

BRONZE SWING CHECK VALVE 300 WOG

Horizontal Swing Type Threaded Check Valve · Cast Bronze · Metal Disc

BRAND: TOHO VALVE

FIG. ST-401

SIZE 1/4" TO 4"

300 WOG / 150 WSP



FIG. 1 | BRONZE SWING CHECK VALVE ST-401, SCREWED CAP

PRODUCT OVERVIEW

The TOHO ST-401 is a horizontal swing check valve in cast bronze, fitted with a bronze disc carried on a hinge pin. Forward flow lifts the disc clear of the seat and reverse flow closes it against the seat, so the valve prevents backflow without any external operation or power.

The screwed cap gives access to the disc and the hinge pin for inspection and cleaning without removing the body from the line. The hinge pin is brass in sizes up to 2" and stainless steel 304 in 2.1/2" and above. Manufactured in Taiwan by Sheng An Hang Valve Machinery Co., Ltd. under an ISO 9001 quality system.

Valve type	Horizontal swing check valve
Operation	Automatic, non-return
Body material	Cast bronze
End connection	Female threaded, NPT
Pressure rating	300 WOG / 150 WSP
Size range	1/4" to 4" (DN8 to DN100)

TECHNICAL SPECIFICATION

Figure number	ST-401	Threads	NPT to ASME B1.20.1
Pattern	Horizontal swing, screwed cap	Shell test	31.0 bar (450 psi), hydrostatic
Disc	Bronze, metal seated	Working pressure	20.7 bar (300 psi) WOG, non-shock
Hinge pin	Brass 1/4" to 2", SS 304 2.1/2" to 4"	Steam rating	10.3 bar (150 psi) WSP to 185°C
Cap	Bronze, screwed	Test pressures	MSS SP-80
Mounting	Horizontal line, cap uppermost	Country of origin	Taiwan

FEATURES

- Horizontal swing type
- Bronze metal disc
- Stainless steel 304 hinge pin in 2.1/2" and above
- Screwed cap for in line inspection
- Working pressure 300 WOG, 150 WSP
- Female NPT ends to ASME B1.20.1

MANUFACTURER



SHENG AN HANG VALVE MACHINERY CO., LTD.

Quality system	ISO 9001, certificate FM584850
Body marking	WOG 300 LBS, size, flow arrow

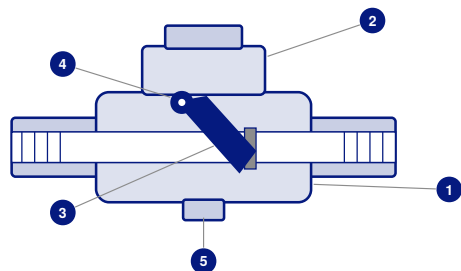


PRODUCT DATA SHEET

BRONZE SWING CHECK VALVE 300 WOG

Ref. ST-401 | Rev. 01

BILL OF MATERIALS



#	COMPONENT	MATERIAL
1	Body	Bronze
2	Cap	Bronze
3	Disc	Bronze
4	Hinge pin	Brass 1/4" to 2", SS 304 2.1/2" to 4"
5	Plug	Brass

A no lead version in C89844 is available to order. Where the line arrangement calls for a different pattern, the same manufacturer offers a lift check (ST-402) and Y pattern swing checks (ST-403 and ST-404).

FIG. 2 | SECTIONAL ARRANGEMENT

DIMENSIONS AND WEIGHTS

SIZE	DN	L (MM)	H (MM)
1/4"	8	55	39
3/8"	10	55	39
1/2"	15	55	39
3/4"	20	63	43
1"	25	73	48
1.1/4"	32	81	58
1.1/2"	40	92	61
2"	50	108	68
2.1/2"	65	137	86
3"	80	148	97
4"	100	180	113

L = face to face length, H = overall height including the cap. Allow clearance above the valve to remove the cap and withdraw the disc. Dimensions are taken from the manufacturer drawing dated 2022.1, are nominal and are given for guidance only. Certified drawings for the supplied size are issued on request.

ORDERING INFORMATION

FIELD	OPTIONS
Product code	ST-401
Size	1/4", 3/8", 1/2", 3/4", 1", 1.1/4", 1.1/2", 2", 2.1/2", 3", 4"
Thread	NPT (ASME B1.20.1), female
Disc	Bronze, metal seated
Related figures	ST-402 lift check, ST-403 and ST-404 Y pattern
Order example	TOHO ST-401 / 2" / NPT

Stock held in Dubai for fast despatch across the UAE and GCC. Contact our sales desk for pricing, availability, project quantities and certification requirements.



PRODUCT DATA SHEET

BRONZE SWING CHECK VALVE 300 WOG

Ref. ST-401 | Rev. 01

PRESSURE AND TEMPERATURE

Cold water, oil, gas	20.7 bar (300 psi), non-shock
Saturated steam (WSP)	10.3 bar (150 psi) to 185°C / 365°F
Shell test	31.0 bar (450 psi), hydrostatic
Seat test	22.8 bar (330 psi) hydrostatic, 5.5 bar (80 psi) air

Ratings apply to non-shock service. A swing check valve needs a minimum forward flow to hold the disc open, so check the duty on lines that run at very low velocity. Test pressures follow MSS SP-80.

TYPICAL APPLICATIONS

- Pump discharge and booster set protection
- Potable and general water supply
- HVAC and chilled water circuits
- Fuel oil and lubricating oil transfer
- Marine and shipboard service lines
- General industrial utility piping

COMPLIANCE AND QUALITY

- Manufactured by Sheng An Hang Valve Machinery Co., Ltd. (TOHO), Taiwan
- Quality system certified to ISO 9001, certificate FM584850
- Test pressures to MSS SP-80
- Female NPT threaded ends to ASME B1.20.1
- Screwed cap allows in line inspection of the disc
- 100 percent shell and seat tested before despatch
- Mill and test certificates available on request

INSTALLATION AND OPERATION

- Install in a horizontal line with the cap uppermost
- Follow the flow arrow on the body, the disc must open with the flow
- Flush the line before installation to clear scale, weld slag and debris
- Apply PTFE tape or an approved sealant to the male thread only
- Tighten on the body flats, never on the cap
- Allow a straight run upstream of the valve to reduce disc chatter
- The valve is designed for horizontal service, confirm any vertical application with SWBM

COMPANY

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