

SERVOFLEX SFF DS-B-B - Datasheet

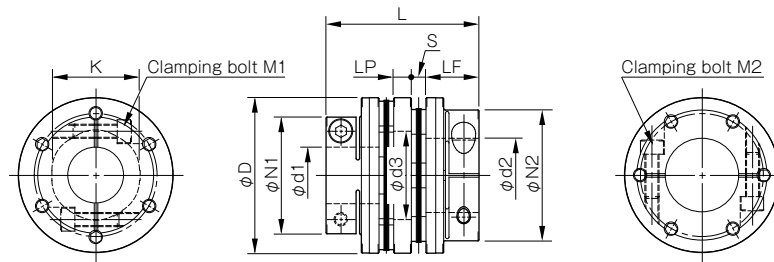
DOUBLE ELEMENT / CLAMPING TYPE

Specifications

Model	Rated torque [N·m]	Misalignment			Max. rotation speed [min ⁻¹]	Torsional stiffness [N·m/rad]	Axial stiffness [N/mm]	Moment of inertia [kg·m ²]	Mass [kg]
		Parallel [mm]	Angular [°]	Axial [mm]					
SFF-040DS-□ B-□ B-8N	8	0.10	2	± 0.4	14000	7500	87	0.04 × 10 ⁻³	0.22
SFF-040DS-□ B-□ B-12N	12	0.10	2	± 0.4	14000	7500	87	0.04 × 10 ⁻³	0.22
SFF-050DS-□ B-□ B-25N	25	0.20	2	± 0.6	14000	16000	72.5	0.13 × 10 ⁻³	0.46
SFF-060DS-□ B-□ B-60N	60	0.20	2	± 0.6	14000	52000	199.5	0.28 × 10 ⁻³	0.64
SFF-060DS-□ B-□ B-80N	80	0.20	2	± 0.6	14000	52000	199.5	0.29 × 10 ⁻³	0.61
SFF-070DS-□ B-□ B-90N	90	0.25	2	± 1.0	14000	120000	242	0.53 × 10 ⁻³	0.90
SFF-070DS-□ B-□ B-100N	100	0.25	2	± 1.0	14000	120000	242	0.55 × 10 ⁻³	0.85
SFF-080DS-□ B-□ B-150N	150	0.32	2	± 1.0	13000	60000	48	1.10 × 10 ⁻³	1.37
SFF-080DS-□ B-□ B-200N	200	0.31	2	± 1.0	13000	155000	273	1.50 × 10 ⁻³	1.72
SFF-090DS-□ B-□ B-250N	250	0.32	2	± 1.2	12000	260000	160.5	2.03 × 10 ⁻³	2.02
SFF-090DS-□ B-□ B-300N	300	0.32	2	± 1.2	12000	260000	160.5	2.10 × 10 ⁻³	1.92
SFF-100DS-□ B-□ B-450N	450	0.38	2	± 1.3	10000	370000	270	4.18 × 10 ⁻³	3.12
SFF-120DS-□ B-□ B-600N	600	0.38	2	± 1.6	9000	485000	180	8.87 × 10 ⁻³	4.60

- Higher rpm possible with balancing.
- Torsional stiffness values given are measured values for the flexible element alone.
- The moment of inertia and mass are specified for the maximum bore diameter.

Dimensions



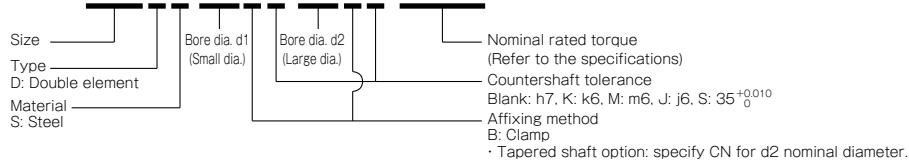
Model	d1 [mm]	d2 [mm]	D [mm]	L [mm]	N1 · N2 [mm]	LF [mm]	LP [mm]	S [mm]	d3 [mm]	K [mm]	M1 · M2 Qty – Nominal dia.	M1 · M2 Tightening torque [N·m]
SFF-040DS-□ B-□ B-8N	8 · 9 · 9.525	8 · 9 · 9.525 · 10 · 11 · 12 · 14 · 15 · 16	38	48.8	33	17.5	6	3.9	17	17	2-M4	3.4
SFF-040DS-□ B-□ B-12N	10 · 11 · 12 · 14 · 15 · 16	10 · 11 · 12 · 14 · 15 · 16	38	48.8	33	17.5	6	3.9	17	17	2-M4	3.4
SFF-050DS-□ B-□ B-25N	10 · 11 · 12 · 14 · 15 · 16 · 17 · 18 · 19	10 · 11 · 12 · 14 · 15 · 16 · 17 · 18 · 19	48	60.8	42	21.5	7	5.4	20	20	2-M5	7
SFF-060DS-□ B-□ B-60N	12 · 14 · 15 · 16 · 17 · 18 · 19	12 · 14 · 15 · 16 · 17 · 18 · 19 · 20 · 22	58	65.8	44	24	7	5.4	31	32	2-M6	14
	—	24 · 25 · 28			52						2-M5	7
	—	30			44						2-M6	14
SFF-060DS-□ B-□ B-80N	20 · 22	20 · 22	58	65.8	44	24	7	5.4	31	32	2-M6	14
	24 · 25 · 28	24 · 25 · 28			52						2-M5	7
	—	30			44						2-M6	14
SFF-070DS-□ B-□ B-90N	18 · 19	18 · 19 · 20 · 22 · 24 · 25	68	69.8	47	25	8	5.9	37	38	2-M6	14
	—	28 · 30 · 32 · 35			56							
SFF-070DS-□ B-□ B-100N	20 · 22 · 24 · 25	20 · 22 · 24 · 25	68	69.8	47	25	8	5.9	37	38	2-M6	14
	28 · 30 · 32 · 35	28 · 30 · 32 · 35			56							
SFF-080DS-□ B-□ B-150N	22 · 24 · 25	22 · 24 · 25	78	86.6	53	30	10	8.3	40	37	2-M8	34
	28 · 30 · 32 · 35	28 · 30 · 32 · 35			56						2-M6	14
	—	22 · 24 · 25			53							
SFF-080DS-□ B-□ B-200N	28 · 30 · 32 · 35	28 · 30 · 32 · 35	78	85.4	70	30	10	7.7	40	42	2-M8	34
	—	28 · 30 · 32 · 35			74							
SFF-090DS-□ B-□ B-250N	25 · 28	25 · 28 · 30 · 32	88	86.6	66	30	10	8.3	50	50	2-M8	34
	—	35 · 38 · 40 · 42			74							
SFF-090DS-□ B-□ B-300N	30 · 32	30 · 32	88	86.6	66	30	10	8.3	50	50	2-M8	34
	35 · 38 · 40 · 42	35 · 38 · 40 · 42			74							
SFF-100DS-□ B-□ B-450N	32 · 35 · 38 · 40 · 42 · 45 · 48	32 · 35 · 38 · 40 · 42 · 45 · 48	98	112.4	84	40	12	10.2	52	56	2-M10	68
	—	32 · 35 · 38 · 40 · 42 · 45			84							
SFF-120DS-□ B-□ B-600N	32 · 35 · 38 · 40 · 42 · 45	32 · 35 · 38 · 40 · 42 · 45	118	112.4	84	40	12	10.2	72	68	2-M10	68
	48 · 50 · 55	48 · 50 · 55			100							

Standard Bore Diameter

Model	Nominal diameter	Standard bore diameter d1 - d2 [mm]																											
		8	9	9.525	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	
SFF-040DS-□ B-□ B-8N	d1	●	●	●																									
	d2	●	●	●	●	●	●	●	●	●																			
SFF-040DS-□ B-□ B-12N	d1				●	●	●	●	●	●																			
	d2				●	●	●	●	●	●																			
SFF-050DS-□ B-□ B-25N	d1				●	●	●	●	●	●	●	●	●																
	d2				●	●	●	●	●	●	●	●	●	●															
SFF-060DS-□ B-□ B-60N	d1							●	●	●	●	●	●	●															
	d2							●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
SFF-060DS-□ B-□ B-80N	d1														●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	d2														●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
SFF-070DS-□ B-□ B-90N	d1																	●	●										
	d2																	●	●	●	●	●	●	●	●	●	●	●	●
SFF-070DS-□ B-□ B-100N	d1																												
	d2																	●	●	●	●	●	●	●	●	●	●	●	●
SFF-080DS-□ B-□ B-150N	d1																												
	d2																	●	●	●	●	●	●	●	●	●	●	●	●
SFF-080DS-□ B-□ B-200N	d1																												
	d2																	●	●	●	●	●	●	●	●	●	●	●	●
SFF-090DS-□ B-□ B-250N	d1																												
	d2																	●	●	●	●	●	●	●	●	●	●	●	●
SFF-090DS-□ B-□ B-300N	d1																												
	d2																	●	●	●	●	●	●	●	●	●	●	●	●
SFF-100DS-□ B-□ B-450N	d1																												
	d2																	●	●	●	●	●	●	●	●	●	●	●	●
SFF-120DS-□ B-□ B-600N	d1																												
	d2																	●	●	●	●	●	●	●	●	●	●	●	●

How to Place an Order

SFF-080DS-25BK-30BK-200N



Options Flange-Mounted

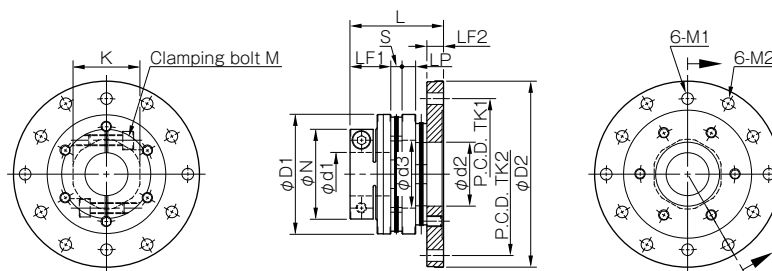
One of the hubs is flange-shaped, allowing mounting on a DD motor, speed reducer, etc.

Specifications

Model	Rated torque [N·m]	Misalignment			Max. rotation speed [min ⁻¹]	Torsional stiffness [N·m/rad]	Axial stiffness [N/mm]	Moment of inertia [kg·m ²]	Mass [kg]
		Parallel [mm]	Angular [°]	Axial [mm]					
SFF-070DS- □ B-105D-100N	100	0.25	2	± 1.0	1000	120000	242	1.20 × 10 ⁻³	1.08
SFF-080DS- □ B-166D-200N	200	0.31	2	± 1.0	1000	155000	273	8.35 × 10 ⁻³	3.11
SFF-090DS- □ B-166D-300N	300	0.32	2	± 1.2	1000	260000	160.5	8.69 × 10 ⁻³	3.18
SFF-100DS- □ B-166D-450N	450	0.38	2	± 1.3	1000	370000	270	10.01 × 10 ⁻³	3.91
SFF-120DS- □ B-166D-600N	600	0.38	2	± 1.6	1000	485000	180	12.66 × 10 ⁻³	4.57

- Max. rotation speed does not take into account dynamic balance.
- Torsional stiffness values given are measured values for the element alone.
- The moment of inertia and mass are measured when d1 is the maximum bore diameter.

Dimensions



Model	d1 [mm]	d2 [mm]	D1 [mm]	D2 [mm]	L [mm]	N [mm]	LF1 [mm]	LF2 [mm]	LP [mm]	S [mm]	d3 [mm]	K [mm]	M1 [mm]	TK1 [mm]	M2 [mm]	TK2 [mm]	M Qty – Nominal dia.	M Tightening torque [N·m]
SFF-070DS- □ B-105D-100N	28 ~ 35	36	68	105	54.4	56	25	10	8	5.9	37	38	6.4	86	6.4	92	2-M6	14
SFF-080DS- □ B-166D-200N	28 ~ 38	39	78	166	68.9	70(74)	30	13.5	10	7.7	40	42	6.4	150	8.6	150	2-M8	34
SFF-090DS- □ B-166D-300N	35 ~ 42	49	88	166	70.1	74	30	13.5	10	8.3	50	50	6.4	150	8.6	150	2-M8	34
SFF-100DS- □ B-166D-450N	32 ~ 48	51	98	166	85.9	84	40	13.5	12	10.2	52	56	6.4	150	8.6	150	2-M10	68
SFF-120DS- □ B-166D-600N	48 ~ 55	67	118	166	85.9	100	40	13.5	12	10.2	72	68	6.4	150	8.6	150	2-M10	68

- The figure in parentheses () for the SFF-080DS is the value when d1 is ø38 mm.
- Special arrangements may be possible for mounting holes at the flange end regarding bore diameter, number, and pitch. Check if arrangements are possible.

Standard Bore Diameter

Model	Standard Bore Diameter d1 [mm]											
	28	30	32	35	38	40	42	45	48	50	55	
SFF-070DS- □ B-105D-100N	●	●	●	●								
SFF-080DS- □ B-166D-200N	●	●	●	●	●							
SFF-090DS- □ B-166D-300N				●	●	●	●					
SFF-100DS- □ B-166D-450N			●	●	●	●	●	●	●			
SFF-120DS- □ B-166D-600N									●	●	●	

How to Place an Order

SFF-080DS-38BK-166D-200N

