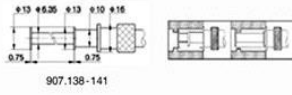


Micrometros de ranhuras – Comparador para ranhuras

Groove micrometers

Micrometers for measuring e.g. steps in bores and internal cross grooves. With double graduation for internal and external measurements. By means of the disk-shaped measuring faces the wide, depth and location of grooves in bores can be determined.

- Measuring range:
 - external measuring: 0 - 100 mm,
 - internal measuring: 1.6-101.5 mm.
- Graduation: 0.01 mm.
- Accuracy: ± 0.01 mm.
- Diameter measuring faces:
 - 907.137: 6.5 mm,
 - 907.138-907.141: 13 mm.
- Double graduation.



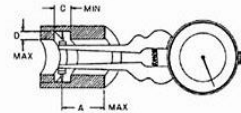
Item No.	Ext. measuring range/mm	Int. measuring range/mm
907.137	0- 25	1.6- 26.5
907.138	0- 25	1.6- 26.5
907.139	25- 50	26.5- 51.5
907.140	50- 75	51.5- 76.5
907.141	75-100	76.5-101.5

Two-point internal measuring instruments

- Measuring range: 20- 150 mm.
- Graduation: 0.01 mm.
- Interchangeable measuring inserts.
- Delivery in a case with an measuring inserts.



Item No.	Measuring range/mm	A _{max} mm	C _{min} mm	D _{max} mm
855.501	20- 34	60	2	3
855.502	30- 60	75	2.5	5
855.503	55-150	90	4	9

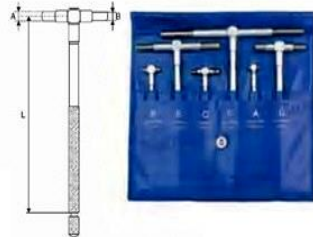


Apalpadores telescópicos para exteriores e interiores

Telescopic gauges

In places that are hard to reach with standard measuring instruments, you can use these telescopic gauges. The spring gauge is put into the bore, centers itself, after that you can turn on the locking screw. Then the gauge is pulled out and you can measure the result, for instance with a micrometer.

- Measuring range: 8- 150 mm.
- Chrome finished.



Individual gauges

Item No.	Measuring range/mm	Dimensions/mm		
		L	A	B
906.604	8 - 12.7	102	4	3
906.605	12.7- 19	102	5	4
906.606	19 - 32	102	5	4
906.607	32 - 54	127	7.5	6
906.608	54 - 90	127	7.5	6
906.609	90 - 150	127	7.5	6

Set of gauges

Item No.	Measuring range/mm
906.610	8-150

Plug gauges for small bores (blind/through)

Ideal for measuring of small bores (blind and through) and grooves. The spring gauge is put into the bore, centers itself, after that you can turn on the locking screw. Then the gauge is pulled out and you can measure the result, for instance with a micrometer. Separate set for blind bores and through bores.

- Measuring range: 3- 13 mm (4 gauges: 3- 5 mm, 5- 7.5 mm, 7.5- 10 mm and 10- 13 mm).
- Chrome finished.



Set of gauges

Item No.	Description
907.747	For blind bores
907.748	For through bores

Comparador para ranhuras e furos

Interapid internal measuring instrument

Bore measuring instrument with a large measuring range without having to change the measuring inserts. Specially suitable for measuring by comparison.

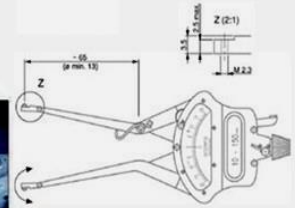
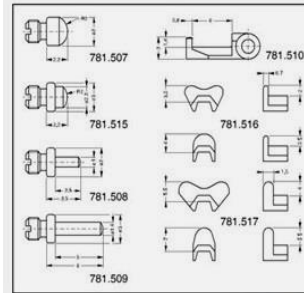
- Measuring range: 10- 150 mm.
- Scale range: ± 0.20 mm.
- Measuring depth depends on the measured value.
- Graduation: 0.01 mm.
- Choice between 2- and 3-point measurements.
- Locking mechanism.
- Fine adjustment.
- Delivery with a declaration of conformity.

Set 1:

- Interapid internal measuring instrument,
- 3 hardened steel inserts (A),
- 3 hardened steel small needle inserts,
- 3 hardened steel long needle inserts,
- 2 adjustable contact arms for measurements from $\phi 6$ mm (781.510),
- 1 small insert holder for 3-point measuring (781.511),
- 1 large insert holder for 3-point measuring (781.512),
- 1 centering device for measuring range $\phi 15-30$ mm (781.513),
- 1 centering device for measuring range $\phi 30-150$ mm (781.514).

Set 2:

- Similar to set 1, the hardened steel inserts (A) are replaced with tungsten carbide ones.



Item No. Description

781.505	Set 1 with hardened steel inserts
781.506	Set 2 with tungsten carbide inserts

Options:

781.507	1 hardened steel insert
781.508	1 hardened steel small needle insert
781.509	1 hardened steel long needle insert
781.515	1 tungsten carbide insert
781.516	Set of small winged inserts (2 single and 1 double)
781.517	Set of large winged inserts (2 single and 1 double)
781.518	Holder

Calibrador de cambotas

Diatest crankshaft meters

- Measuring range: 45- 500 mm.
- Graduation: 0.01 mm.
- Rotatable dial.

- Delivery with dial indicator, counter-weight and extensions in a case.



Item No.	Measuring range/mm
831.469	45- 150
831.470	60- 300
831.471	60- 500

Options:

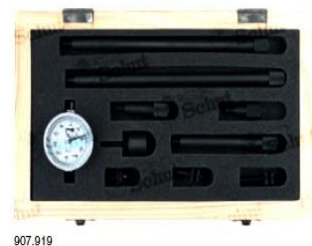
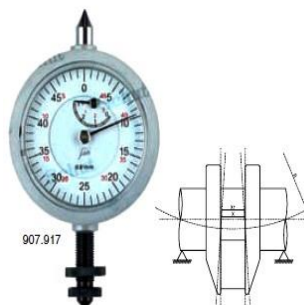
831.472	Separate dial indicator for 831.469
831.473	Counterweight for 831.469
831.474	Separate dial indicator for 831.470 and 831.471
831.475	Counterweight for 831.470 and 831.471

Schut



Crankshaft meters

- Measuring range: 60- 500 mm.
- Graduation: 0.01 mm.
- Rotatable dial.
- Delivery with dial indicator, counter-weight and extensions in a case.



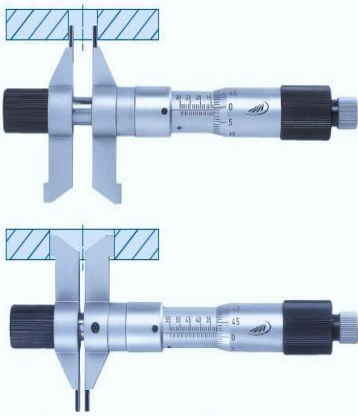
907.919

Item No.	Measuring range/mm
907.918	60- 300
907.919	60- 500

Option:

907.917	Separate dial indicator
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0884 Internal micrometer with measuring jaws



Specification

- DIN 863-4
- Reading: 0.01 mm
- Reading parts are satin chrome finished
- Forward friction coupling
- Cylindrical carbide tipped measuring faces
- Measuring jaws on both sides (Measuring ranges 5-30 mm, 30-55 mm)
- Divisions on both sides

Shipment

- Wooden case

Measuring range mm	Thimble dia. mm	Pitch mm	Ref. No.
5 - 55	20	0.5	0884 501

0885 Internal micrometers with measuring jaws



Specification

- Factory standard
- Reading: 0.01 mm
- Readings parts and body are satin chrome finished
- Ratchet stop
- Carbide measuring faces
- Cylindrical* carbide tipped measuring faces

Shipment

- Plastic case

Measuring range mm	Thimble dia. mm	Pitch mm	Ref. No.
5 - 30	17	0.5	0885 501*
25 - 50	17	0.5	0885 502
50 - 75	17	0.5	0885 503
75 - 100	17	0.5	0885 504
100 - 125	17	0.5	0885 505
125 - 150	17	0.5	0885 506
150 - 175	17	0.5	0885 507
175 - 200	17	0.5	0885 508

0888 Internal micrometers cylindrical version



Specification

- DIN 863-4
- Reading: 0.01 mm
- Reading parts are satin chrome finished
- Carbide measuring faces dia. 6 mm, spherical lapped
- From measuring range 100 - 125 mm with thermal insulation
- From measuring range 100 - 125 mm with locking ring

Shipment

- Wooden case



Measuring range mm	Thimble dia. mm	Pitch mm	Ref. No.
25 - 30	15	0.5	0888 501
30 - 35	15	0.5	0888 502
35 - 50	15	0.5	0888 503
50 - 75	16	0.5	0888 504
75 - 100	17	0.5	0888 505
100 - 125	20	0.5	0888 506
125 - 150	20	0.5	0888 507
150 - 175	20	0.5	0888 508
175 - 200	20	0.5	0888 509
200 - 225	20	0.5	0888 510
225 - 250	20	0.5	0888 511
250 - 275	20	0.5	0888 512
275 - 300	20	0.5	0888 513
300 - 325	20	0.5	0888 514
325 - 350	20	0.5	0888 515
350 - 375	20	0.5	0888 516
375 - 400	20	0.5	0888 517
400 - 425	20	0.5	0888 518
425 - 450	20	0.5	0888 519
450 - 475	20	0.5	0888 520
475 - 500	20	0.5	0888 521

0888 Holder for internal micrometers



Specification

- Ideal for all internal micrometers from series 0888 / 0892

- Length 200 mm

Ref. No.
0888 101

Tubular Inside Micrometers

SERIES 137 — Extension Rod Type

FEATURES

- Wide range of ID measurements by combining extension rods (pipes) and anvils with the micrometer head.
- Carbide-tipped measuring faces are available.
- Supplied in fitted plastic case except 1500 mm / 60" come in wooden case.



SPECIFICATIONS

Range	Order No.	Travel of micrometer head	Extension rods
50 - 63mm	137-011 / 137-013*	13mm	—
50 - 150mm	137-201 / 137-206*	13mm	13mm, 25mm, 50mm
50 - 300mm	137-202 / 137-207*	13mm	13mm, 25mm, 50mm (2 pcs.), 100mm
50 - 500mm	137-203 / 137-208*	13mm	13mm, 25mm, 50mm (2 pcs.), 100mm, 200mm
50 - 1000mm	137-204 / 137-209*	13mm	13mm, 25mm, 50mm (2 pcs.), 100mm, 200mm (2 pcs.), 300mm
50 - 1500mm	137-205 / 137-210*	13mm	13mm, 25mm, 50mm (2 pcs.), 100mm, 200mm (3pcs.), 300mm (2 pcs.)

*With carbide tipped face

Range	Order No.	Travel of micrometer head	Extension rods
2" - 2.5"	137-012 / 137-014*	.5"	—
2" - 6"	137-211 / 137-216*	.5"	.5", 1", 2"
2" - 12"	137-212 / 137-217*	.5"	.5", 1", 2" (2 pcs.), 4"
2" - 20"	137-213 / 137-218*	.5"	.5", 1", 2" (2 pcs.), 4", 8"
2" - 40"	137-214 / 137-219*	.5"	.5", 1", 2" (2 pcs.), 4", 8" (2 pcs.), 12"
2" - 60"	137-215 / 137-220*	.5"	.5", 1", 2" (2 pcs.), 4", 8" (3 pcs.), 12" (2 pcs.)

Tubular Inside Micrometers

SERIES 139 — Extension Pipe Type

FEATURES

- Wide range of ID measurements by combining extension pipes and anvils with the micrometer head.
- Supplied in fitted wooden case except 500 mm / 20" come in plastic case.



Range	Order No.	Travel of micrometer head	Extension pipes
100 - 125mm	139-001	25mm	—
100 - 500mm	139-173	25mm	25mm, 50mm, 100mm, 200mm
100 - 900mm	139-174	25mm	25mm, 50mm, 100mm, 200mm, 400mm
100 - 1300mm	139-175	25mm	25mm, 50mm, 100mm, 200mm, 400mm (2 pcs.)
100 - 1700mm	139-176	25mm	25mm, 50mm, 100mm, 200mm, 400mm (3 pcs.)
100 - 2100mm	139-177	25mm	25mm, 50mm, 100mm, 200mm, 400mm (4 pcs.)

Range	Order No.	Travel of micrometer head	Extension pipes
4" - 5"	139-002	1"	—
4" - 20"	139-178	1"	1", 2", 4", 8"
4" - 36"	139-179	1"	1", 2", 4", 8", 16"
4" - 52"	139-180	1"	1", 2", 4", 8", 16" (2 pcs.)
4" - 68"	139-181	1"	1", 2", 4", 8", 16" (3 pcs.)
4" - 84"	139-182	1"	1", 2", 4", 8", 16" (4 pcs.)



139-201

Range	Order No.	Travel of micrometer head	Extension pipes	Remarks
1.5 - 2"	139-004	.5"	—	—
4 - 5"	139-006	1"	—	—
1.5 - 12"	139-201	.5"	.5", 1", 2", 2.5", 3", 3.5", 4", 6"	Includes 139-004
4 - 40"	139-202	1"	1", 2", 3", 6", 9", 12", 14", 16", 17", 19"	Includes 139-006

Inside Micrometers

SERIES 141 — Interchangeable Rod Type

Technical Data

Metric Model
Accuracy: $\pm 6 \pm 0.50 \mu\text{m}^*$
*L: Maximum measuring length (mm)
Fraction rounded up

Inch Model
Accuracy: $\pm 0.0024 + (0.0004/6Z)^{**}$
*Z: Maximum measuring length (inch)
Fraction rounded up

Graduation: 0.01mm or .001"

Optional Accessories

----- Setting ring (See page C-30)



141-233



FEATURES

- Wide range of ID measurements with interchangeable rods.
- Each interchangeable rod is marked with its measuring range.
- The sizes of interchangeable rods can be adjusted with spacing collars.
- Both micrometer head and furnished rods are satin-chrome finished throughout.
- Supplied in fitted plastic case. Over 1000mm / 40" supplied in wooden case.

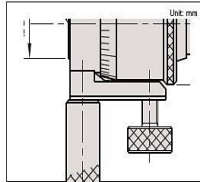


141-101



When using the extension rod

DIMENSIONS



SPECIFICATIONS

Range	Order No.	Travel of micrometer head	Remarks
25 - 32mm	141-001 / 141-003*	7mm	—
25 - 50mm	141-101 / 141-103*	7mm	with 2 rods
50 - 68mm	141-025 / 141-027*	13mm	—
50 - 200mm	141-205 / 141-211*	13mm	with 3 rods
50 - 300mm	141-206 / 141-212*	12mm	with 5 rods
200 - 225mm	141-009 / 141-011*	25mm	—
200 - 500mm	141-117	25mm	with 3 rods
200 - 1000mm	141-118	25mm	with 8 rods

*with carbide tipped face

Range	Order No.	Travel of micrometer head	Remarks
1" - 1.25"	141-002 / 141-004*	25"	—
1" - 2"	141-102 / 141-104*	25"	with 2 rods
2" - 2.5"	141-026 / 141-028*	5"	—
2" - 8"	141-208 / 141-214*	5"	with 3 rods
2" - 12"	141-239 / 141-245*	5"	with 5 rods
8" - 9"	141-010 / 141-012*	1"	—
8" - 20"	141-121	1"	with 3 rods
8" - 40"	141-122	1"	with 8 rods

*with carbide tipped face

Mitutoyo

Digimatic Tubular Inside Micrometers

SERIES 337 — Extension Rod Type / SERIES 339 — Extension Pipe Type

FEATURES

- Wide range of ID measurements by combining extension rods (pipes) and anvils with the micrometer head.
- The 339 Series uses highly-durable extension pipes.
- Carbide-tipped measuring faces.
- Supplied in wooden case.



337-303



339-304



Range	Order No.	Travel of micrometer head	Extension rods
200 - 225mm	337-101	25mm	—
200 - 1000mm	337-301	25mm	25mm, 50mm, 100mm (2 pcs.), 200mm, 300mm
200 - 1500mm	337-302	25mm	25mm, 50mm, 100mm, 200mm, 300mm (3 pcs.)

Inch/Metric Extension rod type

Range	Order No.	Travel of micrometer head	Extension rods
8 - 9" / 203.2 - 228.6mm	337-102	1"	—
8 - 40" / 203.2 - 1016mm	337-303	1"	1", 2", 4" (2 pcs.), 8", 12"
8 - 60" / 203.2 - 1524mm	337-304	1"	1", 2", 4", 8", 12" (3 pcs.)

Metric Extension pipe type

Range	Order No.	Travel of micrometer head	Extension pipes
200 - 225mm	339-101	25mm	—
200 - 1000mm	339-301	25mm	25mm, 50mm, 100mm, 200mm, 400mm
200 - 2000mm	339-302	25mm	25mm, 50mm, 100mm, 200mm (2 pcs.), 400mm (3 pcs.)

Inch/Metric Extension pipe type

Range	Order No.	Travel of micrometer head	Extension pipes
8 - 9" / 203.2 - 228.6mm	339-102	1"	—
8 - 40" / 203.2 - 1016mm	339-303	1"	1", 2", 4", 8", 16"
8 - 60" / 203.2 - 1524mm	339-304	1"	1", 2", 4", 8" (2 pcs.), 16" (3 pcs.)

OUTROS MICROMETROS – FAVOR CONSULTAR