

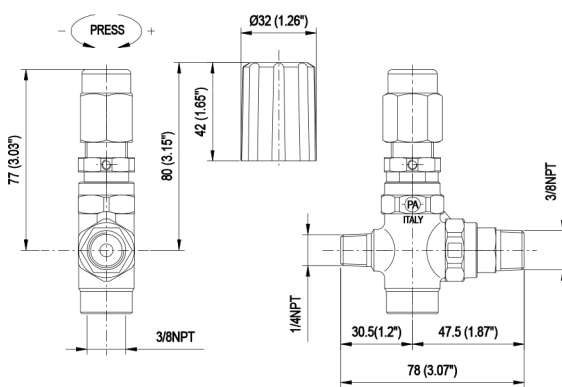
**FEATURES**

- Sturdy steel and brass construction
- Adjustable locknut to control max pressure
- Easy maintenance
- Hexagonal discharge check valve to prevent jamming

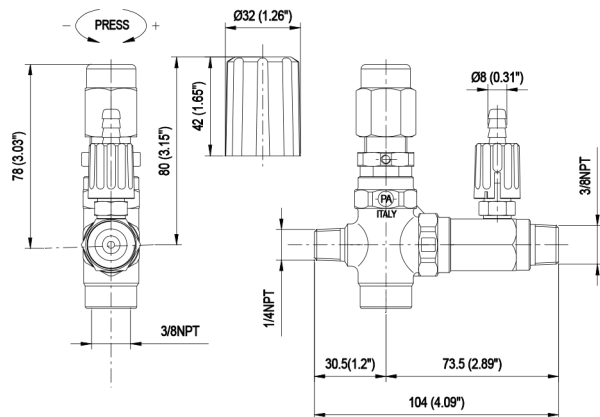
**SPECIFICATIONS**

Part Number	YVB3KTT	YVB3KTTI18	YVB3KTTI21	YVB3KTTI23
Max Volume	6.5 GPM			
Max Discharge Pressure	3600 PSI			
Max Fluid Temp	195° F			
Inlet Port	1/4" BSP-M			
Discharge Port	3/8" BSP-M			
Bypass Port	3/8" BSP-F			
Weight	1.6 lbs	1.8 lbs		
Dimensions	3.07"x1.26"x4.5"		4.09"x1.26"x4.5"	
Materials	Stainless Steel, Brass, Buna-N, Plastic			

**DIMENSIONAL DRAWING**



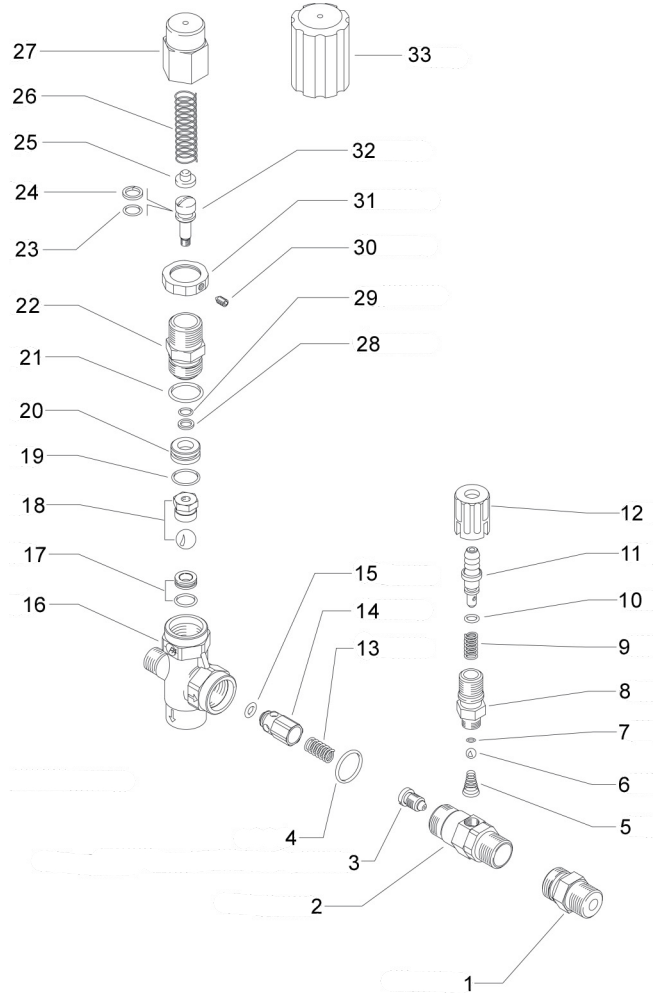
(YVB3KTT)



(YVB3KTTI18, YVB3KTTI21, YVB3KTTI23)

### PARTS LIST

No.	Part No.	Description	Qty.
1	Y60190431	Fitting, 3/8" NPT	1
2	Y21005331	Injector Housing	1
3	Y21005451	Nozzle, 2.1 mm M6x1	1
4	701016	O-Ring, .614 ID x .070 CS	1
5	Y21016051	Spring, SS	1
6	Y14742001	Ball, 7/32", SS	1
7	701501	O-Ring, .208 ID x .070 CS	1
8	Y21017331	Nipple, M12 x M14	1
9	Y21015851	Spring, SS	1
10	701008V	O-Ring, .176 ID x .070 CS	1
11	Y21015599	Hose Barb, 8 mm	1
12	Y21017184	Knob	1
13	Y60086751	Spring, .5 x 6 mm, SS	1
14	Y60085931	Check Valve	1
15	Y10312500	O-Ring, .157 ID x .098 CS	1
16	Y60191135	Body	1
17	Y60087220	Seat, 7.5 mm, O-Ring	1
18	Y60087121	Rest, M5 Brass, Ball, 11/32" SS	1
19	701014	O-Ring, .614 ID x .070 CS	1
20	Y60086331	Spacer, 2 x 16 x 6 mm	1
21	701016	O-Ring, .614 x .070	1
22	Y60030331	Piston Housing	1
23	701011	O-Ring, .301 ID x .070 CS	1
24	Y10400800	Back-up Ring 11 mm x 8 mm	1
25	Y60031061	Spring Seat	1
26	Y60086261	Pressure Spring	1
27	Y60030431	Cap	1
28	Y10400600	Back-up Ring 8.6 mm x 6 mm	1
29	Y10305101	O-Ring, .239 ID x .070 CS	1
30	Y16210000	Set Srew, M4 x 4	1
31	Y60031931	Lock Nut, M18 x1	1
32	Y60033151	Piston, M5	1
33	660008	Knob	1
*	YKITVB3KTT	Repair Kit	



**APPLICATION**

This product is to be used with clean, fresh water. For different or corrosive liquids, contact **GP Companies Inc.** technical support department. Appropriate filtration should be installed when used with liquids containing any solids. Select the proper unloader valve based on the nominal operating rating: system rated pressure, max flow and max temperature. **Under no circumstances should the pressure of the system exceed the maximum rated pressure of any component.**

**INSTALLATION**

When installed on hot water cleaners, this valve is to be installed **before** the boiler. Installing safety devices which limit the accidental increase of the fluid temperature is required.

**Always** install a safety valve (pop-off) to protect the operator and system.

Choose the correct nozzle size, able to discharge regularly, on bypass, at least 5% of the total flow of the system in order to achieve a constant pressure, and avoid troublesome pressure spikes.

When the nozzle wears, the pressure drops. After installing a new nozzle, re-adjust the system to the original pressure setting.

**TROUBLESHOOTING**

<b>PROBLEMS</b>	<b>PROBABLE CAUSES</b>	<b>SOLUTIONS</b>
Unloader cycles	<ul style="list-style-type: none"> <li>• Damaged seat or cone</li> <li>• Fitting leaking</li> <li>• Restricted bypass</li> </ul>	<ul style="list-style-type: none"> <li>• Replace</li> <li>• Check and renew</li> <li>• Clean or adapt</li> </ul>
Unloader does not come up to pressure	<ul style="list-style-type: none"> <li>• Unloader not properly sized</li> <li>• Foreign materials between seat and shutter</li> <li>• Piston o-ring worn out</li> <li>• Nozzle worn out</li> </ul>	<ul style="list-style-type: none"> <li>• Select a proper spring or a new unloader</li> <li>• Clean the seat</li> <li>• Replace</li> <li>• Replace</li> </ul>
Pressure spikes	<ul style="list-style-type: none"> <li>• Spring totally compressed</li> <li>• Excessive flow in bypass</li> <li>• There is not a min. 5% of total flow in bypass</li> </ul>	<ul style="list-style-type: none"> <li>• Loosen and change nozzle size</li> <li>• Select another unloader</li> <li>• Adjust size of piping</li> <li>• Adjust</li> </ul>
Unloader does not bypass at low pressure	<ul style="list-style-type: none"> <li>• Check valve jammed</li> <li>• Check valve o-ring worn out</li> <li>• Foreign materials on check valve</li> </ul>	<ul style="list-style-type: none"> <li>• Clean or replace</li> <li>• Replace</li> <li>• Clean</li> </ul>