

# APV DELTA PR2

**SAMPLING VALVE**

FORM NO.: H170787 REVISION: UK-4

READ AND UNDERSTAND THIS MANUAL PRIOR TO OPERATING OR SERVICING THIS PRODUCT.





## **EU Declaration of Conformity for Valves and Valve Manifolds**

SPX Flow Technology Germany GmbH  
Gottlieb-Daimler-Str. 13, D-59439 Holzwickede  
herewith declares that the

**APV double seal and double seat valves of the series  
SD4, SDT4, SDU4, SDMS4, SDMSU4, SDTMS4, SWcip4, DSV,  
DA4, D4 SL, D4, DA3, DA3SLD, DE3, DEU3, DET3, DKR2, DKRT2, DKRH2**  
in the nominal diameters DN 25 - 150, ISO 1" – 6" and 1 Sh5 - 6 Sh5

**APV butterfly valves of the series SV1 and SVS1F, SVL and SVSL**  
in the nominal diameters DN 25 - 100, DN 125 - 250 and ISO 1" – 4"

**APV ball valves of the series KHI, KHV**  
in the nominal diameters DN 15 - 100

**APV single seat, diaphragm and spring loaded valves of the series  
S2, SW4, SWhp4, SW4DPF, SWmini4, SWT4, SWS4, MF4, MS4, MSP4, AP/T1, CPV,  
RG4, RG4DPF, RGMS4, RGE4, RGE4DPF, RGEMS4, PR2, PRD2, SI2, UF/R3, VRA/H**  
in the nominal diameters DN 10 - 150, ISO 1/2" – 4" and 1 Sh5 - 6 Sh5

and the valve manifolds installed thereof

meet the requirements of the Directives 2006/42/EC (superseding 89/392/EEC  
and 98/37/EC) and ProdSG (superseding GPSG - 9.GPSGV).

For official inspections, SPX FLOW presents  
a technical documentation according to Appendix VII of the Machinery Directive,  
this documentation consisting of documents of the development and construction,  
description of measures taken to meet the conformity and to correspond with  
the basic requirements on safety and health, incl. an analysis of the risks,  
as well as an operating manual with safety instructions.

The conformity of the valves and valve manifolds is guaranteed.

Authorised person for the documentation:  
Frank Baumbach

SPX Flow Technology Germany GmbH  
Gottlieb-Daimler-Str. 13, D-59439 Holzwickede, Germany

May 2018

ppa. Frank Baumbach

Frank Baumbach  
Regional Engineering Manager, F&B Components

**APV**



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## 1. General Terms

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This operating manual should be read carefully by the competent operating and maintenance personnel.

We point out that we will not accept any liability for damage or malfunctions resulting from the non-compliance with this manual.

Descriptions and data are subject to technical changes.

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## 2. Safety Instructions

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### DANGER!

- The technical safety symbol draws your attention to important directions for operating safety. You will find it wherever the activities described are bearing risks of personal injury.
- Before any maintenance work, the line and cleaning systems must be **depressurized** and discharged if possible.
- Observe Service Instructions to ensure safe maintenance of the valve.
- The valve must be assembled, disassembled and reassembled only by persons who have been trained in APV valves or by SPX FLOW service team members. If necessary, contact your local SPX FLOW representative.

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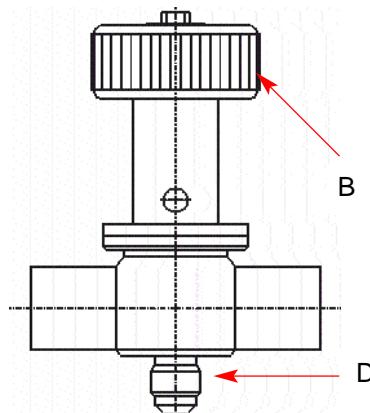
## 3. Intended Use

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The intended use as field of application of the PR valve is the sample taking of liquids from the respective line section.

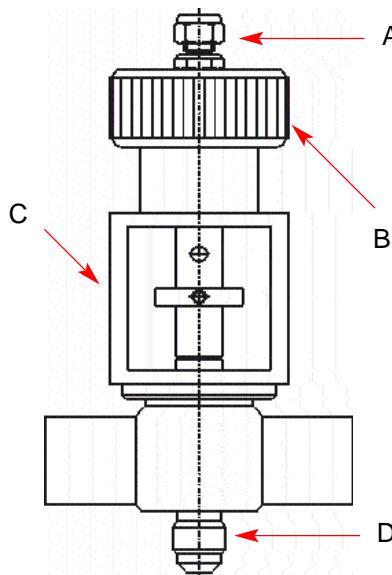
Arbitrary, constructive changes at the valve will influence safety as well as the intended functionality of the valve and are not permissible.

## 4. Mode of Operation



### 4.1. Manually operated design (PR2-HF)

For sample taking the handle (**B**) is operated.  
 turn left = open  
 turn right = closed  
 (until the spring force closes the valve again.)

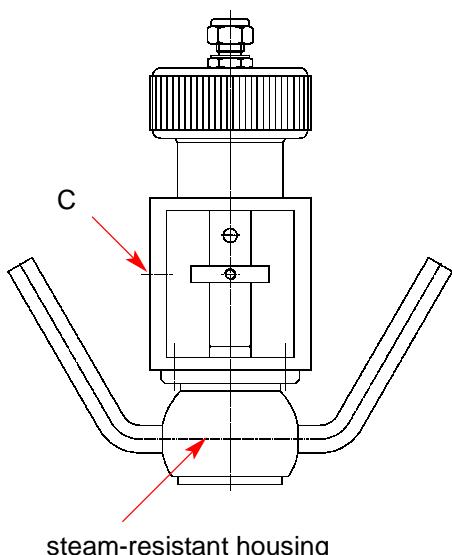


### 4.2. Pneumatically operated design (PR2-FS-H)

For sample taking the handle (**B**) is operated.  
 turn left = open  
 turn right = closed  
 (until the spring force closes the valve again.)

During the cleaning process, the sampling valve can be controlled with air (A). Thus, the valve seat can be cleaned.

## 5. Auxiliary Equipment



#### \* Valve position indication

A proximity switch to signal the valve position can be mounted in the yoke area (**C**) if required.

#### \* Steam-resistant housing (DN 25)

This housing is available for both valve operating types and is welded direct to the tank or pipeline in vertical position. It is equipped with connections for the steam inlet and outlet.

## 6. Cleaning

- In the standard designs, the valve is cleaned during the pipe cleaning process.
- By short-term interval-opening of the valve, the contact surface between the valve shaft and the seat is cleaned, whereas liquid drains off the sampling nozzle (**D**).
- The valve equipped with steam connection is cleaned and sterilized through the connecting tubes.

## 7. Installation

- The installation of the valve must be undertaken in such a way that liquids can drain off the valve housing.
- The steam-resistant valve must be mounted in vertical position, whereas the connecting tubes must be at the top and at the bottom.
- The standard valves can be welded direct into the pipelines either in horizontal position (sampling connection to the bottom) or in vertical position.
- **Attention!** Observe Welding instructions.

### 7.1 Welding instructions

#### PR2

- Before welding of the valves, the valve insert must be dismantled from the housing. See to a careful handling to avoid damage.
- Welding may only be carried out by certified welders DIN EN ISO 9606-1). (Seam quality DIN EN ISO 5817).
- The welding of the valve housing must be undertaken in such a way that deformation strain cannot be transferred from the outside to the valve body.
- The preparation of the weld seam up to 3 mm wall thickness must be carried out in butt manner as a square butt joint without air. (Consider shrinkage!)
- TIG orbital welding is best.
- After welding of the valve housings or of the mating flanges and after work at the pipelines, the corresponding parts of the installation or pipelines must be cleaned from welding residues and soiling. If these cleaning instructions are not observed, welding residues and dirt particles can settle in the valve and cause damage.
- Any damage resulting from the nonobservance of these welding instructions is not subject to our guarantee.
- Welding directives for aseptic applications shall be drawn from the AWS/ANSI Directives and EHEDG Guidelines.

## 8. Maintenance

- The maintenance intervals are different depending on the application and are to be determined by the operator himself carrying out temporary checks.
- Complete seal kits for the valve service are available (see spare parts lists).
- Exchange of seals according to Service Instructions.
- Provide all seals with a thin layer of grease before their installation.

**Recommendation:**

APV assembly grease for EPDM, HNBR and FPM  
(750 g /tin - ref.-No. 000 70-01-019/93; H147382)  
(60 g /tube - ref.-No. 000 70-01-018/93; H147381)

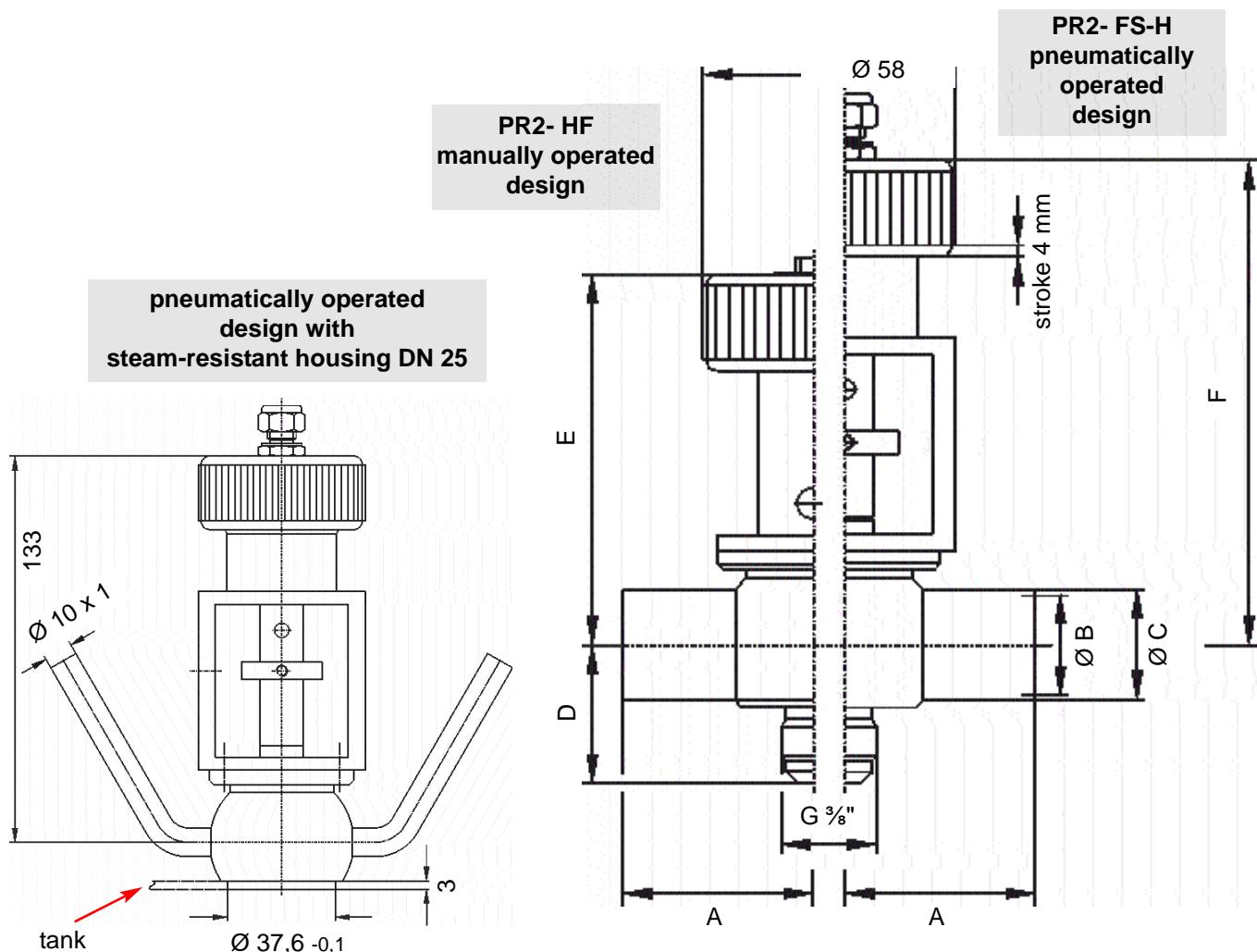
**or**

APV assembly grease for VMQ  
(600 g /tin - ref.-No. 000 70-01-017/93; H147380)  
(60 g /tube - ref.-No. 000 70-01-016/93; H147379).

- ! Do not use grease containing mineral oil for EPDM seals !  
! Do not use Silicone-based grease for VMQ seals !**

- Assembly of the valve according to Service Instructions.

## 9. Dimensions / Weights



weights in kg			
DN	Inch	PR2 - HF	PR2 - FS - H
25	1"	0,9	1,9
40	1,5"	1,0	2,0
50	2"	1,2	2,2
65	2,5"	1,4	2,4
80	3"	1,9	2,9
100	4"	2,6	3,6

dimensions in mm						
DN	A	Ø B	Ø C	D	E	F
25	50	26	29	37	98,5	134
40	67	38	41	46	102,5	138
50	72	50	53	52	108,5	144
65	85	66	70	60	116,5	152
80	98	81	85	67,5	124	159,5
100	111	100	104	77	133,5	169
125	130	125	129	89,5	146	181,5
Inch						
1"	50	22,2	25,4	35,1	96,6	132,1
1,5"	67	34,8	38	44,4	100,9	136,4
2"	72	47,6	50,8	50,8	107,3	142,8
2,5"	85	60,3	63,5	57,2	113,7	149,2
3"	90	72,9	76,1	63,5	118,0	155,5
4"	111	97,6	101,6	75,8	132,3	167,8

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## 10. Materials

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housing, housing cover	<b>1.4404</b> (DIN EN 10088)
spring cylinder, yoke, upper part of shaft, operating cam, screws, air connection	<b>1.4301</b> (DIN EN 10088)
seals standard option	<b>EPDM</b> <b>HNBR, FPM, VMQ</b>
lower part of shaft	<b>PTFE / 25 % glass fiber</b>
handle	<b>Hostalen</b>

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## 11. Technical Data

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### 11.1. General data

- max. line pressure	<b>10 bar</b>
- max. operating temperature	<b>135 °C EPDM, HNBR</b> *VMQ, *FPM
- short-term load	<b>140 °C EPDM, HNBR</b> *VMQ, *FPM *(no steam)
- max. stroke	<b>4 mm</b>
- control pressure for air-operated valve	<b>10 bar max. / 6 bar min.</b>
- air connection for hose	<b>6 x 1</b>

### 11.2 Specification of compressed air quality

**compressed air quality:** quality class according to  
DIN ISO 8573-1

**content of solid particles:** quality class 3  
max. size of solid particles per m<sup>3</sup>  
10000 of 0,5µm < d < 1,0 µm  
500 of 1,0 µm < d < 5,0 µm

**content of water:** quality class 3  
max. dew point temperature -20 °C  
For installations at lower  
temperatures or at higher altitudes,  
additional measures must be  
considered to reduce the pressure  
dew point accordingly.

**content of oil:** quality class 1  
max. 0,01mg/m<sup>3</sup>

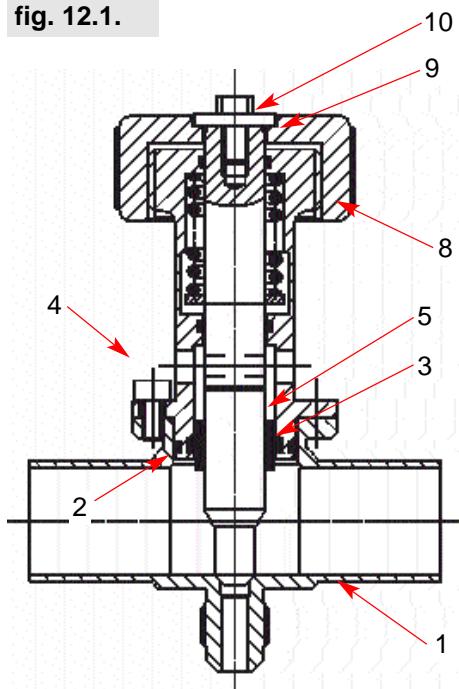
**The oil applied must be compatible with Polyurethane  
elastomer materials.**

## 12. Service Instructions

### Manually operated design - PR2 HF (fig. 12.1.)

The item numbers refer to the spare parts drawing **RN 01.143.0**

**fig. 12.1.**



#### 12.1. Dismantling from the line system

1. Shut off line pressure in the product line.
2. Turn handle (8) to the left until the valve is in open position.
3. Remove flange screw (4) and take the complete valve insert out of the housing (1).
4. Remove o-ring (2).
5. Insert a small screws driver through the bore into the spring housing and into the shaft (5) to prevent the shaft from turning.
6. Remove hexagon screw (10) and washer (9) and press the shaft (5) into the direction of the PTFE part out of the housing.
7. Pull the PTFE shaft tip (5.2) from the metal part (5.1).  
The PTFE tip is destroyed during this action.
8. Remove the shaft seal (3) from the spring housing.

#### 12.2. Installation of seals and assembly of valve - PR2 HF

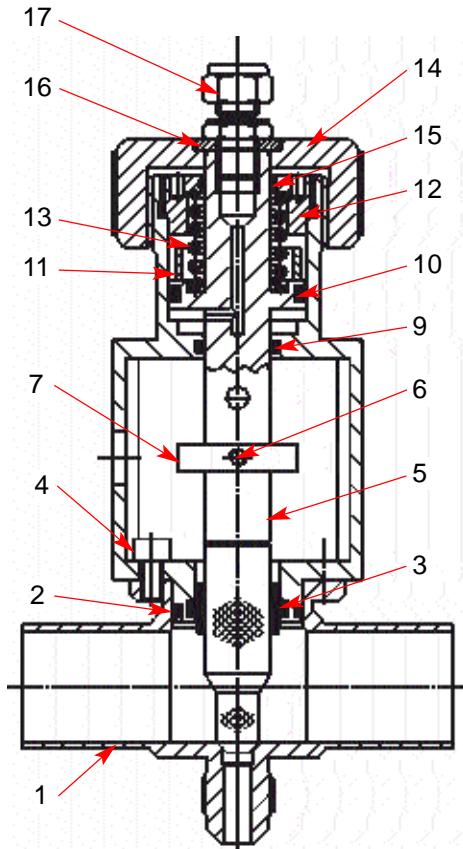
1. Press the slightly greased shaft seal (3) into the groove of the spring housing.
2. Place the PTFE shaft tip (5.2) on the metal part (5.1) and lock it into place.
3. Push the valve shaft (5) with the metal part to the front through the shaft seal into the spring housing.
4. Insert a small screw driver into the bore of the spring housing and of the shaft (5) to prevent the shaft from turning.
5. Screw the hexagon screw (10) with washer (9) in the shaft and tighten it.
6. Insert the slightly greased O-ring (2).
7. Press the complete valve insert into the housing (1) and fix it with the flange screws (4).
8. Check the function of the valve by turning it on and off several times.

## 13. Service Instructions

### Pneumatically operated design PR2-FS-H (fig. 13.1.)

The item numbers refer to the spare parts drawing RN 01.146-2.

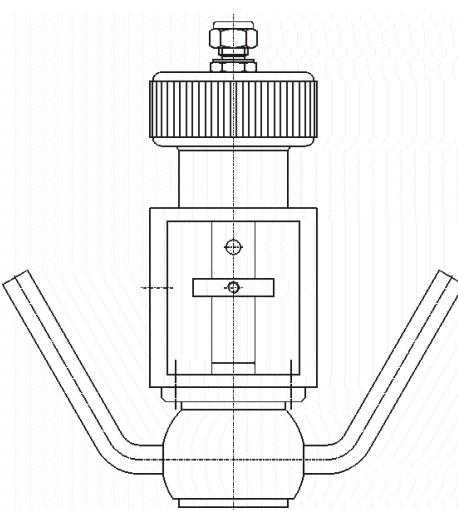
fig. 13.1.



#### 13.1. Dismantling from the line system

1. Shut off line pressure in the product line.
2. Remove pneumatic air line.
3. Release clamp screw of feedback support and pull off proximity switch.
4. Turn handle (14) to the left until the valve is in open position.
5. Remove flange screws (4) and take the complete valve insert out of the housing (1).
6. Remove o-ring (2).
7. Insert a small screw driver through the shaft bore to prevent the shaft from turning.
8. Remove union (17) and washer (16) and screw off the handle (14).
9. Turn off the cover (12). Insert two pins into the bore of the cover to move the cover. Spring (13) and distance tube (11) are now accessible.
10. Remove o-ring (15).
11. Release threaded pin (6) and press the shaft (5) out to the top. The switching ring (7) backs out during this procedure.
12. Pull the PTFE shaft tip (5.2) from the metal part (5.1). The PTFE tip is destroyed during this action.
13. Remove the shaft seal (3) and o-rings (9, 10).

**Pneumatic design  
with steam-resistant housing DN25**



## 13. Service Instructions

### Pneumatically operated design (PR2-FS-H)

#### 13.2. Installation of seals and assembly of valve (PR2-FS-H)

1. Slightly grease the shaft seal (3) and o-ring (9, 10, 15) and place them into the grooves.
2. Place the PTFE shaft tip (5.2) on the metal part (5.1) and lock it into place.
3. Push the shaft (5) from the top through the yoke (8), the switching ring (7) and the shaft seal (3).
4. Insert spring (13) and distance tube (11) and tighten the cover (12) until it stops.
5. Screw on the handle (14) and secure the shaft against turning (**bore in shaft**).
6. Screw the union (17) with washer (16) into the shaft.
7. Adjust the switching ring (7) on the level of the yoke bore by tightening the threaded pin (6) and open the valve by turning the handle to the left.
8. Insert the slightly greased o-ring (2).
9. Press the complete valve insert into the housing (1) and fasten it with the flange screws (4).
10. Connect the pneumatic air line.
11. Push the proximity switch into the holder up to a distance of about 2 mm from the switching ring (7).

The shift point can be adjusted by moving the switching ring and the proximity switch if necessary.

Fix the switching ring and proximity switch holder with the clamp screws.

12. Check the function of the valve by several opening and closing.

## 14. Trouble Shooting

<b>Trouble</b>	<b>Remedy</b>
<b>Manually operated design</b>	
The item numbers refer to the spare parts drawing <b>RN 01.143.0 / 01.143.1</b> Failure removal see chapters <b>12.1. and 12.2.</b> Service Instructions	
<b>Leakage at sampling connection</b>	Turn handle <b>(8)</b> in position "OFF". Replace tip of valve shaft <b>(5.2)</b> .
<b>Leakage between housing and yoke flange</b>	Replace o-ring <b>(2)</b> .
<b>Leakage at yoke bore</b>	Replace shaft seal <b>(3)</b> .
<b>Valve does not open.</b>	Check if screw <b>(10)</b> sticks.
<b>Pneumatically operated design</b>	
The item numbers refer to the spare parts drawing <b>RN 01.146-2</b> Failure removal see chapters <b>13.1. and 13.2.</b> Service Instructions	
<b>Leakage at sampling connection</b>	Turn handle <b>(14)</b> in position "OFF". Replace tip of valve shaft <b>(5.2)</b> . Shut off pneumatic air supply.
<b>Leakage between housing and yoke flange</b>	Replace o-ring <b>(2)</b> .
<b>Leakage at shaft passage</b>	Replace shaft seal <b>(3)</b> .
<b>Actuator</b>	
Actuator does not work, air escapes at the handle.	Replace o-ring <b>(10)</b> .
Air escapes from valve shaft.	Replace o-ring <b>(9)</b> .
<b>Valve position indication</b>	
Valve position does not work or is unprecise. No feedback.	<b>Carry out fine adjustment.</b>

## 15. Spare Parts Lists

The reference numbers of the spare parts for the different valve designs and sizes are included in the attached spare parts drawings with corresponding lists.

Please indicate the following data to place an order for spare parts:

- required number of parts
- reference number
- designation.

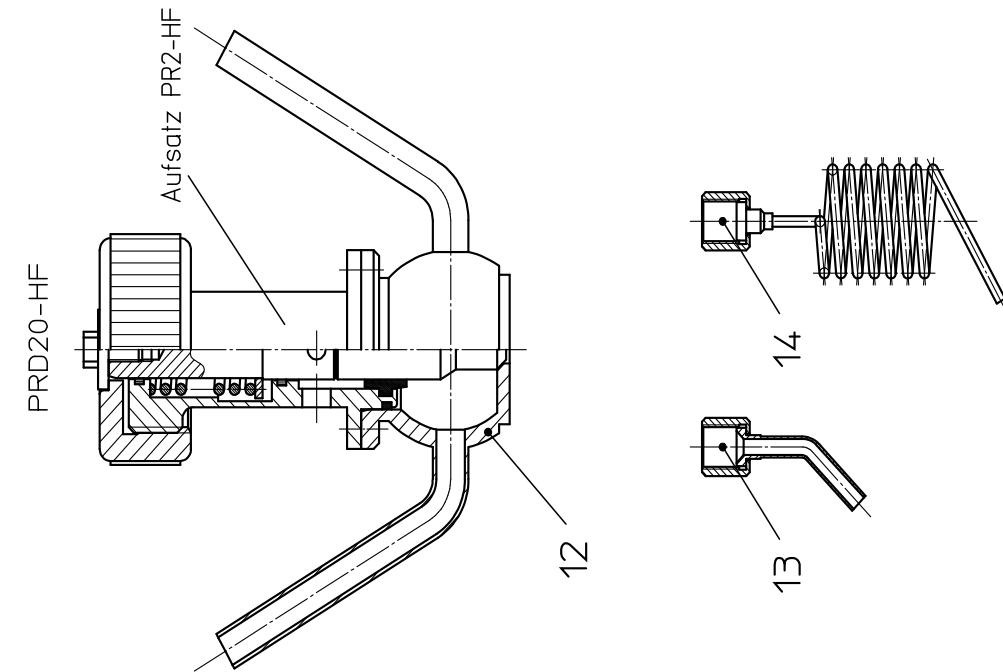
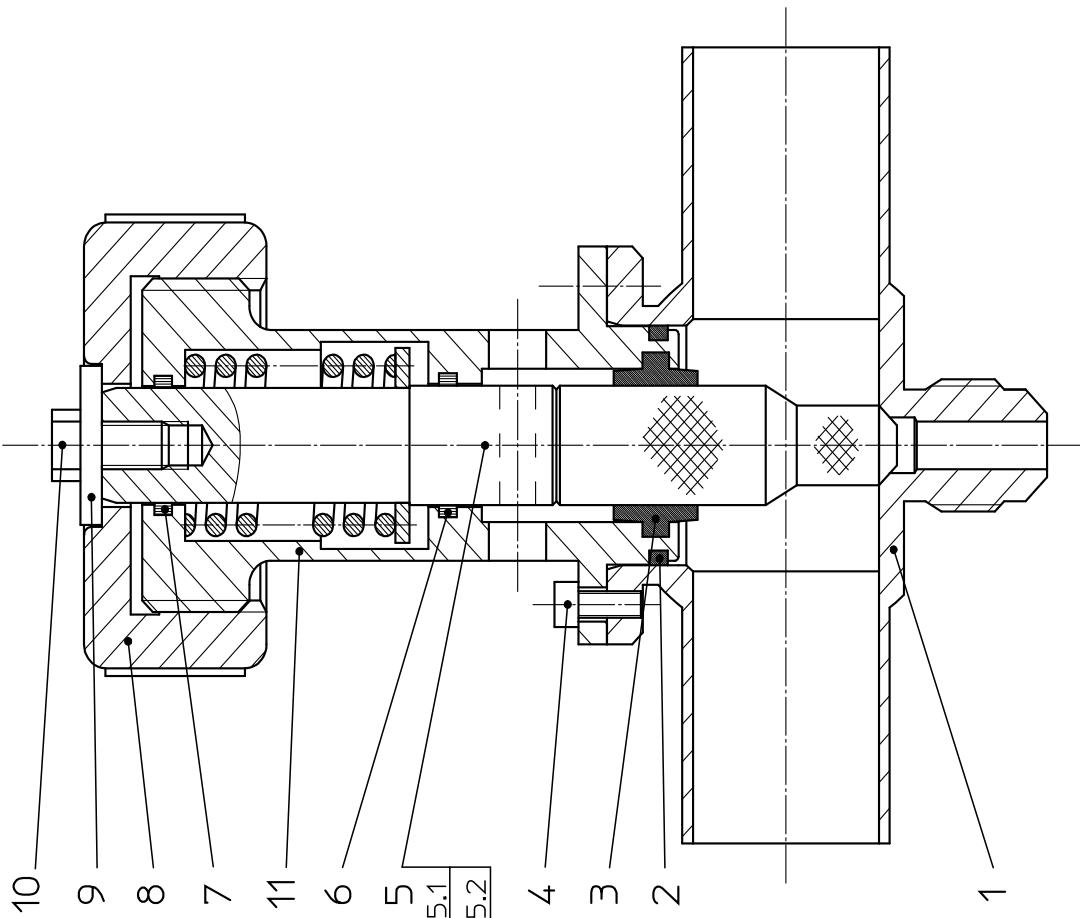
Data are subject to change.



#### Ersatzteilliste: spare parts list

### Probeentnahmventil PR2, PRD2 -HF Sampling valve PR2, PRD2 (steam connection) manual DN25-125 ; 1-4 zoll / inch

>APV	
SPX FLOW	Germany
Datum:	27.10.14
Name:	Trytko
Geprüft:	
Datum:	
Name:	
Geprüft:	
Blatt 1 von 10	
<b>RN 01.143.0</b>	



### Ersatzteilliste: spare parts list

## Probeentnahmventil PR2, PRD2 -HF Sampling valve PR2, PRD2 (steam connection) manual DN25-125 ; 1-4 zoll / inch

		Datum:		27.10.14 29.02.16				>APV	
		Name: Geprüft:		Trytko				SPX FLOW Germany	
		Datum:						Blatt 2 von 10	
		Name: Geprüft:						<b>RN 01.143.0</b>	
				Datum:		1,5"		DN50	
				Name: Material		1"		DN40	
		Beschreibung description		WS-Nr. ref.-no.		WS-Nr. ref.-no.		WS-Nr. ref.-no.	
pos. item	Menge quantity	Beschreibung description	Material	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.
1	Gehäuse Housing	1S	1.4404	21-08-787/47 H122256	21-08-892/47 H161921				
1	Gehäuse Housing	1+2S	1.4404	21-08-769/07 H50647	21-08-164/47 H311685	21-08-771/47 H112880	21-08-837/47 H204834	21-08-166/47 H50661	21-08-166/47 H174660
1	Aufsatz PR2-HF		EPDM-1.4404	15-27-289/59 H105480	15-27-314/59 H311691	15-27-389/59 H105482	15-27-439/59 H207833	15-27-439/59 H105484	15-27-464/59 H208087
1	Insert sampling valve manual		FPM-1.4404	15-27-289/69 H207120	15-27-314/69 H323215	15-27-389/69 H204840	15-27-414/69 H207013	15-27-439/69 H207977	15-27-464/69 H323214
1	Aufsatz PR2-HF		HNBR-1.4404	15-27-289/29 H320011	15-27-314/29 H207120	15-27-389/29 H112876	15-27-414/29 H207013	15-27-439/29 H112876	15-27-464/29 H208085
1	Insert sampling valve manual		VMQ-1.4404	15-27-289/61 H207120	15-27-314/61 H207120	15-27-389/61 H112876	15-27-414/61 H207977	15-27-439/61 H112876	15-27-464/61 H208088
1	O-Ring O-ring	OR 25,3x2,4	EPDM					58-06-102/63 H76954	
1	O-Ring O-ring	OR 25,3x2,4	FPM					58-06-102/73 H76952	
2	O-Ring O-ring	OR 25,3x2,4	HNB					58-06-102/33 H207019	
1	O-Ring O-ring	OR 25,3x2,4	VMQ					58-06-102/53 H76953	
1	Schaffdichtung Shaft seal		EPDM FDA-konform					58-33-014/93 H77374	
1	Schaffdichtung Shaft seal		FPM FDA-konform					58-33-014/73 H77373	
3	Schaffdichtung Shaft seal		HNBR FDA-konform					58-33-014/33 H172192	
1	Schaffdichtung Shaft seal		VMQ FDA-konform					58-33-014/13 H77372	
4	Zyl. Schraube Cyl. Screw	DIN EN ISO 4762	1.43001	21-22-840/12 H106534	21-22-841/12 H311696	21-22-830/12 H106535	21-22-842/12 H204842	65-06-050/13 M5x10 H79027	21-22-831/12 H208090
5	Schaft komplett Shaft complete		Teflon 1.4301						

Weitergabe sowie Vervielfältigung dieser Unterlage, Verwertung und Mitteilung ihres Inhalts nicht gestattet, soweit nicht schriftlich zugestanden. Verstoß verpflichtet zum Schadensersatz und kann strafrechtliche Folgen haben (Paragraph 18 UWG, Paragraph 106 UrhG). Eigentum und alle Rechte, auch für Patientenförderung und Gebrauchsmustereintragung, vorbehalten. SPX FLOW, Germany

Ersatzteilliste: spare parts list

**Probeentnahmegerät PR2, PRD2 -HF**  
**Sampling valve PR2, PRD2 (steam connection) manual**  
**DN25-125 : 1-4 zoll / inch**

Weitergabe sowie Vervielfältigung dieser Unterlage, Verwertung und Weiterleitung ihres Inhalts nicht gestattet, soweit nicht schriftlich zugestanden. Versoßt verpflichtet zum Schadensersatz, und kann strafrechtliche Folgen haben (Paragraph 18 UWG, Paragraph 106 UrhG). Eigentum und alle Rechte, auch für Patenterteilung und Gebrauchsmustereintragung, vorbehalten. SPX FLOW, Germany

Ersatzteilliste: spare parts list

**Probeentnahmegerät PR2, PRD2 -HF**  
**Sampling valve PR2, PRD2 (steam connection) manual**  
**DN25-125 ; 1-4 zoll / inch**

### Ersatzteilliste: spare parts list

## Probeentnahmventil PR2, PRD2 -HF Sampling valve PR2, PRD2 (steam connection) manual DN25-125 ; 1-4 zoll / inch

		Datum:		27.10.14	29.02.16	>APV	
		Name:	Trytko	Trytko		SPX FLOW Germany	
		Geprüft:				Blatt	5 von 10
<b>RN 01.143.0</b>							
pos.	Menge	Beschreibung	Material	DN65	2,5"	3"	DN100
item	quantity	description	material	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.
1	Gehäuse Housing	1S	1.4404	21-08-773/07 H112950	21-08-774/47 H208493	21-08-775/47 H112952	21-08-776/47 H112959
1	Aufsatz PR2-HF		EPDM-1.4404	15-27-489/59 H105488	15-27-514/59 H312483	15-27-539/59 H105491	15-27-639/59 H105492
1	Insert sampling valve manual		FPM-1.4404	15-27-489/69 H156094	15-27-514/69 H331559	15-27-539/69 H331560	15-27-639/69 H331561
1	Aufsatz PR2-HF		HNBR-1.4404	15-27-489/29 H323723	15-27-514/29 H207976	15-27-539/29 H207977	15-27-639/29 H207978
1	Insert sampling valve manual		VMQ-1.4404	15-27-489/61 H131733	15-27-514/61 H131733	15-27-539/61 H131733	15-27-639/61 H131733
1	O-Ring O-ring	OR 25,3x2,4	EPDM				58-06-102/63 H76954
1	O-Ring O-ring	OR 25,3x2,4	FPM				58-06-102/73 H76952
2	O-Ring O-ring	OR 25,3x2,4	HNB				58-06-102/33 H207019
1	O-Ring O-ring	OR 25,3x2,4	VMQ				58-06-102/53 H76953
1	Schaffdichtung Shaft seal		EPDM FDA-konform				58-33-014/93 H77374
1	Schaffdichtung Shaft seal		FPM FDA-konform				58-33-014/73 H77373
3	Schaffdichtung Shaft seal		HNBR FDA-konform				58-33-014/33 H172192
1	Schaffdichtung Shaft seal		VMQ FDA-konform				58-33-014/13 H77372
4	Zyl. Schraube Cyl. Screw	DIN EN ISO 4762	1.43001	21-22-843/12 H106537	21-22-832/12 H312484	21-22-844/12 H106538	65-06-050/13 M5x10 H79027
5	Schaft komplett Shaft complete		Teflon 1.4301				21-22-846/12 H106540

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### Ersatzteilliste: spare parts list

## Probeentnahmeventil PR2, PRD2 -HF Sampling valve PR2, PRD2 (steam connection) manual DN25-125 ; 1-4 zoll / inch

				Datum:		27.10.14		29.02.16		>APV	
				Name:		Trytko		Trytko		SPX FLOW Germany	
				Geprüft:							
				Datum:						Blatt	6 von 10
				Name:						<b>RN 01.143.0</b>	
				Geprüft:							
pos.	item number	Beschreibung description	Material material	DN65	2,5"	3"	DN80	DN100	DN125	4"	
item number	item description	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	
5.1	1	Schaft	1.4301								
5.2	1	Schaftspitze Shaft tip	Teflon 25%GF	15-23-804/93 H31462	15-23-812/93 H208497	15-23-805/93 H31463	15-23-806/93 H31464	15-23-807/93 H31465	15-23-814/93 H311336	15-23-812/93 H106533	
6	1	Führungsband PTFE guide strap	Turcite								
7	1	Führungsband PTFE guide strap	Turcite								
8	1	Rändelmutter Nut	Hostalen								
9	1	Scheibe Washer	1.4301								
10	1	Skt. Schraube Hex. Screw	DIN EN 24017-A2-70	1.4301							
11	1	Federgehäuse Spring housing	1.4404								
12	1	Gehäuse PRD21 Housing PRD21	1 Ablauftrohr 1 drain pipe	1.4404							
12	1	Gehäuse PRD22 Housing PRD22	2 Ablauftrohre 2 drain pipes	1.4404							
		Zubehör / accessories									
13	1	Auslaufrohr Drain pipe	Leitungsdruck >5 bar Line pressure >5 bar	1.4404							
14	1	Auslaufrohr Drain pipe	Leitungsdruck >5 bar Line pressure >5 bar	1.4404							

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### Ersatzteilliste: spare parts list

## Probeentnahmeventil PR2, PRD2 -HF Sampling valve PR2, PRD2 (steam connection) manual DN25-125 ; 1-4 zoll / inch

				>APV	
				SPX FLOW Germany	
				Datum: Name: Geprüft:	Blatt 8 von 10
					<b>RN 01.143.0</b>
pos. item	Menge quantity	Beschreibung description	Material material	DN125 WS-Nr. ref.-no.	DN150 WS-Nr. ref.-no.
1	1	Gehäuse Housing	1S	1.4404	6" WS-Nr. ref.-no.
	1	Aufsatz PR2-HF			
	1	Insert sampling valve manual		EPDM-1.4404	15-27-689/59 H105493
	1	Aufsatz PR2-HF			
	1	Insert sampling valve manual		FPM-1.4404	15-27-6489/69
	1	Aufsatz PR2-HF			
	1	Insert sampling valve manual		HNBR-1.4404	15-27-689/29
	1	Aufsatz PR2-HF			
	1	Insert sampling valve manual		VMQ-1.4404	15-27-689/61
	1	O-Ring O-ring	OR 25,3x2,4	EPDM	58-06-102/63 H76954
	1	O-Ring O-ring	OR 25,3x2,4	FPM	58-06-102/73 H76952
2	1	O-Ring O-ring	OR 25,3x2,4	HNB	58-06-102/33 H207019
	1	O-Ring O-ring	OR 25,3x2,4	VMQ	58-06-102/53 H76953
	1	Schaffdichtung Shaft seal		EPDM FDA-konform	58-33-014/93 H77374
	1	Schaffdichtung Shaft seal		FPM	58-33-014/73 H77373
3	1	Schaffdichtung Shaft seal		HNB FDA-konform	58-33-014/33 H172192
	1	Schaffdichtung Shaft seal		VMQ FDA-konform	58-33-014/13 H77372
4	3	Zyl. Schraube Cyl. Screw	DIN EN ISO 4762	1.43001	65-06-050/13 M5x10 H79027
5	1	Schafft komplett Shaft complete		Teflon 1.4301	21-22-847/12 H106541

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Ersatzteilliste: spare parts list

**Probeentnahmegerät PR2, PRD2 -HF**  
**Sampling valve PR2, PRD2 (steam connection) manual**  
**DN25-125 ; 1-4 zoll / inch**

Ersatzteiliste: spare parts list					
Datum:	27.10.14	29.02.16			
Name:	Trytko	Trytko			
Gepflegt:					
SPX FLOW Germany					
>APV			RN 01.143.0		
Datum:			Blatt	9	von 10
Name:					
Gepflegt:					
<b>Probeentnahmeventil PR2, PRD2 -HF Sampling valve PR2, PRD2 (steam connection) manual DN25-125 ; 1-4 zoll / inch</b>					
pos.	Menge Quantity em	Beschreibung description	Material	DN125	5"
		material	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.
5.1	1	Schaft Shaft	1.4301	21-22-822/12 H106533	
5.2	1	Schaftspitze Shaft tip	Teflon 25%GF	15-23-808/93 H31466	
6	1	Führungsband PTFE guide strap	Turcite	08-39-078/93 H14878	
7	1	Führungsband PTFE guide strap	Turcite	08-39-162/93 H105069	
8	1	Rändelmutter Nut	Hostalen	65-58-705/93 H79569	
9	1	Scheibe Washer	1.4301	67-01-155/ H107969	
10	1	Skt. Schraube Hex. Screw	DIN EN 24017-A2-70	65-01-055/13 M6x12 H78750	
11	1	Federgehäuse Spring housing	1.4301	16-30-120/47 H105721	
12	1	Gehäuse PRD21 Housing PRD21	1 Ablaufröhr 1 drain pipe	1.4404	
13	1	Gehäuse PRD22 Housing PRD22	2 Ablaufröhr 2 drain pipes	1.4404	
		Zubehör / accessories			
13	1	Auslaufrohr Drain pipe	Leitungsdruck >5 bar Line pressure >5 bar	1.4404	08-22-710/47 H114384
14	1	Auslaufrohr Drain pipe	Leitungsdruck >5 bar Line pressure >5 bar	1.4404	08-22-712/43 H164349

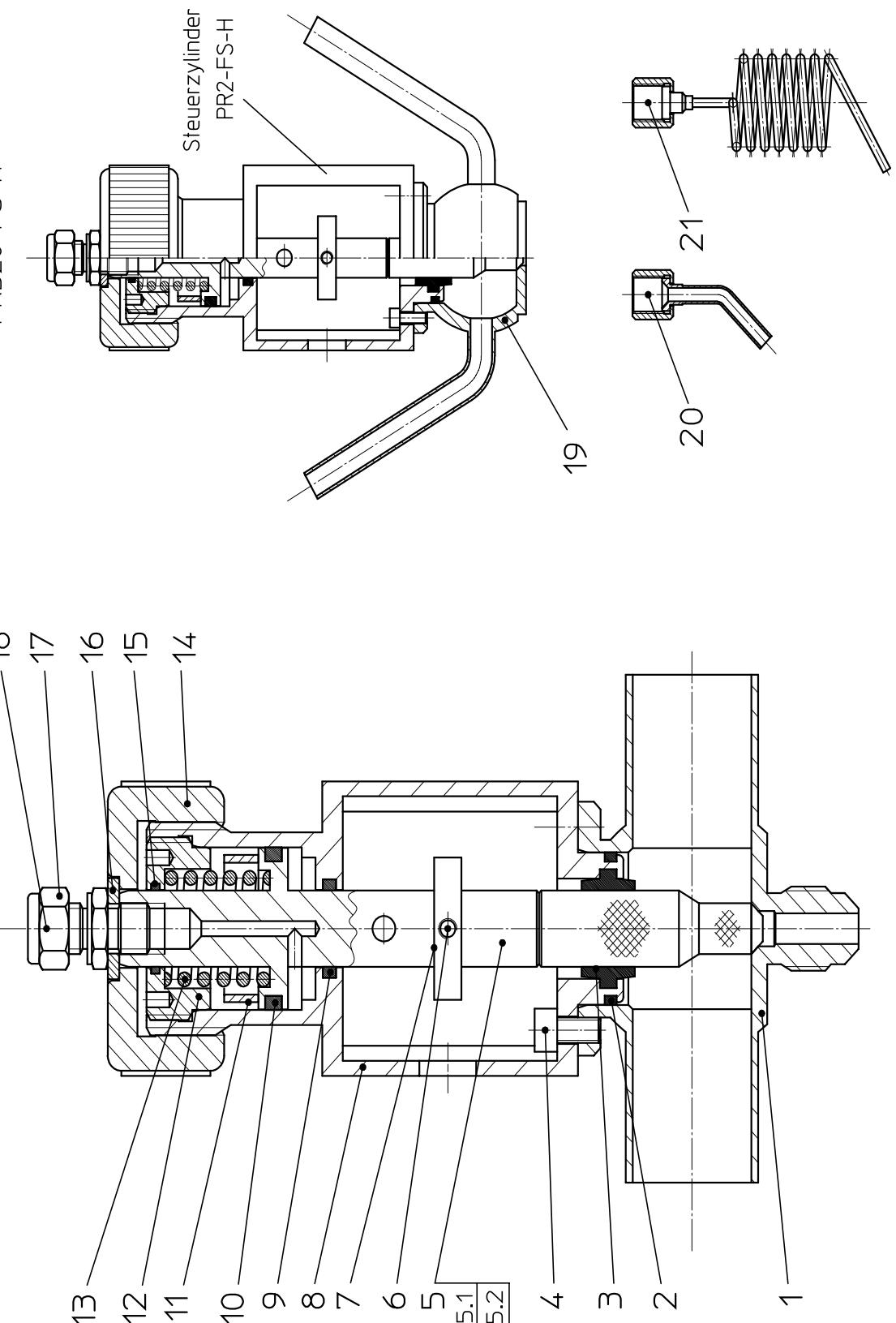
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#### Ersatzteilliste: spare parts list

### Probeentnahmventil PR2, PRD2 FS-H Sampling valve PR2, PRD2 (steam connection) pneumatic DN25-125 ; 1-4 zoll / inch

>APV		
SPX FLOW		
Germany		
	Blatt 1 von 10	
		RN 01.146-2

PRD20-FS-H



rsatzteilliste: spare parts list

Probeentnahmeventil PR2, PRD2 FS-H  
Sampling valve PR2, PRD2 (steam connection) pneumatic  
DN25-125 : 1-4 zoll / inch



SPX FLOW  
Germany

**PN 01 146-2**

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#### Ersatzteilliste: spare parts list

### Probeentnahmventil PR2, PRD2 FS-H Sampling valve PR2, PRD2 (steam connection) pneumatic DN25-125 ; 1-4 zoll / inch

				Datum:	21.10.14	29.02.16			>APV	
				Name:	Trytko	Trytko			SPX FLOW Germany	
				Geprüft:					Blatt 3 von 10	
				Datum:					<b>RN 01.146-2</b>	
				Name:						
				Geprüft:						
pos.	item number	Beschreibung description	Material material	DN25	1"	DN40	1,5"	DN50	2"	
item number	item description	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	
5.1	1	Schaft	1.4301						ref.-no.	
5.2	1	Schaftspitze Shaft tip	Teflon 25%GF H31459	15-23-800/93 H311692	15-23-809/93 H311692	15-23-802/93 H31460	15-23-810/93 H204841	15-23-803/93 H31461	15-23-811/93 H208089	
6	1	Gewindestift Threaded pin	DIN EN 27434	1.4301					ref.-no.	
7	1	Schaltiring Switching ring		1.4301					ref.-no.	
8	1	Laterne		1.4404					ref.-no.	
9	1	Yoke							ref.-no.	
9	1	O-Ring O-ring	OR 15,3x2,4	NBR					ref.-no.	
10	1	O-Ring O-ring	OR 26,2x3	NBR					ref.-no.	
11	1	Distanzrohr Distance tube		1.4301					ref.-no.	
12	1	Deckel Cover		1.4301					ref.-no.	
13	1	Druckfeder Pressure spring		1.4310					ref.-no.	
14	1	Rändelmutter Nut	G11/4	Hostalen					ref.-no.	
15	1	O-Ring O-ring	OR 15x1,5	NBR					ref.-no.	
16	1	Scheibe Washer		1.4404					ref.-no.	
17	1	Verschraubung Union	G1/8"	1.4301					ref.-no.	
18	1	Stützhülse Support sleeve		1.4031					ref.-no.	
19	1	Gehäuse PRD21 Housing PRD21	1 Ablauftrohr 1 drain pipe	1.4404	21-08-864/47 H169765				ref.-no.	

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### Ersatzteilliste: spare parts list

**Probeentnahmegerät PR2, PRD2 FS-H**  
**Sampling valve PR2, PRD2 (steam connection) pneumatic**  
**DN25-125: 1-1/4 zoll / inch**

### Ersatzteilliste: spare parts list

## Probeentnahmventil PR2, PRD2 FS-H Sampling valve PR2, PRD2 (steam connection) pneumatic DN25-125 ; 1-4 zoll / inch

				Datum:	21.10.14	29.02.16		 APV
				Name:	Trytko	Trytko		SPX FLOW Germany
				Geprüft:				Blatt 5 von 10
<b>RN 01.146-2</b>								
pos.	quantity	Beschreibung	Material	DN65	2,5"	3"	DN80	DN100
item	item	description	material	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.
1	1	Gehäuse Housing	1S	1.4404	21-08-773/07 H112950	21-08-774/47 H208493	21-08-775/47 H112952	21-08-776/47 H112954
1	1	Gehäuse Housing	1+2S	1.4404	21-08-773/07 H112950	21-08-774/47 H208493	21-08-775/47 H112952	21-08-921/47 H311333
1	1	Steuerzylinder FS-H komplett		EPDM-1.4404	15-31-674/59 H129568	15-31-675/59 H315991	15-31-675/59 H129571	15-31-697/59 H311330
1	1	Actuator steam connection complete		FPM-1.4404	15-31-674/69 H171422	15-31-695/69	15-31-675/69	15-31-697/69
1	1	Steuerzylinder FS-H komplett		HNBR-1.4404	15-31-674/29 H320161	15-31-695/29	15-31-675/29 H208193	15-31-697/29 H332262
1	1	Actuator steam connection complete		VMQ-1.4404	15-31-674/61 H208492	15-31-695/61 H208197	15-31-676/61 H208197	15-31-697/61 H208197
1	1	O-Ring O-ring	OR 25,3x2,4	EPDM			58-06-102/63 H76954	
1	1	O-Ring O-ring	OR 25,3x2,4	FPM			58-06-102/73 H76952	
2	1	O-Ring O-ring	OR 25,3x2,4	Hnbr			58-06-102/33 H207019	
1	1	O-Ring O-ring	OR 25,3x2,4	Vmq			58-06-102/53 H76953	
1	1	Schaffdichtung Shaft seal		EPDM FDA-konform			58-33-014/93 H77374	
1	1	Schaffdichtung Shaft seal		FPM FDA-konform			58-33-014/93 H77373	
3	1	Schaffdichtung Shaft seal		HNBR FDA-konform			58-33-014/93 H172192	
1	1	Schaffdichtung Shaft seal		Vmq FDA-konform			58-33-014/13 H77372	
4	3	Zyl. Schraube Cyl. Screw	DIN EN ISO 4762	1.43001	15-22-333/12 H314083	15-22-895/12 H30972	15-22-896/12 H30974	15-22-334/12 H314084
5	1	Schafft komplett		Teflon 1.4301			M5x10 H79027	

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#### Ersatzteilliste: spare parts list

### Probeentnahmventil PR2, PRD2 FS-H Sampling valve PR2, PRD2 (steam connection) pneumatic DN25-125 ; 1-4 zoll / inch

				Datum:	21.10.14	29.02.16		<b>&gt;APV</b>
				Name:	Trytko	Trytko		SPX FLOW Germany
				Geprüft:				
				Datum:				Blatt 6 von 10
				Name:				RN 01.146-2
				Geprüft:				
pos.	item number	Beschreibung description	Material material	DN65 WS-Nr. ref.-no.	2,5" WS-Nr. ref.-no.	3" WS-Nr. ref.-no.	DN80 WS-Nr. ref.-no.	DN100 WS-Nr. ref.-no.
5.1	1	Schaft Shaft	1.4301					
5.2	1	Schaftspitze Shaft tip		Teflon 25%GF H31462	15-23-804/93 H208497	15-23-812/93 H31463	15-23-805/93 H31464	15-23-807/93 H31465
6	1	Gewindestift Threaded pin	1.4301					
7	1	Schaltiring Switching ring	1.4301					
8	1	Laterne Yoke	1.4404					
9	1	O-Ring O-ring	OR 15,3x2,4 NBR					
10	1	O-Ring O-ring	OR 26,2x3 NBR					
11	1	Distanzrohr Distance tube	1.4301					
12	1	Deckel Cover	1.4301					
13	1	Druckfeder Pressure spring	1.4310					
14	1	Rändelmutter Nut	G11/4 Hostalen					
15	1	O-Ring O-ring	OR 15x1,5 NBR					
16	1	Scheibe Washer	1.4404					
17	1	Verschraubung Union	G1/8" 1.4301					
18	1	Stützhülse Support sleeve						
19	1	Gehäuse PRD21 Housing PRD21	1 Ablauftrohr 1 drain pipe 1.4404					

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## Ersatzteilliste: spare parts list

**Probeentnahmventil PR2, PRD2 FS-H**  
**Sampling valve PR2, PRD2 (steam connection) pneumatic**  
**DN25-125 : 1-1/4 zoll / inch**

Weitergabe sowie Vervielfältigung dieser Unterlage, Verwertung und Mitteilung ihres Inhalts nicht gestattet, soweit nicht schriftlich zugestanden. Verstoß verpflichtet zum Schadensersatz und kann strafrechtliche Folgen haben (Paragraph 18 UWG, Paragraph 106 UrhG). Eigentum und alle Rechte, auch für Patenterteilung und Gebrauchsmusterantragung, vorbehalten. SPX FLOW, Germany

#### Ersatzteilliste: spare parts list

### Probeentnahmventil PR2, PRD2 FS-H Sampling valve PR2, PRD2 (steam connection) pneumatic DN25-125 ; 1-4 zoll / inch

				Datum:	21.10.14	29.02.16		<b>&gt;APV</b>
				Name:	Trytko	Trytko		SPX FLOW Germany
				Geprüft:				
				Datum:				Blatt 8 von 10
				Name:				<b>RN 01.146-2</b>
				Geprüft:				
pos. Menge item				Beschreibung	Material	DN125	5"	DN150
				description	material	WS-Nr. ref.-no.	WS-Nr. ref.-no.	WS-Nr. ref.-no.
1	1	Gehäuse Housing	1S	1.4404	1.4404	21-08-778/47 H311281		
	1	Steuerzylinder FS-H	komplett	EPDM-1.4404		15-31-678/59 H207193		
	1	Actuator steam	connection complete					
	1	Steuerzylinder FS-H	komplett	FPM-1.4404		15-31-678/69		
	1	Actuator steam	connection complete					
	1	Steuerzylinder FS-H	komplett	HNBR-1.4404		15-31-678/29		
	1	Actuator steam	connection complete					
	1	O-Ring O-ring	OR 25,3x2,4	EPDM		58-06-102/63 H76954		
	1	O-Ring O-ring	OR 25,3x2,4	FPM		58-06-102/73 H76952		
2	1	O-Ring O-ring	OR 25,3x2,4	HNBR		58-06-102/33 H207019		
	1	O-Ring O-ring	OR 25,3x2,4	V/MQ		58-06-102/53 H76953		
	1	Schaffdichtung Shaft seal		EPDM FDA-konform		58-33-014/93 H77374		
	1	Schaffdichtung Shaft seal		FPM FDA-konform		58-33-014/73 H77373		
3	1	Schaffdichtung Shaft seal		HNBR FDA-konform		58-33-014/33 H172192		
	1	Schaffdichtung Shaft seal		V/MQ FDA-konform		58-33-014/13 H77372		
4	3	Zyl. Schraube Cyl. Screw	DIN EN ISO 4762	1.43001		65-06-050/13 M5x10 H79027		
5	1	Schafft komplett		Teflon		15-22-898/12 H30980		
		Shaft complete						

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#### Ersatzteilliste: spare parts list

### Probeentnahmventil PR2, PRD2 FS-H Sampling valve PR2, PRD2 (steam connection) pneumatic DN25-125 ; 1-4 zoll / inch

				Datum:	21.10.14	29.02.16			>APV	
				Name:	Trytko	Trytko			SPX Flow Technology Rosita GmbH D-59425 Unna Germany	
				Geprüft:					Blatt 9 von 10	
				Datum:					RN 01.146-2	
				Name:						
				Geprüft:						
pos.	item	Beschreibung quantity description	Material material	DN125 WS-Nr. ref.-no.	5" WS-Nr. ref.-no.	DN150 WS-Nr. ref.-no.	6" WS-Nr. ref.-no.			
5.1	1	Schaft Shaft	1.4301	15-22-934/12 H31072						
5.2	1	Schaftspitze Shaft tip		Teflon 25%GF H31466	15-23-808/93					
6	1	Gewindestift Threaded pin	1.4301		65-15-031/13 H79213					
7	1	Schaltiring Switching ring	1.4301		08-39-195/12 H132854					
8	1	Laterne Yoke	1.4404		15-40-091/47 H33794					
9	1	O-Ring O-ring	OR 15,3x2,4 OR 26,2x3	NBR H107914	58-06-052/83 H76957					
10	1	O-Ring O-ring			58-06-106/83 H76957					
11	1	Distanzrohr Distance tube		1.4301	09-89-371/12 H20238					
12	1	Deckel Cover		1.4301	15-00-713/12 H27347					
13	1	Druckfeder Pressure spring		1.4310	60-06-176/13 H78466					
14	1	Rändelmutter Nut	G11/4	Hostalen H79569	65-58-705/93					
15	1	O-Ring O-ring	OR 15x1,5	NBR H76935	58-06-056/83 H76935					
16	1	Scheibe Washer		1.4404	67-01-127/47 H79665					
17	1	Verschraubung Union	G1/8"	1.4301	08-63-032/13 H16405					
18	1	Stützhülse Support sleeve		1.4301	08-63-033/13 H16406					
19	1	Gehäuse PRD21 Housing PRD21	1 Ablaurohr 1 drain pipe	1.4404						

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Ersatzteilliste: spare parts list

**Probeentnahmeverteil PR2, PRD2 FS-H**  
**Sampling valve PR2, PRD2 (steam connection) pneumatic**  
**DN25-125 : 1-4 zoll / inch**



SPX Flow Technology Rosista GmbH  
D-59425 Unna Germany

**RN 01 146-2**



# APV DELTA PR2

SAMPLING VALVE

**SPX FLOW**

#### SPX FLOW

##### Design Center

Gottlieb-Daimler-Straße 13  
D-59439 Holzwickede, Germany  
P: (+49) (0) 2301-9186-0  
F: (+49) (0) 2301-9186-300

#### SPX FLOW

##### Production

Stanisława Jana Rolbieskiego 2  
PL - 85-862 Bydgoszcz, Poland  
P: (+48) 52 566 76 00  
F: (+48) 52 525 99 09

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