

## AIR AND GAS FLOAT TRAPS FA21.1 (SG iron ; 1/2" to 1" – DN 15 to DN 25)

### DESCRIPTION

The ADCA FA21.1 is a series of fully automatic ball float traps specially designed for condensate drainage in compressed air and gas systems.

Typical applications include aftercoolers, separators and compressed air mains.

### MAIN FEATURES

Modulating discharge.

Unaffected by sudden or wide load and pressure variations.

Flow direction can be easily changed by repositioning the body in relation to the mechanism and cover.

**OPTIONS:**

- Metal to metal sealing.
- Equalizing (vent) and drain connections.
- BDV – Blowdown valve.
- AFZ – Anti-freeze device.
- FLL – Float lifting lever.

**USE:** Compressed air and other non corrosive gases compatible with the construction.

**AVAILABLE MODELS:** FA21.1-4,5 , 10 and 14 – SG iron.

**SIZES:** 1/2" to 1"; DN 15 to DN 25.

**CONNECTIONS:**

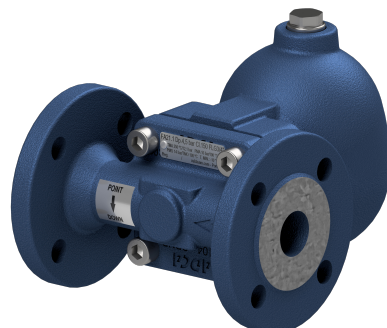
- Female threaded ISO 7 Rp or NPT.
- Flanged EN 1092-1/-2 PN 16.
- Flanged ASME B16.42/B16.5 Class 150.

**INSTALLATION:**

- Inline horizontal or vertical installation.
- Angled horizontal or vertical installation.
- See IMI – Installation and maintenance instructions.

**ΔPMX:**

- FA21.1-4,5 – 4,5 bar
- FA21.1-10 – 10 bar
- FA21.1-14 – 14 bar



**CE MARKING – GROUP 2  
(PED – European Directive)**

PN 16	Category
1/2" to 1" – DN 15 to 25	SEP

BODY LIMITING CONDITIONS		
FLANGED PN 16 *	FLANGED CLASS 150 **	RELATED TEMPERATURE
ALLOWABLE PRESSURE	ALLOWABLE PRESSURE	
16 bar	16 bar	100 °C
15,5 bar	14,8 bar	150 °C
14,7 bar	13,9 bar	200 °C
13,9 bar	12,1 bar	250 °C

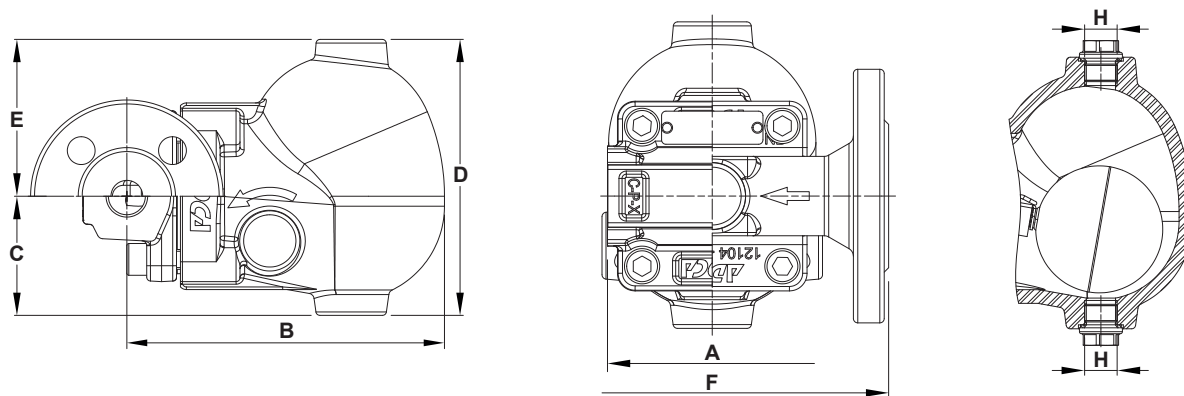
PMO – Maximum operating pressure: 14 bar; TMO – Maximum operating temperature: FPM / Viton valve sealing: 200 °C.

Metal to metal sealing: 250 °C; Minimum liquid specific weight: 0,75 kg/dm³.

\* According to EN 1092-2:2018; \*\* According to ASME B16.42.

FLOW RATE CAPACITY (kg/h)

MODEL	SIZE	DIFFERENTIAL PRESSURE (bar)								
		0,5	1	1,5	2	4,5	7	10	12	14
FA21.1-4,5	1/2" to 1" – DN 15 to 25	455	644	788	910	1366	–	–	–	–
FA21.1-10	1/2" to 1" – DN 15 to 25	285	403	494	570	856	1068	1276	–	–
FA21.1-14	1/2" to 1" – DN 15 to 25	215	304	372	430	645	805	962	1054	1139

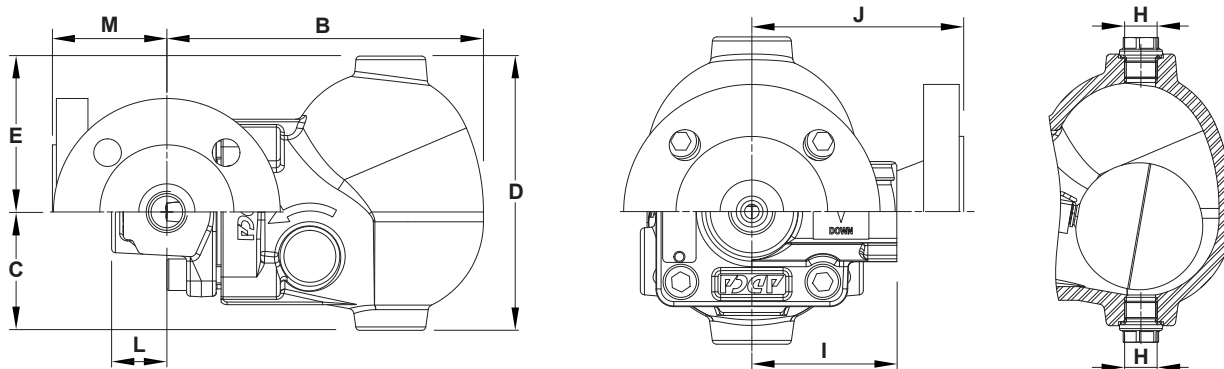


Inline design

DIMENSIONS – INLINE DESIGN (mm)

SIZE	THREADED							PN 16		CLASS 150	
	A	B	C	D	E	H *	WEIGHT (kg)	F	WEIGHT (kg)	F	WEIGHT (kg)
1/2" – DN 15	95	160	60	139	79	3/8"	4,9	150	6,2	150	5,8
3/4" – DN 20	95	160	60	139	79	3/8"	4,8	150	6,7	150	6,1
1" – DN 25	95	160	60	139	79	3/8"	4,7	160	7,4	160	7,2

\* As standard, in versions with EN flanges or female ISO 7 Rp threads, these connections are female threaded ISO 228. In versions with ASME flanges or female NPT threads, these connections are female threaded NPT.



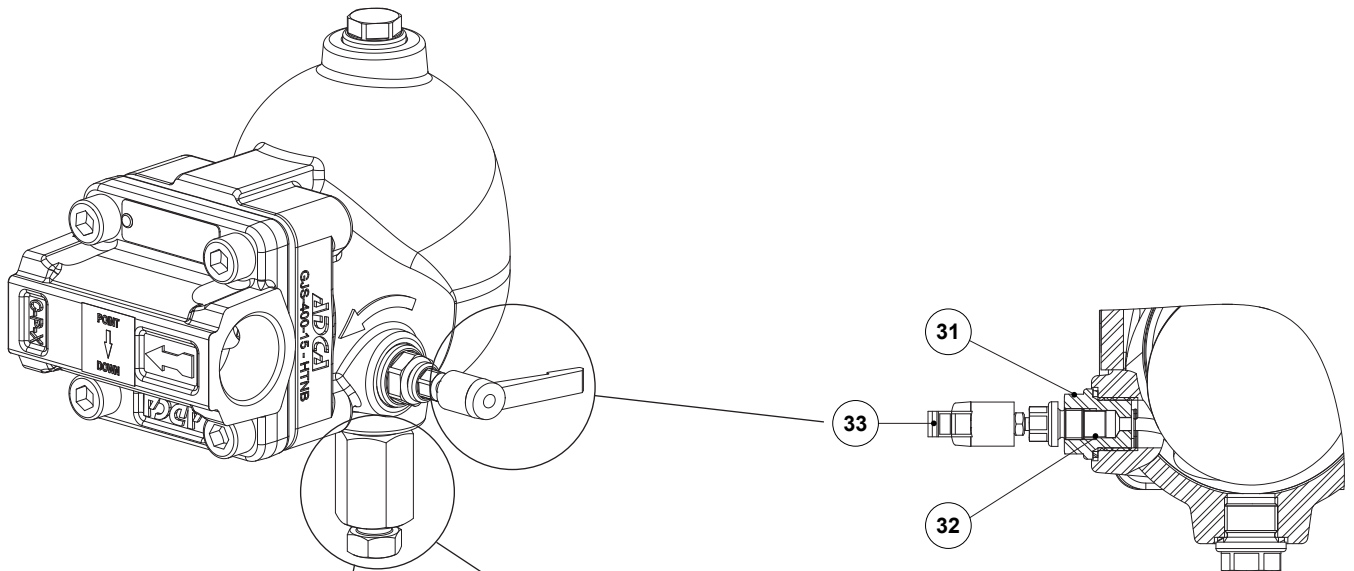
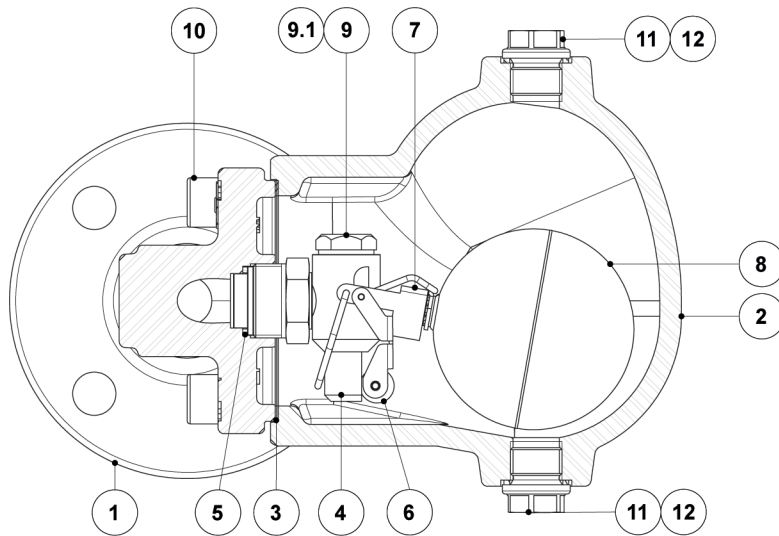
Angled design

DIMENSIONS – ANGLED DESIGN (mm)

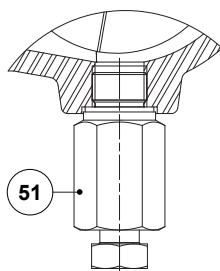
SIZE	THREADED								PN 16			CLASS 150		
	B	C	D	E	H *	I	L	WEIGHT (kg)	J	M	WEIGHT (kg)	J	M	WEIGHT (kg)
1/2" – DN 15	160	60	139	79	3/8"	65	28	4,9	95	58	6,5	100	63	6
3/4" – DN 20	160	60	139	79	3/8"	65	28	4,9	95	58	7	100	63	6,4
1" – DN 25	160	60	139	79	3/8"	65	28	4,9	95	58	7,5	100	63	6,9

\* As standard, in versions with EN flanges or female ISO 7 Rp threads, these connections are female threaded ISO 228. In versions with ASME flanges or female NPT threads, these connections are female threaded NPT.

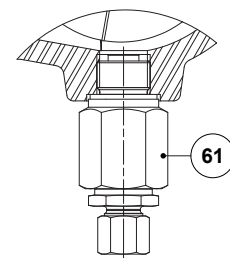
## MATERIALS



*Optional float lifting lever (FLL)*



*Optional blowdown valve (BDV);  
Manual*



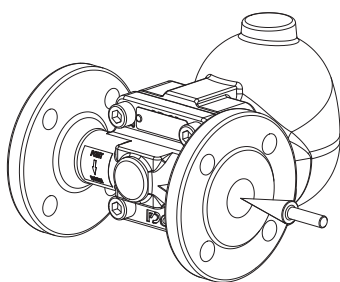
*Optional anti-freeze device (AFZ);  
Automatic*

**MATERIALS**

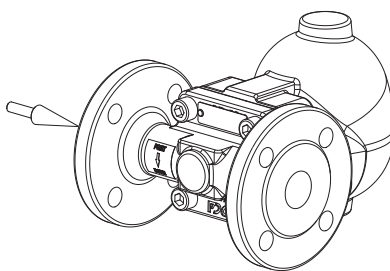
POS. N°	DESIGNATION	MATERIAL
1	Body (inline flanged)	GJS-400-15 / 0.7040
	Body (inline threaded)	P250GH / 1.0460
	Body (angled)	P250GH / 1.0460
2	Cover	GJS-400-15 / 0.7040
3	* Gasket	Stainless steel / Graphite
4	* Seat	AISI 303 / 1.4305
5	* Gasket	Copper
6	* Valve ball	AISI 316 / 1.4401; Viton
7	* Lever	AISI 304 / 1.4301
8	* Float	AISI 304 / 1.4301
9	Plug	AISI 316L / 1.4404
9.1	Gasket	Copper
10	Bolt	Zinc plated steel
11	Plug	AISI 316L / 1.4404
12	** Gasket	Copper; AISI 304 / 1.4301
31	Lever mechanism	AISI 303 / 1.4305; AISI 304 / 1.4301; AISI 316L / 1.4404
32	Packing	Graphite
33	Lever	Plastic
51	Blowdown valve	AISI 303 / 1.4305; AISI 316L / 1.4404
61	Anti-freeze device	AISI 303 / 1.4305; AISI 316L / 1.4404

\* Available spare parts; \*\* Not applicable in NPT version.

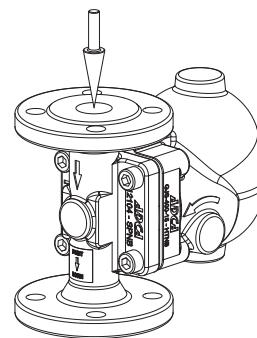
**FLOW DIRECTION**



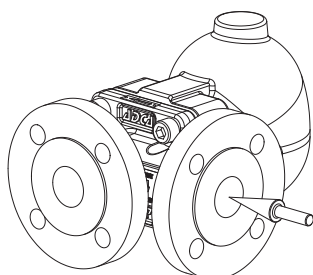
*IR - Horizontal from right to left*



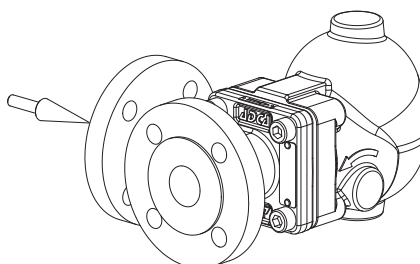
*IL - Horizontal from left to right*



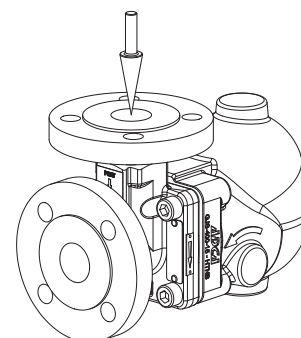
*IT - Vertical from top to bottom*



*AR - Angled from right to front*



*AL - Angled from left to front*



*AT - Angled from top to front*

ORDERING CODES FA21.1										
Model	FA211	2	V	XX	X	IR	A	15		
FA21.1 – GJS-400-15 / 0.7040 SG iron	FA211									
Maximum allowable differential pressure ( $\Delta$ PMX)										
4,5 bar		2								
10 bar		3								
14 bar		4								
Valve sealing										
FPM / Viton (standard)			V							
Metal to metal			M							
Cover connections										
None				XX						
3/8" threaded connections on top and bottom, closed with plugs (mandatory if any options are considered)				10						
Options										
If any, these have specific separate ordering codes, please refer to the appropriate documentation										
FLL - Float lifting lever										
None					X					
Lifting lever on the right side (when facing the steam trap body)					R					
Lifting lever on the left side (when facing the steam trap body)					L					
Flow direction										
Inline horizontal from right to left (standard)						IR				
Inline horizontal from left to right						IL				
Inline vertical from top to bottom						IT				
Angled from right to front						AR				
Angled from left to front						AL				
Angled from top to front						AT				
Pipe connections										
Female threaded ISO 7 Rp							A			
Female threaded NPT							C			
Flanged EN 1092-1/-2 PN 16							L			
Flanged ASME B16.42/B16.5 Class 150							U			
Size										
1/2" or DN 15								15		
3/4" or DN 20								20		
1" or DN 25								25		
Special construction / Additional options										
Full description or additional codes have to be added in case of a non-standard combination									E	