

APV DELTA PR2

SAMPLING VALVE

FORM NO.: H170787 REVISION: UK-4

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



We,

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AUTHORIZED REPRESENTATIVE: SPX Flow Europe Ltd.
(for UKCA) Building A, Compass House, Manor Royal
Crawley, RH10 9PY

declare under our sole responsibility that the

APV double seal and double seat valves of the series
SD4, SDT4, SDU4, SDMS4, SDMSU4, SDTMS4, SWcip4, DSV, DA4, DA4 DPF, D4 SL, DU4
SL, DT4 SL, DP4 SL, D4, DA3, DA3SLD, DE3, DEU3, DET3, DKR2, DKRT2, DKRH2

APV butterfly valves of the series SV1, SVS1F, SV2, SVS2F, SVL, SVSL, SVE, SVSE

APV ball valves of the series BLV1

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, UF/R4, VRA/H

and the valve manifolds installed thereof

meet the requirements of the Machinery Directive 2006/42/EC
& EN ISO 12100-2010, DIN EN ISO 14159-2008-07, DIN EN 1672-2-2009-07.

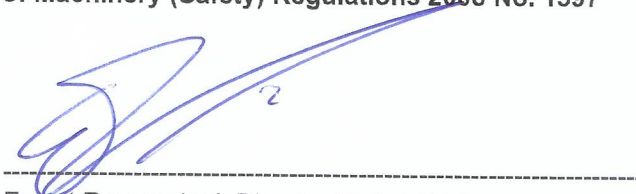
Holzwickede, November 2022



Dr.-Ing. Behdad Ariatabar, Design Center Lead - Valves

meet the requirements of the Supply of Machinery (Safety) Regulations 2008 No. 1597
& BS harmonized standards.

Crawley, November 2022



Ewout Roozendaal, Director Global Pricing

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1. General Terms

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.

2. Safety Instructions



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.

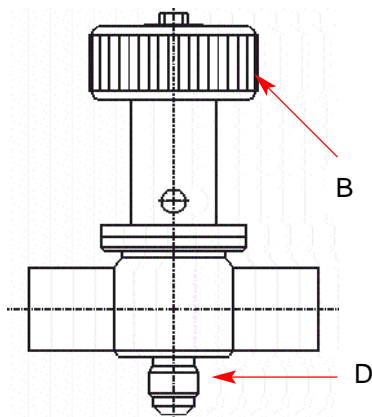
3. Intended Use

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.

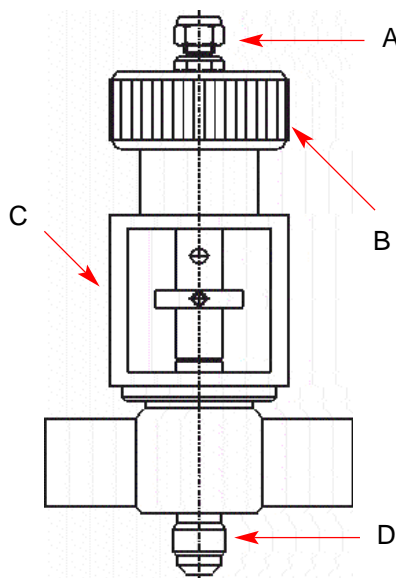
4. Mode of Operation

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.

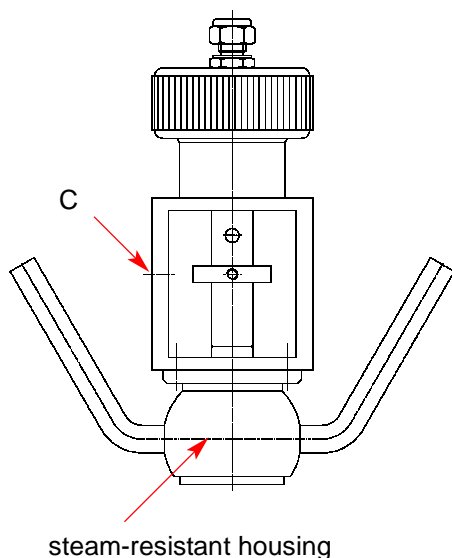
5. Auxiliary Equipment

* 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

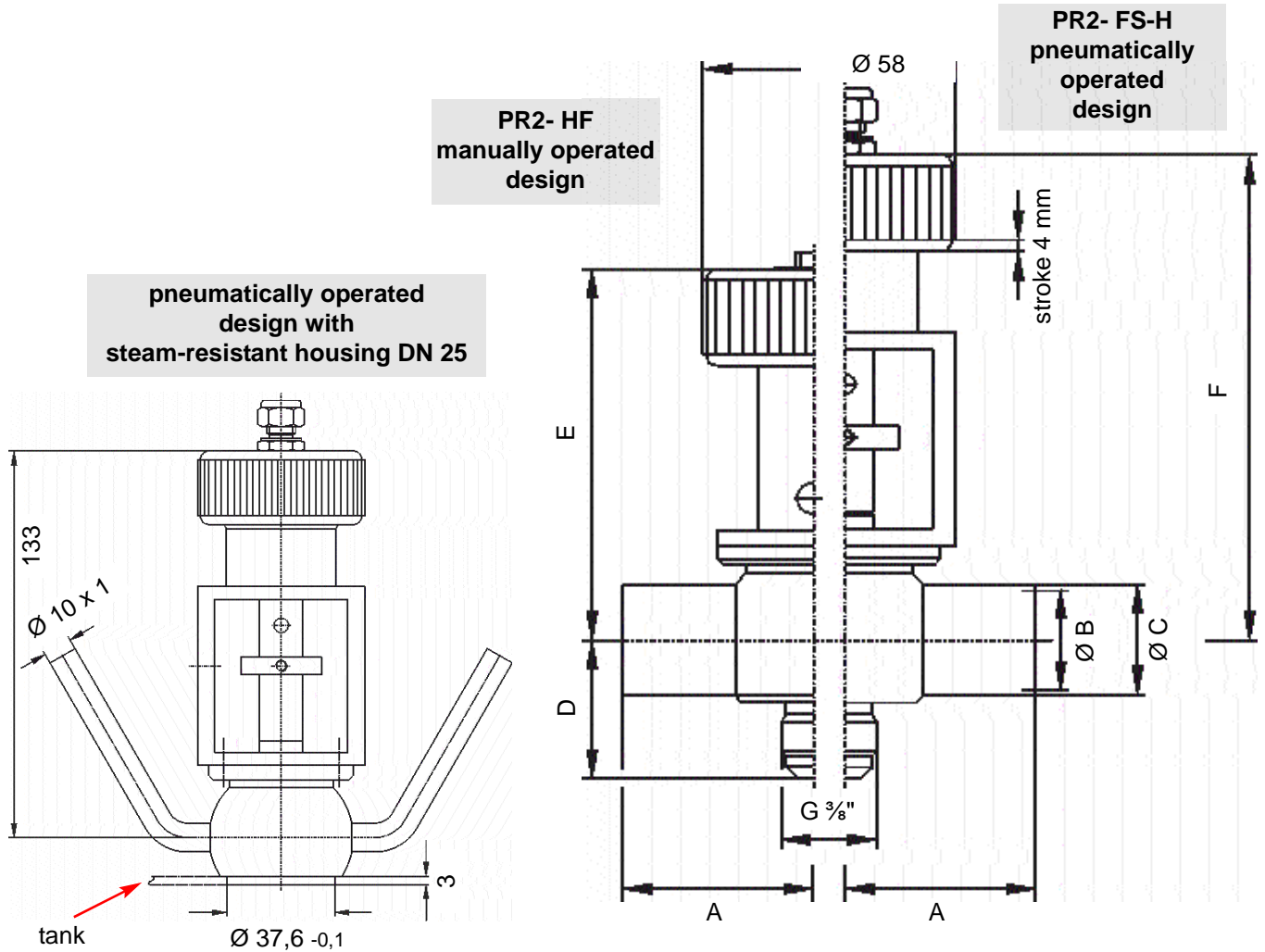
(600 g /tin - ref.-No. 000 70-01-017/93; H147380)

(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

10. Materials

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

11. Technical Data

11.1. General data

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

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 m³
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/m³

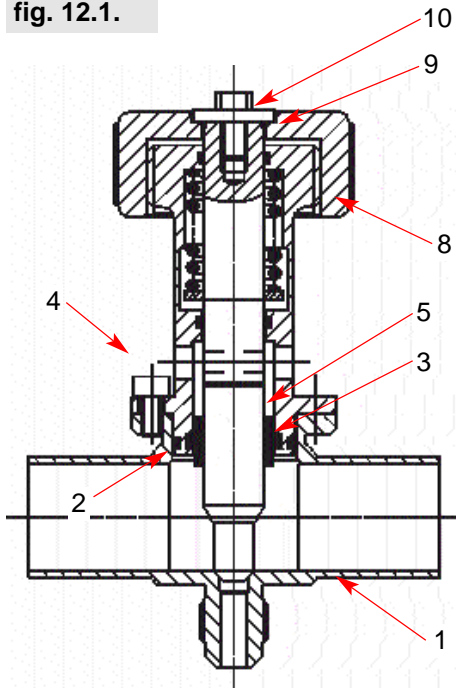
**The oil applied must be compatible with Polyurethane
elastomer materials.**

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

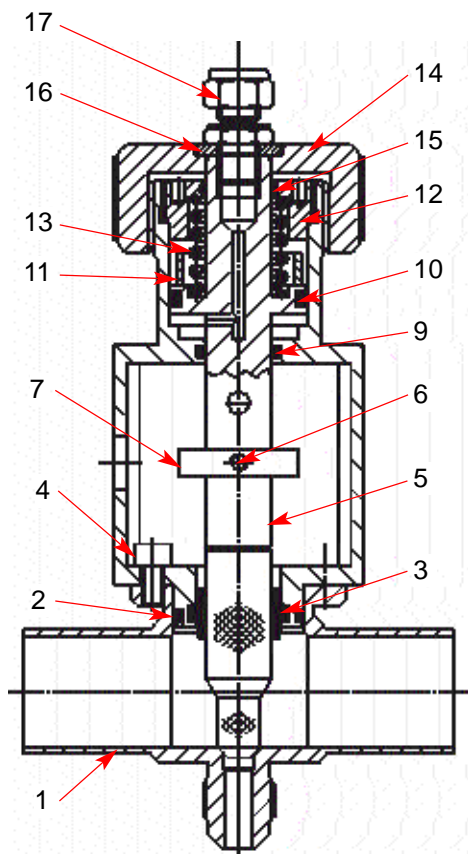
1. Press the slightly greased shaft seal (3) into the groove of the spring housing.
2. Place the PTFE shaft tip (5.2) on the metal part (5.1) and lock it into place.
3. Push the valve shaft (5) with the metal part to the front through the shaft seal into the spring housing.
4. Insert a small screw driver 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**.

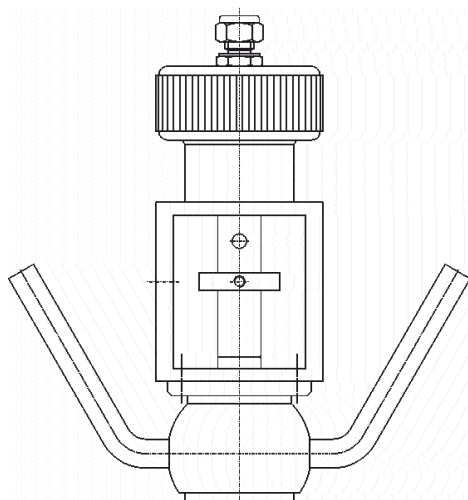
fig. 13.1.



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

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

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.

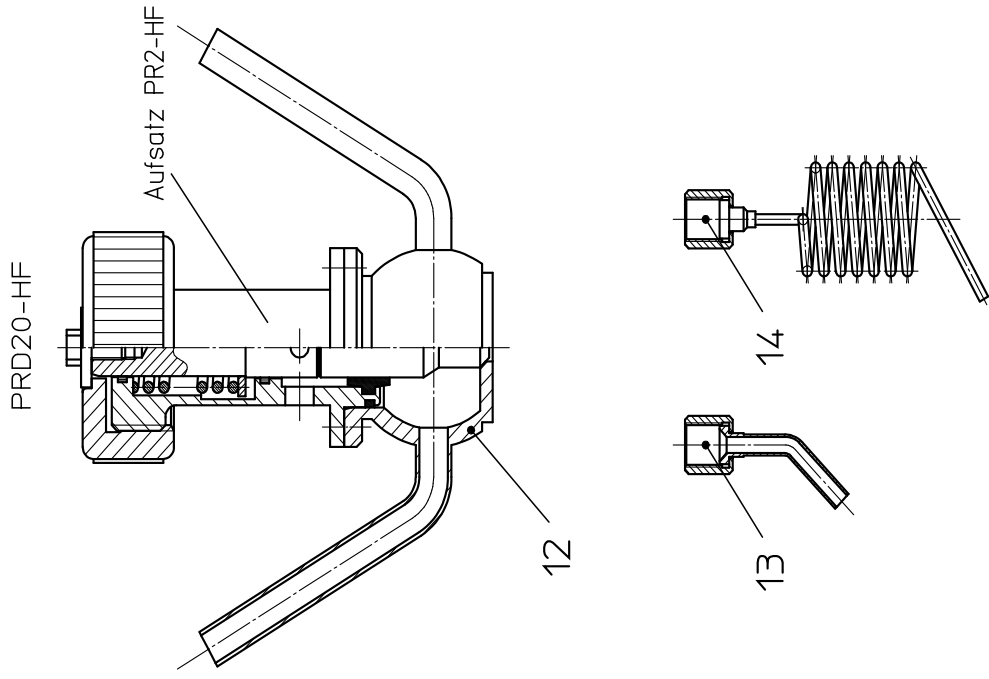
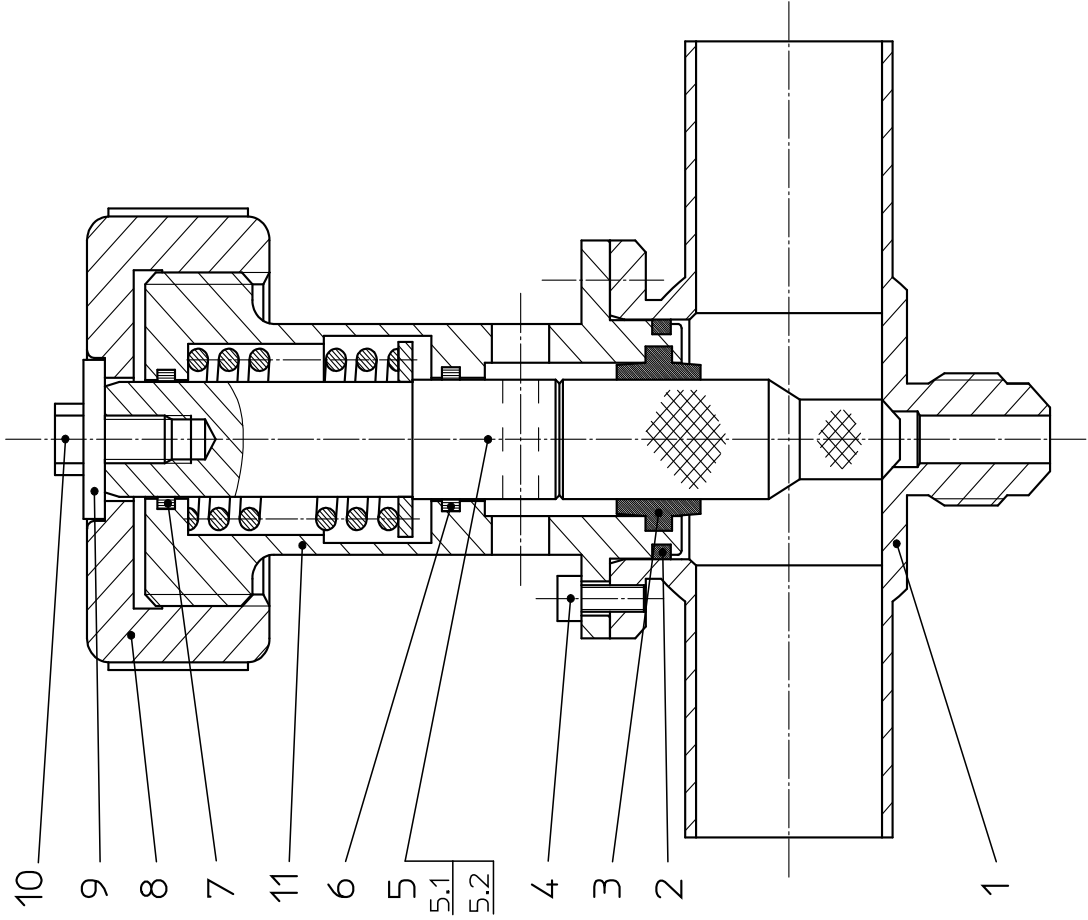
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Ersatzteilliste: spare parts list

Probenentnahmeventil PR2, PRD2 -HF Sampling valve PR2, PRD2 (steam connection) manual DN25-125 ; 1-4 Zoll / inch

Datum: 27.10.14 29.02.16
Name: Trytko Trytko
Geprüft:


Datum: 1 von 10
Name: RN 01.143.0
Geprüft:



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
Name:	Trytko	Trytko
Geprüft:		
Datum:		
Name:		
Geprüft:		
Blatt 5 von 10		
RN 01.143.0		

	
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pos. item	Menge quantity	Beschreibung description	Material	DN65	2,5"	3"	DN80	DN100	4"
			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	1	Gehäuse Housing 1S	1.4404						
	1	Gehäuse Housing 1+2S	1.4404	21-08-773/07 H112950	21-08-920/47 H208493	21-08-774/47 H112952	21-08-775/47 H112954	21-08-776/47 H112959	21-08-921/47 H311333
	1	Aufsatz PR2-HF	EPDM-1.4404	15-27-489/59 H105488	15-27-514/59 H312483	15-27-564/59 H105491	15-27-539/59 H105489	15-27-639/59 H105492	15-27-664/59 H315750
	1	Insert sampling valve manual	FPM-1.4404	15-27-489/69 H156094	15-27-514/69 H331559	15-27-564/69 H331560	15-27-539/69	15-27-639/69	15-27-664/69
	1	Aufsatz PR2-HF	HNBR-1.4404	15-27-489/29 H323723	15-27-514/29	15-27-564/29 H207976	15-27-539/29	15-27-639/29	15-27-664/29
	1	Insert sampling valve manual	VMQ-1.4404	15-27-489/61 H131733	15-27-514/61	15-27-564/61	15-27-539/61	15-27-639/61	15-27-664/61
2	1	O-Ring OR 25,3x2,4	EPDM						
	1	O-Ring OR 25,3x2,4	FPM						
	1	O-Ring OR 25,3x2,4	HNBR						
	1	O-Ring OR 25,3x2,4	VMQ						
	1	Schaftdichtung Shaft seal	EPDM FDA-konform						
	1	Schaftdichtung Shaft seal	FPM FDA-konform						
3	1	Schaftdichtung Shaft seal	HNBR FDA-konform						
	1	Schaftdichtung Shaft seal	VMQ FDA-konform						
	3	Zyl. Schraube Cyl. Screw DIN EN ISO 4762	1.43001						
5	1	Schaft komplett Shaft complete	Teflon 1.4301	21-22-843/12 H106537	21-22-832/12 H312484	21-22-844/12 H106538	21-22-845/12 H106539	21-22-846/12 H106540	21-22-834/12 H314079

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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
Name:	Trytko	Trytko
Geprüft:		
Datum:		
Name:		
Geprüft:		

Blatt 6 von 10	
RN 01.143.0	




pos. item	Menge quantity	Beschreibung description	Material	DN65	2.5"	3"	DN80	DN100	4"
				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 Shaft	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
6	1	Führungsband PTFE guide strap	Turcite			21-22-821/12 H106532			
7	1	Führungsband PTFE guide strap	Turcite			08-39-078/93 H14878			
8	1	Rändelmutter Nut	Hostalen			08-39-162/93 H105069			
9	1	Scheibe Washer	1.4301			65-58-705/93 H79569			
10	1	Skt. Schraube Hex. Screw	1.4301			67-01-176/17 H107969			
11	1	Federgehäuse Spring housing	1.4404			65-01-055/13 M6x12 H78750			
12	1	Gehäuse PRD21 Housing PRD21	1.4404			16-30-120/47 H105721			
	1	Gehäuse PRD22 Housing PRD22	1.4404						
		Zubehör / accessories							
13	1	Auslaufrohr Drain pipe	1.4404			08-22-710/47 H114384			
14	1	Auslaufrohr Drain pipe	1.4404			08-22-712/43 H164349			

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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
Name:	Trytko	Trytko
Geprüft:		
Datum:		
Name:		
Geprüft:		

	
Blatt	8 von 10
RN 01.143.0	

pos. item	Menge quantity	Beschreibung description	Material	DN125	5"	6"	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	1	Gehäuse Housing	1.4404						
	1	Gehäuse Housing	1.4404	21-08-778/47 H311281					
2	1	Aufsatz PR2-HF Insert sampling valve manual	EPDM-1.4404	15-27-689/59 H105493					
	1	Aufsatz PR2-HF Insert sampling valve manual	FPM-1.4404	15-27-6489/69					
	1	Aufsatz PR2-HF Insert sampling valve manual	HNBR-1.4404	15-27-689/29					
	1	Aufsatz PR2-HF Insert sampling valve manual	VMQ-1.4404	15-27-689/61					
	1	O-Ring O-ring	EPDM	58-06-102/63 H76954					
	1	O-Ring O-ring	FPM	58-06-102/73 H76952					
3	1	O-Ring O-ring	HNBR	58-06-102/33 H207019					
	1	O-Ring O-ring	VMQ	58-06-102/53 H76953					
4	1	Schaftdichtung Shaft seal	EPDM	58-33-014/93 H77374					
	1	Schaftdichtung Shaft seal	FPM	58-33-014/73 H77373					
	1	Schaftdichtung Shaft seal	HNBR	58-33-014/33 H172192					
5	1	Schaftdichtung Shaft seal	VMQ	58-33-014/13 H77372					
	3	Zyl. Schraube Cyl. Screw	1.43001	65-06-050/13 M5x10 H79027					
6	1	Schaft komplett Shaft complete	Teflon	1.4301					
	1	Schaft komplett Shaft complete	1.4301	21-22-847/12 H106541					

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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
Name:	Trytko	Trytko
Geprüft:		
Datum:		
Name:		
Geprüft:		

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RN 01.143.0			



pos. item	Menge quantity	Beschreibung description	Material	DN125	5"	6"	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 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	1.4301	65-01-055/13 M6x12 H78750					
11	1	Federgehäuse Spring housing	1.4404	16-30-120/47 H105721					
12	1	Gehäuse PRD21 Housing PRD21	1.4404						
	1	Gehäuse PRD22 Housing PRD22	1.4404						
		Zubehör / accessories							
13	1	Auslaufrohr Drain pipe	1.4404	08-22-710/47 H114384					
14	1	Auslaufrohr Drain pipe	1.4404	08-22-712/43 H164349					

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Ersatzteilliste: spare parts list

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

Datum: 21.10.14
Name: Trytko
Geprüft: Trytko

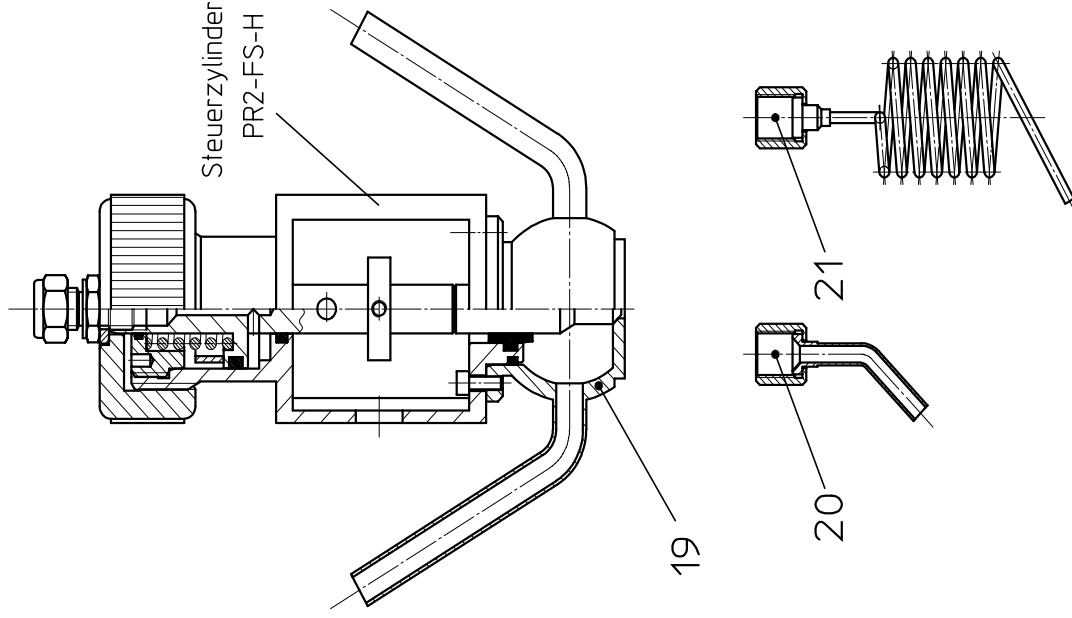
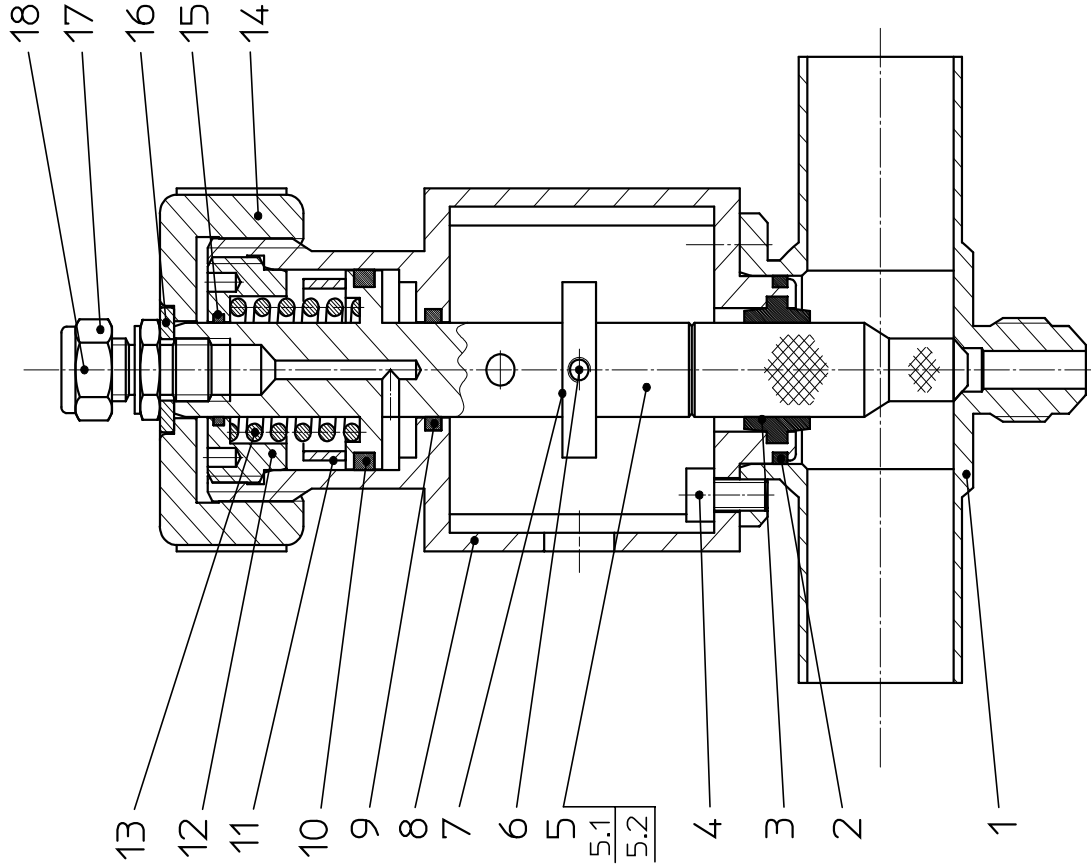
Datum: 29.02.16
Name: Trytko
Geprüft: Trytko

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PRD20-FS-H



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Ersatzteilliste: spare parts list

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

Datum:	21.10.14	29.02.16
Name:	Trytko	Trytko
Geprüft:		

Datum:		
Name:		
Geprüft:		

			
SPX FLOW Germany			
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pos. item	Menge quantity	Beschreibung description	Material	DN25	1"	DN40	1,5"	DN50	2"
			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	1	Gehäuse Housing	1.4404	21-08-787/47 H122256	21-08-892/47 H161921				
	1	Gehäuse Housing	1.4404	21-08-769/07 H50647	21-08-164/47 H311685	21-08-771/47 H112880	21-08-837/47 H204834	21-08-772/47 H50661	21-08-166/47 H174660
	1	Steuerzylinder FS-H komplett Actuator steam connection complete	EPDM-1.4404	15-31-670/59 H32310	15-31-692/59 H323685	15-31-672/59 H129566	15-31-693/59 H208195	15-31-673/59 H129567	15-31-694/59 H208196
	1	Steuerzylinder FS-H komplett Actuator steam connection complete	FPM-1.4404	15-31-670/69 H323177	15-31-692/69	15-31-672/69	15-31-693/69	15-31-673/69 H155719	15-31-694/69
	1	Steuerzylinder FS-H komplett Actuator steam connection complete	HNBR-1.4404	15-31-670/29 H207453	15-31-692/29	15-31-672/29 H325575	15-31-693/29 H208206	15-31-673/29 H311969	15-31-694/29 H208207
	1	Steuerzylinder FS-H komplett Actuator steam connection complete	VMQ-1.4404	15-31-670/61 H128686	15-31-692/61	15-31-672/61	15-31-693/61	15-31-673/61	15-31-694/61
	1	O-Ring O-ring	EPDM	OR 25,3x2,4			58-06-102/63 H76954		
	1	O-Ring O-ring	FPM	OR 25,3x2,4			58-06-102/73 H76952		
2	1	O-Ring O-ring	HNBR	OR 25,3x2,4			58-06-102/33 H207019		
	1	O-Ring O-ring	VMQ	OR 25,3x2,4			58-06-102/53 H76953		
	1	Schafldichtung Shaft seal	EPDM				58-33-014/93 H77374		
	1	Schafldichtung Shaft seal	FDA-konform				58-33-014/73 H77373		
3	1	Schafldichtung Shaft seal	HNBR				58-33-014/33 H172192		
	1	Schafldichtung Shaft seal	FDA-konform				58-33-014/13 H77372		
4	3	Zyl. Schraube Cyl. Screw	1.43001				65-06-050/13 M5x10 H79027		
5	1	Schaft komplett Shaft complete	Teflon 1.4301	15-22-890/12 H30966	15-22-330/12 H314080	15-22-892/12 H30968	15-22-331/12 H314081	15-22-893/12 H30970	15-22-332/12 H314082

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Ersatzteilliste: spare parts list

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

pos. item	Menge quantity	Beschreibung description	Material	DN25	1"	DN40	1,5"	DN50	2"	21.10.14		29.02.16	
										WS-Nr. ref.-no.	WS-Nr. ref.-no.	Trytko	Trytko
5.1	1	Schaft Shaft	1.4301										
5.2	1	Schaftspitze Shaft tip	Teflon 25%GF	15-23-800/93 H31459	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	Blatt 3 von 10			
6	1	Gewindestift Threaded pin	1.4301							RN 01.146-2			
7	1	Schaltring Switching ring	1.4301							15-22-932/12 H31068			
8	1	Laterne Yoke	1.4404							65-15-031/13 M4x6 H79216			
9	1	O-Ring O-ring	NBR	OR 15,3x2,4						08-39-195/12 H132854			
10	1	O-Ring O-ring	NBR	OR 26,2x3						15-40-091/47 H33794			
11	1	Distanzrohr Distance tube	1.4301							58-06-052/83 H76935			
12	1	Deckel Cover	1.4301							58-06-106/83 H76957			
13	1	Druckfeder Pressure spring	1.4310							09-89-371/12 H20238			
14	1	Rändelmutter Nut	Hostalen	G11/4						15-00713/12 H27347			
15	1	O-Ring O-ring	NBR	OR 15x1,5						60-06-176/13 H78466			
16	1	Scheibe Washer	1.4404							65-58-705/93 H79569			
17	1	Verschraubung Union	1.4301	G1/8"						58-06-056/83 H76935			
18	1	Stützhülse Support sleeve	1.4031							67-01-127/47 H79665			
19	1	Gehäuse PRD21 Housing PRD21	1.4404	1 Ablaurrohr 1 drain pipe						08-63-032/13 H16405			
										08-63-033/13 H16406			
										21-08-864/47 H169765			



Ersatzteilliste: spare parts list

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

Datum:	21.10.14	29.02.16
Name:	Trytko	Trytko
Geprüft:		
Datum:		
Name:		
Geprüft:		

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pos. item	Menge quantity	Beschreibung description	Material	DN65	2,5"	3"	DN80	DN100	4"
				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	1	Gehäuse Housing 1S	1.4404						
	1	Gehäuse Housing 1+2S	1.4404	21-08-773/07 H112950	21-08-774/47 H112952	21-08-775/47 H112954	21-08-776/47 H112959	21-08-921/47 H311333	
	1	Steuerzylinder FS-H komplett	EPDM-1.4404	15-31-674/59 H129568	15-31-675/59 H315991	15-31-676/59 H129571	15-31-677/59 H129570	15-31-697/59 H311330	
	1	Actuator steam connection complete	FPM-1.4404	15-31-674/69 H171422	15-31-695/69	15-31-676/69	15-31-677/69	15-31-697/69	
	1	Steuerzylinder FS-H komplett	HNBR-1.4404	15-31-674/29 H320161	15-31-695/29	15-31-676/29	15-31-677/29	15-31-697/29	
	1	Actuator steam connection complete	VMQ-1.4404	15-31-674/61	15-31-695/61 H208492	15-31-676/61	15-31-677/61	15-31-697/61	
	1	O-Ring OR 25,3x2,4	EPDM		58-06-102/63 H76954				
	1	O-Ring OR 25,3x2,4	FPM		58-06-102/73 H76952				
2	1	O-Ring OR 25,3x2,4	HNBR		58-06-102/33 H207019				
	1	O-Ring OR 25,3x2,4	VMQ		58-06-102/53 H76953				
	1	Schafldichtung Shaft seal	EPDM		58-33-014/93 H77374				
	1	Schafldichtung Shaft seal	FDA-konform		58-33-014/73 H77373				
3	1	Schafldichtung Shaft seal	HNBR		58-33-014/33 H172192				
	1	Schafldichtung Shaft seal	FDA-konform		58-33-014/13 H77372				
4	3	Zyl. Schraube Cyl. Screw	1.43001		65-06-050/13 M5x10 H79027				
5	1	Schaft komplett Shaft complete	Teflon 1.4301	15-22-894/12 H30972	15-22-333/12 H314083	15-22-895/12 H30974	15-22-896/12 H30976	15-22-897/12 H30978	15-22-334/12 H314084

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Ersatzteilliste: spare parts list

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

Datum:	21.10.14	29.02.16
Name:	Trytko	Trytko
Geprüft:		
Datum:		
Name:		
Geprüft:		

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		RN 01.146-2


pos. item	Menge quantity	Beschreibung description	Material	DN125	5"	DN150	6"	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.			
1	1	Gehäuse Housing	1.4404							
	1	Gehäuse Housing	1.4404	21-08-778/47 H311281						
2	1	Steuerzylinder FS-H komplett	EPDM-1.4404	15-31-678/59 H207193						
	1	Actuator steam connection complete	FPM-1.4404	15-31-678/69						
	1	Steuerzylinder FS-H komplett	HNBR-1.4404	15-31-678/29						
	1	Actuator steam connection complete	VMQ-1.4404	15-31-678/61						
	1	Steuerzylinder FS-H komplett	EPDM	58-06-102/63 H76954						
	1	Actuator steam connection complete	FPM	58-06-102/73 H76952						
3	1	O-Ring O-ring	HNBR	58-06-102/33 H207019						
	1	O-Ring O-ring	VMQ	58-06-102/53 H76953						
	1	Schafldichtung Shaft seal	EPDM FDA-konform	58-33-014/93 H77374						
	1	Schafldichtung Shaft seal	FPM FDA-konform	58-33-014/73 H77373						
4	1	Schafldichtung Shaft seal	HNBR FDA-konform	58-33-014/33 H172192						
	1	Schafldichtung Shaft seal	VMQ FDA-konform	58-33-014/13 H77372						
5	3	Zyl. Schraube Cyl. Screw	1.43001	65-06-050/13 M5x10 H79027						
	1	Schaft komplett Shaft complete	Teflon 1.4301	15-22-898/12 H30980						

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Ersatzteilliste: spare parts list

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

Datum:	21.10.14	29.02.16
Name:	Trytko	Trytko
Geprüft:		
Datum:		
Name:		
Geprüft:		

	
SPX Flow Technology Rosista GmbH D-59425, Umma Germany	
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RN 01.146-2	

pos. item	Menge quantity	Beschreibung description	Material	DN125		5"		6"	
				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 Shaft	1.4301	15-22-934/12 H31072					
5.2	1	Schaftspitze Shaft tip	Teflon 25%GF	15-23-808/93 H31466					
6	1	Gewindestift Threaded pin	1.4301	65-15-031/13 H79213					
7	1	Schaltring 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	NBR	58-06-052/83 H107914					
10	1	O-Ring O-ring	NBR	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	Hostalen	65-58-705/93 H79569					
15	1	O-Ring O-ring	NBR	58-06-056/83 H76935					
16	1	Scheibe Washer	1.4404	67-01-127/47 H79665					
17	1	Verschraubung Union	1.4301	08-63-032/13 H16405					
18	1	Stützhülse Support sleeve	1.4031	08-63-033/13 H16406					
19	1	Gehäuse PRD21 Housing PRD21	1.4404						

APV DELTA PR2

SAMPLING VALVE

SPXFLOW

SPX FLOW

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