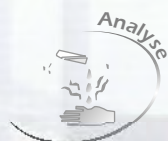
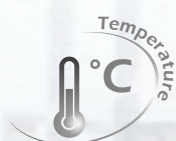


# КАТАЛОГ ДАТЧИКОВ



**Temperature Measurement**  
**Pressure measurement**  
**Fill level measurement**  
**Conductivity measuring**  
**Cleaning- / Monitoring Sensors**  
**Evaluation electronics**

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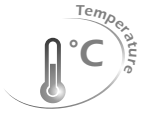
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# Temperature Measurement



## This one works any time

▶ Protective fitting with spherical welding sleeve (Diameter 25 mm), protective pipe diameters 6 x 1 mm from material 1.4571 (V4A). This execution is locked to the process. The high-grade steel connection head can be connected with different connecting pieces with the protective fitting. With changeable measuring element, temperature of the process -50 °C bis +400 °C (other temperature fields on request)

## Type TF 14



## The universal one

- ▶ Welding sleeve system with modular process connections
- ▶ Aseptic measuring point
- ▶ Freely programmable sensor-head transducer optional
- ▶ Wetting parts made of high-grade steel Material No. 1.4404
- ▶ FDA, EHEDG-conformal

## Type TF 35



## The small one

- ▶ Compact design
- ▶ Variable depth of sensor immersion
- ▶ Aseptic measuring point
- ▶ Measuring transducer optional
- ▶ Wetting parts made of high-grade steel Material No. 1.4404
- ▶ FDA, EHEDG-conformal

## Type TF 43



## The cheap one

- ▶ Welding sleeve system with modular process connections
- ▶ Aseptic measuring point
- ▶ Measuring transducer optional
- ▶ Wetting parts made of high-grade steel Material No. 1.4404
- ▶ FDA, EHEDG-conformal

## Type TF 45



## Pressure measurement



### The universal

- ▶ Thick-film ceramic sensor
- ▶ High accuracy
- ▶ High temperature range
- ▶ Nominal pressure ranges from -1 bar to 400 bar
- ▶ Absolute and relative pressure
- ▶ Wetting parts made of high-grade steel No. 1.4305, FKM, ceramics A1203
- ▶ Gehäuse aus Edelstahl 1.4305
- ▶ Case made of high-grade steel

### Type SDT 01



### The cheap one for food and pharma

- ▶ High temperature range
- ▶ Nominal pressure ranges up to 40 bar
- ▶ Relative pressure
- ▶ PC-telecontrolled parametrizable
- ▶ Wetting parts made of high-grade steel 1.4435
- ▶ Housing made of high-grade steel 1.4404
- ▶ Fourfold overload
- ▶ Totally front-flush membrane
- ▶ Modular process connection technology
- ▶ Special units possible
- ▶ FDA, EHEDG-conformal

### Type SDT 02



### The universal for food & pharma

- ▶ High accuracy
- ▶ High temperature range
- ▶ Nominal pressure ranges up to 40 bar
- ▶ Relative pressure
- ▶ Absolute pressure
- ▶ Manually zeroing
- ▶ Triple overload
- ▶ Totally front-flush membrane
- ▶ Wetting parts made of high-grade steel No. 1.4435 und 1.4404
- ▶ Case made of high-grade steel 1.4301, 1.4305
- ▶ Modular process connection technology
- ▶ Special units possible
- ▶ FDA, EHEDG-conform

### Type SDT 12



## Pressure measurement



### The modular one for food & pharma

- ▶ High accuracy
- ▶ High temperature range
- ▶ Nominal pressure ranges up to 40 bar
- ▶ Relative pressure
- ▶ Integrated control + indicator display optional
- ▶ Programmable on unit or PC-telecontrolled parametrizable
- ▶ Very quick compensation of temperature jump
- ▶ Wetting parts made of high-grade steel 1.4435
- ▶ Housing made of high-grade steel 1.4404
- ▶ individual measuring range adjustment
- ▶ smallest measuring range 100 mbar
- ▶ Turndown 4:1
- ▶ Fourfold overload
- ▶ Absolute front-flush membrane
- ▶ Modular process connection technology
- ▶ Special units possible
- ▶ FDA, EHEDG conformal

### Type SDT 03



### The unit to dive

- ▶ Less temperature error
- ▶ Very good linearity
- ▶ Long-time stability
- ▶ Accuracy at IEC 60770: 0,35% FSO
- ▶ High-grade steel sensor
- ▶ Small diameter of 27 mm
- ▶ Measuring of liquid level in water and clean or/and dirty media
- ▶ Effective range from 0...40 mbar to 0...25bar

### Type SDT 09



## Fill level measurement



### The universal one

- ▶ Limit switch of the fill level for liquids
- ▶ Adjustable for various media
- ▶ Welding sleeve system with modular process connections
- ▶ Aseptic measuring point
- ▶ defined position of the gland
- ▶ Wetting parts made of high-grade steel  
Material No. 1.4404
- ▶ FDA, EHEDG-conformal

### Type SMW



### The conductive ones

- ▶ Welding sleeve system with modular process connection
- ▶ Aseptic measuring point
- ▶ Elektrodes free cuttable
- ▶ Wetting parts made of high-grade steel  
Material No. 1.4404
- ▶ 1-3 electrodes
- ▶ Deliverable with level module optional
- ▶ FDA, EHEDG-conformal

### Type KS 15/25/35



### The alternative

- ▶ Welding sleeve system GEA Tuchenhagen without polymer-seal
- ▶ Aseptic measuring point possible
- ▶ Elektrodes free cuttable
- ▶ Wetting parts made of high-grade steel  
Material No. 1.4404
- ▶ Electrode Ø 10 mm
- ▶ optional: integrated level module
- ▶ FDA, EHEDG-conformal

### Type KS 17



### The intelligent one

- ▶ Particularly suitable for the fill level measuring in small-sized blending tanks with viscous, paste-like and highly adhesive media
- ▶ Application in all electrically conductive media with a minimum conductivity of  $1\mu\text{S}/\text{cm}$
- ▶ Automatic detection of the fitting position top/bottom
- ▶ Device completely made of high-grade steel 1.4404
- ▶ Compact Design with integrated evaluation circuit 4...20mA
- ▶ FDA, EHEDG-conformal

### Type SMP



## Conductivity measuring



### The universal conductivity measuring

- ▶ Measuring system for conductivity measurement in processes
- ▶ small compact construction
- ▶ Installation in pipings ex nominal width DN 40
- ▶ Effective range free configurable, reversible
- ▶ Device completely made of high-grade steel 1.4301
- ▶ LCD display for conductivity, temperature and handling
- ▶ Extremely fast response time
- ▶ FDA, EHEDG-conformal

### Type SLI



### The compact turbidity measurement

- ▶ Phase-Separation
- ▶ Quick product-change
- ▶ Reduced costs for waste water
- ▶ Filter-monitoring
- ▶ Colour-independent concentration measurement
- ▶ Compact Design with integrated electronic and display for parameterisation
- ▶ Robust saphir-windows, CIP/SIP-suitable
- ▶ Hygienic Design, polymerfree-sealing system
- ▶ LED-light, stable and durable signal guaranteed
- ▶ Integrated digital- and analog-output
- ▶ Simple parameterization
- ▶ Process-monitoring and documentation

### Type STS 01



### The clean turbidity measurement

- ▶ Automatic Cleaning possible by use of Process Fitting SAW-830
- ▶ Securely Phase-Separation
- ▶ Quick product-changes
- ▶ Reduced costs for waste water
- ▶ Filter-monitoring
- ▶ Colour-independent concentration measurement
- ▶ Compact Design with integrated electronic and display for parameterisation
- ▶ Robust saphir-windows, CIP/SIP-suitable
- ▶ Hygienic Design, elastomer-free sealing system
- ▶ LED-light, stable and durable signal guaranteed
- ▶ Integrated digital- and analog-output
- ▶ Simple parameterization
- ▶ Process-monitoring and documentation

### Type STS 02



## Conductivity measuring



### The static holder

- ▶ For all kind of  $\text{Ø}12/120$  with thread PG13,5 (pH-, Glas-, ISFET-,  $\text{CO}_2$ -, Redox- and other sensors)
- ▶ Chemical industry
- ▶ Food industry
- ▶ Pharmaceutical industry
- ▶ Water treatment

### Type SAS 310



### The retractable holder

- ▶ For all kind of  $12/225$  mm or  $\text{Ø}12/280$  with thread PG13,5 (pH-, Glas-, ISFET-,  $\text{CO}_2$ -, Redox- and other sensors)
- ▶ Food industry
- ▶ Pharmaceutical industry
- ▶ Requirement of automated sensor cleaning or calibration

### Type SAW 830



## Cleaning- / Monitoring Sensors

### The only one for orbital cleaning plants

- ▶ Welding Sleeve System with modular process connections
- ▶ Aseptic Measuring point
- ▶ Wetted parts made of peek
- ▶ FDA, EHEDG-conformal
- ▶ For controlling of orbital cleaning plants

### Typ SOR



### The only one for rotational cleaning plants

- ▶ welding sleeve-system with modular process connections
- ▶ aseptic measuring point
- ▶ wetting parts made of peek
- ▶ further settings via PC and programming interface (optional)
- ▶ FDA, EHEDG-conformal
- ▶ For controlling of rotational cleaning plants

### Typ SRS





## Evaluation electronics



### The universal measuring transducer

- ▶ Universal power supply 24 VAC/DC - 230 VAC/ 250 VDC
- ▶ Galvanic separation of all In-/Outputs/ auxiliary power
- ▶ Universal input for RTD (Pt100 etc), TC Potentiometer, Lin. R, mA and V
- ▶ 2-wire sensor supply
- ▶ 2 relays-output and analogue output (mA, V)
- ▶ Programmable per optionally frontdisplay
- ▶ 5 years guarantee

### Type SMU



### The compact measuring transducer

- ▶ 4..20 mA measuring transducer for Pt100 sensors
- ▶ Connection in 2-, 3- or 4-wire technology
- ▶ Accuracy < 0,25 °C
- ▶ Correction of the actual value
- ▶ Automatic/configurable cable resistance compensation (2-wire)
- ▶ Sensor error detection
- ▶ Programmable linearization, absorption information of condition and serial number
- ▶ PC datalogging

### Type MUK



### The measuring transducer with housing

- ▶ 4..20 mA measuring transducer for Pt100 sensors
- ▶ Connection in 2-, 3- or 4-wire technology
- ▶ Accuracy < 0,25 °C
- ▶ Correction of the actual value
- ▶ Automatic/configurable cable resistance compensation (2-wire)
- ▶ Sensor error detection
- ▶ Programmable linearization, absorption information of condition and serial number
- ▶ PC datalogging

### Type MUK-VG



### The switching device just in case

- ▶ Processor-controlled level switches
- ▶ Up to 4 level-probes + earth probe
  - single level
  - level control
  - wire breakage detection
  - parameter switching
- ▶ Wide-range power supply unit
- ▶ PC-configurable (optional)
- ▶ process monitoring + documentation incl.

### Type SNG-1



## Display Systems / Control-Systems



### The intelligent one

- ▶ 4-digit 14 segment LED indicator
- ▶ Input for mA, V, Pt100, TC and poti
- ▶ 2 relays and analogue output
- ▶ Universal supply voltage
- ▶ Front key programmable
- ▶ Safety class IP65 (IP67 optional)
- ▶ 5 Years guarantee
- ▶ Plain text error-message

### Type SDA-2000



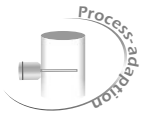
### Paperless recorder and Data Logger

- ▶ Easy operation by control button and through menu guidance
- ▶ Interface to SCADA-Systems, to SPS-controls and to PC-systems
- ▶ Integrated Webserver
- ▶ Measurement display via web browser
- ▶ Simultaneous recording of up to 3 batch reports
- ▶ Data transfer via Compact-Flash-card or USB-keychain
- ▶ Modbus-Master-function

### Type SBS



# Process-adaption

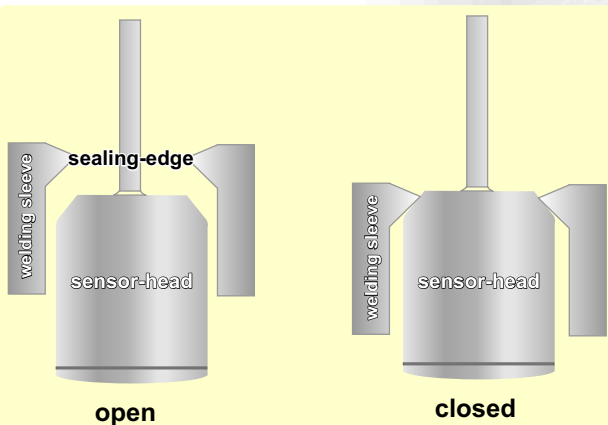


## The hygienic modular process adaptation

- ▶ Hygienic process-adaption
- ▶ dead volume- and elastomer-free
- ▶ aseptic measuring point
- ▶ EHEDG-conform
- ▶ modular concept for multiplicity process connection

## The technology

- ▶ Adaption for following threads: M12, G1/2", G1"
- ▶ Position for thread and/or M12-plug defined and marked (Welding sleeve system)



## Welding reference

- ▶ Weld into tanks/pipings

  1. Please drill a hole with outside diameter of the sleeve.  
Tolerance max.: +0,2 mm
  2. Attach the sleeve with 4 points (fig. 1)
  3. Screw in welding assistance plug
  4. Weld the sections between the points (fig. 2)  
4 parts if M12 and G1/2"  
8 parts if G1"

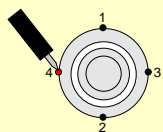


Fig. 1

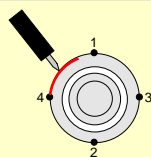


Fig. 2

## e. g. G1/2"-system



in temperature measurement



in fill-level-measurement

## e. g. G1"-system

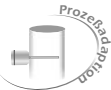


in pressure measurement

## examples



of modular process connections



**Hygienic adaption with welding-sleeve system and modular process-connections**

**Welding sleeve system M12**

for small pipes / bent tubes  
and slanted installation



AP 05



not available

small containers



CP 05

small pipes with  
border crimping



UP 05

**Welding sleeve system G 1/2"**

for pipes / bent tubes  
and slanted installation



AP 15

containers



BP 15

for fill level limit switch  
smw extended version



BP 15-L

thick walled  
containers



CP 15

pipes with  
border crimping



UP 15

**Welding sleeve system G 1"**

containers/  
pipes



AP 35



BP 35



not available



not available

**Examples of order codes**

Order Code BP15		BP15-		-	-	-	-
Control drilling	without control drilling	-	-	-	-	-	-
	with control drilling	K	B	-	-	-	-
Certification	without material-certification	-	-	-	-	-	-
	with 3.1B-certification	-	-	31	-	-	B



G1/2"

Milk-pipe screwing according to DIN 11851    Varivent    Triclamp

Cone-nut

Union-nut



Nominal sizes and types

DP 15 - DN 25  
EP 15 - DN 32  
FP 15 - DN 40  
GP 15 - DN 50  
LP 15 - DN 65  
MP 15 - DN 80

DÜ 15 - DN 25  
EÜ 15 - DN 32  
FÜ 15 - DN 40  
GÜ 15 - DN 50  
LÜ 15 - DN 65  
MÜ 15 - DN 80

Nominal sizes and types

HP 15 - DN 50 Typ N  
IP 15 - DN 25 Typ F

TP 15

G1"

Milk-pipe screwing according to DIN 11851    Varivent    Triclamp    DRD-flange

Cone nut

Union-nut



Nominal sizes and types

FP 35 - DN 40  
GP 35 - DN 50  
LP 35 - DN 65

FÜ 15 - DN 40  
GÜ 15 - DN 50  
LÜ 15 - DN 65

Nominal sizes and types

HP 35 - DN 50 Typ N  
IP 35 - DN 25 Typ F

TP 35

GA 35

GP 35: Combination cone nut  
also suitable for DRD-flange

Techn. Information:  
Complete process connection  
consists of GP 35 GA 35

Examples of order codes

HP15- 


 - 


Control drilling	without control-drilling	-	-
	with control-drilling	K	B
Certificate	without material-certificate	-	-
	with 3.1B certificate	31	B



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