

# AS 90/90*plus*, AS 91 and AS 93*plus* Autosamplers for Atomic Spectroscopy



## Exceptional sampling capacity and flexibility

The PerkinElmer® AS 90, AS 90*plus*, AS 91 and AS 93*plus* autosamplers are computer-controlled, multi-purpose sampling systems for flame and flow-injection atomic absorption, ICP-OES and ICP-MS. They automate standard and sample introductions for instrument calibration and sample analysis via software commands, extending the spectrometer's capabilities to those of a fully automated analytical workstation. Their performance has been proven in thousands of laboratories worldwide.

The easily exchangeable sample trays give you the flexibility to use a variety of differently sized sample vessels.

Use large-volume vessels for long-term, automatic operations requiring increased solution volumes. Use smaller vessels to analyze increased numbers of samples or when only small sample volumes are required.

In addition to the variety of sample trays offered by PerkinElmer, the AS 93*plus* autosampler is also compatible with commonly-used sample trays from other manufacturers such as Gilson and Scienceware.

## Key Benefits

- ▶ Large, flexible sampling capacity
- ▶ Fast, accurate random access
- ▶ Random access for added flexibility
- ▶ Corrosion-resistant sampling components
- ▶ Automatic rinsing (AS 93*plus*)

## Fast, accurate sample access

An advanced drive system moves the sampling arm to its programmed X-Y-Z coordinates quickly and accurately. Random-access programming gives you broad flexibility in the placement of samples and standards. The sample probe – including the sample transport capillary tubing – is made of acid and solvent-resistant materials.



FIMS-400 with AS 91 autosampler.

## Tailored to your needs

To best serve your analytical requirements and provide the best price/performance ratios, the AS 90, AS 90*plus*, AS 91 and AS 93*plus* autosamplers are available in multiple versions (Table 1). They differ primarily in power supply, sample capacity and in the features offered.

The AS 90 and AS 91 autosamplers are powered from a FIAS-100/400 or FIMS-100/400 flow injection system or a separate, standalone power supply. The AS 90*plus* and AS 93*plus* autosamplers include an integrated power supply and control electronics.

Table 1. Compatibility and Part Number Information.

For use with	Part Number			
	AS 90	AS 90 <i>plus</i>	AS 91	AS 93 <i>plus</i>
AAAnalyst™ AA Systems	NA	B3140291	NA	B3140330
Optima™ ICP-OES Systems	NA	B3140291	NA	B3140790
ELAN® ICP-MS Systems	NA	B3140291	NA	B3140810
FIAS-100/400 and FIMS-100/400 Systems	B0508540	B3140291	B0509080	B3140330 (AA) B3140790 (ICP-OES) B3140810 (ICP-MS)

Table 2. Sample Trays.

Autosampler	Tray	Part Number	Composition	Sample Locations	Location Diameter (mm)	Sample Vessel (mL)
AS 90/90 <i>plus</i>	A	B3000133	Anodized aluminum w/polypropylene base	144	12.3	4.5, 6 or 8
	B	B3000132	Polypropylene	98	17.4	15 or 16
	C	B3000135	Anodized aluminum w/polypropylene base	36	31	50
AS 91	E	B0509554	Coated aluminum	218	13.5	4.5, 6 or 8
	F	B0509555	Coated aluminum	152	17.4	15 or 16
	G	B0508520	Coated aluminum	55	30	50
AS 93 <i>plus</i>		B3140617	Polypropylene	90	13	4.5, 6 or 8
		B3140618	Polypropylene	60	16	15 or 16
		B3140621	Polypropylene	21	30	50
		B3141647	Polypropylene	9/29	30/16	50/15

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