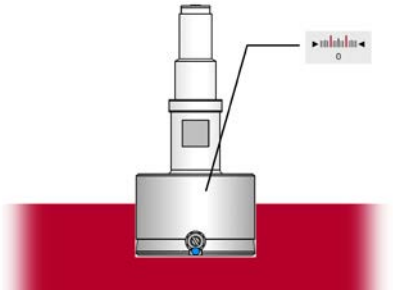
Marameter 844 DS-HR

Indicating plug gage

FEATURES

- Measuring probe made of hardened, stainless guide cylinder and carbide tipped probes
- Carbide driving needle transfers radial measuring movement to the display unit
- Constant measuring force as a result of built-in spring, eliminating user influence
- Measuring head, measuring instrument holder, depth extensions, right angle attachments and depth stops form a comprehensive modular system

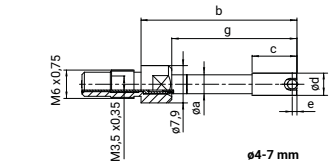


Application: Model for blind holes, for very tight tolerance fields less than 10 µm

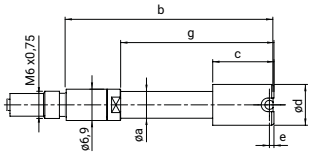
- Manufacturing tolerance of the guide cylinder reduced to 0.01 mm (±5 µm) to reduce the axial and radial measuring influences
- For measurements close to the base of the hole
- For the rapid testing of diameter, roundness and conicity of bores
- Ideal for testing batches with very tight tolerance fields less than 10 µm
- Rocking in the bore is not required to determine diameter
- Ideal for use in conjunction with digital display units and for subsequent processing of measured values

TECHNICAL DATA

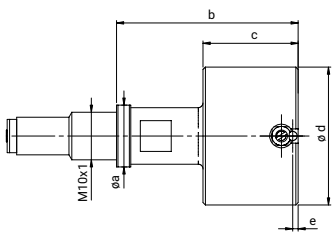
Order no.	Type	Measuring range	Measuring span	Manufacturing tolerance	Linearity deviation fe	Repeatability f_w	a	b	c	e	g	Connection thread
		mm	mm	mm / mm		µm	mm	mm	mm	mm	mm	
4484598	844 DS-HR	3–4	0.2	–0.005 / –0.015	1.5 %, min. 1 µm	1		33	23.5	1	23.5	M6 x 0.75 / M3.5x0.35
4484599	844 DS-HR	>4–7	0.2	–0.005 / –0.015	1.5 %, min. 1 µm	1	4	33	9.5	1	26.5	M6 x 0.75 / M3.5x0.35
4484600	844 DS-HR	>7–9	0.2	–0.005 / –0.015	1.5 %, min. 1 µm	1	6.9	45.5	13.5	1	33.5	M6 x 0.75
4484601	844 DS-HR	>9–12	0.2	–0.005 / –0.015	1.5 %, min. 1 µm	1	7.9	45.5	13.5	1	45.5	M6 x 0.75
4484602	844 DS-HR	>12–13	0.2	–0.005 / –0.015	1.5 %, min. 1 µm	1	7.9	45.5	13.5	1	45.5	M6 x 0.75
4484603	844 DS-HR	>13–16	0.2	–0.005 / –0.015	1.5 %, min. 1 µm	1	11.9	45.5	13.5	1	45.5	M6 x 0.75
4484604	844 DS-HR	>16–20	0.2	–0.005 / –0.015	1.5 %, min. 1 µm	1	15	35.8	13.5	1		M10x1
4484605	844 DS-HR	>20–30	0.2	–0.01 / –0.02	1.5 %, min. 1 µm	1	15	38.2	20	1.2		M10x1
4484606	844 DS-HR	>30–40	0.2	–0.01 / –0.02	1.5 %, min. 1 µm	1	15	38.2	20	1.2		M10x1
4484607	844 DS-HR	>40–60	0.2	–0.01 / –0.02	1.5 %, min. 1 µm	1	15	38.2	28	1.2		M10x1
4484608	844 DS-HR	>60–80	0.2	–0.015 / –0.025	1.5 %, min. 1 µm	1	17.9	39	33	1.2		M10x1
4484609	844 DS-HR	>80–100	0.2	–0.015 / –0.025	1.5 %, min. 1 µm	1	17.9	39	33	1.2		M10x1
4484610	844 DS-HR	>100–110	0.2	–0.015 / –0.025	1.5 %, min. 1 µm	1	17.9	39	33	1.2		M10x1
4484611	844 DS-HR	>110–120	0.2	–0.015 / –0.025	1.5 %, min. 1 µm	1	17.9	39	33	1.2		M10x1
4484612	844 DS-HR	>120–130	0.2	–0.015 / –0.025	1.5 %, min. 1 µm	1	17.9	39	33	1.2		M10x1
4484613	844 DS-HR	>130–140	0.2	–0.025 / –0.035	1.5 %, min. 1 µm	1	17.9	39	33	1.2		M10x1
4484614	844 DS-HR	>140–150	0.2	–0.025 / –0.035	1.5 %, min. 1 µm	1	17.9	39	33	1.2		M10x1
4484615	844 DS-HR	>150–160	0.2	–0.025 / –0.035	1.5 %, min. 1 µm	1	17.9	39	33	1.2		M10x1
4484616	844 DS-HR	>160–170	0.2	–0.025 / –0.035	1.5 %, min. 1 µm	1	17.9	38.6	40	1.2		M10x1
4484617	844 DS-HR	>170–180	0.2	–0.025 / –0.035	1.5 %, min. 1 µm	1	17.9	38.6	40	1.2		M10x1
4484618	844 DS-HR	>180–190	0.2	–0.025 / –0.035	1.5 %, min. 1 µm	1	17.9	38.6	40	1.2		M10x1
4484619	844 DS-HR	>190–200	0.2	–0.025 / –0.035	1.5 %, min. 1 µm	1	17.9	38.6	40	1.2		M10x1



ø4-7 mm



ø7-9 mm



ø20-40 mm

Marameter | 844 D indicating plug gage system

Indicating measurement in highest precision

Plug gages of the 844 D family are 2-point indicating gages, combined with a precisely ground guide cylinder, which centers itself exactly in bores. This means that no reversal point needs to be determined by rocking. The measured value is displayed reliably, precisely and immediately.

The adjustment to a respective nominal dimension is achieved with setting rings.

Benefits:

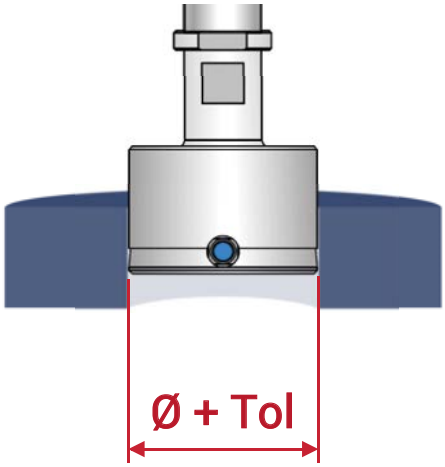
- Fast and easy to use - best performance
- No operator influence
- Self-centering - no rocking required to determine the reversal point
- Especially suitable with use of digital indicators for processing the measured values

The following must be indicated with each order

- Order number
- Bore diameter
- Bore tolerance (ISO or numerical value spec.)

Examples

1 x 4484016	844 D indicating plug gage Nominal bore size Ø 34.5 mm Bore tolerance H8
1 x 4484048	844 DR indicating plug gage Nominal bore size Ø 74.55 mm Bore tolerance +0.05 / -0.03



Modular system

By combining with a wide range of accessories (indicators, holders, extensions and right angle attachment), the indicating plug gage becomes a high precision measuring instrument, adapted to the measuring task.

Samples of application configurations



Standard configuration
- Comparator
- Holder 844 Dg
- Plug gage



Configuration for defined measuring depth
- Comparator
- Holder 844 Dg
- Extension 844 Dv
- Depth stop 844 Dt-3
- Plug gage

Configuration for sideways measuring in defined measuring depth
- Comparator
- Holder 844 Dg
- Angle attachment 844 Dw
- Plug gage
- Stop ring 844 Dt-R



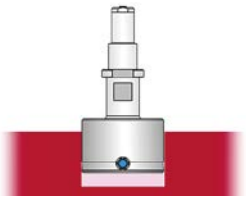
Marameter | 844 D indicating plug gage system

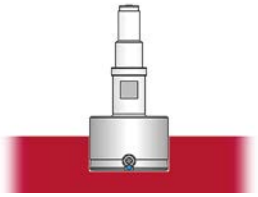
3 basic types

Guide cylinder hard chrome-plated, measuring surfaces made of carbide

844 D

Standard version for general applications
- For quick inspection of precise bores



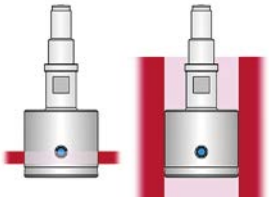


844 DS

Version for blind holes
- For measurements close to the base of the hole

844 DR

Version for through holes and thin-walled holes (metal sheet)
- With extended guide cylinder



Variants

Variant C: 844 D-C / 844 DR-C / 844 DS-C
Measuring surfaces hard-chrome plated: For sensitive surfaces of non-ferrous metals and aluminum alloys



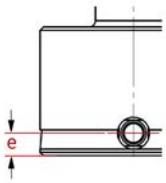
Variant R: 844 D-R / 844 DR-R / 844 DS-R
Measuring surfaces ruby-tipped: For very sensitive surfaces of non-ferrous metals and aluminum alloys



Variant D: 844 D-D / 844 DR-D
Measuring surfaces diamond-tipped: For very sensitive surfaces of soft non-ferrous metals and aluminum alloys



Variant FD: 844 D-FD / 844 DR-FD
Different front distance „e“: Reducing the guide cylinder to measure closer, or at a defined position, to the ground of the bore



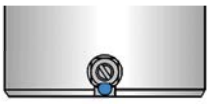
Variant M: 844 D-M / 844 DR-M / 844 DS-M
Extended measuring range: For measuring of larger tolerance fields



Variant HR: 844 D-HR / 844 DR-HR / 844 DS-HR
High resolution for very narrow bore tolerance zones < 10 µm.
More precise manufacturing tolerance of the guide cylinder for tighter gap in the bore, thus reducing axial and radial measuring influences.



Variant F: 844 DS-F
Only with front chamfer (no centering groove): For measuring very short blind holes



Variant 3: 844 D-3 / 844 DR-3
3-Point contact (3 x 120°): For fast measurement of interrupted diameters and detection of shape defects in a polygon

