

PENSTOCK / SLUICE GATE

DATA SHEET WITH THE MINIMUM DATA REQUIRED FOR QUOTATION

Please fill in one (1) data sheet for each size of penstock/sluice gate.

Note: this data sheet is dedicated to the standard penstocks/sluice gates (i.e., size up to 2mx2m and a maximum design water head of 12mWC). For bigger sizes and/or higher water head, please consult BEAUDREY.

1. General

Date:		Data Sheet Revision No.:	
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2. Project Information

Company Name:			
Project Name:			
Type of Project:		Water Source:	

(*): "New" means construction of a new plant.

(**): "Retrofit" means upgrading or revamping of an existing plant.

For a retrofit project, the following documents/drawings must be provided together with this data sheet:

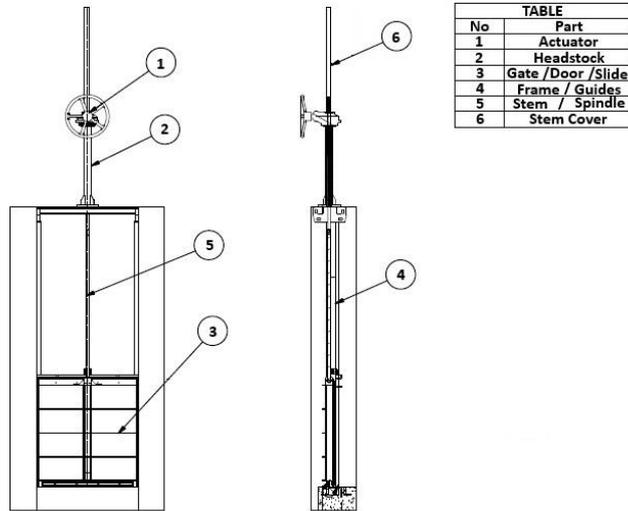
General arrangement drawing of the existing penstock/sluice gate	
Civil Work drawing of the existing penstock/sluice gate, or the location concerned by the modification	
Pictures of the existing penstock/sluice gate or the location concerned by the modification	

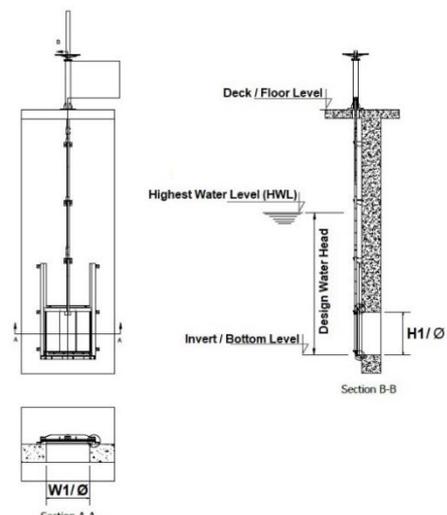
3. Terminology

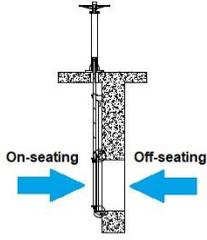
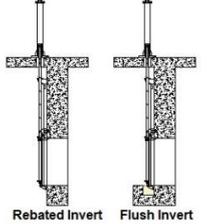
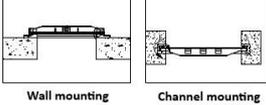
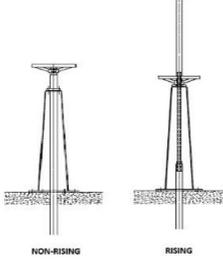
The terms used in BS7775 and AWWA C561 are given below. The terms can be used alternatively in this document.

BS7775	AWWA C561
Penstock	Sluice Gate
Door	Slide
Spindle	Stem
Spindle Nut	Thrust Nut
Spindle Protection	Stem Cover
Resilient Seal	Seal
On-Seating	Seating
Off-Seating	Unseating

4. Data



Location of the penstock/sluice gate(s)		
Quantity:		
Deck/Floor Level:	m	
Highest Water Level (HWL):	m	
Invert/Bottom Level:	m	
Design Water Head (HWL – Invert Level):	m	
For a Square Opening: “Height (H1) x Width (W1)” =	x mm	
For a Round Opening: “Diameter (Ø)” =	mm	
Maximum Flow rate through the opening:	m³/h	
Maximum leakage rate as per (Δ):		
Seating Type (*):		
Invert Type (**):		
Mounting Type/ Installation (***):		
Stem type (****):		
Actuator Type:		

<p>(*):</p> <ul style="list-style-type: none"> • On-seating means the pressure of the water is forcing the gate onto the frame (i.e., against the wall). • Off-seating means the pressure of the water is forcing the gate away from the frame (i.e., away from the wall). • Bi-directional means the pressure of the water can force the gate in both directions (i.e., on and off seating). 	
<p>(**): Invert type</p>	
<p>(***): Mounting type / Installation</p>	
<p>(****): Stem type</p>	
<p>(Δ) Leakage Rate (LR) as per BS7775</p>	<ul style="list-style-type: none"> • <u>If Design Water Head is ≤ 6m:</u> LR max= 0.5l/(min.m) • <u>If Design Water Head is > 6m:</u> LR max = 0.1+(0.067 x Design Head in m)
<p>(Δ) Leakage Rate (LR) as per AWWA C561</p>	<ul style="list-style-type: none"> • <u>If Design Water Head is ≤ 20 feet [6m]:</u> LR max = 0.1 GPM/foot [1.24l/(min.m)] • <u>If Design Water Head is >20 feet [6m]:</u> (GPM/foot) LR max = 0.1+(0.0024 x (Design Head in feet -20)) or [l/(min.m)] LR max = 1.24 +(0.101 x (Design Head in m -6.1))

Note: TBA = To Be Advised by Beaudrey

5. Material

Guides / Frame:	
Gate / Door:	

Note: TBA = To Be Advised by Beaudrey

