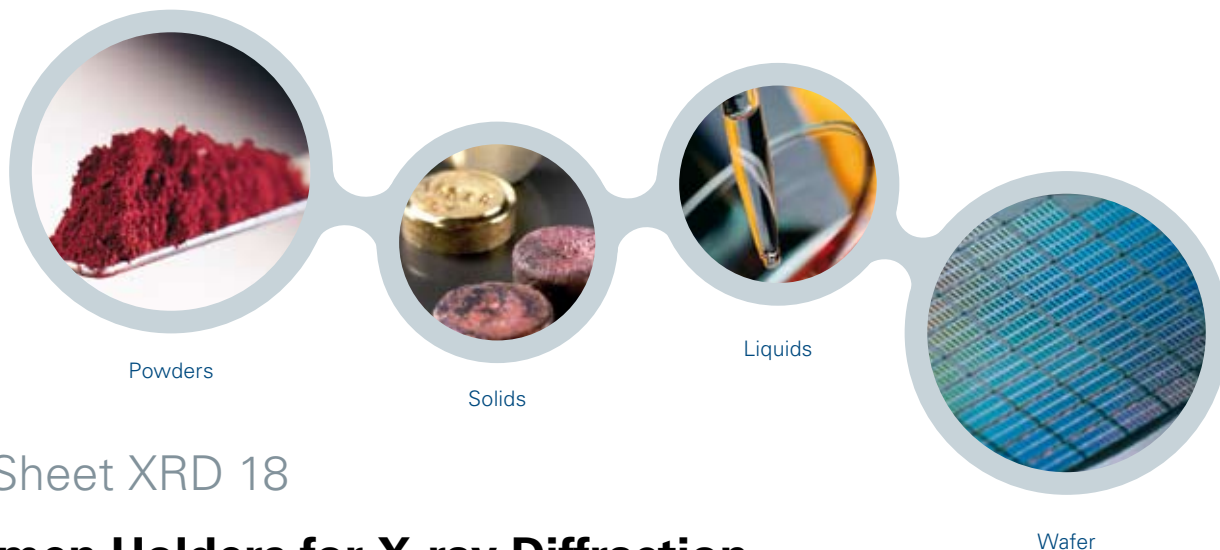


Specimen holders	Catalog no.
Universal cup for reflection measurements	C79298A3158B64/B65
Universal cup for transmission measurements	C79298A3158B67
Sample cup (double-sided) for rotating sample stage, 50 mm	C79298A3158B60
Low background sample cup for rotating sample stage, Ø 25 mm Si crystal, sample reception Ø 20 mm, 0.5 mm depth (B188)	C79298A3158B187/B188
Holder, round, flat for universal cup, for measurement of fibers or similar samples	C72298A225C28
Specimen holder PMMA, Ø 49 mm, top loading, for universal cup, reflection	C72298A227C168
Specimen holder, 50 x 50 mm, PMMA, top loading	C72298A227D19
Special form specimen holder for ¼-circle Eulerian cradle	C79298A3244D48
21 position sample magazine for ¼-circle Eulerian cradle	C79298A3244D75
Large goniometer head 64 mm, non-eucentric	7KP39008AA
Goniometerhead for ¼-circle Eulerian cradles	7KP29128HB
Holder for goniometer head, ¼-cradle	C79298A3228C15
Specimen holder fixture for closed Eulerian cradle, reflection	HUB-0511301
Vacuum chuck 3" or 5"	C79298A3181D5/D6
Wafer chuck for wafers of 50 mm - 150/300 mm diameter	A19B210 & A19B200
Laminar chuck	A100B136
Tilt stage for thin film samples for ¼-circle Eulerian cradle or centric cradle	A100B21
Capillary spinner for capillary investigations with Eulerian cradle	A100B38
HTS-reflection sample holder for high-throughput XRD screening investigations with D8 systems	HTE-1027470
Motorized oscillation device	A280C29
For D4 ENDEAVOR, Flip-Stick sample changer or Auto Changer	
(51.5 mm x 8.5 mm diameter x height)	
NIST corundum standard sample	A13B73
Set specimen holder rings for transmission	C79298A3244D81
Set specimen holder rings for reflection, PMMA or steel, sample reception Ø 25 mm, 1 mm depth	C79298A3244D82/D84
Set specimen holder rings for reflection, PMMA or steel, sample reception Ø 40 mm, 6 mm depth	C79298A3244D83/D85
Set specimen holder rings for reflection, PMMA or steel, for backloading, sample reception Ø 25 mm, max. 2 mm depth	C79298A3244D88/D89
Set specimen holder rings for reflection, PMMA, airtight, sample reception Ø 25 mm, 1 mm depth	C79298A3244D97
Set specimen holder rings for reflection, PMMA, airtight, sample reception Ø 25 mm, 4 mm depth	C79298A3244D98
Set specimen holders, for clays	A100D13
Set glass slides for A100D13, 26 x 26 mm ²	A100D14
Alignment tool for A100D13	A100B35
Airtight specimen holder ring with cap	A100B33
Low background, airtight specimen holder ring with cap, w/o or with cavity	A100B36/37
Assembling tool for A100B33/B36/B37	A100B34
Low background, airtight specimen holder with cap and knife edge, steel or PMMA, w/o or with cavity	A100B138-B141
Set of 10 specimen holder rings, 8.5 mm height, for Ø 25 mm filter samples,	A100D16
Low background specimen holder for small sample amounts, Ø 24.5 mm Si crystal	C79298A3244B249
Low background sample holder, with Ø 20 mm x 0.5 mm sample cavity	C79298A3244B261
Two sample cases, Ø 51.5 mm, height 40 mm, supported sample diameter Ø 25 mm < d < Ø 35 mm, for D4 66 sample position magazine	A13D103
Set specimen holder rings for reflection, PMMA, 51.5 mm x 20 mm (d x h), sample reception Ø 40 mm	C79298A3244D86
Set specimen holder rings steel, 51.5 mm x 20 mm (d x h), airtight	C79298-A3244D96
Set of steel rings Ø 40 mm, height 14 mm (Herzog version), sample reception Ø 25 mm, for D4 with 72 sample position magazine	A13D100
Set of steel rings Ø 35 mm, height 4.7 mm (bath analysis), sample reception Ø 25 mm, for D4 with 120 sample position magazine	A13D101

All configurations and specifications are subject to change without notice. Order No. DOC-S88-EXS018 V3.
© 2007 Bruker AXS. Printed in Germany.

● **Bruker AXS GmbH**
Karlsruhe, Germany
Phone +49 (7 21) 5 95-28 88
Fax +49 (7 21) 5 95-45 87
info@bruker-axs.de
www.bruker-axs.de

Bruker AXS Inc.
Madison, WI, USA
Phone +1 (800) 234-XRAY
Phone +1 (608) 276-3000
Fax +1 (608) 276-3006
info@bruker-axs.com
www.bruker-axs.com



Powders

Solids

Liquids

Wafer

Spec Sheet XRD 18

Specimen Holders for X-ray Diffraction

Proper sample handling for accurate results

X-ray diffraction is the non-destructive analytical method which determines the properties of solid or fluid matter on a micron and a nm length scale. In contrast to various complementary methods x-ray diffraction does not require any complex sample preparation. However, depending on e.g. sample consistency, volume, or other property, an appropriate sample holder is required. Its task is to fix the material under investigation precisely in the measurement position to allow an accurate analytical result.

Bruker AXS offers a number of different sample holders fitted to various analytical requirements. This spec sheet gives an overview of the different D8 family and D4 ENDEAVOR compatible sample holders, their applications and order numbers.



**C72298A227C168**

Specimen holder PMMA, Ø49 mm, top loading, for universal cup B64 and B65.

**C79298A3244D82/84**

Set specimen holder rings PMMA or steel, 8.5 mm height, sample reception Ø25 mm, for [1], [2], or [3].

**C79298A3244D83/85**

Set specimen holder rings PMMA or steel, 8.5 mm height, sample reception Ø40 mm, for [1], [2], or [3].

**C79298A3244D86**

Set specimen holder rings PMMA, 20 mm height, sample reception Ø40 mm, for [1] or [2].

**C79298A3244D81**

Set of specimen holder rings for transmission, for [2] or [3].

**C79298A3244D97**

Set specimen holder rings PMMA, 8.5 mm, airtight, sample reception Ø25 mm, 1 mm depth, for [1], [2], or [3].

**C79298A3244D98**

Set specimen holder rings PMMA, 8.5 mm, airtight, sample reception Ø25 mm, 4 mm depth, for [1], [2], or [3].

**C79298A3244D88/D89**

Set of specimen holder rings made of PMMA or steel for back loading sample preparation. For [1], [2], or [3]. Also shown is the preparation tool A100B107 included in the set.

**C79298A3244B249**

Si low background sample holder for small sample amounts, Ø51.5 mm, Ø24.5 mm Si crystal, for [1], [2], or [3].

**C79298A3244B261**

Si low background sample holder, Ø51.5 mm, with Ø20 mm x 0.5 mm sample cavity, for [1], [2], or [3].

**A100D16**

Set of 10 specimen holder rings for Ø25 mm filter samples, 8.5 mm height, for [1], [2], or [3].

**A100D13**

Set of specimen holder rings for clays. The PMMA made ring carries a height adjustable glass slide, on which the clay is prepared. For [1], [2], or [3].

**A100B33**

Airtight specimen holder ring with dome like x-ray transparent cap, for environmentally sensitive materials, sample reception Ø25 mm, 1 mm depth, for [2].

**A100B36/B37**

Low background, airtight specimen holder ring for small amounts of environmentally sensitive material. Sample reception is a 20 mm diameter silicon wafer with high-index surface orientation without (B36) or with (B37) cavity.

**A100B138-B141**

Low background, airtight specimen holder ring for small amounts of environmental sensitive materials. The dome like cap is equipped with a knife edge beam stop. Also shown on the right: assembly tool A100B34.

**A13B73**

SRM 1976 based Corundum standard sample supplied by the National Institute of Standards & Technology fitted in a steel ring, which is used for instrument performance verification.

**C79298A3158B187/B188**

Low background sample cup for rotating sample stage, with a 25 mm diameter high-index surface orientation silicon wafer.

**C79298A3244D96**

Set specimen holder rings steel, 20 mm, airtight, for [1] or [2].

**C79298A3158B65**

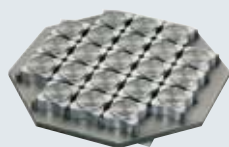
Universal sample cup for rotating sample stage, for samples up to 50 mm diameter and 40 mm height, minimum 2Theta is 0° without sample rotation, 20° with rotation.

**C79298A3158B65**

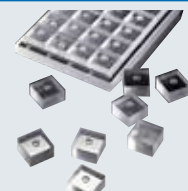
Universal sample cup for rotating sample stage, for samples up to 50 mm diameter and 40 mm height, allows sample rotation down to 3° 2Theta.

**A13D103**

Set of two sample case, Ø51.5 mm, height 40 mm, supported sample diameter $\text{Ø}25 \text{ mm} < d < \text{Ø}35 \text{ mm}$, for [1].

**C79298A3244D75**

21 position sample magazine for ¼-circle Eulerian cradle. The sample reception of each holder has 17 mm Ø and 1.5 mm depth.

**HTS-Reflection sample holder: HTE-1027470**

Library for 24 samples prepared in individual sample holders, for high-throughput XRD screening investigations with D8 ADVANCE or D8 DISCOVER, for [6].

**Capillary spinner for Eulerian cradle: A100B38**

Device enabling permanent spinning for capillary investigations with diffraction system equipped with Eulerian cradle, for [4], [5], or [6].

**Tilt stage: A100B21**

Device for mounting and motorized aligning of thin film samples for IP-GID, HRXRD, or XRR, for [4], [5], or [6].

**Oscillation device: A280C29**

Motorized device conducting a permanent bi-directional oscillation to reduce grain effects while collecting data. For [4] or [6].

**Vacuum chuck 3" or 5": C79298A3181D5/D6**

Device for precise mounting of wafers, glass plates or other flat samples by vacuum, for [4], [5], or [6].

**Wafer Chuck: A19B210 & A19B200**

Device for stress free mounting of wafers of 50 mm - 150/300 mm diameter, for [4], [5], or [6].

**Laminar chuck A100B136**

Laminar sucking chuck for accurate mounting of flat samples. The micro-porous aluminium made sucking plate allows simultaneous fixing of a number of small samples. For [4], [5], or [6].

- [1] D4 ENDEAVOR, 66 sample magazine
- [2] Flip-Stick
- [3] Auto Changer
- [4] ¼-circle Eulerian cradle
- [5] Centric Eulerian cradle
- [6] UMC and XYZ stages