C&H: Precision Linear Motion Solution

C&H designs and manufactures high-quality ring & track systems, linear guide systems, and their components. We offer standard and customized solutions for a wide range of industries.

Products & Services:

- Ring & track systems
- Linear guide systems
- Components: rails, carriages, bearings, lubricators, supports
- Customization

Benefits:

- High speed, Accurate, Durable, Low friction, Low noise
- Competitive pricing
- Customization
- Industry expertise

Contact Us:

- Website: https://www.chmotion.com
- Contact: jason@chenghuibearing.com

Straight Rail

Standard version : High carbon-chromium steel (DIN 100Cr6/AISI 52100), hardened on V faces to HRC56-HRC60 for high wear resistance, ground double 70° V working edges together to ensure parallelism, soft rail body for customization machining process, other faces are phosphated for corrosion resistance.

Stainless steel version: AISI 420, hardened on V faces to HRC53-HRC55, ground on all main surfaces for precision.

Provide three sizes 25, 44, 76 for customer's selection

Two precision rails P1 and P3 is optional, ground and unground. Precision P3 rail length could be up to 4 meters without connection. Longer length (unlimited) can be achieved by connection.

Ring Rail and Segment

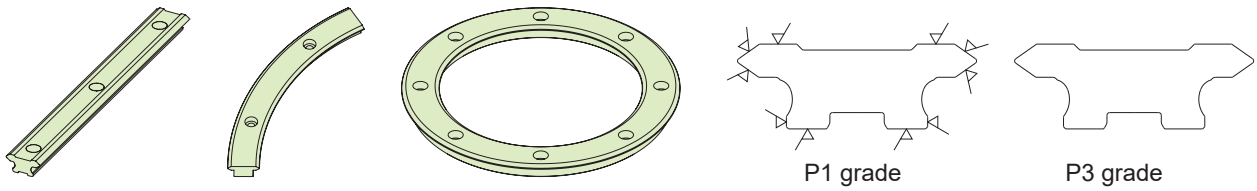
Standard version : High carbon-chromium steel (DIN 100Cr6/AISI 52100), hardened on V faces to HRC56-HRC60 for high wear resistance, ground double 70° V working edges together to ensure parallelism, soft rail body for customization machining process, other faces are phosphated for corrosion resistance.

Provide 90° segment,180° segment , 360° ring.

Stainless steel version: AISI 420, hardened on V faces to HRC53-HRC55, ground on all main surfaces for precision.

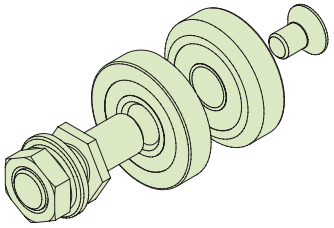
Precision

C&H provides two precision. P1 ground and P3 unground. Here we must emphasize that P3 grade's motion is also very smooth and stable. It is fit for smooth running without very high precision and low cost request. But when linear rail connect ring rail, it must be P1 grade.

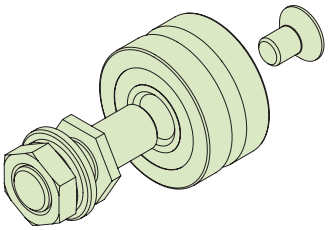


Track Rollers

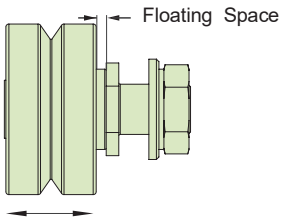
Made of high carbon-chromium steel DIN100Cr6/AISI52100or stainless steel AISI440C. We provide both Twin and Double-row bearings (see below figure). We provide both concentric and eccentric bolt.



Twin bearing



Double row bearing



To help facilitate bearing type selection, key attributes of Twin, Double Row and Axial Stiffness bearings are compared in the chart below:

Bearing Type	Max Working Load Axial	Max Working Load Radial	Speed	Smoothness	Tolerance to Misalignment	Weight	System Height	Tolerance to Debris	Stiffness Under Axial Load
Twin	★★☆☆☆☆	★★★☆☆☆	★★★★★★	★★★★★★	★★★★★☆	★★★★☆☆	★★★★☆☆	★★★★☆☆	★★★★☆☆
Double Row	★★★☆☆☆	★★★★★★	★★★★★★	★★★★★☆	★★★★☆☆	★★★★☆☆	★★★★☆☆	★★★★★★	★★★★★☆
Axial Stiffness	★★☆☆☆☆	★★★★☆☆	★★★★★★	★★★★★☆	★★★☆☆☆	★★★☆☆☆	★★★★☆☆	★★★★★★	★★★★★★

Floating Bearing

Made of high carbon-chromium steel DIN100Cr6/AISI52100or stainless steel AISI440C. We provide both Twin and Double-row bearings (see below figure). We provide both concentric and eccentric bolt.

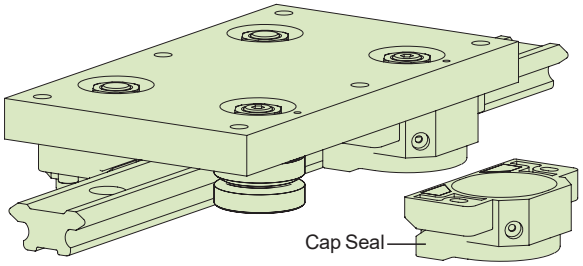
Cap Seal

Protect bearing against dust. Ensures best possible lubrication of the V contact surfaces and protects against ingress of debris. Operational safety and system appearance are also improved. Lubricated felt wiper contact rail's working surface to increase load capacity and life. Depending on stroke, duty and environmental factors, no further lubrication is required. Standard and interchangeable.

Material

- Body: Thermoplastic elastomer
- Inserts: Impact resistant plastic
- Wipers: Oil-impregnated Felt
- Fixing: Stainless Steel AISI304

Temperature Range: -20°C to +60°C.



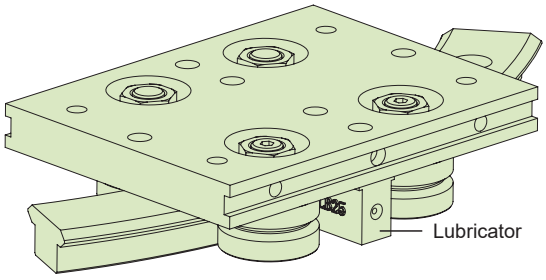
Lubricator

Lubricator can be mounted with a carriage-plate to contact rail's V sliding surface during running operation to feed sufficient lubricant and wipe away foreign substances, so that it increases the load carrying capacity and service life as well as the maximum speed of journal bearings. Lubricated felt wiper is pushed lightly by a small spring to ensure low friction with the rail's sliding surface. Easy to fill lubricate oil from its fill hole. Standard and interchangeable.

Material:

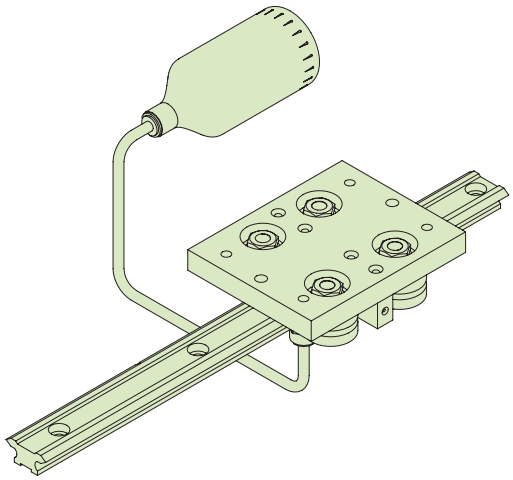
- Body: Impact resistant thermoplastic
- Wiper: Oil-impregnated Felt
- Fixings(spring and : Stainless steel AISI304

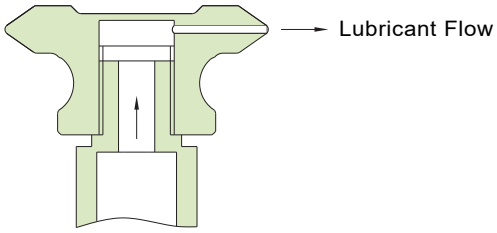
Temperature Range: -20°C to +60°C.
Lubricant: Slideway oils with viscosity 68 cSt or similar.
Shell Tonna S2 MX 68 is the best recommended.



Bleed Lubrication

Oil charging holes supplied for the Track Motion System. Automatic lubricate bleed could connect to the rail's oil charging holes very easily. The bleed lubrication facility channels lubricant direct to the V sliding surface of a straight rail for best lubrication of a track system.





1. Match rollers to carriage plate

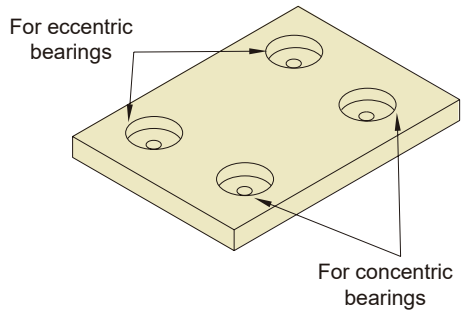
Please mount concentric (fixed) bearings to one side of carriage plate, and eccentric (adjustable) bearing to the other side, following the direction of rail. In case of ring type carriage plate, the fixed type bearings should be mounted to the side where mounting-hole distance is shorter. Please refer to the picture below.

2. Mounting to railway

Carriage assembly should be mounted from the end of railway. Please do not put any overstress when mounting. User please choose either side of supporting portion as datum face, and set the fixed type bearings at the datum-face side.

3. Adjust the clearance between bearing and railway

- Fully tighten concentric bearings first.
- Semi-tighten eccentric bearings and rotated to their outermost position.
- Rotate eccentric bearing via rotate hexagonal key at the end of stud to adjust the clearance between railway and bearing.
- Adjust the clearance to zero.
- Slide the carriage by hand and adjust to the extent where there causes a slight slipping resistance.



Circle motion carriage plate

Correct condition is where moving power becomes the recommended value as below table by putting load by push-pull gauge to the running direction of carriage.

Recommended pre-load by push-pull gauge

V track bearing size	Pre-load(N)
25	4
44	8
76	12

Keep eccentric bearing's position and tighten the nut.

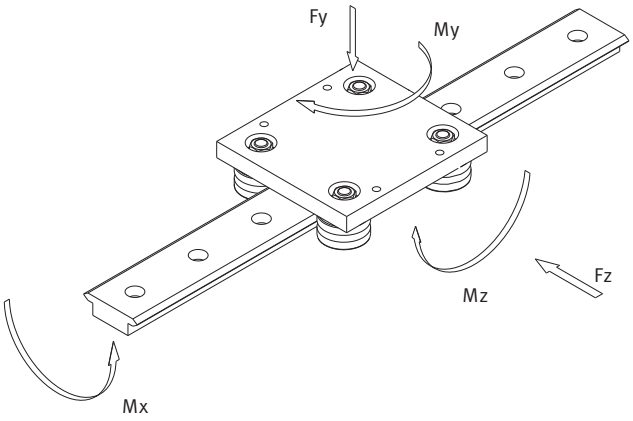
Appropriate pre-load provide the system rigidity. However, over preload will decrease system's life rapidly. Please be careful.

1. Load / Life calculation

Due to the hardness of the railway and fatigue analysis of railway and roller, the railway's life does not determine the system life. It is determined by roller's life. Load capacity of the motion guide system varies mainly by the size of bearing and railway, lubricated or not, and the load magnitude and direction. Other factors include speed and acceleration and environment etc. To calculate system life, loading factor LF should be calculated firstly. Here we provide two methods to calculate the loading factor.

2. Standard 4 bearings carriage calculation

If the system use standard 4 bearings carriage, then calculation can use below formula.



Fy - Actual load in Y direction. (N)

Fz - Actual load in Z direction. (N)

Mx - Actual moment in X direction. (N·m)

My - Actual moment in Y direction. (N·m)

Mz - Actual moment in Z direction. (N·m)

Below parameters can be taken from the table of Load capacity.

Fy max - Max load capacity in Y direction. (N)

Fz max - Max load capacity in Z direction. (N)

Mx max - Max moment capacity in X direction. (N·m)

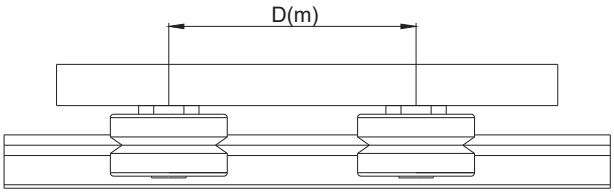
My max - Max moment capacity in Y direction. (N·m)

Mz max - Max moment capacity in Z direction. (N·m)

$$LF = \frac{Fy}{Fymax} + \frac{Fz}{Fzmax} + \frac{Mx}{Mxmax} + \frac{My}{Mymax} + \frac{Mz}{Mzmax}$$

Load and Moment Capacity of Straigt Rail Carrige

Carriage Type	Dry system Double Row Bearings and Twin Bearings					Lubricated system Twin Bearings					Lubricated system Double Row Bearings			
	Fy	Fz	Mx	My	Mz	Fy	Fz	Mx	My	Mz	Fy	Fz	My	Mz
	N	N	Nm	Nm	Nm	N	N	Nm	Nm	Nm	N	N	Nm	Nm
LGC25	410	410	4.6	200xD	200xD	1300	1225	14	600xD	640xD	1610	3020	1500xD	800xD
LGC44	790	790	16	400xD	400xD	3250	2830	65	1400xD	1600xD	3620	6050	3000xD	1800xD
LGC76	1850	1850	65	900xD	900xD	7250	6380	255	3200xD	3600xD	10050	10050	5000xD	5000xD



Load and Moment Capacity of Ring Rail Carrige

Carriage Type	Dry system Double Row Bearings and Twin Bearings					Lubricated system Twin Bearings					Lubricated system Double Row Bearings				
	Fy	Fz	Mx	My	Mz	Fy	Fz	Mx	My	Mz	Fy	Fz	Mx	My	Mz
	N	N	Nm	Nm	Nm	N	N	Nm	Nm	Nm	N	N	Nm	Nm	Nm
SRC25 159	410	410	4.6	8.7	8.7	1300	1225	14	25.5	27.5	1610	3020	18.2	65	33.5
SRC25 255	410	410	4.6	8.2	8.2	1300	1225	14	23.5	25.5	1610	3020	18.2	60	31.5
SRC25 351	410	410	4.6	8.7	8.7	1300	1225	14	24.5	27.5	1610	3020	18.2	64	33.5
SRC44 468	790	790	16	28.2	28.2	3250	2830	65	97	112	3620	6050	74	215	120
SRC44 612	790	790	16	28	28	3250	2830	65	100	110	3620	6050	74	225	130
SRC76 799	1850	1850	65	87	87	7250	6380	255	305	345	10050	10050	365	480	480
SRC76 1033	1850	1850	65	105	105	7250	6380	255	365	415	10050	10050	365	580	580
SRC76 1267	1850	1850	65	122	122	7250	6380	255	425	480	10050	10050	365	680	680
SRC76 1501	1850	1850	65	138	138	7250	6380	255	490	550	10050	10050	365	780	780

Roller load factor

If the system does not use standard 4 roller carriage, It is necessary to calculate each roller's loading factor. Biggest loaded roller's load determines the system's life.

$$LF = \frac{Fy}{Fymax} + \frac{Fz}{Fzmax}$$

LF-Loading Factor

LF should be less than 1.0 for any combination of load

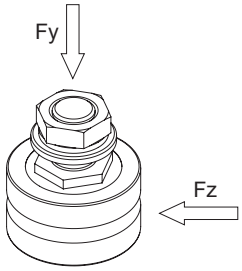
Fy-Actual axial capacity. (N)

Fz - Actual radial capacity. (N)

Below parameters can

Fy max - Max axial load. (N)

Fz max - Max radial load. (N)



Roller's load capacity

Please refer to roller catalog

Life calculation

After getting Loading Factor LF, the life in km can be calculated by selecting one of below two formulas. The basic life can be taken from table below.

Dry system

$$Life(km) = \frac{Basic\_life}{(0.03+0.97LF*f)^2}$$

Lubricated system

$$Life(km) = \frac{Basic\_life}{(0.03+0.97LF*f)^3}$$

Basic life

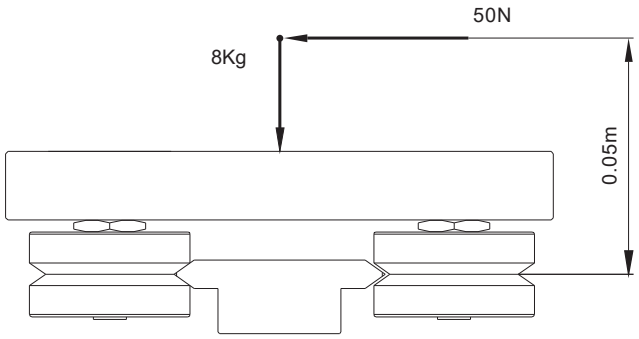
Bearing type	Dry system	Lubricated system
..R25..	100	150
..R34..	100	150
..R54..	150	250

f - Reduction coefficient of the application and environment.

None vibration or shock, Low speed (< 1m/s), Low frequency shift direction, clean environment.	1-1.5
Light vibration or shock, medium speed (1-2.5m/s) medium frequency shift direction, some dirtiness	1.5-2
Heavy vibration or shock, high speed (> 2.5m/s) high frequency shift direction, heavy dirty	2-3.5

Calculation example

A machine use size 25 slide and standard carriage. The carriage and work-piece total weight 8kg. When the carriage moving, there is an external load of 50 N exerted as below drawing. Working environment is clean. There is none vibration or shock.



The load factor LF is calculated use formula

$$LF = \frac{Fy}{Fymax} + \frac{Fz}{Fzmax} + \frac{Mx}{Mxmax} + \frac{My}{Mymax} + \frac{Mz}{Mzmax}$$

Fy = 8kg x 9.8 (gravity) = 78.40 N, Fz = 50 N, Mx = 50 x 0.05 = 2.5 Nm , My = 0, Mz = 0

Take parameters Fy max, Fz max, Mx max, My max, Mz m ax from table and then fill in the formula

$$LF = \frac{78.4}{1280} + \frac{50}{1200} + \frac{2.5}{14} + \frac{0}{Mymax} + \frac{0}{Mzmax} = 0.2816$$

Then life (km) calculation can use formula as below:

Dry system

$$\textbf{Life(km)} = \frac{Basic\_life}{(0.03+0.97LF*f)^2}$$

Basic life is 100km. f=1.3

$$\textbf{Life(km)} = \frac{100}{(0.03+0.97*0.2816*1.3)^2} = 674km$$

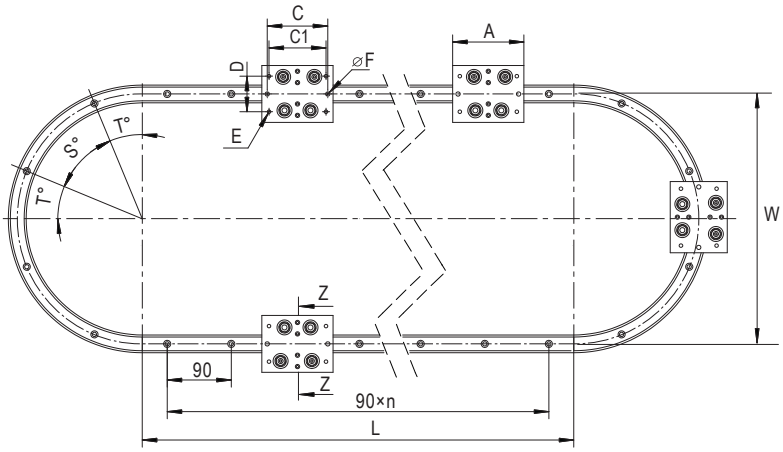
Lubricated system

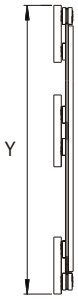
$$\textbf{Life(km)} = \frac{Basic\_life}{(0.03+0.97LF*f)^3}$$

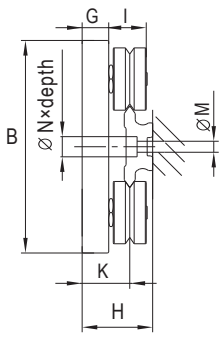
Basic life is 150km. f=1.1

$$\textbf{Life(km)} = \frac{150}{(0.03+0.97*0.2816*1.1)^3} = 4155km$$

From this example, it shows clearly that lubrication is so important for the life. Please pay attention to install the lubrication system for your system.







Z – Z cross section

Set Number	Components			Dimension												
	Straight Rail	Segment	Carriage	A	B	C	C1	D	E	ΦF	G	H	I	K	S°	T°	W
CTS25 x L-159B	LGV25 x L	CGV25 159 R180	CTC25 159	95	80	80	85	50	M6	6	12	31	16.6	21	45	22.5	159
CTS25 x L-255B	LGV25 x L	CGV25 255 R180	CTC25 255	100	80	85	80	50	M6	6	12	31	16.6	21	45	22.5	255
CTS25 x L-351B	LGV25 x L	CGV25 351 R180	CTC25 351	105	80	90	85	50	M6	6	12	31	16.6	21	30	15	351
CTS44 x L-468B	LGV44 x L	CGV44 468 R180	CTC44 468	145	116	125	120	75	M8	8	15	39	21.3	26.5	30	15	468
CTS44 x L-612B	LGV44 x L	CGV44 612 R180	CTC44 612	150	116	130	125	75	M8	8	15	39	21.3	26.5	22.5	11.25	612

Designation (Order No.)

CTS 44 x 2000 - 468 B 8 L

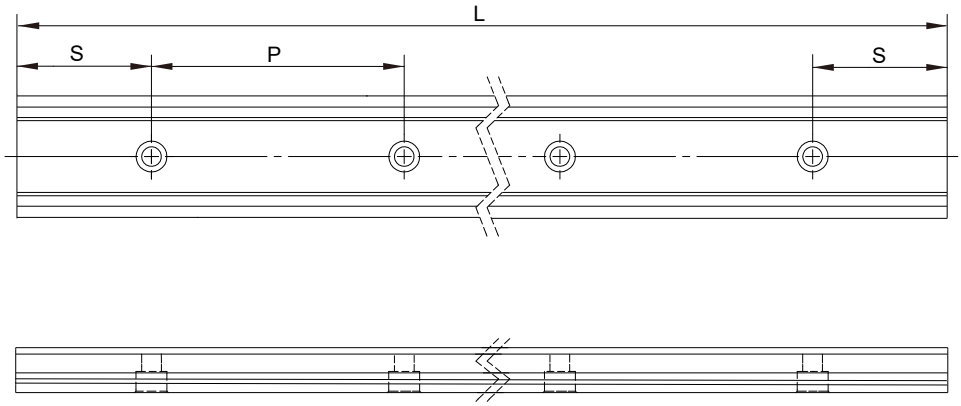
- L: With lubricator / Blank: No lubricator
- Number of carriage
- A: 90° segment / B: 180° segment
- Ring diameter
- Total length of straigt rail
- Rail width
- Circulating ring and track system

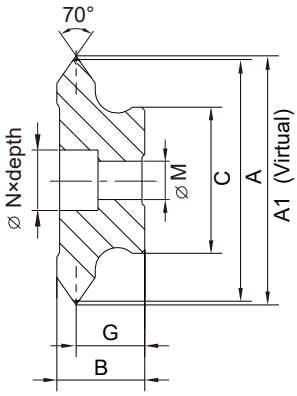
Temperature range

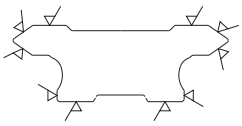
- -20 °C to +120 °C without lubricator
- -20 °C to +60 °C with lubricator

Maximum speed

- 1m/s for dry (unlubricated) operation
- 5m/s when lubricated







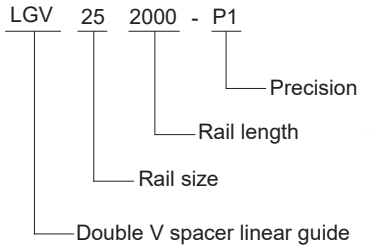
P1

▽ ground surface

P3

Part No	A		B		C		G		M	N	P	S	Lmax		Weight
	P1	P3	P1	P3	P1	P3	P1	P3	Φ	Φ x depth			P1	P3	kg/m
LGV25 x L	25	25.7	12.5	13.1	18	18.6	10	10.3	6	9.5x7	90	45	2000	4000	1.55
LGV44 x L	44	44.7	16	16.6	26.6	27.2	12.5	12.8	7	11x7.5	90	45	2000	4000	3.55
LGV76 x L	76	76.1	24	24.6	50	50.5	19.5	19.75	14	20x13	90	45	2000	4000	7

Designation (Order No.)

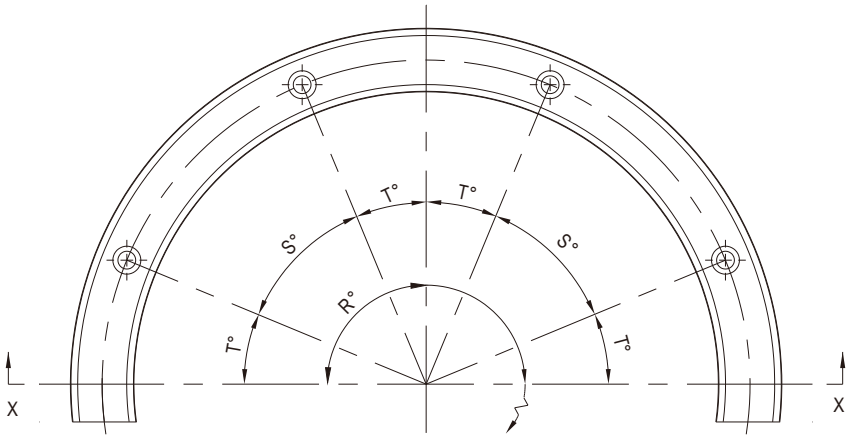


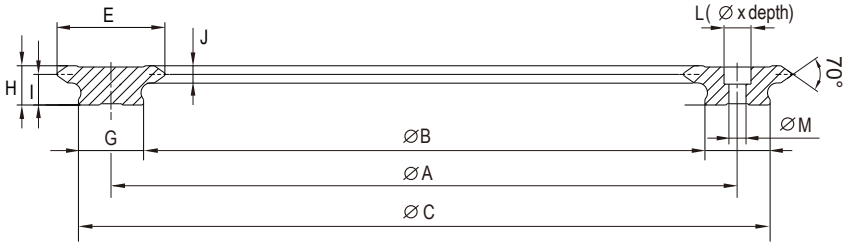
Standard Version

High carbon-chromium steel (DIN 100Cr6/AISI 52100), hardened on V faces to HRC56-HRC60 for high wear resistance, ground double 70° V working edges together to ensure parallelism, soft rail body for customization machining process, other faces are phosphated for corrosion resistance.

Stainless Steel Version

AISI 420, hardened on V faces to HRC53-HRC55, ground on all main surfaces for precision.





Designation (Order No.)

CGV 25 159 - R180

- R180: Segement 90° / Segement 180° / Ring 360°
- 159: Center diameter
- 25: Rail size
- CGV: Double V spacer ring guide

Material

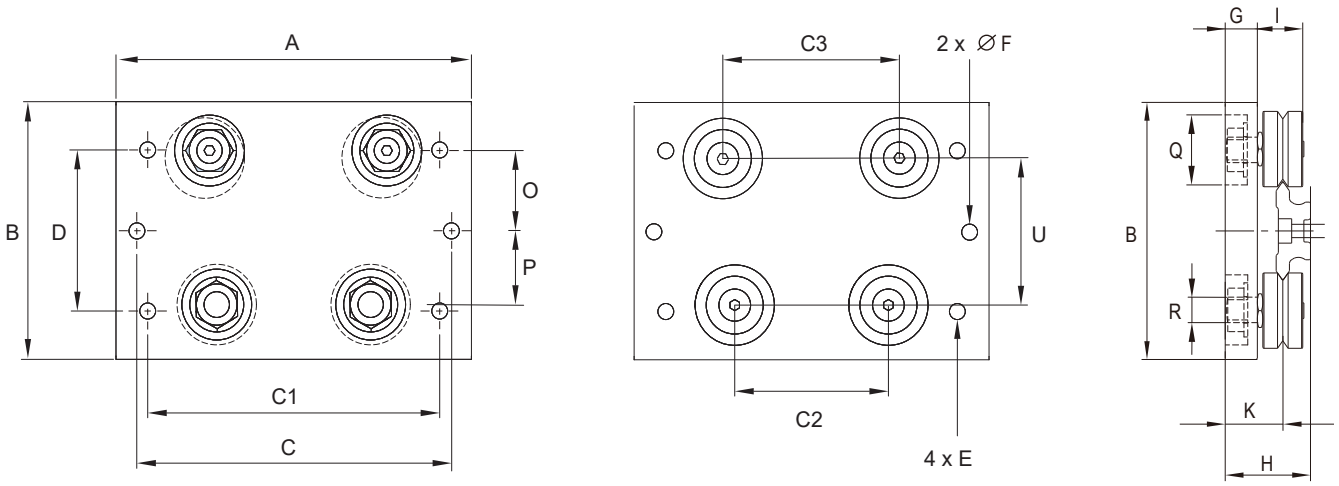
Standard:

High carbon-chromium steel, hardened on V-sliding surface to HRC56-60. Main surfaces ground for precision, other surfaces manganese phosphated.

Stainless steel:

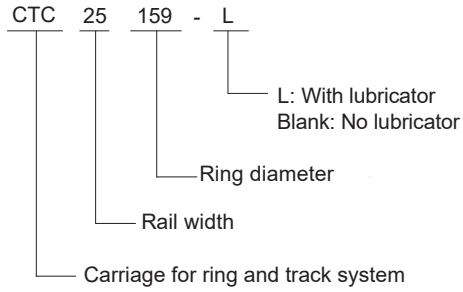
AISI 420, hardened to HRC 53-55. All main surfaces ground to for precision.

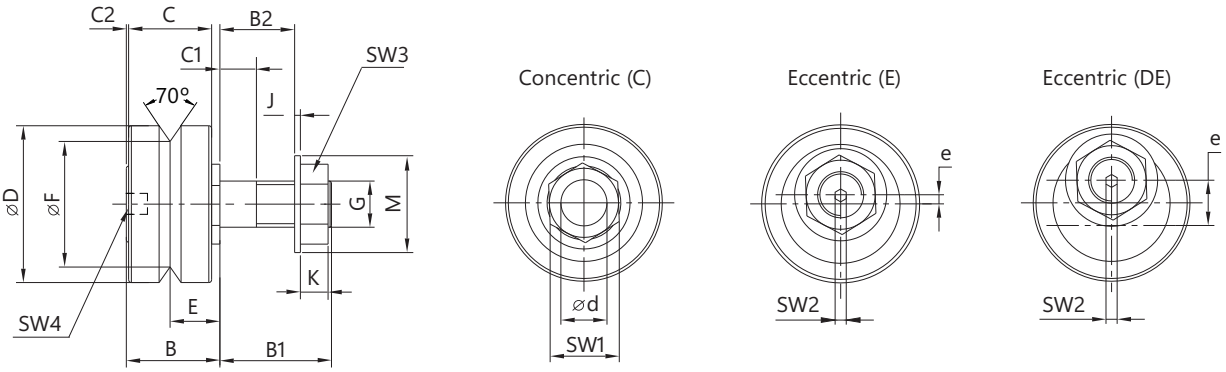
Part No.	A	B	C	E	G	H	I	J	L Ø x Depth	Ø M	Hole Number (R=360°)	Holes Position ±0.2		Weight (kg) (R=360°)	Screw DIN912
												S°	T°		
CGV25 159	159	141	177	25	18	12.5	10	5	9.5 x 7	6	8	45	22.5	0.77	M5
CGV25 255	255	237	273	25	18	12.5	10	5	9.5 x 7	6	8	45	22.5	1.2	M5
CGV25 351	351	333	369	25	18	12.5	10	5	9.5 x 7	6	12	30	15	1.65	M5
CGV44 468	468	441.4	494.6	44	26.6	16	12.5	7	11 x 7.5	7	12	30	15	5.1	M6
CGV44 612	612	585.4	638.6	44	26.6	16	12.5	7	11 x 7.5	7	16	22.5	11.25	6.7	M6



Part No.	Dimension																		Weight kg
	U	A	B	C	C1	C2	C3	D	E	ΦF	G	H	I	K	O	P	Q	RØ	
CTC25 159	46	95	80	80	85	37	50.15	50	M6	6	12	31	16.6	21	24.38	23.01	22 x 8.9	8	0.41
CTC25 255	46	100	80	85	80	36.5	43.86	50	M6	6	12	31	16.6	21	24.38	23.01	22 x 8.9	8	0.42
CTC25 351	46	105	80	90	85	40	45.66	50	M6	6	12	31	16.6	21	24.38	23.01	22 x 8.9	8	0.43
CTC44 468	71.9	145	116	125	120	65	75.95	75	M8	8	15	39	21.3	26.5	38.25	35.94	25 x 9.2	10	1.11
CTC44 612	71.9	150	116	130	125	70	78.8	75	M8	8	15	39	21.3	26.5	38.25	35.94	25 x 9.2	10	1.14

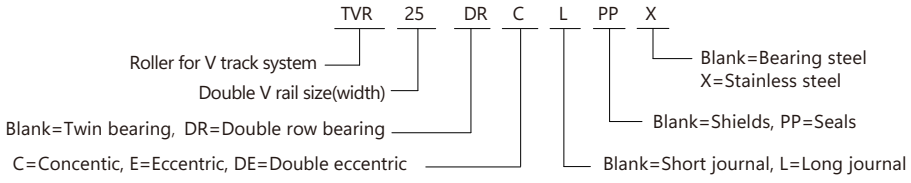
Designation (Order No.)

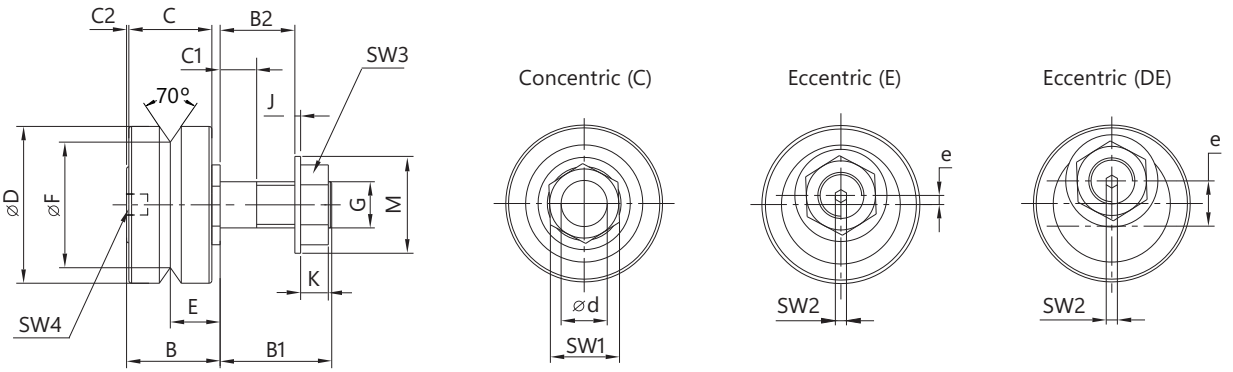




Part No.			D	e		B	E	B1	B2	C1	F	G	C	d	J	K	M
Concentric	Eccentric	Double Eccentric		..E..	..DE..		±0.02		max		±0.025			+0.00 -0.03			
TVR12C	TVR12E	TVR12DE	12.7	0.6	1.9	10.1	5.5	6	3	2.5	9.63	M4x0.5	8	4	0.8	2.2	9
TVR12CL	TVR12EL	TVR12DEL						9.5	6.7	2.5							
TVR20C	TVR20E	TVR20DE	18	0.7	2	12.4	6.75	7.4	3.4	2.4	14	M6x0.75	10	6	0.8	3.2	13
TVR20DRC	TVR20DRE	TVR20DRDE															
TVR20CL	TVR20EL	TVR20DEL						14	10	2.5							
TVR20DRCL	TVR20DREL	TVR20DRDEL															
TVR25C	TVR25E	TVR25DE	25	0.75	2	16.5	9	10	3.8	3.5	20.4	M8x1	14	8	1	5	17
TVR25DRC	TVR25DRE	TVR25DRDE															
TVR25CL	TVR25EL	TVR25DEL						19	13	3.9							
TVR25DRCL	TVR25DREL	TVR25DRDEL															
TVR44C	TVR44E	TVR44DE	34	1	2.5	21.2	11.5	14	6.6	5.5	27.17	M10x1.25	18	10	1.25	6	21
TVR44DRC	TVR44DRE	TVR44DRDE															
TVR44CL	TVR44EL	TVR44DEL						22	14.8	5.9							
TVR44DRCL	TVR44DREL	TVR44DRDEL															
TVR76C	TVR76E	TVR76DE	54	1.5	5.5	34.6	19	18	8.2	6	42	M14x1.5	28	14	1.6	8	28
TVR76DRC	TVR76DRE	TVR76DRDE															
TVR76CL	TVR76EL	TVR76DEL						30	20.4	7.9							
TVR76DRCL	TVR76DREL	TVR76DRDEL															

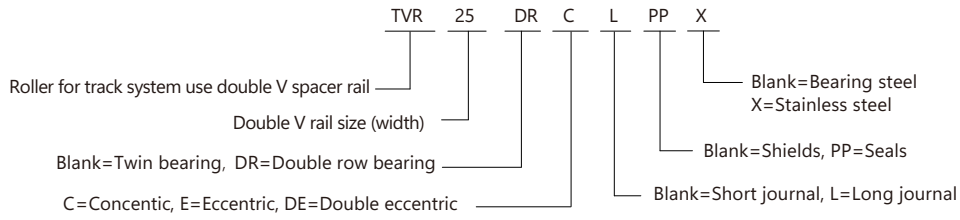
Designations

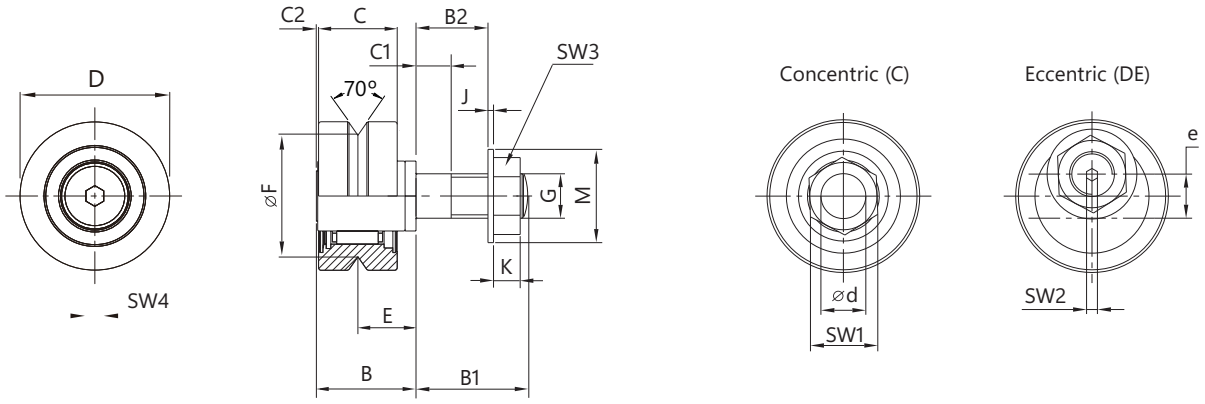




SW1	SW2	SW3	SW4	Weight	Max Working Load (N)		Bearing Load Capacity (N)				Part No.		
				kg	Radial	Axial	Radial		Axial		Concentric	Eccentric	Double Eccentric
							Co	C	Co	C			
7	-	7	1.5	0.008	108	54	260	690	74	190	TVR12C	TVR12E	TVR12DE
											TVR12CL	TVR12EL	TVR12DEL
11	2.5	10	2	0.019	180	112	590	1430	170	410	TVR20C	TVR20E	TVR20DE
					486	171	1160	2300	430	850	TVR20DRC	TVR20DRE	TVR20DRDE
					180	112	590	1430	170	410	TVR20CL	TVR20EL	TVR20DEL
					486	171	1160	2300	430	850	TVR20DRCL	TVR20DREL	TVR20DRDEL
13	3	13	3	0.049	540	288	1310	3230	325	790	TVR25C	TVR25E	TVR25DE
					1350	360	2640	5210	820	1610	TVR25DRC	TVR25DRE	TVR25DRDE
					540	288	1310	3230	325	790	TVR25CL	TVR25EL	TVR25DEL
					1350	360	2640	5210	820	1610	TVR25DRCL	TVR25DREL	TVR25DRDEL
15	4	17	4	0.116	1260	720	2590	5290	550	1260	TVR44C	TVR44E	TVR44DE
					2700	810	5010	9290	1360	2520	TVR44DRC	TVR44DRE	TVR44DRDE
					1260	720	2590	5290	550	1260	TVR44CL	TVR44EL	TVR44DEL
					2700	810	5010	9290	1360	2520	TVR44DRCL	TVR44DREL	TVR44DRDEL
27	6	22	8	0.416	2880	1620	6650	13590	1130	2310	TVR76C	TVR76E	TVR76DE
					4500	2250	12890	21370	2770	4600	TVR76DRC	TVR76DRE	TVR76DRDE
					2880	1620	6650	13590	1130	2310	TVR76CL	TVR76EL	TVR76DEL
					4500	2250	12890	21370	2770	4600	TVR76DRCL	TVR76DREL	TVR76DRDEL

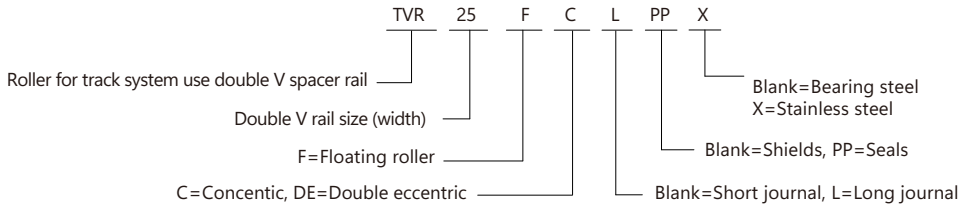
Designations

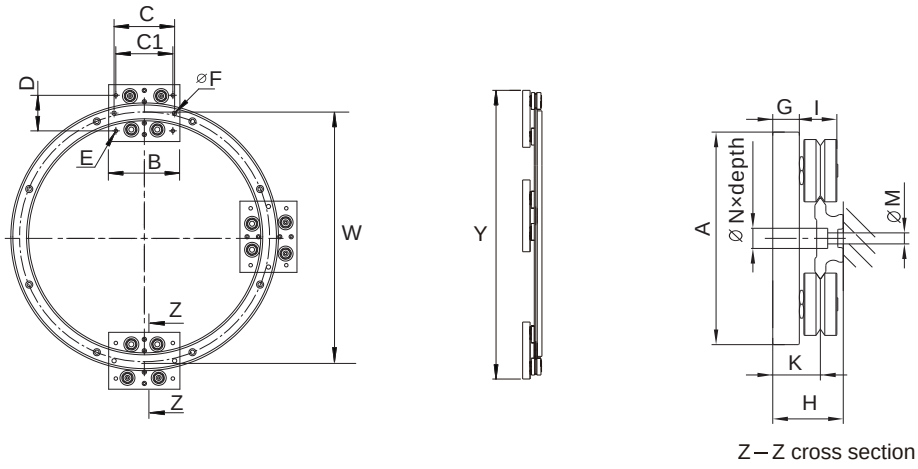




Part No.		D	e	B	E		B1	B2	C1	F	G	C	d	J	K	M	SW1	SW2	SW3	SW4	Weight	Max Working Load (N)	Bearing Load Capacity (N)	
Con.	Double Eccentric				min	max		max		±0.025			+0.00 -0.03								kg		Co	C
TVR25FC	TVR25FDE	25	2	18.1	9	10.5	11.3	3.8	3.5	20.4	M8x1	14	8	1	5	17	13	3	13	3	0.057	1350	6050	4950
TVR25FCL	TVR25FDEL						19	13	5												0.059			
TVR44FC	TVR44FDE	34	2.5	23.2	11.5	13.5	14.3	6.6	5.5	27.17	M10x1.25	18	10	1.25	6	21	15	4	17	4	0.129	2700	12450	11450
TVR44FCL	TVR44FDEL						22	14.8	6												0.134			
TVR76FC	TVR76FDE	54	5.5	37.2	19	21.6	19.8	8.2	6	42	M14x1.5	28	14	1.6	8	28	27	6	22	8	0.493	4500	28800	21300
TVR76FCL	TVR76FDEL						30	20.4	8												0.503			

Designations

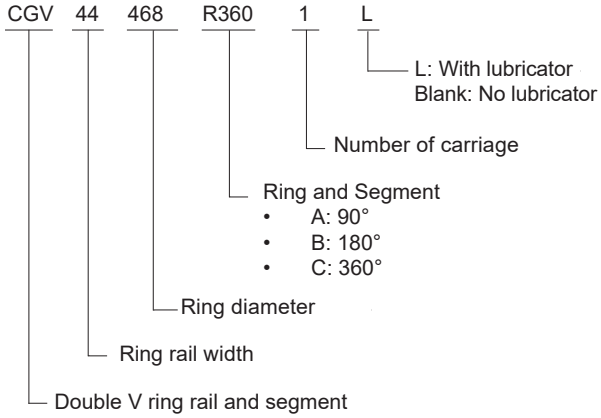


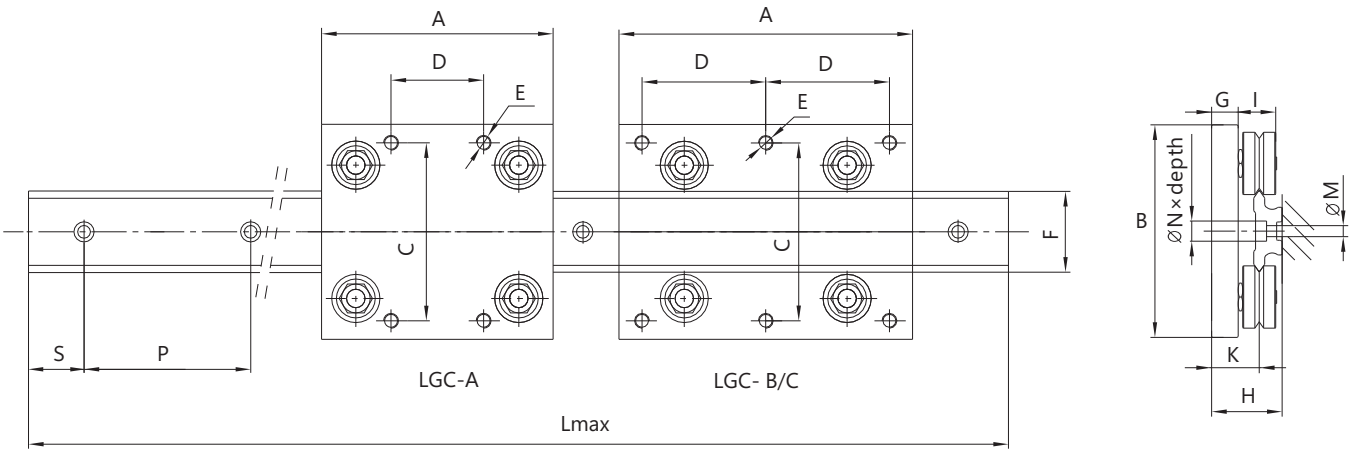


Z—Z cross section

Ring	Carriage	W	A	B	C	C1	D	E	ΦF	G	H	I	K
CGV25 159 R360	CTC25 159	159	95	80	80	85	50	M6	6	12	31	16.6	21
CGV25 255 R360	CTC25 255	255	100	80	85	80	50	M6	6	12	31	16.6	21
CGV25 351 R360	CTC25 351	351	105	80	90	85	50	M6	6	12	31	16.6	21
CGV44 468 R360	CTC44 468	468	145	116	125	120	75	M8	8	15	39	21.3	26.5
CGV44 612 R360	CTC44 612	612	150	116	130	125	75	M8	8	15	39	21.3	26.5

Designation (Order No.)



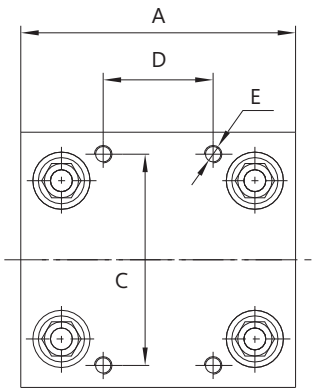


Rail	Carriage	Roller	A	B	C	D	E	G	H		I	K	MØ	NØ x depth	P	S	Lmax	
									P1	P3							P1	P3
LGV25XL	LGC25A	TVR25C TVR25E	80	80	65	24	4xM6	12	31	31.5	16.5	21	6	9.5x7	90	45	2000	4000
	LGC25B		135			60	6xM6											
	LGC25C		180			82	6xM6											
LGV44XL	LGC44A	TVR34C TVR34E	125	116	96	50	4xM8	15	39	39.5	21	26.5	7	11x8	90	45	2000	4000
	LGC44B		180			80	6xM8											
	LGC44C		225			103	6xM8											
LGV76XL	LGC76A	TVR54C TVR54E	200	185	160	90	4xM10	20	58.5	58.75	33.5	76	14	20x13	90	45	2000	4000
	LGC76B		300			135	6xM10											
	LGC76C		400			185	6xM10											

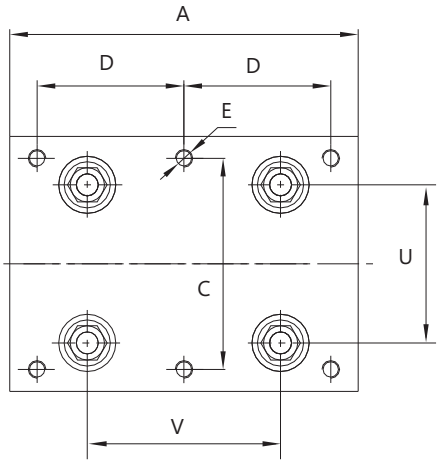
Designation (Order No.)

LGV 44 x 2000 - PA 2 L

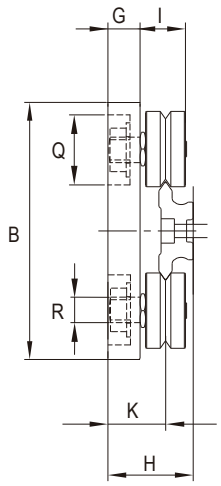
- L: With lubricator
  S: With cap seal
  Blank: No lubricator or cap seal
- Number of carriage
- Length of carriage plate
  - PA: Short
  - PB: Medium
  - PC: Long
- Total rail length
- Rail width
- Double V linear rail system



LGC-A



LGC- B/C



Part No.	A	B	C	D	E	G	H		I	K	Q	RØ	U	V	Weight kg
							P1	P3							
LGC25A	80	80	65	24	4xM6	12	31	31.5	16.5	21	22 x 8.9	8	46	51	0.4
LGC25B	135			60	6xM6									74	0.52
LGC25C	180			82	6xM6									120	0.65
LGC44A	125	116	96	50	4xM8	15	39	39.5	21	26.5	25 x 9.2	10	71.9	88	1.08
LGC44B	180			80	6xM8									103	1.39
LGC44C	225			103	6xM8									153	1.58
LGC76A	200	185	160	90	4xM10	20	58.5	58.75	33.5	76	32 x 13.5	14	118.5	130	1.78
LGC76B	300			135	6xM10									165	2.28
LGC76C	400			185	6xM10									265	3.08

Designation (Order No.)

LGC 44 PA 2 L

- L: With lubricator
  S: With cap seal
  Blank: No lubricator or cap seal
- Number of carriage
- Length of carriage plate
  - PA: Short
  - PB: Medium
  - PC: Long
- Rail width
- Carriage for double V linear rail system

Shanghai Chenghui Bearing Co.,Ltd

Ring and Track System Technical Requirment

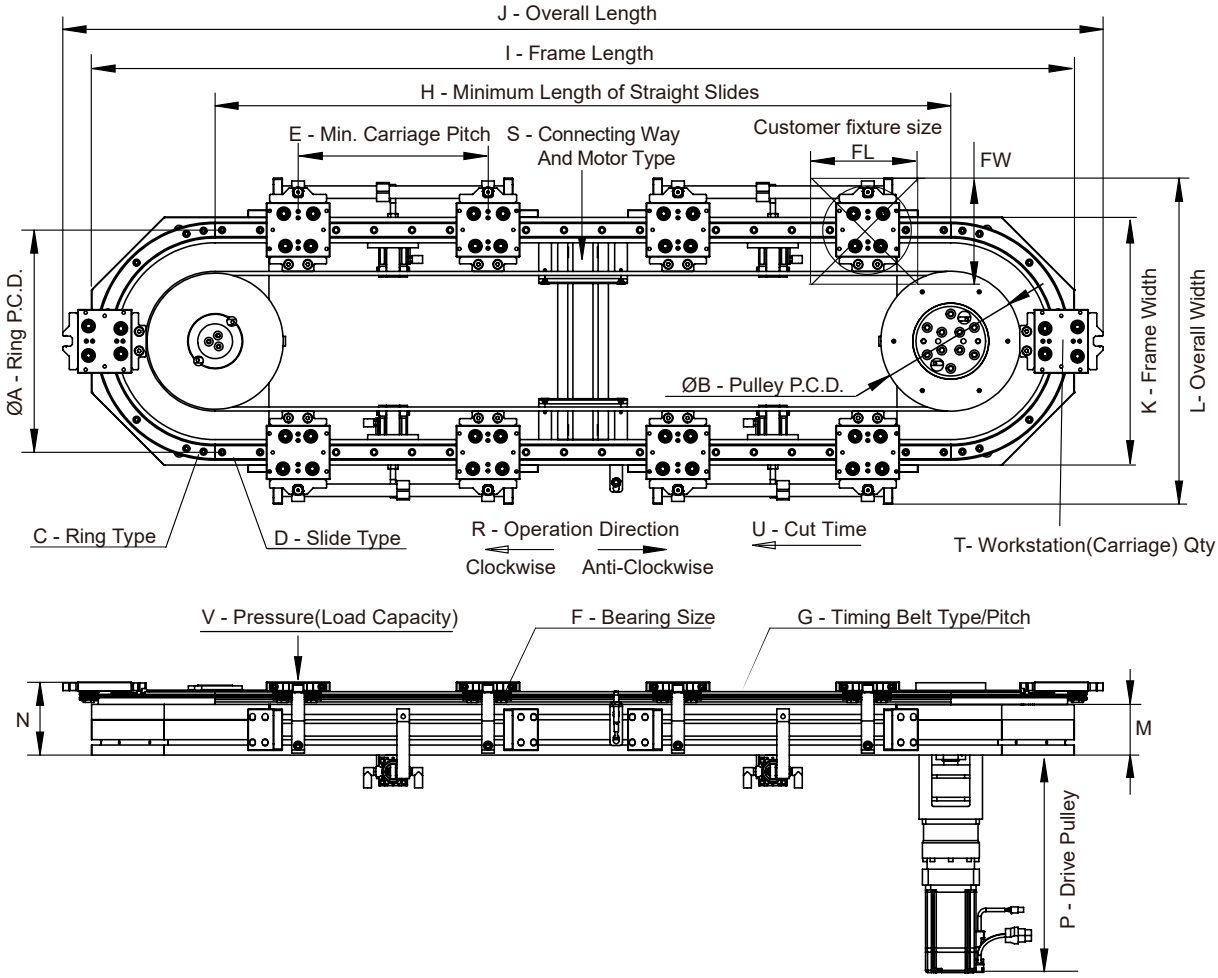
Contact:Mr.Jason Zhou, Mobile:+86 18616206301, E-mail: jason@chenghuibearing.com

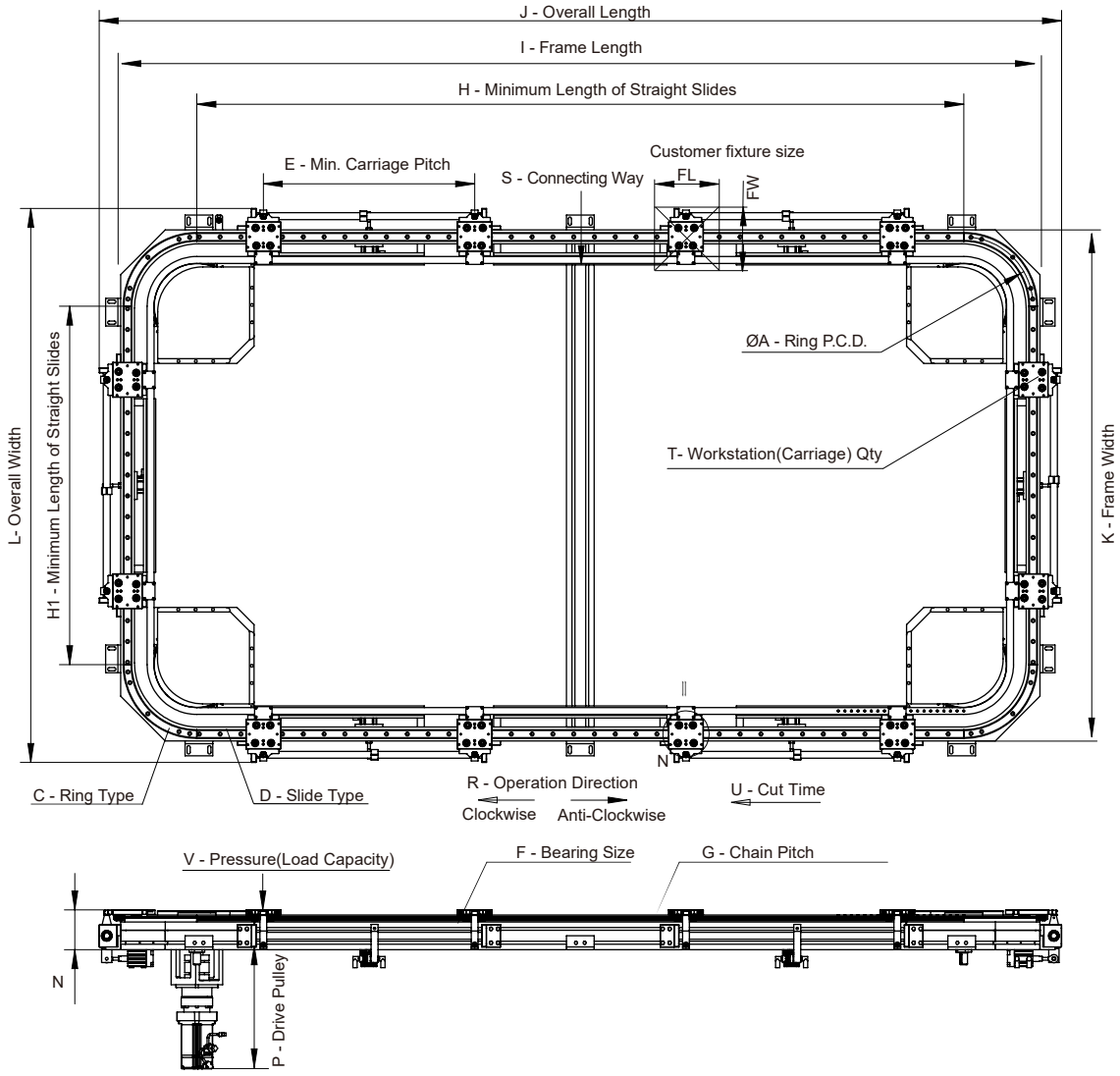
Customer		Date	
Contact		Email	
Mobile		Delivery	

Please fill in the following chart exactly. If you can't give us a concrete value please give us a general description.

Technical Data	Customer Requiement
The number of workstations (carriage) you need and the number need to be positioned, such as 20 /5, 10/0…	
The distance between adjacent station centers, such as 300mm, no interference, about 400mm…	
Cut Time: The time from one workstation to the next, such as 1.5s, no more than 2s, about 10s…	
The carriage plate length and width (accurate or approximate)	
The load capacity on your individual workstation (carriage) and whether there is a press force	
The positioning accuracy you need, if there is no accuracy required, please leave blank.	
The ring slide diameter	
The way of connection between the slides (belt, linkage, chain)	
Tthe overall size of the whole machine (accurate or approximate), such as leaving a blank space of 600mm in the middle, as small as possible	
The shape of your whole machine (circle, oval, rectangle, special shape please specify) (rectangle indicates the lenths of the long straight slide and short straight side).	
Tthe mounting method of the rail (horizontal, vertical, if there are others ways to stall please specify it.	
Operating direction (clock、anti-clock)	
Please describe the working environment of your production line briefly, such as high temperature, oil pollution, dust-free workshop and so on.	

Supplemental Technical Document (drawing or 3D model)


J - Overall Length
I - Frame Length
H - Minimum Length of Straight Slides
E - Min. Carriage Pitch
S - Connecting Way And Motor Type
Customer fixture size
FL
FW
ØA - Ring P.C.D.
ØB - Pulley P.C.D.
K - Frame Width
L- Overall Width
C - Ring Type
D - Slide Type
R - Operation Direction
Clockwise
Anti-Clockwise
U - Cut Time
T- Workstation(Carriage) Qty
V - Pressure(Load Capacity)
F - Bearing Size
G - Timing Belt Type/Pitch
N
M
P - Drive Pulley


J - Overall Length
I - Frame Length
H - Minimum Length of Straight Slides
E - Min. Carriage Pitch
S - Connecting Way
Customer fixture size
FL
FW
ØA - Ring P.C.D.
T- Workstation(Carriage) Qty
L- Overall Width
H1 - Minimum Length of Straight Slides
K - Frame Width
N
C - Ring Type
D - Slide Type
R - Operation Direction
Clockwise
Anti-Clockwise
U - Cut Time
V - Pressure(Load Capacity)
F - Bearing Size
G - Chain Pitch
N
P - Drive Pulley