

HTROBOT

CL rack-and-pinion stage series

English selection guide

Linear motion components and multi-axis automation, with practical support from Tianjin.

Based in Tianjin, HTROBOT works with customers on industrial linear motion and multi-axis automation. Our range brings together linear modules, guides, ball screws, actuators and XYZ stages.

Models: CL135; CL170; CL210

Series notes

Gears and racks are available in different specifications and quality options to suit your requirements.

We connect component supply with application discussions for positioning, transfer and multi-axis equipment.

Core listed values

Compare models on the same row of ratio or lead, speed and load.

Model	Reduction ratio	Maximum speed (mm/s)	Horizontal load (kg)	Vertical load (kg)	Rated thrust (N)
CL135	20:1 / 10:1 / 7:1 / 5:1	312 / 625 / 892 / 1250	80 / 65 / 60 / 35	20 / 15 / 12 / 5	635 / 310 / 210 / 155
CL170	20:1 / 10:1 / 7:1 / 5:1	415 / 830 / 1185 / 1660	105 / 75 / 65 / 60	40 / 30 / 15 / 10	945 / 480 / 240 / 200
CL210	10:1 / 7:1 / 5:1 / 3:1	830 / 1185 / 1660 / 2766	200 / 180 / 145 / 105	100 / 80 / 60 / 40	961 / 640 / 480 / 240

CL135 rack-and-pinion stage

CL135 · CL rack-and-pinion stage series

Gears and racks are available in different specifications and quality options to suit your requirements.



CL135 product illustration

Selection values

Reduction ratio	Maximum speed (mm/s)	Horizontal load (kg)	Vertical load (kg)	Rated thrust (N)
20:1	312	80	20	635
10:1	625	65	15	310
7:1	892	60	12	210
5:1	1250	35	5	155

Reviewed specifications · 400W/750W motor

Parameter	Value
Permissible overhang moment MP	552 Nm
Permissible overhang moment MR	485 Nm
Permissible overhang moment MY	551 Nm
Gear lead	125 mm
Motor power	400W/750W
Rated torque	0.64 Nm
Stroke interval	100 mm
Movement distance	100-3500 mm
Body width	135 mm
Ordering example (reference)	CL135-L125-S3500-I5-P750W-B
Repeatability	±0.04" mm

CL170 rack-and-pinion stage

CL170 · CL rack-and-pinion stage series

Gears and racks are available in different specifications and quality options to suit your requirements.



CL170 product illustration

Selection values

Reduction ratio	Maximum speed (mm/s)	Horizontal load (kg)	Vertical load (kg)	Rated thrust (N)
20:1	415	105	40	945
10:1	830	75	30	480
7:1	1185	65	15	240
5:1	1660	60	10	200

Reviewed specifications · 750 W motor

Parameter	Value
Gear lead	166 mm
Motor power	750 W
Rated torque	1.32 Nm
Stroke interval	100 mm

Parameter	Value
Movement distance	100-4000 mm
Body width	170 mm
Ordering example (reference)	CL170-L166-S4000-I5-P750W-B
Overhang MP	1034 N.m
Overhang MR	908 N.m
Overhang MY	1032 N.m
Repeatability	Value to be confirmed

CL210 rack-and-pinion stage

CL210 · CL rack-and-pinion stage series

Gears and racks are available in different specifications and quality options to suit your requirements.



CL210 product illustration

Selection values

Reduction ratio	Maximum speed (mm/s)	Horizontal load (kg)	Vertical load (kg)	Rated thrust (N)
10:1	830	200	100	961
7:1	1185	180	80	640
5:1	1660	145	60	480
3:1	2766	105	40	240

Reviewed specifications · 750 W motor

Parameter	Value
Permissible overhang moment MP	1034 Nm
Permissible overhang moment MR	908 Nm
Permissible overhang moment MY	1032 Nm
Gear lead	166 mm
Motor power	750 W
Rated torque	2.39 Nm
Stroke interval	100 mm
Movement distance	100-4000 mm



Parameter	Value
Body width	210 mm
Ordering example (reference)	CL210-L166-S4500-I5-M750W-B
Repeatability	Value to be confirmed

Contact

Start with a product or an application. Use the inquiry draft to collect what you are considering, or contact us directly with your requirements.

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