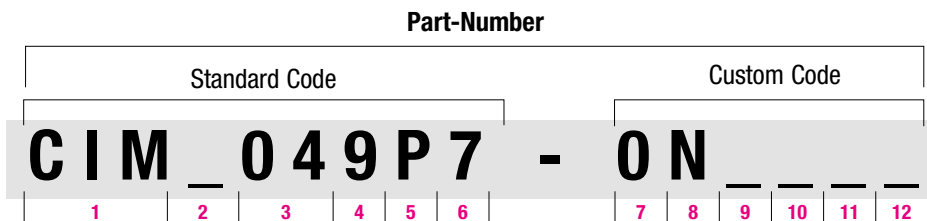**9 C** = closed clamp, **T** = plastic with RTI 115÷120 °C

10 K = integrated polarization, **X** = strain relief - **CHF, CVF: E** = cover for protection and easy removal from the header

11 W = cross-slot screw, **1/9** = special

12 X = product with ex approval, **E** = industrial packaging, **A** = gold plating, **1/9** = special

Connector - Plug
How to order

Part-Number

Standard Code | Custom Code

| C I M _ 0 4 9 P 7 | - | 0 N _ _ _ _ |
| 1 2 3 4 5 6 | | 7 8 9 10 11 12 |

1 Series: CSM, CSMH, CSMD, CLMH, CTM, CTMH, CTM DOUBLE, CTMH DOUBLE, CIM, CIMH, CPM HIGH, CPM, CPMH, CRM, CIMH NORMO-ORTHOGONAL, CGM

2 Soldering technology: H = Through Hole Reflow, **D** = Surface mounted

3 N°of poles

4 Marking for CGM: 0 = none , **A** = reverse, **B** = straight, **C** = various - **Other: 0** = 0°, **9** = 90°, **4** = 45°, **5** = 270° - **CIM: R** = 90° uplifted - **CIMH NORMO-ORTHOGONAL: N** = normo-orthogonal - **CLMH: 0** = 1.3 mm pin diameter, **S** = 1 mm pin diameter - **CTM/CTMH DOUBLE: P** = double level

5 Mounting type: V = with flanges, **M** = modular, **P** = polarized, **A** = side stackable, **E** = with extractor, **F** = with flanges and fake pins, **S** = with PCB screw anchorage - **CIMH NORMO-ORTHOGONAL: R** = right, **L** = left - **CSM, CSMH: S** = side stackable - **CLMH: L** = large base

6 Pitch: 8 = 3.50 mm/.138 in, **T** = 3.81 mm/.150 in, **1** = 5.00 mm/.197 in, **5** = 5.08 mm/.200 in, **9** = 7.00 mm/.275 in, **3** = 7.50 mm/.295 in, **7** = 7.62 mm/.300 in, **2** = 10.00 mm/.394 in, **6** = 10.16 mm/.400 in, **Q** = 15 mm/.591 in, **R** = 15.24 mm/.600 in

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9 T = plastic with RTI 115÷120 C° - **CGM: C** = closed clamp - **CPM HIGH: H** = high

10 K = integrated polarization, **Y** = polarization peg, **G** = ground pin - **CGM: X** = strain relief, **F** = wire entry protection

11 1/9 = special - **CGM, W** = cross-slot screw

12 X = product with ex approval, **E** = industrial packaging, **A** = gold plating, **1/9** = special

Automation

STH (THR-PiP) and SMD connectors and terminal blocks enable the use of **advanced automation** and reduce the number of process steps, with **rapid and error-free PCB assembly resulting in cost-optimized production.**

Unlike standard products, which are suitable for manual or wave soldering, STH and SMD products are made of a glass fiber reinforced polyamide with **high melting temperatures allowing the use of high reflow temperatures.**

The material used is classified **MSL1 (Moisture Sensitive Level 1)**, which means it is **insensitive to moisture** and no specific anti-moisture packaging or drying process is required before reflow soldering. With this type of material, any product deformation or bubbling on the surface after exposure to high temperatures is avoided.

STH and SMD products are **designed to be picked up with pliers or with suction pipette**: they feature parallel walls or flat surfaces which facilitate automatic gripping without the need for pads or kapton dots. **The solution without a pad or kapton dot is always to be preferred**, since, in addition to incurring a not inconsiderable increase in the product price, they are then to be removed manually and are a special waste that must then be handled.

STH and SMD products are visually **tested and inspected throughout their manufacturing**. The pitch, alignment, and protrusion of the terminals are 100% verified before packaging. During the packaging stage, an **automated visual inspection is carried out to ensure that the product is positioned correctly**.

The ideal packaging solutions for automated PCB assembly of STH and SMD products are **tape on reel, cell tray and tube**. Tape on reel and cell tray are designed according to the specific product and manufactured internally.

MSL1

Reflow Soldering

STH products' Assembly
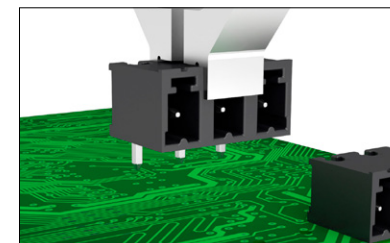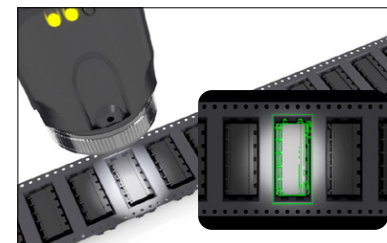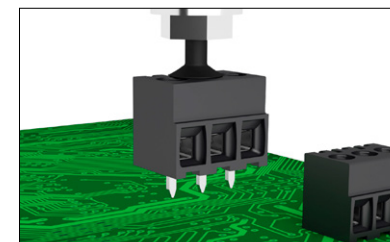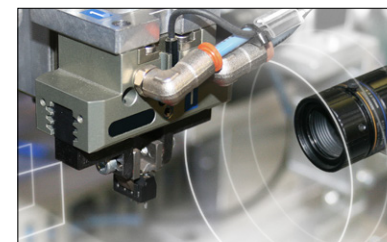
Sauro **STH** (**SMD T**hrough **H**ole) products are manufactured with a resistant to high temperature insulating material and therefore they can be soldered by all lead-free reflow processes with a peak temperature till 260°C/500°F, according to the related profile.

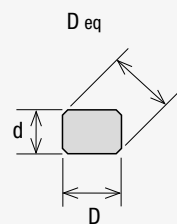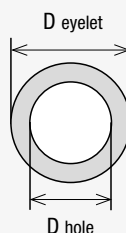| Reflow soldering	Lead-free tin soldering
Preheating t_0 T_1 Time Gradient	25°C (77°F) from 150°C (302°F) to 190°C (374°F) from 150s to 180s 1,5°C/s (34°F/s)
Peak T_P Time	up to 260°C (500°F) from 10s to 30s
Heating T_L Time	above 217°C (422°F) from 60s to 150s

Ramp-up rate (T_L to T_P) 3°C/second max.
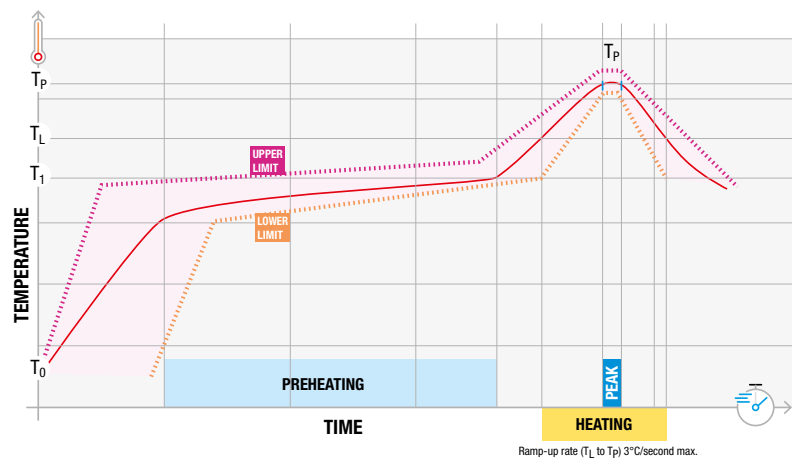
A PCB holes and eyelets sizing

$D_{hole} = D_{eq} + 0,2mm$

$D_{eyelet} = D_{hole} + 0,6mm$

B Soldering paste quantity

$$Vf = \left[\frac{\pi \cdot d_f^2}{4} \cdot S \right]$$

$$Vn = Vf - Vp$$

Paste volume = $V_n * K$

Where:
V_f = Hole volume
V_n = Net volume
V_p = Soldering pin volume
S = PCB thickness
d_f = Hole on the PCB
K = Evaporation factor (equal to 2 if the foreseen evaporation is 50% of the placed paste)

C Reflow soldering process

1 Stencil plate positioning on the PCB.

2 The soldering paste is deposited on the eyelets by means of a Doctor.

3 Once the stencil plate is removed, the paste remains in the hole.

4 The pin insertion drags part of the paste through the hole, until it overflows.

5 Passage in the oven and paste's reflow through the metallized hole.

Choose the product based on power

Low power

Medium power

High power

Data transmission

Signal transmission

Fields of Application

Choose the product based on power

Sauro has developed a classification system for connectors and terminal blocks based on power, providing a clear and intuitive guide to selecting the most suitable solution for each project's specific needs. This system defines three product categories: Low, Medium, and High, each distinguished by a unique color cyan, yellow, and magenta and symbol triangle, circle, and square, respectively.

▲ **Low power**
Wire section up to 1,5 mm² - 14 AWG - Rated current up to 17,5 A

● **Medium power**
Wire section up to 2,5 mm² - 12 AWG - Rated current up to 24 A

■ **High power**
Wire section up to 35 mm² - 1 AWG - Rated current up to 135 A

Terminal blocks and connectors for printed circuit boards are designed for data, signal, and power transmission.

Data transmission:
is the transmission of information or content in the form of digital data between devices and systems.
The current used is generally low, and Low and Medium power products are indicated.

Signal transmission:
signal transmission ensures that each element of a complex electronic device cooperates effectively for the proper functioning of the device.
The current used is generally low, and Low and Medium power products are indicated.

Power transmission:
the correct power distribution is crucial for the operation of any device, minimizing the risk of short circuits or interruptions. Power is transmitted through electrical currents that vary according to circuit design and specific application. Therefore, products of all 3 categories are indicated: Low, Medium and High power.

By offering secure, stable, modular, and customizable connections, Sauro terminal blocks and connectors are used in a wide range of applications, each with unique requirements for robustness, miniaturization, performance, environmental resistance, and connection type.
Key sectors where they are commonly applied include industrial automation, medical, renewable energy, home automation, IoT, HVCAR, and more.

Products with
Customizations

Marking
Products with customized markings are an ideal solution to make the product distinct for error free use. SAURO performs pad printing using a bi-component ink, achieving the highest possible legibility, indelibility and scratch resistance. Pad printing can be standard (numbers in progression) or customized (sequences of characters, numbers or symbols with different sizes, colors, orientation and positions).

Colors
SAURO offers a wide selection of colors to customize the product. This can be the ideal solution for error-free use. Green (similar to RAL 6032) is the standard color of traditional products, suitable for manual or wave soldering, while black (similar to RAL 9005) is the standard color for STH and SMD products, suitable for reflow soldering. Both standard and high temperature products are available in additional colors upon request.

Integration polarization   Wire entry protection   Strain relief

Polarization peg   Closed base   Polarization peg
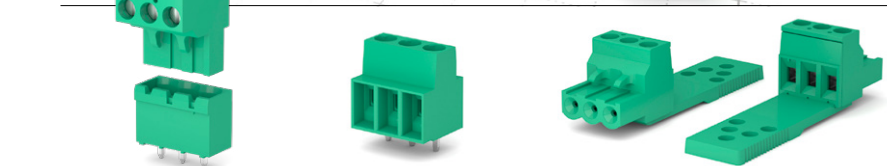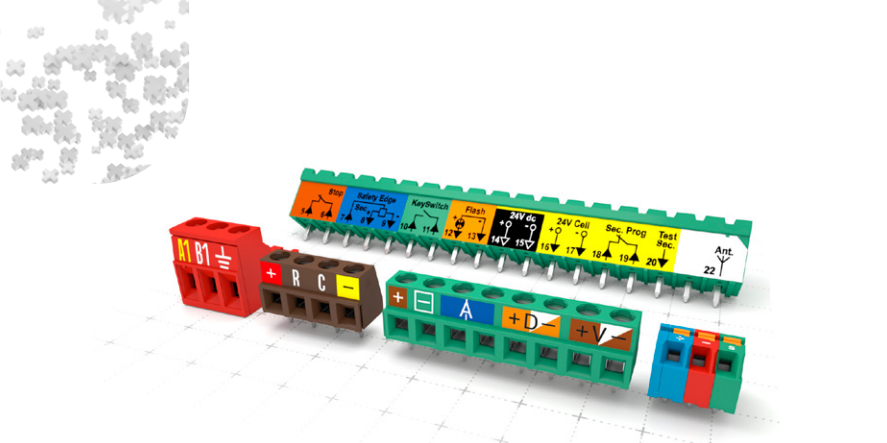
Design-in plastic housing
Due to the flexibility of SAURO's molding tools and philosophy of being oriented towards customer needs, plastic housing can be designed and manufactured according to customer required specifications.
Examples of customizations: non-fundamental geometric plastic housing changes, closed product base, closed wire entry, header and plug with integrated keyed polarization for a distinct and safe connection, peg with dual function (integrated polarization for a distinct and safe assembly on the PCB and a stronger anchoring on the PCB for higher stability during the wire tightening process or reflow soldering process), addition wire strain relief.

Grounding pin   Double pin   Cross and slotted screw head

Customized length pin   Gold plated pin

Desig-in metallic components
Due to the flexibility of SAURO's molding tools and philosophy of being oriented towards customer needs, metallic components can be designed and manufactured according to customer required specification.
Examples of customizations: customized soldering side pin length, special plating such as gold plating, various screw head types different from the standard slotted one, clamp supplied closed, customized spring gap, dedicated grounding pins.
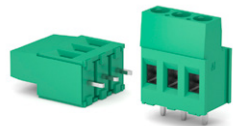
Connect with confidence
we take care of the rest

1984 the dream begins to take form

The beginnings

Our vision

Our mission

ALL MADE IN ITALY

Company
Profile

SAURO (**S**ystem **AU**tomation **RO**botics) is a world leader in the design and fully automated production of terminal blocks and connectors for printed circuit boards

The beginnings
SAURO srl was founded in 1984 out of Padua, in Italy, from the technical encounter between the ophthalmic experience of Santino Favero and the industrial experience gained in electromechanical and mechanical design of the other four founding partners Vito Bergamin, Bruno Pagetta, Odone Ragazzo and Florio Scarso.
By fusing their diverse knowledge, they created a technology that brought new solutions and a level of product quality and customisation previously unthinkable in the connection field. Since its founding, the company has made automated manufacturing the core of its business, ensuring reliable and defect-free products.

Our vision
Be a strategic, innovative, versatile and reliable partner

Our mission
Offer a high-quality, safe, reliable product that actually works. Not only that, the product and the entire production chain, from the choice of supplier to packaging, must respect and safeguard the environment and people through choices that focus an efficiency and sustainability.

In-house design and construction of the entire production technology
The ability to design and build not only the products but also the entire production technology, such as equipment, molds and assembly lines, has supported and made successful a quality and customer- oriented strategy. A team of dedicated professionals from the technical department and the mechanical department is dedicated to the purpose. From their ingenuity, knowledge and synergy, the machines used for manufacturing are created, transformed and maintained. In addition, through the use of state-of-the-art machine tools, molds and various tools are made, modified and maintained.

From single component to packaging: ALL MADE IN ITALY
All production takes place in the plants of the Italian headquarters, allowing better visibility and step-by-step control of the entire production process, from design to packaging, representing a guarantee for the quality of the product and the production processes themselves. Furthermore, the ability to procure components from in-house departments within its production chain allows it to deal with production peaks or changing market demands independently of the timing and dynamics of external suppliers. Not only that, an in-house production allows us to perform special and customised processes that are increasingly requested by our customers thanks to the timeliness, elasticity and flexibility of our production processes. No less important is the fact that a short supply chain substantially reduces environmental impact and complements all the actions taken for a more sustainable future, including recycling of metal and plastic scrap.

Certifications & Declarations

SAURO believes in the continuous quality improvement of company processes and absolute respect for the environment, safety and human health, operating according to an Integrated and Quality Environment and Safety System. In addition, a team is dedicated to the various declarations and certifications of suppliers and raw materials.

ISO 9001: 2015 - The primary object of ISO 9001 is the pursuit of customer satisfaction for products and services provided as well as the continuous improvement of company performance, enabling SAURO to assure customers that the quality of goods and services are maintained and improved over time

ISO 14001: 2015 - By adhering to this standard, SAURO can ensure proactive measures to minimize its environmental footprint, comply with relevant legal requirements and achieve important environmental objectives

ISO 45001: 2018 - By adhering to this standard, SAURO can ensure continuous improvements with regard to the safety, health and well-being of workers, reducing or eliminating workplace risks

REACH - SAURO certifies that the chemicals and compounds listed in the SVHC list and in Annexes XVII and XIV of the REACH Regulation and their modifications are not contained in its products, components or materials,including accessories and packaging

RoHS - Since its foundation in 1984, SAURO has never used substances that were declared or suspected to be carcinogenic, toxic or dangerous for human health and/or the environment in its products and fully complies with RoHS and RoHS China.

CMRT & **EMRT** - SAURO is committed to providing customers with the highest quality products while supporting initiatives against violence, human rights violations and environmental degradation. Based on supplier statements, all raw materials used in the production of terminal blocks and connectors are according to CMRT and EMRT

TSCA - SAURO guarantees that all products do not contain any PBT substances listed in the TSCA Section 6(h) and that these substances are not intentionally added during our processes.

California PROP 65 - SAURO works with supply chain partners to ensure the procurement of raw materials that meet Proposition 65 standards.

POP - All products are free of substances listed in Annexes I, II, III and IV of Regulation (EU) 2019/2021.

Halogen free - SAURO, alongside its suppliers, is limiting the use of halogens such as Bromine (Br), Chlorine (Cl), Fluorine (F), and Iodine (I) in all products to a level below 900ppm.

PFAS free - SAURO guarantees that all the products manufactured do not contain any per- and polyfluoroalkyl substances.

SAURO®
ELECTRONIC CONNECTORS
by the law
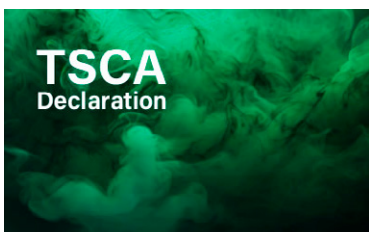
Always there for you!

NORTH and SOUTH AMERICA
SAURO Inc.
1604 - A Bench Mark Dr.
AUSTIN, TX 78728
Tel.: (+1) 512 2558420

E-mail: sauroinc@sauro.net

NORTH EUROPE
SAURO GmbH
Kurfürstenstrasse, 40C
D-47829 Krefeld
Tel.: (+49) 2151 7896043

E-mail: saurogmbh@sauro.net

EUROPE and AFRICA
SAURO s.r.l. Headquarters
Viale delle Industrie, 17
35010 Villafranca Padovana - Padova - Italy
Tel.: (+39) 049 9070440

E-mail: info@sauro.net

FAR EAST, INDIA and OCEANIA
SAURO Electronic Connectors
(Shanghai) Co. Ltd.
133 Fute Beilu Waigaoqiao F.T.Z.
200131 Shanghai - China
Tel.: (+86) 021 58682734

E-mail: saurocn@sauro.net

Each one of your enquiries will be shared among all our Divisions.
Every single request will always be answered.