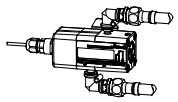
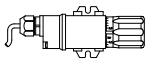
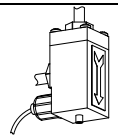
8 | Connection examples

			
Device / terminal	New DS 34 Wire no.	Previous DS 31 Wire colour	Previous differential pressure sensor
AR 102 T 48 49	**1** **2** **3** not used!	bk bl	
BW-tronic 62 63	**1** **2** **3** not used!	bk bl	
MSA 16 17 18	**1** **2** **3** not used!	bk bl	bn gn wh
RS-tronic 20 21 19	**1** **2** **3** not used!	bk bl	bn gn wh

9 | Disposal

9.1 Packaging

Comply with the applicable national regulations.

9.2 Product

Dispose of the packaging in an environmentally sound manner.

If this symbol (crossed out waste bin) is on the product, European Directive 2012/19/EU applies to this product. This means that this product and the electrical and electronic components must not be disposed of as household waste.

Find out about the local regulations on the separate collection of electrical and electronic products.

Make use of the collection points available to you for the disposal of your product.

For information on collection points for your product, contact your municipality, the public waste management authority, an authorised body for the disposal of electrical and electronic products or your waste disposal service.

grünbeck

CE

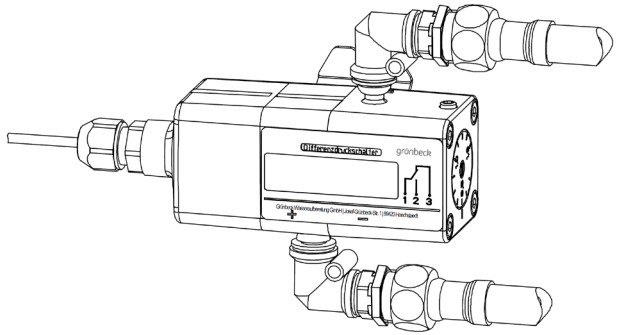
EU Declaration of conformity

This is to certify that the system designated below meets the safety and health requirements of the applicable European guidelines in terms of its design, construction and execution.

If the system is modified in a way not approved by us, this certificate is void

Manufacturer:	Grünbeck Wasseraufbereitung GmbH Josef-Grünbeck-Str. 1 89420 Hoechstaedt/Germany
Responsible for documentation:	Markus Pöpperl
System designation:	GENO Differential pressure switch
System type:	GENO Differential pressure switch DS34
Serial no.	Refer to type designation plate
Applicable guidelines:	EMC (2014/35/EU) RoHS (2011/65/EU)
Applied harmonised standards, in particular:	DIN EN 61010-1:2011-07, DIN EN 50581:2013-02
Applied national standards and technical specifications, in particular:	
Place, date and signature:	Hoechstaedt, 22.01.2019 i. V Markus Pöpperl Dipl. Ing. (FH)
Function of signatory:	Head of Technical product design

GENO differential pressure switch operation manual



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General information

Our systems must be installed by an authorised specialised dealer of the sanitary and heating trade or a trained specialist.

Check the GENO differential pressure switch for transport damage.

The device must be protected against frost and must not be installed next to heat sources which radiate a lot of heat.

The GENO differential pressure switch must be protected against water hammer by suitable measures.

The current terms and conditions of sale and delivery do apply!

1 | Intended use

The GENO differential pressure switch is a combined switching device for differential pressure, overpressure and negative pressure. It is used for monitoring the differential pressure of filters, filter systems, pipeline systems, valves, coolers, etc. Specially designed sets can be selected depending on the device type and application. If the flexible connection hoses supplied as standard are not sufficient, a hose extension set with two 500 mm long extension hoses is available (refer to accessories).

2 | Design

This switching device is based on an uncomplicated, robust diaphragm measuring unit. It is suitable for overpressure, negative pressure and differential pressure measurements.

3 | Function

In all three measurement applications, the device works according to the same principle. The pressure to be measured produces a one-sided force on the diaphragm.

This measuring force pushes the diaphragm system against the measurement range spring.

A switching plunger mounted on the diaphragm actuates an electrical switching element.
A microswitch is used as the switching element. The switching point is adjusted with a screwdriver by turning the scale.

Caution! The set screw **must not** be turned. It is not required to fix the scale!

4 | Technical specifications

	GENO differential pressure switch	
Connection option	flexible 1/4" / 1/8"	
Differential pressure range	0.16 - 1.6 bar infinitely variable	0.4 - 4 bar infinitely variable
Water temperature	90 °C	
Ambient temperature	80 °C	
Max. operating pressure	Protected against overpressure and negative pressure up to 16 bar	
Switching contact	Microswitch as changeover switch	
Max. switching voltage	250 V/AC	
Max. switching current	3 A	
Max. switching power	500 VA/250 W	
Protection type	IP 54	
Total length	124 mm	
Depth	46 mm	
Height	100 mm	
Cable length	1.5 m	
Order no.	**102 870**	**102 875**

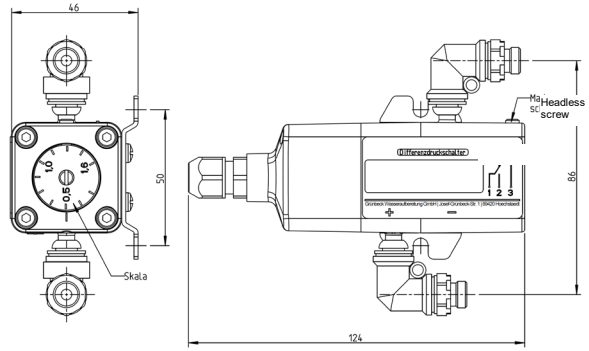

Fig. 1: Dimensional drawing of GENO differential pressure switch

5 | Scope of supply

GENO differential pressure switch incl. 300 mm flexible connection hose, wall bracket and seals, incl. fastening material.

6 | Accessories

For special installations or for special filter types, e.g. FM fine filters, a hose extension set (2 x 500 mm) with **order no. 102 850** is available.

7 | Start-up

Using the flexible hose connection and the wall bracket, the GENO differential pressure switch can be installed on site according to the installation conditions. The pressure connections are marked with **+** and **-** symbols on the device. The flexible pressure connection lines must be installed according to these markings.

Diff. pressure measurement	* +	high pressure
	* -	low pressure
Pressure measurement	* +	pressure connection
Low pressure measurement	* -	low pressure connection

The desired switching point is set by turning the scale.
We recommend setting the differential pressure switch to the desired switching point before wall mounting. The connection of the contact (version as changeover contact) can be found on the type designation plate on the differential pressure switch.

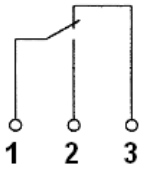

Fig. 2: Circuit diagram