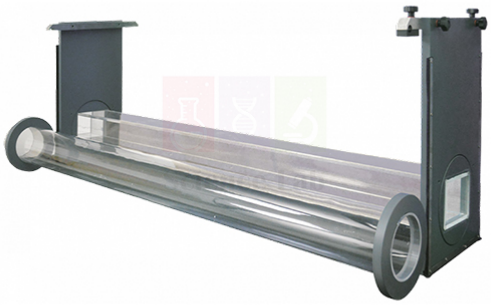
Email : sales@scilabexport.com
Phone: +91-7082934803

Product Name :

Culvert

Product Code :

SLE/EFM/20



Email : sales@scilabexport.com
Phone: +91-7082934803

Description :

Culvert (Product Code: SLE/EFM/20) is a pair of clear culvert models — one of circular section and one of rectangular section — for observing and calculating how water passes through a culvert under a road or embankment. The models let students see both open flow, where the water surface stays free inside the barrel, and orifice flow, where the inlet is submerged and the culvert runs under pressure. The pair is used in civil engineering hydraulics and highway drainage teaching, and is manufactured by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, Ambala, a laboratory equipment exporter from India.

Key Details

Parameter	Detail
Supplied as	A pair of culvert models
Sections	One circular, one rectangular
Construction	Clear, so the flow inside each barrel is visible
Flow regimes studied	Open flow and orifice flow in a culvert
Purpose	Observation and calculation of culvert flow

Typical Use

One model is set across the channel and the flow is increased gradually. At low flows the inlet is not submerged and the barrel carries a free-surface stream; as the upstream (headwater) level rises and covers the inlet, the culvert switches to orifice-type flow. Students record headwater depth against discharge through both regimes, identify the transition, and compare the measured values with open-channel and orifice equations. Repeating the test with the other model shows how a circular barrel and a rectangular box culvert differ in capacity and in how they fill.

Because the models are clear, air pockets, entrance contraction and the point where the barrel runs full can all be seen directly. Seal the model edges so water cannot slip past, set the channel level, and wait for the headwater to stabilise before each reading.

Manufacturer

Jain Scientific Equipments Private Limited, incorporated under CIN U29309HR2020PTC087597, makes these models under the **ScienceLab** name in Ambala, Haryana. Its production runs at the licensed factory in HSIIDC Industrial Area, Saha, Ambala (Factory Licence AMB-ONLINE-CHD-J-414). Read more on our company profile.

Related Fluid Mechanics Equipment

Other items used in the same channel and hydraulic-structure practicals:

- Meter Flume — a recirculating channel to test the models in; confirm fitting with us
- Bridge Piers — the other common road-crossing structure studied in flumes

Find

Email : sales@scilabexport.com
Phone: +91-7082934803