

**“BÜHLER” LEVEL AND TEMPERATURE SWITCH  
NIVOTEMP M-1  
TYPE: M-1-MS-M3-TMS-100**

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2012-03-26

1. MANUFACTURER. Bühler Technologies GmbH  
Harkortstrasse 29  
D-40880Ratingen,  
Tel.:+49(0)2102/4989-0  
Fax:+49(0)2102/4989-20  
e-mail:fluidcontrol@buehler-ratingen.com  
[www.buehler-ratingen.com](http://www.buehler-ratingen.com)

2. IDENTIFICATION.

H.I.T.* Nr.	Leverancier Nr.
341-1011499001	1011499 (L=435 mm / L1= 380 mm)
341-1011499011	1011499 (L=490 mm / L1= 435 mm)
341-1011499021	1011499 (L=535 mm / L1= 435 mm)

3. DESCRIPTION.

- 1 x level switch and 1 x temperature switch in 1 instrument
- bi-stable = 1 float
- float with good buoyancy
- integrated electrical connector
- variable and fixed length
- easy installation
- maintenance free

4. TECHNISCHE SPECIFICATIES.

4.1. Mechanical

Material	Switch tube	Brass
	Flange	Brass
	Float	NBR
Operating pressure (max.)	1 bar	
Temperature range (max.)	100°C	
Gravity of the fluid (min.)	0,8 kg/dm <sup>3</sup>	

4.2. Electric

	Level switch	Temperature switch
Voltage (max.)	230 V	250 V
Contact load (max.)	10 VA	100 VA
Current (max.)	0,5 A	2 A
Hysteresys	-	40K ± 5K
Contact type	Normal open (NO)	Normal open (NO)
Switch	3 pole + PE (DIN 43650)	
Protection class	IP 65	
Cable gland	Pg 11	

\* H.I.T. : Hansen Industrial Transmissions nv

Appr.: DMT  
Goedk.:

Prep.: BE  
Voorb.:

DISTR

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TM 4.45-e ed. B  
2010-03-30

Repl.:  
Verv.:

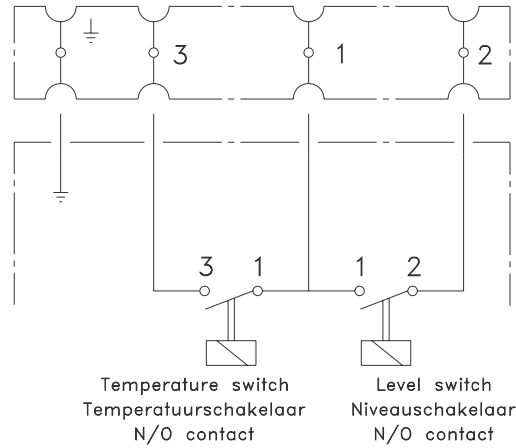
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**NIVOTEMP M-1**  
**TYPE: M-1-MS-M3-TMS-100**

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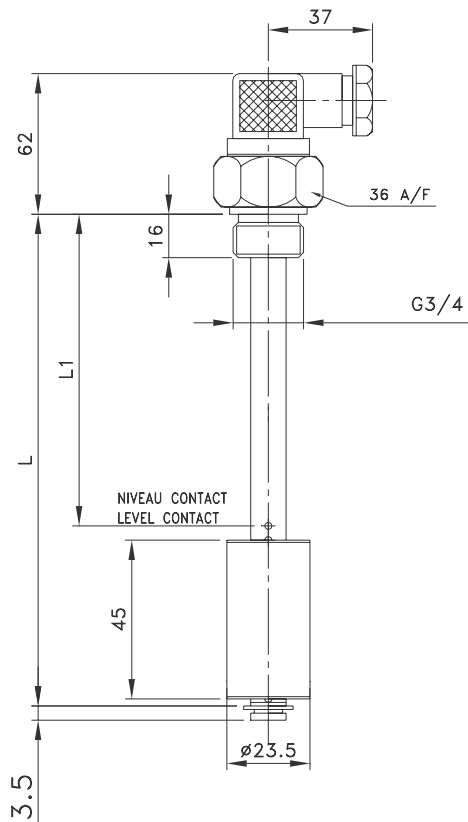
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2012-03-26

5. ELECTRIC CONNECTION DIAGRAMM.



6. DIMENSIONS.



7. MAINTENANCE.

Maintenance free.

Appr. : DMT  
Goedk. :

Prep. : BE  
Voorb. :

DISTR

TM 4.45-e ed. B  
2010-03-30

Repl. :  
Verv. :

**"SUCO" PRESSURE SWITCH**

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2007-02-01

1. **MANUFACTURER** ROBERT SCHEUFFELE GmbH & Co KG  
 Keplerstraße 12 - 16  
 Postfach 1645  
 D-7120 BIETIGHEIM-BISSINGEN  
 Tel (07142) 597-0  
 Fax (07142) 59719  
 WWW.SUCO.DE

2. **IDENTIFICATION**

H.I.T.* Nr.	Thread connection	Switching point dropping pressure	Supplier nr.
257-0184001	G1/4"	0,5 bar	0184 457 03 3 003

3. **DESCRIPTION**

The pressure switch is a membrane type with an incorporated change over contact. When the operating pressure is below the preset value, contact points 1 and 2 are connected with each other. When the operating pressure is above the preset value, the contact switches and connects point 1 and 4.

4. **TECHNICAL DATA**

Adjustment range	0,3-1,5 bar
Tolerance	± 0,2 bar
Overpressure protection up to	100 bar
Protection Class	IP 65
Max. Switching frequency	200 /min
Temperature range	-5°C to +120°C
Hysteresis	Setup during operation: 10 till 30 % adjustable
Mechanical lifespan	10 <sup>5</sup> connections (with switch pressure till 50 bar)
Material Housing	Galvanised Steel (Fe/Zn 12 c C )
Membrane quality	FKM (Trichloride, hydraulic fluid (HFA, HFB, HFC, HFD )
Material Internal contacts	Silver

Rated operating voltage U <sub>e</sub>	Rated operating current I <sub>e</sub>	Utilisation category*
250 V AC 50 / 60 Hz	4 A	AC 12
250 V AC 50 / 60 Hz	1 A	AC 14
24 V DC	4 A / 4 A	DC 12 / DC 13
50 V DC	2 A / 1 A	DC 12 / DC 13
75 V DC	1 A / 0.5 A	DC 12 / DC 13
125 V DC	0.3 A / 0.2 A	DC 12 / DC 13
250 V DC	0.25 A / 0.2 A	DC 12 / DC 13

\* The utilisation category describes among other things the voltages and currents and the way of load for the pressure switch according to DIN EN 60947-5-1

AC 12: Drive of resistive loads and semiconductor input circuits of optoelectronic couplers (e.g. PLC inputs)

AC 14: Drive of electromagnetic loads up to 72 VA

DC 12: Drive of resistive loads and semiconductor input circuits of optoelectronic couplers (e.g. PLC inputs)

DC 13: Drive of electromagnet

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**"SUÇO" PRESSURE SWITCH**

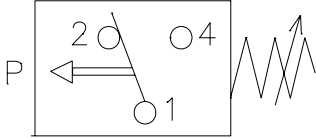
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2007-02-01

**5. ELECTRICAL CONNECTION**

The cable connection is a PG 9



**6. MAINTENANCE**

No maintenance is required.

Appr.: TVP  
Goedk.:

Prep.: VAH  
Voorb.:

DISTR

TM 5.18-e edC  
2006-01-17

Repl.:  
Verv.:

PW nr.: HP 5717