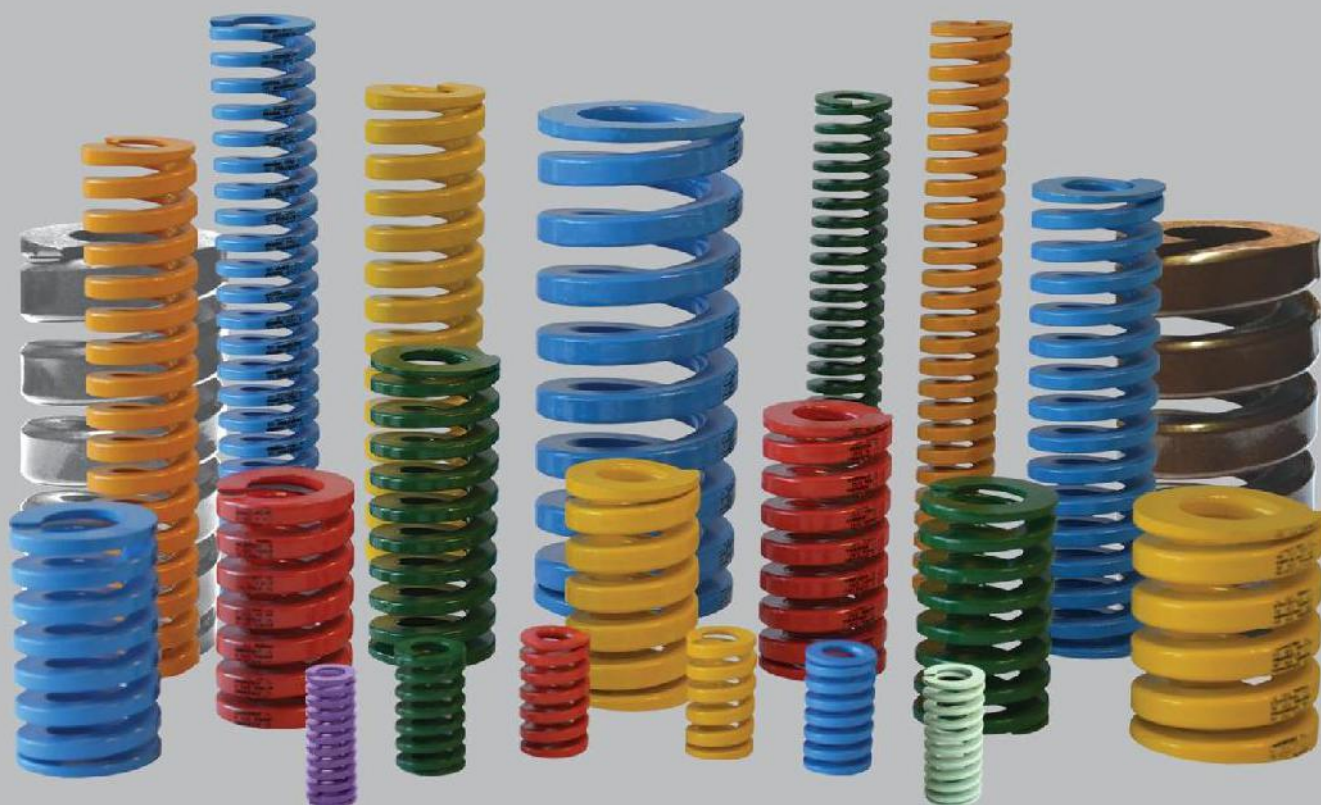




فنرها
Springs

آبان ۱۳۹۸
November 2019



قطعات پیش ساخته قالب های تزریق
Standard Mould Making Components



سنبه، ماتریس، پین و پیران ها
Punches, Dies, Dowel pins and Ejectors



قطعات پیش ساخته قالب های فلزی
Standard Tool Making Components



فنرها
Springs



لوازم کمکی
Accessories



چسب ها، اسپرها
Adhesives, Sprays



4
فنرها
Springs

فنر D64V D64L Spring 4.4	فنر D64JG D64G Spring 4.6	فنر D64JB D64B Spring 4.9		
فنر D64JR D64R Spring 4.12	فنر D64JY D64Y Spring 4.15	فنر D64W D64S Spring 4.18	فنر D63/80 Spring 4.20	فنر D63/90 Spring 4.21
فنر D63/95 Spring 4.22	فنر بشقابی D62 Disc Spring 4.23	واحد فنر بندی D244 Combination Spring and Spacer Unit NEW 4.24	واحد فنر بندی D245 Combination Spring and Spacer Unit NEW 4.25	فنر گازی D611 Gas Spring 4.26
بیرون انداز (فنر گازی) D612 Spring Plungers NEW 4.26				



TENSILE STRENGTH

General Information

استحکام کششی مواد

اطلاعات عمومی

مشخصه Type	شماره مواد STD. NO.	استحکام کششی Tensile Strength	مشخصه Type	شماره مواد STD. NO.	استحکام کششی Tensile Strength	مشخصه Type	استحکام کششی Tensile Strength
فولاد ساختمانی کربن بازرگم فلک شده DIN EN 10025 (1994-03)			ورق و نوار از فولاد نرم و سدره فلک شده DIN EN 10268 (1999-02)			آلیاژهای آلومینوم نورد شده DIN EN 12163 (1998-04)	
S185	1.0035	290...510	DC01	1.0330	270...410	Al 99.5 (1050A)	65...95
S235JR	1.0037	340...470	DC03	1.0347	270...370	Al Mn1 (3103)	90...130
S235JRG1	1.0036	340...470	DC04	1.0338	270...350	Al Mn1Cu (3003)	95...135
S235JRG2	1.0038	340...470	DC05	1.0312	270...330	Al Mg1 (5005)	100...145
S235JO	1.0114	340...470	DC06	1.0873	270...350	Al Mg2 (5251)	160...200
S235J2G3	1.0116	340...470	ورق و نوار از فولاد میکروآلیاژی سرد فلک شده DIN EN 10130 (1999-02)			Al Mg3 (5754)	190...240
S235J2G4	1.0117	340...470	H240LA	1.0480	240...340	Al Mg5 (5019)	250...350
S275JR	1.0044	410...560	H280LA	1.0489	280...370	Al Mg3Mn (5454)	215...275
S275JO	1.0143	410...560	H320LA	1.0548	320...410	Al Mg4.5Mn0.7 (5083)	270...350
S275J2G3	1.0144	410...560	H360LA	1.0550	360...460	Al Cu4SiMg (2014)	220
S275J2G4	1.0145	410...560	H400LA	1.0556	400...500	Al Cu4Mg1 (2024)	220
S355JR	1.0045	490...630	ورق و نوار از فولاد کربنیزه آلیاژی سرد فلک شده DIN EN 10142 (2000-07)			Al Si1MgMn (6082)	150
S355JO	1.0553	490...630	DX51D+Z	1.0226+Z	270...500	Al Zn4.5Mg1 (7020)	220
S355J2G3	1.0570	490...630	DX51D+ZF	1.0226+ZF	270...500	Al Zn5Mg3Cu (7022)	450
S355J2G4	1.0577	490...630	DX52D+Z	1.0350+Z	270...420	Al Zn5.5MgCu (7075)	275
S355K2G3	1.0595	490...630	DX52D+ZF	1.0350+ZF	270...420	آلیاژ من نورد شده (برنج) DIN EN 12163 (1998-04)	
S355K2G4	1.0596	490...630	DX53D+Z	1.0355+Z	270...380	CuZn28 (CW504L)	460
E295	1.0050	470...610	DX53D+ZF	1.0355+ZF	270...380	CuZn37 (CW508L)	440
E335	1.0060	570...710	DX54D+Z	1.0306+Z	270...350	CuZn40 (CW509L)	340
E360	1.0070	670...830	DX54D+ZF	1.0306+ZF	270...350	آلیاژ من روی نورد شده (برنج) DIN EN 12163 (1998-04)	
فولاد کربنیزه و سدره شده DIN EN 10083 (1996-10)			DX56D+Z	1.0322+Z	270...350	CuZn31Si (CW708R)	530
C22	1.0402	410	DX56D+ZF	1.0322+ZF	270...350	CuZn38Mn1Al (CW716R)	550
C22E	1.1151	470...620	فولاد رنگ نزن DIN EN 10088 (1995-08)			CuZn40Mn2Fe1 (CW723R)	540
C25	1.0406	440	X10CrNi18-8	1.4310	500...750	استحکام کششی Tensile Strength	
C25E	1.1158	500...650	X2CrNi18-9	1.4307	450...680	Type	نام
C35	1.0501	520	X2CrNi19-11	1.4306	460...680	ترموپلاستیک	
C35E	1.1181	550...750	X2CrNi18-10	1.4311	550...760	ABS	اکریل نیتریل-بوتادین-استیرن
C45	1.0503	580	X5CrNi18-10	1.4301	500...700	PA 6	پلی آمید ۶
C45E	1.1191	630...800	X8CrNi18-9	1.4305	500...750	PA 66	پلی آمید ۶۶
C60	1.0601	670	X6CrNiTi18-10	1.4541	500...700	PE-HD	پلی اتیلن، چگالی زیاد
C60E	1.1221	750...950	X4CrNi18-12	1.4303	500...700	PE-LD	پلی اتیلن، چگالی کم
28Mn6	1.1170	600	X5CrNiMo17-12-2	1.4401	500...700	PMMA	پلی متیل متاکریلات
38Cr2	1.7003	600...850	X6CrNiMoTi17-12-2	1.4571	500...700	POM	پلی اکسی متیلن
38CrS2	1.7023	600...850	X2CrNiMo18-14-3	1.4435	500...700	PP	پلی پروپیلن
46Cr2	1.7006	650...950	X2CrNiMoN17-13-3	1.4429	580...800	PS	پلی استیرن
46CrS2	1.7025	650...950	X2CrNiMoN17-13-5	1.4439	580...800	PTFE	پلی تترافلور اتیلن
34Cr4	1.7033	700...950	X1NiCrMoCu25-20-5	1.4539	530...730	PVC-P	پلی وینیل کلراید، پلیاستیک
34CrS4	1.7037	700...950	X2CrNi12	1.4003	450...600	PVC-U	پلی وینیل کلراید، غیر پلیاستیک
37Cr4	1.7034	750...1000	X6Cr13	1.4000	400...630	SAN	استیرن-اکریل نیتریل-کوپلیمر
37CrS4	1.7038	750...1000	X6Cr17	1.4016	400...630	SB	استیرن-بوتادین-کوپلیمر
25CrMo4	1.7218	700...950	X2CrTi12	1.4512	380...560	الاستومر (لاستیک)	
25CrMoS4	1.7213	700...950	X6CrMo17-1	1.4113	440...660	BR	بوتادین لاستیک
41Cr4	1.7035	800...1100	X3CrTi17	1.4510	430...630	CO	ایپکسولیدین لاستیک
41CrS4	1.7039	800...1100	X2CrMoTi18-2	1.4521	420...620	CR	کلروپرن لاستیک
34CrMo4	1.7220	800...1100	تیتانیوم، آلیاژ تیتانیوم DIN EN 17860 (1990-11)			CSM	کلروسولفونات پدی اتیلن
34CrMoS4	1.7226	800...1100	Ti1	3.7025	290...410	EPDM	اتیلن پروپیلن لاستیک
42CrMo4	1.7225	900...1200	Ti2	3.7035	390...540	FKM	فلورو لاستیک
42CrMoS4	1.7227	900...1200	Ti3	3.7055	460...590	IIR	ایسوپرن-بوتادین لاستیک
50CrMo4	1.7228	900...1200	Ti1Pd	3.7225	290...410	IR	ایسوپرن لاستیک
51CrV4	1.8159	900...1200	Ti2Pd	3.7235	390...540	NBR	اکریلونیتریل بوتادین لاستیک
36CrNiMo4	1.6511	900...1200	TiAl6V6Sn2	3.7175	1070	NR	لاستیک طبیعی ایسوپرن لاستیک
34CrNiMo6	1.6582	1000...1300	TiAl6V4	3.7165	920	PUR	پلی اورتان لاستیک
30NiCrMo8	1.6580	1100...1450	TiAl4Mo4Sn2	3.7185	1050	SIR	استیرن-ایسوپرن لاستیک
36NiCrMo16	1.6773	1100...1450				SBR	استیرن-بوتادین لاستیک

- These amounts are according to N/mm²

- برای سایر مواد به کتاب جداول استاندارد نوشته Ulrich Fisher مراجعه گردد.
- مقادیر ارائه شده بر حسب N/mm²

HIGH PERFORMANCE COMPRESSION SPRING

Rectangular Wire-Violet/Light Green Color

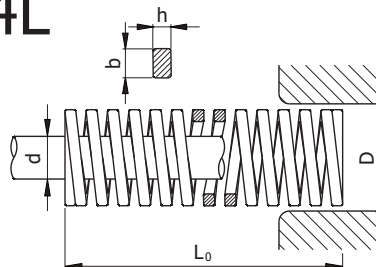
DIN/ISO 10243

فنر

مقطع مفتول فنر مستطیل - بنفش / سبز روشن



D64V
D64L



کد سفارش Ordering Code	D	d	L ₀	R (Rate) ضرب فنر ±10%	A 30% دوام 3.000.000 ضرب		B 40% دوام 1.500.000 ضرب		C 50% Max Defl دوام 200.000 ضرب		D Approx تغییر طول تقریبی تا بسته شدن	
	(b x h)											
	mm	mm	mm	N/mm	mm	N	mm	N	mm	N	mm	
D64.../20/025	20	10	(3.9 x 1.7)	25	32.1	7.5	241	10	321	12.5	401	14
D64.../20/032				32	24.7	9.6	237	12.8	316	16	395	18
D64.../20/038				38	20.7	11.4	236	15.2	315	19	393	22
D64.../20/044				44	17.8	13.2	235	17.6	313	22	392	26
D64.../20/051				51	15.3	15.3	234	20.4	312	25.5	390	30
D64.../20/064				64	12.1	19.2	232	25.6	310	32	386	38
D64.../20/076				76	10.2	22.8	232	30.4	310	38	386	45
D64.../20/089				89	8.6	26.7	230	35.6	306	44.5	384	53
D64.../20/102				102	7.5	30.6	229	40.8	306	51	384	62
D64.../20/115				115	6.7	34.5	231	46	308	57.5	384	70
D64.../20/127				127	6.1	38.1	232	50.8	310	63.5	386	77
D64.../20/139				139	5.5	41.7	229	55.6	306	69.5	385	85
D64.../20/152				152	5.1	45.6	233	60.8	310	76	284	93
D64.../20/305				305	2.5	91.5	229	122	305	152.5	384	188
D64.../25/025	25	12.5	(5.4 x 2.2)	25	52.7	7.5	395	10	527	12.5	658	14
D64.../25/032				32	40	9.6	384	12.8	512	16	640	18
D64.../25/038				38	33.3	11.4	380	15.2	506	19	634	22
D64.../25/044				44	28.6	13.2	378	17.6	503	22	629	25
D64.../25/051				51	24.7	15.3	378	20.4	504	25.5	630	30
D64.../25/064				64	19.4	19.2	372	25.6	497	32	622	38
D64.../25/076				76	16.3	22.8	372	30.4	496	38	618	45
D64.../25/089				89	13.9	26.7	371	35.6	495	44.5	618	53
D64.../25/102				102	12.1	30.6	370	40.8	494	51	618	61
D64.../25/115				115	10.8	34.5	373	46	497	57.5	619	70
D64.../25/127				127	9.8	38.1	373	50.8	498	63.5	620	77
D64.../25/139				139	8.9	41.7	371	55.6	495	69.5	618	85
D64.../25/152				152	8.1	45.6	369	60.8	492	76	616	93
D64.../25/178				178	6.9	53.4	368	71.2	491	89	616	109
D64.../25/203	203	6.1	60.9	371	81.2	495	101.5	615	124			
D64.../25/305	305	4	91.5	366	122	488	152.5	613	188			
D64.../32/038	32	16	(6.5 x 2.6)	38	43.8	11.4	499	15.2	666	19	831	22
D64.../32/044				44	37.5	13.2	495	17.6	660	22	825	26
D64.../32/051				51	32.3	15.3	494	20.4	659	25.5	823	21

High Performance Compression Spring

Rectangular Wire-Violet/Light Green Color

DIN/ISO 10243

فنر

مقطع مفتول فنر مستطیل - بنفش / سبز روشن

کد سفارش Ordering Code	D (b x h)	d	L ₀	R (Rate) ضریب فنر ±10%	A 30% دوام 3.000.000 ضرب		B 40% دوام 1.500.000 ضرب		C 50% Max Defl دوام 200.000 ضرب		D Approx تخمین طول تقریبی تا بسته شدن
	mm	mm	mm	N/mm	mm	N	mm	N	mm	N	mm
D64.../32/064	32 (6.5 x 2.6)	16	64	25.4	19.2	488	25.6	650	32	813	39
D64.../32/076			76	21.3	22.8	486	30.4	648	38	809	47
D64.../32/089			89	18.1	26.7	483	35.6	644	44.5	804	56
D64.../32/102			102	15.8	30.6	483	40.8	645	51	803	64
D64.../32/115			115	13.9	34.5	479	46	639	57.5	800	73
D64.../32/127			127	12.6	38.1	480	50.8	640	63.5	799	81
D64.../32/139			139	11.4	41.7	475	55.6	634	69.5	796	89
D64.../32/152			152	10.5	45.6	479	60.8	638	76	800	97
D64.../32/178			178	8.9	53.4	475	71.2	634	89	796	114
D64.../32/203			203	7.8	60.9	475	81.2	633	101.5	793	131
D64.../32/254			254	6.2	76.2	472	101.6	630	127	784	163
D64.../32/305			305	5.2	91.5	476	122	634	125.5	788	197
D64.../40/051	40 (8.0 x 3.4)	20	51	50.8	15.3	777	20.4	1036	25.5	1297	26
D64.../40/064			64	39.7	19.2	762	25.6	1016	32	1269	34
D64.../40/076			76	33.1	22.8	755	30.4	1006	38	1256	40
D64.../40/089			89	28.1	26.7	750	35.6	1000	44.5	1249	48
D64.../40/102			102	24.5	30.6	750	40.8	1000	51	1249	55
D64.../40/115			115	21.6	34.5	745	46	994	57.5	1244	63
D64.../40/127			127	19.5	38.1	743	50.8	991	63.5	1239	70
D64.../40/139			139	17.8	41.7	742	55.6	990	69.5	1238	76
D64.../40/152			152	16.3	45.6	743	60.8	991	76	1235	84
D64.../40/178			178	13.8	53.4	737	71.2	983	89	1231	99
D64.../40/203			203	12.1	60.9	737	81.2	983	101.5	1232	113
D64.../40/254			254	9.7	76.2	739	101.6	986	127	1227	142
D64.../40/305			305	8	91.5	732	122	976	152.5	1226	171
D64.../50/064	50 (10.5 x 4.1)	25	64	80.2	19.2	1540	25.6	2053	32	2566	37
D64.../50/076			76	66.9	22.8	1525	30.4	2034	38	2544	45
D64.../50/089			89	56.6	26.7	1511	35.6	2015	44.5	2519	53
D64.../50/102			102	49.3	30.6	1509	40.8	2011	51	2517	62
D64.../50/115			115	43.5	34.5	1501	46	2001	57.5	2501	70
D64.../50/127			127	39.3	38.1	1497	50.8	1996	63.5	2494	78
D64.../50/139			139	35.8	41.7	1493	55.6	1990	69.5	2489	85
D64.../50/152			152	32.8	45.6	1496	60.8	1994	89	2490	94
D64.../50/178			178	27.8	53.4	1485	71.2	1979	76	2474	110
D64.../50/203			203	24.2	60.9	1474	81.2	1965	101.5	2457	126
D64.../50/254			254	19.2	76.2	1463	101.6	1951	127	2444	159
D64.../50/305			305	16	91.5	1464	122	1952	152.5	2446	192

Spring Temperature Range:

محدوده دمای فنر:

Temperature Range / محدوده دما	Spring / فنر
-30°C ~ 150°C	D64J...
-30°C ~ 120°C	D64...

- Up to 250°C should be considered an average loss of 1% on springs rate for every 40°C.

- در صورتی که دما تا ۲۵۰ درجه سانتی گراد باشد به نسبت هر ۴۰ درجه می بایست افت یک درصدی از ضریب فنر در نظر گرفته شود.

HIGH PERFORMANCE COMPRESSION SPRING

Rectangular Wire-Green Color

DIN/ISO 10243

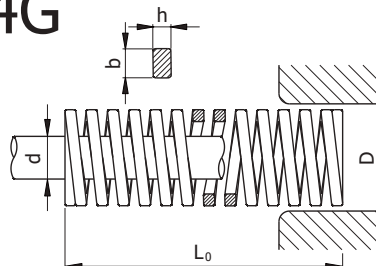
فنر

مقطع مفتول فنر مستطیل - رنگ سبز

Green
سبز



D64JG
D64G



کد سفارش Ordering Code	D d (b x h)		L ₀	D64 (Rate) ضربه فنر ±10%	D64J (Rate) ضربه فنر ±10%	A 25% دوام 3.000.000 ضربه		B 30% دوام 1.500.000 ضربه		C 40%Max. defl بیشترین تغییر طول مجاز دوام 200.000 ضربه		D Approx تغییر طول تقریبی تا بسته شدن					
	mm	mm		mm	N/mm	N/mm	mm	N		mm	N		mm				
								D64	D64J		D64	D64J	D64	D64J	D64	D64	D64
D64.../10/025	10	5	25	10	12	6.3	63	75	90	7.5	75	10	100	120	10.5	13	130
D64.../10/032			32	8.5	9.4	8	68			9.6	82	12.8	109		13.4	16	136
D64.../10/038			38	6.8	7.9	9.5	65			11.4	78	15.2	103		16	20	136
D64.../10/044			44	6	6.8	11	66			13.2	79	17.6	106		18.5	24	144
D64.../10/051			51	5	5.9	12.8	64			15.3	77	20.4	102		21.4	27	135
D64.../10/064			64	4.3	4.7	16	69			19.2	83	25.6	110		26.9	35	151
D64.../10/076			76	3.2	3.9	19	61			22.8	73	30.4	97		31.9	39	125
D64JG/10/089			89	-	3.4	22.3	-			26.7	-	35.6	-		37.4	-	-
D64JG/10/102	102	-	2.9	25.5	-	30.6	-	40.8	-	42.8	-	-					
D64.../10/305	305	1.1	1	76.3	84	91.5	101	122	134	128.1	154	169					
D64.../13/025	12.5	6.3	25	17.9	24	6.3	113	150	180	7.5	134	10	179	240	10.5	13	233
D64.../13/032			32	16.4	18.8	8	131			9.6	157	12.8	210		13.4	17	279
D64.../13/038			38	13.6	15.8	9.5	129			11.4	155	15.2	207		16	21	286
D64.../13/044			44	12.1	13.6	11	133			13.2	160	17.6	213		18.5	26	315
D64.../13/051			51	11.4	11.8	12.8	146			15.3	174	20.4	233		21.4	29	331
D64.../13/064			64	9.3	9.4	16	149			19.2	179	25.6	238		26.9	37	344
D64.../13/076			76	7.1	7.9	19	135			22.8	162	30.4	216		31.9	42	298
D64.../13/089			89	5.4	6.7	22.3	120			26.7	144	35.6	192		37.4	50	270
D64.../13/102	102	4.6	5.9	25.5	117	30.6	141	40.8	188	42.8	58	267					
D64JG/13/115	115	-	5.2	28.8	-	34.5	-	46	-	48.3	-	-					
D64.../13/305	305	1.4	2	76.3	107	91.5	128	122	171	128.1	162	227					
D64.../16/025	16	8	25	23.4	30	6.3	147	188	225	7.5	176	10	234	300	10.5	13	304
D64.../16/032			32	22.9	23.4	8	183			9.6	220	12.8	293		13.4	17	389
D64.../16/038			38	19.3	19.7	9.5	183			11.4	220	15.2	293		16	20	386
D64.../16/044			44	17.1	17	11	188			13.2	226	17.6	301		18.5	25	428
D64.../16/051			51	15.7	14.7	12.8	201			15.3	240	20.4	320		21.4	27	424
D64.../16/064			64	10.7	11.7	16	171			19.2	205	25.6	274		26.9	36	385
D64.../16/076			76	10	9.9	19	190			22.8	228	30.4	304		31.9	43	430
D64.../16/089			89	8.6	8.4	22.3	192			26.7	230	35.6	306		37.4	52	447
D64.../16/102	102	7.8	7.4	25.5	199	30.6	239	40.8	318	42.8	58	452					
D64JG/16/115	115	-	6.5	28.8	-	34.5	-	46	-	48.3	-	-					
D64JG/16/127	127	-	5.9	31.8	-	38.1	-	50.8	-	53.3	-	-					
D64.../16/305	305	2.5	2.5	76.3	191	91.5	229	122	305	128.1	166	415					

HIGH PERFORMANCE COMPRESSION SPRING

Rectangular Wire-Green Color

DIN/ISO 10243

فنر

مقطع مفتول فنر مستطیل - رنگ سبز

کد سفارش Ordering Code	D d (b x h)		L ₀	D64 (Rate) ضریب فنر ±10%	D64J (Rate) ضریب فنر ±10%	A 25% دوام 3.000.000 ضرب		B 30% دوام 1.500.000 ضرب		C 40%Max. defl بیشترین تغییر طول مجاز دوام 200.000 ضرب		D Approx تغییر طول تقریبی تا بسته شدن					
	mm	mm		mm	N/mm	N/mm	mm	N		mm	N		mm	N		mm	
			D64					D64J	D64		D64J	D64		D64J	D64	D64J	
D64.../20/025	20	10	25	55.8	60	6.3	325	375	7.5	419	450	10	558	600	10.5	13	725
D64.../20/032			32	45	46.9	8	360		9.6	432		12.8	576		13.4	17	765
D64.../20/038			38	33.3	39.5	9.5	316		11.4	380		15.2	506		16	20	666
D64.../20/044			44	30	34.1	11	330		13.2	396		17.6	528		18.5	24	720
D64.../20/051			51	24.5	29.4	12.8	314		15.3	375		20.4	500		21.4	27	662
D64.../20/064			64	20	23.4	16	320		19.2	384		25.6	512		26.9	35	700
D64.../20/076			76	16	19.7	19	304		22.8	365		30.4	486		31.9	40	640
D64.../20/089			89	14	16.9	22.3	312		26.7	374		35.6	498		37.4	49	686
D64.../20/102			102	12	14.7	25.5	306		30.6	367		40.8	490		42.8	55	660
D64.../20/115			115	10.9	13	28.8	314		34.5	376		46	501		48.3	62	675
D64.../20/127			127	9.5	11.8	31.8	302		38.1	362		50.8	483		53.3	71	676
D64.../20/139			139	8.4	10.8	34.8	394		41.7	350		55.6	467		58.4	76	638
D64.../20/152			152	7.5	9.9	38	385		45.6	342		60.8	456		63.8	81	608
D64JG/20/178			178	-	8.4	44.5	-		53.4	-		71.2	-		74.8	-	-
D64JG/20/203			203	-	7.4	50.8	-		60.9	-		81.2	-		85.3	-	-
D64.../20/305			305	4	4.9	76.3	305		91.5	366		122	448		128.1	168	672
D64.../25/025	25	12.5	25	100	90	6.3	630	563	7.5	750	675	10	1000	900	10.5	12	1200
D64.../25/032			32	80.3	70.3	8	642		9.6	771		12.8	1028		13.4	16	1285
D64.../25/038			38	62	59.2	9.5	589		11.4	707		15.2	942		16	19	1178
D64.../25/044			44	52.9	51.1	11	582		13.2	698		17.6	931		18.5	22	1164
D64.../25/051			51	44	44.1	12.8	563		15.3	673		20.4	898		21.4	25	1100
D64.../25/064			64	35.2	35.2	16	563		19.2	676		25.6	901		26.9	34	1197
D64.../25/076			76	28	29.6	19	532		22.8	638		30.4	851		31.9	38	1064
D64.../25/089			89	24	25.3	22.3	535		26.7	641		35.6	854		37.4	48	1152
D64.../25/102			102	21.1	22.1	25.5	538		30.6	646		40.8	861		42.8	54	1139
D64.../25/115			115	18.7	19.6	28.8	539		34.5	645		46	860		48.3	61	1141
D64.../25/127			127	16.7	17.7	31.8	531		38.1	636		50.8	848		53.3	69	1152
D64.../25/139			139	15.3	16.2	34.8	536		41.7	638		55.6	851		58.4	75	1148
D64.../25/152			152	14	14.8	38	532		45.6	638		60.8	851		63.8	81	1134
D64.../25/178			178	12.5	12.6	44.5	556		53.4	668		71.2	890		74.8	96	1200
D64.../25/203			203	10.4	11.1	50.8	528		60.9	633		81.2	844		85.3	110	1144
D64JG/25/229			229	-	9.8	57.3	-		68.7	-		91.6	-		96.2	-	-
D64.../25/305	305	7	7.4	76.3	534	91.5	641	122	854	128.1	168	1176					
D64.../32/038	32	16	38	94	92.1	9.5	893	875	11.4	1072	1050	15.2	1429	1400	16	18	1692
D64.../32/044			44	79.5	79.5	11	875		13.2	1049		17.6	1399		18.5	22	1749
D64.../32/051			51	67	68.6	12.8	858		15.3	1025		20.4	1367		21.4	25	1675
D64.../32/064			64	53	54.7	16	848		19.2	1018		25.6	1357		26.9	34	1802
D64.../32/076			76	44	46.1	19	836		22.8	1003		30.4	1338		31.9	40	1760
D64.../32/089			89	37.2	39.3	22.3	830		26.7	993		35.6	1324		37.4	48	1786
D64.../32/102			102	32	34.3	25.5	816		30.6	979		40.8	1306		42.8	55	1760
D64.../32/115			115	29	30.4	28.8	835		34.5	1001		46	1334		48.3	63	1827
D64.../32/127			127	25	27.6	31.8	795		38.1	953		50.8	1270		53.3	69	1725
D64.../32/139			139	23	25.2	34.8	805		41.7	959		55.6	1279		58.4	77	1771
D64.../32/152			152	21.5	23	38	817		45.6	980		60.8	1307		63.8	81	1742
D64.../32/178			178	18.2	19.7	44.5	810		53.4	972		71.2	1296		74.8	95	1729
D64.../32/203			203	15.8	17.2	50.8	803		60.9	962		81.2	1283		85.3	112	1770
D64JG/32/229			229	15.3	15.3	57.3	-		68.7	-		91.6	-		96.2	-	-
D64.../32/254			254	12.5	13.8	63.5	794		76.2	953		101.6	1270		106.7	143	1788
D64.../32/305			305	10.3	11.5	76.3	786		91.5	942		122	1257		128.1	175	1803
D64.../40/051	40	20	51	92	98	12.8	1178	1250	15.3	1408	1500	20.4	1877	2000	21.4	25	2300
D64.../40/064			64	73	78.1	16	1168		19.2	1402		25.6	1869		26.9	33	2409
D64.../40/076			76	63	65.8	19	1197		22.8	1436		30.4	1915		31.9	39	2457
D64.../40/089			89	51	56.2	22.3	1137		26.7	1362		35.6	1816		37.4	47	2397
D64.../40/102			102	43	49	25.5	1097		30.6	1316		40.8	1754	42.8	54	2322	

HIGH PERFORMANCE COMPRESSION SPRING

Rectangular Wire-Green Color

DIN/ISO 10243

فنر

مقطع مفتول فنر مستطیل - رنگ سبز

کد سفارش Ordering Code	D (b x h)	d	L ₀	D64 (Rate) ضریب فنر ±10%	D64J (Rate) ضریب فنر ±10%	A 25% دوام 3.000.000 ضرب		B 30% دوام 1.500.000 ضرب		C 40%Max. defl بیشترین تغییر طول مجاز دوام 200.000 ضرب		D Approx تغییر طول تقریبی تا بسته شدن				
						N		N		N		mm		N		
	mm	mm	mm	N/mm	N/mm	mm	D64	D64J	mm	D64	D64J	mm	D64	D64J	D64	D64
D64.../40/115	40	20	115	39.6	43.5	28.8	1140		34.5	1366		46	1822		2416	
D64.../40/127				127	37	39.4	31.8	1177		38.1	1410		50.8	1880		2442
D64.../40/139				139	32	36	34.8	1120		41.7	1334		55.6	1779		2432
D64.../40/152				152	28	32.9	38	1064		45.6	1277		60.8	1702		2268
D64.../40/178				178	25.2	28.1	44.5	1121		53.4	1346		71.2	1794		2344
D64.../40/203				203	22.7	24.6	50.8	1153		60.9	1382		81.2	1843		2497
D64JG/40/229				229	-	21.8	57.3	-		68.7	-		91.6	-		-
D64.../40/254				254	17	19.7	63.5	1080		76.2	1295		101.6	1727		2312
D64.../40/305		305	14.8	16.4	76.3	1129		91.5	1354		122	1806		2412		
D64.../50/064	50	25	64	156	156.3	16	2995		19.2	2995		25.6	3994		4836	
D64.../50/076				76	125	131.6	19	2850		22.8	2850		30.4	3800		4500
D64.../50/089				89	109	112.4	22.3	2910		26.7	2910		35.6	3880		4796
D64.../50/102				102	94	98	25.5	2876		30.6	2876		40.8	3835		4606
D64.../50/115				115	81	87	28.8	2795		34.5	2795		46	3726		4860
D64.../50/127				127	71	78.7	31.8	2705		38.1	2705		50.8	3607		4544
D64.../50/139				139	66.5	71.9	34.8	2773		41.7	2773		55.6	3697		4655
D64.../50/152				152	60	65.8	38	2736		45.6	2736		60.8	3648		4620
D64.../50/178		178	52	56.2	44.5	2777		53.4	2777		71.2	3702		4888		
D64.../50/203		203	44	49.3	50.8	2235		60.9	2680		81.2	3573		4620		
D64.../50/229		229	38.2	43.7	57.3	2189		68.7	2624		91.6	3499		4813		
D64.../50/254		254	35	39.4	63.5	2223		76.2	2667		101.6	3556		4795		
D64.../50/305		305	28.5	32.8	76.3	2175		91.5	2608		122	3477		4788		
D64.../63/076	63	38	76	189	197.4	19	3591		22.8	4309		30.4	5746		7182	
D64.../63/089				89	158	168.5	22.3	3523		26.7	4219		35.6	5625		7110
D64.../63/102				102	131	147.1	25.5	3341		30.6	4009		40.8	5345		6812
D64.../63/115				115	116	130.4	28.8	3341		34.5	4002		46	5336		6960
D64.../63/127				127	103	118.1	31.8	3275		38.1	3924		50.8	5232		6489
D64.../63/152				152	84.3	98.7	38	3203		45.6	3844		60.8	5125		6575
D64.../63/178				178	71.5	84.3	44.5	3182		53.4	3818		71.2	5091		6364
D64.../63/203				203	61.7	73.9	50.8	3134		60.9	3758		81.2	5010		6664
D64JG/63/229		229	-	65.5	57.3	-		68.7	-		91.6	-		-		
D64.../63/254		254	47	59.1	63.5	2985		76.2	3581		101.6	4775		6439		
D64.../63/305		305	38.2	49.2	76.3	2915		91.5	3459		122	4660		6227		

HIGH PERFORMANCE COMPRESSION SPRING

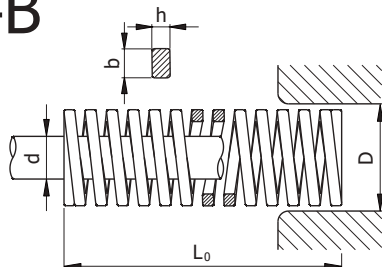
Rectangular Wire-Blue Color

DIN/ISO 10243

فنر

مقطع مفتول فنر مستطیل - رنگ آبی

D64JB
D64B



Blue
آبی



کد سفارش Ordering Code	D d (b x h)		L ₀	D64 (Rate) ضرب فنر ±10%		D64J (Rate) ضرب فنر ±10%		A 25% دوام 3.000.000 ضرب 		B 30% دوام 1.500.000 ضرب 		C 37.5%Max. def بیشترین تغییر طول مجاز دوام 200.000 ضرب 		D Approx تغییر طول تقریبی تا بسته شدن 				
	mm	mm		mm	N/mm	N/mm	mm	N		mm	N		mm	N		mm		N
								D64	D64J		D64	D64J		D64J	D64	D64J		
D64.../10/025	10	5	25	16	18.1	6.3	100	113	7.5	120	136	9.4	150	170	9.9	12	192	
D64.../10/032			32	13	14.2	8	104		9.6	125		12	156		12.6	14	182	
D64.../10/038			38	11.9	11.9	9.5	113		11.4	136		14.3	170		15	19	226	
D64.../10/044			44	10.3	10.3	11	113		13.2	136		16.5	170		17.4	23	237	
D64.../10/051			51	8.9	8.9	12.8	113		15.3	136		19.1	170		20.1	27	240	
D64.../10/064			64	7.5	7.1	16	120		19.2	144		24	180		25.3	31	233	
D64.../10/076			76	5.3	6	19	101		22.8	121		28.5	151		30	37	196	
D64JB/10/089			D64J (1.9 x 1.3)	89	-	5.1	22.3		-	26.7		-	33.4		-	35.2	-	-
D64JB/10/102	102	-	4.4	25.5	-	30.6	-	38.3	-	40.3	-	-						
D64.../10/305	305	1.6	1.5	76.3	122	91.5	146	114.4	183	120.5	137	219						
D64.../13/025	12.5	6.3	25	30	32	6.3	188	200	7.5	225	240	9.4	281	300	9.9	10	300	
D64.../13/032			32	24.8	25	8	198		9.6	238		12	298		12.6	13	322	
D64.../13/038			38	21.4	21.1	9.5	203		11.4	244		14.3	305		15	16	342	
D64.../13/044			44	18.5	18.2	11	204		13.2	244		16.5	305		17.4	20	370	
D64.../13/051			51	15.5	15.7	12.8	198		15.3	237		19.1	296		20.1	25	388	
D64.../13/064			64	12.1	12.5	16	194		19.2	232		24	290		25.3	28	339	
D64.../13/076			76	10.2	10.5	19	194		22.8	233		28.5	291		30	34	347	
D64.../13/089			D64J (2.8 x 1.3)	89	8.4	9	22.3		187	26.7		224	33.4		280	35.2	41	344
D64.../13/102	102	7.1	7.8	25.5	181	30.6	217	38.3	272	40.3	46	327						
D64JB/13/115	115	-	7	28.8	-	34.5	-	43.1	-	45.4	-	-						
D64.../13/305	305	2.1	2.6	76.3	160	91.5	192	114.4	240	120.5	128	269						
D64.../16/025	16	8	25	49.4	53.3	6.3	309	333	7.5	371	400	9.4	463	500	9.9	11	543	
D64.../16/032			32	37.1	41.7	8	297		9.6	356		12	445		12.6	15	557	
D64.../16/038			38	33.9	35.1	9.5	322		11.4	386		14.3	483		15	18	610	
D64.../16/044			44	30	30.3	11	330		13.2	396		16.5	495		17.4	22	660	
D64.../16/051			51	26.4	26.1	12.8	337		15.3	404		19.1	505		20.1	24	634	
D64.../16/064			64	20.5	20.8	16	328		19.2	394		24	492		25.3	32	656	
D64.../16/076			76	17.8	17.5	19	338		22.8	406		28.5	507		30	36	641	
D64.../16/089			89	15.2	15	22.3	338		26.7	406		33.4	507		35.2	43	654	
D64.../16/102	D64J (3.2 x 2.2)	102	13.5	13.1	25.5	344	30.6	413	38.3	516	40.3	47	635					
D64JB/16/115	115	-	11.6	28.8	-	34.5	-	48.1	-	45.4	-	-						
D64JB/16/127	127	-	10.5	31.8	-	38.1	-	47.6	-	50.2	-	-						
D64.../16/305	305	4.8	4.4	76.3	366	91.5	439	114.4	549	120.5	139	667						

HIGH PERFORMANCE COMPRESSION SPRING

Rectangular Wire-Blue Color

DIN/ISO 10243

فنر

مقطع مفتول فنر مستطیل - رنگ آبی

کد سفارش Ordering Code	D (b x h)	d	L ₀	D64 (Rate) ضرب فنر ±10%	D64J (Rate) ضرب فنر ±10%	A 25% دوام 3.000.000 ضرب		B 30% دوام 1.500.000 ضرب		C 37.5%Max. defl بیشترین تغییر طول مجاز دوام 200.000 ضرب		D Approx تغییر طول تقریبی تا بسته شدن						
										N		mm		N				
										D64	D64J	D64	D64J					
	mm	mm	mm	N/mm	N/mm	mm		mm		mm		D64J		mm				
D64.../20/025	20	10	25	98	85.3	6.3	613	533	7.5	735	640	9.4	919	800	9.9	10	980	
D64.../20/032			32	72.2	66.7	8	581		9.6	697		12	871		12.6	13	994	
D64.../20/038			38	56	56.1	9.5	532		11.4	638		14.3	798		15	16	896	
D64.../20/044			44	47.5	48.5	11	523		13.2	627		16.5	784		17.4	19	903	
D64.../20/051			51	41.7	41.8	12.8	532		15.3	638		19.1	798		20.1	21	876	
D64.../20/064			64	32.3	33.3	16	517		19.2	620		24	775		25.3	28	904	
D64.../20/076			76	25.1	28.1	19	477		22.8	572		28.5	715		30	33	828	
D64.../20/089			89	22	24	22.3	490		26.7	587		33.4	734		35.2	41	902	
D64.../20/102			102	19.8	20.9	25.5	505		30.6	606		38.3	757		40.3	48	950	
D64.../20/115			115	18.1	18.6	28.8	520		34.5	624		43.1	781		45.4	55	996	
D64.../20/127			127	16.6	16.8	31.8	527		38.1	632		47.6	791		50.2	61	1013	
D64.../20/139			D64J (4.2 x 2.5)	139	15.1	15.3	34.8		525	41.7		634	52.1		787	54.9	67	1012
D64.../20/152				152	13.2	14	38		502	45.6		600	57		752	60	74	997
D64JB/20/178				178	-	12	44.5		-	53.4		-	66.8		-	70.3	-	-
D64JB/20/203				203	-	10	50.8		-	60.9		-	76.1		-	80.2	-	-
D64.../20/305			305	6.1	7	76.3	465		91.5	558		114.4	698		120.5	146	891	
D64.../25/025	25	12.5	25	147	128	6.3	919	800	7.5	1103	960	9.4	1378	1200	9.9	11	1617	
D64.../25/032			32	118	100	8	944		9.6	1133		12	1416		12.6	13	1534	
D64.../25/038			38	93	84.2	9.5	884		11.4	1060		14.3	1325		15	18	1674	
D64.../25/044			44	80.8	72.7	11	889		13.2	1067		16.5	1333		17.4	21	1697	
D64.../25/051			51	68.6	62.7	12.8	875		15.3	1050		19.1	1312		20.1	23	1578	
D64.../25/064			64	53	50	16	848		19.2	1018		24	1272		25.3	30	1590	
D64.../25/076			76	43.2	42.1	19	821		22.8	985		28.5	1231		30	35	1512	
D64.../25/089			89	38.2	36	22.3	850		26.7	1020		33.4	1275		35.2	43	1643	
D64.../25/102			102	33	31.4	25.5	842		30.6	1010		38.3	1262		40.3	49	1617	
D64.../25/115			115	28	27.8	28.8	805		34.5	966		43.1	1208		45.4	56	1568	
D64.../25/127			D64J (5.8 x 2.9)	127	25.9	25.2	31.8		822	38.1		987	47.6		1233	50.2	60	1554
D64.../25/139				139	23.2	23	34.8		806	41.7		974	52.1		1209	54.9	65	1508
D64.../25/152				152	20.8	21.1	38		790	45.6		948	57		1186	60	71	1477
D64.../25/178				178	17.8	18	44.5		792	53.4		951	66.8		1188	70.3	85	1513
D64.../25/203			203	15.8	15.8	50.8	802		60.9	962		76.1	1203		80.2	96	1517	
D64JB/25/229			229	-	14	57.3	-		68.7	-		85.9	-		90.5	-	-	
D64.../25/305	305	10.2	10.5	76.3	778	91.5	933	114.4	1167	120.5	150	1530						
D64.../32/038	32	16	38	185	154.4	9.5	1758	1467	11.4	2109	1760	14.3	2636	2200	15	17	3145	
D64.../32/044			44	158	133.3	11	1738		13.2	2086		16.5	2607		17.4	19	3002	
D64.../32/051			51	134	115	12.8	1709		15.3	2050		19.1	2563		20.1	23	3082	
D64.../32/064			64	99	91.7	16	1584		19.2	1901		24	2376		25.3	30	2970	
D64.../32/076			76	80.5	77.2	19	1530		22.8	1835		28.5	2294		30	34	2737	
D64.../32/089			89	69.1	65.9	22.3	1537		26.7	1845		33.4	2306		35.2	42	2902	
D64.../32/102			102	58.8	57.5	25.5	1499		30.6	1799		38.3	2249		40.3	47	2764	
D64.../32/115			115	51.5	51.0	28.8	1481		34.5	1777		43.1	2221		45.4	55	2833	
D64.../32/127			127	44.8	46.2	31.8	1422		38.1	1707		47.6	2134		50.2	61	2733	
D64.../32/139			139	42.3	42.2	34.8	1470		41.7	1777		52.1	2205		54.9	68	2876	
D64.../32/152			152	37.8	38.6	38	1436		45.6	1724		57	2155		60	75	2835	
D64.../32/178			D64J (7.4 x 3.8)	178	32.5	33	44.5		1446	53.4		1736	66.8		2169	70.3	89	2893
D64.../32/203				203	28.9	28.9	50.8		1467	60.9		1760	76.1		2200	80.2	101	2919
D64JB/32/229				229	-	25.6	57.3		-	68.7		-	85.9		-	90.5	-	-
D64.../32/254				254	21.4	23.1	63.5		1359	76.2		1631	95.3		2038	100.3	124	2654
D64.../32/305			305	18.3	19.2	76.3	1395		91.5	1674		114.4	2093		120.5	150	2745	
D64.../40/051	40	20	51	181.6	156.9	12.8	2315	2000	15.3	2778	2400	19.1	3473	3000	15	21	3814	
D64.../40/064			64	140	125	16	2240		19.2	2688		24	3360		17.4	28	3920	
D64.../40/076			76	108	105.3	19	2052		22.8	2462		28.5	3078		20.1	33	3564	
D64.../40/089			89	90.7	89.9	22.3	2018		26.7	2422		33.4	3027		25.3	41	3719	
D64.../40/102	D64J (8.7 x 4.8)	102	81	78.4	25.5	2066	30.6	2479	38.3	3098	30	45	3645					

HIGH PERFORMANCE COMPRESSION SPRING

Rectangular Wire-Blue Color

DIN/ISO 10243

فنر

مقطع مفتول فنر مستطیل - رنگ آبی

کد سفارش Ordering Code	D (b x h)	d	L ₀	D64 (Rate) ضرب فنر ±10%		D64J (Rate) ضرب فنر ±10%		A 25% دوام 3.000.000 ضرب 		B 30% دوام 1.500.000 ضرب 		C 37.5%Max. defl بیشترین تغییر طول ممجاز دوام 200.000 ضرب 		D Dapprox تغییر طول تقریبی تا بسته شدن 						
				mm	mm	mm	N/mm	N/mm	mm	N		mm	N		mm	N		mm		N
										D64	D64J		D64	D64J		D64	D64J	D64J	D64	
D64.../40/115	40	20	115	71.8	69.6	28.8	2064	34.5	2477	43.1	3096	45.4	52	3734						
D64.../40/127			127	62.7	63	31.8	1991	38.1	2389	47.6	2986	52.2	59	3699						
D64.../40/139			139	57.5	57.6	34.8	1998	42	2415	52.1	2997	54.9	66	3795						
D64.../40/152			152	51.6	52.6	38	1961	45.6	2353	57	2941	60	71	3664						
D64.../40/178			178	44.1	44.9	44.5	1962	53.4	2355	66.8	2944	70.3	83	3660						
D64.../40/203			203	36.7	39.4	50.8	1863	60.9	2235	76.1	2794	80.2	94	3450						
D64JB/40/229			229	-	34.9	57.3	-	68.7	-	85.9	-	90.5	-	-	-					
D64.../40/254			254	30.1	31.5	63.5	1911	76.2	2294	95.3	2867	100.3	114	3431						
D64.../40/305	50	25	305	24.6	26.2	76.3	1876	91.5	2251	114.4	2814	120.5	148	3641						
D64.../50/064			64	209	208.3	16	3344	19.2	4013	24	5016	25.3	30	6270						
D64.../50/076			76	168	175.4	19	3192	22.8	3830	28.5	4788	30	36	6048						
D64.../50/089			89	140	149.8	22.3	3115	26.7	3738	33.4	4673	35.2	43	6020						
D64.../50/102			102	119	130.7	25.5	3035	30.6	3641	38.3	4552	40.3	48	5712						
D64.../50/115			115	106	115.9	28.8	3048	34.5	3657	43.1	4571	45.4	55	5830						
D64.../50/127			127	97	105	31.8	3080	38.1	3696	47.6	4620	50.2	63	6111						
D64.../50/139			139	87	95.9	34.8	3023	42	3654	52.1	4535	54.9	66	5742						
D64.../50/152	D64J (12 x 5.8)	38	152	80	87.7	38	3040	45.6	3648	57	4560	60	72	5760						
D64.../50/178			178	69.5	74.9	44.5	3093	53.4	3711	66.8	4639	70.3	85	5908						
D64.../50/203			203	59.8	65.7	50.8	3035	60.9	3642	76.1	4552	80.2	95	5681						
D64.../50/229			229	50.9	58.2	57.3	2914	68.7	3497	85.9	4371	90.5	114	5803						
D64.../50/254			254	43.9	52.5	63.5	2788	76.2	3345	95.3	4118	100.3	125	5488						
D64.../50/305			305	38.6	43.7	76.3	2943	91.5	3532	114.4	4415	120.5	150	5790						
D64.../63/076			63	38	76	312	197.4	19	5928	22.8	7114	28.5	8892	30	30	9360				
D64.../63/089					89	260	168.5	22.3	5785	26.7	6942	33.4	8678	35.2	38	9880				
D64.../63/102	102	221			147.1	25.5	5636	30.6	6763	38.3	8453	40.3	43	9503						
D64.../63/115	115	187			130.4	28.8	5376	34.5	6452	43.1	8064	45.4	50	9350						
D64.../63/127	127	168			118.1	31.8	5334	38.1	6401	47.6	8001	50.2	52	8736						
D64.../63/152	152	136			98.7	38	5168	45.6	6202	57	7752	60	67	9112						
D64.../63/178	178	114			84.3	44.5	5073	53.4	6088	66.8	7610	70.3	78	8892						
D64.../63/203	203	100			73.9	50.8	5075	60.9	6090	76.1	7613	80.2	88	8800						
D64JB/63/229	D64J (12 x 9.1)	229	-	65.5	57.3	-	68.7	-	85.9	-	90.5	-	-	-						
D64.../63/254		254	78.4	59.1	63.5	4978	76.2	5974	95.3	7468	100.3	115	9016							
D64.../63/305		305	64.7	49.2	76.3	4933	91.5	5920	114.4	7400	120.5	134	8670							

High Performance Compression Spring

Rectangular Wire-Red Color

DIN/ISO 10243

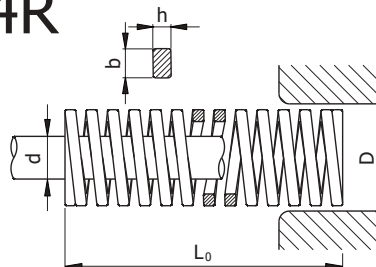
فنر

مقطع مفتول فنر مستطیل - رنگ قرمز

Red
قرمز



D64JR
D64R



کد سفارش Ordering Code	D d (b x h)		L ₀	D64 (Rate) فنر ±10%		D64J (Rate) فنر ±10%		A 20% دوام 3.000.000 			B 25% دوام 1.500.000 			C 30%Max. defl بیشترین تغییر طول مجاز دوام 200.000 			D Approx تغییر طول تقریبی تا بسته شدن 		
	mm	mm		mm	N/mm	N/mm	mm	N		mm	N		mm	N		mm		N	
								D64	D64J		D64	D64J		D64	D64J	D64	D64J		
D64.../10/025	10	5	25	22.1	26.7	5	111	133	6.3	139	167	7.5	166	200	8	9	199		
D64.../10/032			32	17.5	20.8	6.4	112		8	140		9.6	168		10.2	12	210		
D64.../10/038			38	17.1	17.5	7.6	130		9.5	162		11.4	195		12.2	15	257		
D64.../10/044			44	15	15.2	8.8	132		11	165		13.2	198		14.1	17	255		
D64.../10/051			51	12.8	13.1	10.2	131		12.8	164		15.3	196		16.3	21	269		
D64.../10/064			64	10.7	10.4	12.8	137		16	171		19.2	205		20.5	26	278		
D64.../10/076			76	7.5	8.8	15.2	114		19	143		22.8	171		24.3	31	233		
D64JR/10/089			D64J (2 x 1.5)	89	-	7.5	17.8		-	22.3		-	26.7		-	28.5	-	-	
D64JR/10/102				102	-	6.5	20.4		-	25.5		-	30.6		-	32.6	-	-	
D64.../10/305				305	2.1	2.2	61		128	76.3		160	91.5		192	97.6	122	256	
D64.../13/025	12.5	6.3	25	42.1	44	5	211	220	6.3	265	275	7.5	316	330	8	9	379		
D64.../13/032			32	33.2	34.4	6.4	212		8	266		9.6	319		10.2	13	432		
D64.../13/038			38	29.3	28.9	7.6	223		9.5	278		11.4	334		12.2	15	440		
D64.../13/044			44	24.6	25	8.8	216		11	271		13.2	325		14.1	18	443		
D64.../13/051			51	19.6	21.6	10.2	200		12.8	251		15.3	300		16.3	20	392		
D64.../13/064			64	15	17.2	12.8	192		16	240		19.2	288		20.5	26	390		
D64.../13/076			76	13.2	14.5	15.2	201		19	251		22.8	301		24.3	30	396		
D64.../13/089			D64J (2.3 x 2.1)	89	11.4	12.4	17.8		203	22.3		254	26.7		304	28.5	35	399	
D64.../13/102				102	9.4	10.8	20.4		192	25.5		249	30.6		287	32.6	41	385	
D64JR/13/115				115	-	9.6	23		-	28.8		-	34.5		-	36.8	-	-	
D64.../13/305	305	2.8	3.6	61	171	76.3	214	91.5	256	97.6	123	344							
D64.../16/025	16	8	25	75.7	80	5	379	400	6.3	477	500	7.5	568	600	8	9	681		
D64.../16/032			32	52.8	62.5	6.4	338		8	422		9.6	507		10.2	14	739		
D64.../16/038			38	48.5	52.6	7.6	369		9.5	461		11.4	553		12.2	17	825		
D64.../16/044			44	42.8	45.5	8.8	377		11	471		13.2	565		14.1	20	856		
D64.../16/051			51	37.1	39.2	10.2	378		12.8	475		15.3	568		16.3	21	779		
D64.../16/064			64	30.3	31.3	12.8	388		16	485		19.2	582		20.5	28	848		
D64.../16/076			76	25.8	26.3	15.2	391		19	490		22.8	586		24.3	33	848		
D64.../16/089			89	21.7	22.5	17.8	386		22.3	484		26.7	579		28.5	39	846		
D64.../16/102			D64J (3.2 x 2.5)	102	19.3	19.6	20.4		394	25.5		492	30.6		561	32.6	44	849	
D64JR/16/115				115	-	17.4	23		-	28.8		-	34.5		-	36.8	-	-	
D64JR/16/127	127	-		15.7	25.4	-	31.8	-	38.1	-	40.6	-	-						
D64.../16/305	305	7.1	6.6	61	433	76.3	542	91.5	650	97.6	127	902							

HIGH PERFORMANCE COMPRESSION SPRING

Rectangular Wire-Red Color

DIN/ISO 10243

فنر

مقطع مفتول فنر مستطیل - رنگ قرمز

کد سفارش Ordering Code	D (b x h)	d	L ₀	D64 (Rate) ضرب فنر ±10%		D64J (Rate) ضرب فنر ±10%		A 20% دوام 3.000.000 ضرب		B 25% دوام 1.500.000 ضرب		C 30%Max. defl بیشترین تغییر طول مجاز دوام 200.000 ضرب		D Approx تغییر طول تقریبی تا بسته شدن				
	mm	mm	mm	N/mm	N/mm	mm	N	D64	D64J	mm	N	D64	D64J	mm	N	D64	D64	mm
D64.../20/025	20	10	25	216	160	5	1080	800	1000	6.3	1361	1200	7.5	1620	1200	8	9	1944
D64.../20/032			32	168	125	6.4	1075			8	1344		9.6	1613		10.2	11	1848
D64.../20/038			38	129	105.3	7.6	980			9.5	1226		11.4	1471		12.2	13	1677
D64.../20/044			44	112	90.9	8.8	986			11	1232		13.2	1478		14.1	16	1792
D64.../20/051			51	94	78.4	10.2	959			12.8	1203		15.3	1438		16.3	20	1880
D64.../20/064			64	72.1	62.5	12.8	923			16	1154		19.2	1384		20.5	25	1803
D64.../20/076			76	59.7	52.6	15.2	907			19	1134		22.8	1361		24.3	29	1731
D64.../20/089			89	50.5	44.9	17.8	899			22.3	1126		26.7	1348		28.5	35	1768
D64.../20/102			102	44.2	39.2	20.4	902			25.5	1127		30.6	1353		32.6	40	1768
D64.../20/115			115	38.4	34.8	23	883			28.8	1106		34.5	1325		36.8	47	1805
D64.../20/127			127	34.1	31.5	25.4	866			31.8	1084		38.1	1299		40.6	52	1773
D64.../20/139			139	31	28.8	27.8	862			34.8	1085		41.7	1293		44.5	57	1767
D64.../20/152			152	28.2	26.3	30.4	857			38	1072		45.6	1286		48.6	62	1748
D64JR/20/178			178	-	22.5	35.6	-			44.5	-		53.4	-		57	-	-
D64JR/20/203			203	-	19.7	40.6	-			50.8	-		60.9	-		65	-	-
D64.../20/305			305	15	13.1	61	915			76.3	1145		91.5	1373		97.6	121	1815
D64.../25/025	25	12.5	25	375	266.7	5	1875	1333	1667	6.3	2363	2000	7.5	2813	2000	8	9	3375
D64.../25/032			32	297	208.3	6.4	1901			8	2376		9.6	2851		10.2	11	3267
D64.../25/038			38	219	175.4	7.6	1664			9.5	2081		11.4	2497		12.2	14	3066
D64.../25/044			44	187	151.5	8.8	1646			11	2057		13.2	2468		14.1	16	2992
D64.../25/051			51	156	130.7	10.2	1591			12.8	1997		15.3	2387		16.3	19	2964
D64.../25/064			64	123	104.2	12.8	1574			16	1968		19.2	2362		20.5	26	3198
D64.../25/076			76	99	87.7	15.2	1505			19	1881		22.8	2257		24.3	29	2871
D64.../25/089			89	84	74.9	17.8	1495			22.3	1873		26.7	2243		28.5	35	2940
D64.../25/102			102	73	65.4	20.4	1489			25.5	1862		30.6	2234		32.6	39	2847
D64.../25/115			115	65	58.0	23	1495			28.8	1872		34.5	2243		36.8	45	2925
D64.../25/127			127	57.7	52.5	25.4	1466			31.8	1835		38.1	2198		40.6	48	2770
D64.../25/139			139	52.7	48.0	27.8	1465			34.8	1845		41.7	2198		44.5	54	2846
D64.../25/152			152	47.8	43.9	30.4	1453			38	1816		45.6	2180		48.6	60	2868
D64.../25/178			178	41	37.5	35.6	1460			44.5	1825		53.4	2189		57	67	2747
D64.../25/203			203	35.8	32.8	40.6	1453			50.8	1819		60.9	2180		65	80	2864
D64JR/25/229			229	-	29.1	45.8	-			57.3	-		68.7	-		73.3	-	-
D64.../25/305	305	22.9	21.9	61	1397	76.3	1747	91.5	2095	97.6	119	2725						
D64.../32/038	32	16	38	388	298.2	7.6	2949	2267	2833	9.5	3686	3400	11.4	4423	3400	12.2	13	5044
D64.../32/044			44	324	257.6	8.8	2851			11	3564		13.2	4277		14.1	16	5184
D64.../32/051			51	272	222.2	10.2	2774			12.8	3482		15.3	4162		16.3	18	4896
D64.../32/064			64	212	177.1	12.8	2714			16	3392		19.2	4070		20.5	23	4876
D64.../32/076			76	172	149.1	15.2	2614			19	3268		22.8	3922		24.3	27	4644
D64.../32/089			89	141	127.3	17.8	2510			22.3	3144		26.7	3765		28.5	33	4653
D64.../32/102			102	122	111.1	20.4	2489			25.5	3111		30.6	3733		32.6	39	4758
D64.../32/115			115	107	98.6	23	2461			28.8	3082		34.5	3692		36.8	43	4601
D64.../32/127			127	93	89.2	25.4	2362			31.8	2957		38.1	3543		40.6	47	4371
D64.../32/139			139	86	81.5	27.8	2391			34.8	3010		41.7	3586		44.5	51	4386
D64.../32/152			152	78	74.6	30.4	2371			38	2964		45.6	3557		48.6	55	4290
D64.../32/178			178	67.2	63.7	35.6	2392			44.5	2990		53.4	3588		57.0	69	4637
D64.../32/203			203	59.1	55.8	40.6	2399			50.8	3002		60.9	3599		65.0	81	4787
D64JR/32/229			229	-	49.5	45.8	-			57.3	-		68.7	-		73.3	-	-
D64.../32/254			254	46.4	44.6	50.8	2357			63.5	2946		76.2	3536		81.3	99	4594
D64.../32/305			305	38	37.2	61	2318			76.3	2899		91.5	3477		97.6	119	4522
D64.../40/051	40	20	51	350	326.8	10.2	3570	3333	4167	12.8	4480	5000	15.3	5355	5000	16.3	18	6300
D64.../40/064			64	269	260.4	12.8	3443			16	4304		19.2	5165		20.5	25	6725
D64.../40/076			76	219	219.3	15.2	3329			19	4161		22.8	4993		24.3	30	6570
D64.../40/089			89	190	187.3	17.8	3382			22.3	4237		26.7	5073		28.5	36	6840
D64.../40/102			102	163	163.4	20.4	3325			25.5	4157		30.6	4988		32.6	41	6683

High Performance Compression Spring

Rectangular Wire-Red Color

DIN/ISO 10243

فنر

مقطع مفتول فنر مستطیل - رنگ قرمز

کد سفارش Ordering Code	D (b x h)	d	L ₀	D64 (Rate) ضریب فنر ±10%	D64J (Rate) ضریب فنر ±10%	A 20% دوام 3.000.000 ضرب		B 25% دوام 1.500.000 ضرب		C 30%Max. defl بیشترین تغییر طول مجاز دوام 200.000 ضرب		D Approx تغییر طول تقریبی تا بسته شدن			
										N		mm		N	
										D64	D64J	D64	D64J		
	mm	mm	mm	N/mm	N/mm	mm		mm		mm		D64	D64J	D64	D64J
D64.../40/115	40	20	115	142	144.9	23	3266	28.8	4090	34.5	4899	36.8	47	6674	
D64.../40/127			127	128	131.2	25.4	3251	31.8	4070	38.1	4877	40.6	53	6784	
D64.../40/139			139	115	119.9	27.8	3197	34.8	4025	41.7	4796	44.5	56	6440	
D64.../40/152			152	105	109.6	30.4	3192	38	3990	45.6	4788	48.6	62	6510	
D64.../40/178			178	89	93.6	35.6	3168	44.5	3961	53.4	4753	57	70	6230	
D64.../40/203			203	77	82.1	40.6	3126	50.8	3912	60.9	4689	65	83	6391	
D64JR/40/229	D64J (8.7 x 6.3)		229	-	72.8	45.8	-	57.3	-	68.7	-	73.3	-	-	
D64.../40/254			254	61	65.6	50.8	3099	63.5	3874	76.2	4648	81.3	101	6161	
D64.../40/305			305	51	54.6	61	3111	76.3	3891	91.5	4667	97.6	127	6477	
D64.../50/064	50	25	64	413	390.6	12.8	5286	16	6608	19.2	7930	20.5	26	10738	
D64.../50/076			76	339	328.9	15.2	5153	19	6441	22.8	7729	24.3	29	9831	
D64.../50/089			89	288	280.9	17.8	5126	22.3	6422	26.7	7690	28.5	35	10080	
D64.../50/102			102	245	245.1	20.4	4998	25.5	6248	30.6	7497	32.6	41	10045	
D64.../50/115			115	215	217.4	23	4945	28.8	6192	34.5	7418	36.8	47	10105	
D64.../50/127			127	192	196.9	25.4	4877	31.8	6109	38.1	7315	40.6	55	10560	
D64.../50/139			139	168	179.9	27.8	4670	34.8	5880	41.7	7006	44.5	61	10248	
D64.../50/152			152	154	164.5	30.4	7682	38	5852	45.6	7022	48.6	66	10164	
D64.../50/178			178	134	140.4	35.6	4770	44.5	5963	53.4	7156	57	75	10050	
D64.../50/203			203	117	123.2	40.6	4750	50.8	5944	60.9	7125	65	87	10179	
D64JR/50/229	D64J (12.2 x 7.5)		229	-	109.2	45.8	-	57.3	-	68.7	-	73.3	-	-	
D64.../50/254			254	89	98.4	50.8	4521	63.5	5652	76.2	6782	81.3	108	9612	
D64.../50/305			305	73	82	61	4453	76.3	5570	91.5	6680	97.6	133	9709	
D64.../63/076	63	38	76	630	526.3	15.2	9576	19	11970	22.8	14364	24.3	24	15120	
D64.../63/089			89	485	449.4	17.8	8633	22.3	10815	26.7	12920	28.5	32	15520	
D64.../63/102			102	434	392.2	20.4	8854	25.5	11067	30.6	13280	32.6	36	15624	
D64.../63/115			115	484	347.8	23	8832	28.8	11059	34.5	13248	36.8	40	15360	
D64.../63/127			127	349	315	25.4	8865	31.8	11098	38.1	13297	40.6	44	15356	
D64.../63/152			152	276	263.2	30.4	8390	38	10488	45.6	12586	48.6	56	15456	
D64.../63/178			178	237	224.7	35.6	8437	44.5	10546	53.4	12656	57	65	15405	
D64.../63/203			203	210	197	40.6	8526	50.8	10668	60.9	12789	65	74	15540	
D64JR/63/229	D64J (12 x 11.5)		229	-	174.7	57.3	-	57.3	-	68.7	-	73.3	-	-	
D64.../63/254			254	165	157.5	50.8	8382	63.5	10477	76.2	12573	81.3	94	15510	
D64.../63/305			305	134	131.1	61	8174	76.3	10224	91.5	12261	97.6	115	15410	

HIGH PERFORMANCE COMPRESSION SPRING

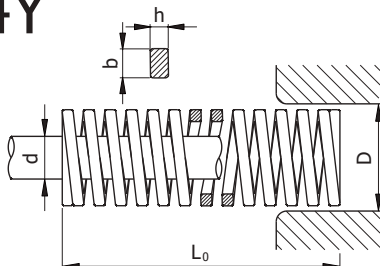
Rectangular Wire-Yellow Color

DIN/ISO 10243

فنر

مقطع مفتول فنر مستطیل - رنگ زرد

D64JY
D64Y



Yellow
زرد



کد سفارش Ordering Code	D d (b x h)		L ₀	D64 (Rate) ضرب فنر ±10%		D64J (Rate) ضرب فنر ±10%		A 17% دوام 3.000.000 			B 20% دوام 1.500.000 			C 25%Max. defl بیشترین تغییر طول مجاز دوام 200.000 			D Approx تغییر طول تقریبی تا بسته شدن 		
	mm	mm		mm	N/mm	N/mm	mm	N		mm	N		mm	N		mm		N	
								D64	D64J		D64	D64J		D64	D64J	D64	D64J		
D64.../10/025	10	5	25	36.8	36.8	4.3	156	156	5	184	184	6.3	230	230	6.8	9	331		
D64.../10/032			32	27.9	28.8	5.4	152		6.4	179		8	223		8.6	12	335		
D64.../10/038			38	23.7	24.2	6.5	153		7.6	180		9.5	225		10.3	14	332		
D64.../10/044			44	19.2	20.9	7.5	144		8.8	169		11	211		11.9	17	326		
D64.../10/051			51	16.5	18	8.7	143		10.2	168		12.8	210		13.8	19	314		
D64.../10/064			64	13.2	14.4	10.9	144		12.8	169		16	211		17.3	23	304		
D64.../10/076			76	10.9	12.1	12.9	141		15.2	166		19	207		20.5	30	327		
D64JY/10/089			D64J (1.8 x 1.9)	89	-	10.3	15.1		-	17.8		-	22.3		-	24	-	-	
D64JY/10/102	102	-		9	17.3	-	20.4	-	25.5	-	27.5	-	-						
D64.../10/305	305	2.6		3	51.9	135	61	159	76.3	198	82.4	117	304						
D64.../13/025	12.5	6.3	25	58.5	57.6	4.3	249	245	5	293	288	6.3	366	360	6.8	9	527		
D64.../13/032			32	43.9	45	5.4	239		6.4	281		8	351		8.6	12	527		
D64.../13/038			38	36	37.9	6.5	233		7.6	274		9.5	342		10.3	14	504		
D64.../13/044			44	30.3	32.7	7.5	227		8.8	267		11	333		11.9	18	545		
D64.../13/051			51	26.2	28.2	8.7	227		10.2	267		12.8	334		13.8	20	524		
D64.../13/064			64	21.2	22.5	10.9	231		12.8	271		16	339		17.3	27	572		
D64.../13/076			76	17.1	18.9	12.9	221		15.2	260		19	325		20.5	32	547		
D64.../13/089			89	14.5	16.2	15.1	219		17.8	258		22.3	323		24	38	551		
D64.../13/102	D64J (2.3 x 2.4)	102	12.5	14.1	17.3	216	20.4	255	25.5	319	27.5	41	513						
D64JY/13/115		115	-	12.5	19.6	-	23	-	28.8	-	31.1	-	-						
D64.../13/305		305	4.3	4.7	51.9	223	61	262	76.3	328	82.4	115	495						
D64.../16/025	16	8	25	118	112	4.3	502	476	5	590	560	6.3	738	700	6.8	10	1180		
D64.../16/032			32	89	87.5	5.4	484		6.4	570		8	712		8.6	12	1068		
D64.../16/038			38	72.1	73.7	6.5	466		7.6	548		9.5	685		10.3	14	1009		
D64.../16/044			44	60.9	63.6	7.5	456		8.8	536		11	670		11.9	17	1035		
D64.../16/051			51	52.3	54.9	8.7	453		10.2	533		12.8	667		13.8	19	994		
D64.../16/064			64	41.2	43.8	10.9	448		12.8	527		16	659		17.3	25	1030		
D64.../16/076			76	34.1	36.8	12.9	441		15.2	518		19	648		20.5	29	989		
D64.../16/089			89	29.5	31.5	15.1	446		17.8	525		22.3	656		24	36	1062		
D64.../16/102	D64J (3.2 x 3)	102	25.6	27.5	17.3	444	20.4	522	25.5	653	27.5	38	973						
D64JY/16/115		115	-	24.3	19.6	-	23	-	28.8	-	31.1	-	-						
D64JY/16/127		127	-	22	21.6	-	25.4	-	31.8	-	34.3	-	-						
D64.../16/305			305	8.4	9.2	51.9	436	61	512	76.3	641	82.4	120	1008					

HIGH PERFORMANCE COMPRESSION SPRING

Rectangular Wire-Yellow Color

DIN/ISO 10243

فنر

مقطع مفتول فنر مستطیل - رنگ زرد

کد سفارش Ordering Code	D (b x h)	d	L ₀	D64 (Rate) فنر ±10%		D64J (Rate) فنر ±10%		A 17% دوام 3.000.000 غروب 		B 20% دوام 1.500.000 غروب 		C 25%Max. defl بیشترین تغییر طول مجاز دوام 200.000 غروب 		D Approx تغییر طول تقریبی تا بسته شدن 			
				mm	mm	mm	N/mm	N/mm	mm	N	mm	N	mm	N	mm	N	
	mm	mm	mm	N/mm	N/mm	mm	D64	D64J	mm	D64	D64J	mm	D64	D64J	D64J	D64	D64
D64.../20/025	20	10	25	293	240	4.3	1245	1020	5	1465	1200	6.3	1831	1500	6.8	7	2051
D64.../20/032			32	224	187.5	5.4	1219		6.4	1434		8	1792		8.6	10	2240
D64.../20/038			38	177	157.9	6.5	1143		7.6	1345		9.5	1682		10.3	12	2124
D64.../20/044			44	149	136.4	7.5	1115		8.8	1311		11	1639		11.9	14	2086
D64.../20/051			51	128	117.6	8.7	1110		10.2	1306		12.8	1632		13.8	16	2048
D64.../20/064			64	99	93.8	10.9	1077		12.8	1267		16	1584		17.3	22	2178
D64.../20/076			76	81.7	78.9	12.9	1056		15.2	1242		19	1552		20.5	25	2043
D64.../20/089			89	69.5	67.4	15.1	1052		17.8	1237		22.3	1546		24	31	2155
D64.../20/102			102	60.6	58.8	17.3	1051		20.4	1236		25.5	1545		27.5	36	2182
D64.../20/115			115	53	52.2	19.6	1036		23	1219		28.8	1524		31.1	42	2226
D64.../20/127			127	47.5	47.2	21.6	1026		25.4	1207		31.8	1508		34.3	43	2043
D64.../20/139			139	43	43.2	23.6	1016		27.8	1204		34.8	1494		37.5	48	2064
D64.../20/152			152	39	39.5	25.8	1008		30.4	1186		38	1482		41	52	2028
D64JY/20/178			178	-	33.7	30.3	-		35.6	-		44.5	-		48.1	-	-
D64JY/20/203			203	-	29.6	34.5	-		40.6	-		50.8	-		54.8	-	-
D64.../20/305			305	21.2	19.7	51.9	1099		61	1293		76.3	1617		82.4	105	2226
D64.../25/025	25	12.5	25	459	-	4.3	1974	1700	5	2295	2000	6.3	2892	2500	-	7.3	3351
D64.../25/032			32	374.4	312.5	5.4	2037		6.4	2396		8	2995		8.6	11	4118
D64.../25/038			38	346	263.2	6.5	2235		7.6	2630		9.5	3287		10.3	13	4498
D64.../25/044			44	244	227.3	7.5	1825		8.8	2147		11	2684		11.9	16	3904
D64.../25/051			51	207.5	196.1	8.7	1799		10.2	2111		12.8	2646		13.8	18	3735
D64.../25/064			64	161	156.3	10.9	1752		12.8	2061		16	2576		17.3	23	3703
D64.../25/076			76	130.8	131.6	12.9	1690		15.2	1988		19	2485		20.5	26	3401
D64.../25/089			89	110.5	112.4	15.1	1672		17.8	1967		22.3	2459		24	31	3426
D64.../25/102			102	96.3	98	17.3	1670		20.4	1965		25.5	2456		27.5	36	3467
D64.../25/115			115	85.7	87	19.6	1675		23	1917		28.8	2464		31.1	41	3514
D64.../25/127			127	76.3	78.7	21.6	1647		25.4	1938		31.8	2423		34.3	47	3586
D64JY/25/139			139	-	71.9	23.6	-		27.8	-		34.8	-		37.5	-	-
D64.../25/152			152	63.5	65.8	25.8	1641		30.4	1930		38	2413		41	54	3429
D64.../25/178			178	53.9	56.2	30.3	1631		35.6	1919		44.5	2399		48.1	63	3396
D64.../25/203			203	47	49.3	34.5	1622		40.6	1908		50.8	2385		54.8	72	3384
D64JY/25/229			229	-	43.7	38.9	-		45.8	-		57.3	-		61.8	-	-
D64.../25/305	305	30.9	32.8	51.9	1602	61	1885	76.3	2356	82.4	113	3492					
D64.../32/038	32	16	38	528.2	421.1	6.5	3412	2720	7.6	4014	3200	9.5	5018	4000	10.3	12	6338
D64.../32/044			44	424.4	363.6	7.5	3175		8.8	3735		11	4668		11.9	15	6366
D64.../32/051			51	353	313.7	8.7	3061		10.2	3601		12.8	4501		13.8	17	6001
D64.../32/064			64	269.2	250	10.9	2929		12.8	3446		16	4307		17.3	22	5922
D64.../32/076			76	218.5	210.5	12.9	2823		15.2	3321		19	4152		20.5	25	5436
D64.../32/089			89	180.3	179.8	15.1	2728		17.8	3209		22.3	4012		24	33	5950
D64.../32/102			102	155	156.9	17.3	2688		20.4	3162		25.5	3953		27.5	36	5580
D64.../32/115			115	140	139.1	19.6	2737		23	3220		28.8	4025		31.1	42	5880
D64.../32/127			127	124	126	21.6	2677		25.4	3150		31.8	3937		34.3	46	5704
D64JY/32/139			139	-	115.1	23.6	-		27.8	-		34.8	-		37.5	-	-
D64.../32/152			152	102	105.3	25.8	2636		30.4	3101		38	3876		41	56	5712
D64.../32/178			178	88.2	89.9	30.3	3669		35.6	3140		44.5	3925		48.1	64	5645
D64.../32/203			203	76	78.8	34.5	2623		40.6	3086		50.8	3857		54.8	71	5396
D64JY/32/229			229	-	69.9	38.9	-		45.8	-		57.3	-		61.8	-	-
D64.../32/254			254	60.8	63	43.2	2625		50.8	3089		63.5	3861		68.6	90	5472
D64.../32/305			305	49	52.5	51.9	2541		61	2989		76.3	3736		82.4	103	5047
D64.../40/051	40	20	51	628	509.8	8.7	2445	4420	10.2	6406	5200	12.8	8007	6500	13.8	17	10676
D64.../40/064			64	487	406.3	10.9	5299		12.8	6234		16	7792		17.3	23	11201
D64.../40/076			76	379	342.1	12.9	4897		15.2	5761		19	7201		20.5	31	10233
D64.../40/089			89	321	292.1	15.1	4857		17.8	5714		22.3	7142		24	36	9951
D64.../40/102			102	281	254.9	17.3	4873		20.4	5732		25.5	7166		27.5	40	10116

HIGH PERFORMANCE COMPRESSION SPRING

Rectangular Wire-Yellow Color

DIN/ISO 10243

فنر

مقطع مفتول فنر مستطیل - رنگ زرد

کد سفارش Ordering Code	D (b x h)	d	L ₀	D64 (Rate) ضریب فنر ±10%	D64J (Rate) ضریب فنر ±10%	A 17% دوام 3.000.000 ضرب		B 20% دوام 1.500.000 ضرب		C 25%Max. defl بیشترین تغییر طول مجاز دوام 200.000 ضرب		D Approx تغییر طول تقریبی تا بسته شدن		
						mm	N		mm	N		mm	N	
							D64	D64J		D64	D64J		D64J	D64
D64.../40/115	40	20	115	245	226.1	19.6	4790	4420	23	5635	5200	28.8	7044	6500
D64.../40/127			127	221	204.7	21.6	4771		25.4	5613		31.1	7017	
D64.../40/139			139	202	187.1	23.6	4773		27.8	5615		34.3	7020	
D64.../40/152			152	168	171.1	25.8	4341		30.4	5107		37.5	6348	
D64.../40/178			178	148	146.1	30.3	4478		35.6	5268		41	6586	
D64.../40/203			203	132	128.1	34.5	4555		40.6	5359		48.1	6699	
D64JY/40/229			229	-	113.5	38.9	-		45.8	-		54.8	-	
D64.../40/254			254	107	102.4	43.2	4620		50.8	5436		61.8	6795	
D64.../40/305	50	25	305	87.8	85.2	51.9	4552	6800	61	5356	8000	76.3	6695	10000
D64.../50/064			64	709	625	10.9	7714		12.8	9075		17.3	11344	
D64.../50/076			76	572	526.3	12.9	7390		15.2	8694		20.5	10868	
D64.../50/089			89	475	449.4	15.1	7187		17.8	8455		24	10569	
D64.../50/102			102	405	392.2	17.3	7023		20.4	8262		27.5	10328	
D64.../50/115			115	352	347.8	19.6	6882		23	8096		31.1	10120	
D64.../50/127			127	316	315	21.6	6822		25.4	8026		34.3	10033	
D64.../50/139			139	289	287.8	23.6	6829		27.8	8092		37.5	10043	
D64.../50/152	63	38	152	239	263.2	25.8	6176	8000	30.4	7266	10000	41	9082	12000
D64.../50/178			178	216	224.7	30.3	6536		35.6	7689		48.1	9612	
D64.../50/203			203	187	197	34.5	6453		40.6	7592		54.8	9490	
D64JY/50/229			229	-	174.7	38.9	-		45.8	-		61.8	-	
D64.../50/254			254	153	157.5	43.2	6607		50.8	7772		68.6	9716	
D64.../50/305			305	127	131.1	51.9	6585		61	7747		82.4	9684	
D64.../63/076			76	842	842.1	12.9	10879	8000	15.2	12798	10000	18.6	15998	12000
D64.../63/089			89	726	719.1	15.1	10984		17.8	12923		21.8	16154	
D64.../63/102			102	656	627.5	17.3	11375		20.4	13382		24	16728	
D64.../63/115			115	534	556.5	19.6	10440		23	12282		27.5	15353	
D64.../63/127			127	480	503.9	21.6	10363		25.4	12192		31.1	15240	
D64.../63/152			152	396	421.1	25.8	10233		30.4	12038		34.3	15048	
D64.../63/178			178	335	359.6	30.3	10137		35.6	11926		41	14908	
D64.../63/203			203	297	315.3	34.5	10249		40.6	12058		48.1	15073	
D64JY/63/229	63	38	229	-	279.5	38.9	-	8000	45.8	-	10000	54.8	-	12000
D64.../63/254			254	235	252.0	43.2	10147		50.8	11938		61.8	14923	
D64.../63/305			305	194	209.8	51.9	10059		61	11834		68.6	14793	

HIGH PERFORMANCE COMPRESSION SPRING

Rectangular Wire-Brown/Silver Color

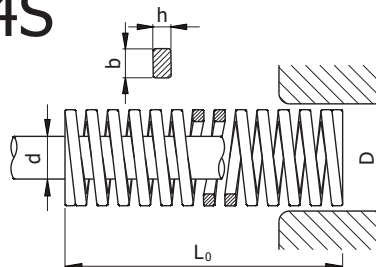
DIN/ISO 10243

فنر

مقطع مفتول فنر مستطیل - رنگ قهوه ای / نقره ای



D64W
D64S



کد سفارش Ordering Code	D (b x h)	d	L ₀	R (Rate) ضریب فنر ±10%	A 10% دوام 3.000.000 ضرب		B 12.5% دوام 1.500.000 ضرب		C 15% Max Defl دوام 200.000 ضرب		D Approx تغییر طول تقریبی تا بسته شدن	
					mm	N	mm	N	mm	N	mm	N
D64W/16/032 D64W/16/038 D64W/16/044 D64W/16/051 D64W/16/064 D64W/16/076 D64W/16/089 D64W/16/102 D64W/16/115 D64W/16/127 D64W/16/152 D64W/16/305	16	8	32	449	3.2	1437	4	1796	4.8	2155	6	2694
			38	363	3.8	1379	4.8	1742	5.7	2069	7	2541
			44	309	4.4	1360	5.5	1700	6.6	2039	8	2472
			51	256	5.1	1306	6.4	1632	7.7	1958	9	2304
			64	203	6.4	1299	8	1624	9.6	1949	11	2233
			76	166	7.6	1262	9.5	1577	11.4	1892	14	2324
			89	139	8.9	1237	11.1	1546	13.4	1856	16	2224
			102	114	10.2	1163	12.8	1454	15.3	1744	19	2166
			115	105	11.5	1208	14.4	1509	17.3	1811	22	2310
			127	94	12.7	1194	15.9	1492	19.1	1791	25	2350
			152	69	15.2	1049	19	1311	22.8	1573	34	2346
			305	37	30.5	1129	38.1	1411	45.8	1693	70	2590
D64W/20/044 D64W/20/051 D64W/20/064 D64W/20/076 D64W/20/089 D64W/20/102 D64W/20/115 D64W/20/127 D64W/20/152 D64W/20/305	20	10	44	452	4.4	1989	5.5	2486	6.6	2983	8	3616
			51	378	5.1	1928	6.4	2410	7.7	2892	10	3780
			64	301	6.4	1926	8	2408	9.6	2890	13	3913
			76	247	7.6	1877	9.5	2347	11.4	2816	16	3952
			89	208	8.9	1851	11.1	2314	13.4	2777	19	3952
			102	188	10.2	1918	12.8	2397	15.3	2876	21	3948
			115	159	11.5	1829	14.4	2286	17.3	2743	24	3816
			127	146	12.7	1854	15.9	2318	19.1	2781	26	3796
			152	91	15.2	1383	19	1729	22.5	2075	45	4095
			305	60	30.5	1830	38.1	2288	45.8	2745	70	4200
D64W/25/044 D64W/25/051 D64.../25/064 D64.../25/076 D64.../25/089 D64.../25/102 D64.../25/115 D64.../25/127 D64.../25/152 D64.../25/178 D64.../25/203 D64.../25/305	25	12.5	44	1158	4.4	5095	5.5	6369	6.6	7643	8	9264
			51	933	5.1	4758	6.4	5948	7.6	7091	10	9330
			64	644	6.4	4672	8	5840	9.6	7008	13	9490
			76	556	7.6	4226	9.5	5282	11.4	6338	16	8896
			89	462	8.9	4112	11.1	5140	13.4	6168	20	9240
			102	390	10.2	3978	12.8	4973	15.3	5967	23	8970
			115	360	11.5	4140	14.4	5175	17.3	6210	26	9360
			127	326	12.7	4140	15.9	5175	19.1	6210	28	9128
			152	255	15.2	3876	19	4845	22.8	5814	34	8670
			178	230	17.8	4094	22.3	5118	26.7	6141	39	8970
			203	202	20.3	4101	25.4	5126	30.5	6151	45	9090
			305	136	30.5	4148	38.1	5185	45.8	6222	63	8568

High Performance Compression Spring

Rectangular Wire-Brown/Silver Color

DIN/ISO 10243

فنر

مقطع مفتول فنر مستطیل - رنگ قهوه ای / نقره ای

کد سفارش Ordering Code	D (b x h)		L ₀	R (Rate) ضریب فنر ±10%	A 10% دوام 3.000.000 ضرب		B 12.5% دوام 1.500.000 ضرب		C 15% Max Defl دوام 200.000 ضرب		D Approx تغییر طول تقریبی تا پسته شدن	
	mm	mm	mm	N/mm	mm	N	mm	N	mm	N	mm	N
D64W/32/044	32	16	44	1300	4.4	5720	5.5	7150	6.6	8580	8	10400
D64W/32/051			51	1150	5.1	5865	6.4	7331	7.6	8740	11	12650
D64.../32/064			64	887	6.4	5677	8	7096	9.6	8515	14	12418
D64.../32/076			76	733	7.6	5570	9.5	6964	11.4	8356	17	12460
D64.../32/089			89	612	8.9	5447	11.1	6808	13.4	8171	21	12853
D64.../32/102			102	544	10.2	5544	12.8	6936	15.3	8316	23	12502
D64.../32/115			115	494	11.5	5685	14.4	7101	17.3	8527	25	12359
D64.../32/127			127	432	12.7	5490	15.9	6858	19.1	8235	30	12968
D64.../32/152			152	356	15.2	5416	19	6764	22.8	8124	35	12471
D64.../32/178			178	304	17.8	5409	22.3	6764	26.7	8114	41	12459
D64.../32/203			203	265	20.3	5387	25.4	6699	30.5	8080	47	12472
D64.../32/254			254	214	25.4	5436	31.8	6795	38.1	8153	58	12412
D64.../32/305			305	177	30.5	5385	38.1	6748	45.8	8077	70	12359
D64W/40/064	40	20	64	1228	6.4	7859	8	9824	9.6	11789	13	15964
D64W/40/076			76	1017	7.6	7729	9.5	9662	11.4	11594	16	16272
D64.../40/089			89	880	8.9	7832	11.1	9790	13.4	11748	20	17600
D64.../40/102			102	762	10.2	7772	12.8	9716	15.3	11649	23	17526
D64.../40/115			115	679	12.5	7809	14.4	9761	17.3	11713	26	17654
D64.../40/127			127	622	12.7	7899	15.9	9874	19.1	11849	28	17416
D64.../40/152			152	509	15.2	7737	19	9671	22.8	11605	36	18324
D64.../40/178			178	429	17.8	7636	22.3	9545	26.7	11454	43	18447
D64.../40/203			203	374	20.3	7592	25.4	9490	30.5	11388	49	18326
D64.../40/254			254	296	25.4	7518	31.8	9398	38.1	11278	62	18325
D64.../40/305			305	246	30.5	7503	38.1	9379	45.8	11255	75	18450
D64W/50/064	50	25	64	1980	6.4	12672	8	15840	9.6	19008	11	21780
D64W/50/076			76	1811	7.6	13764	9.5	17205	11.4	20645	14	25354
D64.../50/089			89	1410	8.9	12549	11.1	15686	13.4	18824	19	26790
D64.../50/102			102	1215	10.2	12393	12.8	15491	15.3	18590	22	26730
D64.../50/115			115	1076	11.5	12374	14.4	15468	17.3	18561	25	26900
D64.../50/127			127	968	12.7	12294	15.9	15367	19.1	18440	28	27104
D64.../50/152			152	806	15.2	12251	19	15314	22.8	18377	34	27404
D64.../50/178			178	698	17.8	12424	22.3	15531	26.7	18637	40	27920
D64.../50/203			203	612	20.3	12424	25.4	15530	30.5	18635	45	27540
D64.../50/254			254	472	25.4	11989	31.8	14986	38.1	17983	58	27376
D64.../50/305			305	388	30.5	11834	38.1	14793	45.8	17751	70	27160

Points:

نکات:

- Any damages on the surface of the springs (cutting, grinding, scratches, etc.) May significantly affect the expected lifetime.
- Apply a minimum pre-load of 5% of the total length.

۱. هرگونه آسیب بر روی سطح فنر (بریدگی، خراش، سایش و...) بطور قابل توجهی در طول عمر فنر موثر می باشد.

۲. پیش بار حداقل ۵ درصد از طول کل فنر در نظر گرفته شود.

SPRING

Pressure Elastomer

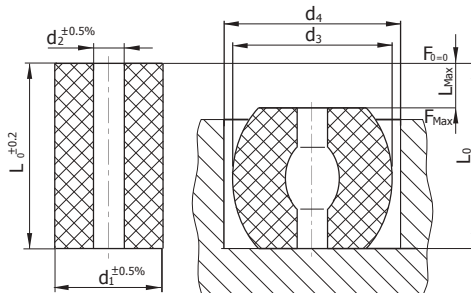
Material: PUR/80 Shore A

فنر

الاستومر فشاری



D63/80



کد سفارش Ordering Code	L ₀	d ₁	d ₂	d ₃	d ₄	F _{max} (N)	L _{max} 35%L ₀
D63/80/16/12	12	16	6.5	22	26	940	4.2
D63/80/16/16	16					900	5.6
D63/80/16/20	20					880	7
D63/80/16/25	25					860	8.7
D63/80/16/32	32					830	11.2
D63/80/20/12	12	20	8.5	27	32	1440	4.2
D63/80/20/16	16					1400	5.6
D63/80/20/20	20					1350	7
D63/80/20/25	25					1330	8.7
D63/80/20/32	32					1280	11.2
D63/80/20/40	40					1260	14
D63/80/25/16	16	25	10.5	34	38	2270	5.6
D63/80/25/20	20					2200	7
D63/80/25/25	25					2160	8.7
D63/80/25/32	32					2090	11.2
D63/80/25/40	40					2050	14
D63/80/25/50	50					1980	17.5
D63/80/32/16	16	32	13.5	43	48	3850	5.6
D63/80/32/20	20					3740	7
D63/80/32/25	25					3600	8.7
D63/80/32/32	32					3460	11.2
D63/80/32/40	40					3420	14
D63/80/32/50	50					3350	17.5
D63/80/40/20	20	40	13.5	54	61	6660	7
D63/80/40/25	25					6410	8.7
D63/80/40/32	32					6190	11.2
D63/80/40/40	40					6010	14
D63/80/40/50	50					5870	17.5
D63/40/63	63					5760	22
D63/80/50/25	25	50	17	68	75	10400	8.7
D63/80/50/32	32					9970	11.2
D63/80/50/40	40					9650	14
D63/80/50/50	50					9400	17.5
D63/80/50/63	63					9140	22
D63/80/50/80	80					8980	28
D63/80/63/32	32	63	17	85	94	17600	11.2
D63/80/63/40	40					16880	14
D63/80/63/50	50					16300	17.5
D63/80/63/63	63					15770	22
D63/80/63/80	80					15260	28
D63/80/63/100	100					14940	35
D63/80/80/40	40	80	21	108	118	28690	14

کد سفارش Ordering Code	L ₀	d ₁	d ₂	d ₃	d ₄	F _{max} (N)	L _{max} 35%L ₀
D63/80/80/50	50	80	21	108	118	27500	17.5
D63/80/80/63	63					26400	22
D63/80/80/80	80					25500	28
D63/80/80/100	100					24900	35
D63/80/80/125	125					24200	43.7
D63/80/100/50	50	100	21	135	150	46700	17.5
D63/80/100/63	63					44500	22
D63/80/100/80	80					42700	28
D63/80/100/100	100					41500	35
D63/80/100/125	125					40000	43.7
D63/80/125/63	63	125	27	169	188	73900	22
D63/80/125/80	80					69500	28
D63/80/125/100	100					66100	35
D63/80/125/125	125					64800	43.7
D63/80/125/160	160					62300	56

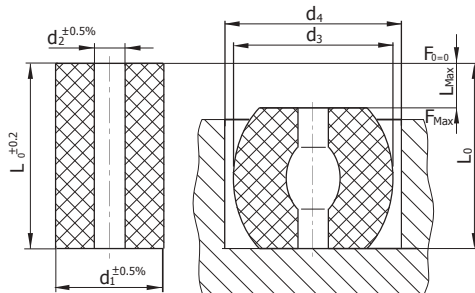
SPRING

Pressure Elastomer

Material: PUR/90 Shore A

فنر
الاستومر فشاری

D63/90



کد سفارش Ordering Code	L ₀	d ₁	d ₂	d ₃	d ₄	F _{max} (N)	L _{max} 30%L ₀
D63/90/16/12	12	16	6.5	22	26	1790	3.6
D63/90/16/16	16					1730	4.8
D63/90/16/20	20					1690	6
D63/90/16/25	25					1660	7.5
D63/90/16/32	32					1590	6.9
D63/90/20/12	12	20	8.5	26	32	2760	3.6
D63/90/20/16	16					2690	4.8
D63/90/20/20	20					2590	6
D63/90/20/25	25					2550	7.5
D63/90/20/32	32					2450	9.6
D63/90/20/40	40					2420	12
D63/90/25/16	16	25	10.5	33	37	4350	4.8
D63/90/25/20	20					4210	6
D63/90/25/25	25					4140	7.5
D63/90/25/32	32					4000	9.6
D63/90/25/40	40					3930	12
D63/90/25/50	50					3800	15
D63/90/32/16	16	32	13.5	42	47	7380	4.8
D63/90/32/20	20					7180	6
D63/90/32/25	25					6900	7.5
D63/90/32/32	32					6620	9.6
D63/90/32/40	40					6560	12
D63/90/32/50	50					6420	15
D63/90/40/20	20	40	13.5	52	59	12770	6
D63/90/40/25	25					12280	7.5
D63/90/40/32	32					11870	9.6
D63/90/40/40	40					11520	12
D63/90/40/50	50					11250	15
D63/90/40/63	63					11049	18.9
D63/90/50/25	25	50	17	65	72	19940	7.5
D63/90/50/32	32					19110	9.6
D63/90/50/40	40					18500	12
D63/90/50/50	50					18000	15
D63/90/50/63	63					17530	18.9
D63/90/50/80	80					17220	24
D63/90/63/32	32	63	17	82	91	33740	9.6
D63/90/63/40	40					32360	12
D63/90/63/50	50					31260	15
D63/90/63/63	63					30220	18.9
D63/90/63/80	80					29260	24
D63/90/63/100	100					28640	30
D63/90/80/40	40	80	21	104	114	55000	12

کد سفارش Ordering Code	L ₀	d ₁	d ₂	d ₃	d ₄	F _{max} (N)	L _{max} 30%L ₀
D63/90/80/50	50	80	21	104	114	52700	15
D63/90/80/63	63					50600	18.9
D63/90/80/80	80					49000	24
D63/90/80/100	100					47700	30
D63/90/80/125	125					46400	37.5
D63/90/100/50	50	100	21	130	145	89500	15
D63/90/100/63	63					85400	18.9
D63/90/100/80	80					82000	24
D63/90/100/100	100					79600	30
D63/90/100/125	125					76600	37.5
D63/90/125/63	63	125	27	163	182	142000	18.9
D63/90/125/80	80					133000	24
D63/90/125/100	100					127000	30
D63/90/125/125	125					124000	37
D63/90/125/160	160					119000	48

SPRING

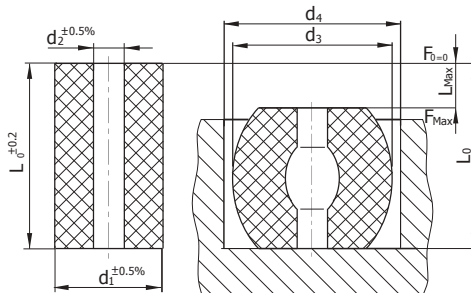
Pressure Elastomer

Material: PUR/95 Shore A

فن الاستومر فشاری



D63/95

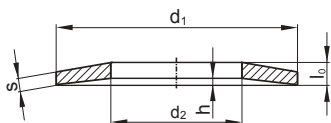


کد سفارش Ordering Code	L ₀	d ₁	d ₂	d ₃	d ₄	F _{max} (N)	L _{max} 25%L ₀
D63/95/16/12	12	16	6.5	20	26	2260	3
D63/95/16/16	16					2150	4
D63/95/16/20	20					2130	5
D63/95/16/25	25					2080	6.2
D63/95/16/32	32					2000	8
D63/95/20/12	12	20	8.5	25	32	3470	3
D63/95/20/16	16					3390	4
D63/95/20/20	20					3260	5
D63/95/20/25	25					3210	6.2
D63/95/20/32	32					3080	8
D63/95/20/40	40					3040	10
D63/95/25/16	16	25	10.5	31	36	5470	4
D63/95/25/20	20					5290	5
D63/95/25/25	25					5210	6.2
D63/95/25/32	32					5030	8
D63/95/25/40	40					4950	10
D63/95/25/50	50					4770	12.5
D63/95/32/16	16	32	13.5	40	47	9290	4
D63/95/32/20	20					9030	5
D63/95/32/25	25					8680	6.2
D63/95/32/32	32					8330	8
D63/95/32/40	40					8250	10
D63/95/32/50	50					8070	12.5
D63/95/40/20	20	40	13.5	50	57	16060	5
D63/95/40/25	25					15450	6.2
D63/95/40/32	32					14930	8
D63/95/40/40	40					14500	10
D63/95/40/50	50					14150	12.5
D63/95/40/63	63					13890	15.7
D63/95/50/25	25	50	17	62	69	25090	6.2
D63/95/50/32	32					24040	8
D63/95/50/40	40					23260	10
D63/95/50/50	50					22650	12.5
D63/95/50/63	63					22050	15.7
D63/95/50/80	80					21660	20
D63/95/63/32	32	63	17	78	84	42450	8
D63/95/63/40	40					40700	10
D63/95/63/50	50					39300	12.5
D63/95/63/63	63					38020	15.7
D63/95/63/80	80					36800	20
D63/95/63/100	100					36020	25
D63/95/80/40	40	80	21	99	109	69180	10

کد سفارش Ordering Code	L ₀	d ₁	d ₂	d ₃	d ₄	F _{max} (N)	L _{max} 25%L ₀
D63/95/80/50	50	80	21	99	109	66300	12.5
D63/95/80/63	63					63700	15.7
D63/95/80/80	80					61600	20
D63/95/80/100	100					60000	25
D63/95/80/125	125					58300	31.2
D63/95/100/50	50	100	21	124	139	112600	12.5
D63/95/100/63	63					107400	15.7
D63/95/100/80	80					103000	20
D63/95/100/100	100					100000	25
D63/95/100/125	125					96300	31.2
D63/95/125/63	63	125	27	155	174	178000	15.7
D63/95/125/80	80					167000	20
D63/95/125/100	100					159000	25
D63/95/125/125	125					156000	31.2
D63/95/125/160	160					150000	40

فنر بشقابی

D62

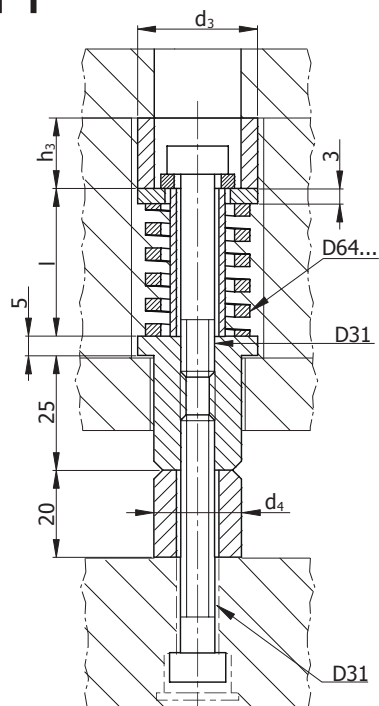


کد سفارش Ordering Code	d ₁	d ₂	S	h	l ₀	A 0.2h		B 0.4h		C 0.6h		D 0.7h		E 0.8h	
	mm	mm	mm	mm	mm	mm	N	mm	N	mm	N	mm	N	mm	N
D62/8/3.2/0.4	8	3.2	0.4	0.2	0.6	0.04	58	0.08	110	0.12	160	0.14	180	0.16	200
D62/10/5.2/0.4	10	5.2	0.4	0.3	0.7	0.06	73	0.12	134	0.18	180	0.21	200	0.24	220
D62/12.5/6.2/0.5	12.5	6.2	0.5	0.35	0.85	0.07	100	0.14	180	0.21	250	0.24	280	0.28	310
D62/14/7.2/0.8	14	7.2	0.8	0.3	1.1	0.06	230	0.12	450	0.18	660	0.21	770	0.24	870
D62/15/5.2/0.7	15	5.2	0.7	0.4	1.1	0.08	180	0.16	340	0.24	470	0.28	540	0.32	610
D62/16/8.2/0.6	16	8.2	0.6	0.45	1.05	0.09	145	0.18	260	0.27	360	0.31	400	0.36	440
D62/16/8.2/0.9	16	8.2	0.9	0.35	1.25	0.07	300	0.14	580	0.21	850	0.24	970	0.28	1100
D62/18/9.2/1	18	9.2	1.0	0.4	1.4	0.08	370	0.16	720	0.24	1050	0.28	1200	0.32	1350
D62/20/10.2/0.8	20	10.2	0.8	0.55	1.35	0.11	250	0.22	470	0.33	650	0.38	370	0.44	800
D62/20/10.2/0.9	20	10.2	0.9	0.55	1.45	0.11	340	0.22	640	0.33	900	0.38	1000	0.44	1150
D62/20/10.2/1.1	20	10.2	1.1	0.45	1.55	0.09	450	0.18	870	0.27	1350	0.31	1450	0.36	1650
D62/23/12.2/1.25	23	12.2	1.25	0.6	1.85	0.12	710	0.24	1360	0.36	1960	0.42	2240	0.48	2520
D62/25/12.2/1.5	25	12.2	1.5	0.55	2.05	0.11	860	0.22	1650	0.33	2450	0.38	2800	0.44	3100
D62/25/12.2/1	25	12.2	1.0	0.6	1.6	0.12	320	0.24	600	0.36	840	0.42	950	0.48	1050
D62/28/14.2/1	28	14.2	1.0	0.8	1.8	0.16	400	0.32	720	0.48	970	0.56	1100	0.64	1200
D62/28/14.2/1.5	28	14.2	1.5	0.65	2.15	0.13	850	0.26	1650	0.39	2400	0.45	2700	0.52	3100
D62/31.5/16.3/1.25	31.5	16.3	1.25	0.9	2.15	0.18	660	0.36	1200	0.54	1650	0.63	1850	0.72	2000
D62/31.5/16.3/1.75	31.5	16.3	1.75	0.7	2.45	0.14	1150	0.28	2200	0.42	3200	0.49	3700	0.56	4200
D62/35.5/18.3/2	35.5	18.3	2.0	0.8	2.8	0.16	1550	0.32	3000	0.48	4300	0.56	5000	0.64	5600
D62/40/14.3/1.5	40	14.3	1.5	1.25	2.75	0.25	950	0.50	1700	0.75	2200	0.87	2500	1.00	2700
D62/40/20.4/2.25	40	20.4	2.25	0.9	3.15	0.18	1900	0.36	3700	0.54	5400	0.63	5200	0.72	7000
D62/45/22.4/2.5	45	22.4	2.5	1	3.5	0.20	2300	0.40	4500	0.60	6400	0.70	7400	0.80	8500
D62/50/18.3/1.5	50	18.3	1.5	1.8	3.3	0.36	1200	0.72	2000	1.08	2400	1.26	2600	1.44	2700
D62/50/25.4/2.5	50	25.4	2.5	1.4	3.9	0.28	2850	0.56	5350	0.84	7600	0.98	8650	1.12	9650
D62/50/25.4/3	50	25.4	3	1.1	4.1	0.22	3500	0.44	6800	0.66	10000	0.77	11500	0.88	13000
D62/56/28.5/2	56	28.5	2	1.6	3.6	0.32	1600	0.64	2900	0.96	3900	1.12	4300	1.28	4700
D62/60/20.4/2	60	20.4	2	2.1	4.1	0.42	2000	0.84	3400	1.26	4300	1.47	4700	1.68	5000
				</											

COMBINATION SPRING AND SPACER UNIT

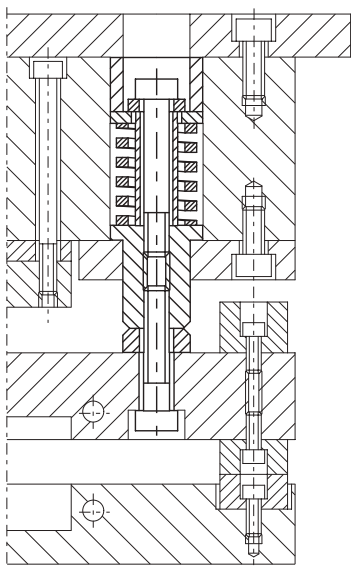
واحد فنر بندی (و اصلاح ارتفاع)

D244

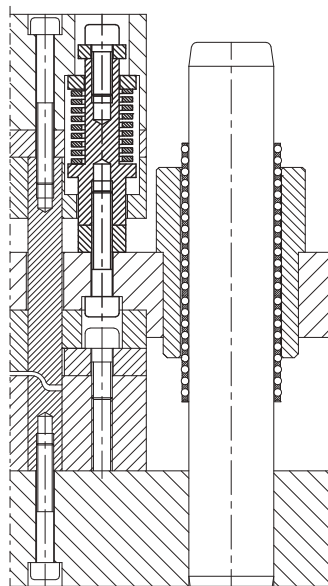


ساخت مطابق سفارش مشتری انجام می پذیرد. Producing on request.

Example:



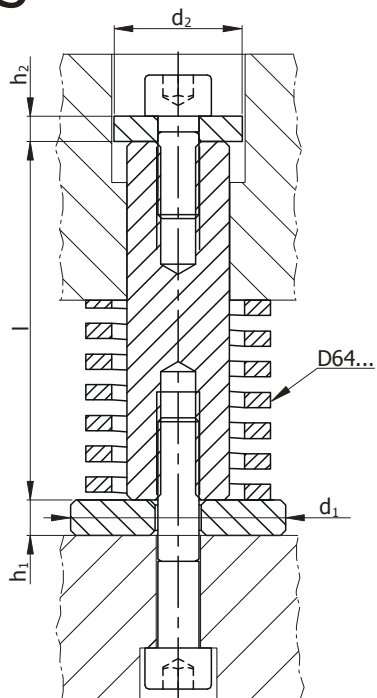
مثال:



COMBINATION SPRING AND SPACER UNIT

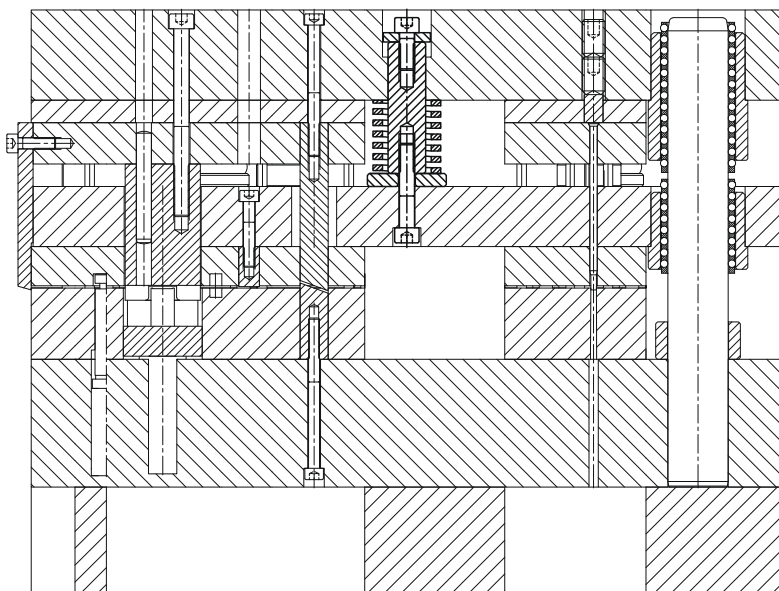
واحد فنر بندی (و اصلاح ارتفاع)

D245



ساخت مطابق سفارش مشتری انجام می پذیرد. Producing on request.

Example:



مثال:

GAS SPRING

فنر گازی



D611



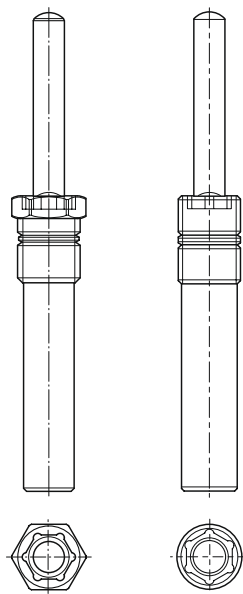
SPRING PLUNGERS

With Gas Spring (Ejector Pin Units)

بیرون انداز (فنر گازی)



D612



Example:

مثال:

