# **RTD SENSORS FOR FERMENTERS**

## **RXF300**

## **APPLICATIONS**

- Process monitoring
- Temperature measurement in fermenter connection
- Monitoring of CIP-/SIP process

## **PROCESS CONNECTION**

- Standard lengths 46mm / 52mm
- CIP-/SIP cleaning up to 150°C
- All stainless steel construction

## **FEATURES**

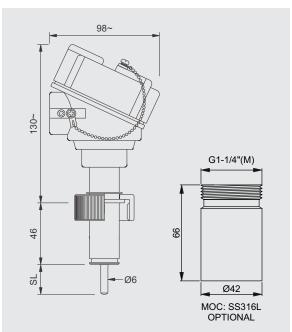
- Pt100 3 wire single / dual circuit
- Class A or higher accuracy
- 6mm sheath dia (straight)
- Wetted parts made of SS316L (1.4404)
- ATEX certified terminal head, epoxy painted
- SS304 coupling nut
- EPDM sealing ring
- Roughness value (Ra) ≤ 0.8 µm (standard)
- Operating pressure 10 bar
- Temperature range ambient -50... +85°C
- Temperature range sensors tip -50...+150°C
- Protection class, IP67

## **OPTIONS**

- Pt100, 4-wire
- Custom port sheath lengths
- 2 x Pt100 (not retrofittable)
- Available with Weatherproof terminal head (Model RHF300)
- Sensors tip with 4 mm (Straight)
- Sensor tips with 6 mm reduced to 4 mm & 8 mm reduced to 5 mm
- Surfaces with Ra  $\leq$  0.38 µm for wetted parts
- Hastalloy C-276 material
- Head mounted transmitter
- Electropolished SS316 terminal head
- Cable gland, nickel plated brass
- Flameproof head certified for gas groups IIB & IIC, Zone 1 & Zone 2, certified by CSIR
- CE certification

## **HOW TO ORDER**

# RXF300 S AL A3 A G32 6 25 46 X X X Optio No. o No. o Termi Lengt Insert Shea Coup Class Optio Value <td



## ACCURACY OF Pt100 AS PER IEC 60751

Pt100	A (½B)	AA (1/3B)
0°C (100Ω)	±0.15°C/±0.06Ω	±0.1°C/±0.04Ω
100°C (138.5Ω)	±0.35°C/±0.13Ω	±0.27°C/±0.1Ω

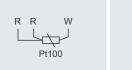
## **RESPONSE TIME**

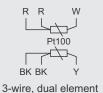
Tip Dia.	Imm. Length	<b>T</b> <sub>0.5</sub>	<b>T</b> <sub>0.9</sub>
6 mm	25 mm	4 s	9 s

 $T_{as}$  and  $T_{as}$  shows the response times at 50% and 90% of the step change. This data is measured by immersing the sensing bulb from ambient temperature to boiling water flowing at 0.4 m/sec.

The result may vary according to the measuring environment and condition.

## **CIRCUIT DIAGRAM**





3-wire, single element

## **TERMINAL HEAD**

CODE	ТҮРЕ
AL	ATEX, Aluminum
AC	ATEX, SS316
F1	Flameproof, Single cable entry
F2	Flameproof, Dual cable entry
FA	Flameproof, SS304
FC	Flameproof, SS316

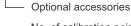
### TERMINATION

CODE	ТҮРЕ
FL	Flying leads
ТВ	Terminal block

Tel : +91 22 41929999 / 42537777 Email : sensors@radix.co.in · www.radix.co.in

DAT#111R4

radix



No. of calibration points

Termination

Length of wetted port

Insertion length

Sheath dia

Coupling nut G1 1/4"

Class A accuracy

- Pt100, 3 wire

- Terminal head
- No. of circuit