



## PRESSURE DETECTOR – DETEX

Detector is working on a principle of measuring and evaluation of static and dynamic pressure. It's equipped with own logic enabling automatic corrections and verifying of own functional status in a way to ensure maximum accuracy, reliability and mainly safety. Detector is composed of sensing head for pressure reading, evaluation unit and connecting cable. Setting and parametrization of the detector is performed via communication dongle in a special software from PC or laptop. Detector has also own internal memory, which allows recording of all events depending on a real time, it's potential processing, archiving etc. All setting and parametrization of Detector is done exclusively by company RSBP or it's certified partner.

There are also specially developed detectors in the food and pharmaceutical industries.

The differences between the variants are given in this documentation with an explanation.



### OVERVIEW OF AVAILABLE OPTIONS

DetEx P12	continuous single head sensor (cable length 2 m)
DetEx P24	continuous dual head sensor (cable length 4 m – for each sensing head)
DetEx F	for pharmaceutical and food industry

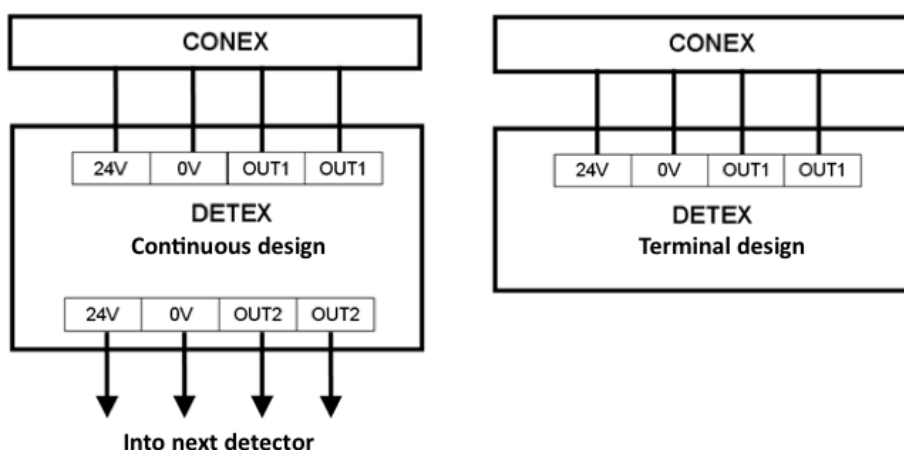
All options meet the marking stated in Type Examination Certificates.





TECHNICAL PARAMETERS	
Operating supply voltage	18 to 27 V DC
Supply current (single head design)	max. 45 mA
Supply current (dual head design)	max. 60 mA
Protection (sensing head and evaluation unit)	IP65
Material of evaluation unit	Aluminium alloy
Material of sensing head	Stainless steel
Internal memory	16 MB
Scale of pressure reading (versions P12, P24)	-1 to 5 bar
Short term overcharging (version P12, P24)	10 bar
Scale of pressure reading (version „F“)	0 to 5 bar
Short term overcharging (version „F“)	10 bar
Certification (control box – version P12, P24)	II 3 (1) D Ex tc [ia Da] IIIC T90°C Dc II 3 (1) G Ex nA nR [ia Ga] IIB T4 Gc
Certification (control box – version F)	II 3G Ex nA nR [ib] IIB T4
Certification (sensing head – version P12, P24)	II 1G Ex ia IIB T3/T4 Ga II 1D Ex ia IIIC T195°C Da
Certification (sensing head – version F)	II 2G Ex ib IIB T4 II 1D Ex ia IIIC T100°C

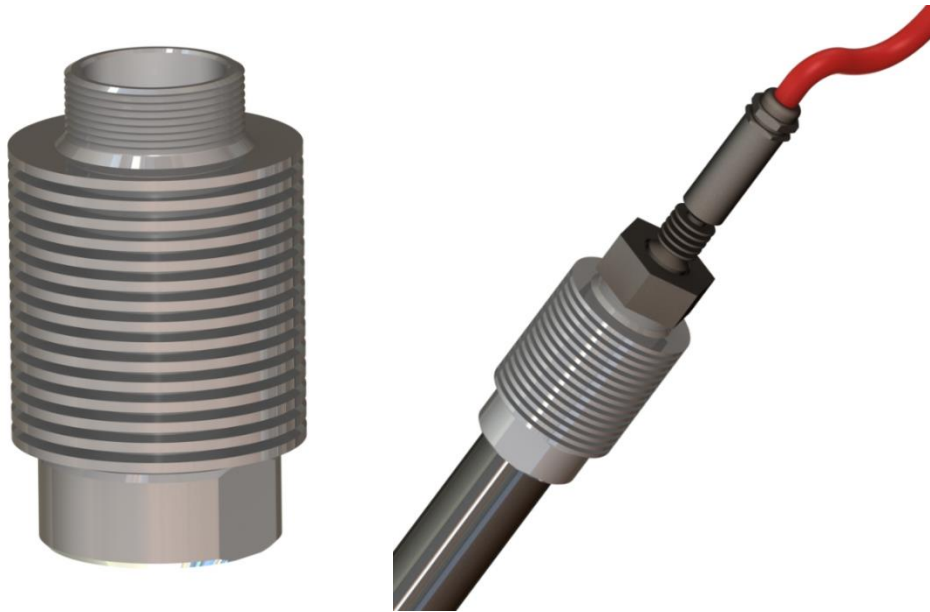
## Block scheme of pressure detector connection





## PASSIVE COOLING ADAPTER FOR DETEX

This passive cooling adapter serves to reduce the temperature of the DetEx explosion detector head. If the protected technology is assumed to have a higher temperature than 125 °C, it is necessary to use this cooler on the detector, since the detector could destroy the detector's head and therefore the system malfunction.



# DATASHEET



TECHNICAL SPECIFICATION	
Material	EN AW 5083
External diameter	85 mm
Length	140 mm
Temperature in technology	250°C (short term up 300°C)
Heat sink thermal resistance	- 196°C to 300°C