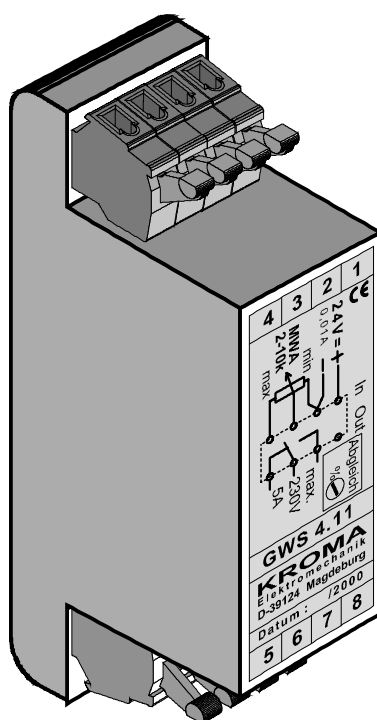


Limit Switch

up to 4 adjustable limits



GWS 4

KROMA
FÜLLSTANDSMESSTECHNIK GmbH
Rostocker Straße 9-10 D-39124 Magdeburg
Telefon: +49(0)391/2538744 Fax: +49(0)391/2538745
E-Mail: info@KROMA.eu Internet: www.KROMA.eu

GWS 4 Limit Switch

Description

KROMA GWS 4 limit switches serve to signal independently adjustable limits of liquid levels of tanks in combination with KROMA filling level sensors. The GWS 4 comprising of one basic module for one limit is expandable to up to four independent limits in one housing. The limits can be set by means of potentiometers. The spindle potentiometers provided on the printed circuit can be readily set from 0% to 100% by terminal screw driver (3mm wide).

The presetting can already be done by the manufacturer, if required.

The outputs of the limit switches are executed as electrically isolated relay change-over contacts.

To suppress switching operations caused by momentary level changes (hunting), the GWS 4 can be furnished with a time delay of up to 4 minutes.

Special Features

- Up to four independently adjustable limits in one housing
- Circuit state signalled by a light-emitting diode
- Versions with switching delay
- Easy installation (refer to typical circuit)
- Parallel connection of other KROMA limit switches and KROMA level indicators to one KROMA level sensor
- Tested according to German railways' standard BN 411002/EN 50155 (approved for use on rail vehicles)

Technical Data

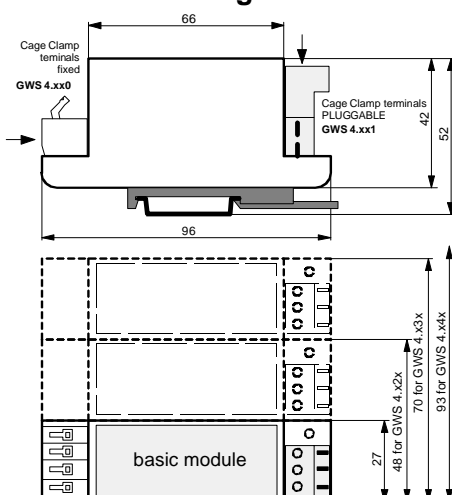
Operating voltage:	24 V DC (16 V to 35 V) or 48 V DC (18 V to 64 V)
Power consumption:	Approx. 30 mA per limit
Input resistance MWA:	2 k Ω to 10 k Ω (three-wire potentiometer)
Output:	change-over contacts, electrically isolated, Standard 230 V, 5 A, max. 1250 VA/120 W Low load max. 60 V, 0.3 A
Time delay:	1 second to 250 seconds, to be programmed by the manufacturer
Electric isolation:	Testing voltage 1,500 V
Degree of protection:	IP 40
Ambient temperature range:	-40°C to +70°C
Storage temperature range:	-55°C to +70°C
Vibratory strength:	20 m/s ² (5 to 150 Hz)
Shock resistance:	50 m/s ²
Weight:	0.10 kg
Dimensions:	96x52xB mm B=27 for one limit B=48 for two limits; B=70 for three limits; B=93 for four limits
Mounting:	35mm standardized bar as per DIN EN 50022

Information required with order (typical order)

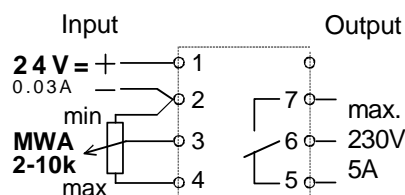
GWS 4 . 1 1 0 - K 15

KROMA GWS 4 limit switch	_____
Supply „1“=24V DC ; „3“=48V DC	_____
Number of limits „1“; „2“; „3“; „4“	_____
Terminals 'Cage clamp' „0“= fixed ; „1“= pluggable	_____
Model „K“ for low loads	_____
Time delay: „“=none ; „15“= time delay 15 seconds	_____

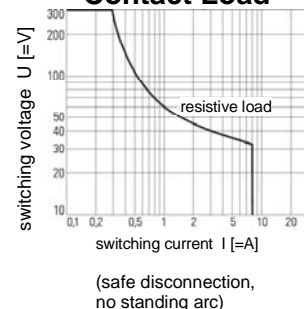
Outline Drawing



Terminal Assignment



Contact Load



Subject to technical modifications.