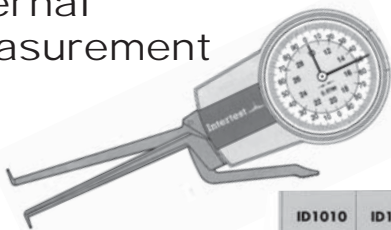
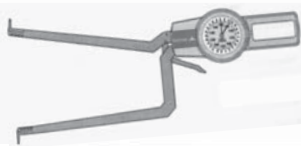
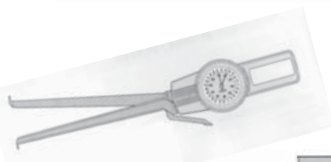


Mechanical internal measurement



		ID1010	ID1020	ID1030	ID1040	ID1050	ID1060	ID1070	ID1080
Range of application	Awb [mm]	10-30	20-40	30-50	40-60	50-70	60-80	70-90	80-100
Measuring range	Meb [mm]	20	20	20	20	20	20	20	20
Scale interval	Skw [mm]	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,01
Deviation in the measuring range	f M [mm]	±0,03	±0,03	±0,03	±0,03	±0,03	±0,03	±0,03	±0,03
Repeatability	f w [mm]	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,01
Measuring depth	L [mm]	80	80	80	80	80	80	80	80
Groove depth	A [mm]	4,5	6	6	6	6	6	6	6
Groove width	B [mm]	1,8	2,5	2,5	2,5	2,5	2,5	2,5	2,5
Type of measuring contact	D [mm]	K ø1 ⊕	K ø1 ⊕	K ø1 ⊕	K ø1 ⊕	K ø1 ⊕	K ø1 ⊕	K ø1 ⊕	K ø1 ⊕
Measuring contact length(movable)	Hb [mm]	5	7	7	10	10	10	10	10
Measuring contact length(fixed)	Hf [mm]	5	7	7	10	20	10	20	10
Measuring contact thickness	S [mm]	1,3	1,9	1,9	2,5	2,5/4	2,5	2,5/4	2,5
Minimum measuring force	Fmin. N	0,9	0,9	0,9	0,9	0,9	0,9	0,9	0,9
Maximum measuring force	Fmax. N	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5



		ID2015	ID2040	ID2100
Range of application	Awb [mm]	15-65	40-90	100-150
Measuring range	Meb [mm]	50	50	50
Scale interval	Skw [mm]	0,05	0,05	0,05
Deviation in the measuring range	f M [mm]	±0,05	±0,05	±0,05
Repeatability	f w [mm]	0,025	0,025	0,025
Measuring depth	L [mm]	175	175	175
Groove depth	A [mm]	4,5	8	8
Groove width	B [mm]	2,5	3,3	3,3
Type of measuring contact	D [mm]	K ø1,5 ⊕	K ø2 ⊕	K ø2 ⊕
Measuring contact length/movable	Hb [mm]	5,3	10,5	10,5
Measuring contact length(fixed)	Hf [mm]	5,3	10,5	10,5
Measuring thickness	S [mm]	1,8	2,5	2,5
Minimum measuring force	Fmin. N	1,2	1,2	1,2
Maximum measuring force	Fmax. N	2	2	2



		ID4040	ID80200
Range of application	Awb [mm]	40-140	200-400
Measuring range	Meb [mm]	100	200
Scale interval	Skw [mm]	0,1	0,2
Deviation in the measuring range	f M [mm]	±0,15	±0,40
Repeatability	f w [mm]	0,075	0,2
Measuring depth	L [mm]	385	735
Groove depth	A [mm]	2	25
Groove width	B [mm]	5	25
Type of measuring contact	D [mm]	K ø5 ⊕	K R20 ⊕
Measuring contact length/movable	Hb [mm]	2,5	29,5
Measuring contact length(fixed)	Hf [mm]	2,5	29,5
Measuring contact thickness	S [mm]	5	8
Minimum measuring force	Fmin. N	1,5	1,0
Maximum measuring force	Fmax. N	2,5	2,0

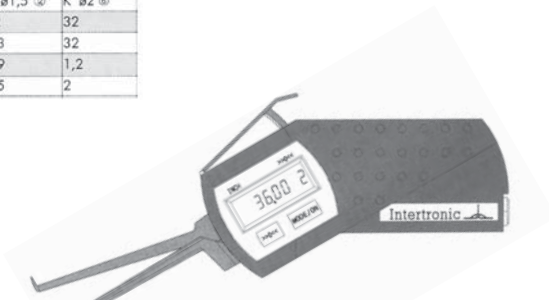
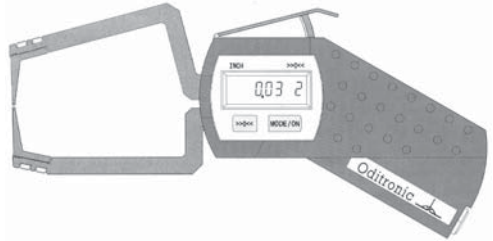


Electronic

external

	EOD1025	EOD2050

	Awb	[mm]	0,3-25	0,5-50
Range of application	Meb	[mm]	24,7	49,5
Measuring range	Zw	[mm]	0,01	0,02
Numerical interval	f M	[mm]	+0,02	±0,04
Deviation in the measuring range	f w	[mm]	0,02	0,04
Repeatability	L	[mm]	80	170
Measuring depth	D	[mm]	K ø1,5 Ⓢ K ø2 Ⓢ	
Type of measuring contact	Hb	[mm]	22	32
Measuring contact length/movable	Hf	[mm]	2,3	32
Measuring contact length/fixed	Fmin.	N	0,9	1,2
Minimum measuring force	Fmax.	N	1,5	2
Maximum measuring force				



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aerospace industry.

internal

	EID1010	EID1030	EID1050

	Awb	[mm]	10-35	30-55	50-75
Range of application	Meb	[mm]	25	25	25
Measuring range	Zw	[mm]	0,01	0,01	0,01
Numerical interval	f M	[mm]	±0,03	±0,03	±0,03
Deviation in the measuring range	f w	[mm]	0,03	0,03	0,03
Repeatability	L	[mm]	80	80	80
Measuring depth	A	[mm]	4,5	6	8
Groove depth	B	[mm]	1,7	2,5	3
Groove width	D	[mm]	K ø1 Ⓢ K ø1 Ⓢ K ø1 Ⓢ		
Type of measuring contact	Hb	[mm]	5	7	10
Measuring contact length/movable	Hf	[mm]	5	7	20
Measuring contact length/fixed	S	[mm]	1,2	1,9	2,5/4
Measuring contact thickness	Fmin.	N	0,9	0,9	0,9
Minimum measuring force	Fmax.	N	1,5	1,5	1,5
Maximum measuring force					

THE MOST IMPORTANT APPLICATION AREAS ARE:

Wire manufacturers:

Diameter measurement of continuous wires.

Glass industry:

Measurement of wall thicknesses in difficulty accessible places.

Tube manufacturers:

Internal and external measurements, also of extremely wide tubes.

Ceramic industry:

Safe and simple determination of contraction due to baking and drying.

Key manufacturers:

Measurement of milled notches of keys.

Foamed material industry:

Measurements of foam material thicknesses.

Dental laboratories:

Measurement of tooth crown thicknesses

Aerosol and packaging industry:

Measurement of aerosol cans.

Foundries:

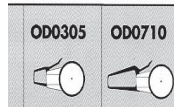
Measurement of cast wall thicknesses.

Medical institutes:

Measurement of skin wrinkles of human and animals.

OTHER SIZES AVAILABLE UPON REQUEST

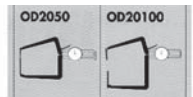
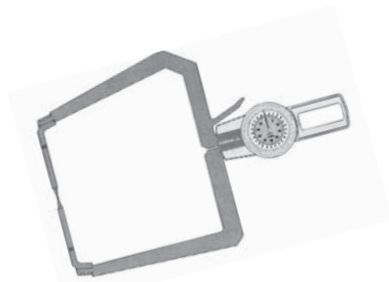
Mechanical external measurement



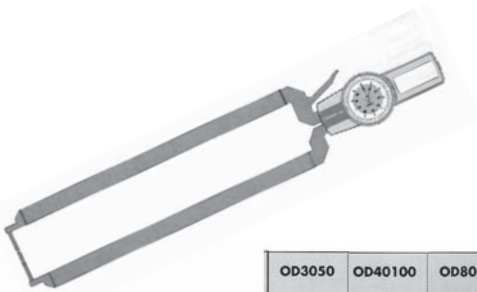
			OD0305	OD0710
Range of application	Awb	[mm]	0,5	0-10
Measuring range	Meb	[mm]	5	10
Scale interval	Skw	[mm]	0,005	0,01
Deviation in the measuring range	fM	[mm]	±0,01	±0,02
Repeatability	f w	[mm]	0,0025	0,005
Measuring depth	L	[mm]	28	59
Type of measuring contact	D	[mm]	K ø1,5 ⊗	K ø1,5 ⊗
Measuring contact length(movable)	Hb	[mm]	7,5	8
Measuring contact length(fixed)	Hf	[mm]	7,5	8
Minimum measuring force	Fmin.	N	1,20	0,80
Maximum measuring force	Fmax.	N	1,70	1,30



			OD1020	OD2050	OD20100
Range of application	Awb	[mm]	0-20	0-50	50-100
Measuring range	Meb	[mm]	20	50	50
Scale interval	Skw	[mm]	0,01	0,05	0,05
Deviation in the measuring range	fM	[mm]	±0,03	±0,05	±0,075
Repeatability	f w	[mm]	0,01	0,025	0,025
Measuring depth	L	[mm]	80	170	170
Type of measuring contact	D	[mm]	K ø1,5 ⊕	K ø2 ⊕	K ø2 ⊕
Measuring contact length/movable	Hb	[mm]	22	32	32
Measuring contact length/fixed	Hf	[mm]	22	32	32
Minimum measuring force	Fmin.	N	0,9	1,2	1,2
Maximum measuring force	Fmax.	N	1,5	1,8	1,8



			OD2050	OD20100
Range of application	Awb	[mm]	0-50	50-100
Measuring range	Meb	[mm]	50	50
Scale interval	Skw	[mm]	0,05	0,05
Deviation in the measuring range	fM	[mm]	±0,075	±0,075
Repeatability	f w	[mm]	0,025	0,05
Measuring depth	L	[mm]	170	170
Type of measuring contact	D	[mm]	K ø2 ⊕	K ø2 ⊕
Measuring contact length/movable	Hb	[mm]	32	32
Measuring contact length/fixed	Hf	[mm]	82	82
Minimum measuring force	Fmin.	N	1,2	1,2
Maximum measuring force	Fmax.	N	1,8	1,8



			OD3050	OD40100	OD80200
Range of application	Awb	[mm]	0-50	0-100	0-200
Measuring range	Meb	[mm]	50	100	200
Scale interval	Skw	[mm]	0,1	0,1	0,2
Deviation in the measuring range	fM	[mm]	±0,15	±0,15	±0,4
Repeatability	f w	[mm]	0,075	0,075	0,2
Measuring depth	L	[mm]	230	368	730
Type of measuring contact	D	[mm]	K ø5 ⊗	K ø5 ⊗	K R20 ⊗

OTHER SIZES AVAILABLE UPON REQUEST