

J48KH

High Pressure Relief Valve



This product is discontinued!

Commissioning Instructions

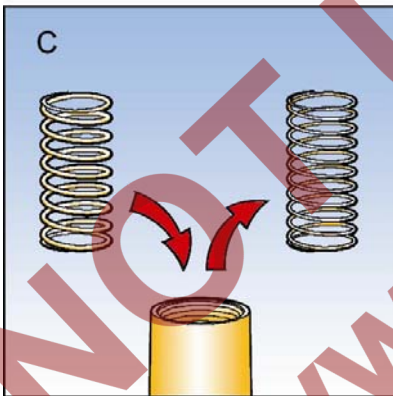
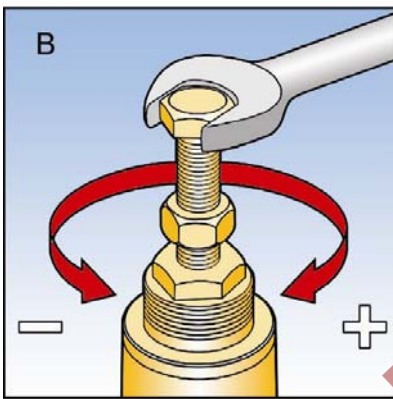
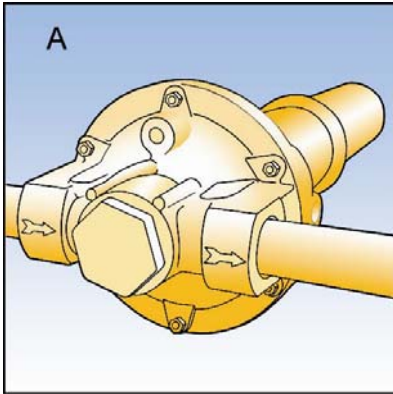
General Arrangement

Parts List

Maintenance Instructions

For: J48KH Pressure Relief Valve $\frac{3}{4}$ " and 1"

J48KH: Commissioning Instructions



OPERATING INSTRUCTIONS

- Ensure that this product is suitable for the chosen application.
- Installation, adjustment and maintenance by authorised, trained personnel only.
- When being fitted to an appliance, refer to the appliance manufacturers instructions.
- The unit should not be installed in a corrosive environment.
- The ambient temperature (surface temperature) should be within the limits stated on the relief valve catalogue.
- Check the maximum allowable pressure on the relief valve nameplate against the installation specification.

Warning! Incorrect installation, adjustment, modification, operation and maintenance may cause injury or damage.
Read the instructions before use. This control must be installed in accordance with the rules in force.

FITTING RELIEF VALVE INTO PIPEWORK (A)

1. Remove the plastic protection plugs from inlet and outlet (and breather if applicable).
2. Ensure that installation pipework is thoroughly clean.
3. The direction of the gas must be the same as the arrows on the relief valve body.
4. Install the relief valve into the pipework using a jointing compound approved to national standards.

FOR PRE-SET RELIEF VALVES

1. Slowly turn on inlet supply.

SETTING THE RELIEF PRESSURE. (B)

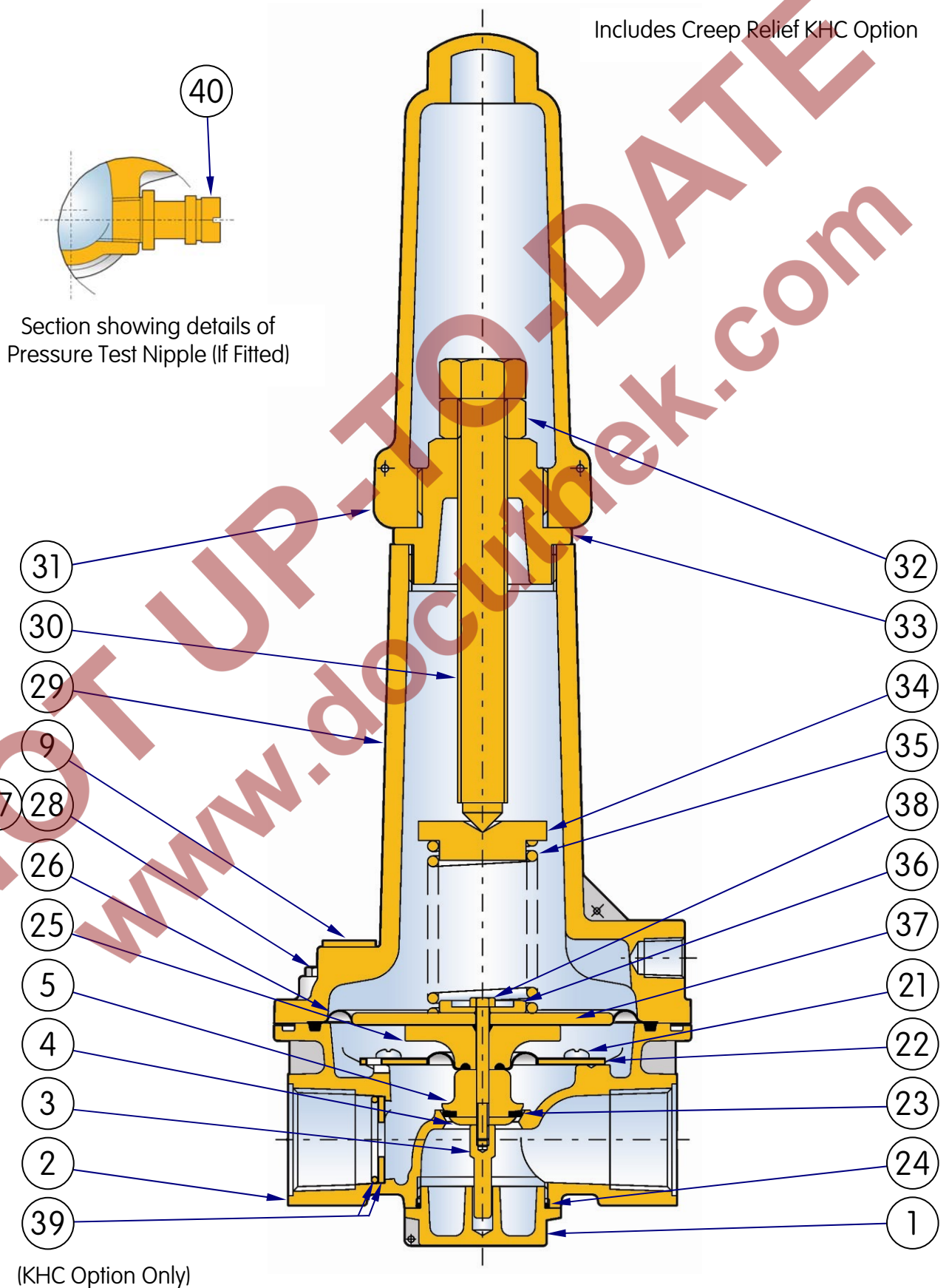
1. Remove the top cap.
2. Loosen lock nut and attach suitable spanner to hexagon on top of spring adjusting screw.
3. Turn clockwise to increase pressure on the loading spring.
4. Slowly turn on inlet supply. If possible adjust supply pressure to the required relief pressure (It is recommended that the relief pressure is set at a minimum of 1.2 times the system working pressure).
5. To set the relief valve turn the spring adjusting screw anticlockwise until the valve starts to relieve.
6. Reduce the supply pressure to normal working conditions.
7. Tighten locknut.
8. Replace the top cap (and seal if necessary).

IF THE REQUIRED RELIEF PRESSURE CANNOT BE ACHIEVED WITH THE SPRING FITTED. (C)

1. Choose a loading spring from the catalogue that will give the required relief pressure.
2. Turn spring adjusting screw anticlockwise (to reduce loading on spring).
3. Fully unscrew and remove spring adjusting bush.
4. Remove top spring holder and loading spring.
5. Insert the new spring - if supplied take the label from the spares kit bag and stick it below the nameplate of the relief valve.
6. Place top spring holder over spring ensuring that spigot is located in loading spring.
7. Screw spring adjusting bush into top cover making sure that the end of the adjusting screw is located in the recess in the top of the spring holder.
8. Adjust the relief pressure, as described above, until the required setting is found.
9. Tighten locknut.
10. Replace the top cap (and seal if necessary).

J48KH: General Arrangement

3/4" and 1" sizes



J48KH: Parts List

¾" and 1" sizes

ITEM	DESCRIPTION	¾"	No. Off	1"	No. Off
1	BOTTOM PLUG	J4806-017Z03	1	J4806-017Z03	1
2	BODY	J4805-005+	1	J4806-094+	1
3	VALVE SPINDLE GUIDE	J4806K-003	1	J4806K-003	1
4	VALVE DISC CLAMPING WASHER	J12006-014	1	J12006-014	1
5	VALVE SPACER	J12006-013	1	J12006-013	1
9	NAMEPLATE	J8112-124	1	J8112-124	1
21	SCREW	JSA410XPTZ	6	JSA410XPTZ	6
22	SECONDARY DIAPHRAGM	J4806-095	* 1	J4806-095	* 1
23	VALVE DISC	J4806-025	* 1	J4806-025	* 1
24	"O" RING SEAL	JORM0376-24	* 1	JORM0376-24	* 1
25	DIAPHRAGM SPACER	J4806K-022	1	J4806K-022	1
26	MAIN DIAPHRAGM	J4806-062	* 1	J4806-062	* 1
27	SCREW	JSA430SANSS	6	JSA430SANSS	6
28	FULL NUT	JNA4FZ	6	JNA4FZ	6
29	TOP COVER	J4806-050+	1	J4806-050+	1
30	SPRING ADJUSTING STEM	J3309-016	1	J3309-016	1
31	TOP CAP	JC085-017Z01	1	JC085-017Z01	1
32	FULL NUT	JNA16FZD	1	JNA16FZD	1
33	ADJUSTING BUSH	J3309-017Z01	1	J3309-017Z01	1
34	TOP SPRING HOLDER	J3309-013	1	J3309-013	1
35	LOADING SPRING	SEE TABLE	1	SEE TABLE	1
36	SPRING LOCATING WASHER	J4806-056	1	J4806-056	1
37	TOP DIAPHRAGM PLATE	J4806-055	1	J4806-055	1
38	VALVE SPINDLE	JSA445HHNZG	1	JSA445HHNZG	1
39	CREEP RELIEF ASSEMBLY (FOR KHC OPTIONS)	CK4806-01	1	CK4806-01	1
40	PRESSURE TEST NIPPLE (If Fitted)	JPTN01-0.71	1	JPTN01-0.71	1

J48KH: Spares Kits and Loading Springs

SPARES KITS

Spares kit contents are marked * on parts list

SPARES KIT CODE	SIZE
SK4806-05	¾" – 1"

LOADING SPRINGS

Spring Range		Part No and Colour Code.
bar	PSIG	¾" & 1"
70 - 2101 - 3	1 - 3	J4806-076 Light Green / Gold
210 - 350	3 - 5	J4808-063 Grey
350 - 760	5 - 11	J4806-078 Light Green / Pink

J48KH: Maintenance Instructions

Dismantling Procedure:

1. Unscrew top cap (31).
2. Using two suitable spanners restrain full nut (32) and unscrew spring adjusting stem (30) (to reduce load on spring (35)).
3. Unscrew the adjusting bush assembly (33) from the top cover (29).
4. Remove the top spring holder (34) and loading spring (35) from the top cover (29).
5. Using suitable spanners restrain nuts (28) and unscrew bolts (27). Carefully lift off the top cover (29).
6. Unscrew bottom plug (1) and remove from body (2).
7. Remove 'O' ring (24) from bottom plug (1).
8. Restrain valve spindle guide (3) with suitable box spanner and unscrew the valve spindle (38).
9. Withdraw valve spindle guide (3) and valve disc clamping washer (4) through bottom plug opening.
10. Remove the valve spindle (38).
11. Remove spring location washer (36).
12. Remove top diaphragm plate (37).
13. Carefully remove main diaphragm (26).
14. Remove diaphragm spacer (25).
15. Remove secondary diaphragm screws (21).
16. Carefully remove the secondary diaphragm (22).
17. Remove valve spacer (5) and valve disc (23).
18. Remove creep relief assembly (39) (if fitted) clean and inspect for damage.
19. Wipe valve seat and body clean of any dirt particles, taking care not to damage sealing surface in body.
20. Inspect all diaphragms and soft seals and replace where necessary (a spares kit is available for this purpose).

J48KH: Maintenance Instructions

Rebuilding procedure:

The use of Molykote 111 "O" ring lubricant is recommended during the rebuild- unless for use with oxygen when no lubricant should be used.

Note: For creep relief KHC model install creep relief assembly (39).

1. Assemble valve disc (23) on to valve spacer (5) with bead uppermost.
2. Locate through top of body (2), valve disc (23) on to valve seat.
3. Place secondary diaphragm (22) with sealing bead in contact with body (2) and ensure screw holes are aligned correctly.
4. Secure secondary diaphragm (22) to body (2) using screws (21).
5. Place diaphragm spacer (25) on secondary diaphragm (22) ensuring diaphragm bead is located correctly in the groove.
6. Place main diaphragm (26) with convolution uppermost, ensuring that the bead is located in the groove in body (2).
7. Locate the top diaphragm plate (37) and spring location washer (36) (with counter bore facing upward) on to diaphragm (7).
8. Insert the valve spindle (38) through centre hole in spring location washer (36), top diaphragm plate (37), main diaphragm (26), diaphragm spacer (25) and valve spacer (5).
9. Locate valve disc clamping washer (4) on to valve spindle (38) through bottom plug opening with flat side against valve spacer (5).
10. Screw valve spindle guide (3) on to threaded end of valve spindle (38) through bottom plug opening. (DO NOT TIGHTEN).
11. Restrain valve spindle guide (3) with suitable box spanner and tighten valve spindle (38).
12. Place "O" ring seal (24) into "O" ring seal groove in bottom plug (1).
13. Replace the bottom plug (1) complete with "O" ring over centre shaft of valve spindle guide (3) into body (2) and screw tightly in position.
14. Carefully place top cover (29) on to body (2) with vent facing the outlet and secure with top cover bolts (27) and nuts (28).
15. Insert loading spring (35) over spring location washer (36).
16. Replace small diameter of top spring holder (34) inside loading spring (35).
17. Screw adjusting bush (33) into top cover (29).
18. Screw full nut (32) on to spring adjusting stem (30).
19. Restrain full nut (32) with suitable spanner and screw spring adjusting stem (30) into adjusting bush (33) such that it locates on the top spring holder (34).
20. Commission relief valve.
21. Screw top cap (31) on to the adjusting stem bush (33).

Elster Jeavons is committed to a programme of continuous quality enhancement. All equipment designed by Elster Jeavons and manufactured within the Elster-Instromet Group benefits from the groups quality assurance standards, which are approved to EN ISO9001:2008.

Elster Jeavons has a programme of continuous product development and improvement and in consequence the information in this leaflet may be subject to change or modification without notice.

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