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 Agilent Bar Code Wands and Sensors**
- **Self Cleaning**
- **Long Service Life**
- **External Threads**

Bar Code Reader Tips Description

Agilent Technologies offers a range of tips to be used in conjunction with Agilent optical reflective sensors and as replacement tips for the Agilent 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

Agilent 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.
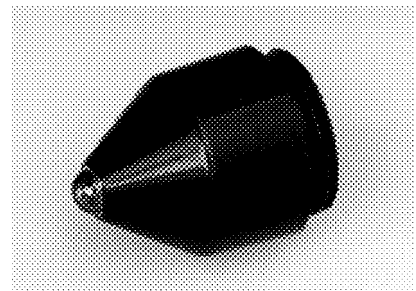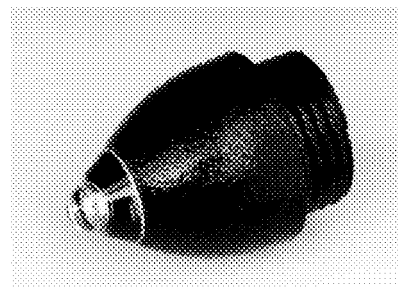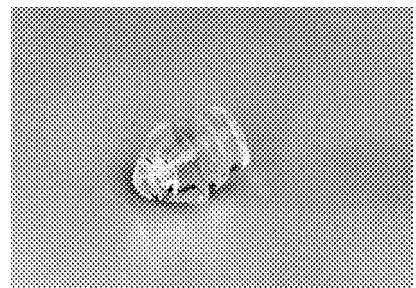

HBCS-2999 Tip
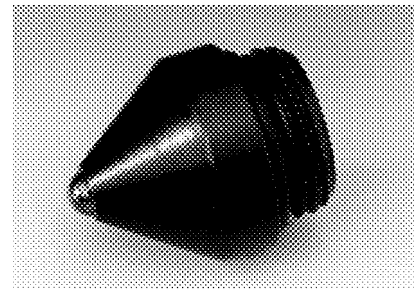
HBCS-4999 Tip
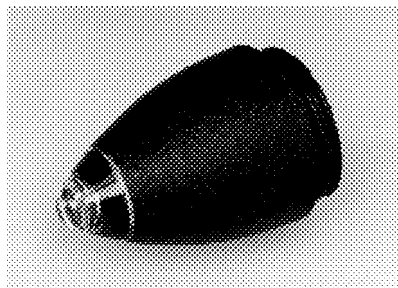
HBCS-A998 Tip

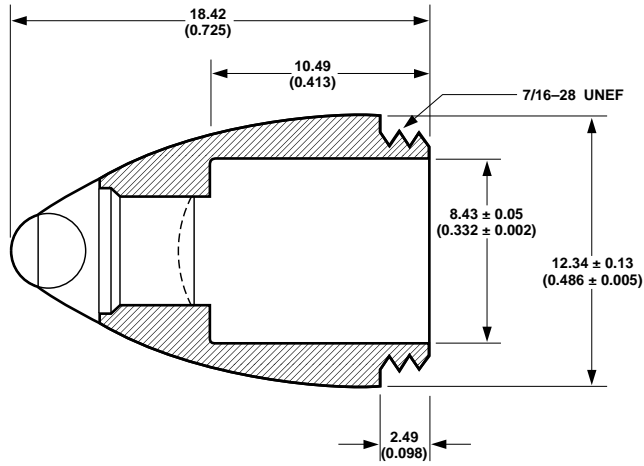

HBCS-T999 Tip

HBCS-A999 Tip

HBCS-A995 Optical Nest Assembly

Tip Selection Guide and Specifications

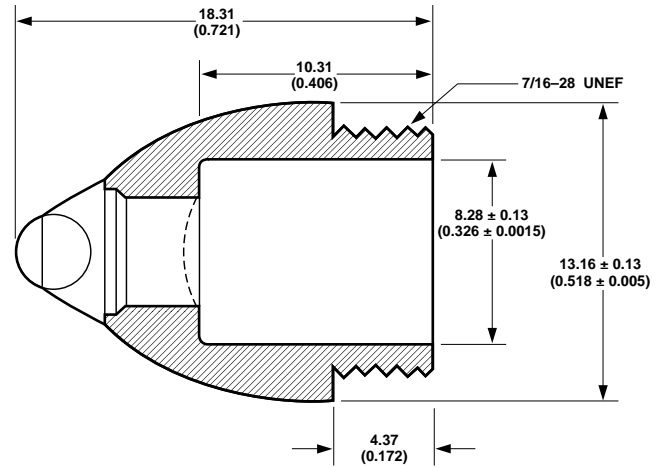|	Polycarbonate Tips		Metal Tips		
	HBCS-A998	HBCS-A999	HBCS-2999	HBCS-4999	HBCS-T999*
ESD Isolation	15 kV		Not Applicable		
Overall Length	18.4 mm (0.725 in.)	18.3 mm (0.721 in.)	15.9 mm (0.625 in.)	15.7 mm (0.620 in.)	14.6 mm (0.576 in.)
Thread Engagement	2.5 mm (0.098 in.)	4.4 mm (0.172 in.)	2.5 mm (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 Digitizer ICs	HBCC-0500				HBCC-0500
Compatible Bar Code Wands	Custom Applications**		HBCS-8XXX		
Compatible 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.
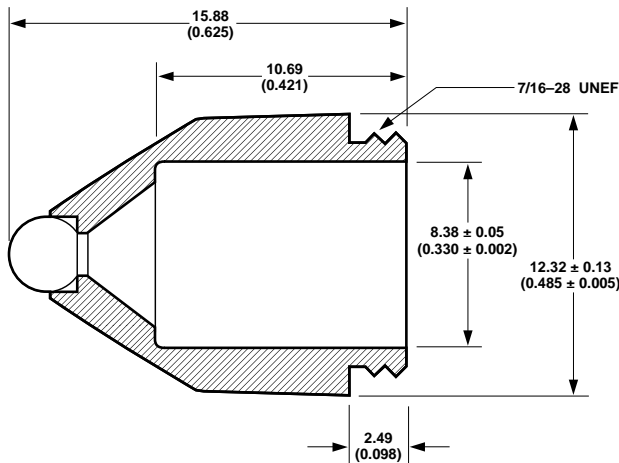**The HBCS-A998/A999 tip is an integral part of the case design of the HBCS-AXXX bar code wands.
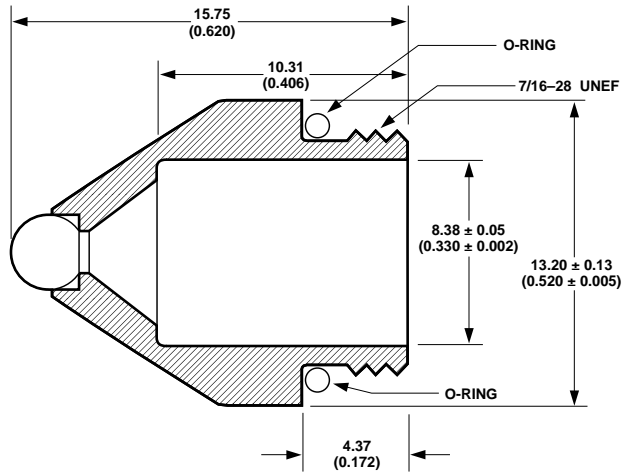
HBCS-A998 Tip

18.42
(0.725)

10.49
(0.413)

7/16–28 UNEF

8.43 ± 0.05
(0.332 ± 0.002)

12.34 ± 0.13
(0.486 ± 0.005)

2.49
(0.098)

DIMENSIONS IN MILLIMETERS AND (INCHES)

HBCS-A999 Tip

18.31
(0.721)

10.31
(0.406)

7/16–28 UNEF

8.28 ± 0.13
(0.326 ± 0.0015)

13.16 ± 0.13
(0.518 ± 0.005)

4.37
(0.172)

DIMENSIONS IN MILLIMETERS AND (INCHES)

HBCS-2999 Tip

15.88
(0.625)

10.69
(0.421)

7/16–28 UNEF

8.38 ± 0.05
(0.330 ± 0.002)

12.32 ± 0.13
(0.485 ± 0.005)

2.49
(0.098)

DIMENSIONS IN MILLIMETERS AND (INCHES)

HBCS-4999 Tip

15.75
(0.620)

O-RING

10.31
(0.406)

7/16–28 UNEF

8.38 ± 0.05
(0.330 ± 0.002)

13.20 ± 0.13
(0.520 ± 0.005)

O-RING

4.37
(0.172)

DIMENSIONS IN MILLIMETERS AND (INCHES)

HBCS-T999 Tip

14.63
(0.576)

O-RING

10.34
(0.407)

8.41 ± 0.025
(0.331 ± 0.001)

12.70 ± 0.13
(0.500 ± 0.005)

O-RING

12 mm x 1.0 THREAD

3.84
(0.151)
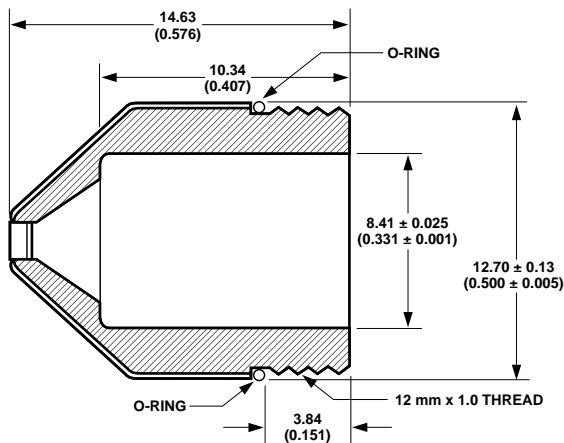
DIMENSIONS IN MILLIMETERS AND (INCHES)

HBCS-A995 Optical Nest Assembly

7.65 ± 0.25
(0.301 ± 0.010)

3.96 ± 0.13
(0.156 ± 0.005)

3.0
(0.118)

5.54 ± 0.05
(0.218 ± 0.002)

4.72
(0.186)

6.43 ± 0.08
(0.253 ± 0.003)

0.127
(0.005)

0.41
(0.016)

1.90
(0.075)

DIMENSIONS IN MILLIMETERS AND (INCHES)

Agilent Technologies