

Crankshaft tester


Application:

For detecting bends in crankshafts

Delivery:

In a wooden case

Execution:

- Dial gauge scale interval: 0.01 mm
- Pendulum weight for positioning dial gauge horizontally

Technical data:

- Scale value: 0.01 mm



Min./max. length of application area	Ident. No.	60-300 mm	60-500 mm
33590...	Price/unit, €	310	510
		•	•

Prod. Gr. 308

film thickness measuring device with lifting device


Application:

For measuring the thickness of films.

- Insulated handles

Execution:

- Glass and external ring made from one piece

Delivery:

in a cardboard case



	Min./max. length measuring range	Scale value (mm)	Bracket depth (mm)	Contact pressing force (N)	Ident. No.	Price/unit, €
33212...	0-1 mm	0.001	30	1.3	010	•
33212...	0-1 mm	0.001	30	1.5	020	•

Prod. Gr. 331

thickness measuring devices


Application:

No. 33185 110, 33197 050: For measuring the thickness of leather, card, paper, films.

No. 33185 135: For measuring the thickness of hard materials.

No. 33195 050–33196 090, 33206 010: For measuring the thickness of rubber blankets, rubber sheets, felt and soft materials.

No. 33199: For measuring the thickness of sheet metal and hard materials.

Execution:

- Precision measuring element
- Replaceable gauge slides
- **No. 33185:** Pocket thickness measuring device in compact design
- **No. 33195 070–33195 090, 33196 090, 33199 070–33199 090:** Stand attachment for stability
- **No. 33195–33206:** Robust throat



No. 33185
Pocket thickness gauge



No. 33195 050–33196 090, 33199 050–33199 090
30 mm measurement range, 400 mm bow depth, with mounting fixture



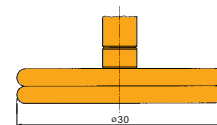
No. 33206
Measuring range 10 mm, bow depth 50 mm



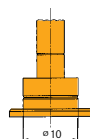
No. 33185 110
Flat Ø 10 mm



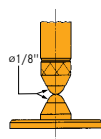
No. 33185 135
Spherical



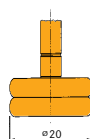
No. 33195
Type A



No. 33197
Type C



No. 33199 050–33199 070
Type E



No. 33206
Type B

	Min./max. length measuring range	Form	Scale value (mm)	Bracket depth (mm)	Ident. No.	
33185...	0-10 mm		0.01	18	Ident. No.	110
					Price/unit, €	●
33185...	0-10 mm		0.01	45	Ident. No.	135
					Price/unit, €	●
33206...	0-10 mm	B	0.01	50	Ident. No.	010
					Price/unit, €	●
33195...	0-30 mm	A	0.1	50	Ident. No.	050
					Price/unit, €	●
33196...	0-30 mm	B	0.1	50	Ident. No.	050
					Price/unit, €	○
33197...	0-30 mm	C	0.1	50	Ident. No.	050
					Price/unit, €	○
33199...	0-30 mm	E	0.1	50	Ident. No.	050
					Price/unit, €	●
33195...	0-30 mm	A	0.1	200	Ident. No.	070
					Price/unit, €	●
33199...	0-30 mm	E	0.1	200	Ident. No.	070
					Price/unit, €	○
33195...	0-30 mm	A	0.1	400	Ident. No.	090
					Price/unit, €	●
33196...	0-30 mm	B	0.1	400	Ident. No.	090
					Price/unit, €	○
33199...	0-30 mm	E	0.1	400	Ident. No.	090
					Price/unit, €	●

Prod. Gr. 331

Electronic thickness gauge



Application:

For measuring the thickness of rubber blankets, rubber sheets, felt and soft materials.

Execution:

- Zero setting at any position

- mm/inch switch-over
- Replaceable gauge slides
- Preset function

Delivery:

3-V lithium battery (type RS 2032), in a cardboard case



	Min./max. length measuring range	Scale value (mm)	Bracket depth (mm)	Data transmission type	Ident. No.	
33211...	0-12.5 mm	0.01	50	multiCOM	011	●

Prod. Gr. 331

Kroeplin quick probes for external measurement of grooves and thicknesses



Application:

For measuring thicknesses, wall thicknesses and external grooves.

Execution:

- 1 fixed and 1 movable measuring arm
- Ident. No. 010-020, 040-050, 075:**
 - Adjustable tolerance marks
 - Easy adjustment with rotating housing
- Ident. No. 030, 065, 085:**
 - Large, high-contrast LCD display (digit size 8.5 mm)

- Combined digit and scale display
- mm/inch switch-over
- Measuring mode ABSOLUTE
- Measured value classification (red/green display)

Advantage:

- Measured result can be read directly

Delivery:

With traceable test certificate in box (excluding ref. no. 010)



Ident. No. 010-020,
040-050, 075
Model D110



Ident. No. 030, 085
Model C220



Ident. No. 065
Model C330



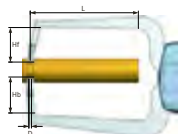
Measuring contact 1



Measuring contact 2



Measuring contact 6



Manual measuring devices with dial indicator \ Quick probes

Min./max. length measuring range	0-10 mm	0-10 mm	0-20 mm	0-20 mm	0-20 mm	0-30 mm	0-50 mm	0-50 mm
Scale value (mm)	0.1	0.005	0.01	0.01	0.01	0.02	0.05	0.02
Display	Analogue	Analogue	Digital	Analogue	Analogue	Digital	Analogue	Digital
Measuring depth (mm)	36	35	85	85	85	115	167	167
Type	POCO 2K	D110	C220	D220	D220S	C330	D450	C450
Measuring arrangement	6	1	1	1	2	1	1	1
Hb (mm)	5	19.1	24.7	24.7	24.7	30	30	30
Hf (mm)	5	18.6	24.6	24.6	24.6	30	30	30
33241...	Ident. No. Price/unit, €	010 ●	020 ●	030 ●	040 ●	050 ●	065 ●	075 ●
								085 ●

Prod. Gr. 332

Kroeplin quick callipers for pipe wall measurements

Längenmesstechnik



Application:

For measuring wall thicknesses of pipes and hollow parts.

Execution:

- 1 fixed and 1 movable measuring arm
- Ident. No. 010-030, 050-065:**
 - Adjustable tolerance marks
 - Easy adjustment with rotating housing
- Ident. No. 040, 075:**
 - Large, high-contrast LCD display (digit size 8.5 mm)

- Combined digit and scale display
- mm/inch switch-over
- Measuring mode ABSOLUTE
- Measured value classification (red/green display)

Advantage:

- Measured result can be read directly

Delivery:

With traceable test certificate in box (excluding ref. no. 010)



Ident. No. 010-030,
050-065
Model D4R50



Ident. No. 040, 075
Model C2R20



Measuring contact 3



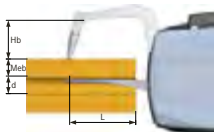
Measuring contact 4



Measuring contact 5



Measuring contact 7



Min./max. length measuring range	1-10 mm	0-10 mm	0-10 mm	0-20 mm	0-20 mm	0-50 mm	0-50 mm
Scale value (mm)	0.1	0.005	0.005	0.01	0.01	0.05	0.02
Display	Analogue	Analogue	Analogue	Digital	Analogue	Analogue	Digital
Measuring depth (mm)	33	35	35	85	85	169	169
Type	POCO 2R	D1R10	D1R10S	C2R20	D2R20	D4R50	C4R50
Measuring arrangement	7	3	4	5	5	5	5
Hb (mm)	5	19.1	18.8	24.7	24.7	30	30
Hf (mm)	0.8	0.9	0.9	2.5	2.5	4.3	4.3
33243...	Ident. No. Price/unit, €	010 ●	020 ●	030 ○	040 ●	050 ●	065 ●
							075 ○

Prod. Gr. 332

Kroeplin quick probe for internal measurements of bores, recesses and internal grooves

Längenmesstechnik



Application:

For measuring bores, recesses and internal grooves.

Execution:

- 1 fixed and 1 movable measuring arm
- Ident. No. 010, 030, 050, 070, 090, 110, 130, 150, 170, 190, 215-225, 245, 265:**
 - Large, high-contrast LCD display (digit size 8.5 mm)
 - Combined digit and scale display
 - mm/inch switch-over
 - Measuring mode ABSOLUTE



Ident. No. 010, 030, 050, 070, 090, 110, 130, 150, 170, 190, 225, 245, 265
Model G102



Ident. No. 020, 040, 060, 080, 100, 120, 140, 160, 180, 200, 235, 255, 275-285
Model H210



Ident. No. 215
Model G313



Measuring contact 1



Measuring contact 2



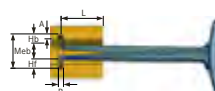
Measuring contact 3



Measuring contact 4



Measuring contact 5



Min./max. length measuring range	2.5-12.5 mm	2.5-12.5 mm	5-15 mm	5-15 mm	10-30 mm	10-30 mm	20-40 mm	20-40 mm
Scale value (mm)	0.005	0.005	0.005	0.005	0.01	0.01	0.01	0.01
Display	Digital	Analogue	Digital	Analogue	Digital	Analogue	Digital	Analogue
Measuring depth (mm)	35	35	35	35	85	85	85	85
Type	G102	H102	G105	H105	G210	H210	G220	H220
Measuring arrangement	1	1	3	3	3	3	4	4
Hb (mm)	0.9	0.9	2.5	2.5	5.3	5.3	7.3	7.3
Hf (mm)	0.9	0.9	2.5	2.5	5.3	5.3	7.3	7.3
33261... Ident. No.	010	020	030	040	050	060	070	080
Price/unit, €	●	●	●	●	●	●	●	●

Min./max. length measuring range	30-50 mm	30-50 mm	40-60 mm	40-60 mm	50-70 mm	50-70 mm	60-80 mm	60-80 mm
Scale value (mm)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Display	Digital	Analogue	Digital	Analogue	Digital	Analogue	Digital	Analogue
Measuring depth (mm)	85	85	85	85	85	85	85	85
Type	G230	H230	G240	H240	G250	H250	G260	H260
Measuring arrangement	4	4	5	5	5	5	5	5
Hb (mm)	7.3	7.3	8.5	8.5	8.5	8.5	8.5	8.5
Hf (mm)	7.3	7.3	8.5	8.5	8.5	8.5	8.5	8.5
33261... Ident. No.	090	100	110	120	130	140	150	160
Price/unit, €	●	●	○	●	○	●	○	●

Min./max. length measuring range	70-90 mm	70-90 mm	80-100 mm	80-100 mm	13-43 mm	30-60 mm	15-65 mm	15-65 mm
Scale value (mm)	0.01	0.01	0.01	0.01	0.02	0.02	0.05	0.02
Display	Digital	Analogue	Digital	Analogue	Digital	Digital	Analogue	Digital
Measuring depth (mm)	85	85	85	85	127	127	188	188
Type	G270	H270	G280	H280	G313	G330	H415	G415
Measuring arrangement	5	5	5	5	2	5	2	2
Hb (mm)	8.5	8.5	8.5	8.5	5.7	6.5	6	6.0
Hf (mm)	8.5	8.5	8.5	8.5	5.7	6.5	6	6.0
33261... Ident. No.	170	180	190	200	215	225	235	245
Price/unit, €	○	●	○	●	●	○	●	●

Min./max. length measuring range	40-90 mm	40-90 mm	70-120 mm	100-150 mm
Scale value (mm)	0.05	0.02	0.05	0.05
Display	Analogue	Digital	Analogue	Analogue
Measuring depth (mm)	192	192	192	192
Type	H440	G440	H470	H4100
Measuring arrangement	5	5	5	5
Hb (mm)	8.5	8.5	8.5	8.5
Hf (mm)	8.5	8.5	8.5	8.5
33261... Ident. No.	255	265	275	285
Price/unit, €	○	●	●	●

Prod. Gr. 332



Internal precision measuring instruments with probe heads

**Application:**

For measuring bore holes using comparison measuring instruments.

- Hardened and chromium-plated probe heads
- Zero using setting master
- **No. 33453:** Suitable for measuring bore hole bases

Execution:

- Repeatability < 1 µm
- One holder for all measuring ranges

Delivery:

Holder with probe heads and drive needles in wooden case, dial gauge and setting rings not included.



Min./max. Ø of measuring range	0.47-0.97 mm	0.95-1.55 mm	1.50-3.95 mm	1.50-9.80 mm	3.70-9.80 mm	9.40-20.60 mm	20.40-30.60 mm	28.90-41.10 mm
Number of probe heads (PCS)	6	5	9	21	12	11	10	6
Number of measurement needles (PCS)	2	1	2	3	1	1	1	1
33450...	Ident. No. 010	Ident. No. 025	Ident. No. 030	Ident. No. 080	Ident. No. 040	Ident. No. 050	Ident. No. 065	Ident. No. 075
	Set price, €	○	○	●	●	●	○	○
33453...	Ident. No. -	Ident. No. -	Ident. No. -	Ident. No. 082	Ident. No. 045	Ident. No. 055	Ident. No. 065	Ident. No. 075
	Set price, €	-	-	○	○	○	○	○

Prod. Gr. 337



individual and add-on parts

for internal precision measuring instruments

Application:

No. 33460: For holding the dial gauge, drive needle and probe head.

No. 33468: For measuring deep bore holes from Ø 8.2 mm.



No. 33460
Standard holder 51 mm long

No. 33468
Standard extension Ø 8 mm, 64 mm long

33460...	Ident. No. 010
	Price/unit, € ●
33468...	Ident. No. 010
	Price/unit, € ●

Prod. Gr. 337



Probe head for Diatest internal precision measuring instrument

For through-bores

Application:

For measuring in combination with additional parts of the internal measuring instrument.

Technical data:

- Connection thread: M6 x 0.75
- Surface: Chrome-plated

**Notes:**

Additional components are required for performing measurements.

Min./max. Ø of measuring range	0.47-0.53 mm	0.52-0.58 mm	0.57-0.67 mm	0.65-0.77 mm	0.75-0.87 mm	0.85-0.97 mm	0.95-1.15 mm	1.07-1.35 mm
Measuring depth (mm)	1.5	1.8	2	2.5	2.8	3	11	11
33464...	Ident. No. 005	Ident. No. 010	Ident. No. 015	Ident. No. 020	Ident. No. 025	Ident. No. 030	Ident. No. 035	Ident. No. 040
	Price/unit, €	○	○	○	○	○	●	●
Min./max. Ø of measuring range	1.17-1.35 mm	1.27-1.45 mm	1.37-1.55 mm	1.5-1.9 mm	1.8-2.2 mm	2.05-2.45 mm	2.3-2.7 mm	2.55-2.95 mm
Measuring depth (mm)	11	11	11	17	17	17	22	22
33464...	Ident. No. 045	Ident. No. 050	Ident. No. 055	Ident. No. 060	Ident. No. 065	Ident. No. 070	Ident. No. 075	Ident. No. 080
	Price/unit, €	●	○	●	●	●	●	●
Min./max. Ø of measuring range	2.8-3.2 mm	3.05-3.45 mm	3.3-3.7 mm	3.55-3.95 mm	3.7-4.3 mm	4.2-4.8 mm	4.7-5.3 mm	5.2-5.8 mm
Measuring depth (mm)	22	22	22	22	40	40	40	40
33464...	Ident. No. 085	Ident. No. 090	Ident. No. 095	Ident. No. 100	Ident. No. 105	Ident. No. 110	Ident. No. 115	Ident. No. 120
	Price/unit, €	●	●	●	○	●	●	●
Min./max. Ø of measuring range	5.7-6.3 mm	6.2-6.8 mm	6.7-7.3 mm	7.2-7.8 mm	7.7-8.3 mm	8.2-8.8 mm	8.7-9.3 mm	9.2-9.8 mm
Measuring depth (mm)	40	40	40	40	40	50	50	50
33464...	Ident. No. 125	Ident. No. 130	Ident. No. 135	Ident. No. 140	Ident. No. 145	Ident. No. 150	Ident. No. 155	Ident. No. 160
	Price/unit, €	●	●	●	●	●	●	●

Min./max. Ø of measuring range	9.4-10.6 mm	10.4-11.6 mm	11.4-12.6 mm	12.4-13.6 mm	13.4-14.6 mm	14.4-15.6 mm	15.4-16.6 mm	16.4-17.6 mm
Measuring depth (mm)	50	50	50	50	50	50	90	90
33464... Ident. No.	165	170	175	180	185	190	195	200
Price/unit, €	●	●	●	●	●	○	●	○
Min./max. Ø of measuring range	17.4-18.6 mm	18.4-19.6 mm	19.4-20.6 mm	20.4-21.6 mm	21.4-22.6 mm	22.4-23.6 mm	23.4-24.6 mm	24.4-25.6 mm
Measuring depth (mm)	90	90	90	90	90	90	90	90
33464... Ident. No.	205	210	215	220	225	230	235	240
Price/unit, €	○	○	●	○	○	○	○	○
Min./max. Ø of measuring range	25.4-26.6 mm	26.4-27.6 mm	27.4-28.6 mm	28.4-29.6 mm	29.4-30.6 mm	28.9-31.1 mm	30.9-33.1 mm	32.9-35.1 mm
Measuring depth (mm)	90	90	90	90	90	100	100	100
33464... Ident. No.	245	250	255	260	265	270	275	280
Price/unit, €	○	○	○	○	○	○	○	○
Min./max. Ø of measuring range	34.9-37.1 mm	36.9-39.1 mm	38.9-41.1 mm					
Measuring depth (mm)	100	100	100					
33464... Ident. No.	285	290	295					
Price/unit, €	○	○	○					

Prod. Gr. 337

Carbide probe heads for blind holes available upon request



Gauge needle for Diatest internal precision measuring instrument

For through-bores

Application:

For measuring in combination with additional parts of the internal precision measuring instrument

Execution:

- Steel



Min./max. area of application for probe head	0.47-0.58 mm	0.57-0.97 mm	0.95-1.55 mm	1.50-2.45 mm	2.30-3.95 mm	3.70-9.8 mm	9.40-30.6 mm	28.90-41.1 mm
33465... Ident. No.	010	020	030	040	050	060	070	090
Price/unit, €	○	○	●	●	●	●	●	●

Prod. Gr. 337



Measuring table

For internal precision measuring instruments

Application:

For quick measurement using internal measuring instruments up to depths of 125 mm.

Delivery:

Quick measuring stand. Does not include dial gauge, floating holder, probe head and drive needle

Execution:

- Measuring table can be lifted using a lever
- Table fixed with clamping screw
- Ground and hardened measuring table

Technical data:

- Measuring table diameter: 58 mm
- Stroke length: 40 mm
- Max. diameter of workpiece: 100 mm
- Max. workpiece height: 100 mm

Advantage:

- Quick series monitoring



Supplied without ① dial gauge, ② floating holder and ③ probe head with driving needle

33475...	Ident. No.	010
	Price/unit, €	●

Prod. Gr. 337



Measuring table

For OSIMESS internal precision measuring instruments

Application:

For convenient and fast measurement of series components.

Advantage:

- Quick series monitoring
- Maximum protection of measuring instrument

Execution:

- Hand lever for operation
- Depth stop

Technical data:

- Measuring table diameter: 120 mm
- Stroke length: 90 mm
- Max. diameter of workpiece: 200 mm
- Max. workpiece height: 200 mm



OSM 5 measuring table supplied without precision pointer

33515...	Ident. No.	050
	Price/unit, €	○

Prod. Gr. 339



OSIMESS expansion probe

- For fast, manual measurement of bores in the $\varnothing$ range 1.0 to 40 mm.
- modular system with a device holder that can be rapidly adapted for the required application using replaceable expansion probes and measuring needles.
- The measuring path is transmitted by a high-precision carbide-tipped wedge needle.
- The three basic versions of the expansion probes are chromium-plated, alternatively carbide-tipped or for blind holes.
- Economical measuring instrument for small diameters.
- Customer-specific special solutions possible.



ATORN® Internal precision measuring instrument

**Application:**

For measuring bore diameters using the 2-point comparison measuring method.

- Fixed measuring pins and moving probe bolts made of hardened steel

Execution:

- Repeat limit 1 μ m

Delivery:

In wooden case (without precision pointer)

Min./max. $\varnothing$ of measuring range	18-35 mm	35-60 mm	50-150 mm
Measuring depth (mm)	176	178	178
Spindle material	Steel	Steel	Steel
33518...	Ident. No. 018	Ident. No. 035	Ident. No. 050
Set price, €	•	•	•

Prod. Gr. 303

Suitable precision pointer page 971



ATORN® Internal precision measuring instrument set 18 - 150 mm



Min./max. $\varnothing$ of measuring range	18-150 mm
Measuring depth (mm)	176/178
Spindle material	Steel
33518...	Ident. No. 400
Set price, €	•

Prod. Gr. 303

Suitable precision pointer page 971



SUBITO internal precision measuring instruments

SU series

Application:

For precise measuring of bores using the 2-point method. Turning and/or moving the device in the hole makes it possible to detect deviations from roundness or cylindricity.

Execution:

- Movable carbide-tipped measuring pin
- No. 33520:** Fixed measuring pin made of hardened steel
- No. 33521:** Fixed carbide-tipped measuring pin

Advantage:

- High repeatability 0.5–1.5 μ m
- Self-centring in the bore hole
- INVAR pipe (special nickel alloy) guarantees minimum thermal expansion caused by body heat from hands or high ambient temperatures

Delivery:

Without precision pointer, with calibration certificate, in wooden case



Determine the reversal point

Min./max. Ø of measuring range	Measuring depth (mm)	Number of measuring pins (PCS)	Nominal dimension of spindle	Number of measurement discs (PCS)	Spindle material Measurement disc thickness	Carbide		Steel	
						33521... Ident. No.		33520... Ident. No.	
4.5-6 mm	80	9	4.5 mm 4.6 mm 4.8 mm 5.0 mm 5.2 mm 5.4 mm 5.6 mm 5.8 mm 6.0 mm	-	-	010	●	-	-
6-8 mm	100	7	6.0 mm 6.4 mm 6.8 mm 7.0 mm 7.2 mm 7.6 mm 8.0 mm	-	-	020	●	-	-
8-12 mm	100	9	8-12 mm increasing every 0.5 mm	-	-	030	●	-	-
12-20 mm	110	9	12-20 mm increasing every 1 mm	1	0.5 mm	040	●	-	-
18-35 mm	110	9	18-34 mm increasing every 2 mm	2	0.5 mm 1 mm	050	●	050	●
35-60 mm	140	6	35-59 mm increasing every 5 mm	2	1 mm 2 mm	060	●	060	●
50-100 mm	180	11	50-100 mm in- creasing every 5 mm	3	1 mm 2 mm 3 mm	070	●	070	●
100-160 mm	230	7	100-160 mm in- creasing every 10 mm	4	1 mm 2 mm 3 mm 6 mm	090	●	090	●
160-290 mm	230	7	160-220 mm in- creasing every 10 mm 1 extension up to 70 mm	4	1 mm 2 mm 3 mm 6 mm	110	●	110	●
280-510 mm	400	7	280-340 mm in- creasing every 10 mm 1 extension 70 and 100 mm	4	1 mm 2 mm 3 mm 6 mm	120	●	120	○
18-100 mm	180	27	18-34 mm increasing every 2 mm 35-59 mm increasing every 5 mm 50-100 mm increasing every 5 mm	7	0.5 mm 1 mm 2 mm 3 mm	080	●	080	○
50-160 mm	230	18	50-100 mm in- creasing every 5 mm 100-160 mm increasing every 10 mm	7	1 mm 2 mm 3 mm 6 mm	100	●	100	●
						Price/unit, €			

Prod. Gr. 338

Suitable precision pointer page 971



Measuring depth extension

For SUBITO SU internal precision measuring instruments

Application:

For extending the measuring depth of SUBITO internal precision measuring instruments

Execution:

- Suitable for SUBITO from application ranges 35–60 mm

Technical data:

- Pipe diameter: 12 mm

Length (mm)		250	500	750	1000
33523...	Ident. No.	025	050	075	100
	Price/unit, €	○	●	○	●

Prod. Gr. 338



measuring range extension

For SUBITO internal precision measuring instruments

Application:

For increasing the measuring range of SUBITO

internal precision measuring instruments.

Min./max. area of application for SUBITO		50-100 mm	100-290 mm
Length (mm)		50	70
33527...	Ident. No.	010	020
	Price/unit, €	●	●

Prod. Gr. 338



**SUBITO VARIO for extended measuring ranges**

SV/SVS series

**Application:**

For precise measuring of bores using the 2-point method. Turning and/or moving the device in the hole makes it possible to detect deviations from roundness or cylindricity.

- Blind hole measurements possible
- Two measuring depth extensions
- Six vernier calipers
- **No. 33556:** Cemented carbide-tipped measuring pin

Execution:

- Dial gauges or precision pointers can be used as display units

▪ **No. 33555:** Steel measuring pin

▪ **No. 33555 040, 33556 045:**

Advantage:

- Modular system for large measuring ranges

Delivery:

In wooden box



No. 33555 040, 33556 045

Type	SV		SV		SVS	SV
Min./max. Ø of measuring range	6-18 mm		18-160 mm		18-160 mm	160-430 mm
Measuring depth (mm)	100		140		-	200
Number of measurement pins (PCS)	17		20		20	7
Nominal dimension of spindle	6.0 mm 6.5 mm 7.0 mm 7.5 mm 8.0 mm 8.5 mm 9.0 mm 9.5 mm 10 mm 11 mm 12 mm 13 mm 14 mm 15 mm 16 mm 17 mm 18 mm		18 mm 20 mm 22 mm 24 mm 26 mm 28 mm 30 mm 32 mm 34 mm 50 mm 55 mm 60 mm 65 mm 70 mm 75 mm 80 mm 85 mm 90 mm 95 mm 100 mm		18 mm 20 mm 22 mm 24 mm 26 mm 28 mm 30 mm 32 mm 34 mm 50 mm 55 mm 60 mm 65 mm 70 mm 75 mm 80 mm 85 mm 90 mm 95 mm 100 mm	160 mm 170 mm 180 mm 190 mm 200 mm 210 mm 220 mm
Number of measurement heads (PCS)	2		2		4	1
Number of measurement discs (PCS)	2		5		5	4
Measurement disc thickness	0.25 mm 0.5 mm		0.5 mm 1 mm 2 mm 3 mm		0.5 mm 1 mm 2 mm 3 mm	1 mm 2 mm 3 mm 6 mm
Spindle material	Carbide		Steel		Steel	Steel
33556...	Ident. No.	010	Ident. No.	035	Ident. No.	045
	Set price, €	●		○		○
33555...	Ident. No.	-	Ident. No.	035	Ident. No.	040
	Set price, €	-		○		○

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Suitable precision pointer page 971

**SUBITO internal precision measuring instruments for blind holes**

SS/SSV series

**Application:**

For measuring blind holes, centring shoulders etc.

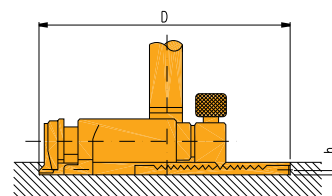
- Setting via ring or ESU setting device 33580 .../33582...
- Dial gauges or precision pointers can be used as display units
- **Ident. No. 140:** Based on Subito SS for larger measuring ranges

Execution:

- Carbide-tipped vernier callipers and moving probe bolt
- High measurement reliability, repeat limit 0.001 mm
- Measurements close to the base

Advantage:

- Modular system for large measuring ranges



Type	SS	SS	SS	SS	SSV
Min./max. Ø of measuring range	20-50 mm	50-110 mm	110-300 mm	300-600 mm	20-140 mm
Measuring depth (mm)	80	60	90	90	60
Number of measurement heads (PCS)	1	1	1	1	2
Number of sliding callipers (PCS)	3	2	4	6	6
Measuring range of sliding calliper	20-30 mm 30-40 mm 40-50 mm	50-80 mm 80-110 mm	110-150 mm 150-200 mm 200-250 mm 250-300 mm	300-350 mm 350-400 mm 400-450 mm 450-500 mm 500-550 mm 550-600 mm	20-30 mm 30-40 mm 40-50 mm 50-80 mm 80-110 mm 110-140 mm
Distance from base of hole (mm)	1.5	1.5	2	2	1.5
33560...	Ident. No. Price/unit. €	020 ●	050 ●	110 ●	300 ○
					140 ○

Prod. Gr. 338

Suitable precision pointer page 971



OD plug gauges for series control



Application:

For measuring bores in series monitoring.

Execution:

- Cemented carbide measuring contacts and measuring needles (wear-resistant)
- Dial gauges or precision pointers can be used as display units

Advantage:

- Easy to use
- Minimum measuring times
- Maximum measuring accuracy
- Robust and reliable

- Matched to the respective bore diameter

Notes:

A device holder no. 33561 and display unit (dial gauge or precision pointer) are also required for measuring. Please indicate the required Ø, measuring height and tolerance when ordering.

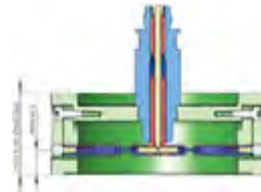
Surcharge for tolerance range below 9 µm or above 20 µm on request.

Technical data:

- Repeat accuracy: 1 µm
- Connection thread: M11 x 0.75



Plug gauge OD with holder and precision pointer



Min./max. Ø of measuring range	2-2.5 mm	2.5-6 mm	6.1-12 mm	12.1-20 mm	20.1-30 mm	30.1-40 mm	40.1-60 mm	60.1-80 mm
Measurement travel (mm)	0.15	0.15	0.2	0.2	0.2	0.2	0.2	0.2
Front size (mm)	1	1.5	2.5	2.5	3.5	3.5	3.5	4
Sleeve length (mm)	-	10	15	15	20	20	28	33
33562... Ident. No.	002	003	005	010	520	530	540	560
Price/unit, €	○	○	○	○	○	○	○	○

Min./max. Ø of measuring range	80.1-100 mm
Measurement travel (mm)	0.2
Front size (mm)	4
Sleeve length (mm)	33
33562... Ident. No.	580
Price/unit, €	○

Prod. Gr. 334

Suitable precision pointer page 971



OD plug gauges with front dimension h for blind holes for basic holes



Min./max. Ø of measuring range	Measurement travel (mm)	Front size (mm)	Repeat accuracy (µm)	Sleeve length (mm)	Connection thread	33566... Ident. No.	Price/unit, €
2.0-2.5 mm	0.15	0.7	1	-	M11 x 0.75	002	○
2.5-6 mm	0.15	1	1	10	M11 x 0.75	006	○
6.1-12 mm	0.2	1	1	15	M11 x 0.75	012	○
12.1-20 mm	0.2	1	1	15	M11 x 0.75	020	○
20.1-30 mm	0.2	1.2	1	20	M11 x 0.75	030	○
30.1-40 mm	0.2	1.2	1	20	M11 x 0.75	040	○
40.1-60 mm	0.2	1.2	1	28	M11 x 0.75	060	○
60.1-80 mm	0.2	1.2	1	33	M11 x 0.75	080	○
80.1-100 mm	0.2	1.2	1	33	M11 x 0.75	100	○

Prod. Gr. 334

Suitable precision pointer page 971



Accessories for SUBITO plug gauge OD Device holder for mounting OD plug gauges

Application:

For connecting an OD bore plug gauge and display unit.

Execution:

- Ident. No. 025, 031: For plug gauges Ø 60 mm

- Ident. No. 050: Special holder for electronic measuring probes
- Ident. No. 060: With retractor for blind hole plug gauges or easily-scratched parts



Length (mm)	50	105	145	235	235	110	70
Pipe Ø (mm)	12	12	18	12	18	12	12
33561... Ident. No.	010	020	025	030	031	050	060
Price/unit, €	●	●	●	●	○	○	○

Prod. Gr. 334



Over and above!

Internal measuring instruments in special designs



Examples of various OD plug gauges in special designs



Examples of various OD plug gauges with measuring bit stop

Describe your measuring problem; a solution for you can certainly be found amongst the many existing specialist solutions – ranging from slightly modified standard measuring devices to custom specialist designs.



Holder

For ON/ONM internal precision measuring instruments

Application:

For use with ON/ONM expansion probes.

Execution:

- Dial gauge holder ± 8 mm

Delivery:

Without dial gauge

33576...

support (without dial gauge)
ON/ONM for 6-55 mm

Ident. No.
Price/unit, €

010
○

Prod. Gr. 338



ESU setting devices

For SUBITO SU, SK, SW, SMT, SP, SS internal precision measuring instruments

Application:

For precise adjustment of internal precision measuring instruments to the required dimensions.

- Clamping element fixes the gauge block unit with reproducible force

Advantage:

- Horizontal and vertical setting options

Execution:

- Adjustment jaws made of hardened steel
- Fixed and loose measuring jaws made from cemented carbide lapped to gauge block quality

Delivery:

Includes accessories, without SUBITO and precision pointer



Image shows vertical application (supplied without SUBITO, precision pointer and base)

	For Subito SU/ SK/SMT/SP/SV	For Subito SU/ SK/SMT/SP/SV	For Subito SU/ SK/SMT/SP/SV	For Subito SU/ SK/SMT/SP/SV	For SUBITO SS
Min./max. length of application area	4.5-160 mm	18-160 mm	18-290 mm	160-510 mm	20-300 mm
	33580...	33580...	33580...	33582...	33582...
	Ident. No.	Ident. No.	Ident. No.	Ident. No.	Ident. No.
	010	015	020	010	020
	●	○	●	●	○
	Price/unit, €				

Prod. Gr. 338