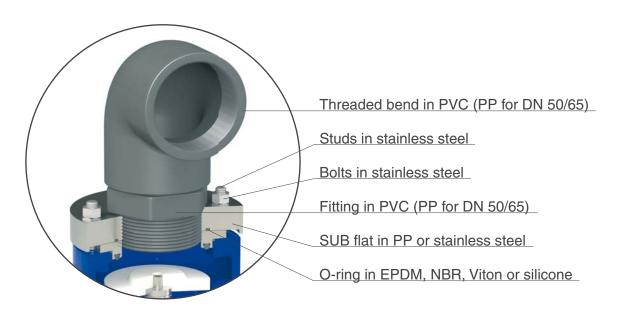


# Wastewater combination air valve - Mod. SCF Version for submerged applications - SUB series

**Version for submerged applications**, **SUB series**, with threaded elbow for air conveyance, standard for DN 50/65, is available on request for other DN. The design sprang from the necessity of having an air valve performing also in case of flood, without the risk of contaminated water entering the pipeline. Another benefit of SUB is to avoid the spray effect, reducing noise and conveying spurts coming from possible rapid closure of the air valve.



### **Technical data**

### **Working conditions**

Water and waste water max. 60°C. Maximum pressure 16 bar. Min. press. 0,2 bar. Lower on request. Version for higher temperatures available on request.

### **Standard**

Certified and tested in compliance with EN-1074/4. Flanges according to EN 1092/2. Epoxy painting applied through fluidized bed technology blue RAL 5005. Changes on the flanges and painting details available on request.

### Weights and dimensions

DN mm	A mm	B* mm	C mm	D mm	Wt Kg
50/65	185	665	300	190	28
80/100	220	770	350	202	38
150	285	1040	488	243	74
200	340	1040	488	243	78

\*: maximum dimension (of the RFP model).

All values are approximate, consult CSA service for more details.

### **Evacuation bends**

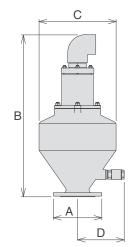
Evacuation bend sizes in relation to air valve DN.

	Bend
DN 50/65	1" 1/2
DN 80/100	2" 1/2
DN 150/200	4"

### **Nozzle choice**

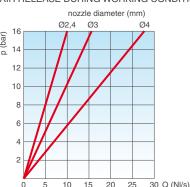
Nozzle diameter in mm according to the size of the air valve and the PN.

	PN 10	PN 16
DN 50/65	2,4	2,4
DN 80/100	3	3
DN 150/200	4	4



## Air flow performance chart in working conditions

AIR RELEASE DURING WORKING CONDITIONS

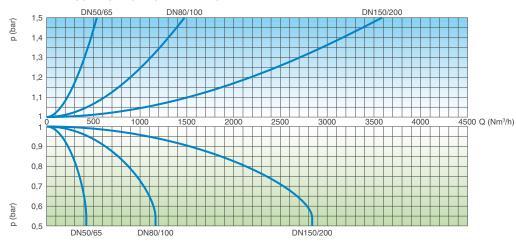




### **Technical data**

### **SCF SUB - Air flow performance charts**

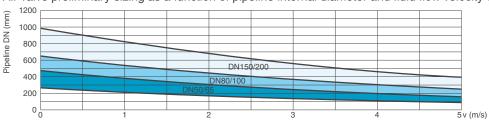
AIR DISCHARGE DURING PIPE FILLING



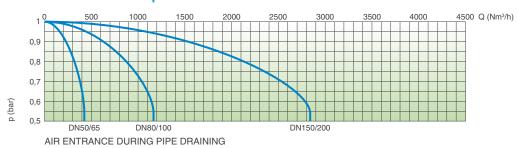
#### AIR ENTRANCE DURING PIPE DRAINING

### SCF AS SUB - Air valve selection chart

Air valve preliminary sizing as a function of pipeline internal diameter and fluid flow velocity expressed in m/s.

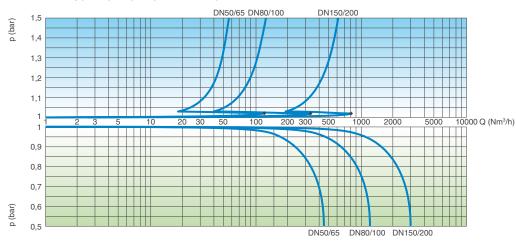


### SCF AS SUB - Air flow performance charts



### **SCF RFP SUB - Air flow performance charts**

AIR DISCHARGE DURING PIPE FILLING



AIR ENTRANCE DURING PIPE DRAINING

The air flow charts were created in Kg/s from laboratory tests and numerical analysis, then converted in Nm³/h using a safety factor.