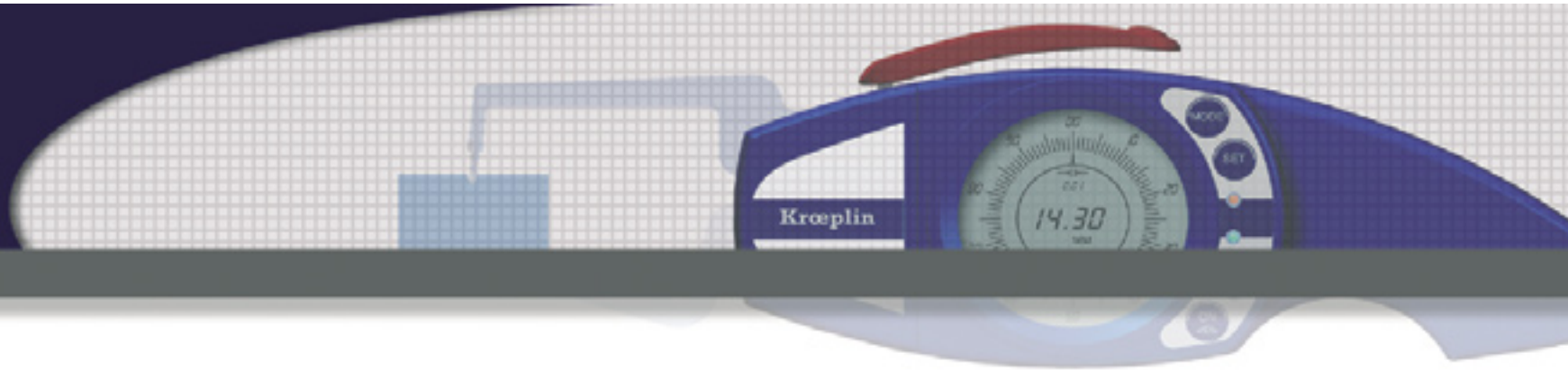
Krœplin

Längenmesstechnik



MECHANICAL AND ELECTRONIC LENGTH MEASURING INSTRUMENTS FOR INTERNAL AND EXTERNAL MEASUREMENTS

POWER TECH S.C.

Przyrządy pomiarowe, pneumatyczne, magnetyczne i skrawające

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PRECISION AND CONTINUITY

Ever since its foundation in 1883 Kroeplin have been involved in development and production of handy reliable and precise gauges for the measurement of lengths and thicknesses, especially for the metalworking industry. Thus the quick test system was created, which was the basis for all further innovations and also for the electronic dial indicators.

Experience is the solid foundation for quality. Careful observation and analysis of the market, flexible realization of requirements, convincing measuring concepts - that is the philosophy that makes Kroeplin successful. Today like before more than 100 years.

www.kroeplin.com

DIN EN ISO9001:2000

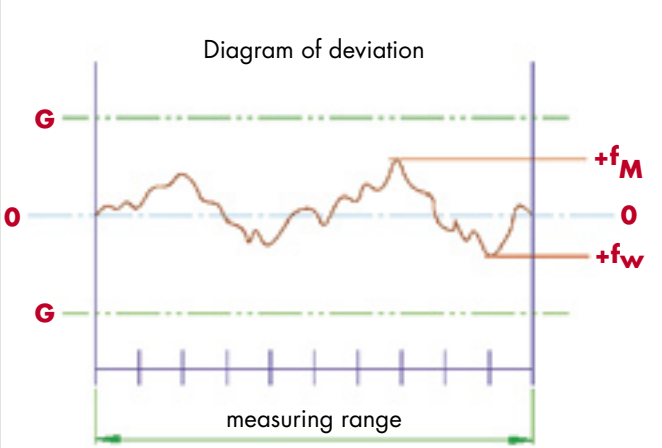
NEW GENERATION OF INTERNAL AND EXTERNAL MEASURING QUICKTEST GAUGES

For the first time the gauges provide a digital / analog display for better reading. The quicktest gauges includes custom designed test programs, measuring contacts, absolute- and relative measuring programs and red/green display for tolerance measurement.

FEATURES

- NEW! For the first time with analog / digital display for better reading
- IP 63, suitable for workshop use
- Mitutoyo interface
- USB interface
- Compact design, easy to handle
- mm / inch conversion
- Measuring programs and contacts for different applications
- Absolute and relative measurement
- Gauge without cable
- Red / green display for tolerance measurement
- Numerical interval switch
- Convincing price for convincing performance
- Special solutions possible
- Ceritficate of quality
- Optional lug-on-center-back

DEFINITIONS AND FEATURES



FEATURES

- Certificate of quality
- Reliable repeatability
- Scales are well arranged and easy to read
- Scale interval from 0,005mm up
- Tolerance marks easy to read
- Very handy
- All mechanical gauges are also available in „INCH". The electronic Quicktest can be switched over to INCH.
- Absolute measurement
- Measuring contacts are mainly made of carbide

Definitions:

Terms of length test techniques see DIN 2257 part 1 and part 2 and International Vocabulary of Basic and General Terms in Metrology

Foundations

This instruction follows approximately the checking instructions of the German standard DIN 878 for dial gauges and the checking instructions for caliper gauges according to VDI/VDE/DGQ 2618, page 13.
The gauges are referred to as gauges with absolute measurement and adjustable zero point.

Range of indication Azb

The range of indication is the range between the highest and the lowest indication.

Measuring range Meb

The measuring range of a gauge represents the range of measuring values in which given error limits must not be exceeded.

Measuring span Mes

The measuring span is the difference between starting value and final value of the measuring range.

Scale interval Skw

The scale interval is the modification of the value of the value of a measured variable that causes the modification of the indication by one interval. The scale interval is indicated in the unity of the measured variable.

Deviation in the measuring range f_M

The deviation in the measuring range f_M represents the distance of ordinates between the highest and the lowest position in the deviation diagram, when the movable caliper arm closes. The **tolerance field G** for f_M is symmetrically positioned to the zero line.

Repeat precision f_w

The repeat precision f_w is a characteristic value for deviations of the measured quantity within the measuring range in the same motion direction of the movable caliper arm (usually n=5). This margin of error is designated as **repeat limit r.**

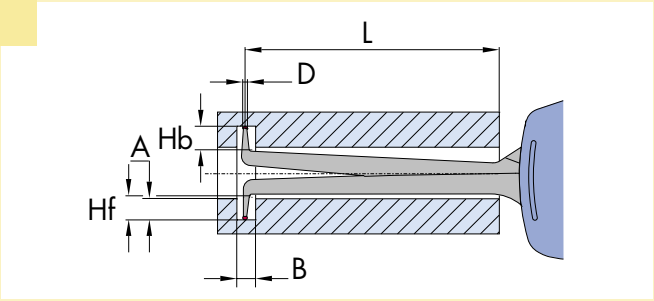
Measuring force F_{min}, F_{max}

When the caliper arm closes, the measuring force F_{min}/F_{max} is determined at the top of the movable caliper arm. The gauge must be held in vertical position >= 200 mm

INTERNAL MEASUREMENT

MEASURING CAPACITY

Groove depth A
Groove width B
Measuring depth L
Type of measuring contact D
Measuring contact movable Hb
Measuring contact fixed Hf



F102

F205

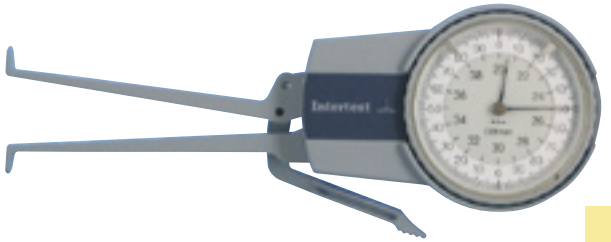
F210

The proven and handy groove measuring gauges for workshop use

ID0305

ID0720

ID1010



ID1020

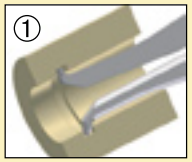
INTERNAL MEASUREMENT

Gauges up to 40 mm

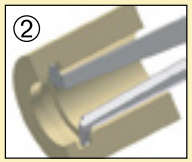
	Measuring range Meb [mm]	Measuring span Mes [mm]	Range of indication Azb [mm]	Scale interval Skw [mm]	Max.permissible errors G [mm]	Repeatability limit r [mm]	Measuring force Fmin - Fmax [N]	Weight [g]	Measuring depth L [mm]	Groove depth A [mm]	Groove width B [mm]	Protection class	Measuring contact movable Hb [mm]	Measuring contact fixed Hf [mm]	Type of measuring contact D [mm]	Picture	Electronic E Mechanical M	ACCESSORIES Wooden box	Interface Mitutoyo	Interface USB
ID0302	2,5 - 7,5	5	2,3 - 7,8	0,005	0,015	0,005	1,2 - 1,7	120	10	0,7	0,6	—	0,9	0,9	R 0,1	①	M	1732-01	—	—
F102 *)	2,5 - 12,5	10	2,3 - 13,0	0,005	0,015	0,015	0,7 - 1,2	270	10	0,7	0,6	IP 63	0,9	0,9	chisel R 0,1	①	E	1732-43	1960-90	1960-91
ID0305	5 - 10	5	4,7 - 10,3	0,005	0,015	0,005	1,0 - 2,0	120	22	1,8	1,4	—	2,2	2,2	ball Ø 0,6	②	M	1732-01	—	—
ID0705	5 - 15	10	4,7 - 15,5	0,010	0,020	0,005	0,9 - 2,0	140	23	1,7	1,1	—	2,3	2,3	ball Ø 0,6	②	M	1732-01	—	—
F205 *)	5 - 25	20	4,8 - 25,5	0,010	0,020	0,020	0,9 - 1,4	290	22	2,2	1,8	IP 63	2,3	2,3	ball Ø 0,6	②	E	1732-43	1960-90	1960-91
ID0710	10 - 20	10	9,5 - 20,5	0,010	0,020	0,005	0,9 - 2,0	140	56	4,5	2	—	5,3	5,3	ball Ø 1,0	③	M	1732-01	—	—
ID1010	10 - 30	20	9,8 - 30,5	0,010	0,030	0,010	0,9 - 1,5	240	80	4,5	1,8	—	5	5	ball Ø 1,0	②	M	1732-31	—	—
F210	10 - 30	20	9,8 - 30,5	0,010	0,020	0,010	0,9 - 1,4	290	47	4	2	IP 63	5,3	5,3	ball Ø 1,0	③	E	1732-43	1960-90	1960-91
ID0720	20 - 30	10	19,2 - 30,3	0,010	0,020	0,005	0,9 - 2,0	140	56	4,5	2	—	5,3	5,3	ball Ø 1,0	③	M	1732-01	—	—
ID1020	20 - 40	20	19,8 - 40,5	0,010	0,030	0,010	0,9 - 1,5	260	80	6	2,5	—	7	7	ball Ø 1,0	②	M	1732-31	—	—
F220	20 - 40	20	19,5 - 40,5	0,010	0,02	0,01	1,1 - 1,7	290	50	4	2	IP 63	—	—	ball Ø 1,0	②	E	1732-43	1960-90	1960-91
ID0730	30 - 40	10	29,2- 40,5	0,010	0,020	0,005	0,9 - 2,0	140	56	4,5	2	—	5,3	5,3	ball Ø 1,0	②	M	1732-01	—	—

MEASURING CONTACTS FOR INTERNAL MEASUREMENT

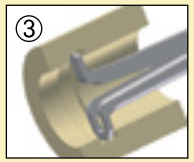
chisel R 0,1 mm



ball Ø 0,6 mm
ball Ø 1,0 mm
ball Ø 1,5 mm



ball Ø 1,0 mm



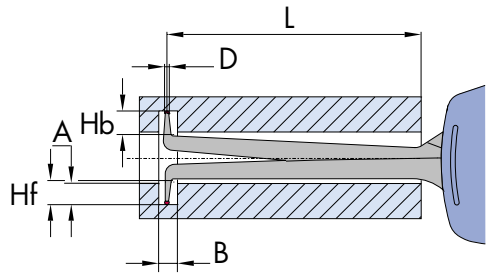
*) MEASUREMENT USING A STAND

Gauges F102 and F205 can be supplied with an adapter to enable measuring a stand. See accessories on page 22, article number 8003-08.

INTERNAL MEASUREMENT

MEASURING CAPACITY

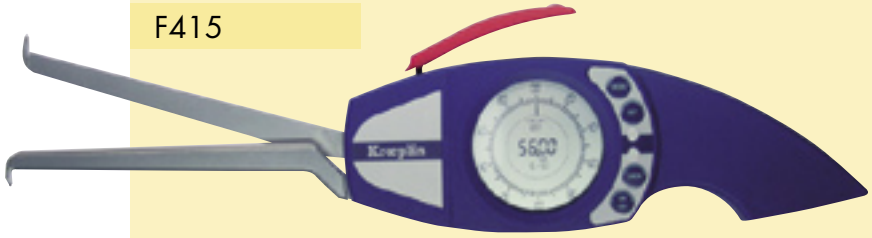
Groove depth A
Groove width B
Measuring depth L
Type of measuring contact D
Measuring contact movable Hb
Measuring contact fixed Hf

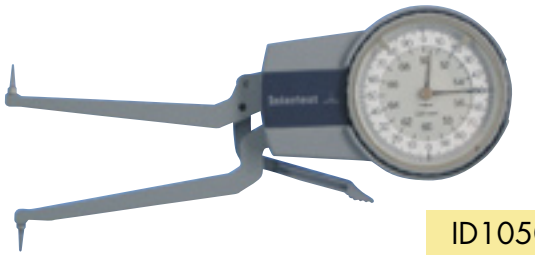


F230

F250

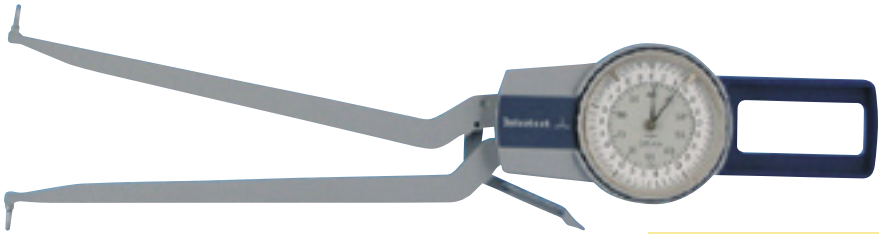
F415





ID1050

ID2015



ID2040

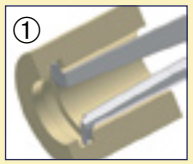
INTERNAL MEASUREMENT

Gauges up to 100 mm

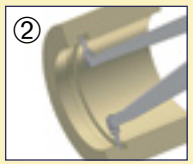
	Measuring range Meb	Measuring span Mes	Range of indication Azb	Scale interval Skw	Max. permissible errors G	Repeatability limit r	Measuring force Fmin - Fmax	Weight	Measuring depth L	Groove depth A	Groove width B	Protection class	Measuring contact movable Hb	Measuring contact fixed Hf	Type of measuring contact D	Picture	Electronic E Mechanical M	ACCESSORIES		
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[N]	[g]	[mm]	[mm]	[mm]		[mm]	[mm]	[mm]			Wooden box	Interface Mitutoyo	Interface USB
F415	15 - 55	40	14,8 - 56	0,020	0,040	0,020	1,2 - 1,7	360	114	4,5	2,5	IP 63	6	6	ball Ø 1,5	①	E	1732-43	1960-90	1960-91
ID2015	15 - 65	50	14,5 - 65,5	0,050	0,050	0,025	1,2 - 2,0	400	175	4,5	2,5	—	5,3	5,3	ball Ø 1,5	①	M	1732-30	—	—
F230	30 - 50	20	29,5 - 50,5	0,010	0,020	0,010	1,1 - 1,7	290	54	6	2	IP 63	9,4	9,4	ball Ø 1,0	②	E	1732-43	1960-90	1960-91
ID1030	30 - 50	20	29,8 - 50,5	0,010	0,030	0,010	0,9 - 1,5	260	80	6	2,5	—	6,8	6,8	ball Ø 1,0	①	M	1732-31	—	—
ID0740	40 - 50	10	39,2 - 50,5	0,010	0,020	0,005	0,9 - 2,0	140	57	4,5	2	—	5	5	ball Ø 1,0	①	M	1732-01	—	—
F240	40 - 60	20	39,5 - 60,5	0,010	0,020	0,010	1,1 - 1,7	290	54	6	2	IP 63	9,1	9,1	ball Ø 1,0	②	E	1732-43	1960-90	1960-91
ID1040	40 - 60	20	39,8 - 60,5	0,010	0,030	0,010	0,9 - 1,5	300	80	8	2,5	—	8,5	8,5	ball Ø 1,0	②	M	1732-31	—	—
F435	35 - 75	40	34,5 - 76	0,020	0,040	0,020	1,3 - 1,8	380	114	8	3	IP 63	8,5	8,5	ball Ø 2,0	②	E	1732-43	1960-90	1960-91
ID2040	40 - 90	50	39,5 - 90,5	0,050	0,050	0,025	1,2 - 2,0	440	175	8	2,5	—	8,5	8,5	ball Ø 2,0	②	M	1732-30	—	—
F250	50 - 70	20	49,5 - 70,5	0,010	0,020	0,010	1,1 - 1,7	290	54	7,5	2	IP 63	6,5	6,5	ball Ø 1,0	②	E	1732-43	1960-90	1960-91
ID1050	50 - 70	20	49,8 - 70,5	0,010	0,030	0,010	0,9 - 1,5	300	80	6	2,5	—	8,5	8,5	ball Ø 1,0	②	M	1732-31	—	—
F455	55 - 95	40	54 - 96	0,020	0,040	0,020	1,3 - 1,8	380	114	8	3	IP 63	8,5	8,5	ball Ø 2,0	②	E	1732-43	1960-90	1960-91
F260	60 - 80	20	59,5 - 80,5	0,010	0,020	0,010	1,1 - 1,7	290	54	6	2	IP 63	6,5	6,5	ball Ø 1,0	②	E	1732-43	1960-90	1960-91
ID1060	60 - 80	20	59,8 - 80,5	0,010	0,030	0,010	0,9 - 1,5	310	80	8	2,5	—	8,5	8,5	ball Ø 1,0	②	M	1732-31	—	—
F270	70 - 90	20	69,5 - 90,5	0,010	0,020	0,010	1,1 - 1,7	290	54	6	2	IP 63	6,5	6,5	ball Ø 1,0	②	E	1732-43	1960-90	1960-91
ID1070	70 - 90	20	69,8 - 90,5	0,010	0,030	0,010	0,9 - 1,5	310	80	8	2,5	—	8,5	8,5	ball Ø 1,0	②	M	1732-31	—	—
ID1080	80 - 100	20	79,8 - 100,5	0,010	0,030	0,010	0,9 - 1,5	310	80	8	2,5	—	8,5	8,5	ball Ø 1,0	②	M	1732-31	—	—

MEASURING CONTACTS FOR INTERNAL MEASUREMENT

ball Ø 1,0 mm
ball Ø 1,5 mm
ball Ø 2,0 mm



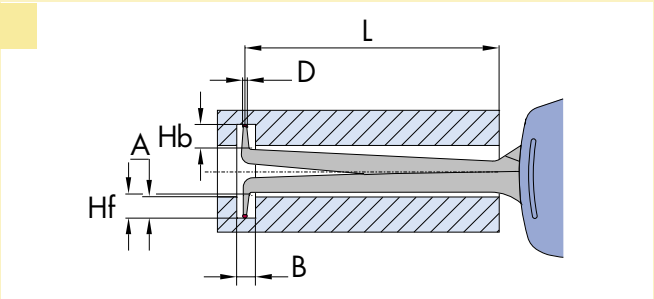
ball Ø 1,0 mm
ball Ø 2,0 mm



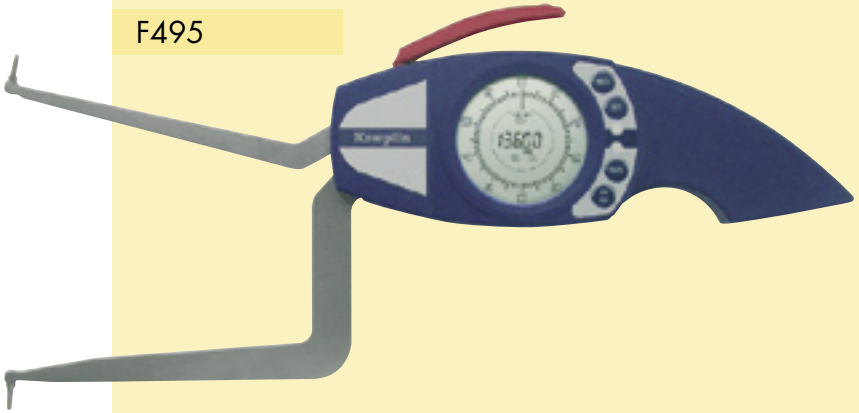
INTERNAL MEASUREMENT

MEASURING CAPACITY

Groove depth A
Groove width B
Measuring depth L
Type of measuring contact D
Measuring contact movable Hb
Measuring contact fixed Hf



F495



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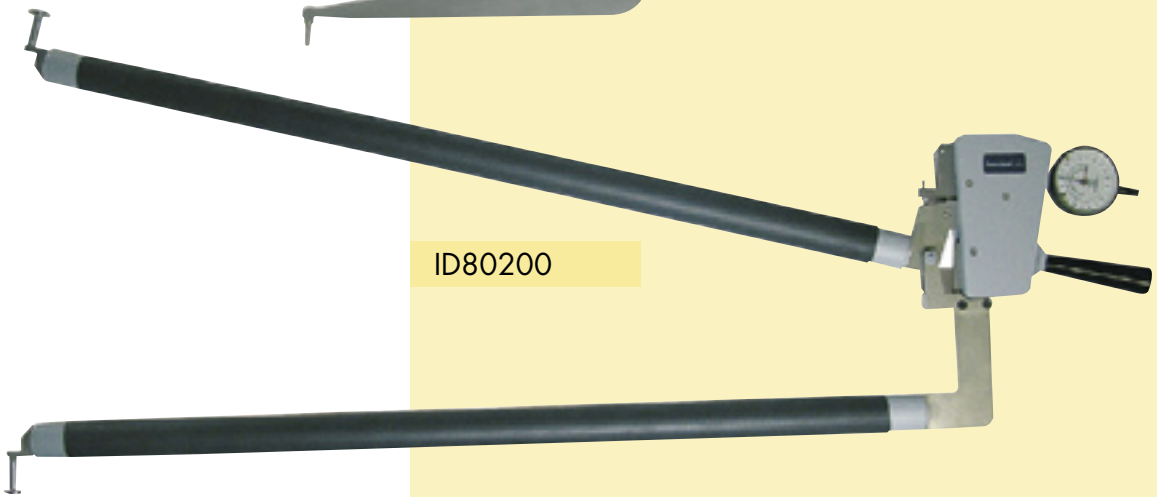
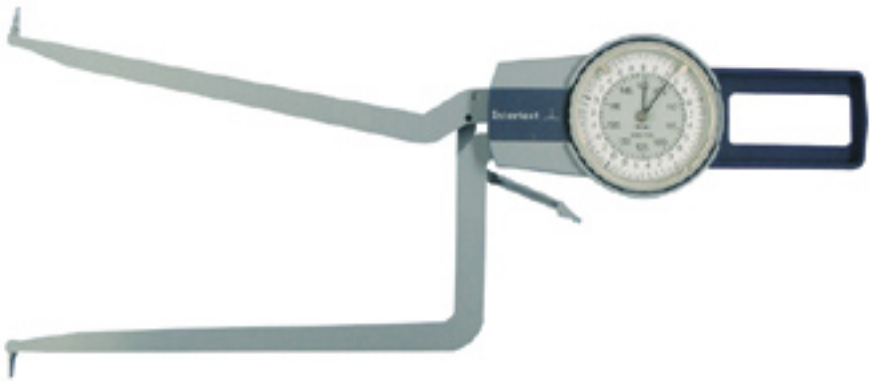


ID20150

ID20100



INTERNAL MEASUREMENT

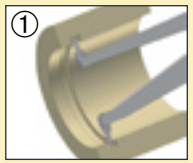
		Measuring range Meb	Measuring span Mes	Range of indication Azb	Scale interval Skw	Max. permissible errors G	Repeatability limit r	Measuring force Fmin - Fmax	Weight	Measuring depth L	Groove depth A	Groove width B	Protection class	Measuring contact movable Hb	Measuring contact fixed Hf	Type of measuring contact D	Picture	Electronic E Mechanical M	Wooden box	Interface Mitutoyo	Interface USB
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[N]	[g]	[mm]	[mm]	[mm]		[mm]	[mm]	[mm]			ACCESSORIES		
Gauges up to 200 mm	ID4040	40 - 140	100	39,5 - 140,5	0,100	0,150	0,075	1,5 - 2,5	510	385	2	5	—	2,5	2,5	ball Ø 5,0	②	M	HK	—	—
	ID4060	60 - 160	100	59,5 - 160,5	0,100	0,150	0,075	1,5 - 2,5	510	385	12	8	—	12,5	12,5	ball Ø 5,0	②	M	HK	—	—
	ID2070	70 - 120	50	69,5 - 120,5	0,050	0,050	0,025	1,2 - 2,0	440	175	8	3,3	—	10,5	10,5	ball Ø 2,0	①	M	1732-30	—	—
	F475	75 - 115	40	74,0 - 116,0	0,020	0,040	0,02	1,3 - 1,8	380	114	8	3,3	IP 63	10,5	10,5	ball Ø 2,0	①	E	1732-43	1960-90	1960-91
	F495	95 - 135	40	94,0 - 136,0	0,020	0,040	0,02	1,3 - 1,8	380	114	8	3,3	IP 63	10,5	10,5	ball Ø 2,0	①	E	1732-43	1960-90	1960-91
	ID20100	100 - 150	50	99,5 - 150,5	0,050	0,050	0,025	1,2 - 2,0	440	175	8	3,3	—	10,5	10,5	ball Ø 2,0	①	M	1732-30	—	—
	ID20130	130 - 180	50	129,5-180,5	0,050	0,050	0,025	1,2 - 2,0	500	175	8	3,3	—	10,5	10,5	ball Ø 2,0	①	M	HK	—	—
	ID20150	150 - 200	50	149,5-200,5	0,050	0,050	0,025	1,2 - 2,0	520	175	8	3,3	—	30	20	ball Ø 2,0	①	M	HK	—	—
	ID6080	80 - 180	100	79,5 - 180,5	0,100	0,250	0,100	1,5 - 2,5	2000	535	11	8	—	11,5	11,5	ball Ø 5,0	②	M	HK	—	—

		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[N]	[g]	[mm]	[mm]	[mm]		[mm]	[mm]	[mm]			ACCESSORIES		
> 200 mm	ID20180	180 - 230	50	179,5-230,5	0,05	0,075	0,025	1,2 - 2,0	520	175	8	3,3	—	30	20	ball Ø 2,0	①	M	HK	—	—
	ID60150	150 - 250	100	149,5-250,5	0,100	0,300	0,100	1,5 - 2,5	2000	535	30	10	—	31,5	31,5	ball Ø 5,0	②	M	HK	—	—
	ID60220	220 - 320	100	219,5-320,5	0,100	0,300	0,100	1,5 - 2,5	2000	535	30	10	—	31,5	31,5	ball Ø 5,0	②	M	HK	—	—
	ID80200	200 - 400	200	199,0-401,0	0,200	0,400	0,200	1,0 - 2,0	2600	735	28	25	—	29,5	29,5	hemisphere SR 20	③	M	HK	—	—

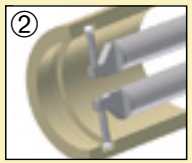
HK — wooden box
is included in delivery.

MEASURING CONTACTS FOR INTERNAL MEASUREMENT

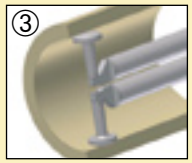
ball Ø 2,0 mm



ball Ø 5,0 mm

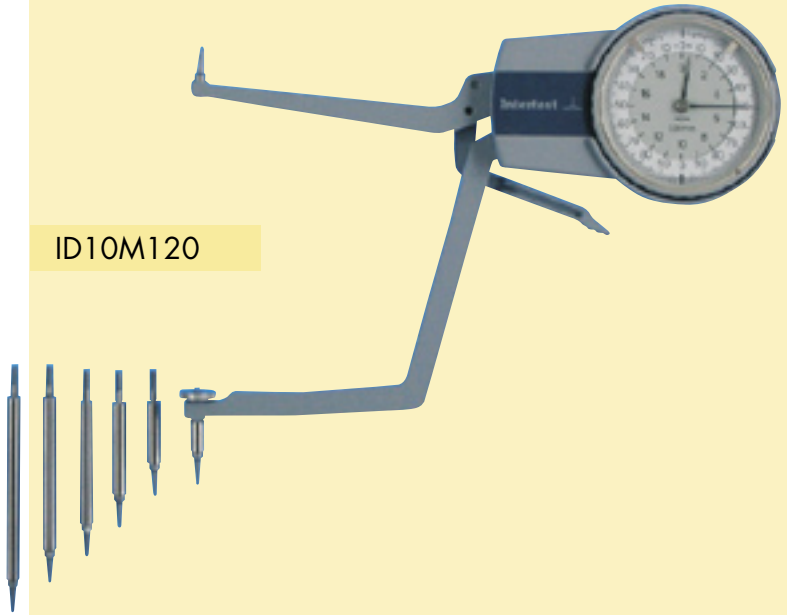


hemisphere SR 20 mm

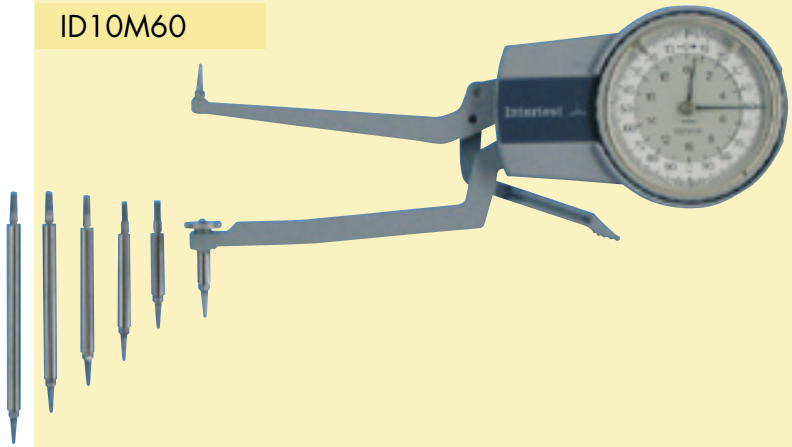


COMPARISON MEASUREMENT

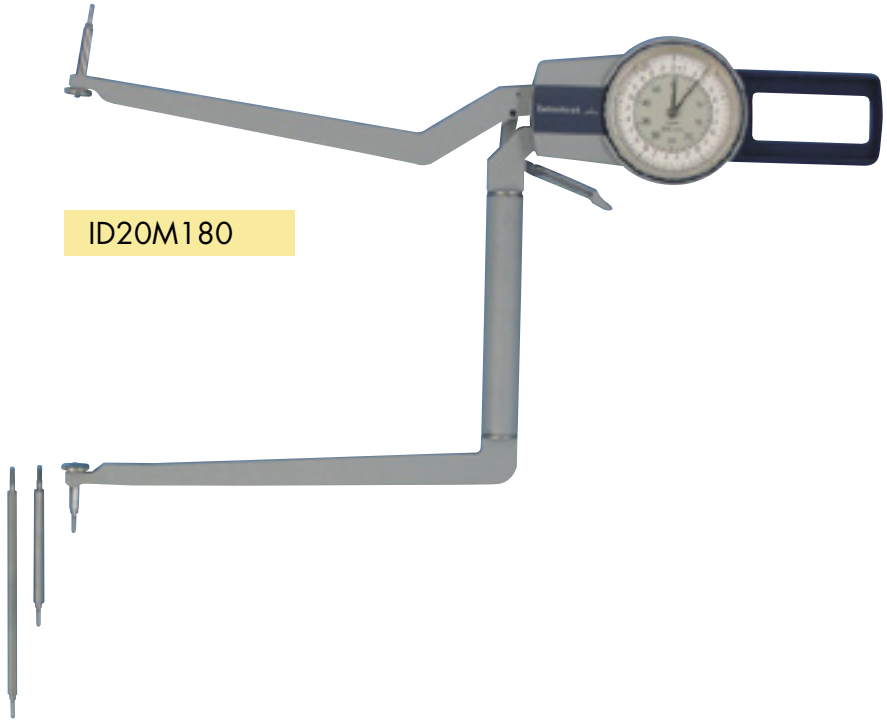
ID10M120



ID10M60



ID20M180



Measuring range can be varied by using different contacts, secured by finger-screw in the lower measuring arm.

COMPARISON MEASUREMENT

GAUGES

up to 190 mm

	Measuring range Meb	Measuring span Mes	Range of indication Azb	Scale interval Skw	Max.permissible errors G	Repeatability limit r	Measuring force F min - F max	Weight	Measuring depth L	Protection class	Measuring contact movable Hb	Measuring contact fixed Hf	Type of measuring contact D	Electronic E Mechanical M		ACCESSORIES		
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[N]	[g]	[mm]		[mm]	[mm]	[mm]			Wooden box	Interface Mitutoyo	Interface USB
ID10M60	60 - 130	20	59,8 - 130,5	0,010	0,030	0,015	0,9 - 1,5	310	80	—	10	20 - 70	ball Ø 1	M		HK	—	—
ID10M120	120 - 190	20	119,8 - 190,5	0,010	0,040	0,020	0,9 - 1,5	330	80	—	10	20 - 70	ball Ø 1	M		HK	—	—

up to 550 mm

	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[N]	[g]	[mm]	[mm]		[mm]	[mm]			ACCESSORIES		
ID20M180	180 - 310	50	179,5-310,5	0,050	0,075	0,050	1,2 - 2,0	520	170	—	30	20/60/100	ball Ø 2	M		HK	—	—
ID20M300	300 - 430	50	299,5-430,5	0,050	0,150	0,050	1,2 - 2,0	600	170	—	30	20/60/100	ball Ø 2	M		HK	—	—
ID20M420	420 - 550	50	419,5-550,5	0,050	0,250	0,050	1,2 - 2,0	600	170	—	30	20/60/100	ball Ø 2	M		HK	—	—

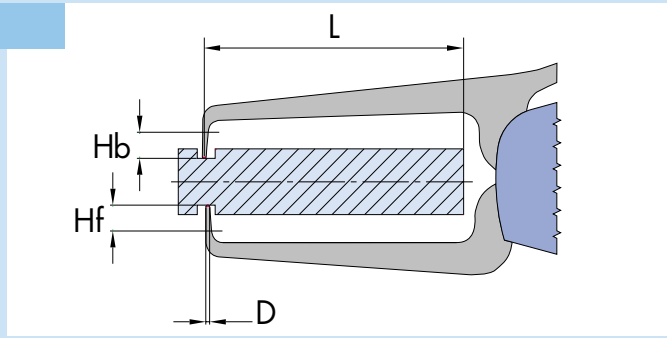
These ergonomically designed gauges were developed for comparison measurement of grooves and bores, over very large measuring ranges.

HK — wooden box is included in delivery.

EXTERNAL MEASUREMENT

MEASURING CAPACITY

Measuring contact movable Hb
Measuring contact fixed Hf
Measuring depth L
Type of measuring contact D



B110

B220

POCO2K

POCO2F

POCO2N

OD0305

OD0710

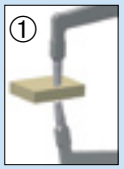
OD1020

Gauges up to 20 mm

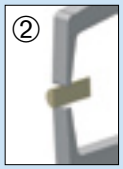
	Measuring range Meb	Measuring span Mes	Range of indication Azb	Scale interval Skw	Max.permissible errors G	Repeatability limit r	Measuring force F min - F max	Weight	Measuring depth L	Protection class	Measuring contact movable Hb	Measuring contact fixed Hf	Type of measuring contact D	Picture	Electronic E Mechanical M		Wooden box	Interface Mitutoyo	Interface USB
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[N]	[g]	[mm]		[mm]	[mm]	[mm]				ACCESSORIES		
OD0305	0 - 5	5	0,0 - 5,4	0,005	0,015	0,005	1,0 - 2,0	120	26	—	7	7	ball Ø 1,5	⑥	M		1732-01	—	—
B110	0 - 10	10	0,0 - 10,5	0,005	0,010	0,010	0,6 - 1,2	270	18	IP 63	16	16	ball Ø 1,5	①	E		1732-43	1960-90	1960-91
OD0710	0 - 10	10	0,0 - 10,8	0,010	0,020	0,005	0,7 - 1,5	140	59	—	7	7	balll Ø 1,5	⑥	M		1732-01	—	—
OD0710S	0 - 10	10	0,0 - 10,8	0,010	0,020	0,005	0,7 - 1,5	140	59	—	7	7	chisel R 0,4	②	M		1732-01	—	—
POCO 2F	0 - 10	10	0,0 - 13,0	0,100	0,100	0,050	0,3 - 1,3	40	36	—	4,5	4,5	Sn-R 0,5 / F Ø 3,5	⑤	M		1732-01	—	—
POCO 2K	0 - 10	10	0,0 - 13,0	0,100	0,100	0,050	0,3 - 1,3	40	36	—	5	5	ball Ø 2,0	③	M		1732-01	—	—
POCO 2N	0 - 10	10	0,0 - 13,0	0,100	0,100	0,050	0,3 - 1,3	40	36	—	3,5	3,5	chisel Ø 0,75	④	M		1732-01	—	—
B220	0 - 20	20	0,0 - 21,0	0,010	0,020	0,010	0,7 - 1,3	290	50	IP 63	16	16	ball Ø 1,5	①	E		1732-43	1960-90	1960-91
B220S	0 - 20	20	0,0 - 21,0	0,010	0,020	0,010	0,7 - 1,3	290	—	IP 63	—	—	chisel R 0,4	②	E		1732-43	1960-90	1960-91
OD1020	0 - 20	20	0,0 - 20,5	0,010	0,030	0,010	0,9 - 1,5	320	80	—	24	24	ball Ø 1,5	①	M		1732-31	—	—
OD1020S	0 - 20	20	0,0 - 20,5	0,010	0,030	0,010	0,9 - 1,5	320	80	—	22	22	chisel R 0,5	②	M		1732-31	—	—

MEASURING CONTACTS FOR EXTERNAL MEASUREMENT

ball Ø 1,5 mm



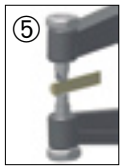
chisel R 0,4 mm
chisel R 0,5 mm



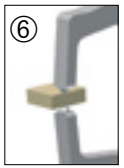
ball Ø 2,0 mm

needle Ø 0,75 mm

chisel R 0,5 mm
plane 3,5 mm



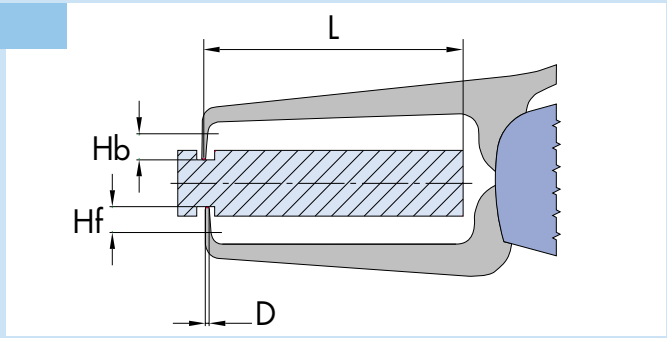
ball Ø 1,5 mm



EXTERNAL MEASUREMENT

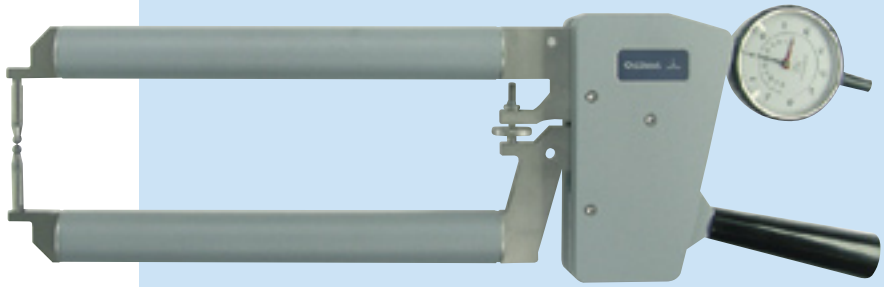
MEASURING CAPACITY

Measuring contact movable Hb
Measuring contact fixed Hf
Measuring depth L
Type of measuring contact D

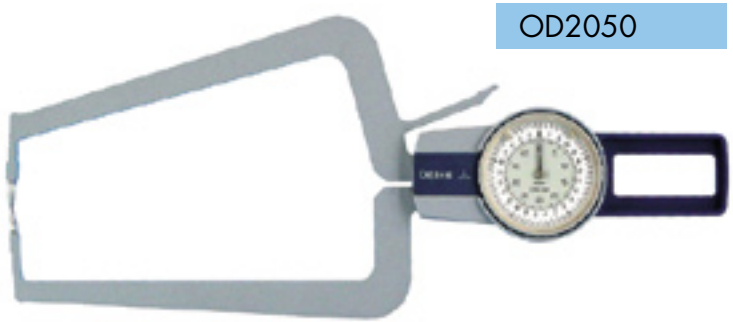


B440

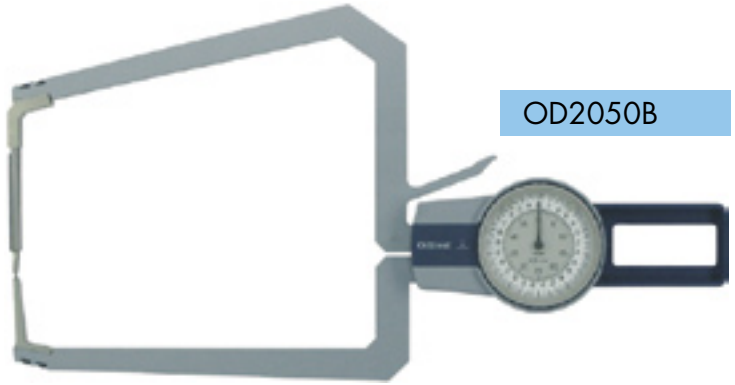
OD3050



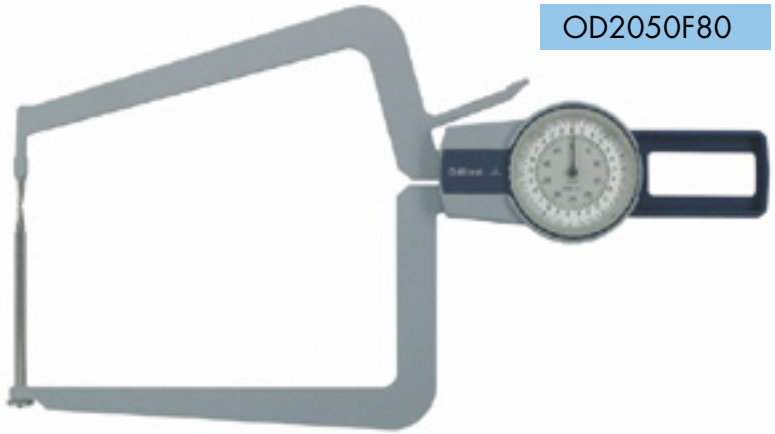
OD2050



OD2050B



OD2050F80



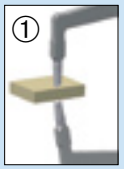
EXTERNAL MEASUREMENT

	Measuring range Meb	Measuring span Mes	Range of indication Azb	Scale interval Skw	Max. permissible errors G	Repeatability limit r	Measuring force F min - F max	Weight	Measuring depth L	Protection class	Measuring contact movable Hb	Measuring contact fixed Hf	Type of measuring contact D	Picture	Electronic E Mechanical M		ACCESSORIES		
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[N]	[g]	[mm]		[mm]	[mm]	[mm]				Wooden box	Interface Mitutoyo	Interface USB
B440	0 - 40	40	0,0 - 41,0	0,020	0,040	0,020	1,0 - 1,5	380	115	IP 63	22	22	ball Ø 3	①	E		1732-43	1960-90	1960-91
B440S	0 - 40	40	0,0 - 41,0	0,020	0,040	0,020	1,0 - 1,5	380	115	IP 63	22	18	chisel R 0,75	②	E		1732-43	1960-90	1960-91
OD2050	0 - 50	50	0,0 - 50,5	0,050	0,050	0,025	1,2 - 1,8	560	170	—	32	32	ball Ø 2	①	M		1732-30	—	
OD2050B	0 - 50	50	0,0 - 50,5	0,050	0,075	0,025	1,2 - 1,8	560	170	—	82	32	ball Ø 2	①	M		HK	—	—
OD2050S	0 - 50	50	0,0 - 50,5	0,050	0,050	0,025	1,2 - 1,8	560	170	—	32	32	chisel R 0,75	②	M		1732-30	—	—
OD2050BF130	0 - 50	50	0,0 - 50,5	0,050	0,075	0,050	1,2 - 1,8	600	170	—	82	132	ball Ø 2	①	M		HK	—	—
OD2050BF80	0 - 50	50	0,0 - 50,5	0,050	0,075	0,050	1,2 - 1,8	580	170	—	82	82	ball Ø 2	①	M		HK	—	—
OD2050F130	0 - 50	50	0,0 - 50,5	0,050	0,075	0,050	1,2 - 1,8	600	170	—	32	132	ball Ø 2	①	M		HK	—	—
OD2050F80	0 - 50	50	0,0 - 50,5	0,050	0,075	0,025	1,2 - 1,8	580	170	—	32	82	ball Ø 2	①	M		HK	—	—
OD3050	0 - 50	50	0,0 - 50,5	0,1	0,150	0,075	1,5 - 2,5	1600	230	—	32	32	ball Ø 5	③	M		HK	—	—

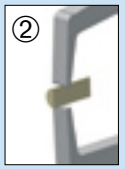
HK — wooden box
is included in delivery.

MEASURING CONTACTS FOR EXTERNAL MEASUREMENT

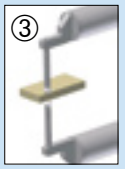
ball Ø 2,0 mm
ball Ø 3,0 mm



chisel R 0,75 mm



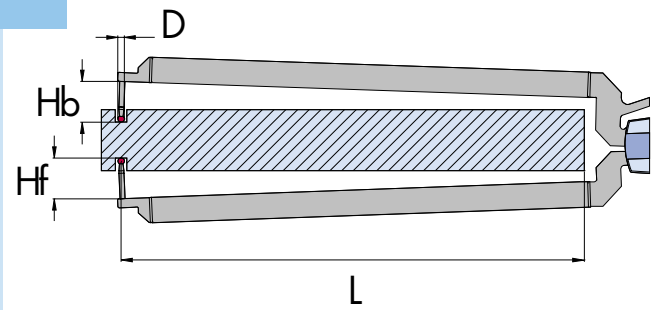
ball Ø 5,0 mm



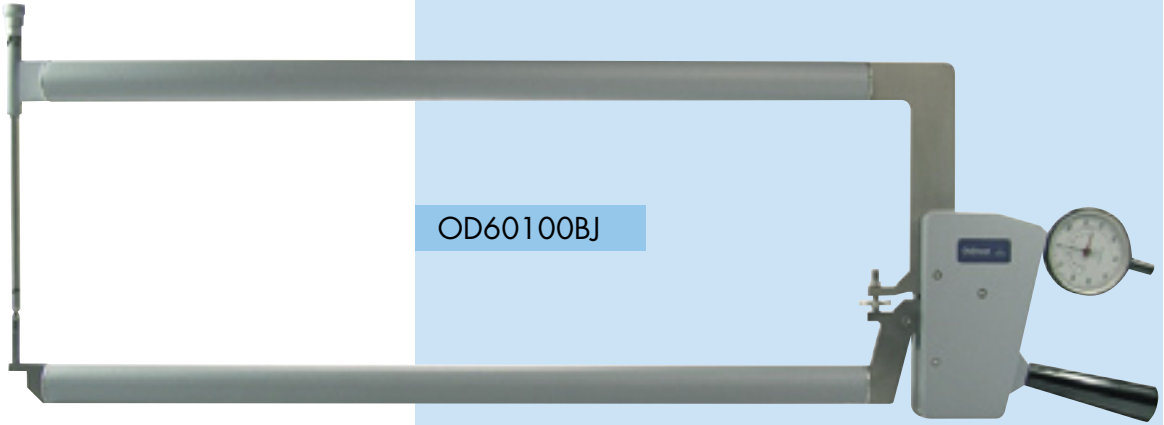
EXTERNAL MEASUREMENT

MEASURING CAPACITY

Measuring contact movable- Hb
Measuring contact fixed Hf
Measuring depth L
Type of measuring contact D



OD40100



OD60100BJ

OD20100F80

Gauges up to 200 mm

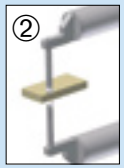
	Measuring range Meb	Measuring span Mes	Range of indication Azb	Scale interval Skw	Max.permissible errors G	Repeatability limit r	Measuring force Fmin - Fmax	Weight	Measuring depth L	Protection class	Measuring contact movable Hb	Measuring contact fixed Hf	Type of measuring contact D	Picture	Electronic E Mechanical M		Wooden box	Interface Mitutoyo	Interface USB
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[N]	[g]	[mm]		[mm]	[mm]	[mm]				ACCESSORIES		
OD20100	50 - 100	50	49,5 - 100,5	0,050	0,075	0,025	1,2 - 1,8	580	170	—	32	82	ball Ø 2	①	M		HK	—	—
OD20100F80	50 - 100	50	49,5 - 100,5	0,050	0,075	0,050	1,2 - 1,8	600	170	—	32	82	ball Ø 2	①	M		HK	—	—
OD40100	0 - 100	100	0 - 102	0,100	0,150	0,075	1,5 - 2,5	680	368	—	32	32	ball Ø 5	②	M		HK	—	—
OD60100	0 - 100	100	0 - 102	0,100	0,300	0,150	1,5 - 2,5	2000	530	—	32	32	ball Ø 5	②	M		HK	—	—
OD60100BJ	0 - 100	100	0 - 102	0,100	0,300	0,150	1,5 - 2,5	2300	530	—	32	132	ball Ø 5	②	M		HK	—	—
OD20150	0 - 150	50	99,5 - 150,5	0,050	0,075	0,050	1,2 - 1,8	600	170	—	32	32	ball Ø 2	①	M		HK	—	—
OD80200	0 - 200	200	0 - 20	0,200	0,400	0,200	1,0 - 2,0	3000	725	—	100	100	hemisphere SR 20	③	M		HK	—	—

HK — wooden box
is included in delivery.

MEASURING CONTACTS FOR EXTERNAL MEASUREMENT

ball Ø 2,0 mm

ball Ø 5,0 mm

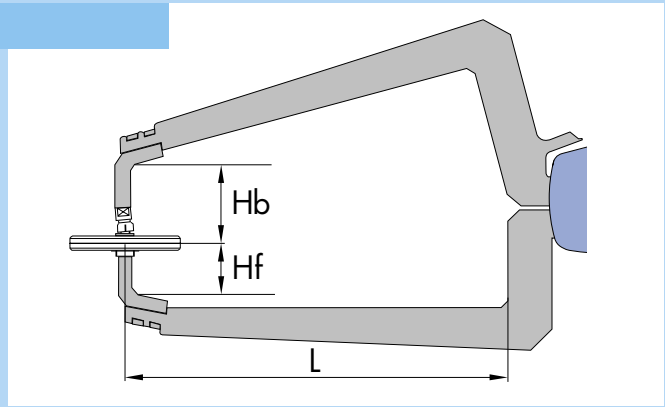


Hemisphere SR 20 mm

EXTERNAL GAUGES WITH FLAT CONTACTS

MEASURING CAPACITY

Measuring contact movable Hb
Measuring contact fixed Hf
Measuring depth L

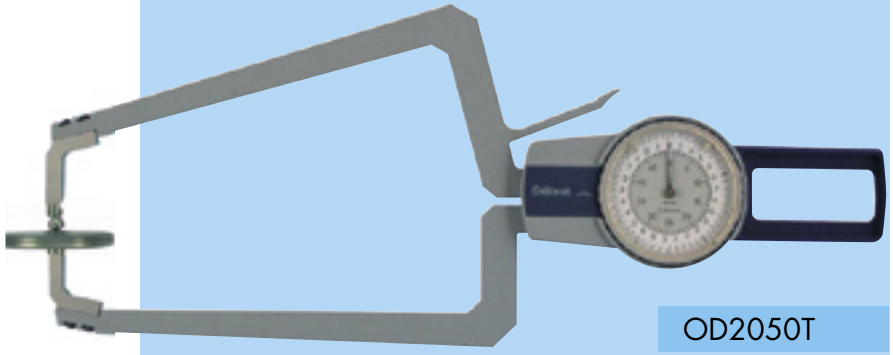


POCO2T

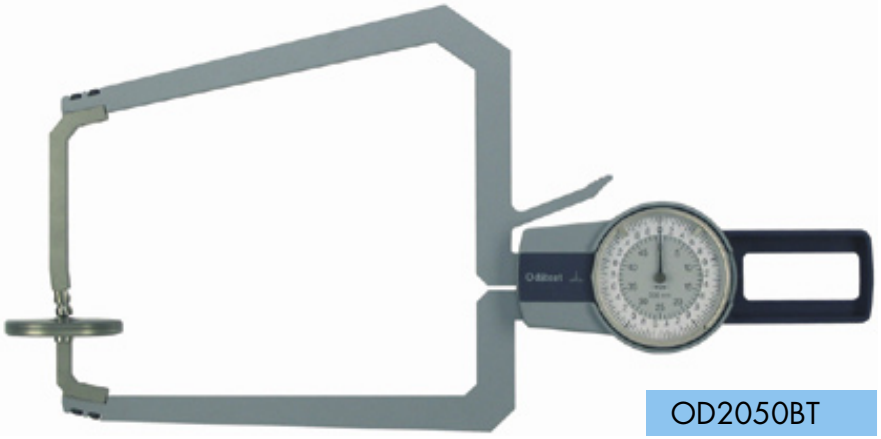
OD0305T

OD1020T10

B110T



OD2050T



OD2050BT

EXTERNAL GAUGES WITH FLAT CONTACTS

Gauges up to 100 mm

	Measuring range Meb	Measuring span Mes	Range of indication Azb	Scale interval Skw	Max.permissible errors G	Repeatability limit r	Measuring force Fmin - Fmax	Weight	Measuring depth L	Protection class	Measuring contact movable Hb	Measuring contact fixed Hf	Type of measuring contact D	Picture	Electronic E Mechanical M		ACCESSORIES		
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[N]	[g]	[mm]		[mm]	[mm]	[mm]				Wooden box	Interface Mitutoyo	Interface USB
OD0305T	0 - 5	5	0,0 - 5,4	0,005	0,020	0,005	1,0 - 2,0	120	26	—	15,5	8,5	flat Ø 10	②	M		1732-01	—	—
B110T	0 - 10	10	0,0 - 10,5	0,005	0,010	0,010	0,6 - 1,2	270	18	IP 63	22	12	flat Ø 10	②	E		1732-43	1960-90	1960-91
POCO 2T	0 - 10	10	0,0 - 13,0	0,100	0,100	0,050	0,3 - 1,3	40	36	—	8	2	flat Ø 10	①	M		1732-01	—	—
OD1020T10	0 - 20	20	0,0 - 20,5	0,010	0,050	0,015	0,9 - 1,5	330	80	—	22	15	flat Ø 10	③	M		1732-31	—	—
B440T	0 - 40	40	0,0 - 41,0	0,020	0,040	0,020	1,0 - 1,5	380	115	IP 63	29	19	flat Ø 50	④	E		1732-43	1960-90	1960-91
OD2050T	0 - 50	50	0,0 - 50,5	0,050	0,100	0,025	1,2 - 1,8	600	170	—	35	23	flat Ø 50	④	M		1732-30	—	
OD40100T	0 - 100	100	0,0 - 102,0	0,100	0,150	0,075	1,5 - 2,5	680	368	—	86	6	flat Ø 50	⑤	M		HK	—	—
OD60100T	0 - 100	100	0,0 - 102,0	0,100	0,400	0,150	1,5 - 2,5	2000	530	—	46	26	flat Ø 50	⑤	M		HK	—	—
OD20100T	50 - 100	50	49,5 - 100,5	0,050	0,100	0,050	1,2 - 1,8	630	170	—	35	23	flat Ø 50	④	M		HK	—	—

HK — wooden box
is included in delivery.

MEASURING CONTACTS FOR EXTERNAL MEASUREMENT

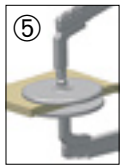
flat Ø 10 mm

flat Ø 10 mm

flat Ø 10 mm

flat Ø 50 mm

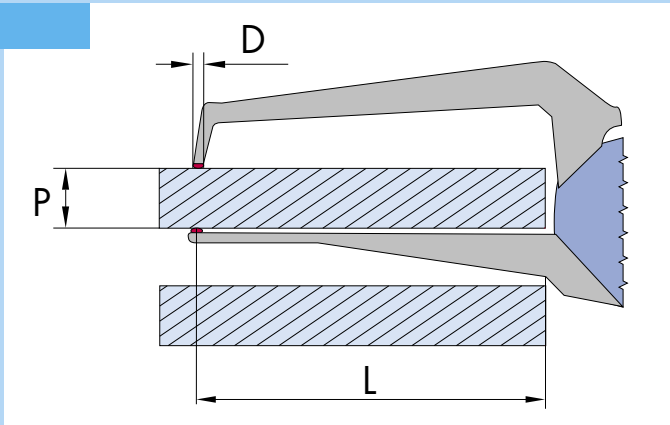
flat Ø 50 mm



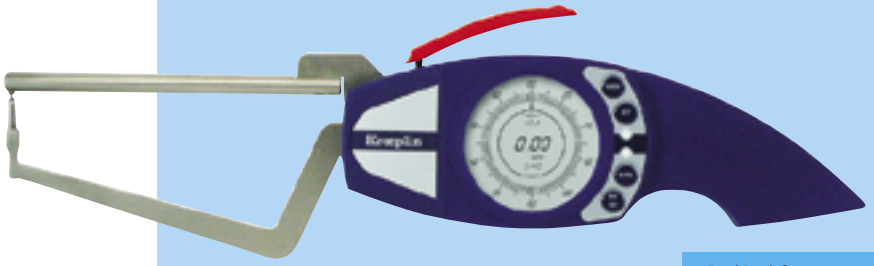
TUBE WALL MEASUREMENT

MEASURING CAPACITY

Measuring depth L
Tube wall thickness P
Type of measuring contact D



B2R20



B4R40

POCO2R

OD0710R

OD1020R

OD2050R

TUBE WALL MEASUREMENT

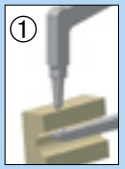
GAUGES

		Measuring range Meb	Measuring span Mes	Range of indication Azb	Scale interval Skw	Max. permissible errors G	Repeatability limit r	Measuring force F min - F max	Weight	Measuring depth L	Protection class	Measuring contact movable Hb	Measuring contact fixed Hf	Type of measuring contact D	Picture	Electronic E Mechanical M		Wooden box	Interface Mitutoyo	Interface USB
up to 20 mm		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[N]	[g]	[mm]		[mm]	[mm]	[mm]				ACCESSORIES		
	POCO 2R	0 - 10	10	0,0 - 13,0	0,100	0,100	0,050	0,3 - 1,3	40	33	—	5	1	K Ø 2 / SR 0,5	⑦	M		1732-01	—	—
	OD0710R	0 - 10	10	0,0 - 15,5	0,010	0,020	0,005	0,7 - 1,5	140	59	—	8	0,9	ball Ø 1,5	③	M		1732-01	—	—
	OD0710RS	0 - 10	10	0,0 - 15,5	0,010	0,020	0,005	0,7 - 1,5	140	59	—	8	0,9	Sn-R 0,4 / K Ø 1,5	④	M		1732-01	—	—
	B2R20	0 - 20	20	0,0 - 21,0	0,010	0,020	0,010	0,7 - 1,3	290	50	IP 63	15	0,9	ball Ø 1,5	①	E		1732-43	1960-90	1960-91
	B2R20S	0 - 20	20	0,0 - 21,0	0,010	0,020	0,010	0,7 - 1,3	290	50	IP 63	15	0,9	Sn-R 0,4 / K Ø 1,5	④	E		1732-43	1960-90	1960-91
	OD1020R	0 - 20	20	0,0 - 20,5	0,010	0,030	0,010	0,9 - 1,5	300	80	—	22	2,3	ball Ø 1,5	③	M		1732-31	—	—
	OD1020RS	0 - 20	20	0,0 - 20,5	0,010	0,030	0,010	0,9 - 1,5	300	80	—	22	2,3	Sn-R 0,5 / K Ø 1,5	⑤	M		1732-31	—	—
up to 50 mm		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[N]	[g]	[mm]		[mm]	[mm]	[mm]				ACCESSORIES		
	B4R40	0 - 40	40	0,0 - 41,0	0,020	0,040	0,020	1,0 - 1,5	380	115	IP 63	22	1	ball Ø 3	②	E		1732-43	1960-90	1960-91
	B4R40S	0 - 40	40	0,0 - 41,0	0,020	0,040	0,020	1,0 - 1,5	380	115	IP 63	22	1	Sn-R 0,75 / K Ø 3,0	⑥	E		1732-43	1960-90	1960-91
	OD2050R	0 - 50	50	0,0 - 50,5	0,050	0,050	0,025	1,2 - 1,8	520	170	—	32	1	ball Ø 2	②	M		1732-30	—	—
	OD2050BR	0 - 50	50	0,0 - 50,5	0,050	0,075	0,025	1,2 - 1,8	560	170	—	82	1	ball Ø 2	②	M		HK	—	—
	OD2050RS	0 - 50	50	0,0 - 50,5	0,050	0,050	0,025	1,2 - 1,8	525	170	—	32	1	Sn-R 0,75 / K Ø 2	⑥	M		1732-30	—	—
up to 100		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[N]	[g]	[mm]		[mm]	[mm]	[mm]				ACCESSORIES		
	OD40100R	0 - 100	100	0,0 - 102,0	0,100	0,150	0,075	1,5 - 2,5	680	368	—	31,5	11,5	ball Ø 5	⑧	M		HK	—	—

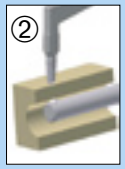
HK — wooden box is included in delivery.

MEASURING CONTACT FORMS FOR TUBE WALL MEASUREMENT

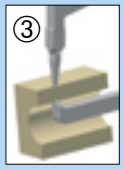
ball Ø 1,5 mm



ball Ø 2,0 mm
ball Ø 3,0 mm

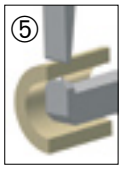


ball Ø 1,5 mm

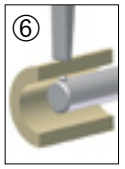


ball Ø 1,5 mm
chisel R 0,4 mm

ball Ø 1,5 mm
chisel R 0,5 mm

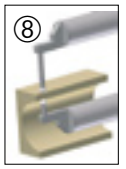


ball Ø 2,0 mm
ball Ø 3,0 mm
chisel R 0,75 mm



ball Ø 2,0 mm
hemisphere SR 0,5 mm

ball Ø 5,0 mm



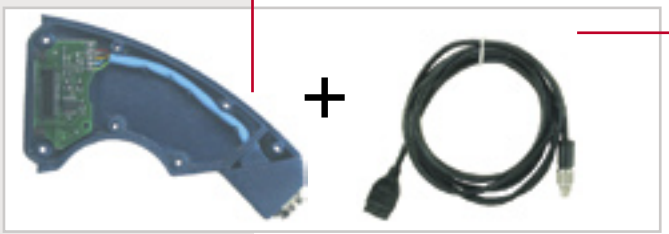
INTERFACES

ELECTRONIC MEASURING GAUGE SERIES B/F

USB

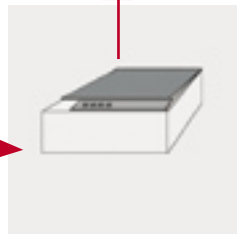
Interface USB
Order code: 1960-91

Mitutoyo-Digimatic

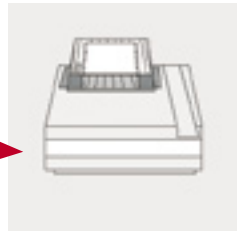


Interface Mitutoyo
Order code: 1960-90

PC · Notebook



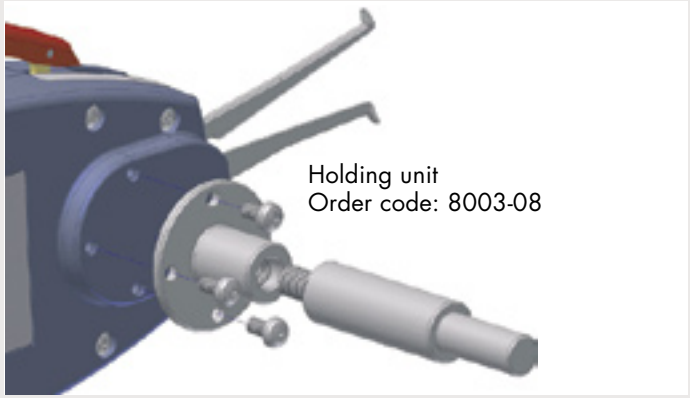
Interface
USB Adapter



Digimatic

The interfaces are available as accessories which can be upgraded at any time. They comprise an interface cover and appropriate cable (1,5m).

ACCESSORIES

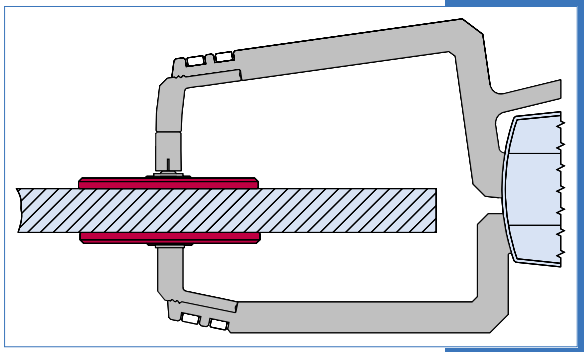


Holding unit
Order code: 8003-08

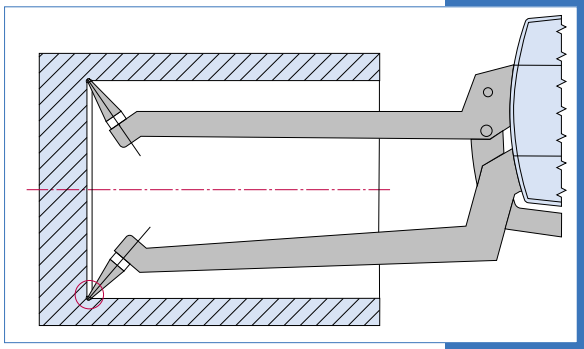
The holding unit enables the Kroeplin gauge to be used with a measuring stand.

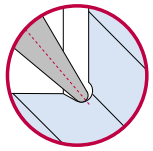
SPECIAL GAUGES

Measurement of foam materials with flat contacts and reduced measuring force

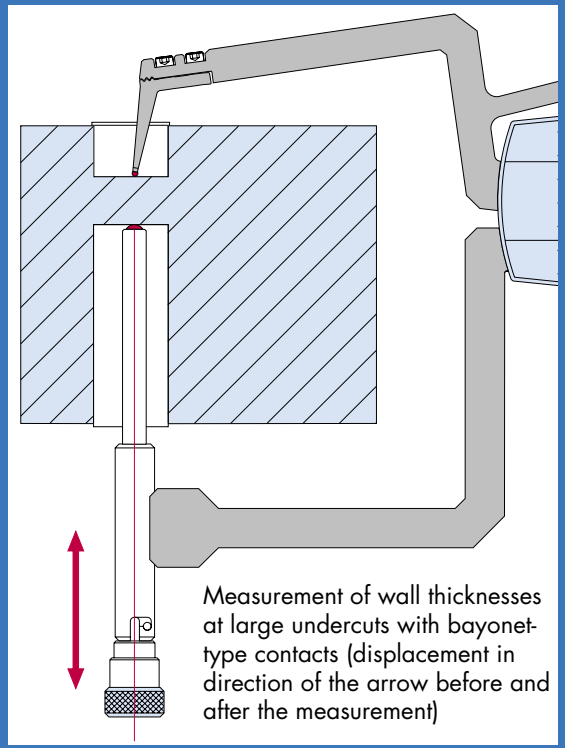


We are always searching for the best solution for your measuring problem, either mechanical or electronic. In order to enable us to find the solution together and to design your special gauge, please kindly send us a drawing of the object to be measured and indicate tolerance and measuring force, and if possible, send us a sample of the part to be measured. Full information at the enquiry stage enables us to put forward the optimum design solution for your application.

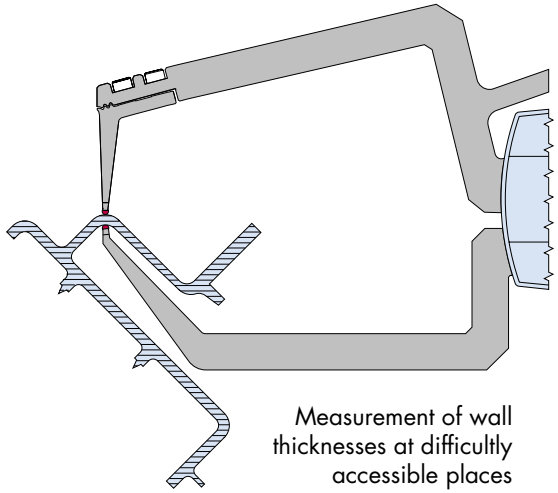




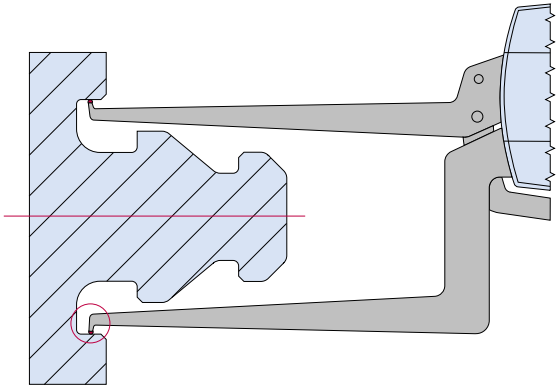
Measurement of undercuts with angled measuring contacts



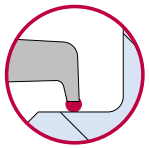
Measurement of wall thicknesses at large undercuts with bayonet-type contacts (displacement in direction of the arrow before and after the measurement)



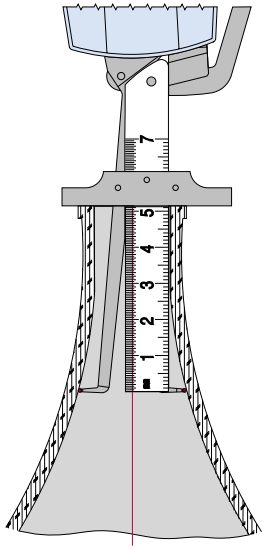
Measurement of wall thicknesses at difficultly accessible places



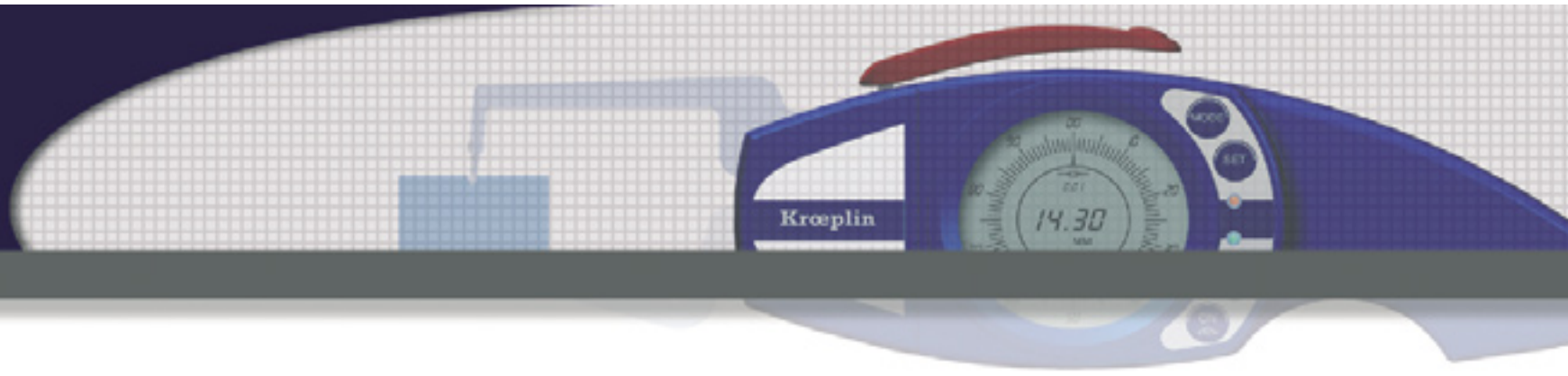
Measurement at difficultly accessible places with specially designed caliper arms



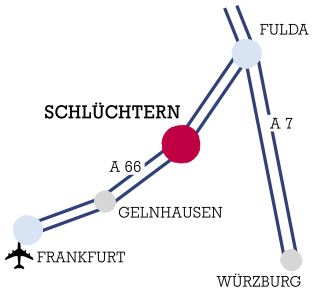
Measurement of bottle diameters with depth measurement



Kroeplin
Längenmesstechnik



APPLICATION AREA



- Mechanical engineering
- Automobile industry
- Aerospace industry
- Wire manufacturers: Diameter determination of continuous wires.
- Glass industry: Measurement of wall thickness in hard-to-access areas.
- Dental laboratories: Measurement of tooth crown thicknesses.
- Aerosol and packaging industry: Measurement of aerosol cans.
- Foundries: Measurement of cast wall thicknesses.
- Key manufacturers: Measurement of milled notches of keys.
- Foam material industry: Thickness measurement of foam material.
- Tube manufacturers: Internal and external measurements, also of extremely wide tubes.
- Ceramic industry: Safe and simple determination of contraction due to baking and drying.
- Gun Clubs: Checking the admissable thickness of shooting jackets.
- Medical institutes: Measurement of skin wrinkles of human and animals.
- Special designs: Your measuring task is among them.

KATALOG/09/2005/3.000/ENGLISCH

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