

Technical Datasheet



Horizontal Level Switch Chambers For Float Switches

Key Features

- Standard finish Black stove paint. 2 pack epoxy available at extra cost.
- Pressure testing All chambers are full pressure tested at the relevant connection flange test pressure.
- Operating pressure
Note that the pressure/temperature ratings of the switches and chambers are not always compatible so that the lower rating will be the governing factor in selection.
- Low temperature use
The lowest operating temperature for the fabricated carbon steel chambers is -7°C and the cast iron chambers is 0°C. If use at temperatures below these limits is required, LT50 or stainless steel can be specified.

Series Overview

Float chambers are used to facilitate the external mounting of a Mobrey Magnetic level switch on to a tank or pressure vessel, particularly where space inside the vessel is restricted or where the control must be isolated for routine maintenance whilst the plant is in operation.

A wide range of cast or fabricated chambers is available. Process connections may be specified top and bottom or side and side, and can be flanged, screwed or butt welded in a choice of sizes to suit most plant installations. Exotic materials are also available.

Relevant chambers are supplied CE marked and fully compliant with the Pressure Equipment Directive (2014/68/EU)

Variety of connection configurations available.

Welding procedures approved to EN 15614-1 & ASME IX

Welders approved to EN ISO 9606

All materials used for fabricated chambers are to ASME specifications

Material certification, EN 10204 Type 3.1

Chambers can be manufactured in a wide variety of materials, including 321 and 316 stainless steel, Incoloy Monel, CrMo steels and other more exotic materials

Other products

Other products we can offer:

- horizontal and vertical level switches



Product applications

Paint finish to customers specifications

Chambers may be supplied in accordance with NACE recommendations for sour service

NDT to CSWIP and ASNT is available for radiographic, ultrasonic, mag particle and dye penetrant

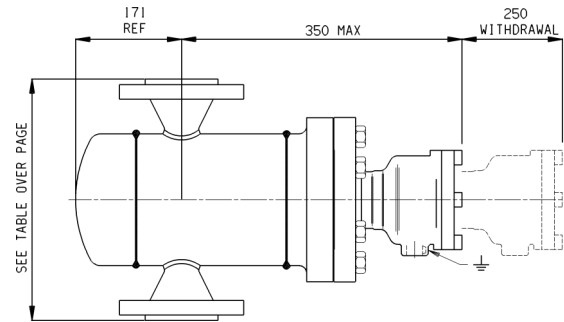
Customers and nominated inspection agencies are welcome to witness pressure testing.

Switches and chambers are individually pressure tested at the relevant flange test pressure. They are supplied loosely assembled for transit and flange bolts must be tightened on site before commissioning.

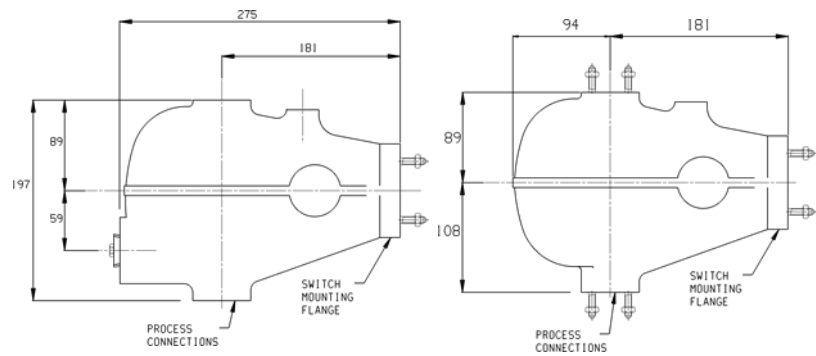
How can we help you?

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Float chambers

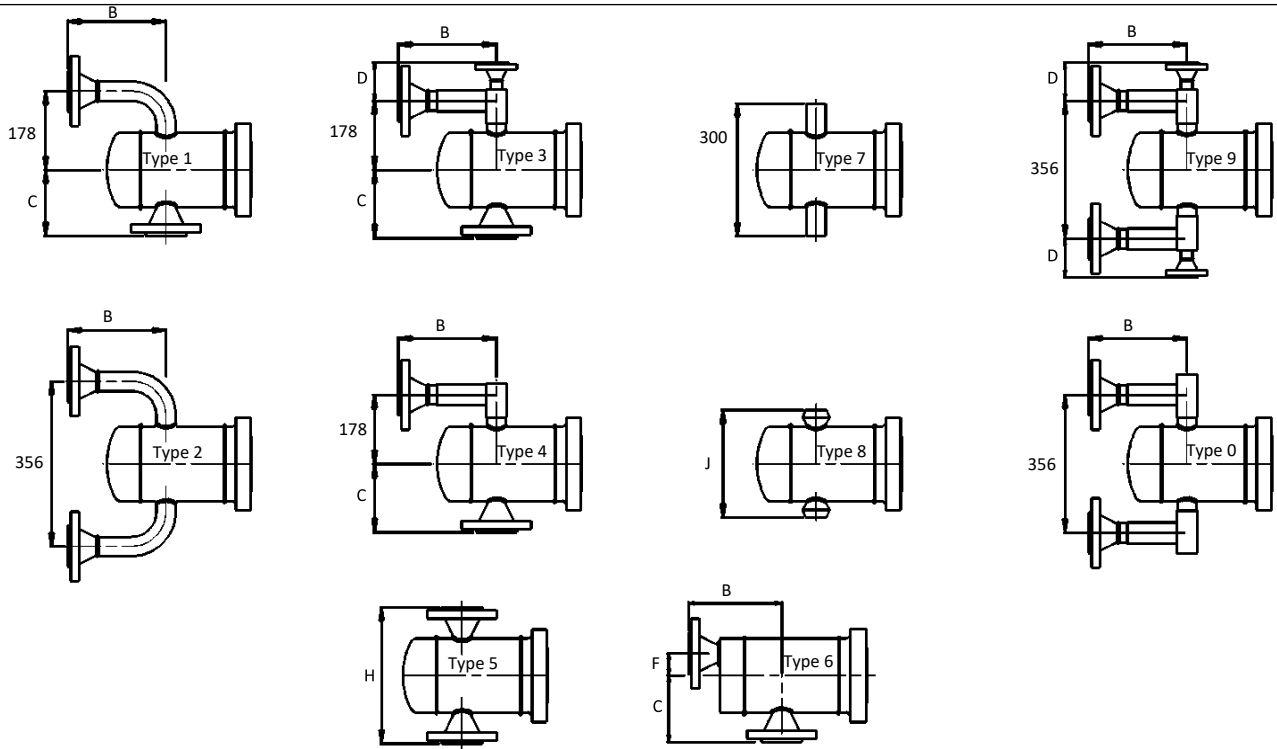


Fabricated chambers



Cast chambers

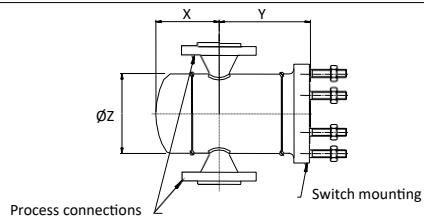
Fabricated chamber dimensions



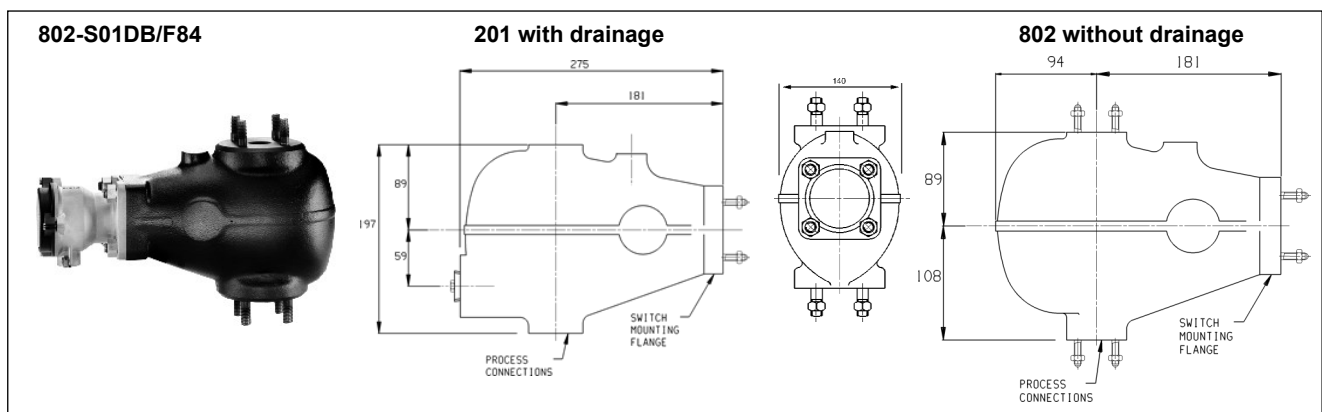
Fabricated chambers Standard dimensions: Ref. only - must be certified on order

Model	Sw mounting flg	Pressure	X	Y	Z	Model	Sw mounting flg	Pressure	X	Y	Z
144C	AMSE B16.5 3" #150	19.6 bar	143	185	168	305C	BSEN1092-1 DN80 PN63	63 bar	143	183	168
145C	ASME B16.5 3" #300	51 bar	143	185	168	306C	BSEN1092-1 DN65 PN40	40 bar	143	162	168
148C	MOBREY 'A'	18 bar	143	169	168	307C	AMSE B16.5 3" Class 600	102 bar	170	162	168
151C	MOBREY 'G'	21 bar	143	169	168	308C	AMSE B16.5 3" Class 900	153 bar	173	161	168

Nominal ref. dimensions



Cast chambers Standard dimensions: Ref. only - must be certified on order



Type no.	Material Cast iron	Process connections	Maximum working conditions for chamber		Suitable Mobrey level switches		Drainage
			Pressure	Temp.	Switch flange	Typical combination	
201	EN 1561 Grade EN GJL 250	Screwed 1" BSP	13 bar	at 210°C	Mobrey A	201-S01DB/F84	With
802	EN 1561 Grade EN GJL 250	EN 1092-1 DN20 PN16	13 bar	at 210°C	Mobrey A	802-S01DB/F84	Without

Minimum working temperature 0°C

Process connection sizes and dimensions for fabricated chambers																					
1"				DN25				1.5"		DN40	2"				DN50			Tolerance			
Dim	150	300	600	PN16	PN25	PN40	PN100	150	300	PN16	150	300	600	900	PN16	PN25	PN40	+	-		
B C D* F H	212	218.5	225	196	198	198	216	218.5	225	200	220	226	236	265	203	206	206	0	3		
	139	143.5	152.5	123	125	125	143.5	143.5	150	125.5	144	150.5	161.5	190	127	130	130	0	1.5		
	108	112	117	-	-	-	-	108	112	-	108	112	117	133	-	-	-	0	2		
	60	60	-	60	60	60	60	54	54	54	48	48	-	-	48	48	48	1	1		
	278	291	305	246	250	250	287	287	300	251	288	301	323	380	254	260	260	0	3		
	Screwed						Screwed/SW			Screwed or socket weld											
J	NPT			BSP				NPT			NPT									0 3	
	240			240				244			250										

* ¾" N.B. Vent/drain flange of relevant rating as shown. All dimensions shown are nominal and should be certified on order.

Fabricated chambers : ordering information

Materials & Flanges

TABLE 1



Material switch flange	Max Pressure @ 20°C	Max Temp °C	Code
Carbon Steel / ASME B16.5, 3" ANSI 150RF	19.6 bar	400°C	144C
Carbon Steel / ASME B16.5, 3" ANSI 300RF	51 bar	400°C	145C
Carbon Steel / Mobrey "A" flange	18 bar	400°C	148C
Carbon Steel / Mobrey "G" flange	21 bar	400°C	151C
Carbon Steel / EN1092 -1, DN80 PN63	63 bar	400°C	305C
Carbon Steel / EN1092 -1, DN65 PN40	40 bar	400°C	306C
Carbon Steel / ASME B16.5, 3" ANSI 600RF	102 bar	400°C	307C
Carbon Steel / ASME B16.5, 3" ANSI 900RF	153 bar	400°C	308C

Connection Style

TABLE 2



Description		Code
Side & Top or Side and Bottom	Flanged	1
Side & Side	Flanged	2
Side & Top or Side and Bottom	Flanged with ¾ " flanged vent/drain	3
Side & Top or Side and Bottom	Flanged with ¾ " threaded vent/drain	4
Top & Bottom	Flanged	5
Side & Top or Side and Bottom	Flanged (close centers)	6
Top & Bottom stub pipe		7
Top & Bottom threadolet or Socket		8
Side & Side	Flanged with ¾ " flanged vent/drain	9
Side & Side	Flanged with ¾ " threaded vent/drain	0

Connection Size/Rating

TABLE 3



Description	Code
1" NB Sockolet	00
1" NPT threaded (Female)	01
1 ½ " NPT threaded (Female)	02
2" NPT threaded (Female)	03
1" BSPT threaded (Female)	04
1" NB Sch.80 stub pipe	08
2" NB Sch.80 stub pipe	10
ASME B 16.5 1" Class 150RF weld Neck	11
ASME B 16.5 1" Class 300RF weld Neck	12
ASME B 16.5 1" Class 600RF weld Neck	13
EN 1092-1 DN25 PN16 RF weld neck	15
EN 1092-1 DN25 PN25 RF weld neck	16
EN 1092-1 DN25 PN40 RF weld neck	17
EN 1092-1 DN25 PN63 RF weld neck	18
EN 1092-1 DN25 PN100 RF weld neck	19
ASME B 16.5 1 ½ " Class 150RF weld Neck	21
ASME B 16.5 1 ½ " Class 300RF weld Neck	22
EN 1092-1 DN40 PN16 RF weld neck	25
ASME B 16.5 2" Class 150RF weld Neck	31
ASME B 16.5 2" Class 300RF weld Neck	32
ASME B 16.5 2" Class 600RF weld Neck	33
ASME B 16.5 2" Class 900RF weld Neck	34
EN 1092-1 DN50 PN16 RF weld neck	35
EN 1092-1 DN50 PN25 RF weld neck	36
EN 1092-1 DN50 PN40 RF weld neck	37

Chamber options to customer order

- Chambers can be manufactured in a wide range of materials, including 304, 321 & 316 Stainless Steel, Alloy 825, Alloy 400, Duplex & other more exotic materials
- Paint Finish to customer specification
- NDT to CSWIP and ASNT is available for radiographic ultrasonic, mag particle and dye penetrant
- Chambers may be supplied in accordance with NACE recommendation for Sour Service

Approvals

EUROPEAN DIRECTIVES



Pressure Equipment Directive (PED) 2014/68/EU:
Compliant to the PED directive and CE marked under module H

In the interest of development and improvement Delta Mobrey Ltd, reserves the right to amend, without notice, details contained in this publication. No legal liability will be accepted by Delta Mobrey Ltd for any errors, omissions or amendments.

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