

# Internal measurement

Application range up to 60 mm



G002



L102



L210



L330



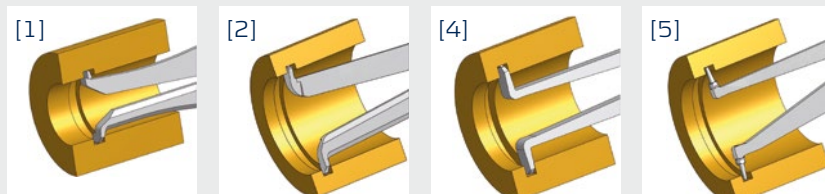
H105



H210

Type	Measuring span Mes [mm]	Measuring range Meb [mm]	Range of indication AzB [mm]	Numerical interval Zw Scale interval Skw [mm]	Permissible errors G [mm]	Repeatability limit r [mm]	Measuring force $F_{min}$ [N]	Measuring force $F_{max}$ [N]	Weight [g]	Protection class	Measuring contact movable Hb [mm]	Measuring contact fixed Hf [mm]	Type of measuring contact [mm]	Groove depth A max. [mm]	Groove width B min. [mm]	Measuring depth L max. [mm]	Picture	Electronic E Mechanical M	Wooden box
G002	10	2.5–12.5	2,4–12,8	0,001	0.010	0.005	0.8	1.3	160	IP67	0.9	0.9	Chisel R 0.12	0.7	0.6	12	[1]	E	1732-38
G005	15	5–20	4,7–20,5	0,001	0.010	0.005	0.8	1.3	160	IP67	2.2	2.2	Ball Ø 0.6	2.2	0.8	44	[2]	E	1732-38
G010	15	10–25	9,7–25,5	0,001	0.010	0.005	0.8	1.3	160	IP67	4.4	4.4	Ball Ø 1	4	1.5	46	[2]	E	1732-38
L102	10	2.5–12.5	2,4–12,8	0,005	0.015	0.005	0.8	1.2	245	IP67	0.9	0.9	Chisel R 0.12	0.7	0.5	12	[1]	E	1732-65
H102	10	2.5–12.5	2,4–12,8	0,005	0.015	0.005	0.8	1.2	155	IP65	0.9	0.9	Chisel R 0.12	0.7	0.5	12	[1]	M	1732-45
L105	10	5–15	4,7–15,3	0,005	0.015	0.005	0.8	1.2	250	IP67	2.5	2.5	Ball Ø 0.6	2.3	0.8	35	[2]	E	1732-65
H105	10	5–15	4,7–15,3	0,005	0.015	0.005	0.8	1.2	160	IP65	2.5	2.5	Ball Ø 0.6	2.3	0.8	35	[2]	M	1732-45
L210	20	10–30	9,5–30,5	0,01	0.03	0.01	1.1	1.6	270	IP67	5.3	5.3	Ball Ø 1	5.2	1.5	85	[2]	E	1732-65
H210	20	10–30	9,5–30,5	0,01	0.03	0.01	1.1	1.6	180	IP65	5.3	5.3	Ball Ø 1	5.2	1.5	85	[2]	M	1732-45
L220	20	20–40	19,5–40,5	0,01	0.03	0.01	1.1	1.6	270	IP67	7.3	7.3	Ball Ø 1	7.0	1.5	85	[4]	E	1732-65
H220	20	20–40	19,5–40,5	0,01	0.03	0.01	1.1	1.6	180	IP65	7.3	7.3	Ball Ø 1	7.0	1.5	85	[4]	M	1732-45
L230	20	30–50	29,5–50,5	0,01	0.03	0.01	1.1	1.6	275	IP67	7.3	7.3	Ball Ø 1	7.0	1.5	85	[4]	E	1732-65
H230	20	30–50	29,5–50,5	0,01	0.03	0.01	1.1	1.6	185	IP65	7.3	7.3	Ball Ø 1	7.0	1.5	85	[4]	M	1732-45
L240	20	40–60	39,5–60,5	0,01	0.03	0.01	1.1	1.6	285	IP67	8.5	8.5	Ball Ø 1	8.3	1.5	85	[5]	E	1732-65
H240	20	40–60	39,5–60,5	0,01	0.03	0.01	1.1	1.6	195	IP65	8.5	8.5	Ball Ø 1	8.3	1.5	85	[5]	M	1732-45
L313	30	13–43	12,8–43,5	0,01	0.04	0.02	1.2	1.7	360	IP67	5.9	5.9	Ball Ø 1.3	5.7	1.6	127	[2]	E	1732-71
L330	30	30–60	29,5–60,5	0,01	0.04	0.02	1.2	1.7	370	IP67	6.5	6.5	Ball Ø 1.5	6.2	1.8	132	[5]	E	1732-71

## Measuring contacts



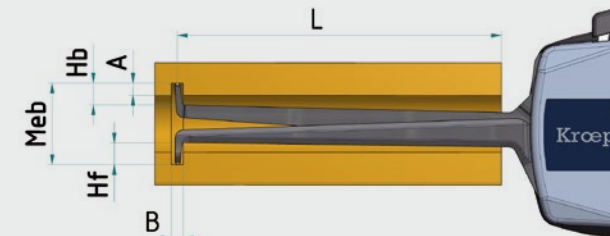
Chisel R 0.12 mm

Ball Ø 0.6 mm  
Ball Ø 1.0 mm  
Ball Ø 1.3 mm

Ball Ø 1.0 mm

Ball Ø 1.0 mm  
Ball Ø 1.5 mm  
Ball Ø 2.0 mm

## Measuring capacity



Meb Measuring range

A Groove depth

B Groove width

Hb Measuring contact movable

Hf Measuring contact fixed

L Measuring depth

# Internal measurement

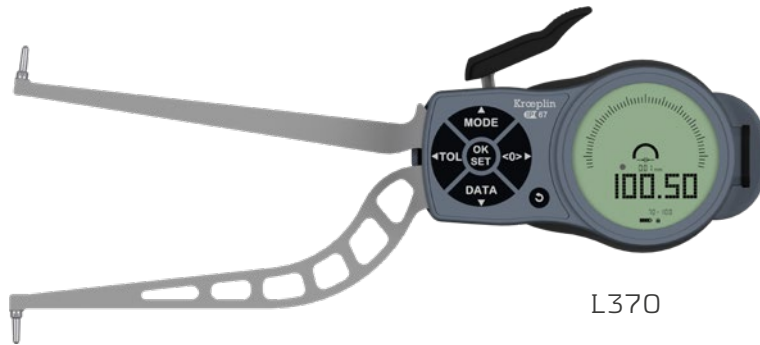
Application range up to 120 mm



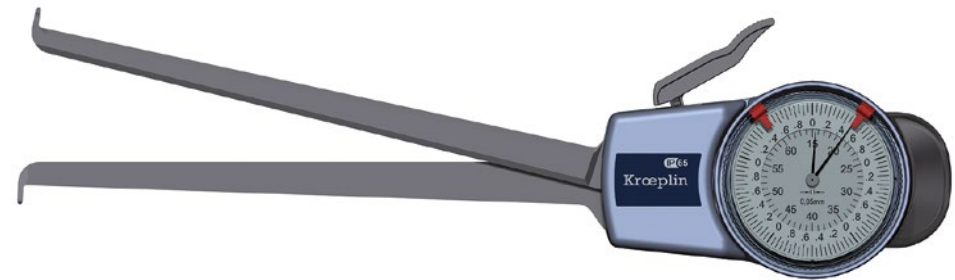
L240



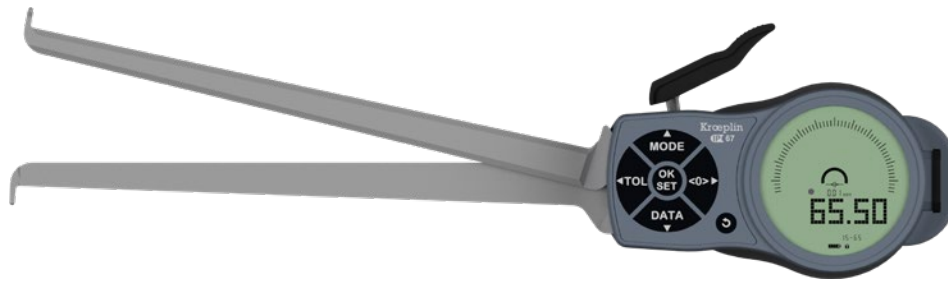
H240



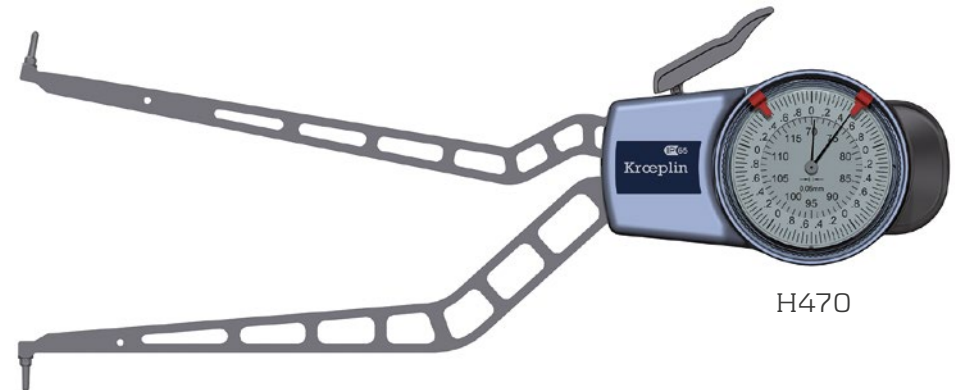
L370



H415



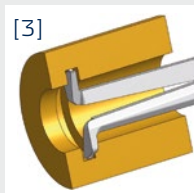
L415



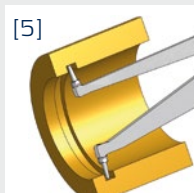
H470

Type	Measuring span Mes [mm]	Measuring range Meb [mm]	Range of indication AzB [mm]	Numerical interval Zw Scale interval Skw [mm]	Permissible errors G [mm]	Repeatability limit r [mm]	Measuring force $F_{min}$ [N]	Measuring force $F_{max}$ [N]	Weight [g]	Protection class	Measuring contact movable Hb [mm]	Measuring contact fixed Hf [mm]	Type of measuring contact [mm]	Groove depth A max. [mm]	Groove width B min. [mm]	Measuring depth L max. [mm]	Picture	Electronic E Mechanical M	Wooden box
L250	20	50-70	49,5-70,5	0,01	0,03	0,01	1,1	1,6	285	IP67	8.5	8.5	Ball Ø 1	8.3	1,5	85	[5]	E	1732-65
H250	20	50-70	49,5-70,5	0,01	0,03	0,01	1,1	1,6	195	IP65	8.5	8.5	Ball Ø 1	8.3	1,5	85	[5]	M	1732-45
L260	20	60-80	59,5-80,5	0,01	0,03	0,01	1,1	1,6	290	IP67	8.5	8.5	Ball Ø 1	8.3	1,5	85	[5]	E	1732-65
H260	20	60-80	59,5-80,5	0,01	0,03	0,01	1,1	1,6	200	IP65	8.5	8.5	Ball Ø 1	8.3	1,5	85	[5]	M	1732-45
L270	20	70-90	69,5-90,5	0,01	0,03	0,01	1,1	1,6	290	IP67	8.5	8.5	Ball Ø 1	8.3	1,5	85	[5]	E	1732-65
H270	20	70-90	69,5-90,5	0,01	0,03	0,01	1,1	1,6	200	IP65	8.5	8.5	Ball Ø 1	8.3	1,5	85	[5]	M	1732-45
L280	20	80-100	79,5-100,5	0,01	0,03	0,01	1,1	1,6	290	IP67	8.5	8.5	Ball Ø 1	8.3	1,5	85	[5]	E	1732-65
H280	20	80-100	79,5-100,5	0,01	0,03	0,01	1,1	1,6	200	IP65	8.5	8.5	Ball Ø 1	8.3	1,5	85	[5]	M	1732-45
L350	30	50-80	49,5-80,5	0,01	0,04	0,02	1,2	1,7	370	IP67	8.5	8.5	Ball Ø 2	8.3	2,5	132	[5]	E	1732-71
L370	30	70-100	69,5-100,5	0,01	0,04	0,02	1,2	1,7	375	IP67	8.5	8.5	Ball Ø 2	8.3	2,5	132	[5]	E	1732-71
L390	30	90-120	89,5-120,5	0,01	0,04	0,02	1,2	1,7	380	IP67	8.5	8.5	Ball Ø 2	8.3	2,5	132	[5]	E	1732-71
L415	50	15-65	14,8-65,5	0,01	0,05	0,03	1,0	1,8	415	IP67	6.0	6.0	Ball Ø 1.5	5.5	2,0	188	[3]	E	1732-71
H415	50	15-65	14,8-65,5	0,05	0,05	0,025	0,9	1,9	355	IP65	6.0	6.0	Ball Ø 1.5	5.5	2,0	188	[3]	M	1732-51
L440	50	40-90	39,5-90,5	0,01	0,05	0,03	1,0	1,8	420	IP67	8.5	8.5	Ball Ø 2	8.3	2,5	192	[5]	E	1732-71
H440	50	40-90	39,5-90,5	0,05	0,05	0,025	0,9	1,9	370	IP65	8.5	8.5	Ball Ø 2	8.3	2,5	192	[5]	M	1732-51
L470	50	70-120	69,5-120,5	0,01	0,05	0,03	1,0	1,8	420	IP67	8.5	8.5	Ball Ø 2	8.3	2,5	192	[5]	E	1732-71
H470	50	70-120	69,5-120,5	0,05	0,05	0,025	0,9	1,9	370	IP65	8.5	8.5	Ball Ø 2	8.3	2,5	192	[5]	M	1732-51

## Measuring contacts

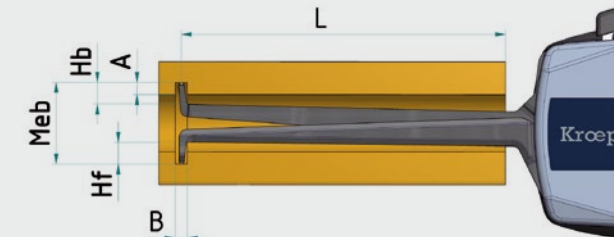


Ball Ø 1.0 mm  
Ball Ø 1.5 mm



Ball Ø 1.0 mm  
Ball Ø 2.0 mm

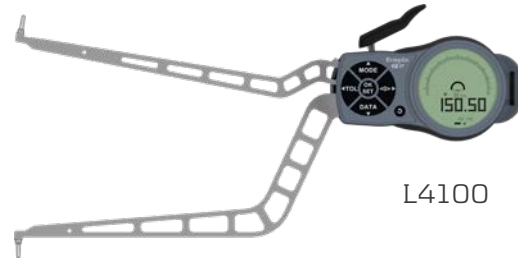
## Measuring capacity



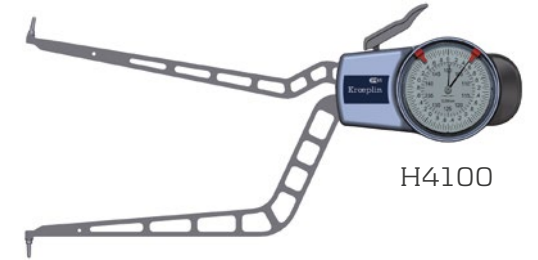
Meb Measuring range  
A Groove depth  
B Groove width  
Hb Measuring contact movable  
Hf Measuring contact fixed  
L Measuring depth

# Internal measurement

Application range exceeding 120 mm



L4100



H4100



L850



H870



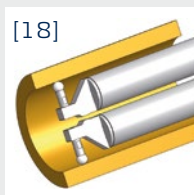
G16200

Type	Measuring span Mes [mm]	Measuring range Meb [mm]	Range of indication AzB [mm]	Numerical interval Zw Scale interval Skw [mm]	Permissible errors G [mm]	Repeatability limit r [mm]	Measuring force $F_{min}$ [N]	Measuring force $F_{max}$ [N]	Weight [g]	Protection class	Measuring contact movable Hb [mm]	Measuring contact fixed Hf [mm]	Type of measuring contact [mm]	Groove depth A max. [mm]	Groove width B min. [mm]	Measuring depth L max. [mm]	Picture	Electronic E Mechanical M	Wooden box
L4100	50	100–150	99,5–150,5	0,01	0,05	0,03	1,0	1,8	425	IP67	8,5	8,5	Ball Ø 2	8.3	2.4	192	[5]	E	1732-71
H4100	50	100–150	99,5–150,5	0,05	0,05	0,025	0,9	1,9	385	IP65	8,5	8,5	Ball Ø 2	8.3	2.4	192	[5]	M	1732-51
L4130	50	130–180	129,5–180,5	0,01	0,05	0,03	1,0	1,8	430	IP67	8,5	8,5	Ball Ø 2	8.3	2.4	192	[5]	E	HK
H4130	50	130–180	129,5–180,5	0,05	0,05	0,025	0,9	1,9	390	IP65	8,5	8,5	Ball Ø 2	8.3	2.4	192	[5]	M	HK
L4150	50	150–200	149,5–200,5	0,01	0,05	0,03	1,0	1,8	435	IP67	8,5	8,5	Ball Ø 2	8.3	2.4	192	[5]	E	HK
H4150	50	150–200	149,5–200,5	0,05	0,05	0,025	0,9	1,9	395	IP65	8,5	8,5	Ball Ø 2	8.3	2.4	192	[5]	M	HK
L850	100	50–150	49,5–150,5	0,05	0,15	0,1	0,8	2,0	650	IP67	4,0	4,0	Ball Ø 5	3.0	5.5	395	[18]	E	HK
H850	100	50–150	49,5–150,5	0,1	0,15	0,1	0,8	2,0	590	IP65	4,0	4,0	Ball Ø 5	3.0	5.5	395	[18]	M	HK
L870	100	70–170	69,5–170,5	0,05	0,15	0,1	0,8	2,0	650	IP67	14,0	14,0	Ball Ø 5	13.0	5.5	395	[19]	E	HK
H870	100	70–170	69,5–170,5	0,1	0,15	0,1	0,8	2,0	590	IP65	14,0	14,0	Ball Ø 5	13.0	5.5	395	[19]	M	HK
G1290	100	90–190	89–191	0,1	0,3	0,1	1,0	1,5	910	-	13	13	Ball Ø 5	12	5.5	535	[19]	E	HK
H1290	100	90–190	89–191	0,1	0,3	0,1	1,0	1,5	950	-	13	13	Ball Ø 5	12	5.5	535	[19]	M	HK
G12150	100	150–250	149–251	0,1	0,3	0,1	1,0	1,5	920	-	30	30	Ball Ø 5	29	5.5	535	[19]	E	HK
H12150	100	150–250	149–251	0,1	0,3	0,1	1,0	1,5	960	-	30	30	Ball Ø 5	29	5.5	535	[19]	M	HK
G16200	200	200–400	199–401	0,2	0,4	0,2	0,7	1,6	1200	-	29	29	Hemisphere SR 20	28	21	720	[20]	E	HK
H16200	200	200–400	199–401	0,2	0,4	0,2	0,7	1,6	1300	-	29	29	Hemisphere SR 20	28	21	720	[20]	M	HK

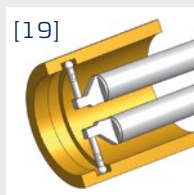
## Measuring contacts



Ball Ø 2.0 mm



Ball Ø 5.0 mm

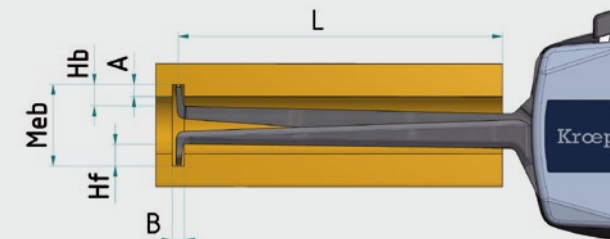


Ball Ø 5.0 mm



Hemisphere SR 20 mm

## Measuring capacity



Meb Measuring range

A Groove depth

B Groove width

Hb Measuring contact movable

Hf Measuring contact fixed

L Measuring depth

# Internal comparison measurement

Application range from 50 to 430 mm



H4M180



H2M50



H2M90



Detailed information and data sheets for all gauges are available on our webpage.

[www.kroepelin.com](http://www.kroepelin.com)



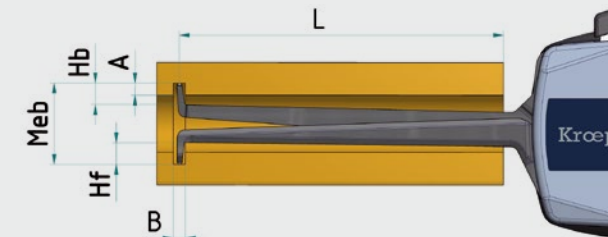
Type	Measuring span Mes [mm]	Measuring range Meb [mm]	Range of indication Azb [mm]	Scale interval Skw [mm]	Permissible errors G [mm]	Repeatability limit r [mm]	Measuring force $F_{min}$ [N]	Measuring force $F_{max}$ [N]	Weight [g]	Protection class	Measuring contact movable Hb [mm]	Measuring contact fixed Hf [mm]	Type of measuring contact [mm]	Groove depth A max. [mm]	Groove width B min. [mm]	Measuring depth L max. [mm]	Picture	Electronic E	Mechanical M	Wooden box
H2M50	20	50-100	49.5-100.5	0.01	0.03	0.015	1.1	1.6	220	IP65	12.0	variable	Ball Ø 1	8.3	1,5	85	[5]	M		HK
H2M90	20	90-140	89.5-140.5	0.01	0.03	0.015	1.1	1.6	230	IP65	12.0	variable	Ball Ø 1	8.3	1,5	85	[5]	M		HK
H2M130	20	130-180	129.5-180.5	0.01	0.03	0.015	1.1	1.6	240	IP65	12.0	variable	Ball Ø 1	8.3	1,5	85	[5]	M		HK
H4M180	50	180-310	179.5-310.5	0.05	0.10	0.05	0.9	1.9	420	IP65	21.0	variable	Ball Ø 2	8.3	2,5	170	[5]	M		HK
H4M300	50	300-430	299.5-430.5	0.05	0.15	0.05	0.9	1.9	450	IP65	21.0	variable	Ball Ø 2	8.3	2,5	170	[5]	M		HK

## Measuring contact



Ball Ø 1.0 mm  
Ball Ø 2.0 mm

## Measuring capacity



Meb Measuring range  
A Groove depth  
B Groove width  
Hb Measuring contact movable  
Hf Measuring contact fixed  
L Measuring depth