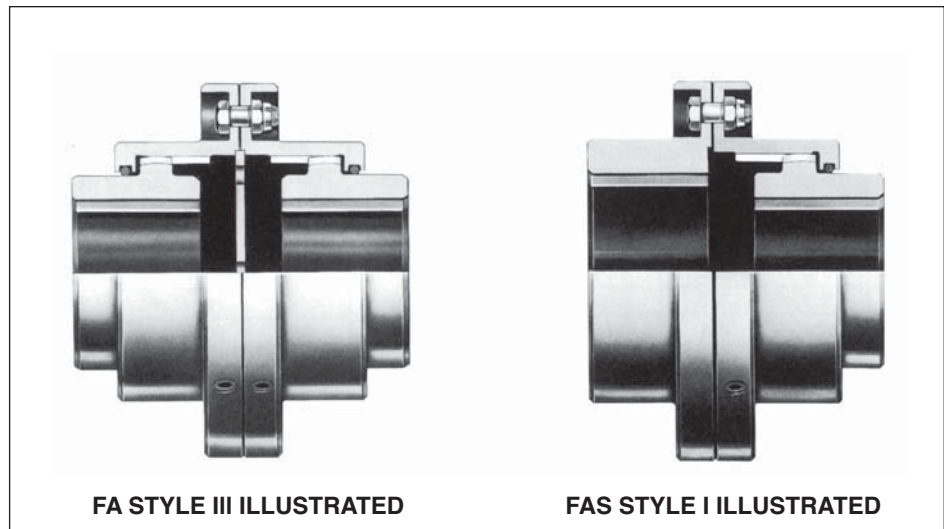


Amerigear

Flexible Couplings

Series FA, FAS

A multitude of applications exist for axial travel or "slide" couplings. All gear-type couplings permit a minimal amount of travel to accommodate for bearing wear, shaft or rotor float, or thermal expansions. But many drive systems require a greater amount of travel. To fill these requirements Ameridrives has developed a series of axial travel couplings to accommodate most travel requirements. The FA Series includes three coupling styles. The FAS Series includes two styles. The chart below shows the make up of each. If further assistance is required in selecting or designing a coupling with axial travel capacity other than what is shown, consult Ameridrives or your local sales office.



Axial Coupling Type	Style No.	END A		END B	
		Hub Type	Sleeve Type	Hub Type	Sleeve Type
FA	I	Standard Hub Modified	Modified Standard	Universal Hub Modified	Modified Standard
FA	III	Universal Hub Modified	Modified Standard	Universal Hub Modified	Modified Standard
FA	X	Standard	Modified Standard	Special	Long -w/Lip Seal
FAS	I	Rigid	-	Universal Hub Modified	Standard
FAS	v	Rigid	-	Special	Long -w/Lip Seal

Amerigear Flexible Couplings - Fully-Crowned Teeth For Higher Torque, Higher Speed, Higher Misalignment Capacity
All Amerigear Series FA and FAS Couplings incorporate the following engineered features:

- Fully-Crowned Gear Teeth—assures smooth action when adjusting for axial displacement with minimum resistance to slide.
- $\pm 1/2^\circ$ angular misalignment capacity per gear mesh. If greater capacity is required, consult Ameridrives.
- Accurately machined medium carbon steel hubs and sleeves.
- Positive-type O-ring seals keep lubricant in...contaminants out. Seals enshrined to prevent damage.
- Many Series FA hubs are modified standard stock components.
- Many designs available to accommodate most travel requirements.

Series FA, Style I, III

Sizes 201½-207

Style I

End A

Standard Hub Modified
Standard Sleeve Modified

End B

Universal Hub Modified
Standard Sleeve Modified

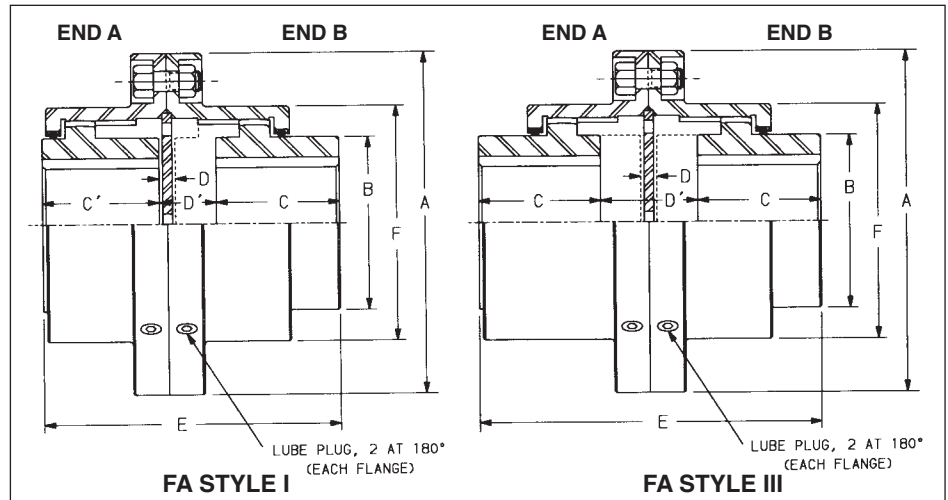
Style III

End A

Universal Hub Modified
Standard Sleeve Modified

End B

Universal Hub Modified
Standard Sleeve Modified



FA Style I Size	*** Parallel Offset Capacity	DIMENSIONS								
		A	B	C	C'	D	D'	E	F	Max. Travel
201½	.016	6.00	3.12	1.94	1.84	.31	.64	4.42	3.92	.33
202	.020	7.00	4.00	2.44	2.34	.31	.98	5.76	4.86	.67
202½	.026	8.38	4.88	3.03	2.94	.38	1.30	7.26	5.86	.92
203	.029	9.44	5.75	3.59	3.50	.38	1.61	8.70	6.86	1.23
203½	.035	11.00	6.50	4.19	4.09	.44	1.91	10.19	7.88	1.47
204	.039	12.50	7.75	4.75	4.56	.62	2.42	11.73	9.22	1.80
204½	.046	13.62	9.00	5.31	5.12	.69	2.52	12.95	10.35	1.83
205	.053	15.31	9.50	6.03	5.84	.69	2.98	14.86	11.44	2.30
205½	.058	16.56	10.50	6.62	6.44	.69	3.47	16.53	12.69	2.78
206	.069	18.00	11.75	7.41	7.16	.81	3.34	17.91	13.75	2.53
207	.084	20.75	13.50	8.69	8.38	1.00	3.62	20.69	16.00	2.62

FA Style III Size	*** Parallel Offset Capacity	DIMENSIONS								
		A	B	C	D	D'	E	F	Max. Travel	
201½	.013	6.00	3.12	1.94	.31	.97	4.84	3.93	.66	
202	.014	7.00	4.00	2.44	.31	1.66	6.53	4.86	1.34	
202½	.018	8.38	4.88	3.03	.38	2.22	8.28	5.88	1.84	
203	.018	9.44	5.75	3.59	.38	2.84	10.03	6.88	2.46	
203½	.022	11.00	6.50	4.19	.44	3.38	11.75	7.91	2.94	
204	.023	12.50	7.75	4.75	.62	4.22	13.72	9.24	3.60	
204½	.030	13.62	9.00	5.31	.69	4.34	14.97	10.37	3.66	
205	.032	15.31	9.50	6.03	.69	5.28	17.34	11.44	4.60	
205½	.033	16.56	10.50	6.62	.69	6.25	19.50	12.69	5.56	
206	.047	18.00	11.75	7.41	.81	5.88	20.69	13.75	5.06	
207	.061	20.75	13.50	8.69	1.00	6.25	23.62	16.00	5.25	

***COMBINED ANGULAR AND PARALLEL OFFSET SHOULD NOT EXCEED $\pm 1/2^\circ$ PER GEAR MESH.

SIZES 201½ - 205½ HAVE SHROUDED BOLTS (SB) WITH SELF-LOCKING NUTS; EXPOSED BOLTS (EB) AVAILABLE UPON REQUEST - NO ADD'L. COST.

SIZES 206 AND 207 HAVE EXPOSED BOLTS (EB) WITH SELF-LOCKING NUTS; SHROUDED BOLTS (SB) UPON REQUEST - NO ADD'L. COST. FOR MAXIMUM BORES AND LOAD CAPACITY, USE SERIES F INFORMATION, PAGE 8.

MAXIMUM BORE, KEYWAY AND PULLER HOLE DATA, PAGE 40. CENTER FLANGE DETAILS, PAGE 41.

TRAVEL AND DIMENSION "E" MAY BE DECREASED BY VARYING D AND D' (CONSULT AMERIDRIVES). MAX. SPEEDS, PAGE 34.

Amerigear

Flexible Couplings

Series FA, Style X Sizes 204-207

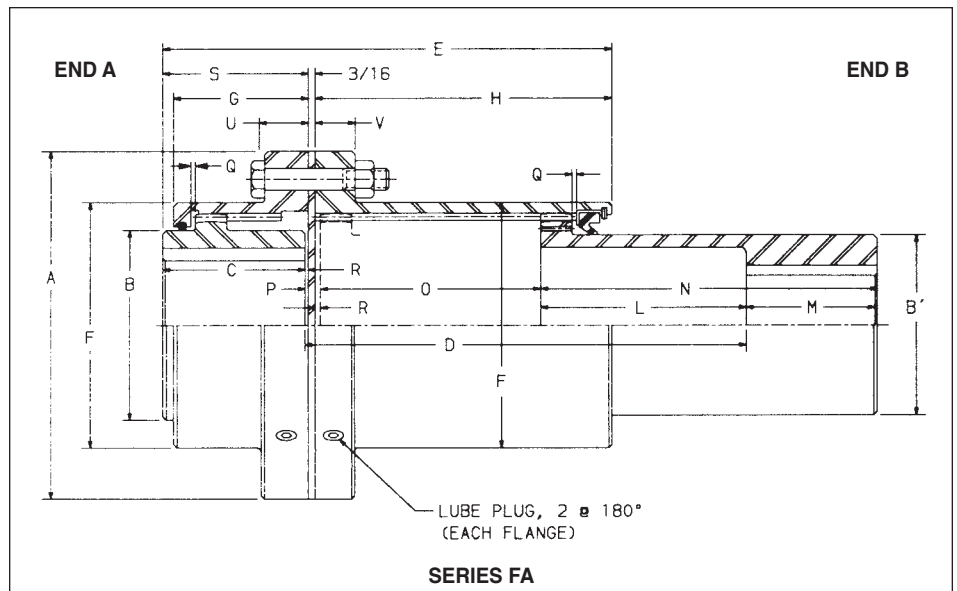
Style X

End A

Standard Hub
Standard Sleeve

End B

Special Hub
Long Sleeve with Lip Seal



FA Coupling Size Style X	Max. Bore Flex Half End "B" Square Key	DIMENSIONS									
		A	E	G	F	S	B	B'	C, M	H	L
204	4.50	12.50	17.89	4.46	9.22	4.87	7.75	7.00	4.75	12.83	8.75
204½	5.50	13.62	19.28	4.98	10.35	5.47	9.00	8.38	5.31	13.62	8.44
205	6.31	15.31	20.41	5.67	11.44	6.19	9.50	9.00	6.03	14.03	8.22
205½	6.88	16.56	21.06	6.25	12.69	6.78	10.50	10.00	6.62	14.09	7.69
206	7.50	18.00	21.62	6.89	13.75	7.56	11.75	11.00	7.41	14.01	6.91
207	9.00	20.75	23.37	7.81	16.00	8.87	13.50	13.00	8.69	14.31	6.06

FA Coupling Size Style X	N	U	V	O Maximum Travel	P Hub-To-Hub		Q	R	D Shaft-To-Shaft	
					Min.	Max.			Min.	Max.
204	13.50	1.06	.87	10.62	.44	11.06	.14	.12	8.81	19.44
204½	13.75	1.06	.87	11.00	.50	11.50	.16	.16	8.94	19.94
205	14.25	1.50	1.31	11.00	.50	11.50	.19	.16	8.72	19.72
205½	14.31	1.50	1.31	11.00	.50	11.50	.19	.16	8.19	19.19
206	14.31	1.00	.81	10.50	.50	11.00	.22	.16	7.41	17.91
207	14.75	1.12	.94	10.50	.56	11.06	.31	.19	6.56	17.12

FOR DIMENSIONS "B" AND "C", SEE PAGE 8.

FURNISHED WITH EXPOSED BOLTS (EB) WITH SELF-LOCKING NUTS; SHROUDED BOLTS (SB) UPON REQUEST — AT ADDITIONAL COST.

FOR LOAD CAPACITY, USE SERIES F INFORMATION, PAGE 8.

PARALLEL OFFSET CAPACITY SHOULD BE CALCULATED WITH HUB SPACING AT "P" (MIN.), SEE PAGE 39. COMBINED ANGULAR AND PARALLEL OFFSET SHOULD NOT EXCEED $\pm 1/2^\circ$ PER GEAR MESH.

FOR "A" END HUB, MAXIMUM BORE, KEYWAY AND PULLER HOLE DATA, PAGE 40.

TRAVEL (DIMENSION "O") MAY BE DECREASED BY VARYING "P" (CONSULT AMERIDRIVES).

MAXIMUM SPEEDS, PAGE 34.

Series FA, Style I Sizes 201¹/₂-207

Flanged Sleeve —
Single-Engagement Axial Type

Style I

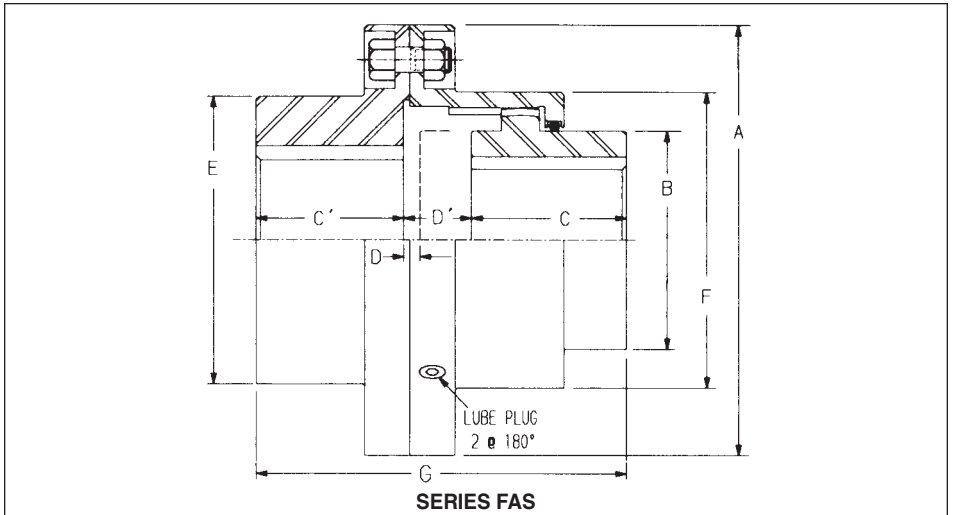
End A

Rigid Half

End B

Universal Hub Modified

Standard Sleeve



FAS STYLE I Size	DIMENSIONS									
	A	B	C	C'	D	D'	E	F	G	Axial Travel
201 ¹ / ₂	6.00	3.12	1.94	1.78	.16	.48	3.92	3.92	4.20	.33
202	7.00	4.00	2.44	2.28	.16	.83	4.86	4.86	5.55	.67
202 ¹ / ₂	8.38	4.88	3.03	2.91	.19	1.11	5.86	5.86	7.05	.92
203	9.44	5.75	3.59	3.41	.19	1.42	6.86	6.86	8.42	1.23
203 ¹ / ₂	11.00	6.50	4.19	3.97	.22	1.69	7.88	7.88	9.84	1.47
204	12.50	7.75	4.75	4.44	.31	2.11	9.22	9.22	11.30	1.80
204 ¹ / ₂	13.62	9.00	5.31	5.00	.34	2.17	10.18	10.35	12.48	1.83
205	15.31	9.50	6.03	5.75	.34	2.64	11.44	11.44	14.42	2.30
205 ¹ / ₂	16.56	10.50	6.62	6.12	.34	3.12	12.69	12.69	15.88	2.78
206	18.00	11.75	7.41	7.16	.41	3.19	13.75	13.75	17.75	2.78
207	20.75	13.50	8.69	8.44	.50	3.44	15.75	16.00	20.56	2.94

SIZES 201¹/₂-205¹/₂ HAVE SHROUDED BOLTS (SB) WITH SELF-LOCKING NUTS; EXPOSED BOLTS (EB) UPON REQUEST — NO ADDITIONAL COST.

SIZES 206 AND 207 HAVE EXPOSED BOLTS (EB) WITH SELF-LOCKING NUTS.

ANGULARITY SHOULD NOT EXCEED $\pm 1/2^\circ$ PER GEAR MESH AT SHAFT SPACING OF "D".

MAXIMUM BORE, KEYWAY AND PULLER HOLE DATA, PAGE 40. CENTER FLANGE DETAILS, PAGE 41.

FOR MAXIMUM BORES AND LOAD CAPACITY, USE SERIES FS INFORMATION, PAGE 10. MAXIMUM SPEEDS, PAGE 34.

Amerigear Flexible Couplings - Fully-Crowned Teeth For Higher Torque, Higher Speed, Higher Misalignment Capacity
All Amerigear Series FAS Couplings incorporate the following engineered features:

- Fully-Crowned Gear Teeth — assures smooth action when adjusting for axial displacement with minimum resistance to slide.
- $\pm 1/2^\circ$ angular misalignment capacity per gear mesh at minimum separation of hub and rigid half. When used in tandem pairs and connected by an intermediate floating shaft, amount of offset misalignment capacity is determined by the distance between gear meshes. By mounting flexible halves on floating shaft, advantage may be taken of larger bore capacity of rigid half. By mounting rigid halves on floating shaft, more parallel offset is available. See page 39 for calculations.
- Accurately machined medium carbon steel hubs and sleeves.
- Positive-type O-ring seals keep lubricant in ... contaminants out. Seals enshrouded to prevent damage.
- Many designs available to accommodate most travel requirements.

Amerigear

Flexible Couplings

Series FAS, Style V Sizes 204-207

Style V

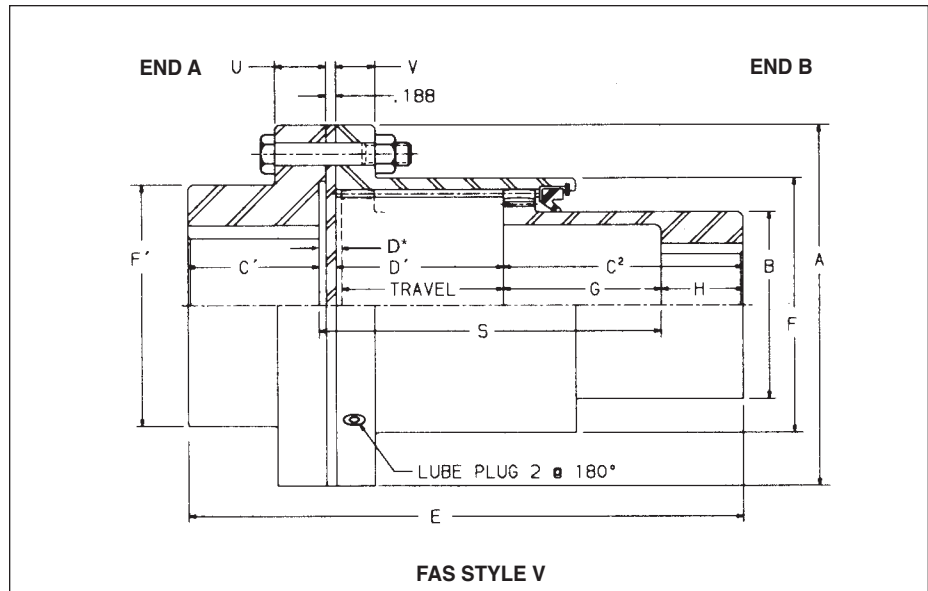
End A

Rigid Half

End B

Special Hub

Long Sleeve with Lip Seal



* SEE PAGE 10 FOR "D" DIMENSION AND ADD .188 FOR PLATE THICKNESS.

FAS Style V Size	FLEX HALF Max. Bore Square Key	Square Key Max. Bore Square Key	DIMENSIONS					
			A	B	C'	C²	D'	E
204	4.50	6.25	12.50	7.00	4.44	13.50	10.75	29.06
204½	5.50	6.88	13.62	8.38	5.00	13.75	11.16	30.28
205	6.31	6.88	15.31	9.00	5.75	14.25	11.16	31.53
205½	6.88	8.75	16.56	10.00	6.12	14.31	11.16	31.97
206	7.50	9.38	18.00	11.00	7.16	14.31	10.66	32.56
207	9.00	10.75	20.75	13.00	8.44	14.75	10.69	34.38

FAS Style V Size	F	F'	G	H	S	U	V	Axial Travel
204	9.22	9.22	8.75	4.75	19.88	1.06	.88	10.62
204½	10.35	10.18	8.44	5.31	19.97	1.06	.88	11.00
205	11.44	11.44	8.22	6.03	19.75	1.50	1.31	11.00
205½	12.69	12.69	7.69	6.62	19.22	1.50	1.31	11.00
206	13.75	13.75	6.91	7.41	18.00	1.00	.81	10.50
207	16.00	15.75	6.06	8.69	17.25	1.12	.94	10.50

SIZES 204 - 205½ HAVE SHROUDED BOLTS (SB) WITH SELF-LOCKING NUTS; EXPOSED BOLTS (EB) UPON REQUEST — NO ADDITIONAL COST.

SIZES 206 AND 207 HAVE EXPOSED BOLTS (EB) WITH SELF-LOCKING NUTS.

ANGULARITY SHOULD NOT EXCEED $\pm \frac{1}{2}^\circ$ PER GEAR MESH AT SHAFT SPACING OF "D".

FOR LOAD CAPACITY, USE SERIES FS INFORMATION, PAGE 10.

MAXIMUM SPEEDS, PAGE 34.