



PRECISION RACKS CATALOGUE

Chiaravalli Linear Center



Chiaravalli Linear Center: excellence in linear motion systems

Chiaravalli Linear Center was established as a specialized division of Chiaravalli Group S.p.A. in 2022 to provide high-performance solutions in the field of linear motion. Thanks to a team with over 25 years of experience, CLC establishing its-self as reference in the distribution and technical consultancy of complete linear systems: guides, screws, carriages, and precision racks.

Thanks to constantly updated know-how and a solid network of top-tier international suppliers, CLC efficiently meets the needs of machine builders, industrial plant designers, robotics developers, and special application engineers. Our offering is based on a careful selection of high-quality linear mechanical components, tested to ensure reliability, durability, and precision even in the most demanding environments.

The vertical integration with Chiaravalli Group—an industrial organization founded in 1952 and now present in over 70 countries—allows CLC to combine technical specialization with the strength of a structured group, offering advanced logistics, efficient customer service, and qualified technical support.

The **precision racks** featured in this catalog represent a synthesis of innovation, versatility, and performance: ideal for systems requiring smooth, quiet, and highly repeatable linear transmissions. From robotics to automation, metalworking to packaging, our solutions support every project with a reliable, flexible, and consulting-based approach.

The philosophy of Chiaravalli Linear Center is rooted in listening to customer needs, applying technical expertise, and pursuing mechanical innovation. For us, each component is part of a greater system—yours.

Precision Racks



CLC is specialized in providing advanced linear motion components, and **precision racks** represent one of our core competencies. Engineered for **exceptional positioning accuracy**, high repeatability, and mechanical stability, our racks are designed to meet the growing demand for performance in sectors such as **robotics, CNC machinery, packaging, automation, and material handling**.

Each rack is manufactured with **tight tolerances**, using high-grade alloy steel and advanced heat treatments to ensure **surface hardness, wear resistance, and long-term dimensional stability**. Our range includes **straight and helical tooth profiles**, multiple quality grades, and various mounting configurations to fit the most complex system architectures.

What sets our precision racks apart is their ability to combine **load-bearing capacity with ultra-smooth motion**—minimizing backlash and ensuring synchronized movement in high-dynamic applications. Whether your system requires **high-speed travel, heavy payload handling, or precise repeatability over long strokes**, CLC racks are built to deliver consistent, uncompromising results.

Our technical team supports each project with **application-specific guidance**, from sizing and selection to integration within complete motion systems. As a division of Chiaravalli Group—leveraging decades of experience in closed transmission—CLC offers more than components: we provide confidence in motion.

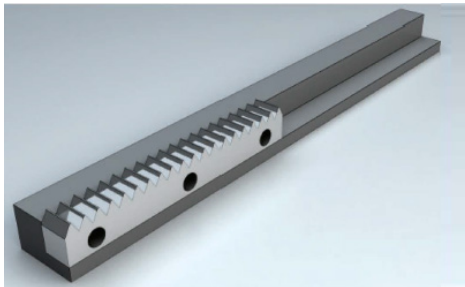
Discover how **precision racks by Chiaravalli Linear Center** can optimize your linear systems with performance you can rely on.

Code Description

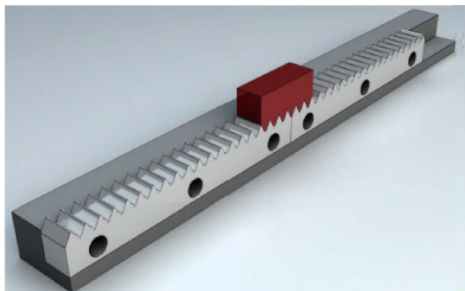
MATERIAL	RACK TYPE	SHAPE	TREATMENT OF TOOTH	HARDNESS	MODULE	LENGTH	HOLES	SIDES GROUND
C	S	T	G	H/Q	20	05	N	G
↓	↓	↓	↓	↓	↓	↓	↓	↓
C= S45C	S= Straight	T= Tetragon	G= Ground	H= Hardened	M2	05= 500mm	N= No Holes	G= Sides Ground
M= SCM440	H= Helical	R= Round	M= Milled	Q= Tempered & quenched Without Hardness		10= 1,000mm		

Assembling Instruction:

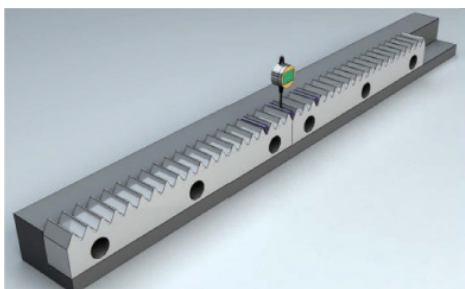
The racks can be connected to any length. The gap between two adjacent racks should be adjusted to match the pitch. Locking pins should be used when assembling the racks.



1. Fix the rack.

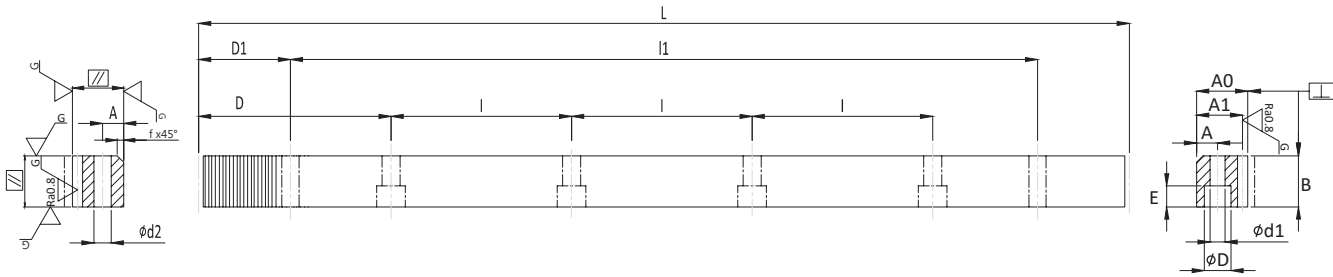


2. Use opposite tooth gauge to fix next rack.



3. Check every joint and measure the levelling of the racks with round bars.

CLCSTGH DIN6 - Straight Teeth Ground Racks



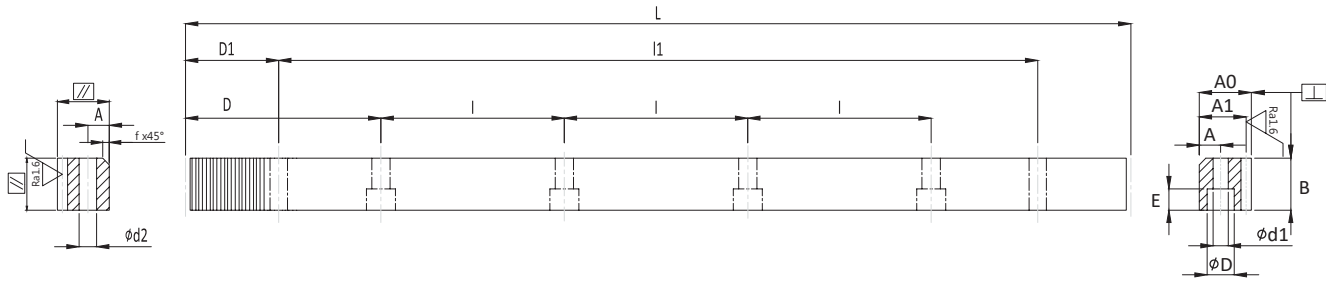
Dimension: mm

CODE	MODULE	L	TOOTH NO.	B	A0	A1	D	I	HOLE NO.	A	Ø d1	ØD	E	D1	l1	Ø d2
CLCSTGH 010	05	1	499.51	159	15	14	-	-	-	-	-	-	-	-	-	-
CLCSTGH 015	05	1.5	499.51	106	19	17.5	62.44	124.88	4	8	7	11	7	29	440.5	5.7
CLCSTGH 015	10	1.5	999.03	212	19	17.5	62.44	124.88	8	8	7	11	7	29	941	5.7
CLCSTGH 020	05	2	502.65	80	24	22	62.83	125.66	4	8	7	11	7	31.3	440.1	5.7
CLCSTGH 020	10	2	1005.31	160	24	22	62.83	125.66	8	8	7	11	7	31.3	942.7	5.7
CLCSTGH 030	05	3	508.94	54	29	26	63.62	127.23	4	9	10	15	9	34.4	440.1	7.7
CLCSTGH 030	10	3	1017.88	108	29	26	63.62	127.23	8	9	10	15	9	34.4	949.1	7.7
CLCSTGH 040	05	4	502.65	40	39	35	62.83	125.66	4	12	10	15	9	37.5	427.7	7.7
CLCSTGH 040	10	4	1005.31	80	39	35	62.83	125.66	8	12	10	15	9	37.5	930.3	7.7
CLCSTGH 050	05	5	502.65	32	49	34	62.83	125.66	4	12	14	20	13	30.1	442.4	11.7
CLCSTGH 050	10	5	1005.31	64	49	34	62.83	125.66	8	12	14	20	13	30.1	945	11.7
CLCSTGH 060	05	6	508.94	27	59	43	63.62	127.23	4	16	18	26	17	31.4	446.1	15.7
CLCSTGH 060	10	6	1017.88	54	59	43	63.62	127.23	8	16	18	26	17	31.4	955	15.7
CLCSTGH 080	05	8	502.65	20	79	7b	62.83	125.66	4	25	22	33	21	26.6	449.5	19.7
CLCSTGH 080	10	8	1005.31	40	79	71	62.83	125.66	8	25	22	33	21	26.6	952	19.7
CLCSTGH 100	10	10	1005.31	32	99	89	62.83	125.66	8	32	33	48	32	125.7	753.96	19.7
CLCSTGH 120	12	12	1017.90	27	120	108	63.60	127.23	8	40	39	58	38	127.23	763.4	19.7

Manufacturing Description:

- Precision Grade: DIN 6h25
- Material: (S45C Medium Carbon Steel) C45
- Type: Straight Rack
- Treatment of Teeth: Ground
- Hardness: High Frequency HRC48 ~ 52 Degree
- Sides Ground: Included
- Pressure Angle: 20 degree
- Total Pitch Error: 0.036mm/1000mm

CLCSTMQ DIN8 - Straight Milled Quenched & Tempered Racks



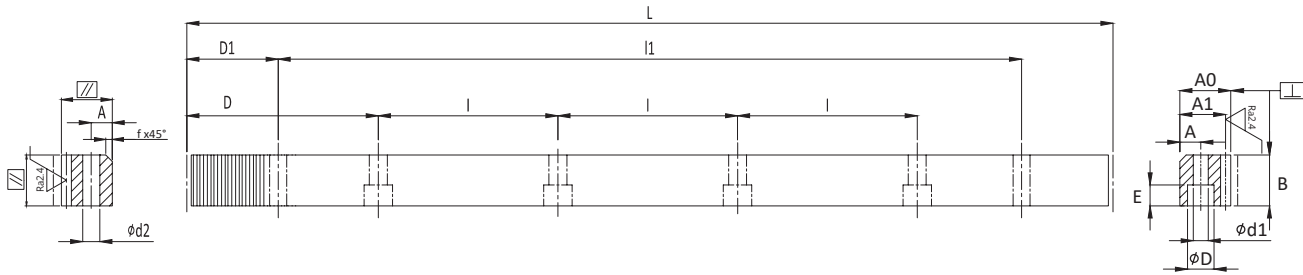
Dimension: mm

CODE	MODULE	L	TOOTH NO.	B	A0	A1	D	I	HOLE NO.	A	Ø d1	ØD	E	D1	l1	Ø d2
CLCSTMQ 010	05	1	499.51	159	15	14	-	-	-	-	-	-	-	-	-	-
CLCSTMQ 015	05	1.5	499.51	106	19	17.5	62.44	124.88	4	8	7	11	7	29	441.5	5.7
CLCSTMQ 015	10	1.5	999.03	212	9	17.5	62.44	124.88	8	8	7	11	7	29	941	5.7
CLCSTMQ 020	05	2	502.65	80	24	22	62.83	125.66	4	8	7	11	7	31.3	440.1	5.7
CLCSTMQ 020	10	2	1005.31	160	24	22	62.83	125.66	8	8	7	11	7	31.3	942.7	5.7
CLCSTMQ 030	05	3	508.94	54	29	26	63.62	127.23	4	9	10	15	9	34.4	440.1	7.7
CLCSTMQ 030	10	3	1017.88	108	29	26	63.62	127.23	8	9	10	15	9	34.4	949.1	7.7
CLCSTMQ 040	05	4	502.65	40	39	35	62.83	125.66	4	12	10	15	9	37.5	427.7	7.7
CLCSTMQ 040	10	4	1005.31	80	39	35	62.83	125.66	8	12	10	15	9	37.5	930.3	7.7
CLCSTMQ 050	05	5	502.65	32	49	34	62.83	125.66	4	12	14	20	13	30.1	442.4	11.7
CLCSTMQ 050	10	5	1005.31	64	49	34	62.83	125.66	8	12	14	20	13	30.1	945.0	11.7
CLCSTMQ 060	05	6	508.94	27	59	43	63.62	127.23	4	16	18	26	17	31.4	446.1	15.7
CLCSTMQ 060	10	6	1017.88	54	59	43	63.62	127.23	8	16	18	26	17	31.4	955.0	15.7
CLCSTMQ 080	05	8	502.65	20	79	71	62.83	125.66	4	25	22	33	21	26.6	449.5	19.7
CLCSTMQ 080	10	8	1005.31	40	79	71	62.83	125.66	8	25	22	33	21	26.6	952	19.7
CLCSTMQ 100	10	10	1005.31	32	99	89	62.83	125.66	8	32	33	48	32	125.7	753.96	19.7

Manufacturing Description:

- Precision Grade: DIN 8e27
- Material: S45C
- Type: Straight Rack
- Treatment of Teeth: Milled
- Hardness: HRC18 ~ 20 Degree
- Sides Ground: not Included
- Pressure Angle: 20 Degree
- Total Pitch Error: 0.1mm/1000mm

CLCSTMH DIN10 - Straight Hardened Rack



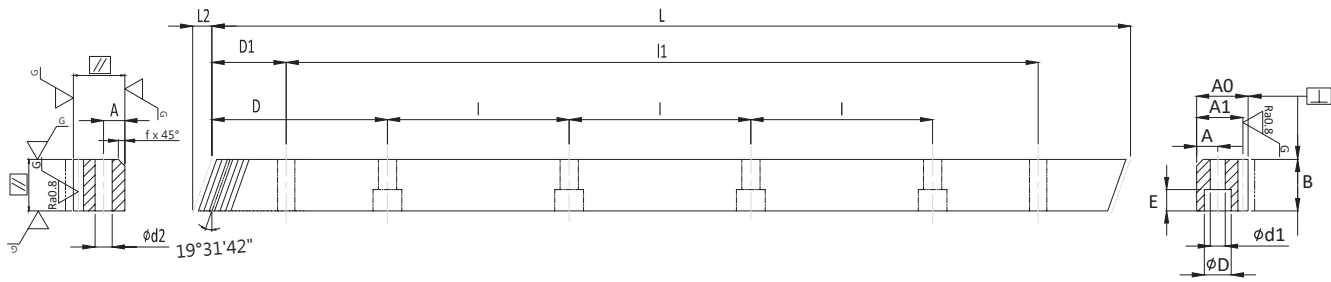
Dimension: mm

CODE	MODULE	L	TOOTH NO.	B	A0	A1	D	I	HOLE NO.	A	Ø d1	ØD	E	D1	l1	Ø d2
CLCSTMH 010	05	1	499.51	159	15	15	14	-	-	-	-	-	-	-	-	-
CLCSTMH 015	05	1.5	499.51	106	19	19	17.5	62.44	124.88	4	8	7	11	7	29.0	441.5
CLCSTMH 015	10	1.5	999.03	212	19	19	17.5	62.44	124.88	8	8	7	11	7	29.0	941.0
CLCSTMH 020	05	2	502.65	80	24	24	22	62.83	125.66	4	8	7	11	7	31.3	440.1
CLCSTMH 020	10	2	1005.31	160	24	24	22	62.83	125.66	8	8	7	11	7	31.3	942.7
CLCSTMH 030	05	3	508.94	54	29	29	26	63.62	127.23	4	9	10	15	9	34.4	440.1
CLCSTMH 030	10	3	1017.88	108	29	29	26	63.62	127.23	8	9	10	15	9	34.4	949.1
CLCSTMH 040	05	4	502.65	40	39	39	35	62.83	125.66	4	12	10	15	9	37.5	427.7
CLCSTMH 040	10	4	1005.31	80	39	39	35	62.83	125.66	8	12	10	15	9	37.5	930.3
CLCSTMH 050	05	5	502.65	32	49	39	34	62.83	125.66	4	12	14	20	13	30.1	442.4
CLCSTMH 050	10	5	1005.31	64	49	39	34	62.83	125.66	8	12	14	20	13	30.1	945
CLCSTMH 060	05	6	508.94	27	59	49	43	63.62	127.23	4	16	18	26	17	31.4	446.1
CLCSTMH 060	10	6	1017.88	54	59	49	43	63.62	127.23	8	16	18	26	17	31.4	955
CLCSTMH 080	05	8	502.65	20	79	79	71	62.83	125.66	4	25	22	33	21	26.6	449.45
CLCSTMH 080	10	8	1005.31	40	79	79	71	62.83	125.66	8	25	22	33	21	26.6	952
CLCSTMH 100	10	10	1005.31	32	99	99	89	62.83	125.66	8	32	33	48	32	125.7	753.96

Manufacturing Description:

- Precision grade: DIN 10e27
- Material: S45C
- Type: Straight Rack
- Treatment of Teeth: Milled
- Hardness: High Frequency HRC 48 ~ 52 Degree
- Sides ground: not Included
- Pressure Angle: 20 degree
- Total pitch Error: 0.2mm/1000mm

CLCHTGH-DIN6 - Helical Teeth Ground Racks



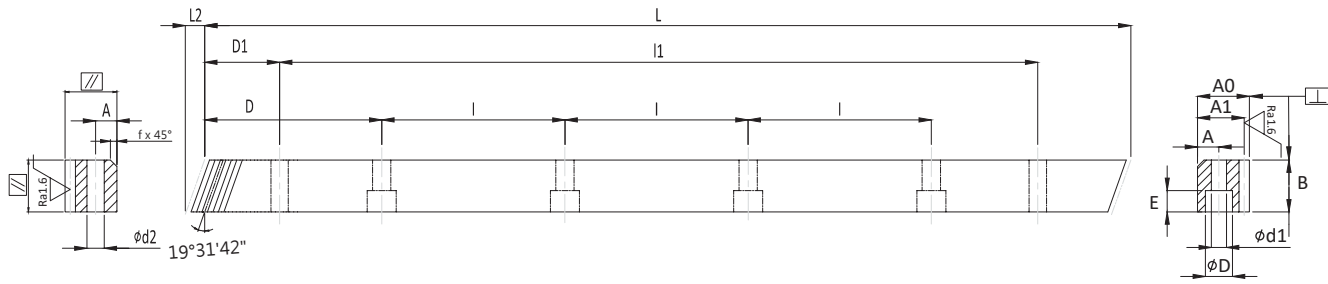
Dimension: mm

CODE	MODULE	L	L2	TOOTH NO.	B	A0	A1	D	I	HOLE NO.	A	Ø d1	ØD	E	D1	I1	Ø d2
CLCHTGH 010 05	1	500.00	3.14	150	15	15	14	-	-	-	-	-	-	-	-	-	-
CLCHTGH 015 05	1.5	500.00	6.7	100	19	19	17.5	62.50	125	4	8	7	11	7	31.7	436.6	5.7
CLCHTGH 015 10	1.5	1000.00	6.7	200	19	19	17.5	62.50	125	8	8	7	11	7	31.7	936.6	5.7
CLCHTGH 020 05	2	500.00	8.5	75	24	24	22	62.50	125	4	8	7	11	7	31.7	436.6	5.7
CLCHTGH 020 10	2	1000.00	8.5	150	24	24	22	62.50	125	8	8	7	11	7	31.7	936.6	5.7
CLCHTGH 030 05	3	500.00	10.3	50	29	29	26	62.50	125	4	9	10	15	9	35.0	430.0	7.7
CLCHTGH 030 10	3	1000.00	10.3	100	29	29	26	62.50	125	8	9	10	15	9	35.0	930.0	7.7
CLCHTGH 040 05	4	506.67	13.8	38	39	39	35	62.50	125	4	12	10	15	9	33.3	433.0	7.7
CLCHTGH 040 10	4	1000.00	13.8	75	39	39	35	62.50	125	8	12	10	15	9	33.3	933.4	7.7
CLCHTGH 050 05	5	500.00	17.4	30	49	39	34	62.50	125	4	12	14	20	13	37.5	425.0	11.7
CLCHTGH 050 10	5	1000.00	17.4	60	49	39	34	62.50	125	8	12	14	20	13	37.5	925.0	11.7
CLCHTGH 060 05	6	500.00	20.9	25	59	49	43	62.50	125	4	16	18	26	17	37.5	425.0	15.7
CLCHTGH 060 10	6	1000.00	20.9	50	59	49	43	62.50	125	8	16	18	26	17	37.5	925.0	15.7
CLCHTGH 080 05	8	480	28.0	18	79	79	71	60.00	120	4	25	22	33	21	120.0	240.0	19.7
CLCHTGH 080 10	8	960.00	28.0	36	79	79	71	60.00	120	8	25	22	33	21	120.0	720.0	19.7
CLCHTGH 100 10	10	1000.00	35.11	30	99	99	89	62.50	125	8	32	33	48	32	125.0	750.0	19.7
CLCHTGH 120 10	12	1000.00	42.56	25	120	120	108	40.00	125	8	40	39	58	38	125.0	750.0	19.7

Manufacturing Description:

- Precision Grade: DIN 6h25
- Material: S45C
- Type: Helical Rack
- Treatment of Teeth: Ground
- Hardness: Heat treatment: 48 ~ 52 Degree
- Sides Ground: Included
- Right hand angle: 19° 31' 42"
- Pressure angle: 20 Degree
- Total Pitch Error: 0.036mm/1000mm

CLCHTMQ-DIN8 - Helical Milled Quenched & Tempered Racks



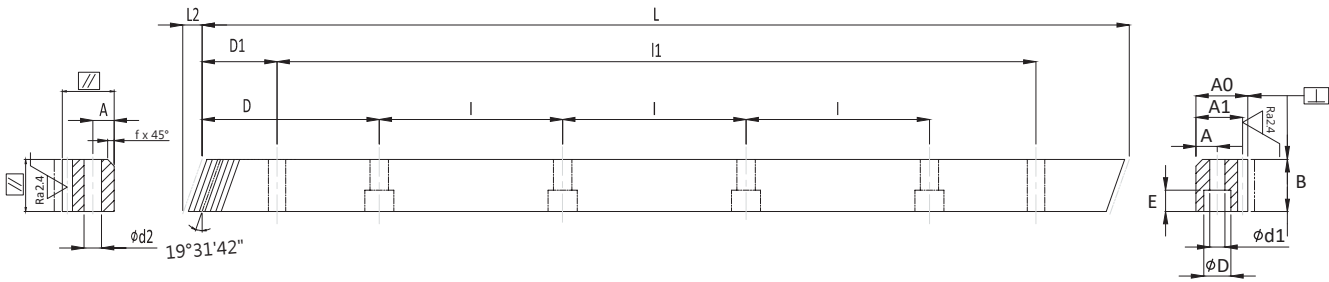
Dimension: mm

CODE			MODULE	L	L2	TOOTH NO.	B	A0	A1	D	I	HOLE NO.	A	Ø d1	ØD	E	D1	I1	Ø d2
CLCHTMQ	010	05	1	500.00	3.14	150	15	15	14										
CLCHTMQ	015	05	1.5	500.00	6.7	100	19	19	17.5	62.5	125	4	8	7	11	7	31.7	436.6	5.7
CLCHTMQ	015	10	1.5	1000.00	6.7	200	19	19	17.5	62.5	125	8	8	7	11	7	31.7	936.6	5.7
CLCHTMQ	020	05	2	500.00	8.9	75	24	24	22	62.5	125	4	8	7	11	7	31.7	436.6	5.7
CLCHTMQ	020	10	2	1000.00	8.9	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.6	5.7
CLCHTMQ	030	05	3	500.00	10.6	50	29	29	26	62.5	125	4	9	10	15	9	35.0	430.0	7.7
CLCHTMQ	030	10	3	1000.00	10.6	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.0	7.7
CLCHTMQ	040	05	4	506.67	14.2	38	39	39	35	62.5	125	4	12	10	15	9	33.3	433.0	7.7
CLCHTMQ	040	10	4	1000.00	14.2	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.4	7.7
CLCHTMQ	050	05	5	500.00	17.4	30	49	39	34	62.5	125	4	12	14	20	13	37.5	425.0	11.7
CLCHTMQ	050	10	5	1000.00	17.4	60	49	39	34	62.5	125	8	12	14	20	13	37.5	925.0	11.7
CLCHTMQ	060	05	6	500.00	20.9	25	59	49	43	62.5	125	4	16	18	26	17	37.5	425.0	15.7
CLCHTMQ	060	10	6	1000.00	20.9	50	59	49	43	62.5	125	8	16	18	26	17	37.5	925.0	15.7
CLCHTMQ	080	05	8	480.00	28.0	18	79	79	71	60.0	120	4	25	22	33	21	120.0	240.0	19.7
CLCHTMQ	080	10	8	960	28.0	36	79	79	71	60.0	120	8	25	22	33	21	120.0	720.0	19.7
CLCHTMQ	100	10	10	1000.00	35.11	30	99	99	89	62.5	125	8	32	33	48	32	125.0	750.0	19.7

Manufacturing Description:

- Precision Grade: DIN 8e27
- Material: S45C
- Type: Helical Rack
- Treatment of Teeth: Milled
- Hardness: Quenched: HRC18 ~ 20 Degree
- Sides Ground: not Included
- Right Hand Angle: 19° 31' 42"
- Pressure angle: 20 degree
- Total Pitch Error: 0.1 mm/ 1000mm

CLCHTMH-DIN10 - Helical Hardened Racks



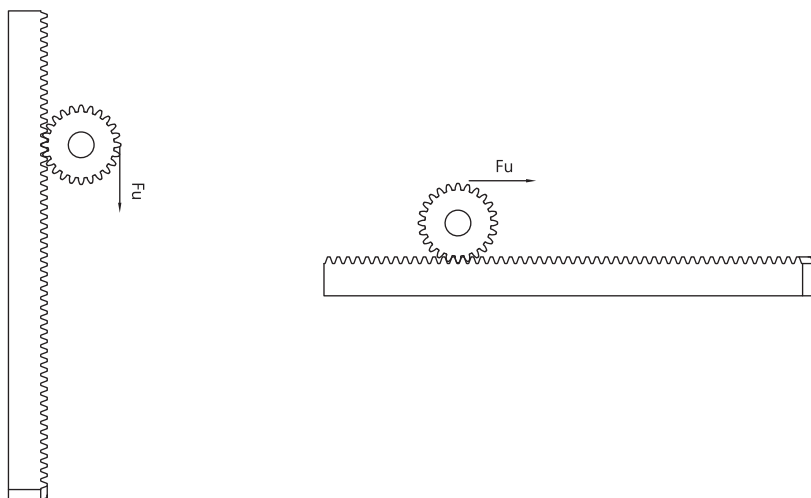
Dimension: mm

CODE	MODULE	L	L2	TOOTH NO.	B	A0	A1	D	I	HOLE NO.	A	Ø d1	ØD	E	D1	I1	Ø d2
CLCHTMH 010 05	1	500.00	5.35	150	15	15	14	-	-	-	-	-	-	-	-	-	-
CLCHTMH 015 05	1.5	500.00	6.7	100	19	19	17.5	62.5	125	4	8	7	11	7	31.7	436.6	5.7
CLCHTMH 015 10	1.5	1000.00	6.7	200	19	19	17.5	62.5	125	8	8	7	11	7	31.7	936.6	5.7
CLCHTMH 020 05	2	500.00	8.5	75	24	24	22	62.5	125	4	8	7	11	7	31.7	436.6	5.7
CLCHTMH 020 10	2	1000.00	8.5	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.6	5.7
CLCHTMH 030 05	3	500.00	10.3	50	29	29	26	62.5	125	4	9	10	15	9	35.0	430.0	7.7
CLCHTMH 030 10	3	1000.00	10.3	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.0	7.7
CLCHTMH 040 05	4	506.67	13.8	38	39	39	35	62.5	125	4	12	10	15	9	33.3	433.0	7.7
CLCHTMH 040 10	4	1000.00	13.8	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.0	7.7
CLCHTMH 050 05	5	500.00	17.4	30	49	39	34	62.5	125	4	12	14	20	13	37.5	425.0	11.7
CLCHTMH 050 10	5	1000.00	17.4	60	49	39	34	62.5	125	8	12	14	20	13	37.5	925.0	11.7
CLCHTMH 060 05	6	500.00	20.9	25	59	49	43	62.5	125	4	16	18	26	17	37.5	425.0	15.7
CLCHTMH 060 10	6	1000.00	20.9	50	59	49	43	62.5	125	8	16	18	26	17	37.5	925.0	15.7
CLCHTMH 080 05	8	480.00	28.0	18	79	79	71	60.0	120	4	25	22	33	21	120	240.0	19.7
CLCHTMH 080 10	8	960.00	28.0	36	79	79	71	60.0	120	8	25	22	33	21	120	720.0	19.7
CLCHTMH 100 10	10	1000.00	35.11	30	99	99	89	62.5	125	8	32	33	48	32	125	750.0	19.7
CLCHTMH 120 10	12	1000.00	42.56	25	120	120	108	40	125	8	40	39	58	38	102.5	750.0	19.7

Manufacturing Description:

- Precision Grade: DIN I0e27
- Material: S45C
- Type: Helical Rack
- Treatment of Teeth: Milled
- Hardness: High Frequency. HRC48 ~ 52 Degree
- Sides Ground: not included
- Right Hand Angle: 19° 31' 42"
- Pressure Angle: 20 Degree
- Total Pitch Error: 0.2mm/1000mm

Selection rack and pinion drive



Lift/Lower

$$F_u = m \cdot g + m \cdot a$$

Drive

$$F_u = m \cdot g \cdot \mu + m \cdot a$$

DESCRIPTION	FORMULA	DIMENSION
ACCELERATION	$a = \frac{v}{t} = \frac{2 \cdot s}{t^2}$	m/s ²
SPEED	$v = \frac{s}{t} = \sqrt{2 \cdot a \cdot s}$	m/s
DISTANCE	s	m
TIME	t	s
RPM	$n = \frac{v \cdot 60}{\pi \cdot d_0}$	1/min
PITCH DIAMETER	d_0	mm
TORQUE	$M = \frac{F_u \cdot d_0}{2000}$	Nm
POWER	$P = \frac{M \cdot n}{9550} = \frac{F_u \cdot n \cdot d_0}{19100}$	kw

- Application factor: 1.0
- Safety Factor of Teeth Connection 1.0
- Safety Factor of prevention of teeth cracking 1.4
- Life Time 20,000 hrs 20,000h

Selection rack and pinion drive



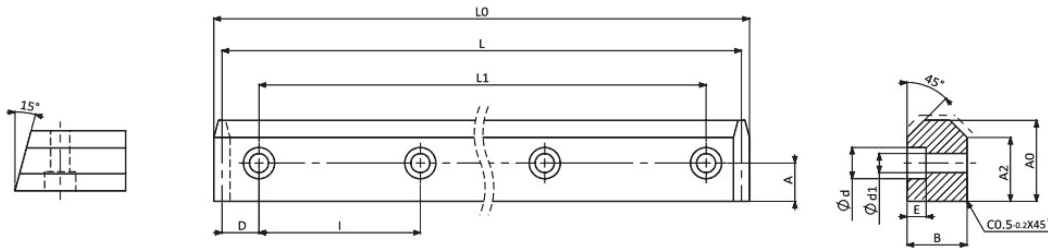
Content of Guideway Racks

CODE	MATERIAL	TYPE	TYPE	SHAPE	TEETH TREATMENT	HARDNESS	CP	GRADE DIN
CLMSVGH-CP	SCM440	STRAIGHT	V TYPE GUIDEWAY RACK	HEXGAN	THEETH GROUND	HARDENED HRC 53°-58°	5,7.5.10	DIN6
CLMNVGH-00	SCM440	N/A	V TYPE GUIDEWAY	HEXGAN	GROUND	HARDENED HRC 53°-58°	N/A	DIN6
CLMS TGH-CP	SCM440	STRAIGHT	GUIDEWAY RACK	TETRAGON	THEETH GROUND	HARDENED HRC 53°-58°	5,7.5.10	DIN6
CLMNTGH-00	SCM440	N/A	GUIDEWAY	TETRAGON	GROUND	HARDENED HRC 53°-58°	N/A	DIN6

Guideway Rack Code Instruction

MATERIAL	TYPE	SHAPE	TEETH TREATMENT	HARDNESS	CIRCULAR PITCH	LENGHT	GRADE
M	S/H	V/T	G	H	CP	10	Q6
M= SCM440	S= STRAIGHT H= HELICAL	V= V TYPE BAR T= TETRAGON BAR	G= TEETH GROUND / GROUND	H= HARDENED	CP= CIRCULAR PITCH	CP5=1030 CP7.5=1230 CP10=1230	Q=DIN

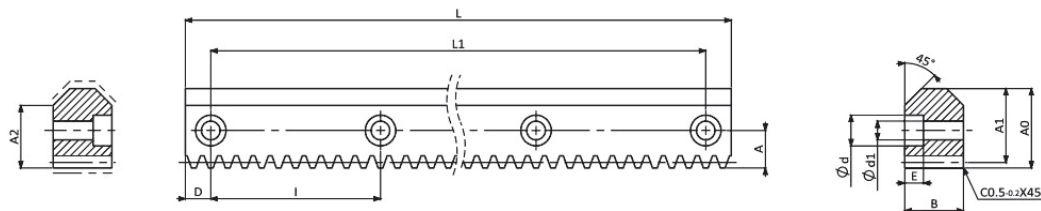
CLV Type Ground Guideway



Dimension: mm

CODE	No	Q	L0	L	L1	B	A0	D	I	Ød	Ød1	E	A2	KG
CLMNVGH-00	1	-Q6	1033.89	1030	1000	14.5	24.5	15	100	11	7	7	20.0	2.3
CLMNVGH-00	2	-Q6	1035.23	1030	1000	19.5	29.5	15	100	15	9	9	23.5	3.6
CLMNVGH-00	3	-Q6	1236.62	1230	1200	24.7	33.0	15	100	15	9	9	25.2	6.3
CLMNVGH-00	4	-Q6	1239.27	1230	1200	34.6	46.6	15	100	18	11	11	36.7	12.5

- Series CLMNVGH-00-Q6 V Type Ground Guideway
- Material SCM440 (Chromium Molybdenum Alloy Steel)
- Hardness HRC 53° ~ 58°
- 6 Sides Ground after hardening

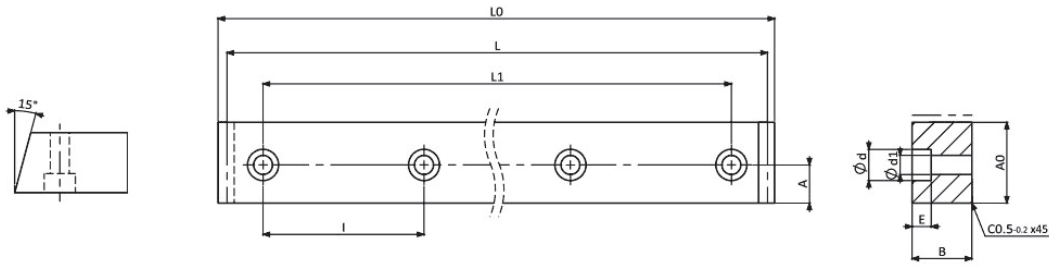


Dimension: mm

CODE	No	Q	CP	L	L1	MODULE	B	A0	A1	D	I	A	Ød	Ød1	E	A2	KG
CLMSVGH-CP 050 10	1	-Q6	5	1030	1000	1.5915	14.5	24.5	22.91	15	100	11.5	11	7	7	20.0	2.2
CLMSVGH-CP 050 10	2	-Q6	5	1030	1000	1.5915	19.5	29.5	27.91	15	100	14.0	15	9	9	23.5	3.5
CLMSVGH-CP 075 12	1	-Q6	7.5	1230	1200	2.3873	24.7	33.0	30.61	15	100	14.5	15	9	9	25.2	5.8
CLMSVGH-CP 100 12	1	-Q6	10	1230	1200	3.1831	34.6	46.6	43.42	15	100	18	18	11	11	36.7	11.7

- Series CLMSVGH-CP-Q6 Straight V Type Ground Guideway Racks
- Material SCM440 (Chromium Molybdenum Alloy Steel)
- Hardness HRC 53° ~ 58°
- 6 Sides Ground and Teeth Ground after hardening

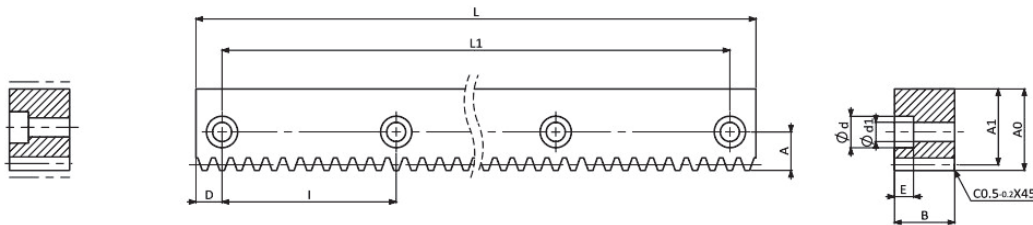
Ground Guideway



Dimension: mm

CODE	No	Q	L0	L	L1	B	A0	D	I	Ød	Ød1	E	KG
CLMNTGH-00	1	-Q6	1033.89	1030	1000	14.5	24.5	15	100	11	7	7	2.3
CLMNTGH-00	2	-Q6	1035.23	1030	1000	19.5	29.5	15	100	15	9	9	4.0
CLMNTGH-00	3	-Q6	1236.62	1230	1200	24.7	33.0	15	100	15	9	9	6.8
CLMNTGH-00	4	-Q6	1239.27	1230	1200	34.6	46.6	15	100	18	11	11	13.4

- Series CLMNTGH-00-Q6 Ground Guideway
- Material SCM440 (Chromium Molybdenum Alloy Steel)
- Hardness HRC 53° ~ 58°
- 4 Sides Ground after hardening

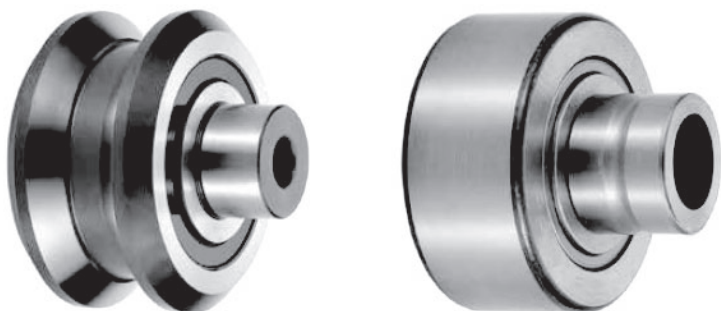


Dimension: mm

CODE	No	Q	CP	L	L1	MODULE	B	A0	A1	D	I	A	Ød	Ød1	E	KG
CLMSTGH-CP 050 10	1	-Q6	5	1030	1000	1.5915	14.5	24.5	22.91	15	100	11.5	11	7	7	2.2
CLMSTGH-CP 050 10	2	-Q6	5	1030	1000	1.5915	19.5	29.5	27.91	15	100	14.0	15	9	9	3.8
CLMSTGH-CP 075 12	1	-Q6	7.5	1230	1200	2.3873	24.7	33.0	30.61	15	100	14.5	15	9	9	6.3
CLMSTGH-CP 100 12	1	-Q6	10	1230	1200	3.1831	34.6	46.6	43.42	15	100	18	18	11	11	12.5

- Series CLMSTGH-CP-Q6 Ground Guideway Racks
- Material SCM440 (Chromium Molybdenum Alloy Steel)
- Hardness HRC 53° ~ 58°
- 4 Sides Ground and Teeth Ground after hardening

Roller



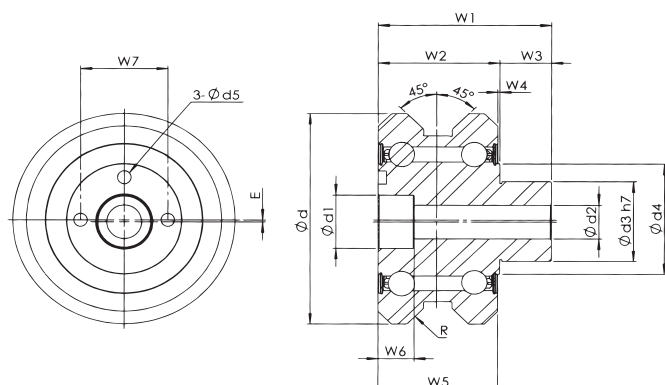
Content of Rollers

CODE	MATERIAL	TYPE	SHAFT DIA.
CLUV	SUJ2 (100Cr6)	V TYPE ROLLER	15 20 25 40
CLUR	SUJ2 (100Cr6)	ROUND ROLLER	15 20 25 40

Rollers Code Instruction

MATERIAL	TYPE	SHAFT DIAMETER	EXCENTER
U= SUJ2 (100Cr6)	V= V TYPE R= ROUND	15 20 25 40	Y= 1mm N= 0mm

Roller

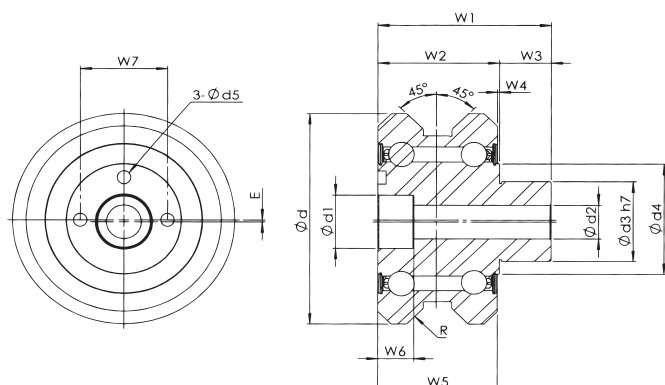


CLV Type Roller

Dimension: mm

CODE	SHAFT DIA.	EXCENTER	ϕd	$\phi d1$	W1	W2	W3	W4	W5	W6	W7	R	$\phi d2$	$\phi d3$	$\phi d4$	$\phi d5$	Cr(KN)	Cor(KN)	KG
CLUV15Y	15	1 mm	53	13.5	35	23	12	1	22	9	18.5	R250	8.4	15	23	2.4x3	14.40	8.47	0.2
CLUV15N	15	0 mm	53	13.5	35	23	12	1	22	9	18.5	R250	8.4	15	23	2.4x3	14.40	8.47	0.2
CLUV20Y	20	1 mm	63	16.5	46	31	15	1	30	11	22.5	R300	10.5	20	26.7	2.4x3	15.76	10.18	0.5
CLUV20N	20	0 mm	63	16.5	46	31	15	1	30	11	22.5	R300	10.5	20	26.7	2.4x3	15.76	10.18	0.5
CLUV25Y	25	1 mm	77	20.5	60	40	20	1	39	13	27.5	R360	13.0	25	35.4	4.1x3	26.46	18.10	1.0
CLUV25N	25	0 mm	77	20.5	60	40	20	1	39	13	27.5	R360	13.0	25	35.4	4.1x3	26.46	18.10	1.0
CLUV35Y	35	1 mm	107	28.5	84	59	25	1	58	17.5	42	R500	16.8	40	55.55	4.1x3	45.15	35.15	2.5
CLUV35N	35	0 mm	107	28.5	84	59	25	1	58	17.5	42	R500	16.8	40	55.55	4.1x3	45.15	35.15	2.5

Roller



CLV Type Roller

Dimension: mm

CODE	SHAFT DIA.	EXCENTER	ϕd	ϕd_1	W1	W2	W3	W4	W5	W6	W7	R	ϕd_2	ϕd_3	ϕd_4	ϕd_5	Cr(KN)	Cor(KN)	KG
CLUR15Y	15	1 mm	47	13.5	35	23	12	1	22	9	18.5	R500	8.4	15	23	2.36x4	14.40	8.47	0.2
CLUR20Y	20	1 mm	72	16.5	46	31	15	1	30	17.5	22.5	R500	10.5	20	26.7	2.2x3	15.76	10.18	0.6
CLUR25Y	25	1 mm	85	20	60	40	20	1	39	17.5	27.5	R500	13	25	35.4	4x4	26.46	18.10	1.0
CLUR35Y	35	1 mm	100	26.5	84	59	25	1	58	17.5	42	R500	16.8	40	55.55	6.5x4	45.15	35.15	2.7



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