

PRESSURE REGULATION VALVE P100- VM; P200- VM;
P270- VM

Manually regulated pressure regulation valve for liquid materials. In particular for paints at operating temperature within a viscosity range of 30 to 1500 mm²/s (cSt).

- In special cases and with agreement the range can be extended.

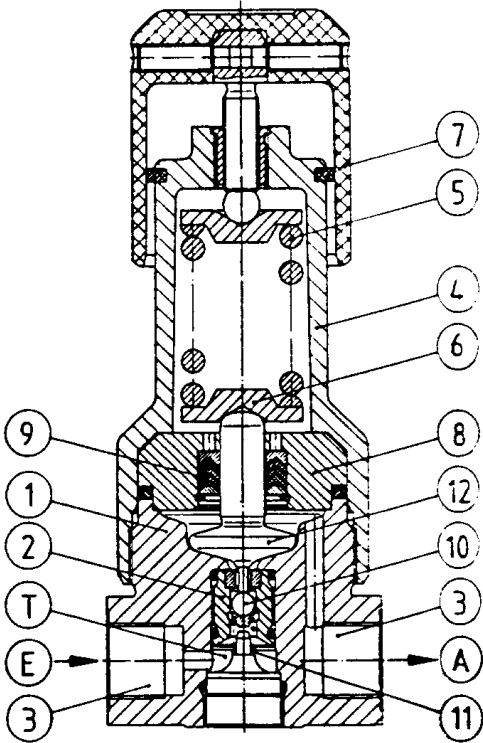
Description

The pressure regulation valve essentially consists of the housing bottom part ① with valve seat ② and fluid connection holes ③ and the housing top part ④ with pressure spring ⑤ and spring plate ⑥. The spring is adjusted using the cap ⑦.

A packing ⑧ with stack ⑧ is fitted between the housing bottom part and top part as a seal (fluid space/spring space).

During operation, the fluid under pressure flows from the inlet (E) through the spring-loaded ball valve (ball ⑩, support spring ⑪), under the tappet ⑫ and from there to the outlet (A).

Changes in pressure, as the result of fluid being removed at the consumer end, are transmitted by the valve tappet to the pressure spring and have a regulatory effect (opening or closing the valve) through the spring coupling (pressure spring, spring plate, valve tappet, ball and support spring).



Note protection mark in accordance with DIN 34

Replaces issue of 01.96
Subject to change

Prepared by	24.09.99 Stengele
Checked by	19.10.99 Kuhn

USER INFORMATION
- TECHN. PRODUCT DESCRIPTION -

Issued on	10.99
	B.12.50.01-P

The pressure regulation valve is designed for straight pipeline construction with the shortest throttle path and best possible flushing capacity.

- Internal threads have been avoided. The fluid path in the pressure regulation valve passes from the inlet via a turbulence zone (in order to avoid deposits) \textcircled{T} rising from below via the ball valve to the outlet.

Technical data

Model range

Pressure regulation valve Model	Regulation pressure range [bar]	Materials of the parts in contact with the material fluid	Weight [kg]	Article No.
P 100 - VM	> 40-100	Stainless steel 1.4305	1,1	79637 002004
P 200 - VM	> 90-200			79637 002005
P 270 - VM	> 90-270		1,2	79637 002006

Fluid

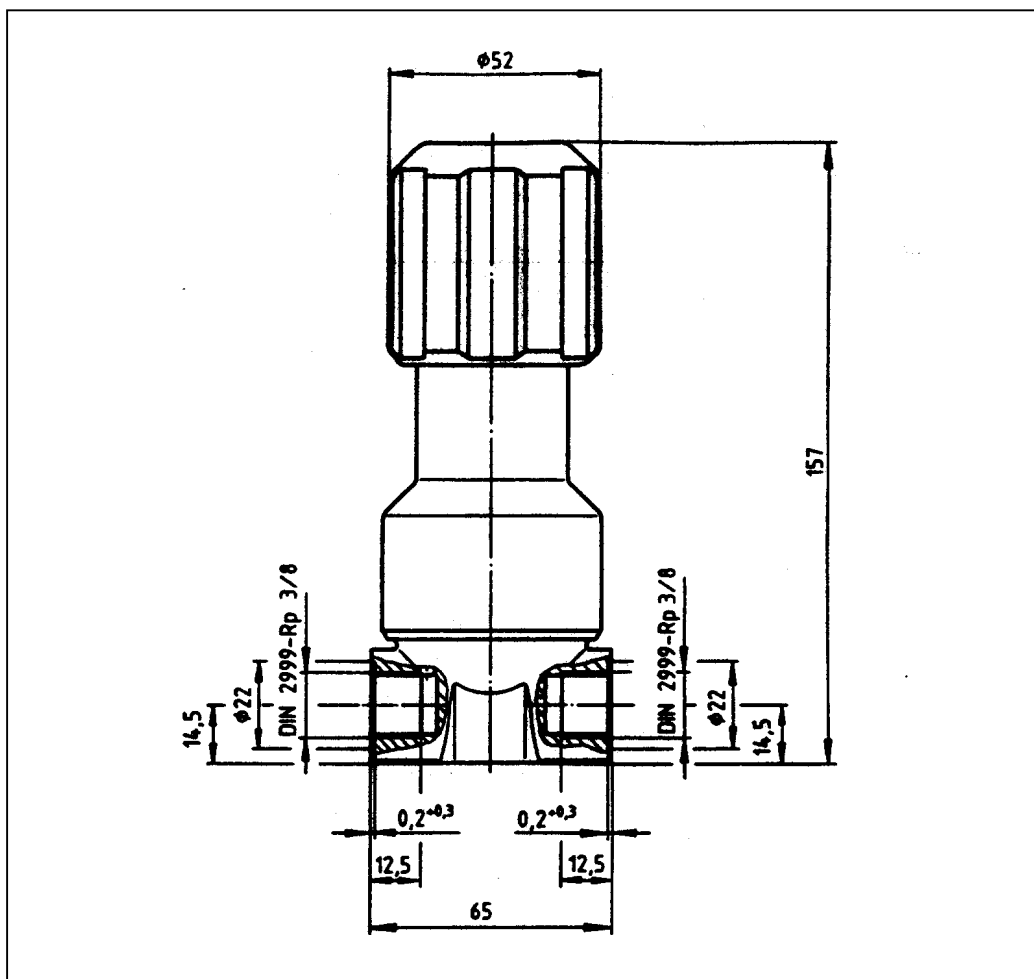
- Temperature range 0 °C to + 90 °C
- Max. inlet pressure 180 bar (P100 – VM)
- Max. inlet pressure 360 bar (P200 – VM), (P270 – VM)

Flow rate 14.8 l/min under the following conditions:
 free passage in the pressure regulation valve
 Viscosity 45 mm²/s (cSt)
 Spray gun with nozzle of
 5.3 mm² (Ø 2.6 mm)

Construction materials

Valve tappet, ball, seat Hardened steel G10
 Packing stack PTFE
 Seals FPM

Dimensions



<u>Build-up position</u>	Vertical, cap points upwards
--------------------------	------------------------------

For accessories See sales catalogue

Commissioning, Operation

After factory assembly all pressure regulation valves are tested with an anti-corrosion liquid for operation.

On commissioning, the residue from this liquid as well as contaminants that are unavoidable during assembly of the system must be thoroughly flushed with a suitable solvent (detergent).

Before prolonged shutdown (holidays), the pressure regulation valves should also be flushed and the detergent left in the system until the next time it is used.

Faults and their causes

Fault location	Fault	Outlet pressure reaches the value of the inlet pressure	Fluid escapes from the aeration hole of the stuffing box
	Valve	Foreign bodies (e.g. paint residues in the valve). Replace defective parts	
	Packing		Replace defective packing

Footnote

This technical product description also serves as operating instructions.

Please consult us when processing highly abrasive and aggressive materials.

Associated documentation

For accessories see sales catalogue

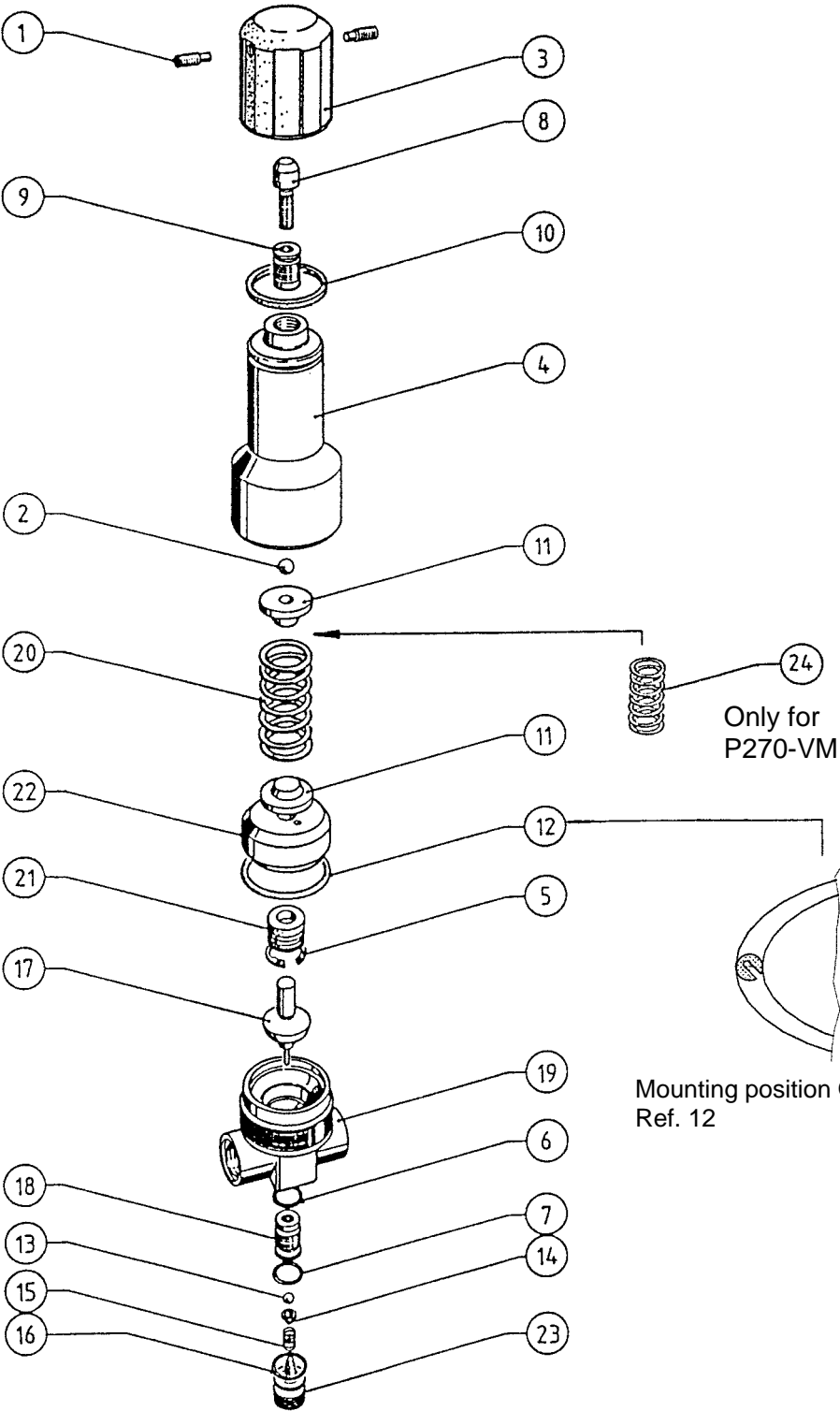
List of replacement parts B.12.50.02-E

GRACO N.V.
Industrieterrein "Oude Bunders"
Loc. 2206 - Slakweidestraat 31
3630 Maasmechelen - Belgium
Tel.: 32 89 770 700 Fax: 32 89 770 777

PRESSURE REGULATION VALVE P100-VM
PRESSURE REGULATION VALVE P200-VM
PRESSURE REGULATION VALVE P270-VM

PART Nbr. 79637 002004
PART Nbr. 79637 002005
PART Nbr. 79637 002006

SST basic model



Note protection mark in accordance with DIN 34

Subject to change

Page 1 of 2

Prepared 29.06.00 Stengele	USER INFORMATION - PARTS -	Issued 06.00
Checked 30.06.00 Kuhn		B.12.50.02-E

PRESSURE REGULATION VALVE P100-VM
PRESSURE REGULATION VALVE P200-VM
PRESSURE REGULATION VALVE P270-VM

PART Nbr. 79637 002004
PART Nbr. 79637 002005
PART Nbr. 79637 002006

Ref. Nbr.	Qty	Part Nbr.	Description
1	2	74052 023000	Set screw M 6 x 20
2	1	74824 017090	Ball 8 mm III
3	1	76411 016001	Cap D 52
4	1	76502 006001	Housing top part
5	1	74124 013000	Retaining ring 20 x 1 for type P100-VM for type P200-VM
6	1	74186 024020	O-ring 11 x 2 B
7	1	74186 023020	O-ring 10 x 2 B
8	1	76007 014001	Cheese head screw M 8 x 21.4
9	1	76091 002001	Threaded insert M 8 x M 12 x 1
10	1	75730 002017	Piston seal PK 42 x 2.8
11	2	76642 034001	Spring support D 27
12	1	75186 002007	O-ring 39 x 3 ground
13	1	74824 012090	Ball 5 mm II
14	1	76660 0030001	Ball support
15	1	76313 025001	Support spring 4.3 x 0.7 x 14.5
16	1	74186 026020	O-ring 16 x 2 B
17	1	77277 005005	Valve tappet
18	1	77275 005003	Valve seat
19	1	76504 005003	Housing bottom part
20	1	76313 075001	Spring for type P100-VM
20	1	76313 076001	Spring for type P200-VM for type P270-VM
21	1	7725 046006	Packing stack 10 x 20 x 9.4
22	1	76515 005003	Packing support D 20
23	1	76035 026003	Fixing screw M 18 x 1
24	1	75130 070001	Spring 12,2 x 8,8 x 38 for type P270-VM

GRACO STANDARD WARRANTY

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized Graco distributor to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the repaid return of equipment claimed to be defective to an authorized Graco distributor for verification of claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

Graco does not extend its warranty to accessories, appliances, materials or components which are sold by Graco but are not manufactured by Graco and makes no guarantee, however implied, with regard to the brand capability and suitability for a certain purpose. These parts sold by Graco but not manufactured by Graco (such as electric motors, switches, hoses, etc.) are covered by the warranties of the respective manufacturers. Graco will support the buyer in enforcing any warranty claim with the proviso that in no event can Graco be made liable for indirect, incidental, special or consequential damages which arise from the supply of appliances by Graco under the conditions governed by these provisions, or the supply, performance or use of any products or other goods which are sold under the conditions governed by these provisions, whether as the result of breach of contract, breach of warranty, negligence on the part of Graco or for any other reason.

GRACO N.V.

Industrieterrein "Oude Bunders"

Loc. 2206 - Slakweidestraat 31

3630 Maasmechelen – Belgium

Tel.: 32 89 770 700 Fax: 32 89 770 777

