

## CG LINEAR GUIDEWAYS

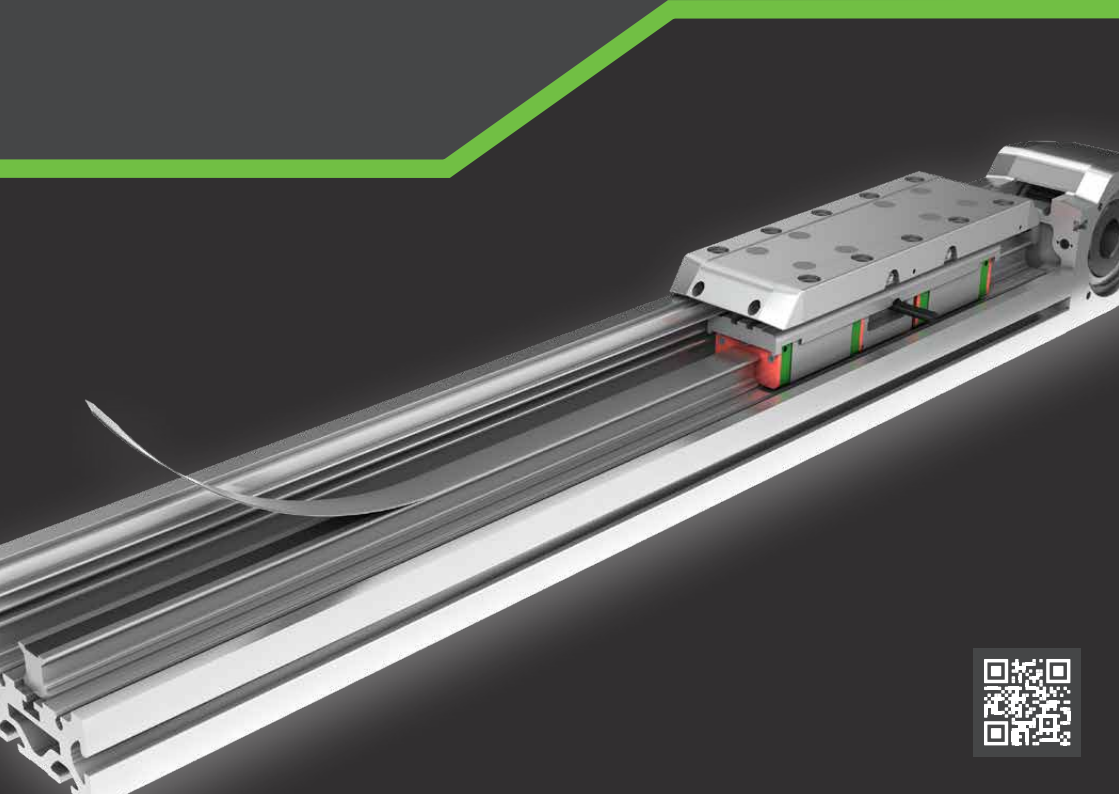
Standard series in O-arrangement for all revised mounting surfaces

The CG series in O-arrangement with four ball tracks is designed for high loads and offers excellent rigidity. With the options we offer, the

high load torque and rigid linear guideways from the CG series can be customised to suit your individual application requirements.

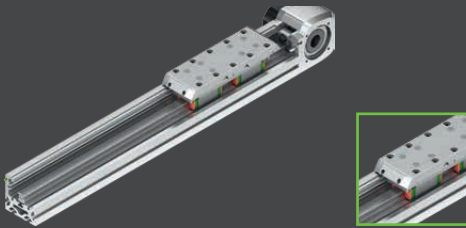
### Areas of application for the CG series:

- Assembly and feeding machines
- Food industry
- Packaging machines
- Machine tools
- Medical technology
- Optical scanners
- Textile industry
- Semiconductor industry
- Sorting machines
- Automotive industry



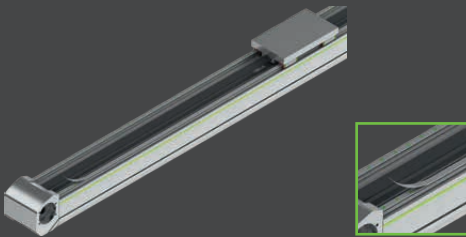
## ADVANTAGES OF THE CG SERIES

Essentially, our CG linear guideways are characterized by higher load torque rigidity compared to conventional linear guideways. This advantage is particularly important for applications with single guideways. Due to the special O-arrangement of the rolling elements, the CG profile rail allows a cover strip to be mounted. Thus, the



### High torque rigidity

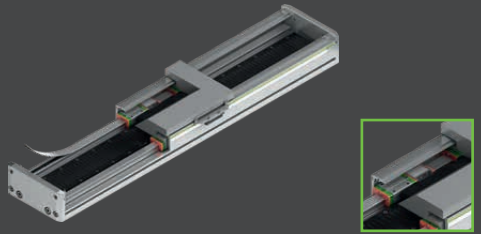
First choice for single-axis applications. The O-arrangement ensures a high torque load capacity in the  $M_x$  direction.



### Optional cover strip

Reduces dirt ingress and wear of the sealing lip to a minimum. Quick and easy installation of the cover strip, especially with lengthy applications. Block remains unchanged, with or without cover strip.

mounting holes are permanently sealed, quickly and easily. An optional additional integrated distance measuring system enables the exact position of the block to be determined and turns the mechanical linear guide into an intelligent guide element in no time at all.



### Distance measuring system PGC

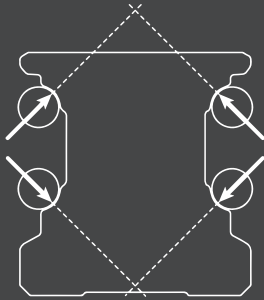
Compactly integrated and easy to install. The encoder is attached to the block and the magnetic scale is inserted into the profile rail.

### FURTHER ADVANTAGES:

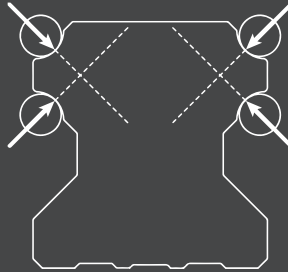
- Lubrication hole on the side open as standard and closed with allen set crew. No drilling required.
- Scraper already included in the standard version. End seal and recirculation system are protected against mechanical damage.
- Optimised lubrication concept, especially suitable for short-stroke applications.
- Large accessory package available for customisation.

# DIFFERENCES CG VS. HG

## CG in O arrangement

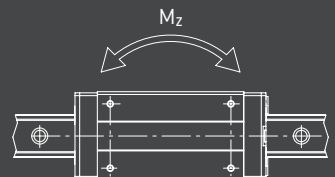
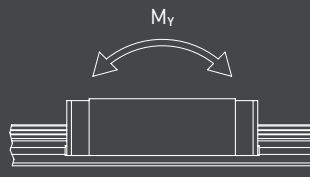


## HG in X arrangement



## Comparison of load ratings/torques:

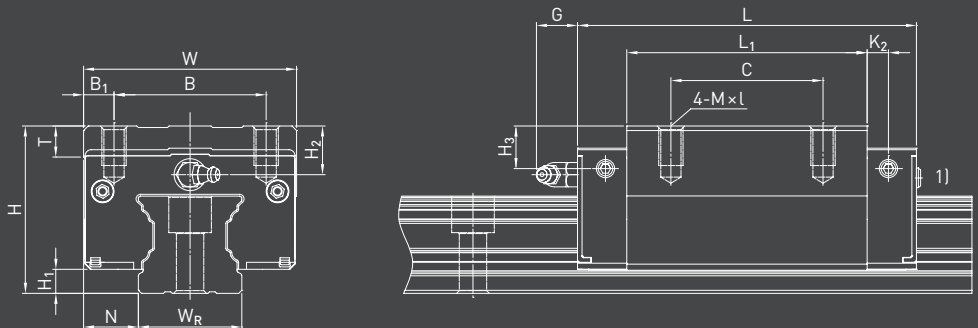
HG						CG						CG vs. HG				
Type	Load rating	Load rating	Torque	Torque	Torque	Type	Load rating	Load rating	Torque	Torque	Torque	Load rating	Load rating	Torque	Torque	Torque
	$C_{dyn}$	$C_0$	$M_{x0}$	$M_{T0}$	$M_{Z0}$		$C_{dyn}$	$C_0$	$M_{x0}$	$M_{T0}$	$M_{Z0}$	$C_{dyn}$	$C_0$	$M_{x0}$	$M_{T0}$	$M_{Z0}$
	[N]	[N]	[Nm]	[Nm]	[Nm]		[N]	[N]	[Nm]	[Nm]	[Nm]	[kN]	[kN]	[Nm]	[Nm]	[Nm]
HG15CA	14.700	23.470	120	140	140	CG15CA	14.700	23.470	190	140	140	0%	0%	37%	0%	0%
HG20CA	27.100	36.680	270	280	280	CG20CA	27.100	36.680	370	280	280	0%	0%	27%	0%	0%
HG20HA	32.700	47.960	350	480	480	CG20HA	32.700	47.960	480	480	480	0%	0%	27%	0%	0%
HG25CA	34.900	52.820	420	490	490	CG25CA	34.900	52.820	600	490	490	0%	0%	30%	0%	0%
HG25HA	42.200	69.070	560	730	730	CG25HA	42.200	69.070	740	730	730	0%	0%	24%	0%	0%
HG30CA	48.500	71.870	660	700	700	CG30CA	48.500	71.870	950	700	700	0%	0%	31%	0%	0%
HG30HA	58.600	93.990	880	1.230	1.230	CG30HA	58.600	93.990	1.350	1.230	1.230	0%	0%	35%	0%	0%
HG35CA	64.600	93.990	1.160	1.090	1.090	CG35CA	64.600	93.990	1.730	1.090	1.090	0%	0%	33%	0%	0%
HG35HA	77.900	122.770	1.540	2.020	2.020	CG35HA	77.900	122.770	2.460	2.020	2.020	0%	0%	37%	0%	0%
HG45CA	103.800	146.710	1.980	2.350	2.350	CG45CA	103.800	146.710	3.560	2.350	2.350	0%	0%	44%	0%	0%
HG45HA	125.300	191.850	2.630	4.450	4.450	CG45HA	125.300	191.850	5.050	4.450	4.450	0%	0%	48%	0%	0%



# DIFFERENCES CG VS. HG

## Comparison of block dimensions:

HGH								CGH						CG vs. HG								
Type	H	H <sub>1</sub>	N	W	L	G	Grease nipple connection	Type	H	H <sub>1</sub>	N	W	L	G	Grease nipple connection	H	H <sub>1</sub>	N	W	L	G	Same grease nipple connection
HG_15C	28	4.3	9.5	34	61.4	5.3	M4	CG_15C	28	4.1	9.5	34	58.2	6	M3	0	-0.2	0	0	-3.2	0.7	no
HG_20C	30	4.6	12	44	77.5	12	M6 × 0.75	CG_20C	30	4.6	12	44	74.9	6	M3	0	0	0	0	-2.6	-6	no
HG_20H	30	4.6	12	44	92.2	12	M6 × 0.75	CG_20H	30	4.6	12	44	90.9	12	M3	0	0	0	0	-1.3	0	no
HG_25C	40	5.5	12.5	48	84	12	M6 × 0.75	CG_25C	40	6.1	12.5	48	84	12	M6 × 0.75	0	0.6	0	0	0	0	yes
HG_25H	40	5.5	12.5	48	104.6	12	M6 × 0.75	CG_25H	40	6.1	12.5	48	101.4	12	M6 × 0.75	0	0.6	0	0	-3.2	0	yes
HG_30C	45	6	16	60	97.4	12	M6 × 0.75	CG_30C	45	7	16	60	97.4	12	M6 × 0.75	0	1	0	0	0	0	yes
HG_30H	45	6	16	60	120.4	12	M6 × 0.75	CG_30H	45	7	16	60	119.9	12	M6 × 0.75	0	1	0	0	-0.5	0	yes
HG_35C	55	7.5	18	70	112.4	12	M6 × 0.75	CG_35C	55	7.6	18	70	111.4	12	M6 × 0.75	0	0.1	0	0	-1	0	yes
HG_35H	55	7.5	18	70	138.2	12	M6 × 0.75	CG_35H	55	7.6	18	70	135.8	12	M6 × 0.75	0	0.1	0	0	-2.4	0	yes
HG_45C	70	9.5	20.5	86	139.4	12.9	1/8 PT	CG_45C	70	9.7	20.5	86	137.6	12.9	M6 × 0.75	0	0.2	0	0	-1.8	0	no
HG_45H	70	9.5	20.5	86	171.2	12.9	1/8 PT	CG_45H	70	9.7	20.5	86	174	12.9	M6 × 0.75	0	0.2	0	0	2.8	0	no



## APPLICATIONS AND DOWNLOADS

CAD configurator

Sizing tool

Webshop



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