

STEAM CHOKE VALVES

VALVTECHNOLOGIES

Steam Choke Valves

The Valvtechnologies steam choke is designed for the harsh conditions associated with steam injection. The rugged, maintenance-free steam choke features a self-adjusting, double live-loaded design.

A The stem/fork packing is isolated from the bonnet seal arrangement and is live-loaded. Belleville springs on the packing gland bolts self-adjust to maintain constant packing load regardless of thermal cycling. This design reduces the potential for packing leaks.



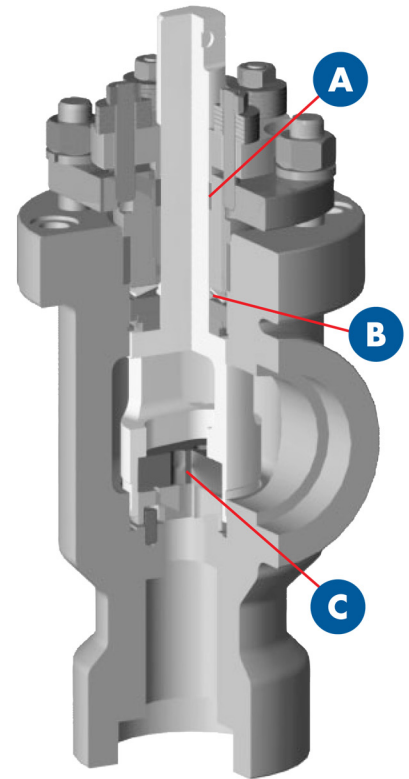
The bonnet seal and the stem/fork packing seal consist of a single layer of Grafoil® encapsulated by stainless steel wire mesh. Under a live load, this packing design prevents costly and environmentally sensitive emissions.



Steam Cycle Testing

B Belleville springs accommodate for thermal expansion of the choke's internal components. During thermal cycling in startup or normal operation, the Belleville springs self-adjust to maintain an ideal contact load between the control discs. This self-adjustment eliminates the possibility of lockup--regardless of process temperature or pressure (within the material limits). The internal springs also provide a constant load to prevent external leakage through the bonnet packing.

C The control discs are designed to provide precise control so that production rates are controlled with a high degree of accuracy. The discs also provide long-term erosion resistance in high-velocity, saturated steam service. Various orifice shapes, sizes and configurations are available for a wide range of production rates and control requirements. The steam choke can easily be retrofitted with new discs if well conditions or production rates change over time.

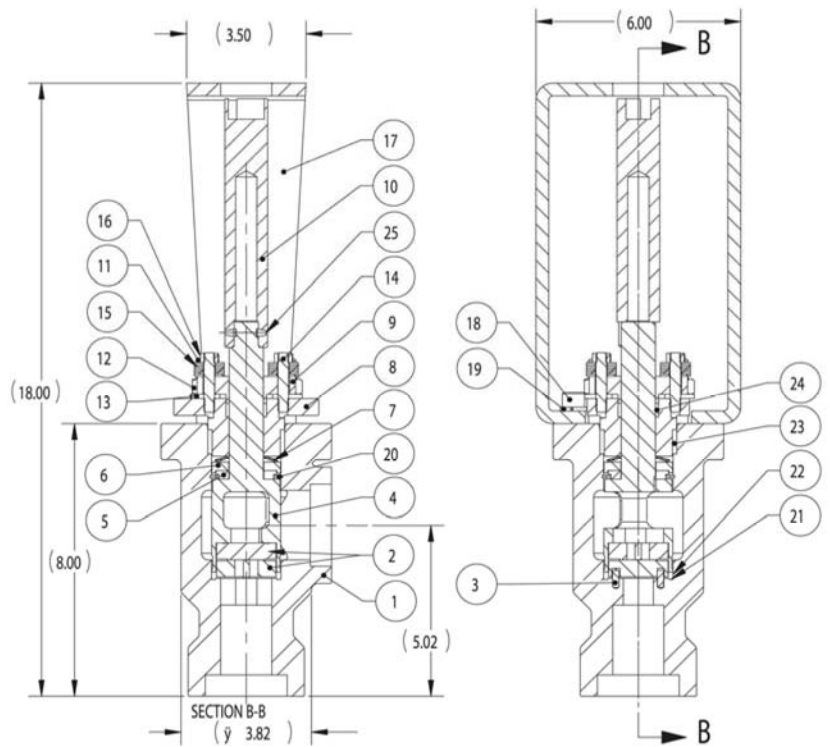


The packing & seals on the Valvtechnologies Steam Choke Valve will never require field adjustment.

Pressure Rating to ANSI 1500
 Max. Cold Working Pressure is 3,650 psi
 Max. Operating Temperature is 800° F

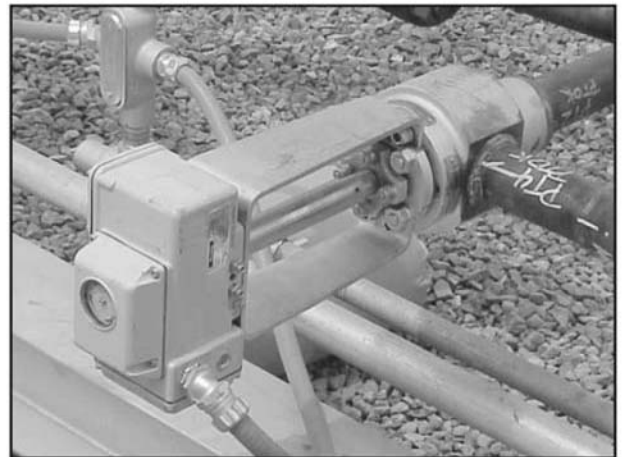
BILL OF MATERIAL

ITEM	DESCRIPTION	MATERIAL
1	2" CHOKE BODY SW	WCB
2	DISC 2-1/4" 17-4 H1150/OPQ	17-4 H1150
3	DOWEL PIN .188 X 5	ALLOY STEEL
4	FORK 28 F/T 28, Y28 17-4 PH/OPQ	CB7 Cu
5	BOTTOM BEARING	410 S.S.
6	TOP BEARING	316 S.S.
7	1-1/16" 150-4500# BELLVILLE SPRING	INC. 718/HT
8	BONNET 28F/T28, Y28	304 S.S.
9	GLAND 1-1/2" 2500# 316 S.S./OPQ	316 S.S.
10	ADAPTER	4130 HT
11	STUD, BONNET	B8M
12	NUT, BONNET	GR8M
13	LOCKWASHER, BONNET	CS
14	STUD, GLAND	B8M
15	SPRING, GLAND	302 S.S.
16	NUT, GLAND	GR8M
17	1500# MOUNTING BRACKET	WCB
18	SOCKET HEAD CAPSCREW, MOUNTING	A574
19	LOCKWASHER, MOUNTING	CS
20	RETAIN RING, INTERNAL	302 S.S.
21	BOTTOM SEAL	GRAFOIL
22	GASKET, BODY	GRAFOIL/INCONEL
23	PACKING, BONNET	310 S.S./GRAFOIL
24	PACKING, GLAND	316 S.S./GRAFOIL
25	SETScrew	A574



Cv CHART

# OF HOLES (PER DISK)	1	2	1	2	2	1	2	2	2
HOLE DIAMETER	1/8"	1/8"	1/8"	1/8"	3/8"	3/8"	3/8"	5/8" PIE	5/8" EXTENDED RANGE
FLOW COEFFICIENT Cv (max est.)	.33	.70	1.8	3.33	5.74	5.74	11.3	14.7	13.2
EQUIVALENT BEAN SIZE (APPROX)	8	11	17	24	32	32	44	52	48



2" ANSI 1500 Steam Choke

