

# Analog angle of rotation VEW 6KA9251 RED

## Redesign

The analog angle of rotation sensor 6KA9251 by manufacturer Siemens can be plug-and-play replaced, by an electrically and mechanically compatible new development.

The angles of rotation function is analog. The linear actual value sensor translates the angularity of the 6mm control shaft into a 10V-output signal (max. 12V) with impressed direct current of 0...20mA (optional 4...20mA).

Load resistor  $\leq 500$  (max. 600 )

The operating range of the standard version is linear with a trapezoidal curve profile of:

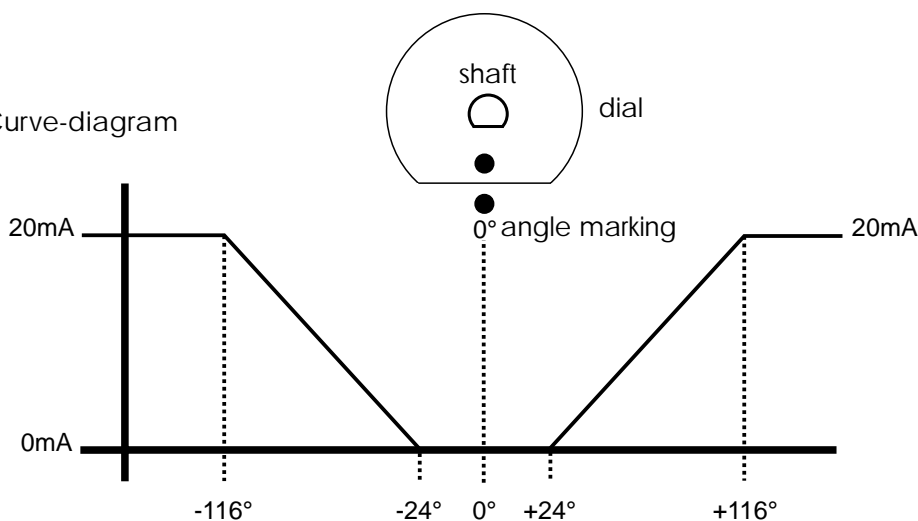
20mA =  $-116^\circ \dots -24^\circ = 0\text{mA}$  alternatively  $+24^\circ = 0\text{mA} \dots 20\text{mA} = +116^\circ$

A dial with angle markings is located on the control shaft.

The control shaft's 0-position is marked by the axis flattening of the shaft and the cam disc as well as by a single marking hole at the casings collar. At 0-position, there's a 0mA output current at an angularity of  $-24^\circ$  to  $+24^\circ$ .



Curve-diagram



The angles of rotation are being used as servos and brake units in rail vehicles, to control TRAM and subway as well as for slewing systems and hoists of conveyor systems (cranes, excavator, etc.)

At disposal are optional different curve profiles as well as a life-zero-output with 4---20mA. Optional curve profiles are feasible.

There's no limit by the rotation of the control shaft's angle of rotation.

### Technical data:

Power supply	: nom. 24VDC (18...33V)
Output	: impressed current 0...20mA bei $\pm 24^\circ \dots \pm 116^\circ$
Linearity	: $< 0,5\%$ in the range of $24 \dots 116^\circ$
Angle of rotation	: unlimited
Control shaft	: $\varnothing 6\text{mm}$ (different $\varnothing$ optional) with cam disc
Connection	: Screw connector terminal, opt. plug connector
Casing	: $\varnothing 60\text{mm} +0 -0,5\text{mm}$ with collar $\varnothing 62\text{mm}$ , back-anodized
Operating temperature	: $-30 \dots +70^\circ\text{C}$



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