



# MASTER CRIMP SPECIFICATIONS

Printed: Feb 15 2024

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>83</b>	<b>REV 00</b>
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111	4200	One-piece
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008








		Fitting Insertion Length	Crimp Length	Crimp Diameter	
Hose	Ferrule			mm	in
111-04	4200	23	Full	16.7	0.657
111-06	4200	25	Full	20.9	0.823
111-08	4200	27	Full	24.2	0.953
111-12	4200	34	Full	31.8	1.252
111-16	4200	44	Full	40.6	1.598

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	183	REV 00
	110	4200	One-piece	Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008		

**PULSAR**  **CORONA 17** 

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
110-04	4200	23	Full	15.7	0.618
110-06	4200	25	Full	19.8	0.780
110-08	4200	27	Full	23.3	0.917

**Crimper**      **Hose**      **Coupling**      **Crimp Instructions**      **CHART NUMBER**      **179**      **REV 00**

111      P4300      One-piece

Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008



		Fitting Insertion Length	Crimp Length	Crimp Diameter	
Hose	Ferrule			mm	in
111-04	4300	22	Full	16.2	0.638
111-06	4300	29	Full	20.9	0.823
111-08	4300	31	Full	24.2	0.953
111-12	4300	38	Full	31.8	1.252
111-16	4300	45	Full	40.6	1.598

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>86</b>	<b>REV 00</b>
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112	4200	One-piece
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008

<b>PULSAR</b>	<b>112</b>	<b>112CC</b>
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		Fitting Insertion Length	Crimp Length	Crimp Diameter	
Hose	Ferrule			mm	in
112-04	4200	23	Full	16.8	0.661
112-06	4200	25	Full	21.0	0.827
112-08	4200	27	Full	25.0	0.984
112-12	4200	34	Full	31.8	1.252
112-16	4200	44	Full	40.6	1.598

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	84	REV 01
	122	4200	One-piece	Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008		

**PULSAR** 

**NOVA 2**

**NOVA 2 ICE-BREAKER**

**122A** 

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
122-04	4200	23	Full	17.8	0.701
122-06	4200	25	Full	22.0	0.866
122-08	4200	27	Full	25.5	1.004
122-10	4200	30	Full	28.8	1.134
122-12	4200	34	Full	32.1	1.264
122-16	4200	44	Full	41.6	1.638

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>180</b>	<b>REV 00</b>
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122	P4300	One-piece
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008

**PULSAR**
**NOVA 2**
**NOVA 2 ICE-BREAKER**
**122A**

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
122-04	4300	22	Full	16.4	0.646
122-06	4300	29	Full	22.0	0.866
122-08	4300	31	Full	25.5	1.004
122-12	4300	38	Full	32.1	1.264
122-16	4300	45	Full	41.6	1.638

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>124</b>	<b>REV 00</b>
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114	4200	One-piece
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008

<b>PULSAR</b>	<b>NOVA 16</b>	<b>CARBONITE 16</b>	<b>AURORA 16</b>	<b>NOVA 16 EXTREME</b>
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Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
114-04	4200	23	Full	17.2	0.677
114-06	4200	25	Full	20.8	0.819
114-08	4200	27	Full	24.2	0.953
114-10	4200	30	Full	28.5	1.122
114-12	4200	34	Full	31.8	1.252
114-16	4200	44	Full	40.6	1.598



<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>178</b>	<b>REV 00</b>
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114	P4300	One-piece
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008

<b>PULSAR</b>	<b>NOVA 16</b>	<b>CARBONITE 16</b>	<b>AURORA 16</b>	<b>NOVA 16 EXTREME</b>
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		Fitting Insertion Length	Crimp Length	Crimp Diameter	
Hose	Ferrule			mm	in
114-04	4300	22	Full	16.2	0.638
114-06	4300	29	Full	20.8	0.819
114-08	4300	31	Full	24.2	0.953
114-12	4300	38	Full	31.8	1.252
114-16	4300	45	Full	40.6	1.598

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	151	REV 02
	124 PLUS	4400	One-piece	Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008		

**PULSAR**  **NOVA 12 PLUS** **CARBONITE 12 PLUS** **AURORA 12 PLUS** 

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
124 PLUS-06	4400	25	Full	24.0	0.945
124 PLUS-08	4400	31	Full	26.4	1.039
124 PLUS-10	4400	31	Full	32.6	1.283
124 PLUS-12	4400	34	Full	34.3	1.350
124 PLUS-16	4400	47	Full	42.7	1.681
124 PLUS-20	4400	54	Full	49.6	1.953
124 PLUS-24	4400	56	Full	60.3	2.374
124 PLUS-32	4400	70	Full	74.8	2.945

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	91	REV 01
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124	4400	One-piece
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008




Hose Ferrule		Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
124-06	4400	25	Full	23.1	0.909
124-08	4400	31	Full	25.4	1.000
124-10	4400	31	Full	32.6	1.283
124-12	4400	34	Full	33.9	1.335
124-16	4400	47	Full	41.4	1.630
124-20	4400	54	Full	51.9	2.043
124-24	4400	56	Full	60.3	2.374
124-32	4400	70	Full	74.8	2.945

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	192	REV 01
	124 XTC	4400	One-piece	Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008		

**PULSAR**  **124XTC** 

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
124 -06	4400 XTC	25	Full	23.1	0.909
124 -08	4400 XTC	31	Full	25.4	1.000
124 -10	4400 XTC	31	Full	32.6	1.283
124 -12	4400 XTC	34	Full	33.9	1.335
124 -16	4400 XTC	47	Full	41.4	1.630
124 -20	4400 XTC	54	Full	51.9	2.043

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	193	REV 01
	124 XTC	5000	Two-piece	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

**PULSAR**

**124XTC**

Hose	Ferrule	Crimp Length	Crimp Diameter	
			mm	in
124 -06	5120 XTC	Full	23.8	0.937
124 -08	5120 XTC	Full	27.1	1.067
124 -10	5120 XTC	Full	30.0	1.181
124 -12	5120 XTC	Full	34.6	1.362
124 -16	5120 XTC	Full	42.4	1.669
124 -20	5120 XTC	Full	51.6	2.031

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	92	REV 03
	136	4400	One-piece	Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008		

**PULSAR** **SPIRAL 13**

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
136-12	4400	34	Full	35.3	1.390
136-16	4400	47	Full	42.0	1.654

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	159	REV 00
	136	4600	One-piece	Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008		

**PULSAR® SPIRAL 13**

Hose	Ferrule	Fitting Insertion	Crimp Length	Crimp Diameter	
				mm	in
136-20	4600	60	Full	57.0	2.244
136-24	4600	61	Full	63.7	2.508
136-32	4600	97	Full	78.8	3.102

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	160	REV 00
	156 PLUS	44/4600 One-piece	Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008			

**PULSAR**

**NOVA 15**

Hose	Ferrule	Fitting Insertion	Crimp Length	Crimp Diameter	
				mm	in
156 PLUS-12	4400	34	Full	35.1	1.382
156 PLUS-16	4400	47	Full	42.0	1.654
156 PLUS-20	4600	60	Full	57.0	2.244
156 PLUS-24	4600	61	Full	63.7	2.508
156 PLUS-32	4600	97	Full	78.2	3.079



Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	185	REV 00
	124 PLUS	4600	One-piece	Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008		

**PULSAR**  **NOVA 12 PLUS** **CARBONITE 12 PLUS** **AURORA 12 PLUS** 

Hose	Ferrule	Fitting Insertion	Crimp Length	Crimp Diameter	
				mm	in
124 PLUS-20	4600	60	Full	53.5	2.106
124 PLUS-24	4600	61	Full	61.2	2.409
124 PLUS-32	4600	97	Full	75.5	2.972

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	186	REV 00
	124	4200	One-piece	Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008		

**PULSAR® SPIRAL 12**

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
124-12	4200	34	Full	33.1	1.303
124-16	4200	44	Full	40.4	1.591

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	95	REV 02
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151	4500	One-piece
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008




Hose	Ferrule	Crimp Length	Crimp Diameter	
			mm	in
151-04	4500-04	Knurl	16.1	0.634
151-05	4500-05	Full	18.3	0.720
151-06	4500-06	Full	20.0	0.787
151-08	4500-08	Full	22.9	0.902
151-10	4500-10	Full	26.7	1.051
151-12	4500-12	Full	30.8	1.213
151-16	4500-16	Full	35.5	1.398
151-20	4500-20	Full	43.5	1.713
151-24	4500-24	Knurl	46.8	1.843
151-32	4500-32	Full	59.8	2.354

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>176</b>	<b>REV 00</b>
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151	42/4400	One-piece
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008

**PULSAR** 151**PULSAR** 151H

		Fitting Insertion	Crimp Length	Crimp Diameter	
Hose	Ferrule			mm	in
151-05	4200-04	23	Full	18.1	0.713
151-08	4200-06	25	Full	22.9	0.902
151-10	4400-08	31	Full	28.2	1.110
151-12	4400-10	31	Full	30.8	1.213

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	177	REV 00
	151	5000	Two-piece	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

**PULSAR 151**

**PULSAR 151H**

A note on crimping 100R5 hose:

SAE 100R5 series hoses were initially designed as a flexible replacement to copper tubing, which is commonly defined by it's outside diameter. The result is that 100R5 hoses have smaller inside diameters than their nominal size (dash size) would indicate. For example, 151-08, nominally 1/2", actually has an I.D. of 13/32", since that is the I.D. of 1/2" O.D. copper tube. This creates confusion when crimping using inserts and ferrules designed for "full dimension hoses", where the nominal size is the inside diameter (ie. -08 hose is 1/2" I.D.). Be careful to check that selection of the appropriate sized ferrule and insert for the hose you are crimping. Quite often it will be smaller than the dash size of the R5 hose.

Hose	Ferrule	Crimp Length	Crimp Diameter	
			mm	in
151-05	5200-04	Full	19.5	0.768
151-08	5120-06	Full	23.6	0.929
151-10	5120-08	Full	28.6	1.126
151-12	5120-10	Full	31.8	1.252

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	87	REV 01
	141	4200	One-piece	Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008		

## PULSAR® 141

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
141-12	4200	34	Full	33.1	1.303
141-16	4200	44	Full	40.0	1.575
141-20	4400	54	Full	50.3	1.980
141-24	4400	56	Full	62.0	2.441
141-32	4400	70	Full	74.5	2.933

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>122</b>	<b>REV 00</b>
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119	4200	Skive
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008



		Cover Skive Length			
Hose	Ferrule		Crimp Length	Crimp Diameter	
		mm		mm	in
119-04	4200	21	Full	16.7	0.657
119-06	4200	21	Full	20.7	0.815

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	146	REV 02
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129G	5000	Skive
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Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .

**PULSAR® 129G**

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
129G-06	4200	21	Full	20.4	0.803
129G-06	4300	27	Full	21.4	0.843
129G-06	5200	25	Full	20.4	0.803
129G-08	4200	26	Full	25.5	1.004
129G-08	5200	26	Full	24.2	0.953



<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>164</b>	<b>REV 00</b>
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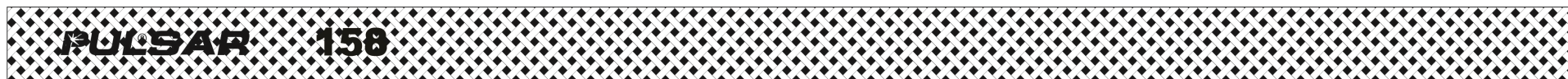
120J	4200	One-piece
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008

**PULSAR® 120J JACK HOSE**

		Fitting Insertion Length	Crimp Length	Crimp Diameter	
Hose	Ferrule			mm	in
120J-04	4200	23	Full	16.8	0.661
120J-06	4200	25	Full	21.0	0.827

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	195	REV H
	158	4000	Non Skive	Tolerance +/- 0.1mm or +/- 0.004 inches .		

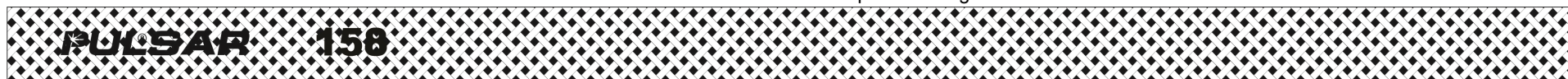


Hose	Ferrule	Crimp Length	Crimp Diameter	
			mm	in
158-02	4000	Full	7.7	0.303
158-03	4000	Full	8.9	0.350
158-03	4012SS-04	Full	8.3	0.327
	4042SS-04			
	4092SS-04			
158-04	4000	Full	10.3	0.406
158-05	4000	Full	12.2	0.480
158-07	4000	Full	14.5	0.571
158-08	4000	Full	17.2	0.677
158-10	4000	Full	20.4	0.803
158-14	4000	Full	26.6	1.047

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	190	REV 01
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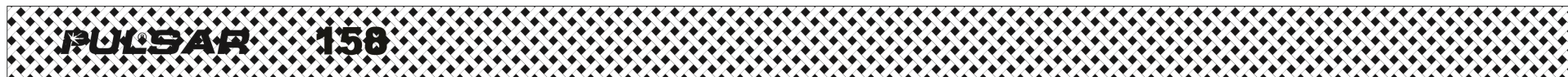
158	4700	One-piece
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.0mm/- 0.2mm or + 0.004/-0.008



		Fitting Insertion	Crimp Length	Crimp Diameter	
Hose	Ferrule			mm	in
158-03	4700	23	Knurl	11.3	0.445
158-04	4700	23	Knurl	12.7	0.500
158-06	4700	26	Knurl	16.0	0.630
158-08	4700	29	Knurl	20.5	0.807
158-10	4700	30	Knurl	25.6	1.008
158-12	4700	34	Knurl	28.1	1.106
158-14	4500	45	Knurl	32.3	1.272
158-16	4700	45	Knurl	35.5	1.398

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	191	REV 01
	158	5000	One-piece	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		



		Fitting Insertion	Crimp Length	Crimp Diameter	
Hose	Ferrule			mm	in
158-04	5514	23	Full	12.7	0.500
158-05	5514	23	Full	14.4	0.567
158-06	5514	26	Full	16.0	0.630
158-08	5514	29	Full	20.5	0.807
158-10	5514	30	Full	24.8	0.976
158-12	5514	34	Full	27.0	1.063
158-16	5514	45	Full	34.4	1.354

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>157</b>	<b>REV 00</b>
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172	4700	Non-Skive
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.0mm/- 0.2mm or + 0.004/-0.008



Fitting  
Insertion

Crimp  
Length

Crimp Diameter

Hose Ferrule

			Crimp Diameter	
Hose	Ferrule		mm	in
172-02	4700	13.3	Full	10.6 0.417
172-03	4700	21.5	Full	13.1 0.516
172-04	4700	23	Full	15.0 0.591
172-06	4700	26	Full	18.8 0.740
172-08	4700	29	Full	24.1 0.949

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>175</b>	<b>REV 00</b>
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182	4700	Non-Skive
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.0mm/- 0.2mm or + 0.004/-0.008



		Fitting Insertion	Crimp Length	Crimp Diameter	
Hose	Ferrule			mm	in
182-04	4700	23	Full	14.1	0.555
182-06	4700	26	Full	18.4	0.724
182-08	4700	29	Full	23.8	0.937

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>189</b>	<b>REV 00</b>
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173	4700	One-piece
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.0mm/- 0.2mm or + 0.004/-0.008



		Fitting Insertion	Crimp Length	Crimp Diameter	
Hose	Ferrule			mm	in
173-04	4700	23	FULL	15	0.591
173-06	4700	26	FULL	19.4	0.764
173-08	4700	29	FULL	24.8	0.976

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>96</b>	<b>REV 00</b>
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109	5000	Two-piece
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Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .




Hose	Ferrule	Cover Skive Length	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm	mm		mm	in
109-04	5000C		20	Full	15.5	0.610
109-06	5000C		20	Full	18.7	0.736
109-08	5000C		22	Full	22.6	0.890
109-10	5000C	21		Full	27.6	1.087



Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	184	REV 00
	110	5000	Two-piece	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

**PULSAR**  **CORONA 17** 

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
110-04	5000C	20	Full	15.1	0.594
110-06	5000C	20	Full	18.7	0.736
110-08	5000C	22	Full	22.5	0.886

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	116	REV 00
	112	5000	Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

**PULSAR 112 112CC**

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
112-04	5000C	16	Full	15.9	0.626
112-06	5000C	18	Full	19.2	0.756
112-08	5000C	20	Full	23.5	0.925
112-10	5000C	20	Full	27.6	1.087
112-12	5000C	26	Full	29.9	1.177
112-16	5000C	35	Full	38.1	1.500

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>113</b>	<b>REV 00</b>
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111	5000	Skive
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Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .



**NOVA 1**



**111A**



**111FS**

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
111-04	5000C	16	Full	15.9	0.626
111-06	5000C	18	Full	19.3	0.760
111-08	5000C	20	Full	23.2	0.913
111-12	5000C	26	Full	29.9	1.177
111-16	5000C	35	Full	38.1	1.500

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	111	REV 00
	122	5000	Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

**PULSAR**

**NOVA 2**

**NOVA 2 ICE-BREAKER**

**122A**

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
122-04	5000C	16	Full	16.4	0.646
122-06	5000C	18	Full	20.0	0.787
122-08	5000C	20	Full	23.8	0.937
122-10	5000C	20	Full	27.9	1.098
122-12	5000C	26	Full	30.1	1.185
122-16	5000C	35	Full	38.4	1.512

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	150	REV 01
	124 PLUS	5000	Two-piece	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

**PULSAR**  **NOVA 12 PLUS** **CARBONITE 12 PLUS** **AURORA 12 PLUS** 

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
124 PLUS-06	5420	25	Full	23.0	0.906
124 PLUS-08	5420	27	Full	26.2	1.031
124 PLUS-10	5420	30	Full	29.0	1.142
124 PLUS-12	5420	32	Full	33.4	1.315
124 PLUS-16	5420	43	Full	41.7	1.642
124 PLUS-20	5420	44	Full	47.5	1.870
124 PLUS-24	5420	57	Full	56.0	2.205
124 PLUS-32	5420	72	Full	71.6	2.819

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	156	REV 00
	124 PLUS	5000	Two-piece	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

**PULSAR**  **NOVA 12 PLUS** **CARBONITE 12 PLUS** **AURORA 12 PLUS** 

Hose	Ferrule	Crimp Length	Crimp Diameter	
			mm	in
124 PLUS-06	5120	Full	24.1	0.949
124 PLUS-08	5120	Full	27.5	1.083
124 PLUS-10	5120	Full	30.0	1.181
124 PLUS-12	5120	Full	34.6	1.362
124 PLUS-16	5120	Full	42.4	1.669
124 PLUS-20	5120	Full	50.7	1.996

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	172	REV 00
	156 PLUS	5000 Two-piece	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .			




Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
156 PLUS-12	5420	32	Full	33.9	1.335
156 PLUS-16	5420	43	Full	40.8	1.606

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	173	REV 01
	156 PLUS	5000 Two-piece	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .			


**NOVA 15**

Hose	Ferrule	Crimp Length	Crimp Diameter	
			mm	in
156 PLUS-12	5120	Full	35.1	1.382
156 PLUS-16	5120	Full	42.0	1.654



Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	112	REV 00
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	G102	5000	Non Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		
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		Fitting Insertion Length	Crimp Length	Crimp Diameter	
Hose	Ferrule			mm	in
G102-06	5000C	18	Full	19.3	0.760
G102-08	5000C	22	Full	23.0	0.906
G102-12	5000C	28	Full	31.3	1.232

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	196	REV 00
	G103	5000	Non Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
G103-06	5000C	18	Full	19.3	0.760
G103-08	5000C	20	Full	23.6	0.929
G103-12	5000C	26	Full	31.0	1.220

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	153	REV 00
	114	5000	Two-piece	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		







Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
114-04	5000C	16	Full	15.9	0.626
114-06	5000C	18	Full	19.1	0.752
114-08	5000C	20	Full	22.6	0.890
114-10	5000C	20	Full	26.7	1.051
114-12	5000C	26	Full	29.8	1.173
114-16	5000C	35	Full	37.7	1.484

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	100	REV 00
	111	5000	Non-Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

**PULSAR**

**NOVA 1**

**PULSAR**

**111A**

**PULSAR**

**111FS**

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
111-04	5200	23	Full	17.9	0.705
111-06	5200	25	Full	20.6	0.811
111-08	5200	27	Full	23.4	0.921
111-12	5200	34	Full	30.9	1.217
111-16	5200	44	Full	38.7	1.524
111-20	5200	54	Full	48.6	1.913
111-24	5200	56	Full	57.0	2.244

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	130	REV 00
	114	5000	Two-piece	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		







Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
114-04	5200	23	Full	18.2	0.717
114-06	5200	25	Full	20.4	0.803
114-08	5200	27	Full	23.5	0.925
114-10	5200	30	Full	27.2	1.071
114-12	5200	34	Full	30.5	1.201
114-16	5200	44	Full	38.6	1.520
114-20	5200	54	Full	49.2	1.937
114-24	5200	56	Full	56.5	2.224

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>102</b>	<b>REV 00</b>
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112	5000	Non-Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .
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**PULSAR 112 112CC**

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
112-04	5200	23	Full	18.2	0.717
112-06	5200	25	Full	20.9	0.823
112-08	5200	27	Full	23.5	0.925
112-10	5200	30	Full	27.2	1.071
112-12	5200	34	Full	30.5	1.201
112-16	5200	44	Full	38.6	1.520

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	101	REV 00
	122	5000	Non-Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

**PULSAR** 

**NOVA 2**

**NOVA 2 ICE-BREAKER**

**122A** 

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
122-04	5200	23	Full	19.1	0.752
122-06	5200	25	Full	21.4	0.843
122-08	5200	27	Full	24.5	0.965
122-10	5200	30	Full	27.7	1.091
122-12	5200	34	Full	31.2	1.228
122-16	5200	44	Full	39.4	1.551
122-20	5200	54	Full	51.5	2.028
122-24	5200	56	Full	59.9	2.358
122-32	5200	70	Full	72.5	2.854

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	105	REV 00
	122	5000	Skive			

Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .

**PULSAR**

**NOVA 2**

**NOVA 2 ICE-BREAKER**

**122A**

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
122-04	5420	24	Full	17.3	0.681
122-06	5420	25	Full	22.5	0.886
122-08	5420	27	Full	25.8	1.016
122-10	5420	30	Full	28.7	1.130
122-12	5420	32	Full	33.6	1.323
122-16	5420	43	Full	41.3	1.626
122-20	5420	44	Full	49.4	1.945
122-24	5420	57	Full	56.6	2.228
122-32	5420	72	Full	71.2	2.803



Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	103	REV 02
	124	5000	Two-piece	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

**PULSAR® SPIRAL 12**

**PULSAR® 124AC SPIRAL 12 ARMOR**

Hose	Ferrule	Crimp Length	Crimp Diameter	
			mm	in
124-06	5120	Full	23.8	0.937
124-08	5120	Full	27.1	1.067
124-10	5120	Full	30.0	1.181
124-12	5120	Full	34.6	1.362
124-16	5120	Full	42.4	1.669
124-20	5120	Full	51.6	2.031

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>106</b>	<b>REV 00</b>
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124	5000	Skive
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Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .

**PULSAR® SPIRAL 12**

**PULSAR® 124AC SPIRAL 12 ARMOR**

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
124-06	5420	25	Full	22.8	0.898
124-08	5420	27	Full	26.0	1.024
124-10	5420	30	Full	29.0	1.142
124-12	5420	32	Full	33.6	1.323
124-16	5420	43	Full	41.7	1.642
124-20	5420	44	Full	49.8	1.961
124-24	5420	57	Full	56.0	2.205
124-32	5420	72	Full	71.6	2.819

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	108	REV 00
	136	5000	Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

**PULSAR® SPIRAL 13**

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
136-12	5420	32	Full	34.5	1.358
136-16	5420	43	Full	41.5	1.634

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	110	REV 01
	141	5000	Non-Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

**PULSAR 141**

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
141-12	5200		Full	33.1	1.303
141-16	5200		Full	41.0	1.614
141-20	5420		Full	49.5	1.949
141-24	5420		Full	56.0	2.205
141-32	5420		Full	71.0	2.795
141-40	5200		Full	79.0	3.110

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	109	REV 00
	156	5000	Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

## PULSAR® SPIRAL 15

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
156-16	5420	43	Full	41.6	1.638

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	187	REV 00
	T101	T1000F	Two-piece			

**PULSAR** T101 MICROBORE

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
T101-2M	T1000F	9.3	Full	7.1	0.280

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	132	REV 00
	172	5000	Non-Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

**PULSAR® 172**

**PULSAR® 172N**

**PULSAR® 172T**

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
172-02	9700	13	13.0	9.6	0.378
172-03	5517		Full	11.9	0.469
172-03	9000SB	19	18	11.4	0.449
172-03	9700	20.2	19.8	12.6	0.496
172-04	5517		Full	14.4	0.567
172-05	5517		Full	17.1	0.673
172-06	5517		Full	18.6	0.732
172-08	5517		Full	22.9	0.902

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	194	REV 01
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119MS	42/44/50	Non Skive
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**Green Line** 119MS MINE SPRAY HOSE MSHA COVER

Hose	Ferrule	Crimp Length	Crimp Diameter	
			mm	in
119MS-16	4200	Full	40.1	1.579
119MS-16	4400	Full	42.2	1.661
119MS-16	5200	Full	39.4	1.551



Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	165	REV 00
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186SC	9800	One-piece
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008

## 186SC Lateral Sewer Cleaning Hose

		Insertion Depth	Crimp Length	Crimp Diameter	
Hose	Ferrule			mm	in
186SC-02	9800	12.7	13.2	9.4	0.370
186SC-03	9800	19.0	22.2	12.3	0.484
186SC-04	9800	28.5	27.4	14.4	0.567
186SC-06	9800	30.4	27.4	17.5	0.689
186SC-08	9800	31.8	31.8	22.1	0.870

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	166	REV 00
	185SC	9800	One-piece	Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008		

## 185SC Sewer Cleaning Hose 3000 psi

Hose	Ferrule	Insertion Depth	Crimp Length	Crimp Diameter	
				mm	in
185SC-12	9800	44.5	38.1	30.5	1.201
185SC-12	9800 Mender	44.0	38.1	30.5	1.201
185SC-16	9800	54.0	44.5	37.6	1.480
185SC-16	9800 Mender	44.0	34.3	37.6	1.480

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	167	REV 00
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184SC	9800	One-piece				
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008

## 184SC Sewer Cleaning Hose 2500 psi

		Insertion Depth	Crimp Length	Crimp Diameter	
Hose	Ferrule			mm	in
184SC-12	9800	44.5	38.1	30.5	1.201
184SC-12	9800 Mender	44.0	38.1	30.5	1.201
184SC-16	9800	54.0	44.5	37.6	1.480
184SC-16	9800 Mender	44.0	34.3	37.6	1.480

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>170</b>	<b>REV 00</b>
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186SC	4700	One-piece
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.0mm/- 0.2mm or + 0.004/-0.008

## 186SC Lateral Sewer Cleaning Hose

		Insertion Depth	Crimp Length	Crimp Diameter	
Hose	Ferrule			mm	in
186SC-03	4700	22.0		13.6	0.535
186SC-04	4700	23.2		15.2	0.598
186SC-06	4700	25.5		19.4	0.764
186SC-08	4700	29.0		24.5	0.965

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	134	REV 0
	173	5000	Non-Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		



Hose	Ferrule	Crimp Length	Crimp Diameter	
			mm	in
173-04	5517	Full	14.5	0.571
173-06	5517	Full	18.8	0.740
173-08	5518	Full	25.0	0.984

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	133	REV 0
	182	5000	Non-Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

**PULSAR® 182**

**PULSAR® 182NY**

Hose	Ferrule	Crimp Length	Crimp Diameter	
			mm	in
182-04	5517	Full	14.1	0.555
182-06	5517	Full	18.2	0.717
182-08	5517	Full	22.6	0.890
182-12	5517	Full	29.8	1.173

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	181	REV 0
	111	4500	One-piece	Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008		

**PULSAR® 111-03**

Hose	Ferrule	Crimp Insert Size	Fitting Insertion	Crimp Length	Crimp Diameter	
					mm	in
111-03	4500	-04	19	Full	14.8	0.583

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	52	REV 0
	111	9000SB Skive	Tolerance +/- 0.1mm or +/- 0.004 inches .			

**PULSAR** 111-03

Hose	Ferrule	Cover Skive Length	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm	mm		mm	in
111-03	9000SB	19		17mm	11.6	0.457



<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>88</b>	<b>REV 00</b>
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111	4400	One-piece
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008








		Fitting Insertion Length	Crimp Length	Crimp Diameter	
Hose	Ferrule			mm	in
111-06	4400	25	Full	21.7	0.854
111-08	4400	31	Full	23.8	0.937
111-12	4400	34	Full	33.0	1.299
111-16	4400	47	Full	41.3	1.626
111-20	4400	54	Full	51.3	2.020
111-24	4400	56	Full	60.0	2.362

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	90	REV 01
	112	4400	One-piece	Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008		

**PULSAR 112 112CC**

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
112-06	4400	25	Full	21.7	0.854
112-08	4400	31	Full	24.0	0.945
112-10	4400	31	Full	31.1	1.224
112-12	4400	34	Full	33.0	1.299
112-16	4400	47	Full	40.7	1.602

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	131	REV 00
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114	4400	One-piece
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008

<b>PULSAR</b>	<b>NOVA 16</b>	<b>CARBONITE 16</b>	<b>AURORA 16</b>	<b>NOVA 16 EXTREME</b>
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Hose Ferrule		Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
114-06	4400	25	Full	22.1	0.870
114-08	4400	31	Full	24.0	0.945
114-10	4400	31	Full	31.1	1.224
114-12	4400	34	Full	33.0	1.299
114-16	4400	47	Full	40.7	1.602
114-20	4400	54	Full	50.6	1.992
114-24	4400	57	Full	57.8	2.276

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>89</b>	<b>REV 00</b>
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122	4400	One-piece
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008



NOVA 2

NOVA 2 ICE-BREAKER

122A

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
122-06	4400	25	Full	22.8	0.898
122-08	4400	31	Full	24.9	0.980
122-10	4400	31	Full	32.2	1.268
122-12	4400	34	Full	34.1	1.343
122-16	4400	47	Full	42.3	1.665
122-20	4400	54	Full	52.4	2.063
122-24	4400	56	Full	60.9	2.398
122-32	4400	70	Full	72.9	2.870

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	114	REV 00
	119	5000	Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		



Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
119-04	5000C	16	Full	15.9	0.626
119-04	5200	22	Full	17.9	0.705
119-06	5000C	18	Full	18.7	0.736
119-06	5200	25	Full	20.1	0.791
119-08	5000C	20	Full	23.2	0.913
119-08	5200	25	Full	23.4	0.921

**Crimper**      **Hose**      **Coupling**      **Crimp Instructions**      **CHART NUMBER**      **148**      **REV 00**

124  
PLUS      9600      One-piece

Cover must be removed before the fittings can be attached. Leave a section of ferrule nearest thread end of fitting uncrimped, crimp only to the position described in "Crimp Length". Crimp diameter tolerance +/- 0.1mm.

**PULSAR**  **NOVA 12 PLUS**      **CARBONITE 12 PLUS**      **AURORA 12 PLUS** 

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
124 PLUS-12	9600	46	Knurl	32.2	1.268
124 PLUS-16	9600	50	Knurl	40.1	1.579
124 PLUS-20	9600	54	Knurl	48.0	1.890
124 PLUS-24	9600	56	Knurl	56.0	2.205
124 PLUS-32	9600	82	Knurl	71.2	2.803

**Crimper**      **Hose**      **Coupling**      **Crimp Instructions**      **CHART NUMBER**      **135**      **REV 00**

124      9600      One-piece

Cover must be removed before the fittings can be attached. Leave a section of ferrule nearest thread end of fitting uncrimped, crimp only to the position described in "Crimp Length". Crimp diameter tolerance +/- 0.1mm.

**PULSAR® SPIRAL 12**

**PULSAR® 124AC SPIRAL 12 ARMOR**

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
124-12	9600	46	Knurl	33.1	1.303
124-16	9600	50	Knurl	40.9	1.610
124-20	9600	54	Knurl	50.0	1.969
124-24	9600	56	Knurl	56.0	2.205
124-32	9600	82	Knurl	71.2	2.803

**Crimper**      **Hose**      **Coupling**      **Crimp Instructions**      **CHART NUMBER**      **149**      **REV 00**

124  
PLUS  
Interlock

Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008 inches .

**PULSAR** **NOVA 12 PLUS** **CARBONITE 12 PLUS** **AURORA 12 PLUS**

Hose	Ferrule	Cover Skive Length	Tube Skive Length	Crimp Length	Crimp Diameter	
		mm	mm		mm	in
124 PLUS-12	8640	52	15	Full	33.8	1.331
124 PLUS-16	8640	65	17	Full	40.9	1.610
124 PLUS-20	8640	74	21.5	Full	50.2	1.976
124 PLUS-24	8640	81	22	Full	58.0	2.283
124 PLUS-32	8640	85	29	Full	73.3	2.886



Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	162	REV 00
	156 PLUS	9600	One-piece	Cover must be removed before the fittings can be attached. Leave a section of ferrule nearest thread end of fitting uncrimped, crimp only to the position described in "Crimp Length". Crimp diameter tolerance +/- 0.1mm.		

**PULSAR**

**NOVA 15**

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
156 PLUS-12	9600	46	Knurl	32.2	1.268
156 PLUS-16	9600	50	Knurl	40.5	1.594
156 PLUS-20	9600	54	Knurl	52.0	2.047
156 PLUS-24	9600	56	Knurl	58.4	2.299

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>137</b>	<b>REV 00</b>
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156	9600	One-piece
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Cover must be removed before the fittings can be attached. Leave a section of ferrule nearest thread end of fitting uncrimped, crimp only to the position described in "Crimp Length". Crimp diameter tolerance +/- 0.1mm.



Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
156-12	9600	46	Knurl	32.2	1.268
156-16	9600	50	Knurl	40.5	1.594
156-20	9600	54	Knurl	52.0	2.047
156-24	9600	56	Knurl	58.4	2.299

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	129	REV 00
	156	8600	Interlock	Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008 inches .		

## PULSAR® SPIRAL 15

Hose	Ferrule	Cover Skive Length	Tube Skive Length	Crimp Length	Crimp Diameter	
		mm	mm		mm	in
156-16	8640	65	17	Full	42.0	1.654
156-20	8660	74	21	Full	53.6	2.110
156-24	8660	81	22	Full	60.5	2.382

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>136</b>	<b>REV 00</b>
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136	9600	One-piece
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Cover must be removed before the fittings can be attached. Leave a section of ferrule nearest thread end of fitting uncrimped, crimp only to the position described in "Crimp Length". Crimp diameter tolerance +/- 0.1mm.



Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
136-12	9600	46	Knurl	33.4	1.315
136-16	9600	50	Knurl	41.0	1.614
136-20	9600	54	Knurl	52.0	2.047
136-24	9600	56	Knurl	58.4	2.299
136-32	9600	82	Knurl	75.0	2.953

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	128	REV 00
	136	8600	Interlock	Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008 inches .		

## PULSAR® SPIRAL 13

Hose	Ferrule	Cover Skive Length	Tube Skive Length	Crimp Length	Crimp Diameter	
		mm	mm		mm	in
136-12	8640	52	15	Full	34.1	1.343
136-16	8640	65	17	Full	42.5	1.673
136-20	8660	74	21	Full	53.6	2.110
136-24	8660	81	22	Full	60.5	2.382
136-32	8660	85	29	Full	78.6	3.094

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	154	REV 00
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663	4400	One Piece				
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008

**Green Line 6663**

		Fitting Insertion Length	Crimp Length	Crimp Diameter	
Hose	Ferrule			mm	in
663-32	4400	70	Full	74.2	2.921

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	168	REV 00
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663	9600	One-piece				
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Cover must be removed before the fittings can be attached. Leave a section of ferrule nearest thread end of fitting uncrimped, crimp only to the position described in "Crimp Length". Crimp diameter tolerance +/- 0.1mm.

**Green Line 6663**

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
663-32	9600	82	Knurl	70.5	2.776

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	155	REV 00
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665	4400	One Piece				
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008

**Green Line® G665**

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
665-32	4400	63	Full	77.5	3.051



Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	169	REV 00
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665	9600	One Piece				
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Cover must be removed before the fittings can be attached. Leave a section of ferrule nearest thread end of fitting uncrimped, crimp only to the position described in "Crimp Length". Crimp diameter tolerance +/- 0.1mm.

**Green Line** 6665

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
665-32	9600	82	Knurl	75.0	2.953

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	140	REV 1
	663	8000	Interlock	Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008 inches .		

## Green Line 6663

Hose	Ferrule	Cover Skive Length	Tube Skive Length	Crimp Length	Crimp Diameter	
		mm	mm		mm	in
663-32	8640	85	29	Full	72.7	2.862

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	141	REV 1
	665	8000	Interlock	Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008 inches .		

## Green Line 6665

Hose	Ferrule	Cover Skive Length	Tube Skive Length	Crimp Length	Crimp Diameter	
		mm	mm		mm	in
665-32	8660	85	29	Full	78.6	3.094

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>142</b>	<b>REV 00</b>
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153	8400	Interlock
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Tolerance +/- 0.1mm or +/- 0.004 inches .

**PULSAR<sup>®</sup> 153 WATER BLAST**

Hose	Ferrule	Cover Skive length	Tube Skive Length	Crimp Length	Crimp Diameter	
		mm	mm		mm	in
153-12	8404	43	17	Full	37.0	1.457
153-16	8404	47	21	Full	43.8	1.724

<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>80</b>	<b>REV 00</b>
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154	8400	Interlock
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Tolerance +/- 0.1mm or +/- 0.004 inches .

**PULSAR<sup>®</sup> 154 WATER BLAST**

Hose	Ferrule	Cover Skive length	Tube Skive Length	Crimp Length	Crimp Diameter	
		mm	mm		mm	in
154-08	8404	34	17	Full	28.7	1.130

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	143	REV 00
	155	8500	Interlock	Tolerance +/- 0.1mm or +/- 0.004 inches .		

## **PULSAR® 155 WATER BLAST**

Hose	Ferrule	Cover Skive length	Tube Skive Length	Crimp Length	Crimp Diameter	
		mm	mm		mm	in
155-08	8506	35	17	Full	32.5	1.280

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	152	REV 00
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653	4400	One-piece				
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008

<b>PULSAR</b>	<b>653</b>	<b>B.O.P HOSE</b>	<b>MSHA</b>	<b>API16D</b>
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A note on crimping BOP hose:

Blow Out Preventer hoses must be assembled with FG-firejacket sleeve and BOP over ferrule, according to Pulsar Hydraulics Ltd. Assembly Instructions in order to achieve API 16D flame specification.

Hose	Ferrule	Cover Skive Length	Over Ferrule Crimp	Crimp Length	Crimp Diameter	
		mm			mm	in
653-06	4400	26	34	Full	22.8	0.898
653-08	4400	33	36	Full	24.9	0.980
653-12	4400	38	43	Full	34.1	1.343
653-16	4400	49	52	Full	42.3	1.665

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	127	REV 00
	115	8600	Interlock	Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008 inches .		

## PULSAR® 115

Hose	Ferrule	Cover Skive Length	Tube Skive Length	Crimp Length	Crimp Diameter	
		mm	mm		mm	in
115-12	8640	52	15	Full	33.7	1.327
115-16	8640	65	17	Full	42.0	1.654
115-20	8640	74	21.5	Full	50.5	1.988
115-24	8640	81	22	Full	56.5	2.224
115-32	8640	85	29	Full	72.7	2.862



<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>138</b>	<b>REV 00</b>
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115	9600	One-piece
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Cover must be removed before the fittings can be attached. Leave a section of ferrule nearest thread end of fitting uncrimped, crimp only to the position described in "Crimp Length". Crimp diameter tolerance +/- 0.1mm.

## PULSAR® 115

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
115-12	9600	46	Knurl	32.4	1.276
115-16	9600	50	Knurl	40.5	1.594
115-20	9600	54	Knurl	48.0	1.890
115-24	9600	56	Knurl	55.0	2.165
115-32	9600	82	Knurl	70.5	2.776

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	104	REV 00
	115	5000	Non-Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

## PULSAR® 115

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
115-06	5120		Full	23.6	0.929
115-08	5120		Full	27.1	1.067
115-10	5120	27	Full	31.0	1.220
115-12	5120		Full	34.7	1.366
115-16	5120		Full	42.1	1.657

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	107	REV 00
	115	5000	Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

## PULSAR® 115

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
115-06	5420	25	Full	22.8	0.898
115-08	5420	27	Full	26.0	1.024
115-12	5420	32	Full	34.3	1.350
115-16	5420	43	Full	41.6	1.638
115-20	5420	44	Full	48.0	1.890
115-24	5420	57	Full	55.6	2.189
115-32	5420	72	Full	71.2	2.803

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	93	REV 01
	115	4400	One-piece	Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008		

**PULSAR<sup>®</sup> 115**

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
115-06	4400	25	Full	23.4	0.921
115-16	4400	47	Full	41.4	1.630
115-20	4400	54	Full	50.1	1.972

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	94	REV 00
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115	4400	One-piece				
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Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008

## PULSAR® 115

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
115-08	4400	27	Full	25.4	1.000
115-10	4400	27	Full	34.0	1.339
115-12	4400	33	Full	35.0	1.378

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	145	REV 01
	113	5000	Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

**PULSAR 113**

Hose	Ferrule	Cover Skive Length	Crimp Length	Crimp Diameter	
		mm		mm	in
113-08	5420	27	Full	26.1	1.028
113-10	5420	30	Full	27.7	1.091

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	68	REV 01
	132	5000	Non-Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

**PULSAR 132**

Hose	Ferrule	Crimp Length	Crimp Diameter	
			mm	in
132-04	5503	Full	17.7	0.697
132-05	5503	Full	21.5	0.846
132-06	5503	Full	20.7	0.815
132-08	5503	Full	25.7	1.012
132-10	5503	Full	30.7	1.209
132-12	5503	Full	34.8	1.370
132-16	5503	Full	42.6	1.677
132-20	5503	Full	46.6	1.835

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	59	REV 07
	151	5000	Non-Skive	Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .		

**PULSAR 151**

**PULSAR 151H**

A note on crimping 100R5 hose:

SAE 100R5 series hoses were initially designed as a flexible replacement to copper tubing, which is commonly defined by it's outside diameter. The result is that 100R5 hoses have smaller inside diameters than their nominal size (dash size) would indicate. For example, 151-08, nominally 1/2", actually has an I.D. of 13/32", since that is the I.D. of 1/2" O.D. copper tube. This creates confusion when crimping using inserts and ferrules designed for "full dimension hoses", where the nominal size is the inside diameter (ie. -08 hose is 1/2" I.D.). Be careful to check that selection of the appropriate sized ferrule and insert for the hose you are crimping. Quite often it will be smaller than the dash size of the R5 hose.

Hose	Ferrule	Crimp Insert Size	Crimp Length	Crimp Diameter	
				mm	in
151-04	5503-03	-03	Full	15.5	0.610
151-05	5503-04	-04	Full	17.4	0.685
151-06	5503-05	-05	Full	20.8	0.819
151-08	5503-06	-06	Full	20.0	0.787
151-10	5503-08	-08	Full	24.9	0.980
151-12	5503-10	-10	Full	30.4	1.197
151-16	5503-12	-14	Full	34.8	1.370
151-20	5503-16	-18	Full	44.1	1.736
151-24	5503-20	-22	Full	47.2	1.858
151-32	5901-32	-29	Full	62.7	2.468



<b>Crimper</b>	<b>Hose</b>	<b>Coupling</b>	<b>Crimp Instructions</b>	<b>CHART NUMBER</b>	<b>67</b>	<b>REV 02</b>
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141	5000	Non-Skive
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Tolerance + 0.1/-0.2mm or + 0.004/-0.008 inches .

**PULSAR<sup>®</sup> 141**

Hose	Ferrule	Crimp Length	Crimp Diameter	
			mm	in
141-12	5503	Full	33.0	1.299
141-16	5503	Full	41.1	1.618
141-20	5503	Full	46.0	1.811
141-24	5503	Full	51.8	2.039
141-32	5503	Full	65.6	2.583
141-40	5503	Full	80.3	3.161

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	48	REV 00
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170	9700	Non-Skive
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Leave a section of ferrule nearest thread end of fitting uncrimped, crimp only to the position described in "Crimp Length". Crimp diameter tolerance +/- 0.1mm.

**PULSAR® 170**

		Fitting Insertion Length	Crimp Length	Crimp Diameter	
Hose	Ferrule			mm	in
170-04	9700	24	Knurl	13.8	0.543

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	70	REV 03
	136	9500	One Piece	Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008		

**PULSAR® SPIRAL 13**

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
136-12	9500	49	Full	37.3	1.469
136-16	9500	56	Full	43.9	1.728
136-20	9500 63.5mm OD Shell	66	Full	56.0	2.205
136-20	R9500 65.0mm OD Shell	84	Full	57.7	2.272
136-24	9500	75	Full	64.2	2.528

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	71	REV 01
	115	9500	One-pieceN	Mark the hose at a distance from the end of the hose equal to the "Insertion Length". Install the fitting on the hose so that the mark is even with the end of the ferrule. Crimp the entire length of the ferrule to the Crimp Diameter given in the table. Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008		

## PULSAR® 115

Hose	Ferrule	Fitting Insertion Length	Crimp Length	Crimp Diameter	
		mm		mm	in
115-12	9500	49	Full	37.0	1.457
115-16	9500	56	Full	43.9	1.728
115-20	R9500 65.0mm OD Shell	84	Full	53.9	2.122
115-24	9500	75	Full	60.3	2.374

Crimper	Hose	Coupling	Crimp Instructions	CHART NUMBER	163	REV 00
	156 PLUS	8600 Interlock	Tolerance +0.1mm/- 0.2mm or + 0.004/-0.008 inches .			

**PULSAR**

**NOVA 15**

Hose	Ferrule	Cover Skive Length	Tube Skive Length	Crimp Length	Crimp Diameter	
		mm	mm		mm	in
156 PLUS-12	8640	52	15	Full	33.7	1.327
156 PLUS-16	8640	65	17	Full	41.2	1.622
156 PLUS-20	8660	74	21.5	Full	53.5	2.106
156 PLUS-24	8660	81	22	Full	60.3	2.374
156 PLUS-32	8660	85	29	Full	77.9	3.067