

SQH type/ Fast Close Steam Extraction Check Valve



SQH Fast-closing Steam Extraction Check Valve is suitable for use in an urgent stop of flow back medium in the power plant steam turbine system. As emergency shut off valve, it can be closed in 0.5~1 S second to prevent steam turbine being damaged by back flowing medium (Steam and Cooling water) of the conduits. The valve system include a valve, an auxiliary pneumatic shut off system(hydraulic system), a pneumatic control system(equipped by customer).

Standard and Scope:

Size: NPS 6"~48" DN150~DN1200 (others upon request)

Pressure Rating: Class 150~600 PN10~PN100 (others upon request)

Connection: Double flange, Butt weld

Material: Carbon steel, Alloy steel, Stainless steel; WCB, Q235, 16Mn, WC6, WC9, C12A, CF8

Design and Manufacture: GB/T 12236, GB/T 12238, ASME B16.34

Test and Inspection: API598, ISO5208, GB/T 13927

Face-to-Face: API609, ISO5752, BS EN558, Manufacturer standard

End Connection: ASME B16.5 (for NPS≤24); ASME B16.47 MSS SP-44 (for NPS>24); BS EN1092-1, GB/T 9113

BW End connection: ASME B16.25, GB/T 12224

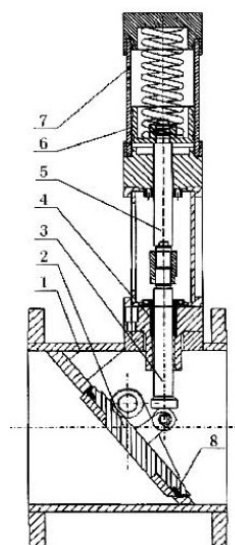
Design feature

- Stop and check function, close in 0.5 second
- Suitable body material was selected to guarantee body strength
- Harden sealing face prevent valve damaged by operation
- No hinge pin gland helps avoid inhibiting performance
- Strong and low friction coefficient bearing was adopted
- Tilting swing disc design has low pressure drop
- Both vertical disc and inclined disc are available
- Both Vertical actuator and Horizontal actuator are available
- The disc is positioned at a large inclined angle seat to shorten the travel of opening/ closing, together with one auxiliary pneumatic (hydraulic) device to speed open/close process, short closing time protect steam turbine in time and reliable
- The main eccentric structure plus the auxiliary pneumatic(hydraulic)pressure on the disc, the flow stopping and checking functions are realized

- Triple eccentric structure design seat and disc, combined with inclined seat geometry, facilitates an tight seal with least friction.
- Every SQH type valve is hydrostatically tested to test the shell and help ensure the seat is leak tight prior to leaving the factory.
- Gravity closing times are checked in still air to verify the valve closes in one second or less.(usually 0.5 second)
- Where pneumatic actuators are fitted, the complete valve is also stroked in free air.

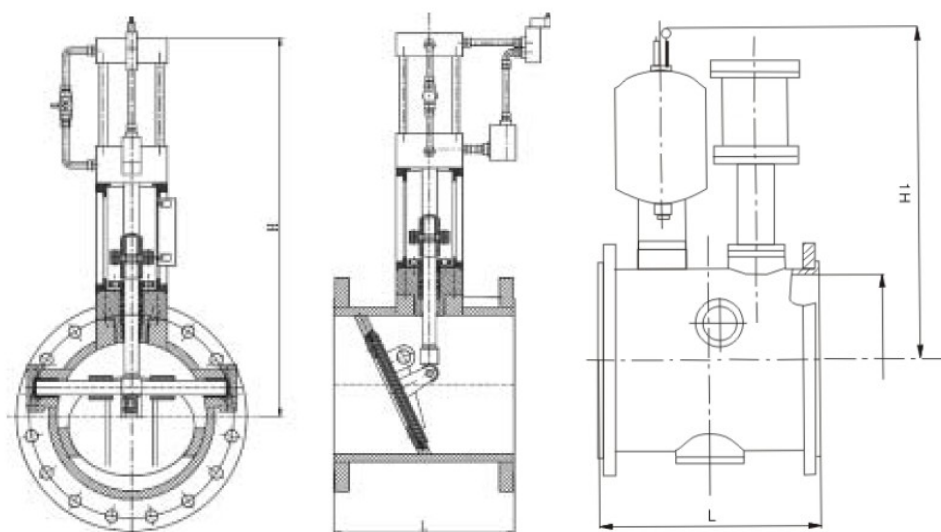
Major Parts Chart

Item	Typical Materials Composition			
	Carbon steel	Alloy steel	Stainless steel	
1	Body	A216 WCB	A216 WC6	A351 CF8
2	Retaining ring	A216 WCB	A216 WC6	A351 CF8
3	Assistant closing shaft	A297 420	A297 420	A182 F304
4	Yoke	A216 WCB		
5	Piston rod	ASTM A194 2H		
6	Piston	Ductile cast iron		
7	Packing	Flexible graphite		
8	Sealing	410,430,304		
Suitable temperature		-29~425		
Suitable medium		water, steam		
Seal test pressure		1.1 times PN		
Body test pressure		1.5 times PN		



Note: The charts above just only list common combination of gate valve. SGV able to offer other material if required.

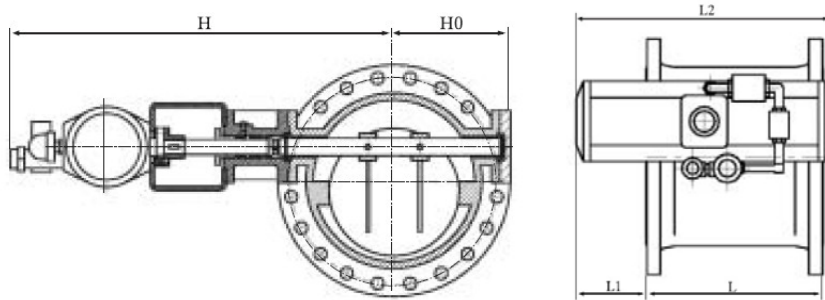
Vertical Installation Actuator SQH Extracting Check Valve



PN10 Flanged Vertical Pneumatic actuator											
DN	300	350	400	450	500	600	700	800	900	1000	1200
L	400	450	500	550	600	640	680	720	760	800	840
H	1228	1233	1325	1386	1526	1598	1739	1892	2050	2189	2345
Ref weight (Kg)	300	380	430	525	610	700	855	1150	1550	2020	2690
PN16 Flanged Vertical Pneumatic actuator											
DN	300	350	400	450	500	600	700	800	900	1000	1200
L	400	450	500	550	600	640	680	720	760	800	840
H	1228	1233	1325	1386	1526	1598	1739	1892	2050	2189	2345
Ref weight (Kg)	375	470	535	656	770	880	1070	1450	1960	2530	3230
PN25 Flanged Vertical Pneumatic actuator											
DN	300	350	400	450	500	600	700	800	900	1000	1200
L	400	450	500	550	600	640	680	720			
H	1298	1385	1402	1510	1639	1758	1862	1913			
Ref weight (Kg)	412	525	610	725	845	980	1238	1660			
PN40 Flanged Vertical Pneumatic actuator											
DN	300	350	400	450	500	600	700	800	900	1000	1200
L	400	450	500	550	600	640					
H	1298	1385	1402	1510	1639	1758					
Ref weight (Kg)	460	588	670	798	970	1125					

PN10 Flanged Vertical Hydraulic actuator											
DN	300	350	400	450	500	600	700	800	900	1000	1200
L	400	450	500	550	600	640	680	720	760	800	840
H1	1020	1055	1137	1212	1365	1576	1613	1828	1996	2071	2226
Ref weight (Kg)	288	360	425	530	594	695	845	1150	1535	2010	2700
PN16 Flanged Vertical Hydraulic actuator											
DN	300	350	400	450	500	600	700	800	900	1000	1200
L	400	450	500	550	600	640	680	720	760	800	840
H1	1020	1055	1137	1212	1365	1576	1613	1828	1996	2071	2226
Ref weight (Kg)	360	460	545	595	750	860	1050	1425	1920	2530	3215
PN25 Flanged Vertical Hydraulic actuator											
DN	300	350	400	450	500	600	700	800	900	1000	1200
L	400	450	500	550	600	640	680	720			
H1	1131	1196	1289	1376	1428	1550	1722	1935			
Ref weight (Kg)	405	515	580	740	845	940	1215	1650			
PN40 Flanged Vertical Hydraulic actuator											
DN	300	350	400	450	500	600	700	800	900	1000	1200
L	400	450	500	550	600	640					
H1	1131	1196	1289	1376	1428	1550					
Ref weight (Kg)	455	583	685	853	945	1110					

Horizontal Installation Actuator SQH Extracting Check Valve



PN10 Flanged Horizontal Pneumatic actuator											
DN	300	350	400	450	500	600	700	800	900	1000	1200
L	400	450	500	550	600	640	680	720	760	800	
L1	90	80	75	50	115	110	90	213	190	190	
L2	478	478	478	478	724	724	724	1033	1033	1033	
H	1020	1040	1060	1180	1220	1270	1320	1490	1540	1620	
H0	270	280	310	350	415	450	495	545	620	670	
Ref weight (Kg)	196	235	295	395	505	643	920	1270	1535	2050	
PN16 Flanged Horizontal Pneumatic actuator											
DN	300	350	400	450	500	600	700	800	900	1000	1200
L	400	450	500	550	600	640	680	720			
L1	90	80	75	50	115	110	90	213			
L2	478	478	478	478	724	724	724	1033			
H	1020	1040	1060	1180	1220	1270	1320	1490			
H0	270	280	310	350	415	450	495	545			
Ref weight (Kg)	240	255	330	420	585	810	1010	1355			
PN25 Flanged Horizontal Pneumatic actuator											
DN	300	350	400	450	500	600	700	800	900	1000	1200
L	400	450	500	550	600	640					
L1	90	80	75	50	115	110					
L2	478	478	478	478	724	724					
H	1020	1040	1060	1180	1220	1270					
H0	270	280	310	350	415	450					
Ref weight (Kg)	280	290	360	460	640	903					

NOTE: The material in this catalog is for general information. For specific performance data, proper material selection and special design, consult us freely. Although every attempt has been made to ensure correct information, Sangong reserves the right to change designs, materials or specifications without notice.