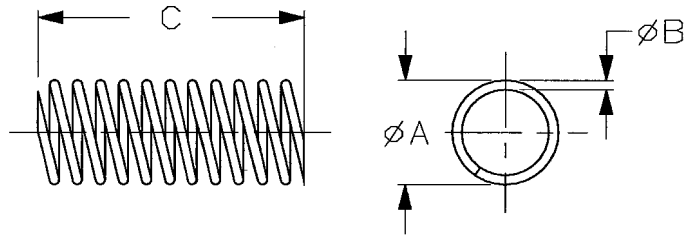


1. PART NUMBER AND CHARACTERISTICS



SEE ALSO 506214, 509087, 510500, 547505 AND 653861

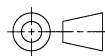
TE Part No	Rev	A	B	C	Approx Load at Solid Height	Rate (N/mm)	Solid Height	Mfr Part No
659650-1	A	3.5	0.55	13.10	23.01 N	3.822	7.08	D-090P
659650-2	A	10.3	1	40	35.09 N	1.333	13.68	D-157
659650-3	A	9	1.8	19	222.40 N	52.095	14.73	D-234D
659650-4	A	35.2	3.2	88.5	356.20 N	5.927	28.4	D-295
659650-5	A	7.9	0.63	31	11.19 N	0.491	8.22	D-095D
659650-6	A	7.9	0.63	13	10.58 N	1.193	4.13	D-095B
659650-7	A	2.9	0.4	18.5	7.88 N	0.902	9.77	D-063
659650-8	A	6.3	0.9	13.6	47 N	7.718	7.51	D-144B
659650-9	A	8.63	0.63	55	10.83 N	0.251	11.83	D-094
1-659650-0	A	6.93	0.63	54	9.99 N	0.285	18.97	D-100A
1-659650-1	A	7.55	1.25	35.5	121 N	7.957	20.29	D-204
1-659650-2	A	2.25	0.25	11.1	2.63 N	0.398	4.49	D-025
1-659650-3	A	10.8	0.8	45.58	17.1 N	0.491	10.67	D-120
1-659650-4	A	OBSOLETE						
1-659650-5	A	7	1	14	43.86 N	7.861	8.42	D-172
1-659650-6	A	6.4	0.8	59	31.18 N	0.932	25.54	D-132E
1-659650-7	A	8.3	0.8	45	22.05 N	0.733	14.9	D-127E
1-659650-8	A	7	0.4	57	4.27 N	0.086	7.54	D-042J
1-659650-9	A	9.6	1.6	21.5	196.5 N	23.709	13.21	D-229
2-659650-0	A	4	0.5	24	14.84 N	1.024	9.51	D-080C
2-659650-1	A	4.5	0.5	10	10.33 N	1.809	4.29	D-077
2-659650-2	A	2.8	0.55	15.3	2.43 N	5.280	10.7	D-090U
2-659650-3	A	6	0.55	17.7	13.42 N	1.047	4.88	D-090K
2-659650-4	A	OBSOLETE						
2-659650-5	A	7.5	1.1	11	71.04 N	16.257	6.63	D-180A

COMMERCIAL ITEM SPECIFICATION

MATERIAL
Spring Steel
FINISH



© 2009 Tyco Electronics Corporation, Harrisburg, PA
All International Rights Reserved



DIMENSIONS IN mm

NO **659650** REV **C** LOC **B** DIST **31**

C Reactivate -81 JNB 27MAR09
REV ENGINEERING CHANGE CHK DATE

SHEET 1 OF 3

TITLE **SPRING, COMPRESSION**

1. PART NUMBER AND CHARACTERISTICS (Continued)

TE Part No	Rev	A	B	C	Approx Load at Solid Height	Rate (N/mm)	Solid Height	Mfr Part No
2-659650-6	A	5.5	0.5	30	8.63 N	0.408	8.81	D-073
2-659650-7	A	4.5	0.5	7	11.11 N	2.842	3.09	D-076
2-659650-8	A	13.5	1	36.5	25.76 N	0.948	9.34	D-147
2-659650-9	A	5	0.7	29.5	30.86 N	1.985	13.95	D-117D
3-659650-0	A	OBSOLETE						
3-659650-1	A	6	1.2	32	107 N	12.324	23.31	D-180Y
3-659650-2	A	24	2.2	59.1	165.8 N	4.188	19.49	D-263K
3-659650-3	A	8.3	1	50	37.05 N	1.416	23.83	D-166D
3-659650-4	A	2.32	0.32	10.9	5.67 N	1.068	5.59	D-042E
3-659650-5	A	1.12	0.12	5.8	0.61 N	0.169	2.17	D-2039
3-659650-6	A	1.36	0.16	3.2	1.18 N	0.702	1.52	D-2062
3-659650-7	A	2.75	0.25	7.3	2.24 N	0.463	2.47	D-018
3-659650-8	A	2.9	0.4	6.7	8.95 N	3.035	3.75	D-060A
3-659650-9	A	2.2	0.3	13	7.46 N	0.962	5.25	D-027D
4-659650-0	A	8	1.6	27.1	182.8 N	26.809	20.28	D-232D
4-659650-1	A	SUPERSEDED BY 2030441-8						
4-659650-2	A	8.3	1.1	38	47.49 N	2.756	20.77	D-180-03
4-659650-3	A	9.25	1.25	69	104 N	2.626	29.36	D-200
4-659650-4	A	2.32	0.32	15.6	5.62 N	0.722	7.82	D-042F
4-659650-5	A	6.3	0.9	35.1	47.1 N	2.739	17.9	D-144D
4-659650-6	A	13.5	1	55.5	25.87 N	0.614	13.34	D-148
4-659650-7	A	SUPERSEDED BY 6-510500-6						
4-659650-8	A	34.5	2.5	110	191 N	2.208	23.5	D-265
4-659650-9	A	3.7	0.5	23.5	12.35 N	1.05	11.74	D-085
5-659650-0	A	3.6	0.4	25.2	6.52 N	0.43	10.05	D-057
5-659650-1	A	28.2	3.2	50.8	291.2 N	12.43	27.37	D-299A
5-659650-2	A	3.5	0.5	8.4	18.14 N	4.288	4.17	D-085C
5-659650-3	A	2.32	0.32	5.3	5.58 N	2.428	3	D-042C
5-659650-4	A	6	0.55	48.5	12.91 N	0.372	11.74	D-090M
5-659650-5	A	1.36	0.16	9.7	1.19 N	0.209	3.99	D-2065
5-659650-6	A	5	0.55	39	11.68 N	0.492	15.27	D-090M-02
5-659650-7	A	10.5	0.63	42.9	11.09 N	0.303	6.35	D-090Y
5-659650-8	A	4.4	0.8	9	39.52 N	16.261	6.57	D-142AB
5-659650-9	A	8.5	0.5	35.8	6.83 N	0.226	5.58	D-063K
6-659650-0	A	7.6	0.5	15	5.87 N	0.508	3.45	D-063N
6-659650-1	A	2.2	0.2	5.9	1.46 N	0.37	1.97	D-008A
6-659650-2	A	9.6	1.6	45	198.7 N	10.432	25.95	D-231
6-659650-3	A	6.4	0.8	43	30.86 N	1.284	18.97	D-132D
6-659650-4	A	OBSOLETE						
6-659650-5	A	7.9	0.63	20	10.18 N	0.759	5.77	D-095C



Tyco Electronics Corporation
Harrisburg, PA

SHEET
2 OF 3

NO

659650

REV
C

LOC
B

DIST
31

1. PART NUMBER AND CHARACTERISTICS (Continued)

TE Part No	Rev	A	B	C	Approx Load at Solid Height	Rate (N/mm)	Solid Height	Mfr Part No
6-659650-6	A	10	0.9	19.7	35.35 N	2.534	5.75	D-143A
6-659650-7	A	11	1	21.4	43.72 N	2.911	6.38	D-151A
6-659650-8	A	2.2	0.2	17.8	1.39 N	0.11	5.22	D-011
6-659650-9	A	3.52	0.32	13.7	3.58 N	0.384	4.36	D-035
7-659650-0	A	7	1	38.8	57.54 N	3.043	19.89	D-173C
7-659650-1	A	7	1.4	23.8	141.9 N	23.458	17.75	D-207H
7-659650-2	A	OBSOLETE						
7-659650-3	A	6	0.55	29.2	13.8 N	0.606	7.62	D-090L
7-659650-4	A	15	2	40	183.5 N	9.892	21.45	D-252AA
7-659650-5	A	2.8	0.5	13	16.9 N	3.876	8.64	D-090AE
7-659650-6	A	3.1	0.4	12	7.43 N	1.262	6.11	D-058
7-659650-7	A	2.25	0.25	7.8	2.63 N	0.585	3.30	D-024
7-659650-8	A	5.7	0.6	62	18.53 N	0.424	18.24	D-090V
7-659650-9	A	11.6	0.63	26	7.4 N	0.347	4.69	D-090W-01
8-659650-0	A	2.7	0.2	18.8	1.24 N	0.083	3.94	D-005
8-659650-1	A	1.5	0.16	10.2	1.09 N	0.168	3.74	86596501
8-659650-2	A	4.4	0.4	17.5	5.78 N	0.479	5.45	D-050A
8-659650-3	A	4.4	0.4	25.1	5.75 N	0.326	7.45	D-051B
8-659650-4	A	9	1	59	37.5 N	1.076	24.13	D-165
8-659650-5	A	7.5	0.7	14.7	22.8 N	2.223	4.44	D-115J
8-659650-6	A	22	2	79	128.8 N	2.397	25.25	D-241A
8-659650-7	A	2.75	0.25	10.9	2.24 N	0.3	3.41	D-019
8-659650-8	A	2.7	0.2	8.2	1.16 N	0.19	2.07	D-003
8-659650-9	A	5.4	0.4	33.4	2.52 N	0.113	11.07	D-046A
9-659650-0	A	20	1.2	50.4	38 N	0.908	8.57	D-180J
9-659650-1	A	17.6	1.6	165	109.9 N	0.881	40.2	D-217
9-659650-2	A	8.63	0.63	37	10.53 N	0.369	8.45	D-093
9-659650-3	A	4.32	0.32	8.5	2.89 N	0.477	2.45	D-028
9-659650-4	A	9	0.55	36.5	8.71 N	0.281	5.5	D-090F
9-659650-5	A	17.6	1.6	34	110.8 N	4.657	10.2	D-213
9-659650-6	A	18	2	30	200.4 N	11.37	12.37	D-248
9-659650-7	A	35.2	3.2	58.5	354.8 N	9.314	20.4	D-294
9-659650-8	A	7.1	0.8	23	26.09 N	1.963	9.71	D-130
9-659650-9	A	4.5	0.9	15.6	63.19 N	15.08	11.41	D-145C

- 1.1. All dimensions are nominal unless otherwise specified
 2. RECOMMENDED MANUFACTURER
 Gutekunst Federn
www.federnshop.com
 or Tyco Electronics Engineering approved equivalent.



Tyco Electronics
 Corporation
 Harrisburg, PA

SHEET
 3 OF 3

NO

659650

REV
C

LOC
B

DIST
31

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Hand Tools](#) category:

Click to view products by [TE Connectivity](#) manufacturer:

Other Similar products are found below :

[568681-1](#) [576786-2](#) [58061-1](#) [58176-1](#) [58177-1](#) [58177-2](#) [58284-1](#) [59085](#) [0031](#) [59737-5](#) [015-0339-000](#) [015-8755-001](#) [600-146-06](#) [M15570-25](#) [62200-5709](#) [6-304052-1](#) [63443-1002](#) [63443-3513](#) [63443-4025](#) [63443-7114](#) [6-354778-5](#) [6-354779-2](#) [63600-2995](#) [63810-0105](#) [M8196914-08](#) [M819698-07](#) [662508-1](#) [662908-1](#) [679994-1](#) [679994-2](#) [68764-0001](#) [69001-0105](#) [69002-5525](#) [690124-7](#) [690191-1](#) [690191-4](#) [690696-1](#) [691409-4](#) [691667-1](#) [692006-2](#) [692655-7](#) [692776-1](#) [692776-4](#) [693077-3](#) [693077-4](#) [693597-1](#) [D20418-137](#) [D20419-189](#) [ESR-17x17](#) [ET-LY10](#)