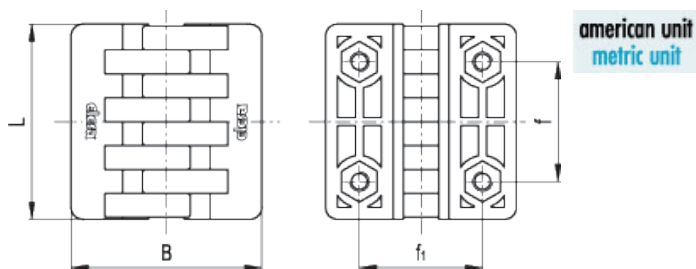
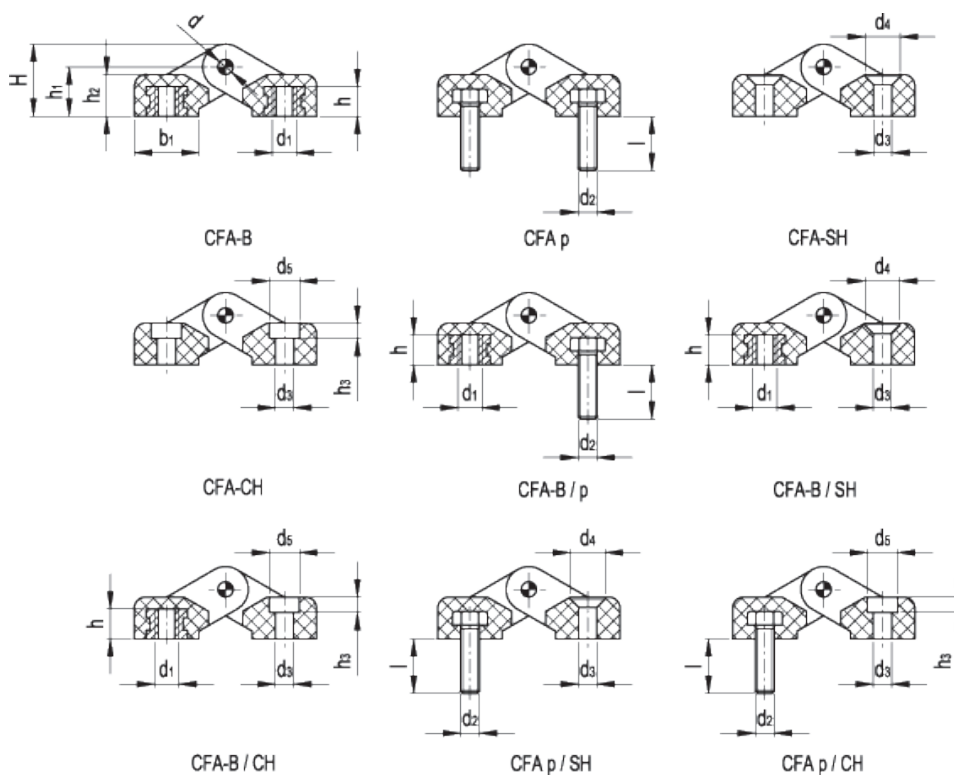


CFA. Hinges



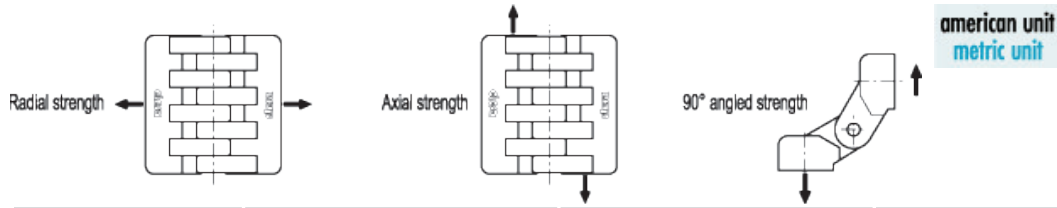
FM Design



Elesa Standards		Main dimensions									Fitting							Weight			
											Bushings			Studs		Through holes					
Code	Description	L	B	f ±.0098	f ₁ ±.0098	H	h ₁	h ₂	b ₁	d	d ₁	h	d ₂	l	d ₃	d ₄	d ₅	h ₃	lbs	g	
422391	CFA.40 B-M4	1.56 39.5	1.52 38.5	0.99 25.1	0.98 25	0.55 14	0.37 9.5	0.37 9.5	0.55 14	0.12 3	- M4	0.26 6.5	- -	- -	- -	- -	- -	- -	- -	0.051	23

Elesa Standards		Main dimensions										Fitting							Weight
												Bushings		Studs		Through holes			
Code	Description	L	B	f _{±.0098}	f _{1±.0098}	H	h ₁	h ₂	b ₁	d	d ₁	h	d ₂	l	d ₃	d ₄	d ₅	h ₃	lbs g
422411	CFA.40 SH-4	1.56 39.5	1.52 38.5	0.99 25.1	0.98 25	0.55 14	0.37 9.5	0.37 9.5	0.55 14	0.12 3	-	-	-	-	0.18 4.5	0.33 8.5	-	-	0.031 14
422412	CFA.40 CH-4	1.56 39.5	1.52 38.5	0.99 25.1	0.98 25	0.55 14	0.37 9.5	0.37 9.5	0.55 14	0.12 3	-	-	-	-	0.18 4.5	-	0.33 8.5	0.18 4.5	0.031 14
422111	CFA.49 B-M5	1.95 49.5	1.89 48	1.2 30.5	1.22 31	0.75 19	0.51 13	0.43 11	0.67 17	0.16 4	-	0.33 8.5	-	-	-	-	-	-	0.086 39
422113	CFA.49 B-M6	1.95 49.5	1.89 48	1.2 30.5	1.22 31	0.75 19	0.51 13	0.43 11	0.67 17	0.16 4	-	0.31 8	-	-	-	-	-	-	0.084 38
422121	CFA.49 p-M5x14	1.95 49.5	1.89 48	1.2 30.5	1.22 31	0.75 19	0.51 13	0.43 11	0.67 17	0.16 4	-	-	-	0.55 14	-	-	-	-	0.099 45
422131	CFA.49 SH-5	1.95 49.5	1.89 48	1.2 30.5	1.22 31	0.75 19	0.51 13	0.43 11	0.67 17	0.16 4	-	-	-	-	0.22 5.5	0.39 10	-	-	0.064 29
422132	CFA.49 CH-5	1.95 49.5	1.89 48	1.2 30.5	1.22 31	0.75 19	0.51 13	0.43 11	0.67 17	0.16 4	-	-	-	-	0.22 5.5	-	0.39 10	0.22 5.5	0.064 29
422141	CFA.49 B-M5-p-M5x14	1.95 49.5	1.89 48	1.2 30.5	1.22 31	0.75 19	0.51 13	0.43 11	0.67 17	0.16 4	-	0.33 8.5	-	0.55 14	-	-	-	-	0.093 42
422151	CFA.49 B-M5-SH-5	1.95 49.5	1.89 48	1.2 30.5	1.22 31	0.75 19	0.51 13	0.43 11	0.67 17	0.16 4	-	0.33 8.5	-	-	0.22 5.5	0.39 10	-	-	0.075 34
422152	CFA.49 B-M5-CH-5	1.95 49.5	1.89 48	1.2 30.5	1.22 31	0.75 19	0.51 13	0.43 11	0.67 17	0.16 4	-	0.33 8.5	-	-	0.22 5.5	-	0.39 10	0.22 5.5	0.075 34
422161	CFA.49 p-M5x14-SH-5	1.95 49.5	1.89 48	1.2 30.5	1.22 31	0.75 19	0.51 13	0.43 11	0.67 17	0.16 4	-	-	-	0.55 14	0.22 5.5	0.39 10	-	-	0.081 37
422162	CFA.49 p-M5x14-CH-5	1.95 49.5	1.89 48	1.2 30.5	1.22 31	0.75 19	0.51 13	0.43 11	0.67 17	0.16 4	-	-	-	0.55 14	0.22 5.5	-	0.39 10	0.22 5.5	0.081 37
422211	CFA.65 B-M6	2.56 65	2.52 64	1.57 40	1.57 40	0.91 23	0.59 15	0.53 13.5	0.94 24	0.2 5	-	0.35 9	-	-	-	-	-	-	0.187 85
422221	CFA.65 p-M6x18	2.56 65	2.52 64	1.57 40	1.57 40	0.91 23	0.59 15	0.53 13.5	0.94 24	0.2 5	-	-	-	0.71 18	-	-	-	-	0.198 90
422231	CFA.65 SH-6	2.56 65	2.52 64	1.57 40	1.57 40	0.91 23	0.59 15	0.53 13.5	0.94 24	0.2 5	-	-	-	-	0.26 6.5	0.49 12.5	-	-	0.137 62
422232	CFA.65 CH-6	2.56 65	2.52 64	1.57 40	1.57 40	0.91 23	0.59 15	0.53 13.5	0.94 24	0.2 5	-	-	-	-	0.26 6.5	-	0.43 11	0.26 6.5	0.137 62
422241	CFA.65 B-M6-p-M6x18	2.56 65	2.52 64	1.57 40	1.57 40	0.91 23	0.59 15	0.53 13.5	0.94 24	0.2 5	-	0.41 10.5	-	0.71 18	-	-	-	-	0.194 88
422251	CFA.65 B-M6-SH-6	2.56 65	2.52 64	1.57 40	1.57 40	0.91 23	0.59 15	0.53 13.5	0.94 24	0.2 5	-	0.41 10.5	-	-	0.26 6.5	0.49 12.5	-	-	0.163 74
422252	CFA.65 B-M6-CH-6	2.56 65	2.52 64	1.57 40	1.57 40	0.91 23	0.59 15	0.53 13.5	0.94 24	0.2 5	-	0.41 10.5	-	-	0.26 6.5	-	0.43 11	0.26 6.5	0.163 74
422261	CFA.65 p-M6x18-SH-6	2.56 65	2.52 64	1.57 40	1.57 40	0.91 23	0.59 15	0.53 13.5	0.94 24	0.2 5	-	-	-	0.71 18	0.26 6.5	0.49 12.5	-	-	0.167 76
422262	CFA.65 p-M6x18-CH-6	2.56 65	2.52 64	1.57 40	1.57 40	0.91 23	0.59 15	0.53 13.5	0.94 24	0.2 5	-	-	-	0.71 18	0.26 6.5	-	0.43 11	0.26 6.5	0.167 76
422311	CFA.97 B-M10	3.8 96.5	3.84 97.5	2.34 59.5	2.46 62.5	1.38 35	0.91 23	0.81 20.5	1.38 35	0.31 8	-	0.59 15	-	-	-	-	-	-	0.674 306
422321	CFA.97 p-M10x20	3.8 96.5	3.84 97.5	2.34 59.5	2.46 62.5	1.38 35	0.91 23	0.81 20.5	1.38 35	0.31 8	-	-	-	0.79 20	-	-	-	-	0.727 330
422331	CFA.97 SH-10	3.8 96.5	3.84 97.5	2.34 59.5	2.46 62.5	1.38 35	0.91 23	0.81 20.5	1.38 35	0.31 8	-	-	-	-	0.41 10.5	0.79 20	-	-	0.487 221
422332	CFA.97 CH-10	3.8 96.5	3.84 97.5	2.34 59.5	2.46 62.5	1.38 35	0.91 23	0.81 20.5	1.38 35	0.31 8	-	-	-	-	0.41 10.5	-	0.67 17	0.41 10.5	0.487 221
422341	CFA.97 B-M10-p-M10x20	3.8 96.5	3.84 97.5	2.34 59.5	2.46 62.5	1.38 35	0.91 23	0.81 20.5	1.38 35	0.31 8	-	0.59 15	-	0.79 20	-	-	-	-	0.7 318
422351	CFA.97 B-M10-SH-10	3.8 96.5	3.84 97.5	2.34 59.5	2.46 62.5	1.38 35	0.91 23	0.81 20.5	1.38 35	0.31 8	-	0.59 15	-	-	0.41 10.5	0.79 20	-	-	0.581 264
422352	CFA.97 B-M10-CH-10	3.8 96.5	3.84 97.5	2.34 59.5	2.46 62.5	1.38 35	0.91 23	0.81 20.5	1.38 35	0.31 8	-	0.59 15	-	-	0.41 10.5	-	0.67 17	0.41 10.5	0.581 264
422361	CFA.97 p-M10x20-SH-10	3.8 96.5	3.84 97.5	2.34 59.5	2.46 62.5	1.38 35	0.91 23	0.81 20.5	1.38 35	0.31 8	-	-	-	0.79 20	0.41 10.5	0.79 20	-	-	0.608 276

422362	CFA.97 p-M10x20-CH-10	3.8 96.5	3.84 97.5	2.34 59.5	2.46 62.5	1.38 35	0.91 23	0.81 20.5	1.38 35	0.31 8	-	-	-	0.79 20	0.41 10.5	-	0.67 17	0.41 10.5	0.608 276
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Elesa Standards		AXIAL STRENGTH		RADIAL STRENGTH		90° ANGLED STRENGTH		Maximum tightening torque [ft-lbf] [Nm]		
Code	Description	Maximum working load Ea [lbf] [N]	Load at breakage Ra [lbf] [N]	Maximum working load Er [lbf] [N]	Load at breakage Rr [lbf] [N]	Maximum working load E90 [lbf] [N]	Load at breakage R90 [lbf] [N]	SH/CH	B	p
422391	CFA.40 B-M4	45 200	459 2050	54 240	497 2220	22 100	164 730	- -	4 5	- -
422411	CFA.40 SH-4	29 130	466 2080	65 290	455 2030	63 280	340 1520	1 1	- -	- -
422412	CFA.40 CH-4	31 137	403 1800	52 230	394 1760	40 180	298 1330	1 1	- -	- -
422111	CFA.49 B-M5	90 400	844 3770	99 440	688 3070	38 170	329 1470	- -	4 5	- -
422113	CFA.49 B-M6	74 330	728 3250	105 470	728 3250	25 110	345 1540	- -	4 5	- -
422121	CFA.49 p-M5x14	83 370	688 3070	81 360	441 1970	45 200	376 1680	- -	- -	4 5
422131	CFA.49 SH-5	67 300	663 2960	69 310	645 2880	72 320	558 2490	1 2	- -	- -
422132	CFA.49 CH-5	81 360	690 3080	69 310	567 2530	56 250	363 1620	1 2	- -	- -
422141	CFA.49 B-M5-p-M5x14	83 370	688 3070	81 360	441 1970	45 200	329 1470	- -	4 5	4 5
422151	CFA.49 B-M5-SH-5	90 400	663 2960	63 280	645 2880	38 170	329 1470	1 2	- -	- -
422152	CFA.49 B-M5-CH-5	81 360	690 3080	72 320	567 2530	38 170	329 1470	1 2	- -	- -
422161	CFA.49 p-M5x14-SH-5	83 370	663 2960	63 280	441 1970	45 200	376 1680	1 2	- -	4 5
422162	CFA.49 p-M5x14-CH-5	81 360	688 3070	72 320	441 1970	45 200	363 1620	1 2	- -	4 5
422211	CFA.65 B-M6	143 640	1024 4570	155 690	1270 5670	49 220	511 2280	- -	4 5	- -
422221	CFA.65 p-M6x18	114 510	1319 5890	103 460	1483 6620	49 220	715 3190	- -	- -	4 5
422231	CFA.65 SH-6	116 520	1066 4760	161 720	1404 6270	54 240	936 4180	2 3	- -	- -
422232	CFA.65 CH-6	114 510	1183 5280	110 490	1297 5790	58 260	715 3190	4 5	- -	- -
422241	CFA.65 B-M6-p-M6x18	114 510	1024 4570	103 460	1270 5670	49 220	511 2280	- -	4 5	4 5
422251	CFA.65 B-M6-SH-6	143 640	1024 4570	155 690	1270 5670	49 220	511 2280	2 3	4 5	- -
422252	CFA.65 B-M6-CH-6	114 510	1024 4570	110 490	1270 5670	49 220	511 2280	4 5	4 5	- -
422261	CFA.65 p-M6x18-SH-6	114 510	1066 4760	103 460	1404 6270	49 220	715 3190	2 3	- -	4 5
422262	CFA.65 p-M6x18-CH-6	114 510	1183 5280	103 460	1297 5790	49 220	715 3190	4 5	- -	4 5
422311	CFA.97 B-M10	217 970	1716 7660	475 2120	4019 17940	132 590	1167 5210	- -	4 5	- -
422321	CFA.97 p-M10x20	199 890	1333 5950	388 1730	3627 16190	103 460	827 3690	- -	- -	4 5

422331	CFA.97 SH-10	249 1110	1508 6730	276 1230	2343 10460	114 510	918 4100	4 5	- -	- -
422332	CFA.97 CH-10	235 1050	1089 4860	461 2060	3062 13670	121 540	1066 4760	4 5	- -	- -
422341	CFA.97 B-M10- p-M10x20	199 890	1333 5950	388 1730	3627 16190	103 460	827 3690	- -	4 5	4 5
422351	CFA.97 B-M10- SH-10	217 970	1508 6730	276 1230	2343 10460	114 510	921 4110	4 5	4 5	- -
422352	CFA.97 B-M10- CH-10	217 970	1089 4860	461 2060	3062 13670	121 540	1066 4760	4 5	4 5	- -
422361	CFA.97 p- M10x20-SH-10	199 890	1333 5950	276 1230	2343 10460	103 460	827 3690	4 5	- -	4 5
422362	CFA.97 p- M10x20-CH-10	199 890	1089 4860	388 1730	3062 13670	103 460	827 3690	4 5	- -	4 5

Material

High resilience polyamide based (PA) technopolymer. Resistant to solvents, oils, greases and other chemical agents.

Colour

Black, matte finish.

Rotation pin

AISI 303 stainless steel.

Assembly

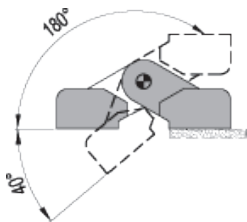
- **B**: nickel-plated brass bushings, tapped hole.
- **p**: nickel-plated steel threaded studs.
- **SH**: through holes for countersunk head screws.
- **CH**: through holes for cylindrical head screws.
- **B/p - B/SH - B/CH - p/SH - p/CH**

Rotation angle

Max 220°, between 0° and -40° and between 0° and 180°

(0°= condition where the two interconnected surfaces are on the same plane).

Do not exceed the rotation angle limit (see drawing) so as not to prejudice the hinge mechanical performance.



To choose the convenient type and the right number of hinges for your application, see the [Guidelines](#).