

**Pressure differential switch with contact output
binary sensor in hazardous locations zones 1, 2 and 22**

ATEX compliant

Type DBK-2G3D

APPLICATION

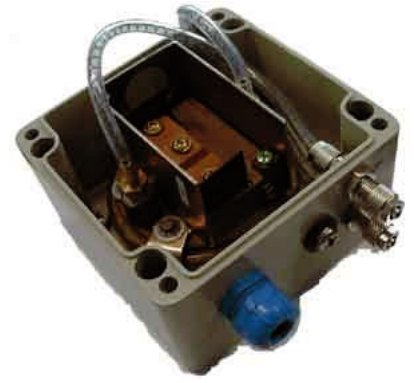
DBK-2G3D is suitable for controlling of over, under and differential pressure in gaseous, non aggressive medias. In combination with Ex-i switch Type EXL-IRU-1 with intrinsic safe circuit the sensors may be used in hazardous areas zones 1, 2 and 22. Application areas are filters, fans, air ducts, air conditioning and ventilation systems and particularly for the monitoring and the security in air conditioning systems for the signaling low pressure on fans and filter obstructions.

DBK-2G3D-40/125	40...125 Pa	hysteresis 25 ... 38 Pa	057.1308.01
DBK-2G3D-100/400	100...400 Pa	hysteresis 38 ... 50 Pa	057.1307.01
DBK-2G3D-350/1400	350...1400 Pa	hysteresis 75 ... 100 Pa	057.1309.01
DBK-2G3D-1000/5000	1000...5000 Pa	hysteresis 100 ... 150 Pa	057.1317.01

TECHNICAL DATAS

Type	DBK-2G3D
Contact	single potential free switch, gold plated
Ambient temperature	-30...+60 °C
Medium	gaseous, non aggressive
Pressure connection	Ø 1/8" for pipe
Connection P1	higher pressure, lower vacuum
Connection P2	lower pressure, higher vacuum
Enclosure	Aluminium
Protection	IP65 (EN60529)
Dimension and weight	120 x 117 x 92 mm, approx. 400 g
Protection class	simple apparatus acc. to EN 60079-11
CE	94/9/EC (ATEX)
Included in price	1 pressure differential switch Type DBK-2G3D
Installation area	Zone 1, 2 and 22 with switching module Type EXL-IRU-1

suitable for
Zone 1, 2, 22
acc. to ATEX



Ex-i CIRCUIT – TABLE 1

Operation values maximum at terminal
Simple apparatus suitable for Zone 1, 2
Only for connecting to intrinsically safe circuits with max values

Voltage	Uo	13,5 VDC
Current	Io	23 mA
Power	Po	76 mW
Capacity	Ci	0 µF
Inductivity	Li	0 mH

The maximum values must not be exceeded!
Please check your external capacities and inductivities in acc. to the length of the cable and the methode of installation

MOUNTING AND INSTALLATION

Switching pressure specifications apply to each position but vertical installation is recommended. Position with pressure pipe connenctions pointing downwards.

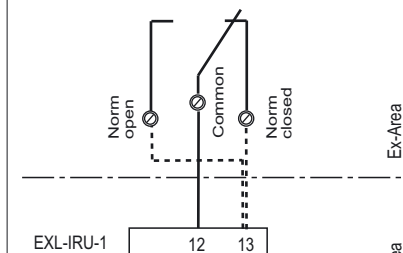
P1 connection of higher pressure or lower vacuum.
P2 connection of lower pressure or higher vacuum

RECOMMENDED MODULE

- Switching module Mfr. Schischek Type EXL-IRU-1.
- In combination with module EXL-IRU-1 is intrinsic safety proof for simple circuits given.
- Manufacturer declaration zone 1, 2 and 22.

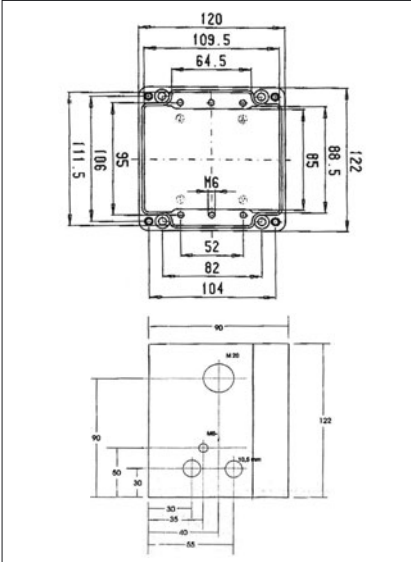
ELECTRICAL CONNECTIONS

**Pressure differential switch
DBK-2G3D**



Ex-i Module EXL-IRU-1

DIMENSIONS



ATTENTION!

- For installation, use and maintenance the official standards and rules must be applied.
- The energy of intrinsically safe circuits are below the level to start an explosion in case of a spark..
- Intrinsic safe circuits must be installed with light blue coloured and separate from non intrinsic safe circuits.
- The sensor is passiv and potential free for use in hazardous locations in zone 1, 2.
- Pay attention to the max values for wiring, listed in table 1.

subject to change