



ARC/HRC/ERC series

Linear motion technology

ARC/HRC/ERC Ball Type Linear Guide Series

* Please note that the specifications are subject to change without notice due to product improvements.

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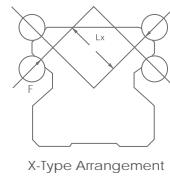
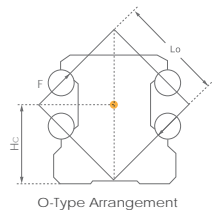
Product Overview

ARC/HRC/ERC Product Characteristics

The **cpc** ARC/HRC/ERC Linear Guide Series uses the O-type arrangement for the four row ball circulation design. The contact angle between the rail and ball is 45 degrees, and can realize the 4 directional load effects. **cpc** places special emphasis on strengthening the Arm length(L_o), so when sustaining external force F , will have even higher M_r value to increase the rigidity and static moment capability. In addition, the runner block for the same size uses larger and more balls, so will outperform competitor's models by 10% to 30% regarding load capabilities. The products have characteristics of high load, high moment, and high stiffness.

| Mode Code | L_o | H_c |
|-----------|-------|-------|
| 15 | 12.4 | 9.35 |
| 20 | 16.4 | 12.5 |
| 25 | 19.5 | 14.5 |
| 30 | 24.0 | 17 |
| 35 | 30.4 | 19.5 |
| 45 | 38.2 | 24 |
| 55 | 43.1 | 28.5 |

$F = M_r / L_o (L_x)$



Stainless steel reinforcement plate

- Total scraping of objects above 0.3mm
- Increase X-axis direction force capacity

Inner Lubrication storage Pad (Upper)

- Length of the Runner Block will not be increased
- Full lubrication contact with balls, suitable for short stroke movement.

End Cap

- All-Round lubrication holes system

High abrasion materials end seal

- Standard high dust proof seal
- Low friction seal

Inner Lubrication storage Pad (Bottom)

Ball chain

- Patented design of reverse operations
- Quiet and prolong the service life

- High Dynamic Load and High Load capabilities
- Excellent dynamic performance: Reach V_{max} 10 m/s Reach a_{max} 450 m/s²
- Can provide counterbored holes from the top and tapped mounting holes from the bottom rail
- Can provide special surface treatment

Product Design

Low noise, high quality and high speed design ball chain

Traditional Ball type linear guide, producing double the speed of slide contact with neighboring balls in different directions for spinning effects. Extremely high friction greatly reduce service life; also, the contact point between balls produce high pressure and noise, and increase the possibility of damagers of film cladding.

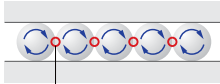


Low noise ball chain



The contact point is between balls and ball chain, so the surface pressure is low.

Traditional Ball type linear guide



The Ball type linear guide's contact point is only between balls, thus the surface pressure is high.

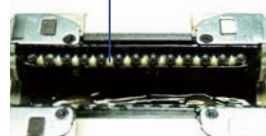
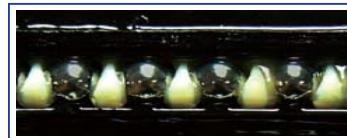
* **cpc** Ball Chain can provide greater contact area between ball and ball chain, so film cladding will eliminate damage and lower noise volume. Balls can move at higher speed and extend its service life.

* The size of the ball chain design block is as the same as the normal type, and therefore it can use the same rail.

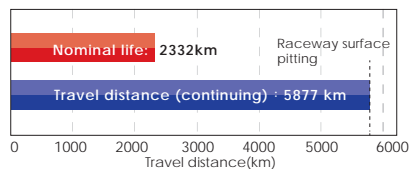
Heavy load test

Condition
 Model : ARC25MN SZC V1H Dynamic load rating C_{100} : 24.8kN
 Velocity : 1m/sec Stroke : 960mm
 Load capacities : 7.44kN(0.3C) Preload : 0.05C

$$\text{Rating Life} \left(\frac{C}{P} \right)^3 \times 100\text{km} = \left(\frac{C}{0.05C + 0.3C} \right)^3 \times 100\text{km} = 2332\text{km}$$

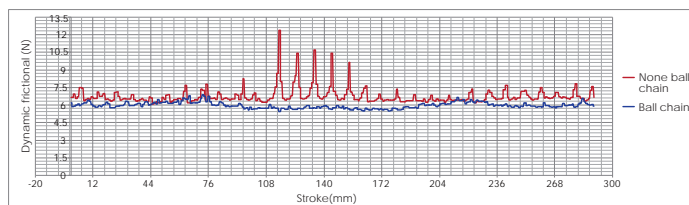


After testing, grease remains and no anomaly in the balls and grease.



Smoothness test

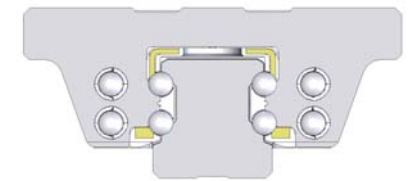
Model code : ARC25MNSV1N
 Velocity : 10 mm/sec



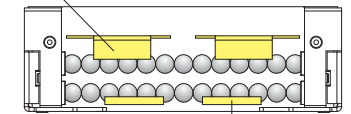
Lubrication Design

Inner oil storage and oil supply system design

Inner PU Lubrication Storage Pad design does not increase length of runner block and can contact directly with all balls. Customer can inject lubrication oil through lubrication holes and can save enough lubrication oil within the PU Lubrication storage pad to ensure long term lubrication effects, conforming to environment protection needs and lowering maintenance costs. Excellent performance when used in short stroke.



Upper Lubrication Storage Pad



Bottom Lubrication Storage Pad

All-direction Lubrication Nozzles

On the top, bottom, and sides, there are oil injection nozzles designed, the upper runner block comes with O-ring seal, and easily complete the oiling from top. Diversified comprehensive oil injection methods, suitable for installation axial and oil injection methods.

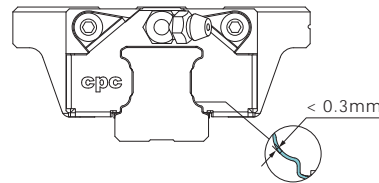


Product Design

Dustproof design

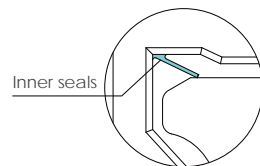
Stainless Steel Reinforcement Plate

With clearance between rail profile of no more than 0.3mm, the plate can scrape large items such as iron filings to protect the end seals



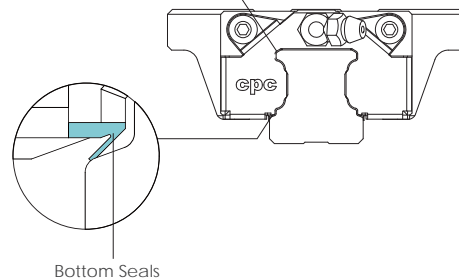
Inner seals

The newly designed inner seals, can protect foreign objects from sliding into the rails while maintaining low friction. It can also allow the lubrication oil to be maintained inside the runner block and prolong the re-lubrication interval.



Bottom Seals

The bottom seals can prevent foreign objects from entering the bottom and prevent lubrication from leaking out. With full sealing design, it reduces the amount of oil usage, prolong the re-lubrication interval, and prolong the service life.



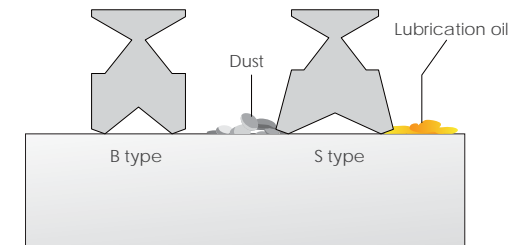
End Seals

The **cpc** double lips type end seals can prevent foreign objects from entering from the side and preventing lubrication oil and grease from leaking. The flexibility of the engineering plastic material has better friction resistance ability and better prevents cracking characteristics than typical NBR plastic.



Standard seals (S)

Directly in contact with the rail surface, having better dustproof and lubrication holding capabilities. **cpc** recommends using this type of seals in environments that is exposed for long durations to high dusts and Saw wood dust, etc. The friction will be higher than standard seals

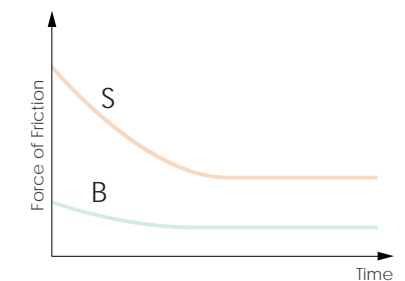


Low friction seals (B)

Suitable for most conditions, with slight contact with the rail, and having both scraping function with low friction.

Comparison of friction of seals

The friction will be highest on new linear rails. After short period of operation, friction will be reduced to a constant level.



Product Design

Average Friction of Block

Below is the friction table for Block Body and End Seal under the condition of without any grease

Unit : N

| ARC/HRC/ERC | | | | | | | |
|-------------|-----------------------------------|------|------|------|----------------------------|-----------------------|---------------------|
| Block Type | Friction caused from ball bearing | | | | Bottom Seals + Inner Seals | End Seals (2 sides) | |
| | Preload Class | | | | | S-Type Standard | B-Type Low friction |
| | VC | V0 | V1 | V2 | | | |
| 15MN/FN | 0.30 | 0.65 | 0.85 | 1.10 | 1.5 | 2.0 | 0.5 |
| 20MN/FN | 0.40 | 0.75 | 1.40 | 1.60 | 2.0 | 2.5 | 1.0 |
| 25MN/FN | 0.60 | 0.95 | 1.30 | 1.95 | 2.5 | 3.0 | 1.5 |
| 30MN/FN | 0.55 | 1.10 | 2.00 | 3.10 | 3.0 | 5.0 | 2.0 |
| 35MN/FN | 0.65 | 1.25 | 2.50 | 3.25 | 3.0 | 8.0 | 3.0 |
| 45MN/FN | 0.85 | 2.10 | 2.80 | 4.00 | 4.0 | 11.0 | 4.0 |

Unit : N

| ARC/HRC/ERC | | | | | | | |
|-------------|-----------------------------------|------|------|------|----------------------------|-----------------------|---------------------|
| Block Type | Friction caused from ball bearing | | | | Bottom Seals + Inner Seals | End Seals (2 sides) | |
| | Preload Class | | | | | S-Type Standard | B-Type Low friction |
| | VC | V0 | V1 | V2 | | | |
| 15MS/FS | 0.30 | 0.60 | 0.80 | 1.00 | 1.5 | 2.0 | 0.5 |
| 20MS/FS | 0.40 | 0.70 | 1.10 | 1.40 | 2.0 | 2.5 | 1.0 |
| 25MS/FS | 0.50 | 0.90 | 1.20 | 1.80 | 2.5 | 3.0 | 1.5 |
| 30MS/FS | 0.50 | 1.00 | 1.80 | 2.30 | 3.0 | 5.0 | 2.0 |

Unit : N

| ARC/HRC/ERC | | | | | | | |
|-------------|-----------------------------------|------|------|------|----------------------------|-----------------------|---------------------|
| Block Type | Friction caused from ball bearing | | | | Bottom Seals + Inner Seals | End Seals (2 sides) | |
| | Preload Class | | | | | S-Type Standard | B-Type Low friction |
| | VC | V0 | V1 | V2 | | | |
| 15ML/FL | 0.40 | 0.70 | 0.90 | 1.40 | 1.5 | 2.0 | 0.5 |
| 20ML/FL | 0.50 | 0.80 | 1.60 | 1.80 | 2.0 | 2.5 | 1.0 |
| 25ML/FL | 0.70 | 1.20 | 1.80 | 2.00 | 2.5 | 3.0 | 1.5 |
| 30ML/FL | 0.80 | 1.40 | 2.20 | 2.80 | 3.0 | 5.0 | 2.0 |
| 35ML/FL | 0.90 | 1.60 | 2.70 | 3.50 | 3.0 | 8.0 | 3.0 |
| 45ML/FL | 1.00 | 2.30 | 3.50 | 4.55 | 4.0 | 11.0 | 4.0 |

Applied example

- ①. ARC25MN SZ V1N
Block friction = 1.3+2.5+3 = 6.8N
- ②. HRC30FL BZ V0P
Block friction= 1.4+3+2 = 6.4N

Friction caused from ball bearing
Bottom Seals + Inner Seals
+ End Seals (2 sides)
Block friction

Saw wood dust Test

Test content

This test uses a total of 4 groups of products (using 2 rails match with 2 lubrications methods) by putting in saw wood dust and moving them within.

Rail

1. Tapped from top rail plus hole plugs (AR)
2. Tapped from bottom rail (ARU)

Runner Block

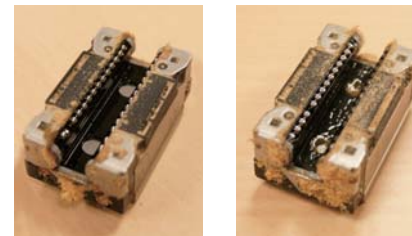
1. Installation of standard seals (S), using grease
2. Installation of lubrication storage Pad and standard seals (SZ), using grease



Testing conditions

1. Stroke = 600mm
2. Total testing stroke = 30m

Test results



Tapped from bottom (oil) Tapped from bottom (grease)

Test result

- The Tapped from top rail has hole plugs, leading to unevenness of rail, allowing some saw wood dust to enter the runner block belly area. The 2 sides of the runner block belly area is protected by stainless steel reinforcement plates and end seals that completely protect the ball bearing, so the ball bearing runner area is fully protected from Saw wood dust.
- The tapped from bottom rail has even rail surface, so the ball bearing runner area is fully protected from Saw wood dust.

Test items

1. If Saw wood dust enters the inner parts of the runner block
2. If Saw wood dust enters the ball raceway

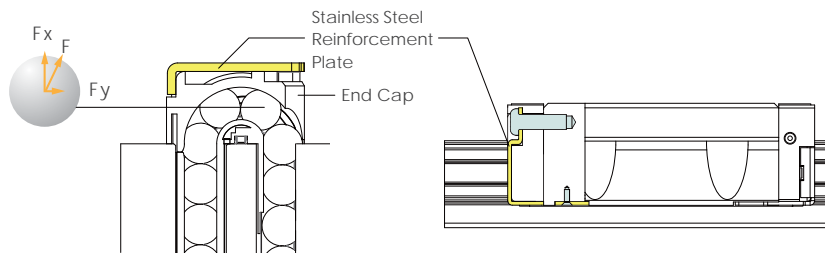
| Checked Item | Saw wood dust enter inner part of runner block | Saw wood dust enter ball bearing runner area |
|---|--|--|
| Installation status | | |
| ARU Rail S Type Runner Block (Grease oil) | No | No |
| ARU Rail S Type Runner Block (Grease lubrication) | No | No |
| AR Rail SZ Type Runner Block (Grease Oil) | Yes (belly area) | No |
| AR Rail S Type Runner Block (Grease Lubrication) | Yes (belly area) | No |

Installation Notice

Reinforcement plate patent design

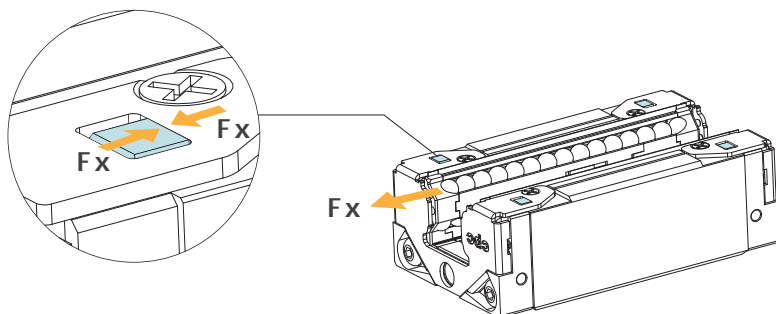
Using 2 stainless steel reinforcement plates, the L type design can fasten the screws onto the top and bottom of the runner block, reinforcing the rigidity of the end caps and cladding.

The clearance between the rail profile with the seal design is below 0.3mm, reinforcing the steel plates while having scraper functions.



The ARC/HRC/ERC type uses the stainless steel reinforcement plates to strengthen the bottom latches, while increasing X-axis direction force capacity, and increasing operation speed.

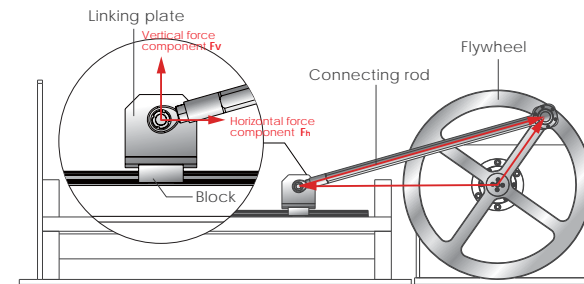
$$V_{max} > 10 \text{ m/s} \quad a_{max} > 450 \text{ m/s}^2$$



Acceleration testing machine

The Acceleration testing machine is a slide-crank mechanism and it uses flywheel as the crank. Working under a limited stroke, it helps block to reach higher acceleration and velocity. Moreover with rotation velocity of the motor, it can be tested the service life under different acceleration and velocity.

The introduction of High-Speed Testing Machine



Rail
AR-Rail

Block

1. Stainless steel reinforcement plate
2. S-Type Standard Seal
3. Environmental Lubrication Pad

Condition

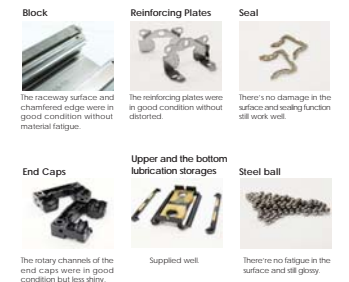


Block Model : ARC25MN
Dynamic load capacities : 24.8 KN
(Rated life of load capacity is based on 100 km)
Stat load capacities : 42.5 KN
Preload : V2 (0.08C)
Max velocity : 10.47 m/s
Max acceleration : 438.2 m/s²
Stroke : 0.5 m
Equivalent Load : 10928 N (0.44C)
Service life : 708.6 km

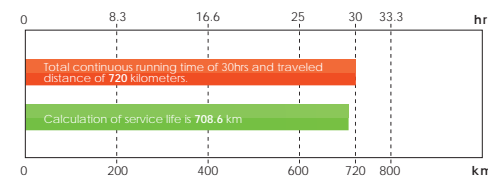
Inspected Item

1. The accessories are defected or not
2. Whether the Rail profile surface is damaged
3. Whether the Block Body profile surface is worn or is in material fatigue situation

Testing Result



Testing record



Testing summary

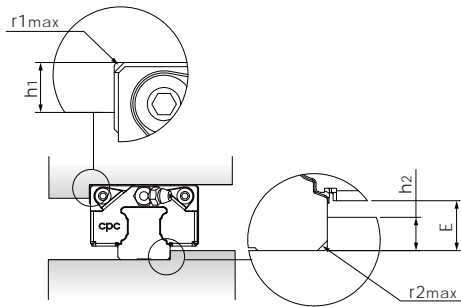
According to ARC25MN V2 its basic load capacities, preload and equivalent dynamic load, the calculation of the service life can be 708.6 km.

This test after running 30 hrs = 720 km, the appearance of the block and the plastic parts without damage, the upper and the bottom lubrication storage pads were in good condition and supplied well, the raceway surfaces were also in good condition which means it can continue running with high velocity.

Installation Notice

Dimension of reference edge

To ensure the linear guide is precisely assembled with machine table, **cpc** machines a recess in the reference edge corner. The corner of the machine table must be smaller than the chamfer of the linear guide to avoid interference.



Unit : mm

| Type | r1max | r2max | h1 | h2 | E |
|------|-------|-------|------|------|------|
| 15 | 0.5 | 0.5 | 4.0 | 2.5 | 3.3 |
| 20 | 0.5 | 0.5 | 5.0 | 4.0 | 5.0 |
| 25 | 1.0 | 1.0 | 5.0 | 5.0 | 6.0 |
| 30 | 1.0 | 1.0 | 6.0 | 5.5 | 6.6 |
| 35 | 1.0 | 1.0 | 6.0 | 6.5 | 7.6 |
| 45 | 1.0 | 1.0 | 8.0 | 8.0 | 9.3 |
| 55 | 1.5 | 1.5 | 10.0 | 10.0 | 12.0 |

Rail Joint

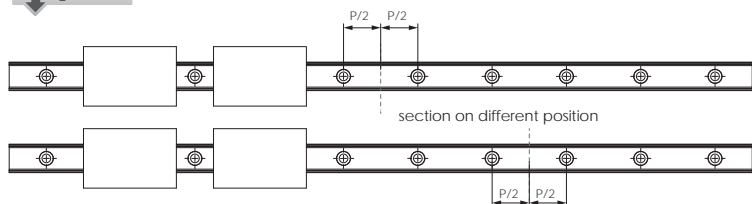
The standard length of rail is 4 meter, **cpc** provides rail joint solution. The joint number will be laser mark on the rail.

1. Follow the joint number to assemble. (Shown in figure A)
2. In the case of two more numbers of rail on the same moving axis, **cpc** suggests to set the joint in different position to avoid the change in accuracy. (Shown in figure B)
3. Follow the recommend tightening torques to fasten the screws from inside to outside.

Figure A



Figure B



Technical information

Screw tightening torque (Nm)

| Screw grade 12.9 Alloy Steel Screw | Steel | Cast Iron | Non Iron Metal |
|------------------------------------|-------|-----------|----------------|
| M3 | 2.0 | 1.3 | 1.0 |
| M4 | 4.1 | 2.7 | 2.1 |
| M5 | 8.8 | 5.9 | 4.4 |
| M6 | 13.7 | 9.2 | 6.9 |
| M8 | 30 | 20 | 15 |
| M10 | 68 | 45 | 33 |
| M12 | 118 | 78 | 59 |
| M14 | 157 | 105 | 78 |
| M16 | 196 | 131 | 98 |

Preload and clearance

The ARC/HRC/ERC linear guides provide 4 different preload class VC, V0, V1, V2.

| | | ARC | | | | | | | | |
|-------|----------------|---------------|----------------|---------|---------|---------|---------|---------|-------------|---|
| Class | Description | Preload Value | Clearance (µm) | | | | | | Application | |
| | | | 15 | 20 | 25 | 30 | 35 | 45 | | 55 |
| VC | Clearance | 0 | +10~+2 | +10~+2 | +11~+3 | +12~+4 | +12~+4 | +13~+5 | +13~+5 | Smooth motion, low friction |
| V0 | Light preload | 0.02C | +2~-4 | +2~-5 | +3~-6 | +4~-7 | +4~-8 | +5~-10 | +5~-12 | For precision situations, smooth motion |
| V1 | Medium Preload | 0.05C | -4~-10 | -5~-12 | -6~-15 | -7~-18 | -8~-20 | -10~-24 | -12~-28 | High stiffness, precision, high load situations |
| V2 | Heavy Preload | 0.08C | -10~-16 | -12~-18 | -15~-23 | -18~-27 | -20~-31 | -24~-36 | -28~-45 | Super High stiffness, precision, super high load situations |

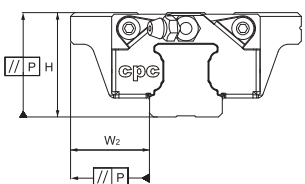
| | | HRC/ERC | | | | | | | | |
|-------|----------------|---------------|----------------|---------|---------|---------|---------|---------|-------------|---|
| Class | Description | Preload Value | Clearance (µm) | | | | | | Application | |
| | | | 15 | 20 | 25 | 30 | 35 | 45 | | 55 |
| VC | Clearance | 0 | +10~+2 | +10~+2 | +11~+3 | +12~+4 | +12~+4 | +13~+5 | +13~+5 | Smooth motion, low friction |
| V0 | Light preload | 0.02C | +2~-4 | +2~-5 | +3~-6 | +4~-7 | +4~-8 | +5~-10 | +5~-12 | For precision situations, smooth motion |
| V1 | Medium Preload | 0.08C | -4~-12 | -5~-14 | -6~-16 | -7~-19 | -8~-22 | -10~-25 | -12~-29 | High stiffness, precision, high load situations |
| V2 | Heavy Preload | 0.13C | -11~-19 | -14~-23 | -16~-26 | -19~-31 | -22~-35 | -25~-40 | -29~-46 | Super High stiffness, precision, super high load situations |

Technical information

Accuracy

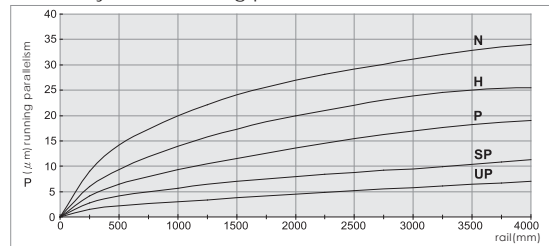
The ARC/HRC/ERC linear guides provide 5 different grades of precision : N, H, P, SP, and UP, Engineers can choose different grades depend on the machine applications.

Accuracy



| Table of accuracy | | | | | | |
|---|-----------------|----|-----|-----|-----|------|
| Accuracy grades (μm) | | UP | SP | P | H | N |
| Tolerance of dimension height H | H | ±5 | ±10 | ±20 | ±40 | ±100 |
| Variation of height for different runner Block on the same position of Rail | ΔH | 3 | 5 | 7 | 15 | 30 |
| Tolerance of dimension width W ₂ | W ₂ | ±5 | ±7 | ±10 | ±20 | ±40 |
| Variation of width for different runner Block on the same position of Rail | ΔW ₂ | 3 | 5 | 7 | 15 | 30 |

Accuracy of the running parallelism



Application

| class | Movement, Conveyance | Manufacturing Equipment | High Precision Manufacturing Equipment | Measuring Equipment |
|----------|---|---|--|---|
| N | ● | ● | | |
| H | ● | ● | ● | |
| P | | ● | ● | ● |
| SP | | | ● | ● |
| UP | | | | ● |
| Examples | 1. Conveyance system 2. Industrial robots 3. Office Machinery | 1. Woodworking machine 2. Punching press 3. Injection Molding machine | 1. Lathe/milling machine/ grinding machine 2. Electrical discharge machining (EDM) 3. CNC machining center | 1. Three dimensional measuring instrument 2. Detection mirror/head shaft 3. X-Y Table |

Ordering information

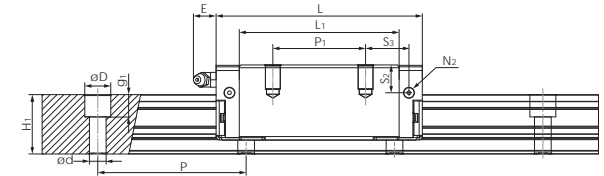
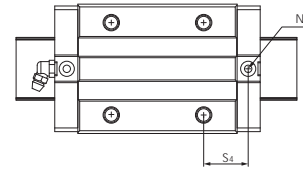
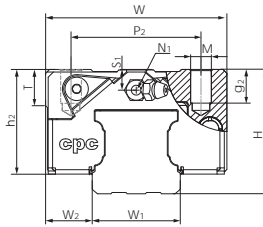
| Model code | | | | | | | | | | | | | | | | |
|--|---|----|---|---|---|---|---|---|----|---|--------|-----|-----|----|----|--|
| ARC | U | 15 | M | N | B | 2 | Z | C | V1 | P | -1480L | -20 | -20 | II | /J | |
| Customization code | | | | | | | | | | | | | | | | |
| Number of rails on the same moving axis | | | | | | | | | | | | | | | | |
| End hole pitch (mm) | | | | | | | | | | | | | | | | |
| Starting hole pitch (mm) | | | | | | | | | | | | | | | | |
| Rail length (mm) | | | | | | | | | | | | | | | | |
| Accuracy grade : UP, SP, P, H, N | | | | | | | | | | | | | | | | |
| Preload class : VC, V0, V1, V2 | | | | | | | | | | | | | | | | |
| C: with ball chain | | | | | | | | | | | | | | | | |
| Z: with lubrication storage pad | | | | | | | | | | | | | | | | |
| Block quantity | | | | | | | | | | | | | | | | |
| Seal type : B: Low friction S: Standard N: Internal NBR seal | | | | | | | | | | | | | | | | |
| Block length : L: long N: standard S: short | | | | | | | | | | | | | | | | |
| Block width : M: standard F: flanged | | | | | | | | | | | | | | | | |
| Block type : 15, 20, 25, 30, 35, 45, 55 | | | | | | | | | | | | | | | | |
| U: rail (tapped from the bottom) | | | | | | | | | | | | | | | | |
| Product type : ARC: automation series HRC/ERC: heavy load series | | | | | | | | | | | | | | | | |

Customization code(The meaning of suffix characters)

| | | |
|--|---|--|
| J : Butt-jointing track rail | R : Special process for rail | SG : Getting through the side grease holes and installed with the set screws |
| G : Customer designated lubricant | VD : Customized designated preload | MC : With metal caps for counter holes on the rail |
| I : With Inspection report | OA : Block install with grease nipple by cpc (Please contact cpc for direction of grease nipple installation) | MPC : With Metal-Plastic Caps for rail mounting holes. |
| S : Special straightness for rail | DE : Reference edges of block and rail on opposite sides | PC : With plastic caps for counter holes on the rail |
| B : Special process for block | | |
| BL : With bellow for the rail | | |
| SN : External NBR seal with Metal Scraper | | |
| BR : Black chrome coating treatment on the rail | CR : Clear chrome coating treatment on the rail | RR : Raydent coating treatment on the rail |
| BB : Black chrome coating treatment on the block | CB : Clear chrome coating treatment on the block | RB : Raydent coating treatment on the block |
| BRB : Black chrome coating treatment on the block and rail | CRB : Clear chrome coating treatment on the block and rail | RRB : Raydent coating treatment on the block and rail |
| SB : With stainless steel ball bearings | NR : Nickel coating treatment on the rail | NB : Nickel coating treatment on the block |
| NRB : Nickel coating treatment on the block and rail | | |

Note: If there is any customization need, please contact **cpc** for more information.

Dimensions Table



ARC MS Series

| Model Code | Mounting Dimensions | | Rail Dimensions(mm) | | | | Block Dimensions(mm) | | | | | | | | | | Block Dimensions(mm) | | | | Load Capacities (kN) | | Static Moment (Nm) | | | Weight | | Model Code | | | |
|------------|---------------------|------|---------------------|----|----|-------------|----------------------|------|------|------|----|----|--------|----|----|--------|----------------------|----|-----|-----|----------------------|------|--------------------|------|------|--------|-----|------------|-----|----------|-----------|
| | H | W2 | W1 | H1 | P | Dx dxg1 | W | L | L1 | h2 | P1 | P2 | M x g2 | M1 | T | N1 | N2 | N3 | E | S1 | S2 | S3 | S4 | C | C0 | Mr0 | Mp0 | | My0 | Block(g) | Rail(g/m) |
| ARC 15 MS | 24 | 9.5 | 15 | 15 | 60 | 7.5x4.5x5.3 | 34 | 41.2 | 26 | 20.7 | - | 26 | M4x7 | - | 6 | M3x6.5 | M3x6 | P3 | 3.5 | 4.5 | 7.5 | 15.6 | 16.7 | 7.7 | 12.1 | 100 | 50 | 50 | 106 | 1290 | ARC 15 MS |
| ARC 20 MS | 28 | 11 | 20 | 20 | 60 | 9.5x6x8.5 | 42 | 49.2 | 32.2 | 23 | - | 32 | M5x7 | - | 8 | M3x7.5 | M3x5.5 | P4 | 10 | 4 | 7.4 | 19.1 | 19.8 | 12.5 | 19.3 | 205 | 100 | 100 | 170 | 2280 | ARC 20 MS |
| ARC 25 MS | 33 | 12.5 | 23 | 23 | 60 | 11x7x9 | 48 | 57.4 | 38.4 | 27 | - | 35 | M6x9 | - | 8 | M6x7.5 | M3x6.5 | P4 | 12 | 5 | 9.3 | 22.2 | 23.2 | 18.2 | 27.3 | 350 | 160 | 160 | 300 | 3020 | ARC 25 MS |
| ARC 30 MS | 42 | 16 | 28 | 27 | 80 | 14x9x12 | 60 | 68 | 44 | 35.2 | - | 40 | M8x10 | - | 12 | M6x8.5 | M6x5 | P5 | 12 | 7.5 | 12 | 27 | 26.7 | 23.3 | 33.1 | 520 | 230 | 230 | 560 | 4380 | ARC 30 MS |

ARC MN Series

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|----|------|----|----|-----|-------------|-----|-------|-------|------|----|----|--------|---|----|------------|---------|----|-----|------|------|------|------|-------|-------|------|------|------|------|-------|-----------|
| ARC 15 MN | 24 | 9.5 | 15 | 15 | 60 | 7.5x4.5x5.3 | 34 | 55.5 | 40.3 | 20.7 | 26 | 26 | M4x7 | - | 6 | M3x6.5 | M3x6 | P3 | 3.5 | 4.5 | 7.5 | 9.8 | 10.9 | 9.9 | 17.5 | 140 | 105 | 105 | 158 | 1290 | ARC 15 MN |
| ARC 20 MN | 28 | 11 | 20 | 20 | 60 | 9.5x6x8.5 | 42 | 69 | 52 | 23 | 32 | 32 | M5x7 | - | 8 | M3x7.5 | M3x5.5 | P4 | 10 | 4 | 7.4 | 13 | 13.7 | 17.1 | 30.0 | 325 | 230 | 230 | 266 | 2280 | ARC 20 MN |
| ARC 25 MN | 33 | 12.5 | 23 | 23 | 60 | 11x7x9 | 48 | 81.2 | 62.2 | 27 | 35 | 35 | M6x9 | - | 8 | M6x7.5 | M3x6.5 | P4 | 12 | 5 | 9.3 | 16.6 | 17.6 | 24.8 | 42.5 | 540 | 385 | 385 | 420 | 3020 | ARC 25 MN |
| ARC 30 MN | 42 | 16 | 28 | 27 | 80 | 14x9x12 | 60 | 95.5 | 71.5 | 35.2 | 40 | 40 | M8x10 | - | 12 | M6x8.5 | M6x5 | P5 | 12 | 7.5 | 12 | 20.8 | 20.5 | 32.8 | 53.7 | 845 | 565 | 565 | 800 | 4380 | ARC 30 MN |
| ARC 35 MN | 48 | 18 | 34 | 32 | 80 | 14x9x12 | 70 | 111.2 | 86.2 | 40.4 | 50 | 50 | M8x13 | - | 14 | M6x10 | M6x7 | P5 | 12 | 8 | 15 | 23.4 | 24.1 | 45.9 | 82.9 | 1700 | 1080 | 1080 | 1120 | 6790 | ARC 35 MN |
| ARC 45 MN | 60 | 20.5 | 45 | 39 | 105 | 20x14x17 | 86 | 135.5 | 102.5 | 50.7 | 60 | 60 | M10x17 | - | 14 | PT1/8x12.5 | M6x10.5 | P5 | 14 | 11.1 | 18.1 | 27.3 | 27.2 | 71.3 | 122.1 | 3200 | 1910 | 1910 | 2120 | 10530 | ARC 45 MN |
| ARC 55 MN | 70 | 23.5 | 53 | 46 | 120 | 20x16x18 | 100 | 155.6 | 118.6 | 58 | 75 | 75 | M12x20 | - | 16 | PT1/8x14.5 | M6x12.5 | P5 | 14 | 12 | 19.5 | 28.5 | 29.5 | 103.4 | 173.1 | 5030 | 3120 | 3120 | 3880 | 14060 | ARC 55 MN |

ARC ML Series

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|----|------|----|----|-----|-------------|-----|-------|-------|------|----|----|--------|---|----|------------|---------|----|-----|------|------|------|------|-------|-------|------|------|------|------|-------|-----------|
| ARC 15 ML | 24 | 9.5 | 15 | 15 | 60 | 7.5x4.5x5.3 | 34 | 76.2 | 61 | 20.7 | 34 | 26 | M4x7 | - | 6 | M3x6.5 | M3x6 | P3 | 3.5 | 4.5 | 7.5 | 16.1 | 17.2 | 13.4 | 26.9 | 215 | 235 | 235 | 240 | 1290 | ARC 15 ML |
| ARC 20 ML | 28 | 11 | 20 | 20 | 60 | 9.5x6x8.5 | 42 | 87.2 | 70.2 | 23 | 45 | 32 | M5x7 | - | 8 | M3x7.5 | M3x5.5 | P4 | 10 | 4 | 7.4 | 15.6 | 16.3 | 20.4 | 38.5 | 415 | 390 | 390 | 330 | 2280 | ARC 20 ML |
| ARC 30 ML | 42 | 16 | 28 | 27 | 80 | 14x9x12 | 60 | 118 | 94 | 35.2 | 60 | 40 | M8x10 | - | 12 | M6x8.5 | M6x5 | P5 | 12 | 8.7 | 12 | 21.7 | 21.7 | 39.6 | 70.2 | 1105 | 950 | 950 | 1138 | 4380 | ARC 30 ML |
| ARC 35 ML | 48 | 18 | 34 | 32 | 80 | 14x9x12 | 70 | 136.6 | 111.6 | 40.4 | 72 | 50 | M8x13 | - | 14 | M6x10 | M6x7 | P5 | 12 | 8 | 15 | 25.1 | 25.8 | 54.7 | 106.5 | 2185 | 1755 | 1755 | 1536 | 6790 | ARC 35 ML |
| ARC 45 ML | 60 | 20.5 | 45 | 39 | 105 | 20x14x17 | 86 | 171.5 | 138.5 | 50.7 | 80 | 60 | M10x17 | - | 14 | PT1/8x12.5 | M6x10.5 | P5 | 14 | 11.1 | 18.1 | 35 | 35 | 89.5 | 169.1 | 4430 | 3460 | 3460 | 3160 | 10530 | ARC 45 ML |
| ARC 55 ML | 70 | 23.5 | 53 | 46 | 120 | 20x16x18 | 100 | 202.5 | 165.5 | 58 | 95 | 75 | M12x20 | - | 16 | PT1/8x14.5 | M6x12.5 | P5 | 14 | 12 | 19.5 | 42 | 43 | 129.9 | 239.7 | 6965 | 5855 | 5855 | 4800 | 14060 | ARC 55 ML |

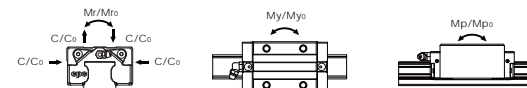
1. The model is in design

2. The load capacities is for full-ball type (without ball chain)

3. N2 = Injecting holes

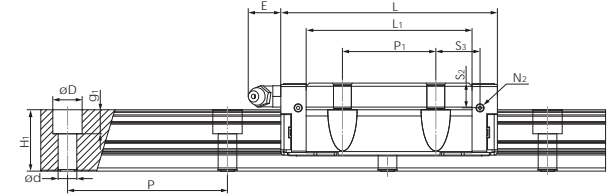
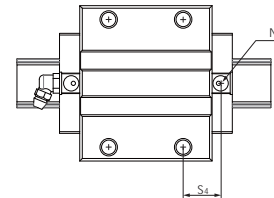
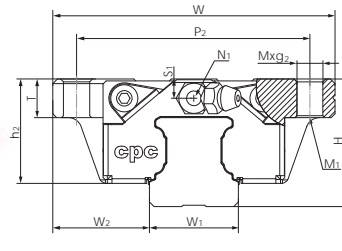
4. N3 = O-ring size for lubrication from above

5. N2, N3 will be seal before shipment, open it when using product.



The above rating load capacities and static moment are calculated according to ISO14728 standard. The rating life for basic dynamic load rating is defined as the total 100km travel distance that 90% of a group of identical linear guides can be operated individually under the same conditions free from any material damage caused by rolling fatigue. When the standard of 50km travel distance is applied, the above basic dynamic load rating C of ISO 14728 should be multiplied by 1.26 for conversion.

Dimensions Table



ARC FS Series

| Model Code | Mounting Dimensions | | Rail Dimensions(mm) | | | | Block Dimensions(mm) | | | | | | | | | | | Block Dimensions(mm) | | | | | Load Capacities (KN) | | Static Moment (Nm) | | | Weight | | Model Code | |
|------------|---------------------|----------------|---------------------|----------------|----|--------------------|----------------------|------|----------------|----------------|----------------|----------------|------------------|----------------|----|----------------|----------------|----------------------|-----|----------------|----------------|----------------|----------------------|------|--------------------|-----------------|-----------------|-----------------|----------|------------|-----------|
| | H | W ₂ | W ₁ | H ₁ | P | Dxdxg ₁ | W | L | L ₁ | h ₂ | P ₁ | P ₂ | Mxg ₂ | M ₁ | T | N ₁ | N ₂ | N ₃ | E | S ₁ | S ₂ | S ₃ | S ₄ | C | C ₀ | M _{r0} | M _{p0} | M _{y0} | Block(g) | | Rail(g/m) |
| ARC 15 FS | 24 | 18.5 | 15 | 15 | 60 | 7.5x4.5x5.3 | 52 | 41.2 | 26 | 20.7 | - | 41 | M5x7 | M4 | 7 | M3x6.5 | M3x6 | P3 | 3.5 | 4.5 | 7.5 | 15.6 | 16.7 | 7.7 | 12.1 | 100 | 50 | 50 | 132 | 1290 | ARC 15 FS |
| ARC 20 FS | 28 | 19.5 | 20 | 20 | 60 | 9.5x6x8.5 | 59 | 49.2 | 32.2 | 23 | - | 49 | M6x10 | M5 | 10 | M3x7.5 | M3x5.5 | P4 | 10 | 4 | 7.4 | 19.1 | 19.8 | 12.5 | 19.3 | 205 | 100 | 100 | 210 | 2280 | ARC 20 FS |
| ARC 25 FS | 33 | 25 | 23 | 23 | 60 | 11x7x9 | 73 | 57.4 | 38.4 | 27 | - | 60 | M8x12 | M6 | 12 | M6x7.5 | M3x6.5 | P4 | 12 | 5 | 9.3 | 22.2 | 23.2 | 18.2 | 27.3 | 350 | 160 | 160 | 345 | 3020 | ARC 25 FS |
| ARC 30 FS | 42 | 31 | 28 | 27 | 80 | 14x9x12 | 90 | 68 | 44 | 35.2 | - | 72 | M10x15 | M8 | 15 | M6x8.5 | M6x5 | P5 | 12 | 7.5 | 12 | 27 | 26.8 | 23.3 | 33.1 | 520 | 230 | 230 | 750 | 4380 | ARC 30 FS |

ARC FN Series

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|----|------|----|----|----|-------------|-----|-------|------|------|----|----|--------|----|----|--------|--------|----|-----|-----|-----|------|------|------|------|------|------|------|------|------|-----------|
| ARC 15 FN | 24 | 18.5 | 15 | 15 | 60 | 7.5x4.5x5.3 | 52 | 55.5 | 40.3 | 20.7 | 26 | 41 | M5x7 | M4 | 7 | M3x6.5 | M3x6 | P3 | 3.5 | 4.5 | 7.5 | 8.9 | 10.9 | 9.9 | 17.5 | 140 | 105 | 105 | 200 | 1290 | ARC 15 FN |
| ARC 20 FN | 28 | 19.5 | 20 | 20 | 60 | 9.5x6x8.5 | 59 | 69 | 52 | 23 | 32 | 49 | M6x10 | M5 | 10 | M3x7.5 | M3x5.5 | P4 | 10 | 4 | 7.4 | 13 | 13.7 | 17.1 | 30.0 | 325 | 230 | 230 | 336 | 2280 | ARC 20 FN |
| ARC 25 FN | 33 | 25 | 23 | 23 | 60 | 11x7x9 | 73 | 81.2 | 62.2 | 27 | 35 | 60 | M8x12 | M6 | 12 | M6x7.5 | M3x6.5 | P4 | 12 | 5 | 9.3 | 16.6 | 17.6 | 24.8 | 42.5 | 540 | 385 | 385 | 524 | 3020 | ARC 25 FN |
| ARC 30 FN | 42 | 31 | 28 | 27 | 80 | 14x9x12 | 90 | 95.5 | 71.5 | 35.2 | 40 | 72 | M10x15 | M8 | 15 | M6x8.5 | M6x5 | P5 | 12 | 7.5 | 12 | 20.8 | 20.5 | 32.8 | 53.7 | 845 | 565 | 565 | 1200 | 4380 | ARC 30 FN |
| ARC 35 FN | 48 | 33 | 34 | 32 | 80 | 14x9x12 | 100 | 111.2 | 86.2 | 40.4 | 50 | 82 | M10x15 | M8 | 15 | M6x10 | M6x7 | P5 | 12 | 8 | 15 | 23.4 | 24.1 | 45.9 | 82.9 | 1700 | 1080 | 1080 | 1580 | 6790 | ARC 35 FN |

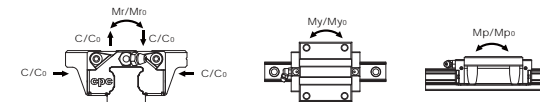
1. The model is in design

3. N₂ = Injecting holes

5. N₂, N₃ will be seal before shipment, open it when using product.

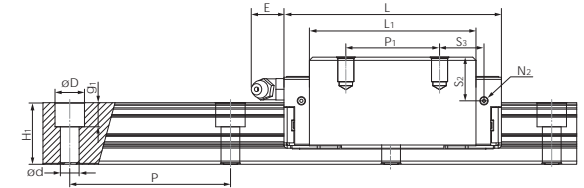
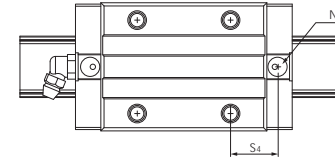
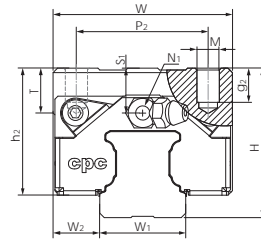
2. The load capacities is for full-ball type (without ball chain)

4. N₃ = O-ring size for lubrication from above



The above rating load capacities and static moment are calculated according to ISO14728 standard. The rating life for basic dynamic load rating is defined as the total 100km travel distance that 90% of a group of identical linear guides can be operated individually under the same conditions free from any material damage caused by rolling fatigue. When the standard of 50km travel distance is applied, the above basic dynamic load rating C of ISO 14728 should be multiplied by 1.26 for conversion.

Dimensions Table



HRC MN Series

| Model Code | Mounting Dimensions | | Rail Dimensions(mm) | | | | Block Dimensions(mm) | | | | | | | | | | Block Dimensions(mm) | | | | | | Load Capacities (KN) | | Static Moment (Nm) | | | Weight | | Model Code | |
|------------|---------------------|----------------|---------------------|----------------|-----|--------------------|----------------------|-------|----------------|----------------|----------------|----------------|------------------|----------------|----|----------------|----------------------|----------------|-----|----------------|----------------|----------------|----------------------|-------|--------------------|-----------------|-----------------|-----------------|----------|------------|-----------|
| | H | W ₂ | W ₁ | H ₁ | P | Dxdxg ₁ | W | L | L ₁ | h ₂ | P ₁ | P ₂ | Mxg ₂ | M ₁ | T | N ₁ | N ₂ | N ₃ | E | S ₁ | S ₂ | S ₃ | S ₄ | C | C ₀ | M _{r0} | M _{p0} | M _{y0} | Block(g) | | Rail(g/m) |
| HRC 15 MN | 28 | 9.5 | 15 | 15 | 60 | 7.5x4.5x5.3 | 34 | 55.5 | 40.3 | 24.7 | 26 | 26 | M4x7 | - | 6 | M3x6.5 | M3x6 | P3 | 3.5 | 8.5 | 11.5 | 9.8 | 10.9 | 9.9 | 17.5 | 140 | 105 | 105 | 200 | 1290 | HRC 15 MN |
| HRC 20 MN | 30 | 12 | 20 | 20 | 60 | 9.5x6x8.5 | 44 | 69 | 52 | 25 | 36 | 32 | M5x8.5 | - | 8 | M3x7.5 | M3x5.5 | P4 | 10 | 6 | 9.4 | 11 | 11.7 | 17.1 | 30.0 | 325 | 230 | 230 | 318 | 2280 | HRC 20 MN |
| HRC 25 MN | 40 | 12.5 | 23 | 23 | 60 | 11x7x9 | 48 | 81.2 | 62.2 | 34 | 35 | 35 | M6x9 | - | 12 | M6x7.5 | M3x6.5 | P4 | 12 | 12 | 16.3 | 16.6 | 17.6 | 24.8 | 42.5 | 540 | 385 | 385 | 578 | 3020 | HRC 25 MN |
| HRC 30 MN | 45 | 16 | 28 | 27 | 80 | 14x9x12 | 60 | 95.5 | 71.5 | 38.4 | 40 | 40 | M8x12 | - | 12 | M6x8.5 | M6x5 | P5 | 12 | 10.5 | 15 | 20.8 | 20.5 | 32.8 | 53.7 | 845 | 565 | 565 | 896 | 4380 | HRC 30 MN |
| HRC 35 MN | 55 | 18 | 34 | 32 | 80 | 14x9x12 | 70 | 111.2 | 86.2 | 47.4 | 50 | 50 | M8x13 | - | 14 | M6x10 | M6x7 | P5 | 12 | 15 | 22 | 23.4 | 24.1 | 45.9 | 82.9 | 1700 | 1080 | 1080 | 1430 | 6790 | HRC 35 MN |
| HRC 45 MN | 70 | 20.5 | 45 | 39 | 105 | 20x14x17 | 86 | 135.5 | 102.5 | 60.7 | 60 | 60 | M10x20 | - | 14 | PT1/8x12.5 | M6x10.5 | P5 | 14 | 21.1 | 28.1 | 27.3 | 27.3 | 71.3 | 122.1 | 3200 | 1910 | 1910 | 2794 | 10530 | HRC 45 MN |
| HRC 55 MN | 80 | 23.5 | 53 | 46 | 120 | 24x16x18 | 100 | 155.6 | 118.6 | 68 | 75 | 75 | M12x24 | - | 16 | PT1/8x14.5 | M6x12.5 | P5 | 14 | 22 | 29.5 | 28.5 | 29.5 | 103.4 | 173.1 | 5030 | 3120 | 3120 | 4780 | 14060 | HRC 55 MN |

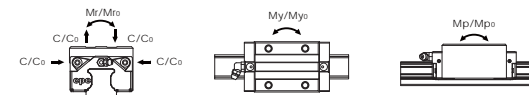
HRC ML Series

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|----|------|----|----|-----|-------------|-----|-------|-------|------|----|----|--------|---|----|------------|---------|----|-----|------|------|------|------|-------|-------|------|------|------|------|-------|-----------|
| HRC 15 ML | 28 | 9.5 | 15 | 15 | 60 | 7.5x4.5x5.3 | 34 | 76.2 | 61 | 24.7 | 26 | 26 | M4x7 | - | 6 | M3x6.5 | M3x6 | P3 | 3.5 | 8.5 | 11.5 | 20.1 | 21.2 | 13.4 | 26.9 | 215 | 235 | 235 | 300 | 1290 | HRC 15 ML |
| HRC 20 ML | 30 | 12 | 20 | 20 | 60 | 9.5x6x8.5 | 44 | 87.2 | 70.2 | 25 | 50 | 32 | M5x8.5 | - | 8 | M3x7.5 | M3x5.5 | P4 | 10 | 6 | 9.4 | 13.1 | 13.8 | 20.4 | 38.5 | 415 | 390 | 390 | 400 | 2280 | HRC 20 ML |
| HRC 25 ML | 40 | 12.5 | 23 | 23 | 60 | 11x7x9 | 48 | 105 | 86 | 34 | 50 | 35 | M6x9 | - | 12 | M6x7.5 | M3x6.5 | P4 | 12 | 12 | 16.3 | 21 | 22 | 30.7 | 57.7 | 735 | 710 | 710 | 685 | 3020 | HRC 25 ML |
| HRC 30 ML | 45 | 16 | 28 | 27 | 80 | 14x9x12 | 60 | 118 | 94 | 38.4 | 60 | 40 | M8x12 | - | 12 | M6x8.5 | M6x5 | P5 | 12 | 10.5 | 15 | 21.7 | 21.8 | 39.6 | 70.2 | 1105 | 950 | 950 | 1150 | 4380 | HRC 30 ML |
| HRC 35 ML | 55 | 18 | 34 | 32 | 80 | 14x9x12 | 70 | 136.6 | 111.6 | 47.4 | 72 | 50 | M8x13 | - | 14 | M6x10 | M6x7 | P5 | 12 | 15 | 22 | 25.1 | 25.8 | 54.7 | 106.5 | 2185 | 1755 | 1755 | 1953 | 6790 | HRC 35 ML |
| HRC 45 ML | 70 | 20.5 | 45 | 39 | 105 | 20x14x17 | 86 | 171.5 | 138.5 | 60.7 | 80 | 60 | M10x20 | - | 14 | PT1/8x12.5 | M6x10.5 | P5 | 14 | 21.1 | 28.1 | 35 | 35 | 89.5 | 169.1 | 4430 | 3460 | 3460 | 4060 | 10530 | HRC 45 ML |
| HRC 55 ML | 80 | 23.5 | 53 | 46 | 120 | 24x16x18 | 100 | 202.5 | 165.5 | 68 | 95 | 75 | M12x24 | - | 16 | PT1/8x14.5 | M6x12.5 | P5 | 14 | 22 | 29.5 | 42 | 43 | 129.9 | 239.7 | 6965 | 5855 | 5855 | 6060 | 14060 | HRC 55 ML |

ERC Series

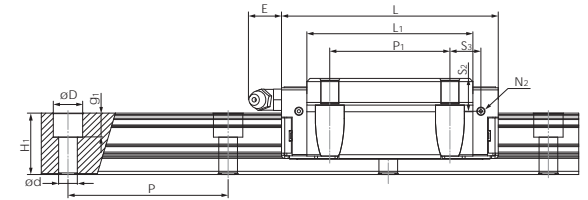
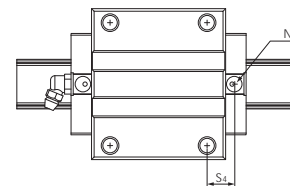
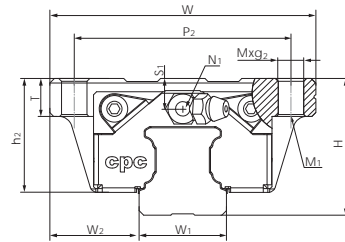
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|-----------|----|------|----|----|----|--------|----|------|------|----|----|----|------|---|---|--------|--------|----|----|---|------|------|------|------|------|-----|-----|-----|-----|------|-----------|
| ERC 25 MS | 36 | 12.5 | 23 | 23 | 60 | 11x7x9 | 48 | 57.4 | 38.4 | 30 | - | 35 | M6x9 | - | 8 | M6x7.5 | M3x6.5 | P4 | 12 | 8 | 12.3 | 22.2 | 23.2 | 18.2 | 27.3 | 350 | 160 | 160 | 315 | 3020 | ERC 25 MS |
| ERC 25 MN | 36 | 12.5 | 23 | 23 | 60 | 11x7x9 | 48 | 81.2 | 62.2 | 30 | 35 | 35 | M6x9 | - | 8 | M6x7.5 | M3x6.5 | P4 | 12 | 8 | 12.3 | 16.6 | 17.6 | 24.8 | 42.5 | 540 | 385 | 385 | 470 | 3020 | ERC 25 MN |
| ERC 25 ML | 36 | 12.5 | 23 | 23 | 60 | 11x7x9 | 48 | 105 | 86 | 30 | 50 | 35 | M6x9 | - | 8 | M6x7.5 | M3x6.5 | P4 | 12 | 8 | 12.3 | 21 | 22 | 30.7 | 57.7 | 735 | 710 | 710 | 610 | 3020 | ERC 25 ML |

1. The model is in design
2. The load capacities is for full-ball type (without ball chain)
3. N₂ = Injecting holes
4. N₃ = O-ring size for lubrication from above
5. N₄: N₄ will be seal before shipment, open it when using product.



The above rating load capacities and static moment are calculated according to ISO14728 standard. The rating life for basic dynamic load rating is defined as the total 100km travel distance that 90% of a group of identical linear guides can be operated individually under the same conditions free from any material damage caused by rolling fatigue. When the standard of 50km travel distance is applied, the above basic dynamic load rating C of ISO 14728 should be multiplied by 1.26 for conversion.

Dimensions Table



HRC FN Series

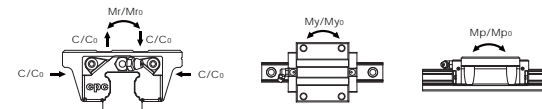
| Model Code | Mounting Dimensions | | Rail Dimensions(mm) | | | | Block Dimensions(mm) | | | | | | | | | | | Block Dimensions(mm) | | | | | | Load Capacities (KN) | | Static Moment (Nm) | | | Weight | | Model Code |
|------------|---------------------|----------------|---------------------|----------------|-----|-------------------|----------------------|-------|----------------|----------------|----------------|----------------|------------------|----------------|----|----------------|----------------|----------------------|-----|----------------|----------------|----------------|----------------|----------------------|----------------|--------------------|-----------------|-----------------|----------|-----------|------------|
| | H | W ₂ | W ₁ | H ₁ | P | Dxdg ₁ | W | L | L ₁ | h ₂ | P ₁ | P ₂ | MxG ₂ | M ₁ | T | N ₁ | N ₂ | N ₃ | E | S ₁ | S ₂ | S ₃ | S ₄ | C | C ₀ | M _{r0} | M _{p0} | M _{y0} | Block(g) | Rail(g/m) | |
| HRC 15 FN | 24 | 16 | 15 | 15 | 60 | 7.5x4.5x5.3 | 47 | 55.5 | 40.3 | 20.7 | 30 | 38 | M5x7 | M4 | 7 | M3x6.5 | M3x6 | P3 | 3.5 | 4.5 | 7.5 | 7.8 | 8.9 | 9.9 | 17.5 | 140 | 105 | 105 | 190 | 1290 | HRC 15 FN |
| HRC 20 FN | 30 | 21.5 | 20 | 20 | 60 | 9.5x6x8.5 | 63 | 69 | 52 | 25 | 40 | 53 | M6x10 | M5 | 10 | M3x7.5 | M3x5.5 | P4 | 10 | 6 | 9.4 | 9 | 9.7 | 17.1 | 30.0 | 325 | 230 | 230 | 396 | 2280 | HRC 20 FN |
| HRC 25 FN | 36 | 23.5 | 23 | 23 | 60 | 11x7x9 | 70 | 81.2 | 62.2 | 30 | 45 | 57 | M8x12 | M6 | 12 | M6x7.5 | M3x6.5 | P4 | 12 | 8 | 12.3 | 11.6 | 12.6 | 24.8 | 42.5 | 540 | 385 | 385 | 626 | 3020 | HRC 25 FN |
| HRC 30 FN | 42 | 31 | 28 | 27 | 80 | 14x9x12 | 90 | 95.5 | 71.5 | 35.2 | 52 | 72 | M10x15 | M8 | 16 | M6x8.5 | M6x5 | P5 | 12 | 7.5 | 12 | 14.8 | 14.5 | 32.8 | 53.7 | 845 | 565 | 565 | 1110 | 4380 | HRC 30 FN |
| HRC 35 FN | 48 | 33 | 34 | 32 | 80 | 14x9x12 | 100 | 111.2 | 86.2 | 40.4 | 62 | 82 | M10x15 | M8 | 16 | M6x10 | M6x7 | P5 | 12 | 8 | 15 | 17.4 | 18.1 | 45.9 | 82.9 | 1700 | 1080 | 1080 | 1550 | 6790 | HRC 35 FN |
| HRC 45 FN | 60 | 37.5 | 45 | 39 | 105 | 20x14x17 | 120 | 135.5 | 102.5 | 50.7 | 80 | 100 | M12x18 | M10 | 19 | PT1/8x12.5 | M6x10.5 | P5 | 14 | 11.1 | 18.1 | 17.3 | 17.3 | 71.3 | 122.1 | 3200 | 1910 | 1910 | 2747 | 10530 | HRC 45 FN |
| HRC 55 FN | 70 | 43.5 | 53 | 46 | 120 | 24x16x18 | 140 | 155.6 | 118.6 | 58 | 95 | 116 | M14x20 | M12 | 20 | PT1/8x14.5 | M6x12.5 | P5 | 14 | 12 | 19.5 | 28.5 | 29.5 | 103.4 | 173.1 | 5030 | 3120 | 3120 | 5260 | 14060 | HRC 55 FN |

HRC FL Series

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|----|------|----|----|-----|-----------|-----|-------|-------|------|----|-----|--------|-----|----|------------|---------|----|----|------|------|------|------|-------|-------|------|------|------|------|-------|-----------|
| HRC 20 FL | 30 | 21.5 | 20 | 20 | 60 | 9.5x6x8.5 | 63 | 87.2 | 70.2 | 25 | 40 | 53 | M6x10 | M5 | 10 | M3x7.5 | M3x5.5 | P4 | 10 | 6 | 9.4 | 18.1 | 18.8 | 20.4 | 38.5 | 415 | 390 | 390 | 504 | 2280 | HRC 20 FL |
| HRC 25 FL | 36 | 23.5 | 23 | 23 | 60 | 11x7x9 | 70 | 105 | 86 | 30 | 45 | 57 | M8x12 | M6 | 12 | M6x7.5 | M3x6.5 | P4 | 12 | 8 | 12.3 | 23.5 | 24.5 | 30.7 | 57.7 | 735 | 710 | 710 | 870 | 3020 | HRC 25 FL |
| HRC 30 FL | 42 | 31 | 28 | 27 | 80 | 14x9x12 | 90 | 118 | 94 | 35.2 | 52 | 72 | M10x15 | M8 | 16 | M6x8.5 | M6x5 | P5 | 12 | 7.5 | 12 | 25.7 | 25.8 | 39.6 | 70.2 | 1105 | 950 | 950 | 1385 | 4380 | HRC 30 FL |
| HRC 35 FL | 48 | 33 | 34 | 32 | 80 | 14x9x12 | 100 | 136.6 | 111.6 | 40.4 | 62 | 82 | M10x15 | M8 | 16 | M6x10 | M6x7 | P5 | 12 | 8 | 15 | 30.1 | 30.8 | 54.7 | 106.5 | 2185 | 1755 | 1755 | 2000 | 6790 | HRC 35 FL |
| HRC 45 FL | 60 | 37.5 | 45 | 39 | 105 | 20x14x17 | 120 | 171.5 | 138.5 | 50.7 | 80 | 100 | M12x18 | M10 | 19 | PT1/8x12.5 | M6x10.5 | P5 | 14 | 11.1 | 18.1 | 35 | 35 | 89.5 | 169.1 | 4430 | 3460 | 3460 | 4280 | 10530 | HRC 45 FL |
| HRC 55 FL | 70 | 43.5 | 53 | 46 | 120 | 24x16x18 | 140 | 202.5 | 165.5 | 58 | 95 | 116 | M14x20 | M12 | 20 | PT1/8x14.5 | M6x12.5 | P5 | 14 | 12 | 19.5 | 42 | 43 | 129.9 | 239.7 | 6965 | 5855 | 5855 | 7480 | 14060 | HRC 55 FL |

1. The model is in design
3. N₂ - Injecting holes
5. N₂ - N₃ will be seal before shipment, open it when using product.

2. The load capacities is for full-ball type (without ball chain)
4. N₃ = O-ring size for lubrication from above



The above rating load capacities and static moment are calculated according to ISO 14728 standard. The rating life for basic dynamic load rating is defined as the total 100km travel distance that 90% of a group of identical linear guides can be operated individually under the same conditions free from any material damage caused by rolling fatigue. When the standard of 50km travel distance is applied, the above basic dynamic load rating C of ISO 14728 should be multiplied by 1.26 for conversion.

Product Overview

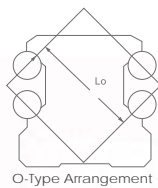
AR/HR/ER Lightweight Linear Guide Product Characteristics

cpc lightweight Ball Type Linear Guide Series adopt the O-type arrangement for the four row ball circulation design featuring high load and high stiffness. The contact angle between the rail and the ball is 45 degrees and realizes the 4 directions equal load capacity.

Among the AR/HR/ER Lightweight Linear Guide, two of the four circulation channels are positioned within the plastic accessories, reducing 10~20% of the block weight.

Stainless steel reinforcement plate has scraper function and the L design fastens the screws onto the top and bottom of the runner block, which reinforces the rigidity of end caps and cladding; further enables the high speed movement of products. AR/HR/ER Lightweight Linear Guide mainly provide the preload class VC and V0 etc. to enhance the tolerance of dimension and convenience of customers' processed components and even reduce the cost of manufacturing work.

- Tolerance of velocity
- Four directions equal load capacity
- Adopting the same rail with ARC/HRC/ERC
- Lightweight block rotary hole design
- Processed accessories match tolerance of dimension
- Available for vertical (downward) and reverse (upward) bolting track rail



All-direction lubrication nozzles and replenish system

Standard equipped stainless steel reinforcement plate has scraper function

Ecology lubrication design: Ecology System Long-term low maintenance with minimal lubrication

- Available for special surface treatment
- Excellent dynamic performance: Reach $V_{max} > 5m/s$ Reach $a_{max} > 300m/s^2$
- Dust protection of double wipe blade design in the end seal; have Standard type and reinforcement type

Technical information

Accuracy

| | Accuracy grades (μm) | Table of accuracy | |
|---|-----------------------------|-------------------|-----------|
| | | H | N |
| Tolerance of dimension height H | H | ± 40 | ± 100 |
| Variation of height for different runner Block on the same position of Rail | ΔH | 15 | 30 |
| Tolerance of dimension width W_2 | W_2 | ± 20 | ± 40 |
| Variation of width for different runner Block on the same position of Rail | ΔW_2 | 15 | 30 |

Please refer to P13 : Accuracy of the running parallelism graph

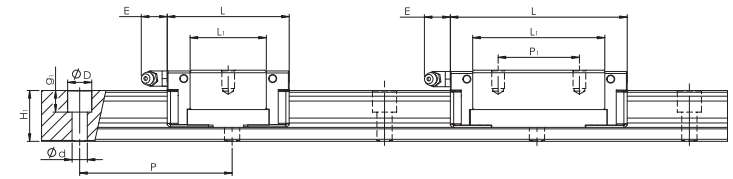
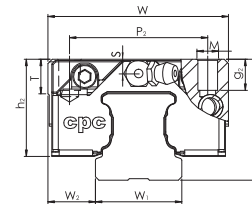
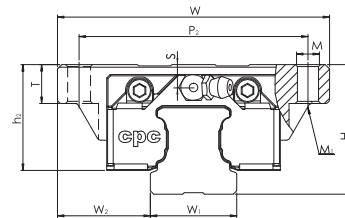
Preload and clearance

| AR/HR/ER | | | | | | |
|----------|---------------|---------------|-----------------------|--------|--------|---|
| Class | Description | Preload Value | Clearance (μm) | | | Application |
| | | | 15 | 20 | 25 | |
| VC | Clearance | 0 | +10~+2 | +10~+2 | +11~+3 | Smooth motion, low friction |
| V0 | Light preload | 0.02C | +2~-4 | +2~-5 | +3~-6 | For precision situations, smooth motion |

Ordering information

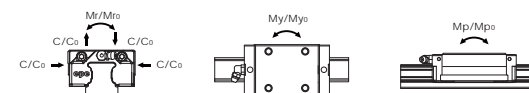
| | | | | | | | | | | | | | | | |
|----|---|----|---|---|---|---|---|----|---|--------|-----|-----|----|---|--|
| AR | U | 15 | M | N | B | 2 | Z | V0 | H | -1480L | -20 | -20 | II | /J | |
| | | | | | | | | | | | | | | Customization code (Please refer to P14) | |
| | | | | | | | | | | | | | | Number of rails on the same moving axis | |
| | | | | | | | | | | | | | | End hole pitch (mm) | |
| | | | | | | | | | | | | | | Starting hole pitch (mm) | |
| | | | | | | | | | | | | | | Rail length (mm) | |
| | | | | | | | | | | | | | | Accuracy grade : H, N | |
| | | | | | | | | | | | | | | Preload class : VC, V0 | |
| | | | | | | | | | | | | | | Z: with lubrication storage pad | |
| | | | | | | | | | | | | | | Block quantity | |
| | | | | | | | | | | | | | | Seal type : B: Low friction S: Standard | |
| | | | | | | | | | | | | | | Block length : L: long N: standard S: short | |
| | | | | | | | | | | | | | | Block width : M: standard F: flanged | |
| | | | | | | | | | | | | | | Block type : 15, 20, 25 | |
| | | | | | | | | | | | | | | U: rail (tapped from the bottom) | |
| | | | | | | | | | | | | | | Product type : AR: automation series HR/ER: heavy load series | |

Dimensions Table



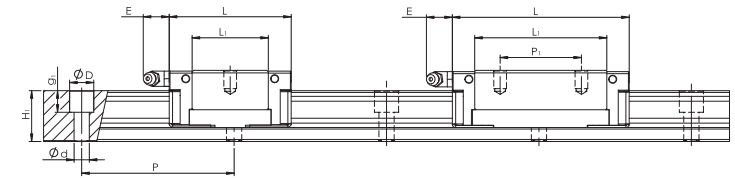
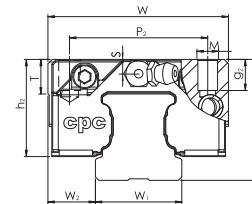
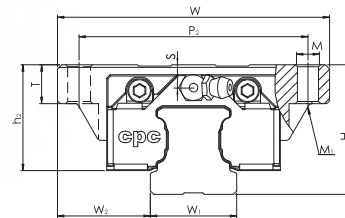
AR Series

| Model Code | Mounting Dimensions | | Rail Dimensions(mm) | | | Dxdxg ₁ | Block Dimensions(mm) | | | | | | | Block Dimensions(mm) | | Load Capacities (KN) | | Static Moment (Nm) | | | Weight | | Model Code | | |
|------------|---------------------|----------------|---------------------|----------------|----|--------------------|----------------------|------|----------------|----------------|----------------|----------------|-----|----------------------|----------------|----------------------|----|--------------------|----------------|-----------------|-----------------|-----------------|------------|----------|-----------|
| | H | W ₂ | W ₁ | H ₁ | P | | W | L | L ₁ | h ₂ | P ₁ | P ₂ | E | M x g ₂ | M ₁ | S | T | C | C ₀ | M _{r0} | M _{p0} | M _{y0} | | Block(g) | Rail(g/m) |
| AR 15 MS | 24 | 9.5 | 15 | 15 | 60 | 7.5x4.5x5.3 | 34 | 40.8 | 24.2 | 20.1 | - | 26 | 4.5 | M4x7 | - | 4 | 6 | 6.40 | 10.8 | 80 | 40 | 40 | 95 | 1290 | AR 15 MS |
| AR 15 MN | 24 | 9.5 | 15 | 15 | 60 | | 34 | 56.1 | 39.5 | 20.1 | 26 | 26 | 4.5 | M4x7 | - | 4 | 6 | 9.0 | 17.5 | 140 | 100 | 100 | 140 | | AR 15 MN |
| AR 15 FS | 24 | 18.5 | 15 | 15 | 60 | | 52 | 40.8 | 24.2 | 20.1 | - | 41 | 4.5 | M5x7 | M4 | 4 | 7 | 6.4 | 10.8 | 80 | 40 | 40 | 120 | | AR 15 FS |
| AR 15 FN | 24 | 18.5 | 15 | 15 | 60 | | 52 | 56.1 | 39.5 | 20.1 | 26 | 41 | 4.5 | M5x7 | M4 | 4 | 7 | 9.0 | 17.5 | 140 | 100 | 100 | 180 | | AR 15 FN |
| AR 20 MS | 28 | 11 | 20 | 20 | 60 | 9.5x6x8.5 | 42 | 48.2 | 30 | 22.5 | - | 32 | 12 | M5x7 | - | 3.5 | 8 | 10.9 | 16.3 | 170 | 80 | 80 | 148 | 2280 | AR 20 MS |
| AR 20 MN | 28 | 11 | 20 | 20 | 60 | | 42 | 70.2 | 52 | 22.5 | 32 | 32 | 12 | M5x7 | - | 3.5 | 8 | 15.6 | 29.8 | 310 | 220 | 220 | 260 | | AR 20 MN |
| AR 20 FS | 28 | 19.5 | 20 | 20 | 60 | | 59 | 48.2 | 30 | 22.5 | - | 49 | 12 | M6x9 | M5 | 3.5 | 9 | 10.9 | 16.3 | 170 | 80 | 80 | 185 | | AR 20 FS |
| AR 20 FN | 28 | 19.5 | 20 | 20 | 60 | | 59 | 70.2 | 52 | 22.5 | 32 | 49 | 12 | M6x9 | M5 | 3.5 | 9 | 15.6 | 29.8 | 310 | 220 | 220 | 299 | | AR 20 FN |
| AR 25 MS | 33 | 12.5 | 23 | 23 | 60 | 11x7x9 | 48 | 57.2 | 37 | 26.6 | - | 35 | 12 | M6x9 | - | 5 | 8 | 12.3 | 21.2 | 220 | 110 | 110 | 285 | 3020 | AR 25 MS |
| AR 25 MN | 33 | 12.5 | 23 | 23 | 60 | | 48 | 80.2 | 60 | 26.6 | 35 | 35 | 12 | M6x9 | - | 5 | 8 | 18.8 | 36.4 | 410 | 300 | 300 | 380 | | AR 25 MN |
| AR 25 FS | 33 | 25 | 23 | 23 | 60 | | 73 | 57.2 | 37 | 26.6 | - | 60 | 12 | M8x10 | M6 | 5 | 10 | 12.3 | 21.2 | 220 | 110 | 110 | 325 | | AR 25 FS |
| AR 25 FN | 33 | 25 | 23 | 23 | 60 | | 73 | 80.2 | 60 | 26.6 | 35 | 60 | 12 | M8x10 | M6 | 5 | 10 | 18.8 | 36.4 | 410 | 300 | 300 | 440 | | AR 25 FN |



The above rating load capacities and static moment are calculated according to ISO14728 standard. The rating life for basic dynamic load rating is defined as the total 100km travel distance that 90% of a group of identical linear guides can be operated individually under the same conditions free from any material damage caused by rolling fatigue. When the standard of 50km travel distance is applied, the above basic dynamic load rating C of ISO 14728 should be multiplied by 1.26 for conversion.

Dimensions Table

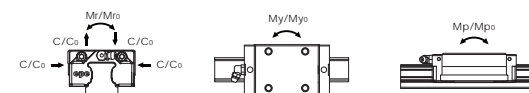


HR Series

| Model Code | Mounting Dimensions | | Rail Dimensions(mm) | | | | Block Dimensions(mm) | | | | | | | Block Dimensions(mm) | | Load Capacities (kN) | | Static Moment (Nm) | | | Weight | | Model Code | | |
|------------|---------------------|----------------|---------------------|----------------|----|--|----------------------|-------|----------------|----------------|----------------|----------------|-----|----------------------|----------------|----------------------|----|--------------------|----------------|-----------------|-----------------|-----------------|------------|----------|-----------|
| | H | W ₂ | W ₁ | H ₁ | P | D _x d _x g ₁ | W | L | L ₁ | h ₂ | P ₁ | P ₂ | E | M x g ₂ | M ₁ | S | T | C | C ₀ | M _{r0} | M _{p0} | M _{y0} | | Block(g) | Rail(g/m) |
| HR 15 FN | 24 | 16 | 15 | 15 | 60 | 7.5x4.5x5.3 | 47 | 56.1 | 39.5 | 20.1 | 30 | 38 | 4.5 | M5x7 | - | 4 | 7 | 9.0 | 17.5 | 140 | 100 | 100 | 180 | 1290 | HR 15 FN |
| HR 20 MN | 30 | 12 | 20 | 20 | 60 | 9.5x6x8.5 | 44 | 70.2 | 52 | 24.5 | 36 | 32 | 12 | M5x8.5 | - | 5.5 | 10 | 15.6 | 29.8 | 310 | 220 | 220 | 310 | 2280 | HR 20 MN |
| HR 20 ML | 30 | 12 | 20 | 20 | 60 | | 44 | 90.2 | 72 | 24.5 | 50 | 32 | 12 | M5x8.5 | - | 5.5 | 10 | 20.8 | 43.3 | 430 | 420 | 420 | 383 | | HR 20 ML |
| HR 20 FN | 30 | 21.5 | 20 | 20 | 60 | | 63 | 70.2 | 52 | 24.5 | 40 | 53 | 12 | M6x9 | M5 | 5.5 | 9 | 15.6 | 29.8 | 310 | 220 | 220 | 385 | | HR 20 FN |
| HR 20 FL | 30 | 21.5 | 20 | 20 | 60 | | 63 | 90.2 | 72 | 24.5 | 40 | 53 | 12 | M6x9 | M5 | 5.5 | 9 | 20.8 | 43.3 | 430 | 420 | 420 | 496 | | HR 20 FL |
| HR 25 MN | 40 | 12.5 | 23 | 23 | 60 | | 11x7x9 | 48 | 80.2 | 60 | 33.6 | 35 | 35 | 12 | M6x9 | - | 12 | 12 | 18.8 | 36.4 | 410 | 300 | 300 | | 530 |
| HR 25 ML | 40 | 12.5 | 23 | 23 | 60 | 48 | | 100.2 | 80 | 33.6 | 50 | 35 | 12 | M6x9 | - | 12 | 12 | 23.4 | 48.5 | 560 | 520 | 520 | 665 | HR 25 ML | |
| HR 25 FN | 36 | 23.5 | 23 | 23 | 60 | 70 | | 80.2 | 60 | 29.6 | 45 | 57 | 12 | M8x10 | M6 | 8 | 10 | 18.8 | 36.4 | 410 | 300 | 300 | 470 | HR 25 FN | |
| HR 25 FL | 36 | 23.5 | 23 | 23 | 60 | 70 | | 100.2 | 80 | 29.6 | 45 | 57 | 12 | M8x10 | M6 | 8 | 10 | 23.4 | 48.5 | 560 | 520 | 520 | 585 | HR 25 FL | |

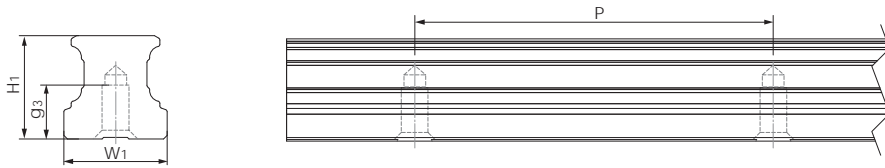
ER Series

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------|----|------|----|----|----|--------|----|-------|----|------|----|----|----|------|---|---|---|------|------|-----|-----|-----|-----|------|----------|
| ER 25 MN | 36 | 12.5 | 23 | 23 | 60 | 11x7x9 | 48 | 80.2 | 60 | 29.6 | 35 | 35 | 12 | M6x9 | - | 8 | 8 | 18.8 | 36.4 | 410 | 300 | 300 | 432 | 3020 | ER 25 MN |
| ER 25 ML | 36 | 12.5 | 23 | 23 | 60 | | 48 | 100.2 | 80 | 29.6 | 50 | 35 | 12 | M6x9 | - | 8 | 8 | 23.4 | 48.5 | 560 | 520 | 520 | 550 | | ER 25 ML |



The above rating load capacities and static moment are calculated according to ISO14728 standard. The rating life for basic dynamic load rating is defined as the total 100km travel distance that 90% of a group of identical linear guides can be operated individually under the same conditions free from any material damage caused by rolling fatigue. When the standard of 50km travel distance is applied, the above basic dynamic load rating C of ISO 14728 should be multiplied by 1.26 for conversion.

Dimensions Table



Rail (tapped from the bottom)

| Model Code | W1 | H1 | P | Mxg ₃ | Lmax | Rail(g/m) |
|------------|----|----|-----|------------------|------|-----------|
| ARU 15 | 15 | 15 | 60 | M5x8 | 4000 | 1290 |
| ARU 20 | 20 | 20 | 60 | M6x10 | 4000 | 2280 |
| ARU 25 | 23 | 23 | 60 | M6x12 | 4000 | 3020 |
| ARU 30 | 28 | 27 | 80 | M8x15 | 4000 | 4380 |
| ARU 35 | 34 | 32 | 80 | M8x15 | 4000 | 6790 |
| ARU 45 | 45 | 39 | 105 | M12x19 | 4000 | 10530 |
| * ARU 55 | 53 | 46 | 120 | M14x22 | 4000 | 14060 |

* The model is in design

Nipple Option

| Type | | Nipple size | | Grease nipple | Optional | | | | |
|-------|-------|-------------|-------|---------------|----------|------------------|---------------|----------------|---------------|
| | | Section | Side | | Standard | Straight adapter | Tube diameter | L-Type adapter | Tube diameter |
| ARC15 | HRC15 | - | M3 | M3 | A-M3 | OA-M3-D4 | - | OB-M3-M6 | - |
| ARC20 | HRC20 | - | M3 | M3 | B-M3 | OA-M3-D4 | - | OB-M3-M6 | - |
| ARC25 | HRC25 | ERC25 | M6 | M3 | B-M6 | OA-M6-M8 | Ø4 | OB-M6-M8 | Ø4 |
| ARC30 | HRC30 | - | M6 | M6 | B-M6 | OA-M6-M8 | Ø4 | OB-M6-M8 | Ø4 |
| | | | | | | OA-M6-PT1/8 | - | OB-M6-PT1/8 | - |
| | | | | | | OA-M6-G1/8 | Ø6 | OB-M6-M8 | - |
| ARC35 | HRC35 | - | M6 | M6 | B-M6 | OA-M6-PT1/8 | - | OB-M6-PT1/8 | - |
| | | | | | | OA-M6-G1/8 | Ø6 | OB-M6-PT1/8 | - |
| | | | | | | OA-PT1/8-M8 | Ø4 | OB-PT1/8-M8 | Ø4 |
| ARC45 | HRC45 | - | PT1/8 | M6 | B-PT1/8 | OA-PT1/8-PT1/8 | - | OB-PT1/8-PT1/8 | - |
| | | | | | | OA-PT1/8-G1/8 | Ø6 | OB-PT1/8-PT1/8 | - |
| | | | | | | OA-PT1/8-M8 | Ø4 | OB-PT1/8-M8 | Ø4 |
| ARC55 | HRC55 | - | PT1/8 | M6 | B-PT1/8 | OA-PT1/8-PT1/8 | - | OB-PT1/8-M8 | Ø4 |
| | | | | | | OA-PT1/8-G1/8 | Ø6 | OB-PT1/8-PT1/8 | - |

Grease nipple/ Oil piping joint

| A - M3 | B - M3 | B - M6 | B - PT1/8 |
|---|---|---|---|
| | | | |
| OB - M3 - M6 | OA - M3 - D4 | OA - M6 - M8 | OA - M6 - PT1/8 |
| | | | |
| OA - M6 - G1/8 | OB - M6 - M8 | OB - M6 - PT1/8 | OA - PT1/8 - M8 |
| | | | |
| * Ø 6Oil holer grease injector is available | * Ø 4Oil holer grease injector is available | * Ø 4Oil holer grease injector is available | * Ø 4Oil holer grease injector is available |
| OA - PT1/8 - PT1/8 | OA - PT1/8 - G1/8 | OB - PT1/8 - M8 | OB - PT1/8 - PT1/8 |
| | | | |
| | Ø 6Oil holer grease injector is available | Ø 4Oil holer grease injector is available | |

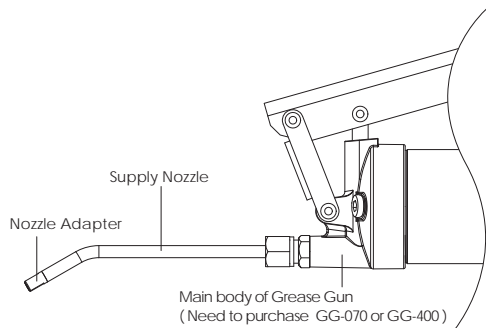
Lubrication Kit and Grease Gun

cpc Lubrication Unit is a supply nozzle with 3 different sizes of nozzle adaptors. These nozzle adaptors are suitable for different size of grease nipple on different size of linear blocks.

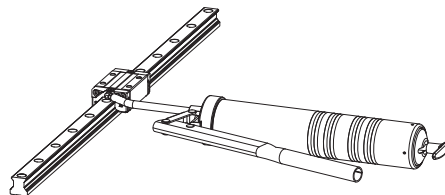


GP-PT1/8-01 Lubrication Kit

The Lubrication Kit is with a supply nozzle (GT-1/8-M5) and three kinds of different nozzle adaptors (GH-M5-MR, GH-M5-06, GH-M5-08). The supply nozzle can be mounted on the main body of common manual or pneumatic grease gun with PT1/8 tapped connector available on the market.



Greasing Diagram



Nipple Option

| Type | Nipple Size | | Nipple Type | | |
|-------|-------------|-------|-------------|----|---------|
| | Section | Side | Standard | | |
| ARC15 | HRC15 | - | M3 | M3 | A-M3 |
| ARC20 | HRC20 | - | M3 | M3 | B-M3 |
| ARC25 | HRC25 | ERC25 | M6 | M3 | B-M6 |
| ARC30 | HRC30 | - | M6 | M6 | B-M6 |
| ARC35 | HRC35 | - | M6 | M6 | B-M6 |
| ARC45 | HRC45 | - | PT1/8 | M6 | B-PT1/8 |
| ARC55 | HRC55 | - | PT1/8 | M6 | B-PT1/8 |

Nozzle Adapter

Unit: mm

| Type | Dimension | Grease Nipple | |
|----------|-----------|---|--|
| GH-M5-MR | | MR series Miniature linear guide size MR-15M \ MR-15W MR-12M \ MR-12W | |
| GH-M5-06 | | A-M3 A-M3X | |
| | | B-M3 B-M3X | |
| GH-M5-08 | | B-M6 B-M6X | |
| | | B-PT1/8 B-PT1/8X | |

Main body of Grease Gun

Option for Main body of Grease Gun: GG-070 for 70g volume grease pack and GG-400 for 400g volume grease pack.

Unit: mm

| Type | Dimension | Feature |
|--------|-----------|---|
| GG-070 | | <ol style="list-style-type: none"> 1. Pressure: 27Mpa 2. Output Volume: 0.5-0.7 c.c/stroke 3. Grease: Suitable for 70g volume grease pack or bulk loading |
| GG-400 | | <ol style="list-style-type: none"> 1. Pressure: 62Mpa 2. Output Volume: 1.0-1.2 c.c/stroke 3. Grease: Suitable for 400g volume grease pack or bulk loading |

Supply Nozzle

| Type | Dimension |
|-------------|-----------|
| GT-PT1/8-M5 | |

cpc AR/HR Z Series Lubrication Storage Pad Testing Report

A linear guide is a category of rolling guidance, by using unlimited re-circulating stainless steel balls operate between the raceways of the rail and the block, result in the moving table achieving high precision and low friction linear movement. If the linear guide do not have sufficient lubrication, rolling friction will increase, cause wear and shortened linear guide life span in long term operation.

cpc has added and embedded PU lubricant storage pads to lengthen linear guide operational life; the pads directly contact and lubricate the rolling balls. This design supplies sufficient lubrication even during short-stroke operations.

cpc's design, due to the embedded pad's absorption and retention capabilities, results in a product that features a long operational life and long-term lubrication.

The following is the cpc in-house life test results:

AR15 Lubrication Storage Pad Testing Data

Testing products : AR15-Blocks with Lubrication Storage Pads 8pcs,
AR15-Rail-N-class-L1500mm 4pcs

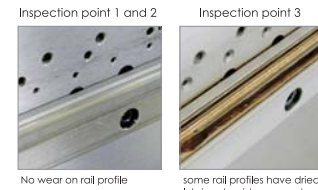
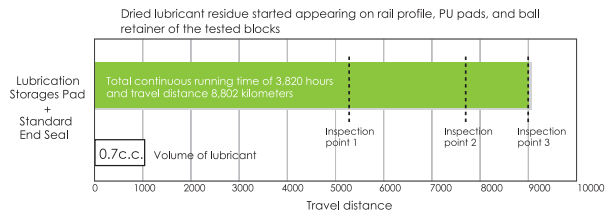
| Testing condition | |
|------------------------------------|---|
| Rating load capacities(each Block) | 1.8KN(C=9KN - C0=17.5KN) |
| Stroke | 0.96m |
| Max running speed | 1m/s |
| Lubricant | DAPHNE SUPER MULTI 68 (Viscosity64.32 CST 40OC) |
| Lubrication period | No lubrication added during testing period |

■ Testing equipment



■ Testing result

■ Testing result of inspection point



Inspection point 1 and 2 : Lubrication result



- Upward Lubrication Storage Pad in good condition
- Lubricant supply in good condition
- Running profile of rail no wear out
- Downward Lubrication Storage Pad in good condition
- Lubricant supply in good condition

Inspection point 3 : Lubrication result



- Dried lubricant residue started appearing broken on upward Lubrication Storage pad of the tested blocks
- Dried lubricant residue started appearing broken on downward Lubrication Storage pad of the tested blocks

Plastic parts and end seal in good condition



Plastic parts in good condition

End seal in good condition

■ Test Summary

Total continuous running time of 3820 hours and travel distance 8802 kilometers.
Out of eight test blocks, dried lubricant residue appeared on 2 blocks and 1 rail. Dried lubricant residue is indicative of a need for re-lubrication.
The test results indicated that the lubrication pad design effectively extends re-lubrication requirement and thus lengthens linear operational life.