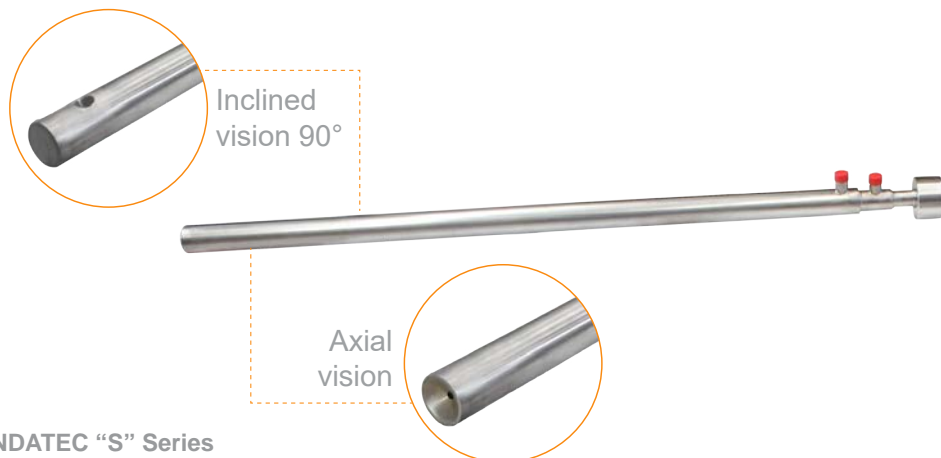


# HIGH TEMPERATURE CAMERA

## sonda<sup>tec</sup> high temperature camera housing

Water and air cooled high temperature vision systems



### SONDATEC "S" Series

#### Operational description

SONDATEC-S housing series have been developed to allow the use of television camera in high temperature environments, as glass process, cement industry, iron&steel plant and boiler. These high-temperature camera systems provide clear, crisp images of the combustion process in boilers, furnaces, kilns, incinerators and other combustion chambers. With the real-time image provided, operators and engineers can monitor the proper flow of fuel and raw materials, reduce emissions, reduce fuel consumption, speed up boiler light off and improve safety.

SONDATEC-S housings have been designed for all applications that require a small entrance diameter. Thanks to this feature SONDATEC-S are ideal also for mobile inspections.

SONDATEC-S housings are available in different lengths from 1200 mm up to 4000 mm, with a diameter equal to 45 mm. They are typically endowed with axial or inclined vision and they can allow diagonal angles of vision up to 105°.

Depending on the behavior of the chemicals involved in the process, SONDATEC camera housing should be made by special stainless steels, high-resistance alloys or by using superficial protections.

SONDATEC-S camera housings employ triple-wall laminar flow for efficient water cooling of the camera and allow operation in temperatures up to 1800°C.

SONDATEC-S housings are "pressurized": an integral compressed air system supplies clean air (or appropriate gas) for cooling and particulate removal from the lens. In such a way the lens doesn't require any expensive protection glass, crystal and protection porthole. A constant supply of clean air is essential for proper camera operation and protection: GFATEC series represent an effective filtration system able to remove contaminants and to provide high quality clean air in industrial environments.

SONDATEC-S housings may be provided with retraction devices (INTEC series): in case of system failure, or failure of the cooling supply, the retraction device automatically removes the housing from the furnace and seals the furnace porthole.

#### Technical specification

Diameter:	45 mm
Length:	from 1200 mm to 4000 mm (other on request)
Angle of vision:	axial or inclined (90°), max horizontal angle: 105°
Camera:	IP Megapixel CAMTEC series
Electrical connections:	MIL-Std multipolar connector

# HIGH TEMPERATURE CAMERA

## Water cooling

Connection: 1/2" M BSPP  
 Temperature IN: 35°C max  
 Temperature OUT:  $\Delta T = 15^\circ\text{C}$  max (3\*)  
 Flow: from 4 l/min to 16 l/min (1\*)  
 Pressure entry: from 2 bar to 6 bar (2\*), maximum 8 bar  
 Quality: pH 6-8, suspensions max 10 mg/l

## Air for cooling and cleaning lens

Connection: 3/8" M BSPP (other on request)  
 Temperatures IN: 40°C max  
 Consumption: around 3 Nm<sup>3</sup>/h (3\*)  
 Pressure entry: from 1 bar to 3 bar, maximum 4 bar (3\*)  
 Quality: Instrumental Air ISO 8573-1Classe 1.7.2

## Correlated products

CAM12X-S-- CAMTEC high temperature television camera  
 INT02X\_ INTEC retraction device  
 JBX---- Junction box and power supply complete with main unit of control camera  
 CAB11X40-A Control cabinet

## Available models (Part Number Configurator)

0 1 X A B C D

0	1	X	A	B	C	D
Length [mm]	Series	View / Field of vision	Material / Connections			
1 = 1000/1200	S = Air & water cooling					
3 = 300	P = Air cooling					
4 = 4000	G = Air cooling					
6 = 1600						
7 = 700						

Part number configurator "C"	View	Field of vision
0	Axial	-
6		bottom
7	Inclined 90°	up
8		left
9		right

Part number configurator "D"	Material	Air and water connectors placed on the: (rear view, as drawings)			
		left	right	up	opposite
0	AISI316L		•		
1	AISI316L	•			
2	AISI316L			•	
3	AISI316L				•
4	AISI310S		•		
5	AISI310S	•			
6	AISI310S			•	
7	AISI310S				•
H	Hastelloy C276		•		
L	Hastelloy C276	•			
U	Hastelloy C276			•	
O	Hastelloy C276				•

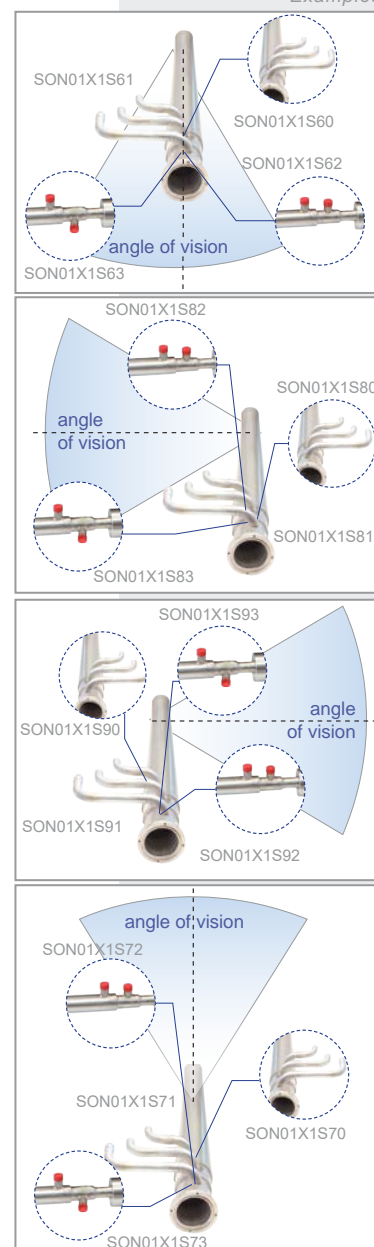
## Notes

(1\*) Data are indicative and depend on process' temperature and application. 16 l/min is referred to temperature >2000°C ( 3650°F);  
 (2\*) Data are indicative and depend on process' temperature and application. 6 bar is referred to application with positive inclination of the housing relative to horizontal plane;  
 (3\*) Data are indicative and depend of process' temperature and application. For more informations, please contact our engineers.

The "T TELEA" brand and "T" logo are registered trademark of Telea Tecnovision S.r.l.  
 Specifications may be subject to change for improvement without prior notice.



## Examples



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