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Technical Data
PH 500W to 1500W

Function: Hose installed heater, designed to pre heat applications such as coolant circuits etc.
Thermostat controlled and overheat protection.
Circulation-pump can be added.



Subject	Data	Note	Approved by
1. Certification			
	ATM 2102246STO-ETL	UL 499-2014 Ed. 14+R:23Feb2017 CSA C22.2#191:1989 Ed.2+G1;G2:G3	Intertek Semko

2. Electrical Data			
Type of element	Resistor element		
Voltage, nom.	110-120 VAC/ 15A		
Input power	500W to 1500W	+5 / -10%	

3. Temperature range			
Operation temperature	-40°C to +125°C and 30min. +140°C		

4. Degree of protection			
	IP44	SS EN 60 529	Intertek Semko

5. High pressure washing			
	Working pressure: 170 bar Water flow: 17 l/min Water temperature: 90°C Distance: 300mm		Approved by SP, Swedish National Testing and Research Institute

6. Chemical resistance			
		Volvo STD 7611;131 SAAB STD 5028	SP (Swedish National Testing and Research Institute)
Chemicals	Type	Immersion Time/Temp.	
Oil	IRM 902	48 h/90°C	
Hydraulic oil	IRM 903	30 min/23°C	
Grease	Gr 2 Diester	1 h/80°C	
Grease	Gr 4 Silicone	1 h/80°C	
Brake fluid	DOT 4	48 h/90°C	



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Battery fluid	25% H_2SO_4	1 h/50°C	
Petrol	ISO 1817 liquid C	30 min/23°C	
Petrol with alcohol	ISO 1817 liquid 4	24 h/23°C	
Diesel	IRM 903/10% paraxylene	48 h/90°C	
Biofuel	SS 155436	24 h/23°C	
Alcofuel	SS 155437		
Solvent	15-17% aromatic content	1 h/23°C	
Window washing fluid	10% isopropanol, 40% ethanol , 50% water	1 h/23°C	
Antifreeze	Volvo No. 1381079- 1	1 h/80°C	
Road salt	5% $CaCl_2/NaCl$ 95% water	48 h/23°C	

7. Coolant pressure			
	3 bar pressure	Calix TM 18-048	

8. Enviroment			
		IMDS	https://public.md.system.com/en/web/imds-public-pages/home
		REACH	REACH (EG) 1907/2006

9. Recycling			
	100% recoverable		Swedish Environmental Protection Agency 2017/04/09

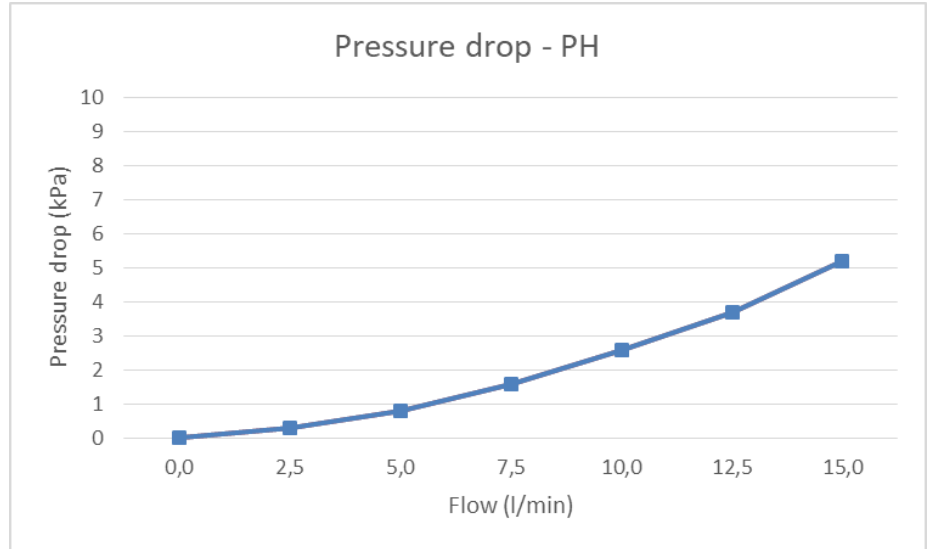
10. Corrosion			
	SS 433 07 90 ISO 9227		Intertek Semko Tested at Swedish Corrosion Institute

11. Durability			
	9000h	Calix TM 18-047	

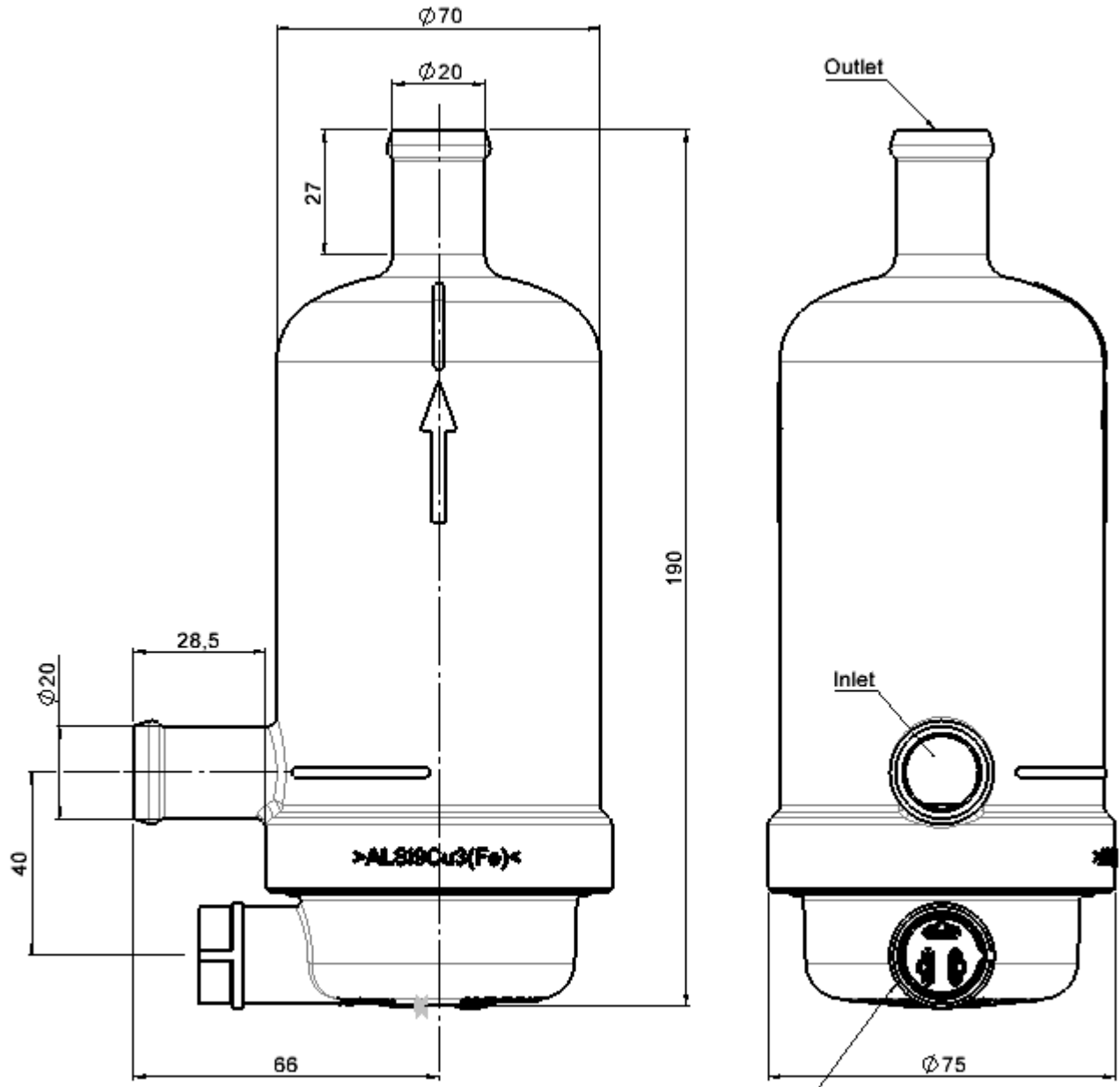
12. Connector geometry			
	Calix interface SI		

13. Pressure drop			
Pressure drop in PH 500-1500W	See table and curve below	All measurements were performed with glycol/water-mix 50/50%, at an ambient temperature of 25°C.	

Flow q (L/min)	Pressure drop p (kPa)
0,0	0
2,5	0,3
5,0	0,8
7,5	1,6
10,0	2,6
12,5	3,7
15,0	5,1



14. Dimensions



Calix connector interface type SI,
fit with Calix connector type SU

N.B. PH heater to be installed in vertical position, with the Outlet pointing upwards, as indicated by the arrow on the hausing.



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15. Available PH configurations

Thermostat	Power (W)
Low: Open 50°C, Close 30°C	500,750, 1000, 1500
Standard: Open 80°C, Close 60°C	500,750, 1000, 1500

16. Doc. change record

Date	Change description	Sign	Rev

We reserve the right to change technical data without prior notice.