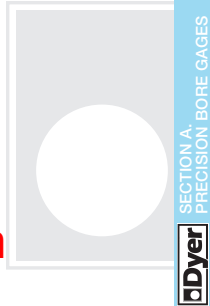


MEASURE SMALL HOLES BORE GAGES FROM DIAMETER 0.0185"



Authorized Distributor: Willrich Precision
866-945-5742 Email:sales@willrich.com

Maximum Measuring Accuracy

Linear $\pm 0.000040''$ (0.001 mm)

Repeatability $\pm 0.000040''$ (0.001 mm)

*50% better accuracy than shown can be obtained by using Bench Stand

Fast, Dependable Gaging

Available in:

- Standard Sets
- Add-On Components Parts
- Non-Standard Lengths and Ranges.

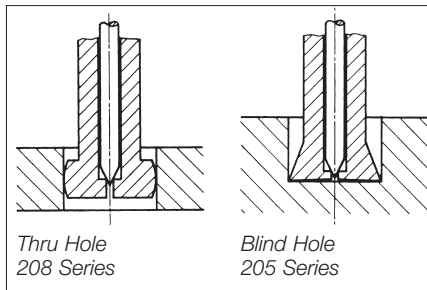


Notable Features

- Ease of use.
- Push-button retractor holder reduces gage wear when entering and leaving bore.
- Bench Stand improves accuracy by 50% and permits electronic indicator. This is a non-tipping measurement.
- Spring-loaded contact points locate in the bore radius.
- Hard chrome contacts RC65-68 standard or carbide-tipped contacts optional.
- Precision measurements are obtained by the movement of a lapped precision needle contact extender that transfers the measurement directly to the indicator.
- Gage must be tipped through the part to attain measurement.



Split Ball Probe Types Available



208 SERIES INDIVIDUAL THRU BORE MEASURING PROBE COMPONENTS



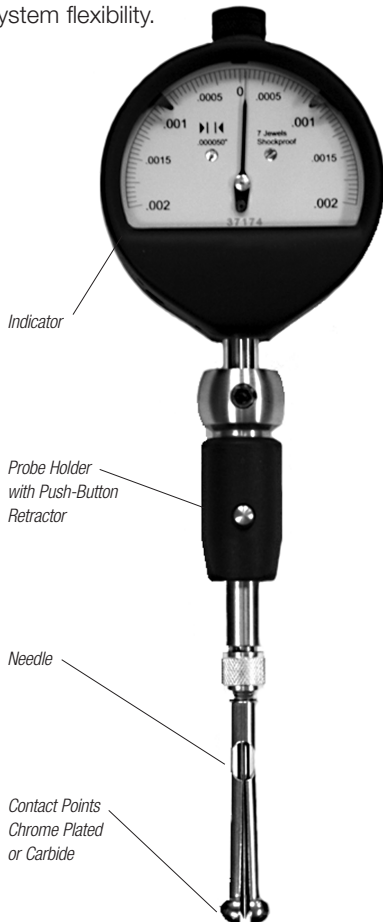
Maximum Measuring Accuracy

Linear $\pm 0.000040''$ (0.001 mm)
Repeatability $\pm 0.000040''$ (0.001 mm)

*50% better accuracy than shown can be obtained by using Bench Stand

Notable Features

- Push button holder reduces hole entrance and exit wear.
- Accurate in very small bores.
- System flexibility.



Standard Individual Components

Effective Measuring Range		Measuring Depth* Inch	Measuring Distance from Bottom "h" Inch	Order No Chrome Probe	Order No Carbide Probe	Order No Needle	Order No Ring Gage	Ring Gage Size
Inch	mm							
0.0205-0.0228	0.52-0.58	0.071	0.010	208-004	—	207-202	204-004	0.0217
0.0224-0.0264	0.57-0.67	0.079	0.012	208-006	—	207-204	204-006	0.0236
0.0256-0.0303	0.65-0.77	0.098	0.012	208-008	—	207-204	204-008	0.0276
0.0295-0.0343	0.75-0.87	0.110	0.014	208-010	—	207-204	204-010	0.0315
0.0335-0.0382	0.85-0.97	0.118	0.014	208-012	—	207-204	204-012	0.0354
0.0374-0.0453	0.95-1.15	0.512	0.016	208-013	208-014	207-206	204-014	0.0394
0.0421-0.0492	1.07-1.25	0.512	0.016	208-015	208-016	207-206	204-016	0.0433
0.0460-0.0531	1.17-1.35	0.512	0.016	208-017	208-018	207-206	204-018	0.0472
0.0500-0.0571	1.27-1.45	0.512	0.017	208-019	208-020	207-206	204-020	0.0512
0.0539-0.0610	1.37-1.55	0.512	0.017	208-021	208-022	207-206	204-022	0.0551
0.0590-0.0748	1.50-1.90	0.669	0.020	208-023	208-024	207-208	204-024	0.0669
0.0708-0.0866	1.80-2.20	0.669	0.020	208-025	208-026	207-208	204-026	0.0787
0.0807-0.0965	2.05-2.45	0.669	0.024	208-027	208-028	207-208	204-028	0.0886
0.0905-0.1063	2.30-2.70	0.984	0.030	208-029	208-030	207-210	204-030	0.0984
0.1003-0.1161	2.55-2.95	0.984	0.030	208-031	208-032	207-210	204-032	0.1082
0.1102-0.1260	2.80-3.20	0.984	0.038	208-033	208-034	207-210	204-034	0.1181
0.1200-0.1358	3.05-3.45	0.984	0.038	208-035	208-036	207-210	204-036	0.1279
0.1299-0.1457	3.30-3.70	0.984	0.038	208-037	208-038	207-210	204-038	0.1378
0.1397-0.1555	3.55-3.95	0.984	0.040	208-039	208-040	207-210	204-040	0.1476
0.1496-0.1654	3.80-4.20	0.984	0.043	208-041	208-042	207-210	204-042	0.1575
0.1633-0.1890	4.15-4.80	1.614	0.044	208-044	208-102	207-212	204-044	0.1771
0.1850-0.2087	4.70-5.30	1.614	0.048	208-046	208-104	207-212	204-046	0.1968
0.2047-0.2283	5.20-5.80	1.614	0.053	208-048	208-106	207-212	204-048	0.2165
0.2244-0.2480	5.70-6.30	1.614	0.053	208-050	208-108	207-212	204-050	0.2362
0.2440-0.2677	6.20-6.80	1.614	0.057	208-052	208-110	207-212	204-052	0.2559
0.2637-0.2874	6.70-7.30	1.772	0.063	208-054	208-112	207-212	204-054	0.2755
0.2834-0.3071	7.20-7.80	1.772	0.065	208-056	208-114	207-212	204-056	0.2952
0.3031-0.3267	7.70-8.30	1.772	0.065	208-058	208-116	207-212	204-058	0.3149
0.3228-0.3465	8.20-8.80	1.772	0.069	208-060	208-118	207-212	204-060	0.3346
0.3425-0.3661	8.70-9.30	1.772	0.069	208-062	208-120	207-212	204-062	0.3543
0.3622-0.4133	9.20-10.5	1.772	0.069	208-063	208-121	207-212	204-066	0.3740
0.4016-0.4528	10.2-11.5	1.772	0.069	208-065	208-123	207-214	204-070	0.4330
0.4409-0.4921	11.2-12.5	1.772	0.069	208-067	208-125	207-214	204-074	0.4724
0.4803-0.5315	12.2-13.5	2.677	0.099	208-069	208-127	207-214	204-076	0.5019
0.5276-0.5787	13.4-14.7	2.677	0.099	208-071	208-129	207-214	204-078	0.5512
0.5669-0.6181	14.4-15.7	2.677	0.099	208-073	208-131	207-214	204-080	0.5905
0.6063-0.6575	15.4-16.7	2.677	0.099	208-075	208-133	207-214	204-082	0.6299
0.6457-0.6969	16.4-17.7	2.677	0.099	208-077	208-135	207-214	204-084	0.6693
0.6850-0.7362	17.4-18.7	2.677	0.099	208-079	208-137	207-214	204-086	0.7086
0.7244-0.7756	18.4-19.7	2.677	0.099	208-081	208-139	207-214	204-088	0.7480
0.7638-0.8150	19.4-20.7	2.677	0.099	208-083	208-141	207-214	204-090	0.7874



Order the following:

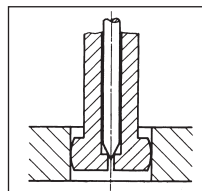
1. Probe(s) required for range.
2. Needle(s) required for range.
3. Instrument holder(s)—model depends on probe(s) ordered.
4. Indicator. See Section E for complete list and specifications.
5. Wooden box (optional).
6. Ring gage(s)
7. Accessories.

Measuring Probe Holder

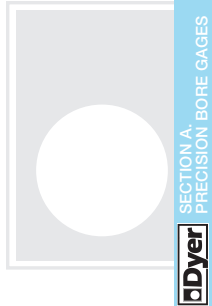
Description	Order No.
Measuring Probe Holder with push-button retractor for (recommended for smaller sizes)	209-020
Standard Measuring Probe Holder without push button for 0.0374"-0.8110" (0.95-20.6 mm)	209-030

Custom Measuring Probes

We will make in-between ranges and longer reach (deeper) measuring probes. Contact Dyer with your special applications.



200 SERIES SMALL HOLE BORE GAGE SETS



SECTION A
PRECISION BORE GAGES



Maximum Measuring Accuracy

Linear $\pm 0.000040''$ (0.001 mm)
Repeatability $\pm 0.000040''$ (0.001 mm)

*50% better accuracy than shown can be obtained by using Bench Stand

We offer choices when ordering 200 Series sets

Sets are available with or without push-button holder. The push-button holder extends life of the measuring probe. It retracts the outward pressure of the contact points, limiting friction, allowing the entering and exiting of the bore to be smooth and effortless. These gages are operator-friendly, and easy to use.

Special Sets

We offer sets with in-between ranges and longer (deeper reaching probes). Contact Dyer with your special needs.

Select a Standard Set

When ordering choose between sets with or without ring gages, push-button holder, chrome or carbide. Dial indicator, see Section E, are optional. Just select the model numbers you want and place the order along with the set.



1. Select the set style: thru or blind; with or without ring.
2. Indicator.



200-140 Complete set with indicator. Indicator not included with set. Order indicator separately.

Thru Bore Design - Complete Sets

Effective Measuring Range		Depth Range Inch	No. of Probes	Order No Chrome w/o Rings	Order No Chrome w/ Rings	Order No Carbide w/o Rings	Order No Carbide w/ Rings
Inch	mm						
Holder With Retraction							
0.0374–0.0610	0.95–1.55	0.512	5	200-005	200-105	200-205	200-305
0.0590–0.1654	1.5–4.2	0.669–0.984	10	200-110	200-110	200-210	200-310
0.0374–0.1654	0.95–4.2	0.512–0.984	15	200-015	200-115	200-215	200-315
0.1634–0.3071	4.15–7.8	1.614–1.772	7	200-031	200-131	200-231	200-331
0.1634–0.4921	4.15–12.5	1.614–2.677	13	200-040	200-140	200-240	200-340
0.3031–0.4921	7.7–12.5	1.772	6	200-046	200-146	200-246	200-346
0.4803–0.8110	12.2–20.6	2.677	8	200-055	200-155	200-255	200-355
Holder Without Retraction							
0.0374–0.0610	0.95–1.55	0.512	5	–	–	200-605	200-705
0.0590–0.1654	1.5–4.2	0.669–0.984	10	–	–	200-610	200-710
0.0374–0.1654	0.95–4.2	0.512–0.984	15	–	–	200-615	200-715
0.1634–0.3071	4.15–7.8	1.614–1.772	7	200-431	200-531	200-631	200-731
0.1634–0.4921	4.15–12.5	1.614–2.677	13	200-440	200-540	200-640	200-740
0.3031–0.4921	7.7–12.5	1.772	9	200-446	200-546	200-646	200-746
0.4803–0.8110	12.2–20.6	2.677	8	200-455	200-555	200-655	200-755

Blind Hole Bore Design - Complete Sets

Effective Measuring Range		Depth Range Inch	No. of Probes	Order No Chrome w/o Rings	Order No Chrome w/ Rings	Order No Carbide w/o Rings	Order No Carbide w/ Rings
Inch	mm						
Holder With Retraction							
0.059–0.165	1.50–4.20	0.669–0.984	10	–	–	205-300	205-400
0.163–0.307	4.15–7.80	1.614–1.772	7	205-100	205-200	–	–
0.303–0.492	7.70–12.50	1.772	6	205-105	205-205	–	–
0.163–0.492	4.15–12.50	1.614–1.772	13	205-110	205-210	–	–
0.480–0.811	12.20–20.60	2.677	8	205-115	205-215	–	–

205 SERIES INDIVIDUAL BLIND HOLE BORE MEASURING PROBE COMPONENTS



Maximum Measuring Accuracy

Gage Hand-held

Linear $\leq \pm 0.000040''$ (0.001 mm)

Repeatability $\leq \pm 0.000040''$ (0.001 mm)

*50% better accuracy than shown can be obtained by using Bench Stand

Notable Features

- Push button holder reduces hole entrance and exit wear.
- Accurate in very small bores.
- System flexibility.



Blind Hole Probes, Needles and Ring Gages – Individual Components

Effective Measuring Range		Measuring Depth* Inch	Measuring Distance from Bottom "h" Inch	Order No Chrome Probe	Order No Carbide Probe	Order No Needle	Order No Ring Gage	Ring Gage Size
Inch	mm							
0.0590–0.0748	1.50–1.90	0.669	0.004	–	205-002	207-002	204-024	0.0669
0.0708–0.0866	1.80–2.20	0.669	0.004	–	205-004	207-002	204-026	0.0787
0.0807–0.0965	2.05–2.45	0.669	0.004	–	205-006	207-002	204-028	0.0886
0.0905–0.1063	2.30–2.70	0.984	0.004	–	205-008	207-004	204-030	0.0984
0.1003–0.1161	2.55–2.95	0.984	0.004	–	205-010	207-004	204-032	0.1082
0.1102–0.1260	2.80–3.20	0.984	0.004	–	205-012	207-004	204-034	0.1181
0.1200–0.1358	3.05–3.45	0.984	0.004	–	205-014	207-004	204-036	0.1279
0.1299–0.1457	3.30–3.70	0.984	0.004	–	205-016	207-004	204-038	0.1378
0.1397–0.1555	3.55–3.95	0.984	0.004	–	205-018	207-004	204-040	0.1476
0.1496–0.1654	3.80–4.20	0.984	0.004	–	205-020	207-004	204-042	0.1575
0.1634–0.1890	4.15–4.80	1.614	0.008	205-022	–	207-006	204-044	0.1771
0.1850–0.2087	4.70–5.30	1.614	0.008	205-024	–	207-006	204-046	0.1968
0.2047–0.2283	5.20–5.80	1.614	0.008	205-026	–	207-006	204-048	0.2165
0.2244–0.2480	5.70–6.30	1.614	0.008	205-028	–	207-006	204-050	0.2362
0.2441–0.2677	6.20–6.80	1.614	0.008	205-030	–	207-006	204-052	0.2554
0.2637–0.2874	6.70–7.30	1.772	0.008	205-032	–	207-006	204-054	0.2755
0.2834–0.3071	7.20–7.80	1.772	0.008	205-034	–	207-006	204-056	0.2952
0.3031–0.3267	7.70–8.30	1.772	0.008	205-036	–	207-006	204-058	0.3149
0.3228–0.3465	8.20–8.80	1.772	0.008	205-038	–	207-006	204-060	0.3346
0.3425–0.3661	8.70–9.30	1.772	0.008	205-040	–	207-006	204-062	0.3543
0.3622–0.4133	9.20–10.50	1.772	0.008	205-043	–	207-006	204-066	0.3937
0.4016–0.4528	10.20–11.50	1.772	0.008	205-045	–	207-006	204-070	0.4330
0.4409–0.4921	11.20–12.50	1.772	0.008	205-051	–	207-006	204-074	0.4724
0.4724–0.5315	12.2–13.5	2.677	0.010	205-054	–	207-008	204-076	0.5019
0.5276–0.5748	13.4–14.7	2.677	0.010	205-056	–	207-008	204-078	0.5512
0.5669–0.6142	14.4–15.7	2.677	0.010	205-058	–	207-008	204-080	0.5905
0.6063–0.6535	15.4–16.7	2.677	0.010	205-060	–	207-008	204-082	0.6299
0.6457–0.6929	16.4–17.7	2.677	0.010	205-062	–	207-008	204-084	0.6693
0.6850–0.7323	17.4–18.7	2.677	0.010	205-064	–	207-008	204-086	0.7086
0.7244–0.7717	18.4–19.7	2.677	0.010	205-066	–	207-008	204-088	0.7480
0.7638–0.8110	19.4–20.7	2.677	0.010	205-068	–	207-008	204-090	0.7874

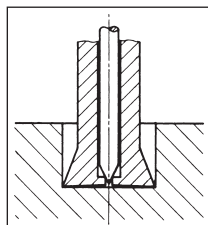


Order the following:

1. Probe(s) required for range.
2. Needle(s) required for range.
3. Instrument holder(s)—model depends on probe(s) ordered.
4. Indicator. See Section E for complete list and specifications.
5. Wooden box (optional).
6. Ring gage(s) (optional).
7. Accessories

Measuring Probe Holder

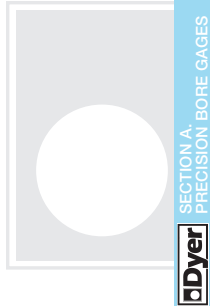
Description	Order No.
Measuring Probe Holder with push-button retractor for (recommended for smaller sizes)	209-020
Standard Measuring Probe Holder without push button for 0.0374"-0.8110" (0.95-20.6 mm)	209-030



Custom Measuring Probes

We will make in-between ranges and longer reach (deeper) measuring probes. Contact Dyer with your special applications.

200 SERIES ACCESSORIES



Model 201-004 (Larger)

Notable Features

- 50% more accuracy.
- Easy to use bore gaging.
- 200 Series is non-tipping, hands-off gaging. No operator error.
- Table Ø is 4.72" (120 mm)
- Built-in adjustable depth stop controls depth of measurement in the bore.
- Protects contact points.
- Adjusts quickly, versatile applications.
- The lever moves entire gage into part.



Model 201-004 Bench Stand

This bench stand has adjustable height up to 9.84" (250 mm) and a stroke/lift 3.54" (90 mm).

Model 201-000 (Smaller)

Notable Features

- 50% more accuracy.
- Easy to use bore gaging.
- 200 Series is non-tipping, hands-off gaging. No operator error.
- Table Ø is 3.15" (80 mm)
- Built-in adjustable depth stop controls depth of measurement in the bore.
- Protects contact points.
- Adjusts quickly, versatile applications.
- The table base itself is raised by the lever.



Model 201-000 Bench Stand

This bench stand has adjustable height up to 5.118" (130 mm) and a stroke/lift 1.57" (40 mm).

Specials

Dyer can customize a bench stand to meet your needs. We provide part holding fixtures, special probes, base plates, stroke lift, etc. Contact our application engineering with your needs.



209-040 Floating Probe Holder

Eliminates radial plane errors when measuring small parts. Permits hands-off gaging.



201-020 90° Angle piece for hard-to-reach bores

Specifications: 90° angle piece that easily attaches to the 200 Series measuring probe and handles