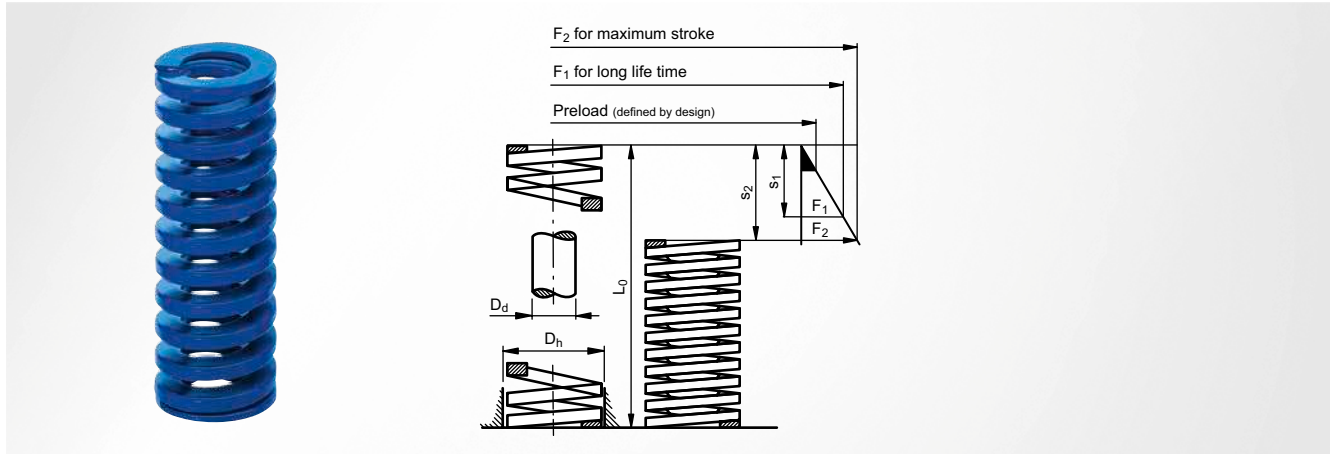


SZ8020 System spring

medium load, identification colour blue



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			
					$s_1^{25\%}$	F_1 N	$s_2^{37.5\%}$	F_2 N				
10.0	5.0	1.8 x 1.2	25	16.0	6.3	100	9.4	150	SZ8020 10 x 025			
			32	13.0	8.0	104	12.0	156	SZ8020 10 x 032			
			38	11.9	9.5	113	14.2	169	SZ8020 10 x 038			
			44	10.3	11.0	113	16.5	170	SZ8020 10 x 044			
			51	8.9	12.8	113	19.1	170	SZ8020 10 x 051			
			64	7.5	16.0	120	24.0	180	SZ8020 10 x 064			
			76	6.2	19.0	118	28.5	177	SZ8020 10 x 076			
			305	1.6	76.3	122	114.4	182	SZ8020 10 x 305			
12.5	6.3	2.5 x 1.7	25	30.0	6.3	188	9.4	282	SZ8020 13 x 025			
			32	24.8	8.0	198	12.0	298	SZ8020 13 x 032			
			38	21.4	9.5	203	14.2	304	SZ8020 13 x 038			
			44	18.0	11.0	198	16.5	297	SZ8020 13 x 044			
			51	15.5	12.8	198	19.1	296	SZ8020 13 x 051			
			64	12.1	16.0	194	24.0	290	SZ8020 13 x 064			
			76	10.2	19.0	194	28.5	291	SZ8020 13 x 076			
			89	8.4	22.3	187	33.3	280	SZ8020 13 x 089			
			102	7.1	25.5	181	38.3	272	SZ8020 13 x 102			
			305	2.4	76.3	183	114.0	274	SZ8020 13 x 305			
16.0	8.0	3.2 x 2.0	25	49.4	6.3	309	9.4	464	SZ8020 16 x 025			
			32	38.5	8.0	308	12.0	462	SZ8020 16 x 032			
			38	33.9	9.5	322	14.2	481	SZ8020 16 x 038			
			44	30.0	11.0	330	16.5	495	SZ8020 16 x 044			
			51	26.4	12.8	337	19.1	504	SZ8020 16 x 051			
			64	20.5	16.0	328	24.0	492	SZ8020 16 x 064			
			76	17.8	19.0	338	28.5	507	SZ8020 16 x 076			
			89	15.2	22.3	338	33.3	506	SZ8020 16 x 089			
			102	13.5	25.5	344	38.2	516	SZ8020 16 x 102			
			115	12.0	28.8	345	43.1	518	SZ8020 16 x 115			
			305	4.3	76.3	328	114.4	490	SZ8020 16 x 305			
			20.0	10.0	4.0 x 2.4	25	98.0	6.3	613	9.4	921	SZ8020 20 x 025
						32	72.6	8.0	581	12.0	871	SZ8020 20 x 032
38	56.0	9.5				532	14.2	795	SZ8020 20 x 038			
44	47.5	11.0				523	16.5	784	SZ8020 20 x 044			
51	41.7	12.8				532	19.1	797	SZ8020 20 x 051			

medium load, identification colour blue

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 ^{25 %}	F ₁ N	s ₂ ^{37.5 %}	F ₂ N	
20.0	10.0	4.0 x 2.4	64	32.3	16.0	517	24.0	775	SZ8020 20 x 064
			76	25.1	19.0	477	28.5	715	SZ8020 20 x 076
			89	22.0	22.3	490	33.3	733	SZ8020 20 x 089
			102	19.8	25.5	505	38.2	756	SZ8020 20 x 102
			115	18.1	28.8	520	43.1	780	SZ8020 20 x 115
			127	16.6	31.8	527	47.6	790	SZ8020 20 x 127
			139	15.1	34.8	525	52.1	787	SZ8020 20 x 139
			152	13.2	38.0	502	57.0	752	SZ8020 20 x 152
			305	6.1	76.3	465	114.4	695	SZ8020 20 x 305
25.0	12.5	5.3 x 3.1	25	157.0	6.3	981	9.4	1476	SZ8020 25 x 025
			32	118.0	8.0	944	12.0	1416	SZ8020 25 x 032
			38	93.0	9.5	884	14.2	1321	SZ8020 25 x 038
			44	80.8	11.0	889	16.5	1333	SZ8020 25 x 044
			51	68.6	12.8	875	19.1	1310	SZ8020 25 x 051
			64	53.0	16.0	848	24.0	1272	SZ8020 25 x 064
			76	43.2	19.0	821	28.5	1231	SZ8020 25 x 076
			89	38.2	22.3	850	33.3	1272	SZ8020 25 x 089
			102	33.0	25.5	842	38.2	1272	SZ8020 25 x 102
			115	28.0	28.8	805	43.1	1207	SZ8020 25 x 115
			127	25.9	31.8	822	47.6	1233	SZ8020 25 x 127
			139	23.2	34.8	806	52.1	1209	SZ8020 25 x 139
			152	20.8	38.0	790	57.0	1186	SZ8020 25 x 152
			178	17.8	44.5	792	66.7	1187	SZ8020 25 x 178
			203	15.8	50.8	802	76.1	1202	SZ8020 25 x 203
			305	10.2	76.3	778	114.4	1163	SZ8020 25 x 305
32.0	16.0	6.8 x 4.0	38	185.0	9.5	1758	14.2	2627	SZ8020 32 x 038
			44	158.0	11.0	1738	16.5	2607	SZ8020 32 x 044
			51	134.0	12.8	1709	19.1	2559	SZ8020 32 x 051
			64	99.0	16.0	1584	24.0	2376	SZ8020 32 x 064
			76	80.5	19.0	1530	28.5	2294	SZ8020 32 x 076
			89	69.1	22.3	1537	33.3	2301	SZ8020 32 x 089
			102	58.8	25.5	1499	38.2	2246	SZ8020 32 x 102
			115	51.5	28.8	1481	43.1	2220	SZ8020 32 x 115
			127	44.8	31.8	1422	47.6	2132	SZ8020 32 x 127
			139	42.3	34.8	1470	52.1	2204	SZ8020 32 x 139
			152	37.8	38.0	1436	57.0	2155	SZ8020 32 x 152
			178	32.5	44.5	1446	66.7	2168	SZ8020 32 x 178
			203	28.9	50.8	1467	76.1	2199	SZ8020 32 x 203
			254	22.2	63.5	1410	95.2	2113	SZ8020 32 x 254
			305	18.3	76.3	1395	114.4	2086	SZ8020 32 x 305
			40.0	20.0	8.1 x 4.8	51	181.6	12.8	2315
64	140.0	16.0				2240	24.0	3360	SZ8020 40 x 064
76	108.0	19.0				2052	28.5	3078	SZ8020 40 x 076
89	90.7	22.3				2018	33.3	3020	SZ8020 40 x 089
102	81.0	25.5				2066	38.2	3094	SZ8020 40 x 102
115	71.8	28.8				2064	43.1	3095	SZ8020 40 x 115
127	62.7	31.8				1991	47.6	2985	SZ8020 40 x 127
139	57.5	34.8				1998	52.1	2996	SZ8020 40 x 139
152	51.6	38.0				1961	57.0	2941	SZ8020 40 x 152
160	47.5	40.0				1900	60.0	2850	SZ8020 40 x 160
178	44.1	44.5				1962	66.7	2941	SZ8020 40 x 178
203	36.7	50.8				1863	76.1	2793	SZ8020 40 x 203
254	30.1	63.5				1911	95.2	2866	SZ8020 40 x 254
305	24.6	76.3				1876	114.4	2804	SZ8020 40 x 305
50.0	25.0	10.9 x 6.0	64	209.0	16.0	3344	24.0	5016	SZ8020 50 x 064
			76	168.0	19.0	3192	28.5	4788	SZ8020 50 x 076
			89	140.0	22.3	3115	33.3	4662	SZ8020 50 x 089
			102	119.0	25.5	3035	38.2	4546	SZ8020 50 x 102
			115	106.0	28.8	3048	43.1	4569	SZ8020 50 x 115

SZ8020 System spring

medium load, identification colour blue

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
					ε ₁ ^{25 %}	F ₁ N	ε ₂ ^{37.5 %}	F ₂ N	
50.0	25.0	10.9 x 6.0	127	97.0	31.8	3080	47.6	4617	SZ8020 50 x 127
			139	87.0	34.8	3023	52.1	4533	SZ8020 50 x 139
			152	80.0	38.0	3040	57.0	4560	SZ8020 50 x 152
			160	76.0	40.0	3040	60.0	4560	SZ8020 50 x 160
			178	69.5	44.5	3093	66.7	4636	SZ8020 50 x 178
			203	59.8	50.8	3035	76.1	4551	SZ8020 50 x 203
			229	50.9	57.3	2914	85.8	4367	SZ8020 50 x 229
			254	46.0	63.5	2921	95.2	4379	SZ8020 50 x 254
			305	38.6	76.3	2943	114.4	4400	SZ8020 50 x 305
			63.0	38.0	11.5 x 9.3	76	320.0	19.0	6080
89	260.0	22.3				5785	33.3	8658	SZ8020 63 x 089
102	221.0	25.5				5636	38.2	8442	SZ8020 63 x 102
115	187.0	28.8				5376	43.1	8060	SZ8020 63 x 115
127	168.0	31.8				5334	47.6	7997	SZ8020 63 x 127
152	136.0	38.0				5168	57.0	7752	SZ8020 63 x 152
160	128.0	40.0				5120	60.0	7680	SZ8020 63 x 160
178	114.0	44.5				5073	66.7	7604	SZ8020 63 x 178
203	100.0	50.8				5075	76.1	7610	SZ8020 63 x 203
229	89.2	57.3				5107	85.8	7653	SZ8020 63 x 229
254	78.4	63.5				4978	95.2	7464	SZ8020 63 x 254
305	64.7	76.3				4933	114.4	7376	SZ8020 63 x 305
315	62.8	78.8				4946	118.1	7418	SZ8020 63 x 315
400	48.5	100.0				4850	150.0	7275	SZ8020 63 x 400

Nitrogen systems

Tapping units

Module system

Machine elements

Accessories