

barber®™

Manufactured By Kings Energy Services Ltd.

➔ **Pigging Valves** ⬅

The Safe, Convenient Way to Launch or Receive Flowline Pigs.



www.kingsenergy.com

Barber Pigging Valve Design Features

Barber Pigging Valves are an established, reliable, and effective way to send and receive pipeline pigs. For decades Barber has proven its reliability in the oil & gas industry and it continues to be the most cost effective alternative to any pigging requirement.

The Barber Pigging Valve design is a simple, safe and convenient way to insert and remove flow line pigs. It eliminates excessive equipment and reduces the number of operations required to insert/remove a pig thus limiting the environmental impact and loss of product.

The basic design concepts in the Barber Pigging Valve also make it easy to perform field repairs and services when required. The Barber Pigging Valve can also be used as a positive shutoff flow line valve.

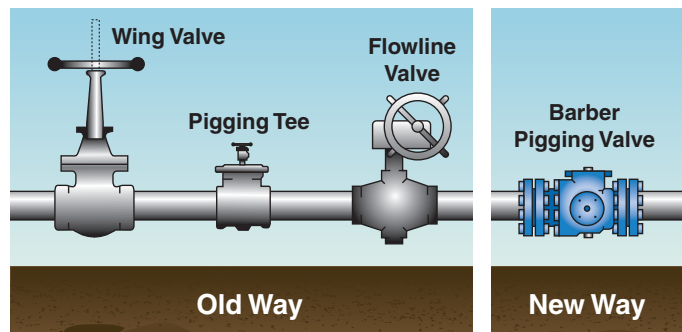
Construction

The rugged construction of these valves, coupled with advanced design technology, ensures an extended service life.

- Materials meet API specification 6-A & 6-D, for low temperature -46 °C (-50 °F).
- N.A.C.E. standard MR-01-75 for sour service.
- The Valve Ball is type 300 stainless steel, surface hardened by Nitriding to resist scratching and corrosion. Valve balls offered with other coatings or materials to meet customer specifications.

- The seat carriers are type 300 stainless steel with seat inserts of various materials to meet specified applications.
- The 2" & 3" Barber Pigging Valves have a seat supported ball. The 4" valve has a trunnion-mounted ball to reduce low turning torque.
- On flow line applications that transition from 2" to 3" or from 3" to 4" the larger valve can be installed to receive and send both sizes of pigs thus simplifying applications and reducing costly expenses.

Simplify Your Pigging



Barber Pig Valve Features

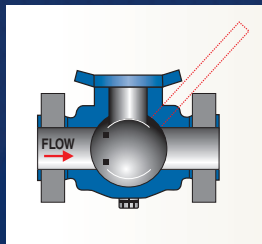
- Oversized entry bore to accept swollen pigs.
- Entry cap vent holes to provide positive release of trapped pressure before removal.
- Bleed valve connections (1/2" NPT) to facilitate a choice between venting and draining.
- Integral Flanges.
- Easy shop/field maintenance. Replacement parts and seal kits are readily available.
- The positive stop plate is easily repositioned 90° on the operating stem to accommodate flow direction, pig sending and pig receiving applications.
- The operating stem is easily marked to verify the position of the ball.
- Cap lugs ensure that pigs are fully inserted into the ball cavity eliminating binding when rotating the valve.



Barber Pigging Valve Operating Cycle

Sending →→

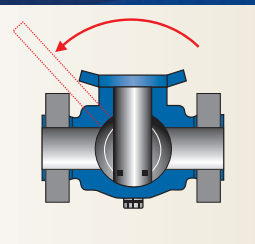
When used as a pig ball sender; the stop frog in the valve ball bore acts as a pig stop to prevent reverse travel of the pig ball.



Step 1

Open position.

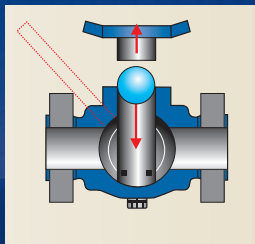
Through conduit flow - no pockets to trap wax or debris.



Step 2

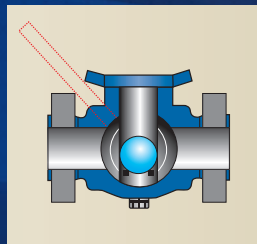
Close valve.

Upstream and downstream is sealed off. Vent body cavity pressure.



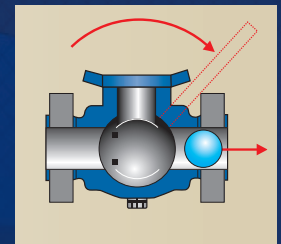
Step 3

Remove side entry cap. Insert pig into valve ball cavity.



Step 4

Screw side entry cap into place. Close vent valve.

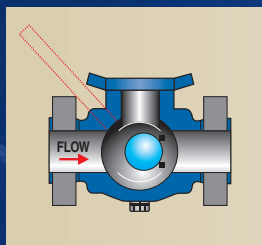


Step 5

Open valve. Flowline pressure moves the pig downstream.

Receiving →←

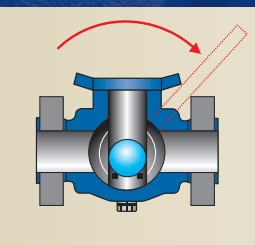
When used as a pig ball receiver; the stop frog in the valve ball bore arrests the pig ball, until it is removed from the system through the side entry of the valve body.



Step 1

Open position.

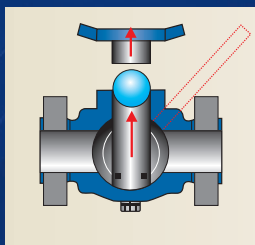
Through conduit flow - stop frog in valve ball cavity arrests pig. Flow goes around the pig.



Step 2

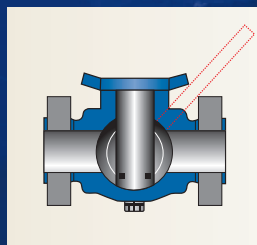
Close valve.

Upstream and downstream is sealed off. Vent body cavity pressure.



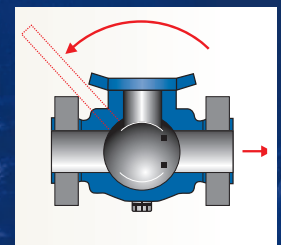
Step 3

Remove side entry cap. Remove pig from valve ball cavity.



Step 4

Screw side entry cap into place. Close vent valve.

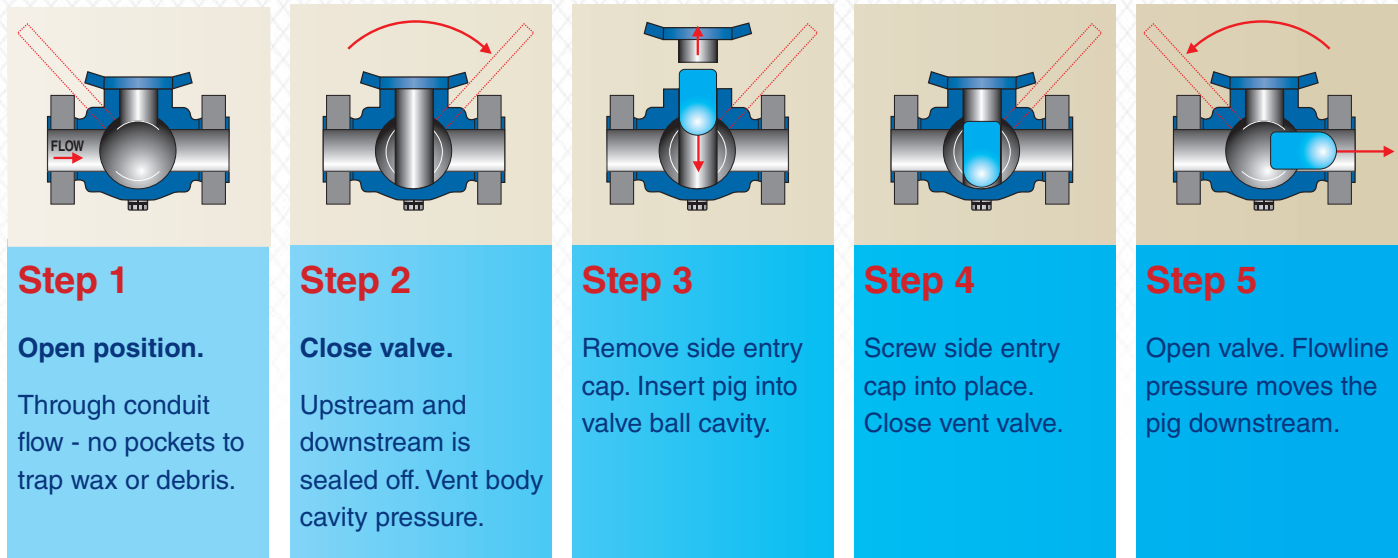


Step 5

Open valve. Flow brings the next pig along to be trapped.

Sending “Bullet” Pigs →→

The Barber Pigging Valve can be used to send 2”, 3” and 4” bullet or scraper type pigs by using a valve ball without the stop frog.



All Barber Pigging Valves with a stop frog in the valve ball bore can be converted in the field to operate as senders or receivers without special tools and without taking the valve out of service. This is accomplished by removing the positive stop plate (#8), turning it 90°, and repositioning it on the square operating stem.

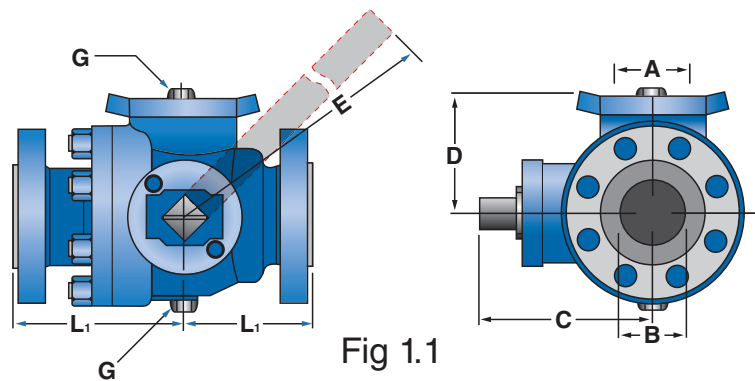


Fig 1.1

2” - 3” - 4” Pigging Valve Dimensions (See Fig 1.1)

Pigging Valve Size	Lengths									Weight LBS.			Lengths/Diameters			
	2”		3”			4”			2”	3”	4”	Pigging Valve Size	2”	3”	4”	
Flanged ANSI Class	L ₁ = L ₂	L ₁ + L ₂	L ₁	L ₂	L ₁ + L ₂	L ₁	L ₂	L ₁ + L ₂				Description				
300 RF	7.12	14.25	6.00	7.75	13.75	8.31	8.31	16.63	95	140	268	A Side Entry: Ball Core Bore	2.50	3.46	4.46	
300 RTJ	7.25	14.50	6.18	7.94	14.12	8.62	8.62	17.25	100	145	270	B Minimum Through Bore	2.06	3.12	4.06	
600 RF	7.12	14.25	6.12	7.88	14.00	8.56	8.56	17.12	100	150	288	C Stem Height	6.20	8.60	8.54	
600 RTJ	7.31	14.62	6.18	7.94	14.12	8.62	8.62	17.25	105	155	293	D Side Entry Cap Height	5.50	6.00	7.64	
900 RF	7.25	14.50	6.56	8.44	15.00	9.00	9.00	18.00	110	175	313	E Operating Handle	22.00	39.00	39.00	
900 RTJ	7.31	14.62	6.62	8.50	15.12	9.06	9.06	18.12	115	180	318	F Max. Bullet Pig Length	3.75	5.00	6.25	
Threaded - NPT	5.25	10.50	5.85	5.81	11.66	-	-	-	80	125	-	G Vent & Drain Connection	1/2” N.P.T.			

Contact us for inquires regarding specifications, availability and refurbished valves.

King’s is Proud to manufacture Barber Pig Valves.



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