

# ZERTIFIKAT

This is to certify

that the operating shaft seal consisting of a PTFE unit,  
i.e. bellow with flanged joint and valve seat cone for  
bellow-type valves,

sizes DN 15 to DN 80, pressure stages PN2 and PN3,  
drawings: N187-1, WZ1004, WZ1002, N86-1, N188-1, WZ1003, WZ1001, N87-1,  
N150-1, N190-1, N237-1, N40-1, N253, N238, WZ997, WZ2026, WZ998, WZ2059

made by

**QVF Engineering GmbH**

D-55122 Mainz

shall be regarded, in respect of its sealing effect, as being equivalent  
to spindle seals in the form of metallic bellows and downstream  
safety glands.

**Basis:**

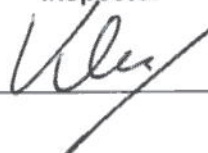
First General Administrative Order of the Federal Pollution Control Act  
(Technical Instructions for Air Pollution Control - TA-Luft), Section 5.2.6.4  
and VDI 2440 (on the same lines as)

**This Certificate shall be valid in conjunction with  
Test Certificate 922 – 960390-2 dated 9 February 2004.**

**Cologne, 9 February 2004**

TÜV Anlagentechnik GmbH  
Unternehmensgruppe  
TÜV Rheinland/Berlin-Brandenburg  
Projektmanagement/ Bauüberwachung

Inspector



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List of QVF-articles certified in the certificate with Test No. 922-960390-2

Also certified:

Also certified are the following types of bellow valves:

1. Straight Trough Valves:

|                         |  |                     |
|-------------------------|--|---------------------|
| manual operated:        | PVD15, PVD25, PVD40, PVD50, PVD80          | Drawing No.: N187-1 |
| pneumatically actuated: | PVS25/..., PVS40/..., PVS50/..., PVS80/... | Drawing No.: WZ1004 |
| pneumatically actuated: | PVM25/..., PVM40/..., PVM50/..., PVM80/... | Drawing No.: WZ1002 |

|                  |                                |                    |
|------------------|--------------------------------|--------------------|
| Jacketed Valves: | DPVD15, DPVD25, DPVD40, DPVD50 | Drawing No.: N89-1 |
|------------------|--------------------------------|--------------------|

2. Angle Valves:

|                         |  |                     |
|-------------------------|--|---------------------|
| manual operated:        | PED15, PED25, PED40, PED50, PED80          | Drawing No.: N188-1 |
| pneumatically actuated: | PES25, PES40, PES50, PES80                 | Drawing No.: WZ1003 |
| pneumatically actuated: | PEM25/..., PEM40/..., PEM50/..., PEM80/... | Drawing No.: WZ1001 |
| Jacketed Valves:        | DPED15, DPED25, DPED40, DPED50             | Drawing No.: N87-1  |

3. Drain Valves:

|   |                     |
|---|---------------------|
| PVA15/16, PVA25/16, PVA40/16,<br>PVA40/26 | Drawing No.: N150-1 |
|---|---------------------|

4. Loading Valves:

|                            |                     |
|----------------------------|---------------------|
| PVF15, PVF25, PVF40, PVF50 | Drawing No.: N190-1 |
|----------------------------|---------------------|

5. Overflow Valves:

|                        |                     |
|------------------------|---------------------|
| OF25, OF40, OF50, OF80 | Drawing No.: N237-1 |
|------------------------|---------------------|

6. Three Way Flow Change Valves:

|              |                    |
|--------------|--------------------|
| PVW25, PVW40 | Drawing No.: N40-1 |
|--------------|--------------------|

7. Gas Mixing Valves:

|                              |                   |
|------------------------------|-------------------|
| RM25/..., RM40/..., RM50/... | Drawing No.: N253 |
|------------------------------|-------------------|

8. Control Valves:

|                         |                                 |                                   |
|-------------------------|---------------------------------|-----------------------------------|
| manual operated:        | PRV25/..., PRV40/..., PRV50/... | Drawing No.: N238                 |
| pneumatically actuated: | PRS25/..., PRS40/..., PRS50/... | Drawing Nos.: WZ997<br>and WZ2026 |
| pneumatically actuated: | PRM25/..., PRM40/..., PRM50/... | Drawing Nos.: WZ998<br>and WZ2059 |