

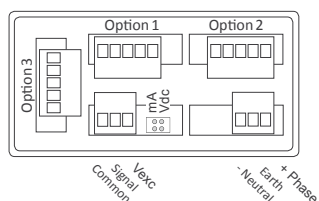
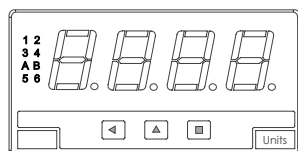
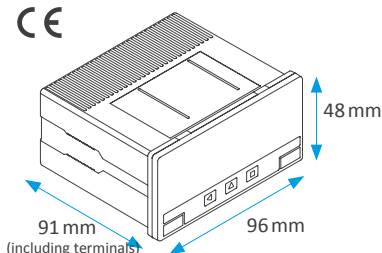
K40-P Process panel meter

Panel meter with 20 mm digit height, in 96x48 mm (1/8 DIN) standard size, for panel mount. Accepts 4/20 mA, 0/10 Vdc, ± 20 mA and ± 10 Vdc signals. Provides excitation voltage for the sensor. Universal high and low AC and DC power options. Optional retransmission and control modules with relays, analog outputs and serial outputs.

Technical specifications

Digits	4
Reading	9999/-1999
Decimal point	configurable
Led color	red
Digit height	20 mm
Signal ranges	4/20 mA, 0/10 Vdc, ± 20 mA, ± 10 Vdc, ...
Excitation voltage	+20 Vdc, +15 Vdc, +10 Vdc, +5 Vdc (max. 35 mA)
Accuracy	0.05% F.S. ± 1 digit
Offset drift	10 ppm/ $^{\circ}$ C
Span drift*	25 ppm/ $^{\circ}$ C *span drift value includes offset drift
Readings	15 readings / second
Refresh	15 refresh / second
Response time	<120 mSec. (0 % to 99 % signal)
Input impedance	11 Ohm in mA, 932 KOhm in Vdc
Power 'H'	85 to 265 Vac/dc (isolated 2500 Veff)
Power 'L'	11 to 60 Vdc y 24/48 Vac (isolated 1500 Veff)
Retransmission and control options	relays, analog output, serial communications, ...
Consumption	<1.5 W (meter only) <4.0 W (meter with options)
Protection	IP54 standard (optional IP65)
Connections	plug-in screw terminal
Weight	<150 grams
Mounting	panel
Front size	96 x 48 mm
Panel cut-out	92 x 44 mm
Deep	91 mm (including terminals)
Operating temperature	0 to 50 $^{\circ}$ C

Dimensions and connections



Detail of the plug-in screw terminal. The instrument is provided with all male and female terminals needed.



Order reference

Model	Power	Option 1	Option 2	Option 3	Others
K40	P	H			
	-H (85-265 Vac/dc) -L (11/60 Vdc, 24 Vac, 48 Vac)	- R1 (1 relay) - AO (analog output) - RTU (Modbus RTU) - S4 (RS-485) - S2 (RS-232) - (empty)			- NBT (no keypad) - 65 (front IP65)

* Relays R1 with contacts (NC / NO / Common), max. 250 Vac 8 A

* Special options with 4 and 6 relays.

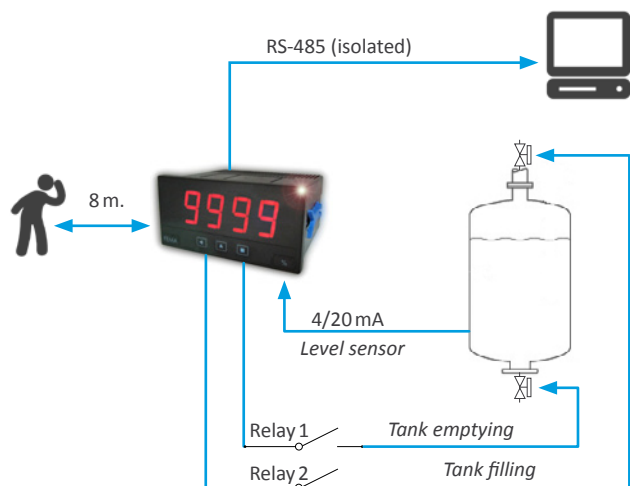
* Analog outputs and serial outputs, isolated.

Functions included

- Segment linearization up to 20 segments for linearization of signals from irregular shaped volumes, tanker ships, ...
- 'Fast access' menu a single press on the front keypad gives access to alarm setpoint modification, special functions, memory of maximum and minimum reading, ...
- 'Field correction' function for fast and easy offset corrections when installing on the field.
- 'On power-up' function protects remote systems by delaying the output and control signals at cold start-up.
- 'Measure' function for troubleshooting purposes, it displays the actual signal at input terminals, directly in mA or Vdc, without scaling.
- Alarms with one or two setpoints, independent activation and deactivation delays, hysteresis, optional manual deactivation of the relay.
- Inverted relay for security applications, relay can be configured with inverted function.
- 'Tare' function for weight applications.
- 'Peak & hold' function for test-break applications.
- Display filters recursive filters for noisy signals, optional reading in predefined steps, configurable fixed digits, ...
- Brightness 5 levels of brightness intensity.
- Password blocks access to configuration menu.

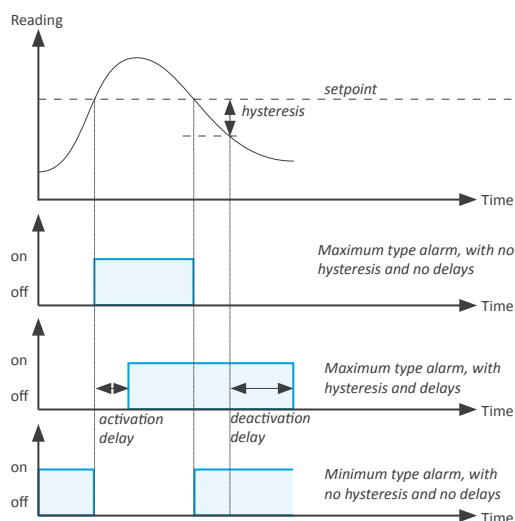
Application example

Measure of level from an irregular tank, with relay outputs to the solenoid valves that control the filling and emptying of the tank. Retransmission of the reading value to a remote SCADA of PLC unit through an isolated RS-485 bus.



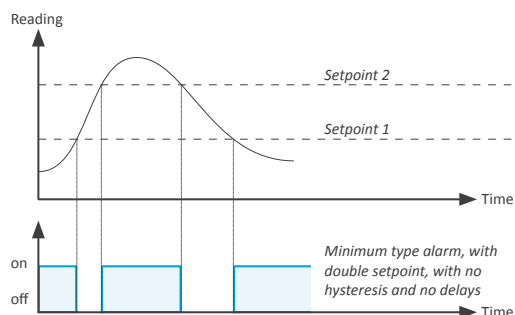
Alarms example

Alarms with one setpoint, configurable deactivation hysteresis, independent activation and deactivation delays.



Double setpoint alarms

Alarms with double setpoint, configurable as maximum or minimum, allow to create activation or deactivation windows..



Other options and accessories

Options for K Series of instruments and mounting accessories for 96x48 mm housings of K Series.



NBT - Without front keypad



WME - Wall mount housing



DRA - DIN rail mount adapter



65 - IP65 front sealing



THM - Benchtop housing



KIP - Protector IP65



KA96 - 96x96 mm adapter

Web documentation

K40-P user's manual

www.fema.es/docs/3552_K40-P_manual_i.pdf

K40-P datasheet

www.fema.es/docs/3554_K40-P_datasheet_i.pdf

Reading distances

Reading distances and series of product for panel meters with digit height starting at 10 mm and up to 100 mm.

Digit height (mm)	10	14	20	60	100
Reading distance	4 m	5 m	8 m	20 m	40 m
Series	L35	Series M	Series K	BDF-24	BDF-44