

# ICDS FOR STORMWATER SYSTEMS

## PRODUCT INFORMATION BULLETIN

### Inlet Control Device

The IPEX Inlet Control Device (ICD) is used to control flow into storm sewers during peak flow events. It is designed to allow a specified flow volume out of a catchbasin at a specified head. This causes the excess stormwater to be temporarily stored above ground. This approach conserves pipe capacity so that catchbasins upstream do not become uncontrollably surcharged, which could lead to flooding.

IPEX ICD's incorporate a special design that prevents clogging, particularly during low flow conditions.

IPEX ICDs can also be fabricated to fit any type of pipe – PVC, concrete, clay or a host of other products.

#### Dimensions

ICD's are available both as standard (Types A, B, C, D, & F) and custom designed configurations. In addition, there are specific designs for different types of pipe, including smooth wall PVC, profile wall and concrete pipe.

The main advantage of specifying standard ICD's is that they are readily available and can be delivered immediately. However, there are definite advantages to specifying custom sized units as they allow tremendous design flexibility because the allowable flow can be matched directly to the topography of the pavement surface.

#### Types Available

##### 'Plug' ICD

A short, slightly tapered plug is inserted in the outlet pipe from the catchbasin. Held in place by friction and hydrostatic pressure, plug ICDs are made to fit 200mm, 250mm and 300mm (8", 10" & 12") pipe made from any material (i.e. PVC, concrete, clay, etc.). The orifice plate sits flush with the inside of the catchbasin.



##### 'Framed' ICD

A plate containing the orifice is held in channels in the frame. The ICD frame is bolted over the outlet pipe inside the catchbasin. Framed ICDs can be fabricated for any size and type of pipe.



#### Applications & Benefits

Storm water flow control for:

- parking lots
- roads
- where main line storm sewer capacity must be managed
- alleviates basement flooding



**IPEX**

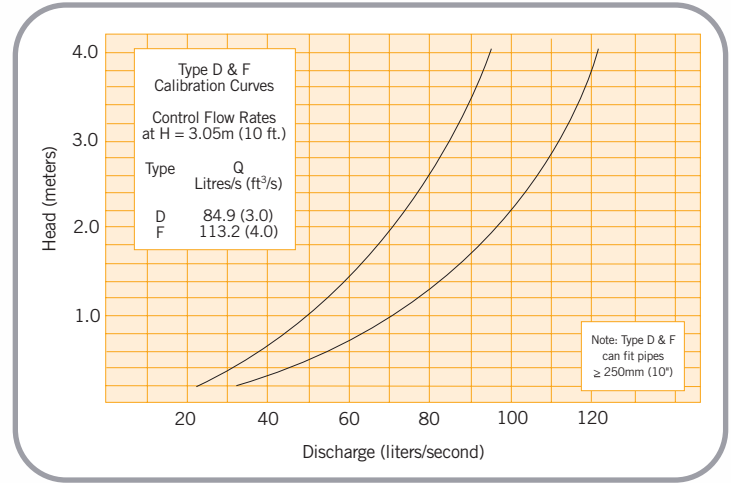
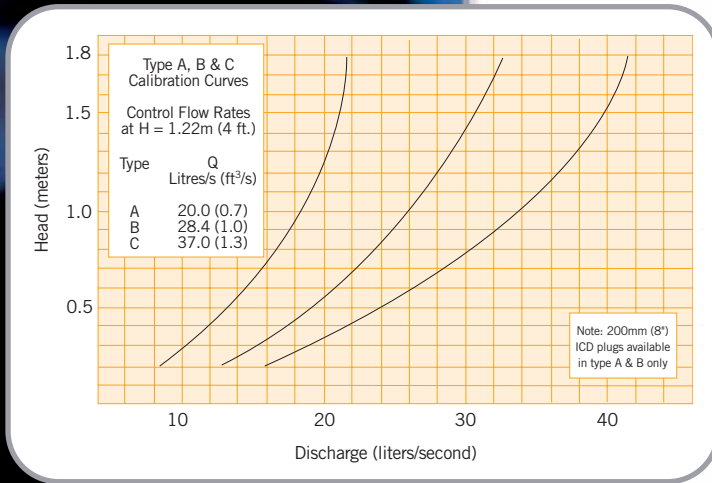
TOLL FREE U.S.: (800) 463-9572

TOLL FREE CANADA: (866) 473-9462

[www.ipexinc.com](http://www.ipexinc.com)

## Unique Slot Design

The rectangular slot at the bottom of the orifice works effectively in two ways. First, during dry periods it draws the water level below the main orifice area, keeping it clear of floating debris. Second, it generates strong vortex action in the discharge flow during heavy rainfalls, vigorously scouring sediment from the pipe.



## Specifications

IPEX Inlet Control Devices are manufactured from Polyvinyl Chloride (PVC) to be supplied according to the type (i.e. A, B, C, D, or F) as shown in the above graphs.

IPEX Plug ICDs are to be machined to provide a friction fit into the outlet pipe.

Framed ICDs are to be bolted in position over appropriate outlet pipe in the catchbasin/maintenance hole.

Note: IPEX can also design and fabricate I.C.D.'s with custom curves, in order to match specific site requirements.

