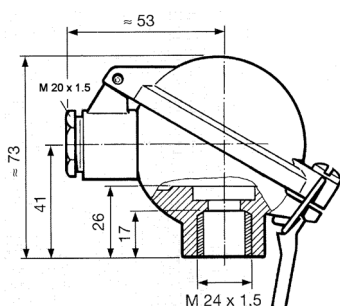
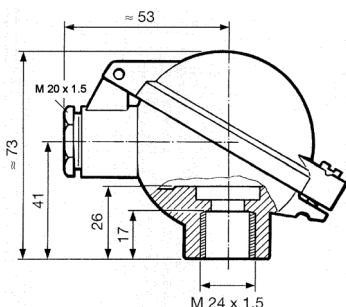


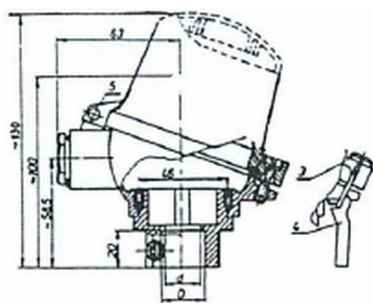
- ZEBL -Form B
- Standard M20x1.5
- Option PG16
- Leichtmetall / light metal / métal léger



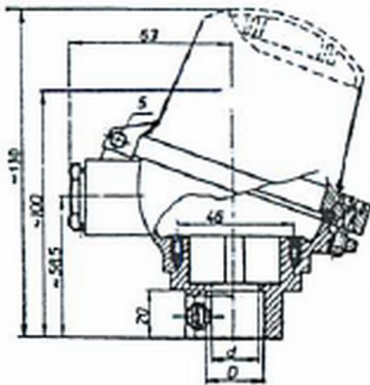
- ZEBH -Form BUS
- Hebelverschluss / quick lock / fermeture de levier
- Standard M20x1.5
- Option PG16
- Leichtmetall / light metal / métal léger



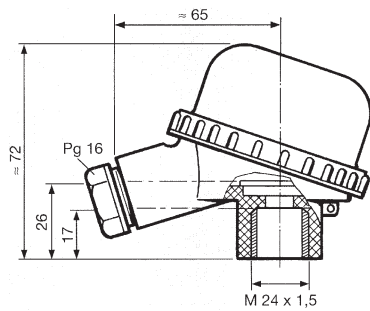
- ZEBG -Form BUZ
- Klappdeckel / screw lock / fermeture de visser
- Standard M20x1.5
- Option PG16
- Leichtmetall / light metal / métal léger



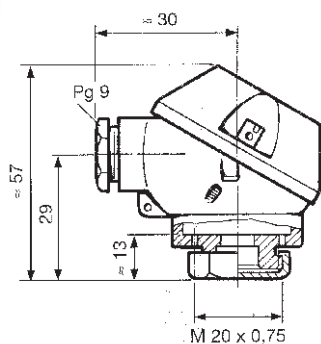
- ZEBMH -Form BUS-H
- Hebelverschluss / quick lock / fermeture de levier
- hoher Klappdeckel / high screw lock / fermeture de visser haute
- Standard M20x1.5
- Option PG16
- Leichtmetall zur Unterbringung eines zus. Kopfmessumformers / light metal to put additional transmitter / métal léger pour placer convertisseur additionnel



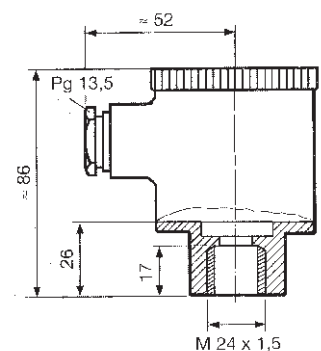
- ZEBM -Form BUZ-H
  - hoher Klappdeckel / high screw lock /  
fermeture de visser haute
  - Standard M20x1.5
  - Option PG16
  - Leichtmetall zur Unterbringung eines zus. Kopfmess-  
umformers / light metal to put additional transmitter /  
métal léger pour placer convertisseur additionnel



- ZEBK -Form BBK-H
  - Kunststoff / plastic
  - PG16
  - schwarz / black / noir



- **ZEDL Form C**
  - Leichtmetall / light metal / métal léger
  - PG9
  - d=M10



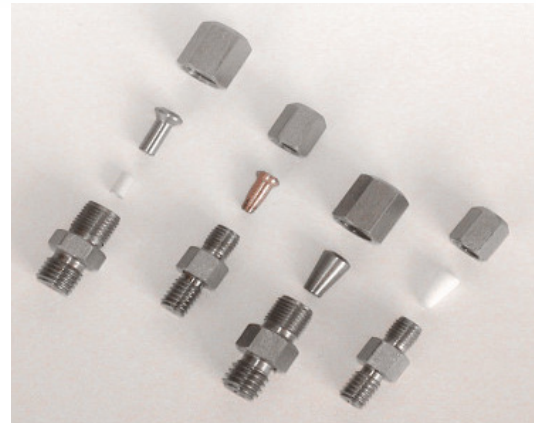
- **ZESM**
  - Messing / brass / cuivre jaune
  - PG9
  - d=6mm
  - d=8mm

Klemmverschraubungen mit einem Druckring aus Teflon PTFE sind für Temperaturen bis 200°C und für Drücke bis 10 bar geeignet. Ein nachträgliches Lösen und Verschieben ist möglich.

*Compression fittings with a pressure ring of Teflon PTFE are for temperatures to 200 ° C and pressures to 10 bar suitable. A subsequent dissolution and moving is possible.*

Klemmverschraubungen mit einem Keilring aus Stahl 1.0711 oder Edelstahl 1.4571 sind für Temperaturen über 200°C und Drücke bis 40bar vorgesehen. Beim Festziehen der Klemmverschraubung setzt sich der Keilring auf dem Fühler fest und lässt sich nicht mehr lösen. Ein nachträgliches Verschieben ist nicht mehr möglich.

*Compression fittings with a wedge from steel for Temeperaturen about 200°C and pressures up to 40bar usable. When tightening the compression ring the wedge fixed on the sensor and can no longer solve. A subsequent move is no longer possible.*



TE Schutzrohr		Gewinde		Werkstoff-Verschraubung		Werkstoff-Klemmring	
<input type="checkbox"/> Ø 0.5mm	<input type="checkbox"/> M8x1			<input type="checkbox"/> 1.4571	<input type="checkbox"/> 1.0711	<input type="checkbox"/> PTFE	
<input type="checkbox"/> Ø 1.0mm	<input type="checkbox"/> M8x1			<input type="checkbox"/> 1.4571	<input type="checkbox"/> 1.0711	<input type="checkbox"/> PTFE	<input type="checkbox"/> 1.4571
<input type="checkbox"/> Ø 1.5mm	<input type="checkbox"/> M8x1	<input type="checkbox"/> G 1/4	<input type="checkbox"/> G 1/2	<input type="checkbox"/> 1.4571	<input type="checkbox"/> 1.0711	<input type="checkbox"/> PTFE	<input type="checkbox"/> 1.4571
<input type="checkbox"/> Ø 1.6mm	<input type="checkbox"/> M8x1			<input type="checkbox"/> 1.4571	<input type="checkbox"/> 1.0711		<input type="checkbox"/> 1.4571
<input type="checkbox"/> Ø 2.0mm	<input type="checkbox"/> M8x1			<input type="checkbox"/> 1.4571	<input type="checkbox"/> 1.0711	<input type="checkbox"/> PTFE	<input type="checkbox"/> 1.4571
<input type="checkbox"/> Ø 2.5mm	<input type="checkbox"/> M8x1			<input type="checkbox"/> 1.4571		<input type="checkbox"/> PTFE	
<input type="checkbox"/> Ø 3.0mm	<input type="checkbox"/> M8x1	<input type="checkbox"/> G 1/4	<input type="checkbox"/> G 1/2	<input type="checkbox"/> 1.4571	<input type="checkbox"/> 1.0711	<input type="checkbox"/> PTFE	<input type="checkbox"/> 1.4571
<input type="checkbox"/> Ø 3.2mm	<input type="checkbox"/> M8x1	<input type="checkbox"/> G 1/4		<input type="checkbox"/> 1.4571	<input type="checkbox"/> 1.0711	<input type="checkbox"/> PTFE	<input type="checkbox"/> 1.4571
<input type="checkbox"/> Ø 3.5mm		<input type="checkbox"/> G 1/4		<input type="checkbox"/> 1.4571		<input type="checkbox"/> PTFE	
<input type="checkbox"/> Ø 4.0mm	<input type="checkbox"/> M10x1	<input type="checkbox"/> G 1/4		<input type="checkbox"/> 1.4571	<input type="checkbox"/> 1.0711	<input type="checkbox"/> PTFE	<input type="checkbox"/> 1.4571
<input type="checkbox"/> Ø 4.5mm		<input type="checkbox"/> G 1/4		<input type="checkbox"/> 1.4571	<input type="checkbox"/> 1.0711	<input type="checkbox"/> PTFE	
<input type="checkbox"/> Ø 5.0mm	<input type="checkbox"/> M10x1	<input type="checkbox"/> G 1/4		<input type="checkbox"/> 1.4571		<input type="checkbox"/> PTFE	<input type="checkbox"/> 1.4571
<input type="checkbox"/> Ø 6.0mm	<input type="checkbox"/> M10x1	<input type="checkbox"/> G 1/4	<input type="checkbox"/> G 1/2	<input type="checkbox"/> 1.4571	<input type="checkbox"/> 1.0711	<input type="checkbox"/> PTFE	<input type="checkbox"/> 1.4571
<input type="checkbox"/> Ø 8.0mm		<input type="checkbox"/> G 1/4	<input type="checkbox"/> G 1/2	<input type="checkbox"/> 1.4571	<input type="checkbox"/> 1.0711	<input type="checkbox"/> PTFE	<input type="checkbox"/> 1.4571
<input type="checkbox"/> Ø 9.0mm			<input type="checkbox"/> G 1/2	<input type="checkbox"/> 1.4571	<input type="checkbox"/> 1.0711	<input type="checkbox"/> PTFE	
<input type="checkbox"/> Ø 10.0mm			<input type="checkbox"/> G 1/2	<input type="checkbox"/> 1.4571	<input type="checkbox"/> 1.0711	<input type="checkbox"/> PTFE	
<input type="checkbox"/> Ø 12.0mm			<input type="checkbox"/> G 1/2	<input type="checkbox"/> 1.4571	<input type="checkbox"/> 1.0711	<input type="checkbox"/> PTFE	
<input type="checkbox"/> Ø 12.0mm			<input type="checkbox"/> G 1/2	<input type="checkbox"/> 1.4571		<input type="checkbox"/> PTFE	<input type="checkbox"/> 1.4571

## Physikalische Eigenschaften

Max. Temperatur	Werkstoff		Beständigkeit			
	Bezeichnung	Nummer	Schwefelhaltig		stickstoff	Aufkohlung
			oxidierend	reduzierend		
550 °C	St. 35.8	1.0305	gering	gering	mittel	----
1200 °C	X 10 CrAl 24	1.4762	sehr gross	gross	gering	mittel
1200 °C	X 15 CrNiSi 2520	1.4841	gering	gering	gross	gering
1200 °C	X 18 CrN 28	1.4749	sehr gross	gross	mittel	mittel
1100 °C	Inconel 600	2.4816	sehr gross	gross	gross	gering
800 °C	X 6 CrNiTi 1810	1.4541	sehr gross	gross	gross	gering
800 °C	X6 CrNiMoTi 17122	1.4571	sehr gross	mittel	gering	mittel

**einseitig geschlossen - Material**     1.0305     1.4762     1.4841     1.4749     2.4816     1.4541  
 1.4571     Cu     \_\_\_\_\_

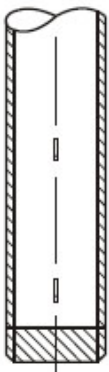
**Typ - Bild Nr.**                     1     2     3     4     5     6     7     8     9     10

**Länge - mm**                     195     265     370     520     730     1020     1220  
 1420mm     1520     1620     \_\_\_\_\_

**Ø D - mm**                     9x1     11x1     11x2     14x2.5     15x11     22x18     \_\_\_\_\_

**Gewinde**                     M10x1     M18x1.5     M20x0.75     M24x1.5     G 1     G 1/2     \_\_\_\_\_

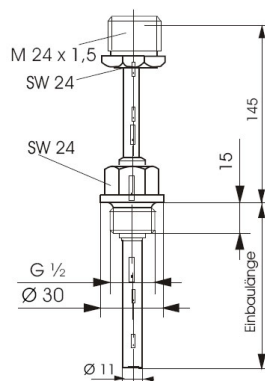
**Bild Nr. 1**



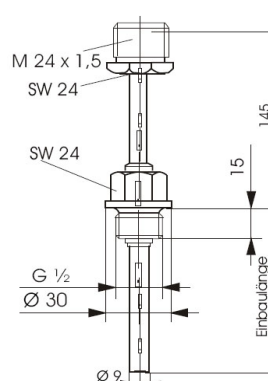
**2**



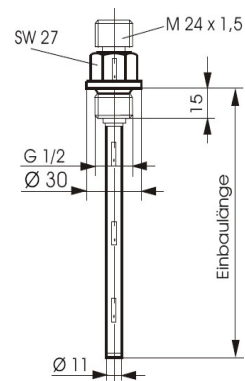
**3**



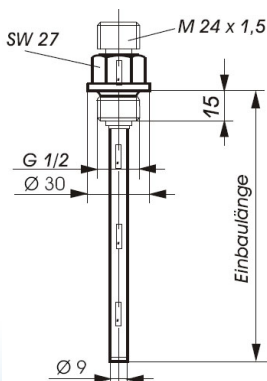
**4**



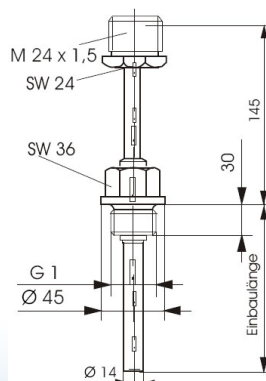
**5**



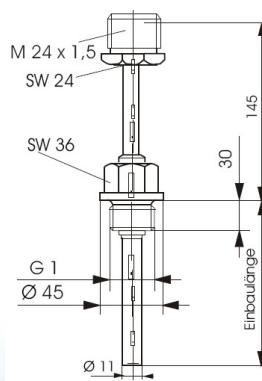
**Bild Nr. 6**



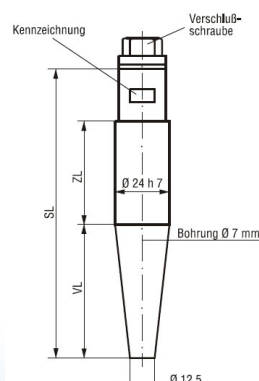
**7**



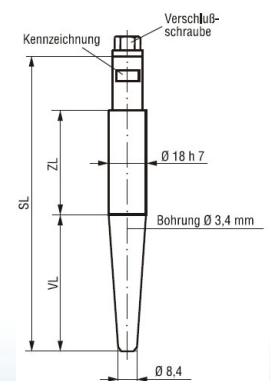
**8**



**9**

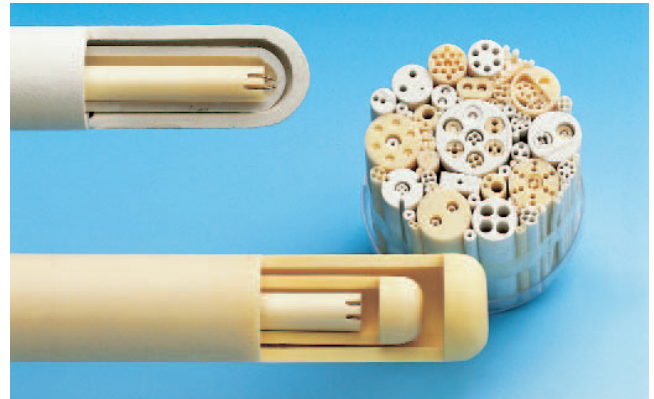


**10**



### Physikalische Eigenschaften

Dichte Keramik	Typ C610	Typ C799
Anwendungsgrenze	1400°C	1700°C
Al <sub>2</sub> O <sub>3</sub> - Gehalt	60%	99.7%
Durchschlagsspannung	17 kV/1.5mm	17 kV/1.5mm
Durchgangswiderstand	10 <sup>13</sup> Ohm/cm	10 <sup>14</sup> Ohm/cm
Wasseraufnahme	<0.2%	<0.2%
Wärmeleitfähigkeit	2.0 W/K	26 W/K
Härte nach Mohs	8	9
Biegefestigkeit	120MPa	300 MPa



#### Alsint Typ C799

#### Schutzrohre einseitig geschlossen

200  270  375  530  740  1030  1430  2030mm  Ø10x6  Ø15x10  Ø24x18

#### Pythagoras Typ C610

#### Schutzrohre einseitig geschlossen

200  270  375  530  740  1030  1430  2030mm  Ø10x7  Ø15x11  Ø24x19

#### Alsint Typ C799

#### Isolierstäbe mit 4-Durchführungen

205  275  380  560  770  1060  1460  2060mm  Ø5.5x1.2  Ø8.5x1.5

#### Pythagoras Typ C610

#### Isolierstäbe mit 4-Durchführungen

205  275  380  560  770  1060  1460  2060mm  Ø5.5x1.2  Ø8.5x1.5

#### Keramische Rohre beidseitig offen Aussen x Innen Ø

Ø0.8x0.3  Ø1.3x0.7  Ø1.6x1.0  Ø1.8x1.2  Ø2.0x1.0  Ø2.7x1.7  Ø3.0x2.0  
 Ø4.0x2.0  Ø5.0x3.0  Ø6.0x4.0  Ø7.0x4.0  Ø8.0x5.0  Ø9.0x6.0  Ø9.6x6.4  
 Ø10.0x6.0  Ø12x8.0  Ø12.7x8.9  Ø14.0x10.0  Ø15.0x10.0  Ø15.0x11.0  Ø17.0x12.0  
 Ø17.5x11.1  Ø20x15  Ø22x17  Ø24x18  Ø24x19  Ø26x20  Ø28x20  
 Ø30x23  Ø35x27  Ø40x32  Ø42x34  Ø46x38  Ø50x40  Ø55x46  
 Ø60x50  Ø65x56  Ø70x60  Ø75x65  Ø80x70  Ø85x75  Ø90x80  
 Ø95x80  Ø100x85  Ø110x95  Ø115x100  Ø120x100  Ø130x110  Ø140x120  
 Ø150x130  Ø160x140  Ø170x150  Ø180x160  Ø190x170  Ø200x175  Ø220x200  
 Ø260x240  Ø300x280  Ø320x300  Ø410x390  
 Länge \_\_\_\_\_  Alsint Typ C799  Pythagoras Typ C610

#### Keramische Isolierröhrchen - 1 Loch Aussen x Innen Ø

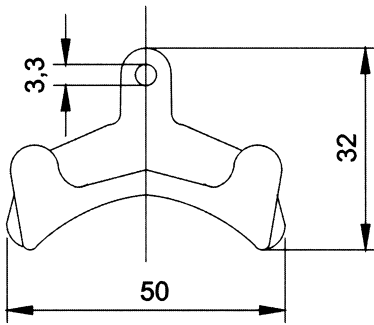
Ø1.0x0.4  Ø1.3x0.7  Ø2.0x1.0  Ø2.7x1.7  Ø3.0x2.0  Ø3.5x2.5  Ø4.0x2.0  
 Ø5.0x3.0  Ø6.0x4.0  Ø8.0x5.0  Ø9.0x6.0  Ø9.6x6.4  Ø10.0x6.0  Ø12x8.0  
 Länge \_\_\_\_\_  Alsint Typ C799  Pythagoras Typ C610

#### Keramische Isolierröhrchen - 2 Loch Aussen x Innen Ø

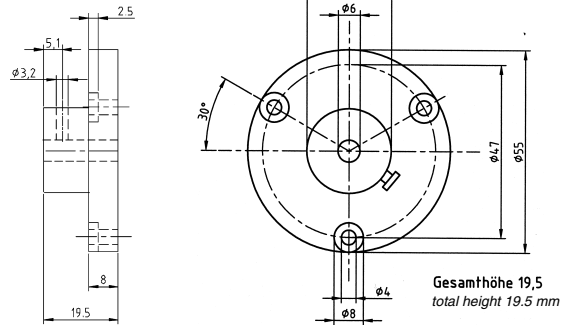
Ø3.0x0.8  Ø4.0x1.0  Ø4.5x1.0  Ø5.5x1.2  Ø6.0x1.8  Ø8.0x2.0  Ø8.5x1.5  
 Ø8.5x2.5  Ø10.0x2.7  Ø12.0x4.0  Ø13x2.4  Ø14.2x4.5  Ø15.3x4.8  Ø18.3x4.1  
 Länge \_\_\_\_\_  Alsint Typ C799  Pythagoras Typ C610

Nicht aufgeführte Dimensionen und Materialtyp auf Anfrage.

## Montageklammern DBZ-05



## Montageflansch MF



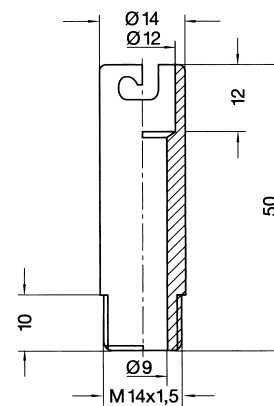
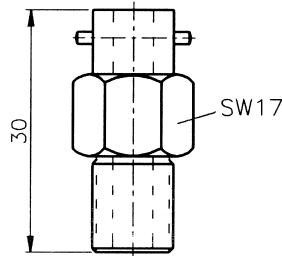
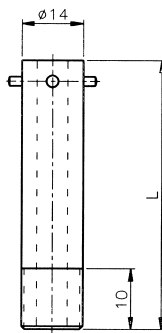
## Gewindenippel

### Standard

Schaft:  
Ø 14 mm  
Ø 12 mm

Gewinde:  
nach Auftrag

*standard*  
shank diameter:  
14 mm  
12 mm  
thread:  
acc. to order



Gewindenippel zylindrisch  
für Bajonett-Kappe  
*cylindrical thread nipple  
for bayonett-cap*

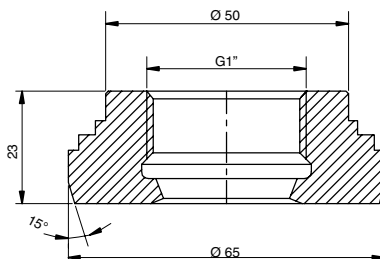
Gewindenippel mit Schlüsselweite  
für Bajonett-Kappe  
*thread nipple with wrench size  
for bayonett-cap*

Einschraubnippel  
*screw-in nipples*

## Einschweissmuffen

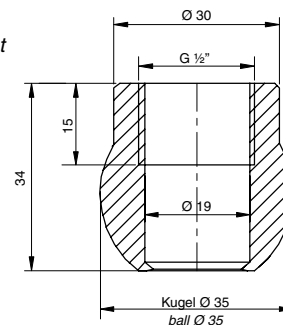
Milchrohradapter DN50  
*adapter DN50*

HAMK-352



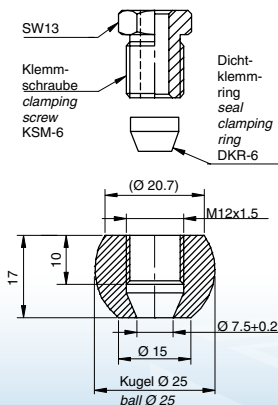
Kugeleinschweißmuffe  
*spherical welded socket*

HKEV-132



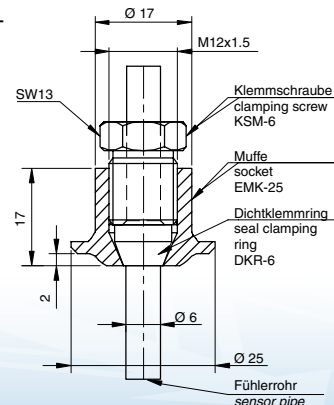
Kugeleinschweiß-  
muffe mit Klemm-  
verschraubung  
*spherical welded  
socket with clamp  
connection*

HKEV-25/76

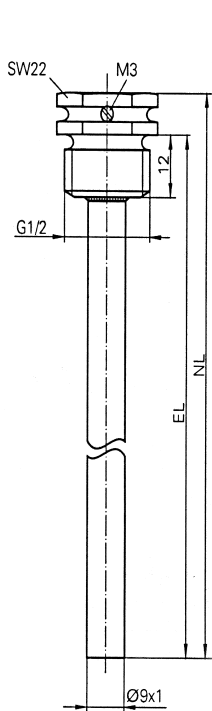


Krageneinschweiß-  
muffe mit Klemm-  
verschraubung  
*collar welded  
socket with  
clamp connection*

HEMK-25/76



## Tauchhülsen TH für Einschraubtemperaturfühler

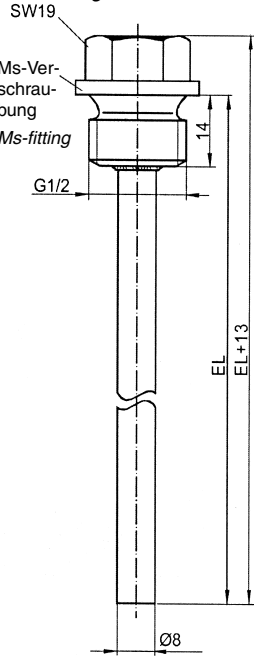


Messing vernickelt  
brass nickel-plated

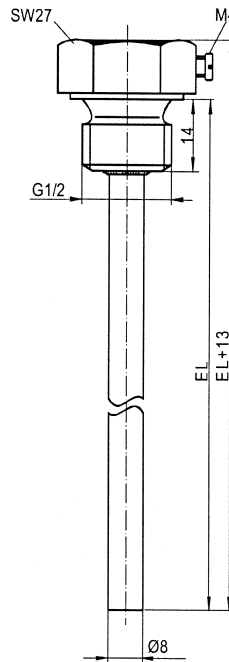
EL	50	100	135	150
NL	58	108	143	158

Maße / dimensions in mm

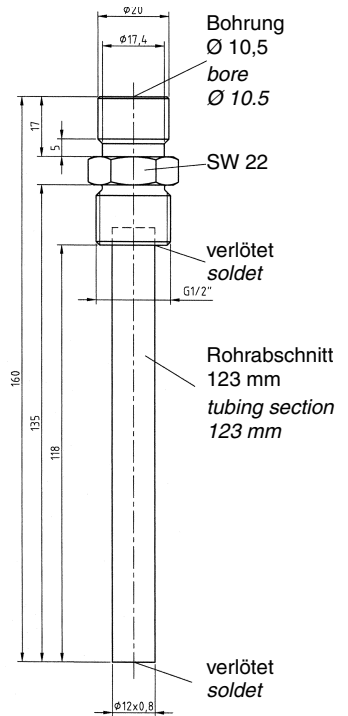
Verschraubung nach DIN 910  
fitting acc. to DIN 910



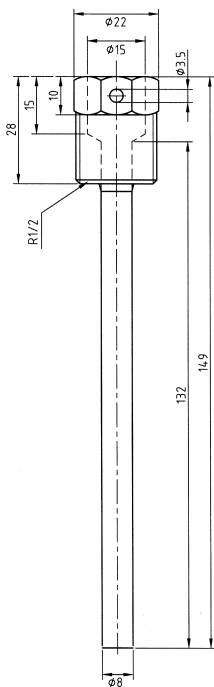
Messing vernickelt  
brass nickel-plated



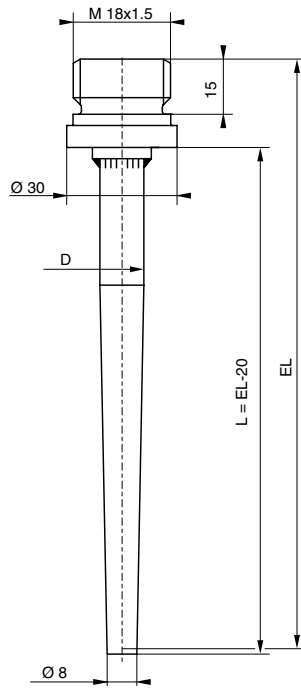
Edelstahl  
stainless steel



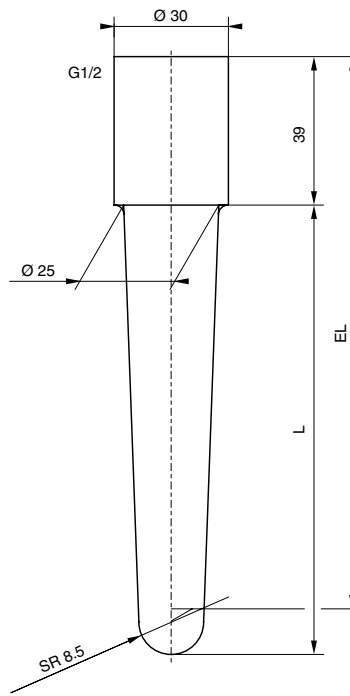
Messing vernickelt,  
auch in VA Edelstahl  
brass nickel-plated,  
also in VA stainless steel



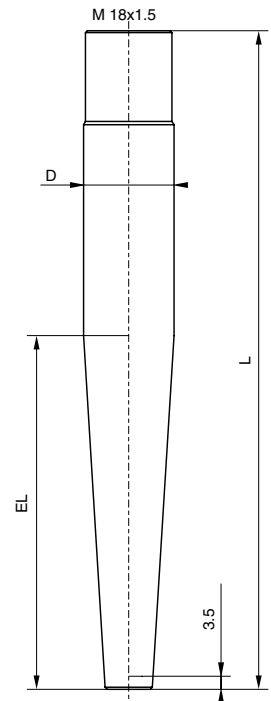
Messing vernickelt  
brass nickel-plated



Einschweißhülse Form S  
weld-in sleeve form S  
mat.-no. 1.7380 IST 35.8



Einschweißhülse Form C  
weld-in sleeve form C  
mat.-no. 1.7380



Einschweißhülse Form D  
weld-in sleeve form D  
mat.-no. 1.7380

Hülsenlänge sleeve length	50 mm	100 mm	200 mm	250 mm	300 mm	400 mm
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Andere Gewinde, Längen und Durchmesser sind nach Kundenwunsch möglich.  
Other threads, lengths and diameters are possible at request.