

**SIRIS**  
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**Do it once, do it right**

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### **Our service promise**

At SIRIS we guarantee that any system we design, install and maintain will be fully MCERTS-compliant – giving you the peace of mind that your system is providing accurate, cost-effective results and ensuring ongoing compliance with Environment Agency regulations.

# **Open Channel Flow Measurement**



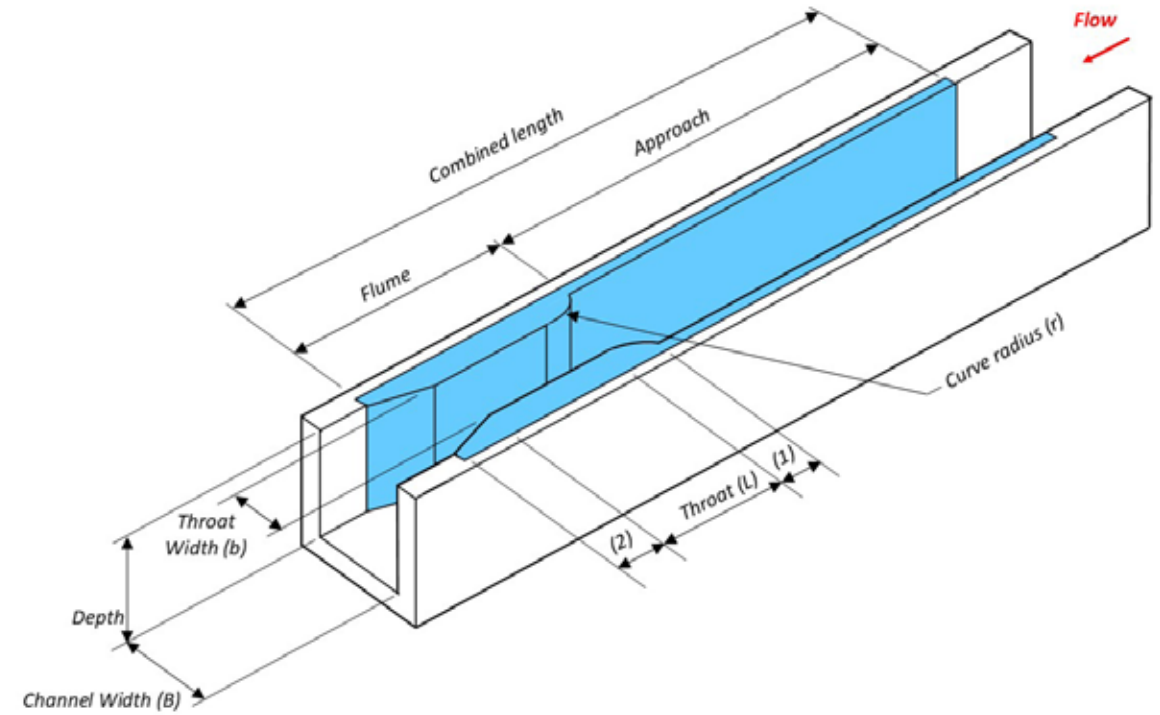
## Flumes & Weirs

Flumes are suitable for both open channel flow measurement and storm water overflow and are used almost exclusively for measuring the inlet flow to sewage treatment works. We offer a range of standard sizes that we hold in stock, and can manufacture bespoke units for specific channel sizes or hydraulic requirements.

Thin plate weirs are most commonly either in v-notch or rectangular notch format. Depending upon type, they can be used for a wide range of flows, with v-notches being especially suitable for very low flow rates with high accuracy. They are ideal for use on cleaner applications such as final effluent from treatment plants or some industrial discharges.

Our standard flume and weir open channel flow measurement systems cover a wide range of flow rates and can be designed to suit most discharge applications.

All SIRIS flumes and weirs are designed to ensure compliance with both BS/ISO and MCERTS.



## Flow gauging rectangular flumes

Flume Type	Channel width (B)mm	Approach length <sup>(3)</sup>	Flume only length (mm)	Channel depth (mm)	Combined length	H max (mm)	Q max (L/sec)	H min (mm)	Q min (L/sec)
Siris 50 <sup>(b)</sup>	100	1000	516	200	1516	150	4.99	34 <sup>(1)</sup>	0.5 <sup>(1)</sup>
Siris 70 <sup>(b)</sup>	100	1000	550	250	1550	210	12.42	34 <sup>(1)</sup>	0.72 <sup>(1)</sup>
Siris no.1	150	1500	816	400	2316	300	28.81	50 <sup>(2)</sup>	1.91 <sup>(2)</sup>
Siris no.2	250	2500	983	350	3483	330	50.17	50	2.86
Siris no.3	300	3000	1232	586	4232	530	138.38	50	3.87
Siris no.4	600	6000	1715	650	7715	565	312.18	50	7.79

1. BS/ISO recommends a minimum upstream head of 50mm, Lab tests have shown good flow to head correlation down to 0.5l/s for the SIRIS(50b) flume & 0.72l/s for the SIRIS(70b) flume. These flumes should only be used for clean water or final effluent applications.
2. BS/ISO recommends a minimum upstream head of 50mm, Lab tests have shown good flow to head correlation <1.5l/s for the SIRIS(no.1) flume.
3. The approach length is based upon guidance taken from relevant BS/ISO standards. It should be noted that if flows enter the approach with high velocity, or after a sharp bend or angle sluice gate, a greater length of uniform approach may be required.



## Flow gauging weir tanks

Siris standard weir tanks	Tank width (mm)	Tank length (mm)	Tank height (mm)	Flow range (Q) (l/sec)
Siris XS	600	1300	700	2
Siris S	1000	1500	800	5
Siris M	1000	2440	800	25*
Siris L	1000	3000	800	50*

Measurements represent internal dimensions. Bespoke weir tanks can be designed to specific client requirements.

\*Flow ranges for the Siris M & L tanks are dependant upon type of weir plate installed.

