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SPRING RETURN HANDLE, FOR 2-WAY BALL VALVES

SH01 User Manual

English Version

Use for company in Europe who will place the product on the market,
please amend which necessary.

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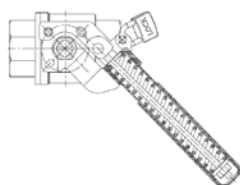
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1 General Precautions

- 1.1 Do not touch the surface of spring return handle on high temperature.
- 1.2 Lock design to avoid the handle operated by non-related people.



2 Product Description

- 2.1 Product specification
 - 2.1 SS spring handle
 - 2.2 Heavy duty design
 - 2.3 For ISO 5211 direct mounting pad
- 2.2 Material of construction & Common dimension

OPEN POSITION

CLOSE POSITION

SIZE	L	J	D
SH01-10	170	9	F3/F4
SH01-15	207	9	F3/F4
SH01-20	220	11	F4/F5
SH01-25	275	11	F4/F5
SH01-30	280	14	F5/F7

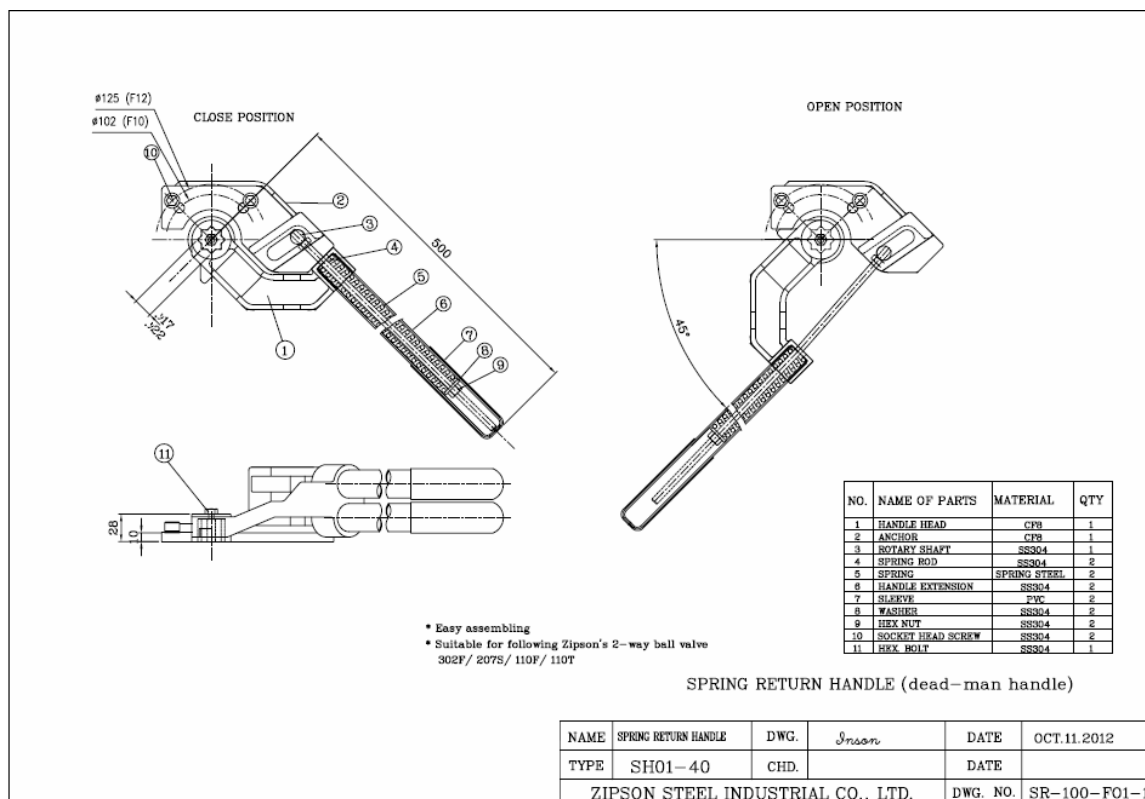
NO.	NAME OF PARTS	MATERIAL	QTY
1	HANDLE HEAD	CFR	1
2	ANCHOR	CFRM	1
3	ANCHOR SCREW	SS304	1
4	SPRING ROD	SS304	1
5	SPRING	SS301	1
6	HANDLE EXTENSION	SS304	1
7	GRIP	PVC	1
8	WASHERS	SS304	1
9	HEX NUTS	SS304	1
10	SOCKET HEAD SCREW	SS304	2

* Easy assembling

* Suitable for following Zipson's 2-way ball valve
201D/ 302F/ 207S/ 110F/ 110T

SPRING RETURN HANDLE (dead-man handle)

NAME	spring handle	DWG.	Kun	DATE	01/12/2016
TYPE	SH01 (SPRING HANDLE)			DATE	
ZIPSON STEEL INDUSTRIES CO., LTD.				DWG. NO.	SH01-F000-SRT-1



3 Delivery Condition and Storage

For incoming QC, it must check:

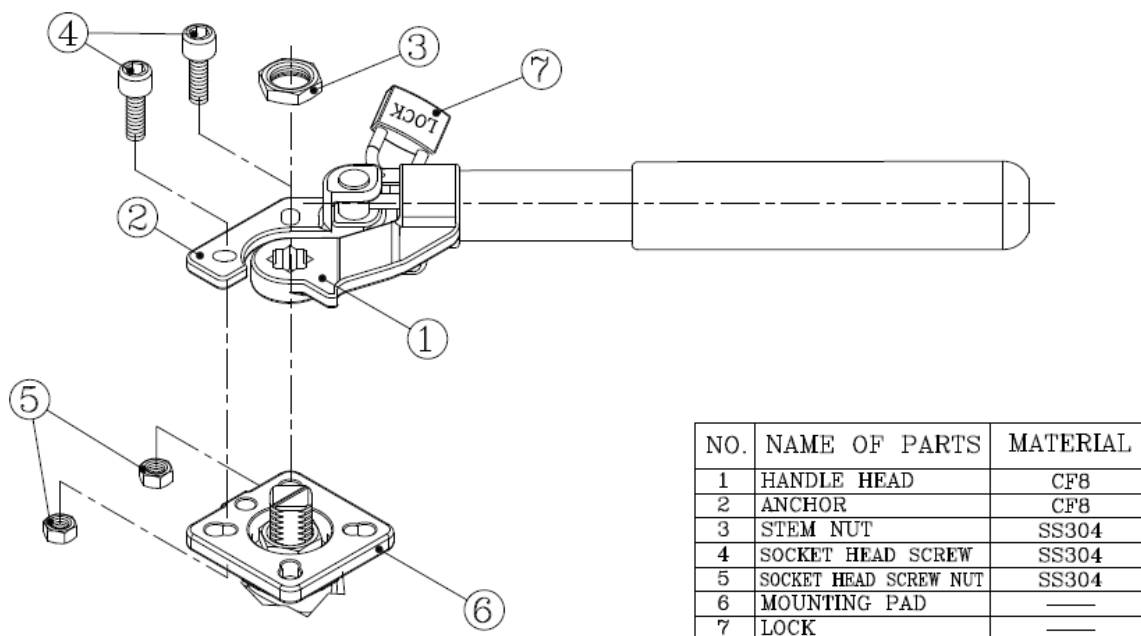
3.1 Packing condition: Is there any damaged during the transportation.

3.2 To make sure the bolt does not loose tightness when it arrived.

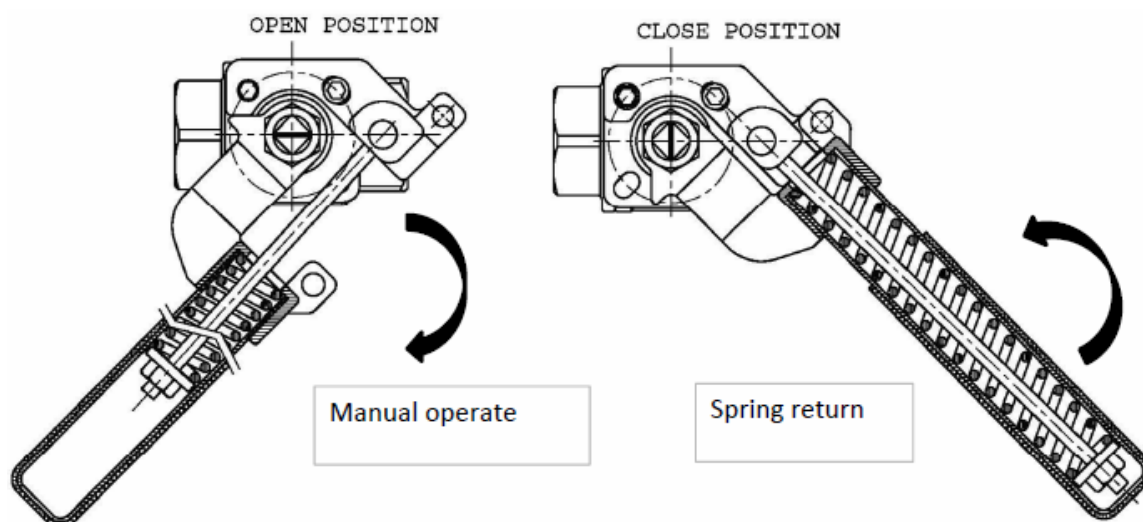
Spring return handle must store in an indoor warehouse to avoid dusts and other foreign object, do not exposed in an open space without to put a cover over or take off the packing under an unnecessary situation.

4 Installation and Operation

4.1. Installation (Install to the ISO5211 direct mounting pad)



4.2. Operation



5 Put into service

5.1. After install on the valve, user need to adjust the spring nut according to valve torque (see below pictures for reference). Then operate the spring return handle about 3 times to ensure the function.



Sep 1



Sep 2



Sep 3



Step 4



Step 5

5.2. The whole pipeline system may be tested with a proper pressure. User shall take care that the testing pressure shall not be exceeded 1.5 times the allowed working pressure.

5.3. After pressure testing, user shall operate the spring return handle again about 3 times to ensure the function.

5.4. When operate the handle, always pull the handle over half of the travel (over 45°), and fully open to let the handle spring back.



6 Dangers of inappropriate use

- 6.1. Never uses the product exceed its allowed condition, such as pressure, temperature and fluid.
- 6.2. If the product has any inappropriate use, the product was damage however there are no signals occurs immediately. User shall change the product to avoid danger in the future.



7 Maintenance

7.1 Maintenance frequency

The maintenance frequency is determined upon the application of ball valve. User shall consider the time interval depend on the kinds of fluid, flow velocity, operation frequency, high-pressure effect and high-temperature effect etc.

7.2 Disassembly

To dismantle the spring return handle must follow the procedure and drawings and be take care as mentioned below.

7.1 Loosing the stem nut.

7.2 Loosing socket head screw nuts.

7.3 Take off socket head screw

7.4 Lifting spring return handle

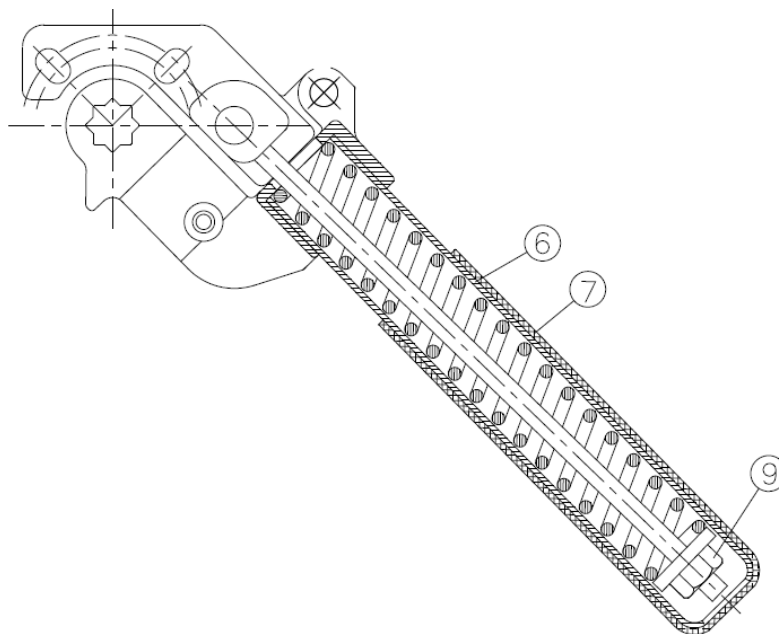
7.3 Assembly

For assembly process, it takes the opposite way of dismantle process.

7.4 Torque Adjust

To adjust the torque of the spring handle, customer needs to take off the handle sleeve (item no. 7) and turn the handle pipe (item no. 6) counterclockwise. Then start to adjust the hex nut (item 9).

After finishing the adjusting work, screw the handle pipe back and put the handle sleeve.



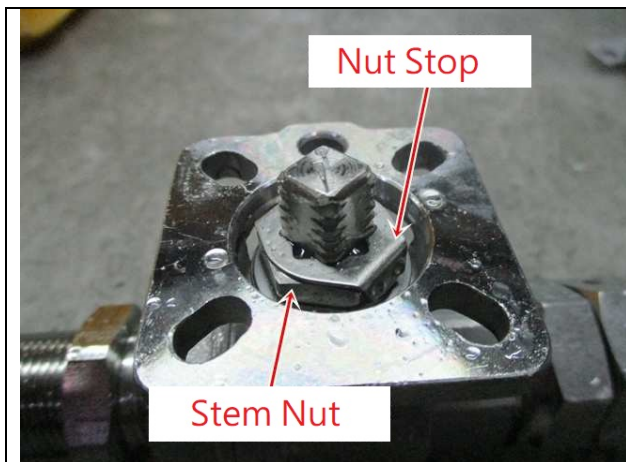
8 Maintenance (installed on valves)

- 8.1 We recommend users open handle to 45° in open position, and avoid opening handle fully at 90°. Operating spring return handle at 90° frequently reduces the service life of spring. Please change new handle if it can no longer springs back fully to close position.
- 8.2 Please operate spring return handle in horizontal direction. Users should avoid pulling up or pushing down handle while operating this product. This will tilt valve stem, damage thrust washer, stem packing and therefore reduce the service life of valve.
- 8.3 Please check periodically if handle nut is loose after long-term usage. Nut is shaken a bit every time handle springs back to close position.
- 8.4 Nuts for spring (item no. 9) and ISO pad are lock nuts. However, please check if they are loose periodically.

8.5 When the spring fatigue after operations, please remove the handle sleeve and tighten the nut of spring to increase the elastic force. If it still not help, please purchase new spring handle from the distributors or Zipson directly.

8.6 If there's leakage from valve stem, please perform following steps:

- a 、 Remove spring return handle
- b 、 Take out nut stop
- c 、 Use a screwdriver to adjust disk washer. Make them aligned with each other.
- d 、 Tighten stem nut
(if customer has torque wrench, please tighten it at 9 N.m.)
- e 、 Put back nut stop and handle
- f 、 If leakage still exists after above repairment step, please replace the whole stem sealing set or a new valve.





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9 Torque Data

Item no.	Start (Nm)	End (Nm)
SH01-10	30	15
SH01-15	45	20
SH01-20	45	20
SH01-25	60	30
SH01-30	60	30
SH01-35	125	55
SH01-40	250	100