

3 WIRE UNIT



Technical Specifications

Available for micrometer with 6.35, 6.50 and 8.0 mm spindle diameters.

Formula to obtain the pitch diameter E*

$E = M - 3d + 0.866025P$ Where

E = Pitch Diameter

P = Screw Thread Pitch

d = Diameter of the wire

M = Measurement over the wire

* For Metric and UNF Screws

Range	Accuracy Diametrical Tolerance	Hardness	Sizes
0.25 - 5 mm Pitch Threads (1 Unit = 03 Wires)	±0.5µm	700 HV	0.170mm, 0.195mm, 0.220mm, 0.250mm, 0.290mm, 0.335mm, 0.390mm, 0.455mm, 0.530mm, 0.620mm, 0.725mm, 0.895mm, 1.100mm, 1.350mm, 1.650mm, 2.050mm, 2.550mm, 3.20mm

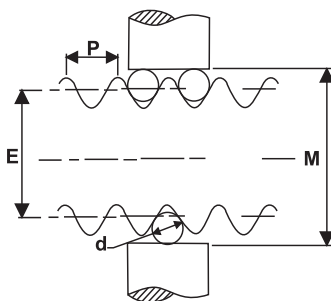
Features

- Available for micrometer with 6.35, 6.50 and 8.0 mm spindle diameters
- Available in single pair or in complete set
- Each 3-wire unit set consists of two holders
- Wires are mounted on the holder to enable easy positioning over the thread during measurement. Wires are hardened, ground and lapped
- Each set consists of 18 assorted sizes of wires

Applications

Measurement of the pitch diameter of screw threads using standard micrometer

PITCH DIAMETER CHART



Nominal size of wire in mm	ISO Metric (MM)		Unified & ISO TPI (INCH)		Whitworth TPI Parallel Threads		British Associate (B.A.)	
	Pitch P	P value	TPI	P Value	TPI	P value	No.	P value
0.170	0.25	0.047	--	--	--	--	10	0.146
	0.30	0.090	--	--	--	--	--	--
0.195	--	--	80	0.080	--	--	9	0.154
	0.220	0.083	72	0.086	--	--	--	--
0.250	0.40	0.096	64	0.094	--	--	7	0.175
	0.290	0.100	56	0.103	--	--	6	0.172
0.335	0.50	0.143	--	--	--	--	--	--
	0.60	0.185	48	0.123	40	0.219	5	0.174
0.390	--	--	--	--	--	--	4	0.253
	0.70	0.151	44	0.110	36	0.223	3	0.251
0.455	--	--	40	0.160	--	--	--	--
	0.75	0.195	36	0.156	32	0.232	2	0.246
0.530	0.80	0.238	--	--	--	--	1	0.348
	0.90	0.249	32	0.157	28	0.253	0	0.350
0.620	--	--	28	0.256	--	--	--	--
	1.00	0.246	26	0.226	26	0.216	--	--
0.725	1.25	0.358	24	0.192	22	0.264	--	--
	--	--	22	0.275	20	0.375	--	--
0.895	--	--	20	0.375	19	0.439	--	--
	1.50	0.404	19	0.433	--	--	--	--
1.100	--	--	18	0.327	18	0.312	--	--
	1.75	0.416	--	--	16	0.482	--	--
1.350	--	--	16	0.275	14	0.460	--	--
	--	--	14	0.471	--	--	--	--
1.650	--	--	13	0.592	--	--	--	--
	2.0	0.382	12	0.483	12	0.459	--	--
2.050	--	--	11	0.650	11	0.644	--	--
	2.5	0.515	10	0.550	10	0.516	--	--
2.550	--	--	9	0.794	9	0.788	--	--
	3.0	0.548	8	0.700	8	0.660	--	--
3.200	3.5	0.981	7	1.092	7	1.096	--	--
	4.0	0.914	6	1.116	6	1.094	--	--
4.000	4.5	1.347	--	--	--	--	--	--
	5.0	1.130	5	1.199	5	1.149	--	--
4.000	5.5	1.563	4.5	1.688	4.5	1.692	--	--
	6	1.186	4	1.499	4	1.437	--	--
--	--	--	--	--	3.5	2.308	--	--

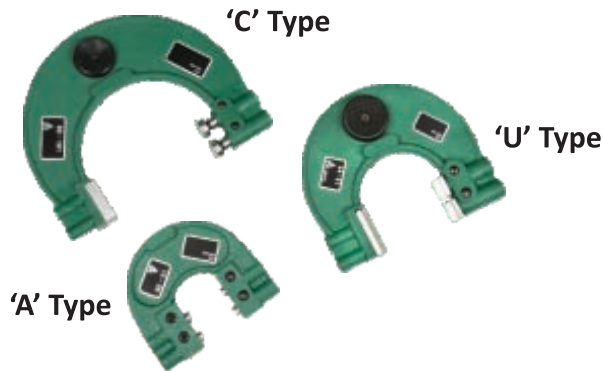
$$P_{\text{value}} = \frac{P}{2} * \cot\left(\frac{\alpha}{2}\right) - d * [\operatorname{cosec}\left(\frac{\alpha}{2}\right) - 1]$$

For 60° P value = 0.866P - d
For 55° P value = 0.960P - 1.166d

Where d is mean diameter of wire

Thread Type, Corresponding pitch & P Value

ADJUSTABLE SNAP GAUGE



Features

- Go/No Go Gauging with Reset Facility in the event of wear
- Available in square, grooved or pin type anvil design for the particular application
- Conforms to IS : 7606-1982

Technical Specifications

Parallelism	3µm upto 32mm 4µm upto 89mm 5µm upto 300mm
Anvil Flatness	1.5µm

'C' Type	'A' Type	'U' Type
(Range in mm) 0-6, 6-13, 13-19, 19-25, 25-32, 32-38, 38-44, 44-51, 51-57, 57-63, 63-70, 70-76, 76-82, 82-89, 89-95, 95-101, 101-108, 108-114, 114-120, 120-127, 127-133, 133-139, 139-146, 146-152, 152-163, 163-175, 175-188, 188-200, 200-213, 213-225, 225-238, 238-250, 250-263	(Range in mm) 0-13, 13-25, 25-38, 38-51, 51-64, 64- 76, 76-95, 95-114, 114-133, 133-152, 152-178, 178-203, 203-229, 229-254, 254-279, 279-305	(Range in mm) 0-6, 6-13, 13-19, 19-26, 26-32, 32-38, 38-44, 44-51, 51-57, 57-67, 67-76, 76-86, 86-95, 95-105, 105-114, 114-124, 124-133, 133-146, 146-159, 159-171, 171-184, 184-197, 197-210, 210-222, 222-235, 235-248, 248-260

Applications

- Useful for checking External Dimensions
- Convenient for checking mass produced components by unskilled labour
- Go & No Go Gauge sizes can be set & checked easily
- Convenient for checking Grooved Dimensions by type A & U



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Note : Due to continuous R & D activities at our end, Specifications are subject to change without prior notice.

DIAL SNAP GAUGE



Features

- Aluminium frame with plastic handle to provide insulation and firm grip
- Ground and lapped carbide measuring anvils provide high wear resistance and long life. Chamfered anvils ensure easy & safe insertion of the work piece
- Collet clamping of sensing device like dial indicators (mechanical or electronic) with 8 mm mounting shank ensures positive clamping and alignment to measuring axis
- Smooth and a rotational movement of the measuring spindle by guide pin
- Adjustable stopper for correct positioning of work piece ensures accuracy in repetitive measurements
- Protector provided to ensure adequate protection to the sensing device
- Cylindrical sensing master available on request
- Conforms to IS 14271-1995

Technical Specifications

Measuring Face	14mmx14mm (Carbide Tipped)	Range mm
Parallelism	4µm upto 0-50mm 5µm For 50-75mm 6µm For 75-125mm 8µm For 125-175mm 10µm For 175-200mm 12µm For 250-300mm	0-25 25-50 50-75 75-100 100-125 125-150 150-175
Movement of Measuring Anvils	2mm	175-200 200-225 225-250
Flatness of Anvil	0.0015mm	250-275 275-300
Repeatability	0.001mm	
Measuring Force	6N upto 75mm, 7N For 75-125mm, 7.5N For 125-200mm, 8N For 200-300mm	

Applications

- External Diameter Checking
- Dial Snap Gauge is a convenient instrument used for checking mass produced components with speed & precision

Authorised Distributor :



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