

**P.A. – S.p.A. – EQUIPAGGIAMENTI TECNICI DEL LAVAGGIO**

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 ART. 2497 – BIS C.C. DIREZIONE E COORDINAMENTO BENETTI srl R.I. TRIB. DI RE 01480690351  
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## VB 56 - Unloader Valve (discharging)

**Technical manual: E 285**

Pressure regulating unloader valve complete with metallic intake manifold.  
 At gun shut off, the water flow is bypassed at reduced pressure.

**DN 10**


- **60.1350.10** VB 56 distance **x: 19 y: 61/73**
- **60.1350.32** VB 56 distance **x: 19 y: 61/73**
- **60.1356.10** VB 56 distance **x: 4.5 y: 53/57**
- **60.1362.10** VB 56 distance **x: 4.5 y: 53/57**
- **60.1372.10** VB 56 distance **x: 26 y: 66/76**

- Direct fitting to the pump by means of two hollow screws
- Sturdy steel and brass construction
- Adjustable locknut to control the max pressure
- Easy maintenance
- Hexagonal shaped check valve to avoid jamming.
- Possibility to fit a venturi injector, on delivery, for chemicals.
- Plastic cap with anti-removal system

### Technical specifications

Max. flow rate: 30 l/min. Max temperature: 90°C (1)

| Part Number | Rated pressure | Permissible pressure | Minimum adjustable pressure | (2) Trapped pressure at circuit closure | (3) Pressure drop to reset bypass | Outlet | Weight |
|-------------|----------------|----------------------|-----------------------------|---|-----------------------------------|--------|--------|
|             | bar - MPa      | bar - MPa            | bar - MPa                   | %                                       | %                                 |        | g      |
| 60.1350.10  | 220 - 22       | 250 - 25             | 22 - 2.2                    | 11                                      | 19                                | G3/8 F | 940    |
| 60.1350.32  | 220 - 22       | 250 - 25             | 22 - 2.2                    | 11                                      | 19                                | G3/8 M | 900    |
| 60.1356.10  | 220 - 22       | 250 - 25             | 22 - 2.2                    | 11                                      | 19                                | G3/8 M | 900    |
| 60.1362.10  | 220 - 22       | 250 - 25             | 22 - 2.2                    | 11                                      | 19                                | G3/8 F | 940    |
| 60.1371.10  | 220 - 22       | 250 - 25             | 22 - 2.2                    | 11                                      | 19                                | G3/8 F | 940    |

(1) The valve has been designed for a continuous use at a water temperature of 60°C. It can resist for short periods at a maximum temperature of 90°C.

(2) This is the maximum pressure increase implemented in the circuit for the intervention of the valve and to bring all the fluid in bypass (percentage figures of the pressure set up)

(3) This is the pressure reduction necessary in comparison to the set up, in order that the valve brings back pressure in the circuit. (percentage figures of the pressure set up)

**Instruction manual, maintenance, installation, spare parts.**

For a correct utilization, follow the directions of this manual

**Re-print them on the Use and Maintenance booklet of the machine.**

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**PROBLEMS AND SOLUTIONS**

| PROBLEMS                                 | PROBABLE CAUSES   | SOLUTIONS   |
|--|---|---|
| Frequent unloader recycles               | Damaged check valve O ring<br>Leaking connections<br>Restricted bypass  | Replace<br>Check and renew<br>Clean or adapt                                      |
| Unloader does not reach pressure         | Unloader not properly sized<br>Piston O rings worn out<br>Material matter between seat and shutter<br>Worn out nozzle | Change spring or type of valve<br>Replace<br>Clean the seat<br>Replace            |
| Pressure peaks                           | There is not a min of 5% of total flow in bypass<br>Excessive flow in bypass<br>Spring totally compressed             | Reset<br>Change type of valve or adjust passages<br>Loosen knob and change nozzle |
| Unloader does not bypass at low pressure | Jammed check valve<br>Check valve O ring worn out<br>Material matter on check valve                                   | Clean or replace<br>Replace<br>Clean  |

**REGULATIONS : see norm manual**

For a correct utilization, follow the directions described in this manual and re-print them on the Use and maintenance manual of the machine.

Make sure that you are given **the Original Conformity Declaration** for the accessory chosen. The present manual is valid for all unloader valves named **VB 56**.

**MAINTENANCE**

Maintenance has to be carried out by **Specialized Technicians**.

**STANDARD:** every 400 working hours (circa 10,000 cycles), check and lubricate the seals with water resistant grease.

**SPECIAL:** every 800 working hours( circa 20,000 cycles), control the wear of the seals and internal parts and if necessary, replace with original PA parts taking care during installation and to lubricate with water resistant grease.

**ATTENTION:** reassemble the valve in the correct manner paying special attention to the Nut (pos 22) which must always be in place.

**The manufacturer is not to be considered responsible for damage as a result from incorrect fitting and maintenance**

Technical data, descriptions and illustrations are indicative and liable to modification without notice