Desde - Since 1950

Diseño y Fabricación de transmisiones cardan y sus componentes
Design and Manufacturing of propeller shafts and components

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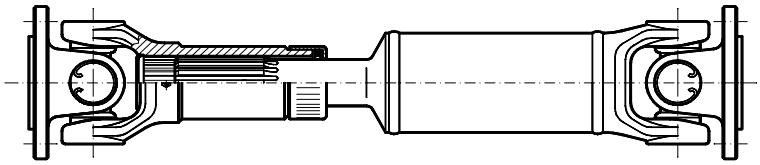
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SERIE INDUSTRIAL - INDUSTRIAL SERIES

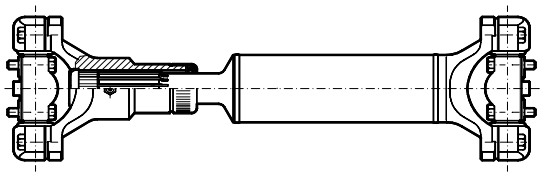
AT-05

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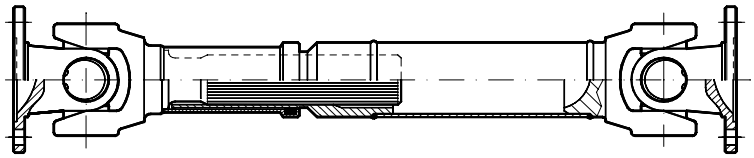
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Cardancillos estandar / Standard Short Coupled Shafts	9 / 10
Transmisiones con puente central / Midship Shafts	11
Transmisiones con dos juntas fijas / Drive Shafts with two fixed joints	12
Juntas correderas / Slip Joints	13 / 14
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Barrones correderos / Slip Stub Shafts	17
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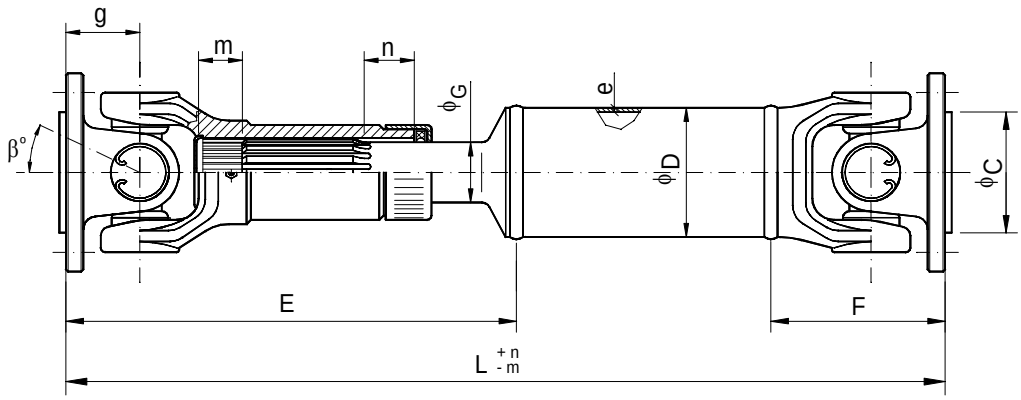
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Transmisiones SAE con acoplamientos SAE
SAE Drive shafts with SAE Flanges fitting

SERIES LIGERAS - LIGHT SERIES



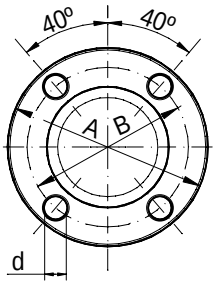


Fig.1

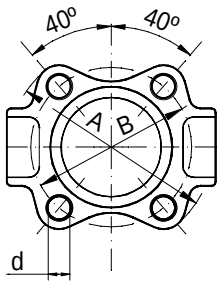


Fig.2

Rec = Recorrido - Slip movement

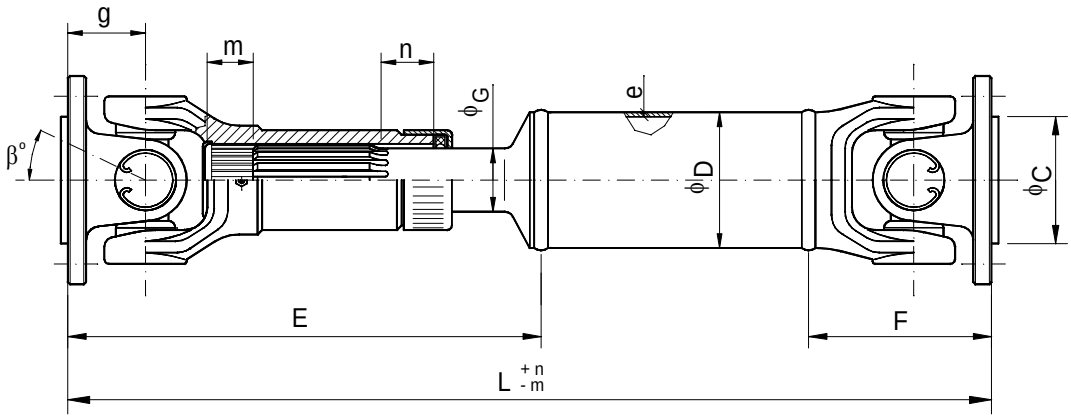
SERIE SERIES	REFERENCIA PART NUMBER	E	F	Rec +n -m	D x e	G	Fig	A	B	C	d	g	βº max.
0500	1999.32-T.L CDR	160	69	+ - 18	32,0x3,5	22,8	1	77	60,32	44,45	6,5	27,0	18
	1999.45-T.L CDR		79		45,0x2,5								
1.100	2001.51-T.L CDR	177	65	+ - 20	50,8x2,4	22,8	1	88	69,87	57,15	8,2	30,2	17
1.300	2003.51-T.L CDR	213	79,5	+ - 25	50,8x2,4	29,2	1	97	79,39	60,32	10,2	34,9	17
	2003.63-T.L CDR		78,5		63,5x2,5								
	2003.76-T.L CDR				76,1x2,5								
	2003.1.51-T.L CDR		79,5		50,8x2,4						9,75		
	2003.1.63-T.L CDR		78,5		63,5x2,5								
	2003.1.76-T.L CDR				76,1x2,5								
1.310	2015.51-T.L CDR	213	78	+ - 25	50,8x2,4	29,2	1	97	79,39	60,32	10,2	34,9	20
	2015.63-T.L CDR		84		63,5x2,5								
	2015.1.51-T.L CDR		78		50,8x2,4						9,75		
	2015.1.63-T.L CDR		84		63,5x2,5								
	2015R70.51-T.L CDR	242	78	+ - 35	50,8x2,4						10,2		
	2015R70.63-T.L CDR		84		63,5x2,5								
	2015R70.1.51-T.L CDR		78		50,8x2,4						9,75		
	2015R70.1.63-T.L CDR		84		63,5x2,5								
	2015A.51-T.L CDR	250	84,5	+ - 25	50,8x2,4		2				10,2	41,4	30
	2015A.63-T.L CDR		90,5		63,5x2,5								
	2015AR70.51-T.L CDR	260	84,5	+ - 35	50,8x2,4								
	2015AR70.63-T.L CDR		90,5		63,5x2,5								

- PARA OBTENER LA REFERENCIA COMPLETA, SUSTITUIR LA "L" POR LA LONGITUD EN POSICIÓN DE TRABAJO EN mm. SI LA LONGITUD ES CERRADA, ELIMINAR LA "CDR" FINAL. PARA OTROS TIPOS DE ACOPLAMIENTO, VER PÁGINA 19.

- FOR OBTAINING THE COMPLETE REFERENCE, SUBSTITUTE THE 'L' BY THE WORKING LENGTH IN mm. IF THE LENGTH IS CLOSED ELIMINATE THE 'CDR' OF THE END. FOR OTHER FLANGES FITTING PLEASE SEE PAGE 19.

Transmisiones SAE con acoplamientos SAE
SAE Drive shafts with SAE Flanges fitting

SERIES MEDIAS - MEDIUM SERIES



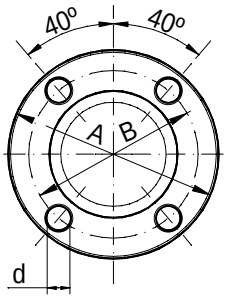


Fig.1

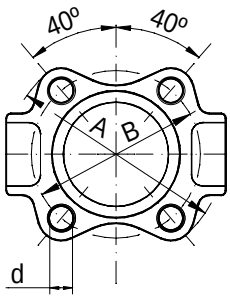


Fig.2

Rec = Recorrido - Slip movement

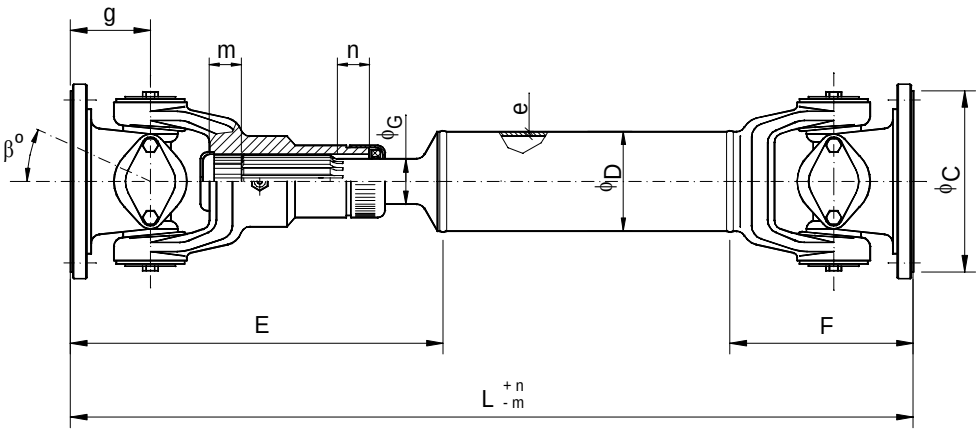
SERIE SERIES	REFERENCIA PART NUMBER	E	F	Rec + n - m	D x e	G	Fig	A	B	C	d	g	βº max.
1.350	2004.63-T.L CDR	244	97	+ - 26	63,5x2,5	32	2	118	95,27	69,85	11,2	39,7	20
	2004.76-T.L CDR				76,1x2,5								
	2004.2.63-T.L CDR				63,5x2,5						12,2		
	2004.2.76-T.L CDR				76,1x2,5								
	2004A.63-T.L CDR	274	127		63,5x2,5		1				11,2	70,0	28
	2004A.76-T.L CDR				76,1x2,5								
1.410	2005.63-T.L CDR	262	103	+ - 26	63,5x2,5	32	2	118	95,27	69,85	11,2	42,9	20
	2005.76-T.L CDR		97	+ - 28	76,1x2,5								
	2005.2.63-T.L CDR		103	+ - 26	63,5x2,5						12,2		
	2005.2.76-T.L CDR		97	+ - 28	76,1x2,5								
1.480	2048.90-T.L CDR	282	102,5	+ - 35	90,0x3,0	37	2	146	120,67	95,25	12,8	50,8	20
1.510	2006.76-T.L CDR	287	135	+ - 27	76,1x2,5	37	1	146	120,67	95,25	12,8	63,5	20
	2006.90-T L CDR	297		+ - 35	90,0x3,0								
	2006.2.76-T.L CDR	287		+ - 27	76,1x2,5						14,2		
	2006.2.90-T.L CDR	297		+ - 35	90,0x3,0								

- PARA OBTENER LA REFERENCIA COMPLETA, SUSTITUIR LA "L" POR LA LONGITUD EN POSICIÓN DE TRABAJO EN mm. SI LA LONGITUD ES CERRADA, ELIMINAR LA "CDR" FINAL. PARA OTROS TIPOS DE ACOPLAMIENTO, VER PÁGINA 19.

- FOR OBTAINING THE COMPLETE REFERENCE, SUBSTITUTE THE 'L' BY THE WORKING LENGTH IN mm. IF THE LENGTH IS CLOSED ELIMINATE THE 'CDR' OF THE END. FOR OTHER FLANGES FITTING PLEASE SEE PAGE 19.

Transmisiones SAE con acoplamientos SAE
SAE Drive shafts with SAE Flanges fitting

SERIES PESADAS – HEAVY SERIES



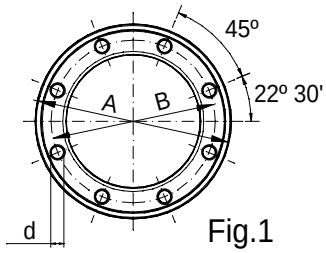


Fig.1

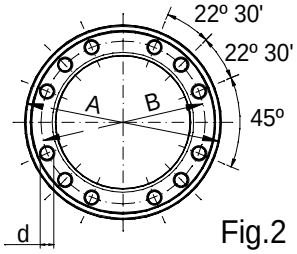


Fig.2

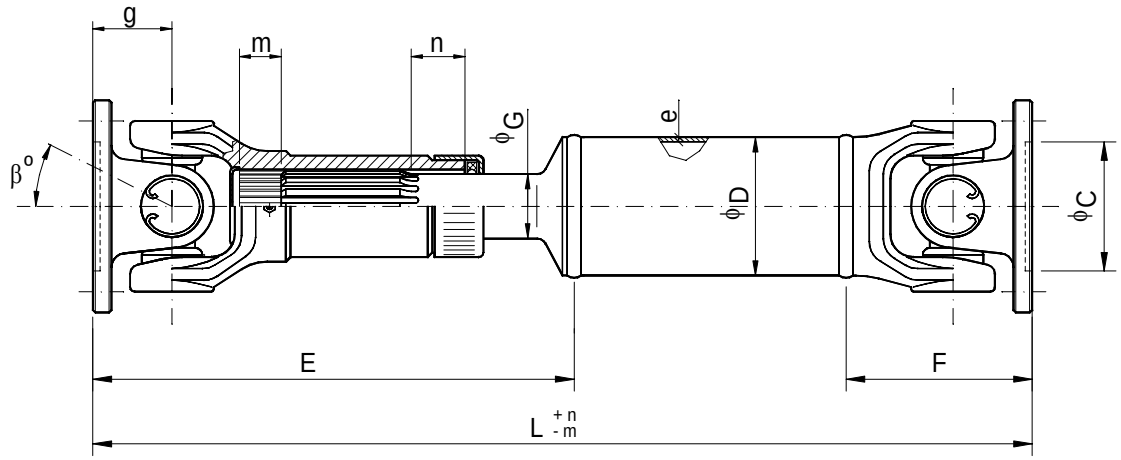
Rec = Recorrido - Slip movement

SERIE SERIES	REFERENCIA PART NUMBER	E	F	Rec +n -m	D x e	G	Fig	A	B	C	d	g	βº max.
1.610	2007.90-T.L CDR	339	146	+ - 30	90,0 x 5,0	42	1	175	155,5	168,2	10,2	69,8	22
	2007R.90-T.L CDR	410		+ - 50									
	2007.1.90-T.L CDR	339		+ - 30							9,75		
	2007R.1.90-T.L CDR	410		+ - 50									
1.710	2008.90-T.L CDR	404	176	+ - 40	90,0 x 5,0	51	1	203	184,1	196,9	10,2	76,2	30
	2008.1.90-T.L CDR										9,75		
	2008.12.90-T.L CDR						2				10,2		
	2008M.90-T.L CDR	436		+ - 50			1				10,2		
	2008M.1.90-T.L CDR										9,75		
	2008M.12.90-T.L CDR						2				10,2		
1.800	2009.110-T.L CDR	445	178	+ - 45	110,0 x 6,0	61	2	203	184,1	196,9	11,2	86,0	20

- PARA OBTENER LA REFERENCIA COMPLETA, SUSTITUIR LA "L" POR LA LONGITUD EN POSICIÓN DE TRABAJO EN mm. SI LA LONGITUD ES CERRADA, ELIMINAR LA "CDR" FINAL. PARA OTROS TIPOS DE ACOPLAMIENTO, VER PÁGINA 19.

- FOR OBTAINING THE COMPLETE REFERENCE, SUBSTITUTE THE 'L' BY THE WORKING LENGTH IN mm. IF THE LENGTH IS CLOSED ELIMINATE THE 'CDR' OF THE END. FOR OTHER FLANGES FITTING PLEASE SEE PAGE 19.

Transmisiones SAE con acoplamientos DIN
SAE Drive shafts with DIN Flanges fitting



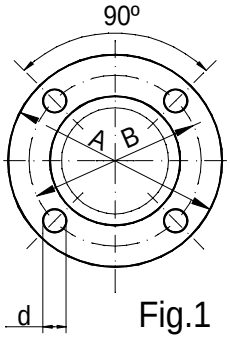


Fig.1

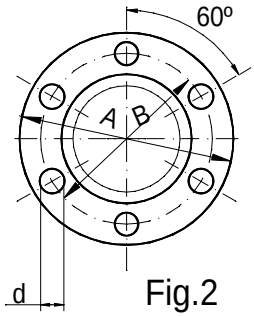


Fig.2

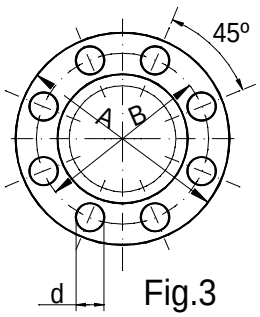


Fig.3

Rec = Recorrido - Slip movement

SERIE SERIES	REFERENCIA PART NUMBER	E	F	Rec +n -m	D x e	G	Fig	A	B	C	d	g	βº max.
0500	1999D1.32-T.L CDR	171,5	80,5	+ - 18	32x3,5	22,8	1	58	47	30	5,2	38,5	25
	1999D2.32-T.L CDR							65	52	35	6,2		
	1999D3.32-T.L CDR						2	75	62	42			
1.100	2001D1.51-T.L CDR	186	74	+ - 20	50,8x2,4	22,8	2	75	62	42	6,2	39,0	17
1.310	2015D.51-T.L CDR	228	93	+ - 25	50,8x2,4	29,2	1	90	74,5	47	8,2	50,0	20
	2015D.63-T.L CDR		99		63,5x2,5								
	2015D4.51-T.L CDR	231	96		50,8x2,4		2	100	84	57		53,0	
	2015D4.63-T.L CDR		102		63,5x2,5								
1.350	2004D.63-T.L CDR	259	112	+ - 26	63,5x2,5	32	2	100	84	57	8,2	55,0	20
	2004D.76-T.L CDR				76,1x2,5								
1.410	2005D.63-T.L CDR	275	116	+ - 26	63,5x2,5	32	3	120	101,5	75	10,2	56,0	22
	2005D.76-T.L CDR		110	+ - 28	76,1x2,5								
1.480	2048D.90-T.L CDR	296	116,5	+ - 35	90,0x3,0	32	3	120	101,5	75	10,2	65,0	22
1.510	2006D.76-T.L CDR	298	146,5	+ - 27	76,1x2,5	37	3	120	101,5	75	10,2	75,0	20
	2006D.90-T.L CDR	308		+ - 35	90,0x3,0								
1.550	2055D.90-T.L CDR	320	135,5	+ - 32	90,0x5,0	37	3	150	130	90	12,2	80,0	25
1.610	2007D.90-T.L CDR	356	163	+ - 30	90,0x5,0	42	3	150	130	90	12,2	87,0	22
	2007RD.90-T.L CDR	427		+ - 50									
1.710	2008D.90-T.L CDR	414	186,5	+ - 40	90,0x5,0	51	3	180	155,5	110	14,2	86,5	25

- PARA OBTENER LA REFERENCIA COMPLETA, SUSTITUIR LA "L" POR LA LONGITUD EN POSICIÓN DE TRABAJO EN mm. SI LA LONGITUD ES CERRADA, ELIMINAR LA "CDR" FINAL. PARA OTROS TIPOS DE ACOPLAMIENTO, VER PÁGINA 20.

- FOR OBTAINING THE COMPLETE REFERENCE, SUBSTITUTE THE 'L' BY THE WORKING LENGTH IN mm. IF THE LENGTH IS CLOSED ELIMINATE THE 'CDR' OF THE END. FOR OTHER FLANGES FITTING PLEASE SEE PAGE 20.

Cardancillos SAE con acoplamientos SAE
SAE Short Coupled Shafts with SAE flanges fitting

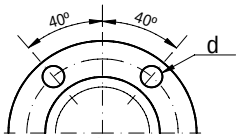


Fig.1

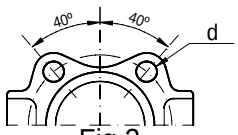
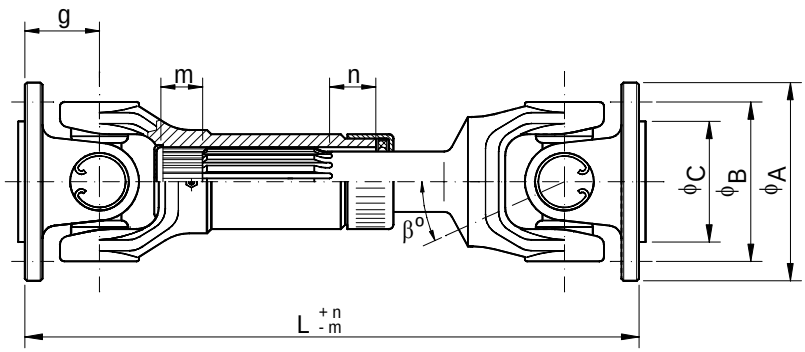


Fig.2



Fig.3



Rec = Recorrido - Slip movement

SERIE SERIES	REFERENCIA PART NUMBER	L	Rec +n -m	Fig	A	B	C	d	g	βº max.
0500	1999-T.198 CDR	198	+ - 10	1	77	60,32	44,45	6,5	27,0	18
	1999-T.210 CDR	210								
	1999-T.253 CDR	253	+ - 18							
1.100	2001-T.186 CDR	186	+ - 10	1	88	69,87	57,15	8,2	30,2	17
	2001-T.203 CDR	203								
	2001-T.222 CDR	222								
1.310	2015-T.230 CDR	230	+ - 10	1	97	79,39	60,32	10,2 - 9,75	34,9	20
	2015-T.259 CDR	259	+ - 22							
	2015-T.282 CDR	282								
	2015-T.299 CDR	299	+ - 26							
	2015-T.326 CDR	326	+ - 36							
	2015-T.334 CDR	334								
	2015A-T.330 CDR	330	+ - 27	2					41,4	30
1.350	2004-T.245 CDR	245	+ - 10	2	118	95,27	69,85	11,2 - 12,2	39,7	20
	2004-T.286 CDR	286	+ - 16							
	2004-T.302 CDR	302	+ - 18							
	2004-T.318 CDR	318								
	2004-T.327 CDR	327	+ - 25							
	2004-T.353 CDR	353								
1.410	2005-T.248 CDR	248	+ - 10	2	118	95,27	69,85	11,2 – 12,2	42,9	20
	2005-T.254 CDR	254								
	2005-T.275 CDR	275	+ - 18							
	2005-T.333 CDR	333	+ - 25							
1.510	2006-T.319 CDR	319	+ - 15	1	146	120,67	95,25	12,8 - 14,2	63,5	20
	2006-T.340 CDR	340								
	2006-T.385 CDR	385								
1.610	2037.1	258	+ - 9	3	175	155,5	168,2	10,2 - 9,75	49,0	8
	2037.2	299							69,8	
	2007-T.400 CDR	400	+ - 20							22
	2007-T.446 CDR	446								
1.710	2038.1	290	+ - 13	3	203	184,1	196,9	10,2 - 9,75	56,0	8
	2038.2	330							76,2	
	2038.3	318							56,0	
	2038.4	358							76,2	

- LAS LONGITUDES QUE APARECEN EN ESTA TABLA SON LAS MAS USUALES. PARA OTRAS LONGITUDES POR FAVOR CONTACTE CON NUESTRA O.T.
-THE LENGTHS SHOWN IN THIS TABLE ARE THE MORE USUAL. PLEASE CONTACT WITH OUR TECHNICAL DEPARTMENT FOR OTHER DIFFERENT ONES.

Cardancillos SAE con acoplamientos DIN
SAE Short Coupled Shafts with DIN flanges fitting

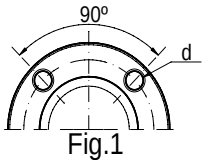


Fig.1

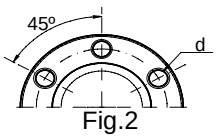


Fig.2

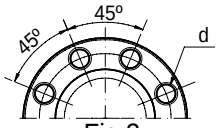
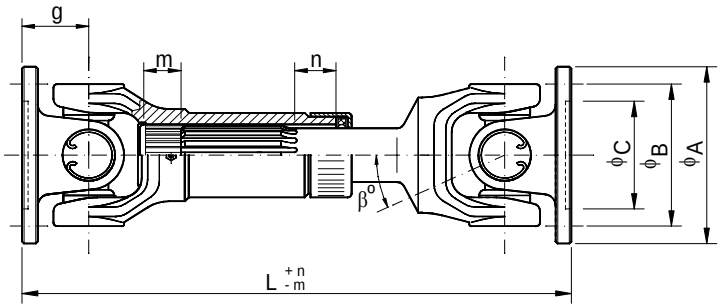


Fig.3



Rec = Recorrido - Slip movement

SERIE SERIES	REFERENCIA PART NUMBER	L	Rec +n -m	Fig	A	B	C	d	g	βº max.
0500	1999D1-T.221 CDR	221	+ - 10	1	58	47	30	5,2	38,5	25
	1999D1-T.230 CDR	230								
	1999D2-T.221 CDR	221			65	52	35	6,2		
	1999D2-T.230 CDR	230								
	1999D3-T.221 CDR	221		2	75	62	42			
	1999D3-T.230 CDR	230								
1.100	2001D1-T.203 CDR	203	+ - 10	2	75	62	42	6,2	39	17
	2001D1-T.220 CDR	220								
	2001D1-T.239 CDR	239								
	2001D2-T.206 CDR	206		1	90	74,5	47	8,2	40	
	2001D2-T.223 CDR	223								
	2001D2-T.242 CDR	242								
1.310	2015D-T.260 CDR	260	+ - 10	1	90	74,5	47	8,2	50	20
	2015D-T.289 CDR	289	+ - 22							
	2015D-T.312 CDR	312								
	2015D-T.329 CDR	329	+ - 26							
	2015D-T.352 CDR	352	+ - 36							
	2015D-T.364 CDR	364								
	2015D4-T.266 CDR	266	+ - 10	2	100	84	57		53	
	2015D4-T.295 CDR	295	+ - 22							
	2015D4-T.318 CDR	318								
	2015D4-T.335 CDR	335	+ - 26							
	2015D4-T.362 CDR	362	+ - 36							
	2015D4-T.370 CDR	370								
1.350	2004D-T.275 CDR	275	+ - 10	2	100	84	57	8,2	55	20
	2004D-T.316 CDR	316	+ - 16							
	2004D-T.332 CDR	332	+ - 18							
	2004D-T.348 CDR	348								
	2004D-T.357 CDR	357	+ - 25							
1.410	2005D-T.274 CDR	274	+ - 10	3	120	101,5	75	10,2 - 8,2	56	20
	2005D-T.280 CDR	280								
	2005D-T.301 CDR	301	+ - 18							
	2005D-T.359 CDR	359	+ - 25							
1.510	2006D-T.342 CDR	342	+ - 15	3	120	101,5	75	10,2	75	20
	2006D-T.363 CDR	363								
	2006D-T.408 CDR	408								
1.610	2037D	333	+ - 9	3	150	130	90	12,2	87	8
1.710	2038D.1	351	+ - 13	3	180	155,5	110	14,2	86,5	8
	2038D.2	379								

Transmisiones SAE con puente central
SAE Midship Shafts

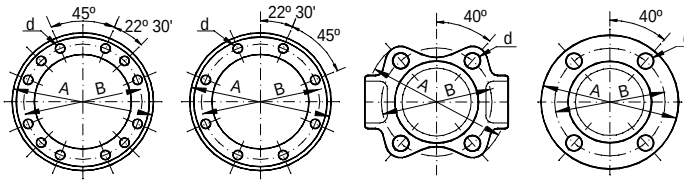
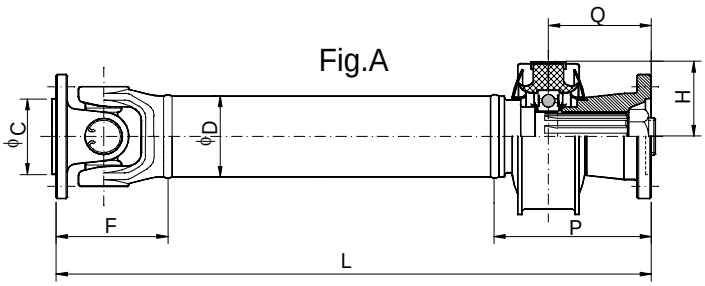


Fig.4 Fig.3 Fig.2 Fig.1



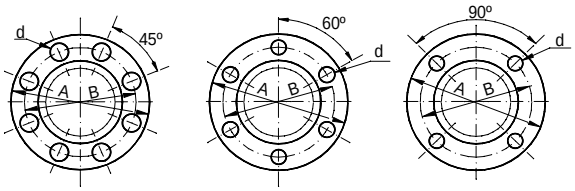
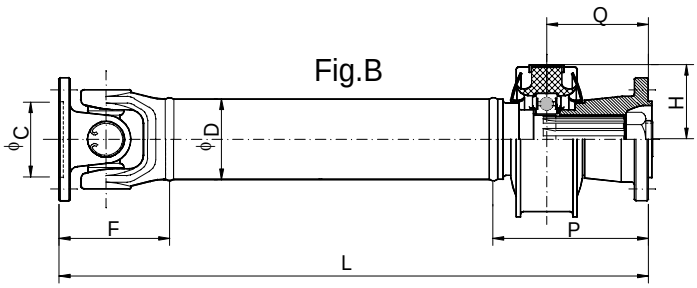


Fig.3 Fig.2 Fig.1



SERIE SERIES	REFERENCIA PART NUMBER	Fig	D	F	P	Q	H	A	B	C	d
1.100	2001.51-TFPC.L	A-1	50,8	65,0	119	78	57,2	88	69,87	57,15	8,2
	2001D1.51-TFPC.L	B-2		74,0				75	62,0	42,0	6,2
1.300	2003.51-TFPC.L	A-1	50,8	79,5	111	70,5	57,2	97	79,39	60,32	10,2 - 9,75
	2003.63-TFPC.L		63,5	78,5							
	2003.76-TFPC.L		76,1								
1.310	2015.51-TFPC.L	A-1	50,8	78,0	111	70,5	57,2	97	79,39	60,32	10,2 - 9,75
	2015.63-TFPC.L		63,5	84,0							
	2015D4.51-TFPC.L	B-2	50,8	96,0				100	84,0	57,0	8,2
	2015D4.63-TFPC.L		63,5	102,0							
1.350	2004.63-TFPC.L	A-2	63,5	97,0	125	81,5	62,5	118	95,27	69,85	11,2 - 12,2
	2004.76-TFPC.L		76,1								
	2004D.63-TFPC.L	B-2	63,5	112,0	119	74		100	84,0	57,0	8,2
	2004D.76-TFPC.L		76,1								
1.410	2005.63-TFPC.L	A-2	63,5	103,0	125	81,5	62,5	118	95,27	69,85	11,2 - 12,2
	2005.76-TFPC.L		76,1	97,0							
	2005D.63-TFPC.L	B-3	63,5	116,0				120	101,5	75,0	10,2
	2005D.76-TFPC.L		76,1	110,0							
1.510	2006.76-TFPC.L	A-1	76,1	135,0	130	85,5	69,1	146	120,67	95,25	12,8 - 14,2
	2006.90-TFPC.L		90,0								
	2006D.76-TFPC.L	B-3	76,1	146,5	127	82,5		120	101,5	75,0	10,2
	2006D.90-TFPC.L		90,0								
1.610	2007.90-TFPC.L	A-3	90,0	146,0	136	94,5	69,1	175	155,5	168,2	10,2 - 9,75
	2007D.90-TFPC.L	B-3		163,0				150	130,0	90,0	12,2
1.710	2008.90-TFPC.L	A-3	90,0	176,0	156	110	71,5	203	184,1	196,9	10,2 - 9,75
	2008.12.90-TFPC.L	A-4									10,2
	2008D.90-TFPC.L	B-3		186,5				180	155,5	110,0	14,2

- LAS MEDIDAS REFLEJADAS EN EL PRESENTE CATÁLOGO SON LAS MAS HABITUALES. PARA OTRAS DIFERENTES, POR FAVOR CONSULTAR DISPONIBILIDAD.

- MEASURES SHOWN IN THIS CATALOGUE ARE THE MORE USUAL. PLEASE ASK FOR AVAILABILITY FOR OTHER DIFFERENT ONES.

Transmisiones SAE con dos juntas fijas
SAE Drive shafts with two fixed joints

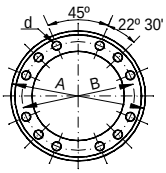


Fig.4

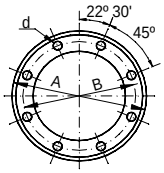


Fig.3

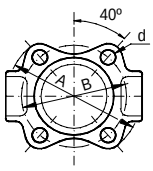


Fig.2

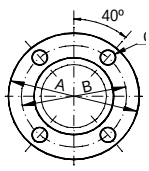
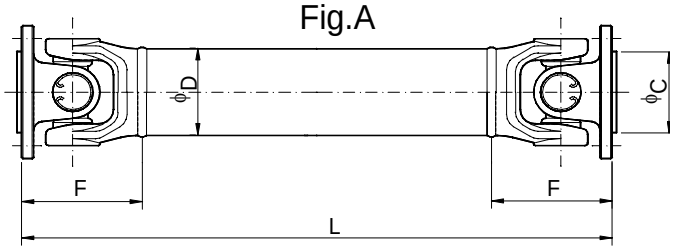


Fig.1

Fig.A



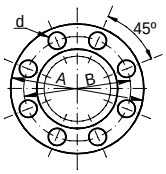


Fig.3

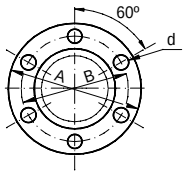


Fig.2

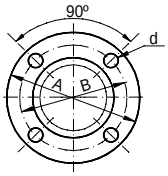
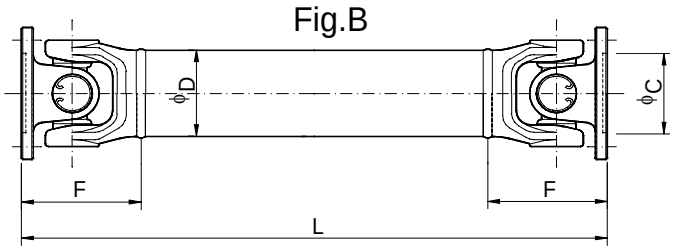


Fig.1

Fig.B



SERIE SERIES	REFERENCIA PART NUMBER	Fig	D	F	A	B	C	d
1.100	2001.51-TF.L	A-1	51	65,0	88	69,87	57,15	8,2
	2001D1.51-TF.L	B-2		74,0	75	62,0	42,0	6,2
1.300	2003.51-TF.L	A-1	51	79,5	97	79,39	60,32	10,2 - 9,75
	2003.63-TF.L		63	78,5				
	2003.76-TF.L		76					
1.310	2015.51-TF.L	A-1	51	78,0	97	79,39	60,32	10,2 - 9,75
	2015.63-TF.L		63	84,0				
	2015D.51-TF.L	B-1	51	93,0	90	74,50	47,00	8,2
	2015D.63-TF.L		63	99,0				
	2015D4.51-TF.L	B-2	51	96,0	100	84,0	57,0	
	2015D4.63-TF.L		63	102,0				
1.350	2004.63-TF.L	A-2	63	97,0	118	95,27	69,85	11,2 - 12,2
	2004.76-TF.L		76					
	2004D.63-TF.L	B-2	63	112,0	100	84,0	57,0	8,2
	2004D.76-TF.L		76					
1.410	2005.63-TF.L	A-2	63	103,0	118	95,27	69,85	11,2 - 12,2
	2005.76-TF.L		76	97,0				
	2005D.63-TF.L	B-3	63	116,0	120	101,5	75,0	10,2
	2005D.76-TF.L		76	110,0				
1.510	2006.76-TF.L	A-1	76	135,0	146	120,67	95,25	12,8 - 14,2
	2006.90-TF.L		90					
	2006D.76-TF.L	B-3	76	146,5	120	101,5	75,0	10,2
	2006D.90-TF.L		90					
1.610	2007.90-TF.L	A-3	90	146,0	175	155,5	168,2	10,2 - 9,75
	2007D.90-TF.L	B-3		163,0	150	130,0	90,0	12,2
1.710	2008.90-TF.L	A-3	90	176,0	203	184,1	196,9	10,2 - 9,75
	2008.12.90-TF.L	A-4						10,2
	2008D.90-TF.L	B-3		186,5	180	155,5	110,0	14,2

- LAS MEDIDAS REFLEJADAS EN EL PRESENTE CATÁLOGO SON LAS MAS HABITUALES. PARA OTRAS DIFERENTES, POR FAVOR CONSULTAR DISPONIBILIDAD.

- MEASURES SHOWN IN THIS CATALOGUE ARE THE MORE USUAL. PLEASE ASK FOR AVAILABILITY FOR OTHER DIFFERENT ONES.

Juntas correderas SAE con acoplamientos SAE
SAE Slip Joints with SAE Flange fitting

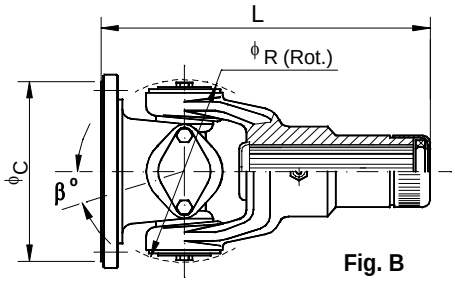


Fig. B

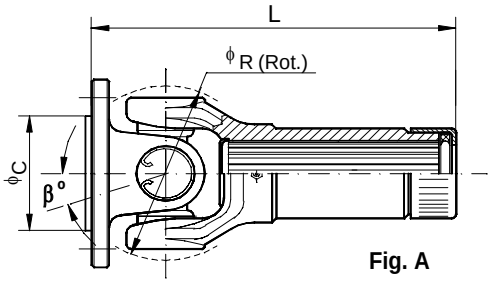


Fig. A

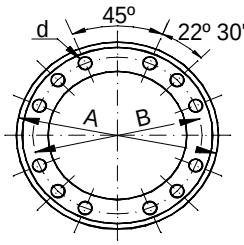


Fig. 4

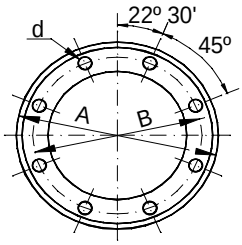


Fig. 3

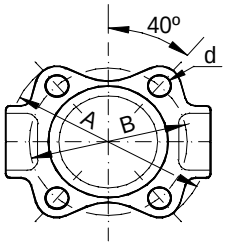


Fig. 2

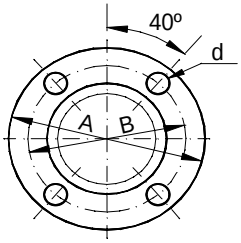


Fig. 1

SERIE SERIES	REFERENCIA PART NUMBER	Fig	A	B	C	d	L	ϕ R	βº max.
0500	1999-C	A - 1	77,0	60,3	44,4	6,5	136,0	65	18
1.100	2001-C	A - 1	88,0	69,9	57,1	8,2	148,0	76	17
1.300	2003.1-C	A - 1	97,0	79,4	60,3	9,75	181,0	92	17
	2003-C					10,2			
1.310	2015.1R-C	A - 1	88,0	69,9	57,1	8,2	194,0	97	20
	2015.1-C		97,0	79,4	60,3	9,75	182,0		
	2015-C					10,2			
	2015A-C	A - 2					216,5		30
	2015R70-C	A - 1					200,0		20
1.350	2004.3-C	A - 1	97,0	79,4	60,3	10,2	212,0	114	20
	2004-C	A - 2	118,0	95,3	69,9	11,2	197,0		
	2004.2-C					12,2			
	2004A-C	A – 1				11,2	227,0		28
1.410	2005-C	A – 2	118,0	95,3	69,9	11,2	219,0	122	22
	2005.2-C					12,2			
1.480	2048.6-C	A - 2	146,0	120,7	95,2	12,8	233,0	122	22
1.510	2006-C	A - 1	146,0	120,7	95,2	12,8	246,5	136	20
	2006.2-C					14,2			
1.610	2007.1-C	B - 3	174,6	155,5	168,2	9,75	277,0	160	22
	2007-C					10,2			
	2007R-C						342,0		
1.710	2008.1-C	B - 3	203,2	184,1	196,8	9,75	338,0	200	30
	2008-C					10,2			
	2008M-C						372,0		
	2008.12-C	B - 4					338,0		

Juntas correderas SAE con acoplamientos DIN
SAE Slip Joints with DIN Flange fitting

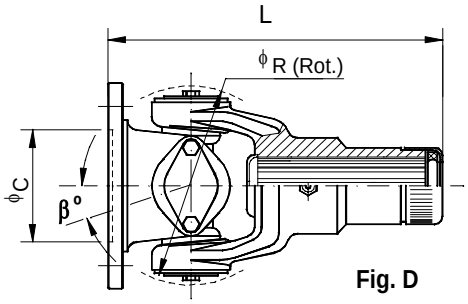


Fig. D

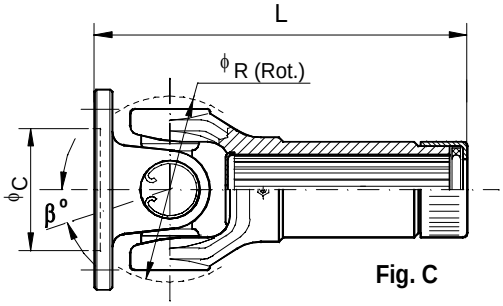


Fig. C

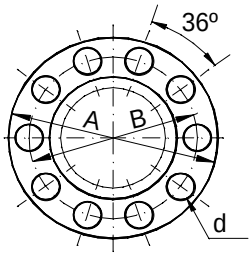


Fig. 8

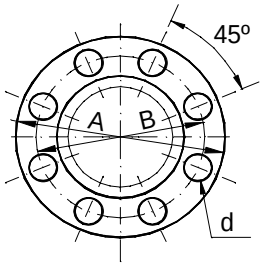


Fig. 7

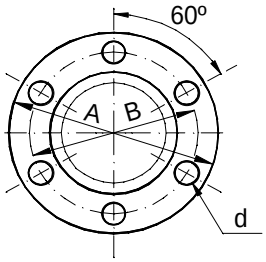


Fig. 6

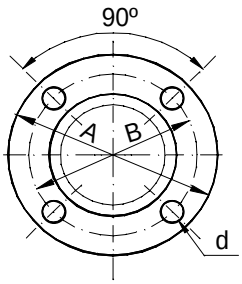


Fig. 5

SERIE SERIES	REFERENCIA PART NUMBER	Fig	A	B	C	d	L	ϕ R	β° max.
0500	1999D1-C	C - 5	58	47,0	30,0	5,2	147,5	65	25
	1999D2-C		65	52,0	35,0	6,2			
	1999D3-C	C - 6	75	62,0	42,0				
1.100	2001D1-C	C - 6	75	62,0	42,0	6,2	157,0	76	17
	2001D2-C	C - 5	90	74,5	47,0	8,2	158,0		
1.300	2003D-C	C - 5	90	74,5	47,0	8,2	194,0	92	17
	2003.1D-C	C - 6							
1.310	2015D-C	C - 5	90	74,5	47,0	8,2	197,0	97	20
	2015.1D-C	C - 6							
	2015D4-C		100	84,0	57,0		200,0		
	2015DM-C	C - 7							
	2015D5-C		120	101,5	75,0	10,2	199,0		
1.350	2004D-C	C - 6	100	84,0	57,0	8,2	212,0	114	20
	2004D5-C	C - 7	120	101,5	75,0	10,2			
1.410	2005D-C	C - 7	120	101,5	75,0	10,2	232,0	122	25
	2005.1D-C					8,2			
1.480	2048D-C	C - 7	120	101,5	75,0	10,2	247,0	122	22
1.510	2006D-C	C - 7	120	101,5	75,0	10,2	258,0	136	20
	2006D7-C		150	130,0	90,0	12,2	273,0		
1.610	2007RD-C	D - 7	150	130,0	90,0	12,2	359,0	160	22
1.710	2008D-C	D - 7	180	155,5	110,0	14,2	348,5	200	25
	2008D10-C	D - 8				16,2			

Juntas fijas SAE con acoplamientos SAE
SAE Fixed Joints with SAE Flange fitting

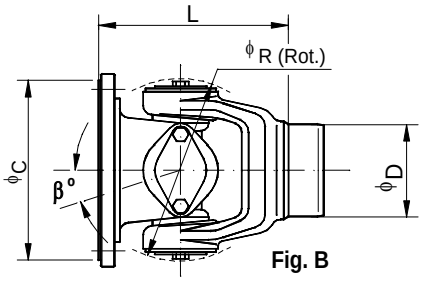


Fig. B

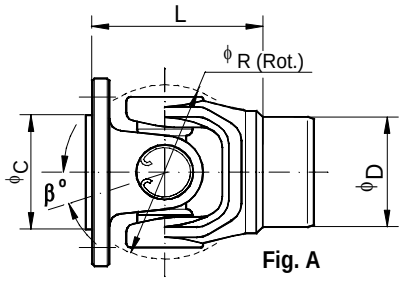


Fig. A

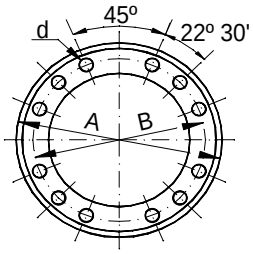


Fig. 4

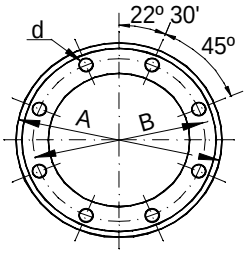


Fig. 3

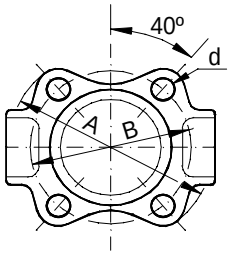


Fig. 2

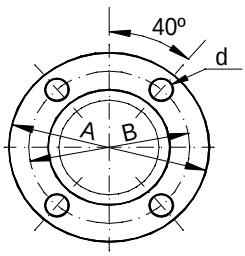


Fig. 1

SERIE SERIES	REFERENCIA PART NUMBER	Fig	A	B	C	d	L	D	ϕ R	β° max
0500	1999-F.32	A - 1	77,0	60,3	44,4	6,5	69,0	26,7	65	18
	1999-F.45						79,0	43,0		
1.100	2001-F.51	A - 1	88,0	69,9	57,1	8,2	65,0	46,2	76	17
1.300	2003.1-F.51.1	A - 1	97,0	79,4	60,3	9,75	79,5	47,7	92	17
	2003-F.51					10,2		46,2		
	2003-F.63						78,5	58,6		
	2003-F.76.1							73,3		
1.310	2015-F.51	A - 1	97,0	79,4	60,3	10,2	78,0	46,2	97	20
	2015A-F.51	A - 2					84,5			30
	2015-F.63	A - 1					84,0	58,6		20
1.350	2004-F.63	A - 2	118,0	95,3	69,9	11,2	97,0	58,6	114	20
	2004.2.-F.63					12,2				
	2004-F.76					11,2		71,2		
	2004A-F.63	A - 1					127,0	58,6		28
1.410	2005-F.63	A - 2	118,0	95,3	69,9	11,2	103,0	58,6	122	20
	2005-F.76.2						97,0	71,6		
	2005.2-F.76.2					12,2				
1.480	2048-F.90	A - 2	146,0	120,7	95,2	12,8	102,5	84,3	122	20
1.510	2006-F.76.2	A - 1	146,0	120,7	95,2	12,8	135,0	71,6	136	25
	2006.2-F.76.2					14,2				
	2006-F.90					12,8		84,3		
	2006.2-F.90					14,2				
1.610	2007.1-F.90.0	B - 3	174,6	155,5	168,2	9,75	146,0	82,3	160	22
	2007-F.90.0					10,2				
1.710	2008.1-F.90	B - 3	203,2	184,1	196,8	9,75	176,0	83,2	200	30
	2008-F.90					10,2				
	2008.12-F.90	B - 4								

Juntas fijas SAE con acoplamientos DIN
SAE Fixed Joints with DIN Flange fitting

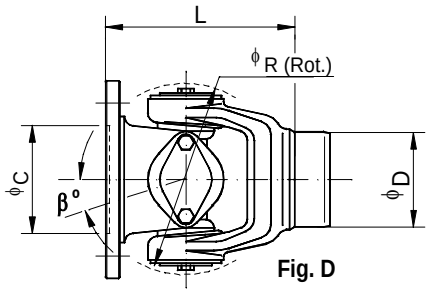


Fig. D

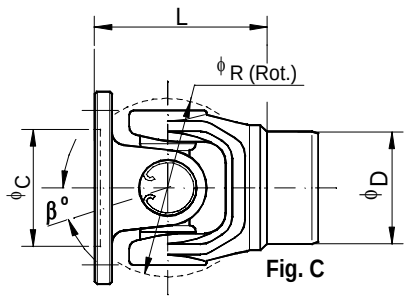


Fig. C

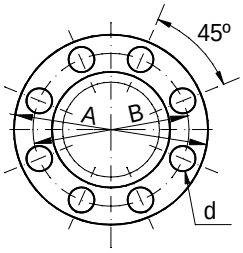


Fig. 7

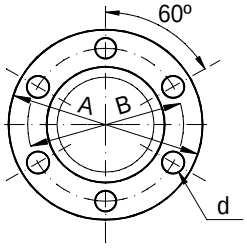


Fig. 6

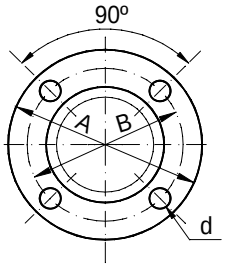
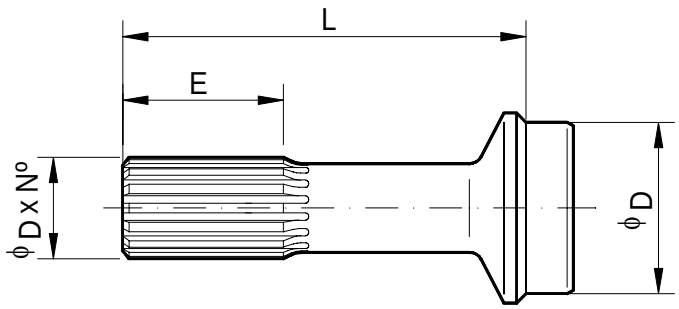


Fig. 5

SERIE SERIES	REFERENCIA PART NUMBER	Fig	A	B	C	d	L	D	ϕ R	β° max
0500	1999D1-F.32	C - 5	58	47,0	30,0	5,2	80,5	26,7	65	30
	1999D2-F.32		65	52,0	35,0	6,2				
	1999D3-F.45	C - 6	75	62,0	42,0		90,5	43,0		
1.100	2001D1-F.51	C - 6	75	62,0	42,0	6,2	74,0	46,2	76	17
	2001D2-F.51	C - 5	90	74,5	47,0	8,2	75,0			
1.300	2003D-F.51	C - 5	90	74,5	47,0	8,2	92,5	46,2	92	25
	2003.1D-F.51	C - 6								
1.310	2015D-F.51	C - 5	90	74,5	47,0	8,2	93,0	46,2	97	20
	2015D-F.63						99,0	58,6		
	2015.1D-F.51	C - 6					93,0	46,2		
	2015D4-F.51		100	84,0	57,0		96,0			
	2015D4-F.63						102,0	58,6		
	2015DM-F.51	C - 7					96,0	46,2		
	2015D5-F.63		120	101,5	75,0	10,2	101,0	58,6		
1.350	2004D-F.63	C - 6	100	84,0	57,0	8,2	112,0	58,6	114	25
	2004D-F.76							71,2		
	2004D5-F.63	C - 7	120	101,5	75,0	10,2		58,6		
1.410	2005D-F.76.2	C - 7	120	101,5	75,0	10,2	110,0	71,6	122	22
	2005.1D-F.76.2					8,2				
1.480	2048D-F.90	C - 7	120	101,5	75,0	10,2	116,5	84,3	122	22
1.510	2006D-F.76	C - 7	120	101,5	75,0	10,2	146,5	71,2	136	22
	2006D-F.90							84,3		
1.610	2007D-F.90.0	D - 7	150	130,0	90,0	12,2	163,0	82,3	160	22
1.710	2008D-F.90	D - 7	180	155,5	110,0	14,2	186,5	83,2	200	25

Barrones correderos SAE
Slip Stub Shafts SAE



SERIE SERIES	REFERENCIA PART NUMBER	ϕ D x Nº	L	E	D
0500	1999-B.32	SAE 1 1/16" Z-16	87	34	26,7
	1999-B.45				43,0
1.100	2001-B.51	SAE 1 1/16" Z-16	104	44	46,2
1.300	2003-B.51.1	SAE 1 3/8" Z-16	141	55	47,7
	2003-B.51		129	57	46,2
	2003-B.63.0				60,6
	2003-B.63				58,6
	2003-B.76.1				73,3
1.310	2015-B.51	SAE 1 3/8" Z-16	129	57	46,2
	2015-B.51R		128	54	
	2015R70-B.51		146	57	
	2015-B.63.0		129		60,6
	2015-B.63				58,6
	2015-B.76.1				73,3
1.350	2004-B.63.1	SAE 1 1/2" Z-16	147	63	59,0
	2004-B.63				58,6
	2004-B.76.1R		145	61	73,3
1.410	2004-B.63.1	SAE 1 1/2" Z-16	147	63	59,0
	2004-B.63				58,6
	2005-B.76.2		160	76	84,3
	2005-B.90.0				71,6
1.480	2048-B.76.2	SAE 1 3/4" Z-16	163	75	71,6
	2048-B.90R			63	84,3
1.510	2006-B.76.2	SAE 1 3/4" Z-16	163	75	71,6
	2006-B.90R			63	84,3
1.550	2055-B.90R	SAE 1 3/4" Z-16	163	75	84,3
	2055M-B.90R	Ev. 46 Z-28	248	76	
	2055R-B.90R	SAE 1 3/4" Z-16	259	82	81,4
1.610	2007-B.90	SAE 2" Z-16	197	90	84,5
	2007R-B.90.0		232		83,4
1.710	2008-B.90	SAE 2 1/2" Z-10	210	98	83,2
	2008M-B.90		238		82,1
1.760	2076-B.102R	SAE 2 1/2" Z-16	235	102	95,2
	2076-BL.102R		268		
1.800	2009.10-B.90	SAE 3" Z-10	233	111	80,0
1.810	2081-B.114	SAE 3" Z-16	250	113	101,7
	2081-BL.114		286		

Cruces de Cardan SAE
Universal Joints SAE

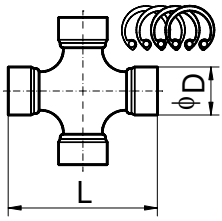


Fig. 1

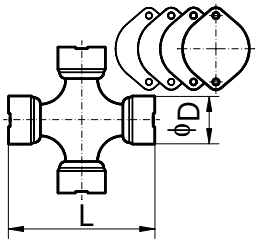


Fig. 2

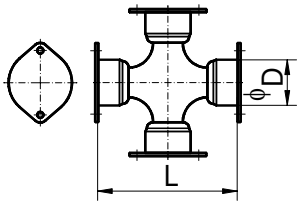


Fig. 3

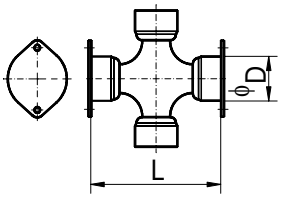


Fig. 4

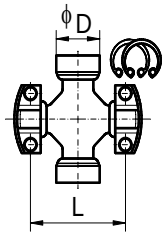


Fig. 5

SERIE SERIES	REFERENCIA PART NUMBER	Fig	D	L	CARACTERÍSTICAS CHARACTERISTICS
0500	1999-CR	1	19,0	51,9	ENGRASADOR CENTRAL-CENTRAL NIPPLE
1100	2001-CR	1	23,8	61,2	ENGRASADOR LATERAL-SIDE NIPPLE
	2001SE-CR				SIN ENGRASE-SEALED FOR LIFE
1210	2002SE-CR	1	27,0	61,9	(HYUNDAI) SIN ENGRASE-SEALED FOR LIFE
1300	2003-CR	1	27,0	74,6	ENGRASADOR LATERAL-SIDE NIPPLE
	2003SE-CR				SIN ENGRASE-SEALED FOR LIFE
1310	2015-CR	1	27,0	81,7	ENGRASADOR LATERAL-SIDE NIPPLE
	2015SE-CR				SIN ENGRASE-SEALED FOR LIFE
1330	2016-CR	1	27,0	92,1	ENGRASADOR LATERAL-SIDE NIPPLE
1350	2004-CR	1	30,2	92,0	ENGRASADOR LATERAL-SIDE NIPPLE
	2004SE-CR				SIN ENGRASE-SEALED FOR LIFE
1410	2005-CR	1	30,2	106,3	ENGRASADOR LATERAL-SIDE NIPPLE
1480	2048-CR	1	34,9	106,4	ENGRASADOR LATERAL-SIDE NIPPLE
	2048/50H-CR	5		88,9	COMBINACION-COMBINATION 1480/5C PERFIL ALTO-HIGH PROFILE
	2048/50L-CR				COMBINACION-COMBINATION 1480/5C PERFIL BAJO-LOW PROFILE
1510	2006-CR	1	39,7	115,9	ENGRASADOR LATERAL-SIDE NIPPLE
	2006T-CR	2			TAPAS SUELTAS-LOOSE PLATES
1550	2055-CR	1	34,9	126,2	ENGRASADOR LATERAL-SIDE NIPPLE
	2055/60H-CR	5		114,3	COMBINACION-COMBINATION 1550/6C PERFIL ALTO-HIGH PROFILE
	2055/60L-CR				COMBINACION-COMBINATION 1550/6C PERFIL BAJO-LOW PROFILE
1610	2007-CR	2	47,6	135,0	TAPAS SUELTAS-LOOSE PLATES
	2007.4TS-CR	3			TAPAS SOLDADAS-WELDED PLATES
	2007.2TS-CR	4			2 DADOS LISOS Y 2 CON TAPAS SOLDADAS-2 CUPS WITH WELDED PLATES
1630	2063-CR	1	39,7	115,9	ENGRASADOR CENTRAL – CENTRAL NIPPLE
1650	2065-CR	1	41,3	142,5	ENGRASADOR CENTRAL – CENTRAL NIPPLE
	2065/70-CR	5		117,5	COMBINACION-COMBINATION 1650/7C
1710	2008-CR	2	49,2	154,7	TAPAS SUELTAS-LOOSE PLATES
	2008.4TS-CR	3			TAPAS SOLDADAS-WELDED PLATES
	2008.2TS-CR	4			2 DADOS LISOS Y 2 CON TAPAS SOLDADAS-2 CUPS WITH WELDED PLATES
1760	2076.4TS-CR	3	49,2	177,8	TAPAS SOLDADAS-WELDED PLATES
	2076.2TS-CR	4			2 DADOS LISOS Y 2 CON TAPAS SOLDADAS-2 CUPS WITH WELDED PLATES
1800	2009-CR	2	59,0	167,5	TAPAS SUELTAS-LOOSE PLATES
	2009.4TS-CR	3			TAPAS SOLDADAS-WELDED PLATES
1810	2081.4TS-CR	3	49,2	191,7	TAPAS SOLDADAS-WELDED PLATES
	2081.2TS-CR	4			2 DADOS LISOS Y 2 CON TAPAS SOLDADAS-2 CUPS WITH WELDED PLATES
1880	2088-CR	1	55,6	205,6	ENGRASADOR LATERAL-SIDE NIPPLE
	2088/90-CR	5		168,3	COMBINACION-COMBINATION 1880/9C

Platillos SAE con acoplamiento SAE
SAE Flange Yokes SAE fitting

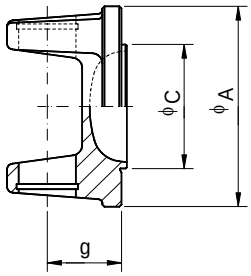


Fig. A

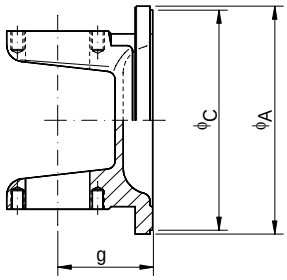


Fig. B

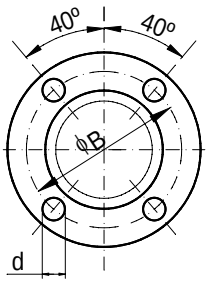


Fig.1

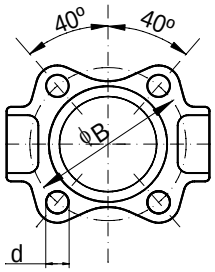


Fig. 2

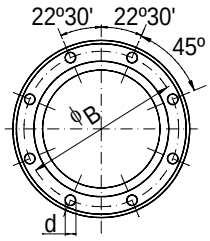


Fig. 3

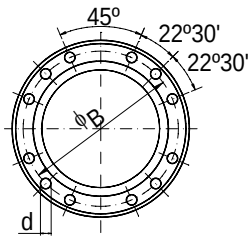


Fig. 4

SERIE SERIES	TAMAÑO DE CRUCETA UNIVERSAL JOINT SIZE	REFERENCIA PART NUMBER	Fig	A	B	C	d	TORNILLOS BOLTS	g
0500	19,05 x 51,9	1999-SC	A - 1	77,0	60,32	44,45	6,5	4 x 1/4”	27,0
1.100	23,8 x 61,2	2001-SC	A - 1	88,0	69,87	57,15	8,2	4 x M8	30,2
1.300	27,0 x 74,6	2003.1-SC	A - 1	97,0	79,39	60,32	9,75	4 x 3/8”	34,9
		2003-SC					10,2	4 x M10	
1.310	27,0 x 81,7	2015.1R-SC	A - 1	88,0	69,87	57,15	8,2	4 x M8	47,0
		2015.1-SC		97,0	79,39	60,32	9,75	4 x 3/8”	34,9
		2015-SC					10,2	4 x M10	
		2015A-SC	A - 2						41,4
		2015A.1-SC					9,75	4 x 3/8”	
		2015.5-SC		118,0	95,27	69,85	11,2	4 x 7/16”	34,9
1.350	30,18 x 92,0	2004.3-SC	A - 1	97,0	79,39	60,32	10,2	4 x M10	55,0
		2004-SC	A - 2	118,0	95,27	69,85	11,2	4 x 7/16”	39,7
		2004.2-SC					12,2	4 x M12	
		2004A-SC	A - 1				11,2	4 x 7/16”	70
1.410	30,18 x 106,3	2005-SC	A - 2	118,0	95,27	69,85	11,2	4 x 7/16”	42,9
		2005.2-SC					12,2	4 X M12	
1.480	34,9 x 106,4	2048-SC	A - 2	146,0	120,67	95,25	12,8	4 x 1/2”	50,8
1.510	39,7 x 115,9	2006-SC	A - 1	146,0	120,67	95,25	12,8	4 x 1/2”	63,5
		2006.2-SC					14,2	4 x M14	
1.610	47,6 x 135,0	2007.1-SC	B - 3	174,6	155,52	168,2	9,75	8 x 3/8”	69,8
		2007-SC					10,2	8x M10	
		2037.1-SC					9,75	8x 3/8”	49,0
		2037-SC					10,2	8x M10	
1.630	39,7 x 115,9	2006-SC	A - 1	146,0	120,67	95,25	12,8	4 x 1/2”	63,5
		2063.7-SC	B - 3	174,6	155,52	168,2	9,75	8 x 3/8”	80,5
1.710	49,2 x 154,7	2008.1-SC	B - 3	203,2	184,12	196,8	9,75	8 x 3/8”	76,2
		2008-SC					10,2	8 x M10	
		2008.12-SC	B - 4					12 x M10	
		2038.1-SC	B - 3				9,75	8 x 3/8”	56,0
		2038-SC					10,2	8 x M10	
1.760	49,2 x 177,8	2076-SC	B - 4	203,2	184,12	196,8	11,2	12 x 7/16”	85,0
1.800	59,0 x 167,5	2009-SC	B - 4	203,2	184,12	196,8	11,2	12 x 7/16”	86,0
1.810	49,2 x 191,7	2081-SC	B - 4	203,2	184,12	196,8	11,2	12 x 7/16”	85,9

Platillos SAE con acoplamiento DIN
SAE Flange Yokes DIN fitting

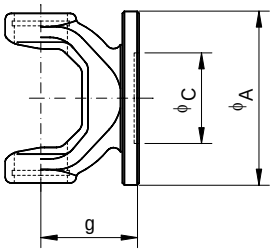


Fig. C

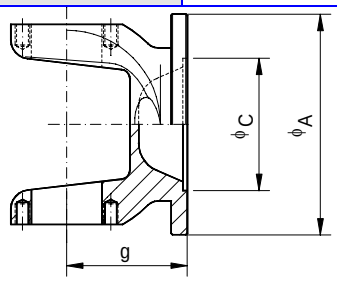


Fig. D

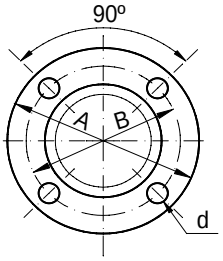


Fig.5

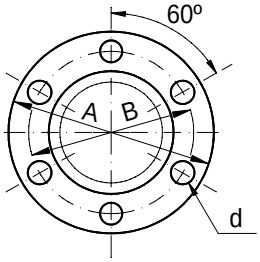


Fig. 6

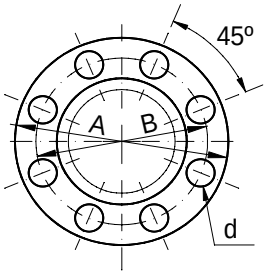


Fig. 7

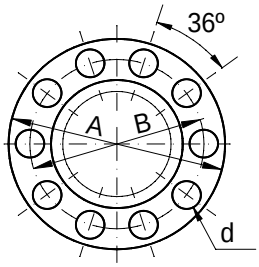


Fig. 8

SERIE SERIES	TAMAÑO DE CRUCETA UNIVERSAL JOINT SIZE	REFERENCIA PART NUMBER	Fig	A	B	C	d	TORNILLOS BOLTS	g
0500	19,05 x 51,9	1999D1-SC	C - 5	58	47,0	30,0	5,2	4 x M5	38,5
		1999D2-SC		65	52,0	35,0	6,2	4 x M6	
		1999D3-SC	C - 6	75	62,0	42,0		6 x M6	
1.100	23,8 x 61,2	2001D1-SC	C - 6	75	62,0	42,0	6,2	6 x M6	39,0
		2001D2-SC	C - 5	90	74,5	47,0	8,2	4 x M8	40,0
1.300	27,0 x 74,6	2003D-SC	C - 5	90	74,5	47,0	8,2	4 x M8	48,0
		2003.1D-SC	C - 6					6 x M8	
		2003DM-SC					10,2	6 x M10	
1.310	27,0 x 81,7	2015D-SC	C - 5	90	74,5	47,0	8,2	4 x M8	50,0
		2015.1D-SC	C - 6					6 x M8	
		2015D4-SC		100	84,0	57,0		6 x M8	53,0
		2015DM-SC	C - 7					8 x M8	
		2015D5-SC		120	101,5	75,0	10,2	8 x M10	52,0
1.350	30,18 x 92,0	2004D-SC	C - 6	100	84,0	57,0	8,2	6 x M8	55,0
		2004D5-SC	C – 7	120	101,5	75,0	10,2	8 x M10	
1.410	30,18 x 106,3	2005D-SC	C - 7	120	101,5	75,0	10,2	8 x M10	56,0
		2005.1D-SC					8,2	8 x M8	
1.480	34,9 x 106,4	2048M120-SC	(C - 6)	120	101,5	82,2 (M)	10,2	6 x M10	60,0
		2048M130-SC	(C - 7)	130	112,0	82,5 (M)		8 x M10	
		2048D-SC	C - 7	120	101,5	75,0		8 x M10	65,0
1.510	39,7 x 115,9	2006D-SC	C - 7	120	101,5	75,0	10,2	8 x M10	75,0
		2006D7-SC		150	130,0	90,0	12,2	8 x M12	90,0
1.550	34,9 x 126,2	2055D-SC	C - 7	150	130,0	90,0	12,2	8 x M12	80,0
1.610	47,6 x 135,0	2007D-SC	D - 7	150	130,0	90,0	12,2	8 x M12	87,0
1.710	49,2 x 154,7	2008D-SC	D - 7	180	155,5	110,0	14,2	8 x M14	86,5
1.760	49,2 x 177,8	2076D10-SC	D - 8	180	155,5	110,0	16,2	10 x M16	108,0
1.800	59,0 x 167,5	2009D-SC	D - 7	180	155,5	110,0	14,2	8 x M14	114,0
		2009D10-SC	D - 8				16,2	10 x M16	
1.810	49,2 x 191,7	2081D-SC	D - 7	180	155,5	110,0	16,2	8 x M16	92,0
		2081D10-SC	D - 8					10 x M16	

Horquillas correderas SAE
SAE Sleeve Yokes

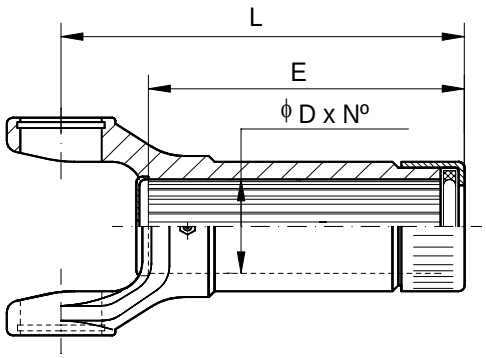


Fig. 1

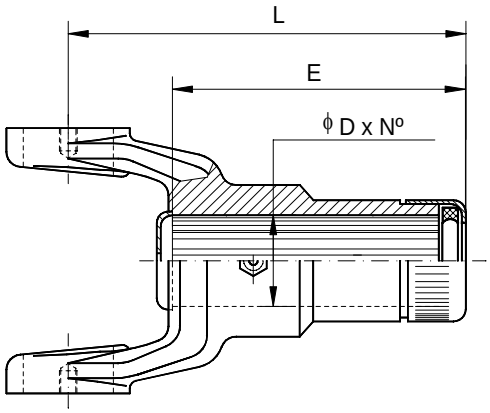


Fig. 2

SERIE SERIES	TAMAÑO DE CRUCETA UNIVERSAL JOINT SIZE	REFERENCIA PART NUMBER	Fig	L	E	ϕ D x Nº
0500	19,05 x 51,9	1999-HC	1	109	82	SAE 1 1/16" Z-16
1.100	23,8 x 61,2	2001-HC	1	118	96	SAE 1 1/16" Z-16
1.300	27,0 x 74,6	2003-HC	1	146	122	SAE 1 3/8" Z-16
1.310	27,0 x 81,7	2015-HC	1	147	121	SAE 1 3/8" Z-16
		2015A-HC		175	138	
		2015R70-HC		165	141	
1.350	30,18 x 92,0	2004-HC	1	157	127	SAE 1 1/2" Z-16
1.410	30,18 x 106,3	2005-HC	1	176	146	SAE 1 1/2" Z-16
1.480	34,9 x 106,4	2048-HC	1	182	150	1,562" Z-16
		2048.6-HC				SAE 1 3/4" Z-16
1.510	39,7 x 115,9	2006-HC	1	183	139	SAE 1 3/4" Z-16
1.550	34,9 x 126,2	2055-HC	1	175	140	SAE 1 3/4" Z-16
		2055M-HC		280	222	Ev. 46 Z-28
1.610	47,6 x 135,0	2007-HC	2	207	155	SAE 2" Z-16
		2007R-HC		272	204	
		2037-HH		103	74	65 Z-16
1.710	49,2 x 154,7	2008-HC	2	262	192	SAE 2 1/2" Z-10
		2008M-HC		296	226	
		2038.1-HH		115	80	81,5 Z-16
		2038.2-HH		143	108	
1.760	49,2 x 177,8	2076-HC	2	235	172	SAE 2 1/2" Z-16
		2076-HCL		283	234	
1.800	59,0 x 167,5	2009.10-HC	2	322	196	SAE 3" Z-10
1.810	49,2 x 191,7	2081-HC	2	261	200	SAE 3" Z-16
		2081-HCL		302	241	

Horquillas fijas SAE
SAE Tube Yokes

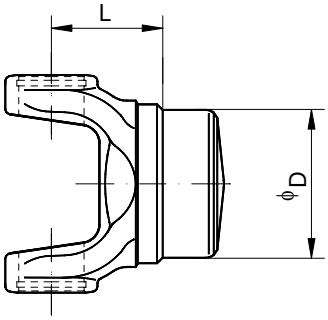


Fig. 1

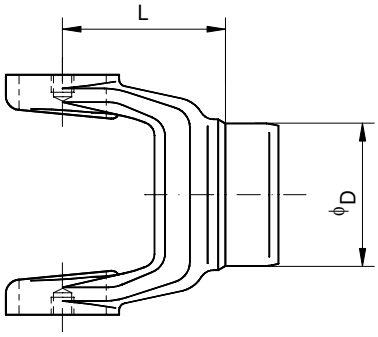


Fig. 2

SERIE SERIES	TAMAÑO DE CRUCETA UNIVERSAL JOINT SIZE	REFERENCIA PART NUMBER	Fig.	L	D	CARACTERÍSTICAS CHARACTERISTICS
0500	19,05 x 51,9	1999-HF.32	1	42,0	26,7	Maciza-Solid base
		1999-HF.45		52,0	43,0	
1.100	23,8 x 61,2	2001-HF.51	1	35,0	46,2	Maciza-Solid base
1.300	27,0 x 74,6	2003-HF.51.1	1	44,5	47,7	Maciza-Solid base
		2003-HF.51			46,2	
		2003-HF.63.0		43,5	60,6	
		2003-HF.63.1			59,0	
		2003-HF.63			58,6	
		2003-HF.76.1			73,3	
1.310	27,0 x 81,7	2015-HF.51	1	43,0	46,2	20º / Hueca-Hollowed
		2015A-HF.51				30º / Hueca-Hollowed
		2015A-HF.63.0		47,0	60,6	
		2015A-HF.63.1			59,0	
		2015-HF.63		49,0	58,6	30º / Maciza-Solid Base
		2015-HF.76.1		43,0	73,3	20º/ Hueca-Hollowed
1.350	30,18 x 92,0	2004-HF.63.1	1	57,0	59,0	Maciza-Solid base
		2004-HF.63			58,6	
		2004-HF.76.1			73,3	
1.410	30,18 x 106,3	2005-HF.63.1	1	60,0	59,0	Maciza-Solid base
		2005-HF.63			58,6	
		2005-HF.76.2		54,0	71,6	Hueca-Hollowed
		2005-HF.90.0			84,3	
1.480	34,9 x 106,4	2048-HF.76.2	1	51,6	71,6	Hueca-Hollowed
		2048-HF.90			84,3	
1.510	39,7 x 115,9	2006-HF.76.2	1	71,4	71,6	Hueca-Hollowed
		2006-HF.90			84,3	
1.550	34,9 x 126,2	2055-HF.90	1	55,5	84,3	Hueca-Hollowed
		2055A-HF.90		67,5		
1.610	47,6 x 135,0	2007-HF.90.0	2	76,2	82,3	Hueca-Hollowed
1.630	39,7 x 115,9	2063-HF.90	1	71,4	84,3	Hueca-Hollowed
1.710	49,2 x 154,7	2008-HF.90	2	100,0	83,2	Hueca-Hollowed
1.760	49,2 x 177,8	2076-HF.102	2	76,0	94,9	Hueca-Hollowed
1.800	59,0 x 167,5	2009-HF.90	2	92,0	80,0	Hueca-Hollowed
1.810	49,2 x 191,7	2081-HF.114	2	85,9	101,7	Hueca-Hollowed

Horquillas-eje SAE
Yoke-shafts SAE

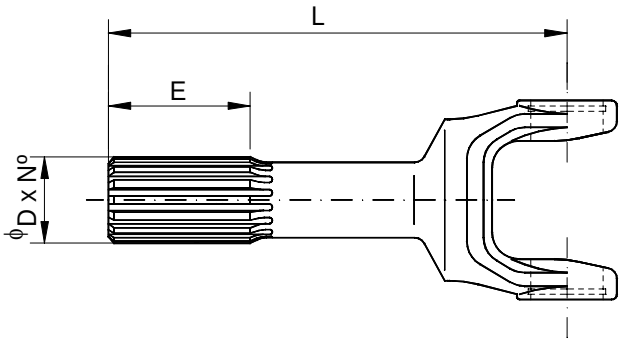


Fig.1

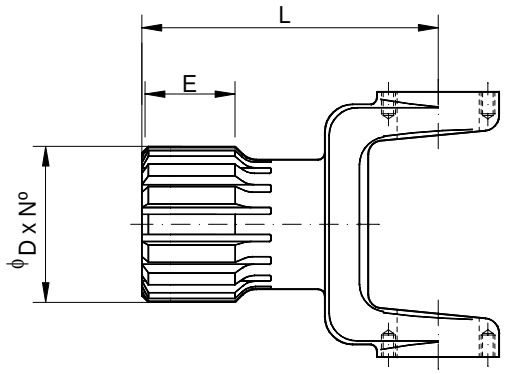
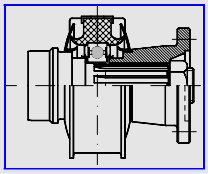


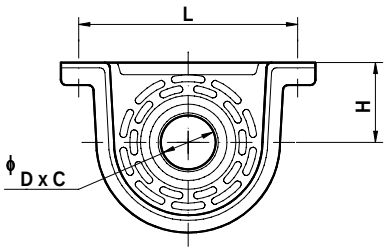
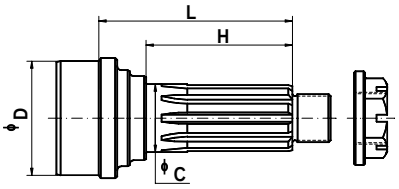
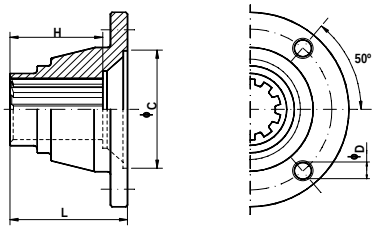
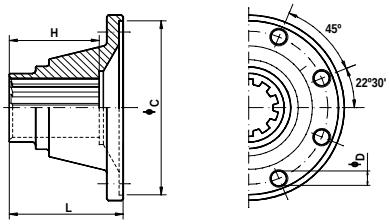
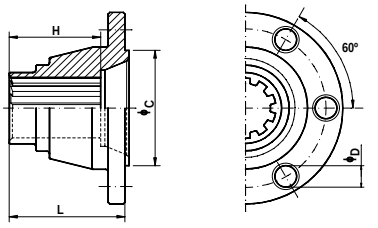
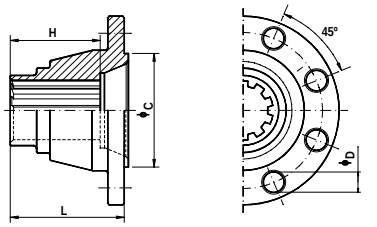
Fig.2

SERIE SERIES	REFERENCIA PART NUMBER	Fig	ϕ D x Nº	L	E
0500	1999-HFB.104	1	SAE 1 1/16" Z-16	104	30
	1999-HFB.150			150	33
1.100	2001-HFB.95	1	SAE 1 1/16" Z-16	95	30
	2001-HFB.110			110	44
1.310	2015-HFB.125R	1	SAE 1 3/8" Z-16	125	51
	2015-HFB.143R			143	45
	2015-HFB.174			174	51
	2015-HFB.190			190	57
	2015A-HFB.167R			167	51
1.350	2004-HFB.125	1	SAE 1 1/2" Z-16	125	48
	2004-HFB.155			155	51
	2004-HFB.170			170	59
	2004-HFB.191			191	61
	2004-HFB.217			217	64
1.410	2005-HFB.126R	1	SAE 1 1/2" Z-16	126	51
	2005-HFB.145R			145	
	2005-HFB.168			168	60
1.480	2048-HFB.144R	1	1,562" Z-16	144	51
	2048.6-HFB.185R		SAE 1 3/4" Z-16	185	58
1.510	2006-HFB.150	1	SAE 1 3/4" Z-16	150	46
	2006-HFB.170			170	66
1.550	2055-HFB.116	1	SAE 2 1/2" Z-16	116	40
	2055-HFB.173R		SAE 1 3/4" Z-16	173	63
	2055-HFB.238R			238	76
1.610	2037-HM	2	65 Z-16	122	41
	2007-HFB.200		SAE 2" Z-16	200	70
1.710	2038-HM	2	81,5 Z-16	133	44

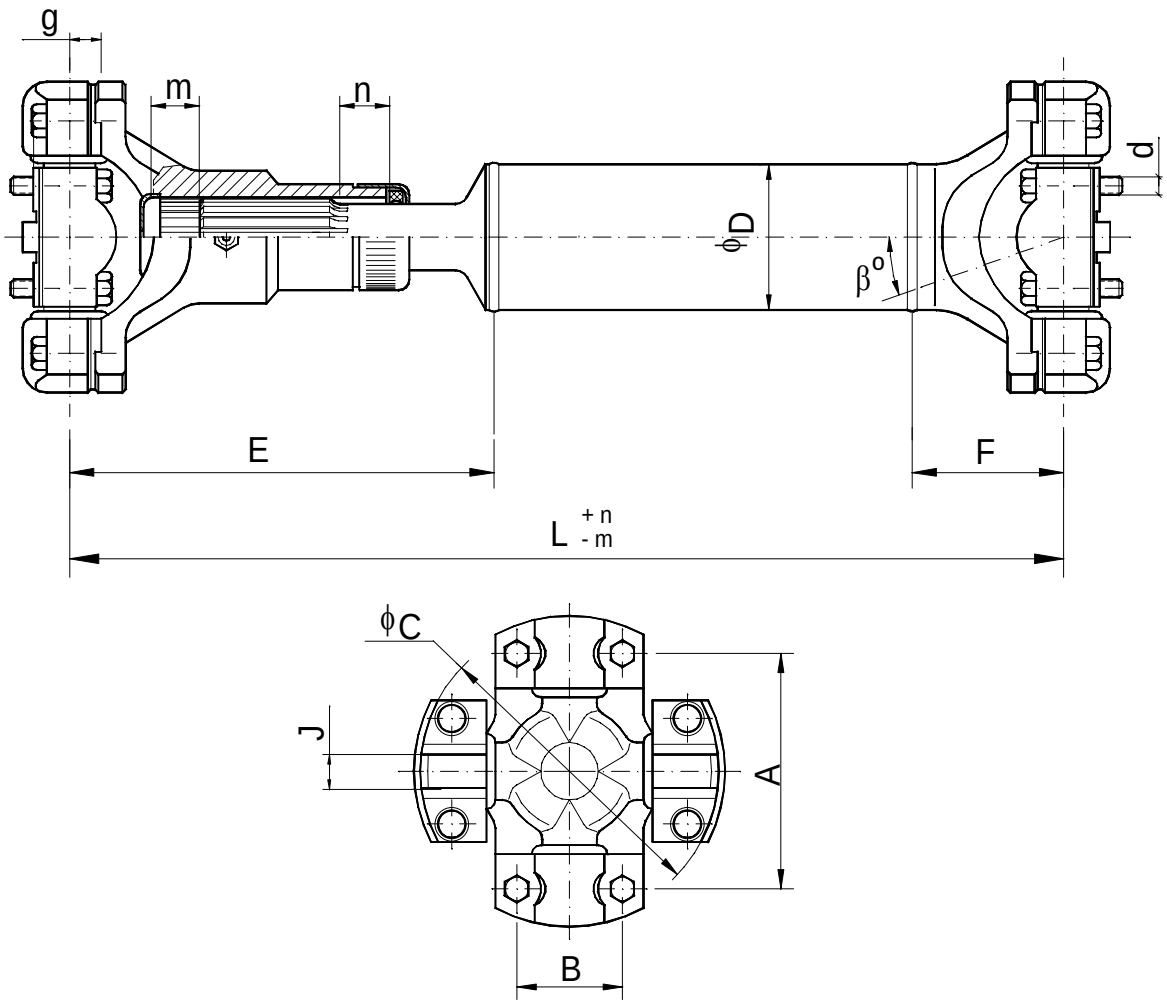
- Las referencias con "R" al final son "con recubrimiento rilsan".
- Part Numbers with "R" in the end are "rilsancoated".

Puentes centrales SAE
SAE Centre Bearing Assemblies



COMPONENTES COMPONENTS	SERIE SERIES	REFERENCIA PART NUMBER	D	L	H	C
	1300 / 1310	2015.35-SBF	35	168	58	25
	1350 / 1410	2004.35-SBF	35	168	58	19
		2005.40-SBF	40	168	63	27
	1510	2006.45-SBF	45	194	69	19
	1610	2007.45-SBF	45	194	69	27
	1710	2008.50-SBF	50	194	72	30
	1300 / 1310	2015.35-BP.51	46,2	92,0	60,0	35
		2015.35-BP.63.0	60,6	92,0	60,0	35
	1350 / 1410	2004.35-BP.76.2	71,6	102,0	70,0	35
		2005.40-BP.76.2	71,6	105,5	75,5	40
	1510	2006.45-BP.76.2	71,6	100,5	68,5	45
		2006.45-BP.90	84,3	109,5	74,5	45
	1610	2007.45-BP.90	82,3	109,2	81,2	45
	1710	2008.50-BP.90	85,0	138,2	106,5	50
	1300 / 1310	2015.35-BR	10,2	60,7	36,0	60,3
		2015.1.35-BR	9,75	60,7	36,0	60,3
	1350 / 1410	2005.40-BR	11,2	68,3	51,0	69,9
		2005.2.40-BR	12,2	68,3	51,0	69,9
	1510	2006.45-BR	12,8	76,1	57,0	95,3
		2006.2.45-BR	14,2	76,1	57,0	95,3
	1610	2007.45-BR	10,2	79,6	59,0	168,3
		2007.1.45-BR	9,75	79,6	59,0	168,3
	1710	2008.50-BR	10,2	95,0	78,0	197,0
ACOPLAMIENTO SAE SAE FITTING						
	1350	2004D.35-BR	8,2	60,5	54,5	57,0
		2004D.40-BR	8,2	60,5	52,0	57,0
	1410	2005D.40-BR	10,2	69,1	51,0	75,0
	1510	2006D.45-BR	10,2	73,0	58,0	75,0
ACOPLAMIENTO DIN DIN FITTING						

Transmisiones tipo MECHANICS
Drive Shafts type MECHANICS



Rec = Recorrido - Slip movement

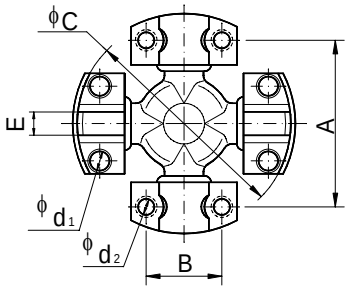
SERIE SERIES	REFERENCIA PART NUMBER	E	F	Rec + n - m	D	A	B	J	C	d	g	β° max
2C	3020.50-T.L CDR	206	40	+ - 25	50	60,32	33,27	9,52	79,25	5/16”	14,7	20
3C	3030.50-T.L CDR	185	47	+ - 22	50	69,90	36,57	9,52	90,42	5/16”	14,7	20
4C	3040.50-T.L CDR	202	50	+ - 25	50	87,32	36,57	9,52	107,95	5/16”	15,5	20
5C	3050.58-T.L CDR	241	64	+ - 30	58	88,90	42,92	14,26	115,06	3/8”	17,5	24
6C	3060.76-T L CDR	231	55	+ - 28	76	114,30	42,92	14,26	140,46	3/8”	18,5	24
7C	3070.90-T.L CDR	260	55	+ - 30	90	117,50	49,27	15,85	148,38	1/2”	20,0	24
8C	3080.90-T.L CDR	326	87	+ - 40	90	174,60	49,27	15,85	206,32	1/2”	22,0	30
8,5 C	3085.100-T.L CDR	379	91	+ - 65	100	123,83	71,37	15,85	165,10	1/2”	25,4	25
9 C	3090.115-T.L CDR	400	102	+ - 65	115	168,28	71,37	15,85	209,55	1/2”	25,4	30
10 C	3100.125-T.L CDR	387	109	+ - 42	125	165,10	91,95	25,35	212,85	5/8”	32,6	25

- PARA OBTENER LA REFERENCIA COMPLETA, SUSTITUIR LA “L” POR LA LONGITUD EN POSICIÓN DE TRABAJO EN mm.SI LA LONGITUD ES CERRADA, ELIMINAR LA “CDR” FINAL.

- FOR OBTAINING THE COMPLETE REFERENCE, SUBSTITUTE THE ‘L’ BY THE WORKING LENGTH IN mm. IF THE LENGTH IS CLOSED ELIMINATE THE ‘CDR’ OF THE END.

Componentes Tipo MECHANICS
Components Type MECHANICS

CRUCES DE CARDAN – UNIVERSAL JOINTS

DENOMINACIÓN DENOMINATION	SERIE SERIES	REFERENCIA PART NUMBER	A	B	E	C	d_1	d_2
	2 C	3020.RR-CR	60,32	33.27	9,52	79,25	5/16”-24	5/16”-24
		3020.PP-CR					8,75	8,75
		3020.PR-CR					8,75	5/16”-24
	3 C	3030.RR-CR	69,90	36,57	9,52	90,42	5/16”-24	5/16”-24
		3030.PP-CR					8,75	8,75
	4 C	3040.RR-CR	87,32	36,57	9,52	107,95	5/16”-24	5/16”-24
		3040.PP-CR					8,75	8,75
		3040.PR-CR					8,75	5/16”-24
	5 C	3050.RR-CR	88,90	42,92	14,26	115,06	3/8”-24	3/8”-24
		3050.PP-CR					10,50	10,50
		3050.PR-CR					10,50	3/8”-24
	6 C	3060.RR-CR	114,30	42,92	14,26	140,46	3/8”-24	3/8”-24
		3060.PP-CR					10,5	10,5
		3060.PR-CR					10,5	3/8”-24
	7 C	3070.RR-CR	117,50	49,27	15,85	148,38	1/2”-20	1/2”-20
		3070.PP-CR					13,50	13,50
		3070.PR-CR					13,50	1/2”-20
	8 C	3080.PP-CR	174,60	49,27	15,85	206,32	13,50	13,50
		3080.RR-CR					7/16”-20	7/16”-20
		2031-CR					1/2”-20	1/2”-20
	8,5 C	3085.RR-CR	123,83	71,37	15,85	165,10	1/2”-20	1/2”-20
	9 C	3090.PP-CR	168,28	71,37	15,85	209,55	13,50	13,50

Cruces dados de aletas con taladros: PP=pasantes-pasantes, PR=pasantes-roscados, RR=roscados-roscados
Universal Joints wing bearings type with holes: PP=drilled-drilled, PR=drilled-threaded, RR=threaded-threaded

CONJUNTOS DESLIZANTES – SLIDING ASSEMBLIES

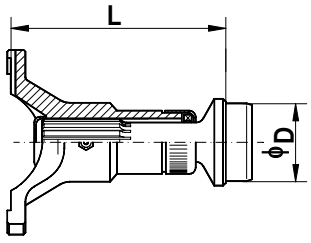


Fig.1

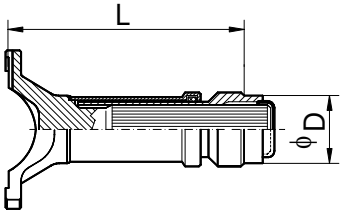


Fig.2

SERIE SERIES	Fig	REFERENCIA PART NUMBER	D	L
2C	1	3020-CB.50	44,0	166,0
4C	1	3040-CB.50	44,0	162,0
5C	1	3050-CB.58	50,0	194,0
6C	1	3060-CB.76	71,6	185,0
7C	1	3070-CB.90	84,3	210,0
8C	1	2031-CBL.90	83,5	263,0
8,5C	2	3085-HEM.100	88,0	289,0
9C	2	3090-HEM.115	100,5	310,0

HORQUILLAS FIJAS – TUBE YOKES

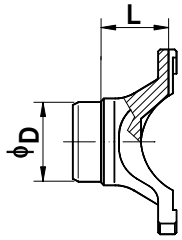
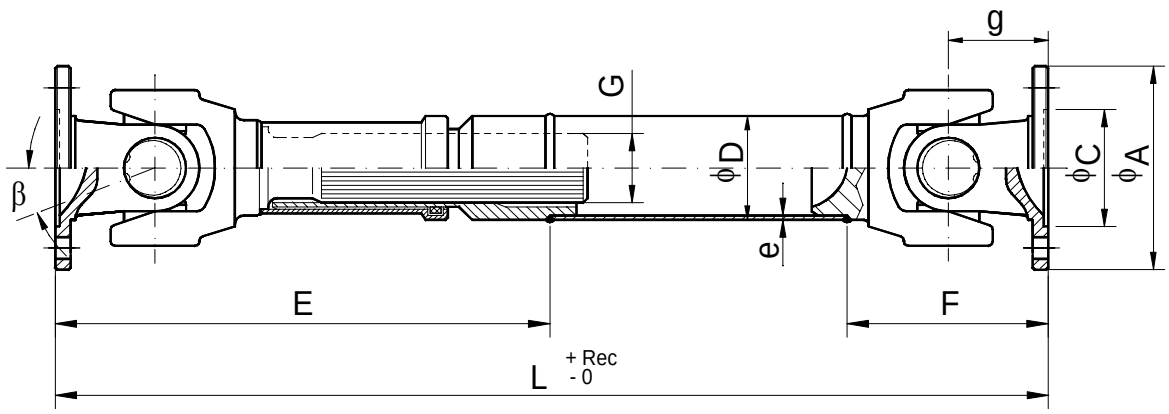
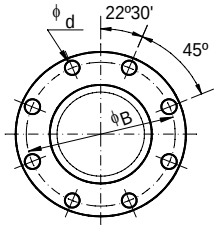


Fig.3

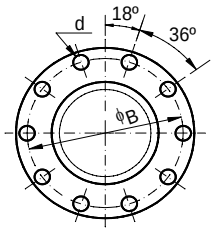
2C	3	3020-F.50	44,0	25,0
4C	3	3040-F.50	44,0	35,0
5C	3	3050-F.58	50,0	47,0
6C	3	3060-F.76	71,6	37,0
7C	3	3070-F.90	84,3	35,0
8C	3	2031-F.90	83,5	65,0
8,5C	3	3085-F.100	88,0	66,0
9C	3	3090-F.115	100,5	77,0

Transmisiones versión DIN
Drive Shafts DIN version (1)

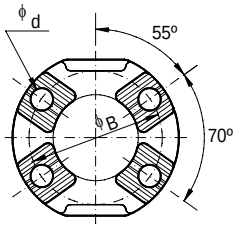




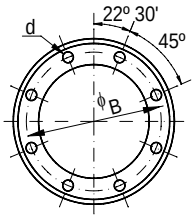
DIN Fig.1



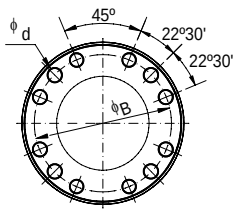
DIN Fig.2



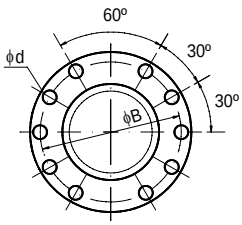
EF Fig.3



SAE Fig.4



SAE Fig.5

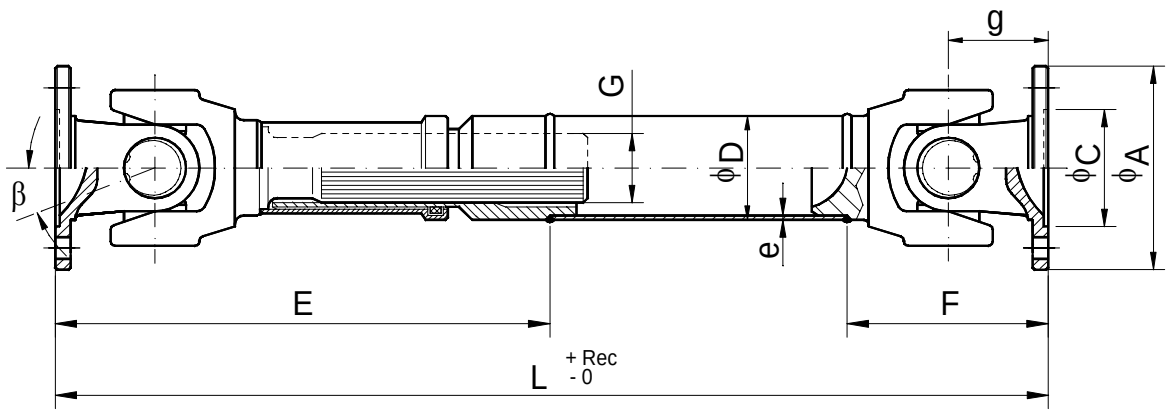


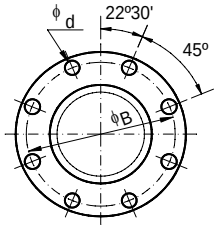
DIN Fig.6

SERIE SERIES	REFERENCIA PART NUMBER	E	F	Rec	D x e	G	Fig.	A	B	C	d	g	βº max.
3515	3515.11.80-T.L	374	159	110	80x3,5	52x2,5	1	120	101,5	75,0	10	75	35º
	3515.33.80-T.L	379	164					150	130,0	90,0	12	80	
	3515.55.80-T.L	374	159				3	122	100,0	-	11	75	
3520	3520.11.85-T.L	398	171	110	85x5	55x2,5	1	150	130,0	90,0	12	86	35º
	3520.22.85-T.L							165	140,0	95,0	16		
	3520.33.85-T.L						3	150	130,0	-	13		
	3520.44.85-T.L						4	175	155,5	168,2	9,75		
	3520.55.85-T.L						1	180		110,0	14		
3530	3530.00.88-T.L	420	184	110	88x4,5	65x2,5	1	150	130,0	90,0	14	95	35º
	3530.11.88-T.L										12		
	3530.22.88-T.L							165	140,0	95,0	14		
	3530.33.88-T.L										16		
	3530.44.88-T.L							180	155,5	110,0	14		
	3530.55.88-T.L										16		
	3530.66.88-T.L						2						
	3530.77.88-T.L						3	150	130,0	-	13		
	3530.88.88-T.L							180	150,0		15		
	3530.99.88-T.L						5	203	184,2	196,8	10		
3535	3535.11.100-T.L	448	203	110	100x6	75x2,5	1	165	140,0	95,0	16	100	35º
	3535.22.100-T.L							180	155,5	110,0	14		
	3535.33.100-T.L										16		
	3535.44.100-T.L						2						
	3535.55.100-T.L						3	180	150,0	-	15		
	3535.66.100-T.L						5	203	184,2	196,8	10		
	3535.77.100-T.L										11		
	3535.88.100-T.L						3	150	130,0	-	13		

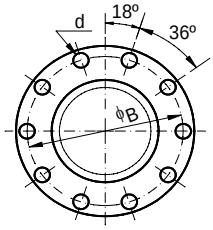
- LOS DOS ACOPLAMIENTOS EXTREMOS PUEDEN SER DIFERENTES / THE TWO ENDS FITTING MAY BE DIFFERENT

Transmisiones versión DIN
Drive Shafts DIN version (2)

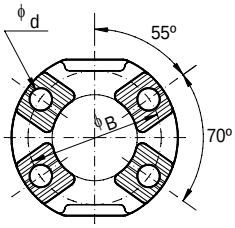




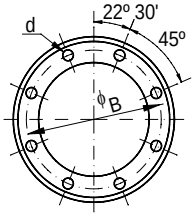
DIN Fig.1



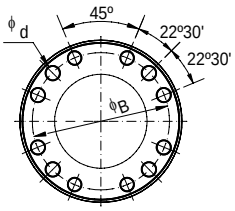
DIN Fig.2



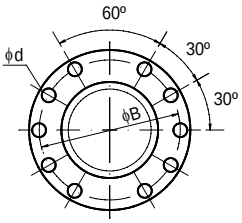
EF Fig.3



SAE Fig.4



SAE Fig.5



DIN Fig.6

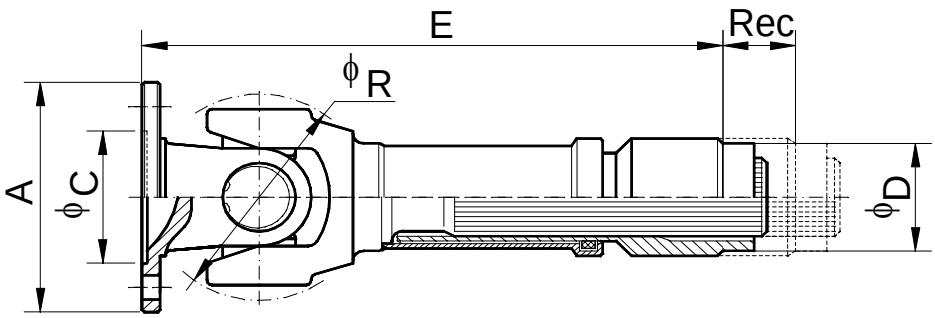
Rec = Recorrido máximo – Maximum slip movement

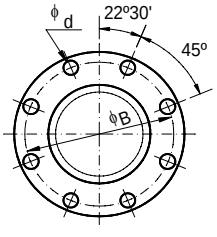
SERIE SERIES	REFERENCIA PART NUMBER	E	F	Rec	D x e	G	Fig.	A	B	C	d	g	β º max.
3542	3542.11.110-T.L	500	211	150	110x6	80x2,5	1	180	155,5	110,0	16	95	25º
	3542.11.120-T.L	382	195	110	120x6	95x2							
	3542.11.140-T.L	495	203	150	140x5	80x2,5							
	3542.22.110-T.L	500	211		110x6		2						
	3542.22.120-T.L	382	195	110	120x6	95x2							
	3542.22.140-T.L	495	203	150	140x5	80x2,5							
	3542.33.110-T.L	500	211		110x6		3	180	150,0	-	15		
	3542.33.120-T.L	382	195	110	120x6	95x2							
	3542.33.140-T.L	495	203	150	140x5	80x2,5							
	3542.44.110-T.L	505	216		110x6		5	203	184,2	196,8	11	100	
	3542.44.120-T.L	387	200	110	120x6	95x2							
	3542.44.140-T.L	500	208	150	140x5	80x2,5							
	3542.55.110-T.L	505	216		110x6		1	225	196,0	140,0	16		
	3542.55.120-T.L	387	200	110	120x6	95x2							
	3542.55.140-T.L	500	208	150	140x5	80x2,5							
3545	3545.11.140-T.L	465	220	110	140x5	75x2,5	2	180	155,5	110,0	16	110	25º
	3545.22.140-T.L	455	210				3		150,0	-	15	100	
3548	3548.11.140-T.L	523	225	150	140x5	90x2,5	2	180	155,5	110,0	16	110	25º
	3548.22.140-T.L						1	225	196,0	140,0			
	3548.33.140-T.L							250	218,0		18		
	3548.44.140-T.L	513	215				3	180	150,0	-	15	100	
	3548.55.140-T.L	523	225				5	203	184,2	196,8	11	110	
	3548.66.140-T.L						6	180	155,5	110,0	16		

- PARA OBTENER LA REFERENCIA COMPLETA, SUSTITUIR LA "L" POR LA LONGITUD TOTAL CERRADA QUE SE DESEE.
- FOR OBTAINING THE COMPLETE REFERENCE, SUBSTITUTE THE 'L' BY THE TOTAL CLOSED LENGTH REQUIRED.

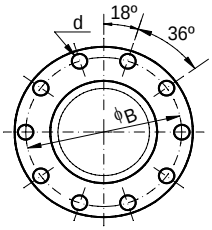
Juntas correderas versión DIN
Slip Joints DIN version

(1)

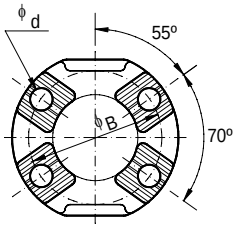




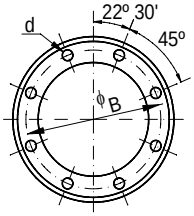
DIN Fig.1



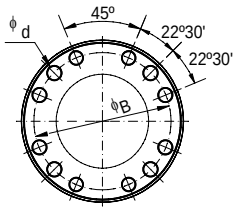
DIN Fig.2



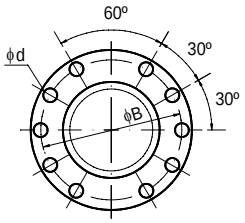
EF Fig.3



SAE Fig.4



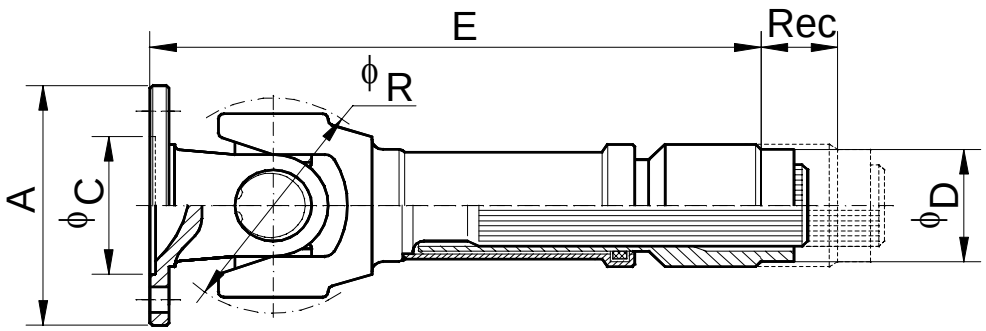
SAE Fig.5

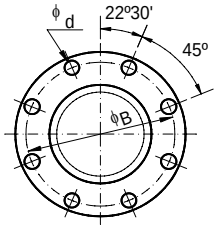


DIN Fig.6

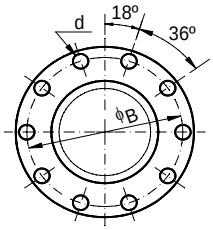
SERIE SERIES	CRUZ U/JOINT	REFERENCIA PART NUMBER	Fig.	A	B	C	d	E	Rec	D	ϕR	βº
3515	42,0 x 104,5	3515.1-CB	1	120	101,5	75,0	10	374	110	73,4	125	35º
		3515.3-CB		150	130,0	90,0	12	379				
		3515.5-CB	3	122	100,0	-	11	374				
3520	48,0 x 116,5	3520.1-CB	1	150	130,0	90,0	12	398	110	75,4	138	35º
		3520.2-CB		165	140,0	95,0	16					
		3520.3-CB	3	150	130,0	-	13					
		3520.4-CB	4	175	155,5	168,2	9,75					
		3520.5-CB	1	180		110,0	14					
3530	52,0 x 133,0	3530.0-CB	1	150	130,0	90,0	14	420	110	79,4	156	35º
		3530.1-CB					12					
		3530.2-CB		165	140,0	95,0	14					
		3530.3-CB					16					
		3530.4-CB		180	155,5	110,0	14					
		3530.5-CB					16					
		3530.6-CB	2									
		3530.7-CB	3	150	130,0	-	13					
		3530.8-CB		180	150,0		15					
		3530.9-CB	5	203	184,2	196,8	10					
3535	57,0 x 144,0	3535.1-CB	1	165	140,0	95,0	16	448	110	88,4	168	35º
		3535.2-CB		180	155,5	110,0	14					
		3535.3-CB					16					
		3535.4-CB	2									
		3535.5-CB	3	180	150,0	-	15					
		3535.6-CB	5	203	184,2	196,8	10					
		3535.7-CB					11					
		3535.8-CB	3	150	130,0	-	13					

Juntas correderas versión DIN
Slip Joints DIN version (2)

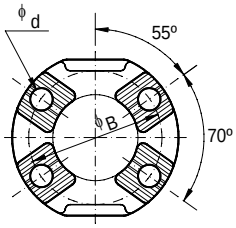




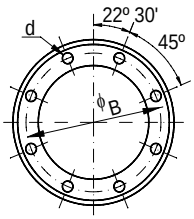
DIN Fig.1



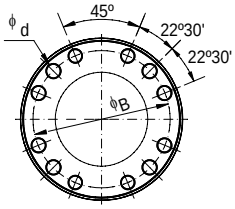
DIN Fig.2



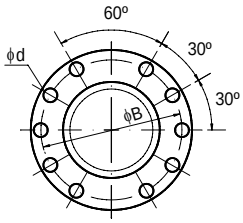
EF Fig.3



SAE Fig.4



SAE Fig.5

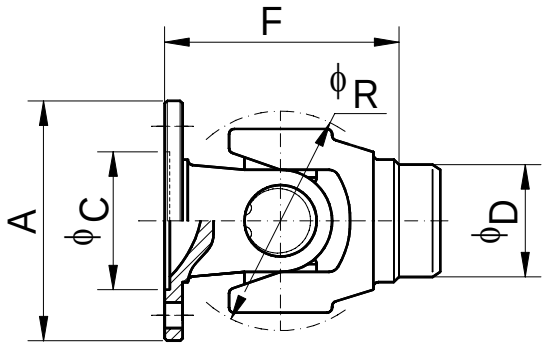


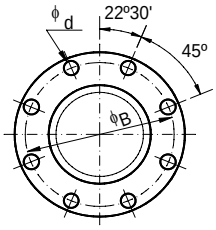
DIN Fig.6

SERIE SERIES	CRUZ U/JOINT	REFERENCIA PART NUMBER	Fig.	A	B	C	d	E	Rec	D	ϕR	βº
3542	57,0 x 152,0	3542.1-CB.110	1	180	155,5	110,0	16	500	150	98,0	178	25º
		3542.1-CB.120						382	110	108,4		
		3542.1-CB.140						495	150	130,4		
		3542.2-CB.110	2					500		98,0		
		3542.2-CB.120						382	110	108,4		
		3542.2-CB.140						495	150	130,4		
		3542.3-CB.110	3	180	150,0	-	15	500		98,0		
		3542.3-CB.120						382	110	108,4		
		3542.3-CB.140						495	150	130,4		
		3542.4-CB.110	5	203	184,2	196,8	11	505		98,0		
		3542.4-CB.120						387	110	108,4		
		3542.4-CB.140						500	150	130,4		
		3542.5-CB.110	1	225	196,0	140,0	16	505		98,0		
		3542.5-CB.120						387	110	108,4		
		3542.5-CB.140						500	150	130,4		
3545	57,0 x 172,0	3545.1-CB	2	180	155,5	110,0	16	465	110	130,4	196	25º
		3545.2-CB	3		150,0	-	15	455				
3548	65,0 x 172,0	3548.1-CB	2	180	155,5	110,0	16	523	150	130,4	204	25º
		3548.2-CB	1	225	196,0	140,0	16					
		3548.3-CB		250	218,0		18					
		3548.4-CB	3	180	150,0	-	15	513				
		3548.5-CB	5	203	184,2	196,8	11	523				
		3548.6-CB	6	180	155,5	110,0	16					

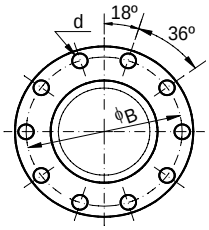
Juntas fijas versión DIN
Fixed Joints DIN version

(1)

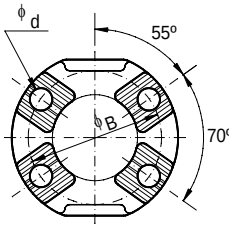




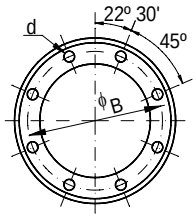
DIN Fig. 1



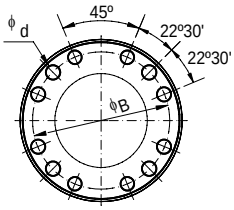
DIN Fig. 2



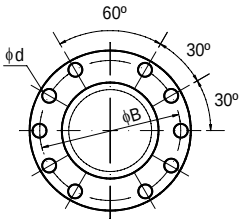
EF Fig. 3



SAE Fig. 4



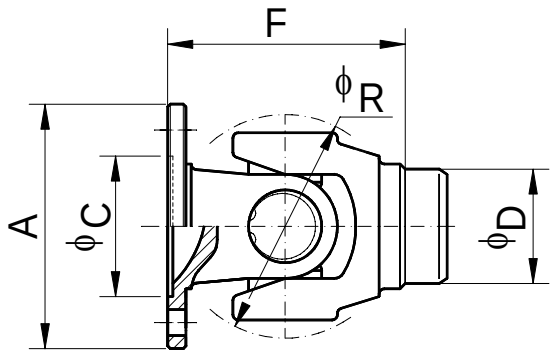
SAE Fig. 5

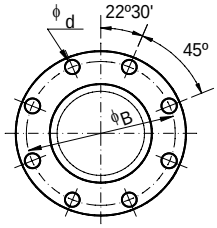


DIN Fig. 6

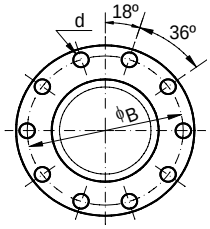
SERIE SERIES	CRUZ U/JOINT	REFERENCIA PART NUMBER	Fig.	A	B	C	d	F	D	ϕR	βº
3515	42,0 x 104,5	3515.1-F	1	120	101,5	75,0	10	159	73,4	125	35º
		3515.3-F		150	130,0	90,0	12	164			
		3515.5-F	3	122	100,0	-	11	159			
3520	48,0 x 116,5	3520.1-F	1	150	130,0	90,0	12	171	75,4	138	35º
		3520.2-F		165	140,0	95,0	16				
		3520.3-F	3	150	130,0	-	13				
		3520.4-F	4	175	155,5	168,2	9,75				
		3520.5-F	1	180		110,0	14				
3530	52,0 x 133,0	3530.0-F	1	150	130,0	90,0	14	184	79,4	156	35º
		3530.1-F					12				
		3530.2-F		165	140,0	95,0	14				
		3530.3-F					16				
		3530.4-F		180	155,5	110,0	14				
		3530.5-F					16				
		3530.6-F	2								
		3530.7-F	3	150	130,0	-	13				
		3530.8-F		180	150,0		15				
		3530.9-F	5	203	184,2	196,8	10				
3535	57,0 x 144,0	3535.1-F	1	165	140,0	95,0	16	203	88,4	168	35º
		3535.2-F		180	155,5	110,0	14				
		3535.3-F					16				
		3535.4-F	2								
		3535.5-F	3	180	150,0	-	15				
		3535.6-F	5	203	184,2	196,8	10				
		3535.7-F					11				
		3535.8-F	3	150	130,0	-	13				

Juntas fijas versión DIN
Fixed Joints DIN version (2)

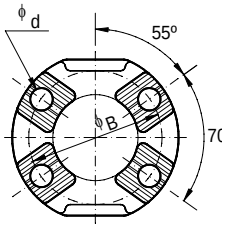




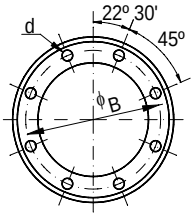
DIN Fig. 1



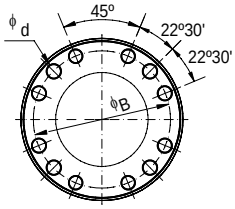
DIN Fig. 2



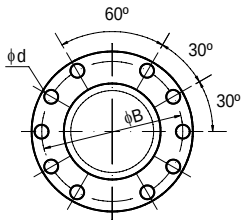
EF Fig. 3



SAE Fig. 4



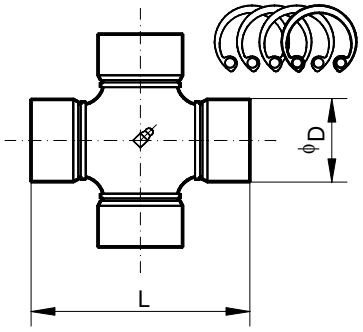
SAE Fig. 5



DIN Fig. 6

SERIE SERIES	CRUZ U/JOINT	REFERENCIA PART NUMBER	Fig.	A	B	C	d	F	D	ϕR	βº
3542	57,0 x 152,0	3542.1-F.110	1	180	155,5	110,0	16	211	98,0	178	25º
		3542.1-F.120						195	108,4		
		3542.1-F.140						203	130,0		
		3542.2-F.110	2					211	98,0		
		3542.2-F.120						195	108,4		
		3542.2-F.140						203	130,0		
		3542.3-F.110	3	180	150,0	-	15	211	98,0		
		3542.3-F.120						195	108,4		
		3542.3-F.140						203	130,0		
		3542.4-F.110	5	203	184,2	196,8	11	216	98,0		
		3542.4-F.120						200	108,4		
		3542.4-F.140						208	130,0		
		3542.5-F.110	1	225	196,0	140,0	16	216	98,0		
		3542.5-F.120						200	108,4		
		3542.5-F.140						208	130,4		
3545	57,0 x 172,0	3545.1-F	2	180	155,5	110,0	16	220	130,4	196	25º
		3545.2-F	3		150,0	-	15	210			
3548	65,0 x 172,0	3548.1-F	2	180	155,5	110,0	16	225	130,4	204	25º
		3548.2-F	1	225	196,0	140,0	16				
		3548.3-F		250	218,0		18				
		3548.4-F	3	180	150,0	-	15	215			
		3548.5-F	5	203	184,2	196,8	11	225			
		3548.6-F	6	180	155,5	110,0	16				

Cruces de Cardan versión DIN
DIN version Universal Joints



SERIE SERIES	REFERENCIA PART NUMBER	D	L	CARACTERÍSTICAS CHARACTERISTICS
3515	3515-CR	42,0	104,5	ENGRASADOR CENTRAL-CENTRAL NIPPLE
3520	3520-CR	48,0	116,5	ENGRASADOR CENTRAL-CENTRAL NIPPLE
	3520SE-CR			SIN MANTENIMIENTO - LIFETIME VERSION
3530	3530-CR	52,0	133,0	ENGRASADOR CENTRAL-CENTRAL NIPPLE
	3530SE-CR			SIN MANTENIMIENTO - LIFETIME VERSION
	3530AT-CR			ALTAS TEMPERATURAS-HIGH TEMPERATURES
3535	3535-CR	57,0	144,0	ENGRASADOR CENTRAL-CENTRAL NIPPLE
	3535SE-CR			SIN MANTENIMIENTO - LIFETIME VERSION
3542	3542-CR	57,0	152,0	ENGRASADOR CENTRAL-CENTRAL NIPPLE
	3542SE-CR			SIN MANTENIMIENTO - LIFETIME VERSION
3545	3545-CR	57,0	172,0	ENGRASADOR CENTRAL-CENTRAL NIPPLE
	3545SE-CR			SIN MANTENIMIENTO - LIFETIME VERSION
3548	3548-CR	65,0	172,0	ENGRASADOR CENTRAL-CENTRAL NIPPLE
	3548SE-CR			SIN MANTENIMIENTO - LIFETIME VERSION

REFERENCIA PART NUMBER	D	L	EQUIVALENCIA EQUIVALENCE
4010-CR	15	41	473.10
4020-CR	19	49,2	473.20
4030-CR	22	58,9	473.30
4000-CR	26	69,7	287.00
6015-CR	27	74,5	Compact 2015 687.15
4001-CR	30	81,8	287.10
6020-CR	30,2	82	Compact 2020 687.20
6025-CR	34,9	92,2	Compact 2025 687.25
6030-CR	34,9	106,4	Compact 2030 687.30
4002-CR	35	96,8	287.20
6130-CR	35	106,4	Compact 2030 68730INA
6035-CR	42	119,4	Compact 2035 687.35
6040-CR	47,6	135	Compact 2040 687.40
6140-CR	48	135	Compact 2040 68740INA
6045-CR	52	147,2	Compact 2045 687.45
6050-CR	49,2	154,9	Compact 2050 687.50
6055-CR	57	152	Compact 2055 687.55
6060-CR	59	167,7	Compact 2060 687.60

- CRUCES SAE PAG. 18, CRUCES MECHANICS PAG. 26 . POR FAVOR CONSULTE OTRAS MEDIDAS DISPONIBLES.
- SAE U.JOINTS PAGE 18, MECHANICS U.JOINTS PAGE 26. PLEASE ASK FOR OTHER MEASURES AVAILABLE.

Platillos DIN con acoplamientos DIN, EF y SAE
DIN flange Yokes with DIN, XS and SAE fitting

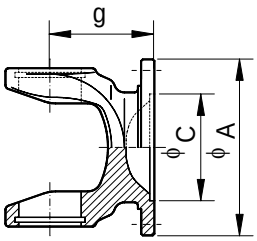


Fig. A

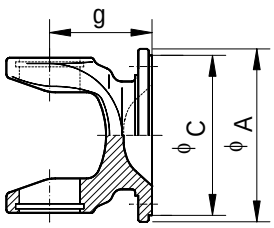


Fig. B

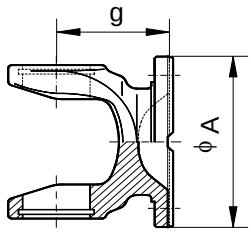


Fig. C

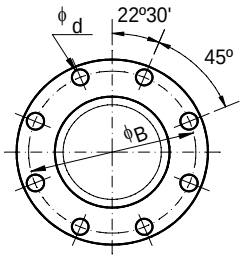


Fig. 1

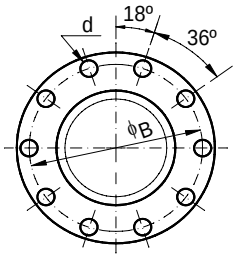


Fig. 2

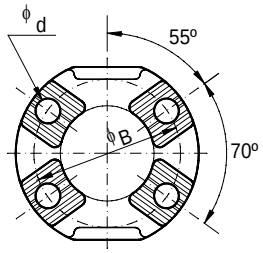


Fig. 3

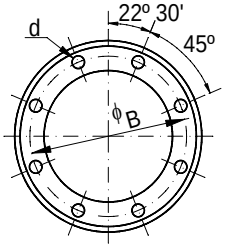


Fig. 4

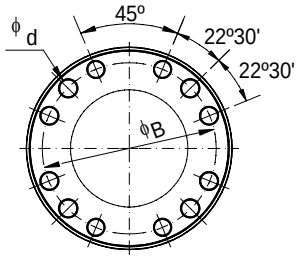


Fig. 5

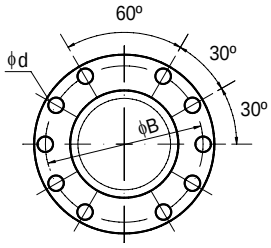


Fig. 6

SERIE SERIES	CRUZ U/JOINT	REFERENCIA PART NUMBER	ACOPLAMIENTO CONECTION	Fig.	A	B	C	d	g
3515	42,0 x 104,5	3515.1-SC	DIN 120 x 8 x 10	A-1	120	101,5	75,0	10	75
		3515.3-SC	DIN 150 x 8 x 12		150	130,0	90,0	12	80
		3515.5-SC	EF 122 x 4 x 11	C-3	122	100,0	-	11	75
3520	48,0 x 116,5	3520.1-SC	DIN 150 x 8 x 12	A-1	150	130,0	90,0	12	86
		3520.2-SC	DIN 165 x 8 x 16		165	140,0	95,0	16	
		3520.3-SC	EF 150 x 4 x 13	C-3	150	130,0	-	13	
		3520.4-SC	SAE 1600, 175 x 8 x 9,7	B-4	175	155,5	168,2	9,75	
		3520.5-SC	DIN 180 x 8 x 14	A-1	180		110,0	14	
3530	52,0 x 133,0	3530.0-SC	DIN 150 x 8 x 14	A-1	150	130,0	90,0	14	95
		3530.1-SC	DIN 150 x 8 x 12					12	
		3530.2-SC	DIN 165 x 8 x 14		165	140,0	95,0	14	
		3530.3-SC	DIN 165 x 8 x 16					16	
		3530.4-SC	DIN 180 x 8 x 14		180	155,5	110,0	14	
		3530.5-SC	DIN 180 x 8 x 16					16	
		3530.6-SC	DIN 180 x 10 x 16	A-2					
		3530.7-SC	EF 150 x 4 x 13	C-3	150	130,0	-	13	
		3530.8-SC	EF 180 x 4 x 15		180	150,0		15	
		3530.9-SC	SAE 1800, 203 x 12 x 10	B-5	203	184,2	196,8	10	

Platillos DIN con acoplamientos DIN, EF y SAE
DIN flange Yokes with DIN, XS and SAE fitting

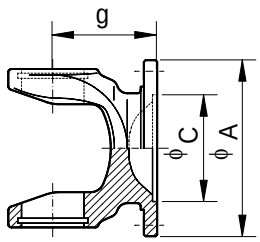


Fig. A

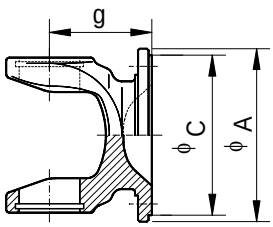


Fig. B

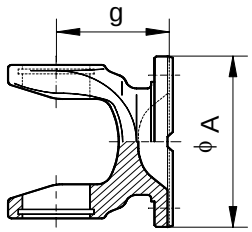


Fig. C

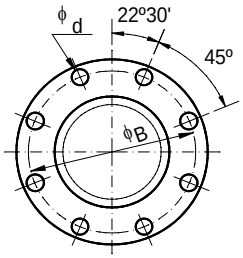


Fig. 1

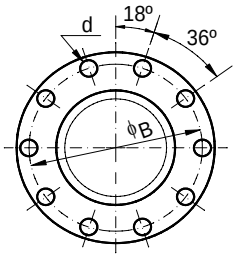


Fig. 2

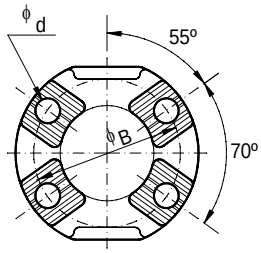


Fig. 3

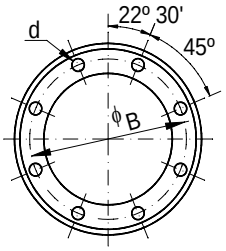


Fig. 4

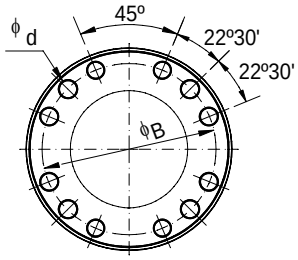


Fig. 5

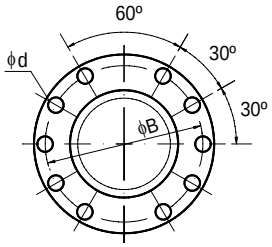


Fig. 6

SERIE SERIES	CRUZ U/JOINT	REFERENCIA PART NUMBER	ACOPLAMIENTO CONECTION	Fig.	A	B	C	d	g
3535	57,0 x 144,0	3535.1-SC	DIN 165 x 8 x 16	A-1	165	140,0	95,0	16	100
		3535.2-SC	DIN 180 x 8 x 14		180	155,5	110,0	14	
		3535.3-SC	DIN 180 x 8 x 16					16	
		3535.4-SC	DIN 180 x 10 x 16	A-2					
		3535.5-SC	EF 180 x 4 x 15	C-3	180	150,0	-	15	
		3535.6-SC	SAE 1800, 203 x 12 x 10	B-5	203	184,2	196,8	10	
		3535.7-SC	SAE 1800, 203 x 12 x 11					11	
		3535.8-SC	EF 150 x 4 x 13	C-3	150	130,0	-	13	
3542	57,0 x 152,0	3542.1-SC	DIN 180 x 8 x 16	A-1	180	155,5	110,0	16	95
		3542.2-SC	DIN 180 x 10 x 16	A-2					
		3542.3-SC	EF 180 x 4 x 15	C-3	180	150,0	-	15	
		3542.4-SC	SAE 1800, 203 x 12 x 11	B-5	203	184,2	196,8	11	100
		3542.5-SC	DIN 225 x 8 x 16	A-1	225	196,0	140,0	16	
3545	57,0 x 172,0	3545.1-SC	DIN 180 x 10 x 16	A-2	180	155,5	110,0	16	110
		3545.2-SC	EF 180 x 4 x 15	C-3		150,0	-	15	100
3548	65,0 x 172,0	3548.1-SC	DIN 180 x 10 x 16	A-2	180	155,5	110,0	16	110
		3548.2-SC	DIN 225 x 8 x 16	A-1	225	196,0	140,0	16	
		3548.3-SC	DIN 250 x 8 x 18		250	218,0		18	
		3548.4-SC	EF 180 x 4 x 15	C-3	180	150,0	-	15	100
		3548.5-SC	SAE 1800, 203 x 12 x 11	B-5	203	184,2	196,8	11	110
		3548.6-SC	DIN 180 x 10 x 16 simétrico	A-6	180	155,5	110,0	16	

Horquillas correderas y fijas DIN
Sleeve Yokes and Tube Yokes DIN

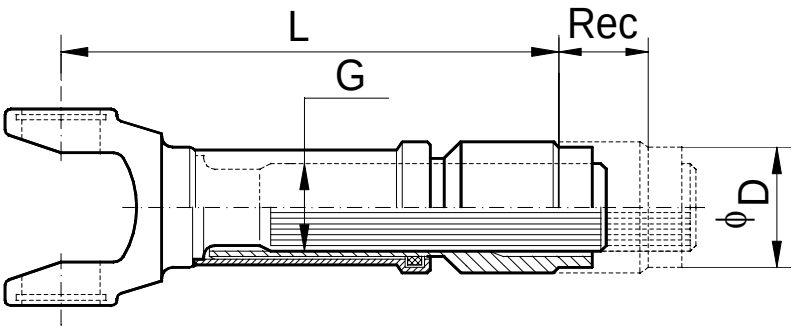


Fig. 1

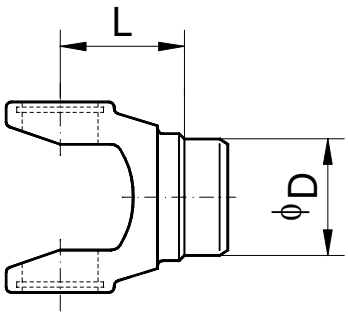
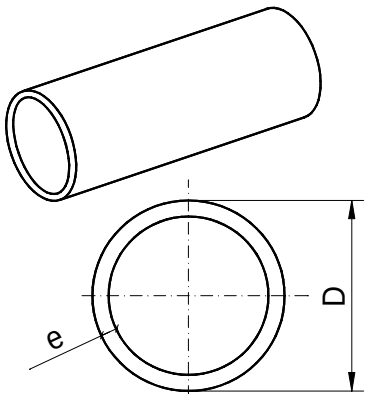


Fig. 2

REC = RECORRIDO MÁXIMO – MAXIMUM SLIP MOVEMENT

SERIE SERIES	CRUZ U/JOINT	REFERENCIA PART NUMBER	Fig.	L	ϕ D	G	Rec.
3515	42,0 x 104,5	3515-HFBM	1	299	73,4	52 x 2,5 DIN 5480	110
		3515-HF	2	84		-	-
3520	48,0 x 116,5	3520-HFBM	1	312	75,4	55 x 2,5 DIN 5480	110
		3520-HF	2	85		-	-
3530	52,0 x 133,0	3530-HFBM	1	325	79,4	65 x 2,5 DIN 5480	110
		3530-HF	2	89		-	-
3535	57,0 x 144,0	3535-HFBM	1	348	88,4	75 x 2,5 DIN 5480	110
		3535-HF	2	103		-	-
3542	57,0 x 152,0	3542-HFBM.110	1	405	98,0	80 x 2,5 DIN 5480	150
		3542-HFBM.120		287	108,4	95 x 2 DIN 5480	110
		3542-HFBM.140		400	130,4	80 x 2,5 DIN 5480	150
		3542-HF.110	2	116	98,0	-	-
		3542-HF.120		100	108,4		
		3542-HF.140		108	130,4		
3545	57,0 x 172,0	3545-HFBM.140	1	355	130,4	75 x 2,5 DIN 5480	110
		3545-HF.140	2	110		-	-
3548	65,0 x 172,0	3548-HFBM.140	1	413	130,4	90 x 2,5 DIN 5480	150
		3548-HF.140	2	115		-	-

Tubos para transmisiones
Tubing for Drive Shafts



REFERENCIA PART NUMBER	D	e	Longitud Length
32T.3000	32,0	3,5	3.000
35T.3000	35,0	2,6	
45T.3000	45,0	2,5	
51T.3000	50,8	2,4	
55T.3000	55,0	2,5	
63T.3000	63,5	2,5	
76T.3000	76,0	2,5	
80T.3000	80,0	3,5	
85T.3000	85,0	5,0	
88T.3000	88,0	4,5	
90.3T.3000	90,0	3,0	
90.5T.3000	90,0	5,0	
92T.3000	92,0	6,5	
100T.3000	100,0	6,0	
104T.3000	104,0	8,0	
110T.3000	110,0	6,0	
120.3T.3000	120,0	3,0	
120.6T.3000	120,0	6,0	
140T.3000	140,0	5,0	

Cinemática de las Juntas Cardan

Al unir dos ejes no alineados por medio de una junta cardan sencilla (Fig. A) y hacer girar el eje conductor **I** a una velocidad angular uniforme ω_1 , el eje conducido **II** gira a una velocidad ω_2 que ya no es uniforme.

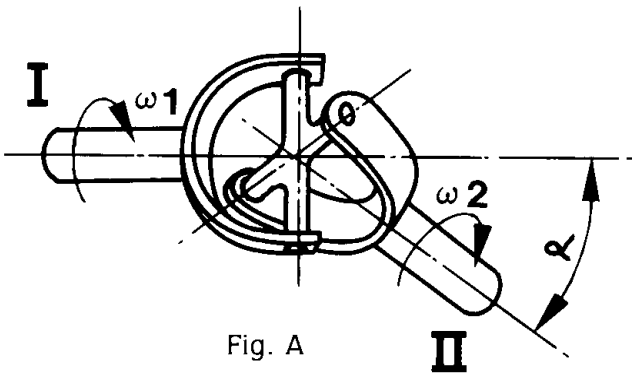


Fig. A

Consideraciones técnicas basadas en el cálculo de la velocidad angular del eje **II** en las diferentes posiciones de la junta cardan en una rotación completa, nos permiten conocer que esto es como consecuencia del ángulo de la articulación α.

Estos cálculos nos indican que la velocidad angular ω_2 pasa dos veces por un máximo y por un mínimo en una rotación completa y la aceleración angular cambia de sentido cuatro veces por revolución, produciéndose vibraciones indeseables.

Para compensar las aceleraciones y deceleraciones del eje conducido **II**, la unión de los dos ejes deberá realizarse (salvo en los casos de pequeños ángulos, velocidades y esfuerzos) con una transmisión cardan que disponga de una junta en cada extremo, siendo una de ellas “corredera” para absorber las variaciones de longitud que se producen por las variaciones de inclinación del árbol en giro. En caso de que la transmisión se realice con dos juntas fijas, habrá que prever el desplazamiento longitudinal en una de las bridas de amarre.

Kinematics of the Cardan Joints

On joining two non-aligned shafts by means of a single cardan joint, Fig. A, and making the drive shaft **I** turn at a constant angular velocity ω_1 , the driven shaft **II** turns at a speed ω_2 which is no longer uniform.

Technical considerations based on the calculation of the angular speed of shaft **II** in the different positions of the cardan joint in a complete rotation, allow us to know that this is as a consequence of the angle of the joint α. These calculations indicate that the angular speed ω_2 passes twice through a maximum and a minimum in just one complete rotation and the angular acceleration changes direction four times per revolution, which produces undesirable vibrations.

For compensating the accelerations and decelerations of the driven shaft **II**, the union of the two shafts will have to be carried out (except in the cases of small angles, speeds and efforts) with a cardan drive shaft having a joint on each end, one of them being “displaceable” for absorbing the variations of length produced by the variations of inclinations of the propshaft when turning. In the case where the propshaft is carried out with two fixed joints, it will be necessary to provide one end companion flange with slip movement.

Condiciones de montaje

Para que la transmisión sea homocinética, es decir, para que la velocidad del eje de salida sea uniforme, al igual que lo es la de entrada, se precisa que el montaje cumpla las siguientes condiciones:

1.- Los ejes conductor y conducido deben de ser paralelos ó concurrentes.
2.- Las horquillas solidarias del árbol de unión(**1**) deben estar alineadas (Fig.**B**)
3.- Los ángulos que forman las dos articulaciones deben ser iguales (Fig.**C**).

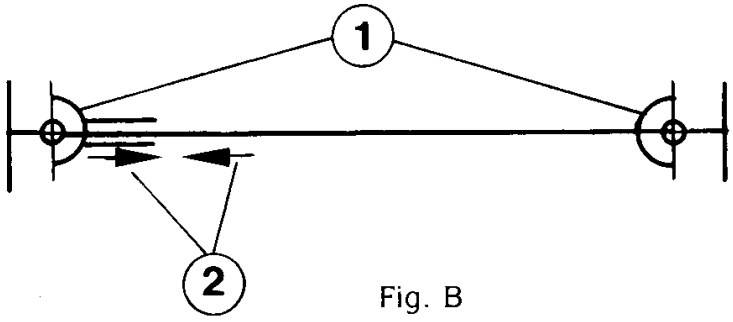


Fig. B

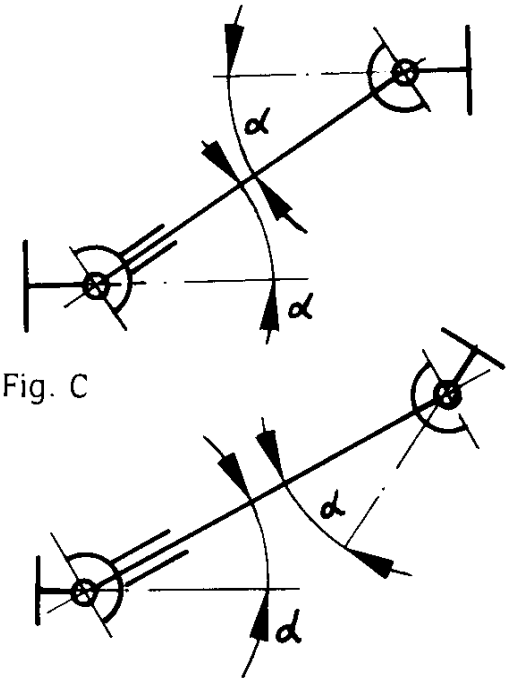


Fig. C

Por otro lado, la transmisión debe ser equilibrada dinámicamente a la velocidad de trabajo para compensar las diferencias de masas de todos sus componentes, no perdiendo la alineación de las flechas(**2**) que indican la posición correcta(Fig.**B**).

Assembly conditions

So that the Propshaft may be homocinetic, that is, so that the velocity of the output shaft may be uniform,as the one of the input shaft, it is necessary the following assembly conditions:

1.-The drive and driven shafts must be parallel or concurrent.

2.-The yokes integral with the union shaft(**1**) must be aligned(Fig.**B**).

3.-The angles which form the two Joints must be the same(Fig.**C**).

On the other hand, the Propshaft must be dynamically balanced at the working velocity for compensating the differences of masses of all their components. Align always the arrows(**2**) which indicate the correct position(Fig.**B**)

Velocidad crítica / Critical velocity (Fig.D)

-Si hacemos girar una transmisión Cardan, aumentando progresivamente la velocidad, se observa que se produce un pandeo en la parte comprendida entre los centros de las articulaciones y que va aumentando a medida que aumenta la velocidad, hasta que adquiere su máximo valor.

-If we make a Propshaft turning, increasing the speed progressively, it is observed that a bulge is produced in the part between centres of joints and which increases at the same time as the speed increases, until such time as it acquires the maximum value.

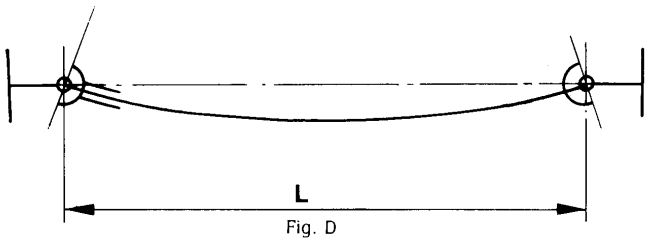


Fig. D

-La velocidad de rotación en este instante se denomina Velocidad Crítica y que para los tubos viene dada por la siguiente fórmula:

-The rotation speed at this moment is called Critical Velocity, which for tubes have the following formula:

$$N_{\text{crítica}} = \frac{1{,}22.10^{8}.\sqrt{D^2+d^2}}{L^2}$$

Siendo:
D = diámetro exterior del tubo en mm.
d = diámetro interior del tubo en mm.
l = longitud entre centros de cruces en mm

Being:
D = outer diameter of the tube in mm.
d = inner diameter of the tube in mm.
l = length between centres of U/Joints in mm.

$$N_{\text{admisible}} = 0{,}6\ N_{\text{crítica}}$$

- La velocidad admisible debe de quedar como mínimo, por razones de seguridad, del orden de un 40% por debajo de la crítica

-The permissible velocity must remain as a minimum, for security reasons, at about 40% below the critical.

Par - Potencia - Velocidad / Torque – Power - Velocity

$M_n = 716{,}2 \frac{P}{N}$		Siendo: M_n = Par en mKg P = Potencia en CV N = Velocidad en rpm	Being: M_n = Torque in mKg P = Power in CV N = Velocity in rpm

Selección de la Serie / Selection of the Series

- La selección del tipo de transmisión apropiado depende de muchos factores. Los siguientes gráficos y datos deben ser considerados solamente como orientativos y no comprometen nuestra responsabilidad.
-The selection of the suitable size of drive shaft depends on many factors. The following graphs and data must be considered as being as a guidance only and do not compromise our responsibility.

A.- Series " S " y " M " / Series " S " and " M "

Gráfico Par - Velocidad / Torque - Speed graph

- El **Gráfico 2** da el par máximo $\mathbf{M_t}$ que puede transmitir cada una de las series según la velocidad de trabajo **N**, en base a una vida esperada **V** de 5.000 horas, un ángulo de trabajo **β** de 3º y una carga constante y sin choques .Si las condiciones necesarias de vida y ángulo son diferentes a las establecidas para el **Gráfico 2**, se deberá multiplicar el par necesario $\mathbf{M_n}$ por el valor del coeficiente **K** que nos da el **Gráfico 1** para el deseado valor de **β x V.**

- **Graph 2** gives the maximum torque $\mathbf{M_t}$ which each one of the series can transmit according to the working speed **N**, on basis of a expected life **V** of 5000 hours, a work angle **β** of 3º and a constant load. If the necessary life and angle conditions are different to those established in **Graph 2** one will have to multiply the necessary torque $\mathbf{M_n}$ by the factor **K** given in **Graph 1** for the required product **β x V** .

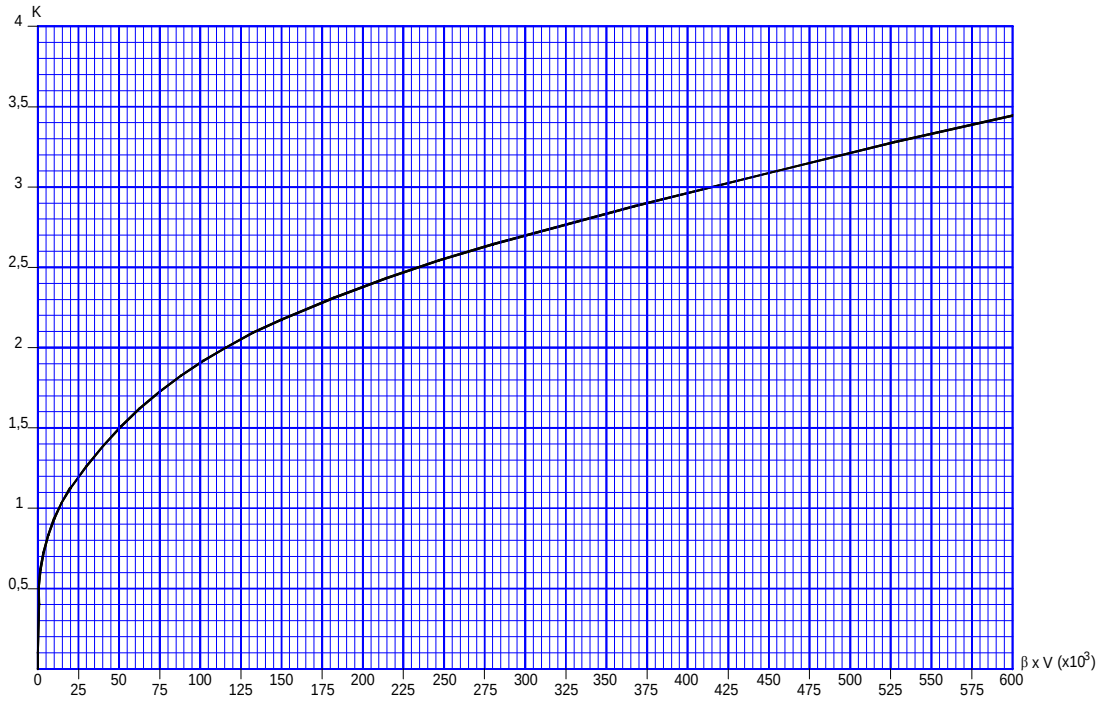


Gráfico 1 / Graph 1

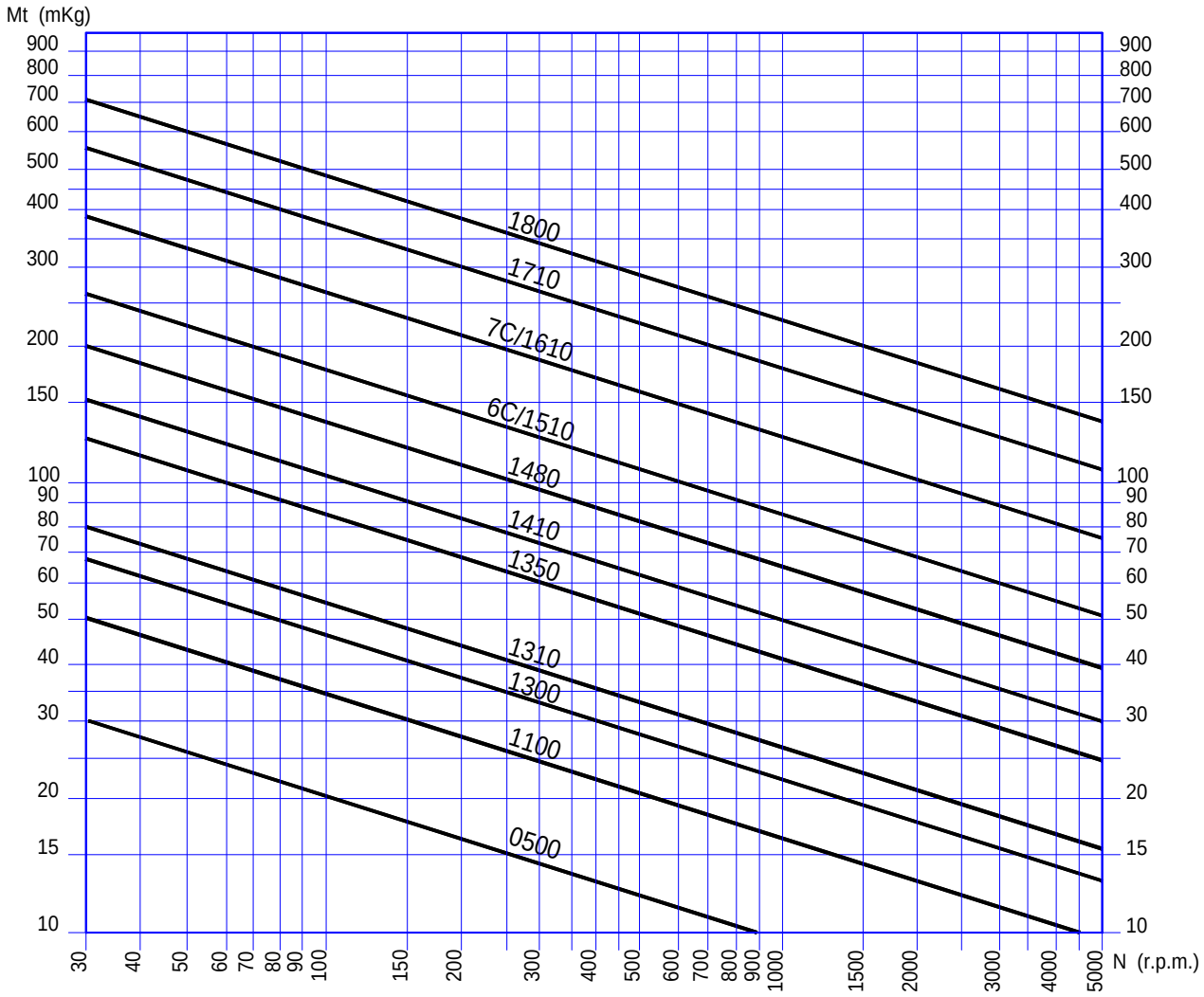


Grafico 2 / Graph 2

Esperanza de vida / Life expectancy

- El componente de la transmisión que determina su esperanza de vida es normalmente la cruz y su evaluación se basa en la capacidad de carga de sus rodamientos-dados. Los datos basados en la experiencia también son tomados en cuenta. En condiciones de carga, ambientales, de mantenimiento, etc, normales, se estima que un porcentaje importante de transmisiones alcanzará la esperada duración de vida. En cualquier caso, el dato debe ser utilizado sólo como guía aproximada.

- The part of the propeller shaft which determinates its life expectancy is normally the universal joint and its valuation is based on the load capacity of its bearings-cups. Data based on experience are taken into consideration as well. Under normal conditions of load, environment, maintenance etc, it is expected that an important percentage of propeller shafts will reach the required lifetime. Anyway the datum must be used only as approximated guidance.

B.- Series " DIN " / "DIN" Series

- La tabla de abajo muestra la Capacidad de par máxima (estática) de la transmisión **M_e** y la Capacidad de carga de la junta cardan **T_c** para cada Serie en Nm.

- The table below shows the maximum torque Capacity (static) of the propeller shaft **M_e** and the Joint load capacity **T_c** for each Series in Nm.

Serie – Series – Série		3515	3520	3530	3535	3542	3545	3548
Capacidad de par máxima (estática) Maximum torque capacity (static)	**M_e**	6.000	10.200	11.500	20.250	25.000	30.000	35.000
Capacidad de carga de la junta cardan Joint load capacity	**T_c**	1.675	2.260	3.040	4.120	4.435	5.100	6.850

- Si se desea transmitir un par uniforme **M** (Nm) durante una vida esperada **L** (horas) a una velocidad de rotación **n** (rpm) y con un ángulo **β (°)**, la Capacidad de carga dinámica necesaria por junta **T_n** se calcula con la formula:

- When needing to transfer an uniform torque **M** (Nm) during an expected life **L** (hours) at a rotation speed **n** (rpm) and a deflection angle **β** (º), the necessary joint load dynamic Capacity **T_n** is calculated by the formula

$$T_n = M \cdot K \cdot \frac{1}{2 \cdot \cos \beta} \left\{ \frac{L \cdot n \cdot \beta}{46{,}8 \cdot 16667} \right\}^{0{,}3} \text{Nm}$$

M = Nm
L = horas / hours
n = rpm
β = º

- K es un factor de choque dado en la siguiente tabla:
- K is a shock factor given in the following table

Unidad conductora Drive Unit	**K** con acoplamiento elástico with rubber coupling	**K** sin acoplamiento elástico without rubber coupling
Motor eléctrico Electric motor	1	1
Motor de gasolina 1-3 cilindros Petrol engine 1-3 cylinders	1,5	2
Motor de gasolina 4 ó mas cilindros Petrol engine 4 or more cylinders	1,25	1,75
Motor diesel 1-3 cilindros Diesel engine 1-3 cylinders	2	2,5
Motor diesel 4 ó mas cilindros Diesel engine 4 or more cylinders	1,5	2

Ejemplo / Example

- Los datos disponibles y requerimientos son los siguientes:
- The data available and requirements are the following

Motor eléctrico / Electric motor
M = 1000 Nm
n = 1500 rpm
β = 10º
L = 5000 h

- Motor eléctrico. El factor de choque en este caso es K = 1
- Electric motor. The shock factor is in this case K=1

$$Tr = 1000 .1. \frac{1}{2 . \cos 10} \left\{ \frac{5000 . 1500 . 10}{46{,}8 . 16667} \right\}^{0,3} = 1998 \text{ Nm.}$$

- De la Tabla 1 seleccionamos T_c = 2260 Nm como valor inmediato superior.
- Este valor corresponde a la Serie 3520.

- From Table 1 we select T_c = 2260 as the next highest value.
- This value corresponds to the 3520 Series

- Para la Serie seleccionada, ahora comprobamos que:
- For the Series selected, we now check that

$$\frac{M . K}{\cos \beta} \leq T_c$$

$$\frac{1000 . 1}{\cos 10} = 1016 \leq 2260 \text{ ; la condición se cumple / the condition is fulfilled}$$

- La esperanza de vida es:
- The expected life is

$$Le = L . \left\{ \frac{Tc}{Tr} \right\}^{3,33} = 5000 \text{ h} . \left\{ \frac{2260}{1998} \right\}^{3,33} = 7536 \text{ h}$$

Instrucciones para el montaje de las Transmisiones Cardan

1.- Comprobar la correcta concentricidad y alabeo de las bridas de amarre. Sus campos de tolerancia depende de la velocidad de trabajo pero nunca deben ser mayor de 0,1 mm

2.- Comprobar que tanto las bridas de amarre, como los platillos de la transmisión, no llevan golpes y se encuentran limpios.

3.- Completar el engrase de cruces y estriado.

4.- Comprobar que las horquillas de los extremos permanecen en el mismo plano y que las flechas de equilibrado están alineadas. Dado que la transmisión se equilibra como un conjunto individual, los componentes de diferentes transmisiones pueden no ser intercambiables. Mantener en su posición original las chapas de equilibrado.

5.- Se recomienda utilizar tornillos rosca corta DIN 931/12.9 y tuercas autoblocantes DIN 980/10 ó exagonales con arandelas Grower, aplicando el par de apriete correspondiente (ver tabla del proveedor).

6.-La selección, transporte, almacenamiento, instalación, mantenimiento, y potencial reparación de una transmisión cardan se debe realizar sólo por expertos y de acuerdo con las Normas y Requerimientos de Seguridad en vigor.

Instructions for the installation of Propeller Shafts

1.- Check the correct concentricity and warping of the connecting flanges. Its fields of tolerance depend on the working speed but never must be more that 0,1 mm.

2.- Check that both the connecting flanges and, as well, the Flange Yokes of the Propshaft do not bear impacts and are free of dirt.

3.- Complete the greasing of the Universal Joints and the Spline.

4.- Check that the end yokes are in the same plane and that the markings arrows of balancing are aligned. Since the propshaft is balanced as an integrated whole, components of different propshafts may be not interchangeable. Balance plates should not be removed.

5.- Use short-threaded bolts DIN 931/12.9 and self-locking nuts DIN 980/10 or hexagonal ones with Grower washers is recommended, applying the corresponding grip-torque (see supplier's table).

6.- Selection, transport, storage, installation, maintenance, and potential repairing of a propeller shaft must be made by experts only and The assembly and installation of a drive shaft must be only made by experts and according to the Safety Norms and Requirements in force.

Engrase y Mantenimiento

1.- Limpiar previamente las boquillas de engrase.

2.- Aplicar el engrase hasta que la grasa salga por los retenes de los cuatro dados. Si no es posible lubricar completamente los cuatro dados hay que desmontar la transmisión

3.- Para uso general se recomienda utilizar grasas de jabón de litio de consistencia NLGI-2. Para aplicaciones especiales consultar con nuestro Dpto. Técnico

4.- El intervalo de engrase depende del tipo de aplicación y de las condiciones de trabajo, pudiendo variar de un mes a un año, no obstante como norma general se recomienda que no supere los tres meses. Se requiere reengrasar también después de cada posible, aunque no recomendada, utilización de agua a presión en su área de trabajo.

5.- Engrasar siempre en caliente (facilitará la entrada del lubricante).

6.- Vigilar los ruidos y vibraciones que se produzcan.

7.- Comprobar antes del engrase el juego de cruces y eje estriado, así como el apriete de los tornillos.

8.- En caso de reparación ó modificación, las horquillas de los extremos deben de permanecer en el mismo plano, equilibrando de nuevo la transmisión

Greasing and maintenance

1.- Clean the grease-nipples beforehand.

2.- Apply lubrication until grease is exuded from all four bearing bushes. If is not possible to lubricate all four bearings fully, the shaft must be dismantled.

3.-Lubricate exclusively with lithium soap grease, of NLGI-2 consistency.

4.-The greasing interval, of a periodical nature, will have to be included in the General Lubrication Plan of the complete mechanism, however, it is recommended that this be not more than 30 days. Re-greasing is required as well after each potential, not recommended, uses of pressurized water in its working area.

5.-Always hot lubricate (it will facilitate the entry of the grease).

6.-Be on the constant look out for unusual noises or vibrations.

7.-Check on a monthly basis the play of Universal Joints and the Spline Shaft (before greasing) and the grip of the fixing bolts as well.

8.-In the event of repair of modification, both end Yokes must remain on the same plane, been the Propshaft balanced again.

Cuestionario para el dimensionado de transmisiones
Questionnaire for sizing Propeller Shafts

Empresa / *Company:*	Dirección / *Address:*
Departamento / *Department:*	Tel. : Fax:
Contacto / *Contact:*	Email :
	Fecha / *Date :*

Descripción de la aplicación / *Description of application :*

Tipo de trabajo: ☐ Trabajo continuo ☐ Trabajo intermitente ☐ Trabajo alternativo
Application conditions: *Permanent use* *Intermittent use* *Reversing use*

Condiciones ambientales / *Ambient conditions:*

Temperatura / *Temperature:* ____ ºC min. ____ ºC max.

Entorno / *Enviroment:* ☐ *Limpio / Clean* ☐ Sucio / *Dirty* ☐ Húmedo / *Wet*

Mantenimiento: ☐ No ☐ Si Intervalo de engrase: ____ Horas
Maintenance: *No* *Yes* *Lubricant interval:* Hours

Unidad conductora: ☐ Motor eléctrico ☐ Motor gasolina ☐ Motor Diesel ☐ Nº de cilindros
Drive machine: *Electric motor* *Petrol engine* *Diesel engine* *No. of cylinders*

Datos del trabajo / Working *data:*

Par máximo : ____ Nm ____ mKg Velocidad máxima : ____ rpm
Maximum torque : *Max. speed :*

Par a transmitir : ____ Nm ____ mKg Velocidad de trabajo ____ rpm
Transfer torque : *Transfer speed:*

Angulo de trabajo / *Working angle :* ____ º Vida esperada / *Expected life :* ____ Horas / *Hours*

Datos de la transmisión cardan / *Propshaft data*

Longitud de trabajo / Working length : ____ mm Recorrido / Slip : ____ mm

Bridas de conexión / *Connection flanges :* ☐ ISO 7646 (DIN) ☐ ISO 7647 (SAE) ☐ ISO 12667 (EF-XS)

Diámetro exterior / *Outer diameter* : ____ Tornillos / *Bolts :* ____ Diám. tornillo / *Bolt Diam.* ____

Requerimientos adicionales / A*dditional requirements :*