

TECHNICAL DESCRIPTION OF TRANSMITTERS

■ Transmitter

In order to avoid the problems of a 2-wire circuit (see page 42) and to do without a multi conductor cable, a 2-wire transmitter is used.

The transmitter transfers the probe signal into a standardized temperature linear current signal from 4...20 mA. The supply of the transmitter is equally done via the two connection cables. Therefore, a quiescent current of 4 mA is used. Due to the removed zero point, it is called "life zero".

Furthermore, the 2-wire transmitter offers the advantage to reduce the interference susceptibility by reinforcing the signal. For the mounting of the transmitters, 2 construction types are possible.

As the distance of the normal signal shall be kept as short as possible, it can be mounted directly in the head of the transmitter and thus the interference susceptibility is reduced.

Constructive conditions or the fact that the transmitter can't be reached easily in case of a defect are sometimes contradictory to this optimum solution.

In this case a transmitter for rail mounting in the switch cabinet is used.

The advantage of better access nevertheless results in a longer distance that the normal signal has to cover.

In all protecting armatures with a corresponding protection head transmitters can be mounted. A cheap solution is the direct mounting of the transmitter on the gauge slide (instead of ceramic socket). We recommend the mounting in the cap of a special connection head which enables a simple exchange and standard gauge slides can be used for replacement.

