



SPECIFICATION // DATA SHEET

ENGINEERED VERTICAL (GRP) FLOAT SWITCHES FS1353 SERIES

Introduction

Quality & Experience

AMS have retained the personnel who have produced the flameproof float switches for over 40 years to ensure that the world renowned quality that is maintained.

With a robust build quality and mechanical operation, our ranges of float switches have a proved track record within many industries such as; Petro-Chem, Chemical, Power Stations, Utilities.

Flexible Specifications

The ATEX Group I float switches have fixed standard switching lengths as determined by the UK mining industries (see float switch questionnaire for lengths), however if the standard specification shown does not meet your application requirements please call our AMS Sales Team who will be happy to discuss your requirements and provide a solution, as AMS can produce custom float switches to suit your needs.

Application Areas

Mainly used in mining applications for areas that requires a Group I Gasses float switch.

The ATEX Group I Float switches are certified to the following:

ATEX Certified to I M2 EEx 'd' I

FS1353 Specifications

ATEX Rating:	I M2 EEx'd' I
Temperature:	-40 to +150 °C
Material:	Body: 316 Stainless Steel All Wetted Parts: 316 Stainless Steel
Pressure	Upto 40 Bar (580 Psi)
IP Rating:	IP65
Cable Entry:	Option for Single M25 x 1.5 cable gland flange

Supplied into the industry for over 40 years by Alan Cobham and world renowned for quality, the Horizontal float switch series are now owned and manufactured in the UK by AM Sensors Ltd.

Standard Flange Mounting Dimensions

Connections to conform to: BS EN 60079-14: 2008

Switch Specifications

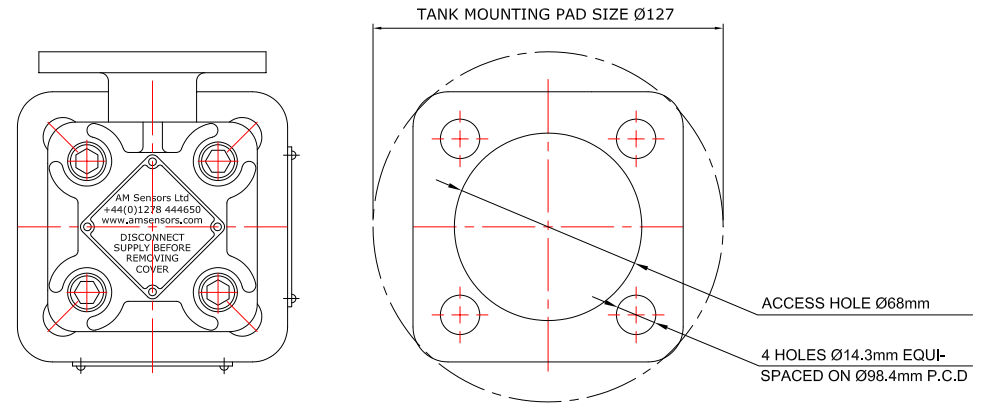
Action	SPCO
Contact material	Rhodium
Switching Capacity	60W
Switching Voltage	400V AC/DC
Switch Current	1 A
Contact Resistance	100 m Ω
Bounce Time	0.5 ms
Release Time	0.15 ms
Operating Temperature	-40 to 125°C

NOTE: Further mounting options are available including screwed, adaptor flanges and standard flanges with different drilling dimensions i.e. $\varnothing 96$ mm P.C.D.

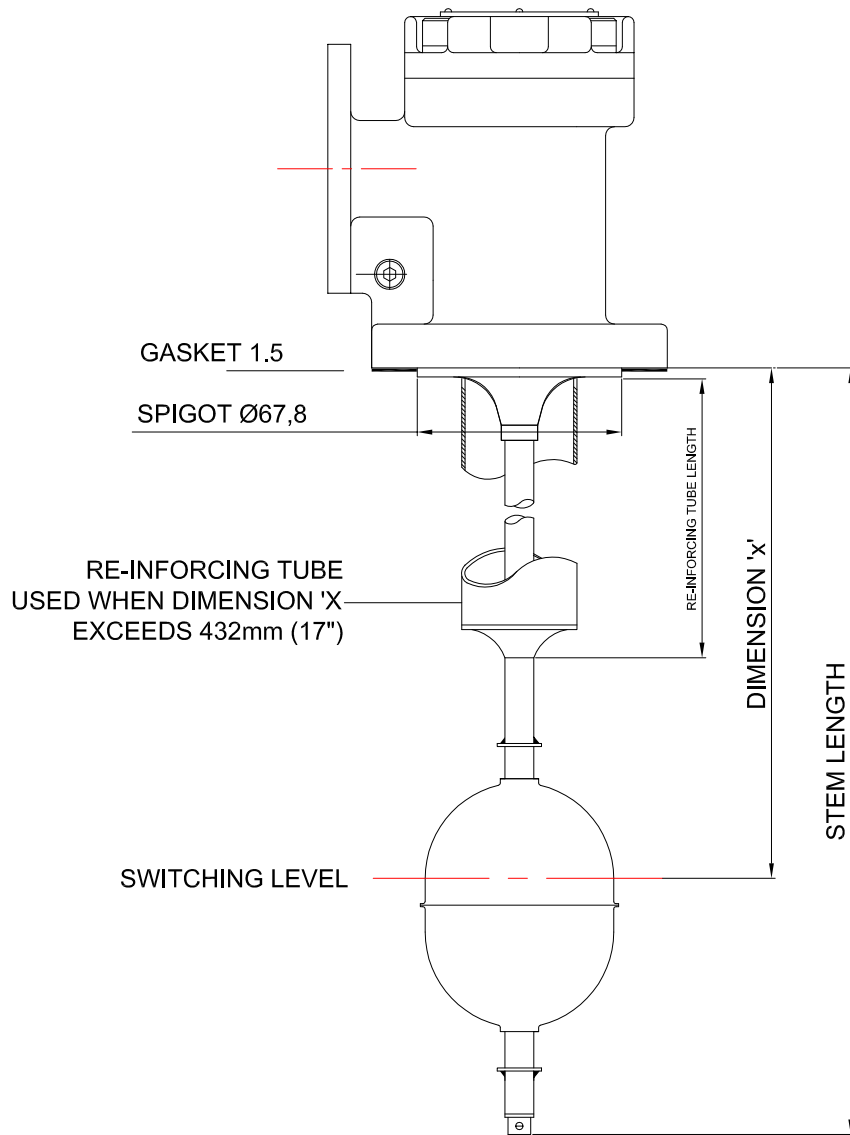
Terminal Details

For wiring details please see the installation, operating and maintenance manual supplied with the float switch.

Switch Dimensions



Standard Switching Dimensions



Float Switch Number	Switching Dimension 'x'	Float Switch Stem Length	Re-inforcing Tube Length (if applicable)
FS 1353/1	152mm (6")	230mm	N/A
FS 1353/2	305mm (12")	382mm	N/A
FS 1353/3	381mm (15")	459mm	N/A
FS 1353/4	229mm (9")	306mm	N/A
FS 1353/5	432mm (17")	509mm	N/A
FS 1353/6	83mm (3¼")	160mm	N/A
FS 1353/7	533mm (21")	606mm	451mm
FS 1353/8	660mm (26")	738mm	578mm
FS 1353/9	610mm (24")	688mm	527mm
FS 1353/10	711mm (28")	789mm	629mm
FS 1353/11	686mm (27")	764mm	603mm
FS 1353/12	483mm (19")	559mm	400mm
FS1353/X	Custom	Custom	Custom

NOTE: Choose FS1353/X for Customer Configured Dimensions with Upto 4 Switch Points

ATEX Group I Float Switch Questionnaire

FS	1353	/			
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Std Switch Length

152mm (6")	1
305mm (12")	2
381mm (15")	3
229mm (9")	4
432mm (17")	5
83mm (3 1/4")	6
533mm (21")	7
660mm (26")	8
610mm (24")	9
711mm (28")	10
686mm (27")	11
483mm (19")	12
Custom Spec	x

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*Denotes a Re-inforcing tube will be used to support the switch

Process Conditions

Fluid Type:		
Fluid S.G:	S.G.	
Ambient Temperature:	°C	
Process Temperature:	°C	
Process Pressure:	Bar	
Tag No's:		

If a Customer Specific switching length is required please indicate switch length.

Ordering Information

When ordering float switches, technical information is required to ensure the customer is supplied with the correct product for the process conditions.

Please complete our float switch questionnaire and email to sales@amsensors.com or contact our sales team on +44 (0)1278 444650

Chambers

Chamber mounting

In situations where mounting of the float switch in an external chamber is required, AMS have in house welders coded to ASME IX and European standards to provide a complete assembly with pressure testing, painting and NDT testing to each customer's specific requirements.

» **Material Origins:**

The origin of the materials used in the construction can be sourced as European, Worldwide or to meet EN 10204-3.1 Material specification.

» **Nace Construction:**

AMS Chambers can be constructed to meet NACE MR 0175 / ISO 15156 for sour service applications.

» **Chamber Design:**

AMS Chambers are designed to meet the ASME B31.3 - Process Piping Codes.

» **Pressure Equipment Directive:**

AMS Chambers are designed to meet the European Pressure Directive (PED) 97/23/EC Guidelines.

» **ISO Approved:**

AMS Chambers are manufactured by ISO approved company for QA, Environment and OHSAS.

» **Process Connections:**

AMS Supply chambers with a wide range of process connections to meet ASME/ANSI B16.5 and EN1092-1.

» **Coded Welders:**

Welders are certified to ASME Boiler and Pressure Vessel Code Section IX and ISO9606-1.

» **Optional Weld Inspection:**

X-Ray for full penetration butt welds.

Magnetic particle for Carbon Steel Chambers.

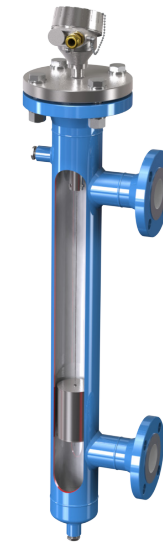
Dye Penetrant Inspection of branch welds (all chambers).

» **Hydrostatic Testing (Optional):**

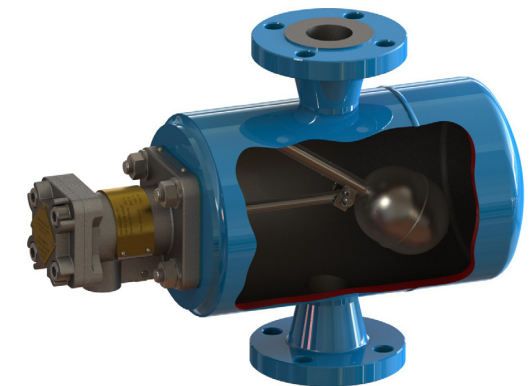
The Chambers can be hydrostatically tested to meet the ASME B31.3 Process Piping Code (1.5 X Design Pressure @ ambient temperatures).

» **Painting (Optional):**

The chambers can be painted to meet individual customer specifications, including offshore environments.



CHAMBER WITH DISPLACER SS



CHAMBER CUT THRU PAINTED
CARBON STEEL

Documentation and Testing

AMS can produce a full documentation package to support the chamber products. A data book containing the documents required by each customer is produced and shipped with each chamber. Documents available include (not restricted to!):

- » Welder Qualification Certs
- » Weld Procedure Qualifications
- » Weld Procedure Specifications
- » GA Drawings
- » Pressure Test Certificates
- » Certificate of Conformity to NACE and PED
- » QA Plan
- » Welder and NDT Inspection Records
- » X-ray, Dye Pen and PMI Tests
- » Instrument Tag Lists
- » Instrument Data Sheets
- » Material Certificates

In addition to the above AMS can also provide:

- » **Accessories:**

AMS offer a range of accessories for use in conjunction with the chambers such as valves, gaskets, nuts / bolts and fittings.

- » **Instrumentation:**

AMS offer a wide range of process instrumentation, including various level measurement technologies, which when used in conjunction with our chambers provide complete level measurement solutions for any application.



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