

## SA-PKxxxM10-000

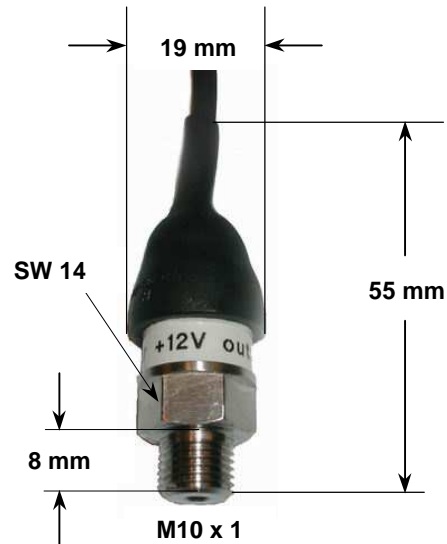
## Pressure sensor

### Function

- To measure brake pressure for example

### Overview:

- Build in signal conditioned output 0..5V
- SA-PK010M10 from 0 to 10bar
- SA-PK025M10 from 0 to 25bar
- SA-PK100M10 from 0 to 100bar
- SA-PK250M10 from 0 to 250 bar



### Technical specifications

#### Electrical characteristics

Possible ranges.....	10 / 25 / 100 / 250 bar
Supply voltage (range).....	8-16 V
Supply voltage (typical).....	12 V
Supply current (maximum).....	0..20 mA
Output.....	0.5 V dc, fixed

Accuracy (combined linearity, hysteresis and repeatability)	
0..+50°C .....	± 1 % / FS
-10..+80°C .....	± 1.5 % / FS
Error free pressure overload.....	1.5 x related pressure
Response frequency.....	2 ms

#### Environmental data

Sealing class.....	IP 65
Long term stability (1 year).....	± 0.3 % FS
Storage temperature range.....	-40..+100 °C
Calibrated operating temp. range	-10..+80 °C

#### Calibration

💡 Use the formulas on 2<sup>nd</sup> page to calculate the physical values

#### Mechanical characteristics

Dimensions.....	refer figure above
Weight.....	45 g
Pressure port.....	M10 x 1

#### Connector

Type.....	Binder 719, 5PM
Options.....	on request

#### Cable

type.....	Raychem, EPD
wire cross section..	3 x AWG 24
length.....	800 mm

#### Vibration resistance

Shock.....	40 G
during a time period of.....	10 ms
Vibration tested at.....	12 G
measured with.....	1000 Hz

#### Ordering information

Art.No.:.....SA-PKxxxM10  
 pressure range \_\_\_\_\_ ↑

## SA-PKxxxM10-000

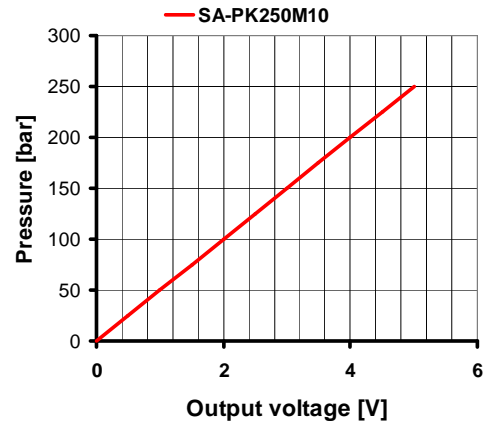
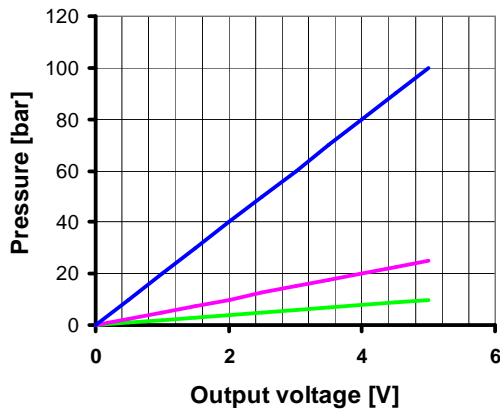
## Pressure sensor

### Formulas

SA-PKxxxM10-000		Multiplier				Offset		
12 Bit A/D	Pressure [bar]	=	xxx / 4095				*	Digits - 0
16 Bit A/D	Pressure [bar]	=	xxx / 65535				*	Digits - 0
Voltage*)	Pressure [bar]	=	2	5	20	50	*	Volt - 0
			SA-PK10M10	SA-PK25M10	SA-PK100M10	SA-PK250M10		



Replace the **xxx** with the pressure of your sensor:  
 → Possible values are 10, 25, 100 or 250 bar (other values on request)



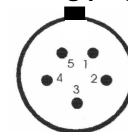
### Connector layout

#### Analog-line

Pin	Name	Description	Color (standard)
1	AGND	Analog Ground	black
2	n.c.	Not connected	-
3	+12V	Power supply	red
4	n.c.	Not connected	-
5	Signal	Analog signal	white

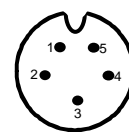
### Connector type

#### Mating plug



Binder 719, 5 PF  
(front side)

#### Connector at sensor



Binder 719, 5 PM  
(front side)



Possible options on customer request !

#### Please note:

For the first order of special customer options please use the following order code: **SA-PKxxxM10-000**  
 After the first order you will get from 2D a uniquely order code for your next orders.