# **Specialist Valves & Saddles**

Hy-Ram has more than 15 years' experience in the design and supply of a range of specialist fittings for the water industry. Our progression is led by innovation and the design of products that provide solutions to 'real' problems... consequently our range is continually specified.



## **Hi-Flow Drilling Saddles**



DrillMaster 4 Branch Drill Connected to EF Hi-Flow

Saddle

### **The System**

The Hy-Ram 'Hi-Flow' System consists of a Drilling Saddle, Flanged Riser Tube and the DrillMaster 4 Branch Drill. The system allows underpressure installation of fire hydrants onto existing mains, avoiding shutdown and subsequent recharging. It is also an ideal method of installing Flushing Points adjacent to 'normally kept shut' boundary valves. The system enables holes up to 79mm diameter to be cut into pressurised water mains, giving excellent flow rate characteristics. The versatility of the system will allow for other applications in the water network.

### **The Benefits**

- · Underpressure installation with no shut down
- Excellent flow rate characteristics
- Robust pipe clamp gives a rigid base for mounting accessories
- Supports the pipe material in the area of the drilled hole
- Simple and quick to install
- · Substantial cost savings
- Suits CI, DI, PVC and certain AC pipes up to 12" / DN300

### **Application / Specification**

- Designed for all potable water and wastewater applications up to a working pressure of 16 bar
- All materials and coatings are WRAS approved

### The Identified Uses

- Underpressure installation of a fire hydrant
- Underpressure installation of an 'OXO' type flushing point either side of a boundary valve. (In the case of both the above applications, it makes future changing of the hydrant achievable without the need to shut down)
- Taking samples from the top of the pipe wall (up to 79mm coupon)
- Forming a by-pass for the installation of a PRV or water meter
- Underpressure access into the main, for example leak detection (Hydra phone) insertion point CCTV insertion point, Probe insertion point, Flow meter, Chlorination point, Temperature monitor point, Chemical analysis point, Correlator point

### 80mm Clear bore...

With the popularity of DN80 'through bore' Fire Hydrants spreading, Hy-Ram recently introduced the Hi-Flow with a clear 80mm bore. Following the initial concept of simplicity and 'one fitting does all', the Hi-Flow remains a 'one-piece' fitting. There is no need for doubling up or using two fittings which adds extra flanged joints and greater potential for leaks.

Key benefits...

- Clear 80mm vertical bore
- 'Solid' under-clamp ensuring good connection with the main
- The Hi-Flow bolts directly to the main and offers a low 'stack height'
- No retraining is required... method of installation and drilling equipment remains the same

# H Available to hire | Repair & Service Available R

# **Hi-Flow Drilling Saddles**

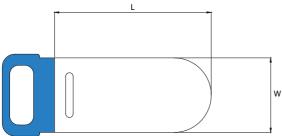


Hi-Flow Drilling Saddle - with 80mm clear bore

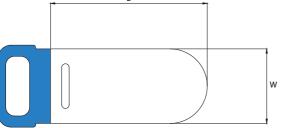
Hi-Flows for use on Metallic and certain AC pipes:

DN mm	DN inch	Pipe Tol. mm (OD)	Hi-Flow for Metallic Pipe	Hi-Flow for PVC Pipe	Max Recommended Cutter Size	Max Working Pressure BAR
80	3	88-103	080-000245	080-000259	57mm	16
100	4	114-125	080-000246	080-000260	79mm	16
125	5	140-153	080-000247	080-000261	79mm	16
150	6	168-180	080-000248	080-000262	79mm	16
175	7	193-208	080-000249	080-000263	79mm	16
200	8	219-235	080-000250	080-000264	79mm	16
225	9	244-262	080-000251	080-000265	79mm	16
250	10	273-290	080-000252	080-000266	79mm	16
300	12	324-338	080-000253	080-000267	79mm	16

### **Hi-Flow Accessories**



Note: Hi-Flows have different Sized Valve Plates to Sandwich Valves



# **Hi-Flow Valve Plate Dimensions**

Valve Plate Hi-Flow

Silicone Grease 500g tub

**Hi-Flow Valve Accessories** 

**Product Code** Description

645-000243

603-000003

605-000017

Туре	Length (L)	Width (W)	Colour
80mm Bore	172mm	100mm	Blue

Handle

Colour

Blue



Automated Pneumatic Pressure Test Rig for Hi-Flow Performance Testing

# Typical Procedure for Installation of a Fire Hydrant Using Hi-Flow

Figure 1: Drill through top of pipe

Figure 2: Withdraw Drill Spindle, remove Cover Plate and insert Valve Plate

Figure 3: Remove Drilling Machine

Figure 4: Assemble Fire Hydrant (Ensure it is in closed state)

Figure 5: Withdraw Valve Plate and reassemble Cover Plate

