

SAIBO
Innovation in Motion



TELESCOPIC RAIL

SAIBO is one of world recognized manufacturers of precision power transmission components. SAIBO group has two divisions, linear motion division and bearing division. Linear Product Division mainly produces curved rail and conveyor, telescopic rail and fork, linear guide, linear module, belt conveyor etc. Bearing Division mainly produces Thin-section bearing, High-speed angular contact ball bearing, linear bearing etc.

SAIBO products are widely used in 3C, factory automation, precision machine, green energy, rail transportation, medical and pharmacy etc. industries. SAIBO end users are located in more than 50 countries and regions around the world.

SAIBO has over 33,000 square meters producing facilities totally and 350 employees. SAIBO continues to develop innovative automation components and modulars to meet customers sustainable solutions.

SAIBO means aim for greatness, focus on details. We seek to work with you and promise the following:

- The right product from your application
- A quality product you can trust
- Engineering assistance that is proven and world renown

TPE

Partial Extension Rail

This rail's stroke could reach half or more than its length. Using shorter ball cage could get longer stroke. But this will reduce load capacity.



TDB

Full Extension Rail

This series products permit full extension. It is assembled with two TPE rails which are bolted back to back. This rail's stroke could reach slider's full length or even more.



TDF

Full Extension Rail

This series products permits full extension. It is assembled with two TPE rails which are bolted face to face. This rail's stroke could reach slider's full length or even more. It has a good dustproof performance to balls.



TFS

Full Extension Rail with S-beam

Telescopic rail of Full extension with S-beam. Thin structure is very fit for limited assembly space. TFS achieves high load capacity, small deflection in compact structure.



TLB**Linear Guide with Ball
Cage**

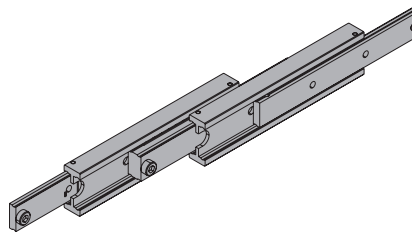
This series products' ball cage and internal slider are limited in the external C-shaped rail. The internal slider can not extend external C-shaped rail. One or more internal sliders could be set in one external rail. Internal slides could be set in the same or different ball cages.

**THR****Full Extension Rail
(Static Application)**

i-beam structure designing. Suitable for heavy duty application without shock or vibration. High carbon steel and Stainless steel are available.

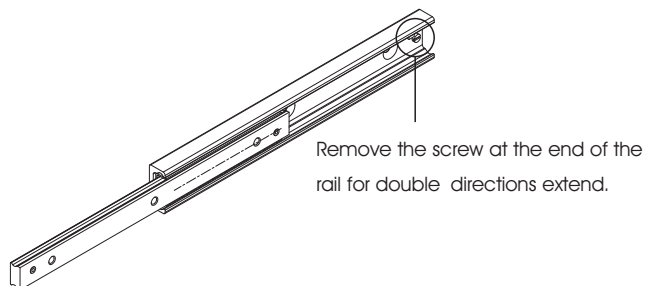
**DTHR****Super Extension Rail
(Static Application)**

200% Extension Rail, i-beam structure designing. Suitable for heavy duty application without shock or vibration. High carbon steel and Stainless steel are available.



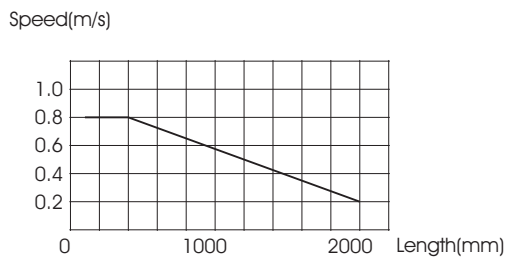
Double Directions

If need double directions extend, just remove the stop screw, Then the internal slider could extend in both directions.



Working Speed

The maximum working speed is 0.8m/s. But this maximum speed could reduce influenced by the length of ball cage and internal slider, installation and application. If application condition is good and installation is perfect, the most influence factor is rail's length. Please refer the maximum speed as below chart.



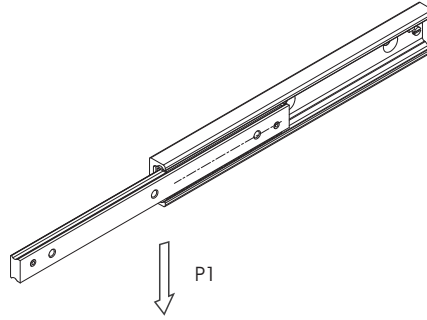
Lubrication and Temperature

High quality lubrication is helpful for rail's working life. It also could reduce running noise. In delivery status, all products are filled lubricate in the raceways which allows to work in the temperature between -20°C and 120°C . It is commended to re-lubricate each 100Km running.

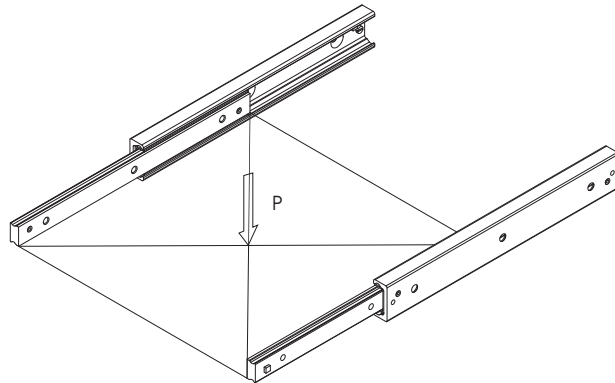
Special temperature request, please contact us.

Load Capacity

These Cold-drawn Steel Rails are designed for heavy load capacity. The load capacity is most different to those steel sheet rolled drawer rails. Please check detailed parameters in each product's load capacity table.



All the maximum permissible load showing in the table is tested in the center of extend slider in the status of completely extension.



When two telescopic rails are mounted parallelly in ideal and the load is distributed on each rail uniformly, This drawer's maximum load P is double of one single rail's load capacity.

$$P=2 P1$$

Load Calculation

Telescopic Rail's life is determined by several factors. These factors include effective load, direction shift frequency, running speed, installation precision, vibration or shock, working condition and temperature, lubricate etc.

Equivalent Load LF

$$LF = F_y + \left(\frac{F_z}{Coax} + \frac{M_x}{M_{xmax}} + \frac{M_y}{M_{ymax}} + \frac{M_z}{M_{zmax}} \right) Corad$$

F_y – Actual load in Y direction (N)

F_z – Actual load in Z direction (N)

M_x- Actual moment load in X directiron (N.m)

M_y- Actual moment load in Y directiron (N.m)

M_z- Actual moment load in Z directiron (N.m)

(Below Parameters can be taken from the table of Load Capacity)

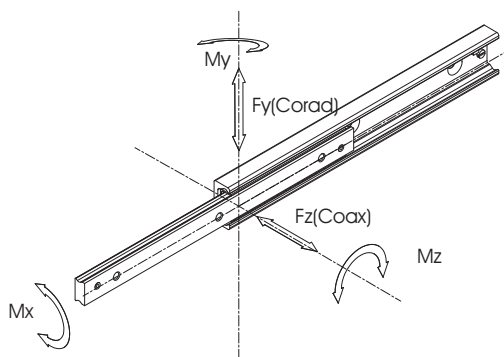
Corad – Load capacity in Y direction (N)

Coax –Load capacity in Z direction (N)

M_x-Max-Moment capacity in X directiron (N.m)

M_y-Max-Moment capacity in Y directiron (N.m)

M_z-Max-Moment capacity in Z directiron (N.m)



Life Calculation

$$L_{km} = 100 \cdot \left(\frac{C_{100}}{LF \cdot f} \right)^3$$

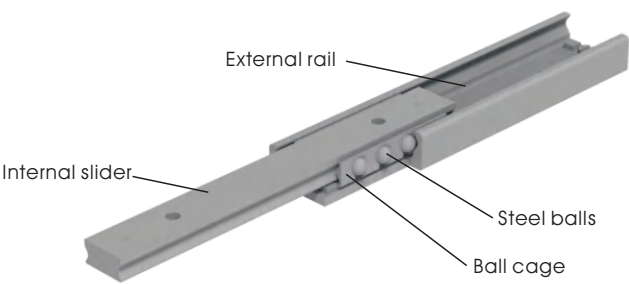
C₁₀₀ – Load capacity factor.
(Please check detailed parameter each product’s load capacity table)

f – Application Coefficient

None vibration or shock, Low speed Low frequency shift direction, clean environment.	1.3-1.8
Light vibration or shock, medium speed medium frequency shift direction, some dirtiness	1.8-2.3
Heavy vibration or shock, high speed high frequency shift direction, heavy dirty	2.3-3.5

TPE

Partial Extension Rail



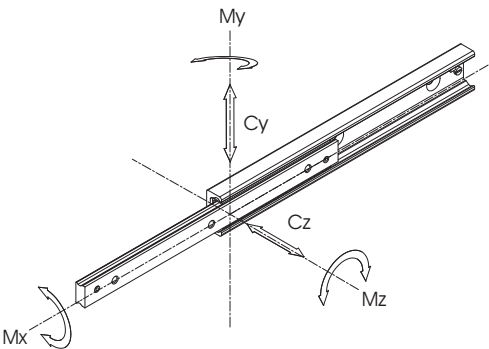
TPE stroke could reach half of its length or even more. Shorter ball cage could achieve longer stroke. But load capacity will be smaller accordingly.

Rail Profile External and internal profiles are made of high-quality steel with cold drawn, induction hardening. So it performs good rigidity, excellent wear-resisting property.

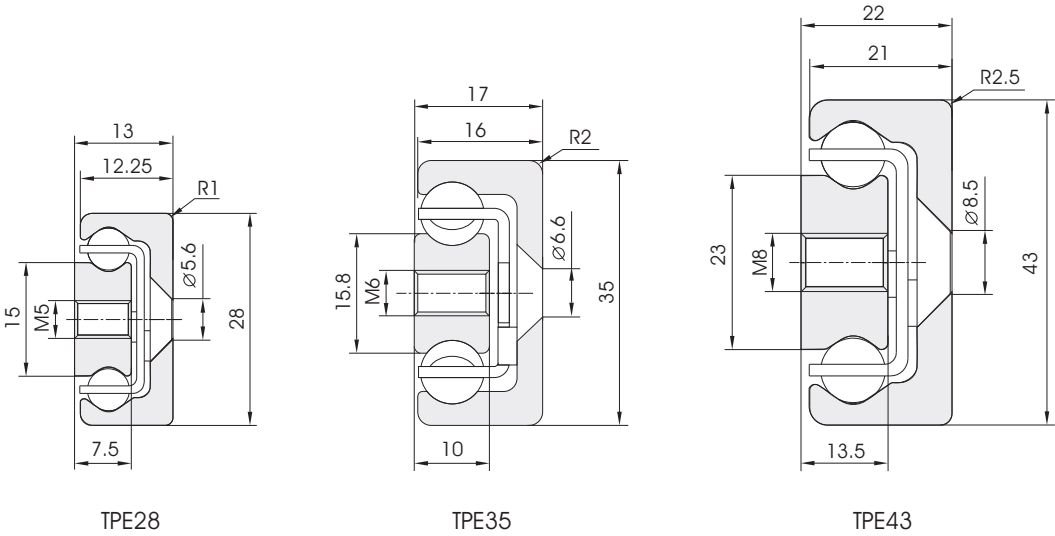
Steel Ball SAIBO select high performance steel balls which are made of high-quality steel. Precision and hardened steel balls are very helpful to improve wear-resisting property and reduce noise

Code Description	TPE	28	- L	- S	
					Stroke
					Rail length
					Size
					Product series code

Force Diagrams

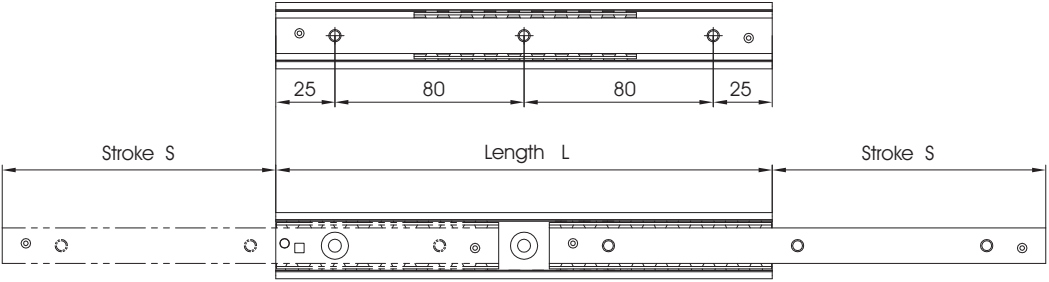


TPE Dimension



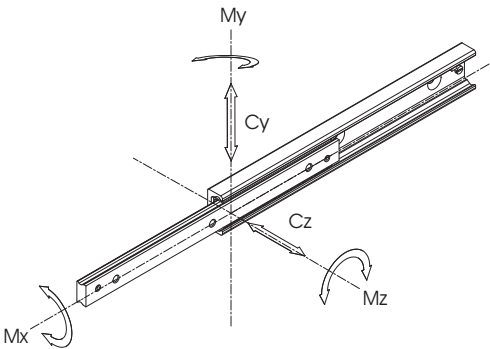
Type	Length L (mm)	Stroke S (mm)	Load Capacity					C ₁₀₀ (N)	No. of holes
			C _y (N)	C _z (N)	M _x (Nm)	M _y (Nm)	M _z (Nm)		
TPE28-130	130	74	612	430	16	21	29	873	2
TPE28-210	210	116	1117	782	27	59	83	1579	3
TPE28-290	290	148	1935	1355	40	133	187	2693	4
TPE28-370	370	190	2446	1712	51	214	306	3403	5
TPE28-450	450	232	2956	2070	62	315	450	4120	6
TPE28-530	530	274	3467	2427	73	436	620	4835	7
TPE28-610	610	316	3978	2785	83	577	820	5558	8
TPE28-690	690	358	4489	3142	94	736	1051	6273	9
TPE28-770	770	400	4996	3499	105	915	1308	6985	10
TPE28-850	850	433	5829	4082	118	1166	1667	8113	11
TPE28-930	930	475	6336	4437	130	1390	1985	8810	12
TPE28-1010	1010	517	6849	4795	140	1633	2329	9526	13
TPE28-1090	1090	559	7359	5150	151	1894	2704	10239	14
TPE28-1170	1170	601	7868	5508	162	2176	3109	10953	15

TPE Dimension



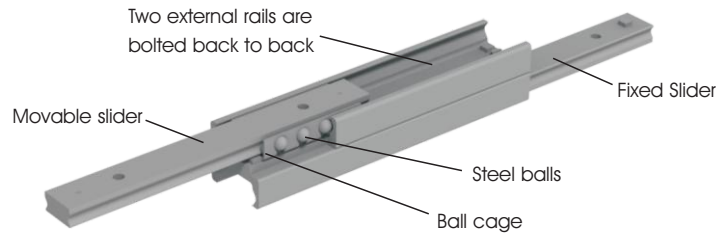
Type	Length L (mm)	Stroke S (mm)	Load Capacity					C_{100} (N)	No. of holes
			C_y (N)	C_z (N)	M_x (Nm)	M_y (Nm)	M_z (Nm)		
TPE35-210	210	127	1066	745	29	58	81	1532	3
TPE35-290	290	159	2061	1441	47	147	207	2905	4
TPE35-370	370	203	2639	1846	60	239	339	3720	5
TPE35-450	450	247	3217	2251	73	355	504	4536	6
TPE35-530	530	279	4282	2996	90	544	774	5989	7
TPE35-610	610	323	4859	3400	104	712	1014	6802	8
TPE35-690	690	367	5436	3803	117	903	1287	7611	9
TPE35-770	770	399	6522	4564	134	1192	1701	9092	10
TPE35-850	850	443	7096	4965	147	1436	2049	9902	11
TPE35-930	930	487	7670	5367	160	1703	2430	10713	12
TPE35-1010	1010	519	8766	6135	178	2093	2988	12200	13
TPE35-1090	1090	563	9338	6535	191	2413	3444	13008	14
TPE35-1170	1170	607	9910	6936	204	2755	3933	13817	15
TPE35-1250	1250	639	11013	7707	221	3246	4635	15310	16
TPE35-1330	1330	683	11583	8106	234	3641	5199	16117	17
TPE35-1410	1410	727	12154	8506	247	4059	5796	16924	18
TPE35-1490	1490	759	13261	9281	265	4651	6642	18422	19

Force Diagrams



Type	Length L (mm)	Stroke S (mm)	Load Capacity					C ₁₀₀	No. of holes
			C _y (N)	C _z (N)	M _x (Nm)	M _y (Nm)	M _z (Nm)		
TPE43-210	210	123	1596	1118	61	85	121	2288	3
TPE43-290	290	158	2873	2012	94	202	289	4055	4
TPE43-370	370	208	3378	2365	116	307	441	4794	5
TPE43-450	450	243	4691	3285	150	510	730	6602	6
TPE43-530	530	278	6040	4228	185	763	1089	8451	7
TPE43-610	610	313	7412	5189	216	1065	1520	10325	8
TPE43-690	690	363	7865	5506	238	1295	1850	11007	9
TPE43-770	770	398	9233	6465	273	1682	2403	12879	10
TPE43-850	850	433	10617	7430	305	2120	3029	14763	11
TPE43-930	930	483	11056	7740	328	2440	3485	15430	12
TPE43-1010	1010	518	12435	8705	360	2962	4231	17311	13
TPE43-1090	1090	568	12878	9015	383	3336	4767	17981	14
TPE43-1170	1170	603	14256	9980	416	3945	5635	19861	15
TPE43-1250	1250	638	15640	10948	450	4597	6572	21749	16
TPE43-1330	1330	688	16076	11255	471	5066	7238	22412	17
TPE43-1410	1410	723	17458	12220	504	5806	8296	24298	18
TPE43-1490	1490	758	18848	13192	538	6599	9426	26187	19
TPE43-1570	1570	793	20240	14168	571	7442	10630	28085	20
TPE43-1650	1650	843	20663	14465	593	8031	11473	28735	21
TPE43-1730	1730	878	22055	15438	626	8958	12796	30628	22
TPE43-1810	1810	928	22480	15738	648	9604	13718	31280	23
TPE43-1890	1890	963	23865	16709	682	10615	15163	33170	24
TPE43-1970	1970	1013	24230	17010	705	11315	16162	33827	25



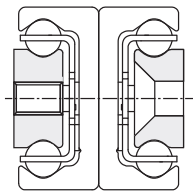
TDB**Full Extension Rail**

This series products permit full extension. It is assembled with two Partial Extension(TPE) Rails which are bolted back to back. This rail's stroke could reach slider's full length or even more.

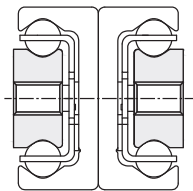
- Full stroke
- High load capacity and good rigidity performance
- Compact and easy structure
- Two-way slide is available

TDB Mount—holes combinations

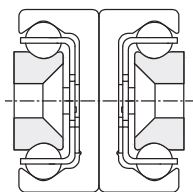
There're several options for mounting holes available for :



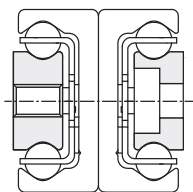
Basic combination



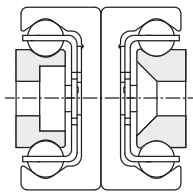
MM



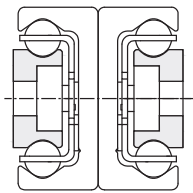
V V



CM



C V

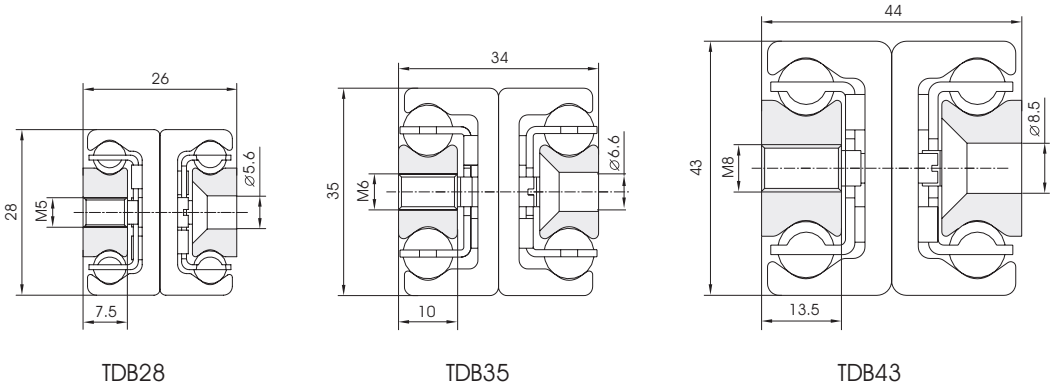


C C

- * V type hole is optional DIN7991 bolt and C type hole is optional DIN7984 Bolt.
- * 28 Size rail is optional M5 bolt, 35 Size rail is optional M6 bolt and 43 size rail is optional M8 bolt.

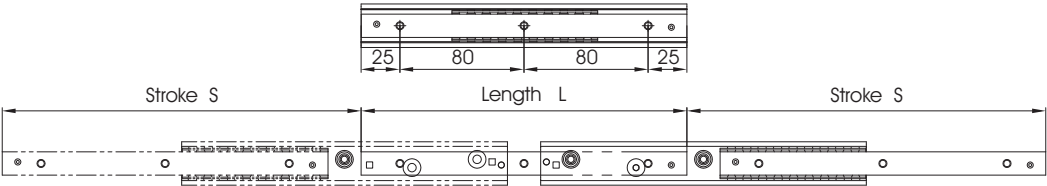
Code Description	TDB	28	MM VV CM CV CC	- L	- S
					Stroke
				Rail length	
			Mount-hole combination type, vacant means basic combination		
		Size			
	Product series code				

TDB Dimension



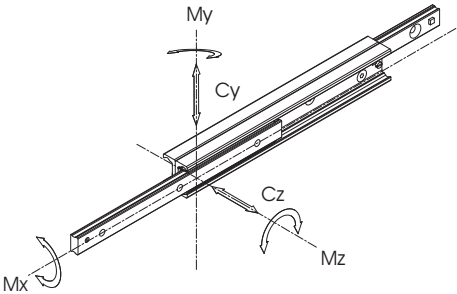
Type	Length L (mm)	Stroke S (mm)	Load Capacity		C_{100} (N)	No. of holes
			C_y (N)	C_z (N)		
TDB28-130	130	148	236	165	358	2
TDB28-210	210	232	433	303	656	3
TDB28-290	290	296	768	538	1155	4
TDB28-370	370	380	969	472	1456	5
TDB28-450	450	464	1170	386	1760	6
TDB28-530	530	548	1108	326	2065	7
TDB28-610	610	633	956	281	2370	8
TDB28-690	690	717	845	248	2673	9
TDB28-770	770	801	754	220	2978	10
TDB28-850	850	866	712	209	3489	11
TDB28-930	930	950	647	190	3785	12
TDB28-1010	1010	1034	593	175	4086	13
TDB28-1090	1090	1118	548	161	4389	14
TDB28-1170	1170	1202	509	150	4691	15

TDB Stroke



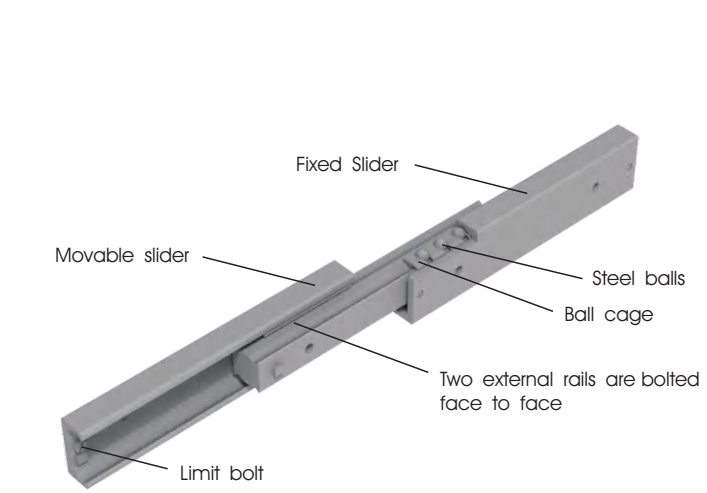
Type	Length L (mm)	Stroke S (mm)	Load Capacity		C_{100} (N)	No. of holes
			C_y (N)	C_z (N)		
TDB35-210	210	254	403	282	615	3
TDB35-290	290	318	801	561	1212	4
TDB35-370	370	406	1026	719	1553	5
TDB35-450	450	494	1251	794	1893	6
TDB35-530	530	558	1686	729	2541	7
TDB35-610	610	646	1909	627	2879	8
TDB35-690	690	734	1690	549	3218	9
TDB35-770	770	798	1592	517	3882	10
TDB35-850	850	886	1426	464	4219	11
TDB35-930	930	974	1292	420	4556	12
TDB35-1010	1010	1038	1234	401	5227	13
TDB35-1090	1090	1126	1132	368	5562	14
TDB35-1170	1170	1214	1046	340	5898	15
TDB35-1250	1250	1278	1007	328	6574	16
TDB35-1330	1330	1366	938	305	6908	17
TDB35-1410	1410	1454	878	286	7243	18
TDB35-1490	1490	1518	851	277	7921	19

Load Diagram



Type	Length L (mm)	Stroke S (mm)	Load Capacity		C_{100} (N)	No. of holes
			C_y (N)	C_z (N)		
TDB43-210	210	246	606	425	923	3
TDB43-290	290	316	1115	781	1687	4
TDB43-370	370	416	1302	912	1974	5
TDB43-450	450	486	1827	1280	2764	6
TDB43-530	530	556	2376	1435	3580	7
TDB43-610	610	626	2935	1303	4414	8
TDB43-690	690	726	3092	1096	4661	9
TDB43-770	770	796	3056	1018	5493	10
TDB43-850	850	866	2848	945	6335	11
TDB43-930	930	966	2508	835	6572	12
TDB43-1010	1010	1036	2365	788	7411	13
TDB43-1090	1090	1106	2239	745	8257	14
TDB43-1170	1170	1206	2020	673	8489	15
TDB43-1250	1250	1276	1929	642	9332	16
TDB43-1330	1330	1376	1767	588	9568	17
TDB43-1410	1410	1446	1694	565	10409	18
TDB43-1490	1490	1516	1628	542	11255	19
TDB43-1570	1570	1586	1568	523	12105	20
TDB43-1650	1650	1686	1460	487	12330	21
TDB43-1730	1730	1756	1407	470	13178	22
TDB43-1810	1810	1856	1322	440	13406	23
TDB43-1890	1890	1926	1281	426	14252	24
TDB43-1970	1970	2026	1207	402	14483	25

TDF
Full Extension Rail



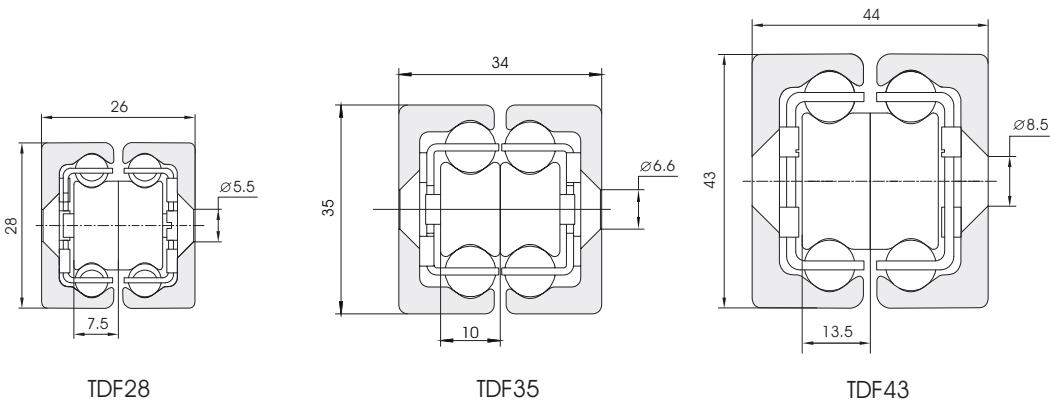
This series products permit full extension. It is assembled with two Partial Extension (TPE) Rails which are bolted face to face. This rail’s stroke could reach slider’s full length or even more.

- One outer rail is fixed, and the other outer rail is installed on the device that needs to be moved.
- The cover of the outer rail can provide good dust protection for the internal steel ball.
- One-way or two-way travel can be selected according to the use.

Code Description

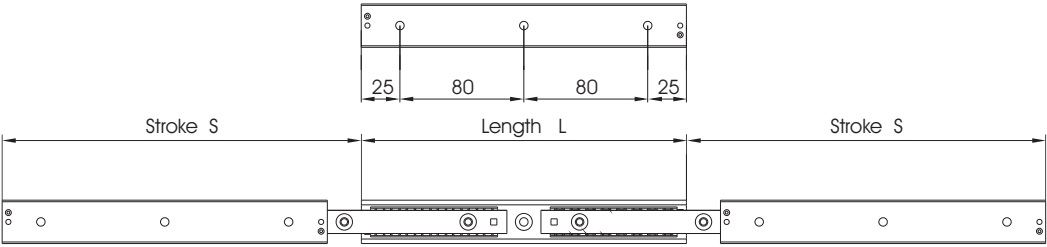
TDF	28	- L	- S	
			Stroke	
			Rail length	
	Size			
				Product series code

TDF Dimension



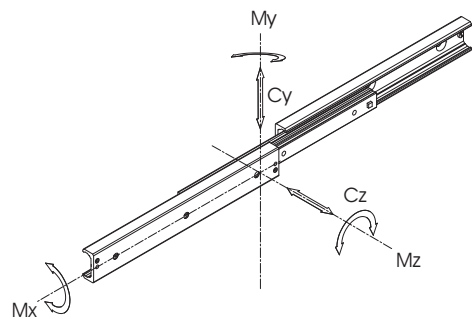
Type	Length L (mm)	Stroke S (mm)	Load Capacity		C_{100} (N)	No. of holes
			C_y (N)	C_z (N)		
TDF28-130	130	148	240	165	360	2
TDF28-210	210	232	432	302	655	3
TDF28-290	290	296	622	537	1153	4
TDF28-370	370	380	482	482	1456	5
TDF28-450	450	464	394	394	1760	6
TDF28-530	530	548	332	332	2063	7
TDF28-610	610	633	286	286	2372	8
TDF28-690	690	717	255	255	2670	9
TDF28-770	770	801	227	227	2980	10
TDF28-850	850	866	213	213	3487	11
TDF28-930	930	950	191	191	3783	12
TDF28-1010	1010	1034	178	178	4086	13
TDF28-1090	1090	1118	165	165	4388	14
TDF28-1170	1170	1202	153	153	4692	15

TDF Stroke



Type	Length L (mm)	Stroke S (mm)	Load Capacity		C_{100} (N)	No. of holes
			C_y (N)	C_z (N)		
TDF35-210	210	254	403	282	615	3
TDF35-290	290	318	801	561	1212	4
TDF35-370	370	406	1026	719	1553	5
TDF35-450	450	494	1251	794	1893	6
TDF35-530	530	558	1686	729	2541	7
TDF35-610	610	646	1909	627	2879	8
TDF35-690	690	734	1690	549	3218	9
TDF35-770	770	798	1592	517	3882	10
TDF35-850	850	886	1426	464	4219	11
TDF35-930	930	974	1292	420	4556	12
TDF35-1010	1010	1038	1234	401	5227	13
TDF35-1090	1090	1126	1132	368	5562	14
TDF35-1170	1170	1214	1046	340	5898	15
TDF35-1250	1250	1278	1007	328	6574	16
TDF35-1330	1330	1366	938	305	6908	17
TDF35-1410	1410	1454	878	286	7243	18
TDF35-1490	1490	1518	851	277	7921	19

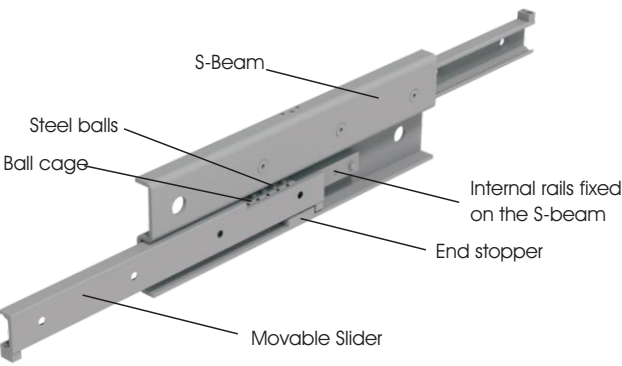
Load Diagram



Type	Length L (mm)	Stroke S (mm)	Load Capacity		C_{100} (N)	No. of holes
			C_y (N)	C_z (N)		
TDF43-210	210	246	610	425	925	3
TDF43-290	290	316	1114	780	1687	4
TDF43-370	370	416	1300	910	1974	5
TDF43-450	450	486	1335	1285	2764	6
TDF43-530	530	556	1193	1193	3580	7
TDF43-610	610	626	1083	1083	4415	8
TDF43-690	690	726	920	920	4665	9
TDF43-770	770	796	845	845	5493	10
TDF43-850	850	866	785	785	6331	11
TDF43-930	930	966	693	693	6572	12
TDF43-1010	1010	1036	655	655	7412	13
TDF43-1090	1090	1106	619	619	8257	14
TDF43-1170	1170	1206	556	556	8485	15
TDF43-1250	1250	1276	533	533	9332	16
TDF43-1330	1330	1376	488	488	9568	17
TDF43-1410	1410	1446	473	473	10415	18
TDF43-1490	1490	1516	450	450	11255	19
TDF43-1570	1570	1586	434	434	12105	20
TDF43-1650	1650	1686	400	400	12330	21
TDF43-1730	1730	1756	390	390	13178	22
TDF43-1810	1810	1856	366	366	13407	23
TDF43-1890	1890	1926	352	352	14250	24
TDF43-1970	1970	2026	335	335	14484	25

TFS

Full Extension rail with S-beam

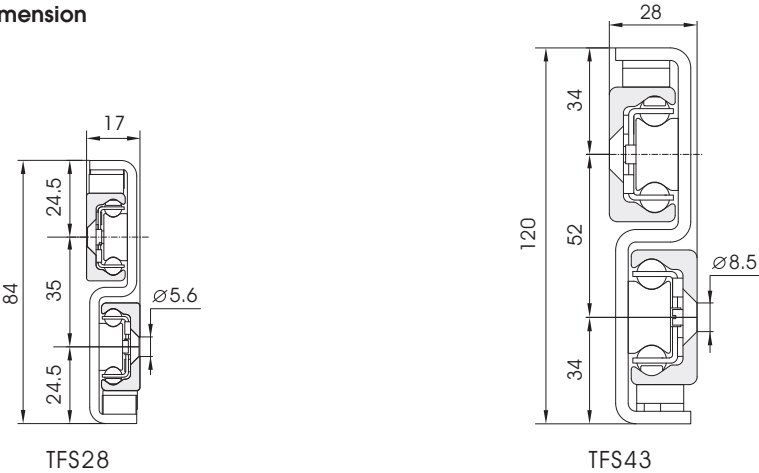


TFS rail is a full extension rail with S-beam. Thin structure is very fit for limited assembly space. TFS achieves high load capacity, small deflection in compact structure.

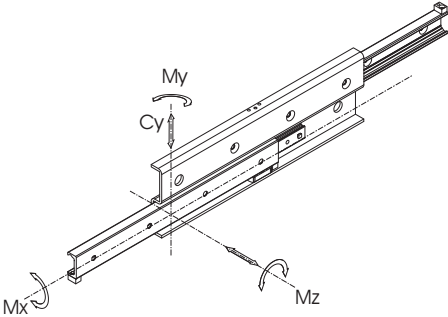
- It is ideal for using in limited space
- Full stroke
- High load capacity and good rigidity performance
- Two-way slide is available

Code Description	TFS	28	D	- L	- S
					Stroke
					Rail length
					Two-way movable , vacant means one-way movable
					Size
					Product series code

TFS One-way Dimension

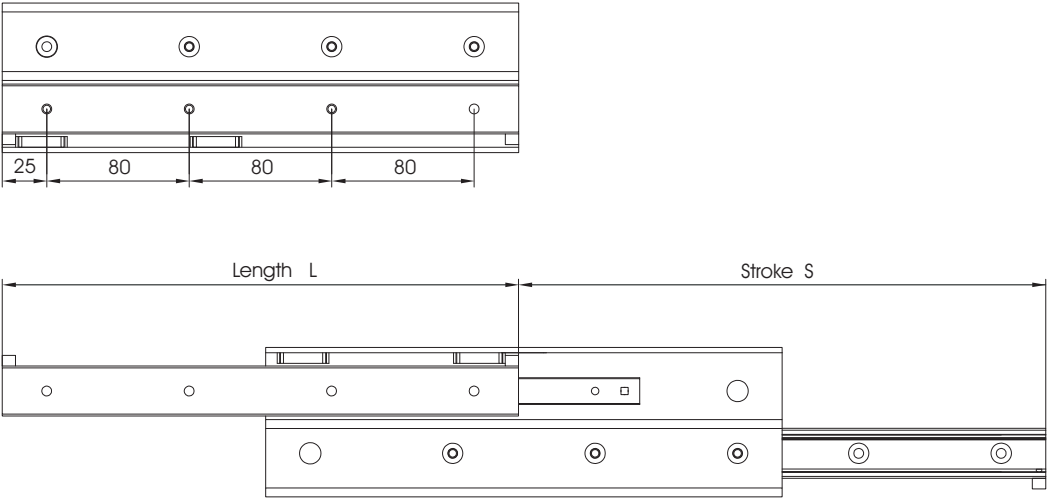


Force Diagrams



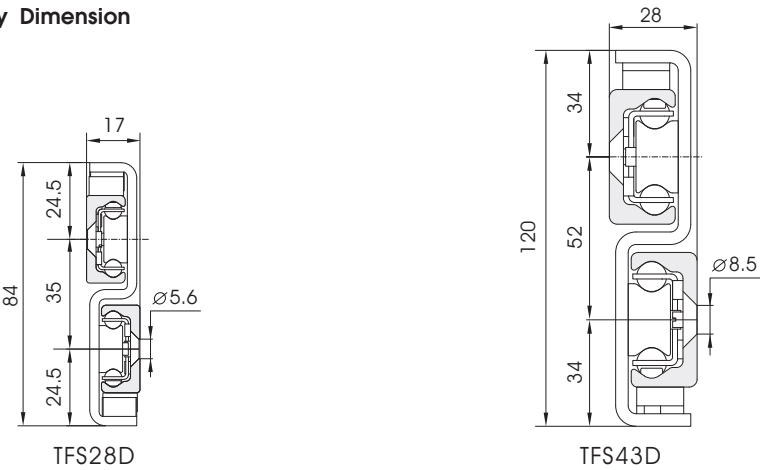
Type	Carriage				
	Length	Stroke	Load Capacity	C_{100} (N)	No. of holes
	L (mm)	S (mm)	Corad (N)		
TFS28-290	290	296	570	864	4
TFS28-370	370	380	769	1164	5
TFS28-450	450	464	969	1465	6
TFS28-530	530	548	1170	1768	7
TFS28-610	610	630	1376	2079	8
TFS28-690	690	714	1577	2385	9
TFS28-770	770	798	1778	2684	10
TFS28-850	850	864	2111	3210	11
TFS28-930	930	950	2240	3475	12
TFS28-1010	1010	1034	2054	3778	13

TFS One-way Stroke

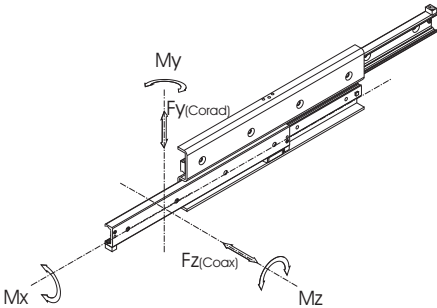


Type	Carriage				
	Length	Stroke	Load Capacity	C ₁₀₀ (N)	No. of holes
	L (mm)	S (mm)	Corad (N)		
TFS43-530	530	556	2061	3121	7
TFS43-610	610	626	2603	3953	8
TFS43-690	690	726	2775	4197	9
TFS43-770	770	796	3319	5010	10
TFS43-850	850	866	3873	5837	11
TFS43-930	930	966	4036	6095	12
TFS43-1010	1010	1036	4590	6916	13
TFS43-1090	1090	1106	4908	7750	14
TFS43-1170	1170	1206	4610	7645	15
TFS43-1250	1250	1276	4398	8829	16
TFS43-1330	1330	1376	4027	9077	17
TFS43-1410	1410	1446	3864	9909	18
TFS43-1490	1490	1516	3713	10750	19
TFS43-1570	1570	1616	3445	10988	20

TFS...D Two-way Dimension

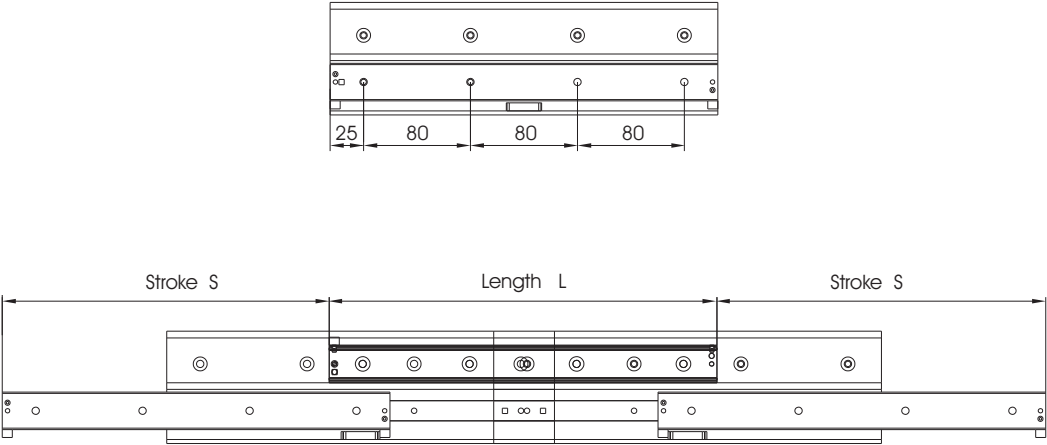


Force Diagrams



Type	Carriage				
	Length	Stroke	Load Capacity	C ₁₀₀ (N)	No. of holes
	L (mm)	S (mm)	Corad (N)		
TFS28D-290	290	246	896	864	4
TFS28D-370	370	326	1105	1164	5
TFS28D-450	450	406	1320	1465	6
TFS28D-530	530	486	1626	1768	7
TFS28D-610	610	566	1838	2079	8
TFS28D-690	690	646	2055	2385	9
TFS28D-770	770	726	2262	2684	10
TFS28D-850	850	806	2485	3210	11
TFS28D-930	930	886	2582	3475	12
TFS28D-1010	1010	966	2357	3778	13

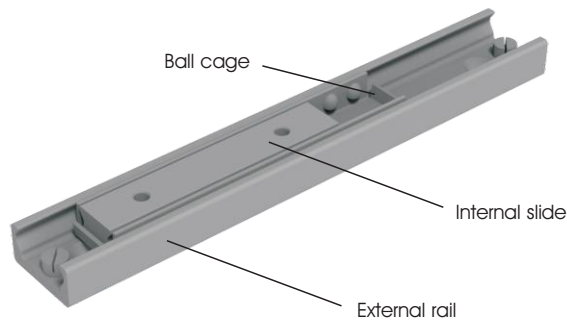
TFS Two-way Stroke



Type	Carriage				
	Length	Stroke	Load Capacity	C ₁₀₀ (N)	No. of holes
	L (mm)	S (mm)	Corad (N)		
TFS43D-530	530	480	3019	3121	7
TFS43D-610	610	560	3280	3953	8
TFS43D-690	690	640	3781	4197	9
TFS43D-770	770	720	4297	5010	10
TFS43D-850	850	800	4548	5837	11
TFS43D-930	930	880	5065	6095	12
TFS43D-1010	1010	960	5578	6916	13
TFS43D-1090	1090	1040	5830	7750	14
TFS43D-1170	1170	1120	5390	7645	15
TFS43D-1250	1250	1200	5014	8829	16
TFS43D-1330	1330	1280	4686	9077	17
TFS43D-1410	1410	1360	4398	9909	18
TFS43D-1490	1490	1440	4140	10750	19
TFS43D-1570	1570	1520	3917	10988	20

TLB

Linear guide with Ball cage

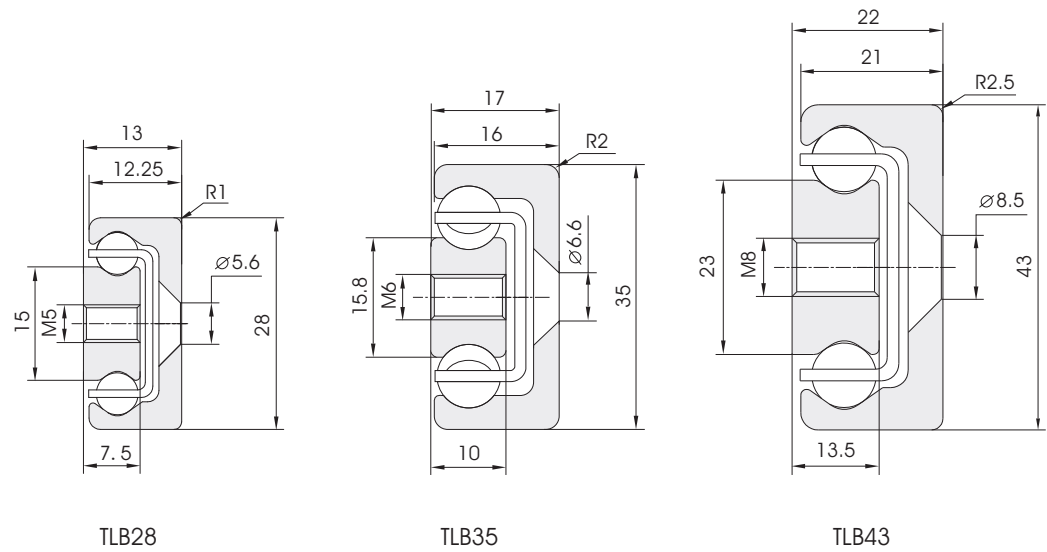


This series products' ball cage and internal slider are limited in the external C-shaped rail. Then the internal slider can't extend external C-shaped rail. One or more internal sliders could be set in one external rail.

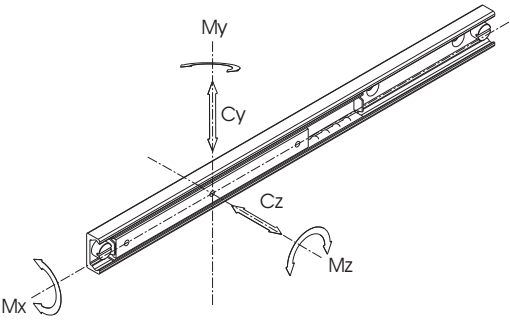
- Internal slider length is available for custom design
- One External rail could set one or more internal sliders
- One or more internal sliders could be set in the same or different ball cages

Code Description	TLB	28	- A	- S	- L
					Rail length
				Stroke	
			Slider length		
		Size			
	Product series code				

TLB Dimension

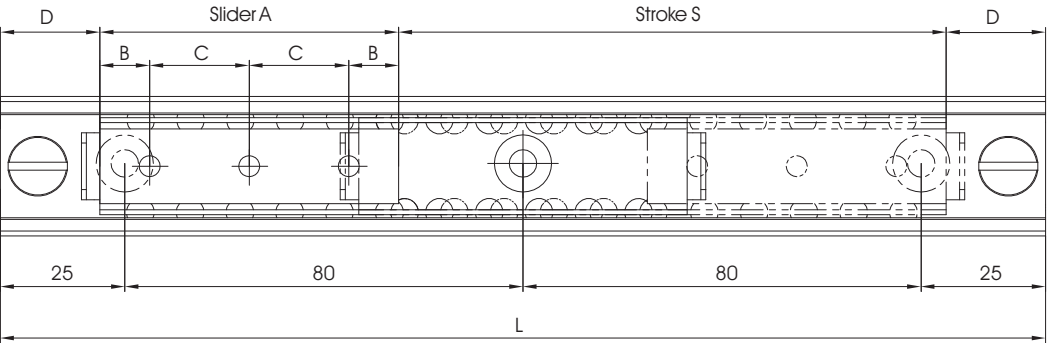


Force Diagrams



Type	Carriage										
	Dimension				Load Capacity					C_{100} (N)	No. of holes
	D (mm)	A (mm)	B (mm)	C (mm)	C_y (N)	C_z (N)	M_x (Nm)	M_y (Nm)	M_z (Nm)		
TLB28	20	60	10	20	3481	2438	17	25	36	3481	3
	20	80	10	20	4642	3249	23	44	62	4642	4
	20	130	25	80	7542	5279	36	115	162	7542	2
	20	210	25	80	12182	8525	60	301	427	12200	3
	20	290	25	80	16850	11775	83	570	812	16823	4
	20	370	25	80	21461	15024	106	928	1324	21461	5
	20	450	25	80	26103	18272	128	1372	1965	26103	6

TLB Stroke



Type	Carriage										
	Dimension				Load Capacity					C ₁₀₀ (N)	No. of holes
	D (mm)	A (mm)	B (mm)	C (mm)	C _y (N)	C _z (N)	M _x (Nm)	M _y (Nm)	M _z (Nm)		
TLB35	25	130	25	80	9755	6830	47.3	149	212	8697	2
	25	210	25	80	15755	11030	76.2	385	550	14572	3
	25	290	25	80	21755	15230	105.5	736	1053	20448	4
	25	370	25	80	27755	19430	134.6	1200	1713	26173	5
	25	450	25	80	33755	23630	163.6	1773	2532	32198	6
	25	530	25	80	39755	27830	192.7	2461	3513	38073	7
	25	610	25	80	45755	32030	221.4	3254	4650	43948	8

Type	Carriage										
	Dimension				Load Capacity					C ₁₀₀ (N)	No. of holes
	D (mm)	A (mm)	B (mm)	C (mm)	C _y (N)	C _z (N)	M _x (Nm)	M _y (Nm)	M _z (Nm)		
TLB43	25	130	25	80	13912	9738	97	212	302	13912	2
	25	210	25	80	22471	15743	156	550	786	22471	3
	25	290	25	80	31032	21723	215	1060	1503	31032	4
	25	370	25	80	39633	27715	272	1710	2442	39592	5
	25	450	25	80	48151	33704	333	2528	3612	48151	6
	25	530	25	80	56713	39698	390	3508	5010	56713	7
	25	610	25	80	65272	45689	451	4646	6637	65272	8

TLB Specifications

Type	Carriage Length	Stroke	Rail Length
TLB28-60-30-130	60	30	130
TLB28-60-110-210	60	110	210
TLB28-60-190-290	60	190	290
TLB28-60-270-370	60	270	370
TLB28-60-350-450	60	350	450
TLB28-80-90-210	80	90	210
TLB28-80-170-290	80	170	290
TLB28-80-250-370	80	250	370
TLB28-80-330-450	80	330	450
TLB28-80-410-530	80	410	530
TLB28-80-490-610	80	490	610
TLB28-130-120-290	130	120	290
TLB28-130-200-370	130	200	370
TLB28-130-280-450	130	280	450
TLB28-130-360-530	130	360	530
TLB28-130-440-610	130	440	610
TLB28-130-520-690	130	520	690
TLB28-130-600-770	130	600	770
TLB28-130-680-850	130	680	850
TLB28-130-760-930	130	760	930
TLB28-130-840-1010	130	840	1010
TLB28-210-200-450	210	200	450
TLB28-210-280-530	210	280	530
TLB28-210-360-610	210	360	610
TLB28-210-440-690	210	440	690
TLB28-210-520-770	210	520	770
TLB28-210-600-850	210	600	850
TLB28-210-680-930	210	680	930
TLB28-210-760-1010	210	760	1010
TLB28-210-920-1170	210	920	1170
TLB28-210-1080-1330	210	1080	1330
TLB28-290-280-610	290	280	610
TLB28-290-360-690	290	360	690
TLB28-290-440-770	290	440	770
TLB28-290-520-850	290	520	850
TLB28-290-600-930	290	600	930
TLB28-290-680-1010	290	680	1010
TLB28-290-840-1170	290	840	1170
TLB28-290-1000-1330	290	1000	1330
TLB28-290-1160-1490	290	1160	1490
TLB28-370-360-770	370	360	770
TLB28-370-440-850	370	440	850
TLB28-370-520-930	370	520	930
TLB28-370-600-1010	370	600	1010
TLB28-370-760-1170	370	760	1170
TLB28-370-920-1330	370	920	1330
TLB28-370-1080-1490	370	1080	1490
TLB28-450-440-930	450	440	930
TLB28-450-520-1010	450	520	1010
TLB28-450-680-1170	450	680	1170
TLB28-450-840-1330	450	840	1330
TLB28-450-1000-1490	450	1000	1490
TLB28-450-1160-1650	450	1160	1650

TLB Specifications

Type	Carriage Length	Stroke	Rail Length
TLB35-130-110-290	130	110	290
TLB35-130-190-370	130	190	370
TLB35-130-270-450	130	270	450
TLB35-130-350-530	130	350	530
TLB35-130-430-610	130	430	610
TLB35-130-510-690	130	510	690
TLB35-130-590-770	130	590	770
TLB35-130-670-850	130	670	850
TLB35-130-750-930	130	750	930
TLB35-130-830-1010	130	830	1010
TLB35-210-190-450	210	190	450
TLB35-210-270-530	210	270	530
TLB35-210-350-610	210	350	610
TLB35-210-430-690	210	430	690
TLB35-210-510-770	210	510	770
TLB35-210-590-850	210	590	850
TLB35-210-670-930	210	670	930
TLB35-210-750-1010	210	750	1010
TLB35-210-910-1170	210	910	1170
TLB35-210-1070-1330	210	1070	1330
TLB35-210-1230-1490	210	1230	1490
TLB35-290-270-610	290	270	610
TLB35-290-350-690	290	350	690
TLB35-290-430-770	290	430	770
TLB35-290-510-850	290	510	850
TLB35-290-590-930	290	590	930
TLB35-290-670-1010	290	670	1010
TLB35-290-830-1170	290	830	1170
TLB35-290-990-1330	290	990	1330
TLB35-290-1150-1490	290	1150	1490
TLB35-290-1310-1650	290	1310	1650
TLB35-370-350-770	370	350	770
TLB35-370-430-850	370	430	850
TLB35-370-510-930	370	510	930
TLB35-370-590-1010	370	590	1010
TLB35-370-750-1170	370	750	1170
TLB35-370-910-1330	370	910	1330
TLB35-370-1070-1490	370	1070	1490
TLB35-370-1230-1650	370	1230	1650
TLB35-450-430-930	450	430	930
TLB35-450-510-1010	450	510	1010
TLB35-450-670-1170	450	670	1170
TLB35-450-830-1330	450	830	1330
TLB35-450-990-1490	450	990	1490
TLB35-450-1150-1650	450	1150	1650
TLB35-450-1310-1810	450	1310	1810
TLB35-530-590-1170	530	590	1170
TLB35-530-750-1330	530	750	1330
TLB35-530-910-1490	530	910	1490
TLB35-530-1070-1650	530	1070	1650
TLB35-530-1230-1810	530	1230	1810
TLB35-610-670-1330	610	670	1330
TLB35-610-830-1490	610	830	1490
TLB35-610-990-1650	610	990	1650
TLB35-610-1150-1810	610	1150	1810

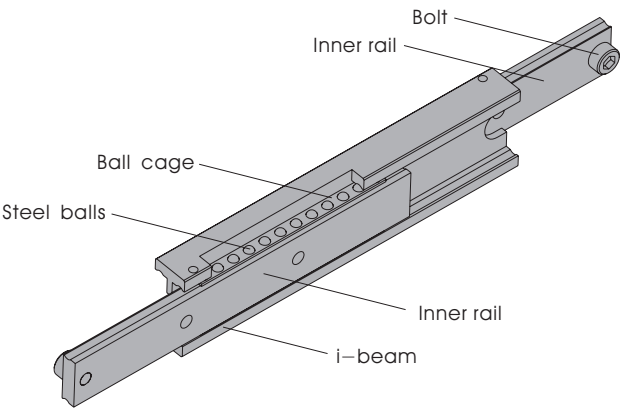
TLB Specifications

Type	Carriage Length	Stroke	Rail Length
TLB43-130-110-290	130	110	290
TLB43-130-190-370	130	190	370
TLB43-130-270-450	130	270	450
TLB43-130-350-530	130	350	530
TLB43-130-430-610	130	430	610
TLB43-130-510-690	130	510	690
TLB43-130-590-770	130	590	770
TLB43-130-670-850	130	670	850
TLB43-130-750-930	130	750	930
TLB43-130-830-1010	130	830	1010
TLB43-210-190-450	210	190	450
TLB43-210-270-530	210	270	530
TLB43-210-350-610	210	350	610
TLB43-210-430-690	210	430	690
TLB43-210-510-770	210	510	770
TLB43-210-590-850	210	590	850
TLB43-210-670-930	210	670	930
TLB43-210-750-1010	210	750	1010
TLB43-210-910-1170	210	910	1170
TLB43-210-1070-1330	210	1070	1330
TLB43-210-1230-1490	210	1230	1490
TLB43-210-1390-1650	210	1390	1650
TLB43-290-270-610	290	270	610
TLB43-290-350-690	290	350	690
TLB43-290-430-770	290	430	770
TLB43-290-510-850	290	510	850
TLB43-290-590-930	290	590	930
TLB43-290-670-1010	290	670	1010
TLB43-290-830-1170	290	830	1170
TLB43-290-990-1330	290	990	1330
TLB43-290-1150-1490	290	1150	1490
TLB43-290-1310-1650	290	1310	1650
TLB43-290-1470-1810	290	1470	1810
TLB43-370-350-770	370	350	770
TLB43-370-430-850	370	430	850
TLB43-370-510-930	370	510	930
TLB43-370-590-1010	370	590	1010
TLB43-370-750-1170	370	750	1170
TLB43-370-910-1330	370	910	1330
TLB43-370-1070-1490	370	1070	1490
TLB43-370-1230-1650	370	1230	1650
TLB43-370-1390-1810	370	1390	1810
TLB43-450-430-930	450	430	930
TLB43-450-510-1010	450	510	1010
TLB43-450-670-1170	450	670	1170
TLB43-450-830-1330	450	830	1330
TLB43-450-990-1490	450	990	1490
TLB43-450-1150-1650	450	1150	1650
TLB43-450-1310-1810	450	1310	1810
TLB43-450-1470-1970	450	1470	1970
TLB43-530-590-1170	530	590	1170
TLB43-530-750-1330	530	750	1330
TLB43-530-910-1490	530	910	1490
TLB43-530-1070-1650	530	1070	1650
TLB43-530-1230-1810	530	1230	1810
TLB43-530-1390-1970	530	1390	1970
TLB43-610-670-1330	610	670	1330
TLB43-610-830-1490	610	830	1490
TLB43-610-990-1650	610	990	1650
TLB43-610-1150-1810	610	1150	1810
TLB43-610-1310-1970	610	1310	1970



THR

Full Extension Rail



The rail achieves 100% extension, featuring precision-milled cold-drawn steel with a central I-beam for maximum rigidity and minimal deflection-ideal for high-load, low-frequency use in compact spaces.

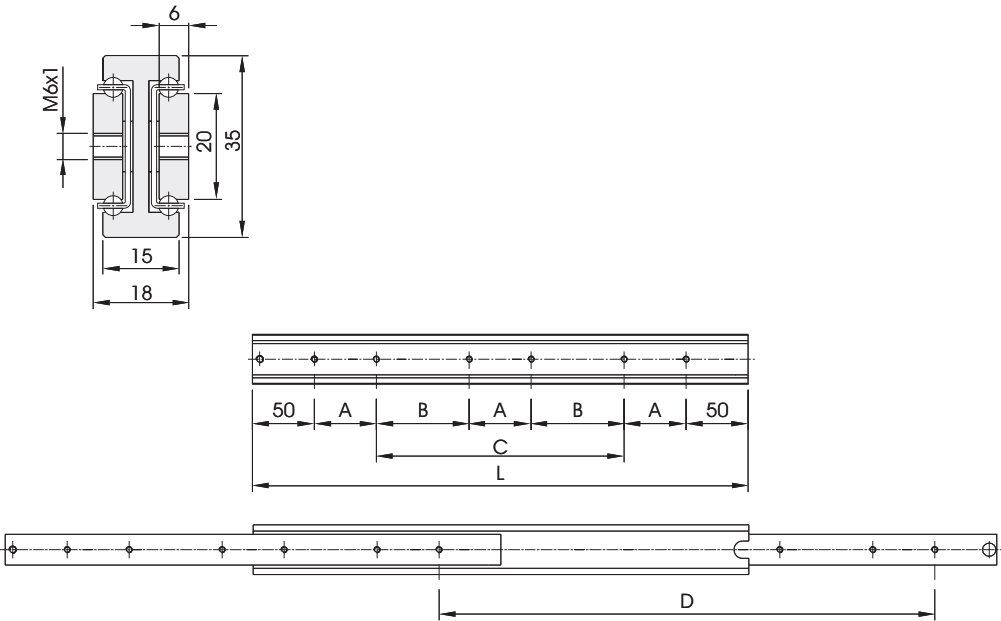
- Internal rail length is available for custom design
- 45# High carbon steel / 316L(1.4404) Stainless steel are available in some models
- Surface Treatment: White Zinc Plated.

Code Description

(SS)	THR	4 0	-0550	
			Stroke	
		Size		
	Product series code			
Material: SS - SUS316L, Blank-45#				

THR

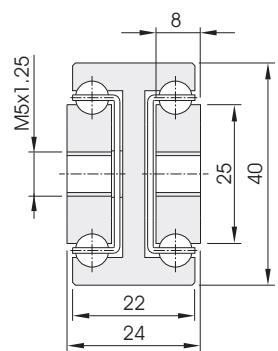
THR35 Dimension



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR35-0150	150	150	60	50		
THR35-0200	200	200	70	50		
THR35-0250	250	250	80	50		50
THR35-0300	300	300	90	50		100
THR35-0350	350	350	100	50		150
THR35-0400	400	400	110	50		200
THR35-0450	450	450	120	50		250
THR35-0500	500	500	115	50		300
THR35-0550	550	550	100	50	150	
THR35-0600	600	600	90	50	175	
THR35-0650	650	650	85	50	200	
THR35-0700	700	700	80	50	225	
THR35-0750	750	750	75	50	250	
THR35-0800	800	800	70	50	275	
THR35-0850	850	850	65	50	300	
THR35-0900	900	900	60	50	325	
THR35-0950	950	950	55	50	350	
THR35-1000	1000	1000	50	50	375	

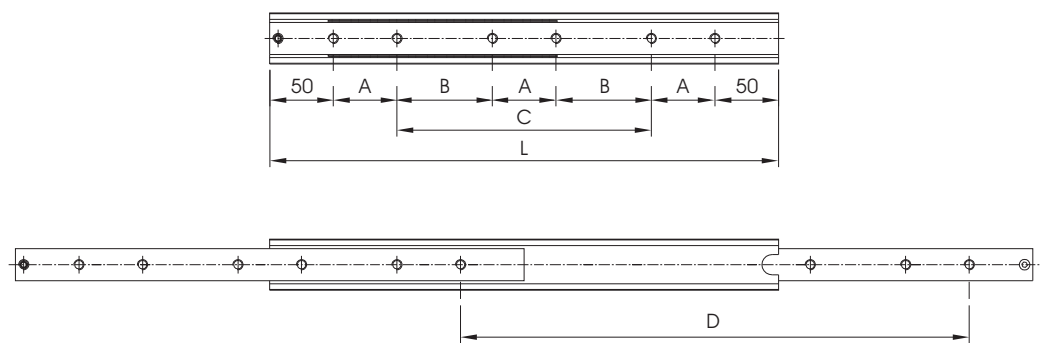
THR

THR40 Dimension



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR40-0200	200	200	270	50		
THR40-0250	250	250	280	50		50
THR40-0300	300	300	290	50		100
THR40-0350	350	350	300	50		150
THR40-0400	400	400	310	50		200
THR40-0450	450	450	320	50		250
THR40-0500	500	500	330	50		300
THR40-0550	550	550	350	50	150	
THR40-0600	600	600	340	50	175	
THR40-0650	650	650	320	50	200	
THR40-0700	700	700	300	50	225	
THR40-0750	750	750	290	50	250	
THR40-0800	800	800	280	50	275	
THR40-0850	850	850	270	50	300	
THR40-0900	900	900	250	50	325	
THR40-0950	950	950	230	50	350	
THR40-1000	1000	1000	220	50	375	
THR40-1050	1050	1050	210	50	400	

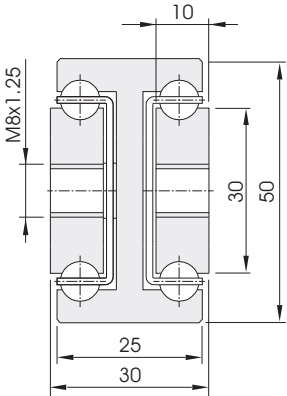
THR40 Stroke



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR40-1100	1100	1100	200	50	425	
THR40-1150	1150	1150	190	50	450	
THR40-1200	1200	1200	180	50	475	
THR40-1250	1250	1250	170	50	500	
THR40-1300	1300	1300	160	50	525	
THR40-1350	1350	1350	155	50	550	
THR40-1400	1400	1400	150	50	575	
THR40-1450	1450	1450	145	50	600	
THR40-1500	1500	1500	140	50	625	
THR40-1550	1550	1550	130	50	650	
THR40-1600	1600	1600	120	50	675	
THR40-1650	1650	1650	110	50	700	
THR40-1700	1700	1700	100	100	650	
THR40-1750	1750	1750	90	100	675	
THR40-1800	1800	1800	80	100	700	
THR40-1850	1850	1850	70	100	725	
THR40-1900	1900	1900	60	100	750	
THR40-2000	2000	2000	40	100	800	

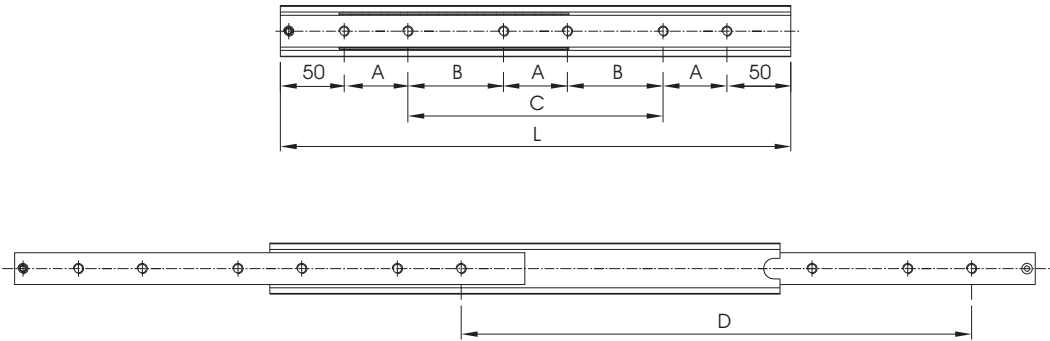
THR

THR50 Dimension



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR50-0200	200	200	340	50		
THR50-0250	250	250	350	50		50
THR50-0300	300	300	360	50		100
THR50-0350	350	350	370	50		150
THR50-0400	400	400	380	50		200
THR50-0450	450	450	390	50		250
THR50-0500	500	500	400	50		300
THR50-0550	550	550	410	50	150	
THR50-0600	600	600	420	50	175	
THR50-0650	650	650	410	50	200	
THR50-0700	700	700	400	50	225	
THR50-0750	750	750	390	50	250	
THR50-0800	800	800	380	50	275	
THR50-0850	850	850	370	50	300	
THR50-0900	900	900	360	50	325	
THR50-0950	950	950	350	50	350	
THR50-1000	1000	1000	340	50	375	
THR50-1050	1050	1050	330	50	400	

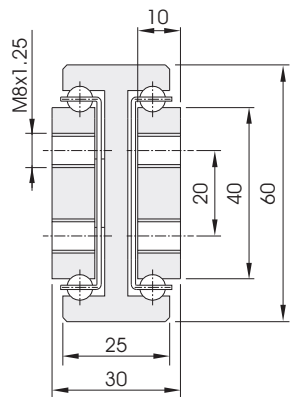
THR50 Stroke



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR50-1100	1100	1100	320	50	425	
THR50-1150	1150	1150	310	50	450	
THR50-1200	1200	1200	290	50	475	
THR50-1250	1250	1250	280	50	500	
THR50-1300	1300	1300	270	50	525	
THR50-1350	1350	1350	260	50	550	
THR50-1400	1400	1400	250	50	575	
THR50-1450	1450	1450	230	50	600	
THR50-1500	1500	1500	200	50	625	
THR50-1550	1550	1550	190	50	650	
THR50-1600	1600	1600	180	50	675	
THR50-1650	1650	1650	170	50	700	
THR50-1700	1700	1700	160	100	650	
THR50-1750	1750	1750	150	100	675	
THR50-1800	1800	1800	140	100	700	
THR50-1850	1850	1850	130	100	725	
THR50-1900	1900	1900	120	100	750	
THR50-2000	2000	2000	100	100	800	

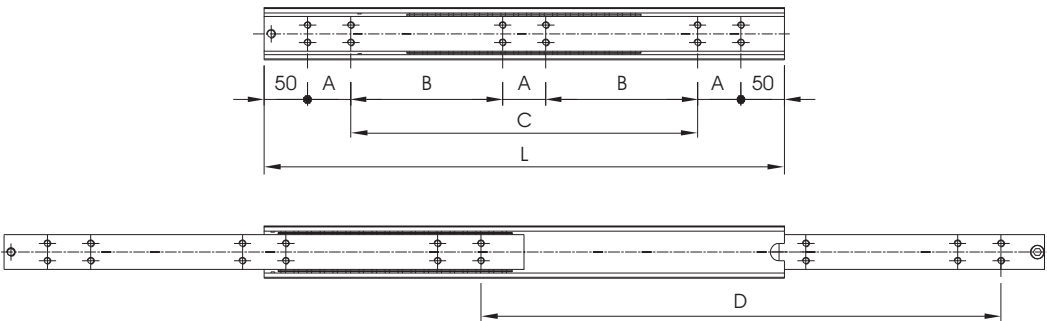
THR

THR60 Dimension



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR60-0200	200	200	450	50		
THR60-0250	250	250	470	50		50
THR60-0300	300	300	480	50		100
THR60-0350	350	350	490	50		150
THR60-0400	400	400	500	50		200
THR60-0450	450	450	520	50		250
THR60-0500	500	500	530	50		300
THR60-0550	550	550	550	50		350
THR60-0600	600	600	560	50		400
THR60-0650	650	650	570	50	200	
THR60-0700	700	700	580	50	225	
THR60-0750	750	750	590	50	250	
THR60-0800	800	800	600	50	275	
THR60-0850	850	850	590	50	300	
THR60-0900	900	900	580	50	325	
THR60-0950	950	950	570	50	350	
THR60-1000	1000	1000	560	50	375	
THR60-1050	1050	1050	540	50	400	

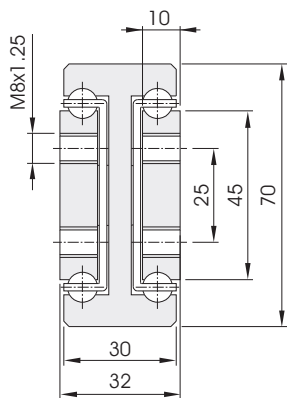
THR60 Stroke



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR60-1100	1100	1100	520	50	425	
THR60-1150	1150	1150	510	50	450	
THR60-1200	1200	1200	500	50	475	
THR60-1250	1250	1250	480	50	500	
THR60-1300	1300	1300	460	50	525	
THR60-1350	1350	1350	440	50	550	
THR60-1400	1400	1400	420	50	575	
THR60-1450	1450	1450	400	50	600	
THR60-1500	1500	1500	380	50	625	
THR60-1550	1550	1550	350	50	650	
THR60-1600	1600	1600	330	50	675	
THR60-1650	1650	1650	310	50	700	
THR60-1700	1700	1700	290	50	650	
THR60-1750	1750	1750	280	100	675	
THR60-1800	1800	1800	260	100	700	
THR60-1850	1850	1850	240	100	725	
THR60-1900	1900	1900	220	100	750	
THR60-2000	2000	2000	180	100	800	

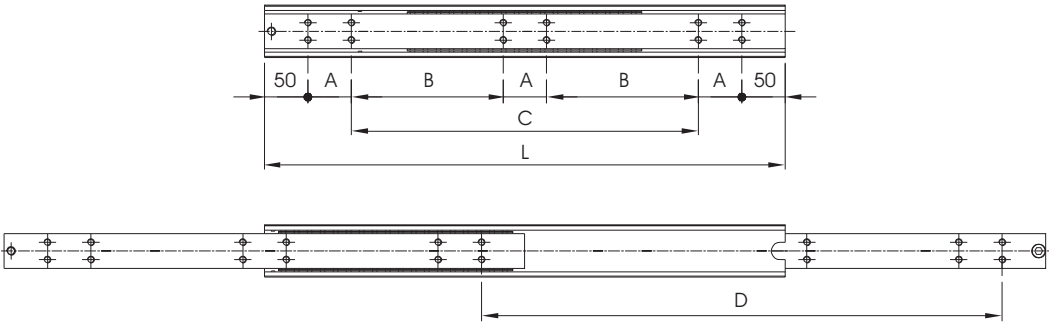
THR

THR70 Dimension



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR70-0200	200	200	540	50		
THR70-0250	250	250	560	50		50
THR70-0300	300	300	580	50		100
THR70-0350	350	350	600	50		150
THR70-0400	400	400	620	50		200
THR70-0450	450	450	640	50		250
THR70-0500	500	500	650	50		300
THR70-0550	550	550	660	50		350
THR70-0600	600	600	670	50		400
THR70-0650	650	650	680	50	200	
THR70-0700	700	700	690	50	225	
THR70-0750	750	750	695	50	250	
THR70-0800	800	800	700	50	275	
THR70-0850	850	850	695	50	300	
THR70-0900	900	900	690	50	325	
THR70-0950	950	950	685	50	350	
THR70-1000	1000	1000	680	50	375	
THR70-1050	1050	1050	660	50	400	

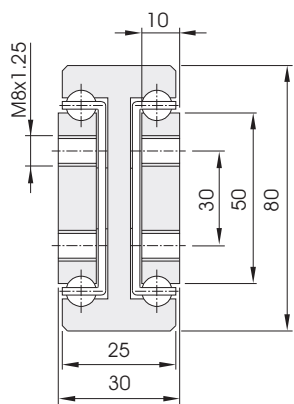
THR70 Stroke



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR70-1100	1100	1100	650	50	425	
THR70-1150	1150	1150	630	50	450	
THR70-1200	1200	1200	610	50	475	
THR70-1250	1250	1250	600	50	500	
THR70-1300	1300	1300	580	50	525	
THR70-1350	1350	1350	550	50	550	
THR70-1400	1400	1400	520	50	575	
THR70-1450	1450	1450	490	50	600	
THR70-1500	1500	1500	460	50	625	
THR70-1550	1550	1550	420	50	650	
THR70-1600	1600	1600	380	50	675	
THR70-1650	1650	1650	350	50	700	
THR70-1700	1700	1700	340	100	650	
THR70-1750	1750	1750	315	100	675	
THR70-1800	1800	1800	300	100	700	
THR70-1850	1850	1850	280	100	725	
THR70-1900	1900	1900	255	100	750	
THR70-2000	2000	2000	220	100	800	

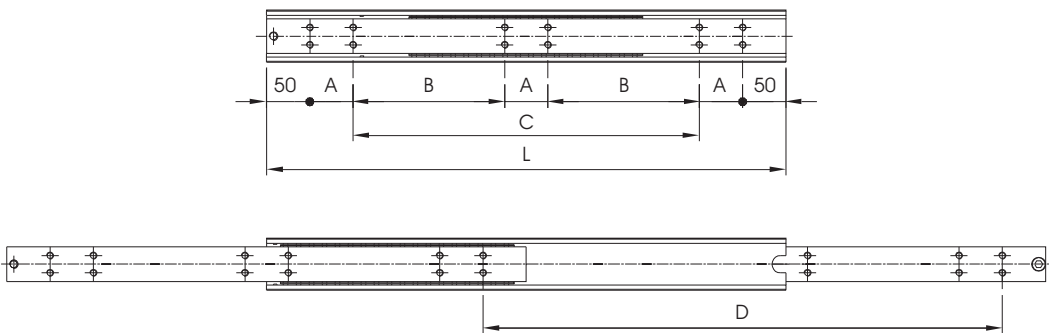
THR

THR80 Dimension



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR80-0200	200	200	600	50		
THR80-0250	250	250	620	50		50
THR80-0300	300	300	640	50		100
THR80-0350	350	350	680	50		150
THR80-0400	400	400	720	50		200
THR80-0450	450	450	760	50		250
THR80-0500	500	500	790	50		300
THR80-0550	550	550	830	50		350
THR80-0600	600	600	850	50		400
THR80-0650	650	650	860	50	200	
THR80-0700	700	700	865	50	225	
THR80-0750	750	750	875	50	250	
THR80-0800	800	800	880	50	275	
THR80-0850	850	850	870	50	300	
THR80-0900	900	900	860	50	325	
THR80-0950	950	950	850	50	350	
THR80-1000	1000	1000	840	50	375	
THR80-1050	1050	1050	820	50	400	

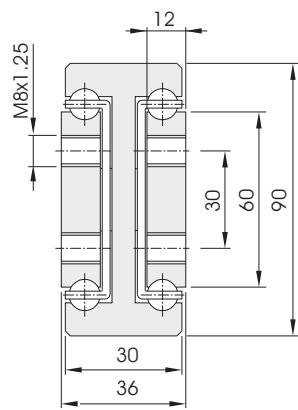
THR80 Stroke



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR80-1100	1100	1100	800	50	425	
THR80-1150	1150	1150	780	50	450	
THR80-1200	1200	1200	760	50	475	
THR80-1250	1250	1250	740	50	500	
THR80-1300	1300	1300	720	50	525	
THR80-1350	1350	1350	690	50	550	
THR80-1400	1400	1400	660	50	575	
THR80-1450	1450	1450	630	50	600	
THR80-1500	1500	1500	600	50	625	
THR80-1550	1550	1550	580	50	650	
THR80-1600	1600	1600	540	50	675	
THR80-1650	1650	1650	520	50	700	
THR80-1700	1700	1700	490	100	650	
THR80-1750	1750	1750	450	100	675	
THR80-1800	1800	1800	400	100	700	
THR80-1850	1850	1850	360	100	725	
THR80-1900	1900	1900	320	100	750	
THR80-2400	2400	2400	90	100	1000	

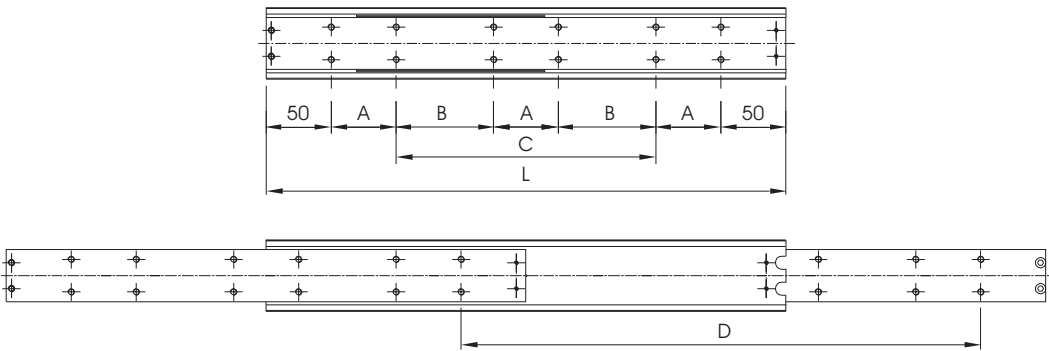
THR

THR90 Dimension



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR90-0200	200	200	650	50		
THR90-0250	250	250	720	50		50
THR90-0300	300	300	780	50		100
THR90-0350	350	350	830	50		150
THR90-0400	400	400	860	50		200
THR90-0450	450	450	890	50		250
THR90-0500	500	500	940	50		300
THR90-0550	550	550	960	50		350
THR90-0600	600	600	980	50		400
THR90-0650	650	650	1000	50	200	
THR90-0700	700	700	1030	50	225	
THR90-0750	750	750	1040	50	250	
THR90-0800	800	800	1050	50	275	
THR90-0850	850	850	1045	50	300	
THR90-0900	900	900	1030	50	325	
THR90-0950	950	950	1015	50	350	
THR90-1000	1000	1000	995	50	375	
THR90-1050	1050	1050	980	50	400	

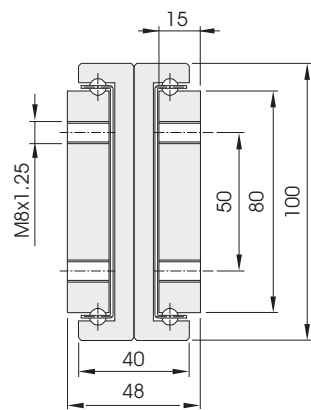
THR90 Stroke



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR90-1100	1100	1100	950	50	425	
THR90-1150	1150	1150	920	50	450	
THR90-1200	1200	1200	900	50	475	
THR90-1250	1250	1250	880	50	500	
THR90-1300	1300	1300	850	50	525	
THR90-1350	1350	1350	820	50	550	
THR90-1400	1400	1400	790	50	575	
THR90-1450	1450	1450	740	50	600	
THR90-1500	1500	1500	710	50	625	
THR90-1550	1550	1550	690	50	650	
THR90-1600	1600	1600	660	50	675	
THR90-1650	1650	1650	640	50	700	
THR90-1700	1700	1700	620	100	650	
THR90-1750	1750	1750	580	100	675	
THR90-1800	1800	1800	540	100	700	
THR90-1850	1850	1850	500	100	725	
THR90-1900	1900	1900	470	100	750	
THR90-3000	3000	3000	220	100	1300	

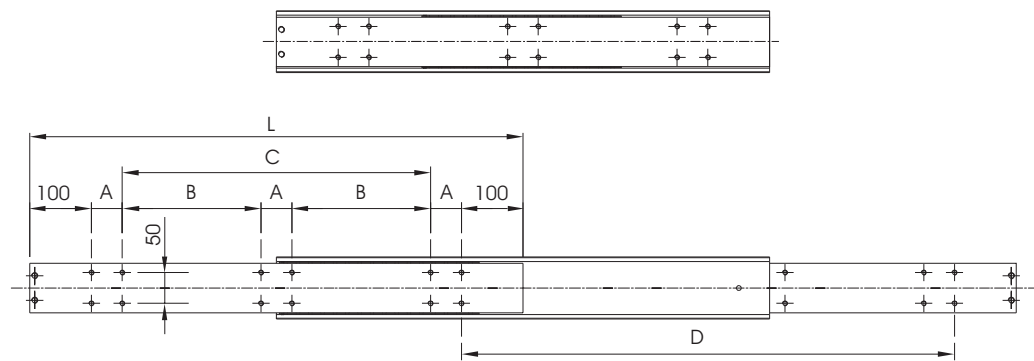
THR

THR100 Dimension



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR100-0300	300	300	1000	50		
THR100-0350	350	350	1030	50		50
THR100-0400	400	400	1070	50		100
THR100-0450	450	450	1130	50		150
THR100-0500	500	500	1180	50		200
THR100-0550	550	550	1230	50		250
THR100-0600	600	600	1290	50		300
THR100-0650	650	650	1310	50	150	
THR100-0700	700	700	1340	50	175	
THR100-0750	750	750	1360	50	200	
THR100-0800	800	800	1380	100	150	
THR100-0850	850	850	1365	100	175	
THR100-0900	900	900	1350	100	200	
THR100-0950	950	950	1330	100	225	
THR100-1000	1000	1000	1300	100	250	
THR100-1050	1050	1050	1270	100	275	
THR100-1100	1100	1100	1240	100	300	
THR100-1150	1150	1150	1220	100	325	

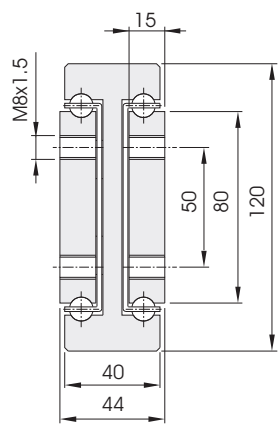
THR100 Stroke



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR100-1200	1200	1200	1180	100	350	
THR100-1250	1250	1250	1160	100	375	
THR100-1300	1300	1300	1140	100	400	
THR100-1350	1350	1350	1120	100	425	
THR100-1400	1400	1400	1100	100	450	
THR100-1450	1450	1450	1080	100	475	
THR100-1500	1500	1500	1060	100	500	
THR100-1550	1550	1550	1040	100	525	
THR100-1600	1600	1600	1020	100	550	
THR100-1650	1650	1650	1000	100	575	
THR100-1700	1700	1700	980	100	600	
THR100-1750	1750	1750	960	100	625	
THR100-1800	1800	1800	940	100	650	
THR100-1850	1850	1850	920	100	675	
THR100-1900	1900	1900	880	100	700	
THR100-1950	1950	1950	840	100	725	
THR100-2000	2000	2000	800	100	750	
THR100-3000	3000	3000	360	100	1250	

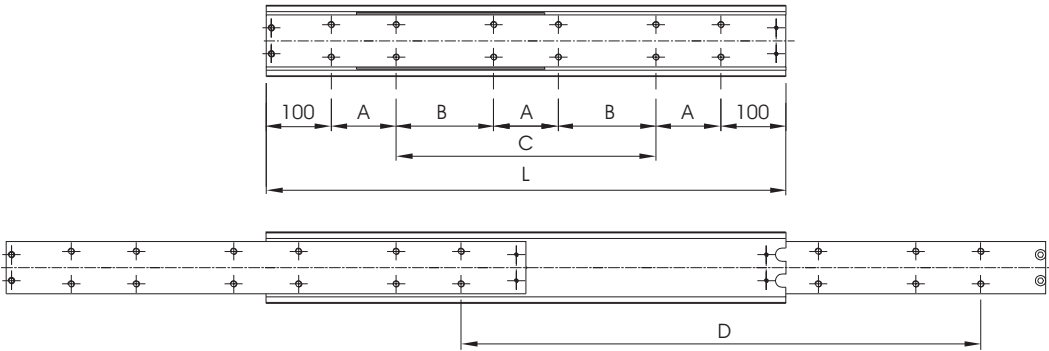
THR

THR120 Dimension



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR120-0300	300	300	1480	100		
THR120-0350	350	350	1560	50		50
THR120-0400	400	400	1640	50		100
THR120-0450	450	450	1720	50		150
THR120-0500	500	500	1760	50		200
THR120-0550	550	550	1820	50		250
THR120-0600	600	600	1850	50		300
THR120-0650	650	650	1870	50	150	
THR120-0700	700	700	1890	50	175	
THR120-0750	750	750	1860	50	200	
THR120-0800	800	800	1840	100	150	
THR120-0850	850	850	1820	100	175	
THR120-0900	900	900	1790	100	200	
THR120-0950	950	950	1760	100	225	
THR120-1000	1000	1000	1730	100	250	
THR120-1050	1050	1050	1700	100	275	
THR120-1100	1100	1100	1660	100	300	
THR120-1150	1150	1150	1630	100	325	

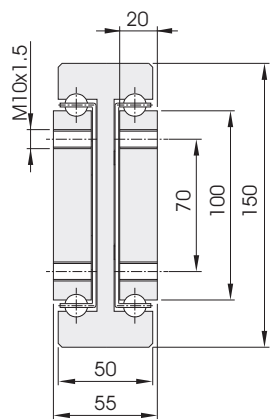
THR120 Stroke



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR120-1200	1200	1200	1600	100	350	
THR120-1250	1250	1250	1570	100	375	
THR120-1300	1300	1300	1540	100	400	
THR120-1350	1350	1350	1500	100	425	
THR120-1400	1400	1400	1460	100	450	
THR120-1450	1450	1450	1410	100	475	
THR120-1500	1500	1500	1370	100	500	
THR120-1550	1550	1550	1320	100	525	
THR120-1600	1600	1600	1280	100	550	
THR120-1650	1650	1650	1230	100	575	
THR120-1700	1700	1700	1180	100	600	
THR120-1750	1750	1750	1130	100	625	
THR120-1800	1800	1800	1080	100	650	
THR120-1850	1850	1850	1030	100	675	
THR120-1900	1900	1900	980	100	700	
THR120-1950	1950	1950	920	100	725	
THR120-2000	2000	2000	860	100	750	
THR120-3000	3000	3000	260	100	1250	

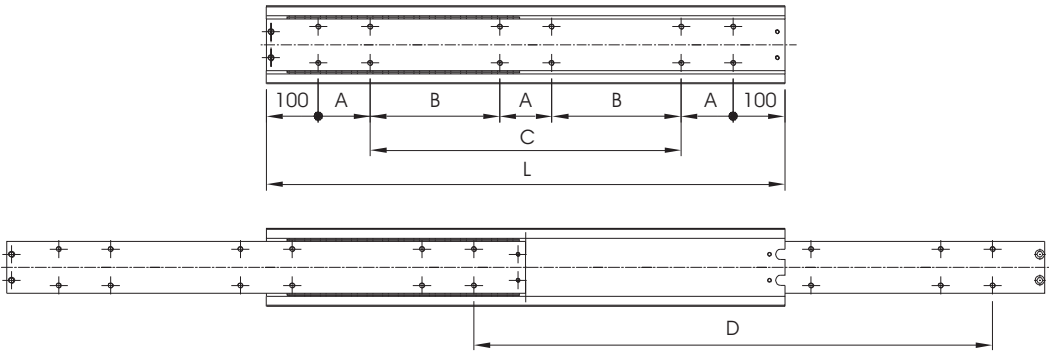
THR

THR150 Dimension



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR150-0300	300	300	1720	100		
THR150-0350	350	350	1790	50		50
THR150-0400	400	400	1860	50		100
THR150-0450	450	450	1930	50		150
THR150-0500	500	500	2020	50		200
THR150-0550	550	550	2100	50		250
THR150-0600	600	600	2180	50		300
THR150-0650	650	650	2250	50	150	
THR150-0700	700	700	2300	50	175	
THR150-0750	750	750	2340	50	200	
THR150-0800	800	800	2380	100	150	
THR150-0850	850	850	2410	100	175	
THR150-0900	900	900	2370	100	200	
THR150-0950	950	950	2330	100	225	
THR150-1000	1000	1000	2300	100	250	
THR150-1050	1050	1050	2270	100	275	
THR150-1100	1100	1100	2240	100	300	
THR150-1150	1150	1150	2210	100	325	

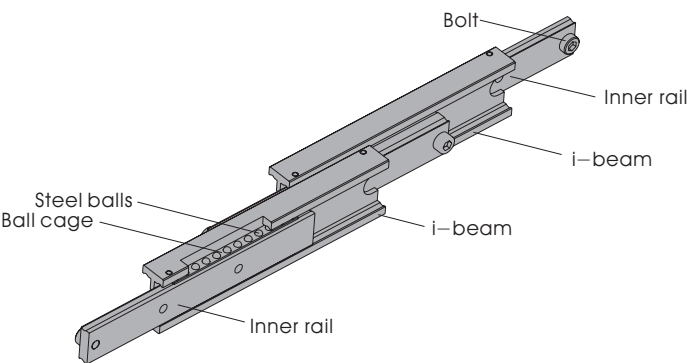
THR150 Stroke



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
THR150-1200	1200	1200	2180	100	350	
THR150-1250	1250	1250	2150	100	375	
THR150-1300	1300	1300	2120	100	400	
THR150-1350	1350	1350	1990	100	425	
THR150-1400	1400	1400	1960	100	450	
THR150-1450	1450	1450	1920	100	475	
THR150-1500	1500	1500	1880	100	500	
THR150-1550	1550	1550	1840	100	525	
THR150-1600	1600	1600	1800	100	550	
THR150-1650	1650	1650	1760	100	575	
THR150-1700	1700	1700	1715	100	600	
THR150-1750	1750	1750	1660	100	625	
THR150-1800	1800	1800	1610	100	650	
THR150-1850	1850	1850	1550	100	675	
THR150-1900	1900	1900	1500	100	700	
THR150-1950	1950	1950	1450	100	725	
THR150-2000	2000	2000	1400	100	750	
THR150-3000	3000	3000	380	100	1250	

DTHR

Super Extension Rail



Double I-beam rail achieves 200% extension with precision-cut cold-drawn steel, delivering superior rigidity, minimal deflection under load, and impact resistance-optimized for long-stroke, low-frequency linear motion

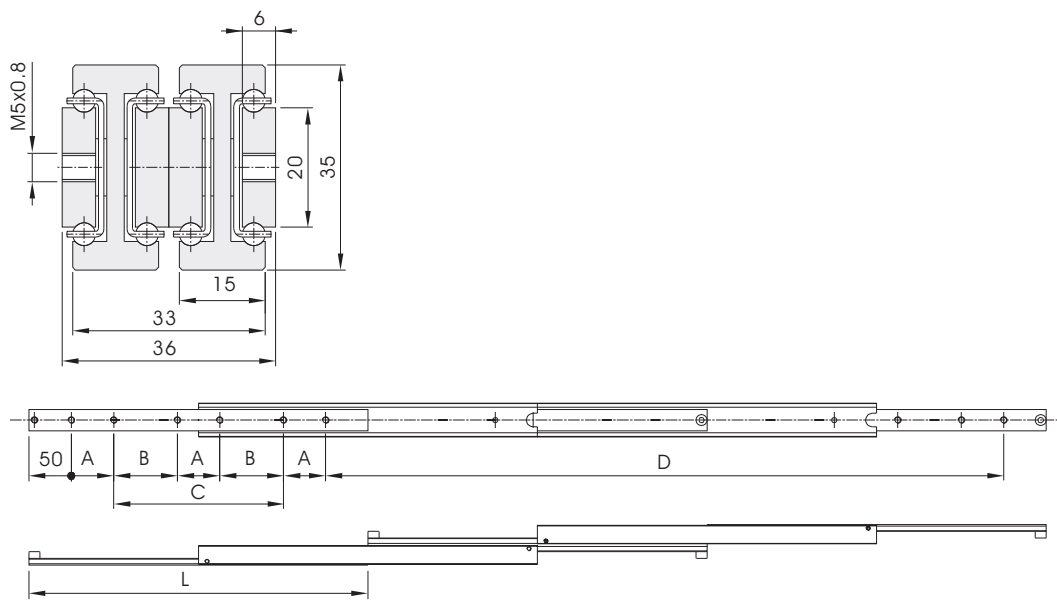
- Internal rail length is available for custom design
- 45# High carbon steel / 316L(1.4404) Stainless steel are available in some models
- Surface Treatment: White Zinc Plated.

Code Description

DTHR	40	-0550	
		Stroke	
	Size		
Product	series	code	

DTHR

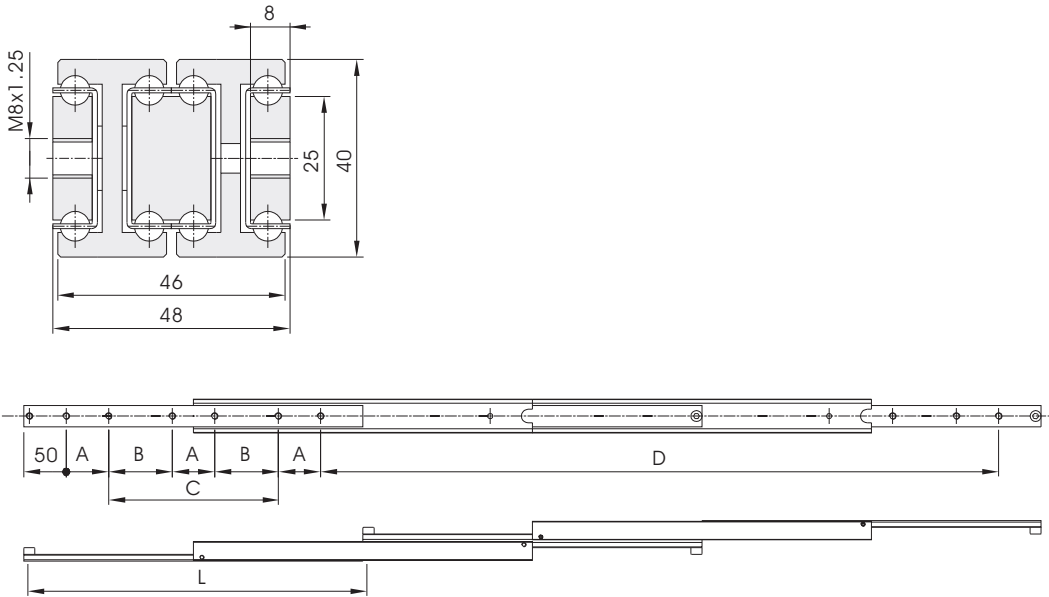
DTHR35 Dimension



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
DTHR35-0150	150	300	60	50		
DTHR35-0200	200	400	70	50		
DTHR35-0250	250	500	80	50		50
DTHR35-0300	300	600	90	50		100
DTHR35-0350	350	700	100	50		150
DTHR35-0400	400	800	90	50		200
DTHR35-0450	450	900	80	50		250
DTHR35-0500	500	1000	70	50		300
DTHR35-0550	550	1100	65	50	150	
DTHR35-0600	600	1200	60	50	175	
DTHR35-0650	650	1300	55	50	200	
DTHR35-0700	700	1400	50	50	225	
DTHR35-0750	750	1500	45	50	250	
DTHR35-0800	800	1600	40	50	275	
DTHR35-0850	850	1700	35	50	300	
DTHR35-0900	900	1800	30	50	325	
DTHR35-0950	950	1900	25	50	350	
DTHR35-1000	1000	2000	20	50	375	

DTHR

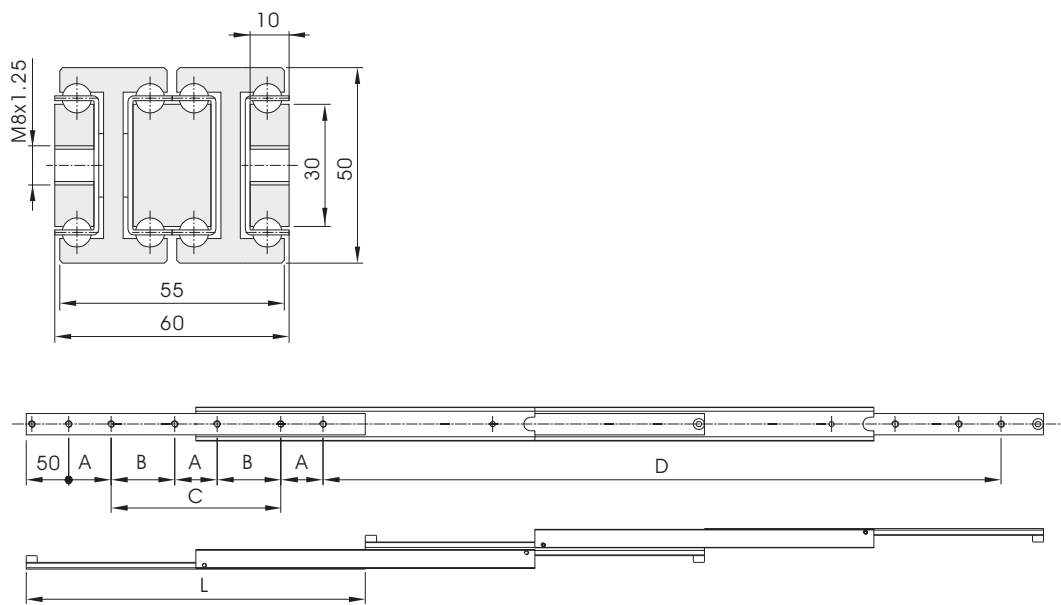
DTHR40 Dimension



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
DTHR40-0200	200	400	130	50		
DTHR40-0250	250	500	138	50		50
DTHR40-0300	300	600	145	50		100
DTHR40-0350	350	700	152	50		150
DTHR40-0400	400	800	160	50		200
DTHR40-0450	450	900	155	50		250
DTHR40-0500	500	1000	150	50		300
DTHR40-0550	550	1100	145	50	150	
DTHR40-0600	600	1200	140	50	175	
DTHR40-0650	650	1300	135	50	200	
DTHR40-0700	700	1400	130	50	225	
DTHR40-0750	750	1500	125	50	250	
DTHR40-0800	800	1600	120	50	275	
DTHR40-0850	850	1700	115	50	300	
DTHR40-0900	900	1800	110	50	325	
DTHR40-0950	950	1900	105	50	350	
DTHR40-1000	1000	2000	100	50	375	
DTHR40-1200	1200	2400	80	50	475	

DTHR

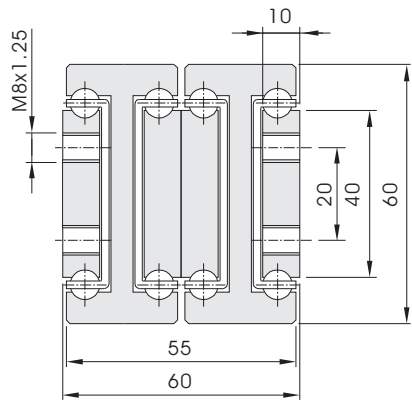
DTHR50 Dimension



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
DTHR50-0200	200	400	190	50		
DTHR50-0250	250	500	195	50		50
DTHR50-0300	300	600	200	50		100
DTHR50-0350	350	700	210	50		150
DTHR50-0400	400	800	220	50		200
DTHR50-0450	450	900	225	50		250
DTHR50-0500	500	1000	230	50		300
DTHR50-0550	550	1100	235	50	150	
DTHR50-0600	600	1200	240	50	175	
DTHR50-0650	650	1300	232	50	200	
DTHR50-0700	700	1400	225	50	225	
DTHR50-0750	750	1500	218	50	250	
DTHR50-0800	800	1600	210	50	275	
DTHR50-0850	850	1700	195	50	300	
DTHR50-0900	900	1800	182	50	325	
DTHR50-0950	950	1900	172	50	350	
DTHR50-1000	1000	2000	160	50	375	
DTHR50-1200	1200	2400	140	50	475	

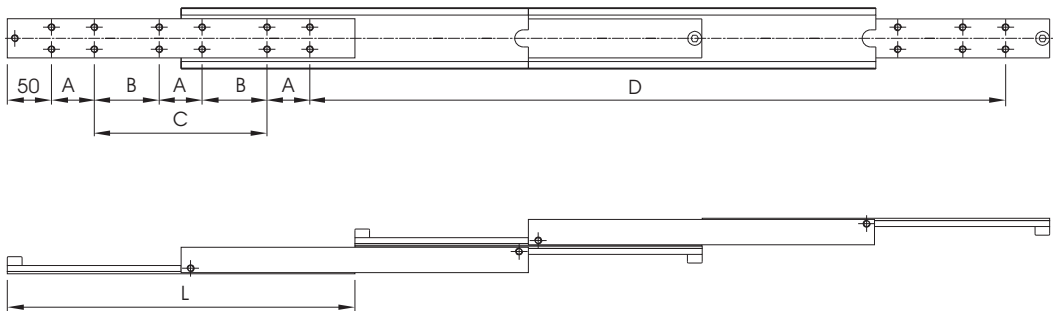
DTHR

DTHR60 Dimension



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
DTHR60-0300	300	600	290	50		100
DTHR60-0350	350	700	295	50		150
DTHR60-0400	400	800	300	50		200
DTHR60-0450	450	900	305	50		250
DTHR60-0500	500	1000	310	50		300
DTHR60-0550	550	1100	315	50		350
DTHR60-0600	600	1200	320	50		400
DTHR60-0650	650	1300	317	50	200	
DTHR60-0700	700	1400	315	50	225	
DTHR60-0750	750	1500	313	50	250	
DTHR60-0800	800	1600	310	50	275	
DTHR60-0850	850	1700	308	50	300	
DTHR60-0900	900	1800	306	50	325	
DTHR60-0950	950	1900	304	50	350	
DTHR60-1000	1000	2000	300	50	375	
DTHR60-1050	1050	2100	290	50	400	
DTHR60-1100	1100	2200	280	50	425	

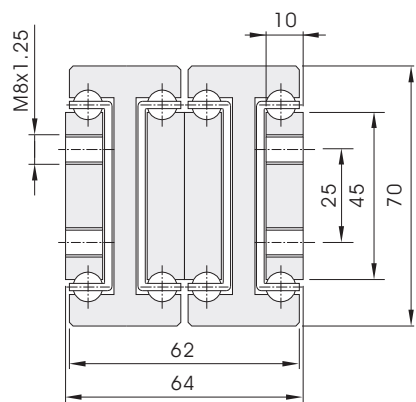
DTHR60 Stroke



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
DTHR60-1150	1150	2300	270	50	450	
DTHR60-1200	1200	2400	260	50	475	
DTHR60-1250	1250	2500	250	50	500	
DTHR60-1300	1300	2600	240	50	525	
DTHR60-1350	1350	2700	230	50	550	
DTHR60-1400	1400	2800	220	50	575	
DTHR60-1450	1450	2900	210	50	600	
DTHR60-1500	1500	3000	200	50	625	
DTHR60-1550	1550	3100	190	50	650	
DTHR60-1600	1600	3200	180	50	675	
DTHR60-1650	1650	3300	170	50	700	
DTHR60-1700	1700	3400	160	100	650	
DTHR60-1750	1750	3500	150	100	675	
DTHR60-1800	1800	3600	140	100	700	
DTHR60-1850	1850	3700	130	100	725	
DTHR60-1900	1900	3800	110	100	750	
DTHR60-2000	2000	4000	90	100	800	

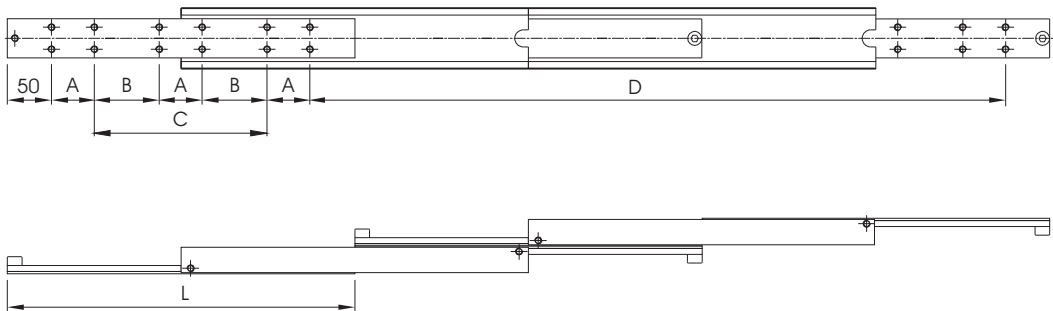
DTHR

DTHR70 Dimension



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
DTHR70-0300	300	600	350	50		100
DTHR70-0350	350	700	355	50		150
DTHR70-0400	400	800	360	50		200
DTHR70-0450	450	900	365	50		250
DTHR70-0500	500	1000	370	50		300
DTHR70-0550	550	1100	380	50		350
DTHR70-0600	600	1200	385	50		400
DTHR70-0650	650	1300	395	50	200	
DTHR70-0700	700	1400	400	50	225	
DTHR70-0750	750	1500	405	50	250	
DTHR70-0800	800	1600	410	50	275	
DTHR70-0850	850	1700	400	50	300	
DTHR70-0900	900	1800	390	50	325	
DTHR70-0950	950	1900	380	50	350	
DTHR70-1000	1000	2000	360	50	375	
DTHR70-1050	1050	2100	350	50	400	
DTHR70-1100	1100	2200	340	50	425	

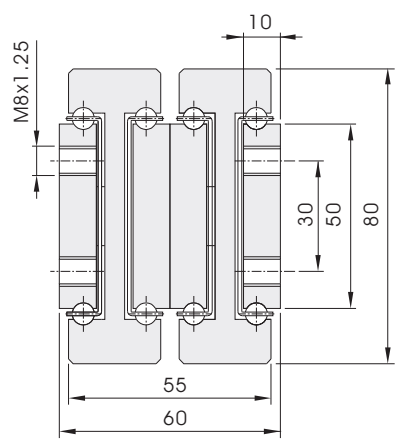
DTHR70 Stroke



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
DTHR70-1150	1150	2300	330	50	450	
DTHR70-1200	1200	2400	320	50	475	
DTHR70-1250	1250	2500	320	50	500	
DTHR70-1300	1300	2600	306	50	525	
DTHR70-1350	1350	2700	287	50	550	
DTHR70-1400	1400	2800	269	50	575	
DTHR70-1450	1450	2900	250	50	600	
DTHR70-1500	1500	3000	240	50	625	
DTHR70-1550	1550	3100	230	50	650	
DTHR70-1600	1600	3200	220	50	675	
DTHR70-1650	1650	3300	210	50	700	
DTHR70-1700	1700	3400	200	100	650	
DTHR70-1750	1750	3500	180	100	675	
DTHR70-1800	1800	3600	160	100	700	
DTHR70-1850	1850	3700	150	100	725	
DTHR70-1900	1900	3800	140	100	750	
DTHR70-2000	2000	4000	120	100	800	

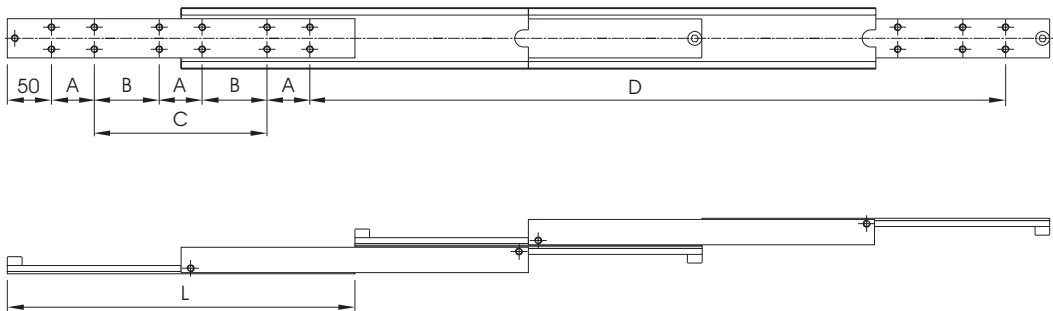
DTHR

DTHR80 Dimension



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
DTHR80-0300	300	600	420	50		100
DTHR80-0350	350	700	430	50		150
DTHR80-0400	400	800	440	50		200
DTHR80-0450	450	900	450	50		250
DTHR80-0500	500	1000	460	50		300
DTHR80-0550	550	1100	470	50		350
DTHR80-0600	600	1200	480	50		400
DTHR80-0650	650	1300	490	50	200	
DTHR80-0700	700	1400	500	50	225	
DTHR80-0750	750	1500	510	50	250	
DTHR80-0800	800	1600	500	50	275	
DTHR80-0850	850	1700	495	50	300	
DTHR80-0900	900	1800	490	50	325	
DTHR80-0950	950	1900	475	50	350	
DTHR80-1000	1000	2000	460	50	375	
DTHR80-1050	1050	2100	440	50	400	
DTHR80-1100	1100	2200	420	50	425	

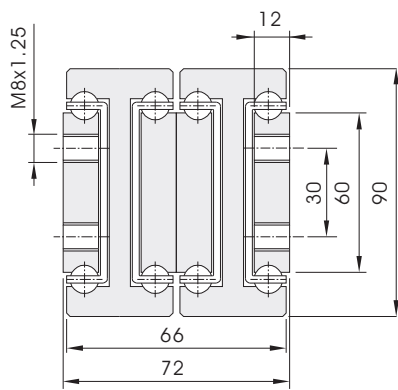
DTHR80 Stroke



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
DTHR80-1150	1150	2300	400	50	450	
DTHR80-1200	1200	2400	380	50	475	
DTHR80-1250	1250	2500	360	50	500	
DTHR80-1300	1300	2600	340	50	525	
DTHR80-1350	1350	2700	320	50	550	
DTHR80-1400	1400	2800	300	50	575	
DTHR80-1450	1450	2900	280	50	600	
DTHR80-1500	1500	3000	260	50	625	
DTHR80-1550	1550	3100	250	50	650	
DTHR80-1600	1600	3200	240	50	675	
DTHR80-1650	1650	3300	230	50	700	
DTHR80-1700	1700	3400	220	100	650	
DTHR80-1750	1750	3500	200	100	675	
DTHR80-1800	1800	3600	180	100	700	
DTHR80-1850	1850	3700	170	100	725	
DTHR80-1900	1900	3800	160	100	750	
DTHR80-2000	2000	4000	140	100	800	

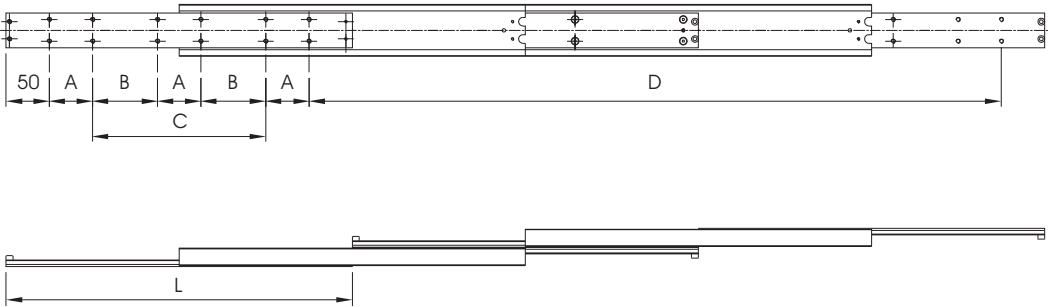
DTHR

DTHR90 Dimension



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
DTHR90-0300	300	600	460	50		100
DTHR90-0350	350	700	480	50		150
DTHR90-0400	400	800	510	50		200
DTHR90-0450	450	900	530	50		250
DTHR90-0500	500	1000	550	50		300
DTHR90-0550	550	1100	575	50		350
DTHR90-0600	600	1200	600	50		400
DTHR90-0650	650	1300	610	50	200	
DTHR90-0700	700	1400	620	50	225	
DTHR90-0750	750	1500	625	50	250	
DTHR90-0800	800	1600	630	50	275	
DTHR90-0850	850	1700	625	50	300	
DTHR90-0900	900	1800	620	50	325	
DTHR90-0950	950	1900	615	50	350	
DTHR90-1000	1000	2000	610	50	375	
DTHR90-1050	1050	2100	585	50	400	
DTHR90-1100	1100	2200	570	50	425	

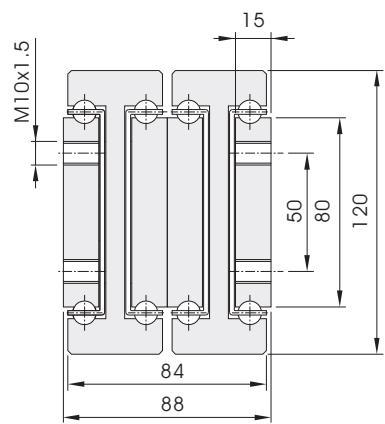
DTHR90 Stroke



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
DTHR90-1150	1150	2300	555	50	450	
DTHR90-1200	1200	2400	535	50	475	
DTHR90-1250	1250	2500	520	50	500	
DTHR90-1300	1300	2600	500	50	525	
DTHR90-1350	1350	2700	480	50	550	
DTHR90-1400	1400	2800	460	50	575	
DTHR90-1450	1450	2900	440	50	600	
DTHR90-1500	1500	3000	420	50	625	
DTHR90-1550	1550	3100	405	50	650	
DTHR90-1600	1600	3200	390	50	675	
DTHR90-1650	1650	3300	380	50	700	
DTHR90-1700	1700	3400	360	100	650	
DTHR90-1750	1750	3500	330	100	675	
DTHR90-1800	1800	3600	300	100	700	
DTHR90-1850	1850	3700	280	100	725	
DTHR90-1900	1900	3800	260	100	750	
DTHR90-2000	2000	4000	220	100	800	

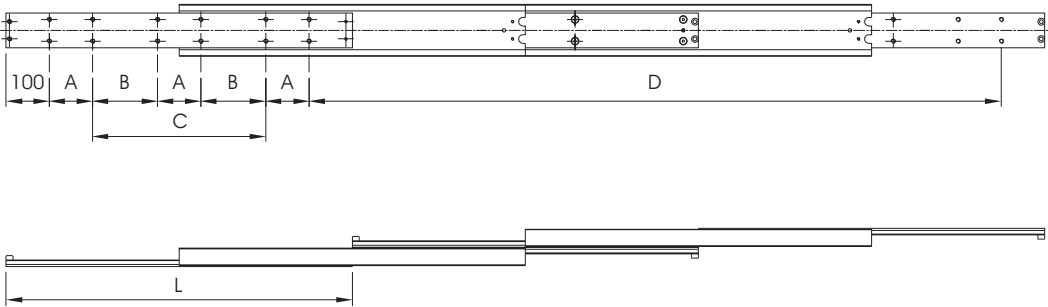
DTHR

DTHR120 Dimension



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
DTHR120-0300	300	600	640	100		
DTHR120-0350	350	700	680	50		50
DTHR120-0400	400	800	720	50		100
DTHR120-0450	450	900	760	50		150
DTHR120-0500	500	1000	790	50		200
DTHR120-0550	550	1100	810	50		250
DTHR120-0600	600	1200	830	50		300
DTHR120-0650	650	1300	840	50	150	
DTHR120-0700	700	1400	860	50	175	
DTHR120-0750	750	1500	880	50	200	
DTHR120-0800	800	1600	890	100	150	
DTHR120-0850	850	1700	875	100	175	
DTHR120-0900	900	1800	860	100	200	
DTHR120-0950	950	1900	845	100	225	
DTHR120-1000	1000	2000	830	100	250	
DTHR120-1050	1050	2100	810	100	275	
DTHR120-1100	1100	2200	800	100	300	
DTHR120-1150	1150	2300	790	100	325	

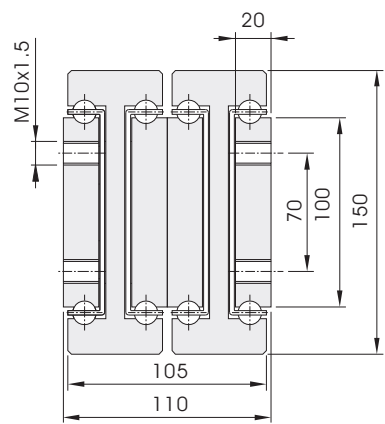
DTHR120 Stroke



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
DTHR120-1200	1200	2400	780	100	350	
DTHR120-1250	1250	2500	770	100	375	
DTHR120-1300	1300	2600	760	100	400	
DTHR120-1350	1350	2700	740	100	425	
DTHR120-1400	1400	2800	730	100	450	
DTHR120-1450	1450	2900	710	100	475	
DTHR120-1500	1500	3000	690	100	500	
DTHR120-1550	1550	3100	680	100	525	
DTHR120-1600	1600	3200	660	100	550	
DTHR120-1650	1650	3300	640	100	575	
DTHR120-1700	1700	3400	620	100	600	
DTHR120-1750	1750	3500	600	100	625	
DTHR120-1800	1800	3600	580	100	650	
DTHR120-1850	1850	3700	540	100	675	
DTHR120-1900	1900	3800	510	100	700	
DTHR120-1950	1950	3900	470	100	725	
DTHR120-2000	2000	4000	450	100	750	
DTHR120-2200	2200	4400	300	100	850	

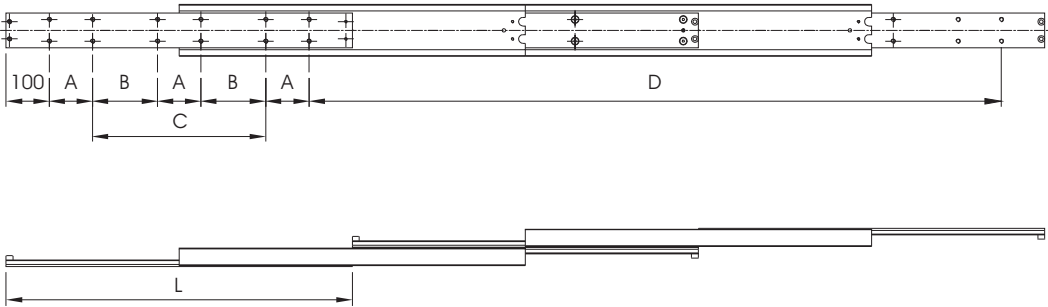
DTHR

DTHR150 Dimension



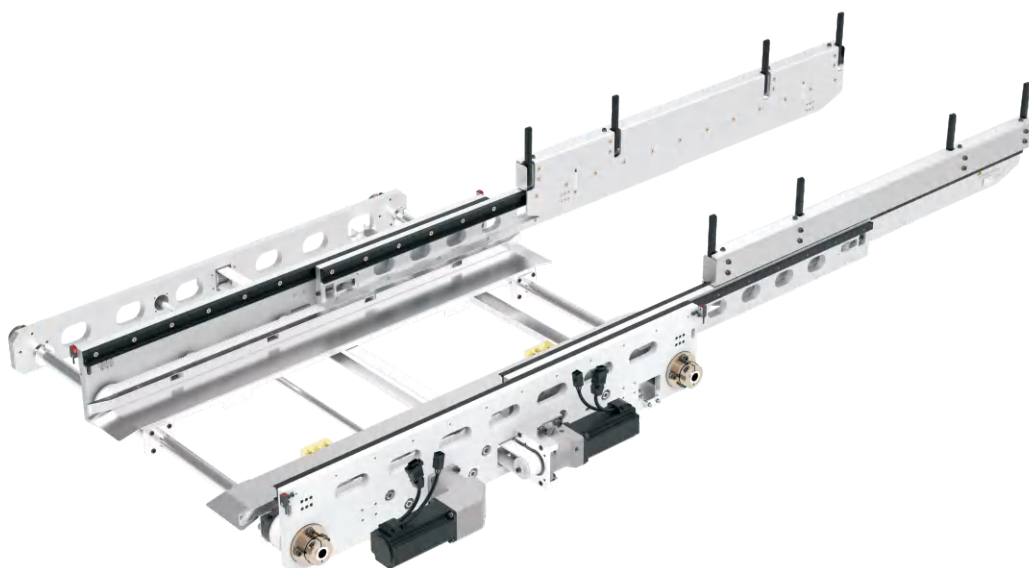
Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
DTHR150-0300	300	600	1120	100		
DTHR150-0350	350	700	1170	50		50
DTHR150-0400	400	800	1220	50		100
DTHR150-0450	450	900	1280	50		150
DTHR150-0500	500	1000	1300	50		200
DTHR150-0550	550	1100	1380	50		250
DTHR150-0600	600	1200	1440	50		300
DTHR150-0650	650	1300	1460	50	150	
DTHR150-0700	700	1400	1490	50	175	
DTHR150-0750	750	1500	1510	50	200	
DTHR150-0800	800	1600	1540	100	150	
DTHR150-0850	850	1700	1520	100	175	
DTHR150-0900	900	1800	1500	100	200	
DTHR150-0950	950	1900	1480	100	225	
DTHR150-1000	1000	2000	1460	100	250	
DTHR150-1050	1050	2100	1440	100	275	
DTHR150-1100	1100	2200	1410	100	300	
DTHR150-1150	1150	2300	1390	100	325	

DTHR150 Stroke



Type	Length L (mm)	Stroke S (mm)	Load Capacity (Per Pair) (kg)	Pitch (mm)		
				A	B	C
DTHR150-1200	1200	2400	1350	100	350	
DTHR150-1250	1250	2500	1330	100	375	
DTHR150-1300	1300	2600	1300	100	400	
DTHR150-1350	1350	2700	1275	100	425	
DTHR150-1400	1400	2800	1250	100	450	
DTHR150-1450	1450	2900	1225	100	475	
DTHR150-1500	1500	3000	1200	100	500	
DTHR150-1550	1550	3100	1180	100	525	
DTHR150-1600	1600	3200	1160	100	550	
DTHR150-1650	1650	3300	1130	100	575	
DTHR150-1700	1700	3400	1100	100	600	
DTHR150-1750	1750	3500	1060	100	625	
DTHR150-1800	1800	3600	1000	100	650	
DTHR150-1850	1850	3700	940	100	675	
DTHR150-1900	1900	3800	880	100	700	
DTHR150-1950	1950	3900	820	100	725	
DTHR150-2000	2000	4000	760	100	750	
DTHR150-2500	2500	5000	160	100	1000	

Telescopic Fork



SAIBO Telescopic fork is designed for pull or push material container in the automated logistics storage system. It has characteristic of compact structure, light weight, high speed, single or bidirectional movement. It mainly used for shuttle vehicles, container-storage-type AGV, light weight stacker etc.

Single Depth Telescopic Fork

It is used to pick a single row of 400x600 standard material containers, The arms run fast and locates precisely. The combination of aluminum alloy and metal sheet material not only realizes the compact structure and light weight, but also has the characteristics of high rigidity and low deflection deformation.

Double Depth Telescopic forks

It is used to pick double-row 400x600 standard material containers. It is characterized by precise stroke control and multiple sets of independent fingers. It can realize pick double-row material containers with bidirectional movement. This structure helps increase material storage density.

Adjustable Width Telescopic Fork

It is used to pick double-row material containers with different sizes. With the function of width adjustment, it can realize the handling and storage of materials with different sizes to meet the special needs of mixed storage of various materials.

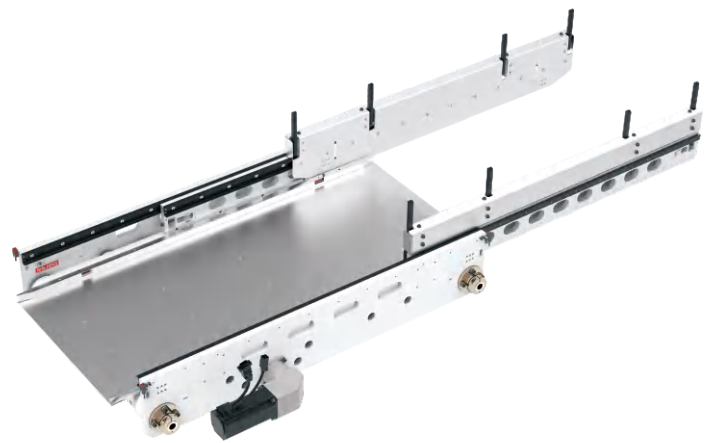
Single Depth Telescopic Fork



Item	Parameter
Model No.	FTMB400
Dimension (L/W/H)	783/675/242mm
Stroke	910mm
Applicable case size	600 × 400mm
Max No-load Speed	2m/s
Max No-load Acceleration	3m/s ²
Max Load Capacity	50KG
Extend Arm Thickness	40mm
Fork Weight	35KG
Finger Quantity on One Side Arm	2pcs
Distance between Fingers	658mm

- Compact structure, lightweight
- Life test verification, long life and efficient
- Standard and modular design
- Quick response and delivery timely

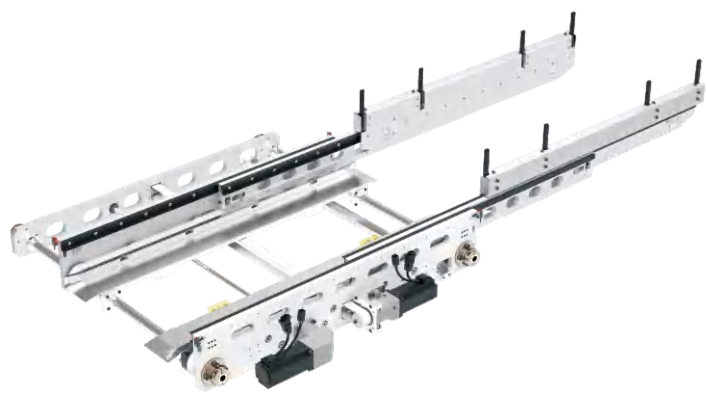
Double Depth Telescopic Fork



Item	Parameter
Model No.	FTMC400
Dimension (L/W/H)	1020/723/233mm
Stroke	1444mm
Applicable case size	600 × 400mm
Max No-load Speed	1.6m/s
Max No-load Acceleration	3m/s ²
Max Load Capacity	50KG
Extend Arm Thickness	40mm
Fork Weight	55KG
Finger Quantity on One Side Arm	4pcs
Distance between Fingers	664mm

- Suitable for taking and placing in double depth material case
- Flexible switch between single depth and double depth
- Standard and modular design
- Quick response and delivery timely

Adjustable Width Telescopic Fork



Item	Parameter
Model No.	RMFB 200-600
Dimension (L/W/H)	1003/1016/233mm
Stroke	1444mm
Applicable case size	600 × (200-600)mm
Max No-load Speed	1.6m/s
Max No-load Acceleration	3m/s ²
Max Load Capacity	50KG
Extend Arm Thickness	40mm
Fork Weight	61KG
Finger Quantity on One Side Arm	4pcs
Distance between Fingers	664mm

- Suitable for taking and placing different size material cases
- Flexible switch between single depth and double depth
- Standard and modular design
- Quick response and delivery timely

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Due to constant development of the products, we reserve the right of modifications without notifications.

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