

Thread Micrometer 40 Z

DIN
863-3



Features

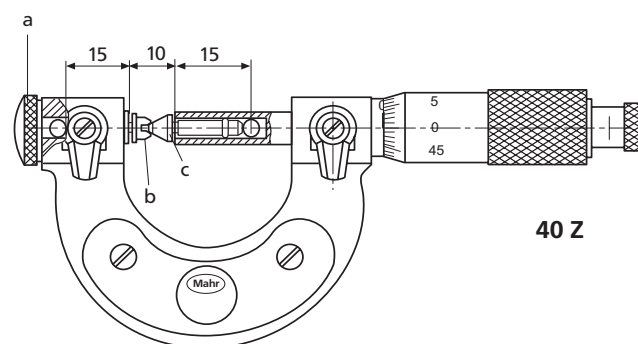
- For measuring pitch, root and outside diameters
- Rugged steel frame, heat insulated
- Spindle is hardened throughout, ground and is also provided with a locking device
- Adjustable anvil
- Both the spindle and anvil have a mounting bore for accommodating interchangeable anvils
- Flat end surface of the anvil shank rests on a hardened steel ball which is at the bottom of the mounting bore
- Scales have a satin-chrome finish

Technical Data

Readings	0.01 mm
Mounting bores for anvils	3.5 mm
Spindle thread pitch	0.5 mm
Thimble dia.	17.5 mm
Accuracy	DIN 863

Measuring range mm	Error limit G_{me}	Order no.	Order no. wooden case
0 - 25*	4 μ m	4170000	4170010
25 - 50	4 μ m	4170001	4170011
50 - 75	5 μ m	4170002	4170012
75 - 100	5 μ m	4170003	4170013
100 - 125	6 μ m	4170004	4170014
125 - 150	6 μ m	4170005	4170015
150 - 175	7 μ m	4170006	4170016
175 - 200	7 μ m	4170007	4170017

* Setting only with Thread Setting Plug Gages 715 E, when the interchangeable anvils span over several leads



a = Regulating range ± 0.5 mm
b = V-anvil
c = Tapered anvil

Indicating Thread Snap
Gage 852 see page 9-18

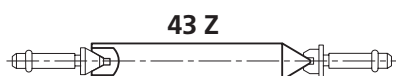


Ball anvils see Page 9-23

Accessories

Setting Standards 43 Z

For setting Thread Micrometers 40 Z.
With point on one side and a V-groove on the other, both match the pitch angle of thread to be inspected.
One setting standard is sufficient for two adjacent frame sizes.



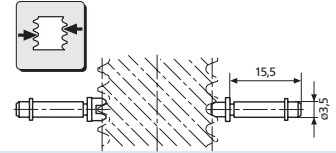
Length mm	Accuracy $\pm \mu$ m	Thread angle 60° Order no.	Thread angle 55° Order no.
25	4	4175000	4175100
50	4.5	4175001	4175101
75	4.5	4175002	4175102
100	4.5	4175003	4175103
125	5	4175004	4175104
150	5	4175005	4175105
175	5	4175006	4175106
200	5.5	4175630	4175636

Interchangeable Anvils for Thread Micrometer 40 Z

For pitch, root and outside diameters. Hardened, wear-resistant special steel. With cylindrical mounting shank and retainer ring which ensures locking while permitting rotation in bore of spindle and anvil.

For pitch diameters

Set consists of V-anvil and tapered anvil. For pitch range 0.2 - 0.45 mm V-anvil covers 3 thread leads. Therefore setting with Thread Setting Plug Gages 715 E, as opposed to Setting Standards 43 Z for other applications.



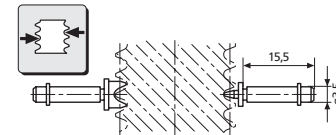
Metric thread (60°)			Whitworth thread (55°)			American UST thread (60°)		
Pitch mm	V-anvil Order no.	Tapered anvil Order no.	Pitch range TPI	V-anvil Order no.	Tapered anvil Order no.	Pitch range TPI	V-anvil Order no.	Tapered anvil Order no.
0.2	4173007	4173407	40 - 32	4173043	4173443	60 - 48	4173113	4173513
0.25	4173008	4173408	32 - 24	4173044	4173444	48 - 40	4173114	4173514
0.3	4173009	4173409	24 - 18	4173045	4173445	40 - 32	4173115	4173515
0.35	4173010	4173410	18 - 14	4173046	4173446	32 - 24	4173116	4173516
0.4	4173011	4173411	14 - 10	4173047	4173447	24 - 18	4173117	4173517
0.45	4173012	4173412	10 - 7	4173048	4173448	18 - 14	4173118	4173518
0.5 - 0.7	4173000	4173400	7 - 4.5	4173049	4173449	14 - 10	4173119	4173519
0.7 - 1	4173001	4173401	4.5 - 3	4173050	4173450	10 - 7	4173120	4173520
1.25 - 2	4173002	4173402	3 - 2.5	4179408	4179409	7 - 4.5	4173121	4173521
2 - 3.5	4173003	4173403				4.5 - 3	4173122	4173522
3.5 - 5	4173004	4173404						
5 - 7	4173005	4173405						
7 - 9	4173006	4173406						

For pitch diameters

Set consists of V-anvil and tapered anvil. Shank length 15.5 mm

For root diameters

Set consists of V-anvil and pointed anvil. Each pitch requires a separate V-anvil. Pointed anvil can be used for several pitches.



Trapezoid threads			Metric thread (60°)			Whitworth thread (55°) American UST thread (60°)		
Pitch mm	V-anvil Order no.	Tapered anvil Order no.	Pitch mm	V-anvil Order no.	Tapered anvil Order no.	Pitch range TPI	V-anvil Order no.	Tapered anvil Order no.
1	4173250	4173650	0.5	4173213	4173220	40	4173331	4173334
1.5	4173251	4173651	0.6	4173214		36	4173321	
2	4173252	4173652	0.7	4173215		32	4173332	
3	4173253	4173653	0.75	4173216		28	4173333	
4	4173254	4173654	0.8	4173217	4173224	26	4173335	4173341
5	4173255	4173655	0.9	4173218		24	4173336	
6	4173256	4173656	1	4173219		22	4173337	
7	4173257	4173657	1.25	4173221		20	4173338	
8	4173258	4173658	1.5	4173222	4173228	19	4173339	4173344
9	4173259	4173659	1.75	4173223		18	4173340	
10	4173260	4173660	2	4173225		16	4173342	
			2.5	4173226		14	4173343	4173348
			3	4173227	4173232	12	4173345	
			3.5	4173229		11	4173346	
			4	4173230		10	4173347	
			4.5	4173231	4173236	9	4173349	4173452
			5	4173233		8	4173350	
			5.5	4173234		7	4173451	
			6	4173235		6	4173453	
			7	4173237	4173240	5	4173454	4173456
			8	4173238		4.5	4173455	
			9	4173239		4	4173457	
						3.5	4173458	4173461
						3.25	4173459	
						3	4173460	

For outside diameter

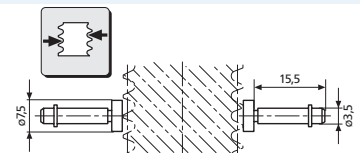
Pair of Flat Anvils 40 Za
with flat measuring faces

Made of hardened steel

Order no. 4173210

Carbide tipped

Order no. 4511190



Accessories for Micrometers



Stand 41 H

- For mounting a micrometer
- Enables the user to use both hands to operate the micrometer and / or to insert a work piece
- Sturdy, heavy-duty base, hammer-dimple enamel finish
- Clamping jaws are rubber lined to protect micrometer, the clamping jaws can be tilted
- Both the clamping jaws and hinge are fixed in place with one screw

Dimensions

(D x W x H)

130 x 100 x 90 mm

Order no.

4158000

Ball shaped Anvil Attachment 40 k

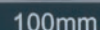
- For measuring the thickness, for example: of pipe walls
- Slips over every anvil or the spindle with a dia. 7.5 mm
- Carbide ball,
Ball dia. 5 ± 0.002 mm



Order no. 4130099

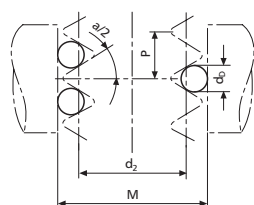
Setting Standards 43 A

- For testing the basic setting of a micrometer
- Heat insulated handle
- Manufacturing tolerance js 2



Thread Pin Gage 426 M in holder

- For determining the pitch diameter of external threads according to the three wire method
- Slips over every anvil or the spindle
- Pin gages are hardened and lapped



Length mm	Order no.	Length inch	Order no.
25	4159400	1"	4159940
50	4159401	2"	4159941
75	4159402	3"	4159942
100	4159403	4"	4159943
125	4159404	5"	4159944
150	4159405	6"	4159945
175	4159406	7"	4159946

Wooden Cases for Micrometer

For measuring ranges over 100 mm the following wooden cases are available:

	40 SH	40 SM	Order no.
Meas. range	100-125	95-120	4130064
mm	125-150	120-145	4130065
	150-175	145-170	4130066
	175-200	170-195	4130067

Pin gage dia.	Manufacturing tol.	Mounting hole
0.17 - 5.05 mm	$\pm 0.5 \mu\text{m}$	dia. 6.5 mm / 7.5 mm

Order no. and further details see page 13-18