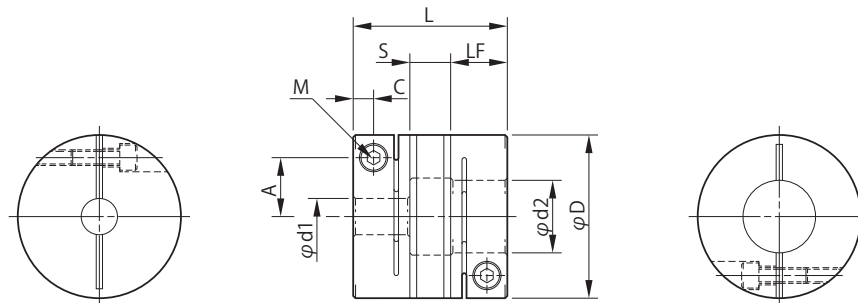


STEPFLEX STF - Datasheet

■ Dimensions



Model	d1 • d2 [mm]		D [mm]	L [mm]	LF [mm]	S [mm]	A [mm]	C [mm]	M Qty-Nominal diameter	Tightening torque [N·m]
	Min.	Max.								
STF-013SA1	3	5	13	18	6	6	3.9	2	1-M1.6	0.23 ~ 0.28
STF-016SA1	3	6	16	22	7.5	7	4.8	2.5	1-M2	0.4 ~ 0.5
STF-019SA1	3	8	19	25	9	7	5.8 (6)	3.15	1-M2.5 (M2)	1.0 ~ 1.1 (0.4 ~ 0.5)
STF-024SA1	5	10	24	27	9	9	8.7	3.15	1-M2.5	1.0 ~ 1.1
STF-029SA1	5	14	29	30	10	10	11	3.3	1-M2.5	1.0 ~ 1.1
STF-034SA1	5	16	34	34	12	10	12.5	3.75	1-M3	1.5 ~ 1.9
STF-039SA1	6	19	39	41	15.5	10	14	4.5	1-M4	3.4 ~ 4.1
STF-044SA1	8	24	44	48	15.5	17	17	4.5	1-M4	3.4 ~ 4.1
STF-056SA1	8	30	56	60	20.5	19	22	6	1-M5	7.0 ~ 8.5

* The nominal diameter for the clamping bolt M is equal to the quantity minus the nominal diameter of the screw threads, where the quantity is for a hub on one side.
 * The figures in parentheses () for the STF-019 are the values when d1 or d2 is ø8 mm.
 * The escape in the internal diameter of the element is equal to dimension d2 (large diameter) plus ø0.9 mm.
 * The rated dimension tolerance for countershafts is h7 class.

■ Specifications

Model	Torque		Misalignment			Max. rotation speed [min ⁻¹]	Torsional stiffness [N·m/rad]	Moment of inertia [kg·m ²]	Mass [kg]
	Nominal [N·m]	Max. [N·m]	Parallel [mm]	Angular [°]	Axial [mm]				
STF-013SA1	0.5	1	0.15	1.5	± 0.2	10000	15	0.11 × 10 ⁻⁶	0.004
STF-016SA1	1	2	0.15	1.5	± 0.2	10000	27	0.31 × 10 ⁻⁶	0.009
STF-019SA1	1.5	3	0.15	1.5	± 0.2	10000	38	0.70 × 10 ⁻⁶	0.013
STF-024SA1	2.5	5	0.15	1.5	± 0.2	10000	127	1.89 × 10 ⁻⁶	0.023
STF-029SA1	4	8	0.2	1.5	± 0.3	10000	201	4.40 × 10 ⁻⁶	0.034
STF-034SA1	6	12	0.2	1.5	± 0.3	10000	371	9.77 × 10 ⁻⁶	0.056
STF-039SA1	8.5	17	0.2	1.5	± 0.3	10000	485	21.13 × 10 ⁻⁶	0.091
STF-044SA1	15	30	0.2	1.5	± 0.3	10000	996	37.30 × 10 ⁻⁶	0.120
STF-056SA1	30	60	0.2	1.5	± 0.3	10000	2075	125.5 × 10 ⁻⁶	0.251

* Check the Max. Torque for the Shaft Diameter list as there may be limitations on the standard and maximum torque caused by the holding power of the coupling shaft section.
 * The max. rotation speed values do not take into account dynamic balance.
 * The static torsional stiffness values are analysis values for the element taken at a temperature of 20° C at maximum bore diameter.
 * The moment of inertia and mass are measured for the maximum bore diameter.

■ Max. Torque for the Shaft Diameter

Model	Standard bore diameter [mm] and max. torque for the shaft diameter [N • m]																									
	3	4	5	6	6.35	7	8	9	9.525	10	11	12	13	14	15	16	17	18	19	20	22	24	25	28	30	
STF-013SA1	0.10	0.25	0.40																							
STF-016SA1	0.5	0.6	0.7	0.8																						
STF-019SA1	0.8	1.2	1.6	1.9	1.9	2.3	0.8																			
STF-024SA1			1.6	2.1	2.1	2.6	3.3	4.0	4.0	4.7																
STF-029SA1			1.8	2.2	2.2	2.7	3.4	4.1	4.1	4.8	5.5	6.3	7.8	8.0												
STF-034SA1			2.7	3.0	3.0	3.3	4.0	4.8	4.8	5.6	6.5	7.8	9.0	10.7	12.0	12.0										
STF-039SA1				3.4	3.4	4.0	5.0	6.1	6.1	7.1	8.2	9.3	10.4	11.5	12.8	14.0	15.3	16.6	17.0							
STF-044SA1							6.0	8.3	8.3	9.8	11.3	12.8	14.3	16.0	17.3	18.8	20.3	21.8	23.5	24.8	27.8	30.0				
STF-056SA1							10.7	11.9	11.9	13.4	14.9	16.3	17.8	18.7	20.8	22.2	23.7	25.2	27.0	32.0	41.9	52.0	56.3	60.0	60.0	

* Check the above list as there may be limitations on the standard and maximum torque caused by the holding power of the coupling shaft section.
 * Maximum torque with a limitation becomes the small diameter (d1) torque value. However, note that only in the instance that d1 or d2 for STF-019SA1 is ø8 mm, there is a decrease in the size of the clamping bolt, and the limit is 0.8 N·m.