

# Bar Code Reader Tips and Optical Nest Assembly

## Technical Data

**HBCS-A998 HBCS-4999**  
**HBCS-A999 HBCS-T999**  
**HBCS-2999 HBCS-A995**

### Features

- Rugged Sapphire Front End
- Enclosure Options:  
Polycarbonate, Anodized Aluminum, or Stainless Steel
- 15 kV ESD Isolation for Polycarbonate Tips
- Compatible with HP Bar Code Wands and Sensors
- Self Cleaning
- Long Service Life
- External Threads

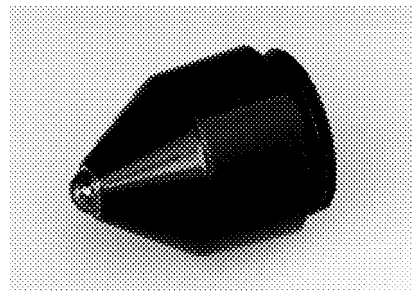
### Bar Code Reader Tips Description

Hewlett-Packard offers a range of tips to be used in conjunction with HP optical reflective sensors and as replacement tips for the HP family of wand products. This combination results in a high performance optical system, which is unique in its size and precision. In addition to their optical performance, the tips protect the sensors and act as mechanical holders. With a rugged sapphire front end, these tips are generally self cleaning and should last for many years under normal use.

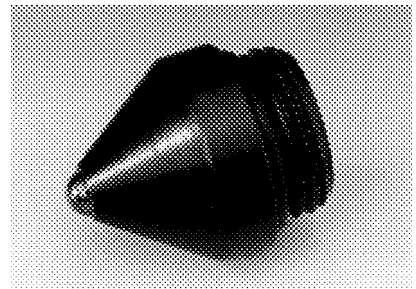
All tips have an internal reference ledge that positions the sensors so that the maximum signal point (MSP) occurs at the correct position, making the tips suitable for contact scanning.

### HBCS-A995 Bar Code Reader Optical Nest Assembly

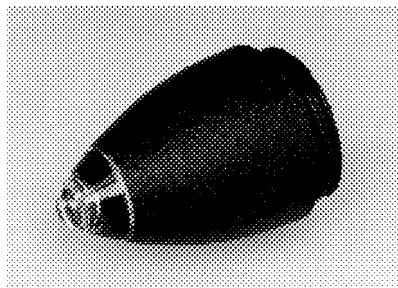
HP also offers the HBCS-A995 bar code reader optical nest assembly for custom applications. This device consists of a rugged sapphire ball bonded to a transparent polycarbonate assembly. The HBCS-A995 optical assembly is an integral part of the HBCS-A998/A999 tip and HBCS-AXXX wand construction. The HBCS-A995 can be bonded to a tip or a case by either press fitting or using a suitable adhesive. Ultrasonic bonding is not recommended. The HBCS-A995 polycarbonate assembly is UV opaque and is made of Lexan 303-11103.



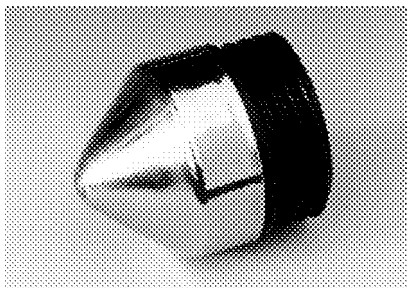
HBCS-2999 Tip



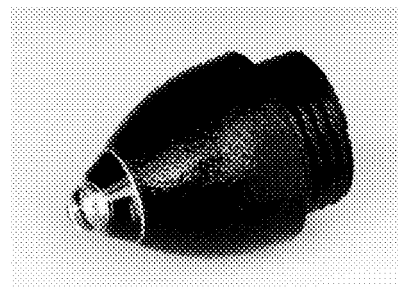
HBCS-4999 Tip



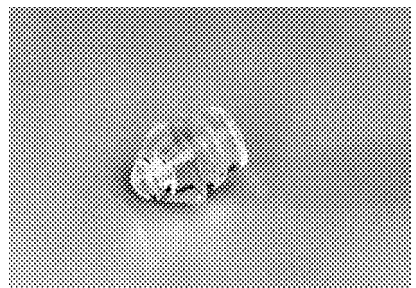
HBCS-A998 Tip



HBCS-T999 Tip



HBCS-A999 Tip



HBCS-A995 Optical Nest Assembly

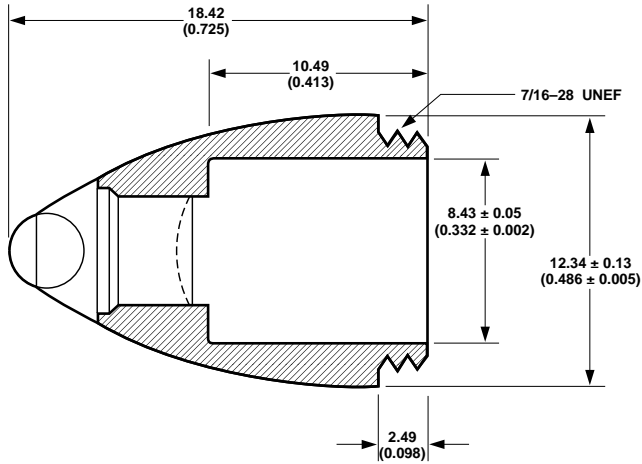
## Tip Selection Guide and Specifications

	Polycarbonate Tips		Metal Tips		
	HBCS-A998	HBCS-A999	HBCS-2999	HBCS-4999	HBCS-T999*
ESD Isolation	15 kV		Not Applicable		
Overall Length	18.4 mm (0.725 in.)	18.3 mm (0.721 in.)	15.9 mm (0.625 in.)	15.7 mm (0.620 in.)	14.6 mm (0.576 in.)
Thread Engagement	2.5 mm (0.098 in.)	4.4 mm (0.172 in.)	2.5 mm (0.098 in.)	4.4 mm (0.172 in.)	3.8 mm (0.151 in.)
Thread	7/16-28 UNEF				12 mm x 1.0
Outer Diameter	12.3 mm (0.486 in.)	13.2 mm (0.518 in.)	12.3 mm (0.485 in.)	13.2 mm (0.520 in.)	12.7 mm (0.500 in.)
Compatible HP Digitizer ICs	HBCC-0500/0600/0601				HBCC-0500
Compatible HP Bar Code Wands	Custom Applications**		HBCS-2XXX	HBCS-6XXX HBCS-8XXX	HBCS-TXXX
Compatible HP Bar Code Sensors	HBCS-1100, HEDS-1200/1300/1500, HBCC-1570/1580/1590				

\*HBCS-T999 has a stainless steel outer covering with plastic on the inside. The threads on this tip have a flat top.

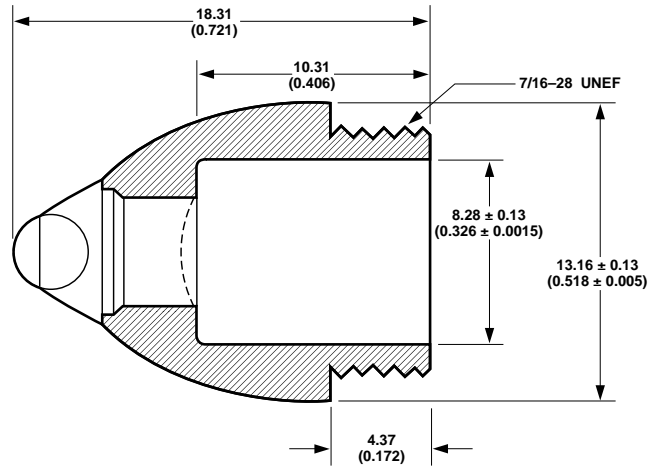
\*\*The HBCS-A998/A999 tip is an integral part of the case design of the HBCS-AXXX bar code wands.

**HBCS-A998 Tip**



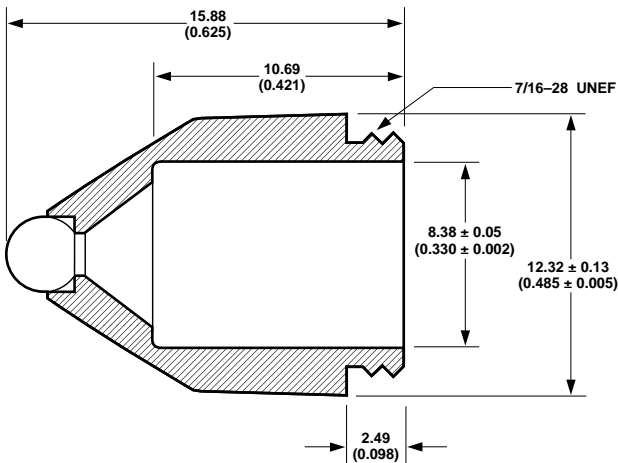
DIMENSIONS IN MILLIMETERS AND (INCHES)

**HBCS-A999 Tip**



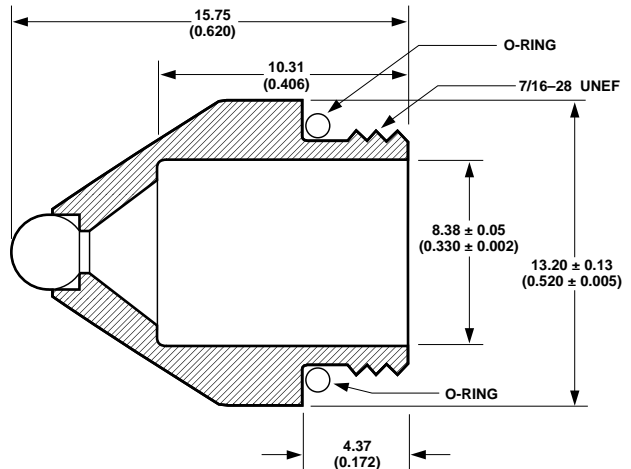
DIMENSIONS IN MILLIMETERS AND (INCHES)

**HBCS-2999 Tip**



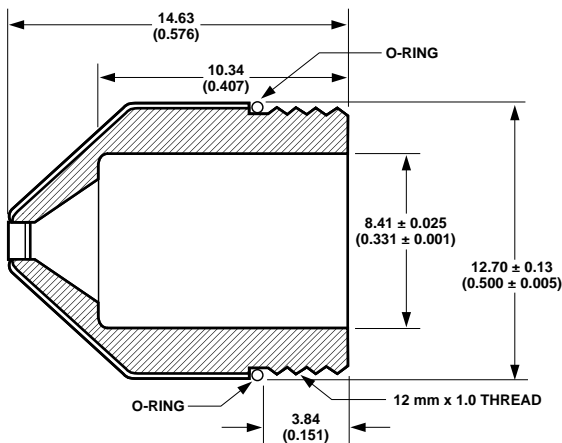
DIMENSIONS IN MILLIMETERS AND (INCHES)

**HBCS-4999 Tip**



DIMENSIONS IN MILLIMETERS AND (INCHES)

**HBCS-T999 Tip**



DIMENSIONS IN MILLIMETERS AND (INCHES)

**HBCS-A995 Optical Nest Assembly**

