

ISOLADORES DE VIBRAÇÕES FDS – “FREESTANDING”

A TCA-Somax, em cooperação tecnológica com a KINETICS NOISE CONTROL, possui uma variedade de soluções para isolamento de vibrações “freestanding” adequadas a todas as necessidades de engenharia.



FDS - FREESTANDING SPRINGS

Consistem em isoladores de vibração de molas com alta deflexão, assentados livremente sobre o piso, sem estruturação ou limitadores, com grande diâmetro (proporcionalmente à altura), formados por molas de aço com boa estabilidade lateral sobre uma placa resistente às sobrecargas e com um “cap” nivelador em aço dotado de parafuso de nivelamento e parafuso de fixação.

As molas são recobertas por pintura epoxi a pó, de acordo com “1000 hour salt spray rating” pela norma ASTM B-117. Os isoladores de menor capacidade de carga possuem as placas inferiores moldadas em neoprene com estrutura interna de aço. Os de maiores capacidades são soldados na base inferior de aço, que por sua vez é revestida na parte inferior por um “pad” isolador de neoprene. Os isoladores FDS podem ser aparafusados ao piso ou à estrutura onde esteja montado. Na linha Standard, esses isoladores de vibrações podem possuir capacidade de deflexão de até 102 mm (4 in) e capacidade de carga de até 10.523 kg (23.200 lbs). Também estão disponíveis isoladores FDS especiais com capacidades de carga e deflexão superiores às tabelas padronizadas, sendo tratados sob consulta em cada caso.



Aplicações:

Os isoladores de vibrações FDS são recomendados para uso em fontes de vibração e ruídos que sejam apoiados sobre piso ou estruturas e localizados perto de áreas onde o ruído e a vibração sejam críticos e indesejados. São tipicamente utilizados para reduzir a transmissão de ruídos e vibração de equipamentos mecânicos de baixa velocidade para a estrutura das edificações. Deflexões estáticas de até 102 mm (4 in) são disponíveis para compensar longos vãos entre apoios de estruturas e pisos.

Os isoladores modelo FDS são muito efetivos no controle tanto de alta como de baixa frequências de vibração produzidas por compressores, bombas, equipamentos de condicionamento de ar, ventiladores centrífugos e axiais, máquinas de combustão interna, etc. Em algumas aplicações é recomendável o uso de bases **TCA-Somax** anti-vibratórias ou de inércia para a obtenção de melhores resultados no controle de vibrações e de ruído estrutural.

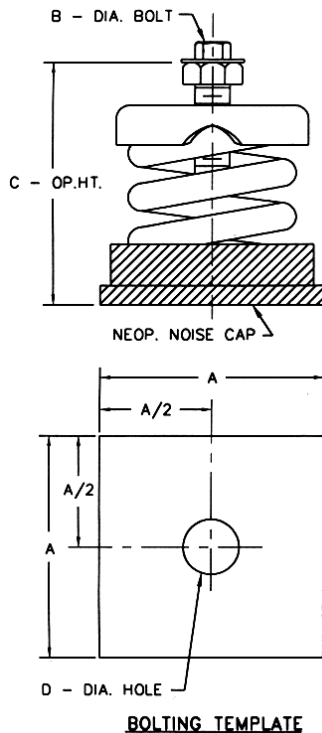
Especificações técnicas dos isoladores de vibrações modelos FDS:

São isoladores de vibrações “freestanding”, sem carcaça, com molas de aço lateralmente estáveis, com resistência lateral superior à capacidade de carga vertical, projetados para suportar sobrecarga de até 50% da capacidade nominal.

As molas são montadas entre placas de carga superior e inferior. A placa superior possui um parafuso de ajuste de altura e outro de fixação ao suporte do equipamento a ser isolado. A placa da base do isolador possui revestimento de neoprene na sua superfície inferior e previsão para fixação (opcional) por parafuso no piso ou na estrutura suportante.

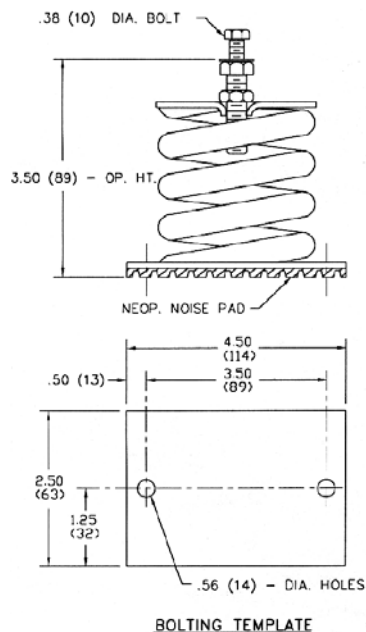
As molas podem ser selecionadas para prover a deflexão estática mostrada na tabela de isolamento de vibrações ou como indicado nas especificações de projeto. São codificadas por cores que indicam sua capacidade de carga.

FDS-1-35/3500



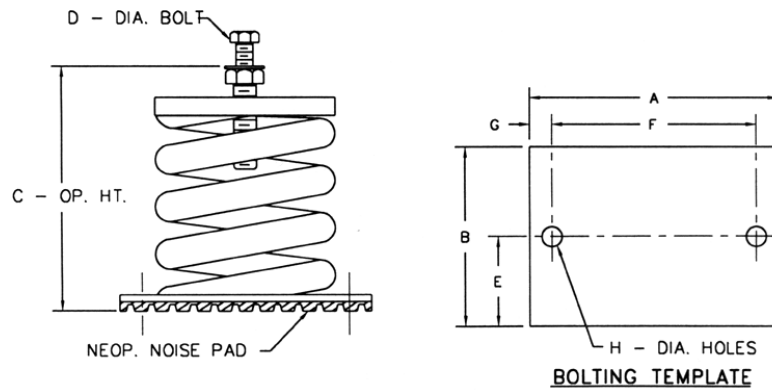
Spring Type	Spring Color	Rated Defl. in/mm	Rated Load lb/kg	Spring O.D. in/mm	A in/mm	B in/mm	C in/mm	D in/mm
FDS-1-35	Blue	1.52/39	35/16	1.75/45	2.63/67	.38/10	4.25/108	.69/18
FDS-1-70	Green	1.36/35	70/32	1.75/45	2.63/67	.38/10	4.25/108	.69/18
FDS-1-120	Gray	1.18/30	120/55	1.75/45	2.63/67	.38/10	4.25/108	.69/18
FDS-1-220	Brown	1.07/27	220/100	1.75/45	2.63/67	.38/10	4.25/108	.69/18
FDS-1-370	Orange	1.00/25	370/165	1.75/45	2.63/67	.38/10	4.25/108	.69/18
FDS-1-500	Beige	1.00/25	500/225	1.75/45	2.63/67	.38/10	4.25/108	.69/18
FDS-1-600	Chrome	1.00/25	600/275	1.75/45	2.63/67	.38/10	4.25/108	.69/18
FDS-1-700	Beige/White	1.00/25	700/315	1.75/45	2.63/67	.38/10	4.25/108	.69/18
FDS-1-805	Chrome/White	1.00/25	805/365	1.75/45	2.63/67	.38/10	4.25/108	.69/18
FDS-1-250	Blue	1.79/46	250/115	3.00/76	3.88/99	.38/10	5.63/143	1.00/25
FDS-1-450	Green	1.54/39	450/205	3.00/76	3.88/99	.38/10	5.63/143	1.00/25
FDS-1-625	Black	1.44/37	625/285	3.00/76	3.88/99	.38/10	5.63/143	1.00/25
FDS-1-800	Gray	1.31/33	800/365	3.00/76	3.88/99	.38/10	5.63/143	1.00/25
FDS-1-1000	Red	1.15/29	1000/455	3.00/76	3.88/99	.38/10	5.63/143	1.00/25
FDS-1-1250	Brown	1.09/28	1250/565	3.00/76	3.88/99	.38/10	5.63/143	1.00/25
FDS-1-1700	Orange	1.00/25	1700/770	3.00/76	3.88/99	.38/10	5.63/143	1.00/25
FDS-1-2200	Org/Gray	1.00/25	2200/998	3.00/76	3.88/99	.38/10	5.63/143	1.00/25
FDS-1-2465	Blue	1.00/25	2465/1118	3.00/76	3.88/99	.38/10	5.63/143	1.00/25
FDS-1-2865	Blue/Gray	1.00/25	2865/1300	3.00/76	3.88/99	.38/10	5.63/143	1.00/25
FDS-1-3500	Blue/Brown	1.00/25	3500/1588	3.00/76	3.88/99	.38/10	5.63/143	1.00/25

FDS-1-120B/805B



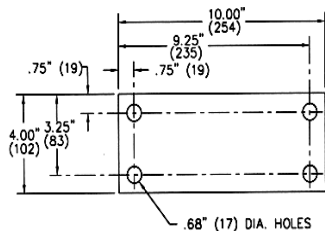
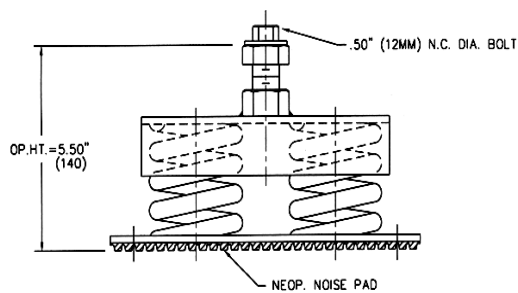
Spring Type	Rated Defl. in/mm	Spring O.D. in/mm	Rated Load lb/kg
FDS-1-120B	1.23/31	1.75/44	120/54
FDS-1-220B	1.12/28	1.75/44	220/100
FDS-1-370B	1.01/26	1.75/44	370/168
FDS-1-500B	1.00/25	1.75/44	500/227
FDS-1-600B	1.00/25	1.75/44	600/272
FDS-1-700B	1.00/25	1.75/44	700/318
FDS-1-805B	1.00/25	1.75/44	805/365

FDS-1-250B/3500B



Spring Type	Rated Defl. in/mm	Spring O.D. in/mm	Rated Load lb/kg	A in/mm	B in/mm	C in/mm	D in/mm	F in/mm	G in/mm	H in/mm
FDS-1-250B	1.79/46	3.00/76	250/115	7.00/178	4.00/100	5.63/143	.38/10	5.50/140	.75/19	.68/17
FDS-1-450B	1.54/39	3.00/76	450/205	7.00/178	4.00/100	5.63/143	.38/10	5.50/140	.75/19	.68/17
FDS-1-625B	1.44/37	3.00/76	625/285	7.00/178	4.00/100	5.63/143	.38/10	5.50/140	.75/19	.68/17
FDS-1-800B	1.31/33	3.00/76	800/365	7.00/178	4.00/100	5.63/143	.38/10	5.50/140	.75/19	.68/17
FDS-1-1000B	1.15/29	3.00/76	1000/455	7.00/178	4.00/100	5.63/143	.38/10	5.50/140	.75/19	.68/17
FDS-1-1250B	1.09/28	3.00/76	1250/565	7.00/178	4.00/100	5.63/143	.38/10	5.50/140	.75/19	.68/17
FDS-1-1700B	1.00/25	3.00/76	1700/770	7.00/178	4.00/100	5.63/143	.38/10	5.50/140	.75/19	.68/17
FDS-1-2200B	1.00/25	3.00/76	2200/998	7.00/178	4.00/100	5.63/143	.38/10	5.50/140	.75/19	.68/17
FDS-1-2465B	1.00/25	3.00/76	2465/1118	7.00/178	4.00/100	5.63/143	.38/10	5.50/140	.75/19	.68/17
FDS-1-2865B	1.00/25	3.00/76	2865/1300	7.00/178	4.00/100	5.63/143	.38/10	5.50/140	.75/19	.68/17
FDS-1-3500B	1.00/25	3.00/76	3500/1588	7.00/178	4.00/100	5.63/143	.38/10	5.50/140	.75/19	.68/17

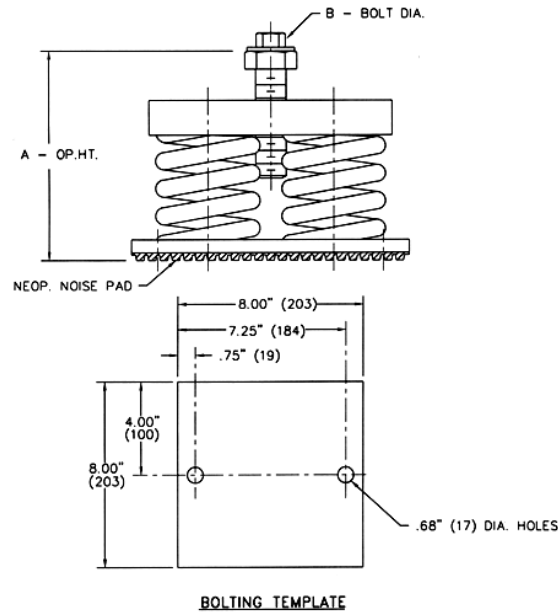
FDS-1-2500B/7000B



BOLTING TEMPLATE

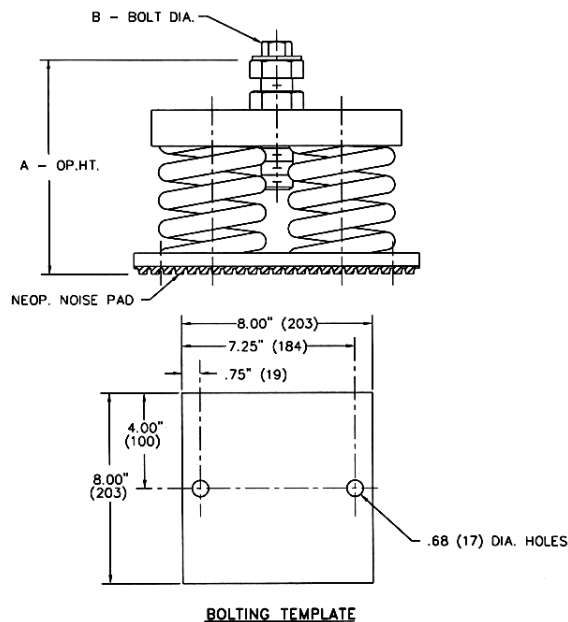
Spring Type	Rated Defl. in/mm	Spring O.D. in/mm	Rated Load lb/kg
FDS-1-2500B	1.09/28	3.00/76	2500/1134
FDS-1-3400B	1.00/25	3.00/76	3400/1542
FDS-1-4400B	1.00/25	3.00/76	4400/1996
FDS-1-4930B	1.00/25	3.00/76	4930/2236
FDS-1-5730B	1.00/25	3.00/76	5730/2599
FDS-1-7000B	1.00/25	3.00/76	7000/3175

FDS-1-5000B/8800B



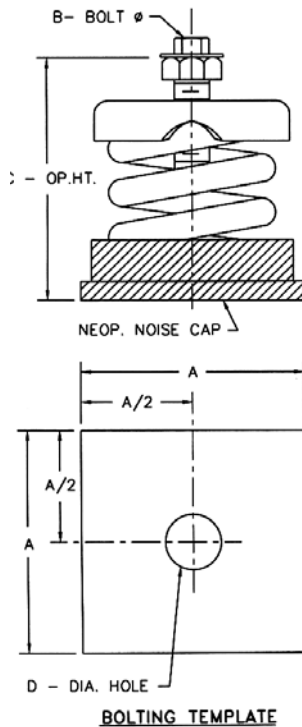
Spring Type	Rated Defl. in/mm	Spring O.D. in/mm	Rated Load lb/kg	A in/mm	B in/mm
FDS-1-5000B	1.09/28	3.00/76	5000/2270	6.00/152	.50/12
FDS-1-6800B	1.00/25	3.00/76	6800/3085	6.00/152	.50/12
FDS-1-8800B	1.00/25	3.00/76	8800/3992	6.00/152	.50/12

FDS-1-9860B/14000B



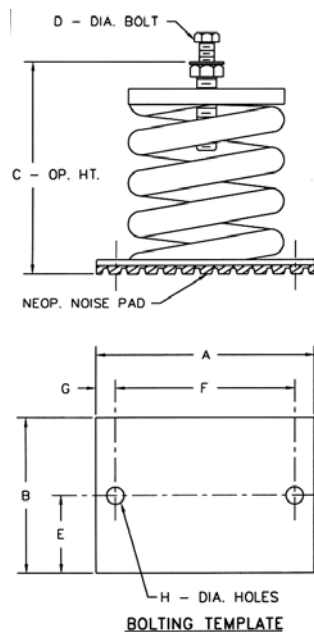
Spring Type	Rated Defl. in/mm	Spring O.D. in/mm	Rated Load lb/kg	A in/mm	B in/mm
FDS-1-9860B	1.00/25	3.00/76	9860/4472	7.50/191	.63/16
FDS-1-11460B	1.00/25	3.00/76	11460/5198	7.50/191	.63/16
FDS-1-14000B	1.00/25	3.00/76	14000/6350	7.50/191	.63/16

FDS-2-100/1975



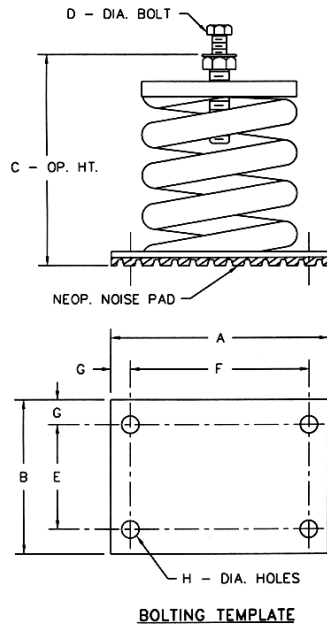
Spring Type	Spring Color	Rated Defl. in/mm	Rated Load lb/kg	Spring O.D. in/mm	A in/mm	B in/mm	C in/mm	D in/mm
FDS-2-100	Gray	2.00/51	100/45	3.50/89	4.38/111	.38/10	7.50/190	1.00/25
FDS-2-250	Blue	2.00/51	250/115	3.50/89	4.38/111	.38/10	7.50/190	1.00/25
FDS-2-500	Green	2.00/51	500/225	3.50/89	4.38/111	.38/10	7.50/190	1.00/25
FDS-2-750	Black	2.00/51	750/340	3.50/89	4.38/111	.38/10	7.50/190	1.00/25
FDS-2-995	Orange	2.00/51	995/450	3.50/89	4.38/111	.38/10	7.50/190	1.00/25
FDS-2-1400	Org/Grn	2.00/51	1400/635	3.50/89	4.38/111	.38/10	7.50/190	1.00/25
FDS-2-1600	Red	2.00/51	1600/727	3.50/89	4.38/111	.38/10	7.50/190	1.00/25
FDS-2-1975	Red/Grn	2.00/51	1975/898	3.50/89	4.38/111	.38/10	7.50/190	1.00/25

FDS-2-100B/1975B



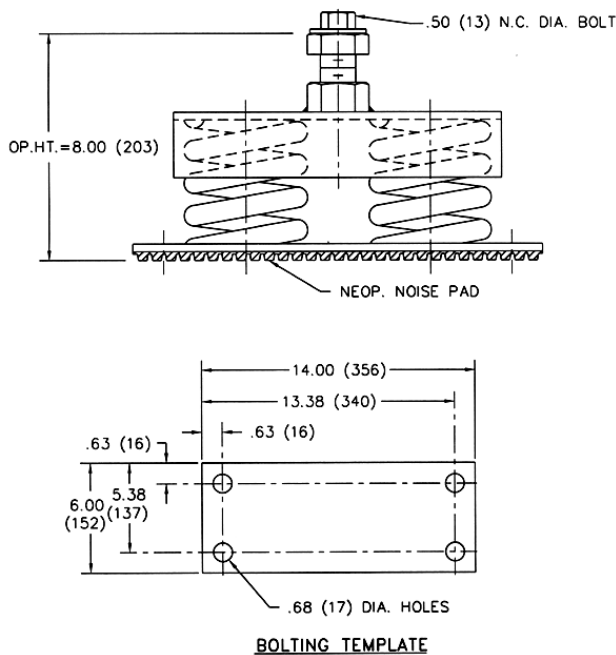
Spring Type	Rated Defl. in/mm	Spring O.D. in/mm	Rated Load lb/kg	A in/mm	B in/mm	C in/mm	D in/mm	E in/mm	F in/mm	G in/mm	H in/mm
FDS-2-100B	2.00/51	3.50/89	100/45	7.00/178	4.00/102	7.50/190	.30/10	2.00/51	5.50/140	.75/19	.68/17
FDS-2-250B	2.00/51	3.50/89	250/113	7.00/178	4.00/102	7.50/190	.30/10	2.00/51	5.50/140	.75/19	.68/17
FDS-2-500B	2.00/51	3.50/89	500/227	7.00/178	4.00/102	7.50/190	.30/10	2.00/51	5.50/140	.75/19	.68/17
FDS-2-750B	2.00/51	3.50/89	750/340	7.00/178	4.00/102	7.50/190	.30/10	2.00/51	5.50/140	.75/19	.68/17
FDS-2-995B	2.00/51	3.50/89	995/451	7.00/178	4.00/102	7.50/190	.30/10	2.00/51	5.50/140	.75/19	.68/17
FDS-2-1400B	2.00/51	3.50/89	1400/635	7.00/178	4.00/102	7.50/190	.30/10	2.00/51	5.50/140	.75/19	.68/17
FDS-2-1600B	2.00/51	3.50/89	1600/727	7.00/178	4.00/102	7.50/190	.30/10	2.00/51	5.50/140	.75/19	.68/17
FDS-2-1975B	2.00/51	3.50/89	1975/898	7.00/178	4.00/102	7.50/190	.30/10	2.00/51	5.50/140	.75/19	.68/17

FDS-2-2000B/4500B



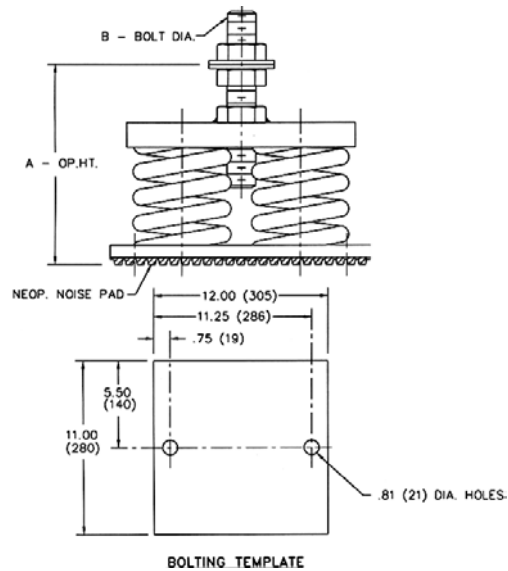
Spring Type	Rated Defl. in/mm	Spring O.D. in/mm	Rated Load lb/kg	A in/mm	B in/mm	C in/mm	D in/mm	E in/mm	F in/mm	G in/mm	H in/mm
FDS-2-2000B	2.00/51	5.00/127	2000/905	7.00/178	5.00/127	8.75/222	.38/10	3.75/95	5.75/146	.63/16	.56/14
FDS-2-2500B	2.00/51	5.00/127	2500/1135	7.00/178	5.00/127	8.75/222	.38/10	3.75/95	5.75/146	.63/16	.56/14
FDS-2-2750B	2.00/51	5.00/127	2750/1245	7.00/178	5.00/127	8.75/222	.50/12	3.75/95	5.75/146	.63/16	.56/14
FDS-2-3025B	2.00/51	5.00/127	3025/1375	7.00/178	5.00/127	8.75/222	.50/12	3.75/95	5.75/146	.63/16	.56/14
FDS-2-3250B	2.00/51	5.00/127	3250/1475	7.00/178	5.00/127	8.75/222	.50/12	3.75/95	5.75/146	.63/16	.56/14
FDS-2-3500B	2.02/51	5.00/127	3500/1588	7.00/178	5.00/127	8.75/222	.50/12	3.75/95	5.75/146	.63/16	.56/14
FDS-2-3900B	2.03/52	5.00/127	3900/1769	7.00/178	5.00/127	8.75/222	.50/12	3.75/95	5.75/146	.63/16	.56/14
FDS-2-4100B	2.02/51	5.00/127	4100/1864	7.00/178	5.00/127	8.75/222	.50/12	3.75/95	5.75/146	.63/16	.56/14
FDS-2-4500B	2.03/52	5.00/127	4500/2045	7.00/178	5.00/127	8.75/222	.50/12	3.75/95	5.75/146	.63/16	.56/14

FDS-2-4000B/9000B



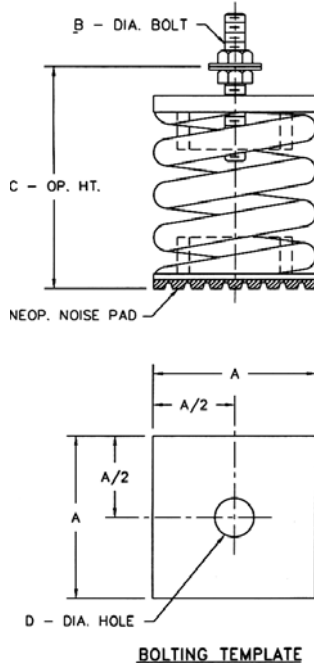
Spring Type	Rated Defl. in/mm	Spring O.D. in/mm	Rated Load lb/kg
FDS-2-4000B	2.00/51	5.00/127	4000/1815
FDS-2-5000B	2.00/51	5.00/127	5000/2270
FDS-2-5500B	2.00/51	5.00/127	5500/2495
FDS-2-6050B	2.00/51	5.00/127	6050/2745
FDS-2-6500B	2.00/51	5.00/127	6500/2950
FDS-2-7000B	2.02/51	5.00/127	7000/3175
FDS-2-7800B	2.03/52	5.00/127	7800/3538
FDS-2-8200B	2.02/51	5.00/127	8200/3727
FDS-2-9000B	2.03/52	5.00/127	9000/4091

FDS-2-8000B/18000B



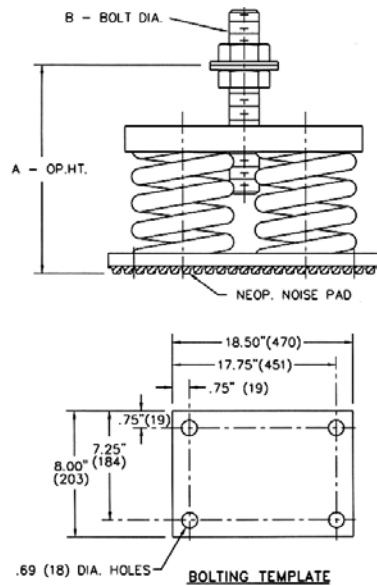
Spring Type	Rated Defl. in/mm	Spring O.D. in/mm	Rated Load lb/kg	A in/mm	B in/mm
FDS-2-8000B	2.00/51	5.00/127	8000/3625	9.75/248	1.25/32
FDS-2-10000B	2.00/51	5.00/127	10000/4535	9.75/248	1.25/32
FDS-2-11000B	2.00/51	5.00/127	11000/4990	9.75/248	1.50/38
FDS-2-12100B	2.00/51	5.00/127	12100/5490	9.75/248	1.50/38
FDS-2-13000B	2.00/51	5.00/127	13000/5895	9.75/248	1.50/38
FDS-2-14000B	2.02/51	5.00/127	14000/6350	9.75/248	1.50/38
FDS-2-16500B	2.03/52	5.00/127	15600/7076	9.75/248	1.50/38
FDS-2-16400B	2.00/51	5.00/127	16400/7455	9.75/248	1.50/38
FDS-2-18000B	2.00/51	5.00/127	18000/8182	9.75/248	1.50/38

FDS-4-100/5800



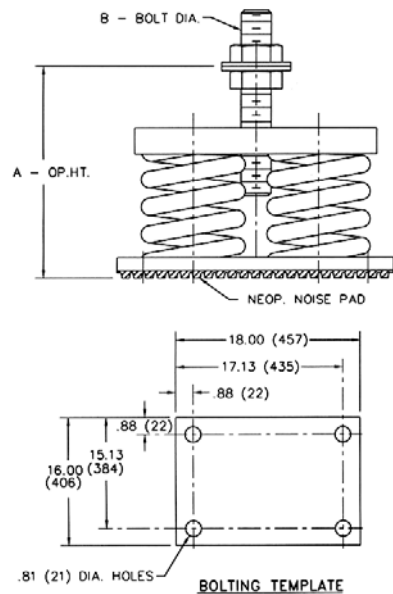
Spring Type	Spring Color	Rated Defl. in/mm	Rated Load lb/kg	Spring O.D. in/mm	A in/mm	B in/mm	C in/mm	D in/mm
FDS-4-100	Gray	4.00/100	100/46	5.63/143	6.00/152	.63/16	13.00/330	.81/21
FDS-4-250	Blue	4.00/100	250/114	5.63/143	6.00/152	.63/16	13.00/330	.81/21
FDS-4-500	Green	4.00/100	500/227	5.63/143	6.00/152	.63/16	13.00/330	.81/21
FDS-4-750	Black	4.00/100	750/341	5.63/143	6.00/152	.63/16	13.00/330	.81/21
FDS-4-1000	Red	4.00/100	1000/455	5.63/143	6.00/152	.63/16	13.00/330	.81/21
FDS-4-1250	Brown	4.00/100	1250/568	5.63/143	6.00/152	.63/16	13.00/330	.81/21
FDS-4-1600	Orange	4.00/100	1600/727	5.63/143	6.00/152	.63/16	13.00/330	.81/21
FDS-4-2250	Beige	4.00/100	2250/1023	8.00/203	8.00/203	.75/19	15.25/387	.94/24
FDS-4-2500	Beige/Blu	4.00/100	2500/1136	8.00/203	8.00/203	.75/19	15.25/387	.94/24
FDS-4-2750	Beige/Grn	4.00/100	2750/1250	8.00/203	8.00/203	.75/19	15.25/387	.94/24
FDS-4-3000	Beige/Blk	4.00/100	3000/1364	8.00/203	8.00/203	.75/19	15.25/387	.94/24
FDS-4-3250	Beige/Red	4.00/100	3250/1477	8.00/203	8.00/203	.75/19	15.25/387	.94/24
FDS-4-3500	Beige/Brn	4.00/100	3500/1591	8.00/203	8.00/203	.75/19	15.25/387	.94/24
FDS-4-3850	Beige/Org	4.00/100	3850/1746	8.00/203	8.00/203	.75/19	15.25/387	.94/24
FDS-4-4200	Chrome	4.00/100	4200/1905	8.00/203	8.00/203	.75/19	15.25/387	.94/24
FDS-4-4450	Chr/Blu	4.00/100	4450/2019	8.00/203	8.00/203	.75/19	15.25/387	.94/24
FDS-4-4700	Chr/Grn	4.00/100	4700/2132	8.00/203	8.00/203	.75/19	15.25/387	.94/24
FDS-4-4950	Chr/Blk	4.00/100	4950/2245	8.00/203	8.00/203	.75/19	15.25/387	.94/24
FDS-4-5200	Chr/Red	4.00/100	5200/2359	8.00/203	8.00/203	.75/19	15.25/387	.94/24
FDS-4-5450	Chr/Brn	4.00/100	5450/2472	8.00/203	8.00/203	.75/19	15.25/387	.94/24
FDS-4-5800	Chr/Org	4.00/100	5800/2631	8.00/203	8.00/203	.75/19	15.25/387	.94/24

FDS-4-5500/11600



Spring Type	Rated Defl. in/mm	Spring O.D. in/mm	Rated Load lb/kg	A in/mm	B in/mm
FDS-4-5500	4.00/100	8.00/203	5500/2495	12.50/317	1.00/25
FDS-4-6000	4.00/100	8.00/203	6000/2722	12.50/317	1.00/25
FDS-4-6500	4.00/100	8.00/203	6500/2948	12.50/317	1.00/25
FDS-4-7000	4.00/100	8.00/203	7000/3175	12.50/317	1.00/25
FDS-4-7700	4.00/100	8.00/203	7700/3493	12.50/317	1.00/25
FDS-4-8400	4.00/100	8.00/203	8400/3810	12.50/317	1.00/25
FDS-4-8900	4.00/100	8.00/203	8900/4037	12.50/317	1.00/25
FDS-4-9400	4.00/100	8.00/203	9400/4264	12.50/317	1.25/32
FDS-4-9900	4.00/100	8.00/203	9900/4491	12.50/317	1.25/32
FDS-4-10400	4.00/100	8.00/203	10400/4717	12.50/317	1.25/32
FDS-4-10900	4.00/100	8.00/203	10900/4944	12.50/317	1.25/32
FDS-4-11600	4.00/100	8.00/203	11600/5262	12.50/317	1.25/32

FDS-4-11000/23200



Spring Type	Rated Defl. in/mm	Spring O.D. in/mm	Rated Load lb/kg	A in/mm	B in/mm
FDS-4-11000	4.00/100	8.00/203	11000/4990	12.50/317	1.50/38
FDS-4-12000	4.00/100	8.00/203	12000/5443	12.50/317	1.50/38
FDS-4-13000	4.00/100	8.00/203	13000/5897	12.50/317	1.50/38
FDS-4-14000	4.00/100	8.00/203	14000/6350	12.50/317	1.50/38
FDS-4-15400	4.00/100	8.00/203	15400/6985	12.50/317	1.50/38
FDS-4-16800	4.00/100	8.00/203	16800/7620	12.50/317	1.50/38
FDS-4-17800	4.00/100	8.00/203	17800/8074	12.50/317	1.50/38
FDS-4-18800	4.00/100	8.00/203	18800/8528	12.50/317	1.75/44
FDS-4-19800	4.00/100	8.00/203	19800/8982	12.50/317	1.75/44
FDS-4-20800	4.00/100	8.00/203	20800/9435	12.50/317	1.75/44
FDS-4-21800	4.00/100	8.00/203	21800/9888	12.50/317	1.75/44
FDS-4-23200	4.00/100	8.00/203	23200/10524	12.50/317	1.75/44

TCA-Somax juntamente com Kinetics Noise Control estão continuamente desenvolvendo a qualidade dos nossos produtos.

Nos reservamos o direito de efetuar modificações nos dados aqui informados sem a obrigatoriedade de qualquer aviso prévio.