

Spicer® 10 Series™ Driveshafts

The codes in this section are for quick reference to:

J = Major spline diameter and number of spline teeth

S = Total slip

FF-FF = Flange face to flange face

CL-CL = Centerline to centerline

S.S. = Shipping strap

B = Slip Joint max working angle (degrees)

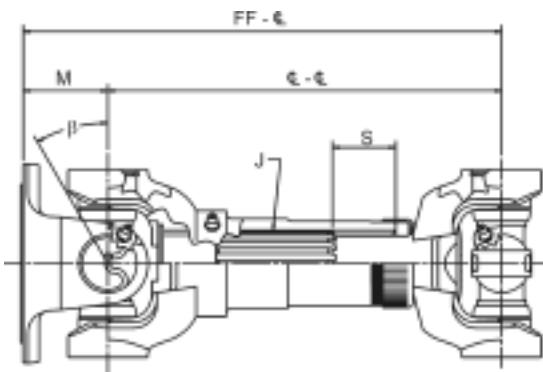
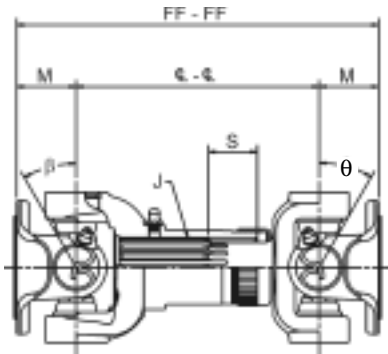
θ = Tight Joint max working angle (degrees)

T = Tube Length

R = Center line of center bearing to center line of end yoke/flange face

M = Centerline to Flange Face

Short Coupled Configurations - Series 1310 - 1550



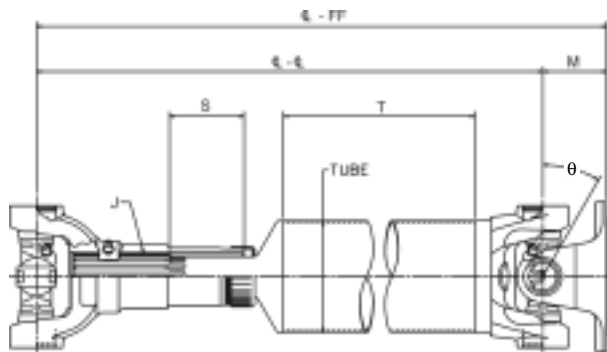
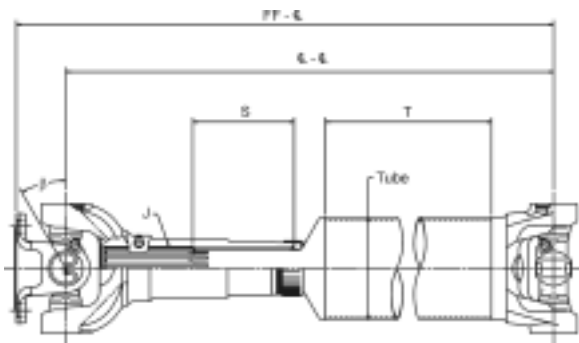
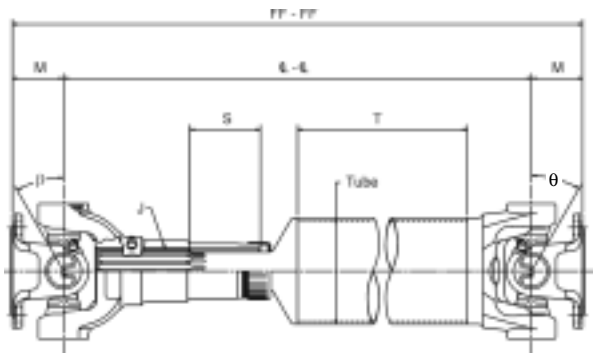
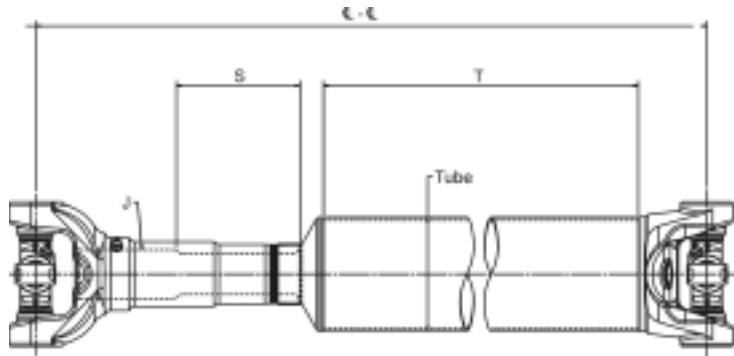
Short Coupled Assembly

Standard Parts

Series 1310

Minimum Length Collapsed		Slip Joint End				Tight Joint End		Assembly Part Number
FF-FF Flange Face to Flange Face	☉-☉ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Yoke Shaft	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	
<i>J = 1.375" - (34.9mm) - 16 Spline</i>		<i>S = .938" - (23.8 mm)</i>						
9.07" (230.3mm)	6.32" (160.5mm)	2-2-329	5-477X	2-3-348KX	2-82-21	5-477X	2-2-329	920750-1
<i>J = 1.375" - (34.9mm) - 16 Spline</i>		<i>S = 1.125" - (28.5 mm)</i>						
8.38" (212.8mm)	5.62" (142.7mm)	2-2-329	5-255X	2-3-348KX	2-82-641	5-255X	2-2-329	207070-1

Tube Type Configurations - Series 1310 - 1550



Tube Type Assembly

Series 1310

Standard Tube Size 2.5"x.083" (63.5mm x 2.11mm)
 Tube Part Number 20-30-22

Minimum Length Collapsed		Slip Joint End				Tight Joint End			Assembly Part Number
FF-FF Flange Face to Flange Face	ϕ-ϕ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Tube Shaft	Tube Yoke	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	

J = 1.375" - (34.9mm) - 16 Spline S = 2.125" - (53.9mm)

Tubing Formula: T = FF-FF (Collapsed) minus 9.560" - (242.8mm)

10.78" (273.8mm)	9.44" (239.7mm)	2-2-329	5-477X	2-3-128KX	2-40-1041	2-28-277	5-477X	S.S.	909250 (1)
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J = 1.375" - (34.9mm) - 16 Spline S = 3.062" - (77.7mm)

Tubing Formula: T = ϕ-ϕ (Collapsed) minus 9.690" - (246.1mm)

	10.91" (277.1mm)	S.S.	5-477X	2-3-8001KX	2-40-1711	2-28-367	5-477X	S.S.	909426
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Tubing Formula: T = FF-FF (Collapsed) minus 11.310" - (287.2mm)

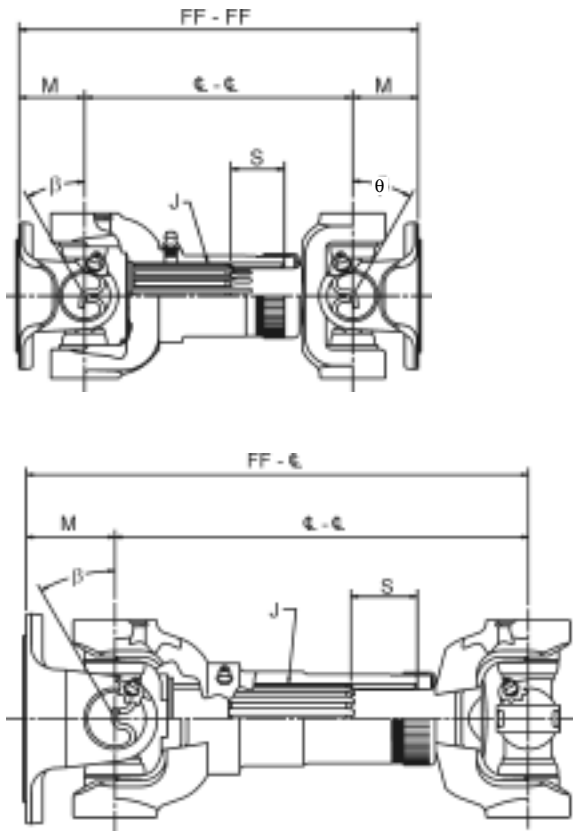
12.48" (316.9mm)	10.86" (275.8mm)	S.S.	5-477X	2-3-8001KX	2-40-1711	2-28-367	5-477X	2-2-459	915754
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Tubing Formula: T = FF-FF (Collapsed) minus 12.440" - (315.9mm)

13.62" (345.9mm)	10.86" (275.8mm)	2-2-329	5-477X	2-3-8001KX	2-40-1711	2-28-367	5-477X	2-2-329	917814
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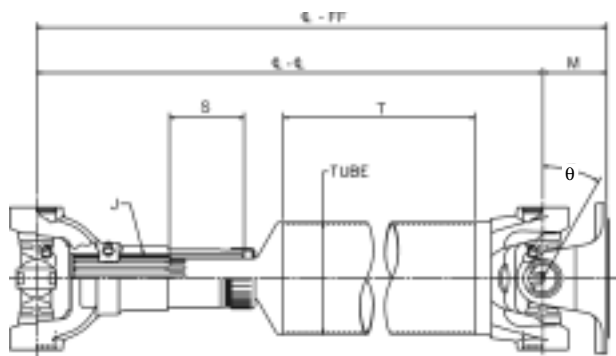
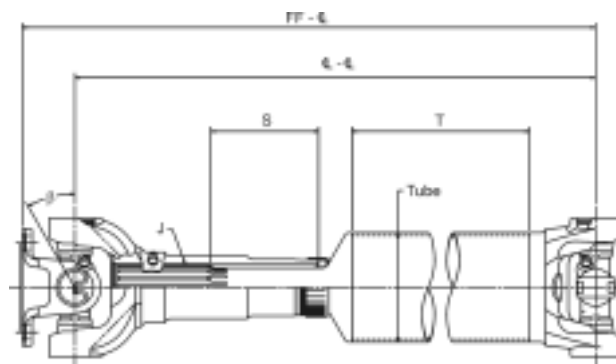
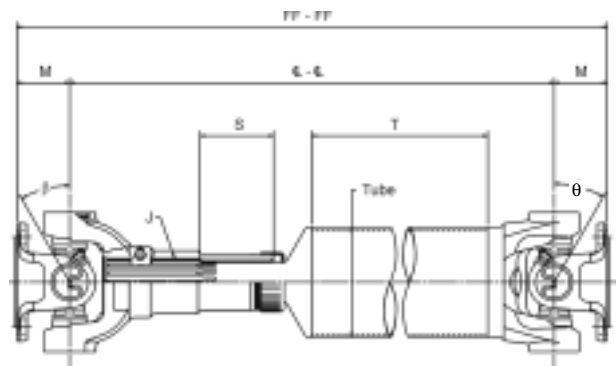
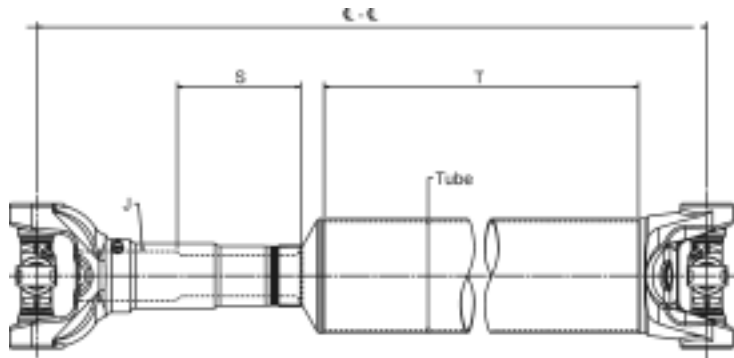
(1) Non-Standard tube size 2.5" x 0.065" (63.5mm x 1.52mm) Part #20-30-12

Short Coupled Configurations - Series 1310 - 1550



<i>Minimum Length Collapsed</i>		<i>Slip Joint End</i>				<i>Tight Joint End</i>		<i>Assembly Part Number</i>
FF-FF Flange Face to Flange Face	☐-☐ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Yoke Shaft	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	
<i>J = 1.500" - (38.1mm) - 16 Spline</i>		<i>S = .750" - (19.0mm)</i>						
9.50" (241.3mm)	6.38" (162.0mm)	3-2-119	5-480X	3-3-388KX	3-82-61	5-480X	3-2-119	9012-SF

Tube Type Configurations - Series 1310 - 1550



Tube Type Assembly

Standard Tube Size 3.0" x 0.083 (76.2mm x 2.11mm)

Tube Part Number 24-30-42

Series 1350

Minimum Length Collapsed		Slip Joint End				Tight Joint End			Assembly Part Number
FF-FF Flange Face to Flange Face	☉-☉ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Tube Shaft	Tube Yoke	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	

J = 1.500" - (38.1mm) - 16 Spline **S = 2.000" - (50.8mm)**

tubing Formula: T = ☉-☉ (Collapsed) minus 8.750" - (222.2mm)

10.12" (257.0mm)	S.S.	5-178X	3-3-598KX	3-40-1471	3-28-47	5-178X	S.S.	910598 (1)
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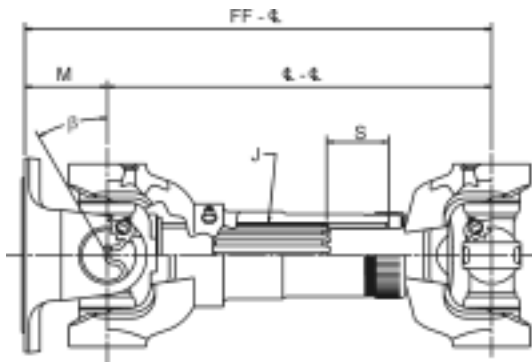
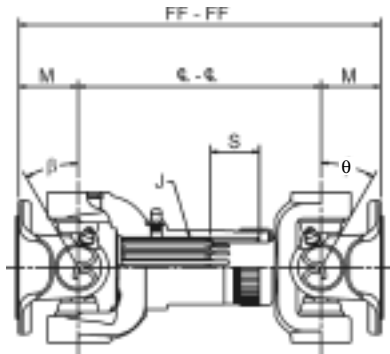
J = 1.500" - (38.1mm) - 16 Spline **S = 3.624" - (92.0mm)**

tubing Formula: T = ☉-☉ (Collapsed) minus 13.590" - (345.1mm) Minimum T = 1.470" - (37.3mm)

15.12" (384.0mm)	12.00" (304.8mm)	3-2-119	5-480X	3-3-488KX	3-40-1611	3-28-57	5-480X	3-2-119	909048
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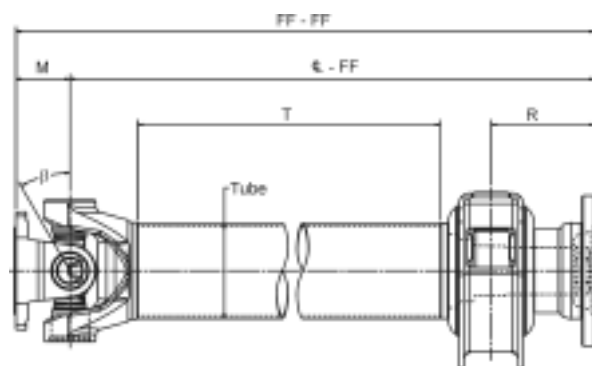
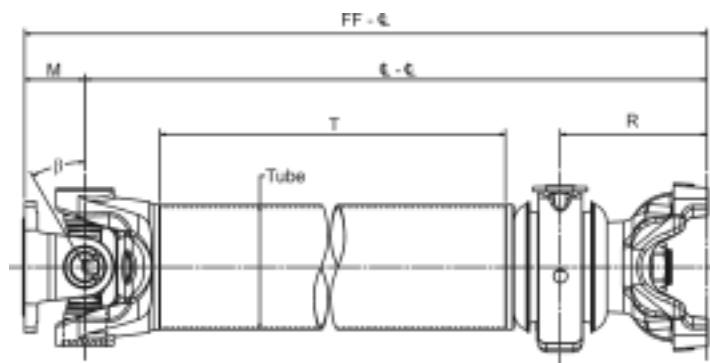
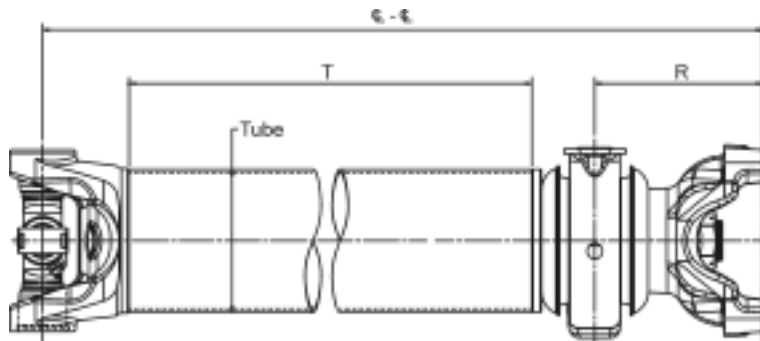
(1) Non-Standard tube size 2.5" x 0.083" (63.5 mm x 2.11 mm) Part #20-30-22

Short Coupled Configurations - Series 1310 - 1550



Minimum Length Collapsed		Slip Joint End				Tight Joint End		Assembly Part Number
FF-FF Flange Face to Flange Face	☉-☉ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Yoke Shaft	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	
J = 1.500" - (38.1mm) - 16 Spline		S = .750" - (19.0mm)						
9.50" (241.3mm)	6.12" (155.4mm)	3-2-159	5-481X	3-3-468KX	3-82-81	5-481X	3-2-159	8134-SF
J = 1.750" - (44.4mm) - 16 Spline		S = .624" - (15.8mm)						
7.05" (179.0mm)	5.36" (136.1mm)	S.S.	5-481X	3-3-1511KX	3-82-261	5-481X	3-2-159	902262-1

Coupling Shaft Configurations - Series 1310 - 1550



Coupling Shaft Assembly

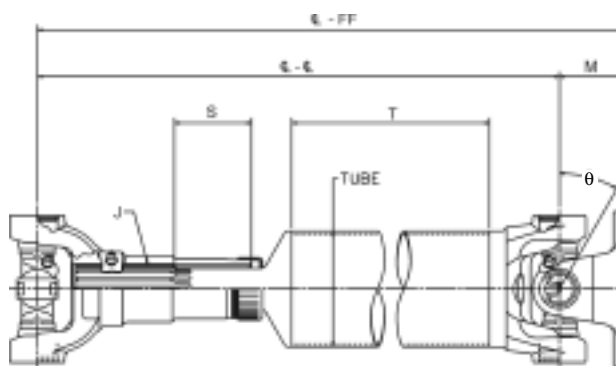
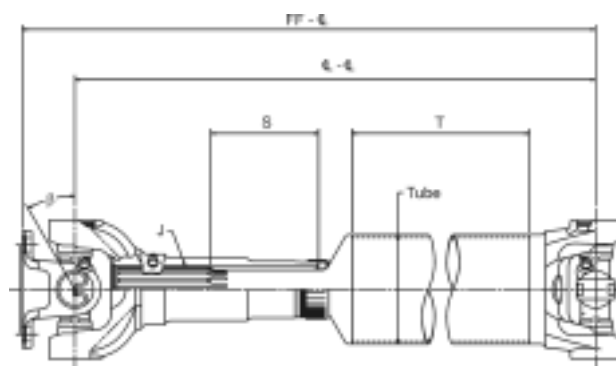
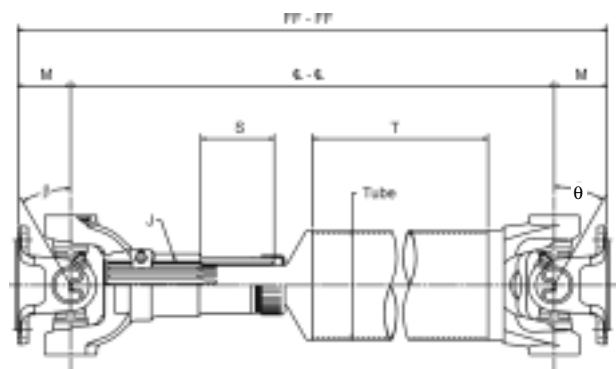
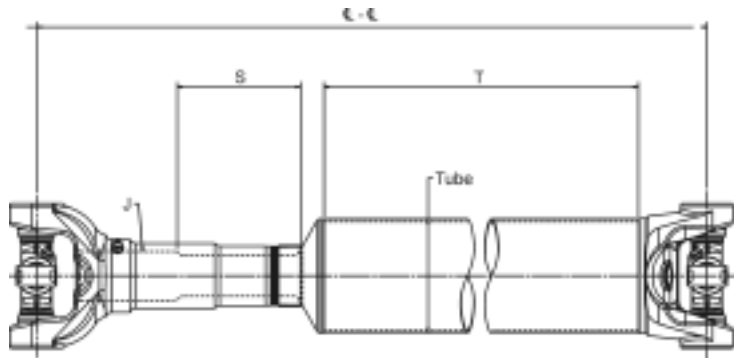
Series 1410

Standard Parts
 Standard Tube Size 3.5" x 0.083" (88.90mm x 2.11mm)
 Tube Part # 28-30-62
 Nut 16-74-101

Minimum Length Collapsed		Tight Joint End				Center Bearing End			R	Assembly Part Number
FF-FF Flange Face to Centerline	☉-☉ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Tube Yoke	Tubing	Midship Tube Shaft	Center Bearing	End Yoke (Assy)/ Companion Flange	Center Bearing to End Yoke/Flange Face	
<i>Tube Formula: T = ☉-☉ (Collapsed) minus 7.810" - (198.3 mm)</i>										
	9.19" (233.4mm)	S.S	5-462X	3-28-557	28-30-62	3-53-1791	210391-1X	3-4-6561	4.13" (104.9mm)	905771
<i>Tube Formula: T = FF-☉ (Collapsed) minus 8.500" - (215.9mm)</i>										
10.88" (276.3mm)	9.19" (233.4mm)	3-2-159	5-462X	3-28-557	28-30-62	3-53-1791	210873-1X	3-4-6561-1	4.13" (104.9mm)	911159
<i>Tube Formula: T = FF-FF (Collapsed) minus 8.660" - (219.9mm)</i>										
10.16" (258.0mm)	8.47" (215.1mm)	3-2-159	5-160X	3-28-97	24-30-42	3-53-1881	210391-1X	3-1-4621	3.25" (82.5mm)	917043 (1)

(1) Non-Standard tube size 3.0" x 0.083" (76.2 mm x 2.11 mm) Part #24-30-42

Tube Type Configurations - Series 1310 - 1550



Tube Type Assembly

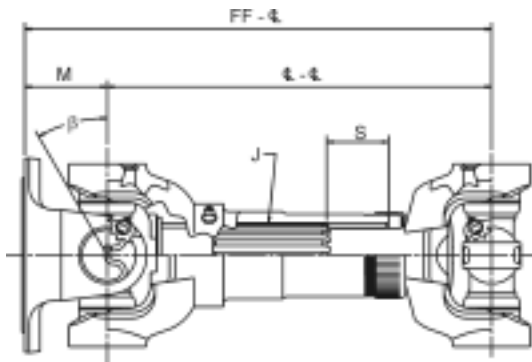
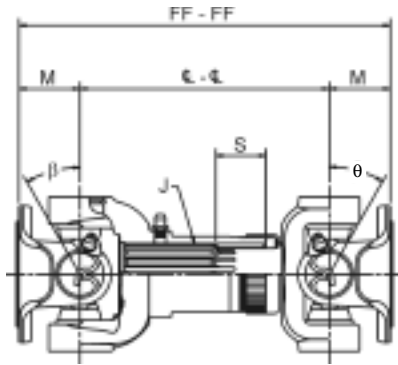
Series 1410

Standard Parts
 Standard Tube Size 3.50" x 0.083" (88.90mm x 2.11mm)
 Tube Part Number 28-30-62

Minimum Length Collapsed		Slip Joint End				Tight Joint End			Assembly Part Number
FF-FF Flange Face to Flange Face	Q-Q Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Tube Shaft	Tube Yoke	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	
<i>J = 1.500" - (38.1mm) - 15/16 Spline</i>		<i>S = 4.718" - (119.8mm)</i>							
<i> tubing Formula: T = FF-FF (Collapsed) minus 13.160" - 334.264mm</i>									
14.56" (369.8mm)	12.56" (319.0mm)	S.S.	5-481X	3-3-768KX	3-42-451	3-26-437	5-481X	3-2-939	910410 (1)
<i>J = 1.500" - (38.1mm) - 16 Spline</i>		<i>S = 2.344" - (59.5mm)</i>							
<i> tubing Formula: T = Q-Q (Collapsed) minus 9.840" - (249.9mm)</i>									
	11.25" (285.7mm)	S.S.	5-160X	3-3-118KX	3-40-1531	3-28-557	5-160X	S.S.	905751
<i> tubing Formula: T = Q-FF (Collapsed) minus 11.840" - (300.7mm)</i>									
13.33" (338.5mm)	11.33" (287.7mm)	S.S.	5-481X	3-3-118KX	3-40-1531	3-28-557	5-481X	3-2-429	921668
<i> tubing Formula: T = FF-FF (Collapsed) minus 13.220" - (335.7mm)</i>									
14.72" (373.8mm)	11.34" (288.0mm)	3-2-159	5-481X	3-3-118KX	3-40-1531	3-28-557	5-481X	3-2-159	905753
<i> tubing Formula: T = FF-FF (Collapsed) minus 13.840" - (351.5mm)</i>									
15.34" (389.6mm)	11.34" (288.0mm)	3-2-309	5-481X	3-3-118KX	3-40-1531	3-28-557	5-481X	3-2-309	922256
<i>J = 1.500" - (38.1mm) - 16 Spline</i>		<i>S = 3.468" - (88.0mm)</i>							
<i> tubing Formula: T = Q-Q (Collapsed) minus 11.000" - (279.4mm)</i>									
	12.38" (314.4mm)	S.S.	5-481X	3-3-508KX	3-40-1491	3-28-557	5-481X	S.S.	905785
<i> tubing Formula: T = Q-Q (Collapsed) minus 12.690" - (322.3mm)</i>									
14.06" (357.1mm)	12.37" (314.2mm)	3-2-159	5-481X	3-3-508KX	3-40-1491	3-28-557	5-481X	S.S.	905754
<i> tubing Formula: T = FF-FF (Collapsed) minus 14.370" - (364.9mm)</i>									
15.90" (403.8mm)	12.52" (318.0mm)	3-2-159	5-481X	3-3-508KX	3-40-1491	3-28-557	5-481X	3-2-159	917821

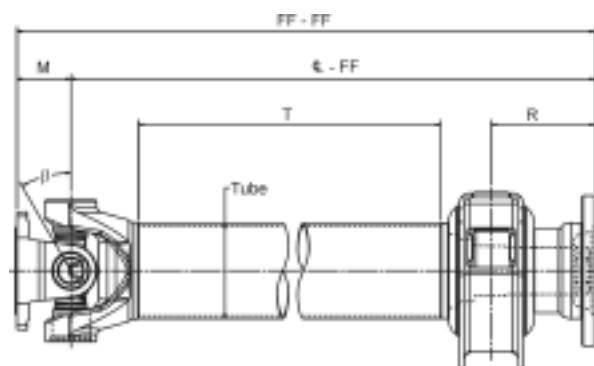
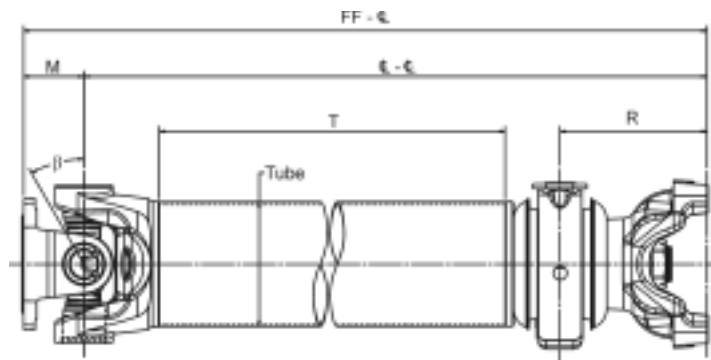
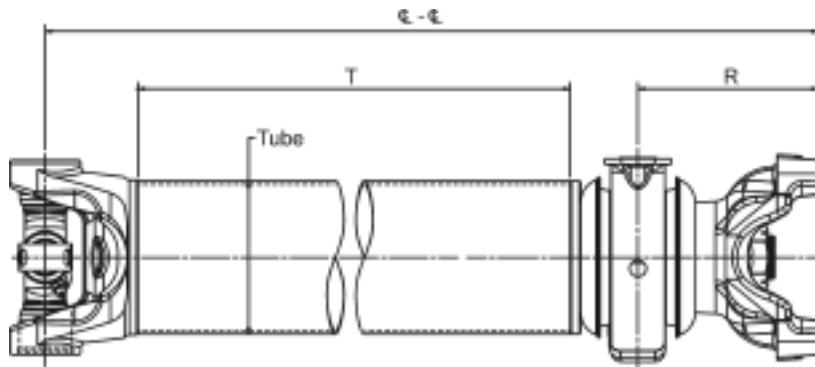
(1) Non-Standard tube size 2.5" x 0.056" (63.5 mm x 1.42 mm) Part #24-32-82

Short Coupled Configurations - Series 1310 - 1550



<i>Minimum Length Collapsed</i>		<i>Slip Joint End</i>				<i>Tight Joint End</i>		<i>Assembly Part Number</i>
FF-FF Flange Face to Flange Face	☐-☐ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Yoke Shaft	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	
<i>J = 2.250" - (57.1mm) - 10 Spline</i>				<i>S = .937" - (23.8mm)</i>				
8.50" (215.9mm)	5.50" (139.7mm)	3-2-489	5-482X	3-3-1621KX	3-82-271	5-482X	3-2-489	202990-1

Coupling Shaft Configurations - Series 1310 - 1550



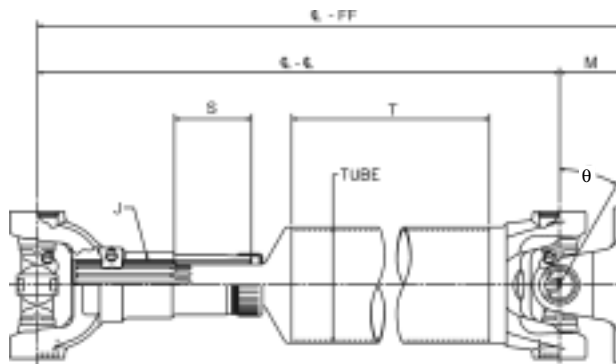
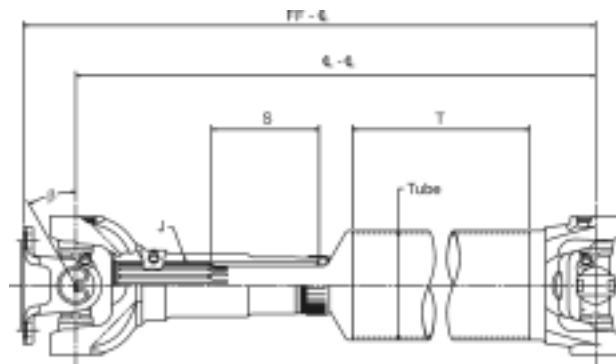
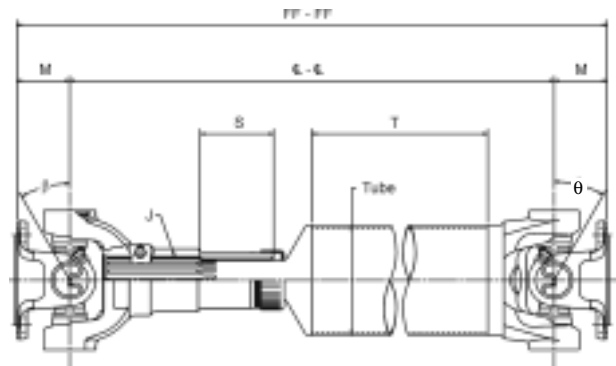
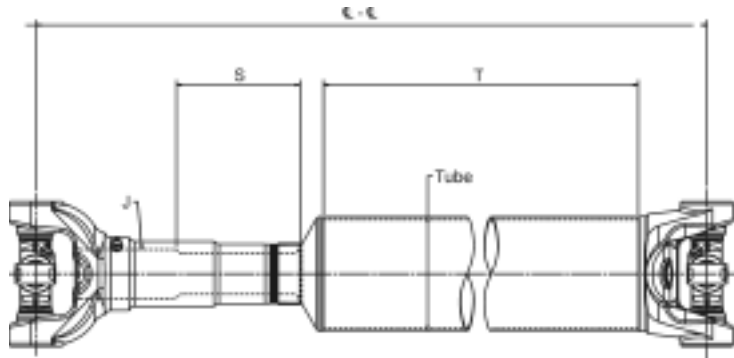
Coupling Shaft Assembly

Series 1480

Standard Parts
 Standard Tube Size 3.5" x 0.083" (88.90mm x 2.11mm)
 Part # 28-30-62
 Nut 16-74-101

Minimum Length Collapsed		Tight Joint End					Center Bearing End		R	Assembly Part Number
FF-FF Flange Face to Centerline	☉-☉ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Tube Yoke	Tubing	Midship Tube Shaft	Center Bearing	End Yoke (Assy)	Center Bearing to End Yoke/Flange Face	
<i>Tubing Formula: T = ☉-☉ (Collapsed) minus 8.190" - (208.0mm)</i>										
	9.64" (244.8mm)	S.S.	5-482X	3-28-537	28-30-62	3-53-1821	210391-1X	3-4-3091-1	4.56" (115.8mm)	911122
<i>Tubing Formula: T = FF-☉ (Collapsed) minus 10.190" - (258.8mm)</i>										
11.66" (296.1mm)	9.66" (245.3mm)	3-2-479	5-482X	3-28-537	28-30-62	3-4-3091-1	210391-1X	3-4-3091-1	4.56" (115.8mm)	911121

Tube Type Configurations - Series 1310 - 1550



Tube Type Assembly

Series 1480

Standard Parts
 Standard Tube Size 3.5" x 0.083" (88.90mm x 2.11mm)
 Tube Part Number 28-30-62

Minimum Length Collapsed		Slip Joint End				Tight Joint End			Assembly Part Number
FF-FF Flange Face to Flange Face	☉-☉ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Tube Shaft	Tube Yoke	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	

$J = 1.562" - (39.6mm) - 16 \text{ Spline}$ **$S = 4.500" - (114.3mm)$**

tubing Formula: $T = ☉ - ☉$ (Collapsed) minus 13.060" - (331.7mm)

	14.44" (366.7mm)	S.S.	5-482X	3-3-1641KX	3-40-1871	3-28-547	5-482X	S.S.	909741
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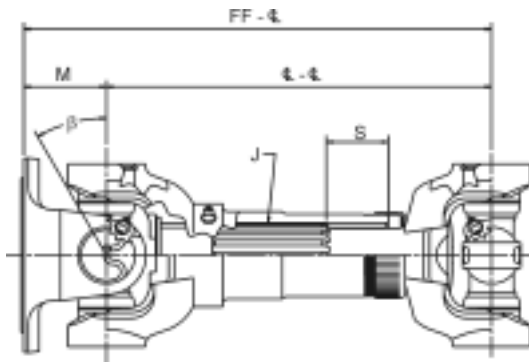
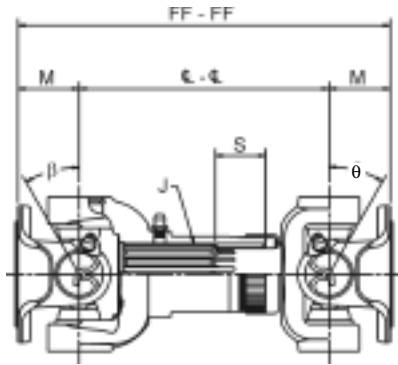
$J = 2.250" - (57.1mm) - 10 \text{ Spline}$ **$S = .937" - (23.8mm)$**

tubing Formula: $T = FF-FF$ (Collapsed) minus 7.470" - (189.7mm)

8.50" (215.9mm)	7.00" (177.8mm)	3-2-489	5-482X	3-3-1621KX	3-40-731	3-28-497	5-482X	S.S.	914673 (1)
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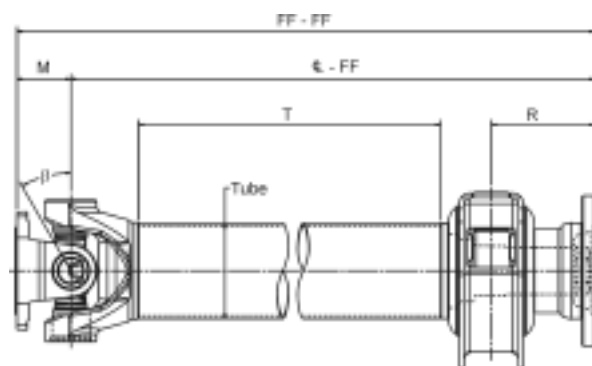
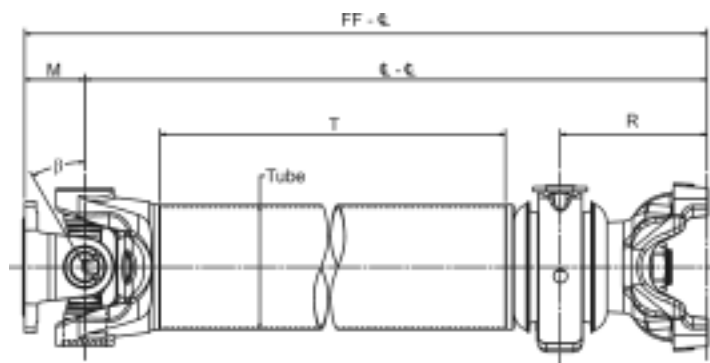
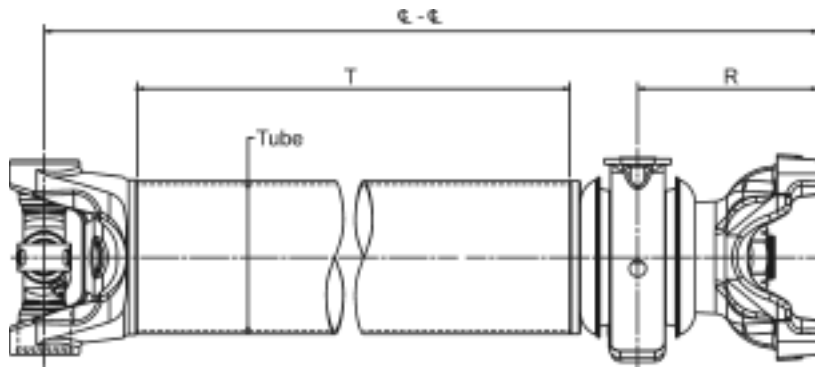
(1) Non-Standard tube size 3.0" x 0.095" (76.2 mm x 2.41 mm) Part #24-30-12

Short Coupled Configurations - Series 1310 - 1550



Minimum Length Collapsed		Slip Joint End				Tight Joint End		Assembly Part Number
FF-FF Flange Face to Flange Face	☐-☐ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Yoke Shaft	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	
J = 1.750" - (44.4mm) - 16 Spline		S = 2.500" - (63.5mm)						
13.51" (343.1mm)	10.01" (254.2mm)	4-2-669	5-155X	4-3-1241KX	4-82-401	5-155X	4-2-679	919473-1
J = 2.500" - (63.5mm) - 16 Spline		S = .813" - (20.7mm)						
9.75" (247.6mm)	5.75" (146.0mm)	4-2-669	5-304X	4-3-1261KX	4-82-201	5-304X	4-2-669	204249-6

Coupling Shaft Configurations - Series 1310 - 1550



Coupling Shaft Assembly

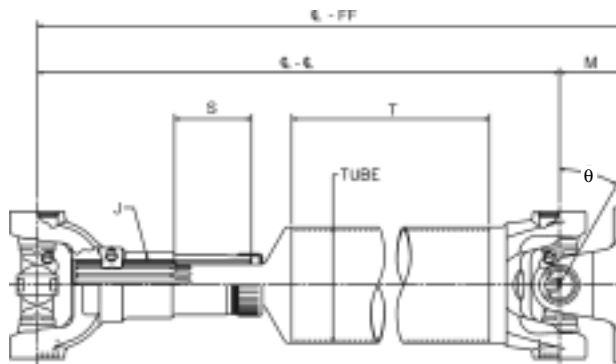
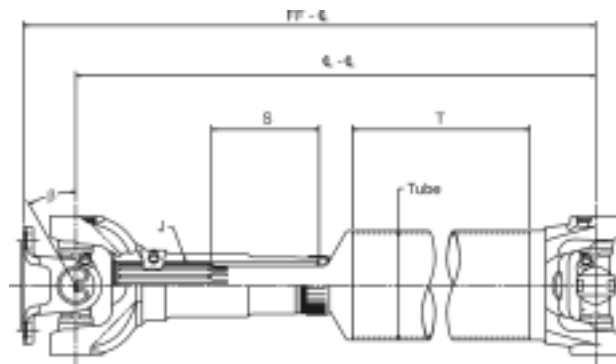
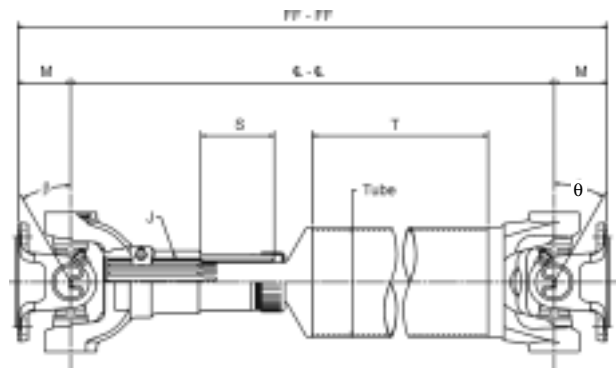
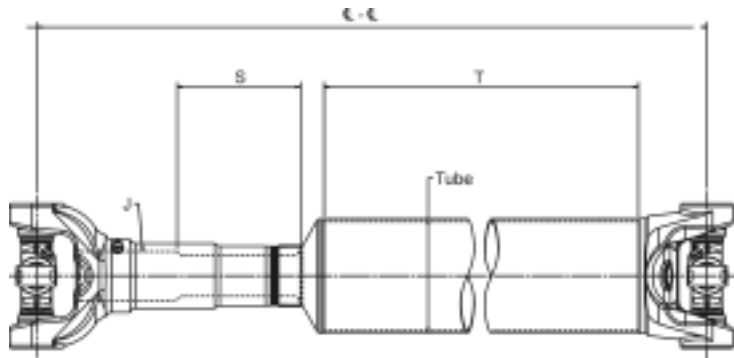
Series 1550

Standard Parts
 Standard Tube Size 3.50 x 0.095 (88.90mm x 2.41mm)
 Part # 28-30-22
 Nut 16-74-101

Minimum Length Collapsed		Tight Joint End				Center Bearing End			R	Assembly Part Number
FF-FF Flange Face to Flange Face	☐-☐ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Tube Yoke	Tubing	Midship Tube Shaft	Center Bearing	End Yoke (Assy)	Center Bearing to End Yoke/Flange Face	
<i>Tubing Formula: T = ☐-☐ (Collapsed) minus 8.160" - (207.2mm)</i>										
	9.61" (244.0mm)	S.S.	5-155X	4-28-307	28-30-22	4-53-401	210084-2X	4-4-4211-1	4.35" (110.5mm)	915959
	9.68" (245.8mm)	S.S.	5-609X	4-28-307	28-30-22	4-53-401	210084-2X	4-4-4211-1	4.35" (110.5mm)	914007
<i>Tubing Formula: T = FF-☐ (Collapsed) minus 10.160" - (258.0mm)</i>										
11.56" (293.6mm)	9.56" (245.8mm)	4-2-669	5-609X	4-28-277	32-30-22	4-53-271	210084-2X	4-4-4211-1	4.35" (110.5mm)	913173 (1)
11.63" (295.4mm)	9.63" (244.6mm)	4-2-669	5-155X	4-28-307	28-30-22	4-53-401	210084-2X	4-4-4211-1	4.35" (110.5mm)	915962
11.68" (296.6mm)	9.68" (245.8mm)	4-2-699	5-609X	4-28-307	28-30-22	4-53-401	210084-2X	4-4-4211-1	4.35" (110.5mm)	915963
11.68" (296.6mm)	9.68" (245.8mm)	4-2-669	5-609X	4-28-307	28-30-22	4-53-401	210084-2X	4-4-4211-1	4.35" (110.5mm)	914212

(1) Non-Standard tube size 4.0" x 0.083" (101.6 mm x 2.11 mm) Part #32-30-22

Tube Type Configurations - Series 1310 - 1550



Tube Type Assembly

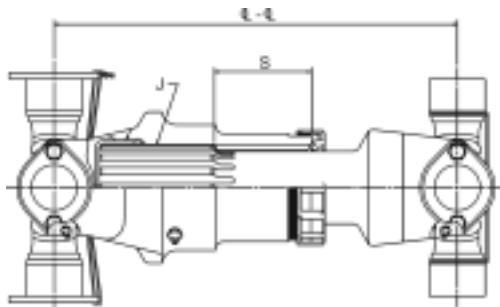
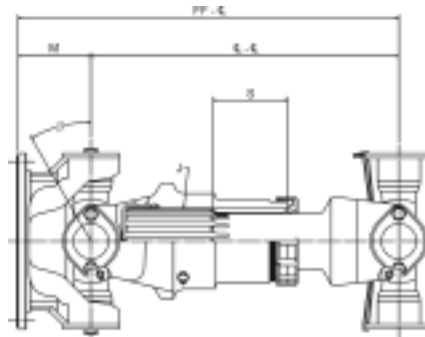
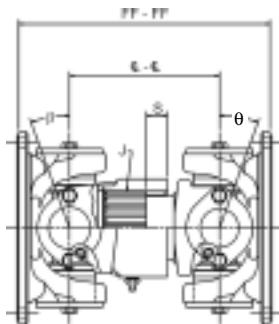
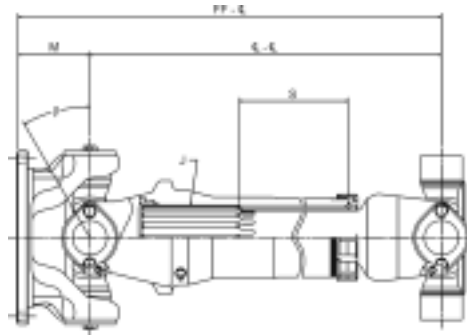
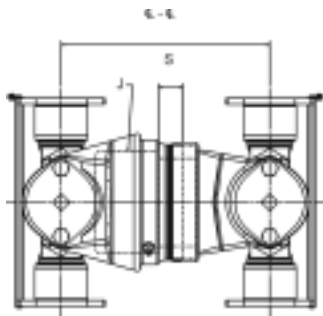
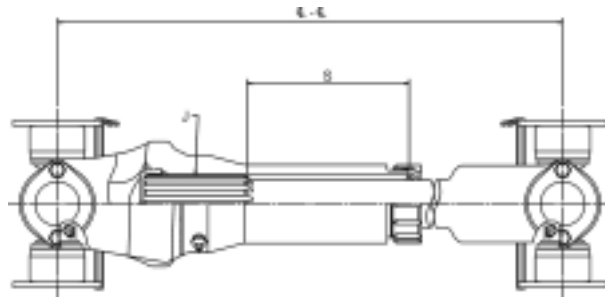
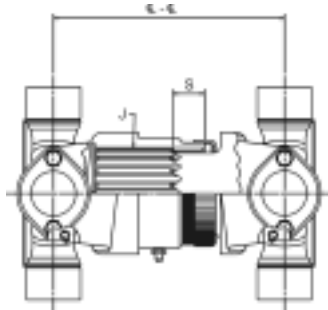
Series 1550

Standard Parts
 Standard Tube Size 3.5" x 0.095" (88.9mm x 2.41mm)
 Tube Part Number 28-30-22

Minimum Length Collapsed		Slip Joint End				Tight Joint End			Assembly Part Number
FF-FF Flange Face to Flange Face	Q-Q Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Tube Shaft	Tube Yoke	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	
<i>J = 1.750" - (44.4mm) - 16 Spline</i>		<i>S = 2.500" - (63.5mm)</i>							
<i> tubing Formula: T = Q-Q (Collapsed) minus 10.340" - (262.6mm)</i>									
	11.72" (399.2mm)	S.S.	5-304X	4-3-1241KX	4-40-761	4-28-307	5-304X	S.S.	906366
<i> tubing Formula: T = FF-FF (Collapsed) minus 12.350" - (313.7mm)</i>									
13.83" (351.2mm)	11.83" (300.4mm)	4-2-669	5-155X	4-3-1241KX	4-40-951	4-28-657	5-155X	S.S.	905282 (1)
<i> tubing Formula: T = FF-FF (Collapsed) minus 14.340" - (364.2mm)</i>									
15.72" (399.3mm)	11.75" (298.4mm)	4-2-669	5-155X	4-3-1241KX	4-40-761	4-28-307	5-155X	4-2-669	909469
<i> tubing Formula: T = FF-FF (Collapsed) minus 14.350" - (364.5mm)</i>									
15.75" (400.0mm)	11.75" (298.4mm)	4-2-1159	5-609X	4-3-1241KX	4-40-761	4-28-307	5-609X	S.S.	921600
15.84" (402.3mm)	11.84" (300.7mm)	4-2-669	5-155X	4-3-1241KX	4-40-1051	4-28-307	5-155X	4-2-669	920142
15.91" (404.1mm)	11.91" (302.5mm)	4-2-699	5-155X	4-3-1241KX	4-40-761	4-28-307	5-155X	4-2-699	922836
<i>J = 1.750" - (44.4mm) - 16 Spline</i>		<i>S = 5.000" - (127mm)</i>							
<i> tubing Formula: T = FF-FF (Collapsed) minus 17.970" - (456.4mm)</i>									
19.50" (495.3mm)	15.50" (393.7mm)	4-2-669	5-304X	4-3-1431KX	4-40-721	4-28-417	5-304X	4-2-669	913150

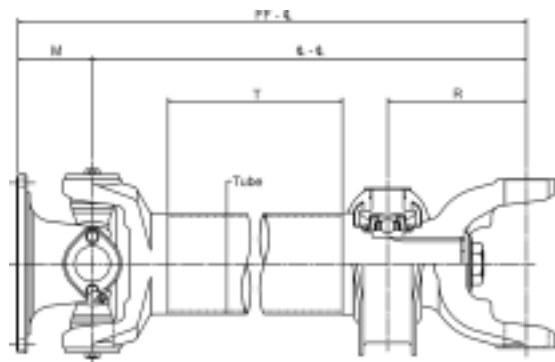
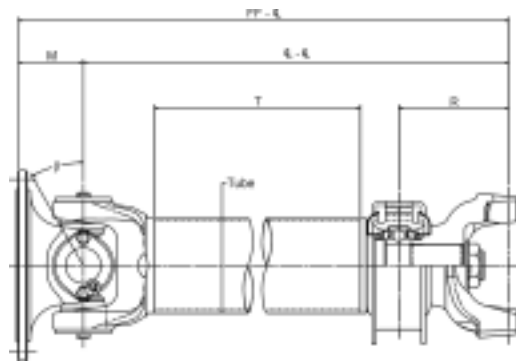
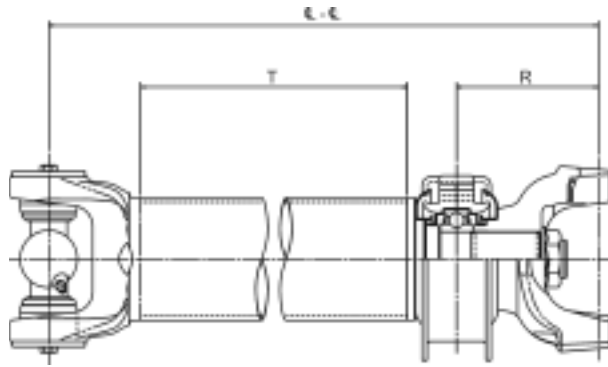
(1) Non-Standard tube size 3.50" x 0.156" (88.9 mm x 3.96 mm) Part #28-30-52

Short Coupled Configurations - Series 1610 - 1880



Minimum Length Collapsed		Slip Joint End				Tight Joint End		Assembly Part Number
FF-FF Flange Face to Flange Face	Q-Q Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Yoke Shaft	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	
J = 2.000" - (50.8mm) - 16 Spline		S = 1.290" - (32.7mm)						
	11.47" (291.3mm)	S.S.	5-674X	5-3-3321KX	5-82-791-2	5-674X	S.S.	822218-1
J = 2.000" - (50.8mm) - 16 Spline		S = 2.624" - (66.6mm)						
15.51" (393.9mm)	12.76" (324.1mm)	S.S.	5-674X	5-3-288KX	5-82-781	5-674X	S.S.	821346-1
	14.00" (355.6mm)	S.S.	5-674X	5-3-288KX	5-82-831-1	5-674X	S.S.	807276-1
J = 2.000" - (50.8mm) - 16 Spline		S = 3.248" - (82.5mm)						
	12.000" (304.8mm)	S.S.	5-674X	5-3-488KX	5-82-791-3	5-674X	S.S.	814119-1
J = 2.000" - (50.8mm) - 16 Spline		S = 4.750" - (120.6mm)						
	17.00" (431.8mm)	S.S.	5-279X	5-3-3121KX	5-82-961-5	5-279X	S.S.	905908-7
	17.94" (455.7mm)	S.S.	5-279X	5-3-3121KX	5-82-961-5	5-279X	S.S.	905908-2
J = 2.672" - (67.8mm) - 17/18 Involute Spline		S = .531" - (13.5mm)						
9.34" (237.2mm)	5.59" (141.9mm)	5-2-619	5-279X	5-3-1861KX	5-82-191	5-279X	5-2-619	207904-1
J = 2.672" - (67.8mm) - 18 Involute Spline		S = .750" - (19.0mm)						
9.13" (231.9mm)	5.37" (136.4mm)	5-2-379	5-279X	5-3-3231X	5-82-161	5-279X	5-2-379	918926-1
J = 2.672" - (67.8mm) - 18 Involute Spline		S = 1.563" - (39.7mm)						
	7.87" (199.9mm)	S.S.	5-674X	5-3-2971KX	5-82-951	5-674X	S.S.	815509-1
J = 2.676" - (67.9mm) - 18 Involute Spline		S = .750" - (19.0mm)						
9.12" (231.6mm)	5.38" (136.6mm)	5-2-379	5-279X	5-3-168KX	5-82-161	5-279X	5-2-379	906224-1

Coupling Shaft Configurations - Series 1610 - 1880



Coupling Shaft Assembly

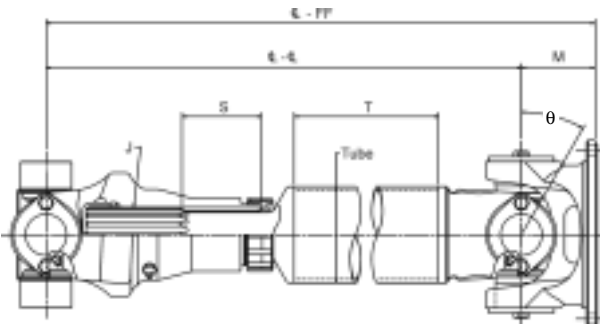
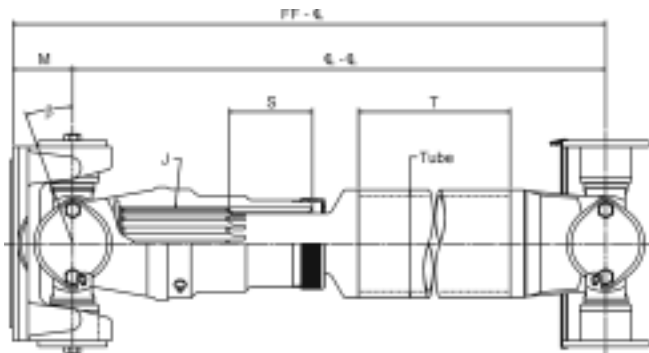
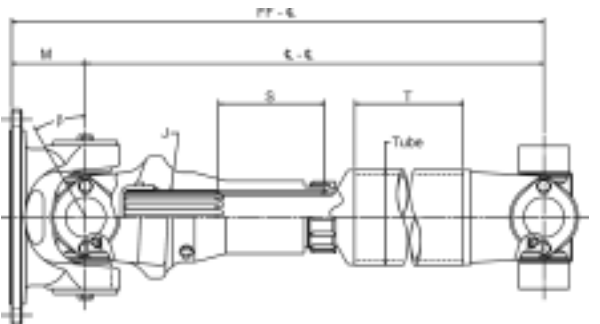
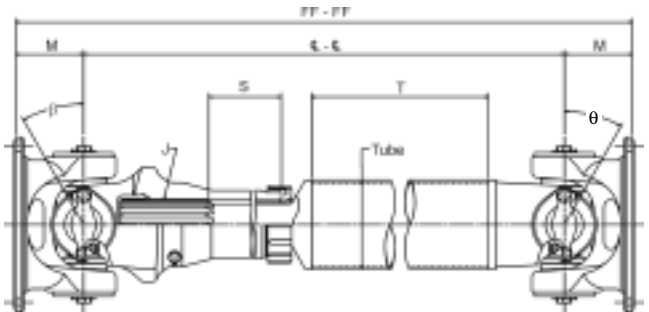
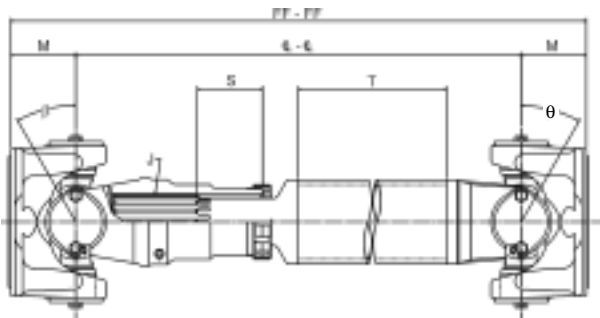
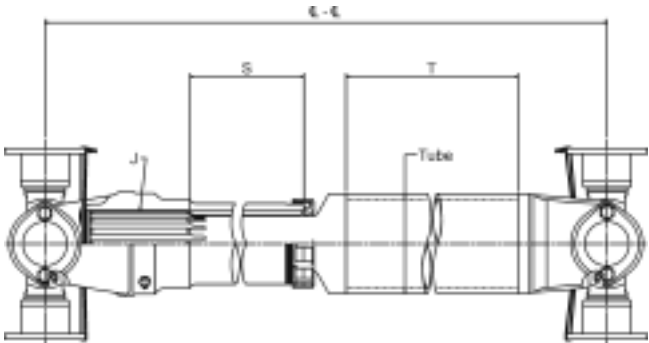
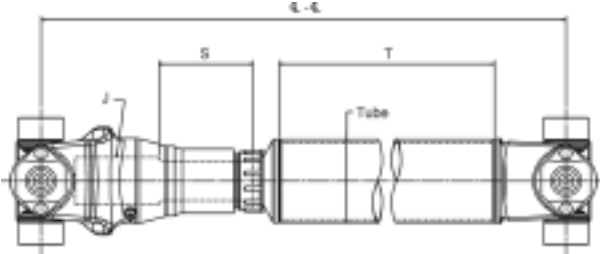
Series 1610

Standard Parts
 Standard Tube Size 3.5" x 0.134" (88.9mm x 3.40mm)
 Tube Part # 28-30-92
 Nut 231502

Minimum Length Collapsed		Tight Joint End				Center Bearing End			R	Assembly Part Number
FF-FF Flange Face to Centerline	Q-Q Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Tube Yoke	Tubing	Midship Tube Shaft	Center Bearing	End Yoke (Assy)	Center Bearing to End Yoke/Flange Face	
<i>Tube Formula: T = Q-Q (Collapsed) minus 9.280" - (235.7mm)</i>										
	11.56" (293.6mm)	S.S.	5-279X	5-28-327	32-30-52	5-53-271	210084-2X	5-4-7171-1	4.66" (118.4mm)	808499 (1)
	11.64" (295.6mm)	S.S.	5-674X	5-28-627	28-30-92	5-53-261	210084-2X	5-4-7171-1	4.66" (118.4mm)	815967
<i>Tube Formula: T = Q-Q (Collapsed) minus 12.020" - (305.3mm)</i>										
14.40" (365.7mm)	11.650" (295.9mm)	5-2-709	5-279X	5-28-327	32-30-52	5-53-271	210084-2X	5-4-7171-1	4.66" (118.4mm)	918637 (1)
<i>Tube Formula: T = FF-FF (Collapsed) minus 12.030" - (305.5mm)</i>										
14.41" (366.0mm)	11.66" (296.1mm)	5-2-599	5-279X	5-28-627	28-30-92	5-53-261	210084-2X	5-4-7171-1	4.66" (118.4mm)	816112

(1) Non-Standard tube size 4.0" x 0.134" (101.6 mm x 3.40 mm) Part #32-30-52

Tube Type Configurations - Series 1610 - 1880



Tube Type Assembly

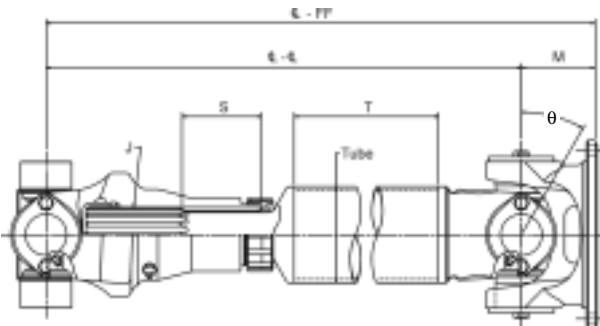
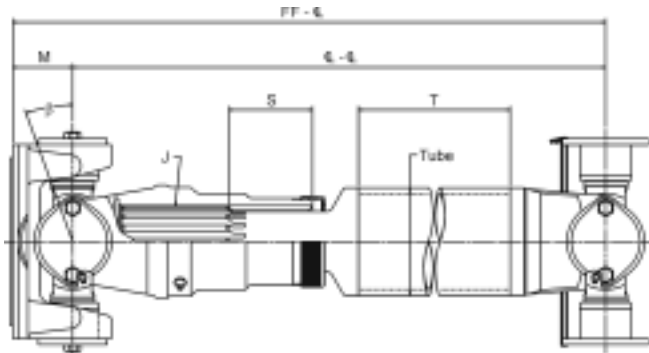
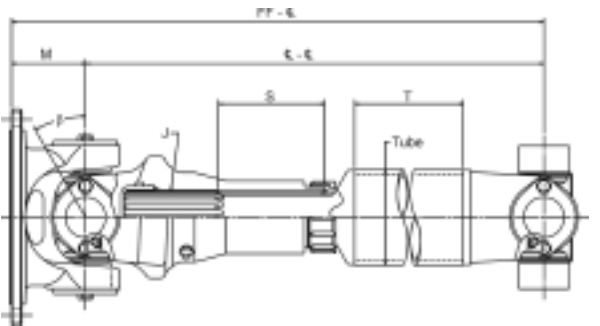
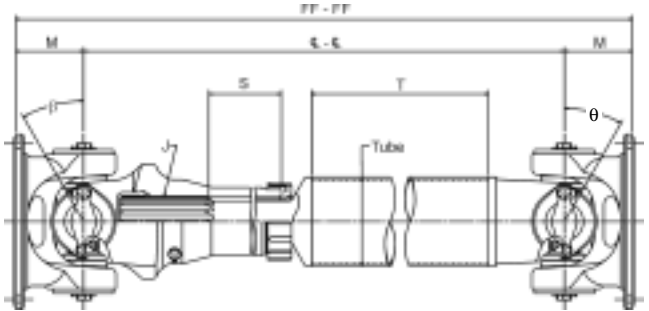
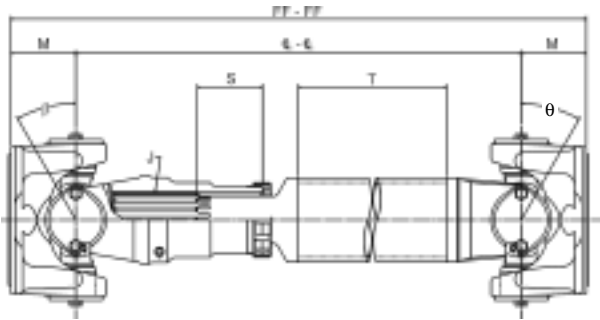
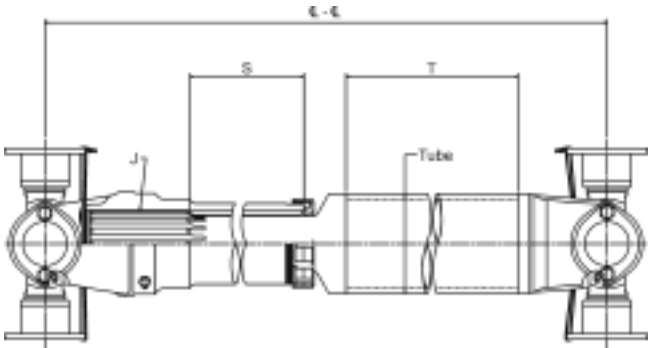
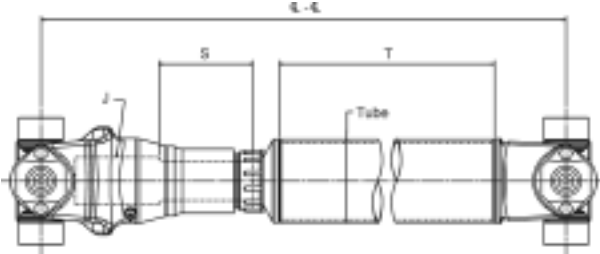
Series 1610

Standard Parts
 Standard Tube Size 3.5" x 0.134" (88.9mm x 3.40mm)
 Tube Part Number 28-30-92

Minimum Length Collapsed		Slip Joint End				Tight Joint End			Assembly Part Number
FF-FF Flange Face to Flange Face	☉-☉ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Tube Shaft	Tube Yoke	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	
<i>J = 2.000" - (50.8mm) - 16 Spline</i>		<i>S = 1.624" - (41.2mm)</i>							
<i> tubing Formula: T = FF-FF (Collapsed) minus 14.750" - (374.6mm)</i>									
17.13" (435.1mm)	14.38" (365.2mm)	S.S.	5-674X	5-3-108KX	5-40-1011	5-28-627	5-279X	5-2-279	820590
<i> tubing Formula: T = FF-FF (Collapsed) minus 17.500" - (444.5mm)</i>									
19.81" (503.1mm)	14.31" (363.5mm)	5-2-279	5-279X	5-3-108KX	5-40-1191	5-28-627	5-279X	5-2-279	907849
<i>J = 2.000" - (50.8mm) - 16 Spline</i>		<i>S = 3.935" - (99.9mm)</i>							
<i> tubing Formula: T = ☉-☉ (Collapsed) minus 12.220" - (310.4mm)</i>									
	14.05" (356.8mm)	S.S.	5-279X	5-3-368KX	5-40-1241	5-28-837	5-279X	S.S.	817414 (2)
<i> tubing Formula: T = ☉-☉ (Collapsed) minus 13.000" - (330.2mm)</i>									
	15.31" (388.9mm)	S.S.	5-674X	5-3-368KX	5-40-1151	5-28-627	5-674X	S.S.	807148
<i> tubing Formula: T = FF-FF (Collapsed) minus 15.750" - (400.0mm)</i>									
17.19" (436.6mm)	14.44" (366.8mm)	5-2-709	5-279X	5-3-368KX	5-40-1401	5-28-967	5-674X	S.S.	820521 (2)
18.13" (460.55mm)	15.32" (389.1mm)	5-2-629	5-279X	5-3-368KX	5-40-1151	5-28-627	5-674X	S.S.	813641 (3)
<i>J = 2.000" - (50.8mm) - 16 Spline</i>		<i>S = 4.124" - (104.7mm)</i>							
<i> tubing Formula: T = ☉-☉ (Collapsed) minus 15.120" - (384.0mm)</i>									
	17.44" (442.9mm)	S.S.	5-674X	5-3-2261KX	5-40-1011	5-28-627	5-674X	S.S.	805670
<i> tubing Formula: T = ☉-☉ (Collapsed) minus 15.280" - (388.1mm)</i>									
	17.56" (446.0mm)	S.S.	5-438X	5-3-2261KX	5-40-1051	5-28-327	5-438X	S.S.	804536 (1)

(1) Non-Standard tube size 4.0" x 0.134" (101.6 mm x 3.40 mm) Part #32-30-52
 (2) Non-Standard tube size 3.55" x 0.207" (90.2 mm x 5.26 mm) Part #28-30-122
 (3) Non-Standard tube size 3.5" x 0.134" (88.9 mm x 3.40 mm) Part #28-30-92

Tube Type Configurations - Series 1610 - 1880



Tube Type Assembly

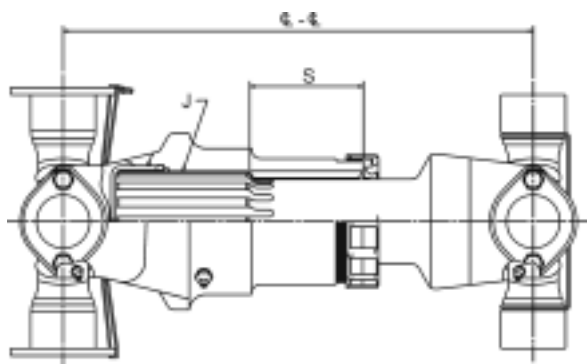
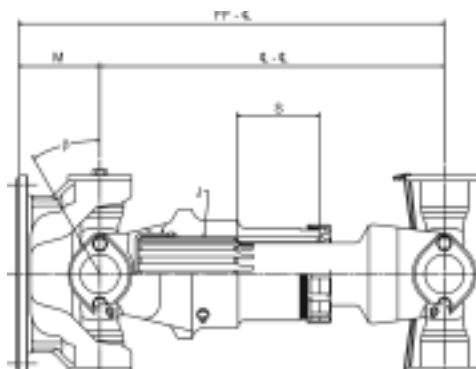
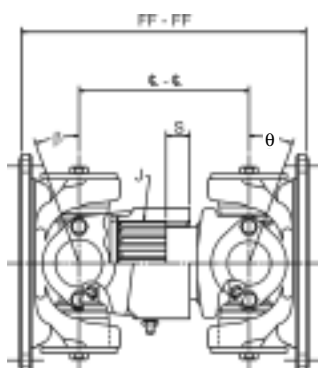
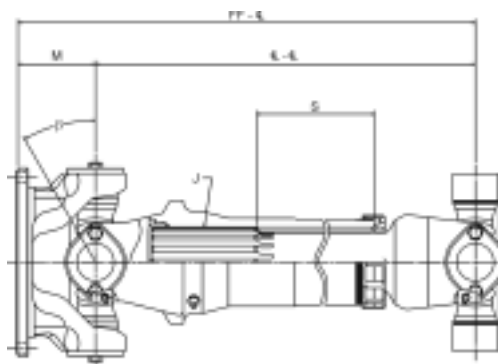
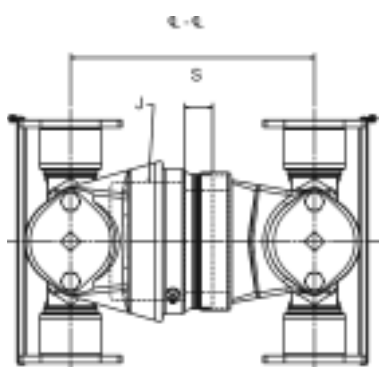
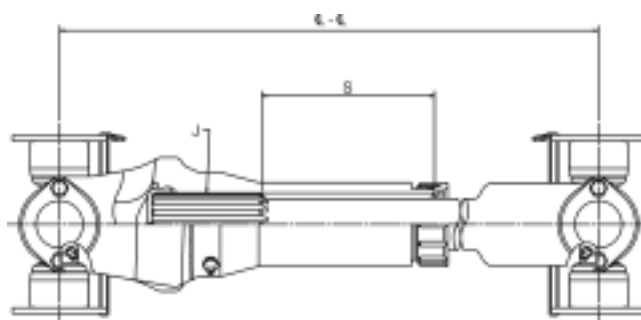
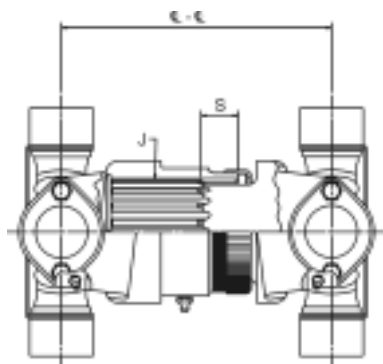
Series 1610

Standard Parts
 Standard Tube Size 3.5" x 0.134" (88.9mm x 3.40mm)
 Tube Part Number 28-30-92

Minimum Length Collapsed		Slip Joint End				Tight Joint End			Assembly Part Number
FF-FF Flange Face to Flange Face	Q-Q Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Tube Shaft	Tube Yoke	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	
<i> tubing Formula: T = Q-Q (Collapsed) minus 15.940" - (404.8mm)</i>									
	18.20" (462.3 mm)	S.S.	5-674X	5-3-2261KX	5-40-1011	5-28-887	5-674X	S.S.	817062
<i> tubing Formula: T = Q-Q (Collapsed) minus 17.880" - (454.1mm)</i>									
19.32" (490.7mm)	16.57" (420.8mm)	5-2-709	5-279X	5-3-2261KX	5-40-1371	5-28-967	5-674X	S.S.	818681 (2)
20.25" (514.3mm)	17.50" (444.5mm)	5-2-279	5-279X	5-3-2261KX	5-40-1011	5-28-627	5-674X	S.S.	818161
20.25" (514.3mm)	17.50" (444.5mm)	S.S.	5-674X	5-3-2261KX	5-40-1011	5-28-627	5-279X	5-2-279	821523
<i> tubing Formula: T = FF-FF (Collapsed) minus 20.620" - (523.7mm)</i>									
22.94" (582.7mm)	17.44" (442.9mm)	5-2-279	5-279X	5-3-2261KX	5-40-1011	5-28-627	5-279X	5-2-279	906257
<i> tubing Formula: T = FF-FF (Collapsed) minus 20.630" - (524.0 mm)</i>									
23.02" (584.7mm)	17.52" (445.0mm)	5-2-279	5-279X	5-3-2261KX	5-40-1011	5-28-627	5-279X	5-2-279	917829
<i> tubing Formula: T = FF-FF (Collapsed) minus 20.780" - (527.8mm)</i>									
23.17" (588.5mm)	17.67" (448.8mm)	5-2-279	5-279X	5-3-2261KX	5-40-1051	5-28-327	5-279X	5-2-279	914921 (1)

- (1) Non-Standard tube size 4.0" x 0.134" (101.6 mm x 3.40 mm) Part #32-30-52
 (2) Non-Standard tube size 3.55" x 0.207" (90.2 mm x 5.26 mm) Part #28-30-122
 (3) Non-Standard tube size 3.5" x 0.134" (88.9 mm x 3.40 mm) Part #28-30-92

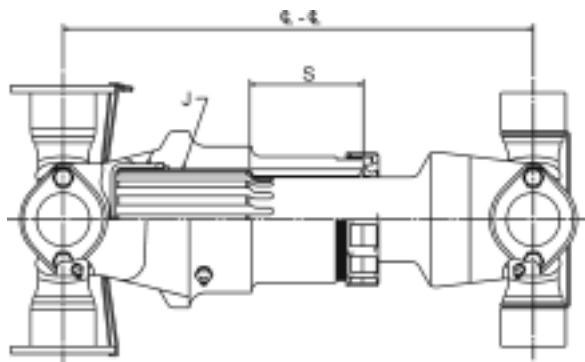
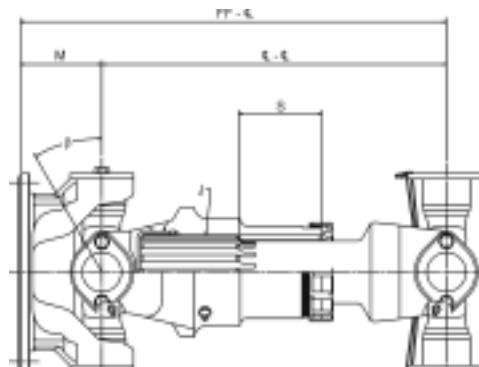
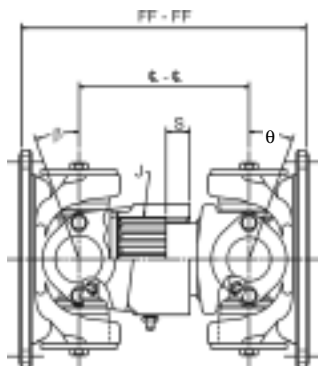
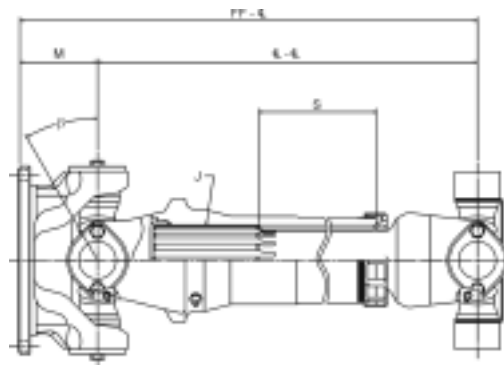
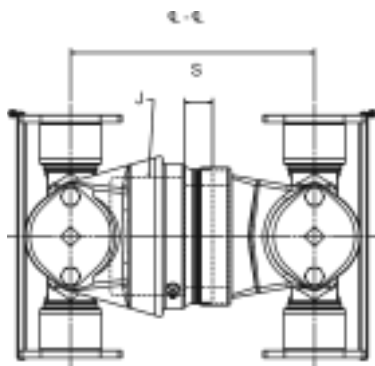
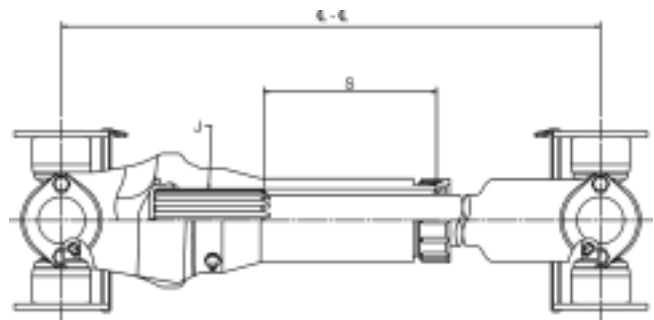
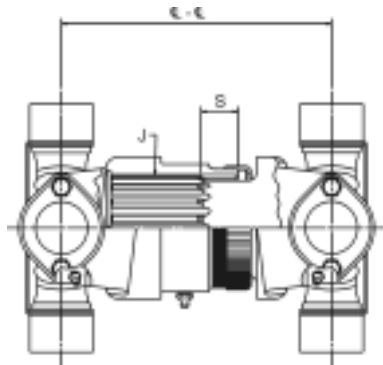
Short Coupled Configurations - Series 1610 - 1880



Minimum Length Collapsed		Slip Joint End				Tight Joint End		Assembly Part Number
FF-FF Flange Face to Flange Face	☉-☉ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Yoke Shaft	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	
J = 2.500" - (63.5mm) - 16 Spline		S = 1.750" - (44.4mm)						
	11.54" (293.1mm)	S.S.	5-675X	6-3-2741KX	6-82-1141	5-675X	S.S.	822742-1
J = 2.500" - (63.5mm) - 16 Spline		S = 2.250" - (57.1mm)						
	11.38" (289.0mm)	S.S.	5-280X	6-3-2741KX	6-82-1171-10	5-675X	S.S.	821735-1
	11.88" (301.7mm)	S.S.	5-675X	6-3-2741KX	6-82-1171-11	5-675X	S.S.	805363-2
J = 2.500" - (63.5mm) - 16 Spline		S = 2.375" - (60.3mm)						
	10.75" (273.0mm)	S.S.	5-675X	6-3-2741KX	6-82-1291	5-675X	S.S.	810482-1
J = 2.500" - (63.5mm) - 16 Spline		S = 2.750" - (69.8mm)						
	11.75" (298.4mm)	S.S.	5-675X	6-3-2801KX	6-82-1171-1	5-675X	S.S.	806446-1
J = 2.500" - (63.5mm) - 16 Spline		S = 3.433" - (87.2mm)						
15.23" (386.8mm)	12.04" (305.8mm)	S.S.	5-675X	6-3-3321KX	6-82-1381	5-280X	6-2-15*	821821-1
J = 2.500" - (63.5mm) - 16 Spline		S = 3.625" - (92.0mm)						
	13.380" (339.8mm)	S.S.	5-675X	6-3-2631KX	6-82-1351-7	5-675X	S.S.	822242-1
J = 2.500" - (63.5mm) - 16 Spline		S = 3.875" - (98.4mm)						
	14.000" (355.6mm)	S.S.	5-675X	6-3-2671KX	6-82-1091-13	5-675X	S.S.	805361-7
	14.41" (366.0mm)	S.S.	5-675X	6-3-2671KX	6-82-1341-1	5-675X	S.S.	805361-5
	15.10" (383.5mm)	S.S.	5-675X	6-3-2671KX	6-82-1341-2	5-675X	S.S.	805361-10
J = 2.500" - (63.5mm) - 16 Spline		S = 5.000" - (127.0mm)						
	16.00" (406.4mm)	S.S.	5-280X	6-3-3461KX	6-82-1351-3	5-280X	S.S.	916207-1

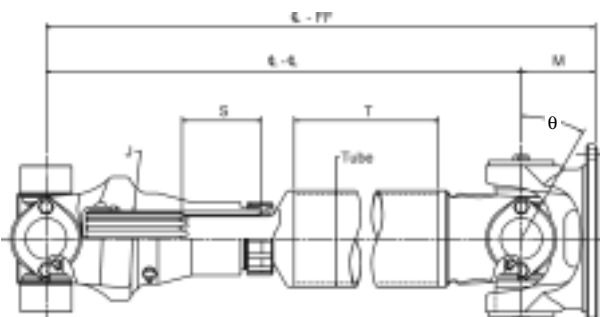
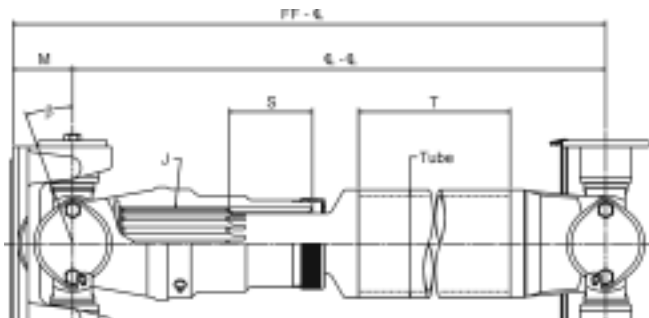
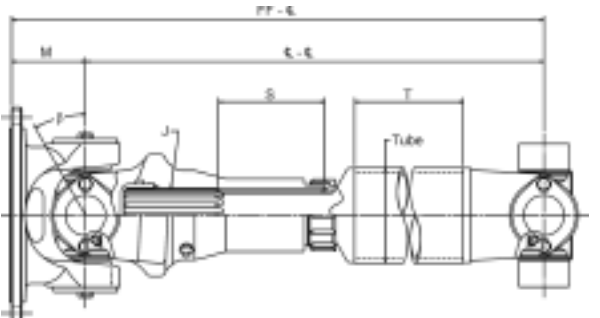
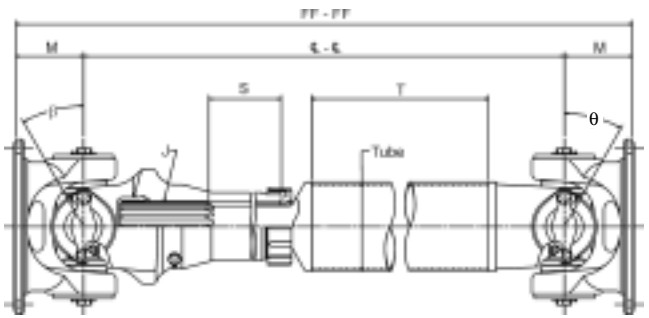
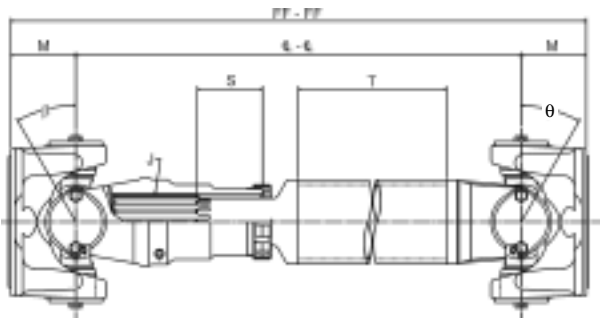
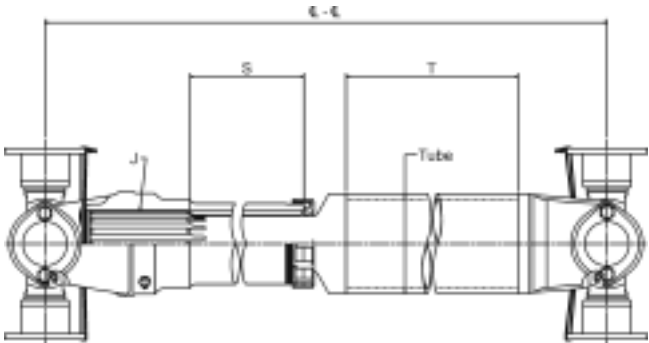
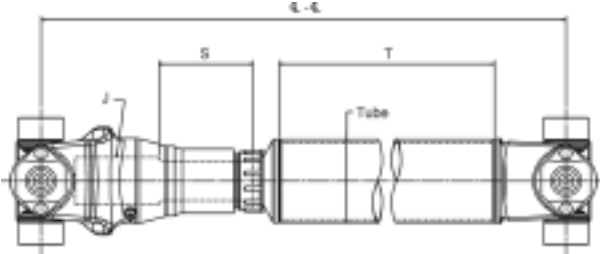
*Serrated Flange Yoke

Short Coupled Configurations - Series 1610 - 1880



Minimum Length Collapsed		Slip Joint End				Tight Joint End		Assembly Part Number
FF-FF Flange Face to Flange Face	☐-☐ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Yoke Shaft	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	
<i>J = 2.500" - (63.5mm) - 16 Spline</i>		<i>S = 5.250" - (133.3mm)</i>						
	17.47" (443.7mm)	S.S.	5-280X	6-3-2651KX	6-82-1341-7	5-280X	S.S.	905357-6
<i>J = 2.500" - (63.5mm) - 16 Spline</i>		<i>S = 5.500" - (139.7mm)</i>						
	17.22" (437.4mm)	S.S.	5-675X	6-3-3441KX	6-82-1341-4	5-675X	S.S.	817262-5
	18.97" (481.8mm)	S.S.	5-675X	6-3-3441KX	6-82-1341-9	5-675X	S.S.	817262-3
	19.25" (488.9mm)	S.S.	5-675X	6-3-3441KX	6-82-1341-10	5-675X	S.S.	817262-9
	19.63" (498.6mm)	S.S.	5-675X	6-3-3441KX	6-82-1341-11	5-675X	S.S.	817262-8
	20.00" (508.0mm)	S.S.	5-675X	6-3-3441KX	6-82-1341-12	5-675X	S.S.	817262-4
<i>J = 2.500" - (63.5mm) - 16 Involute Spline</i>		<i>S = 2.499" - (63.5mm)</i>						
13.56" (344.4mm)	10.35" (262.9mm)	S.S.	5-675X	6-3-3661KX	6-82-1391	5-280X	6-2-15	822202-1
	10.37" (263.4mm)	S.S.	5-280X	6-3-3661KX	6-82-1391	5-675X	S.S.	822803-1

Tube Type Configurations - Series 1610 - 1880



Tube Type Assembly

Series 1710

Standard Parts
 Standard Tube Size 4.0" x 0.134" (101.6mm x 3.40mm)
 Tube Part Number 32-30-52

Minimum Length Collapsed		Slip Joint End				Tight Joint End			Assembly Part Number
FF-FF Flange Face to Flange Face	Q-Q Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Tube Shaft	Tube Yoke	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	

J = 2.500" - (63.5mm) - 16 Spline **S = 3.125" - (79.4mm)**

tubing Formula: T = FF-FF (Collapsed) minus 19.190" - 487.426mm

21.50" (546.1mm)	15.50" (393.7mm)	6-2-749	5-280X	6-3-2631KX	6-40-711	6-28-347	5-280X	6-2-749	907883
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J = 2.500" - (63.5mm) - 16 Spline **S = 3.875" - (98.4mm)**

tubing Formula: T = Q-Q (Collapsed) minus 14.000" - (355.6mm)

	16.38" (416.0mm)	S.S.	5-675X	6-3-2671KX	6-40-541	6-28-347	5-675X	S.S.	806336 (1)
	16.39" (416.3mm)	S.S.	5-675X	6-3-2671KX	6-40-541	6-28-347	5-675X	S.S.	805359

tubing Formula: T = FF-FF (Collapsed) minus 17.000" - (431.8mm)

19.42" (493.3mm)	16.42" (417.0mm)	6-2-739	5-675X	6-3-2671KX	6-40-541	6-28-347	5-280X	S.S.	818864
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tubing Formula: T = FF-FF (Collapsed) minus 20.000" - (508.0mm)

22.31" (566.7mm)	16.31" (414.3mm)	6-2-749	5-280X	6-3-2671KX	6-40-541	6-28-347	5-280X	6-2-749	906802
22.31" (566.7mm)	16.31" (414.3mm)	6-2-749	5-280X	6-3-2671KX	6-40-541	6-28-347	5-280X	6-2-749	912943 (1)
22.42" (569.5mm)	16.42" (417.0mm)	6-2-739	5-280X	6-3-2671KX	6-40-541	6-28-347	5-280X	6-2-739	918863

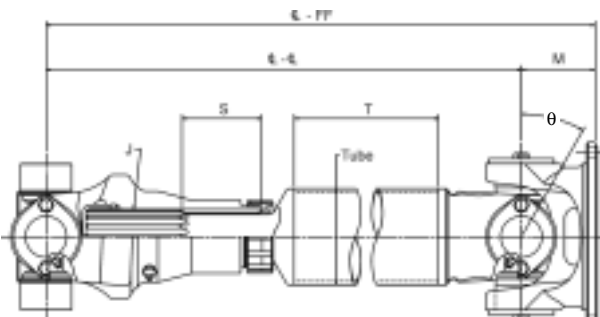
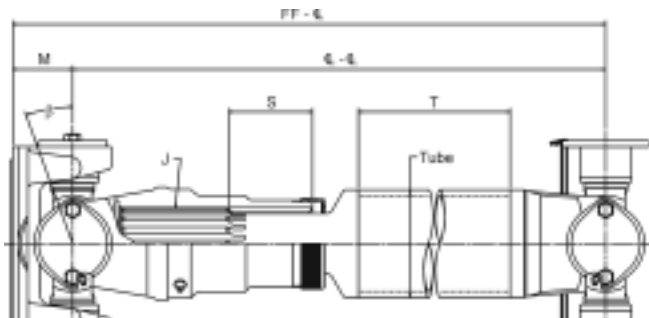
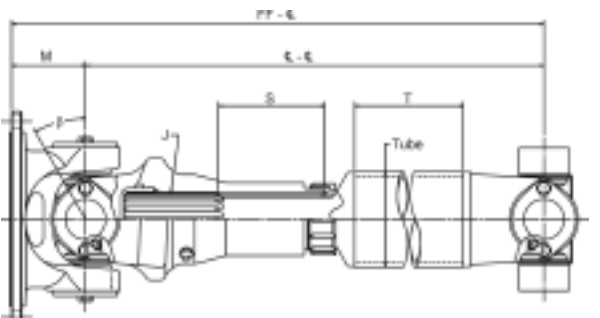
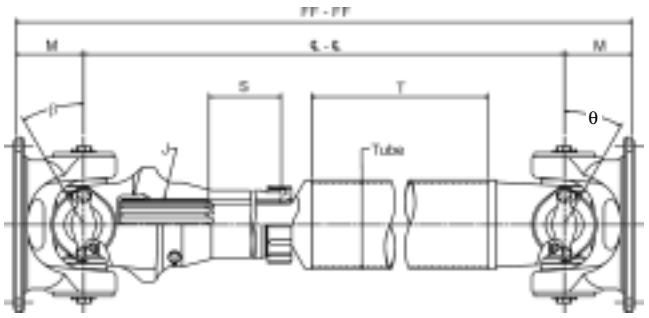
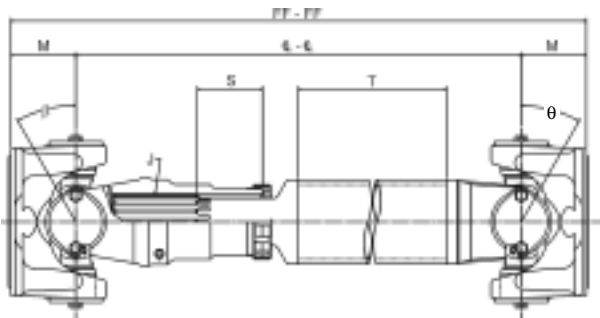
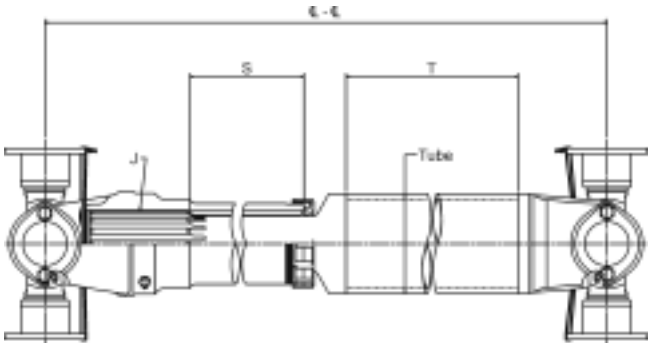
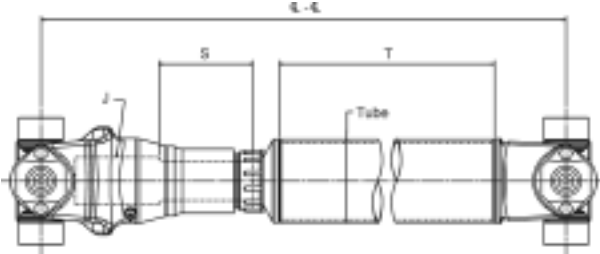
J = 2.500" - (63.5mm) - 16 Spline **S = 5.250" - (133.4mm)**

tubing Formula: T = Q-Q (Collapsed) minus 16.030" - (407.2mm)

	18.38" (466.9mm)	S.S.	5-280X	6-3-2651KX	6-40-521	6-28-347	5-280X	S.S.	905358
	18.38" (466.9mm)	S.S.	5-675X	6-3-2651KX	6-40-521	6-28-347	5-675X	S.S.	805358
	18.46" (468.9mm)	S.S.	5-675X	6-3-2651KX	6-40-521	6-28-347	5-675X	S.S.	806354 (1)

(1) Non-Standard tube size 4.09" x 0.180" (103.9 mm x 3.57 mm) Part #32-30-72

Tube Type Configurations - Series 1610 - 1880



Tube Type Assembly

Series 1710

Standard Parts
 Standard Tube Size 4.0" x 0.134" (101.6mm x 3.40mm)
 Tube Part Number 32-30-52

Minimum Length Collapsed		Slip Joint End				Tight Joint End			Assembly Part Number
FF-FF Flange Face to Flange Face	☉-☉ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Tube Shaft	Tube Yoke	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	

J = 2.500" - (63.5mm) - 16 Spline **S = 5.250" - (133.4mm)**

tubing Formula: T = FF-FF (Collapsed) minus 19.030" - (483.4mm)

21.38" (543.0mm)	18.38" (466.9mm)	6-2-739	5-280X	6-3-2651KX	6-40-521	6-28-347	5-280X	S.S.	921142
21.38" (543.0mm)	18.38" (466.9mm)	S.S.	5-280X	6-3-2651KX	6-40-521	6-28-347	5-280X	6-2-739	912072

tubing Formula: T = FF-FF (Collapsed) minus 19.220" - (488.2mm)

21.63" (549.4mm)	18.44" (468.4mm)	6-2-749	5-280X	6-3-2651KX	6-40-521	6-28-347	5-280X	S.S.	821662 (1)
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J = 2.500" - (63.5mm) - 16 Spline **S = 3.88" - (98.6mm)**

tubing Formula: T = FF-FF (Collapsed) minus 20.000" - (508.0mm)

22.42" (569.5mm)	16.42" (417.0mm)	6-2-749	5-280X	6-3-2651KX	6-40-521	6-28-347	5-280X	6-2-749	917832
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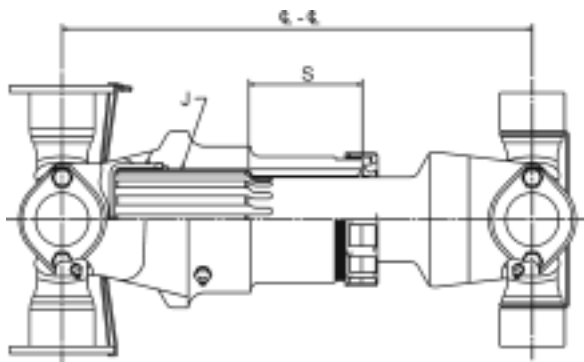
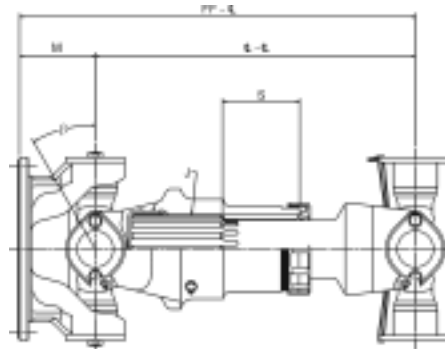
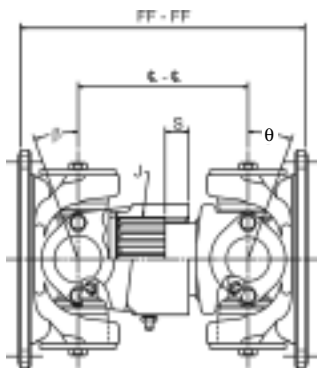
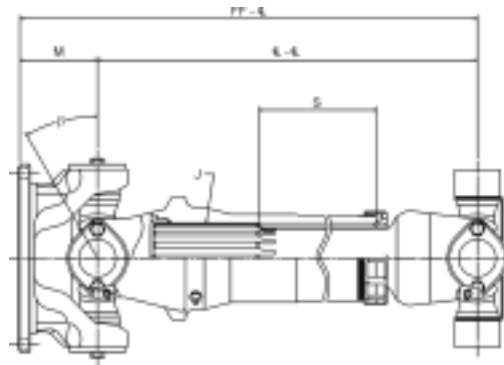
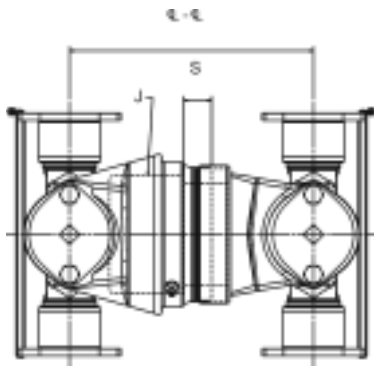
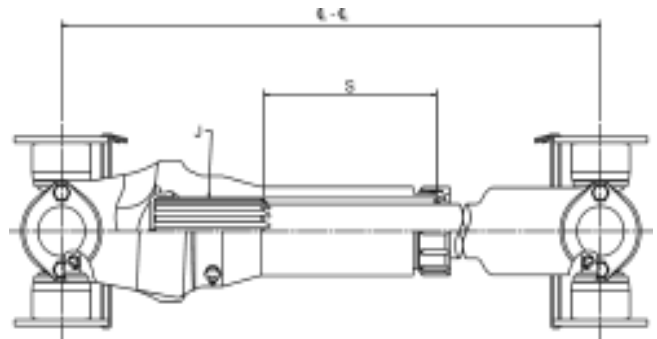
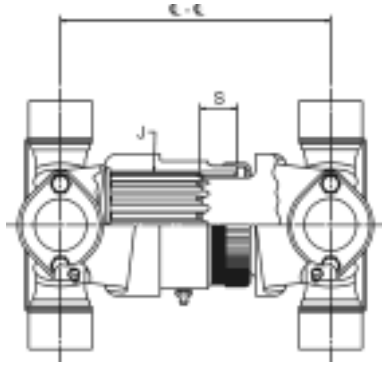
J = 2.500" - (63.5mm) - 16 Spline **S = 5.500" - (139.7mm)**

tubing Formula: T = ☉-☉ (Collapsed) minus 17.470" - (443.7mm)

	19.18" (487.2mm)	S.S.	5-280X	6-3-3441KX	6-40-521	6-28-467	5-280X	S.S.	911435
	19.81" (503.2mm)	S.S.	5-280X	6-3-3441KX	6-40-521	6-28-467	5-280X	S.S.	913045 (1)

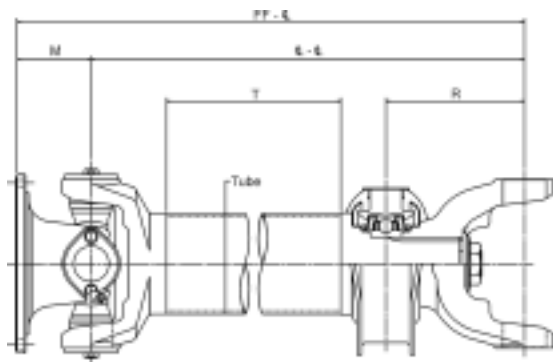
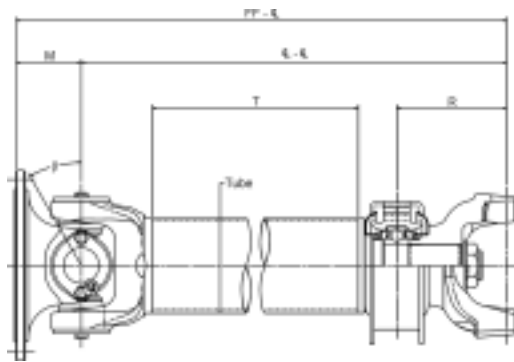
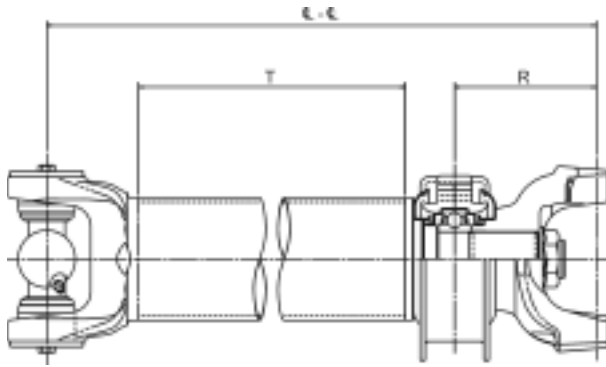
(1) Non-Standard tube size 4.09" x 0.180" (103.9 mm x 3.57 mm) Part #32-30-72

Short Coupled Configurations - Series 1610 - 1880



Minimum Length Collapsed		Slip Joint End				Tight Joint End		Assembly Part Number
FF-FF Flange Face to Flange Face	☉-☉ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Yoke Shaft	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	
J = 2.500" - (63.5mm) - 16 Spline		S = 2.328" - (59.1mm)						
	12.38" (314.5mm)	S.S.	5-677X	6.3-3-41KX	6.3-82-21-1	5-677X	S.S.	810664-1
	13.88" (352.5mm)	S.S.	5-677X	6.3-3-41KX	6.3-82-21-4	5-677X	S.S.	810664-4

Coupling Shaft Configurations - Series 1610 - 1880



Coupling Shaft Assembly

Series 1760

Standard Parts
 Standard Tube Size 4.0" x 0.134" (101.6mm x 3.40mm)
 Washer 230123-6
 Nut 20-74-91

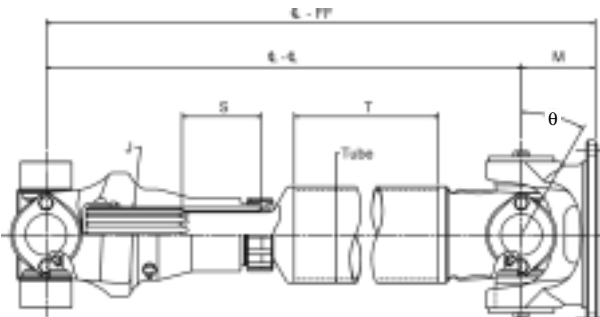
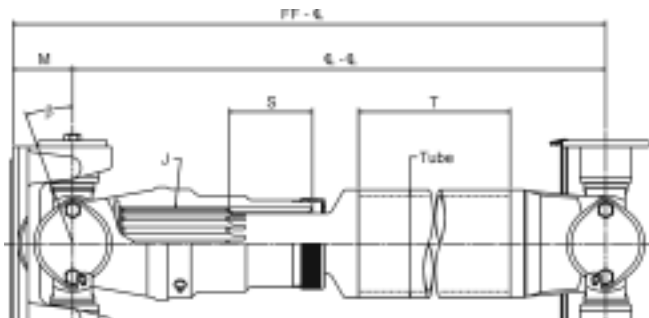
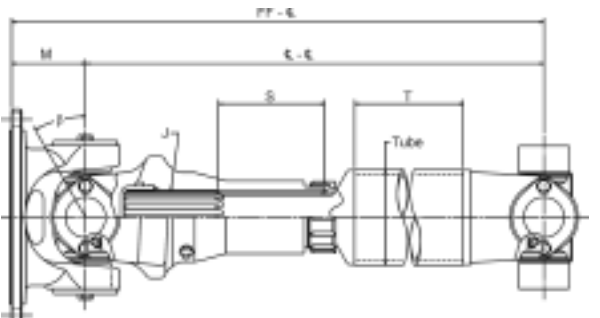
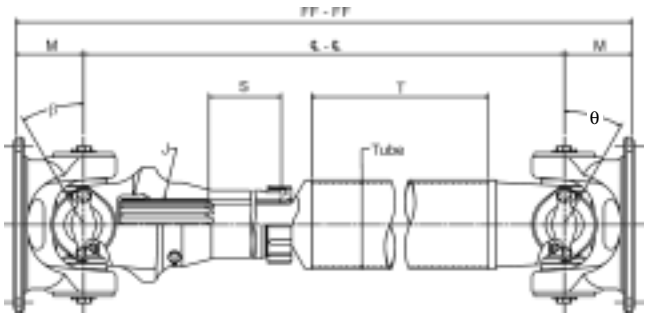
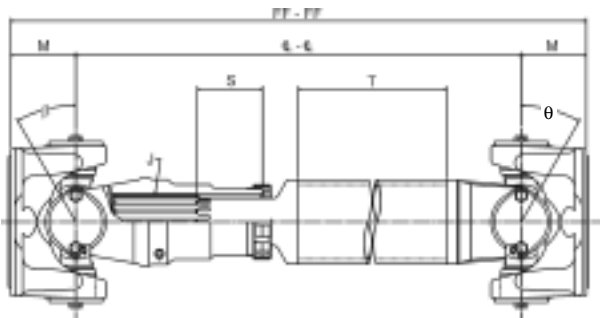
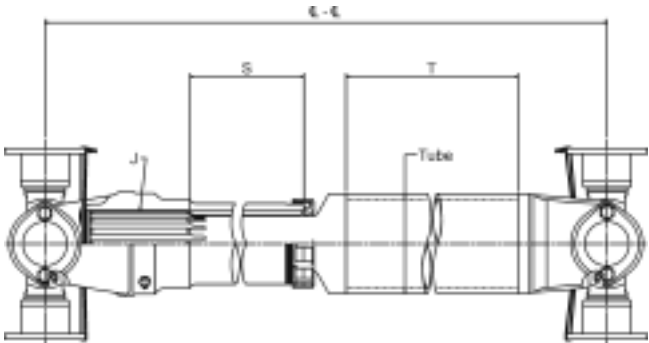
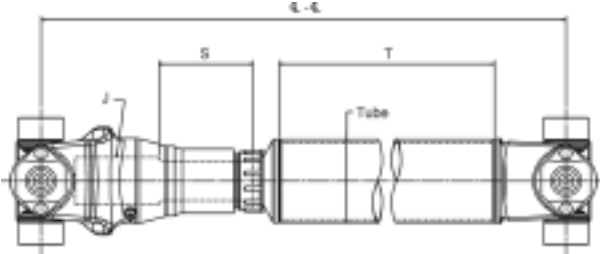
Minimum Length Collapsed		Tight Joint End				Center Bearing End			R	Assembly Part Number
FF-FF Flange Face to Centerline	☉-☉ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Tube Yoke	Tubing	Midship Tube Shaft	Center Bearing	End Yoke (Assy)	Center Bearing to End Yoke/Flange Face	

Tube Formula: $T = \text{☉-☉ (Collapsed)} \text{ minus } 11.250" - (285.8\text{mm})$

	13.63" (346.2mm)	S.S.	5-677X	6.3-28-17	32-30-72	6.3-53-21	210875-1X	6.3-4-821-1	6.2" (157.5mm)	811456 (1)
	13.63" (346.2mm)	S.S.	5-677X	6.3-28-17	32-30-92	6.3-53-21	210661-1X	6.3-4-821-1	6.2" (157.5mm)	810251
	13.63" (346.2mm)	S.S.	5-677X	6.3-28-17	32-30-72	6.3-53-21	210661-1X	6.3-4-821-1	6.2" (157.5mm)	810661 (1)

(1) Non-Standard tube size 4.09" x 0.180" (103.9 mm x 4.57 mm) Part #32-30-72

Tube Type Configurations - Series 1610 - 1880



Tube Type Assembly

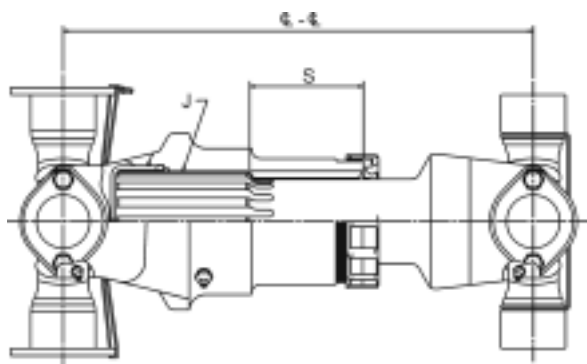
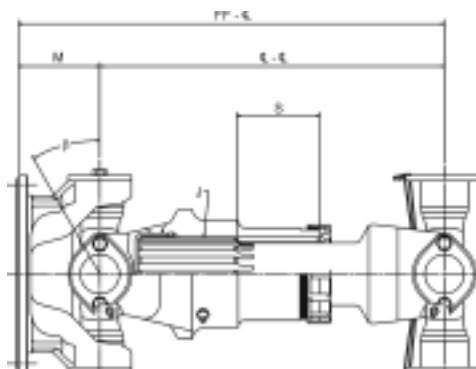
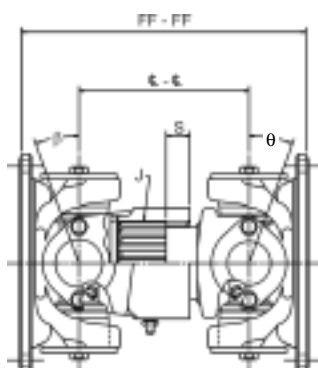
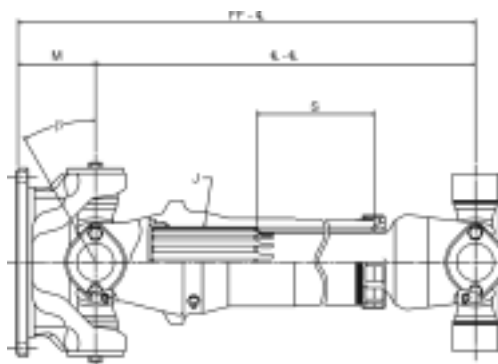
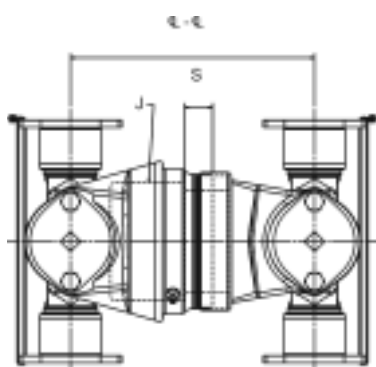
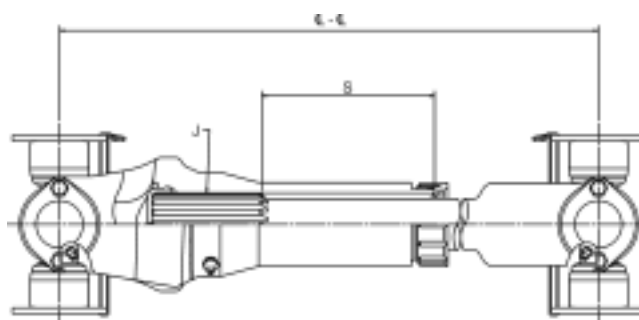
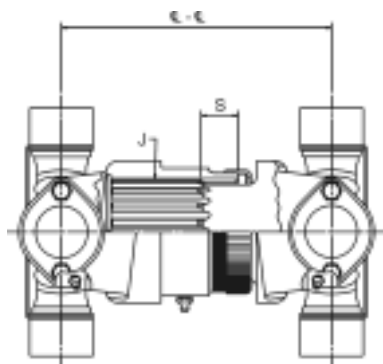
Series 1760

Standard Parts
 Standard Tube Size 4.0" x 0.134" (101.6mm x 0.340mm)
 Tube Part Number 32-30-92

Minimum Length Collapsed		Slip Joint End				Tight Joint End			Assembly Part Number
FF-FF Flange Face to Flange Face	☉-☉ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Tube Shaft	Tube Yoke	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	
<i>J = 2.500" - (63.5mm) - 16 Spline</i>		<i>S = 2.328" - (59.1mm)</i>							
<i> tubing Formula: T = ☉-☉ (Collapsed) minus 13.660" - (346.9mm)</i>									
	15.97" (405.6mm)	S.S.	5-677X	6.3-3-41KX	6-40-541	6.3-28-17	5-677X	S.S.	810654 (1)
<i>J = 2.500" - (63.5mm) - 16 Spline</i>		<i>S = 4.687" - (119.0mm)</i>							
<i> tubing Formula: T = ☉-☉ (Collapsed) minus 15.500" - (393.7mm)</i>									
	17.81" (452.4mm)	S.S.	5-677X	6.3-3-21KX	6-40-521	6.3-28-17	5-677X	S.S.	810074
	17.81" (452.4mm)	S.S.	5-677X	6.3-3-21KX	6-40-521	6.3-28-17	5-677X	S.S.	810566 (1)

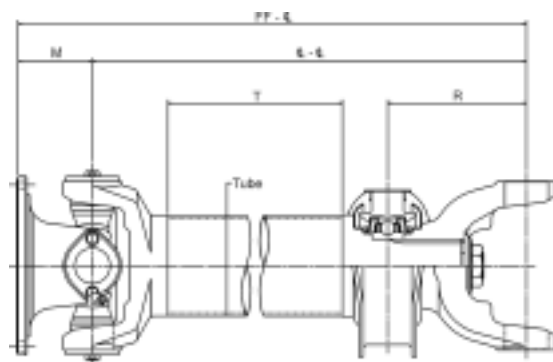
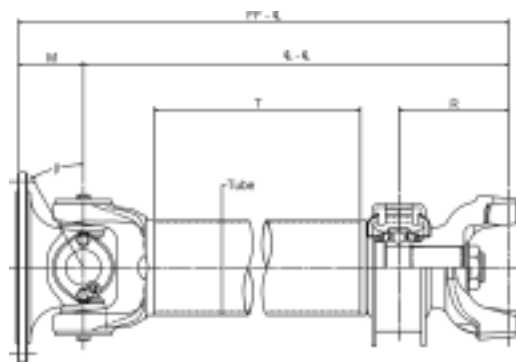
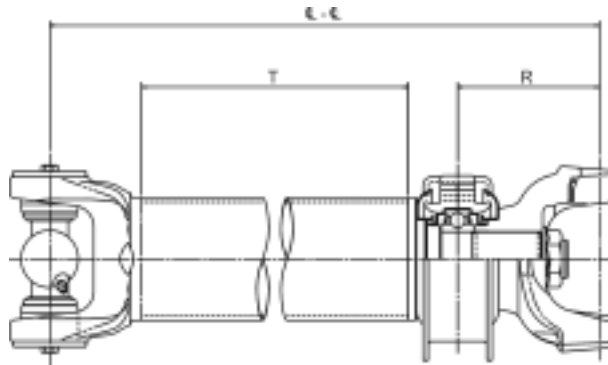
(1) Non-Standard tube size 4.09" x 0.180" (103.9 mm x 4.57 mm) Part #32-30-72

Short Coupled Configurations - Series 1610 - 1880



Minimum Length Collapsed		Slip Joint End				Tight Joint End		Assembly Part Number
FF-FF Flange Face to Flange Face	☐-☐ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Yoke Shaft	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	
<i>J = 3.000" - (76.2mm) - 16 Spline</i>		<i>S = 3.376" - (85.7mm)</i>						
	13.00" (330.2mm)	S.S.	5-676X	6.5-3-1431KX	6.5-82-451-1	5-676X	S.S.	805248-1
	14.00" (355.6mm)	S.S.	5-676X	6.5-3-1431KX	6.5-82-451-5	5-676X	S.S.	819702-1
17.38" (441.4mm)	14.00" (355.6mm)	6.5-2-329	5-281X	6.5-3-1431KX	6.5-82-451-5	5-281X	S.S.	916971-1
<i>J = 3.000" - (76.2mm) - 16 Spline</i>		<i>S = 5.000" - (127.0mm)</i>						
19.57" (497.1mm)	16.19" (411.2mm)	6.5-2-329	5-281X	6.5-3-1371KX	6.5-82-461-8	5-676X	S.S.	819530-2
<i>J = 3.250" - (82.6mm) - 18 Involute Spline</i>		<i>S = 1.125" - (28.6mm)</i>						
	8.22" (208.8mm)	S.S.	5-676X	6.5-3-1451KX	6.5-82-511-1	5-676X	S.S.	810500-1

Coupling Shaft Configurations - Series 1610 - 1880



Coupling Shaft Assembly

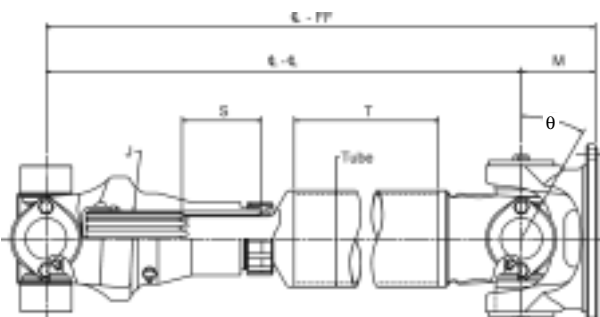
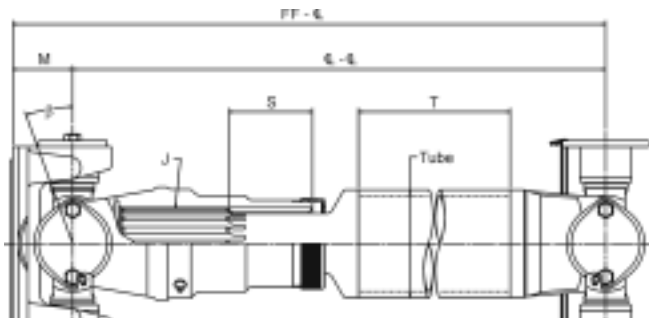
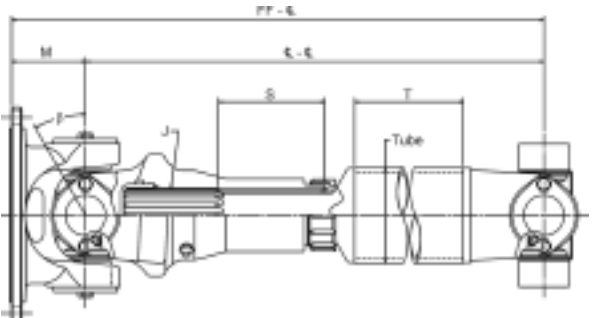
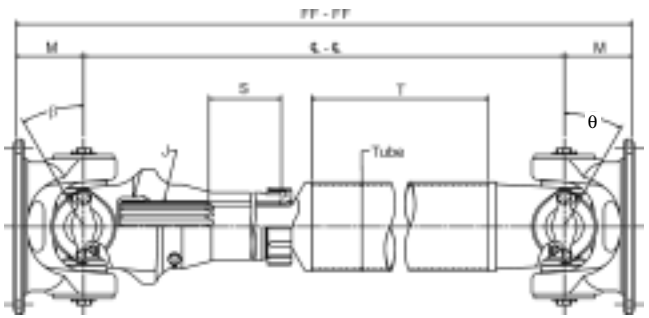
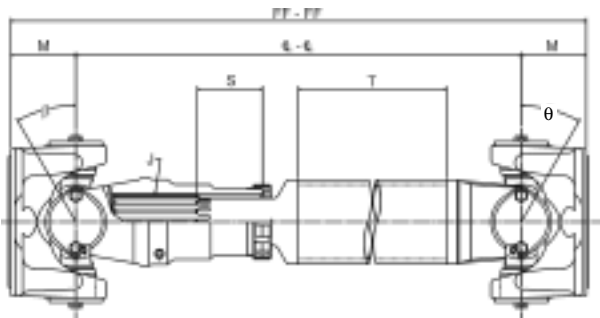
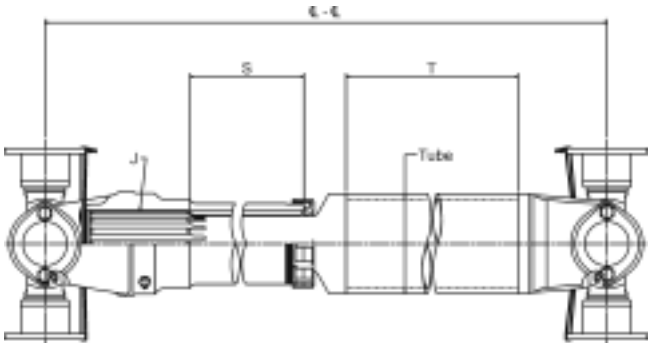
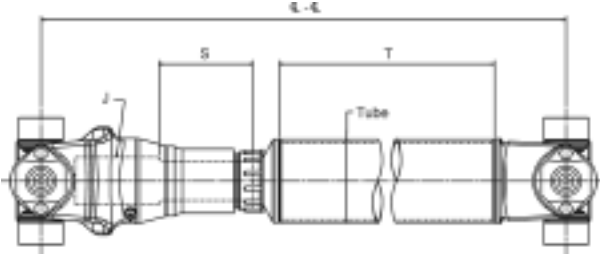
Series 1810

Standard Parts
 Standard Tube Size 4.5" x 0.134" (114.3mm x 3.40mm)
 Tube Part # 36-30-62
 Washer 230123-6
 Nut 20-74-91

Minimum Length Collapsed		Tight Joint End				Center Bearing End			R	Assembly Part Number
FF-FF Flange Face to Flange Face	☐-☐ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Tube yoke	Tubing	Midship Tube Shaft	Center Bearing	End Yoke (Assy)	Center Bearing to End Yoke/Flange Face	
<i>Tubing Formula: T = ☐-☐ (Collapsed) minus 11.590" - (294.4mm)</i>										
	14.20" (360.7mm)	S.S.	5-676X	5.6-28-117	36-30-62	6.5-53-171	210661-1x	6.5-4-3591-1	6.2" (157.5mm)	804149
	14.20" (360.7mm)	S.S.	5-676X	5.6-28-127	36-30-22	6.5-53-181	210661-1x	6.5-4-3591-1	6.2" (157.5mm)	804248 (1)
<i>Tubing Formula: T = FF-FF (Collapsed) minus 14.970" - (380.2mm)</i>										
17.60" (447.0mm)	14.22" (361.2mm)	6.5-2-329	5-281X	6.5-28-117	36-30-62	6.5-53-91	210875-1x	6.5-4-1891	6.2" (157.5mm)	911617

(1) Non-Standard tube size 4.50" x 0.259" (114.3 mm x 6.58 mm) Part #36-30-22

Tube Type Configurations - Series 1610 - 1880



Tube Type Assembly

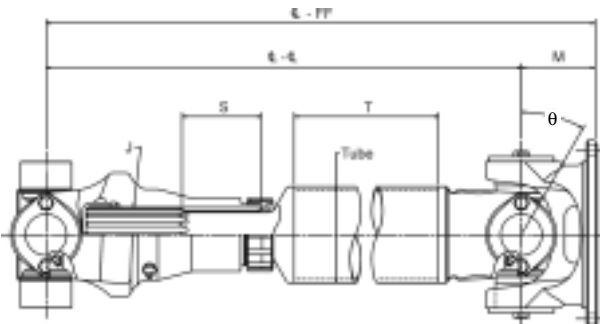
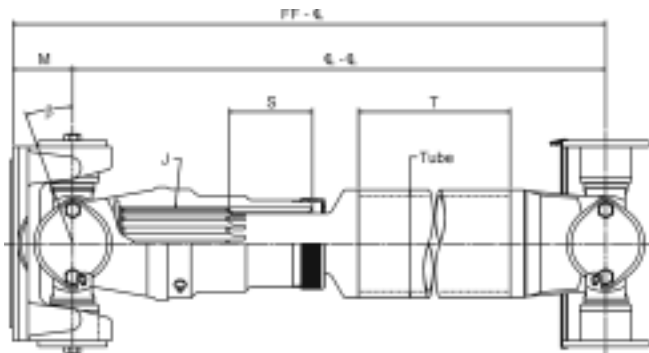
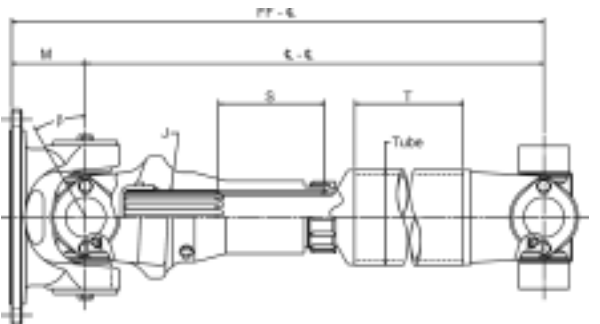
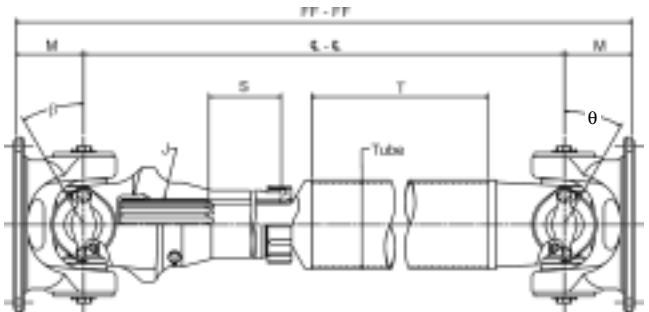
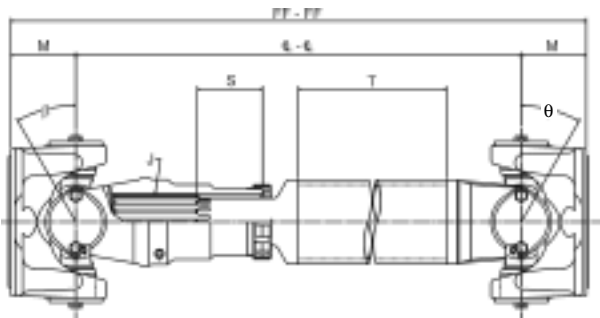
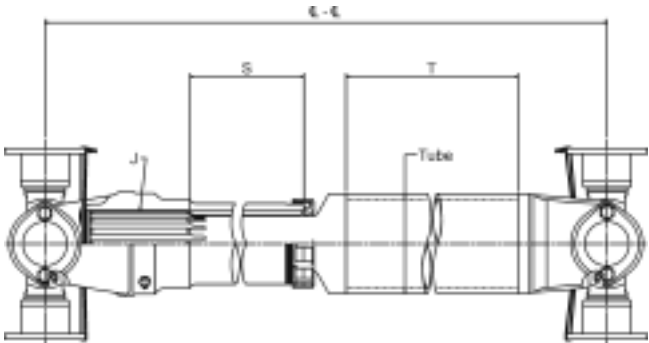
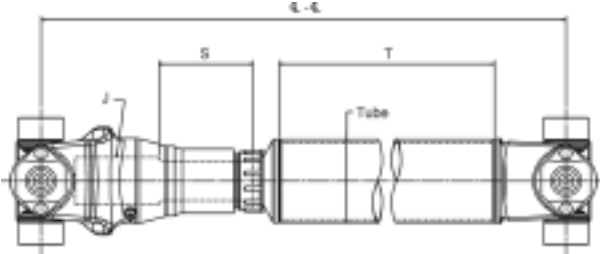
Series 1810

Standard Parts
 Standard Tube Size 4.5" x 0.134" (114.3mm x 3.40mm)
 Tube Part Number 36-30-62

Minimum Length Collapsed		Slip Joint End				Tight Joint End			Assembly Part Number
FF-FF Flange Face to Flange Face	Q-Q Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Tube Shaft	Tube Yoke	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	
J = 3.000" - (76.2mm) - 16 Spline		S = 3.375" - (85.7mm)							
Tubing Formula: T = FF-FF (Collapsed) minus 21.990" - (558.5mm)									
24.87" (631.7mm)	18.12" (460.2mm)	6.5-2-329	5-281X	6.5-3-1351KX	6.5-40-201	6.5-28-117	5-281X	6.5-2-329	917835
Tubing Formula: T = FF-FF (Collapsed) minus 22.410" - (569.2mm)									
25.19" (639.8mm)	18.44" (468.4mm)	6.5-2-329	5-281X	6.5-3-1351KX	8-40-91	6.5-28-127	5-281X	6.5-2-329	908392 (1)
J = 3.000" - (76.2mm) - 16 Spline		S = 5.000" - (127.0mm)							
Tubing Formula: T = Q-Q (Collapsed) minus 17.000" - 431.8mm									
	19.75" (501.7mm)	S.S.	5-676X	6.5-3-1371KX	6.5-40-191	6.5-28-117	5-676X	S.S.	804848
Tubing Formula: T = FF-FF (Collapsed) minus 20.380" - (517.7mm)									
23.12" (587.2mm)	19.740" (501.4mm)	6.5-2-329	5-281X	6.5-3-1371KX	6.5-40-191	6.5-28-117	5-676X	S.S.	821376
Tubing Formula: T = FF-FF (Collapsed) minus 20.870" - (530.1mm)									
23.71" (602.2mm)	20.13" (511.3mm)	6.5-2-15	5-281X	6.5-3-1371KX	8-40-101	6.5-28-127	5-676X	S.S.	821663 (1)
Tubing Formula: T = FF-FF (Collapsed) minus 23.750" - (603.3mm)									
26.50" (673.1mm)	19.75" (501.7mm)	6.5-2-329	5-281X	6.5-3-1371KX	6.5-40-191	6.5-28-117	5-281X	6.5-2-329	914582
26.68" (677.7mm)	19.92" (505.9mm)	6.5-2-329	5-281X	6.5-3-1371KX	6.5-40-191	6.5-28-117	5-281X	6.5-2-329	906323

(1) Non-Standard tube size 4.50" x 0.250" (114.3 mm x 6.58 mm) Part #36-30-22

Tube Type Configurations - Series 1610 - 1880



Tube Type Assembly

Series 1880

Standard Parts
 Standard Tube Size 4.5" x 0.259" (114.3mm x 6.58mm)
 Tube Part Number 36-30-22

Minimum Length Collapsed		Slip Joint End				Tight Joint End			Assembly Part Number
FF-FF Flange Face to Flange Face	☉-☉ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Tube Shaft	Tube Yoke	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	

tubing Formula: $T = FF-FF$ (Collapsed) minus 18.440" - (468.4mm)

21.28" (540.5mm)	18.78" (477.0mm)	8-2-119	5-308X	8-3-391KX	8-40-91	8-28-147	5-308X	S.S.	916587
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tubing Formula: $T = FF-FF$ (Collapsed) minus 19.440" - (493.8mm)

22.19" (563.6mm)	18.69" (474.7mm)	8-2-109	5-308X	8-3-391KX	8-40-91	8-28-147	5-308X	S.S.	908537
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tubing Formula: $T = FF-FF$ (Collapsed) minus 22.940" - (582.7mm)

25.69" (652.5mm)	18.69" (474.7mm)	8-2-109	5-308X	8-3-391KX	8-40-91	8-28-147	5-308X	8-2-109	905869
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$J = 3.000"$ - (76.2mm) - 16 Spline $S = 4.687"$ - (119.0mm)

tubing Formula: $T = FF-FF$ (Collapsed) minus 24.562" - (623.8mm)

27.31" (693.7mm)	20.31" (515.9mm)	8-2-109	5-308X	8-3-411KX	8-40-101	8-28-147	5-308X	8-2-109	905882
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Spicer® Life Series™ *Driveshafts*

The codes in this section are for quick reference to:

J = Major spline diameter and number of spline teeth

S = Total slip

FF-FF = Flange face to flange face

CL-CL = Centerline to centerline

S.S. = Shipping strap

B = Slip Joint max working angle (degrees)

θ = Tight Joint max working angle (degrees)

T = Tube Length

R = Center line of center bearing to center line of end yoke/flange face

M = Centerline to Flange Face

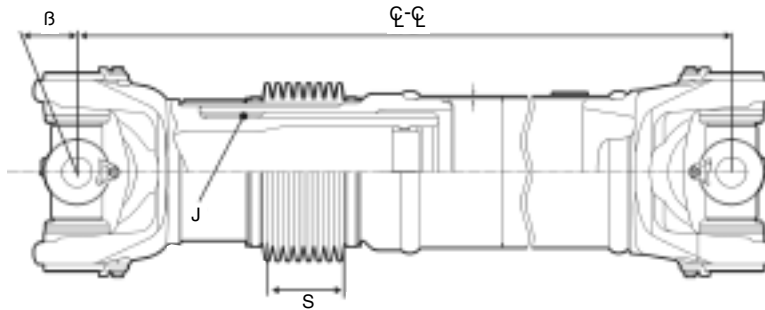
Tube Type

Standard Parts

Standard Tube Size 3.5" x 0.083" (88.9mm x 2.11mm)

Tube Part Number 28-30-62

Series SPL55



Minimum Length Collapsed		Slip Joint End				Tight Joint End			Assembly Part Number
FF- ϕ Flange Face to Centerline	ϕ - ϕ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Tube Shaft	Tube Yoke	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	

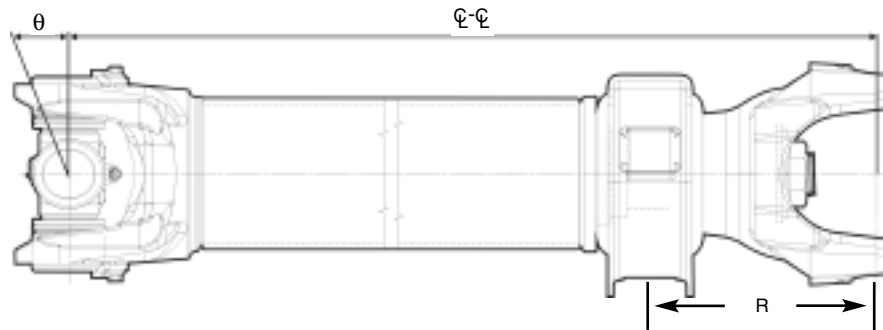
$J = 1.562'' - (39.6\text{mm})$ 16 Spline $S = 2.500'' - (63.5\text{mm})$

Tube Formula: $T = A - 2$ (Collapsed) minus $10.090'' - (256.3\text{mm})$

	11.57" (293.9mm)	S.S.	SPL55-1X	3-3-1601KX	3-40-1571	3-28-537	SPL55-1X	S.S.	922637
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Tube Formula: $T = FF - \phi$ (Collapsed) minus $12.090'' - (307.1\text{mm})$

13.55" (344.2mm)	11.55" (293.4mm)	3-2-479	SPL55-1X	3-3-1601KX	3-40-1571	3-28-537	SPL55-1X	S.S.	922636
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Minimum Length Collapsed		Tight Joint End				Center Bearing End			R	Assembly Part Number
FF-C Flange Face to Centerline	C-C Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Tube Yoke	Tubing	Midship Tube Shaft	Center Bearing	End Yoke (Assy)	Center Bearing to end Yoke Flange Face	
<i>Tubing Formula: T = C-C (Collapsed) minus 11.300" - (287.0mm)</i>										
	13.68" (347.5mm)	S.S.	SPL140X	140-28-17	100-30-3	140-53-11	210121-1X	140-4-11-1	5.96" (151.5mm)	140CS54025
	13.68" (347.5mm)	S.S.	SPL140X	140-28-17	100-30-3	140-53-11	5003326	140-4-11-1	5.96" (151.5mm)	140CS54031
<i>Tubing Formula: T = C-C (Collapsed) minus 11.600" - (294.6mm)</i>										
	13.79" (350.3mm)	S.S.	SPL140X	140-28-17	100-30-5	140-53-11	5003323	140-4-1011-1	6.10" (154.5mm)	140CS54013
	13.79" (350.3mm)	S.S.	SPL140X	140-28-17	100-30-5	140-53-11	5003326	140-4-1011-1	6.10" (154.5mm)	140CS54019
	13.79" (350.3mm)	S.S.	SPL140X	140-28-17	100-30-5	140-53-11	5003323	140-4-1011-1	6.10" (154.5mm)	140CS54043
	13.79" (350.3mm)	S.S.	SPL140X	140-28-17	100-30-3	140-53-11	5003323	140-4-1011-1	6.10" (154.5mm)	140CS54037

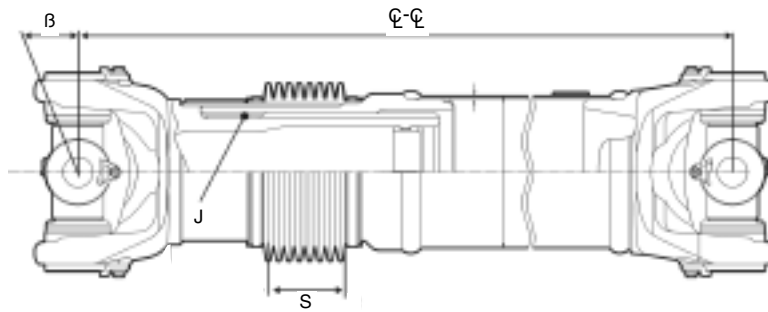
Tube Type Assembly

Standard Parts

Standard Tube Size 4.4" x 0.14" (111.7mm x 3.5mm)

Tube Part Number 100-30-3

Series SPL140



Minimum Length Collapsed		Tight Joint End				Center Bearing End			Assembly Part Number
FF-FF Flange Face to Flange Face	ϕ-ϕ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Tube Shaft	Tube Yoke	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	

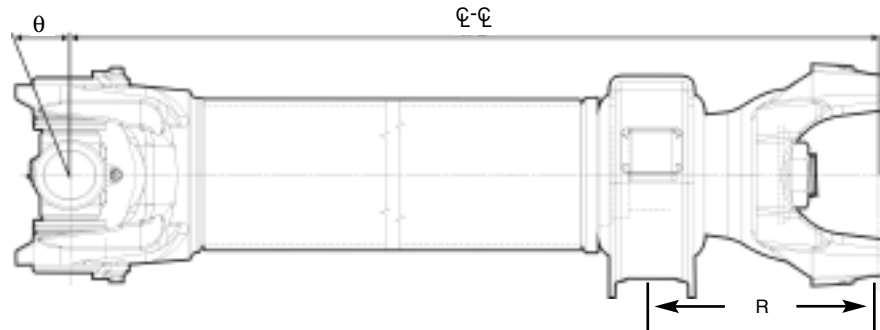
J = 3.07" - (78mm) - 30 Spline

S = 4.33" - (110mm)

tubing Formula: T = A-2 (Collapsed) minus 14.370" - (365.0mm) Minimum T = 2.678" - (68.0mm)

	16.92" (429.8mm)	S.S.	SPL140X	140-82-21X	140-55-21X	140-28-17	SPL140X	S.S.	140DS55007
	16.92" (429.8mm)	S.S.	SPL140X	140-82-21X	140-55-21X	140-28-17	SPL140X	S.S.	140DS55001(1)

(1) Non-Standard tube size 4.3" x 0.20" (110 mm x 5 mm) Part #100-30-5



Minimum Length		Tight Joint End				Center Bearing End			R	Assembly Part Number
FF-C Flange Face to Centerline	C-C Centerline to Centerline	Flange Yoke or S.S.	U-Joint Kit	Tube Yoke	Tubing	Midship Tube Shaft	Center Bearing (Shipping Strap)	End Yoke (Assy)	Center Bearing to end Yoke Flange Face	

Tube Formula: $T = C-C$ (Collapsed) minus 12" - (304.8mm)

	14.45" (367.0mm)	S.S	SPL170X	170-28-17	120-30-3	250-53-11	5003326	170-4-1271-1	6.30" (160mm)	170CS54027C
	14.47" (367.5mm)	S.S	SPL170X	170-28-17	120-30-3	250-53-11	5003323	170-4-1271-1	6.30" (160mm)	170CS54018C
	14.45" (367.0mm)	S.S	SPL170X	170-28-17	120-30-4	250-53-11	5003323	170-4-1271-1	6.30" (160mm)	170CS54016C

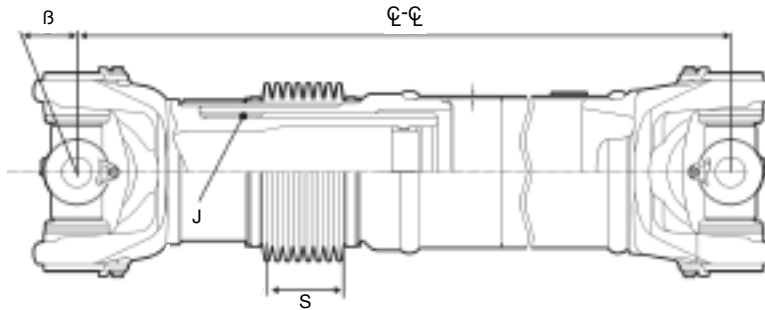
Tube Type Assembly

Standard Parts

Standard Tube Size 4.9" x 0.12" (124.5mm x 3.0mm)

Tube Part Number 120-30-3

Series SPL 170



Minimum Length Collapsed		Slip Joint End				Tight Joint End			Assembly Part Number
FF-FF Flange Face to Flange Face	Φ-Φ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Tube Shaft	Tube Yoke	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	

J = 3.85" - 98mm - 38 Spline

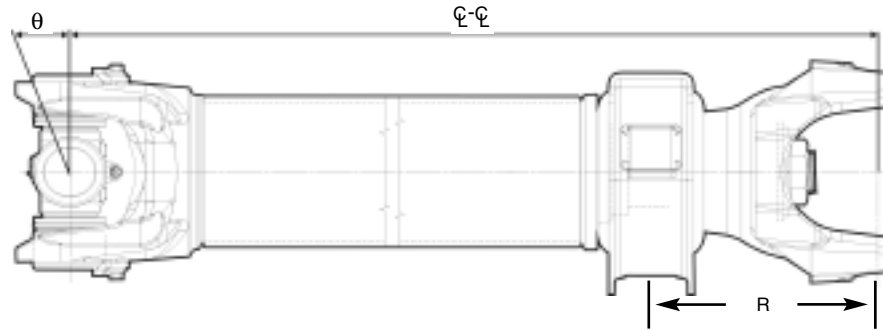
S = 4.3" - 110mm

tubing Formula: T = Φ-Φ (Collapsed) minus 14.60" - (371.0mm) Minimum T = 2.678" - (68.0mm)

17.28" (438.9mm)	S.S.	SPL170X	170-82-21X	250-55-31X	170-28-17	SPL170X	S.S.	170DS55002C (1)
17.28" (438.9mm)	S.S.	SPL170X	170-82-21X	250-55-31X	170-28-17	SPL170X	S.S.	170DS55001C
20.08" (510.0mm)	S.S.	SPL170X	170-82-71X	170-55-21-2X	170-28-27	SPL170X	S.S.	170DS55005C (2)

(1) Non-Standard tube size 5.06" x 1.67" (128.5 mm x 4.25 mm) Part #120-30-4

(2) Non-Standard tube size 4.72" x 0.19" (120 mm x 5 mm) Part #110-30-5



Minimum Length Collapsed		Tight Joint End				Center Bearing End			R	Assembly Part Number
FF-FF Flange Face to Centerline	C-C Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Tube Yoke	Tubing	Midship Tube Shaft	Center Bearing	End Yoke (Assy)	Center Bearing to end Yoke Flange Face	

Tube Formula: $T = C-C$ (Collapsed) minus 12.67" - (321.8mm)

(384.0mm)	15.12"	S.S	SPL250X	250-28-17	120-30-4	250-53-11	5003323	250-4-21-1	6.45" (164mm)	250CS54005C
	15.12" (384.0mm)	S.S	SPL250X	250-28-17	120-30-5	250-53-11	5003326	250-4-21-1	6.45" (164mm)	250CS54018C
	15.05" (382.3mm)	S.S	SPL250X	250-28-17	120-30-5	250-53-11	5003323	250-4-21-1	6.45" (164mm)	250CS54006C

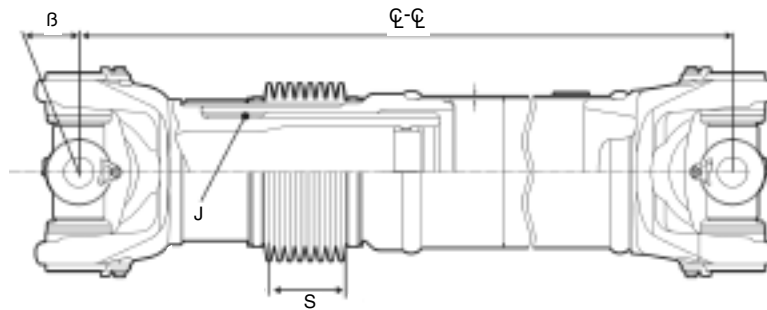
Tube Type Assembly

Standard Parts

Standard Tube Size 5.06" x 0.17" (128.5mm x 4.32mm)

Tube Part Number 120-30-4

Series SPL 250



Minimum Length Collapsed		Slip Joint End				Tight Joint End			Assembly Part Number
FF-FF Flange Face to Flange Face	$\Phi-\Phi$ Centerline to Centerline	Flange Yoke or S.S. (Shipping Strap)	U-Joint Kit	Slip Yoke Assembly (Includes Dust Cap Kit)	Tube Shaft	Tube Yoke	U-Joint Kit	Flange Yoke or S.S. (Shipping Strap)	

J = 3.85" - (98mm)

S = 4.33" - (110mm)

tubing Formula: $T = \Phi-\Phi$ (Collapsed) minus 15.00" - 381.0mm

17.71" (450.0mm)	S.S.	SPL250X	250-82-21X	250-55-31X	250-28-17	SPL250X	S.S.	250DS55006C (1)
17.71" (450.0mm)	S.S.	SPL250X	250-82-21X	250-55-31X	250-28-17	SPL250X	S.S.	250DS55005C

(1) Non-Standard tube size 5.12" x 0.19" (130 mm x 5 mm) Part #120-30-5

Spicer[®]
Wing Bearing

"WING BEARING" or "C - Positive Type" Driveshafts

Spicer Italcardano driveshafts main feature is that torque transfer occurs through mechanical drive, by means of keys placed on the bearing blocks .

These keys are mated to corresponding slots machined on connecting fitting yokes.

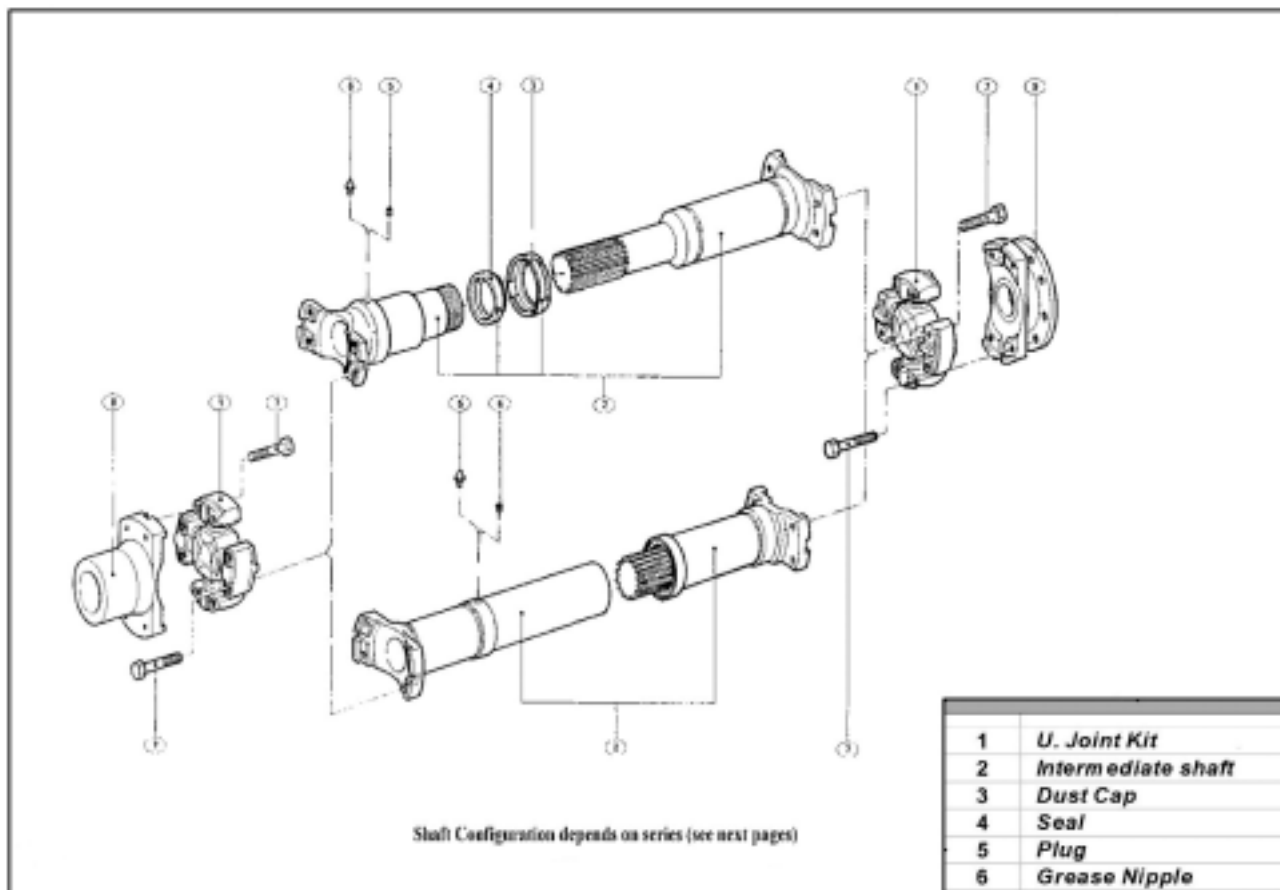
This feature offers great advantages for all those applications characterized by continuous load variations or shock loads.

The main benefit of having bearing blocks directly connected to output flanges are:

- **Extremely high flexibility of use**
- **Fitting for all applications with short application lengths**
- **Smaller joints working angles**
- **Quicker dismantling of the whole shaft (4 bolts each side)**
- **U-joint kits can be disassembled and replaced without dismantling the whole shaft, making field maintenance easier**

This type of driveshaft is already an established leader. A series of end fittings are available to facilitate its utilization.

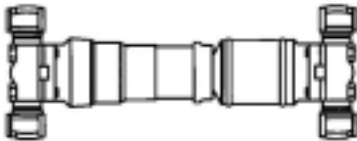
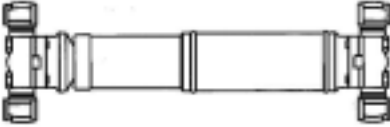
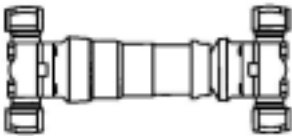
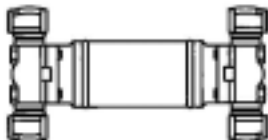
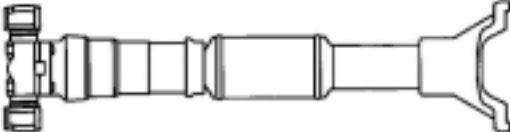
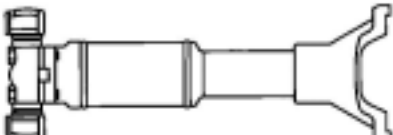
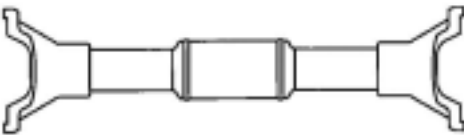
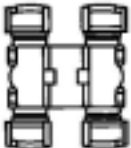

Driveshaft Exploded View



Shaft Configuration depends on series (see next pages)

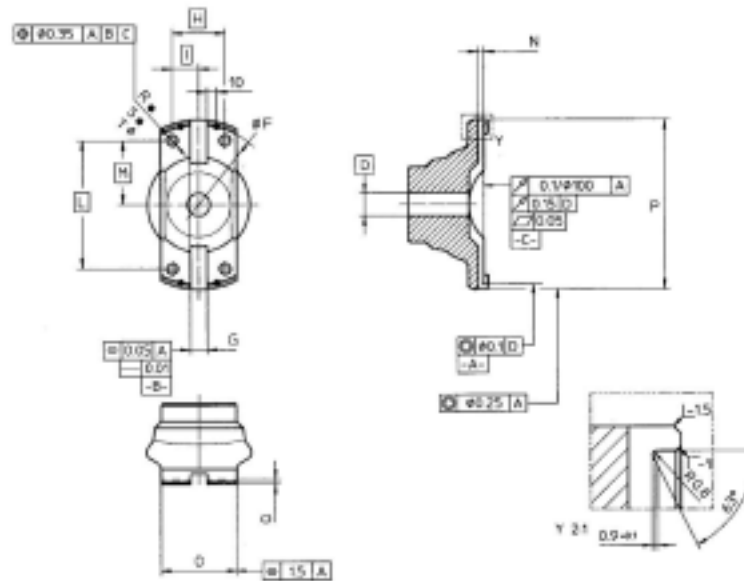
1	U. Joint Kit
2	Intermediate shaft
3	Dust Cap
4	Seal
5	Plug
6	Grease Nipple
7	Bolt
8	End Fitting
9	Adaptor

Wing Bearing Types

010		<i>Tube with length compensation</i>
015		<i>Tube long slip</i>
020		<i>Short coupling with length compensation</i>
030		<i>Tube rigid</i>
035		<i>With length compensation and center bearing</i>
040		<i>Rigid with center bearing</i>
050		<i>Twin center bearing shaft assembly</i>
060		<i>Double Joint</i>
065		<i>Centered Double Joint</i>

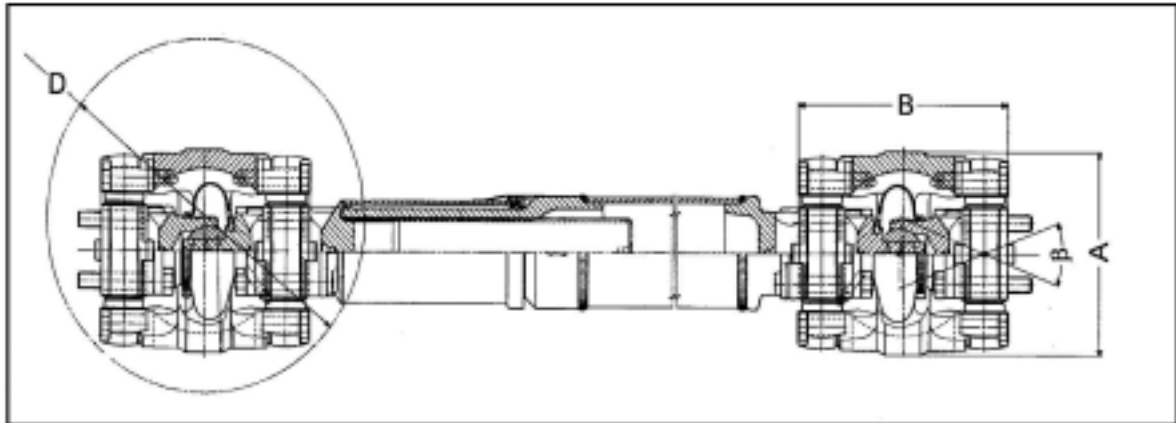
Coupling Dimensions

Spicer Italcardan can supply a wide range of Wing Style end fittings; these can be also supplied semi-finished in case the customer prefers to machine the parts or due to broach availability. In this case it is necessary that connecting dimensions meet specifications listed in the table below. This allows the best working conditions, avoiding vibrations or premature wear of the u-joint bearings. Quotations can be submitted upon request.



Series	F ^{+0.05}	G ^{+0.04}	H	I	L	M	N ^{±0.02}	O ₁ ⁺²	P ^{±0.25}	Q ^{±0.25}	R Metric	S Inches
80M 20 2C	79.35	9.5	33.32	16.66	59.53	29.765	3.8	48	85	2.8	-	5/16" 24UNF-2B
108M 40 4C	107.92	9.5	36.52	18.26	87.32	43.66	3.8	53	116	3.3	-	5/16" 24UNF-2B
115M 50 5C	115.08	14.28	42.9	21.5	88.9	44.45	5.1	62	123	4	M10x1.5	3/8" 24UNF-2B
140M 60 6C	140.46	14.28	42.9	21.45	114.3	57.15	5.1	63	150	4	M10x1.5	3/8" 24UNF-2B
148M 70 7C	148.38	15.85	49.2	24.6	117.5	58.75	5.9	72	158	4.8	M12x1.75	1/2" 20UNF-2B
206M 80 8C	206.32	15.85	49.2	24.6	174.6	87.3	5.9	72	216	4.8	M12x1.75	1/2" 20UNF-2B
165M 85 8.5C	165.07	15.85	71.42	35.71	123.8	61.9	5.9	96	175	4.8	M12x1.75	1/2" 20UNF-2B
209M 90 9C	209.52	15.85	71.42	35.71	168.28	84.14	5.9	100	223	4.8	M12x1.75	1/2" 20UNF-2B
213M 100 10C	212.7	25.35	92.1	46.05	165.1	82.55	9.5	123	225	6.4	M16x2	5/8" 18UNF-2B
222M 110 11C	222.25	25.35	88.9	44.45	172.7	86.35	9.5	123	235	6.4	M20x2.5	3/4" 16UNF-2B
288M 120 12C	288.9	25.37	92.1	46.05	241.3	120.65	9.5	123	301	6.4	M14x1.5	-
280M 220 12.5C	280	35	92	46	227	113.5	8.5	130	295	8	M18x1.5	-
339M 140 14C	338.8	28.6	134.88	67.44	269.5	134.75	13	185	360	6.4	M18x1.5	-
310M 230 14.5C	310	44	107	53.5	252	126	9.5	152	326	9	M22x1.5	-
260M 160 15C	259.98	31.725	99.98	49.99	199.94	99.97	12.5	135	273	6.4	M20x2.5	3/4" 16UNF-2B

Double Centered Joints



Series	β_{max}	A	B	D
140M60 6C	43	155	162	255
148M70 7C	43	163	204	300
165M85 8.5C	43	190	221.6	330

Double centered joints are designed for high and variable angle requirements. By dividing the angle between two coupled yokes equally at any total angle between zero and the maximum operating angle, constant velocity is always produced on the driven shaft in any position.

A constant velocity (cv) joint is basically two standard single-cardan joints connected in phase by a coupling yoke. A unique centering device divides the angle between the shafts into equal angles. This results in constant velocity (cv) and can eliminate many vibration problems related to single cardan driveshafts.

These vibrations can cause intermittent stress levels that exceed the design limits of transmissions, differential gears or other components.

In a conventional driveshaft assembly the majority of shaft mass does not operate at constant velocity and at high speeds damaging vibrations can result from torsional and inertial forces at moderate angularity. At high angularity and torques, these vibrations are caused by secondary couple loads at low speeds. In either case, the CV joint is designed to eliminate the vibration and resulting stress peaks.

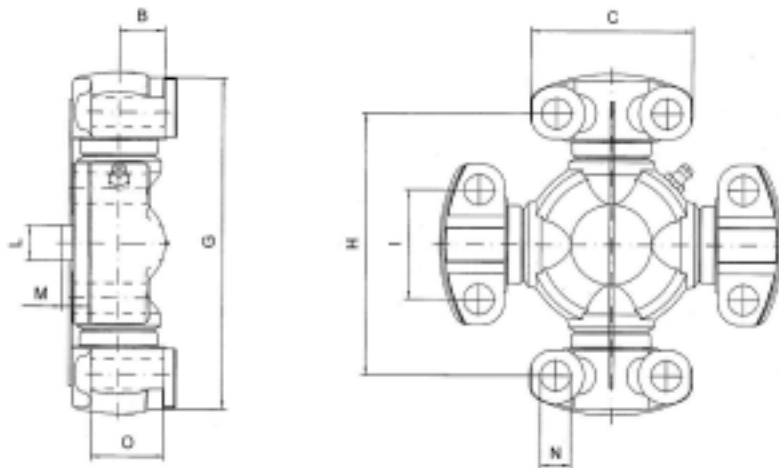
Above parts are special and available upon request to be evaluated by Spicer Italcarno.

Wing Style Universal Joint Kits

Universal joint kits used on the Spicer Italcardan range of driveshafts meet International standards. They may be used to connect all mechanical components having this type of connection. High quality manufacturing finishing and heat treatment processes contribute to reach an increased durability.

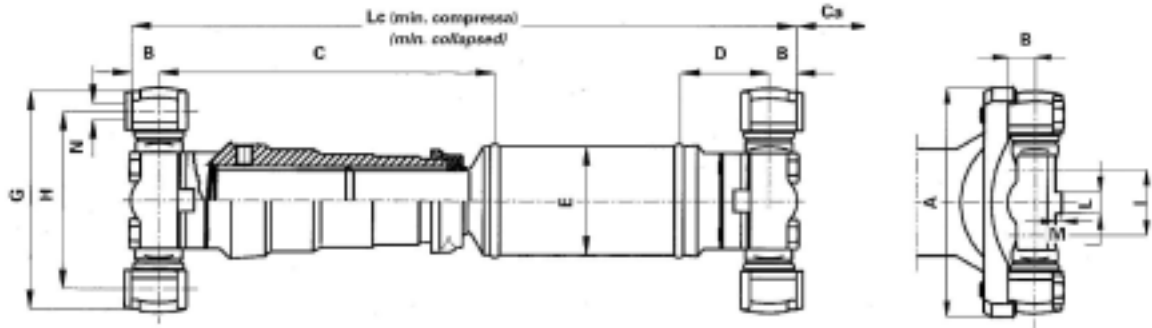
All universal joints can be supplied in the following configurations:

- Re-lube type (grease nipple fitted)
- Service Free type SF (pre-lube, no maintenance required, no grease nipple)

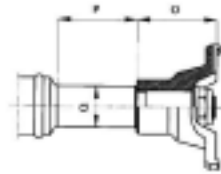


	80M20 2C	108M40 4C	165M50 5C	140M60 6C	148M70 7C	206M80 8C	165M89 8,5C	209M90 9C	215M100 10C	222M110 11C	288M120 12C	280M220 12,5C	339M140 14C	310M230 14,5C	280M150 15C
G	79.35	107.92	115.06	140.46	148.38	206.32	165.1	209.52	212.7	222.17	288.9	280	338.8	310	259.58
B	13.1	15.5	17.5	17.5	20.6	20.6	25.4	25.4	32.5	34	32.58	38	49	44	38
C	48	51	62	62	72	72	96	96	120	120	121.5	128	185	147	135
H	59.53	87.32	88.9	114.3	117.48	174.6	123.83	168.25	165.1	172.7	241.35	227	270	252	199.94
I	33.32	36.52	42.9	42.9	49.2	49.2	71.44	71.44	92.1	88.9	92.1	92	134.88	107	99.98
L	9.5	9.5	14.26	14.26	15.85	15.85	15.85	15.85	25.35	25.35	25.37	35	29	44	31.73
M	3.1	3.1	4.1	4.1	5.1	5.1	5.2	5.2	8.5	8.5	8.3	8	12	8	12
N	8.4	8.75	10.5	10.5	13.5	13.5	13.5	13.5	17	20	15	19	19	24	21
O	8	25	29	29	33	33	40	40	49	52	51	62	70	68	58

Wing Bearing Series 80 M 20 - 2C

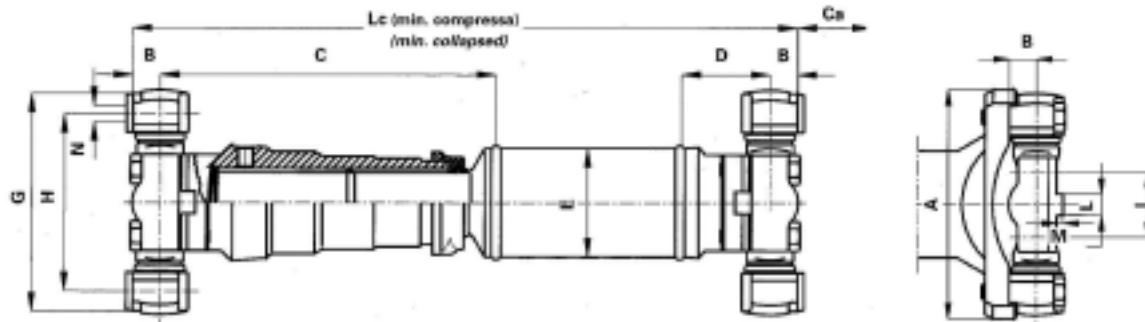


Dimensions						Bolt Size	
A	87	G	79.35	N	8.8	METRIC	INCHES
B	13.1	H	59.53	O	-	-	5/16" 24 UNF
C	172.6	I	33.32	P	-	Spline 35x2x16 DIN 5480	
D	40.1	L	9.5	Q	-		
E	50x3	M	3.1				

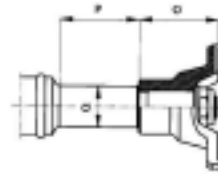


Type	Model	Lc (mm)	Ca (mm) slip	β max (°)	Base Part Numbers
010		280	50	20	611460000
015					
020		165	25	20	611960000
030		133	-	20	
035					
040					
050					
0060		73	-	10	

Wing Bearing Series 108 M 40 - 4C



Dimensions						Bolt Size	
A	116	G	107.92	N	8.75	METRIC	INCHES
B	15.5	H	87.32	O	-	-	5/16" 24 UNF
C	176	I	38.52	P	-	Spline Size	
D	50.5	L	9.5	Q	-		
E	50x3	M	3.1			35x2x16 DIN 5480	

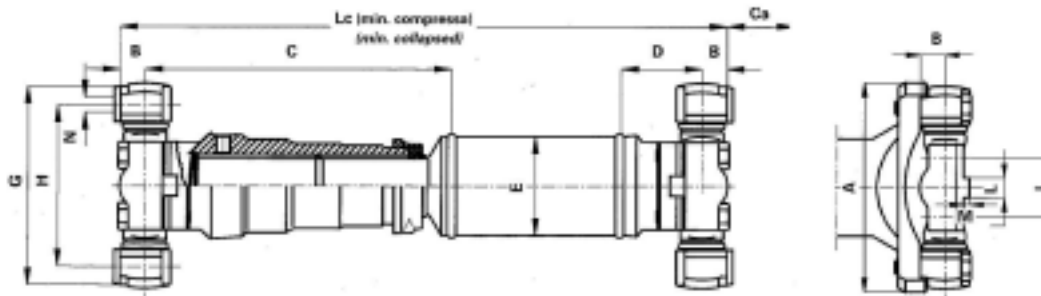


Type	Model	Lc (mm)	Ca (mm) slip	β max (°)	Base Part Numbers
010		307	50	22	609300003
015					
020		178	28	15	607740003
		186	28	22	607750000
		225	43	22	607770000
		257	50	22	607780000
030		180	-	22	608550000
035					
040					
050					
060		86	-	15	602310025
		100	-	20	602310036
					*602310045

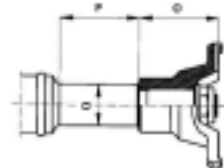
Missing types not detailed above, may be available upon request

* SERVICE FEE

Wing Bearing Series 115 M 50 - 5C



Dimensions						Bolt Size	
A	123	G	115.06	N	10.5	METRIC	INCHES
B	17.5	H	88.9	O	95	M10x1.5	3/8" 24 UNF
C	210	I	42.9	P	100	Spline Size	
D	62.5	L	14.26	Q	45		
E	58x4	M	4.1			45x2x21 DIN 5480	

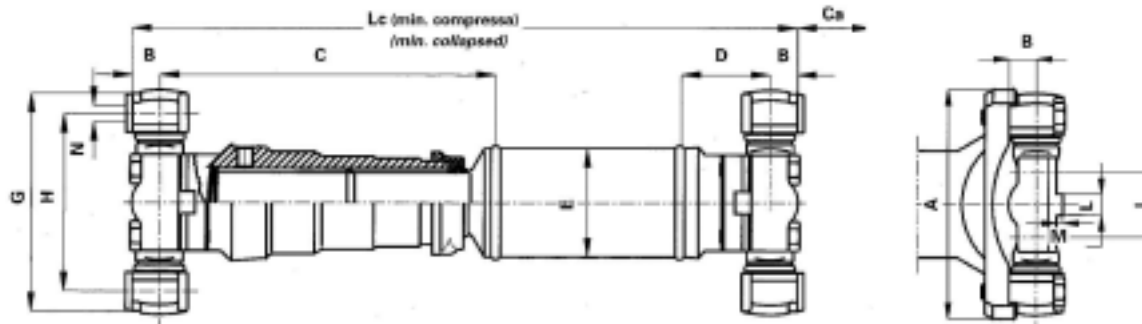


Type	Model	Lc (mm)	Ca (mm) slp	β max (°)	Base Part Numbers
010		355	60	30	608790000
					*605600006
015		405	110	30	612636000
020		155	20	7	611380000
		201	26	17	605360098
		223	45	17	607410000
		247	45	17	607420000
		271	45	17	607430000
		297	72	17	*607860028
		340	72	30	607440000 607450000
030					
035		200	-	30	60590000
					*60590034
040					
050		222	-	25	644120010
		330		25	607270000
060		229	-	25	644120006
		101	-	15	605430001
		105	-	18	605430005
		116	-	20	603290021 *603290029

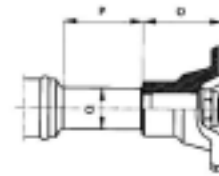
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* SERVICE FEE

Wing Bearing Series 140 M 60 - 6C



Dimensions						Bolt Size	
A	150	G	140.46	N	10.5	METRIC	INCHES
B	17.5	H	114.3	O	80	M10x1.5	3/8" 24 UNF
C	215	I	42.9	P	78.5	Spline Size	
D	57.5	L	14.26	Q	55		
E	70x4	M	4.1			45x2x21 DIN 5480	

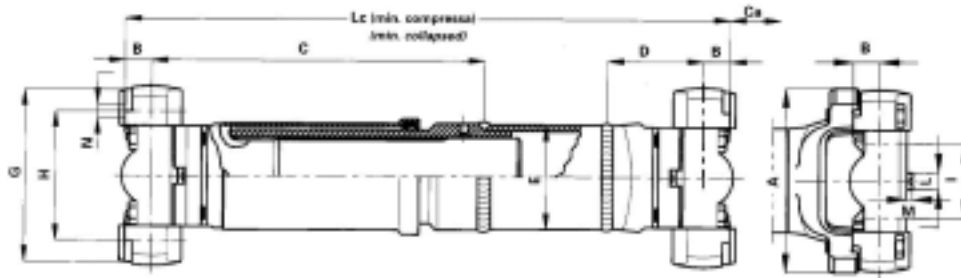


Type	Model	Lc (mm)	Ca (mm) slip	β max (°)	Base Part Numbers	
010		362	60	25	608760000	
					*602380072	
015		395	120	25	612632000	
					*612632033	
020		165	21	10	602380067	
		210	30	15	607460000	
		221	30	25	607470000	
		226	30	25	602380077	
		241	50	25	607480000	
		259	50	25	607490000	
						*607490011
		280	75	25	607500000	
		310	75	25	*611170038	
		345	75	25	607510000	
030		200	-	25	607520000	
					*607490023	
035		510	60	25	608330008	
					*608330026	
040		350	-	25	612780000	
					611320000	
050		480	-	25	*611320029	
					610280000	
060		98.5	-	10	602320008	
		127	-	19	601970003	

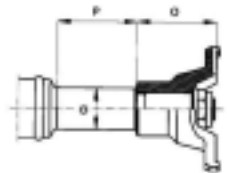
Missing types not detailed above, may be available upon request

* SERVICE FEE

Wing Bearing Series 148M 70 - 7C



Dimensions						Bolt Size	
A	158	G	148.38	N	13.5	METRIC	INCHES
B	20.6	H	117.5	O	94.5	M12x1.75	1/2" 20 UNF
C	262.1	I	49.2	P	108	Spline Size	
D	70.6	L	15.85	Q	60		
E	88x4	M	5.1			55x2.5x20 DIN 5480	

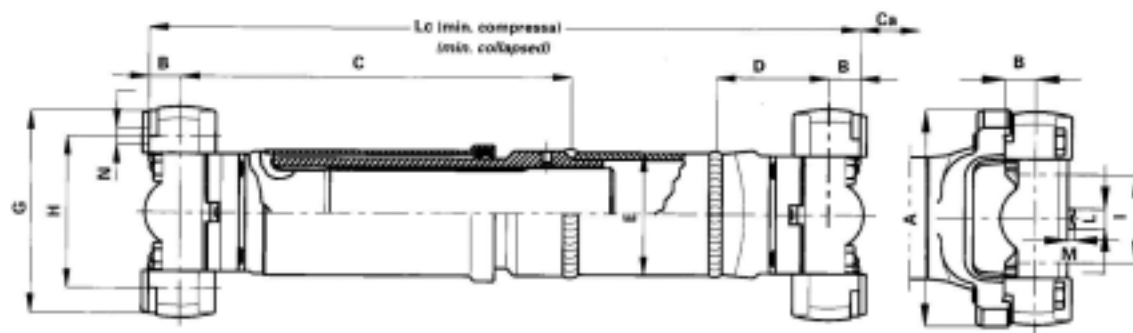


Type	Model	Lc (mm)	Ca (mm) slip	β_{max} (°)	Base Part Numbers
010		450	130	25	612370000
					*612370122
015		550	150	25	605850000
020		225	30	25	611290039
		232	51	17	607540000
		259	45	25	*611290082
		280	75	25	607540000
		310	75	25	607550000
		351	80	25	*611290080
		391	80	25	607560000
		406	130	25	*606910001
		406	130	25	607630000
030		219	-	25	*611290064
035		590	130	25	607640000
040		370	-	25	*611290103
050		507	-	28	607650000
060		124	-	12	*606910005
		127	-	15	602880186
		136.4	-	22.5	605120014
		140	-	10	*605120027
		152.4	-	25	610370004
		178.3	-	25	611310015
		195	-	25	*611310034

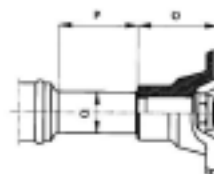
Missing types not detailed above, may be available upon request

* SERVICE FEE

Wing Bearing Series 206 M 80 - 8C



Dimensions					Bolt Size		
A	216	G	206.32	N	13.5	METRIC	INCHES
B	20.8	H	174.6	O	125	M12x1.75	1/2" 20 UNF
C	320	I	49.2	P	112	Spline Size	
D	85.6	L	15.85	Q	65		
E	100x6	M	5.1			75x2.5x28 DIN 5480	

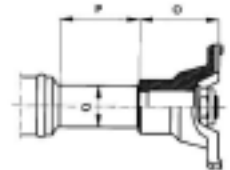
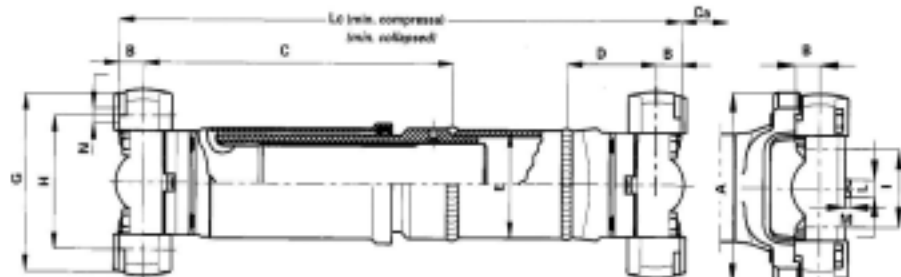


Type	Model	Lc (mm)	Ca (mm) slip	β max (°)	Base Part Numbers
010		497.5	130	30	602940022
					*602940028
015					
020		271	30	26	
		305	50	30	608070000
		344	60	30	608080000
		447	130	30	608080002
030		260	-	25	602030009
					*602030006
035					
040		425	-	30	612635010
050					
060		178	-	30	606660010
		237.4	-	30	606660009

Missing types not detailed above, may be available upon request

* SERVICE FEE

Wing Bearing Series 165 M 85 - 8.5C



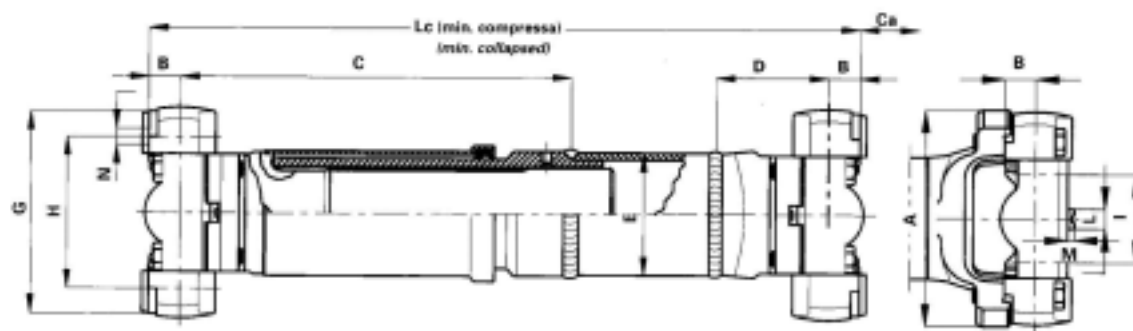
Dimensions						Bolt Size	
A	175	G	165.1	N	13.5	METRIC	INCHES
B	25.4	H	123.8	O	124	M12x1.75	1/2" 20 UNF
C	315.4	I	71.42	P	112	Spline Size	
D	90.4	L	15.85	Q	65		
E	100x6	M	5.2			75x2.5x28 DIN 5480	

Type	Model	Lc (mm)	Ca (mm) slip	β max (°)	Base Part Numbers
010		505	130	25	612290000
					612290054
015					
020		275	30	13	612500023
					*612500086
		290	53	13	612500168
					*612500090
		310	65	25	612500024
					*609750001
		326	61	25	612500025
					*612500138
		340	65	25	612500026
			612500028		
			*612500096		
			612500034		
			*612500093		
			612500060		
			*612500079		
030		280	-	25	612643000
					*610350002
035					
040		440	-	25	608370018
					*608370028
050		580	-	25	
060		152.4	-	16	606570001
		169	-	23	606570014
		195	-	25	606570021
		220	-	25	*606570010
		226.6	-	25	

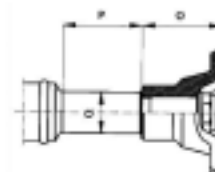
Missing types not detailed above, may be available upon request

* SERVICE FEE

Wing Bearing Series 209 M 90 - 9C



Dimensions						Bolt Size	
A	223	G	209.52	N	13.5	METRIC	INCHES
B	25.4	H	168.28	O	155	M12x1.75	1/2" 20 UNF
C	322.4	I	71.42	P	115	Spline Size 90x2.5x34 DIN 5480	
D	98.4	L	15.85	Q	90		
E	115x7.5	M	5.2				

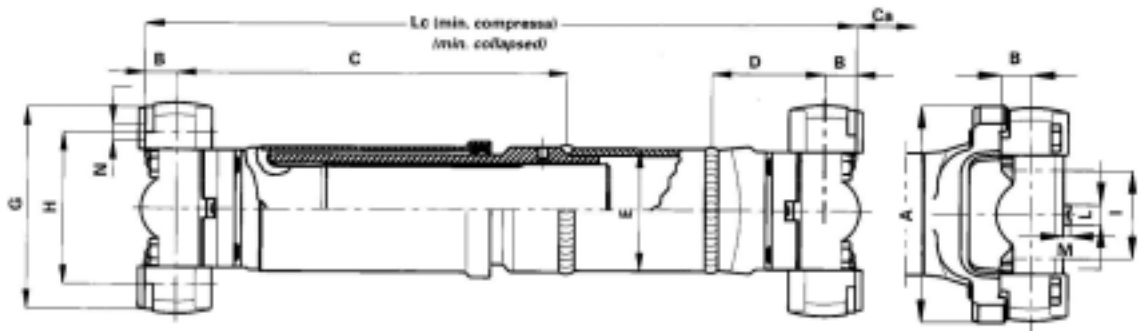


Type	Model	Lc (mm)	Ca (mm) slip	β max (°)	Base Part Numbers
010		550	150	30	612540000
					*612540039
015		-	-	-	
020		325	40	25	612530013
					608090000
		347	72	25	*612530046
		391	75	25	608120000
		435	95	25	608140000
		472	95	25	608150000
		497	130	25	612530028
			*612530043		
030		310	-	30	612340000
035		720	150	25	612847003
040		480	-	25	607530000
050		650	-	TBD	612848000
060		148.4	-	9	602090002
		184	-	20	602090006
		270	-	30	602090003

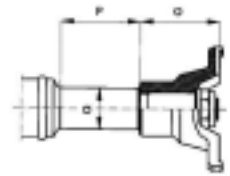
Missing types not detailed above, may be available upon request

* SERVICE FEE

Wing Bearing Series 213 M 100 - 10C



Dimensions						Bolt Size	
A	225	G	212.7	N	17	METRIC	INCHES
B	32.5	H	165.1	O	160	M16x2	5/8" 18 UNF
C	391.5	I	92.1	P	115	Spline Size	
D	117.5	L	25.35	Q	90		
E	144x7	M	8.5			90x2.5x34 DIN 5480	

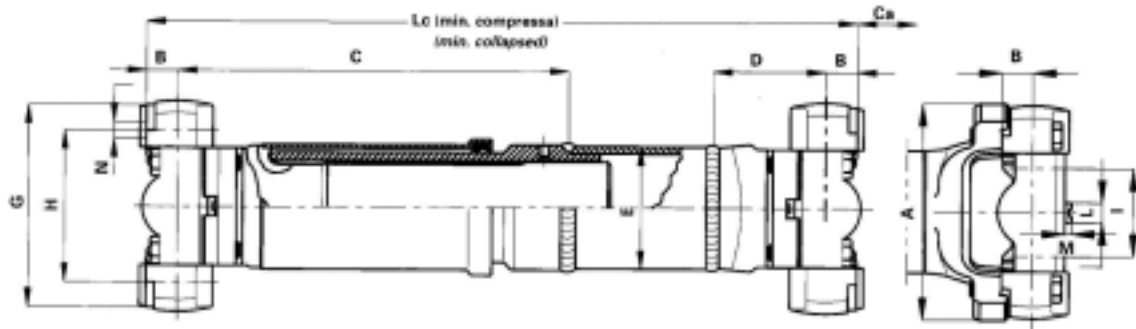


Type	Model	Lc (mm)	Ca (mm) slip	β_{max} (°)	Base Part Numbers
010		656	150	25	609050000
					*609050034
015		-	-	-	-
020		440	95	25	610810004
		473	100	25	610810011
		606	150	25	610810010
		628	150	25	610810018
		642	150	25	*610810025
030		350	-	25	610810022
					*610230000
035		814	150	TBD	*610230016
					612851000
040		500	-	25	612730000
050		-	-	-	-
060		254	-	25	*610230030
		269	-	25	610230027

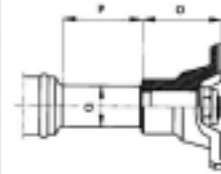
Missing types not detailed above, may be available upon request

* SERVICE FEE

Wing Bearing Series 222 M 110 - 11C



Dimensions					Bolt Size		
A	235	G	222.25	N	20	METRIC	INCHES
B	34	H	172.7	O	-	M20x2.5	3/4" 16 UNF
C	393	I	88.9	P	-	Spline Size	
D	119	L	25.35	Q	-		
E	140x7	M	8.5			90x2.5x34 DIN 5480	

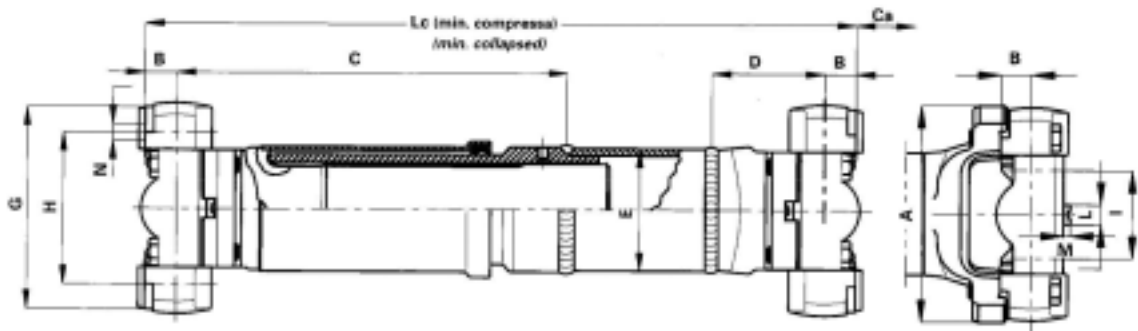


Type	Model	Lc (mm)	Ca (mm) slip	β max (°)	Base Part Numbers
010		662	150	25	61017000
015		-	-	-	-
020		558	120	25	612842000
030		358	-	25	612645000 *612645011
035					
040					
050					
060					

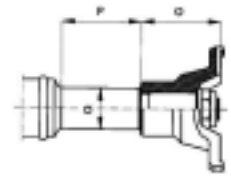
Missing types not detailed above, may be available upon request

* SERVICE FEE

Wing Bearing Series 288 M 120 - 12C**



Dimensions						Bolt Size	
A	301	G	288.9	N	15	METRIC	INCHES
B	32.575	H	241.35	O	-	M14x1.5	-
C	390	I	92.1	P	-	Spline Size	120x2.5x46 DN5480
D	97.2	L	35.37	Q	-		
E	160x10	M	8.3				

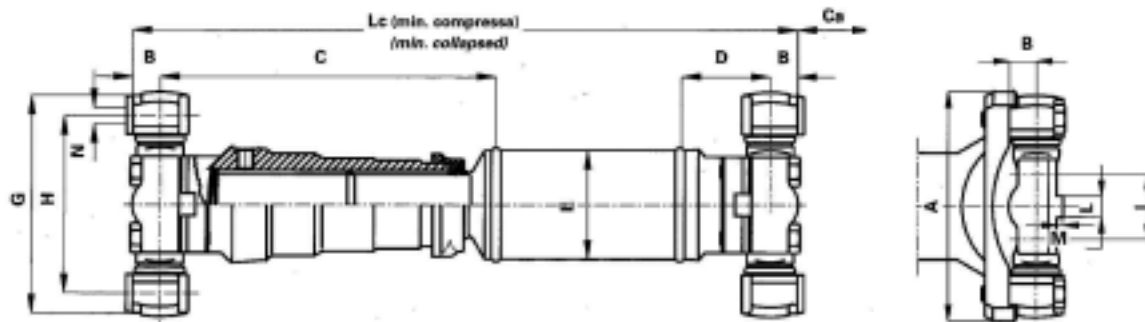


Type	Model	Lc (mm)	Ca (mm) slip	β max (°)	Base Part Numbers
010		685	135	25	612825001
015					
020		585	150	25	612827001
		600	135	TBD	612826001
030		424.7	-	25	612826001
035					
040					
050					
060		366	-	25	612840000

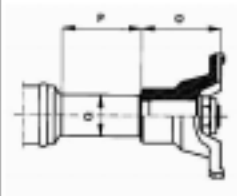
Missing types not detailed above, may be available upon request

** Note: All bolts in this series are metric

Wing Bearing Series 280 M 220 - 12.5C**



Dimensions						Bolt Size	
A	295	G	280	N	19	METRIC	INCHES
B	38	H	227	O	-	M18x1.5	-
C	407	I	92	P	-	Spline Size	
D	128	L	35	Q	-		
E	140x10	M	8			92x102x7 92UN223	

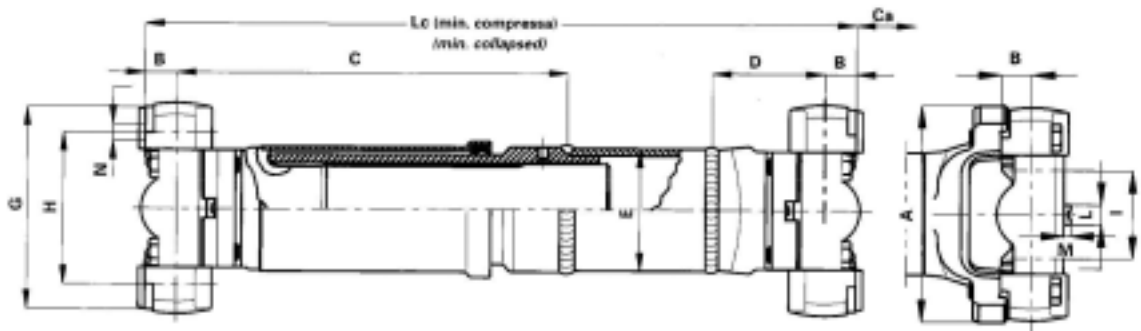


Type	Model	Lc (mm)	Ca (mm) slip	β max (°)	Base Part Numbers
010		681	100	16	602660000
085					
020		496	94	16	605080008
030					
035					
040					
050					
060					

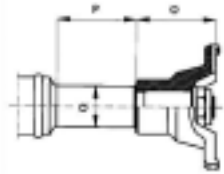
Missing types not detailed above, may be available upon request




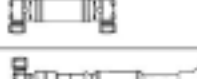
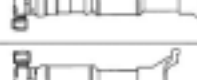
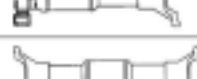
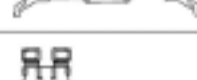

** Note: All bolts in this series are metric

Wing Bearing Series 339 M 140 - 14C**



Dimensions					Bolt Size		
A	360	G	338.8	N	19	METRIC	INCHES
B	49	H	269.5	O	-	M18x1.5	-
C	419	I	134.88	P	-	Spline Size	
D	149	L	28.6	Q	-		
E	219x13.3	M	12			150x3x30x48 DIN5480	



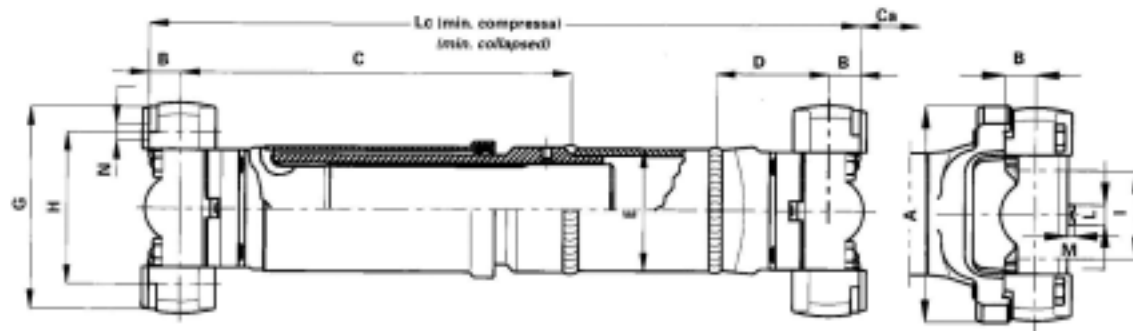
Type	Model	Lc (mm)	Ca (mm) slip	β max (°)	Base Part Numbers
010		738	135	25	612680012 *612680004
015					
020		671	135	25	612680014 *612680007
030					480000079
035					
040					
050					
060					

Missing types not detailed above, may be available upon request

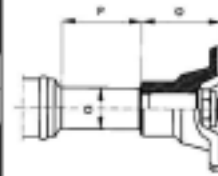
** Note: All bolts in this series are metric

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Wing Bearing Series 310 M 230 - 14.5C**



Dimensions						Bolt Size	
A	326	G	310	N	23.5	METRIC	INCHES
B	44	H	252	O	-	M22x1.5	-
C	414	I	107	P	-	Spline Size	
D	144	L	44	Q	-		
E	218.2x8.7	M	9			150x3x48 DIN5480	



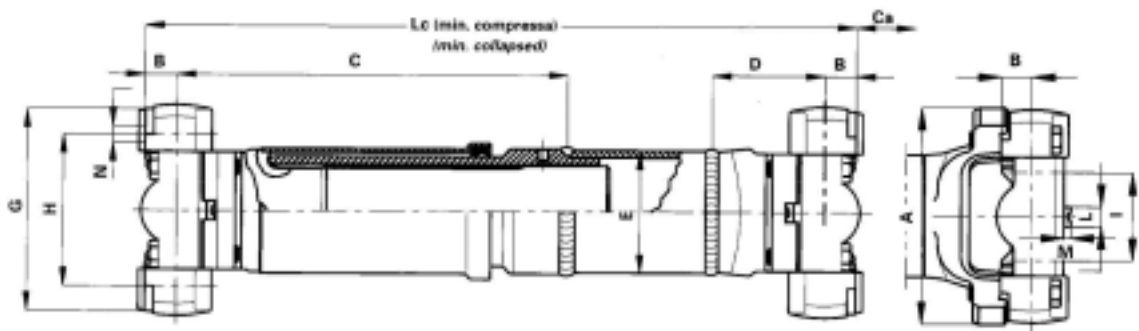
Type	Model	Lc (mm)	Ca (mm) slip	β max (°)	Base Part Numbers
010		718	135	25	612845000 *612896000
015					
020		640	135	25	612670001
030		530	-	16	605380000
035					
040					
050					
060					

Missing types not detailed above, may be available upon request

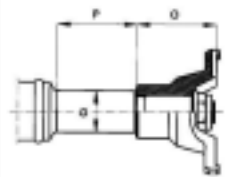
** Note: All bolts in this series are metric

* SERVICE FEE

Wing Bearing Series 260 M 150 - 15C**



Dimensions					Bolt Size		
A	273	G	259.98	N	21	METRIC	INCHES
B	38.1	H	199.94	O	-	M20x2.5	3/4" 16 UNF
C	379.6	I	99.98	P	-	Spline Size 120x2.5x46 DIN5480	
D	132.7	L	31.725	Q	-		
E	160x10	M	11.5				



Type	Model	Lc (mm)	Ca (mm) slip	b max (°)	Base Part Numbers
010		685	130	25	612740011
					*612740032
015					
020		549	100	25	612740015
					*612740033
030		441.6	-	25	612828000
					*612828004
035					
040					
050					
060					

Missing types not detailed above, may be available upon request

** Note: All bolts in this series are metric

* SERVICE FEE