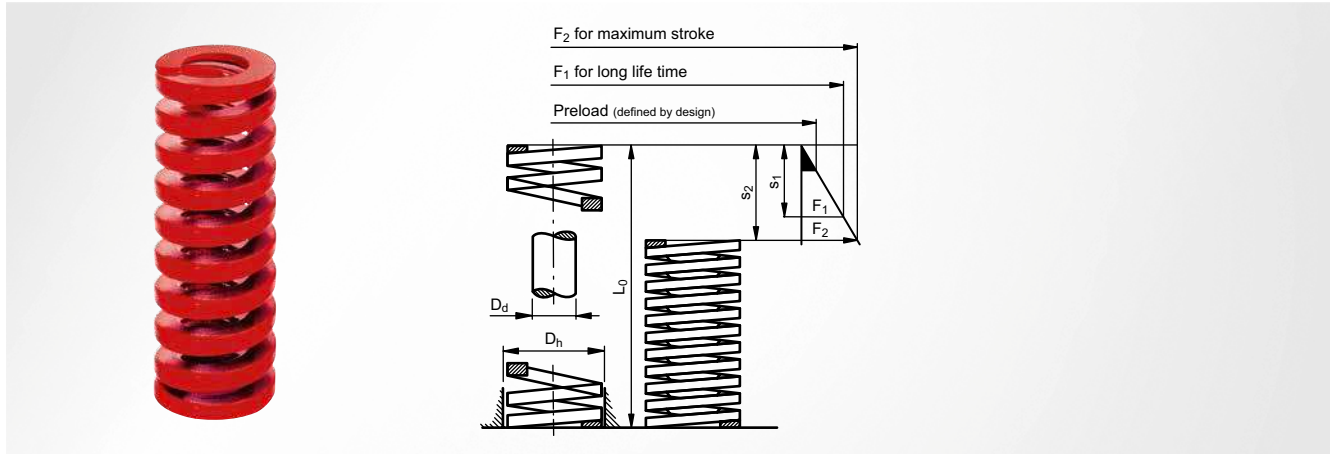


SZ8030 System spring

heavy load, identification colour red



ISO 10243

Material

Profiled valve spring steel wire (52SiCrNi5)

Spring type

Helical compression spring

Wire cross-section

rectangular

Note

Spring is set, closed and rectangular ground

Sleeve Ø D_h^{H15}	Pin Ø D_d^{h15}	Wire	L_0	Spring rate N/mm $c \pm 10\%$	long life time		max. stroke		Item number
					$s_1^{20\%}$	F_1 N	$s_2^{30\%}$	F_2 N	
10.0	5.0	1.8 x 1.4	25	23.0	5.0	115	7.5	173	SZ8030 10 x 025
			32	17.5	6.4	112	9.6	168	SZ8030 10 x 032
			38	14.8	7.6	112	11.4	169	SZ8030 10 x 038
			44	13.0	8.8	114	13.2	172	SZ8030 10 x 044
			51	11.2	10.2	114	15.3	171	SZ8030 10 x 051
			64	9.2	12.8	118	19.2	177	SZ8030 10 x 064
			76	7.5	15.2	114	22.8	171	SZ8030 10 x 076
			305	1.9	61.0	116	91.5	174	SZ8030 10 x 305
12.5	6.3	2.4 x 2.0	25	42.1	5.0	211	7.5	316	SZ8030 13 x 025
			32	33.2	6.4	212	9.6	319	SZ8030 13 x 032
			38	29.3	7.6	223	11.4	334	SZ8030 13 x 038
			44	24.6	8.8	216	13.2	325	SZ8030 13 x 044
			51	19.6	10.2	200	15.3	300	SZ8030 13 x 051
			64	15.0	12.8	192	19.2	288	SZ8030 13 x 064
			76	13.2	15.2	201	22.8	301	SZ8030 13 x 076
			89	11.4	17.8	203	26.7	304	SZ8030 13 x 089
			102	9.4	20.4	192	30.6	288	SZ8030 13 x 102
			305	3.2	61.0	195	91.5	293	SZ8030 13 x 305
16.0	8.0	3.0 x 2.4	25	75.7	5.0	379	7.5	568	SZ8030 16 x 025
			32	60.2	6.4	385	9.6	578	SZ8030 16 x 032
			38	50.8	7.6	386	11.4	579	SZ8030 16 x 038
			44	42.8	8.8	377	13.2	565	SZ8030 16 x 044
			51	37.1	10.2	378	15.3	568	SZ8030 16 x 051
			64	30.3	12.8	388	19.2	582	SZ8030 16 x 064
			76	25.7	15.2	391	22.8	586	SZ8030 16 x 076
			89	21.7	17.8	386	26.7	579	SZ8030 16 x 089
			102	18.9	20.4	386	30.6	578	SZ8030 16 x 102
			115	17.0	23.0	391	34.5	587	SZ8030 16 x 115
305	6.3	61.0	384	91.5	577	SZ8030 16 x 305			
20.0	10.0	4.0 x 3.2	25	216.0	5.0	1080	7.5	1620	SZ8030 20 x 025
			32	168.0	6.4	1075	9.6	1613	SZ8030 20 x 032
			38	129.0	7.6	980	11.4	1471	SZ8030 20 x 038
			44	112.0	8.8	986	13.2	1478	SZ8030 20 x 044
			51	94.0	10.2	959	15.3	1438	SZ8030 20 x 051

heavy load, identification colour red

Sleeve Ø D _h H15	Pin Ø D _d h15	Wire	L ₀	Spring rate N/mm c ±10 %	long life time		max. stroke		Item number
					s ₁ ^{20 %}	F ₁ N	s ₂ ^{30 %}	F ₂ N	
20.0	10.0	4.0 x 3.2	64	72.1	12.8	923	19.2	1384	SZ8030 20 x 064
			76	59.7	15.2	907	22.8	1361	SZ8030 20 x 076
			89	50.5	17.8	899	26.7	1348	SZ8030 20 x 089
			102	44.2	20.4	902	30.6	1353	SZ8030 20 x 102
			115	38.4	23.0	883	34.5	1325	SZ8030 20 x 115
			127	34.1	25.4	866	38.1	1299	SZ8030 20 x 127
			139	31.0	27.8	862	41.7	1293	SZ8030 20 x 139
			152	28.2	30.4	857	45.6	1286	SZ8030 20 x 152
			305	14.0	61.0	854	91.5	1281	SZ8030 20 x 305
			25.0	12.5	5.6 x 4.1	25	375.0	5.0	1875
32	297.0	6.4				1901	9.6	2851	SZ8030 25 x 032
38	219.0	7.6				1664	11.4	2497	SZ8030 25 x 038
44	187.0	8.8				1646	13.2	2468	SZ8030 25 x 044
51	156.0	10.2				1591	15.3	2387	SZ8030 25 x 051
64	123.0	12.8				1574	19.2	2362	SZ8030 25 x 064
76	99.0	15.2				1505	22.8	2257	SZ8030 25 x 076
89	84.0	17.8				1495	26.7	2243	SZ8030 25 x 089
102	73.0	20.4				1489	30.6	2234	SZ8030 25 x 102
115	65.0	23.0				1495	34.5	2243	SZ8030 25 x 115
127	57.7	25.4				1466	38.1	2198	SZ8030 25 x 127
139	52.7	27.8				1465	41.7	2198	SZ8030 25 x 139
152	47.8	30.4				1453	45.6	2180	SZ8030 25 x 152
178	41.0	35.6				1460	53.4	2189	SZ8030 25 x 178
203	35.8	40.6				1453	60.9	2180	SZ8030 25 x 203
305	22.9	61.0				1397	91.5	2095	SZ8030 25 x 305
32.0	16.0	6.9 x 5.3	38	388.0	7.6	2949	11.4	4423	SZ8030 32 x 038
			44	324.0	8.8	2851	13.2	4277	SZ8030 32 x 044
			51	272.0	10.2	2774	15.3	4162	SZ8030 32 x 051
			64	212.0	12.8	2714	19.2	4070	SZ8030 32 x 064
			76	172.0	15.2	2614	22.8	3922	SZ8030 32 x 076
			89	141.0	17.8	2510	26.7	3765	SZ8030 32 x 089
			102	122.0	20.4	2489	30.6	3733	SZ8030 32 x 102
			115	107.0	23.0	2461	34.5	3692	SZ8030 32 x 115
			127	93.0	25.4	2362	38.1	3543	SZ8030 32 x 127
			139	86.0	27.8	2391	41.7	3586	SZ8030 32 x 139
			152	78.0	30.4	2371	45.6	3557	SZ8030 32 x 152
			178	67.2	35.6	2392	53.4	3558	SZ8030 32 x 178
			203	59.1	40.6	2399	60.9	3599	SZ8030 32 x 203
			254	46.4	50.8	2357	76.2	3536	SZ8030 32 x 254
305	38.0	61.0	2318	91.5	3477	SZ8030 32 x 305			
40.0	20.0	8.4 x 6.2	51	350.0	10.2	3570	15.3	5355	SZ8030 40 x 051
			64	269.0	12.8	3443	19.2	5165	SZ8030 40 x 064
			76	219.0	15.2	3329	22.8	4993	SZ8030 40 x 076
			89	190.0	17.8	3382	26.7	5073	SZ8030 40 x 089
			102	163.0	20.4	3325	30.6	4988	SZ8030 40 x 102
			115	142.0	23.0	3266	34.5	4899	SZ8030 40 x 115
			127	128.0	25.4	3251	38.1	4877	SZ8030 40 x 127
			139	115.0	27.8	3197	41.7	4796	SZ8030 40 x 139
			152	105.0	30.4	3192	45.6	4788	SZ8030 40 x 152
			178	89.0	35.6	3168	53.4	4753	SZ8030 40 x 178
			203	77.0	40.6	3126	60.9	4689	SZ8030 40 x 203
			254	61.0	50.8	3099	76.2	4648	SZ8030 40 x 254
			305	51.0	61.0	3111	91.5	4667	SZ8030 40 x 305
50.0	25.0	11.3 x 7.4	64	413.0	12.8	5286	19.2	7930	SZ8030 50 x 064
			76	339.0	15.2	5153	22.8	7729	SZ8030 50 x 076
			89	288.0	17.8	5126	26.7	7690	SZ8030 50 x 089
			102	245.0	20.4	4998	30.6	7497	SZ8030 50 x 102
			115	215.0	23.0	4945	34.5	7418	SZ8030 50 x 115
			127	192.0	25.4	4877	38.1	7315	SZ8030 50 x 127

SZ8030 System spring

heavy load, identification colour red

Sleeve Ø D _h ^{H15}	Pin Ø D _d ^{h15}	Wire	L ₀	Spring rate N/mm c ±10 %	long life time		max. stroke		Item number
					s ₁ ^{20 %}	F ₁ N	s ₂ ^{30 %}	F ₂ N	
50.0	25.0	11.3 x 7.4	139	168.0	27.8	4670	41.7	7006	SZ8030 50 x 139
			152	154.0	30.4	4682	45.6	7022	SZ8030 50 x 152
			178	134.0	35.6	4770	53.4	7156	SZ8030 50 x 178
			203	117.0	40.6	4750	60.9	7125	SZ8030 50 x 203
			254	89.0	50.8	4521	76.2	6782	SZ8030 50 x 254
			305	73.0	61.0	4453	91.5	6680	SZ8030 50 x 305
63.0	38.0	11.2 x 12.9	76	630.0	15.2	9576	22.8	14364	SZ8030 63 x 076
			89	485.0	17.8	8633	26.7	12950	SZ8030 63 x 089
			102	434.0	20.4	8854	30.6	13280	SZ8030 63 x 102
			115	384.0	23.0	8832	34.5	13248	SZ8030 63 x 115
			127	349.0	25.4	8865	38.1	13297	SZ8030 63 x 127
			152	276.0	30.4	8390	45.6	12586	SZ8030 63 x 152
			178	237.0	35.6	8437	53.4	12656	SZ8030 63 x 178
			203	210.0	40.6	8526	60.9	12789	SZ8030 63 x 203
			254	165.0	50.8	8382	76.2	12573	SZ8030 63 x 254
			305	134.0	61.0	8174	91.5	12261	SZ8030 63 x 305