

DAMPTAC

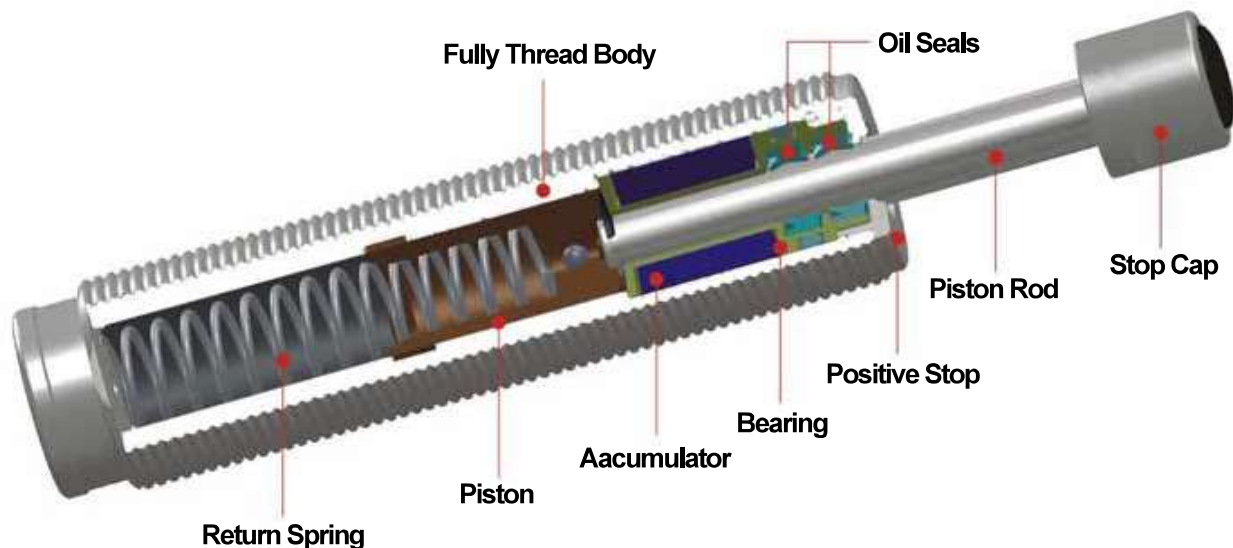
Industrial Shock Absorber



DTS Series

Self-Compensating

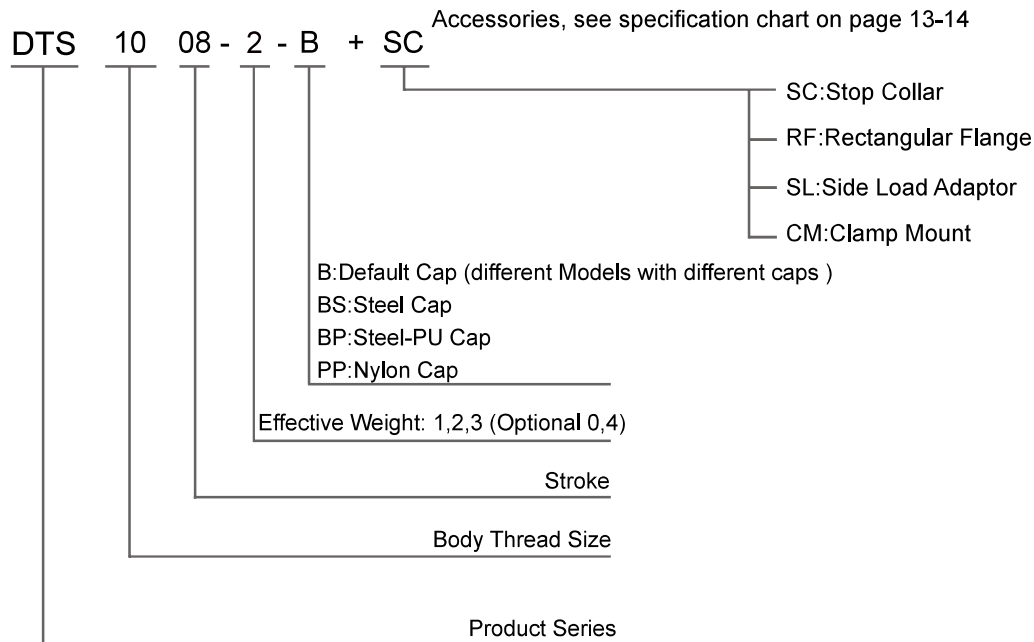
The DAMPTAC DTS self-compensation series is widely used in non-standard automation industry, it ensures the mass smooth deceleration until the stop, no rebound, and the reliability is fully verified. DTS series is designed with compact and simple structure, mainly used in the stereotyped conditions and workplaces with little change of the application parameters. Compared to the adjustable DTK series, DTS series selection calculation requires more accurate application parameters, fuzzy parameters may lead to the wrong selection, and ultimately cause the use problem of the shock absorbers. However, if after the accurate selection calculation or the successful field test verification, DTS series has a greater advantage in the installation process without adjustment, direct installation, you can quickly install large quantities, to avoid the risk of the wrong adjustment of the field workers. DTS series models has a variety of specifications, thread from M6 to M36, stroke from 4mm to 50mm (special models to 80mm), a single impact absorption energy from 2Nm to 560Nm, and accessories are also rich and complete, can solve all the customers' application requirements. Compared with the same size and stroke of the self-compensating shock absorbers, the absorbing energy and effective weight of DAMPTAC DTS series is much higher than other brands, while the service life is up to 5 million impact cycle (correct selection and use); Moreover, DTS series comes with "sideforce protection" function, in the same application conditions (with side force, without side force adapter), the life time of DTS series is far more than other brands of the same series of products! DTS series can provide special customized services, and provides professional perfect solutions according to the special conditions and applications of the customers.



Properties

- DTS uses the advanced design of integrated energy absorbing and damping tube, effective damping area greatly increased, absorbing energy is higher than most of the same specifications of other brands in the market.
- DTS series uses the advanced composite polyester oil seals and wiper scraper seals, and hardened, aluminium-titanium-nitride coated piston rod, and special accumulator made of special materials. These designs ensure the long life time of DTK (up to 5 million impacting cycles) and the performance of resistance to harsh environment.
- DTK series uses the distinctive front extended guidance bearing and the advanced oil-free bearing. It improves the performance of resistance to side load force.
- Impacting Velocity: 0.01 m/s ~ 5 m/s (special demand on request)
- Environment Temperature: -10 °C ~ 80 °C (special demand on request)
- Customized service: Professional customization service for special working conditions, consult DAMPTAC.

DTS Series Ordering Information



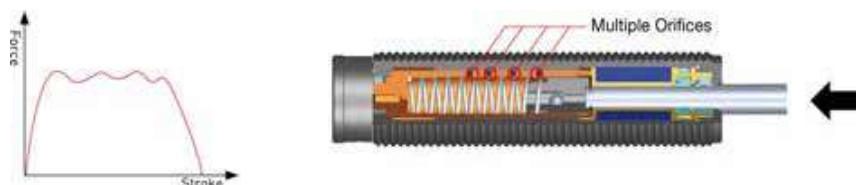
Example: DTS1412-2 (Thread M14, Stroke 12mm, Effective Weight "2", Without Cap)

DTS1412-2-B (Thread M14, Stroke 12mm, Effective Weight "2", Standard With Steel-PU Cap)

DTS Series - Special Customized Service

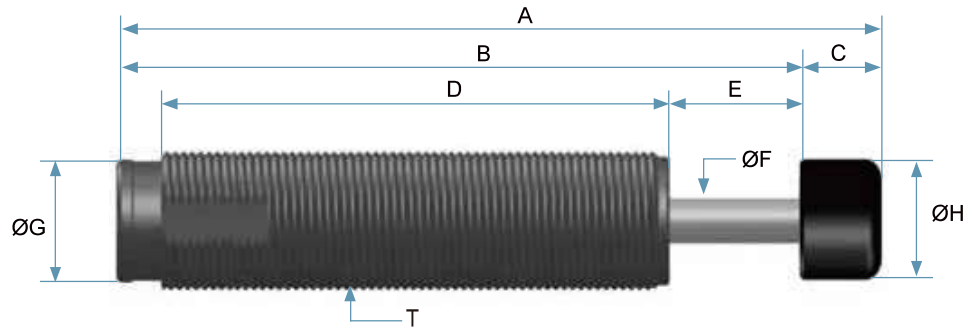
DAMPTAC can offer the standard multi-orifice design and the special customized service like composite multi-stage orifice design. So we can provide professional solution for many complex and special application conditions, and other brands can not provide this service.

The standard multi-orifice design We can use the standard multi-orifice design in most of the application conditions. During the entire damping stroke, the damping force remains almost constant and the peak value is small. This constant damping force provides better protection for machinery and equipments.



The composite multi-stage orifice design In some special application conditions, we need to use the special composite multi-stage orifice design. It can provide staged deceleration and damping. For example, one design, the damping force is larger in the initial stage of the damping stroke. It makes the velocity of the moving object fast declines. Then the damping force is changed to a low level, and the moving object continues to decelerate until stop. The other design, the damping force is smaller in the initial stage of the damping stroke. It makes a "soft touch" of the moving object and the shock absorber. Damping force becomes larger at the end and let the object quickly stop.





Specifications Chart -Self-Compensating DTS Series

Type (with cap)	Type (without cap)	Stroke (mm)	Max. Energy /Cycle E1 (Nm)	Max. Energy /Hour E2 (Nm/h)	Effective Weight (kg)			Return Force (N)		Weight (g)
					-1	-2	-3	Ext	Comp	
DTS0604-B	DTS0604	4	2	3,000	0.9-15			2.1	4.1	5
DTS0806-B	DTS0806	6	5	8,000	0.6-2.8	1-16	11-25	2.2	5.8	13
DTS1008-B	DTS1008	8	11	14,500	0.7-3.5	1.5-19	18-54	2.5	6.9	19
DTS1210-B	DTS1210	10	18	34,000	0.8-6.2	1.8-21	19-65	3.7	9.6	35
DTS1412F-B	DTS1412F	12	34	51,000	1-12	8-86	70-200	3.8	13.3	69
DTS1412-B	DTS1412									
DTS1415-B	DTS1415	15	35	51,000	1-12	8-86	70-200	3.8	13.3	73
DTS2015-B	DTS2015	15	78	68,500	2-33	28-210	180-819	5.8	17.2	175
DTS2020-B	DTS2020	20	105	69,500	3-35	31-230	190-910	8.2	23	206
DTS2050-B	DTS2050	50	149	75,000	1-40	32-249	198-997	9.2	19.3	285
DTS2525-B	DTS2525	25	226	113,000	28-230	140-1,255	706-7,230	11	29	295

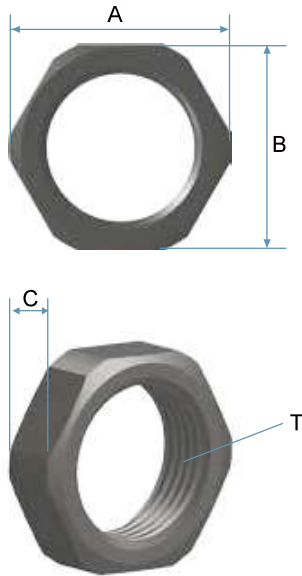
Dimensions Chart -Self-Compensating DTS Series

Type (with cap)	Type (without cap)	Dimensions (Unit: mm)								
		A with cap	B without cap	C	D	E	F	G	H	T
DTS0604-B	DTS0604	36.5	32.5	4	24.5	4	1.8	5.1	4.6	M6x0.75
DTS0806-B	DTS0806	53.5	46	7.5	35	6	3	6.7	6.8	M8x1.0
DTS1008-B	DTS1008	61.7	51.8	9.9	37	8	3	8.4	7.5	M10x1.0
DTS1210-B	DTS1210	70.5	60	10.5	43.8	10	4	10	10.5	M12x1.0
DTS1412F-B	DTS1412F	93	81	12	64.8	12	4	12	10.5	M14x1.0 M14x1.5
DTS1412-B	DTS1412									
DTS1415-B	DTS1415	103.5	91.5	12	72	15	4	12	10.5	M14x1.5
DTS2015-B	DTS2015	109	93	16	70	15	6	18	16	M20x1.5
DTS2020-B	DTS2020	146	126	20	94.9	20	6	18	16	M20x1.5
DTS2050-B	DTS2050	237	217	20	160.3	50	6	18	17.8	M20x1.5
DTS2525-B	DTS2525	144	131	13	96	25	8	22.8	22	M25x1.5

*More threads and strokes are available, please consult DAMPTAC!

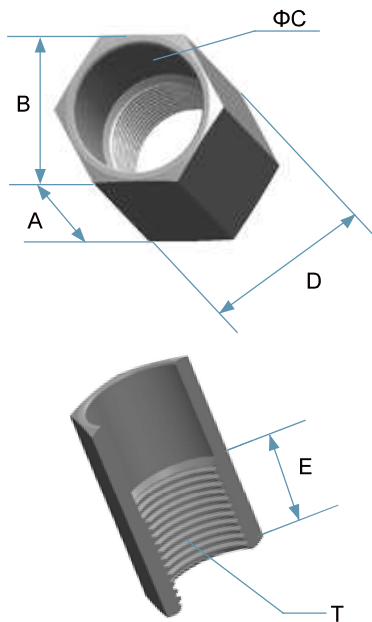
Accessories Specification Chart- DTK & DTS Series

1. Lock Nut



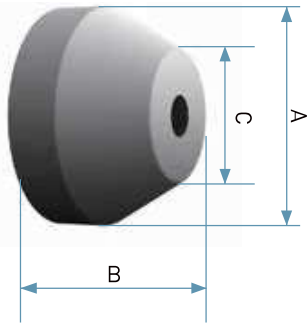
Type	A	B	C	T
LN06	9.2	8	3	M6X0.75
LN08	12	11	4	M8X1.0
LN10	15	14	4	M10X1.0
LN12	18.5	17	4	M12X1.0
LN14F	20.5	19	6	M14X1.0
LN14	20.5	19	6	M14X1.5
LN16	20.5	19	6	M16X1.5
LN20	28	25.8	8	M20X1.5
LN25	38.5	36	10	M25X1.5
LN27F	38.5	36	10	M27X1.5
LN27	38.5	36	10	M27X3.0
LN30	44.8	41	10	M30X1.5
LN33	44.8	41	10	M33X1.5
LN36	49.5	46	10	M36X1.5

2. Stop Collor



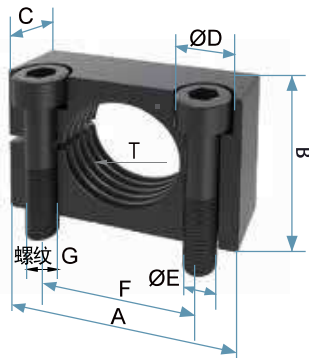
Type	A	B	C	D	E	T
SC06	12	8.5		10	12	M6X0.75
SC08	14	12		13.9	14	M8X1.0
SC10	19	14		16.2	19	M10X1.0
SC12	21	17	11	19.6	21	M12X1.0
SC14F	26	19	14	22	10	M14X1.0
SC14	26	19	14	22	10	M14X1.5
SC16	26	19	16.5	22	10	M16X1.5
SC20	33	24	20.5	27.7	21	M20X1.5
SC25	45	32	25.5	37	30	M25X1.5
SC27F	45	32	27.5	37	32	M27X1.5
SC27	45	32	27.5	37	32	M27X3.0

3. Polyurethane Cap



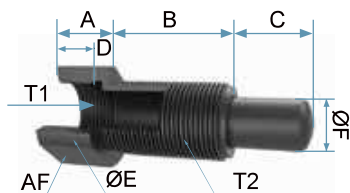
Type	A	B	C
UC30	31.7	21	18
UC33	31.7	21	18
UC36	31.7	21	18

4. Clamp Mount



Type	A	B	C	D	E	F	G	T
CM8	25	14	10	8	5	16	M4	M8X1.0
CM10	25	14	10	8	5	16	M4	M10X1.0
CM12	32	16	12	9	6	20	M5	M12X1.0
CM14F	32	20	12	9	6	20	M6	M14X1.0
CM14	32	20	12	9	6	20	M6	M14X1.5
CM16	36	22	16	11	7	24	M6	M16X1.5
CM20	40	25	20	11	7	28	M6	M20X1.5
CM25	46	32	25	11	7	32	M6	M25X1.5
CM27F	48	32	25	11	7	35	M6	M27X1.5
CM27	48	32	25	11	7	35	M6	M27X3.0
CM30	53	37	25	11	7	39	M6	M30X1.5
CM33	56	40	25	11	7	42	M6	M33x1.5
CM36	61	42	25	11	7	45	M6	M36x1.5

5. Side Load Adaptor



Type	A	B	C	F	E	AF	D	T1	T2
SL0806	12	11.5	6	3	16	14	10	M8X1.0	M8X1.0
SL1008	13	13.5	8	4	18	16	11	M10X1.0	M10X1.0
SL1210	12	17.5	10	5	20	18	9	M12X1.0	M12X1.0
SL1412F	14	19.5	12	6	22	19	9	M14X1.0	M14X1.0
SL1412	14	19.5	12	6	22	19	9	M14X1.5	M14X1.5
SL1612	19	22.8	12	8	22	19	13	M16X1.5	M16X1.5
SL2016	20	34	16	12	30	25	12	M20X1.5	M20X1.5
SL2525	20	42	25	16	35	31	14	M25X1.5	M25X1.5
SL2725F	20	42	25	16	35	32	15	M27X1.5	M27X1.5
SL2725	20	42	25	16	35	32	15	M27X3.0	M27X3.0
SL3035	25	57	35	20	40	36	16	M30X1.5	M30X1.5
SL3325	22	47	25	20	44	40	15	M33X1.5	M33X1.5
SL3625	22	47	25	20	44	41	15	M36X1.5	M36X1.5