

PASVE® pH is a mounting/service valve for pH sensors. It can be used with practically all pH sensors in this size category.

PASVE® pH allows the cleaning and calibration of pH sensors without stopping the process. When required, this can be done automatically. To protect the sensor in abrasive processes, it can be turned to the measuring position only for the duration of the actual measurement.

PASVE® pH is available in a manually operated type or equipped with a pneumatic or electric actuator.

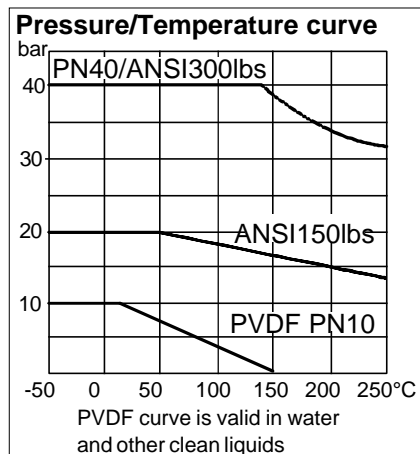
TECHNICAL

Applicable pH sensors

Refer to the Selection Table.

Max. operating pressure/temperature

40 bar, 250 °C, (see the appended table). Min. operating temp. -50°C. Sensor-specific limitations should also be taken into account in applications.



Materials

Wetted parts: AISI316L, Titanium, Hastelloy® C276, Duplex and for type F PVDF.

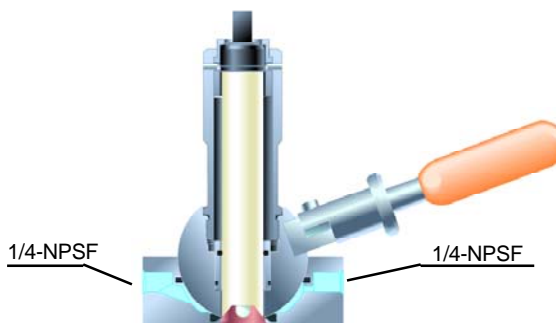
Seals: PTFE, or PTFE with carbon and graphite filling.

Weight

PASVE pH 4.7 kg, PASVE pHP 4.8 kg, PASVE pHF 8.9 kg, Actuator 5.5 kg

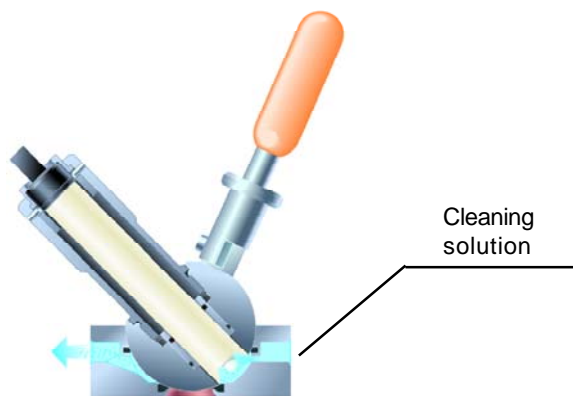


OPERATING POSITIONS



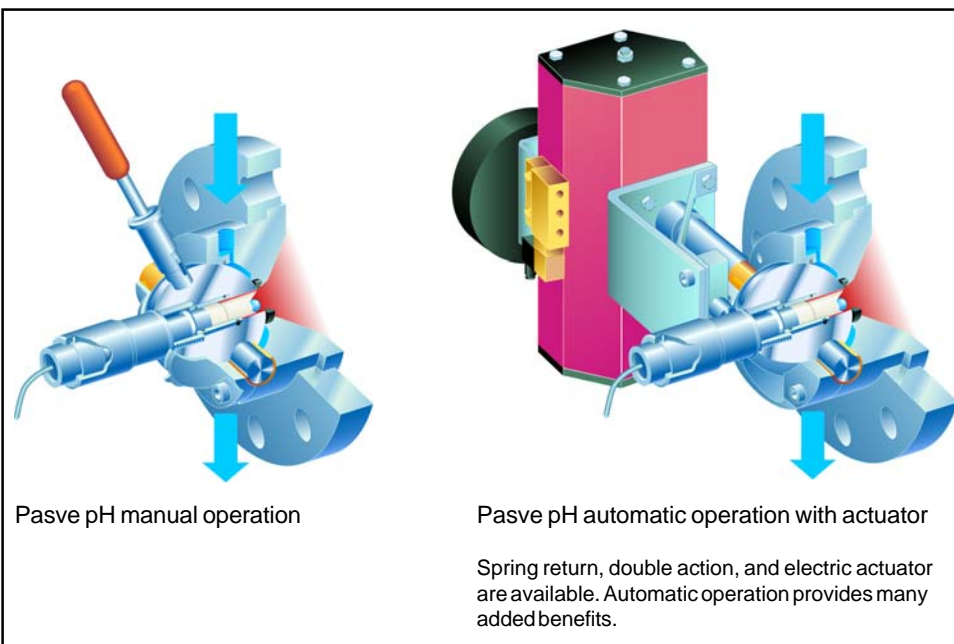
Measuring position

Sensor in measurement. Valve's and sensor's water cooling through flushing channel.



Servicing and calibration position

Sensor turned to cleaning, calibrating and protective position without stopping the process.



Pasve pH manual operation

Pasve pH automatic operation with actuator

Spring return, double action, and electric actuator are available. Automatic operation provides many added benefits.

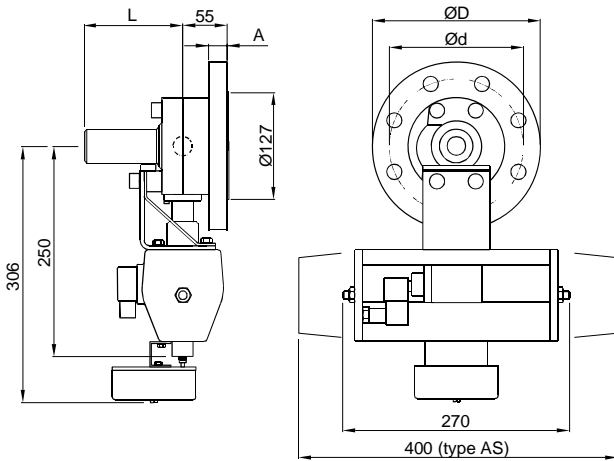
We reserve the right for technical modifications without prior notice.

Hastelloy is the registered trademark of Haynes International.

Pasve is the registered trademark of Satron Instruments Inc.

Pasve pH with pneumatic actuator

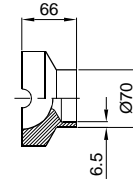
PASVE pHF
(Flange type)



PASVE pHC
(Welded on container or)



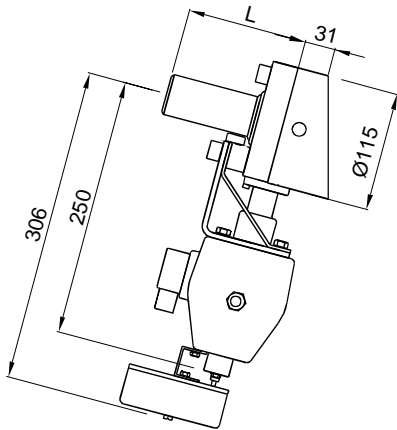
PASVE pHP
(Shape the body to be suitable to the pipe, welded)



PASVE pHF

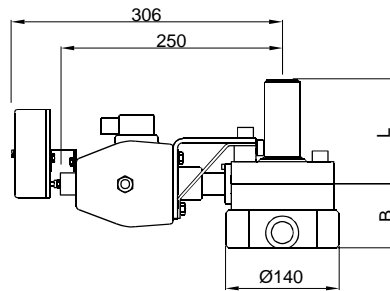
FLANGE		ØD	Ød	A
Code	Type			
A	ANSI 3" 150 lbs	191	152.4	22
B	ANSI 3" 300 lbs	210	168.3	27
H	ANSI 4" 150 lbs	229	190.5	26
G	ANSI 4" 300 lbs	254	200	29
T	DN50 PN40	165	125	20
D	DN80 PN40	200	160	22
J	DN100 PN10/16	220	180	22
C	DN100 PN40	235	190	26
E	JIS10K 80	185	150	20
F	JIS40K 80	210	170	30

PASVE pHB
(Welded on container or vertical pipe, body 15°)

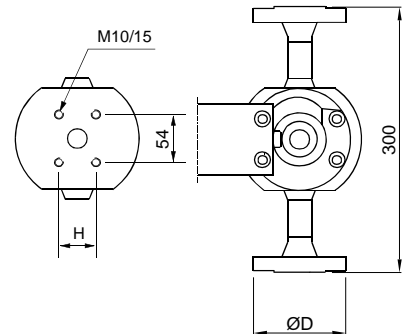
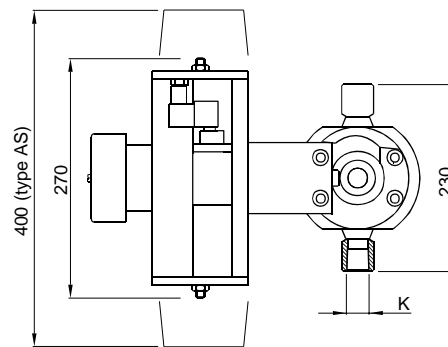
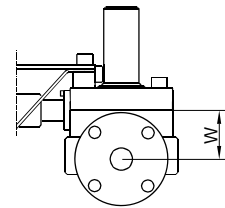


L depends on the sensor type

PASVE pHT
(Flow-through, threaded connection)



PASVE pHD
(Flow through, flange connection)



PASVE pHD

FLANGE		W	ØD	H
Code	Type			
H	ANSI 1" 150 lbs	55	108	48
J	ANSI 1" 300 lbs	55	124	48
U	ANSI 2" 150 lbs	68	153	76
V	ANSI 2" 300 lbs	68	165	76
G	DN25 PN40	55	115	48
T	DN50 PN40	68	165	76

PASVE pHT

THREAD		B	H
Code	Type (dim.K)		
2	1" - NPT	77	48
4	1.5" - NPT	92	64
5	2" - NPT	104	76

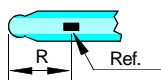
Dimensions (in mm)

Sensor connection

Standard sensor connection PG13.5 / length 120 mm

Code **dimension R**

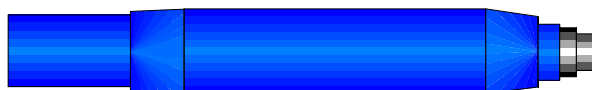
S R < 30 mm
M R < 20 mm
L R < 10 mm



Special sensor connection types

Code **Sensor**

A1 Satron S508
A2 in-line Satron S508 (manual only)
B1 Broadley-James Dynaprobe II
B2 Broadley-James S410
B3 Broadley-James DynaProbe ST856
C1 Honeywell Durafet II, smooth tip
C2 Honeywell Meredian II and Durafet II guarded tip
D1 Barben 546/556
D4 Barben 551/561
D6 in-line Barben 551/561 (manual only)
E1 Endress+Hauser CPF81
E2 Endress+Hauser CPF81 -flat glass
F1 Foxboro 871A
F2 Foxboro 871pH
F3 Foxboro PH10-3
F4 Foxboro PH10-2
F5 in-line Foxboro PH10-2
G1 Lange (GLI) PD1P1.99
G2 Lange (GLI) DPD1P1.99
K1 Kemotron 4835 and 4837 UPW
O2 Orbisphere (31110)
P1 Polymetron 8350/51
R1 Rosemount 389
R2 Rosemount 385+
R4 Rosemount 396TUpH
R5 in-line Rosemount 396P (manual only)
R6 Rosemount 396P
R9 Rosemount 3300HT/HTVP
T1 ABB TB556 (38 mm insertion depth), flat glass
T2 ABB TB557
T3 ABB TB564
T4 ABB TB561
T5 in-line ABB TB564 (manual only)
T6 in-line ABB TB561 (manual only)
T7 ABB TB556 (28 mm insertion depth), flat glass
Y1 Yokogawa FU20 -- NPT
Y2 Yokogawa FU20 -- FSM (flat glass)



Surface temperature

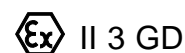
Ambient temperature °C	Temperature class
70	T6
85	T5
120	T4

European Directive Information

ATEX directive (94/9/EC)
 Satron Instruments Inc. complies with the ATEX directive.

European Pressure Equipment Directive (PED) (97/23/EC)
 - Sound Engineering Practice

European Certification:



Selection Table																				
PASVE pH Mounting type				Wetted parts (C, B and P)																
C	On container or horizontal pipe, welded	Code	Material																	
B	On container or vertical pipe, body 15°, welded	none	AlSi316L (std.)																	
P	Shape the body to be suitable to the pipe, welded	3	Hastelloy® C276																	
F	On flange	4	AlSi904L																	
T	Flow-through, threaded connection	6	Titanium																	
D	Flow-through, flange connection	8	Duplex (Wnr. 1.4462)																	
Process connection type, specified for mounting type F																				
Flanges					Flanges					Wetted parts										
Code	Type	Code	Type	Code	Material															
T	DN50 PN40 (only manual operation)	H	ANSI 4"/150 lbs	2	AlSi316L															
D	DN80 PN40	G	ANSI 4"/300 lbs	3	Hastelloy®C276															
J	DN100 PN10/16	E	JIS 10K 80	4	AlSi904L															
C	DN100 PN40	F	JIS 40K 80	6	Titanium															
A	ANSI 3"/150 lbs			8	Duplex (Wnr. 1.4462)															
B	ANSI 3"/300 lbs			P1	PVDF PN10															
(P1 only for flange codes D,A,E)																				
Process connection type, specified for mounting type T																				
Threads					Wetted parts															
Code	Type	Code	Material																	
2	1" - NPT	2	AlSi 316L																	
4	1.5" - NPT	3	Hastelloy® C276																	
5	2" - NPT	4	AlSi904L																	
Process connection type, specified for mounting type D																				
Flanges					Flanges					Wetted parts										
Code	Type	Code	Type	Code	Material															
G	DN25 PN40	U	ANSI 2"/150	2	AlSi316L															
M	DN40 PN40	V	ANSI 2"/300	3	Hastelloy®C276															
T	DN50 PN40	K	JIS 10K 25	4	AlSi904L															
H	ANSI 1"/150	R	JIS 10K 40	6	Titanium															
J	ANSI 1"/300	S	JIS 10K 40	8	Duplex (Wnr. 1.4462)															
N	ANSI 1.5"/150	X	JIS 10K 50																	
P	ANSI 1.5"/300	L	JIS 40K 25																	
Seals																				
0	PTFE + 20C + 5Gr / FPM (std.)																			
1	PTFE 100% / FPM																			
2	PTFE +20C+5Gr / FFPM																			
3	PTFE 100% / FFPM																			
4	PTFE + 20C + 5Gr / FPM+AlSi316 / PTFE 50 % (Hard)																			
5	PTFE 100% / FPM+AlSi316 / PTFE 50% (Hard)																			
6	PTFE 100% / FPM + PVDF 100% (Hard)																			
Sensor connection																				
Sensor connection types, see page 3																				
Pt100 temperature sensor																				
0	No sensor																			
X	With sensor (Measuring range -50 ... +200°C)																			
Actuator																				
MD	No actuator (manually operated)			AE1	Electric actuator 230 V 50 Hz															
AD	Double-action actuator			AE3	Electric actuator 115 V 60 Hz															
AS	Spring-return actuator																			
Solenoid for actuator (only for actuator types AD and AS)																				
0	No solenoid valve			2	24 V DC 2.5 W (also EEx dm)			4	28 V DC 0.4 W (EEx ia)											
1	230 V AC 50 Hz 2 W (as standard)			3	115 V AC 60 Hz 2 W															
Solenoid explosion proof																				
0	No explosion proof			2	EEx ia IIC T6 (only 28V)															
1	EEx m II T5			3	EEx dm IIC T5/T6 (only 24V)															
Position switches																				
0	None			A	Position switch EEX ib IIC T5/T6															
X	Equipped with position switches																			
E	Position switch NAMUR, DIN 19234																			
Special options																				
Z1	For oxygen use			Z4	Cutting ball															
Z2	Process side flushing			Z5	Diamond-coated ball															
Z3	Actuator (AS) reverse action																			
Documentation																				
Installation and operating instructions										Material certificates										
IE	English									0	No material certificate									
IF	Finnish									MC1	SFS-EN 10204-2.1 (DIN50049-2.1)									
										MC2	SFS-EN 10204-2.2 (DIN50049-2.2)									
										MC3	SFS-EN 10204-3.1B (DIN50049-3.1B)									

Specification example: PASVE pH D U2 0 O2 X AD3 1 E Z1 IEMC1