

SIGNAL CONTACTS

SIGNAL CONTACTS

CRIMP CONTACTS

MIL-DTL-38999 SERIES I, II,III / EN3645 / EN4165

INTRODUCTION

Amphenol contacts are designed to meet and exceed SAE39029 and EN3155 standards. The following contacts are gold plating over suitable underplate. They withstand 500 and 1500 cycles. The 1500 cycles contacts are dedicated to MIL-DTL-38999 series III classes H and J.



SAE39029 CONTACTS - US MIL STANDARD

500 CYCLES

PIN or SOCKET	MILITARY Nb	CONTACT		AMPHENOL P/N	Color bands			CONNECTOR				
		Mating end size	Wire barrel size		Wire barrel			MIL-DTL-38999			EN3645	EN4165
					1st	2nd	3rd	S I	S II	S III		
P	M39029/18-177	23	22	900049	Orange	Purple	Black			X	X	X
	M39029/58-360	22	22D	900004	Orange	Purple	Black	X	X	X	X	X
	M39029/58-363	20	20	900001	Orange	Blue	Black	X	X	X	X	X
	M39029/58-364	16	16	900000	Orange	Blue	Yellow	X	X	X	X	X
	M39029/58-365	12	12	900005	Orange	Blue	Green	X	X	X	X	X
S	M39029/17-172	23	22	900048	Orange	Purple	Red			X	X	X
	M39029/56-348	22	22D	900044	Orange	Yellow	Grey	X		X	X	
	M39029/57-354	22	22D	900014	Orange	Green	Yellow		X			X
	M39029/56-351	20	20	900041	Orange	Green	Brown	X		X	X	
	M39029/57-357	20	20	900011	Orange	Green	Purple		X			X
	M39029/56-352	16	16	900040	Orange	Green	Red	X		X	X	
	M39029/57-358	16	16	900010	Orange	Green	Grey		X			X
	M39029/56-353	12	12	900045	Orange	Green	Orange	X		X	X	
	M39029/57-359	12	12	071315	Orange	Green	White		X			X



Contacts size 23 are dedicated to HD38999 Amphenol connectors.

SAE39029 CONTACTS

1500 CYCLES

PIN or SOCKET	MILITARY Nb	CONTACT		AMPHENOL P/N	Color bands			CONNECTOR			
		Mating end size	Wire barrel size		Wire barrel			MIL-DTL-38999			EN3645
					1st	2nd	3rd	S I	S II	S III	
P	M39029/107-620	22	22D	900317	Blue	Red	Black			X	X
	M39029/107-621	20	20	900318	Blue	Red	Brown			X	X
	M39029/107-622	16	16	900319	Blue	Red	Orange			X	X
	M39029/107-623	12	12	900320	Blue	Red	Orange			X	X
S	M39029/106-614	22	22D	900322	Blue	Brown	Yellow			X	X
	M39029/106-615	20	20	900323	Blue	Brown	Green			X	X
	M39029/106-616	16	16	900324	Blue	Brown	Blue			X	X
	M39029/106-617	12	12	900325	Blue	Brown	Purple			X	X

SIGNAL CONTACTS

SIGNAL CONTACTS









CRIMP CONTACTS

MIL-DTL-38999 SERIES I, II,III / EN3645 / EN4165

SAE39029 WIRE BARREL RANGE AND NOMINAL TEST CURRENT (A)

Wire barrel size	Wire Size								
	12	14	16	18	20	22	24	26	28
22						5	3	2	1.5
22D						5	3	2	1.5
20					7.5	5	3		
16			7.5	10	13				
12	23	17							

COLOR BAND

	Orange
	Brown
	Violet
	Blue
	Green
	Black
	Yellow
	Red
	Gray
	White

SIGNAL CONTACTS

Signal Contacts

SIGNAL CONTACTS

CRIMP CONTACTS

MIL-DTL-38999 SERIES I, II,III / EN3645 / EN4165



SAE 39029 CRIMPING TOOLS

PIN or SOCKET	MILITARY Nb	CONTACT		Amphenol P/N	Crimping Tool	
		Mating end size	Wire barrel size		Crimping Tool	Positionner
P	M39029/18-177	23	22	900045	M22520/2-01	M22520/2-13
	M39029/58-360	22	22D	900004	M22520/2-01	M22520/2-09
	M39029/58-363	20	20	900001	M22520/2-01	M22520/2-10
					M22520/1-01	M22520/1-04
	M39029/58-364	16	16	900000	M22520/1-01	M22520/1-04
M39029/58-365	12	12	900005	M22520/1-01	M22520/1-04	
S	M39029/17-172	23	22	900048	M22520/2-01	M22520/2-16
	M39029/56-348	22	22D	900044	M22520/2-01	M22520/2-07
	M39029/57-354	22	22D	900014	M22520/2-01	M22520/2-06
	M39029/56-351	20	20	900041	M22520/2-01	M22520/2-10
					M22520/1-01	M22520/1-04
	M39029/57-357	20	20	900011	M22520/2-01	M22520/2-10
					M22520/1-01	M22520/1-04
	M39029/56-352	16	16	900040	M22520/1-01	M22520/1-04
	M39029/57-358	16	16	900010	M22520/1-01	M22520/1-04
	M39029/56-353	12	12	900045	M22520/1-01	M22520/1-04
M39029/57-359	12	12	071315	M22520/1-01	M22520/1-04	

PIN or SOCKET	MILITARY Nb	CONTACT		Crimping Tool	
		Mating end size	Wire barrel size	Crimping Tool	Positionner
P	M39029/107-620	22	22D	M22520/2-01	M22520/2-13
	M39029/107-621	20	20	M22520/2-01	M22520/2-10
				M22520/1-01	M22520/1-04
	M39029/107-622	16	16	M22520/2-01	M22520/2-10
M39029/107-623	12	12	M22520/1-01	M22520/1-04	
S	M39029/106-614	22	22D	M22520/1-01	M22520/1-04
	M39029/106-615	20	20	M22520/2-01	M22520/2-10
				M22520/1-01	M22520/1-04
	M39029/106-616	16	16	M22520/2-01	M22520/2-16
M39029/106-617	12	12	M22520/2-01	M22520/2-07	

SIGNAL CONTACTS



SIGNAL CONTACTS

CRIMP CONTACTS

MIL-DTL-38999 SERIES I, II, III /
EN3645 / EN4165

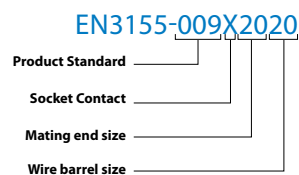
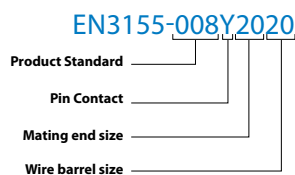
EN3155 CONTACTS - EUROPEAN STANDARD

PIN or SOCKET	EN3155	CONTACT		AMPHENOL P/N	Color bands		CONNECTOR				
		Mating end size	Wire barrel size		Wire barrel		MIL-DTL-38999			EN3645	EN4165
					1st	2st	S I	S II	S III		
P	EN3155-008	22	22	600880	Green	Green	X	X	X	X	X
		20	22	600881	Red	Green	X	X	X	X	X
		20	20	600882	Red	Red	X	X	X	X	X
		20	18	600883	Red	Brown	X	X	X	X	X
		16	16	600884	Blue	Blue	X	X	X	X	X
		16	14	600885	Blue	White	X	X	X	X	X
		12	12	600886	Yellow	Yellow	X	X	X	X	X
S	EN3155-003	22	22	600870	Green	Green		X			X
		20	22	600871	Red	Green		X			X
		20	20	600872	Red	Red		X			X
		20	18	600873	Red	Brown		X			X
		16	16	600874	Blue	Blue		X			X
		16	14	600875	Blue	White		X			X
		12	12	600876	Yellow	Yellow		X			X
	EN3155-009	12	14	600877	Yellow	White		X			X
		22	22	600890	Green	Green	X		X	X	
		20	22	600891	Red	Green	X		X	X	
		20	20	600892	Red	Red	X		X	X	
		20	18	600893	Red	Brown	X		X	X	
		16	16	600894	Blue	Blue	X		X	X	
		16	14	600895	Blue	White	X		X	X	
12	12	600896	Yellow	Yellow	X		X	X			
12	14	600897	Yellow	White	X		X	X			

EN3155 WIRE BARREL RANGE AND NOMINAL TEST CURRENT (A)

Wire barrel size	Wire Size								
	12	14	16	18	20	22	24	26	28
22						5	3	2	
20					7.5	5	3		
18				7.5	7.5	5	3		
16			13	10	7.5				
14		13	13	10	7.5				
12	23	17							

HOW TO BUILD EN3155 REFERENCE



SIGNAL CONTACTS

SIGNAL CONTACTS

CRIMP CONTACTS

MIL-DTL-38999 SERIES I, II,III / EN3645 / EN4165

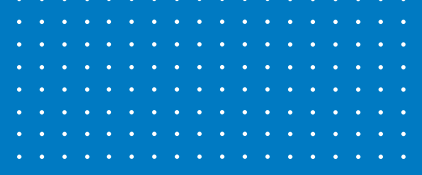
EN3155 CRIMPING TOOLS

PIN or SOCKET	EN3155	CONTACT		Amphenol P/N	Crimping Tool	
		Mating end size	Wire barrel size		Crimping Tool	POSITIONNER
P	EN3155-008	22	22	600880	M22520/2-01	M22520/2-09
		20	22	600881	M22520/2-01	M22520/2-10
					M22520/1-01	M22520/1-04
		20	20	600882	M22520/2-01	M22520/2-10
					M22520/1-01	M22520/1-04
		20	18	600883	M22520/2-01	M22520/2-10
					M22520/1-01	M22520/1-04
		16	16	600884	M22520/1-01	M22520/1-04
		16	14	600885	M22520/1-01	M22520/1-04
		12	12	600886	M22520/1-01	M22520/1-04
12	14	600887	M22520/1-01	M22520/1-04		
S	EN3155-003	22	22	600870	M22520/2-01	M22520/2-06
		20	22	600871	M22520/2-01	M22520/2-10
					M22520/1-01	M22520/1-04
		20	20	600872	M22520/2-01	M22520/2-10
					M22520/1-01	M22520/1-04
		20	18	600873	M22520/2-01	M22520/2-10
					M22520/1-01	M22520/1-04
		16	16	600874	M22520/1-01	M22520/1-04
		16	14	600875	M22520/1-01	M22520/1-04
		12	12	600876	M22520/1-01	M22520/1-04
	12	14	600877	M22520/1-01	M22520/1-04	
	EN3155-009	22	22	600890	M22520/2-01	M22520/2-07
					M22520/2-01	M22520/2-10
		20	22	600851	M22520/1-01	M22520/1-04
					M22520/2-01	M22520/2-10
		20	20	600852	M22520/1-01	M22520/1-04
					M22520/2-01	M22520/2-10
		20	18	600893	M22520/2-01	M22520/2-10
					M22520/1-01	M22520/1-04
		16	16	600894	M22520/1-01	M22520/1-04
16		14	600855	M22520/1-01	M22520/1-04	
12	12	600856	M22520/1-01	M22520/1-04		
12	14	600896	M22520/1-01	M22520/1-04		

NOTES

Lined area for notes with horizontal dotted lines.





SIGNAL CONTACTS

SIGNAL CONTACTS

PCB CONTACTS

MIL-DTL-38999 SERIES I, II,III / EN3645 / EN4165

PIN or SOCKET	Mating end size	TYPE	AMPHENOL P/N	TYPE	AMPHENOL P/N
P	23	CI	900458	LI	600867
	22D		900245		900389
	20		900241		900243
	16		900240		900246
	12		900238		900413
S	23		900459		600866
	22D		900256		922390
	20		900251		900252
	16		900263		600526
	12		900403		900423

Pin 900245, Socket 900256

Connectors with PCB Contacts		MIL-DTL-38999 series I		SJT		MIL-DTL-38999 series II			MIL-DTL-38999 series III / EN3645			MIL-DTL-38999 series III / EN3645 composite									
Diagram		Sizes	9 to 17	19 to 25	8 to 16	18 to 24	8 to 18	20 to 22	24	9 to 11	13	15 to 17	19 to 25	9 to 11	13 to 25						
	Pin	L1	8,7 - 9,7		13,8 - 14,8		12,3 - 13,2		11,6 - 12,6		10,1 - 11,1		10 - 10,9		10,1 - 11,1	10 - 10,9					
		L2	1,1 - 2,1	0,7 - 1,7		1,2 - 2,4	0,4 - 1,6		5,1 - 5,9		3,3 - 4,2		1 - 1,9		1 - 1,8	1 - 1,9		(-0,1) - 0,8			
	Socket	L1	8,5 - 9,5		13,6 - 14,6		12,1 - 13		11,4 - 12,4		9,9 - 10,9		9,8 - 10,7		9,9 - 10,9		9,8 - 10,7				
		L2	0,9 - 1,9	0,5 - 1,5		1 - 2,2	0,2 - 1,4		4,9 - 5,7		3,1 - 4,0		0,8 - 1,7		0,8 - 1,6	0,8 - 1,7		(-0,3) - 0,6			
	Pin	L1	9 to 25		8 to 22		24		/		9 to 25			9 to 19		21 to 25					
		L2	13,7 - 14,6		13,8 - 14,6						9,3 - 10,1			9,3 - 10,2		9,4 - 10,3					
	Socket	L1	1,6 - 2,6		1,6 - 2,6		0,3 - 1,2				1 - 2			1 - 1,9							
		L2	13,5 - 14,4		13,6 - 14,4						9,1 - 9,9			9,1 - 10		9,2 - 10,1					
	Pin	L1	9 to 19	21 to 25		8 to 22		24		8 to 22		24		9 to 19		21 to 25		9 to 19		21 to 25	
		L2	11,3 - 12,1	12,1 - 12,9		15,4 - 16,2		11,8 - 12,6		12,2 - 13				11,5 - 12,4		12,3 - 13,2		12,8 - 13,6		13,6 - 14,4	
	Socket	L1	1,3 - 2,2		2,7 - 3,7		0 - 0,9		4,6 - 5,5		3,3 - 4,2		1 - 2		1 - 1,9						
		L2	11,1 - 11,9	11,9 - 12,7		15,2 - 16		11,6 - 12,4		12 - 12,8				11,3 - 12,2		12,1 - 13		12,6 - 13,4		13,4 - 14,2	
	Pin	L1	1,1 - 2		2,5 - 3,5		0 - 0,7		4,4 - 5,3		3,1 - 4		0,8 - 1,8		0,8 - 1,7						
		L2	8 to 22		24		8 to 24		9 to 19		21 to 25										
	Socket	L1	4,5 - 5,3		0,9 - 1,7		12,2 - 13		11,5 - 12,4		12,3 - 13,2										
		L2	/		1 - 2		/		6,8 - 7,8		6,8 - 7,8		/		/						
Socket	L1	4,2 - 5,1		0,7 - 1,5		12 - 12,8		11,3 - 12,2		12,1 - 13											
	L2	0,8 - 1,8		/		6,6 - 7,6		6,6 - 7,6		6,6 - 7,6											

SIGNAL CONTACTS

THERMO COUPLE CONTACTS

MIL-DTL-38999 SERIES I, II,III / EN3645 / EN4165

AMPHENOL thermocouples contacts are designed to keep the signal transmission of thermocouples wires. They meet or exceed SAE 39029 standards

EN3155 BIN CODES

PIN or SOCKET	AMPHENOL P/N	MILITARY Nb	CONTACT		Color bands			CLASS
			Mating end size	Wire barrel size	Wire barrel end			
					1st	2nd	3rd	
P	072502	M39029/87-471	22	22D	Yellow	Blue	Black	ALUMEL
	072501	M39029/87-472	22	22D	Yellow	Blue	Red	CHROMEL
	070586	M39029/87-475	20	20	Yellow	Blue	Green	ALUMEL
	070587	M39029/87-476	20	20	Yellow	Blue	Blue	CHROMEL
		M39029/87-479	16	16	Yellow	Grey	White	ALUMEL
		M39029/87-480	16	16	Yellow	Grey	Black	CHROMEL
S	072500	M39029/88-484	22	22D	Yellow	Grey	Yellow	ALUMEL
	072503	M39029/88-483	22	22D	Yellow	Grey	Orange	CHROMEL
	250711	M39029/88-488	20	20	Yellow	Grey	White	ALUMEL
	250712	M39029/88-487	20	20	Yellow	Grey	Purple	CHROMEL
		M39029/88-492	16	16	Yellow	White	Red	ALUMEL
		M39029/88-491	16	16	Yellow	White	Brown	CHROMEL



For other thermocouple class as Iron or Constantan, please consult us.



PRINT CIRCUIT BOARD CONTACTS

- Amphenol Socapex can design specific Print Circuit Board pin contacts for thermocouple application. Please consult us.
- Amphenol Socapex has a wide range of thermo-couple contacts.