

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
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

Installation drawings are in the separate dimension atlas.

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Engineering reference

Overhang limits, wall

Printed ratio/load condition	0°(mm)	45°(mm)	90°(mm)
ratio 5:1 · 25kg	979 mm	460 mm	431 mm
ratio 5:1 · 45kg	682 mm	312 mm	300 mm
ratio 5:1 · 65kg	566 mm	203 mm	171 mm
ratio 6:1 · 30kg	1095 mm	660 mm	550 mm
ratio 6:1 · 50kg	730 mm	335 mm	325 mm
ratio 6:1 · 75kg	580 mm	215 mm	195 mm
ratio 10:1 · 50kg	1212 mm	478 mm	369 mm
ratio 10:1 · 65kg	1130 mm	384 mm	335 mm
ratio 10:1 · 80kg	973 mm	263 mm	220 mm
ratio 20:1 · 70kg	911 mm	400 mm	365 mm
ratio 20:1 · 90kg	622 mm	249 mm	197 mm
ratio 20:1 · 110kg	464 mm	176 mm	110 mm

Original distance reference(mm);
 no replacement speed, sellable configuration or angular operating rating is inferred. Blank cells are not zero.

Exact original embedded image981 read;
 distance6:1 vs main7:1 retained. no CL210 borrowing.

Application notes

Motor installation reference: BD: motor direct position;

BL: motor outside left;

BR: motor outside right;

BM: motor outside lower. These are source ordering/installation references, not a listed configuration.

Operating condition: Stroke over600mm may cause resonance. the overhang tables are printed in mm, not mm/s.

Allowable overhang reference: The 0°/45°/90° headings are overhang/use references, not motor mounting direction or replacement speed ratings.