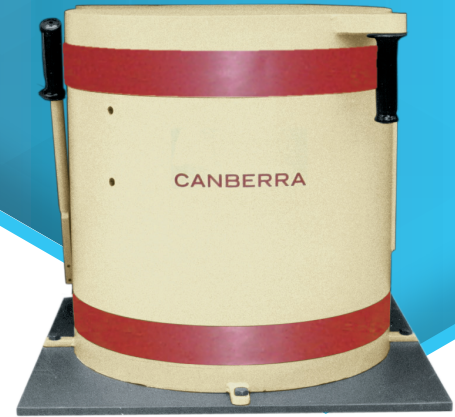




DETECTORS

737

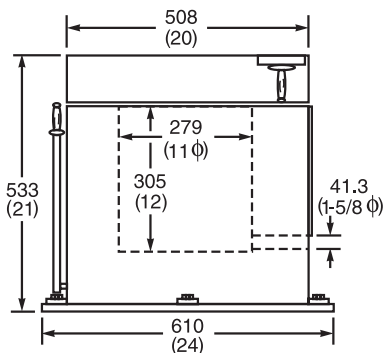
Lead Shield



737 Front View
Dimensions in mm (inches)

FEATURES

- “No stream” design for U-style™ cryostat
- Low center of gravity
- Four-inch low background lead
- Graded tin and copper liner
- Easy detector installation



DESCRIPTION

The Model 737 Lead Shield is designed to accommodate U-style cryostats which have a vertical detector chamber located at the end of a horizontal arm extending from the side of the Dewar. This detector/shield arrangement excludes the preamplifier and other hardware from the shield volume and eliminates all line-of-sight streaming paths to the detector element. These factors can contribute significantly to overall background reduction in the counting system.

Unlike most shields of this type, the 737 shield is designed for ease of detector installation with a narrow, stepped plug providing access for the horizontal arm of the detector. This plug is removed vertically, thus minimal space is required between the shield and the Dewar with attendant reduction in floor space required for the system.

Like the Model 747 Shield, the 737 system has a graded copper-tin liner and is jacketed by 3/8 in. steel finished in an attractive light grey textured paint which matches other Mirion products. The exclusive Mirion door lift mechanism allows the shield door to close lightly against the shield body, reducing the streaming path to virtually nothing.

SPECIFICATIONS

MATERIALS

- Outer Jacket: 9.5 mm (3/8 in.) thick low carbon steel
- Bulk Shield: 10 cm (4 in.) thick low background lead
- Graded Lining: 1.0 mm (0.040 in.) tin and 1.5 mm (0.062 in.) copper

WEIGHT

- 907 kg (2000 lb); 950 kg (2050 lb) shipping weight

FINISH

- Mirion light grey textured epoxy

MECHANICS

- Door Hinge: Oiled bronze bushings
- Door Lift: Lever actuated cam

OPTIONS

- Model 737-1 Cryostat Stand (with adjustable legs)



737 Shield shown with Model 7905-30U Cryostat

