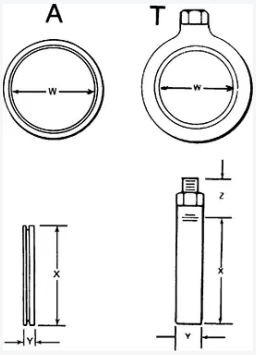
ORTEC

ORTEC B Series

Helt utarmade kiselytbarriärdetektorer

ORTEC B Series omfattar 74 modeller (helt utarmade kiselytbarriärdetektorer). Modellerna skiljer sig i bland annat aktiv yta, utarmningsdjup och garanterad upplösning – jämför dem i modelltabellen.



Detektortyp

Helt utarmad kiselytbarriär [1]

Specifikationer

Detektortyp	Helt utarmad kiselytbarriär	[1]
Upplösningens mätvillkor	^{241}Am, 5,486 MeV alfapartiklar; standard ORTEC-elektronik; 0,5 µs formningstidskonstanter	[1]
Mät- och garantitemperatur	21 ±1 °C	[2]
Upplösningens referensgeometri	Tunnfönstrad punktkälla; avstånd minst 2 gånger detektordiametern	[2]
Montagealternativ enligt produktguiden	A/T (öppen baksida)	[3]
Alpha Suite-kompatibilitet	Inte garanterat kompatibel; kräver ett godkänt specialutförande för kompatibilitet och garanterade specifikationer	[3]
Kontakt vid upplösningsprov	≤500 µm tjocklek: mäts genom utträdeskontakten (låg fältstyrka); >500 µm: genom den främre kontakten	[2]

Modeller

Modell	Minsta aktiva area	Garanterad maximal alfaupplösning	Nominellt utarmningsdjup	Utarmningsdjupets intervall
B-015-050-150	≥50 mm² [3]	≤15 keV FWHM [4]	150 µm [4]	125–175 µm [4]
B-015-050-200	≥50 mm² [3]	≤15 keV FWHM [4]	200 µm [4]	176–225 µm [4]
B-015-050-250	≥50 mm² [3]	≤15 keV FWHM [4]	250 µm [4]	226–275 µm [4]
B-015-050-300	≥50 mm² [3]	≤15 keV FWHM [4]	300 µm [4]	276–350 µm [4]
B-015-050-400	≥50 mm² [3]	≤15 keV FWHM [4]	400 µm [4]	351–450 µm [4]
B-015-050-500	≥50 mm² [3]	≤15 keV FWHM [4]	500 µm [4]	451–550 µm [4]
B-015-050-700	≥50 mm² [3]	≤15 keV FWHM [4]	700 µm [4]	650–750 µm [4]
B-015-050-1000	≥50 mm² [3]	≤15 keV FWHM [4]	1000 µm [4]	950–1050 µm [4]
B-016-050-150	≥50 mm² [3]	≤16 keV FWHM [4]	150 µm [4]	125–175 µm [4]
B-016-050-200	≥50 mm² [3]	≤16 keV FWHM [4]	200 µm [4]	176–225 µm [4]
B-016-050-250	≥50 mm² [3]	≤16 keV FWHM [4]	250 µm [4]	226–275 µm [4]

B-016-050-300	≥50 mm² [3]	≤16 keV FWHM [4]	300 µm [4]	276–350 µm [4]
B-016-050-400	≥50 mm² [3]	≤16 keV FWHM [4]	400 µm [4]	351–450 µm [4]
B-016-050-500	≥50 mm² [3]	≤16 keV FWHM [4]	500 µm [4]	451–550 µm [4]
B-016-050-700	≥50 mm² [3]	≤16 keV FWHM [4]	700 µm [4]	650–750 µm [4]
B-016-050-1000	≥50 mm² [3]	≤16 keV FWHM [4]	1000 µm [4]	950–1050 µm [4]
B-017-050-1500	≥50 mm² [3]	≤17 keV FWHM [4]	1500 µm [4]	1450–1550 µm [4]
B-017-150-150	≥150 mm² [3]	≤17 keV FWHM [4]	150 µm [4]	125–175 µm [4]
B-017-150-200	≥150 mm² [3]	≤17 keV FWHM [4]	200 µm [4]	176–225 µm [4]
B-017-150-250	≥150 mm² [3]	≤17 keV FWHM [4]	250 µm [4]	226–275 µm [4]
B-017-150-300	≥150 mm² [3]	≤17 keV FWHM [4]	300 µm [4]	276–350 µm [4]
B-017-150-400	≥150 mm² [3]	≤17 keV FWHM [4]	400 µm [4]	351–450 µm [4]
B-017-150-500	≥150 mm² [3]	≤17 keV FWHM [4]	500 µm [4]	451–550 µm [4]
B-017-150-700	≥150 mm² [3]	≤17 keV FWHM [4]	700 µm [4]	650–750 µm [4]
B-017-150-1000	≥150 mm² [3]	≤17 keV FWHM [4]	1000 µm [4]	950–1050 µm [4]
B-018-050-2000	≥50 mm² [3]	≤18 keV FWHM [4]	2000 µm [4]	1950–2050 µm [4]
B-018-150-150	≥150 mm² [3]	≤18 keV FWHM [4]	150 µm [4]	125–175 µm [4]
B-018-150-200	≥150 mm² [3]	≤18 keV FWHM [4]	200 µm [4]	176–225 µm [4]
B-018-150-250	≥150 mm² [3]	≤18 keV FWHM [4]	250 µm [4]	226–275 µm [4]
B-018-150-300	≥150 mm² [3]	≤18 keV FWHM [4]	300 µm [4]	276–350 µm [4]
B-018-150-400	≥150 mm² [3]	≤18 keV FWHM [4]	400 µm [4]	351–450 µm [4]
B-018-150-500	≥150 mm² [3]	≤18 keV FWHM [4]	500 µm [4]	451–550 µm [4]
B-018-150-700	≥150 mm² [3]	≤18 keV FWHM [4]	700 µm [4]	650–750 µm [4]
B-018-150-1000	≥150 mm² [3]	≤18 keV FWHM [4]	1000 µm [4]	950–1050 µm [4]
B-019-050-1500	≥50 mm² [3]	≤19 keV FWHM [4]	1500 µm [4]	1450–1550 µm [4]
B-019-150-1500	≥150 mm² [3]	≤19 keV FWHM [4]	1500 µm [4]	1450–1550 µm [4]
B-019-300-150	≥300 mm² [3]	≤19 keV FWHM [4]	150 µm [4]	125–175 µm [4]
B-019-300-200	≥300 mm² [3]	≤19 keV FWHM [4]	200 µm [4]	176–225 µm [4]
B-019-300-250	≥300 mm² [3]	≤19 keV FWHM [4]	250 µm [4]	226–275 µm [4]
B-019-300-300	≥300 mm² [3]	≤19 keV FWHM [4]	300 µm [4]	276–350 µm [4]
B-019-300-400	≥300 mm² [3]	≤19 keV FWHM [4]	400 µm [4]	351–450 µm [4]
B-019-300-500	≥300 mm² [3]	≤19 keV FWHM [4]	500 µm [4]	451–550 µm [4]
B-019-300-700	≥300 mm² [3]	≤19 keV FWHM [4]	700 µm [4]	650–750 µm [4]
B-019-300-1000	≥300 mm² [3]	≤19 keV FWHM [4]	1000 µm [4]	950–1050 µm [4]
B-020-150-2000	≥150 mm² [3]	≤20 keV FWHM [4]	2000 µm [4]	1950–2050 µm [4]
B-020-300-150	≥300 mm² [3]	≤20 keV FWHM [4]	150 µm [4]	125–175 µm [4]
B-020-300-200	≥300 mm² [3]	≤20 keV FWHM [4]	200 µm [4]	176–225 µm [4]
B-020-300-250	≥300 mm² [3]	≤20 keV FWHM [4]	250 µm [4]	226–275 µm [4]
B-020-300-300	≥300 mm² [3]	≤20 keV FWHM [4]	300 µm [4]	276–350 µm [4]

B-020-300-400	≥300 mm² [3]	≤20 keV FWHM [4]	400 µm [4]	351–450 µm [4]
B-020-300-500	≥300 mm² [3]	≤20 keV FWHM [4]	500 µm [4]	451–550 µm [4]
B-020-300-700	≥300 mm² [3]	≤20 keV FWHM [4]	700 µm [4]	650–750 µm [4]
B-020-300-1000	≥300 mm² [3]	≤20 keV FWHM [4]	1000 µm [4]	950–1050 µm [4]
B-021-150-1500	≥150 mm² [3]	≤21 keV FWHM [4]	1500 µm [4]	1450–1550 µm [4]
B-021-300-1500	≥300 mm² [3]	≤21 keV FWHM [4]	1500 µm [4]	1450–1550 µm [4]
B-021-450-500	≥450 mm² [3]	≤21 keV FWHM [4]	500 µm [4]	451–550 µm [4]
B-021-450-700	≥450 mm² [3]	≤21 keV FWHM [4]	700 µm [4]	650–750 µm [4]
B-021-450-1000	≥450 mm² [3]	≤21 keV FWHM [4]	1000 µm [4]	950–1050 µm [4]
B-023-300-2000	≥300 mm² [3]	≤23 keV FWHM [4]	2000 µm [4]	1950–2050 µm [4]
B-023-450-150	≥450 mm² [3]	≤23 keV FWHM [4]	150 µm [4]	125–175 µm [4]
B-023-450-200	≥450 mm² [3]	≤23 keV FWHM [4]	200 µm [4]	176–225 µm [4]
B-023-450-250	≥450 mm² [3]	≤23 keV FWHM [4]	250 µm [4]	226–275 µm [4]
B-023-450-300	≥450 mm² [3]	≤23 keV FWHM [4]	300 µm [4]	276–350 µm [4]
B-023-450-400	≥450 mm² [3]	≤23 keV FWHM [4]	400 µm [4]	351–450 µm [4]
B-023-450-500	≥450 mm² [3]	≤23 keV FWHM [4]	500 µm [4]	451–550 µm [4]
B-023-450-700	≥450 mm² [3]	≤23 keV FWHM [4]	700 µm [4]	650–750 µm [4]
B-023-450-1000	≥450 mm² [3]	≤23 keV FWHM [4]	1000 µm [4]	950–1050 µm [4]
B-024-450-150	≥450 mm² [3]	≤24 keV FWHM [4]	150 µm [4]	125–175 µm [4]
B-024-450-200	≥450 mm² [3]	≤24 keV FWHM [4]	200 µm [4]	176–225 µm [4]
B-024-450-250	≥450 mm² [3]	≤24 keV FWHM [4]	250 µm [4]	226–275 µm [4]
B-024-450-300	≥450 mm² [3]	≤24 keV FWHM [4]	300 µm [4]	276–350 µm [4]
B-024-450-400	≥450 mm² [3]	≤24 keV FWHM [4]	400 µm [4]	351–450 µm [4]
B-024-450-1500	≥450 mm² [3]	≤24 keV FWHM [4]	1500 µm [4]	1450–1550 µm [4]
B-026-450-2000	≥450 mm² [3]	≤26 keV FWHM [4]	2000 µm [4]	1950–2050 µm [4]

Modell	Beställningsvillkor
B-015-050-150	–
B-015-050-200	–
B-015-050-250	–
B-015-050-300	–
B-015-050-400	–
B-015-050-500	–
B-015-050-700	–
B-015-050-1000	–
B-016-050-150	–
B-016-050-200	–
B-016-050-250	–
B-016-050-300	–

B-016-050-400	–
B-016-050-500	–
B-016-050-700	–
B-016-050-1000	–
B-017-050-1500	Djupet kräver specialbeställning enligt tillverkaren [1]
B-017-150-150	–
B-017-150-200	–
B-017-150-250	–
B-017-150-300	–
B-017-150-400	–
B-017-150-500	–
B-017-150-700	–
B-017-150-1000	–
B-018-050-2000	Djupet kräver specialbeställning enligt tillverkaren [1]
B-018-150-150	–
B-018-150-200	–
B-018-150-250	–
B-018-150-300	–
B-018-150-400	–
B-018-150-500	–
B-018-150-700	–
B-018-150-1000	–
B-019-050-1500	Djupet kräver specialbeställning enligt tillverkaren [1]
B-019-150-1500	Djupet kräver specialbeställning enligt tillverkaren [1]
B-019-300-150	–
B-019-300-200	–
B-019-300-250	–
B-019-300-300	–
B-019-300-400	–
B-019-300-500	–
B-019-300-700	–
B-019-300-1000	–
B-020-150-2000	Djupet kräver specialbeställning enligt tillverkaren [1]
B-020-300-150	–
B-020-300-200	–
B-020-300-250	–
B-020-300-300	–
B-020-300-400	–

B-020-300-500	–
B-020-300-700	–
B-020-300-1000	–
B-021-150-1500	Djupet kräver specialbeställning enligt tillverkaren [1]
B-021-300-1500	Djupet kräver specialbeställning enligt tillverkaren [1]
B-021-450-500	–
B-021-450-700	–
B-021-450-1000	–
B-023-300-2000	Djupet kräver specialbeställning enligt tillverkaren [1]
B-023-450-150	–
B-023-450-200	–
B-023-450-250	–
B-023-450-300	–
B-023-450-400	–
B-023-450-500	–
B-023-450-700	–
B-023-450-1000	–
B-024-450-150	–
B-024-450-200	–
B-024-450-250	–
B-024-450-300	–
B-024-450-400	–
B-024-450-1500	Djupet kräver specialbeställning enligt tillverkaren [1]
B-026-450-2000	Djupet kräver specialbeställning enligt tillverkaren [1]

Källor

[1] B Series Totally Depleted Silicon Surface Barrier Radiation Detector
ORTEC (AMETEK) · product-page · Page heading; Ordering Information, footnote **; Ordering Information, column header "Depletion Depth 1500 µm§" and footnote § · kontrollerad 2026-10-16
https://web.archive.org/web/20261016000000/https://www.ortec-online.com/products/radiation-detectors/silicon…

[2] Introduction to Charged-Particle Detectors
ORTEC (AMETEK) · application-note · p. 8, "Test Data and General Information – Alpha Resolution"; p. 3, "Energy Resolution and Noise" · kontrollerad 2026-10-16
https://web.archive.org/web/20220928135003/https://www.ortec-online.com/-/media/ametekortec/other/introducti…

[3] ORTEC Product Guide
ORTEC (AMETEK) · catalog · PDF p. 11 (printed p. 8), table "Standard Mounting Information"; PDF p. 11 (printed p. 8) "Ordering Information"; same note on the series table page; PDF p. 6 (printed p. 3), table "B Series Totally Depleted Silicon Surface Barrier Detectors"; PDF p. 11 (printed p. 8) " · kontrollerad 2026-10-16
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[4] B Series – Totally Depleted Silicon Surface Barrier Detectors (brochure 020821)
ORTEC (AMETEK) · brochure · p. 1, Ordering Information table, "Guaranteed Maximum Resolution (keV)**", α column; footnote **; p. 1, Ordering Information table, column "Depletion Depth 150 µm Range: 125–175 µm"; p. 1, Ordering Information table, column "Depletion Depth 200 µm Range: 176–225 µm" · kontrollerad 2026-10-16
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