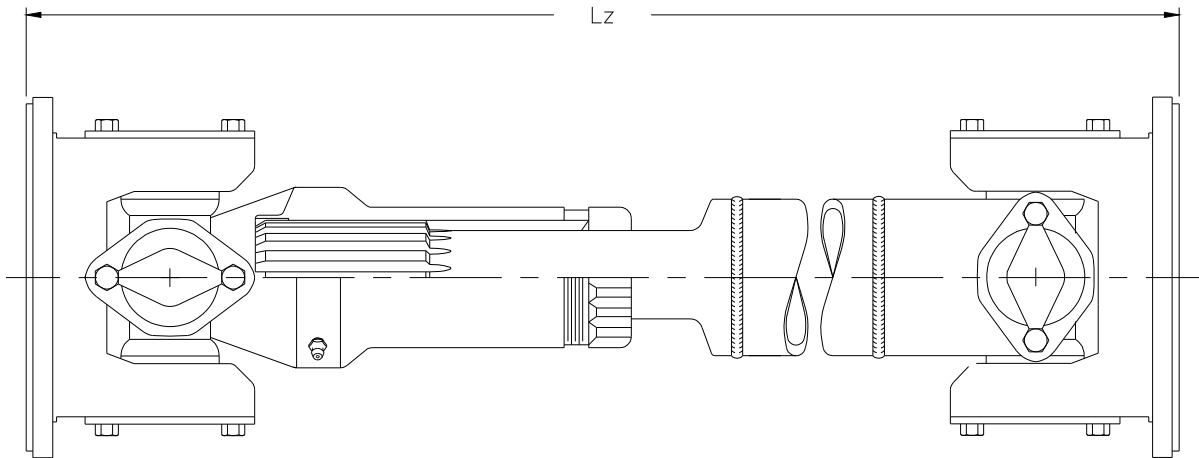
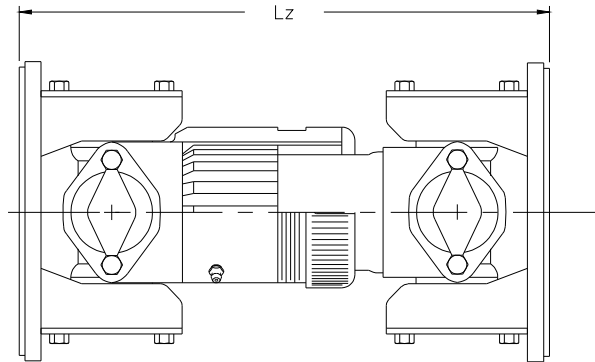


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# Introduction

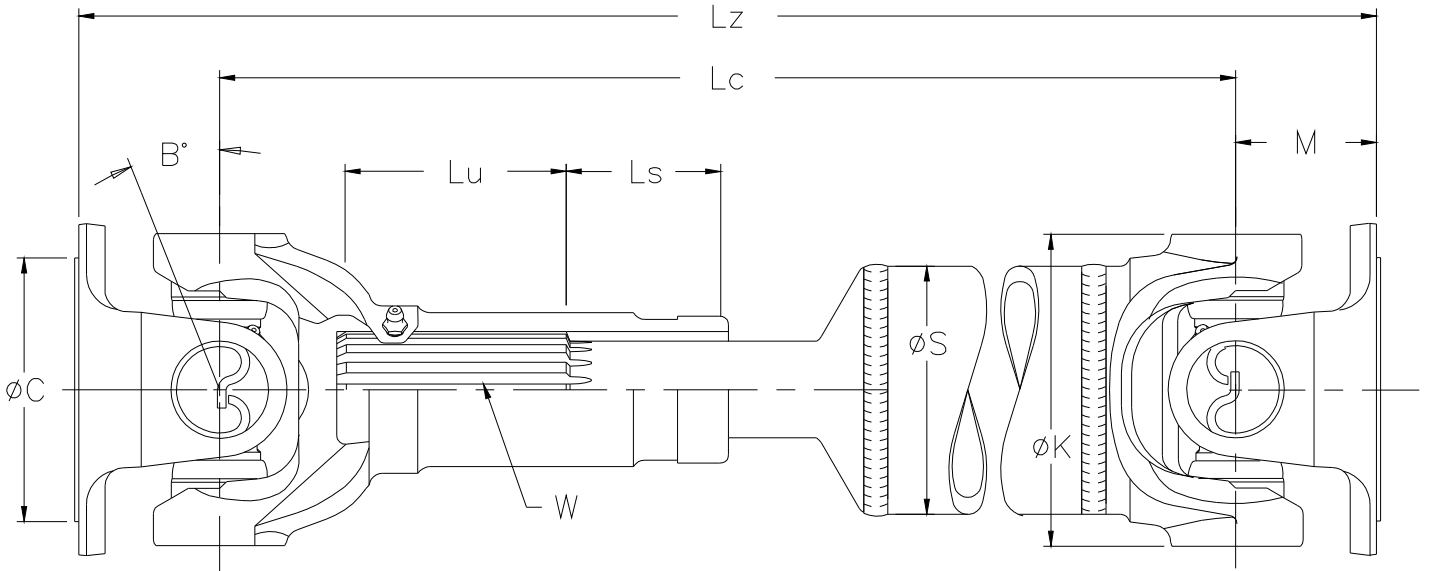
## Basic Torque Ratings



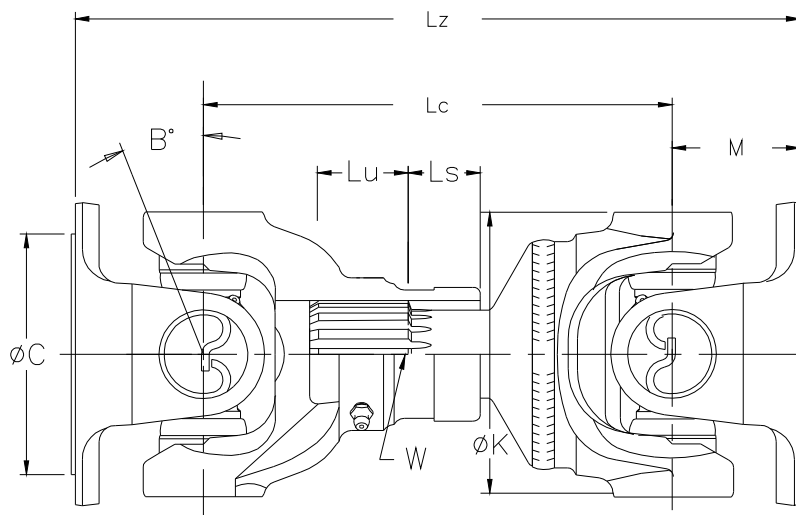
Series	Torque Ratings (ft lbs)			U-Joint Swing Diameter	Lz - Minimum Length Collapsed	
	Continuous Torque	Short Duration Torque	Minimum Elastic Limit		Tube Type	Short Couple
1280	-	570	1250	3.75"	13.66"	8.88"
1310	400	800	1600	3.75"	13.66"	8.88"
1350	680	1240	2260	4.25"	14.96"	9.50"
1410	820	1500	2700	4.69"	14.62"	8.75"
1480	1100	2000	3330	4.81"	15.50"	8.50"
1550	1400	2400	4400	5.63"	15.75"	8.50"
1610	2200	3650	6500	7.00"	19.81"	9.12"
1710	2930	4800	8000	7.75"	21.50"	10.62"
1760	3480	5800	10200	8.57"	22.73"	19.14"
1810	3800	6500	12000	9.13"	24.69"	13.40"
1880	5000	8900	16000	9.88"	25.69"	13.63"
1910	7800	12000	20800	8.81"	30.38"	21.65"
1950	11300	18000	34000	11.25"	44.00"	33.94"

# Series 1280

## Tube Type Assembly



## Short Couple Assembly

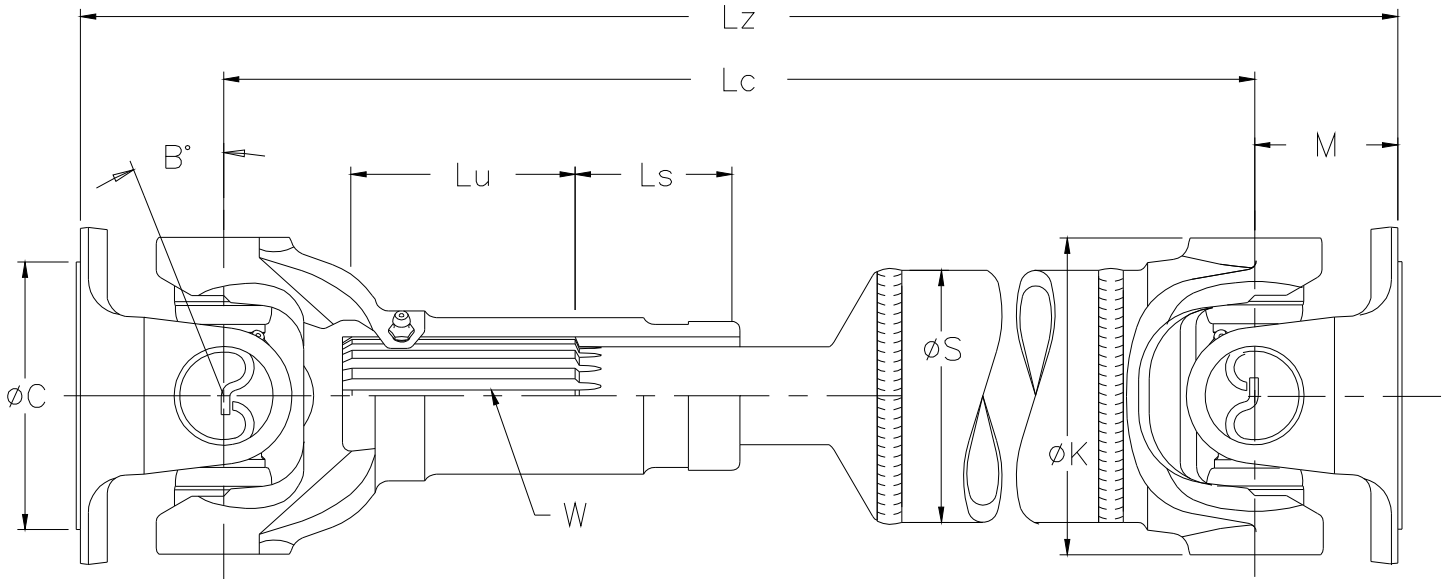


# Series 1280

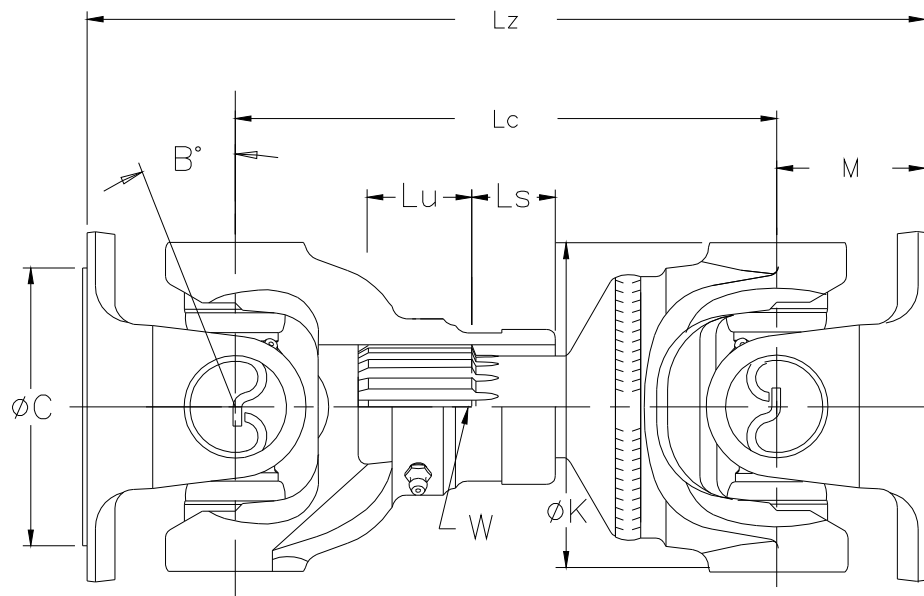
	Minimum Lz	Minimum Lc	Lu	Ls	M	C	S	K	B	W
Style	Face to Face	Center to Center	Useable Length	Slip Length	End to Center	Pilot Diameter	Tube Diameter	Swing Diameter	Angle	Spline
<b>Tube Type</b>	13.66"	10.91"	2.25"	3.12"	1.38"	Male 2.38"	2.50"x.083"W	3.88"	20	1.38"-16
<b>Short Couple</b>	8.88"	6.12"	1.88"	1.25"	1.38"	Male 2.38"	-	3.88"	15	1.25"-16

# Series 1310

## Tube Type Assembly



## Short Couple Assembly

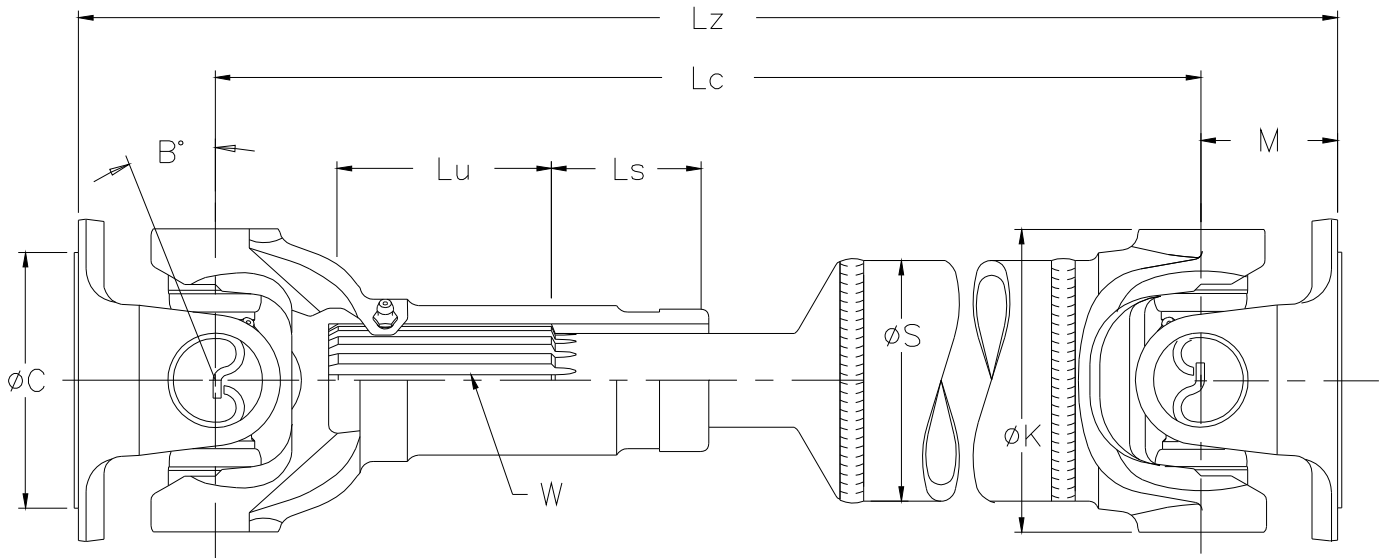


# Series 1310

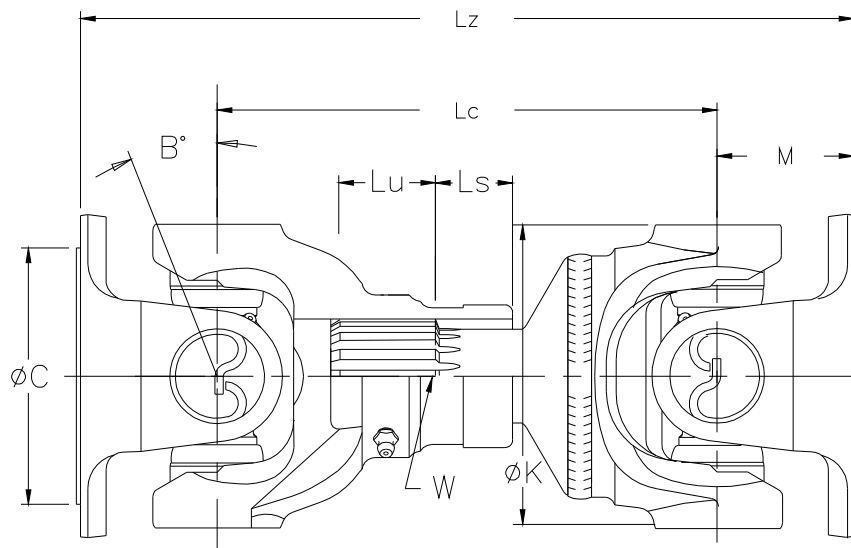
	Minimum Lz	Minimum Lc	Lu	Ls	M	C	S	K	B	W
Style	Face to Face	Center to Center	Useable Length	Slip Length	End to Center	Pilot Diameter	Tube Diameter	Swing Diameter	Angle	Spline
<b>Tube Type</b>	13.66"	10.91"	2.25"	3.12"	1.38"	Male 2.38"	2.50"x.083"W	3.88"	20	1.38"-16
<b>Short Couple</b>	8.88"	6.12"	1.88"	1.25"	1.38"	Male 2.38"	-	3.88"	15	1.25"-16

# Series 1350

## Tube Type Assembly



## Short Couple Assembly



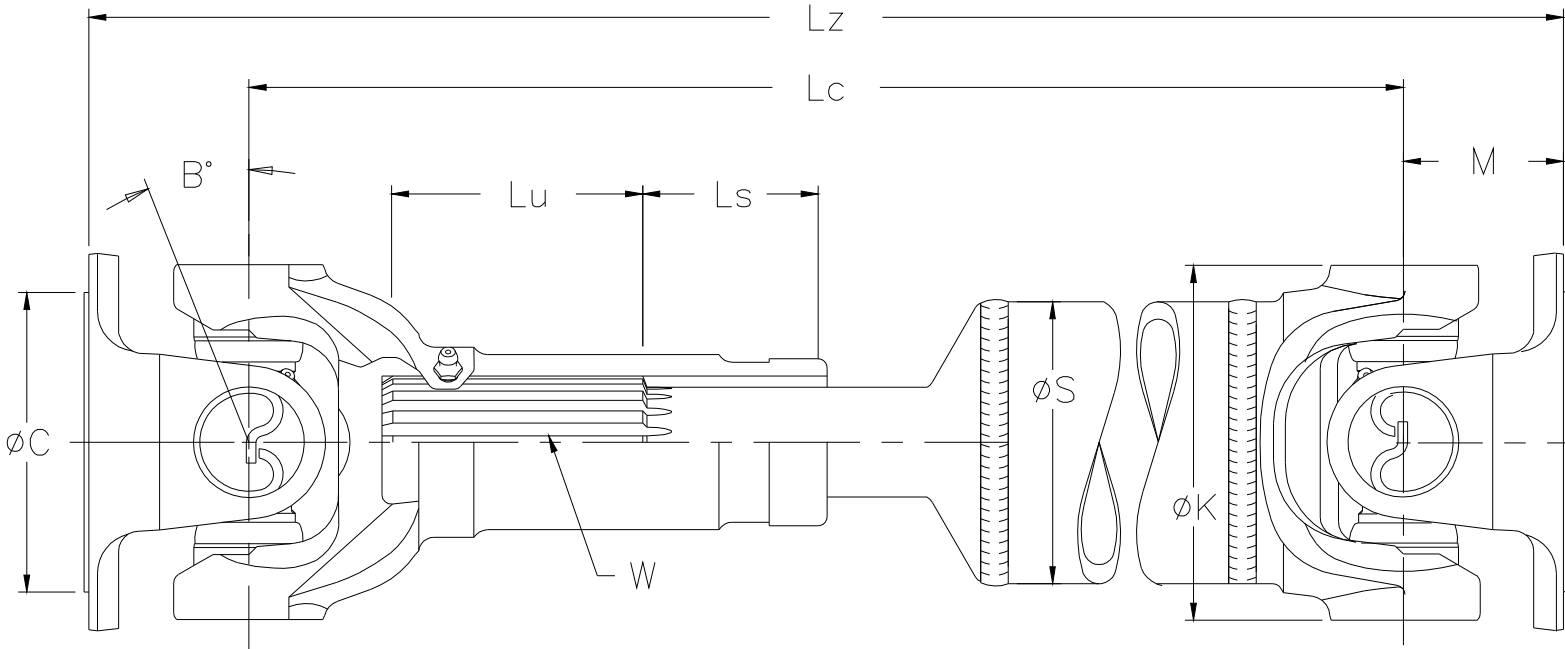


# Series 1350

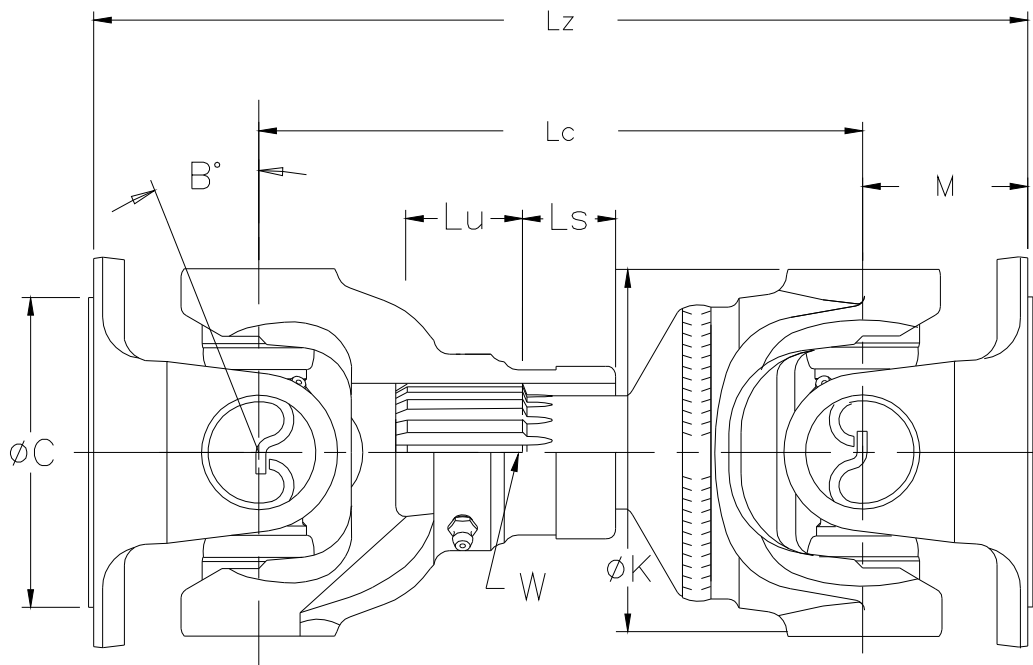
	Minimum Lz	Minimum Lc	Lu	Ls	M	C	S	K	B	W
Style	Face to Face	Center to Center	Useable Length	Slip Length	End to Center	Pilot Diameter	Tube Diameter	Swing Diameter	Angle	Spline
<b>Tube Type</b>	14.96"	11.84"	2.50"	3.62"	1.56"	Male 2.75"	3.0"x.083"W	4.62"	20	1.50"-16
<b>Short Couple</b>	9.50"	6.38"	2.00"	.75"	1.56"	Male 2.75"	-	4.62"	8	1.50"-16

# Series 1410

## Tube Type Assembly



## Short Couple Assembly

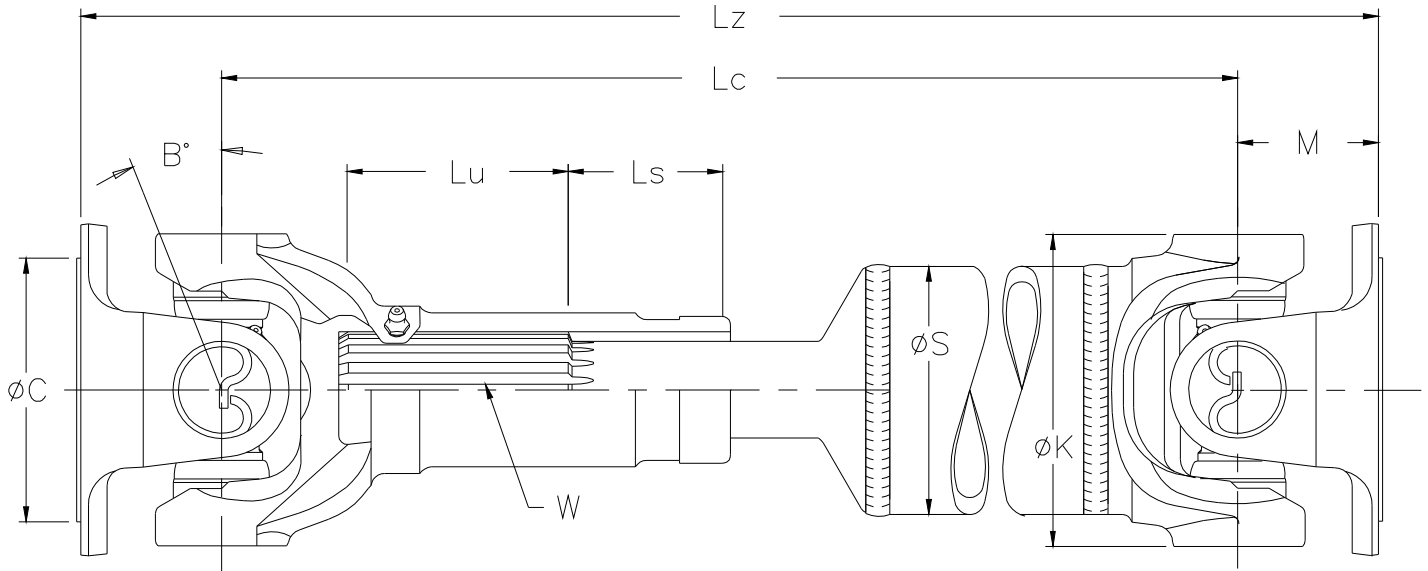


## Series 1410

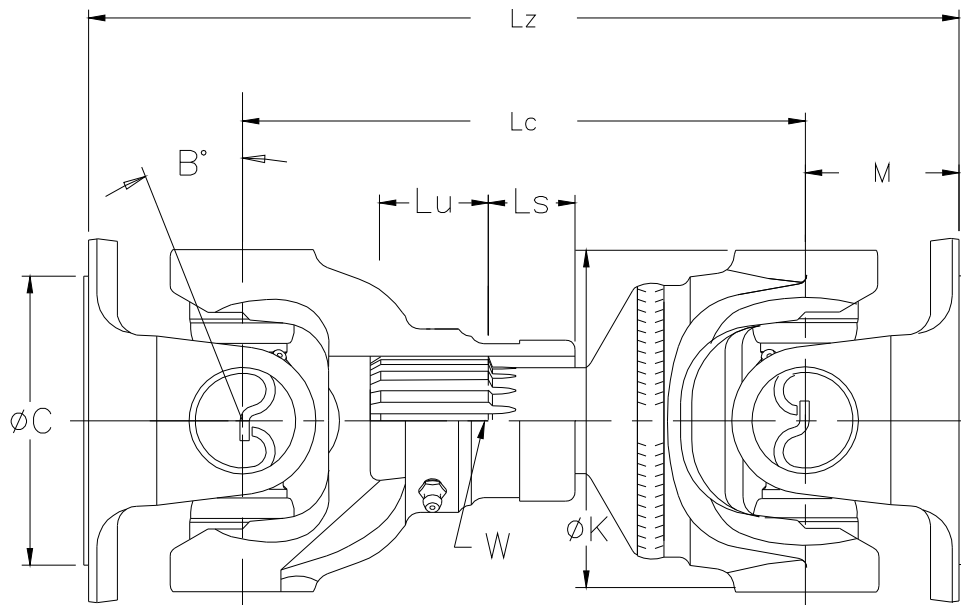
	M	C	K	B		
	End to Center	Pilot Diameter	Swing Diameter	Angle		
<b>Tube</b>	1.69"	Male 2.75"	4.69"	22		
<b>Short</b>	1.69"	Male 2.75"	4.69"	8		
	Length Variations					
	Minimum Lz	Minimum Lc	Lu	Ls	W	S
<b>Style</b>	Face to Face	Center to Center	Useable Length	Slip Length	Spline	Tube Diameter
<b>Tube</b>	14.62"	11.25"	3"	2.34"	1.50"-16	3.50" x .083"W
	15.81"	12.44"	3"	3.47"	1.50"-16	3.50" x .083"W
	22.91"	18.91"	5"	4.50"	1.56"-16	3" x .083"W
<b>Short</b>	9.50"	6.12"	2"	.75"	1.50"-16	
	8.73"	5.35"	1.44"	1"	1.75"-16	

# Series 1480

## Tube Type Assembly



## Short Couple Assembly

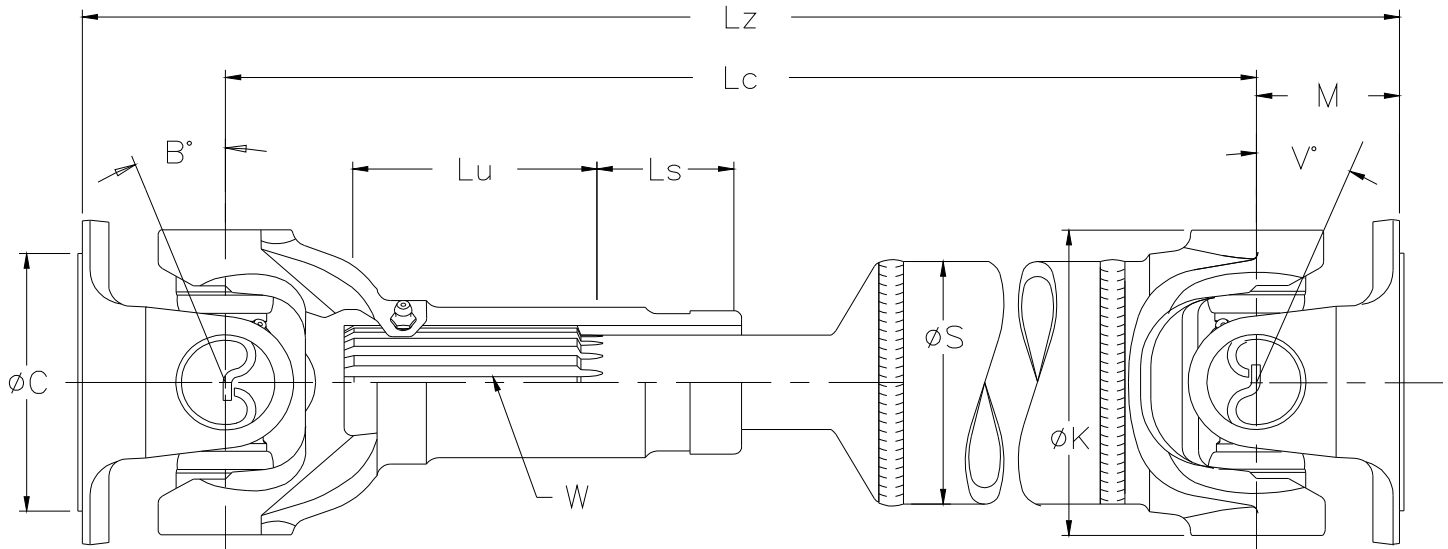


# Series 1480

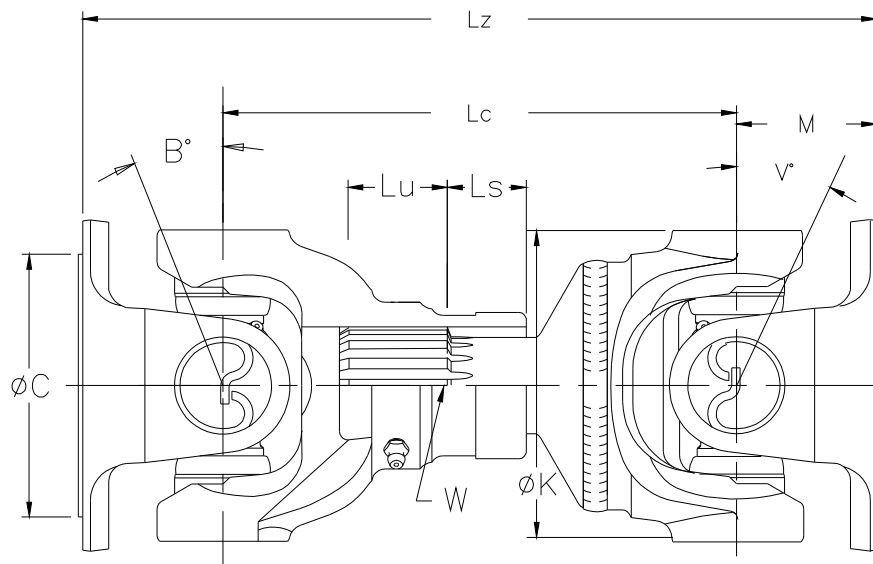
	M	C	K	B			
	End to Center	Pilot Diameter	Swing Diameter	Angle			
<b>Tube</b>	2"	Male 3.75"	4.81"	22			
<b>Short</b>	M = Lz - Lc	Male 3.75"	4.81"	8			
	Length Variations						
	Minimum Lz	Minimum Lc	Lu	Ls	W	S	
	Face to Face	Center to Center	Useable Length	Slip Length	Spline	Tube Diameter	Tubing Formula
<b>Tube</b>	-	11.50" (2)	3"	2.50"	1.56"-16	3.50"x.083"W	T = Lc - 10.09"
	13.50"	11.50" (1)	3"	2.50"	1.56"-16	3.50"x.083"W	T = Lc - 10.09"
	15.50"	11.50"	3"	2.50"	1.56"-16	3.50"x.083"W	T = Lz - 14.09"
	-	14.44" (2)	3"	4.50"	1.56"-16	3.50"x.083"W	T = Lc - 13.06"
	16.18"	14.18" (1)	3"	4.50"	1.56"-16	3.50"x.083"W	T = Lc - 12.78"
	-	14.38" (2)	3"	4.50"	1.56"-16	4"x.083"W	T = Lc - 12.97"
<b>Short</b>	8.50"	5.50"	1.59"	1"	2.25"-10		
	9.00"	5.50"					
	9.50"	5.50"					
	7.00"	5.50"					
	7.50"	5.50"					
	(1) No flange yoke on stub end						
	(2) No flange yoke on either end						

# Series 1550

## Tube Type Assembly



## Short Couple Assembly



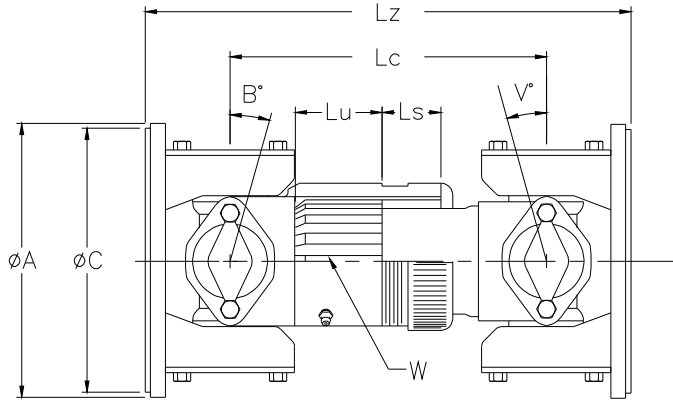
# Series 1550

	M	C	K	S				
	End to Center	Pilot Diameter	Swing Diameter	Tubing				
<b>Short</b>	M = Lz - Lc	Male 3.75"	5.625"	-				
<b>Tube</b>	M = Lz - Lc	Male 3.75"	5.625"	3.50" x .095" W				
	Length Variations							
	Minimum Lz	Minimum Lc	Lu	Ls	V	B	W	
	Face to Face	Center to Center	Useable Length	Slip Length	Angle	Angle	Spline	Tubing Formula
<b>Tube</b>	-	11.75" (2)	3"	2.50"	22	22	1.75"-16	T = Lc - 10.34"
	13.75"	11.75" (1)	3"	2.50"	21	23	1.75"-16	T = Lc - 10.34"
	13.75"	11.75" (1*)	3"	2.50"	22	22	1.75"-16	T = Lc - 10.34"
	15.75"	11.75"	3"	2.50"	22	22	1.75"-16	T = Lz - 14.34"
	15.75"	11.75"	3"	2.50"	21	21	1.75"-16	T = Lz - 14.34"
	15.75"	11.75"	3"	2.50"	22	22	1.75"-16	T = Lz - 14.34"
	-	15.38" (2)	3"	5"	35	35	1.75"-16	T = Lc - 10.34"
<b>Short</b>	8.5	5.5	1.56"	1"	5	8	2.50"-16	
	8.75	5.75	1.56"	1"	5	8	2.50"-16	
	9	5.5	1.56"	1"	5	8	2.50"-16	
	9.25	5.75	1.56"	1"	5	8	2.50"-16	
	9.5	5.5	1.56"	1"	5	11	2.50"-16	
	9.75	5.75	1.56"	1"	5	10	2.50"-16	
	9.5	5.5	1.56"	1"	8	8	2.50"-16	
	-	8.19" (2)	2.50"	1.50"	21	21	1.75"-16	
	(1) No flange yoke on stub end							
	(1*) No flange yoke on slip end							
	(2) No flange yoke on either end							

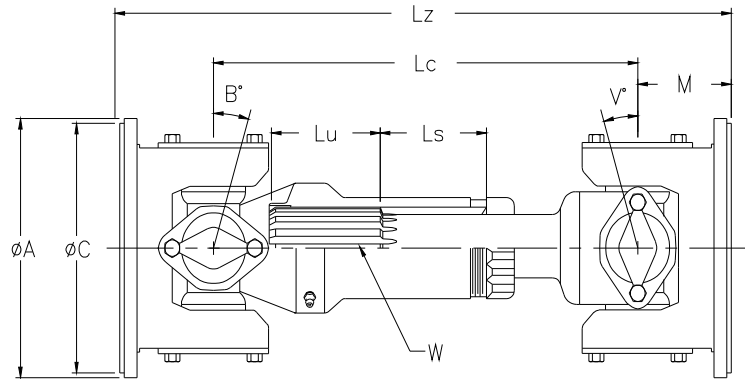
# Series 1610

## Short Couple Assembly

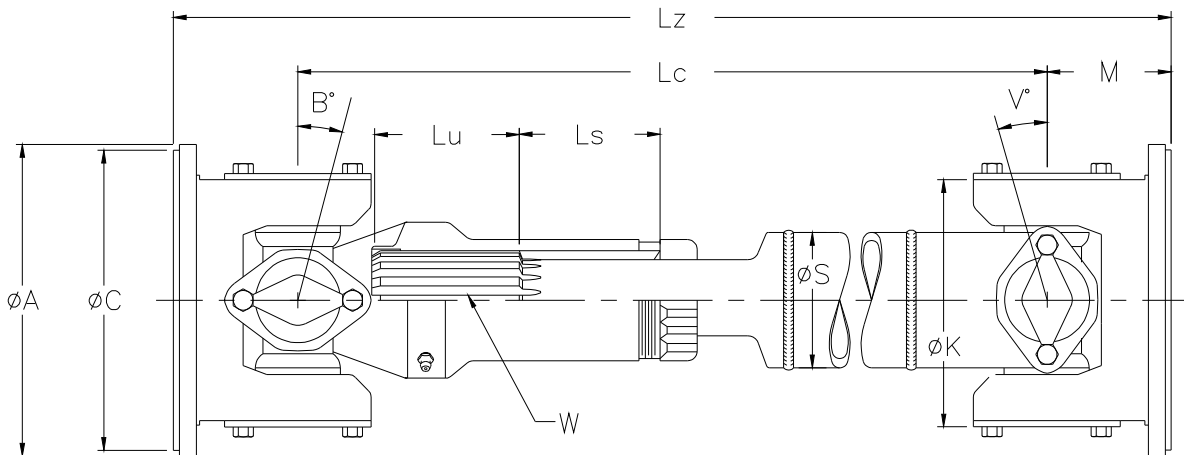
### Short Slip



### Intermediate/Long Slip



## Tube Type Assembly



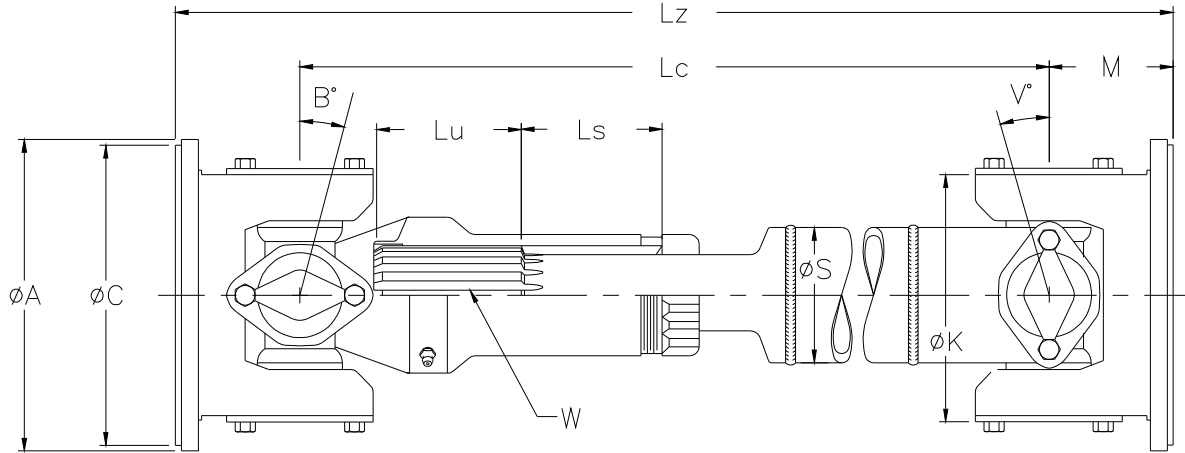


# Series 1610

	M	C	K						
	End to Center	Pilot Diameter	Swing Diameter						
Tube	M = Lz - Lc	Male 6.62"	6.88"						
Short	M = Lz - Lc	Male 6.62"	6.88"						
Length Variations									
	Minimum Lz	Minimum Lc	Lu	Ls	B	V	W	S	
Tube	Face to Face	Center to Center	Useable Length	Slip Length	Angle	Angle	Spline	Tubing	Tubing Formula
	-	14.31"	3.50"	2.88"	20	28/34	2"-16	3.50" x .134 W	T = Lc - 12"
	17.06"	14.31"	3.50"	2.88"	20	28/34	2"-16	3.50" x .134 W	T = Lc - 12"
	17.06"	14.31"	3.50"	2.88"	20	28/34	2"-16	3.50" x .134 W	T = Lc - 12"
	19.81"	14.31"	3.50"	2.88"	20	26	2"-16	3.50" x .134 W	T = Lz - 17.50"
	-	17.44"	3.50"	4.88"	28/34	28/34	2"-16	3.50" x .134 W	T = Lc - 15.125"
	-	17.44"	3.50"	4.88"	28/34	28/34	2"-16	3.50" x .134 W	T = Lc - 15.125"
	20.19"	17.44"	3.50"	4.88"	26	28/34	2"-16	3.50" x .134 W	T = Lc - 15.125"
	22.94"	17.44"	3.50"	4.88"	26	26	2"-16	3.50" x .134 W	T = Lz - 20.63"
	-	17.56	3.50"	4.88"	34/30	26/21	2"-16	4" x .134W	T = Lc - 15.28"
Short	-	19.56"	3.50"	5.50"	45	45	2"-16	3.50" x .134 W	T = Lc - 18"
	-	5.38"	1.50"	.75"	8	8	2.673"-18 Inv.		
	-	5.88"	1.50"	.75"	8	8	2.673"-18 Inv.		
	-	6.12"	1.50"	.75"	8	8	2.673"-18 Inv.		
	9.12	5.38	1.50"	.75"	8	8	2.673"-18 Inv.		
	9.62	5.88	1.50"	.75"	8	8	2.673"-18 Inv.		
	9.88	6.12	1.50"	.75"	8	8	2.673"-18 Inv.		
	10	5.38	1.50"	.75"	8	8	2.673"-18 Inv.		
	10.5	5.88	1.50"	.75"	8	8	2.673"-18 Inv.		
	10.75	6.12	1.50"	.75"	8	8	2.673"-18 Inv.		
	10.88	5.38	1.50"	.75"	8	8	2.673"-18 Inv.		
	11.38	5.88	1.50"	.75"	8	8	2.673"-18 Inv.		
	11.62	6.12	1.50"	.75"	8	8	2.673"-18 Inv.		
	-	14.00"	3.50"	2.88"	25/26*	30/35*	2"-16		
	-	17.34"	3.50"	5.50"	45	45	2"-16		
	-	17.94"	3.50"	5.50"	45	45	2"-16		
	-	18.44"	3.50"	5.50"	45	45	2"-16		
	-	18.88"	3.50"	5.50"	45	45	2"-16		
	-	19.25"	3.50"	5.50"	45	45	2"-16		

# Series 1710

## Tube Type Assembly

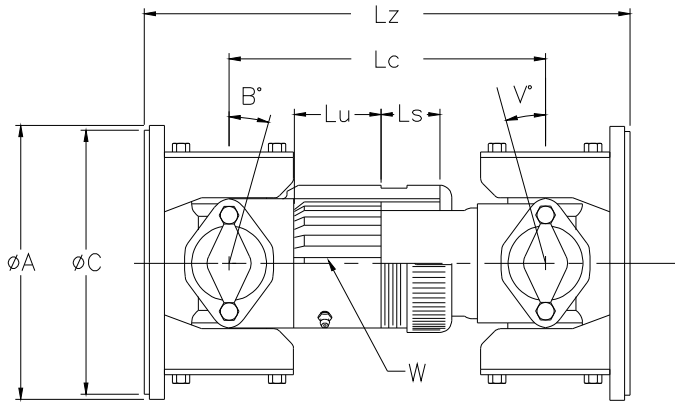


	M	C	K									
	End to Center	Pilot Diameter	Swing Diameter									
Short	M = Lz - Lc	Male 7.75"	8.00"	Minimum Lz	Minimum Lc	Lu	Ls	B	V	W	S	
Tube	M = Lz - Lc	Male 7.75"/6.64"/8"	8.00"	Face to Face	Center to Center	Useable Length	Slip Length	Angle	Angle	Spline	Tubing	Tubing Formula
				-	15.50"	4"	3.12"	20	22/29	2.50"-16	4" x .134 W	T = Lc - 13.19"
	21.50"	15.50"	4"	21.50"	15.50"	4"	3.12"	20	22/29	2.50"-16	4" x .134 W	T = Lz - 19.19"
	21.50"	15.50"	4"	-	16.31"	4"	3.88"	20	22/29	2.50"-16	4" x .134 W	T = Lc - 14"
	-	16.31"	4"	-	16.31"	4"	3.88"	20	22/29	2.50"-16	4.09"x .180"W	T = Lc - 14"
	19.31"	16.31"	4"	19.31"	16.31"	4"	3.88"	20	22/29	2.50"-16	4" x .134 W	T = Lc - 14"
	19.31"	16.31"	4"	19.31"	16.31"	4"	3.88"	20	22/29	2.50"-16	4" x .134 W	T = Lc - 14"
	19.31"	16.31"	4"	22.31"	16.31"	4"	3.88"	20	22/29	2.50"-16	4" x .134 W	T = Lz - 20"
	-	16.56"	4"	-	16.56"	4"	3.88"	20	20/29	2.50"-16	4.50"x.134W	T = Lc - 14.25"
	-	18.38"	4"	-	18.38"	4"	5.25"	23/28	22/29	2.50"-16	4" x .134 W	T = Lc - 16.03"
	-	18.38"	4"	-	18.38"	4"	5.25"	23/28	22/29	2.50"-16	4.09"x .180"W	T = Lc - 16.03"
	21.38"	18.38"	4"	21.38"	18.38"	4"	5.25"	23/28	22/29	2.50"-16	4" x .134 W	T = Lc - 16.03"
	21.38"	18.38"	4"	21.38"	18.38"	4"	5.25"	23/28	22/29	2.50"-16	4" x .134 W	T = Lc - 16.03"
	21.38"	18.38"	4"	24.38"	18.38"	4"	5.25"	23/28	22/29	2.50"-16	4" x .134 W	T = Lz - 22.03"
	24.38"	18.38"	4"	24.38"	18.38"	4"	5.25"	23/28	22/29	2.50"-16	4" x .134 W	T = Lz - 22.03"
	24.38"	18.38"	4"	-	18.44"	4"	5.25"	23/28	20/29	2.50"-16	4.50"x.134"	T = Lc - 16.12"
	24.44"	18.44"	4"	24.44"	18.44"	4"	5.25"	23/28	20/29	2.50"-16	4.50"x.134"	T = Lz - 22.12"

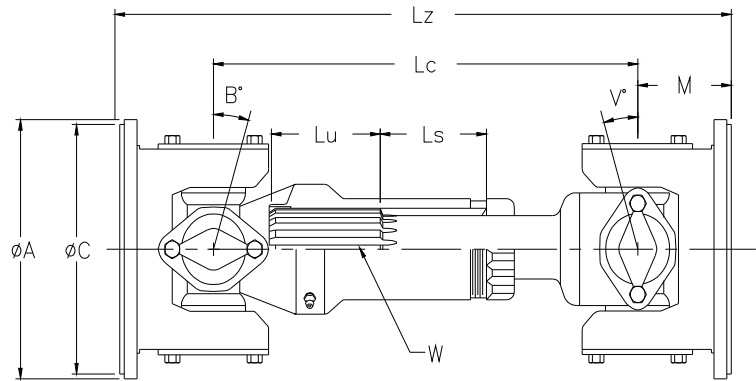
# Series 1710

## Short Couple Assembly

### Short Slip



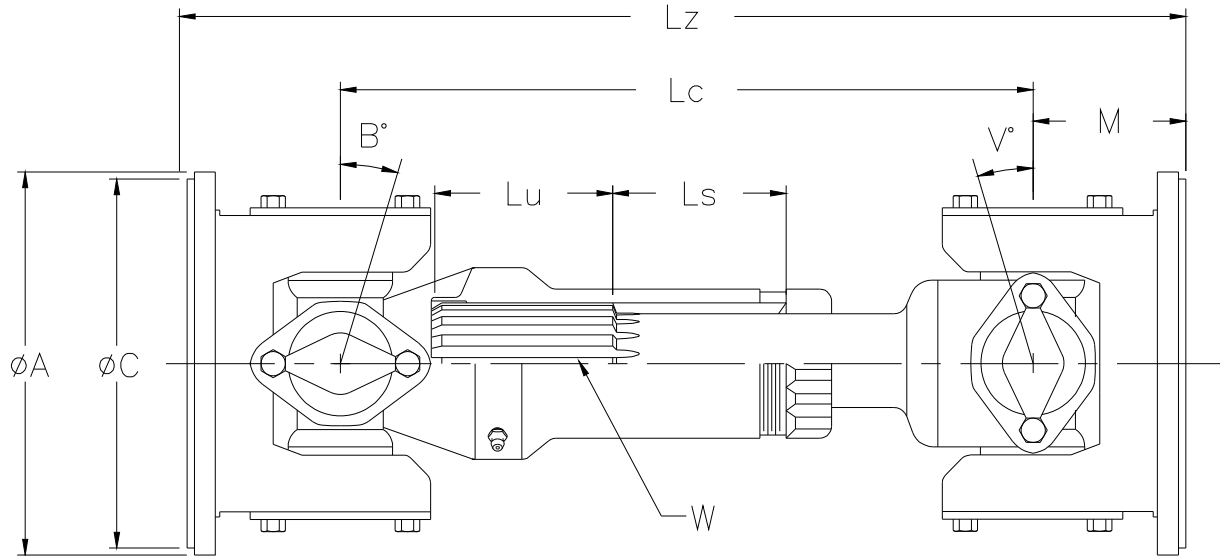
### Intermediate/Long Slip



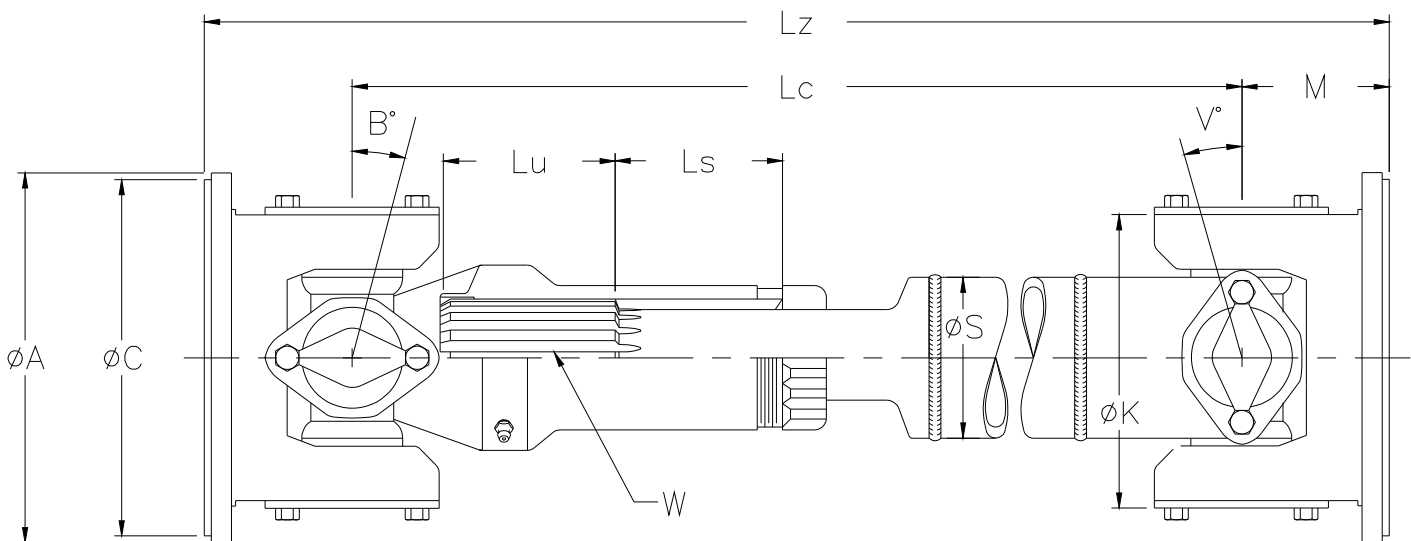
Short	-	6.62"	2"	.75"	8	8	3.25"-18 Inv.
	-	7.38"	2"	.75"	8	8	3.25"-18 Inv.
	10.62"	6.62"	2"	.75"	8	8	3.25"-18 Inv.
	11.38"	7.38"	2"	.75"	8	8	3.25"-18 Inv.
	11.62"	6.62"	2"	.75"	8	8	3.25"-18 Inv.
	12.38"	7.38"	2"	.75"	8	8	3.25"-18 Inv.
	12.62"	6.62"	2"	.75"	8	8	3.25"-18 Inv.
	13.38"	7.38"	2"	.75"	8	8	3.25"-18 Inv.
	-	11.38"	3.50"	2.25"	20	24/29	2.50"-16
	-	11.88"	3.50"	2.25"	20	24/29	2.50"-16
	-	12.38"	3.50"	2.25"	20	24/29	2.50"-16
	-	13.38"	3.50"	2.25"	20	24/29	2.50"-16
	17.38"	11.38"	3.50"	2.25"	20	24	2.50"-16
	17.88"	11.88"	3.50"	2.25"	20	24	2.50"-16
	18.38"	12.38"	3.50"	2.25"	20	24	2.50"-16
	19.38"	13.38"	3.50"	2.25"	20	24	2.50"-16
	-	13.88"	4"	3.88"	20	24/29	2.50"-16
	-	14.00"	4"	3.88"	20	24/29	2.50"-16
	-	14.38"	4"	3.88"	20	24/29	2.50"-16
	-	14.88"	4"	3.88"	20	24/29	2.50"-16
	-	15.62"	4"	3.88"	20	24/29	2.50"-16
	-	15.88"	4"	3.88"	20	24/29	2.50"-16
	19.88	13.88"	4"	3.88"	20	24/29	2.50"-16
	-	15.88"	4"	5.25"	23/29	24/29	2.50"-16
	-	16.06"	4"	5.25"	23/29	24/29	2.50"-16
	-	16.50"	4"	5.25"	23/29	24/29	2.50"-16
	-	17.00"	4"	5.25"	23/29	24/29	2.50"-16

# Series 1760

## Short Coupled Assembly



## Tube Type Assembly



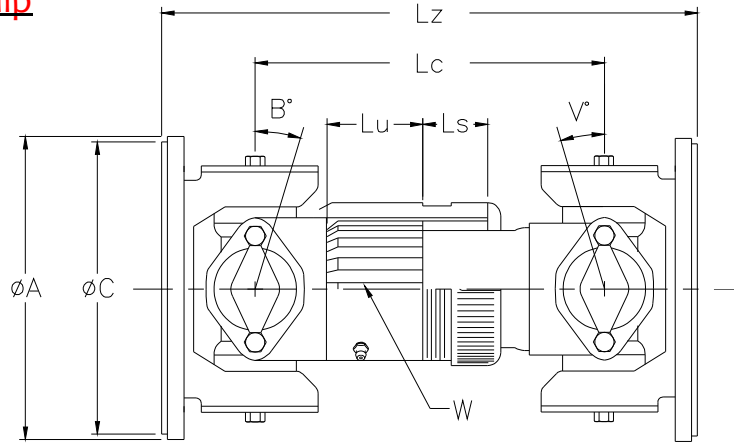
# Series 1760

	M	C	K						
	End to Center	Pilot Diameter	Swing Diameter						
Short	M = Lz - Lc	Male 7.75"	8.00"						
Tube	6.76	Male 7.75"	8.00"						
Length Variations									
	Minimum Lz	Minimum Lc	Lu	Ls	B	V	W	S	
	Face to Face	Center to Center	Useable Length	Slip Length	Angle	Angle	Spline	Tubing	Tube Formula
Tube	22.72"	15.96"	4"	3.88"	20.5	30	2.50"-16	4.06" x .165W	T = Lz - 20.41"
Short	-	12.38"	4"	3.88"	22	30	2.50"-16		
	-	12.88"	4"	3.88"	22	30	2.50"-16		
	-	13.38"	4"	3.88"	22	30	2.50"-16		
	-	13.88"	4"	3.88"	22	30	2.50"-16		
	19"	12.38"	4"	3.88"	20.5	30	2.50"-16		
	19.50"	12.88"	4"	3.88"	20.5	30	2.50"-16		
	20"	13.38"	4"	3.88"	20.5	30	2.50"-16		
	20.50"	13.88"	4"	3.88"	20.5	30	2.50"-16		
	-	14.28"	4"	5.25"	30	30	2.50"-16		
	-	14.78"	4"	5.25"	30	30	2.50"-16		
	-	15.28"	4"	5.25"	30	30	2.50"-16		
	-	15.78"	4"	5.25"	30	30	2.50"-16		
	-	16.28"	4"	5.25"	30	30	2.50"-16		
	-	16.78"	4"	5.25"	30	30	2.50"-16		
	-	17.28"	4"	5.25"	30	30	2.50"-16		

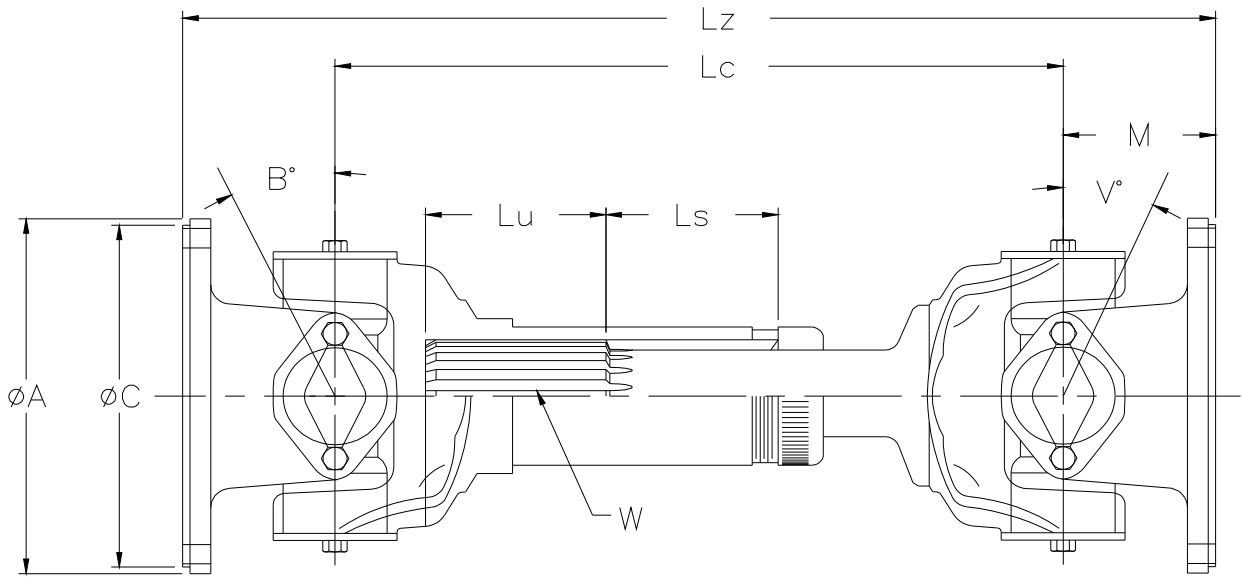
# Series 1810

## Short Couple Assembly

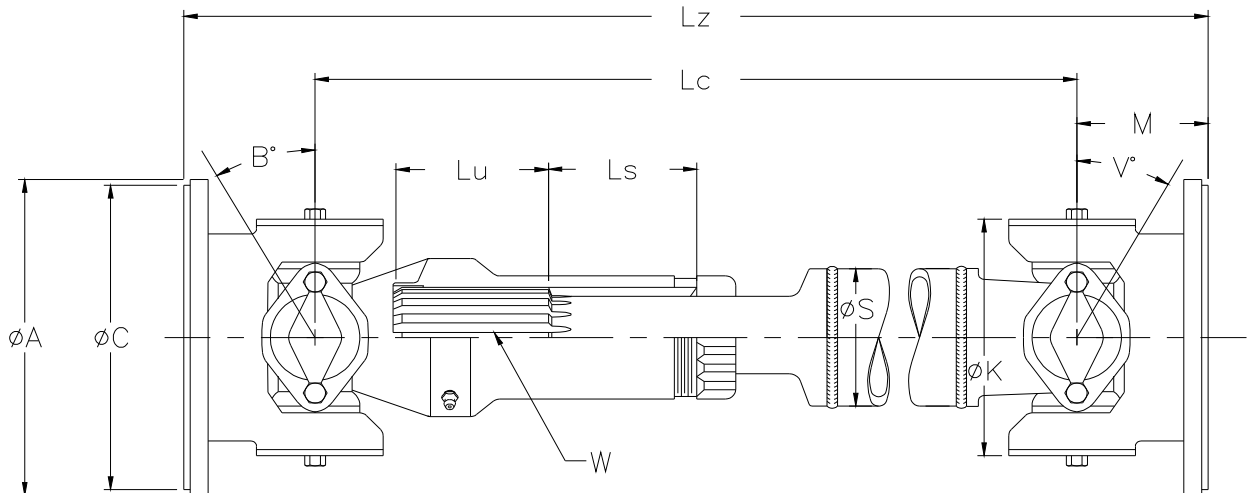
### Short Slip



### Intermediate/Long Slip



## Tube Type Assembly



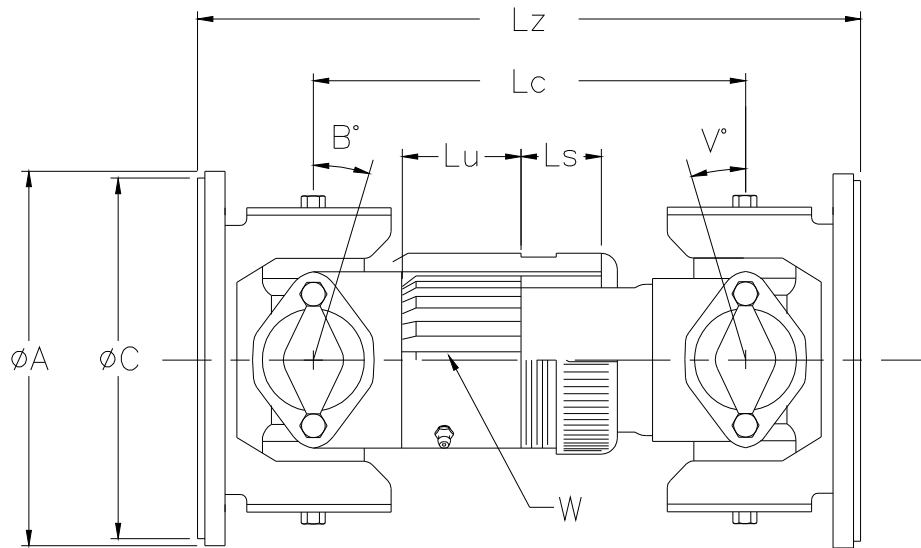
# Series 1810

	M	C	K						
	End to Center	Pilot Diameter	Swing Diameter						
Tube	M = Lz - Lc	Male 7.75"	8.00"						
Short	M = Lz - Lc	Male 7.75"	8.00"						
Length Variations									
	Minimum Lz	Minimum Lc	Lu	Ls	B	V	W	S	
	Face to Face	Center to Center	Useable Length	Slip Length	Angle	Angle	Spline	Tubing	Tube Formula
Tube	-	18"	4.50"	3.38"	30	30	3"-16	4.50" x .134W	T = Lc - 15.219
	21.38"	18"	4.50"	3.38"	30	30	3"-16	4.50" x .134W	T = Lc - 15.219
	21.38"	18"	4.50"	3.38"	30	30	3"-16	4.50" x .134W	T = Lc - 15.219
	21.31"	18"	4.50"	3.38"	30	30	3"-16	4.50" x .134W	T = Lc - 15.219
	24.75"	18"	4.50"	3.38"	30	30	3"-16	4.50" x .134W	T = Lz - 21.97"
	24.75"	18"	4.50"	3.38"	30	30	3"-16	4.50" x .259W (4)	T = Lz - 21.97"
	-	18.44"	4.50"	3.38"	30	30	3"-16	4.50" x .259W	T = Lz - 15.66
	25.19"	18.44"	4.50"	3.38"	30	30	3"-16	4.50" x .259W	T = Lz - 22.41"
	-	19.75"	4.50"	5"	30	30	3"-16	4.50" x .134W	T = Lc - 17"
	26.50"	19.75"	4.50"	5"	30	30	3"-16	4.50" x .134W	T = Lz - 23.75"
	-	20.06"	4.50"	5"	30	30	3"-16	4.50" x .259W (4)	T = Lc - 17.28"
Short	13.40"	8.21"	2.75"	1.12"	12	12	3.25"-18		
	13.90"	8.71"	2.75"	1.12"	12	12	3.25"-18		
	14.97"	8.21"	2.75"	1.12"	12	12	3.25"-18		
	15.47'	8.71"	2.75"	1.12"	12	12	3.25"-18		
	19.75"	13"	4"	3.38"	23	30	3"-16		
	20.75"	14"	4"	3.38"	23	30	3"-16		
	21.81"	15.06"	4.50"	3.38"	30	30	3"-16		
	-	16.19"	4.50"	5"	30	30	3"-16		
	-	17.44"	4.50"	5"	30	30	3"-16		
	-	18.06"	4.50"	5"	30	30	3"-16		
	-	18.69"	4.50"	5"	30	30	3"-16		
	22.94"	16.19"	4.50"	5"	30	30	3"-16		
	24.18"	17.44"	4.50"	5"	30	30	3"-16		
	24.81"	18.06"	4.50"	5"	30	30	3"-16		
	25.44"	18.69"	4.50"	5"	30	30	3"-16		
	(4) Unwelded at Tube Shaft								

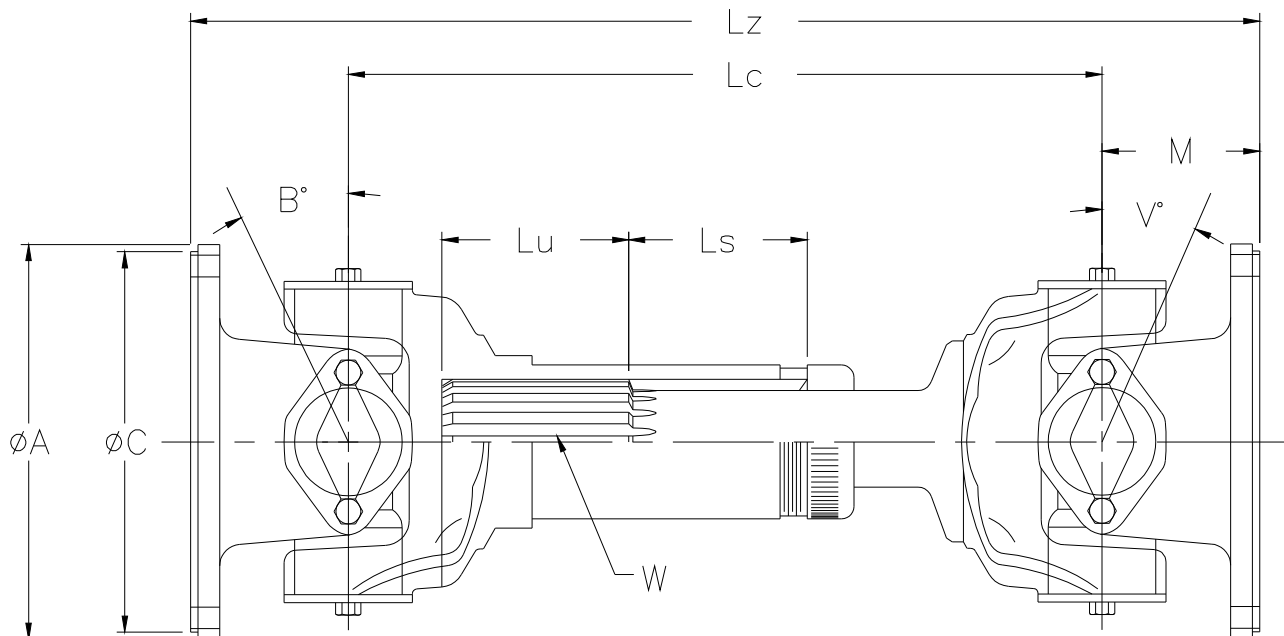
# Series 1880

## Short Couple Assembly

### Short Slip



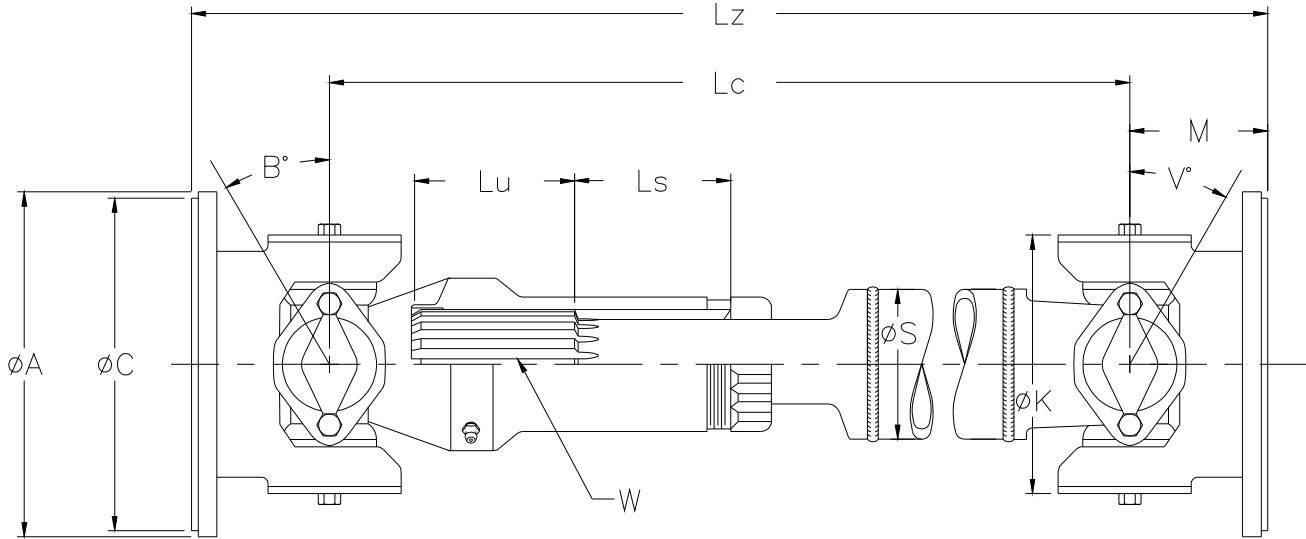
### Long Slip





# Series 1880

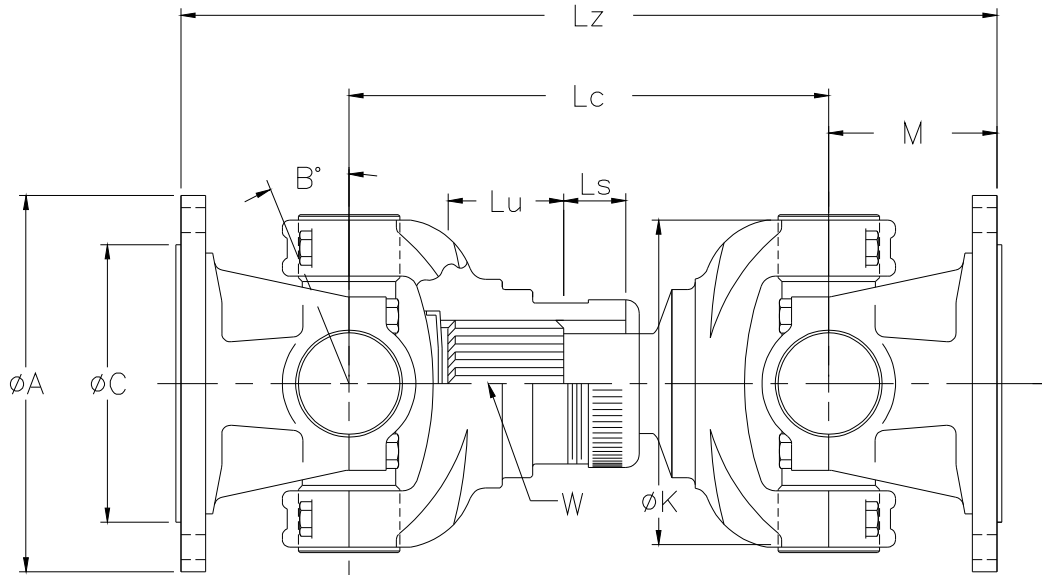
## Tube Type Assembly



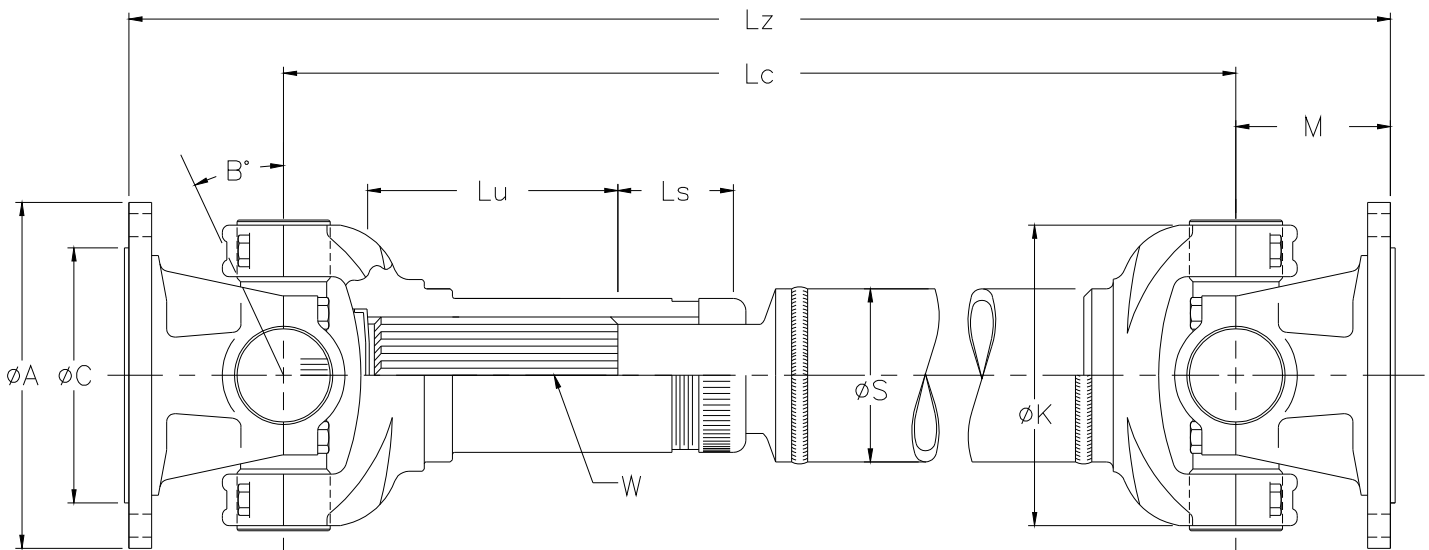
	M	C	K						
	End to Center	Pilot Diameter	Swing Diameter						
	$M = Lz - Lc$	Male 7.00"	9.75"						
Length Variations									
	Minimum Lz	Minimum Lc	Lu	Ls	B	V	W	S	
	Face to Face	Center to Center	Useable Length	Slip Length	Angle	Angle	Spline	Tubing	Tube Formula
Tube	-	18.69"	4.50"	3.50"	22	22	3"-16	4.50" x .259" W	$T = Lc - 15.94"$
	-	18.69"	4.50"	3.50"	22	22	3"-16	4.50" x .259" W	$T = Lc - 15.94"$
	25.69"	18.69"	4.50"	3.50"	22	22	3"-16	4.50" x .259" W	$T = Lz - 22.94"$
	25.69"	18.69"	4.50"	3.50"	22	22	3"-16	4.50" x .259" W	$T = Lz - 22.94"$
	-	20.31"	4.50"	3.50"	22	22	3"-16	4.50" x .259" W	$T = Lc - 17.56"$
	27.31"	20.31"	4.50"	3.50"	22	22	3"-16	4.50" x .259" W	$T = Lz - 24.562"$
Short	13.625"	8.625"	2.625"	1"	8*	8*	4.17"-24 Inv.		
	14.625"	8.625"	2.625"	1"	8	8	4.17"-24 Inv.		
	15.625"	8.625"	2.625"	1"	8	8	4.17"-24 Inv.		
	-	14.875"	4.50"	3.50"	8	8	3"-16		
	-	15.875"	4.50"	3.50"	8	8	3"-16		
	-	16.875"	4.50"	3.50"	8	8	3"-16		
	-	17.375"	4.50"	3.50"	8	8	3"-16		
	21.88"	14.875"	4.50"	3.50"	8	8	3"-16		
	22.88"	15.875"	4.50"	3.50"	8	8	3"-16		
	23.88"	16.875"	4.50"	3.50"	8	8	3"-16		
	24.38"	17.375"	4.50"	3.50"	8	8	3"-16		
	* Long Slip Angle = 22								

# Series 1910

## Short Couple Assembly



## Tube Type Assembly

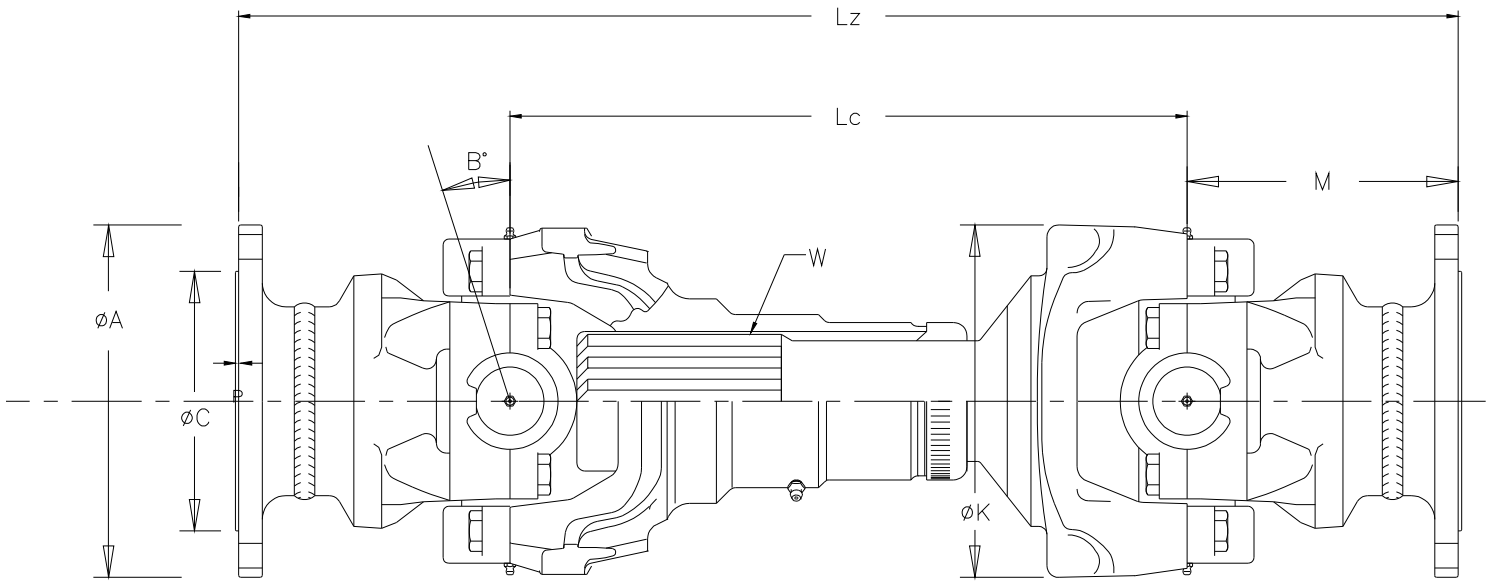


# Series 1910

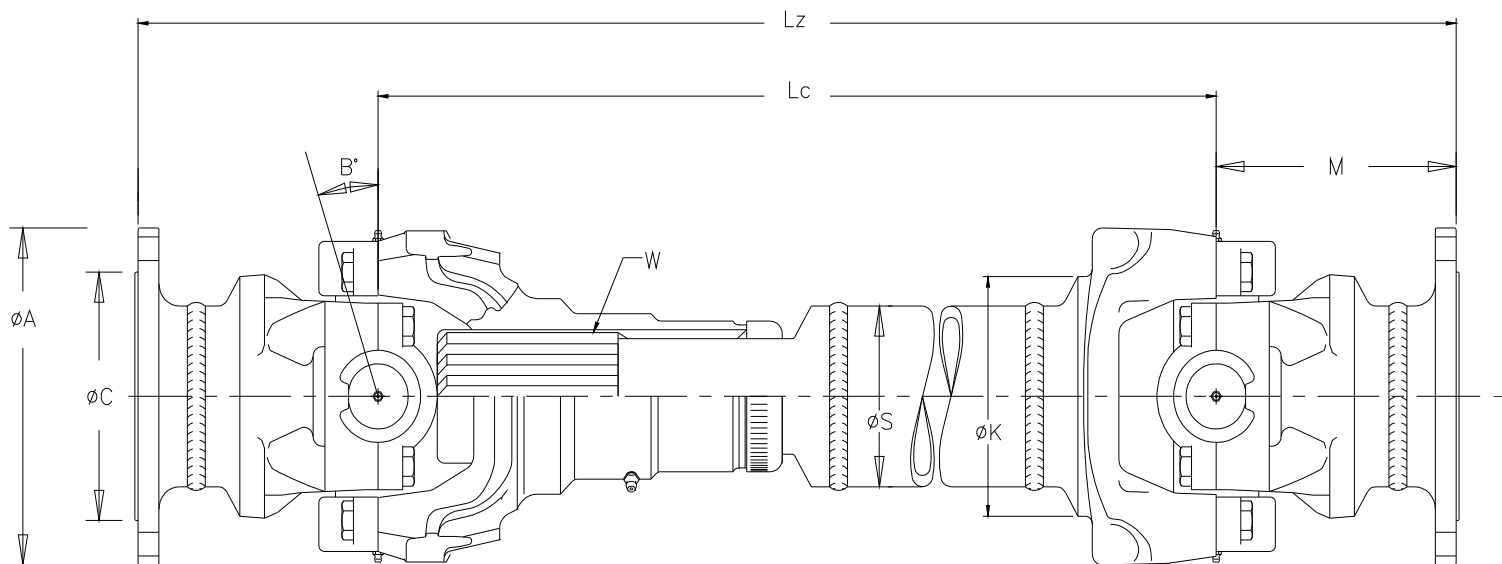
	M	C	K						
	End to Center	Pilot Diameter	Swing Diameter						
Tube	4.25"	Male 8.75"	10.875"						
		Female 5.512"	8.858"						
		Male 7.00"	9.50"						
Short	M = Lz - Lc	(same)	(same)						
	Length Variations								
	Minimum Lz	Minimum Lc	Lu	Ls	B	V	W	S	
	Face to Face	Center to Center	Useable Length	Slip Length	Angle	Angle	Spline	Tubing	Tube Formula
Tube	30.38"	21.88"	6.693"	2.95"	20	20	3.163"-36	4.75" x .250"	T = Lz - 26.83"
	30.38"	21.88"	6.693"	2.95"	20	20	3.163"-36	4.75" x .250"	T = Lz - 26.83"
	30.38"	21.88"	6.693"	2.95"	20	20	3.163"-36	4.75" x .250"	T = Lz - 26.83"
	30.38"	21.88"	6.693"	2.95"	20	20	3.163"-36	4.75" x .250"	T = Lz - 26.83"
	32.43"	23.93"	6.693"	5"	20	20	3.163"-36	4.75" x .250"	T = Lz - 28.88"
Short	21.654"	13.15"	2.91"	1.57"	22	22	3.15"-36		
	24.60"	16.10"	2.91"	1.57"	22	22	3.15"-36		
	21.654"	13.15"	2.91"	1.57"	22	22	3.15"-36		
	24.60"	16.10"	2.91"	1.57"	22	22	3.15"-36		
	21.654"	13.15"	2.91"	1.57"	22	22	3.15"-36		
	24.60"	16.10"	2.91"	1.57"	22	22	3.15"-36		

# Series 1950

## Short Couple Assembly



## Tube Type Assembly

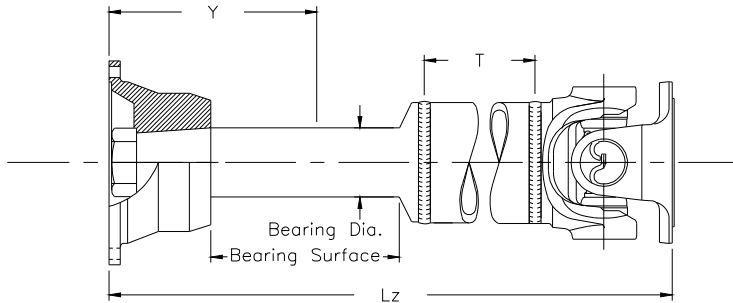


# Series 1950

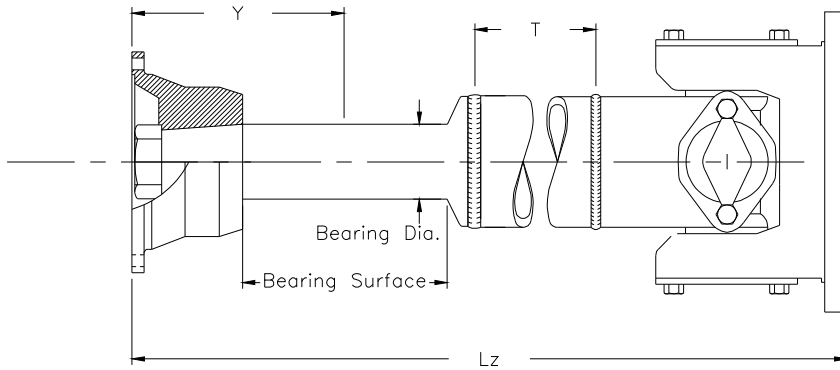
	M	C	K						
	End to Center	Pilot Diameter	Swing Diameter						
	8.625"	Male 8.25"	11.25"						
	Length Variations								
	Minimum Lz	Minimum Lc	Lu	Ls	B	V	W	S	
	Face to Face	Center to Center	Useable Length	Slip Length	Angle	Angle	Spline	Tubing	Tube Formula
Tube	-	26.75"	6.50"	5"	20	20	4.167"-24 Inv.	6" x .500"	T = Lc - 22.344"
	44.00"	26.75"	6.50"	5"	20	20	4.167"-24 Inv.	6" x .500"	T = Lz - 39.594"
	44.062"	26.82"	6.50"	5"	20	20	4.167"-24 Inv.	6" x .500"	T = Lz - 39.625"
	-	26.82"	6.50"	5"	20	20	4.167"-24 Inv.	6" x .500"	T = Lc - 22.375"
Inter./Long	-	18.562"	5"	3.50"	20	20	4.167"-24 Inv.		
	35.812"	18.562"	5"	3.50"	20	20	4.167"-24 Inv.		
	33.938"	16.688"	5"	2.312"	20	20	4.167"-24 Inv.		

# Single Joint Assemblies

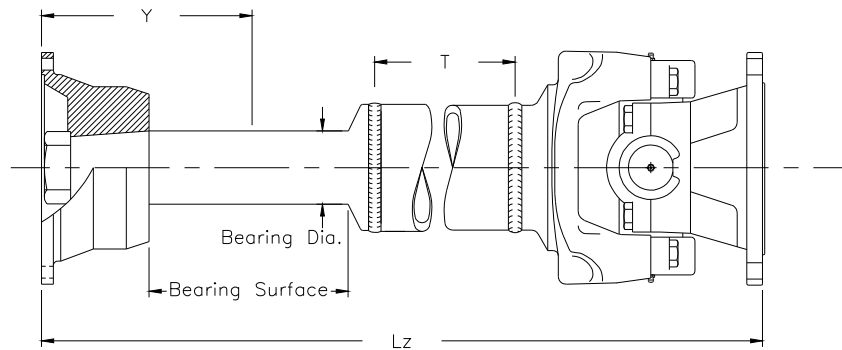
## 1310 – 1550 Series



## 1610 – 1880 Series

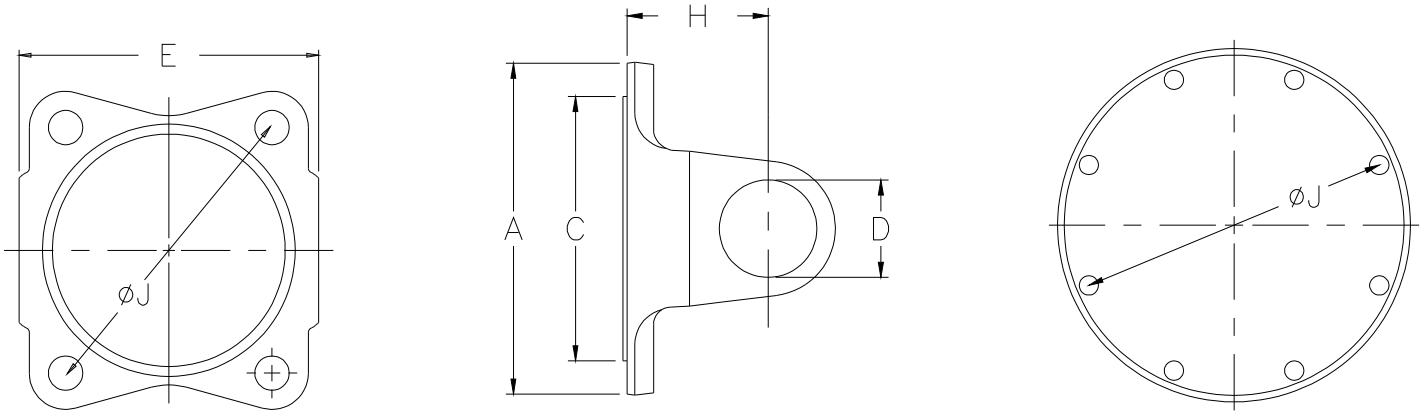


## 1910 – 1950 Series



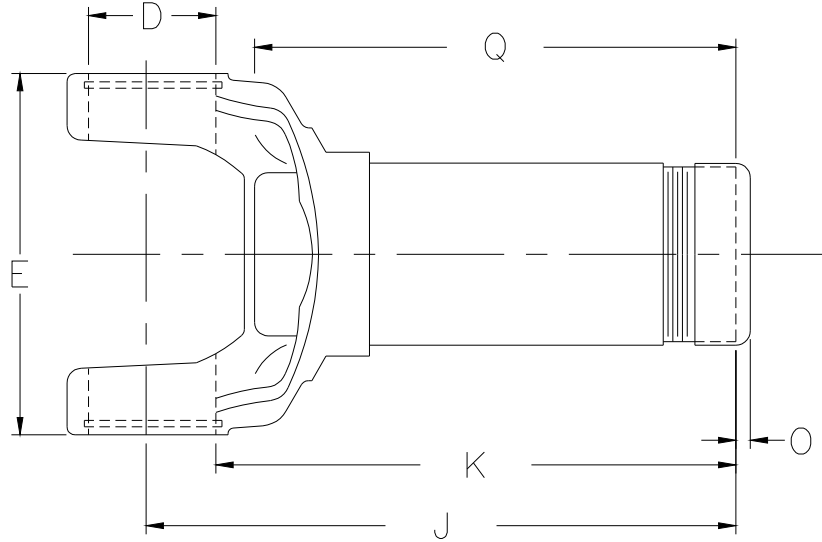
Series	1310	1350	1410	1480	1550	1610	1710	1810	1880	1910	1950
Y -- Center of Bearing Surface to Companion Flange Face	4.92"	4.92"	5.88"	6.74"	7.12"	7.10"	7.88"	7.02"	8.53"	9.04"	9.42"
Length of Bearing Surface	5.41"	5.41"	6.25"	8"	8"	8"	8"	5.41"	7.31"	7.31"	8.06"
Lz	12.81"	13.12"	15.22"	16.75"	17.56"	19.62"	20.75"	20.38"	23.75"	26.062"	34.50"
Tubing Formula	$T = Lz - 11.50"$	$T = Lz - 11.78"$	$T = Lz - 13.37"$	$T = Lz - 14.84"$	$T = Lz - 15.76"$	$T = Lz - 17.38"$	$T = Lz - 18.41"$	$T = Lz - 17.62"$	$T = Lz - 21"$	$T = Lz - 22.50"$	$T = Lz - 30.02"$
Bearing Diameter (max/min)	1.187"/ 1.186"	1.187"/ 1.186"	1.439"/ 1.435"	1.687"/ 1.685"	1.937"/ 1.935"	1.937"/ 1.935"	2.187"/ 2.185"	2.4375"/ 2.4345"	2.937"/ 2.935"	3.187"/ 3.185"	3.437"/ 3.435"

# Flange Yokes



	E	D	A	J			C	H
Series	Distance Across Lugs	Bearing Diameter	Flange Swing Diameter	Circle Diameter	Bolt Hole Diameter	No. Bolt Holes	Pilot Diameter	Flange Face to Centerline
1280	3.47"	1.06"	3.88"	3.12"	.38"	4	M-2.38"	1.38"
1310	3.47"	1.06"	3.88"	3.12"	.38"	4	M-2.38"	1.38"
1350	3.88"	1.19"	4.62"	3.75"	.44"	4	M-2.75"	1.56"
1410	4.44"	1.19"	4.69"	3.75"	.44"	4	M-2.75"	1.69"
1410	4.44"	1.19"	5.88"	4.75"	.50"	4	M-3.75"	2.00"
1480	4.44"	1.38"	5.88"	4.75"	.50"	4	M-3.75"	2.00"
1480	4.44"	1.38"	5.88"	4.75"	.50"	4	M-3.75"	1.50"
1550	5.25"	1.38"	5.88"	4.75"	.50"	4	M-3.75"	2.00"
1550	5.25"	1.38"	5.88"	4.75"	.50"	4	M-3.75"	1.50"
1550	5.25"	1.38"	6.88"	6.12"	.38"	8	M-6.62"	2.00"
1550	5.25"	1.38"	6.88"	6.12"	.38"	8	M-5.31"	2.00"
1610	5.31"	1.88"	6.88"	6.12"	.38"	8	M-6.62"	2.75"
1610	5.31"	1.88"	6.88"	6.12"	.38"	8	M-6.62"	2.75"
1610	5.31"	1.88"	6.88"	6.12"	.38"	8	M-6.62"	1.88"
1710	6.09"	1.94"	8.00"	7.25"	.38"	8	M-7.75"	3.00"
1710	6.09"	1.94"	8.00"	7.25"	.38"	8	M-8.00"	3.00"
1710	6.09"	1.94"	8.00"	7.25"	.38"	8	M-7.75"	2.00"
1710	6.09"	1.94"	8.00"	7.25"	.38"	8	M-6.44"	3.00"
1760	7.00"	1.94"	8.00"	7.25"	.44"	12	M-7.75"	3.38"
1810	7.55"	1.94"	8.00"	7.25"	.44"	12	M-7.75"	3.38"
1810	7.55"	1.94"	8.00"	7.25"	.44"	12	M-6.44"	3.31"
1810	7.55"	1.94"	8.00"	7.25"	.44"	12	M-7.75"	2.59"
1880	8.09"	2.18"	9.75"	8.25"	.62"	8	M-7.00"	3.50"
1880	8.09"	2.18"	9.75"	8.25"	.62"	8	M-7.00"	2.50"
1910	-	2.560"	10.875"	9.75"	.629"	8	M-8.75"	4.25"
1910	-	2.560"	8.858"	7.720"	.640"	8	F-5.512"	4.252"
1910	-	2.560"	9.50"	8.250"	.629"	8	M-7.00"	4.25"
1950	-	3.062"	11.188"	9.815"	.754"	12	M-8.250"	8.625"

# Slip Yokes



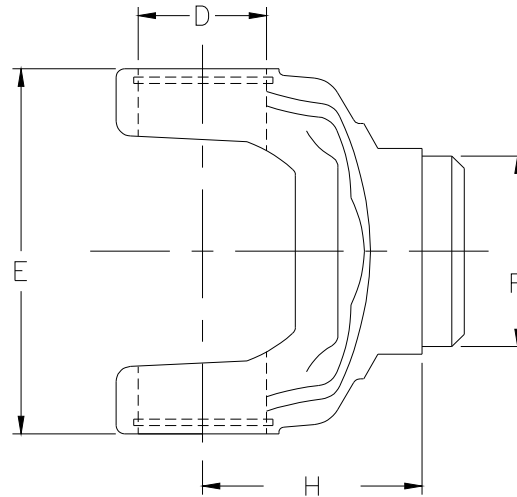
Series	E Distance Across Lugs	D Bearing Diameter	M Spline Diameter & Number	J Centerline to End of Spline	K Bottom of Cross Hole to End of Spline	Q Length of Thru Hole	O End of Slip Yoke to Inside of Dust Cap	Joint Angle
1280	3.47"	1.06"	1.25"-16	4.12"	3.59"	3.12"	.34"	16
1280	3.47"	1.06"	1.38"-16	6.88"	6.34"	5.38"	.34"	30
1310	3.47"	1.06"	1.25"-16	4.12"	3.59"	3.12"	.34"	16
1310	3.47"	1.06"	1.38"-16	6.88"	6.34"	5.38"	.34"	30
1350	3.88"	1.19"	1.50"-16	3.94"	3.34"	2.75"	.28"	20
1350	3.88"	1.19"	1.50"-16	7.31"	6.72"	6.12"	.28"	20
1410	4.44"	1.19"	1.50"-16	6.50"	5.90"	5.34"	.28"	20
1410	4.44"	1.19"	1.50"-16	3.91"	3.31"	2.75"	.28"	20
1410	4.44"	1.19"	1.50"-16	7.81"	7.21"	6.47"	.28"	28
1410	4.44"	1.19"	1.75"-16	3.25"	2.65"	2.44"	.28"	8
1410	4.44"	1.19"	1.56"-16	11.50"	10.90"	9.50"	.40"	37
1480	4.44"	1.38"	1.56"-16	6.81"	6.12"	5.50"	.40"	21
1480	4.44"	1.38"	2.25"-10	3.72"	3.03"	2.59"	.25"	8
1480	4.44"	1.38"	1.56"-16	9.50"	8.81"	7.50"	.40"	35
1550	5.25"	1.38"	1.75"-16	6.88"	6.18"	5.50"	.257"	22
1550	5.25"	1.38"	2.50"-16	3.50"	2.81"	2.56"	.413"	8
1550	5.25"	1.38"	1.75"-16	10.06"	9.37"	8.00"	.257"	35
1550	5.25"	1.38"	1.75"-16	5.38"	4.69"	4.00"	.257"	-



# Slip Yokes

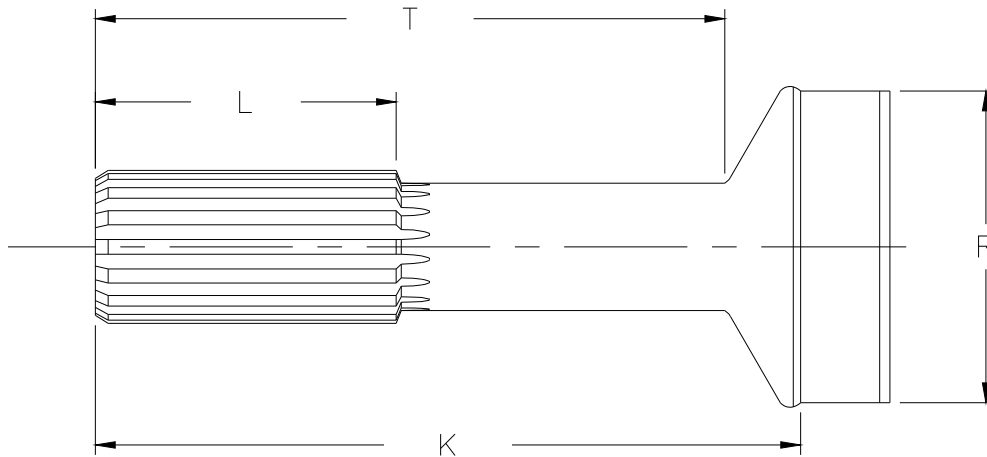
1610	5.31"	1.88"	2"-16	7.81"	6.88"	6.38"	-	22
1610	5.31"	1.88"	2.673"-18 Inv.	3.50"	2.57"	2.25"	.38"	8
1610	5.31"	1.88"	2.673"-18 Inv.	4.00"	3.07"	2.75"	.38"	8
1610	5.31"	1.88"	2.673"-18 Inv.	4.25"	3.32"	3"	.38"	8
1610	5.31"	1.88"	2"-16	9.31"	8.38"	7.38"	-	30
1610	5.31"	1.88"	2"-16	11.94"	11"	9.00"	-	45
1610	5.31"	1.88"	2"-16	10.81"	9.88"	8.38"	-	30
1710	6.09"	1.94"	3.25"-18 Inv.	4.88"	3.91"	3.50"	.362"	28/35
1710	6.09"	1.94"	3.25"-18 Inv.	4.12"	3.15"	2.74"	.362"	8
1710	6.09"	1.94"	2.50"-16	8.84"	7.87"	7.50"	-	22
1710	6.09"	1.94"	2.50"-16	11.69"	10.72"	9.25"	-	23/29
1710	6.09"	1.94"	2.50"-16	9.59"	8.62"	7.875"	-	21
1710	6.09"	1.94"	2.50"-16	7.47"	6.50"	7.625"	-	21
1760	7"	1.94"	2.50"-16	11.16"	10.19"	8.69"	-	30
1760	7"	1.94"	2.50"-16	9.25"	8.28"	6.78"	-	30
1810	7.55"	1.94"	3"-16	10.25"	9.28"	7.88"	-	30
1810	7.55"	1.94"	3"-16	11.88"	10.91"	9.50"	-	30
1810	7.55"	1.94"	3"-16	8.94"	7.97"	7.38"	-	30
1810	7.55"	1.94"	3.25"-18 Inv.	5.38"	4.41"	3.88"	.50"	12
1880	8.09"	2.18"	3"-16	10.03"	8.93"	8.00"	-	22
1880	8.09"	2.18"	3"-16	11.65"	10.56"	9.62"	-	22
1880	8.09"	2.18"	4.17"-24 Inv.	5.03"	3.94"	3.62"	.50"	8
1910	-	2.56"	3.163"-36 Inv.	8.94"	7.66"	6.30"	-	20
1910	-	2.56"	3.163"-36 Inv.	11.94"	10.66"	9.30"	-	22
1950	-	3.062"	4.167"-24 Inv.	13.875"	12.34"	10.313"	.50"	20
1950	-	3.062"	4.167"-24 Inv.	10.875"	9.34"	7.313"	.50"	20
1950	-	3.062"	4.167"-24 Inv.	9.688"	8.157"	6.126"	.50"	20

# Tube Yokes



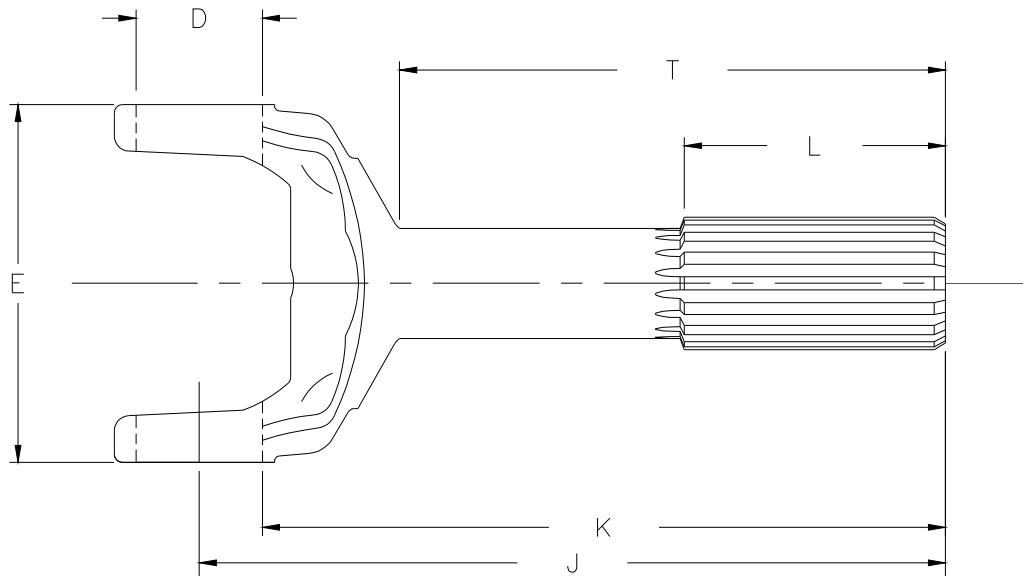
		E	D	R	H	
Series	Tubing	Distance Across Lugs	Bearing Diameter	Hub Diameter	Centerline to Point of Weld	Momentary Operating Angle
1280	2.50"x.083"W	3.47"	1.06"	2.34"	1.84"	30
1310	2.50"x.083"W	3.47"	1.06"	2.34"	1.84"	30
1350	3"x.083W	3.88"	1.19"	2.84"	2"	20
1410	3"x.083W	4.44"	1.19"	2.84"	2.13"	30
1410	3.50"x.083W	4.44"	1.19"	3.34"	2.12"	30
1480	3.50"x.083W	4.44"	1.38"	3.34"	2.03"	22
1480	3.50"x.083W	4.44"	1.38"	3.34"	2.31"	33
1480	4"x.083W	4.44'	1.38"	3.84"	2.03"	22
1550	3.50"x.095W	5.25"	1.38"	3.32"	2.31"	22
1550	3.50"x.095W	5.25"	1.38"	3.32"	2.03"	35
1610	4"x.134"W	5.31"	1.88"	3.74"	3"	-
1610	3.50"x.134"W	5.31'	1.88"	3.25"	3"	35
1610	3.50"x.134"W	5.31"	1.88"	3.25"	4.87"	45
1710	4"x.134"W	6.09"	1.94"	3.75"	3.03"	22/30
1710	4.09"x.180"W	6.09"	1.94"	3.75"	3.03"	22/30
1710	4.50"x.134"W	6.09"	1.94"	4.25"	3.03"	22
1760	4.06"x.165"W	7"	1.94"	3.74"	3.03"	30
1810	4.50"x.134"W	7.55"	1.94"	4.24"	3.38"	30
1810	4.50"x.259"W	7.55"	1.94"	4"	3.38"	30
1880	4.50"x.259"W	8.09"	2.18"	4"	4"	22
1910	4.75"x.250W	-	2.560"	4.25"	4.19"	20
1950	5.25"x.375"W	-	3.062"	4.50"	6.531"	20
1950	6"x.500"W	-	3.062"	5.146"	6.531"	20

# Tube Shafts



		L		R	T	K
Series	Spline	Useable Length	Tube Size	Hub Diameter	End of Spline to Point of Radius	End of Spline to Point of Weld
1280	1.38"-16	2.25"	2.50" x .083"W	2.34"	5.62"	6.34"
1310	1.38"-16	2.25"	2.50" x .083"W	2.34"	5.62"	6.34"
1350	1.50"-16	2.50"	3" x .083"W	2.84"	6.44"	7.25"
1410	1.50"-16	3"	3.50" x .083"W	3.34"	5.62"	6.56"
1410	1.50"-16	3"	3.50" x .083"W	3.34"	6.39"	7.53"
1410	1.56"-16	5"	3" x .083"W	2.84"	12.59"	13.41"
1480	1.56"-16	3"	4" x .083"W	3.84"	7.81"	8.94"
1480	1.56"-16	3"	3.50" x .083"W	3.34"	5.81"	6.75"
1480	1.56"-16	3"	3.50" x .083"W	3.34"	7.81"	8.75"
1550	1.75"-16	3"	3.50" x .095"W	3.32"	8.25"	9.22"
1550	1.75"-16	3"	3.50" x .095"W	3.32"	5.81"	6.78"
1610	2"-16	3.50"	3.50" x .134"W	3.24"	8.78"	9.69"
1610	2"-16	3.50"	3.50" x .134"W	3.24"	9.28"	10.19"
1610	2"-16	3.50"	3.50" x .134"W	3.24"	6.66"	7.56"
1610	2"-16	3.50"	4" x .134"W	3.74"	8.78"	9.84"
1710	2.50"-16	4"	4" x .134"W	3.74"	9.56"	10.56"
1710	2.50"-16	4"	4.09" x .180"W	3.74"	9.56"	10.56"
1710	2.50"-16	4"	4" x .134"W	3.74"	8.25"	9.25"
1710	2.50"-16	4"	4.09" x .180"W	3.74"	8.25"	9.25"
1710	2.50"-16	4"	4.50" x .134"W	4.24"	9.47"	10.65"
1710	2.50"-16	4"	4.50" x .134"W	4.24"	8.31"	9.50"
1710	2.50"-16	4"	4" x .134"W	3.74"	7.43"	8.44"
1760	2.50"-16	4"	4.06" x .165"W	3.74"	8.25"	9.25"
1810	3"-16	4.50"	4.50" x .134"W	4.24"	10.03"	11.25"
1810	3"-16	4.50"	4.50" x .134"W	4.24"	8.41"	9.47"
1810	3"-16	4.50"	4.50" x .259"W	4"	8.59"	9.91"
1810	3"-16	4.50"	4.50" x .259"W	4"	10.22"	11.53"
1880	3"-16	4.50"	4.50" x .259"W	4"	8.59"	9.90"
1880	3"-16	4.50"	4.50" x .259"W	4"	10.22"	11.53"
1950	4.167"-24 Inv.	6.50"	5.25" x .375"W	4.50"	11.94"	13.47"
1950	4.167"-24 Inv.	6.50"	6" x .500"W	5.15"	11.94"	13.47"

# Yoke Shafts



	E	D		L	J	K	T	
Series	Distance Across Lugs	Bearing Diameter	Spline	Useable Length	Centerline to End of Spline	Bottom of Cross Hole to End of Spline	End of Spline to Point of Radius	Momentary Joint Angle
1280	3.47"	1.06"	1.25"-16	1.88"	5.12"	4.59"	3.34"	15
1310	3.47"	1.06"	1.25"-16	1.88"	5.12"	4.59"	3.34"	15
1350	3.88"	1.19"	1.50"-16	2"	5.19"	4.59"	3.12"	20
1410	4.44"	1.19"	1.50"-16	2"	4.97"	4.38"	3.12"	22
1410	4.44"	1.19"	1.75"-16	1.44"	4.54"	3.95"	2.67"	8
1480	4.44"	1.38"	2.25"-10	1.59"	4.38"	3.68"	2.81"	8
1550	5.25"	1.38"	2.50"-16	1.56"	4.56"	3.88"	2.87"	8
1550	5.25"	1.38"	2.50"-16	1.56"	4.81"	4.12"	3.12"	8
1550	5.25"	1.38"	1.75"-16	2.50"	6.81"	6.12"	4.25"	22
1610	5.31"	1.88"	2.673"-18 Inv.	1.50"	4.12"	3.19"	2.43"	8
1610	5.31"	1.88"	2"-16	3.50"	15.93"	15"	10.81"	45
1610	5.31"	1.88"	2"-16	3.50"	15"	14.06"	9.87"	45
1610	5.31"	1.88"	2"-16	3.50"	16.31"	15.38"	11.8"	45
1610	5.31"	1.88"	2"-16	3.50"	15.50"	14.56"	10.37"	45
1610	5.31"	1.88"	2"-16	3.50"	14.41"	13.47"	9.28"	45
1610	5.31"	1.88"	2"-16	3.50"	12.06"	11.13"	8.50"	30/35

# Yoke Shafts

1710	6.09"	1.94"	3.25"-18 Inv.	2"	5.25"	4.28"	3.13"	15
1710	6.09"	1.94"	2.50"-16	4"	12.16"	11.18"	8.48"	24/29
1710	6.09"	1.94"	2.50"-16	4"	13.16"	12.18"	9.48"	24/29
1710	6.09"	1.94"	2.50"-16	4"	14.16"	13.18"	10.48"	24/29
1710	6.09"	1.94"	2.50"-16	4"	13.44"	12.47"	9.76"	24/29
1710	6.09"	1.94"	2.50"-16	4"	14.56"	13.59"	10.88"	24/29
1710	6.09"	1.94"	2.50"-16	4"	12.66"	11.68"	8.98"	24/29
1710	6.09"	1.94"	2.50"-16	4"	13.63"	12.66"	9.95"	24/29
1710	6.09"	1.94"	2.50"-16	4"	14.06"	13.09"	10.38"	24/29
1710	6.09"	1.94"	2.50"-16	4"	12.28"	11.31"	8.60"	24/29
1710	6.09"	1.94"	2.50"-16	4"	13.91"	12.94"	10.23"	24/29
1710	6.09"	1.94"	2.50"-16	3.50"	9.66"	8.68"	6.32"	24/29
1710	6.09"	1.94"	2.50"-16	3.50"	10.16"	9.18"	6.82"	24/29
1710	6.09"	1.94"	2.50"-16	3.50"	10.66"	9.68"	7.32"	24/29
1710	6.09"	1.94"	2.50"-16	3.50"	11.66"	10.68"	8.32"	24/29
1760	7"	1.94"	2.50"-16	4"	11"	10.03"	8.19"	30
1760	7"	1.94"	2.50"-16	4"	11.50"	10.50"	8.69"	30
1760	7"	1.94"	2.50"-16	4"	12"	11.03"	9.19"	30
1760	7"	1.94"	2.50"-16	4"	12.50"	11.53"	9.69"	30
1760	7"	1.94"	2.50"-16	4"	12.38"	11.41"	9.57"	30
1760	7"	1.94"	2.50"-16	4"	12.88"	11.91"	10.07"	30
1760	7"	1.94"	2.50"-16	4"	13.38"	12.41"	10.57"	30
1760	7"	1.94"	2.50"-16	4"	13.88"	12.91"	11.07"	30
1760	7"	1.94"	2.50"-16	4"	14.38"	13.41"	11.57"	30
1760	7"	1.94"	2.50"-16	4"	14.88"	13.91"	12.07"	30
1760	7"	1.94"	2.50"-16	4"	15.38"	14.41"	12.57"	30
1810	7.55"	1.94"	3"-16	4"	11.44"	10.47"	7.81"	30
1810	7.55"	1.94"	3"-16	4"	12.44"	11.47"	8.81"	30
1810	7.55"	1.94"	3"-16	4.50"	12.68"	11.71"	8.81"	30
1810	7.55"	1.94"	3"-16	4.50"	13.81"	12.84"	9.94"	30
1810	7.55"	1.94"	3"-16	4.50"	15.06"	14.09"	11.18"	30
1810	7.55"	1.94"	3"-16	4.50"	15.68"	14.71"	11.81"	30
1810	7.55"	1.94"	3"-16	4.50"	16.31"	15.34"	12.44"	30
1810	7.55"	1.94"	3.25"-18 Inv.	2.75"	6.71"	5.75"	4.18"	12
1810	7.55"	1.94"	3.25"-18 Inv.	2.75"	7.21"	6.25"	4.68"	12
1880	8.09"	2.18"	3"-16	4.50"	12.844"	11.75"	8.532"	22
1880	8.09"	2.18"	3"-16	4.50"	13.844"	12.75"	9.5362"	22
1880	8.09"	2.18"	3"-16	4.50"	14.844"	13.75"	10.532"	22
1880	8.09"	2.18"	3"-16	4.50"	15.344"	14.25"	11.032"	22
1880	8.09"	2.18"	4.17"-24 Inv.	2.625"	7.219"	6.125"	4.156"	8
1910	-	2.56"	3.163"-36 Inv.	4.49"	10.51"	9.23"	6.30"	-
1950	-	3.062"	4.167"-24 Inv.	5"	16.188"	14.657"	9.344"	20
1950	-	3.062"	4.167"-24 Inv.	5"	14.310"	12.779"	7.810"	-