

***NOVE H is a pneumatically controlled sampler designed for sampling high-consistency wood pulps and/or pulps containing knots and shives. NOVE H can be used for all pulp types, in all applications in the pulp and paper manufacturing processes, also in the digester blow line.***

## TECHNICAL SPECIFICATIONS

### Types and materials

- Refer to the Specification Table.

### Applicability

- For pulps containing knots, shives, strings and other solid particles: 0–18 % Cs

### Process pressure

- Minimum – refer to Figure 1
- Maximum 25 bar (350 psi)

### Process temperature

- Max. 200°C (392°F)

### Actuator operating pressure

- 5–8 bar (71–114 psi)
- Recommended: 6 bar (85 psi), corresponds to plunger opening/closing force 3000 N
- A spring keeps the valve closed when air supply is cut off

### Process couplings

#### NOVE H S xxx 1

- Clamp-mounted process coupling 1: normal use.

#### NOVE H S xxx 2

- Clamp-mounted process coupling 2: for especially abrasive applications, e.g. digester blow line.

The supplied items are shown in dimensional drawings.

### Materials

#### \* Parts in contact with process medium

- NOVE Hx2xx: AISI 316L and acid-proof special steel.
- NOVE H x3xx: Hastelloy C276 and titanium (AISI 316L, only in contact with process medium during sampling).
- MOVE H x6xxx: titanium

#### \* Other parts

- AISI 316L, aluminium alloy and structural steel with protective paint

## SPECIFICATION TABLE

### Types

- S Installation on clamp-mounted coupling
- F Flange-mounted

### Sampler material

- 2 AISI 316L
- 3 Hastelloy C276
- 6 Titanium

### Process coupling material

- 2 AISI 316L
- 3 Hastelloy C276
- 6 Titanium
- 0 Process coupling not supplied

### Application point

- 1 Standard installations, Process coupling 1
- 2 Blow line installation, Process coupling 2

### Pressure switch assembly (Switch)

### NOTE:

Use MUKI H option for safe, easy, accurate sampling.

Recommended types (for other variations please contact your sales representative)

NOVEH S22B1 AIS1316L

NOVEH S33B2 (HC-276)

NOVEH S22B2 AIS1316L

NOVEH S66B1 (Titanium)

NOVEH S33B1 HC-276

NOVEH S66B2 (Titanium)



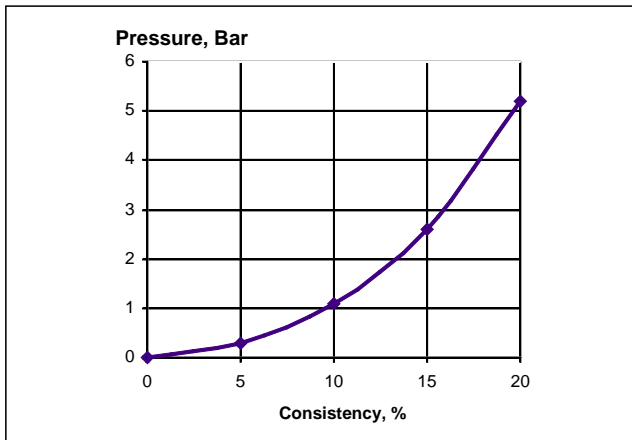


Figure 1 – Minimum required process pressure.

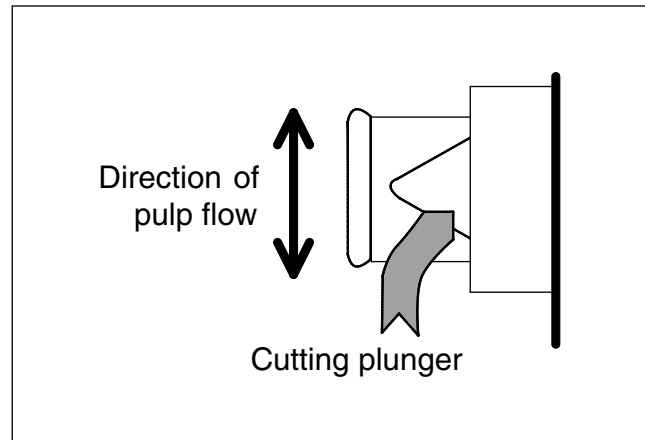


Figure 2 – The inlet opening of the plunger can be adjusted.

## INSTALLATION

**NOTE:** Only a qualified technician may install the device!

Install NOVE H at a point that will give as representative a sample as possible (not in dead zone of flow).

Weld the NOVE H process coupling to a hole in the process pipe. Refer to figures 3, 4 and 5 and the dimensional drawings.

Mount NOVE H with its seals on the coupling and connect as shown in figure 5.

Mount the compressed air control valve and the warning sign supplied with the sampler side by side on a wall near the sampling point.

**NOTE:** If sample temperature is over 100°C (212°F) or if the pulp contains hazardous chemicals, the control valve and warning sign must be mounted at least 3 m from the sampling point. The warning sign must be placed at a location where everyone moving in the area can see it!

Build a flat-bottomed receiver basin for overflowing pulp under the sample discharge tube, and install a discharge pipe from the bottom of the basin to sewer.

Use MUKI H option for safe, easy and accurate sampling.

## CONNECTIONS

- Water flushing connection: R3/4 (sampler should always be flushed after taking a sample)
- Actuator connections: R1/8 (2 connectors)
- Actuator control valve connections: R1/8 (5 connections)
- Sample discharge tube connection: clamp mounting + R2 thread.

### Weight

- NOVE H S 7.5 kg (17 lbs)

### Patents

- FI 84665
- F187115

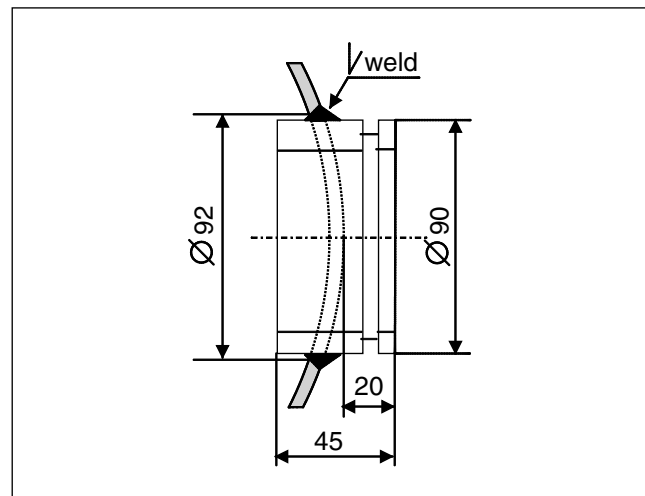


Figure 3 – Installation of NOVE H Process coupling 1.

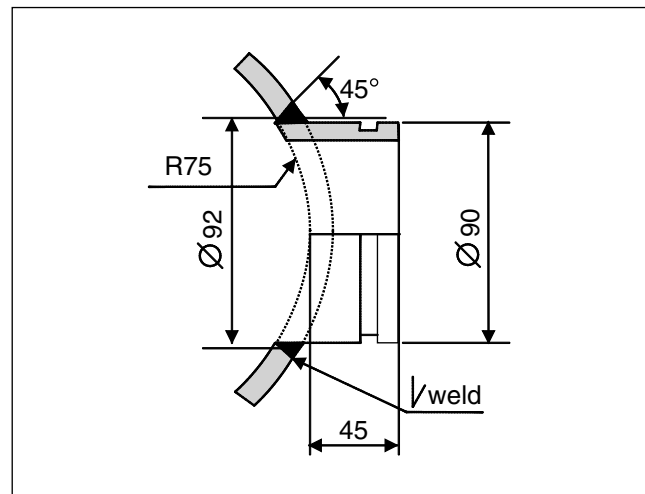
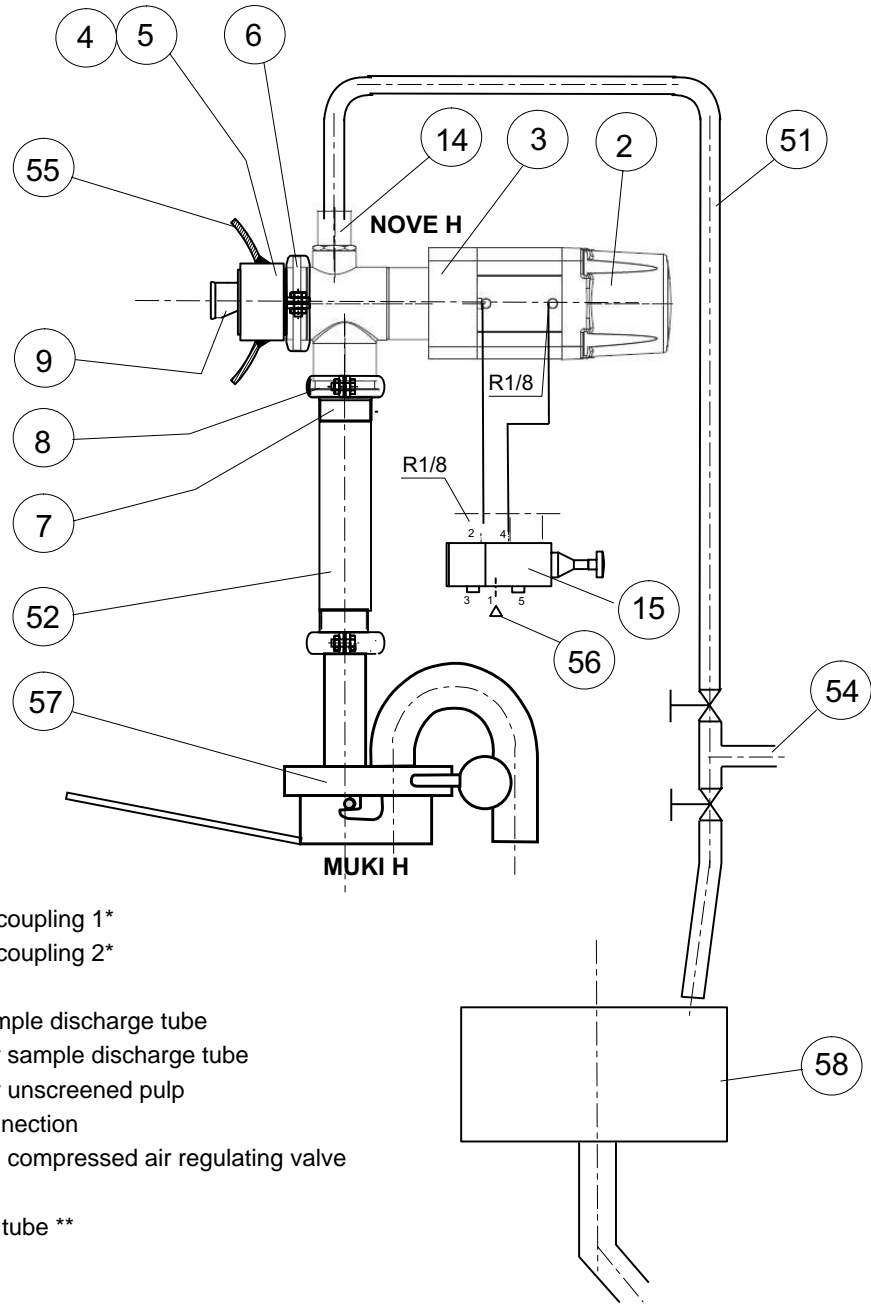


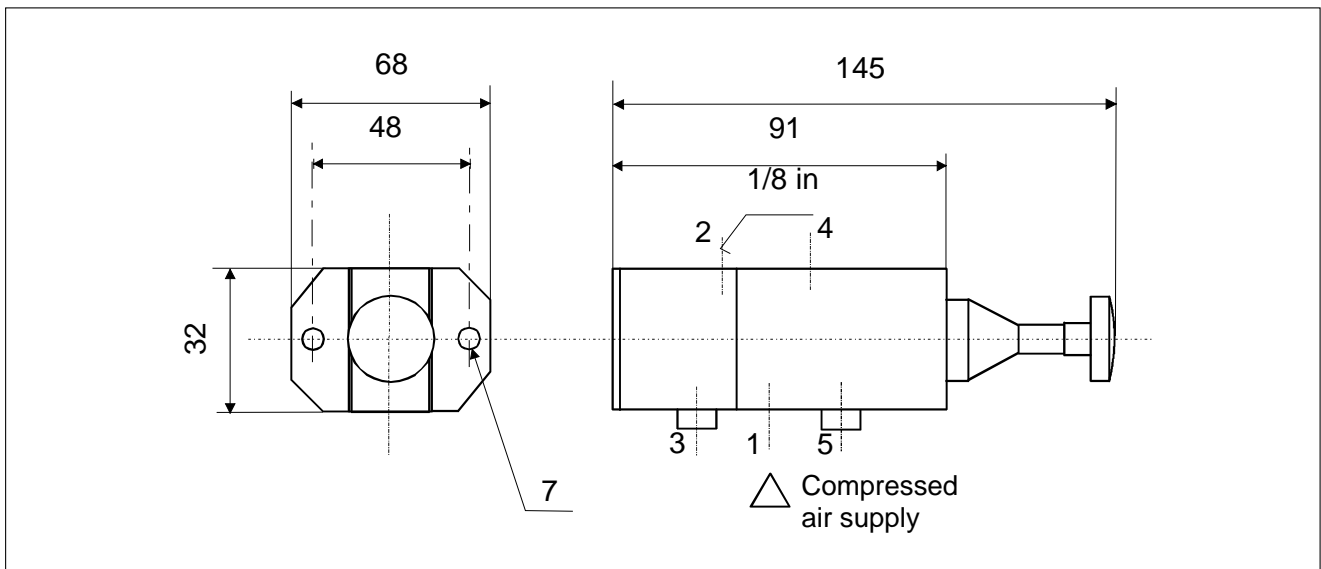
Figure 4 – Installation of NOVE H Process coupling 2.



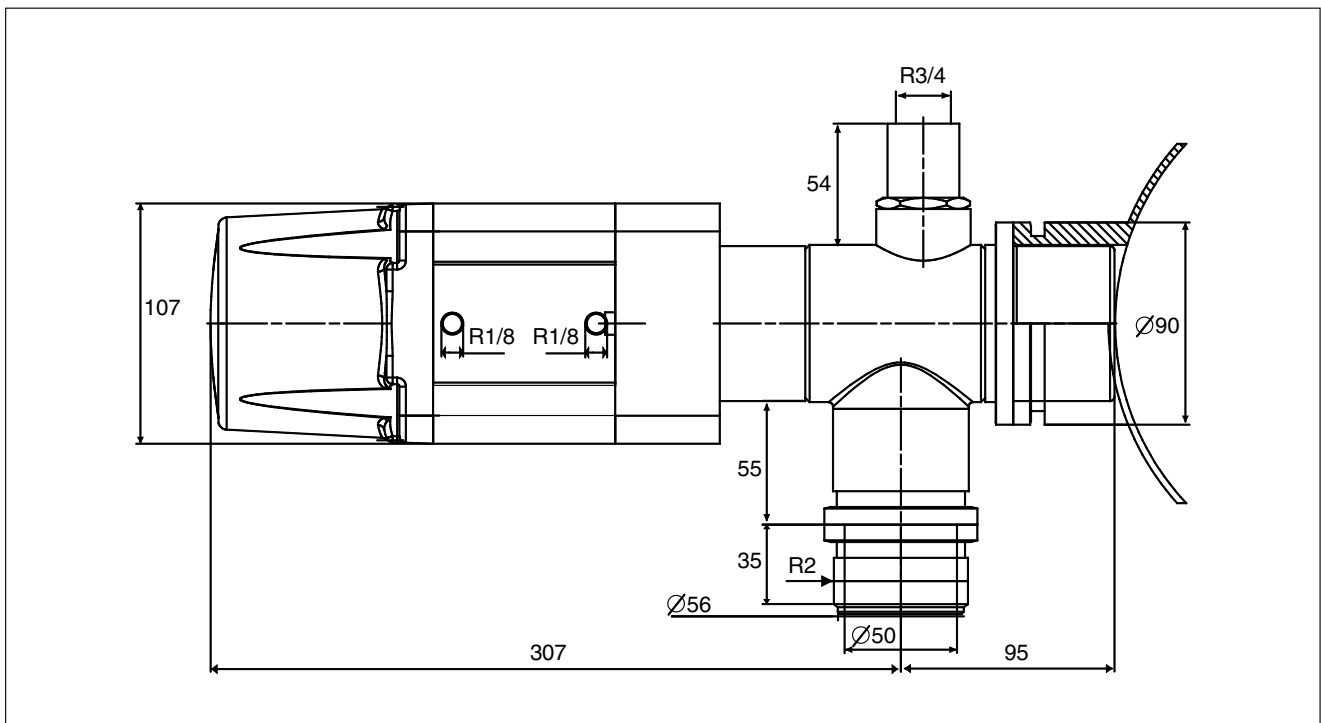
- ((1)) NOVE H
- (2) Actuator
- (3) Cover
- (4) NOVE H Process coupling 1\*
- (5) NOVE H Process coupling 2\*
- (6) Mounting collar
- (7) Connection for sample discharge tube
- (8) Mounting collar for sample discharge tube
- (9) Cutting plunger for unscreened pulp
- (14) Water flushing connection
- (15) Manually operated compressed air regulating valve
- (51) Water pipe \*\*
- (52) Sample discharge tube \*\*
- (54) Water supply \*\*
- (55) Process pipe \*\*
- (56) Pressured air supply \*\*
- (57) MUKI H Sample receptacle. Option.  
See document G 511
- (58) Overflow funnel \*\*
- (59) Pressure switch assy. Option

\* Optional process couplings  
\*\* Not included in delivery

**Figure 5** – Installation of NOVE H.



**Figure 6** – Dimensions and connections of air regulating valve.



**Figure 7** – Dimensions for NOVE HSxxx. Process coupling, seal and mountings are supplied with sampler.