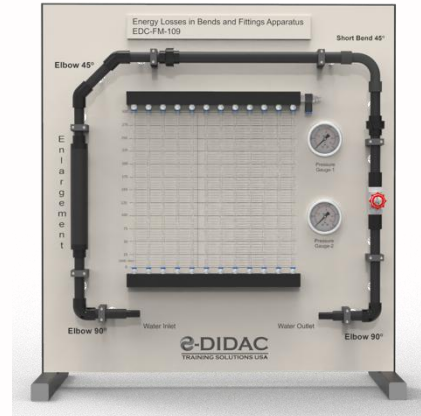


Energy losses in Bends and Fittings Apparatus (EDC-FM-109)

EXPERIMENTAL DATA:

- Investigation of head loss in pipe fittings
- Investigation of pressure loss in pipe fittings for laminar and turbulent flow
- Investigation of load losses for a valve
- Investigation of pressure differential at sudden enlargement and contraction



DESCRIPTION:

This experimental unit consists of a pipe section containing different segment fittings along the loop as well as sudden enlargement and contraction elements. All of the elements and fittings are connected to the manometer manifold while clear piping to visualize pressure differential.

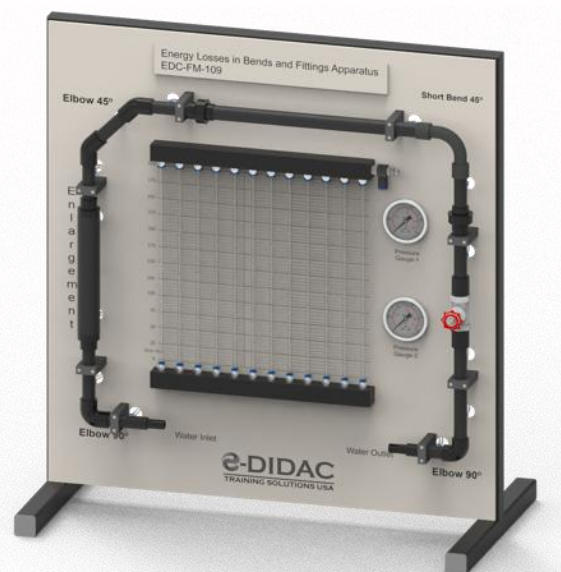
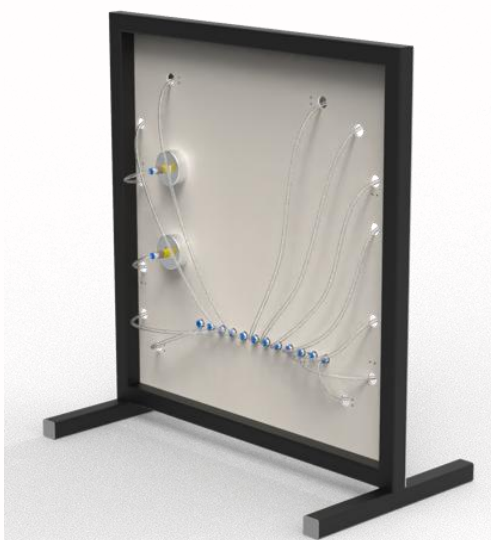
This unit can be used with EDC-FM-100 or can also be used with laboratory water supply. The on-board flow control valve allows students to observe the pressure losses at different flow rates.

DIMENSIONS AND WEIGHT:

- **Minimum Size:** 800 x 550 x 750mm (L x W x H)

SCOPE OF DELIVERY:

- 1 x EDC-FM-109
- 1 x Instructional Manual



TECHNICAL DATA:

Pipe Bends and Fittings:

- **Material:** PVC
- **Pipe Size:** 0.5-inch standard pipe size
- **Types of Bends & Fittings:**
 - 90-degree miter bend
 - 90-degree elbow
 - Large radius bend
 - Sudden expansion: 0.5 inch to 0.75 inch
 - Sudden contraction: 0.75 inch to 0.5 inch

Gate Valve:

- **Material:** Stainless Steel
- **Fitting Size:** 0.5-inch pipe size
- **Maximum Water Working Pressure:** 2 bar

Manometer Tubes:

- **Material:** PPI
- **Quantity:** 12 nos.

Bourdon Gauges:

- **Quantity:** 2 nos.
- **Measuring Range:** 0 to 2.5 bar
- **Mounting Type:** Panel mount