FLOW CONTROL

FOX air valves range conveyance system bias kit - Mod. SUB

The air conveyance system SUB, provided with watertight threaded elbow for submerged applications, has been created to be retrofitted on existing FCC FOX air valves or as a standalone version. 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 the possibility of conveying spurts coming from the rapid closure of the air valve.



Technical data

Working conditions

Treated water max. 60°C. Max. pressure 40 bar. Min. pressure 0,2 bar. Lower on request.

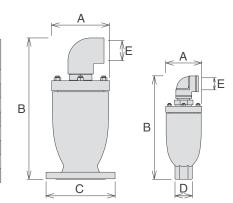
Standard

Designed in compliance with EN-1074/4 and AWWA C-512. Flanges according to EN 1092/2 or ANSI 150. Epoxy painting applied through fluidized bed technology blue RAL 5005. Changes on flanges and painting on request.

Weights and dimensions

CONNECTION	Α	В	С		D	Е	Weight
inch/mm	mm	mm	mm		mm	inch	Kg
Threaded 1"	105	302	-	-	CH 45	1"	4,0
Threaded 2"	128	385	-	-	CH 70	2"	7,5
Flanged 50	128	395	165	-	-	2"	9,5
Flanged 80	158	439	210	205	-	2" 1/2	13,8
Flanged 100	192	507	235	220	-	3"	21,7
Flanged 150	272	648	305	285	-	4"	44,5
Flanged 200	359	828	375	340	-	6"	92,5
Flanged 250	430	1060	450	405	-	8"	147,0

Approximate values. - Mod. SUB is stock available up to DN 150 mm, for larger sizes consult with FCC.

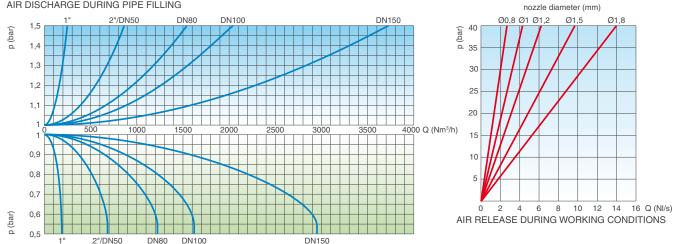




Technical data

FOX SUB - Air flow performance charts

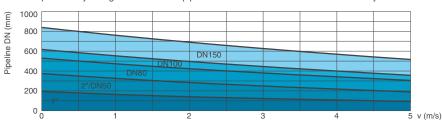
AIR DISCHARGE DURING PIPE FILLING

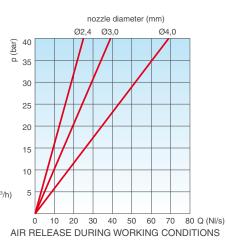


AIR ENTRANCE DURING PIPE DRAINING

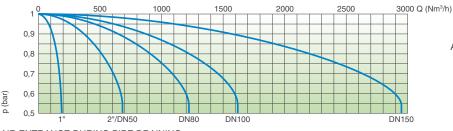
FOX AS SUB - Air valve selection chart

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





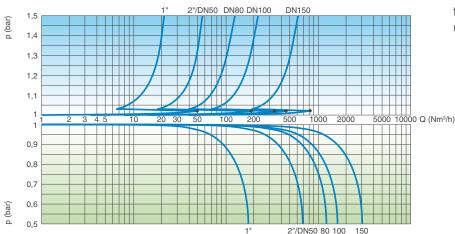
FOX AS SUB - Air flow performance chart



AIR ENTRANCE DURING PIPE DRAINING

FOX 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.

Nozzle choice

For the nozzle choice make reference to the available technical data sheets of the relative FOX models.