

## Model D Pig Valve Lifting Location and Handling Instruction

The information on this document is strictly confidential and may not be reproduced in any way without prior written permission of Argus  
 PRINTED COPIES ARE UNCONTROLLED

### 1.0 PURPOSE

To outline the lifting and handling instructions for Argus Model D Pig Valves. As per API 6D, valves weighing 55 lbs. (25 kg) or greater require safe lifting instructions.

Pig Valve Center of Gravity is measured relative to a reference point on the Pig Valve. This reference point is located on the axis of the Valve bore, midway between the left and right flange faces. Note that this location is approximate and based on a standard valve configuration.

### 2.0 LIFTING INSTRUCTIONS

The safe working limits of each lifting lug are specified in the design calculations of each Pig Valve size. Each lifting lug is designed for ½ of the Pig Valve weight. Therefore, both lifting lugs must be used and evenly loaded during the lifting operation.

2.1 Only trained and / or credentialed personnel should perform crane lifts of Pig Valves. All local, site-specific safety requirements must be adhered to during the lifting operation.

**⚠ Warning:** Failure to adhere to the following guidelines may result in equipment damage, injury or fatality.

2.2 Refer to Table 1 to determine the required shackle size for the Pig Valve to be lifted. Table 1 also lists the approximate weight of the Pig Valve.

2.3 Inspect shackles for wear and damage. Ensure shackles are suitable to use. Table 1 lists shackle size based on information from Crosby Group shackle data sheet. Operator must ensure shackles being used are rated for load prior to beginning lifting operation.

2.4 Install the proper sized Anchor Shackles into the hole of the two lifting lugs located on either side of the valve main body.

**Note:** Ensure that shackle pin is fully engaged with the shackle ears.

2.5 Prepare the Pig Valve for lifting. Inspect the Pig Valve and surrounding area to ensure that there are no objects that could snag on the Pig Valve during the lift.

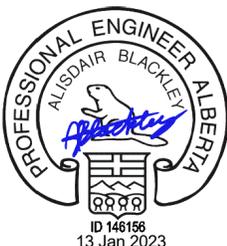
2.6 Connect a double leg chain sling of sufficient length to give a sling angle of 45° or greater.

**Note:** Sling angle is measured from horizontal to the leg of the chain sling. See Figure 1 for details.

2.7 Connect the master link / upper fitting of the chain sling to the crane hook.

**Note:** Begin lift slowly, Pig Valve may tilt during initial portion of lift. Check to ensure that Pig Valve is level when lifted off the ground. If Pig Valve is not level, it may be necessary to rig a sling from the master link of the chain sling to the valve stem to balance the Pig Valve.

Specifications are Subject to Change Without Prior Notice – All Dimensions: inch [mm]



Created By:	Mark Stout
Created Date:	11 Jan 2023
Approved By:	Alisdair Blackley
Approved Date:	13 Jan 2023
ECN No.:	
Page:	1 of 2

**Model D Pig Valve Lifting Location and Handling Instruction**

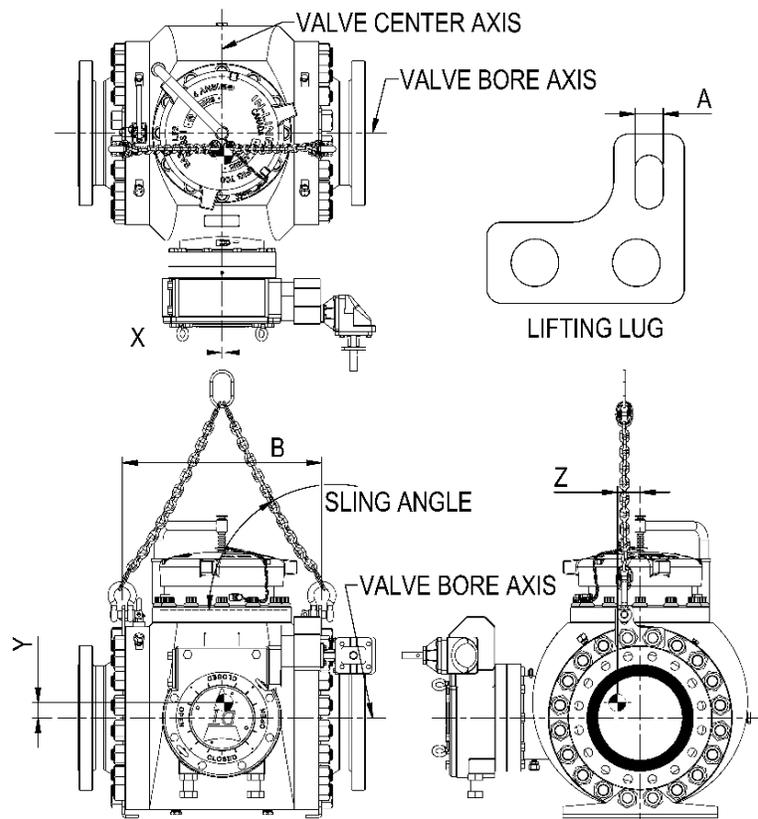
The information on this document is strictly confidential and may not be reproduced in any way without prior written permission of Argus  
PRINTED COPIES ARE UNCONTROLLED

**Table 1: Pig Valve Lift Information**

Valve Size	ASME Class	Pig Valve Weight <sup>(1)</sup> (lbs.)	Anchor Shackle Size <sup>(2)</sup>	Lifting Lug Opening (A) (inches)	Lug to Lug Distance (B) (inches)	Center of Gravity Location (inches)		
						X	Y	Z
6"	900	1460	7/16	.75	17.0	.7	1.9	2.7
	1500	2600	5/8	1	20.0	.3	2.4	2.2
8"	150	1937	7/16	.75	19.5	.4	2.3	2.7
	300	2075	7/16	.75	19.5	.4	2.2	2.6
	600	2225	7/16	.75	20.6	.2	2.0	2.6
	900	2785	5/8	1	22.6	.3	1.8	2.1
	1500	4150	5/8	1	24.0	.3	1.9	1.8
10"	150	2985	5/8	1	22.3	.4	2.2	2.2
	300	3225	5/8	1	24.3	.4	2.0	2.0
	600	3400	5/8	1	24.3	.4	2.0	1.9
12"	150	4593	5/8	1	26.3	.3	2.1	2.1
	300	5120	3/4	1	28.3	.4	2.1	3.2
	600	5300	3/4	1	28.3	.4	2.0	3.1
	900	6340	3/4	1	31.7	.2	1.9	1.2
14"	600	7062	1	1.2	31.3	.2	3.2	2.5
16"	150	7598	3/4	1	32.5	0	3.6	1.0
	300	8860	3/4	1	35.5	.1	3.2	2.1
	600	9035	3/4	1	35.5	.1	3.1	2.0
18"	150	6887	7/8	1.2	32.7	.2	3.8	2.8
20"	150	7525	1	1.2	33.6	.3	3.0	2.6
	600	14997	1-3/4	2.13	42.0	.3	3.5	3.0

(1) Values are approximate only. Pig Valve weight also referenced in TB-PV-030

(2) Based on Crosby bolt-type Anchor Shackles



**Figure 1: Pig Valve and Lifting Lug**