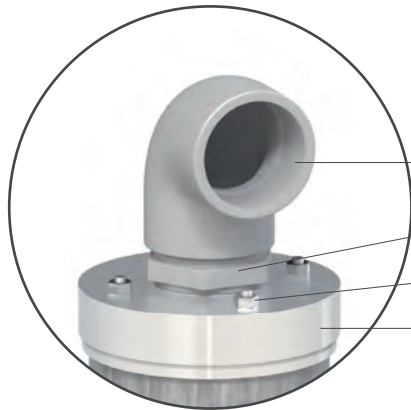




GOLIA air valves range

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 CSA GOLIA 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.



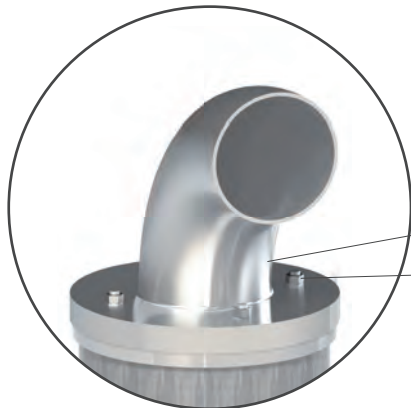
Plastic elbow for 1", 2", DN 50-200R

Threaded elbow in PVC (PP for 1", 2", DN 50-65)

Fitting in PVC (PP for 1", 2", DN 50-65)

Nuts in stainless steel

SUB flat in PP or stainless steel



Elbow in stainless steel for DN 200 and 250R *

SUB flat and elbow in stainless steel

Nuts in stainless steel

Technical data

Working conditions

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

Standard

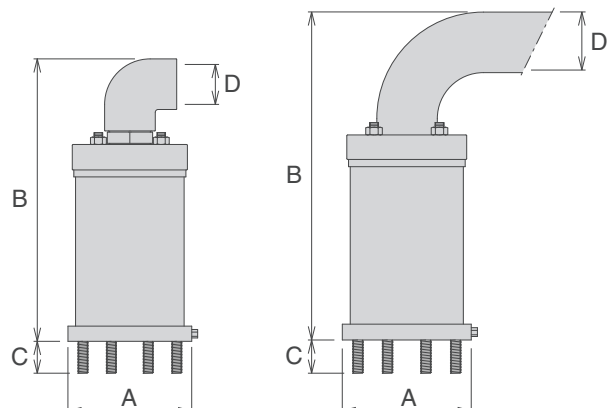
Certified and tested in compliance with EN 1074/4.
 Flanges according to EN 1092/2 or ANSI.
 Gaskets in NBR, EPDM or Viton.
 Changes and variations on the flanges and gaskets on request.

Weights and dimensions

CONNECTION inch/mm	A mm	B mm	C mm	D inch	Weight Kg
Threaded 1"	95	252	-	1"	7,0
Threaded 2"	165	356	-	2"	7,7
Flanged 50	165	356	40	2"	9,3
Flanged 65	185	356	40	2"	9,3
Flanged 80	200	413	50	2" 1/2	13,4
Flanged 100	235	484	50	3"	19,7
Flanged 150R	235	494	50	3"	29,7
Flanged 150	300	624	70	4"	51,4
Flanged 200R	360	624	70	4"	55,4
Flanged 200	360	*	70	*	78,3
Flanged 250R	405	*	70	*	88,3

R: reduced bore. - Larger sizes available on request. - Approximate values.

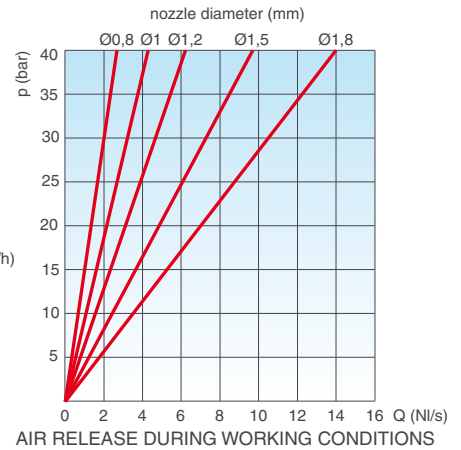
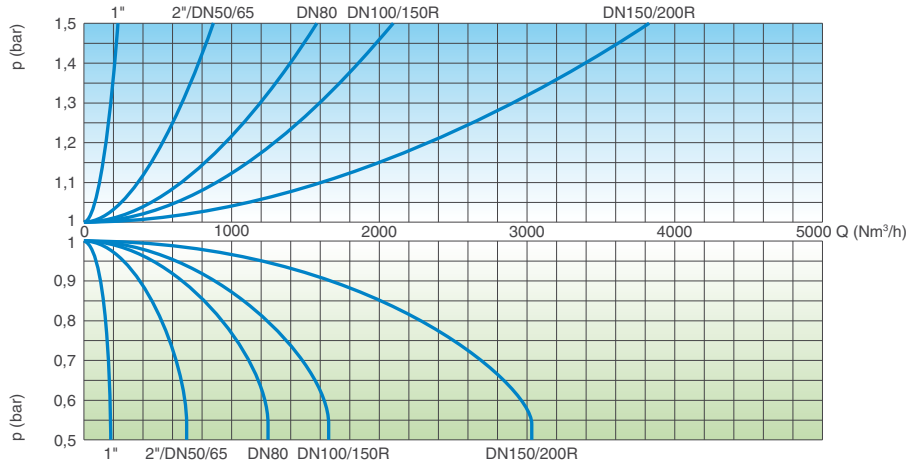
*: Mod. SUB is stock available up to DN 200R, for larger sizes consult with CSA.



Technical data

GOLIA SUB - Air flow performance charts

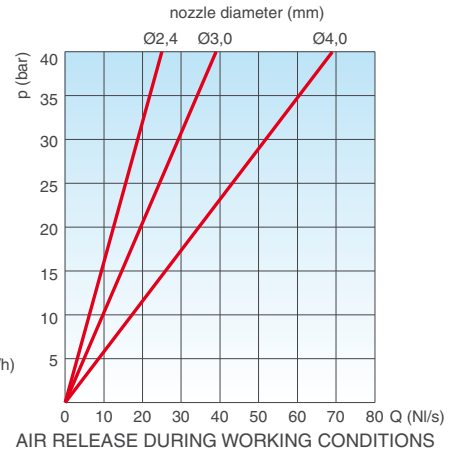
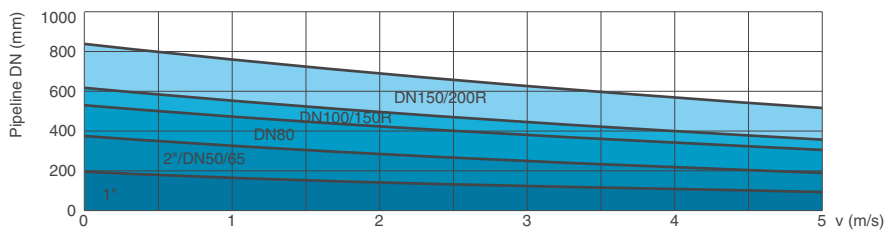
AIR DISCHARGE DURING PIPE FILLING



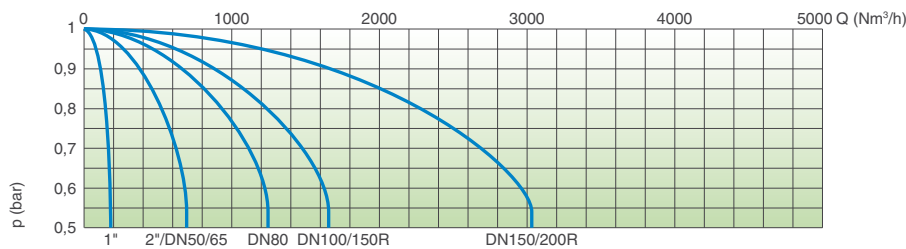
AIR ENTRANCE DURING PIPE DRAINING

GOLIA AS SUB - Air valve selection chart

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



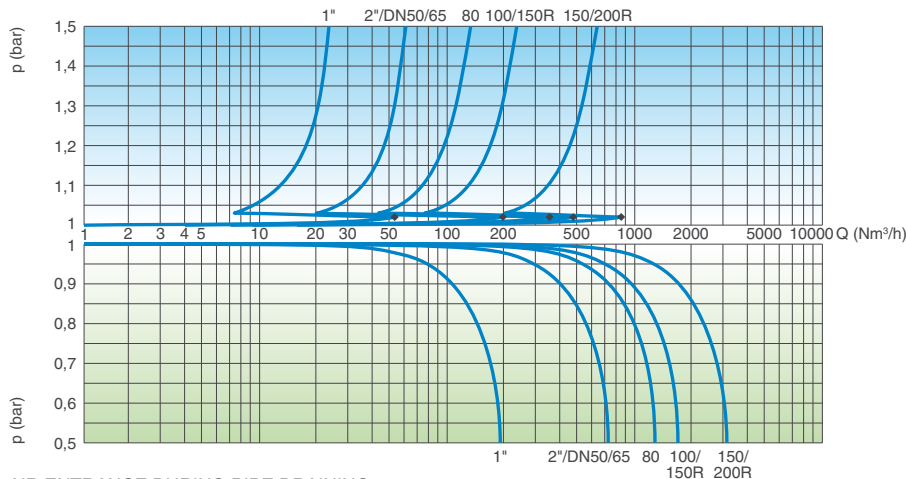
GOLIA AS SUB - Air flow performance chart



AIR ENTRANCE DURING PIPE DRAINING

GOLIA 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 GOLIA models.