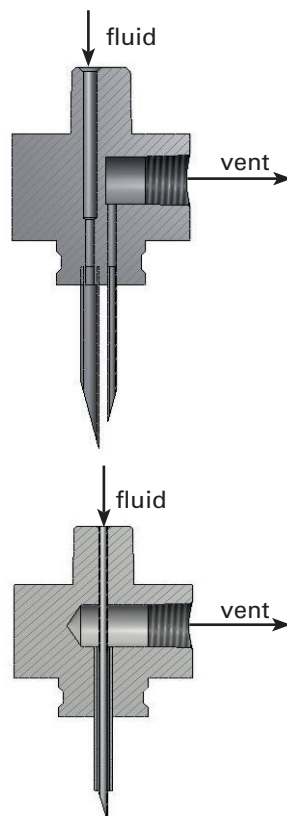


The needle assembly is the foundation of the DOPAK sampler for liquids. It is a housing with two integrated needles. The sample fluid enters through one needle (process) and displaced gas / vapour leaves through the other (vent).

The vent connection prevents a buildup of pressure in the sample container. The vent line should remain open at all times therefore placing valves or any other obstructions in the vent outlet should be avoided. To prevent any unwanted backflow of the waste system when the sampler is not in use a check valve could be installed.

## 1 MODELS

### VTO (Vent To Outlet)



#### VTO-standard

The VTO design provides a fitting connection to the vent (needle). In this way the vent can lead to a waste system, wet collector, scrubber, activated carbon canister, or back to the process if the process pressure allows.

#### VTO-NBNF (No Bottle No Flow)

The VTO-NBNF is based on the conventional Dopak VTO needle assembly. The VTO-NBNF offers additional safety features for all Dopak liquid samplers.

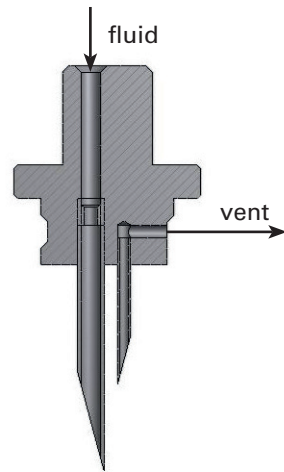
**For more information please refer to our sheet: Dopak Component sheet: VTO-No Bottle No Flow (NBNF).**

#### Concentric needle assembly

With this design the process needle is inside the vent needle. As the two needles are using lesser surface of the septum, the sealing of the septum is optimal. This rigid design is a major advantage when taking smaller samples or when needles from a softer material are manufactured.



## VTA (Vent To Atmosphere)



The VTA design allows the gas / vapour from the bottle to be vented directly to the atmosphere.

## 2 SPECIFICATIONS

Part no. VTO models	Part no. VTA models	Process/Vent ID		Sealing capacity		
		process	vent	A	B	C
1300800	1300000	0,85	0,85	A	B	C
1300900	1300100	1,35	1,35	A	B	C
1301000	1300200	2,00	1,35	A	B	
1301100	1300300	2,00	2,00	A	B	
1301200	1300400	3,00	1,35	A	B	
1301300	1300500	3,00	3,00	A		
1301400	1300600	4,00	1,35	A		
1301500	1300700	6,00	1,35	A		

All standard materiaal SS316 (L)

To ensure resealing of the septum, the use of larger diameter needles than 1,35 mm I.D. should be limited in accordance with the category given hereafter

Septum material	Sealing capacity
Natural rubber	A
EPDM	A
Silicone rubber	B
PTFE coated butyl	B
PTFE coated silicone	B
Viton	C

For more information please contact our sales department at Bergschenhoek or Houston or your local representative.

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