KMS pressure sensor 400 kPa

Part nr: 01-01-07-0012

Kronenburg Management Systems

This document contains detailed information about the KMS pressure sensor 400 kPa. Additional information, user manuals, wiring examples and software can be found on our website: http://kms.vankronenburg.nl or on the software CD included with the ECU.

Contents of the package:

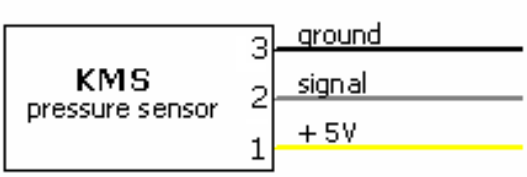
- KMS Pressure sensor 400 kPa
- 3P contra connector superseal
- KMS pressure sensor 400 kPa manual

Specifications:

- EMC protection up to 100V
- Temperature-compensated
- Ratio metric output
- Sensor cell resistive to fuels (incl. diesel) and oils such as engine lube oil

Wiring:

- Yellow: +5V supply from ECU
- Grey/black: signal (0-5V). Connect to ECU.
- Black: sensor ground. Connect to sensor ground of ECU.



Calibration values:

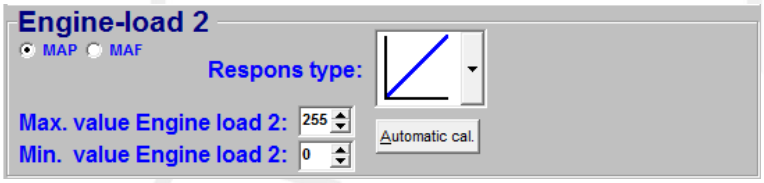
WARNING: There are two types of the KMS 400 kPa MAP sensors; with a blue hose connection or a silver hose connection. These types have different calibration values as shown below!!!

Blue hose connection:

- At 3.75 volt 310 kPa ±2 kPa (see tolerance curves)
- At 1.25 volt 85 kPa ±2 kPa (see tolerance curves)

Engine load 2 values for setting in the software with blue hose connection.

Pressure (kPa)	Min. Value	Max. Value
0-400	15	250
0-350	15	220
0-300	15	190
0-250	15	160
0-200	15	130



Silver hose connection:

- At 3.75 volt: 312 kPa
- At 1.25 volt: 106 kPa

Engine load 2 values for setting in the software:

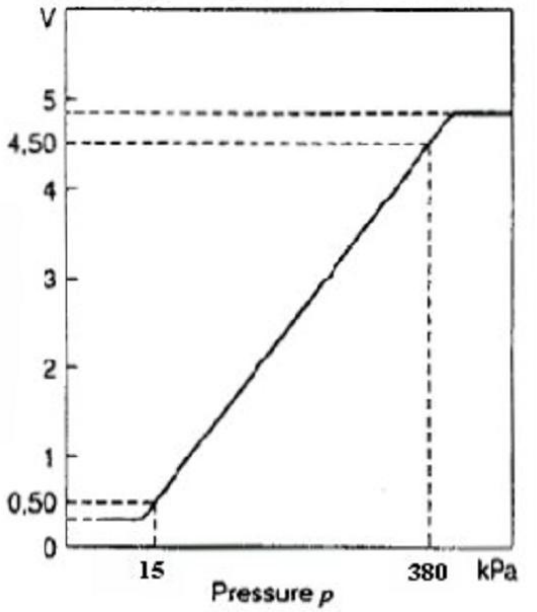
Pressure (kPa)	Min. Value	Max. Value
0-400	15	250
0-350	15	220
0-300	15	190
0-250	15	160

0-200	15	130
0-150	15	100
0-100	15	70

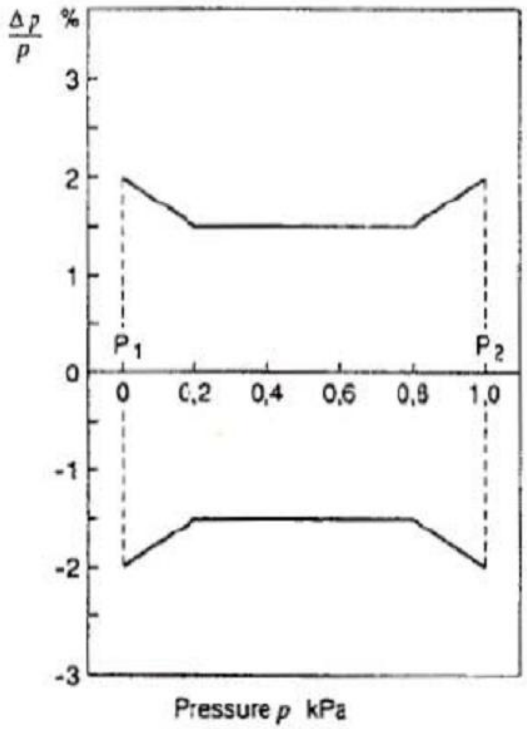
Technical data		*Min.*	*Typical*	*Max.*
Supply voltage Uv	Volt	4.5	5.0	5.5
Current input Iv at Uv = 5 V	mA	6	9	12.5
Load current	mA	-0.1	-	0.1
Load resistance to ground or Uv	K Ohm	50	-	-
Lower Limit at Uv = 5 V	Volt	0.25	0.30	0.35
Upper Limit at Uv = 5 V	Volt	4.75	4.80	4.85
Response time 10/90	ms	-	30	-
Operating temperature	Deg. C	-40	-	+125

Limit data				
supply voltage Uv	Volt	-	-	16
operating temperature	Deg. C	-40	-	+130

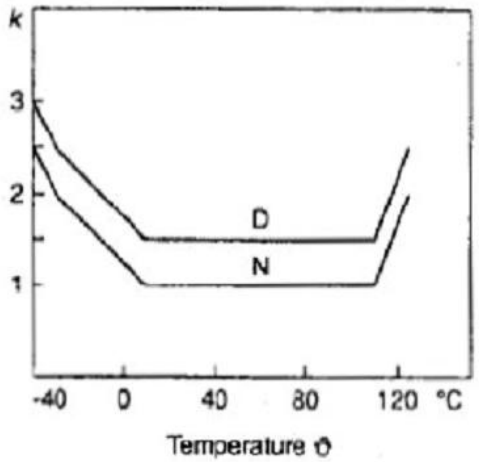
Characteristic curve ($Uv = 5.0v$)



Characteristic curve tolerance



Tolerance extension factor



P1 = 15 kPa P2 = 390 kPa

N = new sensor
D = After endurance