

GESTRA Steam Systems

Product Range B1

Max.-Min. Limit Switch NRS 2-1b

NRS 2-1

Description

In conjunction with level electrode NRG 21... or NRG 26... for signalling high and low levels (MAX and MIN alarm) in steam boilers, condensate vessels, feedwater deaerators and other tanks.

Function

Level switch for two variably adjustable switchpoints. MIN and MAX alarm limits in conjunction with GESTRA level electrodes NRG 21... or NRG 26... .

The level switch NRS 2-1 consists of a plastic plug-in case for installation in control cabinets. The plug-in case can be snapped onto a 35 mm supporting rail or screwed into position on a mounting panel.

Technical Data

Limit switch for MAX and MIN alarms with level probe type NRG 21... or type NRG 26... .

Type-approval no.
TÜV-WR/WS-04-317

Input

Three connections for NRG 21... or NRG 26... or for input current 0 to 1 mA at 6K 8Ω.

Output

Two potential-free relay contacts,
max. contact rating: 250 V, 500 W, 3 A ohmic with a life of 4×10^5 switching cycles or 0.35 A inductive with a life of 2×10^6 cycles;
contact material silver, hard-gold plated.

Switching hysteresis

Max. - 5 %

Min. + 5 %

referred to the range between "Max" and "Min"

Adjustors and indicators

Two potentiometers for MAX and MIN level, continuously adjustable

One LED MAX alarm, one LED MIN alarm

One LED for power supply and indication of operating errors

Mains supply

24 V/50/60 Hz, 120 V/60 Hz, 230 V/50 Hz,
240 V/50 Hz, 2.5 VA

(please state voltage when ordering)

24 V DC supply also possible with the ancillary unit type URN-1.

Protection

IP 40

Permissible ambient temperature

0-55 °C

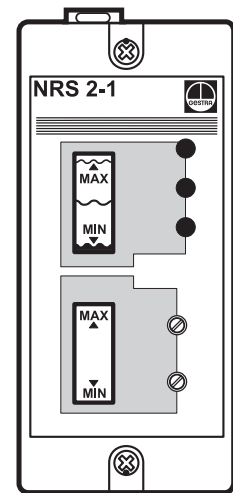
Case materials

Base: ABS plastic, black

Cover: polystyrene (highly shock-resistant), stone grey

Approx. weight

0.5 kg



NRS 2-1

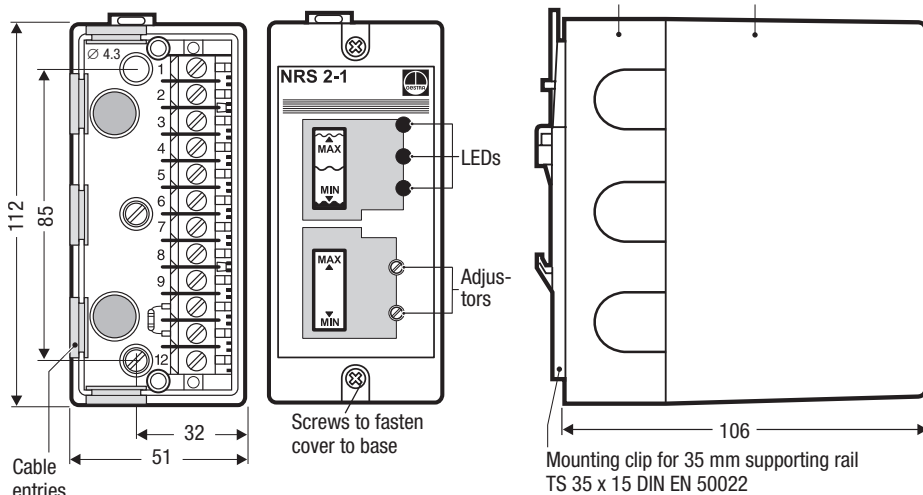
Dimensions

Base with terminals

Front view

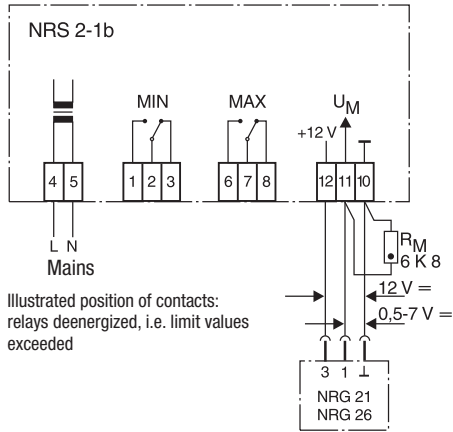
Side view

Base Cover

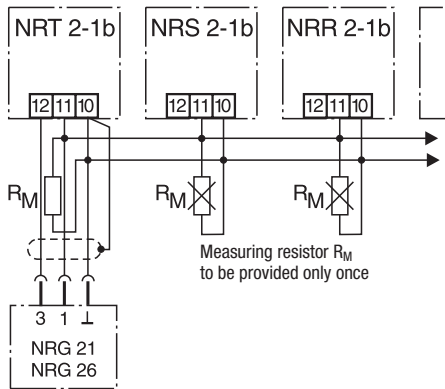


Max.-Min. Limit Switch NRS 2-1b

Wiring Diagrams



Wiring diagram for max.-min. limit switch type NRS 2-1b



Example of parallel connection of several units

Important Notes

Recommended cable for wiring to the probe: Screened cable, e.g. I-Y (St) Y2 x 2 x 0.8, max. cable length 100 m. The switch contacts must be fused with 2.5 (inert fuse) if the installation is inspected by TÜV (German Technical Supervisory Association).

Order and Enquiry Specifications

GESTRA max.-min. limit switch for signalling 2 limit values used with the GESTRA level probe type NRG 21... or NRG 26...:

Max.-min. limit switch type NRS 2-1b, plug-in unit in plastic case for installation in control cabinets.

Mains supply..... V

Associated Equipment

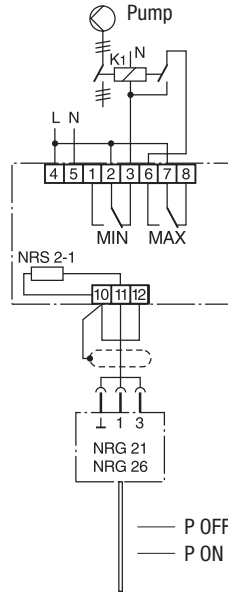
Level controller type NRR 2-1b as three-position stepping controller with proportional action.

Level transmitter type NRT 2-1b with current output 0 to 20 mA or 4 to 20 mA.

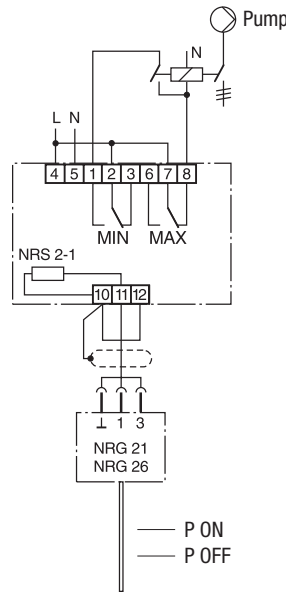
Level indicator type URA with LED analogue display.

Supply in accordance with our general terms of business.

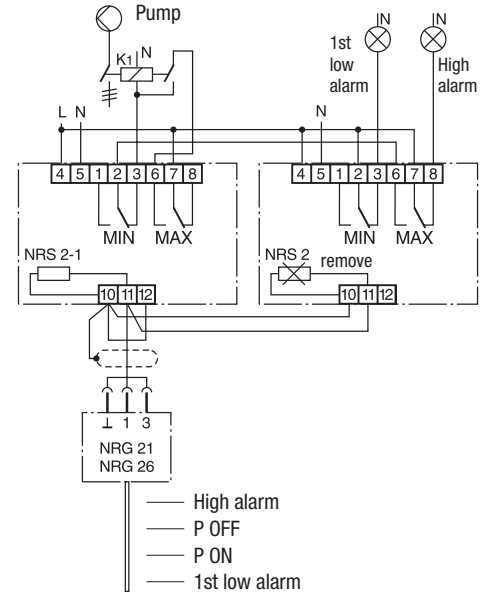
Wiring Diagrams



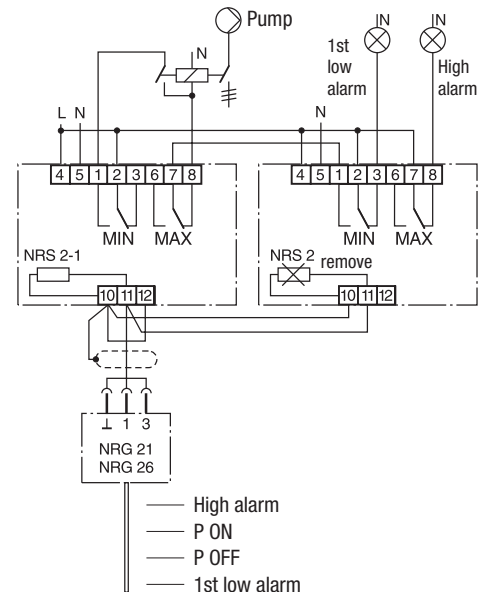
Fill control



Discharge control



Fill control with high-level alarm with EMERGENCY cut-off of pump and low-level alarm



Discharge control with high-level alarm and low-level alarm with EMERGENCY cut-off of pump

ATEX (Atmosphère Explosible)

According to the European Directive 94/9/EC the equipment must **not** be used in explosion risk areas.

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