PROTEK
Processteknik GH AB

AIR AND GAS FLOAT TRAPS
FA45.3
(Stainless steel 11/2" – 2"; DN 40 – 50)

DESCRIPTION

The FA45.3 is a range 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: 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: FA45.3-4,5 , 10, 14, 21 and 32 – stainless steel.

SIZES: 11/2" to 2"; DN 40 to DN 50.

CONNECTIONS: Female threaded ISO 7 Rp or NPT.
Flanged EN 1092-1 PN 40.
Flanged ASME B16.5 Class 150 or 300.
Socket weld (SW) ASME B16.11.

INSTALLATION: Horizontal or vertical installation.

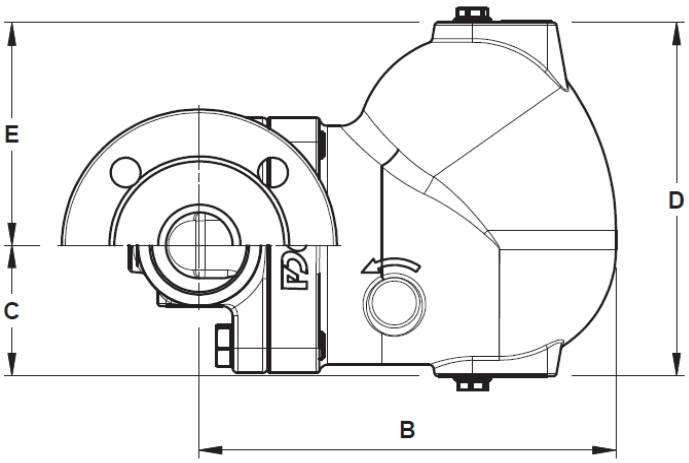
MAX. ΔP:
FA45.3-4,5 – 4,5 bar
FA45.3-10 – 10 bar
FA45.3-14 – 14 bar
FA45.3-21 – 21 bar
FA45.3-32 – 32 bar

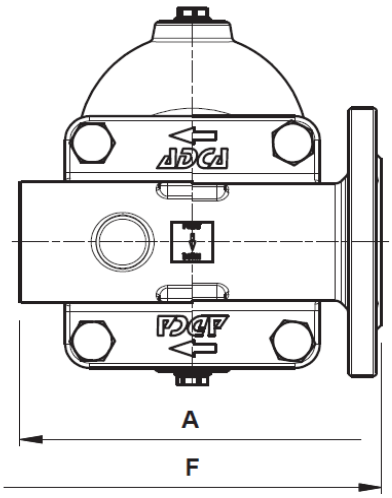
CE MARKING – GROUP 2 (PED – European Directive)		
CLASS 150	**PN 40**	**Category**
11/2" to 2" – DN 40 to 50	–	SEP
–	11/2" to 2" – DN 40 to 50	1 (CE marked)

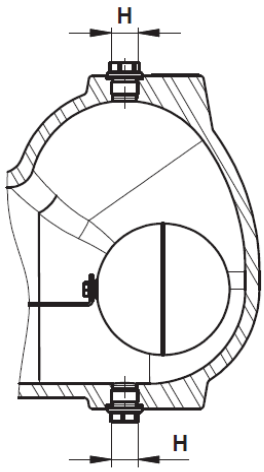
BODY LIMITING CONDITIONS		
FLANGED PN 40 / CLASS 300 *	**FLANGED CLASS 150 ****	**RELATED TEMP.**
ALLOWABLE PRESSURE	**ALLOWABLE PRESSURE**	
40 bar	16 bar	100 ºC
33,7 bar	13,6 bar	200 ºC
31,8 bar	12 bar	250 ºC
29,7 bar	10,2 bar	300 ºC

PMO – Max. operating pressure: 32 bar.
TMO – Max. operating temperature: 250 ºC.
Min. liquid specific weight: 0,75 kg/dm³.
* Acc. to EN 1092-1:2018; ** Acc. to EN 1759-1:2004.
Body limiting conditions PN 40 or below, depending on the type of connection adopted. Rating PN 40 for threaded, SW and BW versions.

FLOW RATE CAPACITY (kg/h)														
MODEL	**SIZE**	**DIFFERENTIAL PRESSURE (bar)**												
		0,5	**1**	**1,5**	**2**	**4,5**	**7**	**10**	**12**	**14**	**16**	**21**	**25**	**32**
FA45.3-4,5	**11/2" to 2" – DN 40 to 50**	995	1450	1710	2000	2990	–	–	–	–	–	–	–	–
FA45.3-10	**11/2" to 2" – DN 40 to 50**	505	720	850	1010	1600	1890	2300	–	–	–	–	–	–
FA45.3-14	**11/2" to 2" – DN 40 to 50**	370	520	610	735	1150	1430	1620	1750	1980	–	–	–	–
FA45.3-21	**11/2" to 2" – DN 40 to 50**	305	430	515	600	900	1160	1435	1590	1620	1760	1995	–	–
FA45.3-32	**11/2" to 2" – DN 40 to 50**	175	230	290	340	505	625	745	815	900	955	1125	1250	1480





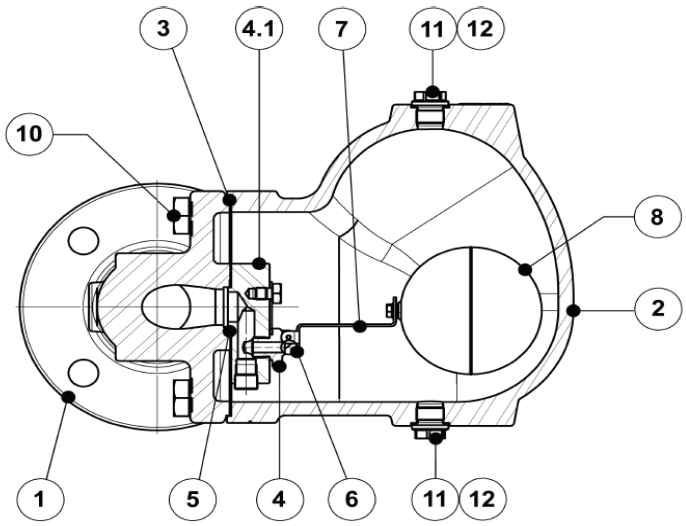


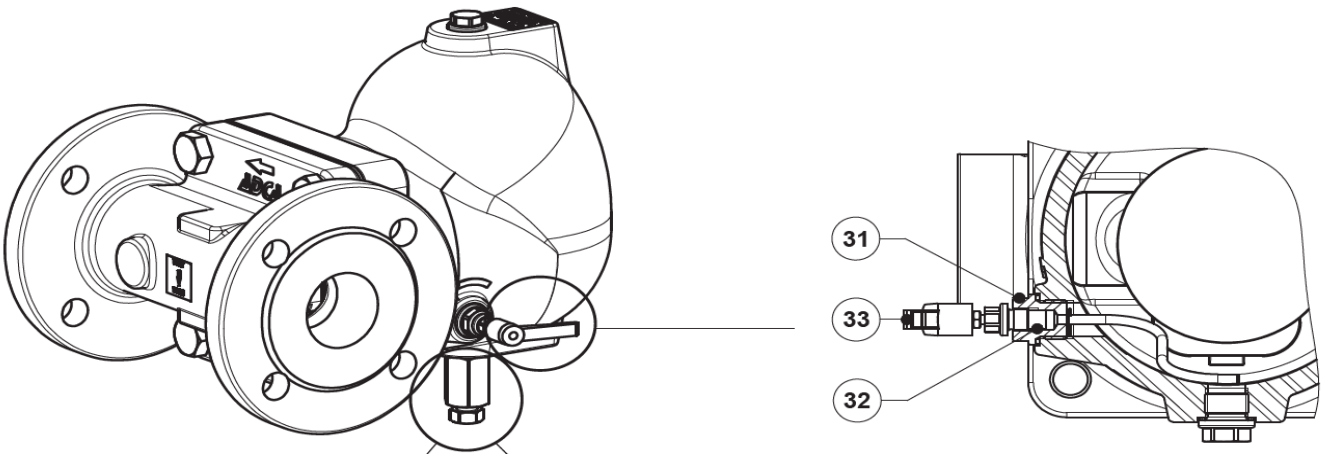
DIMENSIONS (mm)																
THREADED / SW								PN 40			CLASS 150			CLASS 300		
SIZE	A	B	C	D	E	H *	WGT. (kg)	F	B	WGT. (kg)	F	B	WGT. (kg)	F	B	WGT. (kg)
11/2" – DN 40	210	250	80	215	136	3/8"	18,9	230	250	21,7	230	250	20,2	230	250	21,5
2" – DN 50	210	250	80	215	136	3/8"	18,2	230	250	23,6	230	250	21,5	230	250	23,2

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

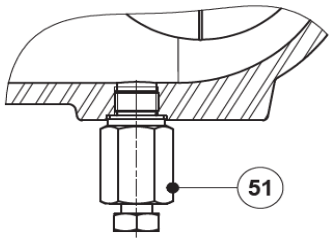
MATERIALS		
POS. N°	**DESIGNATION**	**MATERIAL**
1	Body	A351 CF8M / 1.4408
2	Cover	A351 CF8M / 1.4408
3	* Gasket	Stainless steel / Graphite
4	* Seat	AISI 410 / 1.4006
4.1	Mounting plate	AISI 316 / 1.4401
5	* Gasket	Graphite
6	* Valve ball	AISI 440C / 1.4125
7	* Lever	AISI 304 / 1.4301
8	* Float	AISI 304 / 1.4301
10	Bolts	Stainless steel A2-70
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.

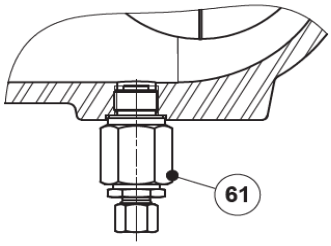




FLL - Float lifting lever



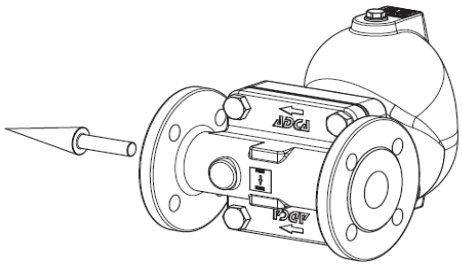
BDV - Blowdown valve (Manual)



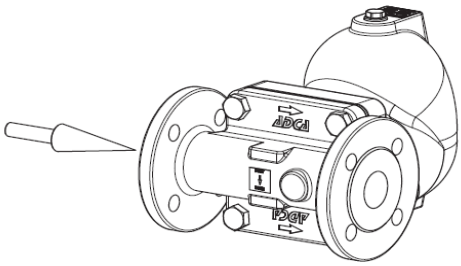
AFZ - Anti-freeze device (Automatic)

PROTEK
Processteknik GH AB

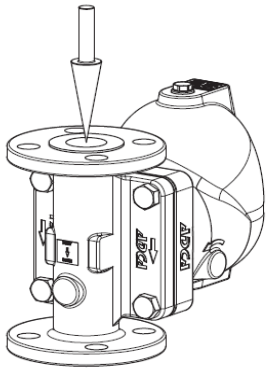
FLOW DIRECTION



R - Horizontal from right to left



L - Horizontal from left to right



V - Vertical from top to bottom

ORDERING CODES FA45.3									
Model	**FA453**	**2**	**M**	**XX**	**X**	**IR**	**A**	**40**	
FA45.3 – A351 CF8M / 1.4408 stainless steel	**FA453**								
Differential pressure									
4,5 bar		**2**							
10 bar		**3**							
14 bar		**4**							
21 bar		**5**							
32 bar		**6**							
Valve sealing									
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									
BDV and AFZ have specific separated 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									
Horizontal from right to left – standard						**IR**			
Horizontal from left to right						**IL**			
Vertical from top to bottom						**IT**			
Pipe connections									
Female threaded ISO 7 Rp							**A**		
Female threaded NPT							**C**		
Socket weld (SW) ASME B16.11							**H**		
Flanged EN 1092-1 PN 40							**N**		
Flanged ASME B16.5 Class 150							**U**		
Flanged ASME B16.5 Class 300							**V**		
Size									
11/2" or DN 40								**40**	
2" or DN 50								**50**	
Special valves / Extras									
Full description or additional codes have to be added in case of a non-standard combination									**E**