

Contact Specifications

HR Series • MIL-26482 Series 1 Crimp Type Connectors

Wire Dimensions

Contact Size	Wire Range		Potential Drop (Millivolts)	Max Contact Resistance (Milliohm)	Crimp Well Diameter	Min Crimp Well Depth	Contact Retention Min Axial Load Pounds (Newtons)
	AWG	Dia					
#20	20, 22, 24	.020-.032 (.51-.81)	25	9	.049 (1.24)	.250 (6.35)	15 (66.7)
#16	16, 18, 20	.032-.050 (.81-1.29)	21	6	.067 (1.70)	.236 (5.99)	25 (111.2)

Dimensions are in inches (mm) unless otherwise noted.

Contact Derating Specifications

Service Rating	Max Operating Voltage Sea Level		Test Voltage			
	AC (RMS)	DC	Sea Level	50,000 ft	70,000 ft	110,000 ft
			AC (RMS)	AC (RMS)	AC (RMS)	AC (RMS)
I	600	850	1,500	500	375	200
II	1,000	1,275	2,300	750	500	200

Test ratings only. A connector cannot withstand maximum current through all contacts continuously. Please note that the establishment of electrical safety factors is left entirely in the designer's hands, since he or she is in the best position to know what peak voltage, switching surges, transients, etc. can be expected in a particular circuit.

Current Rating By Contact Size & Wire Size

Wire Size (AWG)	Contact Size	
	#20	#16
24	3A	
20	7.5A	7.5A
16		13A

Test ratings only. A connector cannot withstand maximum current through all contacts continuously. Please note that the establishment of electrical safety factors is left entirely in the designer's hands, since he or she is in the best position to know what peak voltage, switching surges, transients, etc. can be expected in a particular circuit.

Torque Values For Cable Clamp Screws

Screw Size	Recommended Torque	
	Min	Max
#2-56	1.5 (.2)	2.5 (.3)
#4-40	3.5 (.4)	4.5 (.5)
#6-32	5 (.6)	7 (.8)
#8-32	7 (.8)	9 (1.0)
#10-32	9 (1.0)	11 (1.2)
#.250-20	11 (1.2)	13 (1.5)

Units are in inch pounds (Newton meters).

Coupling Torque

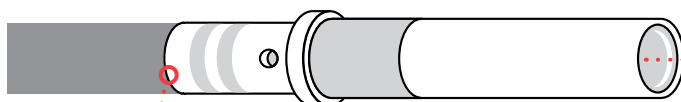
Shell Size	Maximum Engagement & Disengagement	Minimum Disengagement
8	8 (.9)	
10	12 (1.4)	1 (.1)
12	16 (1.8)	2 (.3)
14	20 (2.3)	
16	24 (2.7)	4 (.5)
18	28 (3.2)	
20	32 (3.6)	6 (.7)
22	36 (4.1)	
24	44 (5.0)	7 (.8)

Units are in inch pounds (Newton meters).

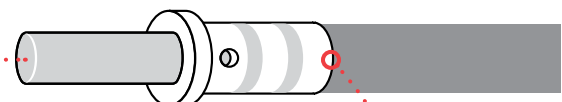
Wire Sealing Range

Contact Size	Wire Size (AWG)	Insulation Outside Diameter Range	
		Min	Max
#20	20, 22, & 24	.060 (1.52)	.083 (2.11)
#16	16, 18, & 20	.066 (1.68)	.109 (2.77)

Dimensions are in inches (mm) unless otherwise noted.



Socket contacts are female and are usually found on the "hot" or powered side of a circuit. They are recessed in a connector for user and equipment protection.



Pin contacts are male and are usually exposed on the "load" side of a circuit.

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Standard Contacts, Sealing Plugs, & Tooling

Contact Size	Contact Style	Part Number	Wire Size (AWG)	Wire Range (Dia)	Jacket Strip Length	Crimping Tool	Positioner (Turret)	Insertion Tool	Extraction Tool
#20	Pin	HRPP20	20, 22, & 24	.020–.032 (.51–.81)	.185 (4.70)	TK101A (Hand Crimper)	TP102	TN703	TX907
	Socket	HRSS20							
	Pin	HRPB20*					TP254		
	Socket	HRSB20*							
	Sealing Plugs	HRSP20					—		
#16	Pin	HRPP16	16, 18, & 20	.032–.050 (.81–1.29)	.250 (6.40)	TK101A (Hand Crimper)	TP102	TN704	TX908
	Socket	HRSS16							
	Sealing Plugs	HRSP16					—		

Dimensions are in inches (mm) unless otherwise noted. * Contacts for use with 8-2, 8-3, 8-4, 10-98 inserts only.

Thermocouple Contacts & Tooling

Contact Size	Contact Style	Part Number	Wire Size (AWG)	Wire Range (Dia)	Jacket Strip Length	Crimping Tool	Positioner (Turret)	Insertion Tool	Extraction Tool						
#20 Alumel	Pin	HRPA20	20, 22, & 24	.020–.032 (.51–.81)	.185 (4.70)	TK101A (Hand Crimper)	TP102	TN703	TX907						
	Socket	HRSA20													
#20 Chromel	Pin	HRPR20													
	Socket	HRSR20													
#20 Constantan	Pin	HRPK20													
	Socket	HRSK20													
#20 Iron	Pin	HRPE20													
	Socket	HRSE20													
#16 Alumel	Pin	HRPA16					16, 18, & 20			.032–.050 (.81–1.29)	.250 (6.40)	TK101A (Hand Crimper)	TP102	TN704	TX908
	Socket	HRSA16													
#16 Chromel	Pin	HRPR16													
	Socket	HRSR16													
#16 Constantan	Pin	HRPK16													
	Socket	HRSK16													
#16 Iron	Pin	HRPE16													
	Socket	HRSE16													

Dimensions are in inches (mm) unless otherwise noted. Thermocouple contacts not for use with 8-2, 8-3, 8-4, and 10-98 inserts.

HR Series Crimp Contacts



Milnec's versatile crimp tool with turret positioner allows the termination of all contact sizes in the series (#16, #20).

