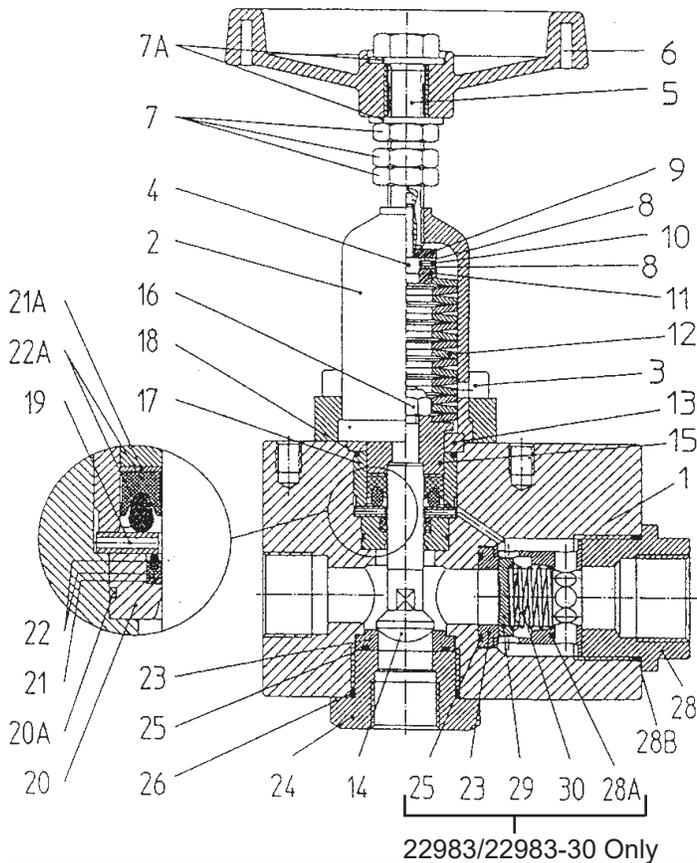


Models Industrial Unloader/Regulator (High Flow)

22983, 22983-30, 22983R, 22983R-30



22983 = Unloader
 22983-30 = Unloader, 303 S.S.
 22983R = Regulator
 22983R-30 = Regulator, 303 S.S.

Operating Specifications:

Maximum Pressure: 800 PSI (55 bar)
 Minimum Pressure: 200 PSI (14 bar)
 Maximum Flow: 66 GPM (250 L/m)
 Minimum Flow: 2.1 GPM (8 L/m)
 Maximum Temperature: 190° F (88° C)
 Inlet Port: 1" BSP
 Outlet Port: 1" BSP
 Bypass: 3/4" BSP
 Weight: 15.4 lbs. (7 kg)

Repair Kits:

Unloader Repair Kit

09578 (22983)
 09578-30 (22983-30)

Parts Included:

14, 15, 16, 18, 20A, 21, 21A,
 22, 22A, 23, 25, 26, 28B, 29, 30

Regulator Repair Kit

09750 (22983R)
 09750-30 (22983R-30)

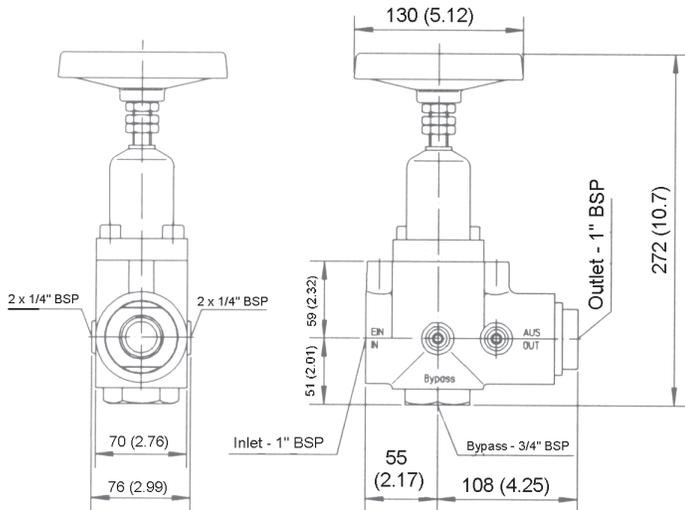
Parts Included:

14, 15, 16, 18, 20A, 21, 21A,
 22, 22A, 23, 25, 26, 28B

Spare Parts List

| Item | Part # | Description | Qty. | Item | Part# | Description | Qty. |
|------|------------|-----------------------------------|------|------|------------|-----------------------------------|------|
| 1 | 13245 | Casing, 22983/22983R | 1 | 20 | 13251 | Seal Adapter, 22983/22983R | 1 |
| 1 | 13245-0400 | Casing, 22983-30/22983R-30 | 1 | 20 | 05258 | Seal Adapter, 22983-30/229883R-30 | 1 |
| 2 | 06880 | Spring Guide | 1 | 20A | 07281 | O-Ring | 1 |
| 3 | 07381 | Inner Hexagon Screw | 4 | 21 | 07840 | Support Ring | 1 |
| 4 | 08503 | Inner Hexagon Screw | 1 | 21A | 13253 | Support Ring | 1 |
| 5 | 08504 | Stud Bolt | 1 | 22 | 13254 | Seal Pack | 1 |
| 6 | 08505 | Hand Wheel | 1 | 22A | 13255 | Seal Pack | 1 |
| 7 | 08506 | Hexagon Nut | 3 | 23 | 13256 | Valve Seat, 22983/22983-30 | 2 |
| 7A | 08882 | Disc | 2 | 23 | 13256 | Valve Seat, 22983R/22983R-30 | 1 |
| 8 | 08507 | Disc | 2 | 24 | 13257 | Bypass Valve Plug | 1 |
| 9 | 08508 | Bearing Cover | 1 | 25 | 12057 | O-Ring, 22983/22983-30 | 2 |
| 10 | 12323 | Axial Bearing | 1 | 25 | 12057 | O-Ring, 22983R/22983R-30 | 1 |
| 11 | 08510 | Bearing Cover | 1 | 26 | 12055 | O-Ring | 1 |
| 12 | 04284 | Spring Plate | 23 | 28 | 13258 | Kick-Back Valve Plug | 1 |
| 13 | 13246 | Centering Disc | 1 | 28A | 13259 | Spacer Pipe, 22983 | 1 |
| 14 | 13247 | Piston | 1 | 28A | 13259-0100 | Kick Back Valve Plug, 22983-30 | 1 |
| 15 | 13248 | Seal Support, 22983/22983R | 1 | 28B | 07653 | O-Ring | 1 |
| 15 | 05256 | Seal Support, 22983-30/229883R-30 | 1 | 29 | 13260 | Valve Plate, 22983/22983-30 | 1 |
| 16 | 12021 | Hexagon Nut | 1 | 30 | 07750 | Valve Spring, 22983/22983-30 | 1 |
| 17 | 13249 | Cylinder | 1 | 31 | 07423-0100 | Stop Plug (not shown) | 4 |
| 18 | 13012 | O-Ring | 1 | 32 | 06934 | Copper Washer (not shown) | 4 |
| 19 | 13250 | Spacer Ring, 22983/22983R | 1 | | | (22983/22983R) | |
| 19 | 05257 | Spacer Ring, 22983-30/229883R-30 | 1 | 32 | 07755-0100 | Steel Washer (not shown) | 4 |
| | | | | | | (22983-30/22983R-30) | |

22983/22983R/22983R-30 DIMENSIONS - INCHES (mm)



SERVICE AND ADJUSTMENT

Servicing and adjusting work is only to be carried out by a skilled tradesman.

TO RENEW THE PISTON ROD SEALS AND SLEEVES

Relieve the spring pack by means of the hand wheel (6). Screw out the four inner hexagon screws (3). Remove the spring guide (2) along with the spring plates (12) and hand wheel. **CAUTION: The hexagon nuts (7) are not to be shifted from the set position. These are the locking nuts to retain the maximum adjusting pressure.** Note the sequence of the spring plates (12) for reassembling.

Push out complete piston assembly (13-22A) over the bypass. Hold piston (14) with size 10 spanner and screw off hexagon nut (16). Take seals and cylinder along with the seal supports off the piston, taking note of the sequence for reassembling. Check inner cylinder surface and piston surface. Check seals and replace as necessary. Dirt or damage will cause seals to wear out quickly.

Grease all parts lightly with silicone before reinstalling. Tighten hexagon nut (16) to 36 ft.-lbs.

Center bypass valve seat within casing and tighten to 184 ft.-lbs. with valve plug (24).

WARNING: This product might contain a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

GIANT
Performance Under Pressure

Giant Industries, Inc.
900 N. Westwood Ave.
Toledo, Ohio 43607
419-531-4600
FAX 419-531-6836
www.giantpumps.com

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TO CHECK AND REPLACE VALVES

Screw out plugs (24 & 28) and check whether the ball (29) underneath or the piston (14) is worn out. Remove the valve seats (23) and check the surfaces for damage. Replace as necessary.

TO ADJUST PRESSURE

The spring packing is pre-tensioned by means of the hand wheel (6) while the pump is running and the gun is open (in the case of more than one gun, all guns have to be open) until required operating pressure is reached. This must allow for a residue of at least 0.13 GPM to flow over the bypass. The spring packing is never to be tensioned high enough to completely seal up the bypass. The hexagon nut (7) is then to be locked to the spring guide (2).

If the nozzle hole is too small, on no account is the valve to be adjusted to an operating pressure higher than that of the pump. It is advisable in this case to install nozzles more suitable for this purpose.

OPERATION

The whole discharge must be guided through the valve. Should the actual operating the actual operating pressure exceed the adjusted operating pressure, the valve then acts as a pressure regulator. The valve switches to pressure free bypass operation when the spray gun shuts off and the spray pressure between gun and valve remains idle.

The valve can be operated with a number of spray guns ; furthermore, more than one pump can be connected to the pressure pipe.

Valves are pre-adjusted to the desired operating pressure; therefore, the actual operating pressure has always to be stated when ordering.

| Defect | Cause | Remedy |
|-----------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------------|
| Valve switches repeatedly when gun is closed | Leaky gun | Repair gun |
| | Leaky pressure pipe | Seal pressure pipe |
| | Leaky seal pack (22) | Renew seal pack |
| | Worn out valve plate (29) | Check and replace as valve plate (23), and seat (23). |
| | Leaky O-Ring (18). | Renew O-Ring (18). |
| Pressure gauge shows high-pressure peaks when shutting off gun. | Valve set too high above operating pressure. | Turn back handwheel (6). |
| | Dirty valve. | Clean valve (removing deposits etc.). Grease parts before reinstalling. |