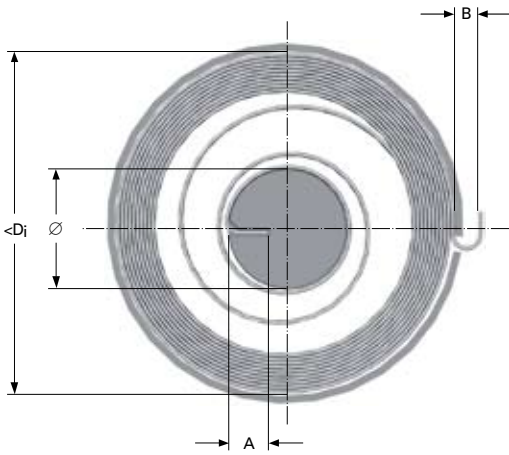


MOTOR SPRINGS

SF-DVF Stainless steel



All dimensions are in mm

t = Material thickness

b = Strip width

M_1 = Torque at 1.5 and 2.5 coils pre-tension for 10 and 20 coils respectively

M_{22} = Torque at at maximum torsion 10 and 20 coils

N_C = Lifespan, guideline value 250 000 oscillations

D_i = Internal housing diameter

Material: Stainless steel EN 10270-3-1.4310

Nominal torque without effect from friction stated.

1 kp = 9.80665 Newtons, 1 Newton = 0.10197 kp

Motor spring for circular motion in max 10 and 20 coils, except pre-tension as specified below. The spring is usually positioned in a housing with the outer hook located around a pin or in a slot on the housing with the smallest internal diameter as specified below. It can also be placed in a larger housing, but with an associated decrease in force. It should be positioned on a shaft with a groove in it, in accordance with the dimensions listed below. It is also possible to slightly increase the diameter of the inner coil for placement on a larger shaft.

To minimise friction, the spring should be lubricated when it is fitted and the coils separated. If no lubrication is applied, there may be a reduction in spring force of up to 20%. If more torque is required, two or more springs can be placed next to each other. In such circumstances, it is preferable to position a washer between the springs. Motor springs are supplied with a protective ring or nylon band that must be removed during assembly. The spring should be handled with care and held using a suitable tool whilst it is being positioned in the housing.

t	b	Shaft Ø	A	B	10 coils				20 coils			
					D _i	M ₁ Nmm	M ₂ Nmm	Cat.no	D _i	M ₁ Nmm	M ₂ Nmm	Cat. no.
0,4	8	12	3	4	55	52	219	8964	77	57	219	8984
0,4	10	12	3	4	55	66	275	8965	77	72	275	8985
0,5	10	15	4	5	70	103	417	8966	97	97	417	8986
0,5	12	15	4	5	70	124	503	8967	97	117	503	8987
0,5	15	15	4	5	70	155	631	8968	97	147	631	8988
0,6	10	18	5	5	85	143	588	8969	116	127	588	8989
0,6	12	18	5	5	85	172	709	8970	116	153	709	8990
0,6	15	18	5	5	85	216	891	8971	116	192	891	8991
0,7	12	20	6	6	100	228	942	8972	136	184	942	8992
0,7	15	20	6	6	100	287	1184	8973	136	232	1184	8993
0,7	20	20	6	6	100	384	1589	8974	136	311	1589	8994
0,8	12	25	7	6	115	292	1205	8975	157	243	1205	8995
0,8	15	25	7	6	115	368	1516	8976	157	306	1516	8996
0,8	20	25	7	6	115	494	2036	8977	157	411	2036	8997
1	15	30	8	8	145	570	2312	8978	196	437	2312	8998
1	20	30	8	8	145	766	3110	8979	196	587	3110	8999
1	25	30	8	8	145	963	3907	8980	196	738	3707	9450
1,5	20	40	12	10	220	1599	6713	8981	295	1306	6713	9451
1,5	25	40	12	10	220	2014	8457	8982	295	1646	8457	9452
1,5	30	40	12	10	220	2429	10200	8983	295	1985	10200	9453