

DOMIZI CHAMBER FOR LEVEL INSTRUMENTS

Model : DBH-SO and DBH-WN

The DOMIZI Chambers allow to link different level instruments (guided wave radar, torsion bars etc..) to the process, providing various benefits to the user and resolving multiple issues.

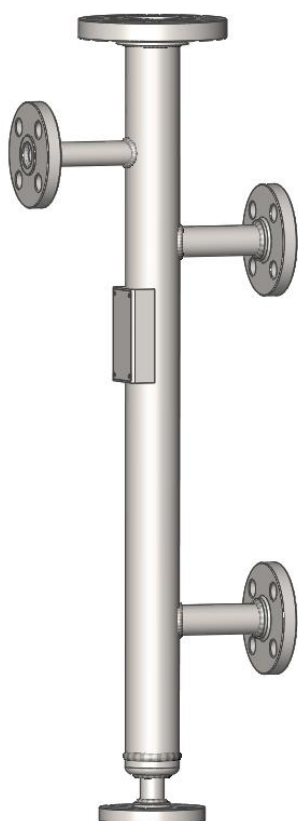


Fig.1 Model DBH-SO

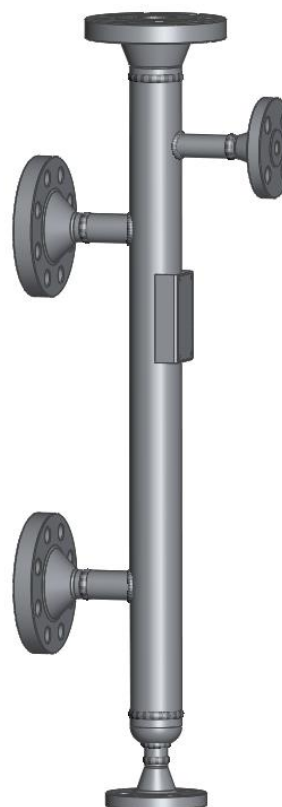


Fig.2 Model DBH-WN

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Features and benefits of DOMIZI Chambers:

The DOMIZI Chambers allow to link different level instruments (guided wave radar, torsion bars, level switches, etc..) to the process, providing various benefits to the user and resolving multiple issues. A few benefits:

- In case of fluid turbulence the chamber serves as a surge pipe.
- It allows to isolate the instrument from the tank, ensuring that the operator can work safely (high pressures/temperature and hazardous liquids)
- Maintenance operations on the instrument can be performed while the system is running.
- Chambers are designed in compliance with ASME VIII div.1 and comply with standard 97/23/CE PED.

Technical characteristics:

- Carbon Steel and Stainless Steel body (other materials available upon request)
- Process connectors: Flanged (ANSI/UNI/DIN), Threaded (NPT/GAS) or welded (SW/BW).
- Arrangement of standard process connectors: side-side, or side-bottom.
- Body rating ranging between ANSI 150 and ANSI 2500
- Available standard body diameters: 2" (DN50) ; 3" (DN80) ; 4" (DN100)
- Standard connector size: 1" (DN25) ; 1 ½" (DN40) ; 2" (DN50)
- Designed in accordance with ASME VIII div.1
- Manufactured in compliance with the PED Directive
- Designed upon specific customer request

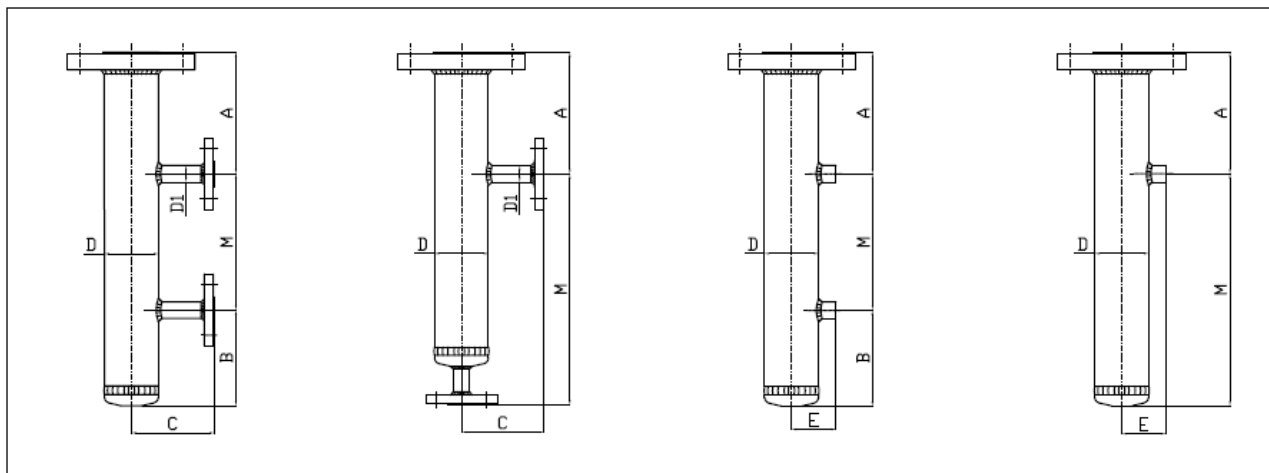
Certifications:

- Certificate of conformity with the order
- Pressure test certificate
- Certificates of materials EN 10204 3.1 (*optional*)
- Declaration of conformity with PED 97/23/CE (*optional*)

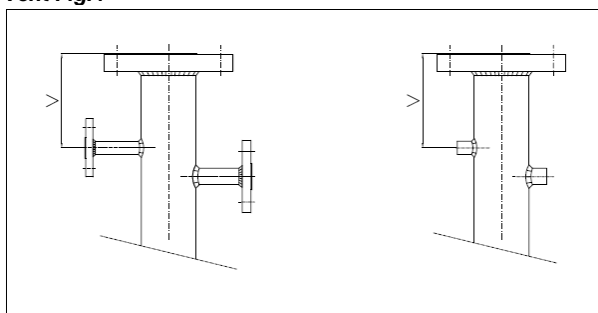
Tests and Inspections:

- Hydrostatic pressure test
- Liquid penetrant test on welds (ASME/EN) (*Optional*)
- X-ray tests (ASME/EN) (on butt-welds only) (*Optional*)
- PMI- Positive Material Identification (*Optional*)

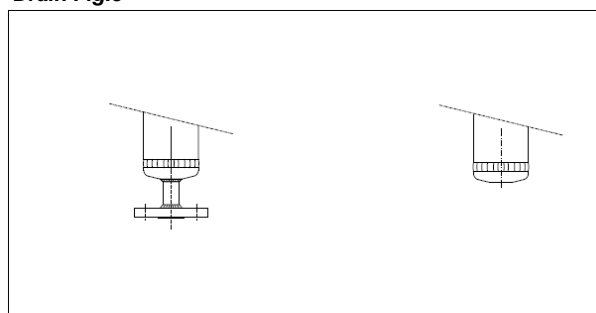
Chamber Model DBH-SO Fig.3



Vent Fig.4



Drain Fig.5

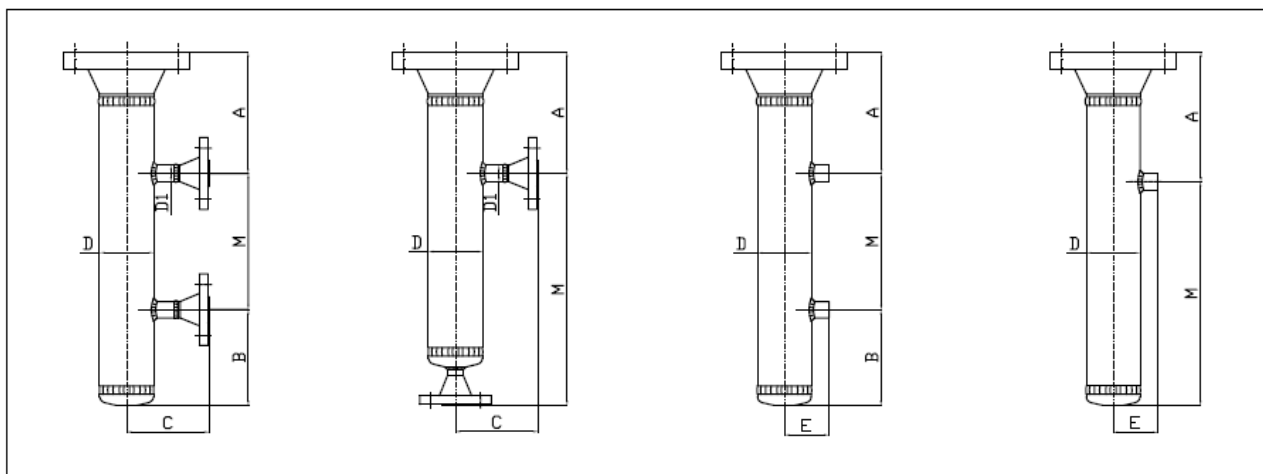


Tab.1 Chamber DBH-SO - C and E dimensions. For the other dimensions please refer to Table 3

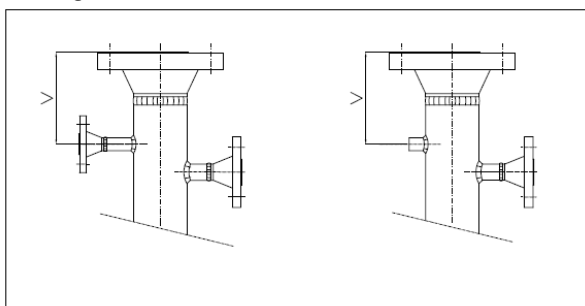
Model	Chamber Diameter	Connection Diameter	RATING									
			150 PN 16/25		300 PN 40		600 PN 64/100		900 PN 150		1500 PN 250	
			Quote C	Quote E	Quote C	Quote E	Quote C	Quote E	Quote C	Quote E	Quote C	Quote E
DBH-SO2	2" (60.3 mm)	1"	150	80	150	80	150	80	170	90	170	90
		1 1/2"										
		2"										
DBH-SO3	3" (88.9 mm)	1"	170	100	170	100	170	100	190	110	190	110
		1 1/2"										
		2"										
DBH-SO4	4" (114.3 mm)	1"	195	110	195	110	195	110	195	120	215	120
		1 1/2"										
		2"										

Upon request we can manufacture Chambers with C and E dimensions other than the ones listed in table 1.

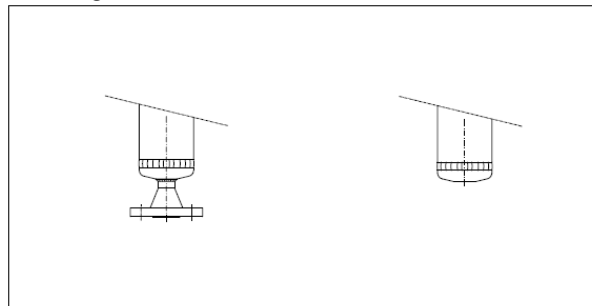
Chamber Model DBH-WN Fig.6



Vent Fig.7



Drain Fig.8



Tab.2 Chamber DBH-WN - C and E dimensions. For the other dimensions please refer to Table 3

Model	Chamber Diameter	Connection Diameter	RATING									
			150 PN 16/25		300 PN 40		600 PN 64/100		900 PN 150		1500 PN 250	
			Quote C	Quote E	Quote C	Quote E	Quote C	Quote E	Quote C	Quote E	Quote C	Quote E
DBH-WN2	2" (60.3 mm)	1"	150	80	150	80	150	80	170	90	170	90
		1 1/2"										
		2"										
DBH-WN3	3" (88.9 mm)	1"	170	100	170	100	170	100	190	110	190	110
		1 1/2"										
		2"										
DBH-WN4	4" (114.3 mm)	1"	195	110	195	110	195	110	195	120	215	120
		1 1/2"										
		2"										

(* Dimensions other than the ones listed in table 2 are available upon request.

Tabella 3: DBH-SO e DBH-WN codici

Chamber FLG.SO Fig.3				
<i>Model</i>	<i>Chamber Dimension "D" (See fig.3 pag. 3)</i>	<i>Nozzle Dimension "D1"</i>	<i>Instrument Flange Dim.</i>	<i>Standard</i>
DBH-SO2	Chamber 2" (60 mm)	1" (Note A)	2"	Std
DBH-SO3	Chamber 3" (89 mm)	1"-1 ½"-2"	3"	Std
DBH-SO4	Chamber 4" (114 mm)	1"-1 ½"-2"	4"	Std
	<i>Note: Special Chambers are available upon request.</i>			
Chamber FLG.WN Fig.6				
<i>Model</i>	<i>Chamber Dimension "D" (See fig.6 pag.4)</i>	<i>Nozzle Dimension "D1"</i>	<i>Instrument Flange Dim.</i>	<i>Standard</i>
DBH-WN2	Chamber 2" (60 mm)	1" (Note B)	2"	Std
DBH-WN3	Chamber 3" (89 mm)	1"-1 ½"-s2"	3"	Std
DBH-WN4	Chamber 4" (114 mm)	1"-1 ½"-2"	4"	Std
	<i>Note: Special Chambers are available upon request.</i>			
Material Chamber	Body: Pipe/Flange			
AC	Carbon Steel ASTM A106 gr.b / ASTM A 105			
ALT	Low Carbon Steel ASTM A333 gr. 6/ A350 LF2			
A4	Stainless Steel A312 TP304L / A182 F304L			
A6	Stainless Steel A312 TP316L / A182 F316L			
	<i>Note: Other special materials (e.g. Inconel 625, 825, Hastelloy etc...) are available upon request</i>			
Dimension (See fig.6-7-8 pag. 4)				
Range "M":				
M.....	M + Range / centre to centre distance mm			
Distance Top "A":				
A2	200 mm			Std
A27	270 mm			Std
	<i>Note: Special Chambers are available upon request.</i>			
Distance Bottom "B":				
B1	150 mm			Std
B2	200 mm			
	<i>Note: Special Chambers are available upon request.</i>			

Flg. Instrument :				
Rating :				
15	Flange ASME B16,5 Class 150			Std
30	Flange ASME B16,5 Class 300			Std
60	Flange ASME B16,5 Class 600			Std
M5	Flange ASME B16,5 Class 900			
D5	Flange ASME B16,5 Class 1500			
16	Flange EN1092 PN16			
25	Flange EN1092 PN25			
40	Flange EN1092 PN40			
63	Flange EN1092 PN63			
C0	Flange EN1092 PN100			
C6	Flange EN1092 PN160			
C25	Flange EN1092 PN250			
Type Face :				
R	Flange RF			Std
J	Flange RTJ			
S	SW Socket Welded			
PROCESS CONNECTION :				
Disposition :				
LL	Side-Side			
LF	Side-bottom			
Dimension :				
1	1"=25 mm (DN 25)			
2	1 1/2"= 40 mm (DN40) <i>(Note C)</i>			
5	2"= 50 mm (DN50) <i>(Note C)</i>			
Rating :				
15	Flange ASME B16,5 Class 150			
30	Flange ASME B16,5 Class 300			
60	Flange ASME B16,5 Class 600			
M5	Flange ASME B16,5 Class 900			
D5	Flange ASME B16,5 Class 1500			
16	Flange EN1092 PN16			
25	Flange EN1092 PN25			
40	Flange EN1092 PN40			
63	Flange EN1092 PN63			
C0	Flange EN1092 PN100			
C6	Flange EN1092 PN160			
C25	Flange EN1092 PN250			

Type :				
R	Flange RF			Std
T	Flange RTJ			
N	NPT threading			
S	SW Socket Welded			
DRAIN :				
Dimension :				
12	1/2"			
34	3/4"			Std
1	1"			
Type :				
DR	Flange RF			
DJ	Flange RTJ			
DN	NPT threading			Std
DS	SW Socket Welded			
VENT :				
Dimension :				
-	None			Std
12	1/2"			Std
34	3/4"			
1	1"			
Type :				
VR	Flange RF			Std
VJ	Flange RTJ			
VN	NPT threading			
VS	SW Socket Welded			
Quote "V" (See pag.3 , fig.4-7)				
V15	150 mmm			
V20	200 mm			
	<i>Note: Other dimensions are available upon request.</i>			
Painting Standard Domizi for Carbon Steel and LTCS Chamber :				Max Temp.
D001	Sa 2 ½ (Medium G 40-70 µ) Primer Epoxy : <i>Carboguard E19</i> Finish : Polyurethane <i>Carbothane 134 RAL 6001</i> Total Thickness : 100 µ	Thickness : 50 µ Thickness: 50µ		93°C Std
D002	Sa 2 ½ (Medium G 40-70 µ) Primer : <i>Carbozinc 11</i> Intermedia : <i>Thermaline 4900 R</i> Finish : <i>Thermaline 4900 R</i> Total Thickness : 125 µ	Thickness : 75 µ Thickness : 25 µ Thickness : 25 µ		260°C
D003	Sa 2 ½ (Medium G 40-70 µ) Primer : <i>Carbozinc 11</i> Intermedia : <i>Thermaline 4700</i> Finish : <i>Thermaline 4700</i> Total Thickness : 125 µ	Thickness : 75 µ Thickness : 25 µ Thickness : 25 µ		528°C

Table 3 notes:

- A) All flange sizes (1", 1 1/2", 2") can be used in the *Blind* version; flanges exceeding 1" - the maximum pipe diameter available for mechanical tightness reasons - shall be equipped with an adapter.
- B) In this version the maximum WN flange diameter that can be used for side connectors is 1" with 1" D1 outlet connections (if specifically requested by the customer we can provide support for reduced *Welding Neck* flanges E.g. 2" to 1").
- C) These diameters cannot be used in Chambers **DBH-WN2**.

Accessories available upon request for Fig. Instrument:**Bolts + Nuts made of the following materials (*):****Bolts :**

A193 b7
A320L7
A193b8
A193b8m

Nuts :

A194 2H (galvanised) **(Standard)**
A194 Gr.4 (galvanised)
A194 Gr.8 (AISI 304)
A194 Gr.8m (AISI 316)

Gaskets (*):**RF flanges:**

AISI 316 spiral wound SW with galvanised Carbon Steel outer ring **(Standard version)**
AISI 316 spiral wound SW with AISI 316 outer ring

RTJ flanges:

SOFT-IRON (galvanised) RJ gasket **(for Carbon Steel)**
AISI 304 RJ gasket
AISI 316 RJ gasket

Insulation KIT:

upon request we can provide insulation KITS with various types of materials, as demanded by the end customer.

(*) the supply item dimensions shall be appropriate for the chosen instrument flange.

Placing the order:

Example: **DBH-WN2-AC-M500-A27-B1-30R-LL-1-30R-34DR-12VR-V15-D001**

Sample Chamber description

DBH: Chamber

WN2: Chamber diameter: 2" flange welding neck

AC: Carbon Steel material

M500 distance M= 500 mm

A27: dimension A= 270 mm

B1: dimension B1= 150 mm

30: 2" WN process flanges

R: ANSI 300 RF

LL: side-side connection to process

1: side connection diameter 1"

30: side connection flange 1"

R: ANSI 300 RF

34DR: flange drain 3/4" WN ANSI 300 RF

12VR: flange vent 1/2" WN ANSI 300 RF

V15: dimension V= 150 mm

D001: painting for temperatures < 93°C

For proper chamber design you need to provide the design Temperature and Pressure data.

*Technical specification Sch. EN-08 Ed.07-2016
Subject to technical alteration.*

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