


M23 POWER, M23 HYBRID CONNECTORS

HIGH POWER AND MULTIPLE OPTIONS

The M23 Power connector is diverse with many pin-out configurations and housing styles. Connection styles include standard Threaded screw lock, Twilock and Twilock-S 1/4 turn system, which mates to SpeedTEC® by Intercontec/TE Connectivity. EMI ready options! Available in 6, 8, 9, 10 or 12 pole inserts with power transmission up to 600 Volts and 28 Amps as well as a Hybrid Insert.

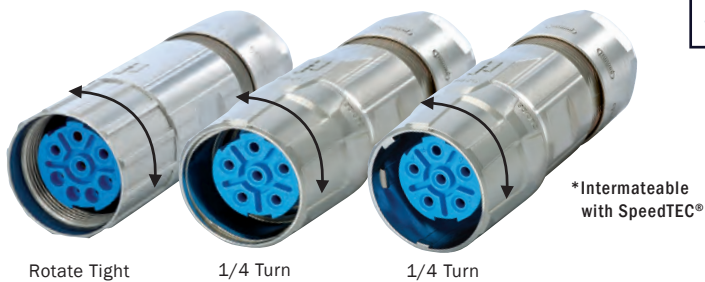
Mechanical Data	Materials and Technical Data
Housing	Copper-Zinc alloy, Die Cast
Housing surface	Nickel plated Other surface upon request
Inserts	Thermoplastic Polyamid PA 6 (Nylon 6/6), PBT Fire protection class V-0
Contacts	Brass Alloy
Contact surface at point of contact	Nickel and gold plated (0.25 µm)
Minimum mating cycles	> 1000 (Sealcon to Sealcon connector)
Seals / O-Rings	Buna-N (Black), Optional FKM (Green)
Temperature range	-40 °F - 257 °F (-40 °C - 125 °C)
Type of contacts	Crimp
Protection	IP 67 / IP 69K per EN 60 529 (connected), NEMA 4x
Cable diameter range	.28 - .67" (7 - 17 mm)

 HYBRID INSERT AVAILABLE ON PAGE 56. INSERT FITS STANDARD M23 POWER SHELL.



CONNECTION SYSTEM TYPES

THREADED TWILOCK TWILOCK-S*



*Intermateable with SpeedTEC®

Components Needed For A Complete M23 Power Connector:

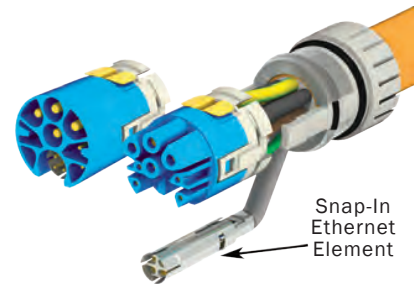
- HOUSING (pages 51 - 54)
- INSERT (page 56)
- CONTACTS (page 56)

HYBRID INSERT

HYPERFACE
DSL & EnDat 2.2

Allowing Data Transfer up to 500 Mbit/s

< Cat 5e



Snap-In Ethernet Element

Electrical Data	5 + PE	4 + 3 + PE		5 + 3 + PE		10
Number of positions	6	4	4	5	4	10
Number of contacts	6	4	4	5	4	10
Contact-Ø [mm]	2	1	2	1	2	1
Nominal current [A]	28	8	28	10	28	10
Nominal voltage [V~] degree of protection 3	600	300	600	250	600	160
Test voltage (Breakdown voltage) [V~]	4000	2500	4000	2500	4000	2500
Insulation resistance [MΩ]	> 10 ¹³	> 10 ¹³		> 10 ¹³		> 10 ¹³
Max. contact resistance [mΩ]	3	3		3	3	3

M23 Hybrid Electrical Data	4 + 4 + 3 + PE		
Number of positions			
Number of contacts	POWER 4	SIGNAL 4	ETHERNET 4
Contact-Ø [mm]	2	1	0.6
[mm ²] (AWG)	0.75 - 4 (18 - 12)	0.14 - 1 (26 - 17)	0.08 - 0.34 (28 - 22)
Nominal current [A]	28	8	2
Nominal voltage [V~] degree of protection 3	600	300	60
Test voltage (Breakdown voltage) [V~]	4000	2500	500
Insulation resistance [MΩ]	> 10 ¹³	> 10 ¹⁰	> 10 ⁶
Max. contact resistance [mΩ]	< 3	< 3	< 3
Hybrid Connector Ethernet Capabilities			5e

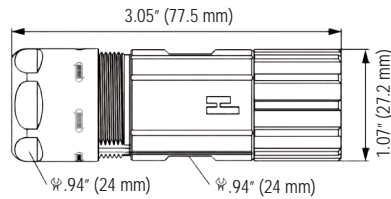
SEE TECHNICAL INFORMATION ON PAGE 80

*ASSEMBLY INSTRUCTIONS CAN BE FOUND AT WWW.SEALCONUSA.COM OR BY CALLING US AT 1-800-456-9012

M23 POWER, M23 HYBRID CONNECTORS

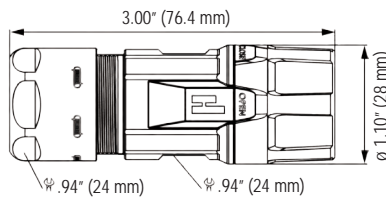
HOUSINGS

M23 Power Straight Connector, EMI, Female Thread



Cable-Ø	Part Number
7 - 12 mm (.27 - .47")	S7.550.500.000
11 - 17 mm (.43 - .67")	S7.550.600.000

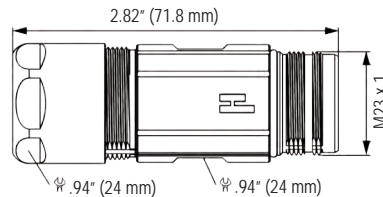
M23 Power Straight Connector, EMI, Female Thread Standard Threaded and TWILOCK/TWILOCK-S* - Quick Connect



Cable-Ø	Part Number
7 - 12 mm (.24 - .47")	S7.556.500.000
11 - 17 mm (.43 - .67")	S7.556.600.000

*Intermateable with SpeedTEC® (Twilock-S)
 7 - 12 mm (.24 - .47") S7.556.500.00S
 11 - 17 mm (.43 - .67") S7.556.600.00S

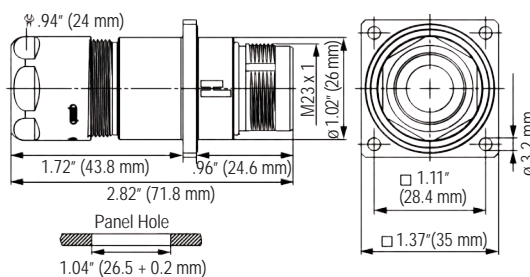
M23 Power Straight Connector, EMI, Male Thread Standard Threaded and TWILOCK/TWILOCK-S* - Quick Connect



Cable-Ø	Part Number
7 - 12 mm (.27 - .47")	S7.560.500.000
11 - 17 mm (.43 - .67")	S7.560.600.000

*Intermateable with SpeedTEC® (Twilock-S)
 7 - 12 mm (.24 - .47") S7.566.500.00S
 11 - 17 mm (.43 - .67") S7.566.600.00S

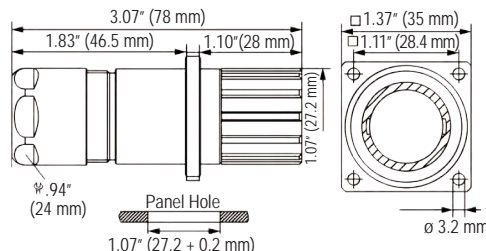
M23 Power Panel Connector with Strain Relief, EMI, Male Thread



Cable-Ø	Part Number
Front or Rear Mounting, 4 x Holes Ø 3.2 mm, Flange 35 x 35 mm	
7 - 12 mm (.27 - .47")	S7.683.500.000
11 - 17 mm (.43 - .67")	S7.683.600.000

Flange 35 x 35 mm

M23 Power Panel Connector with Strain Relief, EMI, Female Thread



Cable-Ø	Part Number
Front or Rear Mounting, 4 x Holes Ø 3.2 mm, Flange 35 x 35 mm	
7 - 12 mm (.27 - .47")	S7.681.500.000
11 - 17 mm (.43 - .67")	S7.681.600.000

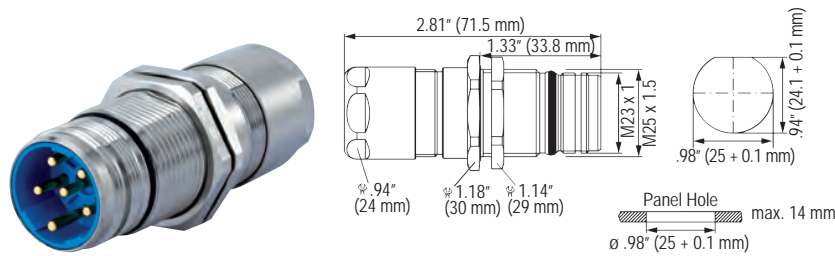
Flange 35 x 35 mm

MATES WITH TWILOCK SYSTEM DOES NOT MATE WITH TWILOCK SYSTEM

M23 POWER, M23 HYBRID CONNECTORS

HOUSINGS

M23 Power Panel Connector w/ Strain Relief, EMI, Single Hole, Male Thread Standard Threaded and TWILOCK/TWILOCK-S* - Quick Connect



Cable-Ø	Part Number
Rear Mounting, Single Hole, Thread M25 x 1.5, 7 - 12 mm (.27 - .47").....	⊗ S7.653.500.000
11 - 17 mm (.43 - .67").....	⊗ S7.653.600.000
*Intermateable with SpeedTEC® (Twilock-S)	
7 - 12 mm (.24 - .47").....	⊗ S7.653.500.00S
11 - 17 mm (.43 - .67").....	⊗ S7.653.600.00S
Including Hex Locking Nut M25 x 1.5	

M23 Power Right Angle Connector, EMI, Female Thread, Rotatable



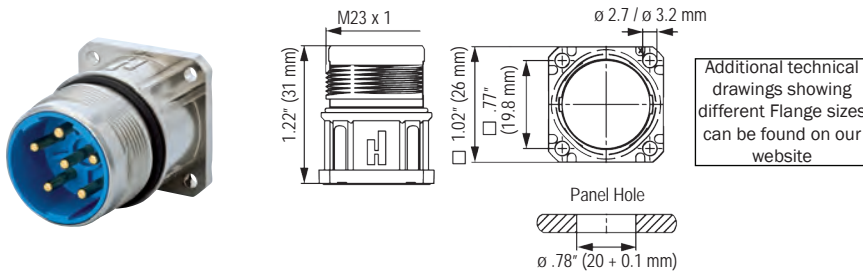
Cable-Ø	Part Number
7 - 12 mm (.27 - .47").....	S7.576.500.000
11 - 17 mm (.43 - .67").....	S7.576.600.000

M23 Power Right Angle Connector, EMI, Male Thread, Rotatable



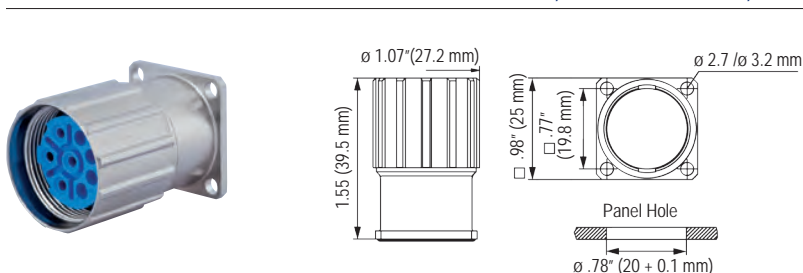
Cable-Ø	Part Number
7 - 12 mm (.27 - .47").....	⊗ S7.580.500.000
10 - 14 mm (.39 - .55").....	⊗ S7.580.600.000

M23 Power Panel Connectors, Male Thread, Flange Standard Threaded and TWILOCK/TWILOCK-S* - Quick Connect



Type	Part Number
Front Mounting, Flange 26 x 26 mm	
4 x Holes Ø 3.2 mm.....	⊗ S7.601.000.000
4 x Holes Ø 2.7 mm.....	⊗ S7.605.000.000
*Intermateable with SpeedTEC® (Twilock-S)	
4 x Holes 3.2 mm, Flange 25 x 25.....	⊗ S7.601.000.00S
4 x Holes 3.2 mm, Flange 28 x 28.....	⊗ S7.601.100.00S

M23 Power Panel Connector with Knurled Nut, Female Thread, Flange



Type	Part Number
Front Mounting, Flange 25 x 25 mm	
4 x Holes Ø 3.2 mm.....	⊗ S7.641.000.000
Optional: Flat gasket....STAD2-7P2510	
4 x Holes Ø 2.7 mm.....	⊗ S7.645.000.000
Optional: Flat gasket....STAD1-7P2510	

⊗ MATES WITH TWILOCK SYSTEM

⊗ DOES NOT MATE WITH TWILOCK SYSTEM

M23 POWER, M23 HYBRID CONNECTORS


HOUSINGS

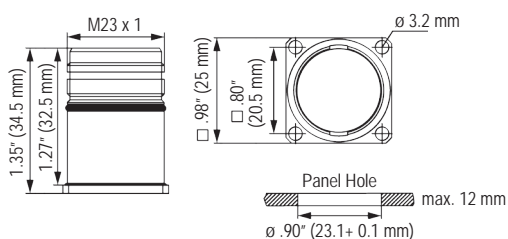
M23 Power Panel Connector, Male Thread, Flange

Type

Part Number

Rear Mounting, Flange 25 x 25 mm

4 x Holes \varnothing 3.2 mm.....  S7.661.000.000



M23 Power Panel Connector, Male Thread, Single Hole, M20

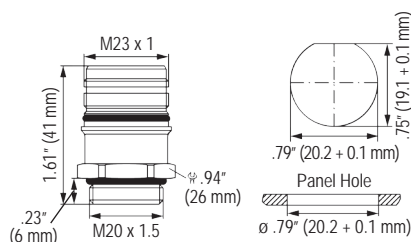
Type

Part Number

Front Mounting, Single Hole

Thread M20 x 1.5.....  S7.621.000.000

Options: Flat gasket, Hex Locking Nut M20 x 1.5



M23 Power Panel Connector, Male Thread, Single Hole, PG 13.5

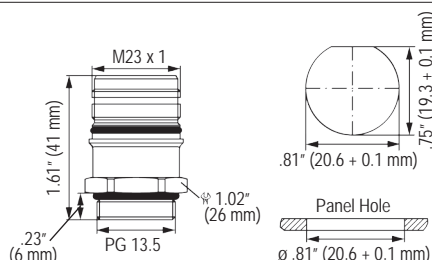
Type

Part Number

Front Mounting, Single Hole

Thread PG 13.5.....  S7.623.000.000

Options: Flat gasket, Hex Locking Nut PG 13.5



M23 Power Panel Connector, Male Thread, Single Hole, M25

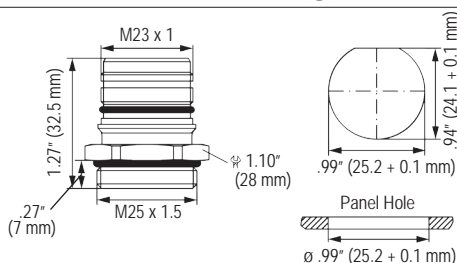
Type

Part Number

Front Mounting, Single Hole

Thread M25x1.5.....  S7.626.000.000

Options: Flat gasket, Hex Locking Nut M25 x 1.5




M23 Power Panel Connector, Male Thread, Single Hole, M25

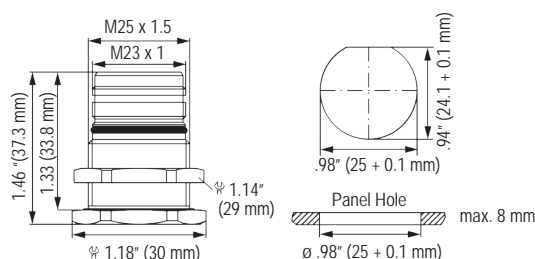
Type

Part Number


Rear Mounting, Single Hole

Thread M25x1.5.....  S7.651.000.000

Including Hex Locking Nut M25 x 1.5



 MATES WITH TWILOCK SYSTEM

 DOES NOT MATE WITH TWILOCK SYSTEM

M23 POWER, M23 HYBRID CONNECTORS

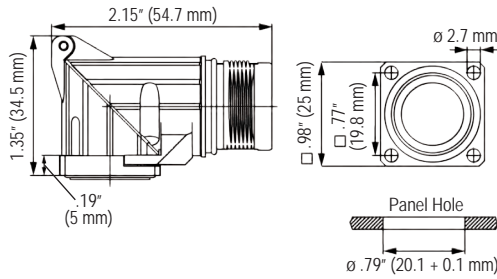
HOUSINGS

M23 Power Right Angle Panel Connector, Male Thread, Fixed Flange

Type Part Number

Fixed Panel Mount, Flange 25 x 25 mm
 4 x Holes \varnothing 2.7 mm.....S7.635.000.000
 Optional: Flat gasket....STAD1-7P2510

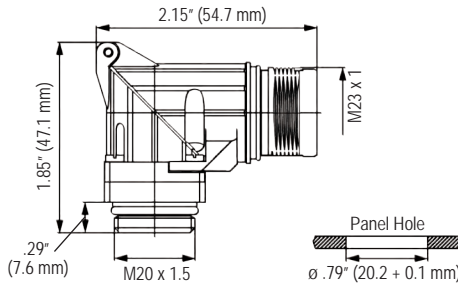
Easy Fastening with:
 M2.5 x 10 mm or .39" Long Screws



M23 Power Right Angle Panel Connector, Male Thread, Rotatable 335°

Type Part Number

335° Rotatable, Hole Mounted
 Thread M20 x 1.5.....S7.636.000.000



M23 Power Right Angle Panel Connector, Male Thread, Rotatable 330° Standard Threaded and TWILOCK/TWILOCK-S* Quick Connect

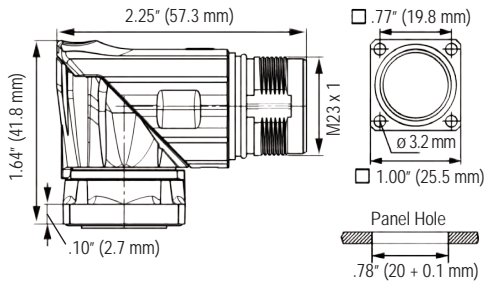
Type Part Number

330° Rotatable, Flange 25 x 25 mm
 4 x Holes \varnothing 3.2 mm.....S7.639.000.000
 Optional: Flat gasket....STAD1-7P2510

* Intermateable with SpeedTEC® (Twilock-S)
 4 x Holes \varnothing 3.2 mm.....S7.639.000.00S
 Optional: Flat gasket....STAD1-7P2510



1.5 mm Locking Screw at Flange



TWILOCK-S OPTIONS DO NOT COME WITH A SEAL RING.

M23 Power Right Angle Panel Connector, Male Thread, Rotatable 330° Standard Threaded and TWILOCK/TWILOCK-S* Quick Connect

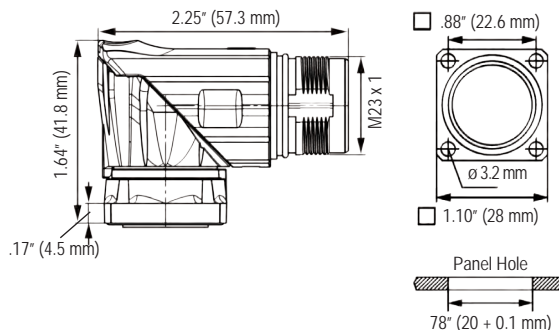
Type Part Number

330° Rotatable, Flange 28 x 28 mm
 4 x Holes \varnothing 3.2 mm.....S7.639.100.000

* Intermateable with SpeedTEC® (Twilock-S)
 4 x Holes \varnothing 3.2 mm.....S7.639.100.00S



1.5 mm Locking Screw at Flange



TWILOCK-S OPTIONS DO NOT COME WITH A SEAL RING.

MATES WITH TWILOCK SYSTEM DOES NOT MATE WITH TWILOCK SYSTEM

M23 POWER, M23 HYBRID CONNECTORS

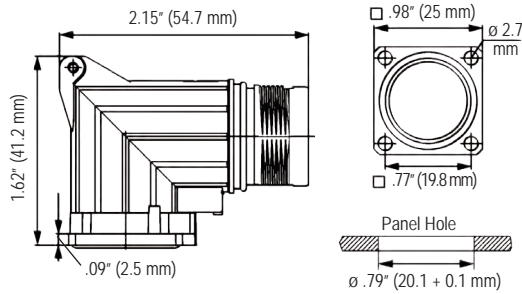
HOUSING, ACCESSORIES

M23 Power Right Angle Panel Connector, Male Thread, Rotatable 300°

Type Part Number



1.5 mm Locking Screw at Flange



300° Rotatable, Flange 25 x 25 mm
4 x Holes Ø 2.7 mm..... S7.638.000.000

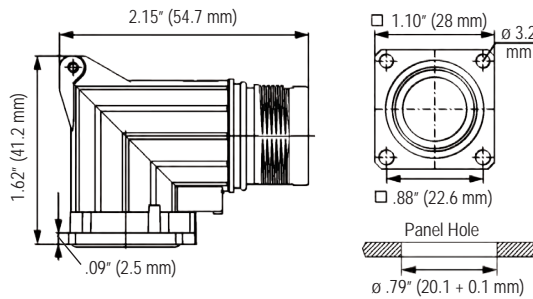
Optional: Flat gasket....STAD1-7P2510

M23 Power Right Angle Panel Connector, Male Thread, Rotatable 300°

Type Part Number



1.5 mm Locking Screw at Flange



300° Rotatable, Flange 28 x 28 mm
4 x Holes Ø 3.2 mm..... S7.638.100.000

M23 Power Accessories



Plastic Protective Cap for connectors with Male thread.....S7.000.900.101
with Female threadS7.000.900.102



Brass Protective Cap for connectors with Female thread S7.010.900.183



Brass Protective Cap for connectors with Male threadS7.010.900.102



Adapter Flange for Straight Connectors..... S7.010.900.128



Conduit Adapter
Nylon Conduit DN 12.....S7.010.900.205
Nylon Conduit DN 14.....S7.010.900.207
Nylon Conduit DN 17.....S7.010.900.209



Tool Adapter for tightening or loosening knurled nuts for M23S7.010.900.192



Disassembly Tool for crimp contacts.....S7.010.900.531



Brass Protective Cap with chain for connectors with Female thread
Length 70 mm..... S7.010.9S0.783
Length 100 mm..... S7.010.9S1.083



Brass Protective Cap with chain for connectors with Male thread
Length 70 mm.....S7.010.9S0.702
Length 100 mm.....S7.010.9S1.002



Crimp Tool for manual crimping of EMI sleeve for Hybrid Ethernet inserts
.....S7.000.900.912



Crimp Tool for manual crimping of machined crimp contacts
Works with contacts for power or signal
.....S7.000.900.901



Positioner for Crimp Tool DMC M22520 S7.000.900.DMC



Screw Tool, adjustable 0.5 - 1.7 Nm S7.010.900.190



Locator for Crimp Tool DMC M22520 with positioner S7.000.9DM.C06
For Sealcon Contact:
S7.010.941.001, S7.010.942.001, S7.010.942.011



















Locator for Crimp Tool DMC M22520 with positionerS7.000.9DM.C07
For Sealcon Contact:
S7.010.941.002, S7.010.942.002, 7.010.942.012

MATES WITH TWILOCK SYSTEM DOES NOT MATE WITH TWILOCK SYSTEM

M23 POWER, M23 HYBRID CONNECTORS

INSERTS, CONTACTS

M23 Power Contact Arrangement, Mating View	Number of Poles	Required Contacts
	6 - pole	Two-Piece Snap-In *INSERT/REMOVAL TOOL S7.010.900.531 REQUIRED 6 x Crimp Pins 2 mm.....S7.084.951.121* 6 x Crimp Sockets 2 mm.....S7.084.951.122* EuroClip 6 x Crimp Pins 2 mm.....S7.084.951.101 6 x Crimp Sockets 2 mm.....S7.084.951.102
	8 - pole	Two-Piece Snap-In *INSERT/REMOVAL TOOL S7.010.900.531 REQUIRED 4 x Crimp Pins 1 mm, 4 x Crimp Pins 2 mm.....S7.084.943.121* 4 x Crimp Sockets 1 mm, 4 x Crimp Sockets 2 mm.....S7.084.943.122* EuroClip 4 x Crimp Pins 1 mm, 4 x Crimp Pins 2 mm.....S7.084.943.101 4 x Crimp Sockets 1 mm, 4 x Crimp Sockets 2 mm.....S7.084.943.102
	9 - pole	5 x Crimp Pins 1 mm, 4 x Crimp Pins 2 mm.....S7.084.953.101 5 x Crimp Sockets 1 mm, 4 x Crimp Sockets 2 mm.....S7.084.953.102
	9 - pole	5 x Crimp Pins 1 mm, 4 x Crimp Pins 2 mm.....S7.084.909.101 5 x Crimp Sockets 1 mm, 4 x Crimp Sockets 2 mm.....S7.084.909.102
	10 - pole	10 x Crimp Pins 1 mm.....S7.084.910.101 10 x Crimp Sockets 1 mm.....S7.084.910.102
	12 - pole	HYBRID Insert - Power, Signal, and Ethernet 4 each Crimp Pins 1 mm, 2 mm, 0.6 mm.....S7.084.944.101* 4 each Crimp Sockets 1 mm, 2 mm, 0.6 mm.....S7.084.944.102* *CONTACT REMOVAL TOOL S7.010.900.531 REQUIRED FOR 2MM CONTACTS

M23 Power Contacts	Type	Crimp Range	Part Number
	Crimp Pin 0.6 mm, machined.....	0.08 - 0.34 mm ² (AWG28 - AWG 22)	S7.010.980.641
	Crimp Socket 0.6mm, machined.....	0.08 - 0.34 mm ² (AWG28 - AWG 22)	S7.010.980.602
	Crimp Pin 1 mm, machined.....	0.14 - 1 mm ² (AWG 26 - 17)	S7.010.941.001
	Crimp Pin 1 mm, machined.....	0.75 - 1.5 mm ² (AWG 18 - 16).....	S7.010.941.021
	Crimp Socket 1 mm, machined.....	0.14 - 1 mm ² (AWG 26 - 17)	S7.010.941.002
	Crimp Socket 1 mm, machined.....	0.75 - 1.5 mm ² (AWG 18 - 16).....	S7.010.941.022
	Crimp Pin 2 mm, machined.....	0.75 - 2.5 mm ² (AWG 18 - 14).....	S7.010.942.001
	Crimp Pin 2 mm, machined.....	2.5 - 4 mm ² (AWG 14 - 12)	S7.010.942.011
	Crimp Socket 2 mm, machined.....	0.75 - 2.5 mm ² (AWG 18 - 14).....	S7.010.942.002
	Crimp Socket 2 mm, machined.....	2.5 - 4 mm ² (AWG 14 - 12)	S7.010.942.012