



Marking, Scribing Devices, Protractors

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Image Directory • Marking, Scribing Devices, Protractors




























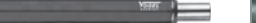





































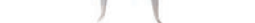
















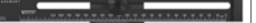






























				
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Ink Markers and Steel Scribes

Emil Otto • Metal Etching Pens

- for markings on metal and aluminium
- with exchangeable ink tank
- chemical and thermal resistant
- package contents 1 pen holder and 2 cartridges



ink tank (spare part)

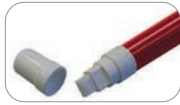
ART N ^o	ART N ^o	ART N ^o	ART N ^o
for metal (green liquid)	for aluminium (light blue liquid)	for tool steel (blue liquid)	for titanium and titanium alloys (turquoise dark blue)
334501	334502	334503	334504
spare part ink tank for metal (green liquid)	spare part ink tank for aluminium (light blue liquid)	spare part ink tank for tool steel (blue liquid)	spare part ink tank for titanium and titanium alloys (turquoise dark blue)
334591	334592	334593	334594

EMIL OTTO • Marking Ink

- for the marking of machining points on surfaces
- as marker, in a spray bottle or in a plastic canister available
- dries within seconds
- non-reflective fluid
- good adhesions and can be removed easily
- 2 different colours available



ART N^o 262601



ART N^o 262611



ART N^o 262603

ART N^o 262605

ART N^o 262604

ART N ^o	colour	contents ml	marker	spray bottle	canister
262601	blue	30	✓	—	—
262603	blue	500	—	—	✓
262604	blue	1000	—	—	✓
262605	blue	500	—	✓	—
262611	red	30	✓	—	—
262613	red	500	—	—	✓
262614	red	1000	—	—	✓
262615	red	500	—	✓	—

Steel Scribes

- with hardened tips
- made from special steel



ART N ^o	mm	scriber-ø mm	version
334600	180	5	straight bar, knurled handle
334602	230	4	straight and cranked bar, with plastic handle
334603	175	4	straight bar, exchangeable tip, knurled handle
334604	250	4	straight and cranked bar, exchangeable tips, knurled handle
334691	90	4	spare tip, straight (for art.-no.: 334603 – 334604)
334692	100	4	spare tip, cranked (for art.-no.: 334604)

Steel Scribers

- with tungsten carbide tips



ART N ^o	mm	shaft-ø mm	version
334606	175	14	straight bar, with red plastic handle
334608	150	6	hexagonal bar, galvanized, with clip
334609	180	8	hexagonal bar, galvanized, without clip
334610	150	8	hexagonal, aluminium shaft, lacquered, with drop mechanic
334695	35	—	spare tip, carbide, for 334610
334611	150	10	„RICO“-Marker, aluminium shaft, knurled handle, pen type
334694	70	—	spare tip, carbide, for 334611
334612	230	4	straight and cranked bar, exchangeable tips, knurled handle
334615	150	9	carbide marker, push technic, with clip
334690	30	—	spare tip, carbide, straight version, for 334615
334696	90	—	spare tip, carbide, straight version, for 334612
334697	100	—	spare tip, carbide, cranked version, for 334612

Steel Scribes

- with tungsten carbide needle
- with clip and magnet

- made of steel, black burnished
- with exchangeable needle
- with anti-slip knurled handle



with magnet



ART N ^o	mm	shaft-ø mm	version
334620	155	7.5	with tungsten carbide tip, anti-slip knurled handle
334629	—	3	spare part, tungsten carbide needle

Parallel Surface Gauge

- for simple workshop purposes

- round, chromed column, without graduation
- hardened steel scribe, straight and cranked bar
- scribe is rotatable and turnable
- round and lacquered iron base



ART N ^o	mm
342102	300
342104	500

Dividers and Compasses

Spring Divider

DIN 6486

- steel, polished
- square legs, with hardened tips
- with quick nut for quick movement
- with fine adjustment

ART N° 302422



ART N° 302682



ART N° 302689
pair of spare needles



DIN

ART N°

Divider



302420	100
302421	125
302422	150
302423	175
302424	200
302425	250
302426	300
302427	400
302428	500
302429	600

ART N°

Divider with exchangeable points



302680	100
302681	125
302682	150
302683	175
302684	200
302685	250
302686	300
302687	400
302688	500
302689	600

Internal and External Spring Joint Compass

DIN 6482/6484

- steel, polished
- square legs, with hardened tips
- with quick nut for quick movement
- with fine adjustment

ART N° 302442



ART N° 302462



DIN

ART N°

Spring Inside Compass



302440	100
302441	125
302442	150
302443	175
302444	200
302445	250
302446	300
302447	400
302448	500
302449	600

ART N°

Spring Outside Compass



302460	100
302461	125
302462	150
302463	175
302464	200
302465	250
302466	300
302467	400
302468	500
302469	600

Divider and Divider with Setting Wing

DIN 6486

- steel, polished
- square legs, with hardened tips
- with rivet

ART N° 302402



ART N° 302412



ART N° 302472



DIN

ART N°	Divider	→ ←
302402	150	
302403	175	
302404	200	
302405	250	
302406	300	
302407	400	
302408	500	

ART N°	with setting wing	→ ←
302412	150	
302413	175	
302414	200	
302415	250	
302416	300	
302417	400	
302418	500	

ART N°	with holder	→ ←
302472	150	
302473	175	
302474	200	
302475	250	
302476	300	
302477	400	
302478	500	

Internal and External Joint Compass

DIN 6482 / 6484

- steel, polished
- with flat legs
- with rivet

ART N° 302432



ART N° 302452



DIN

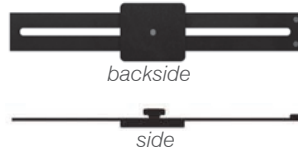
ART N°	Inside Compass	→ ←
302432	150	
302433	175	
302434	200	
302435	250	
302436	300	
302437	400	
302438	500	




ART N°	Outside Compass	→ ←
302452	150	
302453	175	
302454	200	
302455	250	
302456	300	
302457	400	
302458	500	

Marking Gauges and Marking Vernier Calipers

Marking Gauges

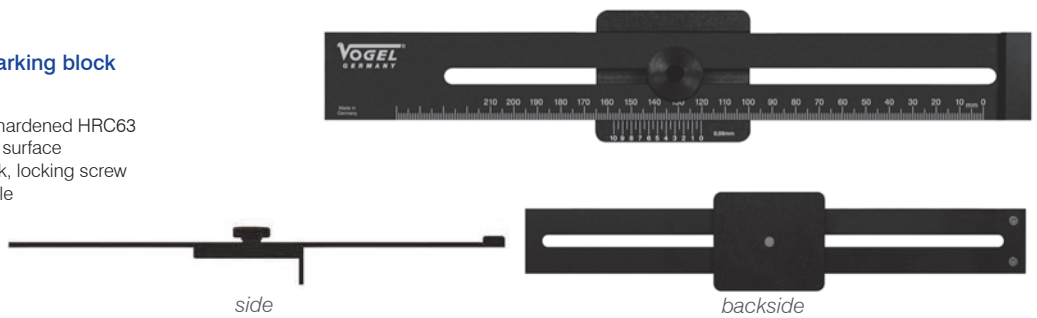
- with flat sliding ruler and marking block
- with fixing screw
- made of Dur-Aluminium, surface hardened HRC63
- scratch-resistant, black anodized surface
- marking block made of steel
- laser engraved, clear reading scale
- vernier reading 0.05 mm






ART N ^o	 mm	 mm	
336230	200	0.05	298 x 60 x 16
336231	250	0.05	348 x 60 x 16
336233	300	0.05	400 x 60 x 16

Marking Gauges

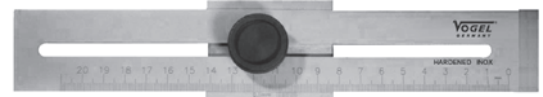
- with flat sliding ruler and marking block
- with fitting screw
- made of Dur-Aluminium, surface hardened HRC63
- scratch-resistant, black anodized surface
- with hardened steel marking block, locking screw
- laser engraved, clear reading scale
- marking block 44 mm high






ART N ^o	 mm	 mm	
336260	200	0.05	300 x 60 x 44
336261	250	0.05	350 x 60 x 44
336262	300	0.05	400 x 60 x 44

Marking Gauges

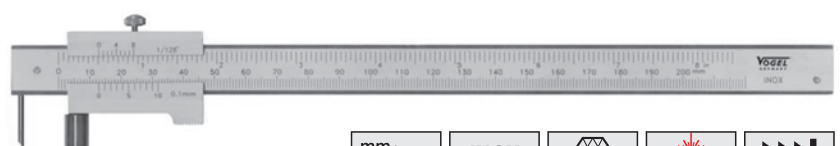
- with flat sliding rule
- with metal fixing screw
- stainless steel blade, with hardened marking block
- laser engraved scale, blade surface matt chrome finish
- with vernier reading 0.1 mm





ART N ^o	 mm	 mm	
336220	200	0.1	260 x 40 / 50 x 25
336221	250	0.1	305 x 40 / 50 x 25
336223	300	0.1	360 x 40 / 50 x 25

Universal Marking Gauges

- with contact-roll
- carbide scriber, exchangeable
- stainless steel, hardened
- laser engraved scale, reading parts in matt chrome finish
- 2nd scriber as spare part included

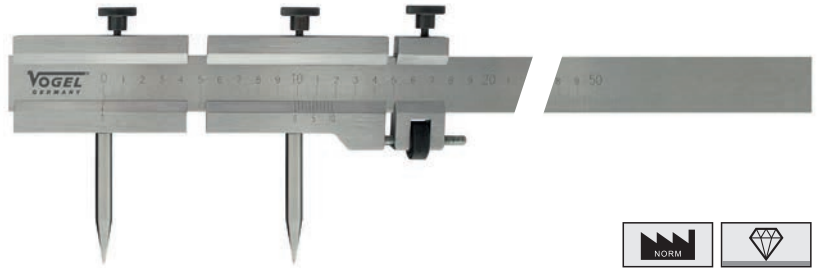
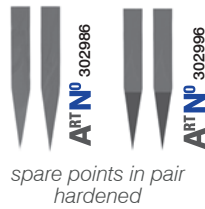






ART N ^o	 mm / inch	 mm	ART N ^o carbide scriber (spare part)
335070	200 / 8	0,1	335072
335071	400 / 16	0,1	335072

Marking Gauges and Marking Vernier Calipers

Trammels

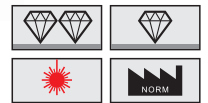
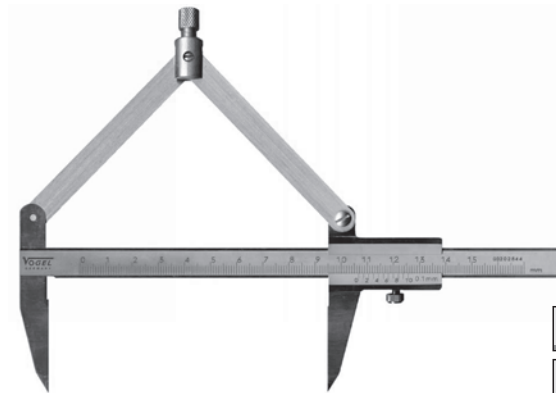
- steel, with hardened, exchangeable points
- flat beam, with fine adjustment
- with fixing screws






ART NO	 mm	 mm
302911	500	0.1
302912	1000	0.1
302913	1500	0.1
 302914	2000	0.1
 302915	3000	0.1

Compass Vernier Calipers

- for accurate marking owing to parallel position of the scriber jaws
- special steel, reading scale in matt chrome finish
- with fixing screw
- with carbide tips or hardened tips at your choice







ART NO hardened tips	ART NO carbide tips	 mm	 for ϕ mm	 mm
303002	303102	150	300	0.1
303003	303103	200	400	0.1
303004	303104	250	500	0.1
303005	303105	300	600	0.1

Marking Gauges

- with round bar
- chromed bar and scale, with 0.1 mm vernier reading
- with round contact plate, with fixing screw
- with or without fine adjustment, at your choice
- with exchangeable, hardened marking needle

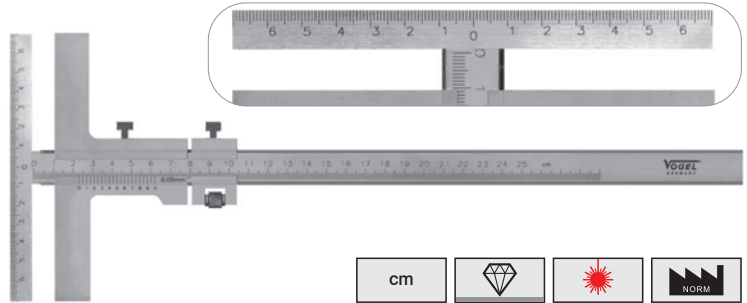
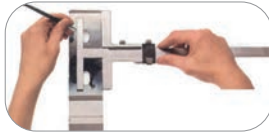


ART NO 	ART NO 	 cm		ART NO spare needle
335030	335031	30	0.1	335066
—	335051	50	0.1	335066

Marking Vernier Calipers and Digital Protractors

T-Marking Vernier Calipers

- with mm-graduation at the edge of the T-bar
- special steel, hardened, with fine adjustment
- laser engraved scale, reading parts in matt chrome finish



ART NO	cm	mm	length of T-bar mm
337301	16	0.05	100
337302	25	0.05	140
337303	30	0.05	160
337305	50	0.05	160

Electr. Digital Universal Bevel Protractor Set

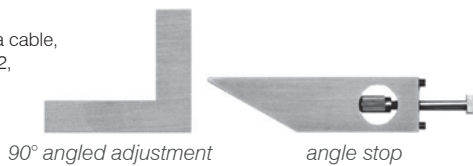
- with data output
- with 3 blades (150 / 200 / 300 mm), 90° square and angle stop

- stainless steel, hardened and fine ground
- rugged ABS-plastic housing, multifunctional display
- with fine adjustment for easy adjustment and fixing device for the blade
- large LCD display with clear reading
- two display lines, resolution in 1. line with 0.005° and in 2. line with min. 10"
- preset to 360° / 180° / 90°, two measuring directions selectable
- On/Off button, mode-button, set-button, zero setting at any position
- automatic switch off after approx. 5 min
- operation temperature 0 °C ~ +40 °C, storage temperature -10 °C ~ +60 °C
- incl. 1x 3 V battery (type CR2032, art.-no.: 90112), with operation manual



Option

- data transfer via cable, art.-no. 2420192, see page 272

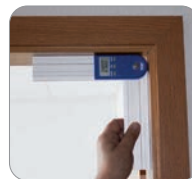


ART NO	length of blade mm	360° / 2x 180° / 4x 90°	0.005° / 10"	5'	CC
320100	150 / 200 / 300				on request

Electr. Digital Protractor

- for checking and transferring angles

- large LCD display with clear reading, digit height 10 mm
- blades in anodized aluminium with profile grooves, and embedded magnet strips
- On/Off button and data hold function, with fixing screw
- 180° rotating display, by pressing function button
- zero setting at any position
- incl. 1x 3 V battery (type CR2032, art. no.: 90112), operation manual



ART NO	0 - 360	0.05	0.3	length of blades mm	205 x 45 x 30	CC
320021				200 x 200		on request
320022				300 x 300		on request

Electr. Digital Bevel Protractor

- for high precision accuracy and safety reading

- LCD display with clear reading, digit height 10 mm
- stainless, hardened and fine ground
- On/Off button, with fixing screw
- zero setting at any position, with data hold function
- reading of values in display by 180° switchable
- incl. 1x 3 V battery (type CR2032, art. no.: 90112), with operation manual



ART N°	length of blade mm	arc-ø mm				
320201	150	120	0 – 180	0.05	0.3	on request
320202	200	150	0 – 180	0.05	0.3	on request
320203	300	200	0 – 180	0.05	0.3	on request

Protractor (Skew Measure)

- for high precision accuracy and safety reading

- LCD display with clear reading, digit height 10 mm
- stainless, hardened and fine ground
- On/Off button, with fixing screw
- zero setting at any position, with data hold function
- reading of the values in the display from 10° – 170°
- incl. 1x 3 V battery (type CR2032, art. no.: 90112), with operation manual



ART N°	length of blade mm	arc-ø mm	angle graduation	
320581	150	100	10 – 170	on request
320582	300	150	10 – 170	on request
320583	400	200	10 – 170	on request

Digital Protractors

Electr. Digital Angle-Sensor „Bevel-Box“ and „Level-Box“ • IP54

- dust- and splash water proof acc. to DIN 40050 / IEC 60529
- ideal device for angle adjustment, can be used for many purposes

- rugged metal housing
- large LCD display with clear reading, digit height 10 mm
- with 3 magnetic discs in the bottom of the housing
- with On/Off-, zero- and ABS button, data hold function
- art.-no. 32 0011 added with a vial on top of the housing
- incl. 1x 3 V battery (type CR2032, art. no.: 90112), with operation manual



magnetic discs



ART No				
320010	±180°	0.1°	±0.1°	50 x 50 x 32
320011	±180°	0.1°	±0.1°	50 x 63 x 32

Electr. Digital Angle-Sensor with 90° swiveling LCD display • IP54

- dust- and splash water proof acc. to DIN 40050 / IEC 60529
- ideal device for angle adjustment, can be used for many purposes

- large LCD display, with clear reading, digit height 8 mm
- LCD display swivelling up to 90°, with direction indicating vial in the display
- with magnetic V-base
- On/Off button and data hold function
- incl. 2x 1.5 V battery (type AAA, art. no.: 90002), with operation manual



magnetic V-base

swivelling display



ART No				
320015	±180°	0.1°	±0.1°	55 x 57 x 32

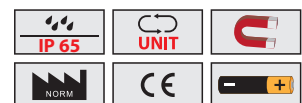
Electr. Digital Protractor • IP65

- water- and coolant proof acc. to DIN 40050 / IEC 60529
- ideal device for precise leveling and measuring of flatness and squareness, can be used for many purposes

- sturdy housing with aluminium V-prism at top and bottom side
- art.-no. 320016 additionally with magnetic discs in the V-bottom
- large LCD display, with clear reading, digit height 9 mm
- with acoustic signal and backlight
- autom. 180° rotating display, by turning up-side down
- with data hold function, ABS system, with easy to handle self calibration
- On/Off- and zero button, zero setting at any position
- incl. 2x 1.5 V battery (type AAA, art. no.: 90002), with operation manual



magnetic base



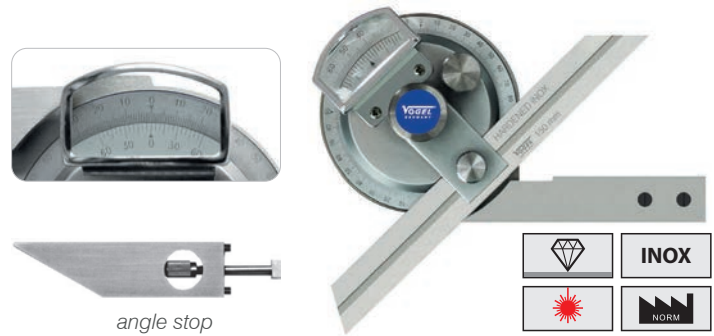
ART No					
320013	4 x 90° (0 – 360°)	0.05°	±0.15°	150 x 33 x 60	X
320016	4 x 90° (0 – 360°)	0.05°	±0.15°	150 x 33 x 60	✓

Universal Bevel Protractor Set

- set with 3 blades in different length
- stainless, hardened and fine ground
- scales matt chrome finish
- parallaxfree reading by vernier, with large magnifying lens
- with fine adjustment
- incl. angle stop (art. no.: 321276)

Option

- Wooden box: art. no.: 3299020



ART N ^o	length of blades mm		angle graduation °	
321220	150 / 200 / 300 mm	4 x 90°	1/12° = 5'	on request

Protractors (Skew Measurer)

- for standard mechanical engineering

- special steel, in chromed finish
- scale in matt chrome finish
- with adjustable blade, with fixing screw




ART N ^o	length of blades mm	arc-Ø mm	angle graduation °
320571	150	100	10 – 170°
320572	300	150	10 – 170°
320573	400	200	10 – 170°
320574	500	250	10 – 170°

Protractor

- with fixing screw
- with half round plate


- special steel, chromed
- scale matt chrome finish
- double graduation from 0° – 180° in opposite direction



ART N ^o	length of blades mm	arc-Ø mm		
322541	150	80	0 – 180	on request

Spare Parts for Electr. Digital Universal Protractors

- art.-no. 320100

ART N ^o	 spare blade
320101	150
320102	200
320103	300



ART N ^o	90° angled adjustment	
321275		60 x 50 / 15 x 4

ART N ^o	angle stop	
321276		70 / 40 x 18 x 4



Analog Protractors

Spare Parts for Universal Protractors

- art.-no. 321220

ART N°	← ← spare blade
321225	150
321226	200
321227	300
321229	500



ART N°	magnifying glass, w/o screws	← ← mm
321228		37 x 22



ART N°	angle stop	← ← mm
321230		68 x 38 / 18 x 4



Protractor

- with fixing screw
- for standard mechanical engineering
- made of Dur-Aluminium, surface hardened HRC63
- scratch-resistant, black anodized surface
- laser engraved, clear reading scale



ART N°	length of blade mm	arc-Ø mm		CC
322511-2	120	80	0 – 180	on request
322512-2	150	120	0 – 180	on request
322513-2	200	150	0 – 180	on request
322514-2	300	200	0 – 180	on request
322515-2	500	300	0 – 180	on request

Protractor

- with fixing screw
- for standard mechanical engineering
- special steel, in chromed finish
- scale in matt chrom finish, laser engraved scale



ART N°	length of blade mm	arc-Ø mm		CC
322511	120	80	0 – 180	on request
322512	150	120	0 – 180	on request
322513	200	150	0 – 180	on request
322514	300	200	0 – 180	on request
322515	500	300	0 – 180	on request
322516	600	300	0 – 180	on request

Angle Measure Spirit Levels

Electr. Digital Angle Measurer Spirit Level

- automatic calculation of single and double mitre angles without any other tools
- sturdy aluminium housing, with adjustable bevel blade
- large LCD display, digit height 12 mm, reading from all directions possible, with shiftable backlight
- rapid calculation and transfer of angles by means of memory function for frequently used angle dimensions
- power On/Off button, data hold function, shock resistant up to 1 m falling down
- precise mitre- and self-calibration function
- with 1x horizontal vial and 1x vertical vial
- with fixing screw for fixing the angle setting
- incl. 2x battery 1.5 V (type AAA, art.-no.: 90002)
- incl. operation manual



ART N°					
711020	0 – 225°	0.05°	max. ± 0.1°	max. vial 1 mm/m = ±0.057°	mm 440 x 60 x 25

Electr. Digital Angle Measurer Spirit Level

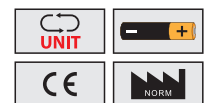
- for quick and accurate measuring of angular degrees, can also be used as a spirit level
- with 1x horizontal vial and 1x vertical vial
- sturdy aluminium housing, with adjustable bevel blade
- large LCD display with clear reading, digit height 12 mm
- On/Off and zero button, zero setting at any position
- incl. 1x 3 V battery (type CR2032, art.-no.: 90112), with operation manual



ART N°					
711025	0° – 225°	0.1°	max. 0.3°	max. vial 1 mm/m = ±0.057°	mm 305 x 52 x 23

Electr. Digital Spirit Level

- for trade and industry
- rugged, rectangular profile, made of light alloy
- large LCD display with clear reading, digit height 12 mm, with shiftable back light
- display always appears in the reading direction no matter which direction the device is rotated
- conversion between ABS- and INC-measurement
- calculation of ascend/descend, angle and deviation
- with self-calibration function
- power On/Off button, data hold function
- with 1 x horizontal vial and 1 x vertical vial
- incl. 2x 1.5 V battery (type AAA, art.-no.: 90002)
- with operation manual



ART N°				
712020	4 x 90°	0.1°	max. ± 0.2°	mm 416 x 50 x 21

Angle Measure Spirit Levels and Spirit Levels

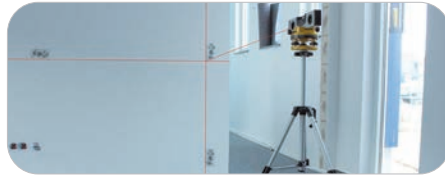
Electr. Digital Light Alloy Spirit Level

• with cross laser, angle degree indicator and percent deviation

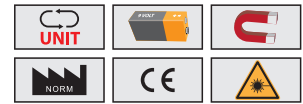
- rugged, rectangular profile, made of light alloy, with ribbed surface
- large LCD display, digit height 10 mm, reading from all directions possible
- switchable display in angle-, percentage measuring- and tangent-mode
- On/Off button, data hold function and memory function
- magnetic inserts in the bottom and M6 thread for tripod attachment
- with each 1x horizontal and 1x vertical vial
- with self-calibration and switchable cross laser, range about 7 m (inside)
- incl. 1x 9 V battery (type 6LR61, art.-no.: 90006), with operation manual



with cross laser



with magnet inserts and M6 thread for tripod attachment



ART NO				
712010	4 x 90°	0.05°	0.2	225 x 57 x 25

Spirit Levels „NIVEAU NORM“

• top quality spirit levels with plane surfaces

- rugged light alloy rectangular profile, from up 1500 mm length with extrem solid wallthickness
- with 1x horizontal vial and 1x vertical vial
- barrel-shaped vials with patented SOLID built-in system, permanent fixed and constantly aligned with the profile
- surfaces in stratosilver elocated
- measuring accuracy adjusted by electronical adjustment and at final inspection
- measuring accuracy in normal position 0.5 mm/m = 0.029°, with reversal measurement minimum 0.75 mm/m = 0.043°

ART NO 714000 – 714010



without magnets

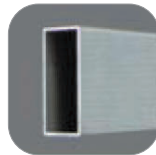
ART NO 714100 – 714110



with strong adhesive magnet in the measurement base

art.-no.: 714100 – 714110

- with strong adhesive magnet in the measurement base



plane, rectangular aluminium profile, extruded and warm cured

ART NO 714000 – 714010



ART NO 714100 – 714110



ART NO				
714000	200	50 x 20	X	0.5 mm/m = ±0.029°
714001	300	50 x 20	X	0.5 mm/m = ±0.029°
714002	400	50 x 20	X	0.5 mm/m = ±0.029°
714003	500	50 x 20	X	0.5 mm/m = ±0.029°
714004	600	50 x 20	X	0.5 mm/m = ±0.029°
714005	800	50 x 20	X	0.5 mm/m = ±0.029°
714006	1000	50 x 20	X	0.5 mm/m = ±0.029°
714007	1200	50 x 20	X	0.5 mm/m = ±0.029°
714008	1500	50 x 20	X	0.5 mm/m = ±0.029°
714009	1800	50 x 20	X	0.5 mm/m = ±0.029°
714010	2000	50 x 20	X	0.5 mm/m = ±0.029°
714100	250	50 x 20	✓	0.5 mm/m = ±0.029°
714101	300	50 x 20	✓	0.5 mm/m = ±0.029°
714102	400	50 x 20	✓	0.5 mm/m = ±0.029°
714103	500	50 x 20	✓	0.5 mm/m = ±0.029°
714104	600	50 x 20	✓	0.5 mm/m = ±0.029°
714105	800	50 x 20	✓	0.5 mm/m = ±0.029°
714106	1000	50 x 20	✓	0.5 mm/m = ±0.029°
714107	1200	50 x 20	✓	0.5 mm/m = ±0.029°
714108	1500	50 x 20	✓	0.5 mm/m = ±0.029°
714109	1800	50 x 20	✓	0.5 mm/m = ±0.029°
714110	2000	50 x 20	✓	0.5 mm/m = ±0.029°

Parallel V-Block Pairs

- made of dense special cast iron with high resistance to wear
- supplied in matched pair
- 4 different large grooves, 90°
- available in milled or ground version

grade 0 = ground parallelism tolerance = ± 0.008 mm
grade 1 = ground parallelism tolerance = ± 0.016 mm
grade 3 = milled parallelism tolerance = ± 0.064 mm



ART N° grade 0	ART N° grade 1	ART N° grade 3	→ mm ←	for shaft- ϕ mm
333511	333501	333531	60 x 120 x 100	8 – 90
333512	333502	333532	75 x 150 x 130	10 – 120
333513	333503	333533	90 x 200 x 170	12 – 180

Prism Pair

- made of dense special cast iron with high resistance to wear
- supplied in matched pair
- with 1 large cut, 90°
- available in milled or ground version
- from 200 mm length with grooves

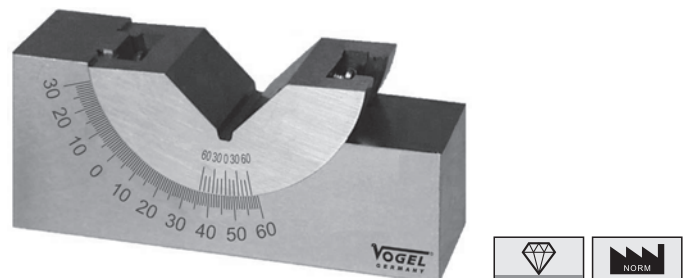
grade 0 = ground parallelism tolerance = ± 0.008 mm
grade 1 = ground parallelism tolerance = ± 0.016 mm
grade 3 = milled parallelism tolerance = ± 0.064 mm



ART N° grade 0	ART N° grade 1	ART N° grade 3	→ mm ←	for shaft- ϕ mm
333101	333201	333301	100 x 40 x 30	6 – 40
333102	333202	333302	150 x 50 x 40	8 – 50
333103	333203	333303	200 x 70 x 50	8 – 70
333104	333204	333304	250 x 85 x 60	12 – 85
333105	333205	333305	300 x 100 x 70	12 – 100

Adjustable Angle Prism

- special steel, hardened, fine ground
- prism cut 90°, angle scaling 0° – 60° / 0° – 30°



ART N°	→ mm ←	parallelism tolerance \pm mm	for shaft- ϕ mm
334001	75 x 25 x 32 / 23	0.05	28
334002	102 x 30 x 48 / 29	0.05	40
334003	102 x 46 x 48 / 29	0.05	40

Magnetic Blocks

Magnetic Measuring and Clamping V-Block

• especially engineered for toolmakers etc.

- made of special steel
- with V-cut 90°, finely ground
- strong magnetic block
- with On/Off-rotary switch made of aluminium
- magnetic base with finely ground prism
- plane, parallel and squared machined



ART N°	mm	for shaft- \varnothing mm	parallelism tolerance \pm mm	prism N	surface N
330100	80 x 67 x 96	\varnothing 6 – 66	0,004	400	900
330101	100 x 70 x 96	\varnothing 6 – 72	0,004	650	1800

Magnetic Measuring and Clamping V-Block

- special steel made
- with On/Off switch
- art.-no. 331000 – 331002: with flat magnetic base
- art.-no. 331010 – 331012: with magnetic prism base
- with V-cut 90°, fine ground
- plane, parallel and squared machined

ART N° 331012

ART N° 331002



ART N° 331010 + 331011



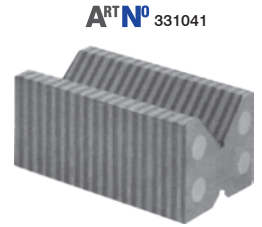
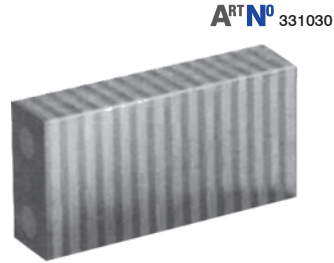
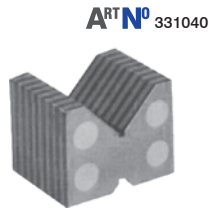
ART N° steel	mm	for shaft- \varnothing mm	parallelism tolerance \pm mm	N	flat base	prism base
331000	101 x 76 x 78	\varnothing 6 – 40	0.05	700	✓	—
331001	127 x 60 x 73	\varnothing 6 – 35	0.05	600	✓	—
331002	70 x 60 x 73	\varnothing 6 – 30	0.05	700	✓	—
331010	80 x 70 x 95	\varnothing 6 – 30	0.05	800	—	✓
331011	101 x 67 x 95	\varnothing 6 – 70	0.05	1000	—	✓
331012	115 x 75 x 100	\varnothing 6 – 70	0.05	800	—	✓

Magnetic Blocks and V-Blocks with Clamps

Lamellar Block / Prism Lamellar Block

- for setting on magnetic holding plates

- special steel, fine ground
- with 90° cut or in flat version
- with pole distance 4 mm



ART N° flat	
331030 (pair)	100 x 50 x 25
—	—

ART N° with V-cut	
331040 (pair)	50 x 60 x 48
331041 (single)	100 x 60 x 48

V-Block with Clamp

- for clamping cylindrical pieces

- special steel, hardened, fine ground
- 2 different deep 90° V-cuts
- 2 supporting surfaces
- single or in pair adjusted available



ART N° single	ART N° pair		clamping range for ø mm	 ± mm / 100 mm
333001	333011	45 x 40 x 35	5 – 20	0.01
333002	333012	70 x 45 x 40	5 – 25	0.01

V-Block Pair with Clamps

- for clamping cylindrical pieces and marking purposes, etc.

- special steel, hardened or stainless steel hardened
- 2 different deep 90° V-cuts, surfaces finely ground
- front faces angular ground in regard to base area, adjusted in pairs

Option

- wooden boxes available, by extra charge



ART N° carbon steel in pairs		clamping range for ø mm	 ± mm / 100 mm
333041	50 x 40 x 50	5 – 30	0.01
333042	75 x 55 x 55	5 – 50	0.01
333043	100 x 75 x 75	7 – 70	0.01

Clamps for Prisms and Precision Parallel Support Sets

Replacement Clamp for Prisms

- single packed

ART N°	suitable for
3330901	333001 + 333011
3330902	333002 + 333012
3330941	333041
3330942	333042
3330943	333043



Precision Parallel Support Sets

- 14 pairs of parallels
- special steel, carefully hardened and strain-removed, HRC 58 – 60
- longitudinal surfaces are plane parallel machined and extra fine adjusted in pairs



ART N°	sizes mm		accuracy for height ± mm
260600	14 / 16 / 18 / 20 / 22 / 24 / 26 / 28 / 30 / 32 / 35 / 40 / 45 / 50	150 x 10 ± 0.05	0,01


Precision Parallel Support Sets, magnetic

- hardened (~60 HRC), black anodized
- with magnetic inserts, reduce the clamping time by up to ~ 10
- fine ground in pair, as set of each 5 pairs
- scratch-resistant, black anodized surface



Application example



ART N°	sizes mm	height tolerance ± mm	width tolerance ± mm	
260620	15 / 22 / 25 / 30 / 32	0.005	0.01	120 x 2.5
260621	15 / 30 / 35 / 37 / 39	0.005	0.01	125 x 2.5
260622	25 / 35 / 40 / 45 / 47	0.005	0.01	150 x 2.5

Our certified QM-System is constantly controlled and improved by internal and external Audits of **TÜV Rheinland**.



Calibration certificates for our products on request, please!



Workshop Calibration Certificate in german or english language, acc. to DIN/ISO etc.

Scope: Calibration certificate indicating the deviation and limits of normal and with the test curve(s) for the measured according to the criteria of standards, confirmation of their performance. Confirmation of traceability to national normal, indicating an identification number.

Validity: Individually for each single instrument/device. Period of validity in accordance with your quality management manual (usually 12 month)

Price: See our price list, prices valid only for initial delivery from the factory, price for re-calibration on request, please.



Calibration test report by an accredited testing laboratory

Scope: As mentioned above, calibration test report as mentioned above, but accredited by testing laboratory.

Validity: Individually for each single instrumen/device. Period of validity in accordance with your quality management manual (usually 12 month)

Price: see price list, prices valid only for initial delivery from the factory, price for re-calibration on request, please.

Digital Protractors



example

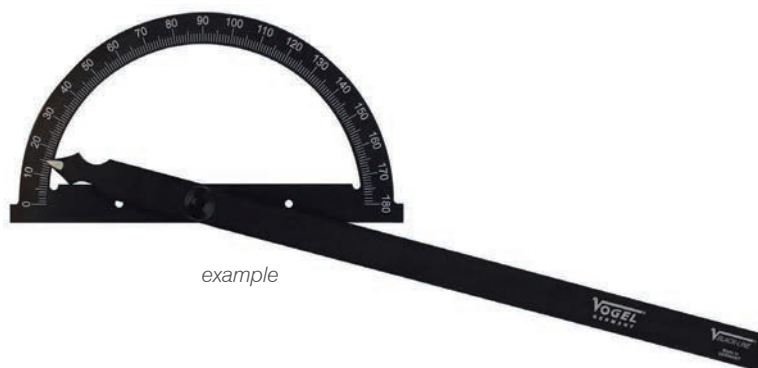


3294020



3294020-DKD

Protractors



example

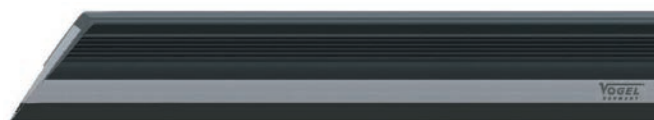


3294025






3294025-DKD

Precision Knife Straight Edge






example

		
300	3194302	3194302-DKD
800	3194303	3194303-DKD

Precision Squares and Bevel Edge Squares



example

		
100	3194100	3194100-DKD
300	3194300	3194300-DKD
600	3194600	3194600-DKD
800	3194800	—

Center Squares, Acute Angle Squares and Mitre Squares



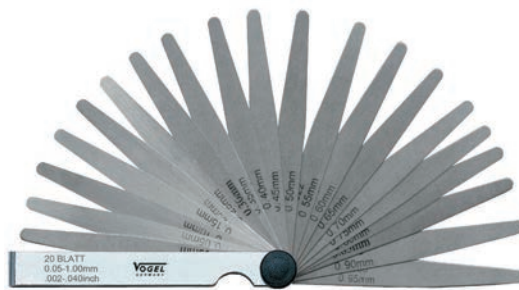
example



3194253

Feeler Gauges

- each blade



example



4194000

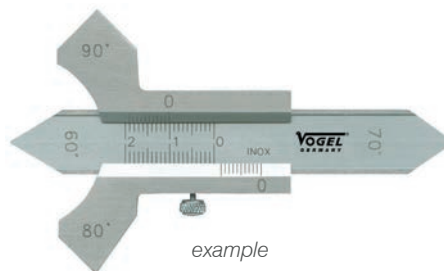


only tolerance class 3

4194000-DKD

Please specify tolerance class

Welding Gauges



example



4794000