### SPECIAL FUNCTION INDICATORS

#### CHAMFER GAGES

FOR INTERNAL CHAMFERS: 683 CHAMFER GAGE 0-90° 684 CHAMFER GAGE 90-127°

FOR EXTERNAL CHAMFERS: 685 CHAMFER GAGE 0-90° 686 CHAMFER GAGE 90-127°

These gages directly measure the diameter of chamfered holes. No setting master is necessary. When the three-blade plunger is pressed against a flat surface, the gage should read the set number stamped on the back of the indicator. In case of wear, the gage may be adjusted to read the proper number.

All ground surfaces are of hardened tool steel. Indicators are AGD design.

Internal gages will measure the largest diameter of any chamfer that has an included angle within the range of angles printed on the dial face of the gage.

External gages will measure the smallest diameter of any chamfer within the range of angles printed on the dial face of the gage.

683 Inch Reading Internal Gages					684 Millimeter Reading Internal Gages with Yellow Dials					
	0-90° Angle		90-127° Angle			0-90° Angle		90-127° Angle		
Range	Cat. No.	EDP	Cat. No.	EDP	Range	Cat. No.	EDP	Cat. No.	EDP	
0-3/8"	683-1Z	63684	684-1Z	63688	0-9.5mm	683M-1Z	64989	684M-1Z	64993	
0-1/2"	683-2Z	63685	684-2Z	63689	0-12.7mm	683M-2Z	64990	684M-2Z	64994	
0-1"	683-3Z	63686	684-3Z	63690	0-25mm	683M-3Z	64991	684M-3Z	64995	
1-2"	683-4Z	63687	684-4Z	63691	25-50mm	683M-4Z	64992	684M-4Z	64996	
685 Inch Reading External Gages					686 Millimeter Reading External Gages with Yellow Dials					
1/8-1/2"	685-1Z	63692	686-1Z	63695	3.2-12.7mm	685M-1Z	64997	686M-1Z	65000	
3/16-1"	685-2Z	63693	686-2Z	63696	4.7-25mm	685M-2Z	64998	686M-2Z	65001	
1-2"	685-3Z	63694	686-3Z	63697	25-50mm	685M-3Z	64999	686M-3Z	65002	

Also available with electronic indicators. Please specify.

Gages furnished in deluxe padded case.

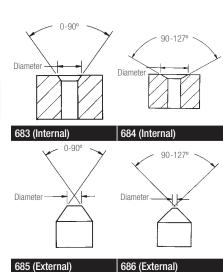


# SPECIAL FUNCTION DIAL GAGES

This section includes special function dial gages that we list as regular items. Gages are also available with electronic indicators on request, where noted.

- Chamfer Gages
- Countersink Gages
- Hole Gages
- Bore Gages See Bore Gage Section
- Direct-Reading Thickness Gages
- Snap Gages
- Groove Gages
- Caliper Gages
- Depth Gages
- Out-of-roundness Gages
- Inside Dial Gages
- Automotive Gages
- Crankshaft Distortion Gages
- Cylinder Gages
- Disc Brake Gages
- Large Diameter Gages

In addition, we have made many other special function gages to suit a wide variety of our customers' specific requirements. If you have a special application, we invite you to submit your drawings and specifications to our Special Order Department at 121 Crescent Street, Athol, MA 01331, USA. We will be happy to provide a prompt quotation.







## SPECIAL FUNCTION INDICATORS

### COUNTERSINK GAGES

687 COUNTERSINK GAGE 82° 688 COUNTERSINK GAGE 90° 689 COUNTERSINK GAGE 100°

Starrett Countersink Gages are offered in three different angles so that the gage sets on the angular side of the countersink, as opposed to a chamfer gage which sets on the top edge of the chamfer.

This gage directly reads the large diameter of the countersink in .002" or 0.05 mm increments. A set master ring is furnished with each gage for calibration and setting. Press the button on top of the indicator to firmly depress the gage head into the countersink. When the gage is removed, the indicator reading is held in place until the reset button is activated.

Diameter 82-90-100°

687, 688, 689

All ground surfaces are of hardened tool steel. Indicators are AGD design.

Inch Reading Countersink Gages												
	82° Angle		90° Angle		100° Angle							
Range	Cat. No.	EDP	Cat. No.	EDP	Cat. No.	EDP						
.020170"	687-1Z	63698	688-1Z	63702	689-1Z	63706						
.160360"	687-2Z	63699	688-2Z	63703	689-2Z	63707						
.360560"	687-3Z	63700	688-3Z	63704	689-3Z	63708						
.560780"	687-4Z	63701	688-4Z	63705	689-4Z	63709						
Millimeter Reading Countersink Gages with Yellow Dials												
0.5-4.3mm	687M-1Z	65003	688M-1Z	65007	689M-1Z	65011						
4-9mm	687M-2Z	65004	688M-2Z	65008	689M-2Z	65012						
9-14.2mm	687M-3Z	65005	688M-3Z	65009	689M-3Z	65013						
14.2-19.8mm	687M-4Z	65006	688M-4Z	65010	689M-4Z	65014						
Check Gage Stand for Chamfer, Countersink and Hole Gages												
Description	Cat. No.	EDP										
8-3/16" H x 6" W Hold Downs - 5"	695	63875										

Also available with electronic indicators. Please specify.



indicator stand.





