

Simplaflex

Torsionally flexible shaft coupling

# Highly elastic and resistant to extreme temperature fluctuations.



The Simplaflex is a maintenance-free all-steel coupling. The spring package makes it extremely flexible for optimum compensation of shaft misalignments. Thanks to their compact and rotationally symmetric structure, Simplaflex couplings can also be used in applications operating at high rotational speeds.

## Highlights

- Compensates for shaft misalignments axially - radially - angularly
- Range of use from -40 °C to +100 °C, in individual cases up to +300 °C
- Rated torque up to 900 Nm
- Maintenance-free
- Large number of different variants; also available as a rust-free model

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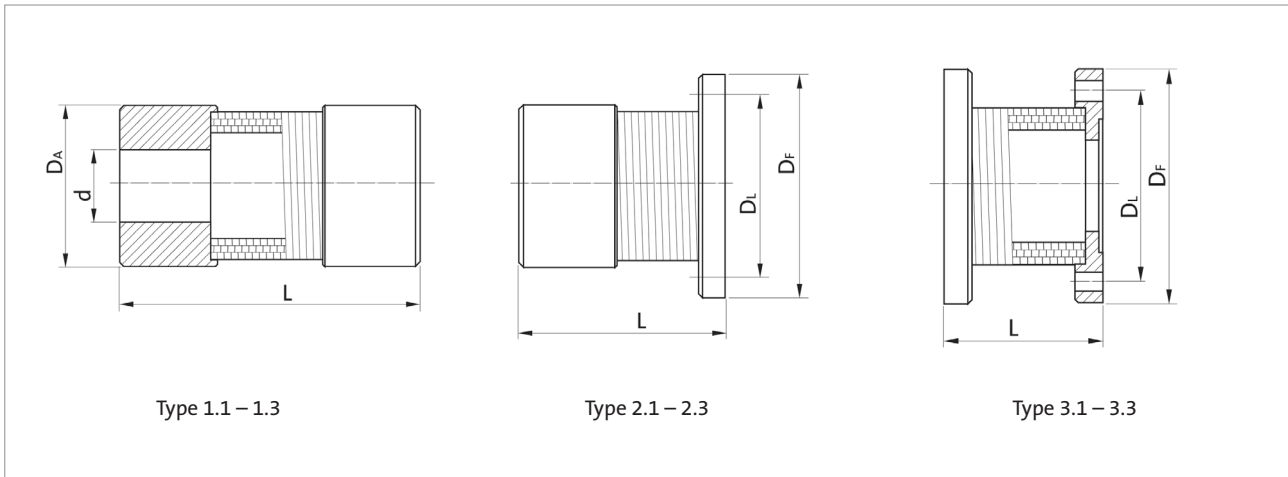
## Structure/function

The Simplaflex consists of a triple-layered spring bellow with square cross-sections.

Misalignments are very effectively absorbed and compensated for by the springs. The springs are connected to the body of the shaft by hubs and a flange.

The different types of this coupling can be supplied in three lengths: x.1 / x.2 / x.3.

In addition to the standard version, we also supply the Simplaflex with a clamping hub for backlash-free torque transmission or with a sliding hub for high axial displacement.



## Simplaflex technical specifications and main dimensions

Size	Rated torque	Max. speed	DA	d pre-bored	d with slot	d without slot	L <sub>1.1</sub>	L <sub>1.2</sub>	L <sub>1.3</sub>	L <sub>2.1</sub>	L <sub>2.2</sub>	L <sub>2.3</sub>	L <sub>3.1</sub>	L <sub>3.2</sub>	L <sub>3.3</sub>	D <sub>f</sub>	D <sub>L</sub>	Misalignment angular			Misalignment radial			Misalignment axial		
																		1	2	3	1	2	3	1	2	3
	[N]	[rpm]	[mm]	[mm]			[mm]										[°]			[mm]			[mm]			
6	2.5	20,000	17	2.5	6	10	25	30	35	20	25	30	15	20	25	32	24	3	4.5	6	0.18	0.27	0.36	0.4	0.6	0.8
8	5	15,000	21	3.5	8	12	35	40	50	30	40	45	25	35	40	42	30	3	4.5	6	0.24	0.36	0.48	0.5	0.8	1
12	10	12,000	26	5.5	12	15	50	60	70	40	50	60	30	40	50	48	37	3	4.5	6	0.36	0.54	0.72	0.6	0.9	1.2
14	10	10,000	30	5.5	14	19	50	60	70	40	50	60	30	40	50	52	40	3	4.5	6	0.42	0.63	0.84	0.6	0.9	1.2
16	20	9,000	35	5.5	16	20	65	80	90	50	65	75	35	50	60	58	47	3	4.5	6	0.48	0.72	0.96	0.8	1.3	1.6
19	20	8,000	38	5.5	19	25	65	80	90	50	65	75	35	50	60	62	50	3	4.5	6	0.57	0.86	1.1	0.8	1.3	1.6
20	40	7,000	45	5.5	20	27	80	95	110	60	75	90	40	55	70	65	52	3	4.5	6	0.6	0.9	1.2	1	1.5	2
24	40	7,000	48	5.5	24	31	80	95	110	60	75	90	40	55	70	70	57	3	4.5	6	0.72	1	1.4	1	1.5	2
25	90	6,000	55	5.5	25	34	100	120	140	75	95	115	50	70	90	75	62	3	4.5	6	0.75	1.1	1.5	1.2	1.8	2.4
28	90	6,000	55	5.5	28	35	100	120	140	75	95	115	50	70	90	78	65	3	4.5	6	0.84	1.2	1.7	1.2	1.8	2.4
30	150	5,000	65	5.5	30	40	125	150	175	95	120	145	65	90	115	90	74.5	3	4.5	6	0.9	1.3	1.8	1.6	2.4	3.2
35	220	4,500	75	5.5	35	45	150	180	210	115	145	175	80	110	140	100	84	3	4.5	6	1	1.6	2	2	3	4
40	300	3,000	80	21	40	50	170	200	240	130	160	200	90	120	160	120	101.5	3	4.5	6	1.2	1.8	2.4	2	3	4
50	500	1,500	100	24	50	64	210	250	300	160	200	250	110	150	200	150	130	3	4.5	6	1.5	2.2	3	2.5	3.6	5
60	900	1,500	120	34	60	75	250	300	350	190	240	290	130	180	230	180	155.5	3	4.5	6	1.8	2.7	3.6	3.2	4.8	6.4

We are happy to help and advise you with your individual dimensioning requirements.