

DYNAMIC SPRING CLAMP SERIES

TE Connectivity (TE)'s Dynamic spring clamp series of connectors provide efficient and reliable solution to power and signal line interface, especially for servo drive application. Their spring clamp design allows users to easily obtain a highly reliable wire termination, without having to use screw fasteners or crimps. The Dynamic spring clamp series adopts the classic multiple contact points of Dynamic family, all gold-plated, providing reliable and safe connection in harsh industrial environment. Vibration- and shock-proof, the push-on locking system with audible sound helps to improve efficiency and provide for long service life. The series is available in 3.5mm(D1900), 5.08mm(D2950), 7.5mm(D3950 and D4950) center line blocks for max. AWG 10/2.5mm², handle up to 22A, - all conforming to the UL1059 standard for terminal blocks.

BENEFITS

- Highly reliable connection by “multiple contact points” stable contact performance.
- Safety and easy mating via locking system and guide rail
- Fast field installation and highly reliable field wire termination
- Complete product portfolio for platform design

APPLICATIONS

- Servo Drive
- PLC
- Variable Frequency Controller
- Robotic and CNC Control

Dynamic Spring Clamp Series

KEY FEATURES

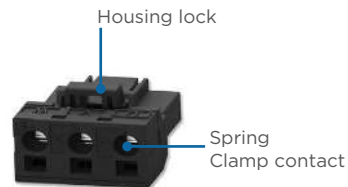
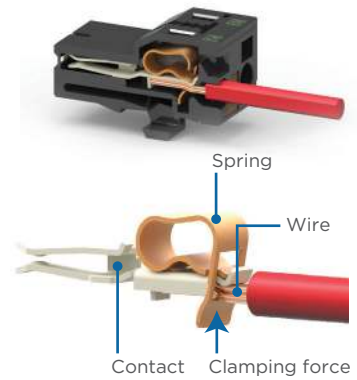
Spring Clamp concept

Spring clamp contact provides easy and high reliable wire termination.

- Reduce processing time
 - Only inserting stripped wire into connector.
 - No screw fastening or crimping process required.
- High reliability
 - Stable clamping force with Spring feature.
 - Avoiding operational dispersion in screw fastening process.

Push-on lock

Safety and easy mating by locking system. Just push the plug for mating of connector and proper position is confirmed with clear sound.



D3950 3POS Receptacle

PRODUCT SPECIFICATIONS

Series	D1900	D2950	D3950	D4950
Products image				
Contact pitch [mm]	3.5	5.08	7.5	7.5
Rated current max. UL [A]	4 (AWG18 x 1)	11.5 (AWG14 x 5)	14.5 (AWG14 x 1)	22 (AWG10 x 8)
Rated current max. IEC [A]	-	-	-	TBD
Rated voltage UL1059 B [V]	150 AC/DC	300 AC/DC	300 AC/DC	300 AC/DC
Rated voltage UL1059 C [V]	-	-	300 AC/DC	300 AC/DC
Rated voltage UL1059 D [V]	-	300 AC/DC	600 AC/DC	600 AC/DC
Rated voltage IEC Pollution Degree: 3, Protection Class: III [V]	-	-	-	400 AC/DC
Dielectric withstand-ing Voltage :	1,100V AC	2,200V AC	2,200V AC	2,200V AC
Wire size [AWG]	24 - 18	22-14	22-14	16-10
Wire size [sq]	0.2-0.75	0.3-2.0	0.3-2.0	1.25-5.5
Product specifica - tion :	108-78336	108-140221	108-78997	108-140216
Instruction sheet:	411-78291	408-78172	411-78272	408-78173
Ferrules size [sq] or [AWG] * Please contact to sales team for detail	-	0.75sq	AWG14~AWG16	AWG16-AWG12
Pos #	8, 12, 16, 22, 30, 38pos	5pos, 6pos	3,4,6,8,11pos	8pos

Dynamic Spring Clamp Series

DYNAMIC SPRING CLAMP D1900 SERIES.

Specification

Contact pitch :	3.5mm				
Rated current [A] :	Number of energized contacts	AWG18	AWG20	AWG22	AWG24
	1	4	3	2.5	2
	2-12	3	2	1.5	1
	13-38	2	1.5	1	0.5
	UL1059 // Temperature rising : 30°C max.				
Rated voltage :	150V AC/DC (UL1059 group B)				
Dielectric withstanding Voltage :	1,100V AC				
Wire size :	AWG24(0.2sq) - AWG18(0.75sq)				
Product specification :	108-78336				
Instruction sheet:	411-78291				

Portfolio / Parts Number

Pos	Keying	Plating	Color of HSG	Receptacle assembly	Header assembly	
				2 row	2 row Horizontal	2 row Vertical
8	X	Au	Black	1-1871940-4	1-1871935-4	1-2013325-4
12	X	Au	Black	1-1871940-6	1-1871935-6	1-2013325-6
16	X	Au	Black	1-1871940-8	1-1871935-8	-
22	X	Au	Black	2-1871940-1	2-1871935-1	2-2013325-1
30	X	Au	Black	2-1871940-5	2-1871935-5	-
38	X	Au	Black	2-1871940-9	2-1871935-9	-

Opener 1891348-1

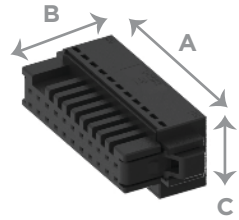


Dynamic Spring Clamp Series

DYNAMIC SPRING CLAMP D1900 SERIES.

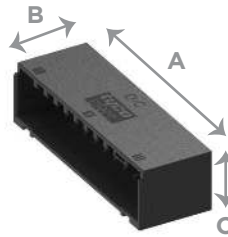
Product Dimensions
Receptacle Assembly

Pos	Keying	Plating	HSG color	Part number	Dimension		
					A	B	C
8	X	Au	Black	1-1871940-4	25.2	20.6	16.4
12	X	Au	Black	1-1871940-6	32.2	20.6	16.4
16	X	Au	Black	1-1871940-8	39.2	20.6	16.4
22	X	Au	Black	2-1871940-1	49.7	20.6	16.4
30	X	Au	Black	2-1871940-5	63.7	20.6	16.4
38	X	Au	Black	2-1871940-9	77.7	20.6	16.4



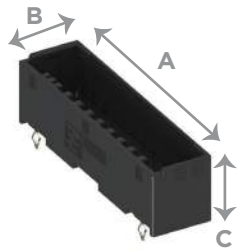
PCB Mounting Tab Header Horizontal type

Pos	Keying	Plating	HSG color	Part number	Dimension		
					A	B	C
8	X	Au	Black	1-1871935-4	19.8	14.8	11.8
12	X	Au	Black	1-1871935-6	26.8	14.8	11.8
16	X	Au	Black	1-1871935-8	33.8	14.8	11.8
22	X	Au	Black	2-1871935-1	44.3	14.8	11.8
30	X	Au	Black	2-1871935-5	58.3	14.8	11.8
38	X	Au	Black	2-1871935-9	72.3	14.8	11.8



PCB Mounting Tab Header Vertical type

Pos	Keying	Plating	HSG color	Part number	Dimension		
					A	B	C
8	X	Au	Black	1-2013325-4	20.2	11.5	12.5
12	X	Au	Black	1-2013325-6	26.8	11.5	12.5
22	X	Au	Black	2-2013325-1	44.3	11.5	12.5



Dynamic Spring Clamp Series

DYNAMIC SPRING CLAMP D2950 SERIES.

Specification

Contact pitch :	5.08mm					
Rated current [A] :	Number of energized contacts	AWG14	AWG16	AWG18	AWG20	AWG22
	5	11.25	10.5	9.5	8.0	6.5
	6	10.5	9.75	9.0	7.0	5.5
	UL1059 // Temperature rising : 30°C max.					
Rated voltage :	300V AC/DC (UL1059 group B) 300V AC/DC (UL1059 group D)					
Dielectric withstanding Voltage :	2,200V AC					
Wire size :	AWG22(0.3sq) - AWG14(2.0sq)					
Product specification :	108-140221					
Instruction sheet:	408-78172					



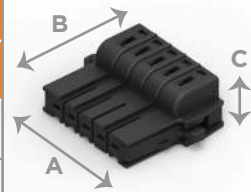
Portfolio / Parts Number

Pos	Keying	Plating	HSG color	Circuit mark	Receptacle assembly		Header assembly	
					1 row Horizontal	2 row Horizontal	1 row Horizontal	2 row Horizontal
5	X	Au	Black	Yes	1-2347004-5	-	1-2347005-5	-
6	X	Au	Black	Yes	1-2347004-6	-	1-2347005-6	-

Opener 2347681-1

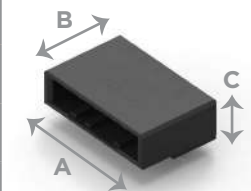
Receptacle assembly Single Row

Pos	Keying	Plating	HSG color	Circuit mark	Part number	Dimension		
						A	B	C
5	X	Au	Black	Yes	1-2347004-5	39.2	29	13
6	X	Au	Black	Yes	1-2347004-6	44.3	29	13



PCB Mounting Tab Header / Horizontal type / Single Row

Pos	Keying	Plating	HSG color	Part number	Dimension		
					A	B	C
5	X	Au	Black	1-2347005-5	34.3	22.1	10.9
6	X	Au	Black	1-2347005-6	39.4	22.1	10.9



Dynamic Spring Clamp Series

DYNAMIC SPRING CLAMP D3950 SERIES.

Specification

Contact pitch :	7.5mm					
Rated current [A] :	Number of energized contacts	AWG14	AWG16	AWG18	AWG20	AWG22
	1	14.5	13.75	13	10.75	8.7
	2-5	12.75	11.75	10.25	8.25	7.2
	6-11	11.8	9.75	8.75	7	5.5
Rated voltage :	UL1059 // Temperature rising : 30° C max. 300V AC/DC (UL1059 group B,C) 600V AC/DC (UL1059 group D 5A max.)					
Dielectric withstanding Voltage :	2,200V AC					
Wire size :	AWG22(0.3sq) - AWG14(2sq)					
Product specification :	108-78997					
Instruction sheet:	411-78272					



Portfolio / Parts Number

Pos	Keying	Plating	HSG color	Circuit mark	Receptacle assembly		Header assembly	
					1 row Horizontal	2 row Horizontal	1 row Horizontal	2 row Horizontal
3	X	Au	Black	Yes	3-2229794-1	-	3-2229803-1	-
3	X	Au	Black	No	3-2289080-1	-	3-2229803-1	-
4	X	Au	Black	Yes	1-2331743-4	-	1-2271457-4	-
4	Y	Au	Black	No	2-2331743-4	-	2-2271457-4	-
6	X	Au	Black	No	1-2271454-6	-	1-2271457-6	-
6	-	Au	Black	Yes	-	2229800-1	-	2229806-1
*7	Y	Au	Black	Yes	1-2229794-2	-	1-2229803-2	-
8	X	Au	Black	Yes	1-2349815-2	-	1-2271457-8	-
11	X	Au	Black	Yes	1-2229794-1	-	1-2229803-1	-
11	X	Au	Black	No	1-2289080-1	-	1-2229803-1	-

Opener 1981045-1

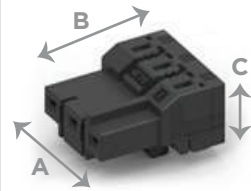
*: 7contacts in 11pos HSG

Dynamic Spring Clamp Series

DYNAMIC SPRING CLAMP D3950 SERIES.

Receptacle assembly Single Row

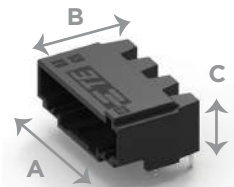
Pos	Keying	Plating	HSG color	Circuit mark	Part number	Dimension		
						A	B	C
3	X	Au	Black	Yes	3-2229794-1	22	25.4	15.6
3	X	Au	Black	No	3-2289080-1	22	25.4	15.6
4	X	Au	Black	Yes	1-2331743-4	27.7	25.4	15.6
4	Y	Au	Black	No	2-2331743-4	27.7	25.4	15.6
6	X	Au	Black	No	1-2271454-6	44.5	25.4	15.6
*7	Y	Au	Black	No	1-2229794-2	82	25.4	15.6
8	X	Au	Black	Yes	1-2349815-2	57.7	25.4	15.6
11	X	Au	Black	Yes	1-2229794-1	82	25.4	15.6
11	X	Au	Black	No	1-2289080-1	82	25.4	15.6



*: 7contacts in 11pos HSG

PCB Mounting Tab Header / Horizontal type / Single Row

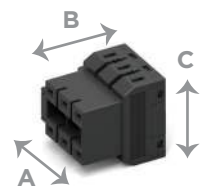
Pos	Keying	Plating	HSG color	Part number	Dimension		
					A	B	C
3	X	Au	Black	3-2229803-1	22	18.1	12
4	X	Au	Black	1-2271457-4	29.5	18.1	12
4	Y	Au	Black	2-2271457-4	29.5	18.1	12
6	X	Au	Black	1-2271457-6	44.5	18.1	12
*7	Y	Au	Black	1-2229803-2	82	18.1	12
8	X	Au	Black	1-2271457-8	59.5	18.1	12
11	X	Au	Black	1-2229803-1	82	18.1	12



*: 7contacts in 11pos HSG

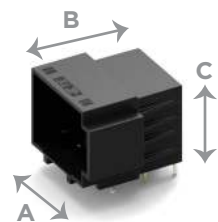
Receptacle assembly / Double Row

Pos	Keying	Plating	HSG color	Circuit mark	Part number	Dimension		
						A	B	C
6	-	Au	Black	Yes	2229800-1	24.3	25.4	27.5



PCB Mounting Tab Header / Horizontal type / Double Row

Pos	Keying	Plating	HSG color	Part number	Dimension		
					A	B	C
6	-	Au	Black	2229806-1	25.2	25.6	20.4

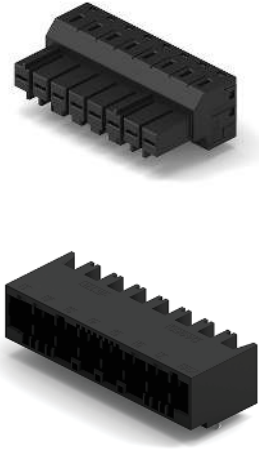


Dynamic Spring Clamp Series

DYNAMIC SPRING CLAMP D4950 SERIES.

Specification

Contact pitch :	7.5mm				
Rated current [A] :	Number of energized contacts	AWG10	AWG12	AWG14	AWG16
	1	22	19	15	10
Rated voltage :	UL1059 // Temperature rising : 30°C max.				
Rated voltage :	300V AC/DC (UL1059 group B,C) 600V AC/DC (UL1059 group D)				
Dielectric withstanding Voltage :	2,200V AC				
Wire size :	AWG16(1.25sq) – AWG10(5.5sq)				
Product specification :	108-140216				
Instruction sheet:	408-78173				



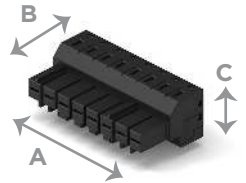
Portfolio / Parts Number

Pos	Keying	Plating	HSG color	Circuit mark	Receptacle Assembly		Header Assembly	
					1 row Horizontal	2 row Horizontal	1 row Horizontal	2 row Horizontal
8	X	Au	Black	Yes	1-2349825-8	-	1-2349849-8	-

Opener 2349891-1

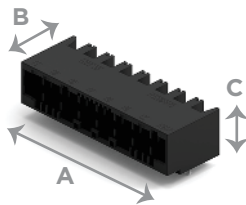
Receptacle assembly Single Row

Pos	Keying	Plating	HSG color	Circuit mark	Part number	Dimension		
						A	B	C
8	X	Au	Black	Yes	1-2349825-8	61.5	31.7	22.1



PCB Mounting Tab Header / Horizontal type / Single Row

Pos	Keying	Plating	HSG color	Part number	Dimension		
					A	B	C
8	X	Au	Black	1-2349849-8	61.5	22.0	15.9



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