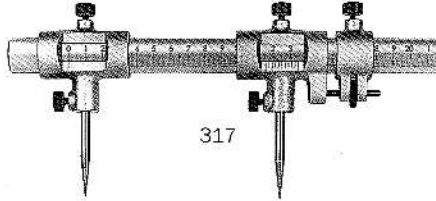


609**Beam compass**

1) **No. 316 flat beam**, of stainless steel, with mm-graduation and micrometer slide and locking screw, replaceable steel points, 1/10 mm vernier

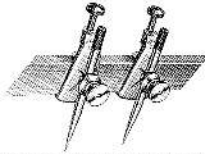
Measuring range	Beam cross section	Item No.	Item No. of a pair of spare points
500 mm	25 x 6 mm	609.2201	609.2210
1000 mm	25 x 6 mm	609.2202	

2) **No. 317 round beam** of special steel with malleable iron slider, without fine setting, replaceable steel points, measuring rod steel tube with guide groove and mm-graduation, 1/10 mm vernier



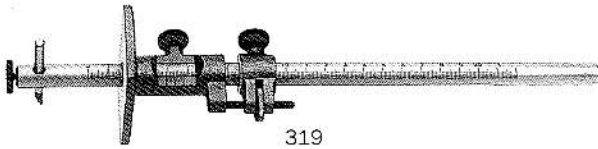
Measuring range	Beam cross section dia.	Item No.		Pair of spare points
		without fine setting	with fine setting	
500 mm	20 mm	609.1001	609.1101	609.1010
1000 mm	20 mm	609.1002	609.1102	
1500 mm	20 mm	609.1003	609.1103	
2000 mm	20 mm	609.1004	609.1104	609.1012
3000 mm	28 mm	609.1005	609.1105	
4000 mm	28 mm	609.1006	609.1106	

The beam can also be equipped with **shrinkage graduation** upon request.

610**Compass points 'E'** Item No. 610.001

with hardened and ground points, without wooden beam, for dia. 20 to 40 mm, points can be set vertically and at 45°.

These points can also be used for gauging on two different levels.

611**Scratch gauges**

1) **No. 319** of special steel, with round bar, guide groove and mm-graduation, 1/10 mm vernier, slider of malleable iron, with or without micrometer adjustment, with back stop and locking screw, scriber hardened and replaceable.

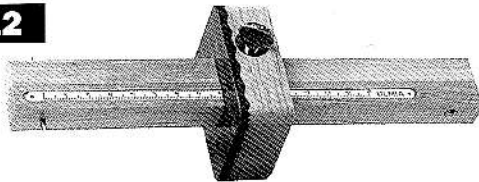
Measuring range mm	Bar dia mm	Item No.		
		without microadj.	with microadj.	Spare needle
200	11	611.001	611.101	611.010
300	11	611.002	611.102	
400	11	611.003	611.103	
500	11	611.004	611.104	



2) **No. 322** with roller

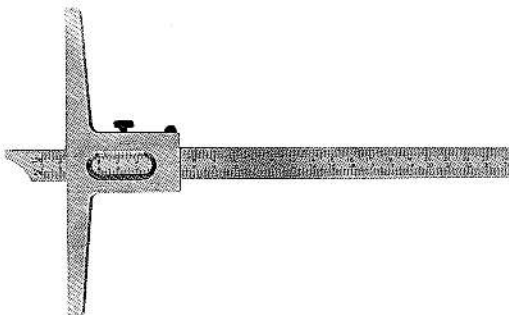
of stainless steel, slider with locking screw, hardened roller as back stop, lightweight and handy design, measuring beam hardened with mm-graduation, scriber of hardened steel is replaceable

Measuring range	Vernier	Item No.	Spare scriber
200 mm	bottom 1/10 mm	611.501	611.521
	top 1/128"		

612**'ULMIA' - Scratch gauges**

of white beech wood with embedded white graduation and lockable marking tips

Measuring range mm	Head size l x b mm	Total length mm	Item No.	
			without curve stop	with curve stop
150	66 x 50	220	612.001	612.002

613**Pattern maker's depth gauges No. 040**

of stainless steel or dull chrome-plated stainless steel, accuracy in accordance with DIN 862 open slider front, back of slider, with oval vernier bezel, milled of a solid piece, measuring faces hardened, 1/20 mm vernier.

Design				Stainless steel		Dull chrome-plated	
Measuring				Measuring range			
front		back		300 mm	500 mm	300 mm	500 mm
top	bottom	top	bottom	Item No.			
1,0 %	mm	1,5 %	2,0 %	613.001	613.003	613.101	613.103
1,0 %	mm	1,25 %	2,0 %	613.002	613.004	613.102	613.104

Other shrinkage graduations upon request!

Measuring ranges and spare parts

Measuring range	Crossbar length	Bar cross section	Item No.	
			locking screw	brass spring
300 mm	160 mm	17 x 4 mm	613.201	613.301
500 mm	160 mm	17 x 4 mm	613.202	613.302

Remark: Do not reverse the measuring bar as the verniers for the front and back graduations would otherwise not correspond.

For calibration see page 23, Item No. 594