



The MK96-11-R/24VDC are single channel devices designed for use with insertion style and in-line flow monitors. All logic functions as well as the adjustments and display elements are combined in one 18 mm wide package. The devices mount on a 35 mm DIN track.

Flow setpoint adjustments are achieved by means of a coarse and a fine adjuster. The course adjuster tunes the flow setpoint to the different flow speed ranges of the remote flow monitor. The fine adjuster calibrates the flow setpoint to the exact desired flow speed.

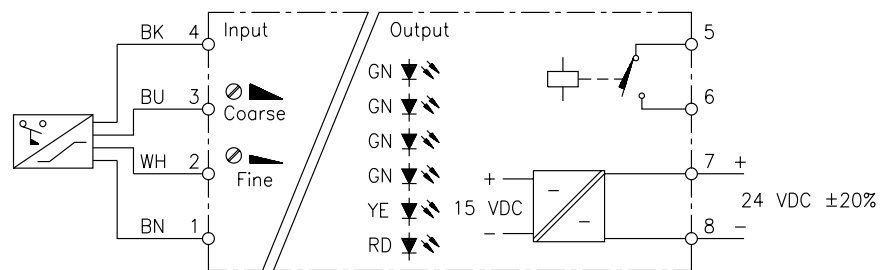
Each of the six LEDs display the difference between the actual flow speed in comparison to the flow speed that the setpoint is adjusted to.

- Red LED: flow is below setpoint
- Yellow LED: flow is at or above setpoint
- Green LED: degree of setpoint over-range (1, 2, 3 or 4 green LEDs are lit.)

MK96-11-R/24 VDC

- Signal processors for insertion style and in-line flow monitors
- One normally open dry contact
- 18 mm wide terminal housing
- Finger protection according to VGB 4 and VDE 0470, Part 1
- Simple switching setpoint calibration with potentiometer
- Six LEDs to indicate flow conditions

Block Diagram



Flow Monitors Signal Processor MK96-11-R/24VDC 1 channel

Type	MK96-11-R/24VDC
ID Number	M7525090
Supply Voltage	24 VDC $\leq 20\%$
Power / Current consumption	≤ 65 mA
Output Circuits	one normally open relay output (SPST)
Switching current	1 A AC/2 A DC
Voltage drop	≤ 1.5 V
Switching voltage	125 VAC/60 VDC
Switching capacity	125 VA/60 W
LED Indications	
Flow below setpoint, output de-energized	red
Flow at setpoint, output energized	yellow
Flow above setpoint, output energized	4 green LEDs (in addition to yellow LED)
Housing	8-pole terminal housing (H x W x D) 89 x 18 x 71 mm, page 11 PC/ABS, flammability class V-O per UL 94
Mounting	snap-on clamps for hat rail (DIN 50 022) or G-rail (DIN 50 035)
Connection	via flat terminals with self-lifting pressure plates
Connection profile	2 x 14 AWG conductors per terminal
Enclosure	IP 30
Operating temperature	-25° to +60°C (-13° to +140°F)



The single channel MK96-VP01 and MK96-VN01 signal processors are designed for use with the insertion and in-line style flow monitors. These units feature a complementary PNP/NPN transistor output with short-circuit protection.

The flow setpoint adjustments are achieved by means of a coarse and a fine tune adjuster. The coarse adjuster tunes the flow setpoint to the different flow speed ranges of the remote flow monitors. The fine adjuster calibrates the flow setpoint to the exact desired flow speed.

The output is de-energized when the flow speed is below the setpoint; the output is energized when the flow speed is above the setpoint. Each of the six LEDs display the difference between the actual flow speed in comparison to the flow speed that the setpoint is adjusted to.

The LED indications are as follows:

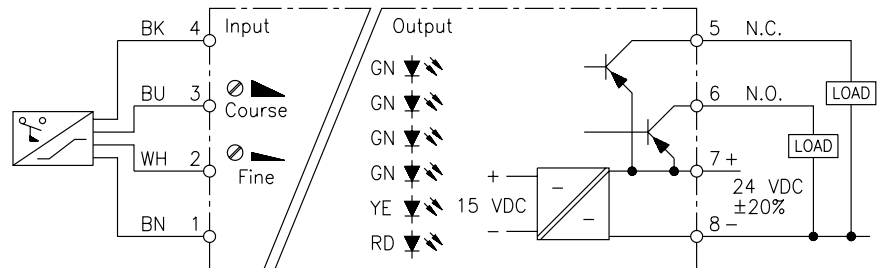
- Red LED: flow is below setpoint
- Yellow LED: flow is at or above setpoint
- Green LEDs: each LED indicates a percentage of flow above the setpoint.

MK96-VP01
MK96-VN01

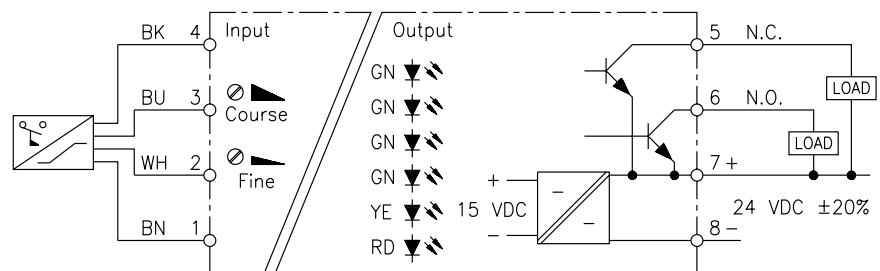
- Remote signal processor for insertion and in-line style flow monitors
- Two complementary, short-circuit protected PNP/NPN transistor outputs
- 18 mm wide terminal housing
- Simple switch set point calibration with potentiometers
- Six LEDs to indicate flow conditions

Block Diagram

MK96-VP01



MK96-VN01



Flow Monitors Signal Processor MK96-VP01 MK96-VN01 1 channel

Type	MK96-VP01	MK96-VN01
ID Number	M7525002	M7525003
Supply Voltage	24 VDC \pm 20%	24 VDC \pm 20%
Power / Current consumption	\leq 65 mA	\leq 65 mA
Output Circuits	two complementary transistor outputs exclusive OR, PNP, short-circuit and reverse polarity protected	two complementary transistor outputs exclusive OR, NPN, short-circuit and reverse polarity protected
Switching current	\leq 400 mA	\leq 400 mA
Voltage drop	\leq 1.5 V at 400 mA	\leq 1.5 V at 400 mA
LED Indications		
Flow below setpoint, output de-energized	red	red
Flow at setpoint, output energized	yellow	yellow
Flow above setpoint, output energized	4 green	4 green
Housing	8-pole terminal housing (H x W x D) 89 x 18 x 71 mm, page 11 PC/ABS, flammability class V-O per UL 94	8-pole terminal housing (H x W x D) 89 x 18 x 71 mm, page 11 PC/ABS, flammability class V-O per UL 94
Mounting	snap-on clamps for hat rail (DIN 50 022) or G-rail (DIN 50 035)	snap-on clamps for hat rail (DIN 50 022) or G-rail (DIN 50 035)
Connection	flat terminals with self-lifting pressure plates	flat terminals with self-lifting pressure plates
Connection profile	2 x 14 AWG conductors per terminal	2 x 14 AWG conductors per terminal
Enclosure	IP 30	IP 30
Operating temperature	-25° to +60°C (-13° to +140°F)	-25° to +60°C (-13° to +140°F)



The single channel MK96-LI01 is designed for use with insertion and in-line style flow monitors. All logic functions as well as the adjustment and display elements are combined in one 18 mm wide compact package.

The voltage analog input signal is transferred to an U/A converter where it is converted into a 4 to 20 mA analog output.

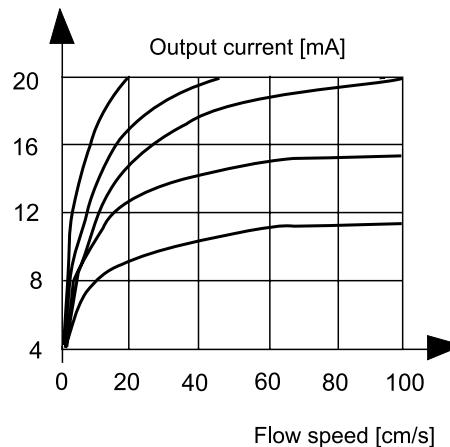
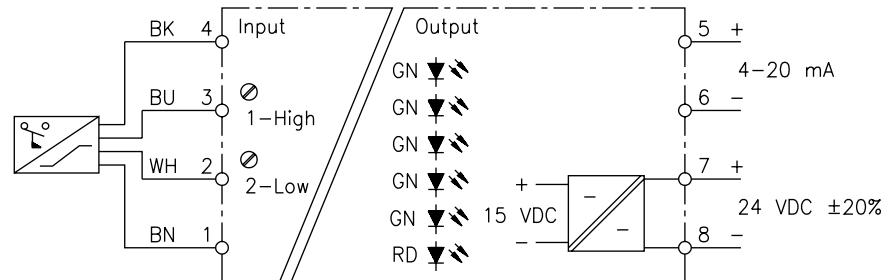
The operating range, over which switch actuation is desired, is adjusted by means of two potentiometers. Potentiometer 2 is used to set the 4 mA output at minimum flow speed. The high level setting is achieved with potentiometer 1 by adjusting the output to 20 mA when flow is at maximum speed.

Each of the six LEDs displays the difference between the actual flow speed and the flow speed to which the unit was calibrated.

MK96-LI01

- Signal processor for insertion and in-line style flow monitors
- Current output from 4 to 20 mA
- 18 mm wide terminal housing
- Finger protection according to VGB 4 and VDE 0470, Part 1
- Simple zero and span calibration with two potentiometers
- Six LEDs to indicate output status

Block Diagram



Flow Monitors Signal Processor with Current Output MK96-LI01 1 channel

Type	MK96-LI01
ID Number	M7525004
Supply Voltage	24 VDC \pm 10% including ripple
Power / Current consumption	\leq 100 mA
Output Circuit	current output
Load	\leq 500 Ω
Current	\leq 4 -20 mA (max 25 mA)
LED Indications	
Output status	5 green, 1 red
- LED 6	\geq 20 mA
- LED 5	>16 mA
- LED 4	>12 mA
- LED 3	> 8 mA
- LED 2	> 4 mA
- LED 1	= 4 mA
Housing	8-pole terminal housing (H x W x D) 89 x 18 x 71 mm, page 11 PC/ABS, flammability class V-O per UL 94
Mounting	snap-on clamps for hat rail (DIN 50 022) or G-rail (DIN 50 035)
Connection	flat terminals with self-lifting pressure plates
Connection profile	2 x 14 AWG conductors per terminal
Enclosure	IP 30
Operating temperature	-25° to +60°C (-13° to +140°F)