P.A. – S.p.A. – EQUIPAGGIAMENTI TECNICI DEL LAVAGGIO
VIA MILANO, 13 – CASELLA POSTALE 115 – 42048 RUBIERA (REGGIO EMILIA) – ITALY
Tel. +39 0522 623611 – Fax. +39 0522 629600 – R.E.A. RE 156319 – R.I. RE11535 – Mecc. RE 013446
C.F. e P. IVA 01035950359 – Cap. Soc. i.v. € 750.000,00 – Codice Identificativo C.E.E. IT 01035950359
ART. 2497 – BIS C.C. DIREZIONE E COORDINAMENTO BENETTI srl R.I. TRIB. DI RE 01480690351
Web: http://www.pa-etl.it – **E-mail:** info@pa-etl.it

VS28 Pressure adjusted RELIEF VALVE

Technical manual: **E 266**



DN8

- **60.0555.15** VS28/1 1/4Bsp M
- **60.0555.16** VS28/2 1/4Bsp M
- **60.0555.22** VS28/2 1/4Bsp M

- Brass central body.
- Sst ball sealing.
- Totally protected moving parts.
- Leak-preventing sealings.
- External discharge to show valve intervention.

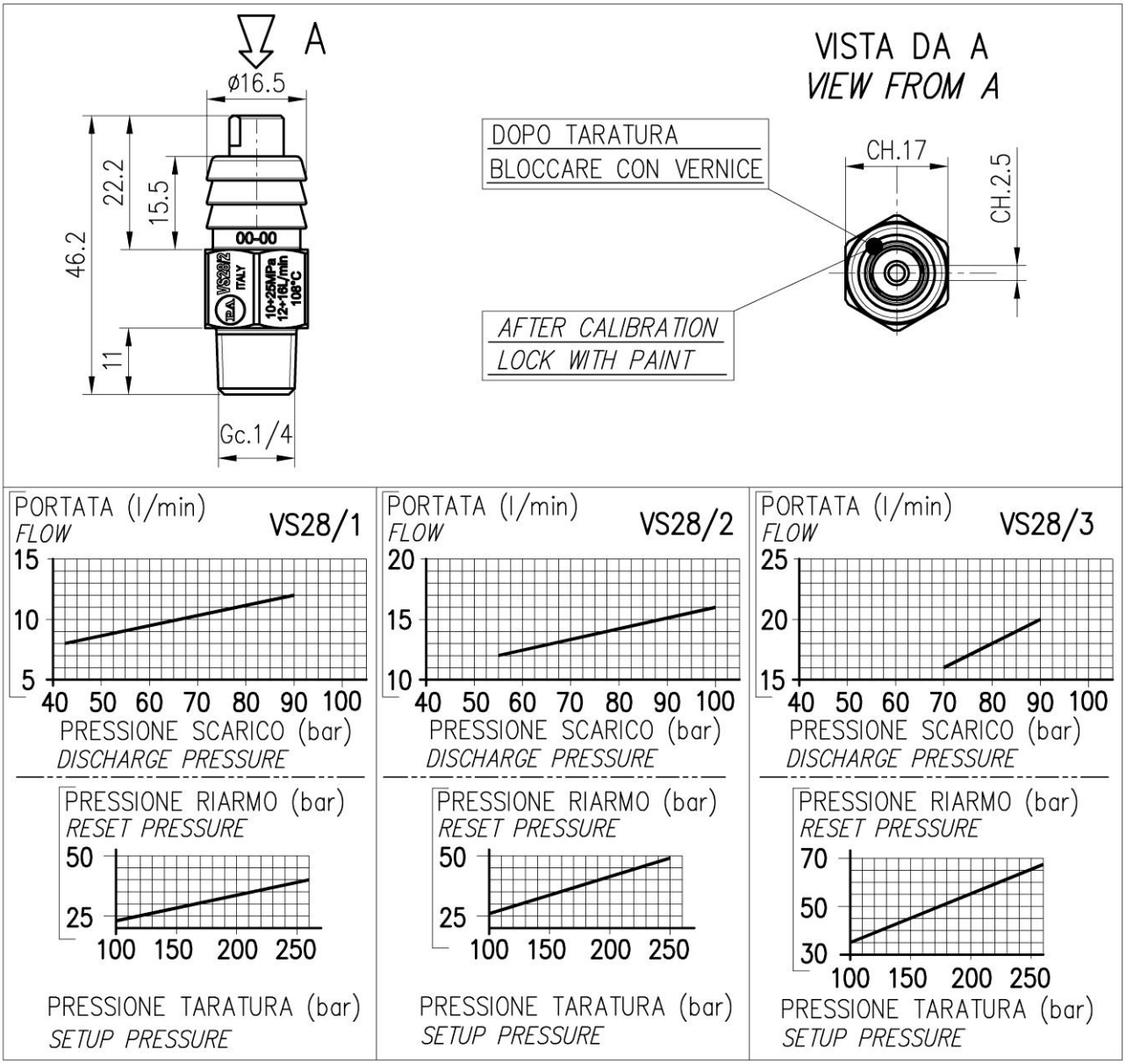
TECHNICAL SPECIFICATION

Maximum temperature 108° C

PART N.	TYPE	COLORED SEAL	ADJUSTMENT OR STARTUP PRESSURE LEVEL (±3%) bar (MPa)	MAX FLOW RATE L/ min	INLET	OUTLET	WEIGHT g
60.0555.15	1	Red	165 (16.5)	8-12	¼ M Bspt	Hose b 16mm	55
60.0555.16	2	Red	165 (16.5)	12-16	¼ M Bspt	Hose b 16mm	55
60.0555.22	2	White	220 (22)	12-16	¼ M Bspt	Hose b 16mm	55

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.**	n. 12.9220.00

DIMENSIONAL DRAWING



INSTRUCTIONS

SELECTION

This product is to be used with clean fresh water, even slightly additivated with normal detergents. For use involving different or corrosive liquids, contact the PA Technical department. Choose the valve in line with the data of nominal running (system rated pressure, max flow and max temperature). The valve VS28 prevents pressure spikes while the machine is in operation. To do this, the valve must be fitted following these instructions.

The calibration pressure must be at least 20% higher than the maximum pressure occurring in the side protected by the VS28 but in any case not superior to the maximum pressure lay-out of the system.

INSTALLATION

The VS28 valve is a protective element of the system. There are three installation sites, depending on the system part that needs to be protected:

A) it can be fitted on the pump head before the unloader valve or the regulator valve, in order to achieve an optimal protection of the pump and the initial circuit side;

B) on cold systems, it can be fitted after the unloader valve or regulator valve. In this way the secondary line (from the unloader to the gun) is protected from harmful overpressure caused by malfunctions or by an incorrect pressure adjustment in the system;

C) on hot water systems, the valve can be fitted after the burner where its potential activation, involving an abundant flow of water in by-pass, removes heat from the system thus protecting it thermally.

IMPORTANT: do not stand in front of the valve or let hands cross water discharge path.
IMPORTANT: the relief valve is a secondary safety device and shall not replace an unloader valve.

OPERATIONS
In case of overpressure, the protection valve intervenes by opening a by-pass. To reset to operating pressure, it is necessary to turn off the pump, in order to allow the shutter to close down: then search for the problem source and only then, turn on the pump again.

PROBLEMS AND SOLUTIONS

PROBLEMS	PROBABLE CAUSES	SOLUTIONS
Pressure spikes	- Clogged nozzle - Incorrect setting of the system	- Clean - Reset & replace nozzle
Water leaks at discharge	- Damaged seat	- Replace valve
Decrease of pressure set up	- Valve wear caused by excessive number of interventions	- Replace valve

REGULATIONS: see Standard Booklet

For a correct utilization, follow the instructions described in this manual and re-print them on the Use and maintenace manual of the machine.
Make sure that you are given **the Original Declaration of Conformity** for the chosen item. This manual is applicable for all unloader valves type **VS28**

MAINTENANCE
Life span of protection valves is 10 years, with a general check up carried out after 3 years.
The operational life span is however subordinated to the harshness of application, fluids, environmental conditions and exertion (pressure & temperature).

ATTENTION: item only to be replaced with another valve adjusted to the same pressure level.

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