

RTD temperature probes for process technology with terminal head or Field mounted HART temperature transmitter and Ex approval

Specific features :

- Sensor range from -270 to +800 °C
- Protective sleeve is made from steel, stainless steel, titanium, Inconel..
- Protective sleeve are made up of a solid bored or mechanically welded thermowell
- Available with two-wire transmitter (4 to 20 mA/HART®) in Ex version
- Available with Ex Field mounted HART temperature transmitter

Brief description

JUMO RTD probe are used as intrinsically safe equipment, Increased safety or with flameproof enclosure for temperature measurements in liquid, gaseous media and in the presence of dust.

The RTD temperature probes consist of a protection fitting with various process connections, a terminal head, and with or without interchangeable measuring insert, with or without transmitter or field mounted HART temperature transmitter.

The measuring insert is fitted with a Pt100 temperature sensor as a standard feature according to EN 60751:2009 / IEC 60751:2008 Class A, Class B in two-wire circuit; versions with two Pt100 measuring circuits can also be supplied, as well as three and four-wire circuits.

The use of these sensors with a higher basic value (Pt500, Pt1000, Pt2000, or Pt5000) is possible. Similarly, NTCs, such as KTY, or other PTCs can also be used. Versions with two or three measuring circuits are also possible.

A CERNOX or digital sensor can also be used.

Applications

- Cryogenics
- Oil and gas industriesEnergie
- Machinery, plant and tank measurement
- Explosion protection : intrinsically safe, equipment protection by increased safety flameproof enclosure, protection by enclosure for explosives atmospheres gas and dust

Explosion protection :

The maximum product-specific explosion protection depends on the design type of the RTD temperature probe. For an exact classification of the RTD temperature probe, please refer to the operating manual..

Approvals and approval marks





Approvals

Approvals and approval marks + marking		
LOGO	DESCRIPTION	Countries
 	Directive ATEX Intrinsically safe Ex « i » : zone 0 II 1 G Ex ia IIC T6..T1 Ga zone 0/1 II 1/2 G Ex ia IIC T6..T1 Ga /Gb zone 20/21 II 1/2 D Ex ia IIIC T20085°C... T200450°C Da / Ex ia IIIC T85°C..T135°C Db Increased safety Ex « e » :zone 1 II 2/2 G Ex eb IIC ...°C ou T1 à T5/T6 Gb/Gb II 2/2 G Ex eb IIC ...°C ou T1 à T6/T6 Gb/Gb Protection by flameproof enclosure Ex « d » : zone 1 II 2 G Ex db IIC T6..T1 Ga Protection by enclosure Ex « t » zone 20/21 II 1/2 D Ex ta IIIC T20085°C... T200450°C Da / Ex tb IIIC T85°C..T135°C Db Ex « t » zone 20/21 II 1/2 D Ex ta/tb IIIC T200 T97°C-T...°C/T85°C Da/Db	European Union
	IECEx Intrinsically safe Ex « i » : zone 0 Ex ia IIC T6..T1 Ga zone 0/1 Ex ia IIC T6..T1 Ga /Gb zone 20/21 Ex ia IIIC T20085°C... T200450°C Da / Ex ia IIIC T85°C..T135°C Db Increased safety Ex « e » :zone 1 Ex eb IIC ...°C ou T1 à T5/T6 (1) Gb/Gb Ex eb IIC ...°C ou T1 à T6/T6 (1) Gb/Gb Protection by flameproof enclosure Ex « d » : zone 1 Ex db IIC T1 .. T6 Gb Protection by enclosure Ex « t » zone 20/21 Ex ta IIIC T20085°C... T200450°C Da / Ex tb IIIC T85°C..T135°C Db Ex « t » zone 20/21 Ex ta/tb IIIC T200 T97°C-T...°C/T85°C Da/Db	
	Marine : 903564/10 – 903564/20 Explosive atmospheres Intrinsically safe Ex « i » : zone 0 II 1 G Ex ia IIC T1 .. T6 Ga zone 20/21 II 1/2 D Ex ia IIIC T20085°C... T200450°C Da / Ex ia IIIC T85°C..T135°C Db	
	SIL QUALIFIED PL QUALIFIED 658 : SIL and PL compatible (only in conjunction with JUMO SIL-certified Safety temperature limiters and monitors STB/STW Ex 70115x 659 : SIL and PL compatible with Jumo dTRANS T06 Ex 707075 transmitter 869 : SIL compatible with Jumo dTRANS T07 Ex 707080 transmitter	
		International
		International
		International

JUMO GmbH & Co. KG
Adresse de livraison :
Mackenrodtstraße 14
36039 Fulda, Allemagne
Adresse postale :
36035 Fulda, Allemagne
Tél. : +49 661 6003-0
Fax. : +49 661 6003-607
E-Mail : mail@jumo.net
Internet : www.jumo.net

JUMO-REGULATION SAS
7 rue des Drapiers
B.P. 45200
57075 Metz Cedex 3, France
Tél. : +33 3 87 37 53 00
E-Mail : info.fr@jumo.net
Internet : www.jumo.fr

JUMO AUTOMATION
S.P.R.L. / P.G.M.B.H. / B.V.B.A
Industriestraße 18
4700 Eupen, Belgique
Tél. : +32 87 59 53 00
Fax. : +32 87 74 02 03
E-Mail : info@jumo.be
Internet : www.jumo.be

JUMO
Mess- und Regeltechnik AG
Laubisrütistrasse 70
8712 Stäfa, Suisse
Tél. : +41 44 928 24 44
Fax. : +41 44 928 24 48
E-Mail : info@jumo.ch
Internet : www.jumo.ch



Type definition

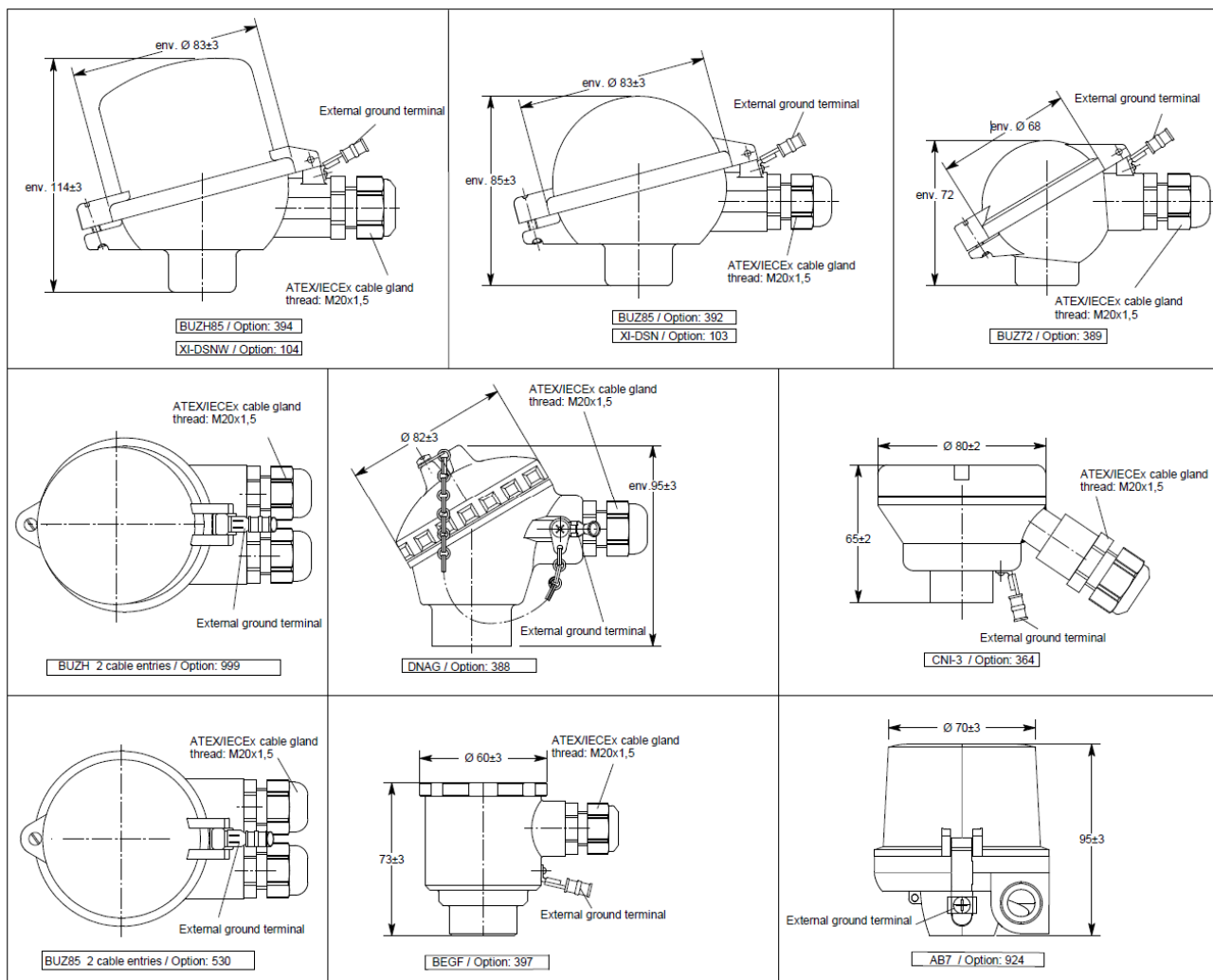
TEMPERATURE SENSOR SERIE I... - TYPE OF PROTECTION Ex » i » Intrinsically safe – utilisation for zone 0 Gaz and 20/21 Dust				
TYPE	MEASURING ELEMENT	REFERENCE	REMARKS	ADDITIONAL CODE
I.I.R	Resistive sensor (Pt100, Pt1000, CTP, CTN..) CERNOX Digital sensor	903520/10	Terminal head	
I.I.R.420	Resistive sensor (Pt100,Pt1000, CTP, CTN..)	903520/10 903520/15	Terminal head Field mounted temperature transmitter Digital display : 105 : PR 7501A Alu ATEX-IECEX 106 : PR 7501B SS (inox) ATEX-IECEX 107 : YOKO YTA610 ATEX-IECEX 108 : YOKO YTA710 ATEX-IECEX Terminal head + digital display : 924 : AB7 with LCD display 547 : BUZH + LED Ex display	/331 Ex Transmitter /332 Transmetteur Ex Profibus /336 Transmetteur Ex HART /868 Transmetteur Ex HART 2 channel /869 Transmetteur Ex HART/SIL 2 channel
TEMPERATURE SENSOR SERIE C97 EEX...- PROTECTION MODE Ex » e » et Ex « t » Increased safety + Protection by enclosure « t » – 903520/20 utilisation for zone 1 Gaz and 20/21 Dust				
TYPE	MEASURING ELEMENT	REFERENCE	REMARKS	ADDITIONAL CODE
C97 EEX..	Resistive sensor (Pt100,Pt1000, CTP,CTN..) –	903520/20	Terminal head + Ex modular terminal block (Ex «e» + Ex »t »)	
TEMPERATURE SENSOR SERIE TB97-XD - PROTECTION MODE Ex » d » and Ex « t » Protection by flameproof enclosure « d » + Protection by enclosure « t » - utilisation for zone 1 Gaz and 20/21 Dust				
TYPE	MEASURING ELEMENT	REFERENCE	REMARKS	ADDITIONAL CODE
TB97-XD-R	Resistive sensor (Pt100,Pt1000, CTP,CTN..) – CERNOX – Digital sensor	903520/30	Terminal head	
TB97-XD-R.420	Resistive sensor (Pt100,Pt1000, CTP, CTN..)	903520/30 903520/35	Terminal head Field mounted temperature transmitter : 105 : PR 7501A Alu ATEX-IECEX 106 : PR 7501B SS (inox) ATEX-IECEX 107 : YOKO YTA610 ATEX-IECEX 108 : YOKO YTA710 ATEX-IECEX Terminal head + digital display : 934 : XD-AH with LCD display	/330 Analog Transmitter /331 Transmetteur Ex /332 Transmetteur Ex Profibus /336 Transmetteur Ex HART /868 Transmetteur Ex HART 2 channel /869 Transmetteur Ex HART/SIL 2 channel Ex Transmitter



Terminal head

Type	Temperature range	Matériau	IP	For temperature sensor type
JFR (BUZ72) - Option: 389	-40..+100°C	Alu pressure die casting	IP68	I.I.R / I.I.R.420 903520/10
BFR (BUZ85 - Option: 392 BFR 2 cable entries Option: 530	-40..+100°C	Alu pressure die casting	IP68	I.I.R / I.I.R.420 903520/10 C97 EEX.. 903520/20
BUSH - Option: 394 BUSH 2 cable entries	-40..+100°C	Alu pressure die casting	IP68	I.I.R / I.I.R.420 903520/10 / 903520/15 C97 EEX.. 903520/20
DNAG - Option: 388	-40..+100°C	Alu pressure die casting	IP68	I.I.R / I.I.R.420 903520/10 / 903520/15 C97 EEX.. 903520/20
CNI-3 - Option: 364	-30..+100°C -50..+100°C	Stainless Steel (304,316..)	IP66	I.I.R / I.I.R.420 903520/10
BEGF - Option: 397	-50..+100°C	Stainless Steel (304,316..)	IP65	I.I.R / I.I.R.420 903520/10
AB7 - Option: 924	-40..+100°C	Alu pressure die casting		I.I.R / I.I.R.420 903520/10 / 903520/15
XI-DSN (1) - Option : 103	-40..+100°C	Poyamide PA12 antistatic - Black	IP68	I.I.R / I.I.R.420 903520/10
XI-DSNW (1) - Option : 104	-40..+100°C	Poyamide PA12 antistatic - Black	IP68	I.I.R / I.I.R.420 903520/10

(1) ATEX certification : FTZU 12 ATEX 0202U



JUMO GmbH & Co. KG
 Adresse de livraison :
 Mackenrodtstraße 14
 36039 Fulda, Allemagne
 Adresse postale :
 36035 Fulda, Allemagne
 Tél. : +49 661 6003-0
 Fax. : +49 661 6003-607
 E-Mail : mail@jumo.net
 Internet : www.jumo.net

JUMO-REGULATION SAS
 7 rue des Drapiers
 B.P. 45200
 57075 Metz Cedex 3, France
 Tél. : +33 3 87 37 53 00
 E-Mail : info.fr@jumo.net
 Internet : www.jumo.fr

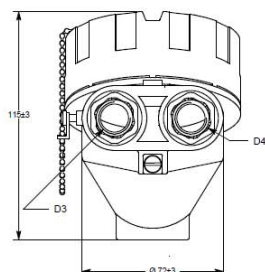
JUMO AUTOMATION
 S.P.R.L. / P.G.M.B.H. / B.V.B.A
 Industriestraße 18
 4700 Eupen, Belgique
 Tél. : +32 87 59 53 00
 Fax. : +32 87 74 02 03
 E-Mail : info@jumo.be
 Internet : www.jumo.be

JUMO
 Mess- und Regeltechnik AG
 Laubisrütistrasse 70
 8712 Stäfa, Suisse
 Tél. : +41 44 928 24 44
 Fax. : +41 44 928 24 48
 E-Mail : info@jumo.ch
 Internet : www.jumo.ch

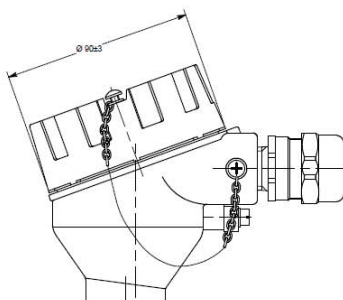


TERMINAL HEAD FOR TEMPERATURE SENSOR TYPE Ex « d » TB.97-XD.. 903520/30

Type	Temperature range	Matériel	IP	Remarks
XD-AD – Option : 399	-50..+100°C	Alu pressure die casting	IP68	
XD-SD – Option : 541	-50..+100°C	Inox 316 L	IP68	
TTE 200 – Option : 999	-55..+60°C	Alu pressure die casting	IP69	Ex »d« - Ex »t« certified alu. Connection head- FPL
TTE 300 – Option : 999	-55..+60°C	Alu pressure die casting	IP69	Ex »d« - Ex »t« certified alu. Connection head- FPL



Terminal head XD-AD - Option 399
(Alu. pressure die cast)



Terminal head XD-SD - Option 541
(Stainless steel)

Terminal head TE200: without smooth hole flameproof joint
 Terminal head TE300: with smooth hole flameproof joint



Terminal head TTE200 - Option 999

FIELD MOUNTED TEMPERATURE TRANSMITTER – TERMINAL HEAD + DIGITAL DISPLAY FOR TEMPERATURE SENSOR TEMPERATURE SENSOR SERIE I... AND TYPE Ex « d » TB.97-XD.. 903520/30

Type	Temperature range	Matériel	IP	For temperature sensor type
PR 7501A ATEX-IECEX Option : 105	-40..+80°C	Alu pressure die casting	IP66 IP68	I.I.R.420 (Ex »i«) 903520/15 TB97-XD.420 (Ex »d«) 903520/35
PR 7501B ATEX-IECEX Option : 106	-40..+85°C	Inox 316	IP66 IP68	I.I.R.420 (Ex »i«) 903520/15 TB97-XD.420 (Ex »d«) 903520/35
YOKO YTA610 ATEX-IECEX Option : 107	-40..+100°C	Alu pressure die casting	IP68 IP67	I.I.R.420 (Ex »i«) 903520/15 TB97-XD.420 (Ex »d«) 903520/35
YOKO YTA710 ATEX-IECEX Option : 108	-40..+100°C	Alu pressure die casting	IP69 IP67	I.I.R.420 (Ex »i«) 903520/15 TB97-XD.420 (Ex »d«) 903520/35
AB7 WITH LCD DISPLAY Option : 924	-40..+85°C	Alu pressure die casting	IP69 IP67	I.I.R.420 (Ex »i«) 903520/15
BUZH + LED Ex DISPLAY Option : 547	-20..+70°C	Alu pressure die casting	IP69 IP67	I.I.R.420 (Ex »i«) 903520/15
XD-AH + LCD DISPLAY Option : 547	-20..+85°C	Alu pressure die casting	IP68	TB97-XD.420 (Ex »d«) 903520/35



PR 7501A ATEX-IECEX

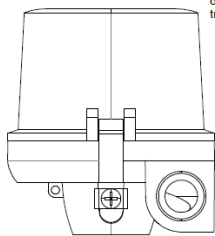
**FIELD MOUNTED
TEMPERATURE
TRANSMITTER**



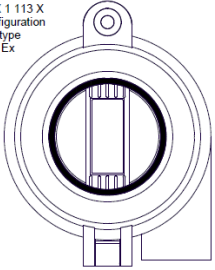
YOKO YTA

**FOR : 903520/15
903520/35**

For: 903520/15



Display BD07 - EPS 18 ATEX 1 113 X
the display is used for the configuration
of the head AB7 equipped with type
transmitter type dTrans T07 B Ex

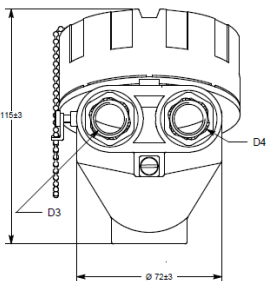
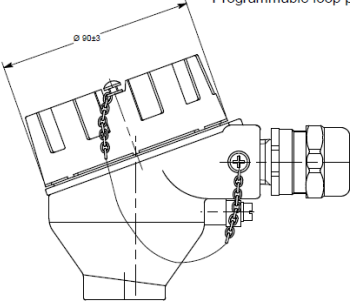



Terminal head AB7 + Display - Option: 924



Terminal head BUZH + Display Ex - Option: 547

For : 903520/35

Terminal head XD-AD + Display
Programmable loop powered LED Display LPI-02

Terminal head XD-ADdig - Option 399 + 661



Mounting with temperature sensor type I.I.R.420

The associated equipment is certified and compatible with intrinsic safety according to CEI/EN 60079-11

II 1 G Ex ia IIC - II 2 D Ex ia IIIC

They are also compatible with the following electrical values: $U_o \leq 25V$ $I_o \leq 95mA$ $P_o \leq 140mW$

Mounting with temperature sensor type TB.97-XD

The associated equipment is certified Ex "d" et Ex "t", and according to CEI/EN 60079-1 and CEI/EN 60079-31

II 2 G Ex db IIC - II 2 D Ex tb IIIC

They are also compatible with the following electrical values: $U_n: 25V$ $I_n: 95mA$ $P_n: 40mW$

Functional safety

With this product, JUMO provides a number of different possibilities in terms of functional safety to realize a completely or partially certified solution.

If you require consulting with regard to the safety integrity level (SIL) or performance level (PL), you can contact us.

The safety data (MTBF, MTTFD, and FIT values) can also be accessed on demand for this item

658 : SIL and PL compatible only in conjunction with JUMO SIL-certified safety temperature limiters and monitors according to data sheet 701150,

659 : SIL and PL compatible only in conjunction with Jumo dTRANS T06 Ex temperature transmitter datasheet : 707075

869 : SIL compatible only in conjunction with Jumo dTRANS T07 Ex temperature transmitter datasheet FT : 707080

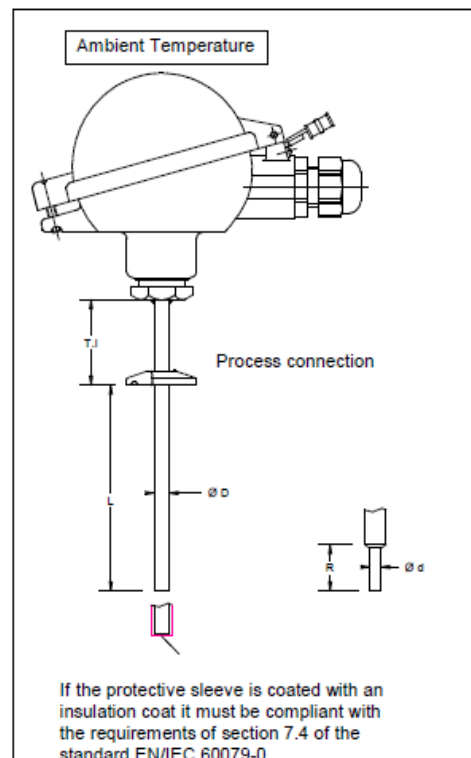
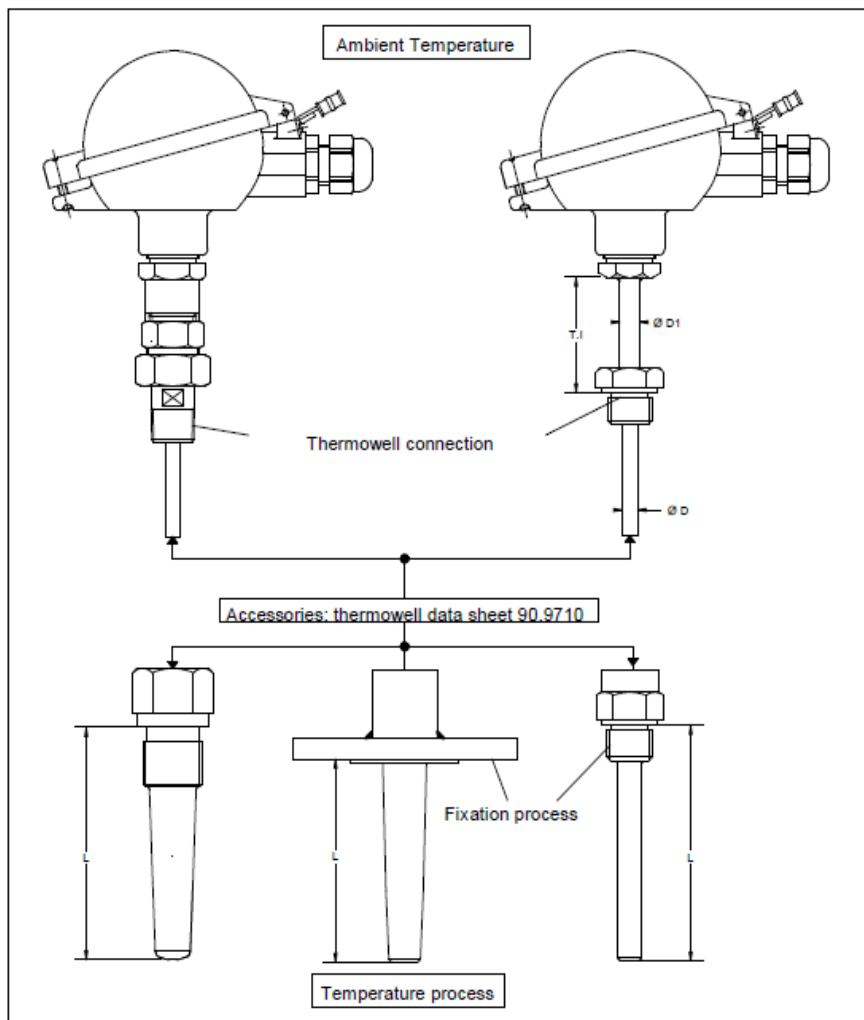


Basic type : 903520/10 Type of protection, Intrinsically safe „i“

Technical data

Type	I.I.R I.I.R.420	Terminal head + ceramic terminal block Terminal head + temperature transmitter
Terminal head	Forme BUZ Forme BUZH Forme DNAG Forme BEGF Forme CNI-3 Forme AB7 Forme XI-DSN..(1) (1) ATEX certification : FTZU 12 ATEX 0202U	Alu pressure die cast, M20 × 1,5 ; IP65, maxi. temperature range -40 à +100 °C Alu pressure die cast, M20 × 1,5 ; IP65, maxi. temperature range -40 à +100 °C Alu pressure die cast, M20 × 1,5 ; IP65, maxi. temperature range -40 à +100 °C Stainless steel 1.4541 (AISI 321), M20 × 1,5 ; IP65, maxi. temperature range -40 à +100 °C Stainless steel 1.4404 (AISI 316L), 1.4304 (AISI 304L) M16 × 1,5 ; IP66, maxi. temperature range -30 à +100 °C Alu pressure die cast, M20 × 1,5 ; IP65, maxi. temperature range -40 à +100 °C Poyamide PA12 antistatic – Black ; IP68, maxi. temperature range -50 à +100 °C
Process temperature range.	-70°C ≤ Tp ≤ +550°C for chip temperature sensor -200°C ≤ Tp ≤ +800°C for ceramic/glas temperature sensor (Platinum wire winding) -270°C ≤ Tp ≤ +200°C for Cernox sensor/specific resistiv sensor -50°C ≤ Tp ≤ +120°C for digital sensor	
Measuring insert	Standard : Pt100, Pt1000, classe B, A ou AA according to EN 60751 2, 3 or 4 wire are possible CTN ou PTC on request Cernox Digital sensor	
Extension tube	Stainless steel 1.4571 (AISI 316 Ti), 1.4404 (AISI 316L) ..	
Process connection	Fitting – flange – clamp ... 1.4571 (AISI 316 Ti), 1.4404 (AISI 316L) .. Protective sleeve, stainless steel 1.4571 (AISI 316 Ti), steel 1.7335 (A182 F11), 1.4404 (AISI 316L) .. Highly corrosion-resistant materials and coatings are optionally available	
Convertisseur – pour type I.I.R.420	Programmable head transmitter, datasheet 707010 programmable two-channel transmitter with HART®/SIL, datasheet 707080 Any transmitter, digital display or Field mounted temperature transmitter compatible with the values of the certificate either: Ui:25V li:95mA Pi:140mW (Resistive sensor)	
ATEX / IECEx marking for type I.I.R	II 1 G Ex ia IIC T6..T1 Ga II 1/2 D Ex ia IIIC T20085°C... T200450°C Da / Ex ia IIIC T85°C..T135°C Db Ui :25V li :95mA Pi :140mW Li :0 Ci :0 Ui :9V li :95mA Pi :140mW Li :0 Ci :0 (Cernox) Ui :9V li :550mA Pi :630mW Li :0 Ci :0 (Digital sensor) Utilisation : - Zone 0 Gaz - Zone 20 (protection sleeve) / zone 21 (terminal head) for Dust	
Marine BV marking	903564/10 (sensor with CNI-3 stainless steel terminal head) and 903564/20 (sensor with BUZ72 terminal head)	
ATEX / IECEx marking for type I.I.R.420	II 1/2 G Ex ia IIC T6..T1 Ga /Gb II 1/2 D Ex ia IIIC T20085°C... T200450°C Da / Ex ia IIIC T85°C..T135°C Db Ui :..V li :..mA Pi :..mW Li :.. Ci :.. Electrical value : depending on the transmitter, digital display or field mounted temperature transmitter Utilisation : - Zone 0 (protective sleeve) / zone 1 (terminal head) for Gaz - Zone 20 (protective sleeve) / zone 21 (terminal head) for Dust	
Accessories	Thermowells, data sheet 909710	

Dimensions



DIMENSIONS

D :	from 1 to 50mm
L :	from 10 to 4000mm
D1 :	from 0 to 50mm
T.I. :	from 0 to 500mm
R :	from 5 to 200mm
D :	from 3 to 20mm

The protective sleeve is available in various lengths and with various process connections : fitting, flange, Clamp, weld in...and is made from steel, stainless steel, Hastelloy,etc and has a minimum wall thickness of 1 mm, or the measuring insert is made in mineral insulated cable.

In case of a wall thickness less than 1 mm, the instrument may not be exposed to environmental conditions which may negatively affect the partition wall.

A thermowell with a suitable minimum wall thickness can be used alternatively.

JUMO GmbH & Co. KG
 Adresse de livraison :
 Mackenrodtstraße 14
 36039 Fulda, Allemagne
 Adresse postale :
 36035 Fulda, Allemagne
 Tél. : +49 661 6003-0
 Fax. : +49 661 6003-607
 E-Mail : mail@jumo.net
 Internet : www.jumo.net

JUMO-REGULATION SAS
 7 rue des Drapiers
 B.P. 45200
 57075 Metz Cedex 3, France
 Tél. : +33 3 87 37 53 00
 E-Mail : info.fr@jumo.net
 Internet : www.jumo.fr

JUMO AUTOMATION
 S.P.R.L. / P.G.M.B.H. / B.V.B.A
 Industriestraße 18
 4700 Eupen, Belgique
 Tél. : +32 87 59 53 00
 Fax. : +32 87 74 02 03
 E-Mail : info@jumo.be
 Internet : www.jumo.be

JUMO
 Mess- und Regeltechnik AG
 Laubisrütistrasse 70
 8712 Stäfa, Suisse
 Tél. : +41 44 928 24 44
 Fax. : +41 44 928 24 48
 E-Mail : info@jumo.ch
 Internet : www.jumo.ch



Data sheet 903520

Page 9 / 27

Basic type : 903520/15 Type of protection, Intrinsically safe „i“ Field mounted temperature transmitter – terminal Head + digital display

Technical data

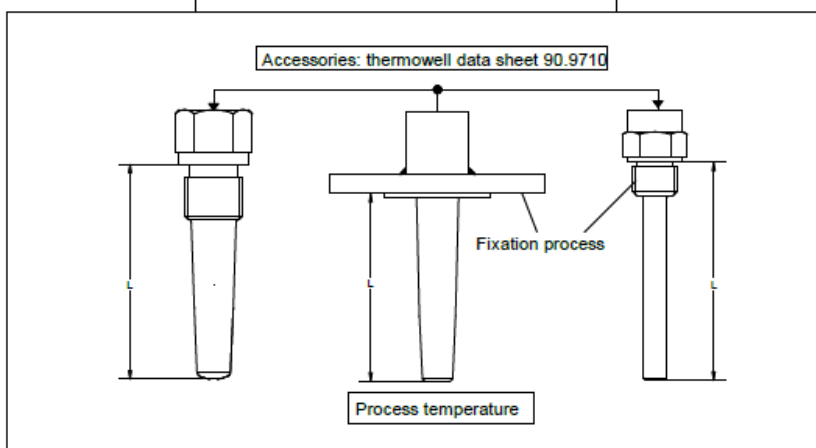
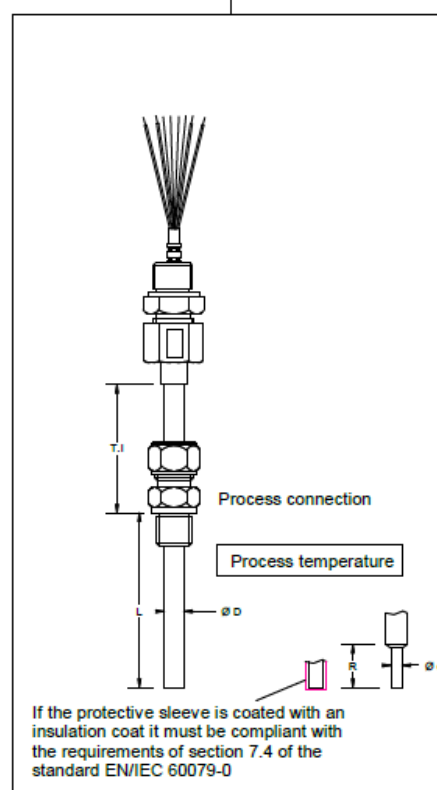
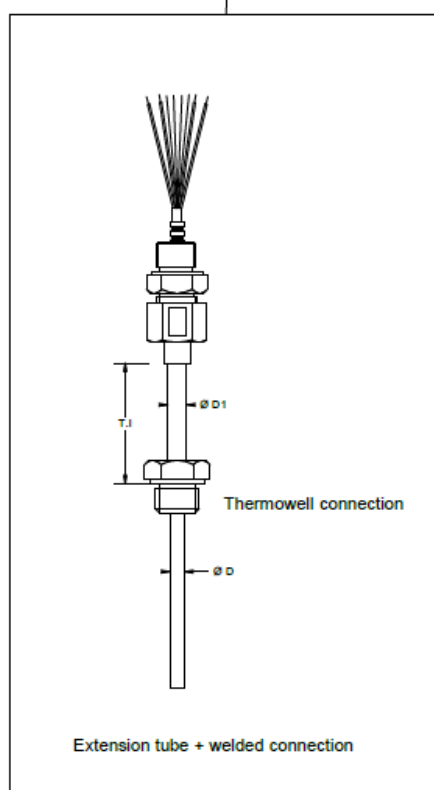
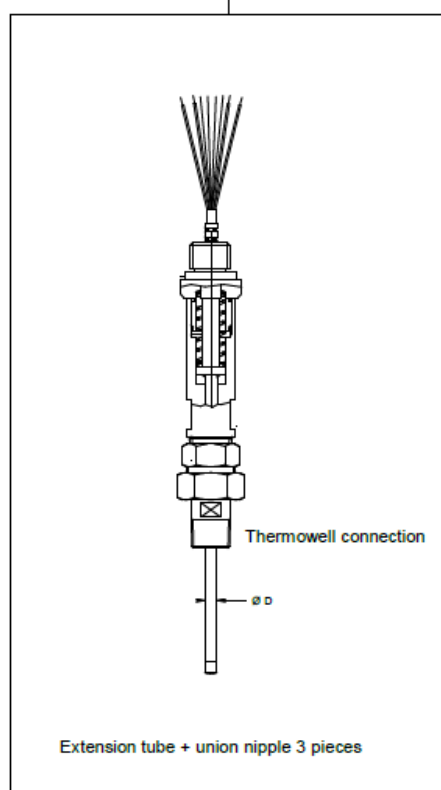
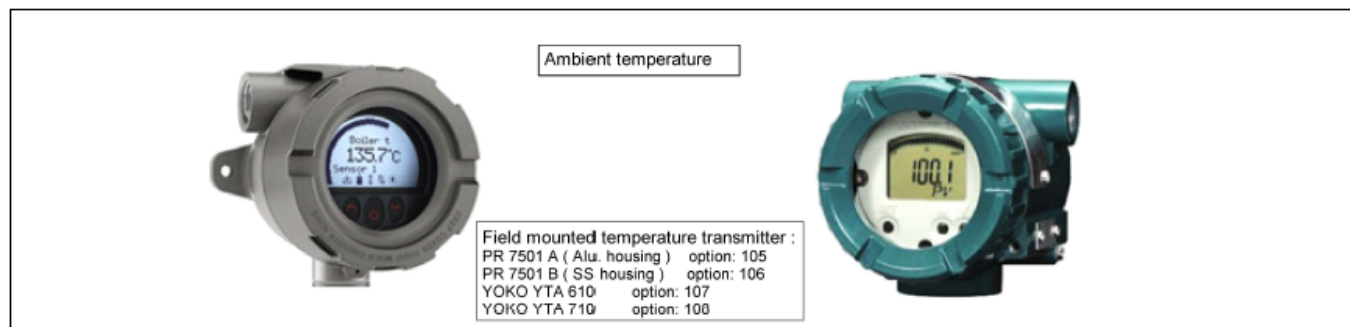
Type	I.I.R.420
Field mounted temperature transmitter	PR 7501A ATEX-IECEX –Aluminium housing PR 7501B ATEX-IECEX – Stainless steelAluminium housing YOKO YTA610 ATEX-IECEX – Aluminium housing (Résolution Pt100 +/- 0 ,14°C) YOKO YTA710 ATEX-IECEX – Aluminium housing (Résolution Pt100 +/- 0 ,10°C + extended diagnostic functions)
Terminal head	Forme BUZH + display (Alu pressure die cast, M20 × 1,5 ; IP65, maxi. temperature range -40 à +100 °C) Forme AB7 + BD7 Display (Alu pressure die cast, M20 × 1,5 ; IP65, maxi. temperature range -40 à +100 °C)
Process temperature range.	-70°C ≤ Tp ≤ +550°C for chip temperature sensor -200°C ≤ Tp ≤ +800°C for ceramic/glas temperature sensor (Platinum wire winding)
Measuring insert	Standard : Pt100, Pt1000, classe B, A ou AA according to EN 60751 2, 3 or 4 wire are possible
Extension tube	Stainless steel 1.4571 (AISI 316 Ti), 1.4404 (AISI 316L) ..
Process connection	Fitting – flange – clamp ... 1.4571 (AISI 316 Ti), 1.4404 (AISI 316L) .. Protective sleeve, stainless steel 1.4571 (AISI 316 Ti), steel 1.7335 (A182 F11), 1.4404 (AISI 316L) .. Highly corrosion-resistant materials and coatings are optionally available
Application	RTD, TC, Ohm, and bipolar mV input and analog output Communication HART et sortie analogique 4...20 mA de la valeur principale (PV) d'un capteur, de la différence ou la mesure de la température moyenne de deux capteurs d'entrée RTD ou TC
Configuration	Local parameter setting : Parameter configuration by the push button offers easy and quick setup for parameters. Accessible parameters are different with each output signal cor
ATEX / IECEx marking for type I.I.R.420	II 1/2 G Ex ia IIC T6..T1 Ga /Gb II 1/2 D Ex ia IIIC T20085°C... T200450°C Da / Ex ia IIIC T85°C..T135°C Db Ui ...V li ...mA Pi ...mW Li ... Ci ... Electrical value : depending on the transmitter, digital display or field mounted temperature transmitter Utilisation : - Zone 0 (protective sleeve) / zone 1 (terminal head) for Gaz - Zone 20 (protective sleeve) / zone 21 (terminal head) for Dust
Accessories	Thermowells, data sheet 909710

The protective sleeve is available in various lengths and with various process connections : fitting, flange, Clamp, weld in...and is made from steel, stainless steel, Hastelloy,etc and has a minimum wall thickness of 1 mm, or the measuring insert is made in mineral insulated cable.

In case of a wall thickness less than 1 mm, the instrument may not be exposed to environmental conditions which may negatively affect the partition wall.

A thermowell with a suitable minimum wall thickness can be used alternatively.

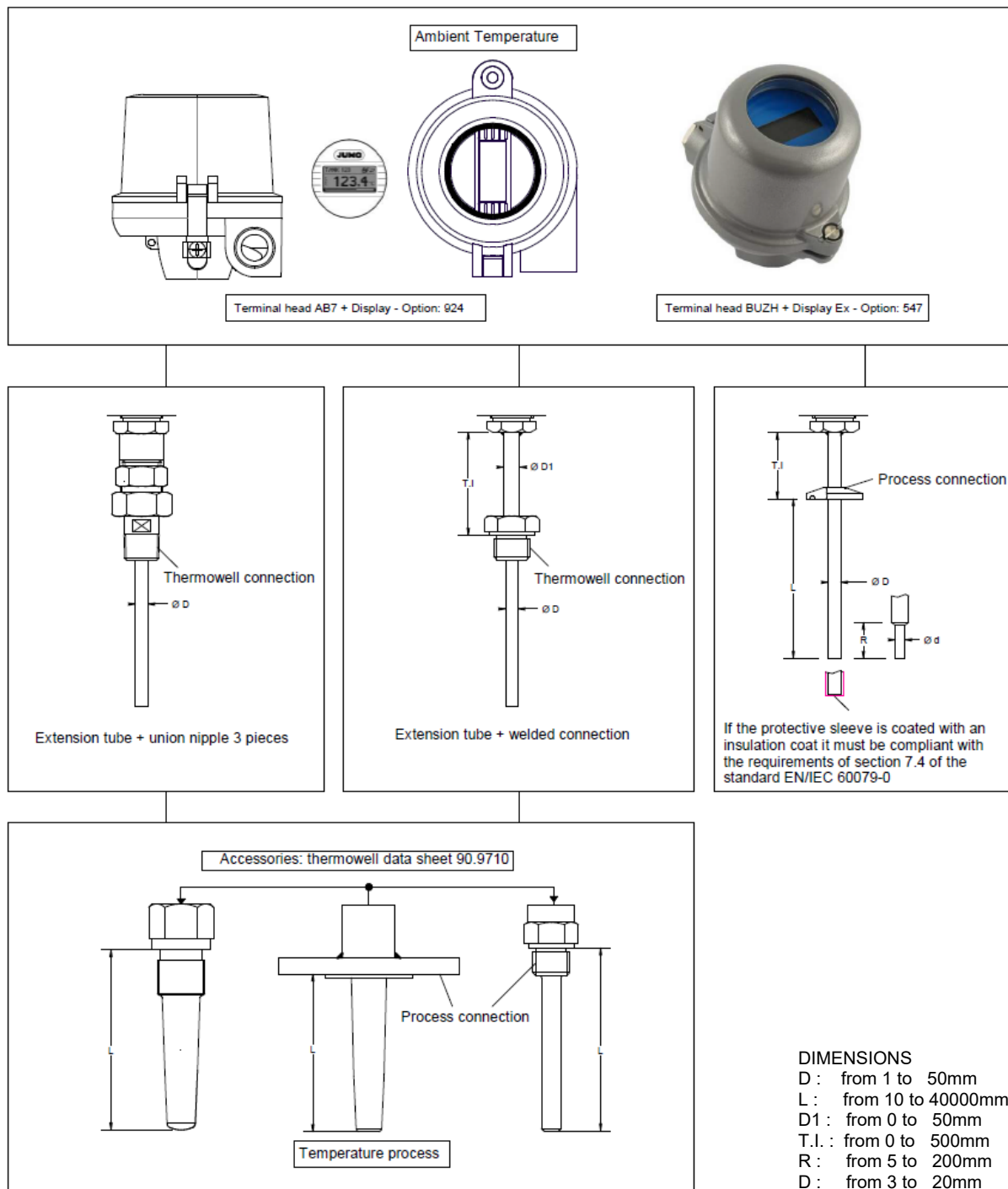
Dimensions



DIMENSIONS

D : from 1 to 50mm
 L : from 10 to 40000mm
 D1 : from 0 to 50mm
 T.I. : from 0 to 500mm
 R : from 5 to 200mm
 D : from 3 to 20mm

Dimensions



The protective sleeve is available in various lengths and with various process connections : fitting, flange, Clamp, weld in...and is made from steel, stainless steel, Hastelloy,etc and has a minimum wall thickness of 1 mm, or the measuring insert is made in mineral insulated cable.

In case of a wall thickness less than 1 mm, the instrument may not be exposed to environmental conditions which may negatively affect the partition wall.
 A thermowell with a suitable minimum wall thickness can be used alternatively

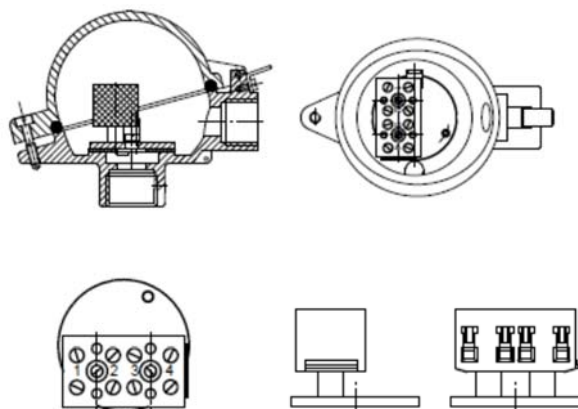


Basic type : 903520/20 Type of protection Ex « e » + Ex « t » Increased safety + protection by enclosure

Technical data

Type	C97-EEEx...
Terminal head	Forme BUZ Alu pressure die cast, M20 × 1,5 ; IP65, maxi. temperature range -40 à +100 °C Forme BUZH Alu pressure die cast, M20 × 1,5 ; IP65, maxi. temperature range -40 à +100 °C Forme DNAG Alu pressure die cast, M20 × 1,5 ; IP65, maxi. temperature range -40 à +100 °C Forme XD-AD Alu pressure die cast, M20 × 1,5 ; IP65, maxi. temperature range -40 à +100 °C
Ex modular terminal block	Certified II 2GD – Ex e II according to EN 60079-7 / EN 60079-31
Process temperature range.	-70°C ≤ Tp ≤ +550°C for chip temperature sensor -200°C ≤ Tp ≤ +800°C for ceramic/glas temperature sensor (Platinum wire winding)
Measuring insert	Standard : Pt100, Pt1000, classe B, A ou AA according to EN 60751 2, 3 or 4 wire are possible
Measuring element	Interchangeable – mounting in protective sleeve or thermowell Without interchangeable. Mineral insulated cable.
Extension tube	Stainless steel 1.4571 (AISI 316 Ti), 1.4404 (AISI 316L) ..
Process connection	Fitting – flange – clamp ... 1.4571 (AISI 316 Ti), 1.4404 (AISI 316L) .. Protective sleeve, stainless steel 1.4571 (AISI 316 Ti), steel 1.7335 (A182 F11), 1.4404 (AISI 316L) .. Highly corrosion-resistant materials and coatings are optionally available
ATEX/IECEx marking for type C97-EEEx..	II 2/2 G Ex eb IIC ...°C ou T1 à T5/T6 Gb/Gb II 1/2 D Ex « t » zone 20/21 II 1/2 D Ex ta/tb IIIC T200 T97°C-T...°C/T85°C Da/Db Un :25V In :50mA Pn :125mW II 2/2 G Ex eb IIC ...°C ou T1 à T6/T6 Gb/Gb Un :28V In :2mA These electrical values depend on the electrical values of the selected equipment. Utilisation : - Zone 1 (protective sleeve) for Gaz - Zone 20 (protective sleeve) / zone 21 (terminal head) for Dust
Accessories	Thermowells, data sheet 909710

Ex certified modular terminal block

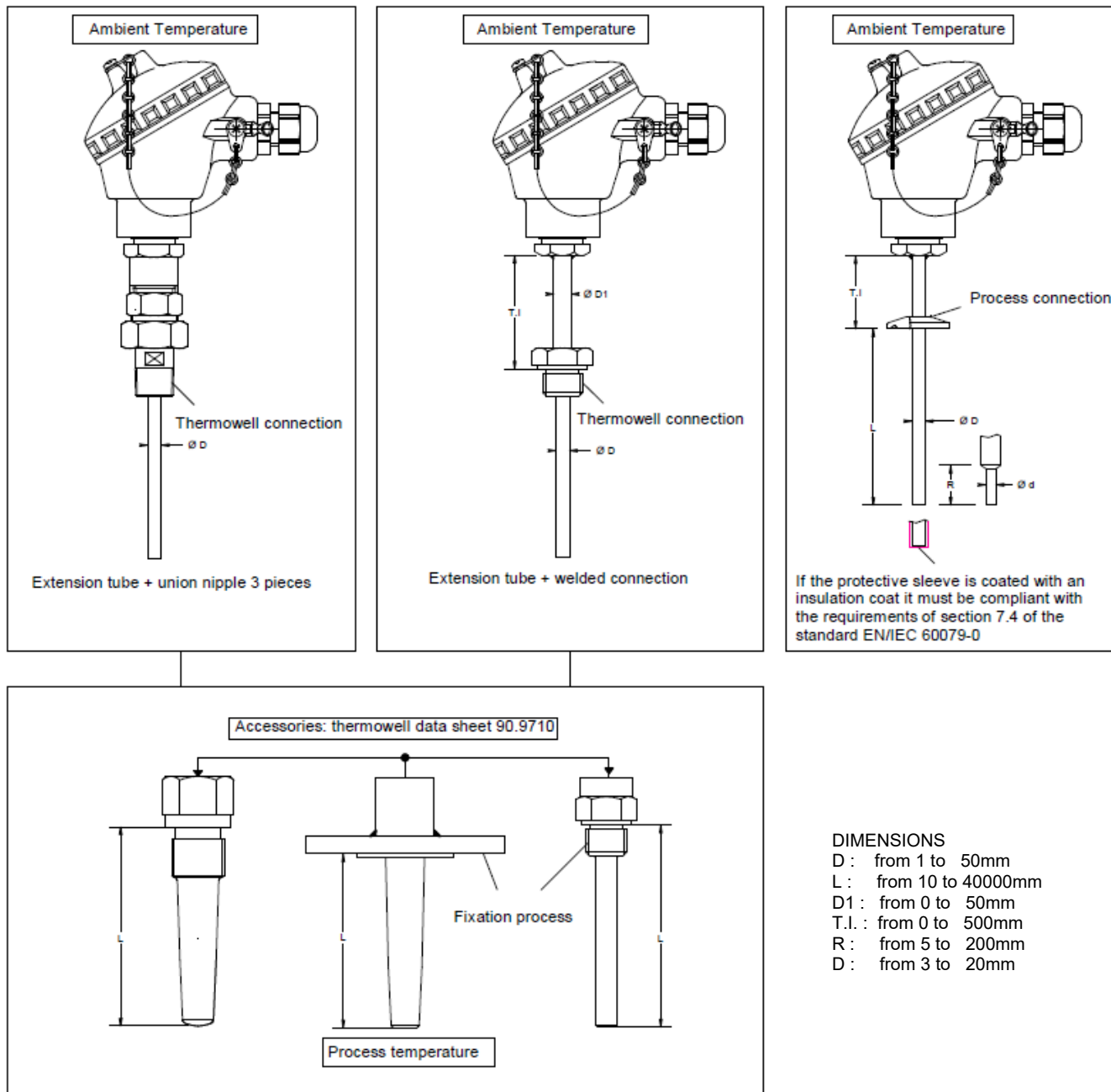


Terminal block

According to

II 2GD
Ex e II
EN 60079-0
EN 60079-7
EN 60079-31

Dimensions



DIMENSIONS

D : from 1 to 50mm
 L : from 10 to 40000mm
 D1 : from 0 to 50mm
 T.I. : from 0 to 500mm
 R : from 5 to 200mm
 D : from 3 to 20mm

The protective sleeve is available in various lengths and with various process connections : fitting, flange, Clamp, weld in...and is made from steel, stainless steel, Hastelloy,etc and has a minimum wall thickness of 1 mm, or the measuring insert is made in mineral insulated cable.

In case of a wall thickness less than 1 mm, the instrument may not be exposed to environmental conditions which may negatively affect the partition wall.

A thermowell with a suitable minimum wall thickness can be used alternatively

JUMO GmbH & Co. KG
Adresse de livraison :
Mackenrodtstraße 14
36039 Fulda, Allemagne
Adresse postale :
36035 Fulda, Allemagne
Tél. : +49 661 6003-0
Fax. : +49 661 6003-607
E-Mail : mail@jumo.net
Internet : www.jumo.net

JUMO-REGULATION SAS
7 rue des Drapiers
B.P. 45200
57075 Metz Cedex 3, France
Tél. : +33 3 87 37 53 00
E-Mail : info.fr@jumo.net
Internet : www.jumo.fr

JUMO AUTOMATION
S.P.R.L. / P.G.M.B.H. / B.V.B.A
Industriestraße 18
4700 Eupen, Belgique
Tél. : +32 87 59 53 00
Fax. : +32 87 74 02 03
E-Mail : info@jumo.be
Internet : www.jumo.be

JUMO
Mess- und Regeltechnik AG
Laubisrütistrasse 70
8712 Stäfa, Suisse
Tél. : +41 44 928 24 44
Fax. : +41 44 928 24 48
E-Mail : info@jumo.ch
Internet : www.jumo.ch



Data sheet 903520

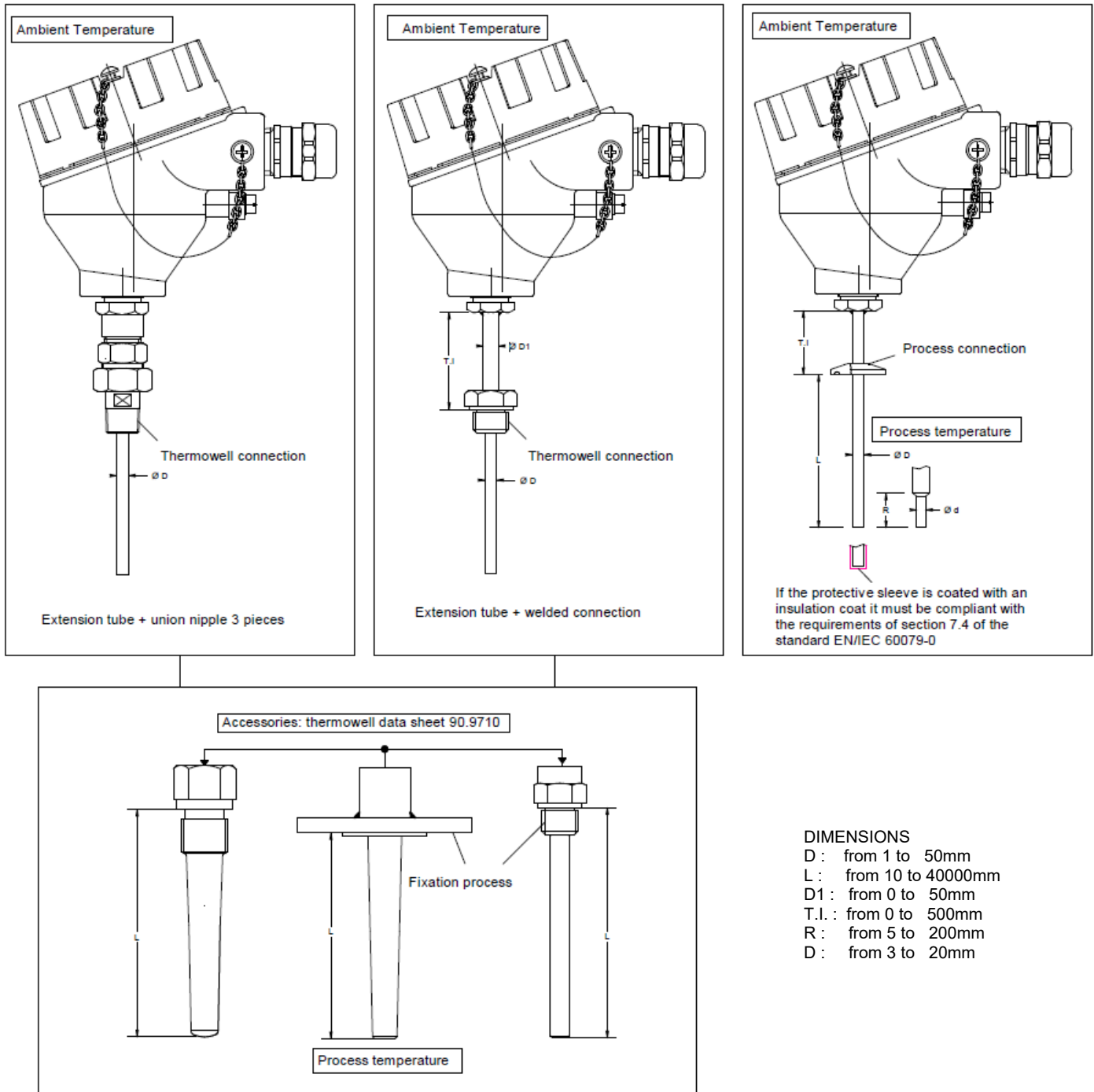
Page 14 / 27

Basic type : 903520/30 Protection by flameproof enclosure « d » + Protection by enclosure « t »

Technical data

Type	TB.97-XD.R Terminal head + ceramic terminal block TB97-XD.R.420 Terminal head + temperature transmitter
Terminal head	Form XD-AD (1) Alu pressure die cast, ½ »NPT ; IP68, maxi. temperature range -50 à +100 °C Form XD-SD (1) Stainless steel 316L, ½ »NPT ; IP68, maxi. temperature range -50 à +100 °C Form TTE 200 (2) Alu pressure die cast, ½ »NPT ; IP68, maxi. temperature range -55 à + 60 °C Form TTE 300 (2) Alu pressure die cast,, ½ »NPT ; IP68, maxi. temperature range -55 à + 60 °C (1) ATEX certification : FTZU 12 ATEX 0074U (2) ATEX certification : CESI 08 ATEX 029 U
Process temperature range.	-70°C ≤ Tp ≤ +550°C for chip temperature sensor -200°C ≤ Tp ≤ +800°C for ceramic/glas temperature sensor (Platinum wire winding) -270°C ≤ Tp ≤ +200°C for Cernox sensor/specific resistiv sensor -50°C ≤ Tp ≤ +120°C for digital sensor
Measuring insert	Standard : Pt100, Pt1000, classe B, A ou AA according to EN 60751 2, 3 or 4 wire are possible CTN ou PTC on request Cernox Digital sensor
Extension tube	Stainless steel 1.4571 (AISI 316 Ti), 1.4404 (AISI 316L) ..
Process connection	Fitting – flange – clamp ... 1.4571 (AISI 316 Ti), 1.4404 (AISI 316L) .. Protective sleeve, stainless steel 1.4571 (AISI 316 Ti), steel 1.7335 (A182 F11), 1.4404 (AISI 316L) .. Highly corrosion-resistant materials and coatings are optionally available
Convertisseur – pour type TB.97-XD-R.420	Programmable head transmitter, datasheet 707010 programmable two-channel transmitter with HART®/SIL, datasheet 707080 Any transmitter, digital display or Field mounted temperature transmitter compatible with the values of the certificate either: Un:25V In:95mA Pn:140mW (Resistive sensor)
ATEX / IECEx marking for type TB.97-XD-R	II 2 G Ex db IIC T6..T1 Ga II 1/2 D Ex ta IIIC T20085°C... T200450°C Da / Ex tb IIIC T85°C..T135°C Db Un :25V In :95mA Pn :140mW Un :9V In :95mA Pn :140mW (Cernox) Un :9V In :550mA Pn :630mW (Digital sensor) Utilisation : - Zone 1 Gaz - Zone 20 (protective sleeve) / zone 21 (terminal head) for Dust
ATEX / IECEx marking for type TB.97-XD-R.420	II 2 G Ex db IIC T6..T1 Ga II 1/2 D Ex ta IIIC T20085°C... T200450°C Da / Ex tb IIIC T85°C..T135°C Db Un : 25V In : 95mA Pn : 140mW Utilisation : - Zone 1 (protective sleeve) / zone 1 (terminal head) pour Gaz - Zone 20 (protective sleeve) / zone 21 (terminal head) pour Dust
Accessories	Thermowells, data sheet 909710

Dimensions



The protective sleeve is available in various lengths and with various process connections : fitting, flange, Clamp, weld in...and is made from steel, stainless steel, Hastelloy,etc and has a minimum wall thickness of 1 mm, or the measuring insert is made in mineral insulated cable.

In case of a wall thickness less than 1 mm, the instrument may not be exposed to environmental conditions which may negatively affect the partition wall.

A thermowell with a suitable minimum wall thickness can be used alternatively

JUMO GmbH & Co. KG
 Adresse de livraison :
 Mackenrodtstraße 14
 36039 Fulda, Allemagne
 Adresse postale :
 36035 Fulda, Allemagne
 Tél. : +49 661 6003-0
 Fax. : +49 661 6003-607
 E-Mail : mail@jumo.net
 Internet : www.jumo.net

JUMO-REGULATION SAS
 7 rue des Drapiers
 B.P. 45200
 57075 Metz Cedex 3, France
 Tél. : +33 3 87 37 53 00
 E-Mail : info.fr@jumo.net
 Internet : www.jumo.fr

JUMO AUTOMATION
 S.P.R.L. / P.G.M.B.H. / B.V.B.A
 Industriestraße 18
 4700 Eupen, Belgique
 Tél. : +32 87 59 53 00
 Fax. : +32 87 74 02 03
 E-Mail : info@jumo.be
 Internet : www.jumo.be

JUMO
 Mess- und Regeltechnik AG
 Laubisrütistrasse 70
 8712 Stäfa, Suisse
 Tél. : +41 44 928 24 44
 Fax. : +41 44 928 24 48
 E-Mail : info@jumo.ch
 Internet : www.jumo.ch

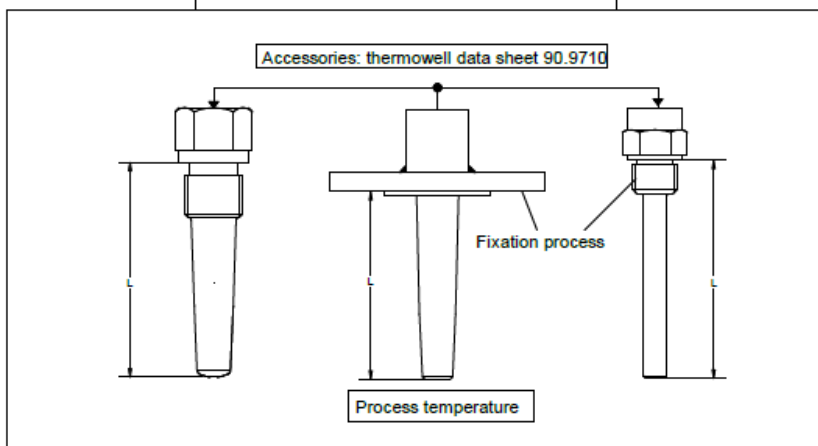
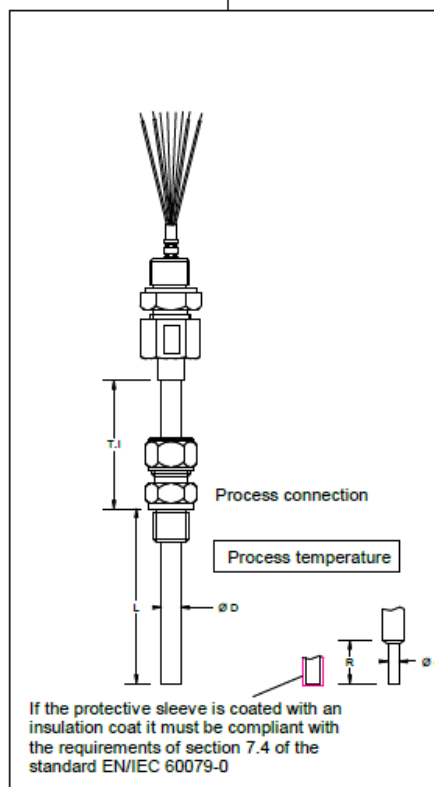
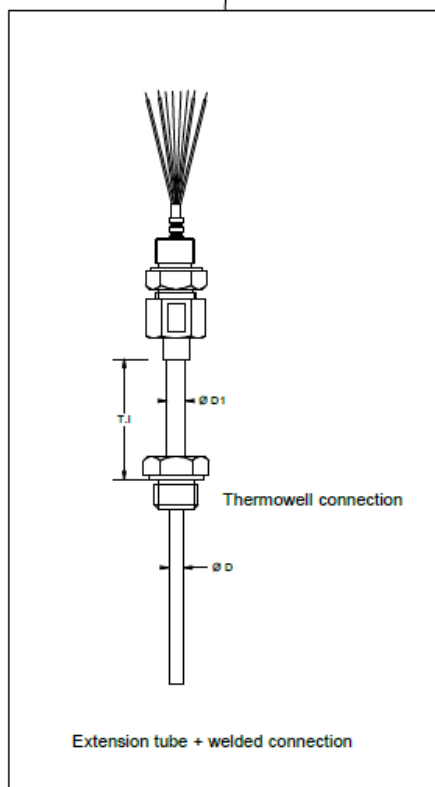
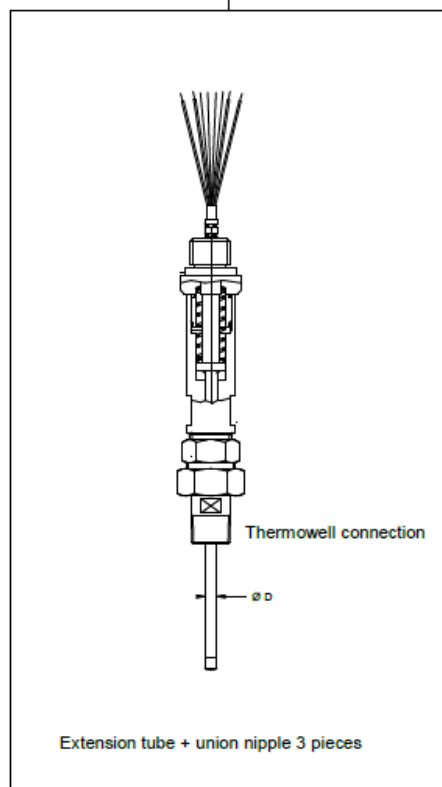
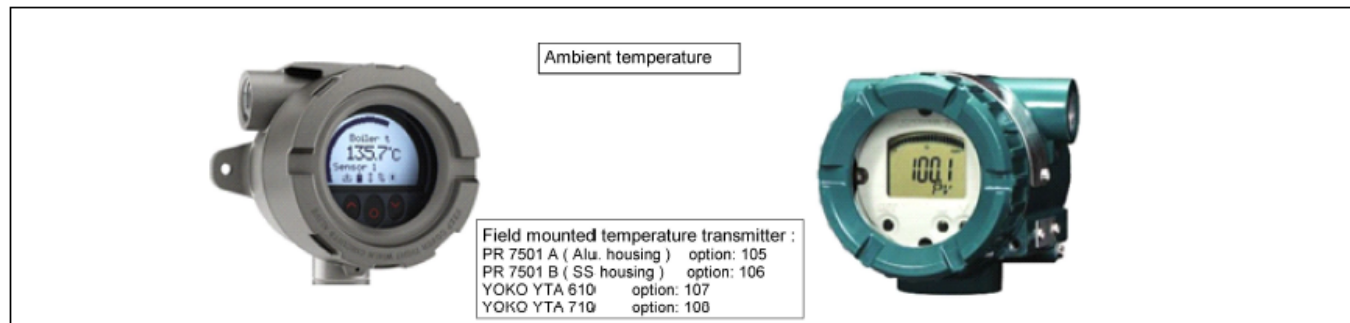


**Basic type : 903520/35 Protection by flameproof enclosure « d » +
 Protection by enclosure « t »
 Field mounted temperature transmitter – terminal
 Head + digital display**

Technical data

Type	TB.97-R.420
Field mounted temperature transmitter	PR 7501A ATEX-IECEX –Aluminium housing PR 7501B ATEX-IECEX – Stainless steelAluminium housing YOKO YTA610 ATEX-IECEX – Aluminium housing (Résolution Pt100 +/- 0 ,14°C) YOKO YTA710 ATEX-IECEX – Aluminium housing (Résolution Pt100 +/- 0 ,10°C + extended diagnostic functions)
Terminal head	Forme XD-AH (1) + glas windows + display, Alu pressure die cast, ½ »NPT ; IP68, maxi. temperature range -20 à +85 °C
Process temperature range.	-70°C ≤ Tp ≤ +550°C for chip temperature sensor -200°C ≤ Tp ≤ +800°C for ceramic/glas temperature sensor (Platinum wire winding)
Measuring insert	Standard : Pt100, Pt1000, classe B, A ou AA according to EN 60751 2, 3 or 4 wire are possible
Extension tube	Stainless steel 1.4571 (AISI 316 Ti), 1.4404 (AISI 316L) ..
Process connection	Fitting – flange – clamp ... 1.4571 (AISI 316 Ti), 1.4404 (AISI 316L) .. Protective sleeve, stainless steel 1.4571 (AISI 316 Ti), steel 1.7335 (A182 F11), 1.4404 (AISI 316L) .. Highly corrosion-resistant materials and coatings are optionally available
Application	RTD, TC, Ohm, and bipolar mV input and analog output Communication HART et sortie analogique 4...20 mA de la valeur principale (PV) d'un capteur, de la différence ou la mesure de la température moyenne de deux capteurs d'entrée RTD ou TC
Configuration	Local parameter setting : Parameter configuration by the push button offers easy and quick setup for parameters. Accessible parameters are different with each output signal cor
ATEX / IECEx marking for type TB.97-R.420	II 2 G Ex db IIC T6..T1 Gb II 1/2 D Ex ta IIIC T20085°C... T200450°C Da / Ex ta IIIC T85°C..T135°C Db Un :25V In :95mA Pn :140mW Utilisation : - Zone 1 (protective sleeve) / zone 1 (terminal head) for Gaz - Zone 20 (protective sleeve) / zone 21 (terminal head) for Dust
Accessories	Thermowells, data sheet 909710

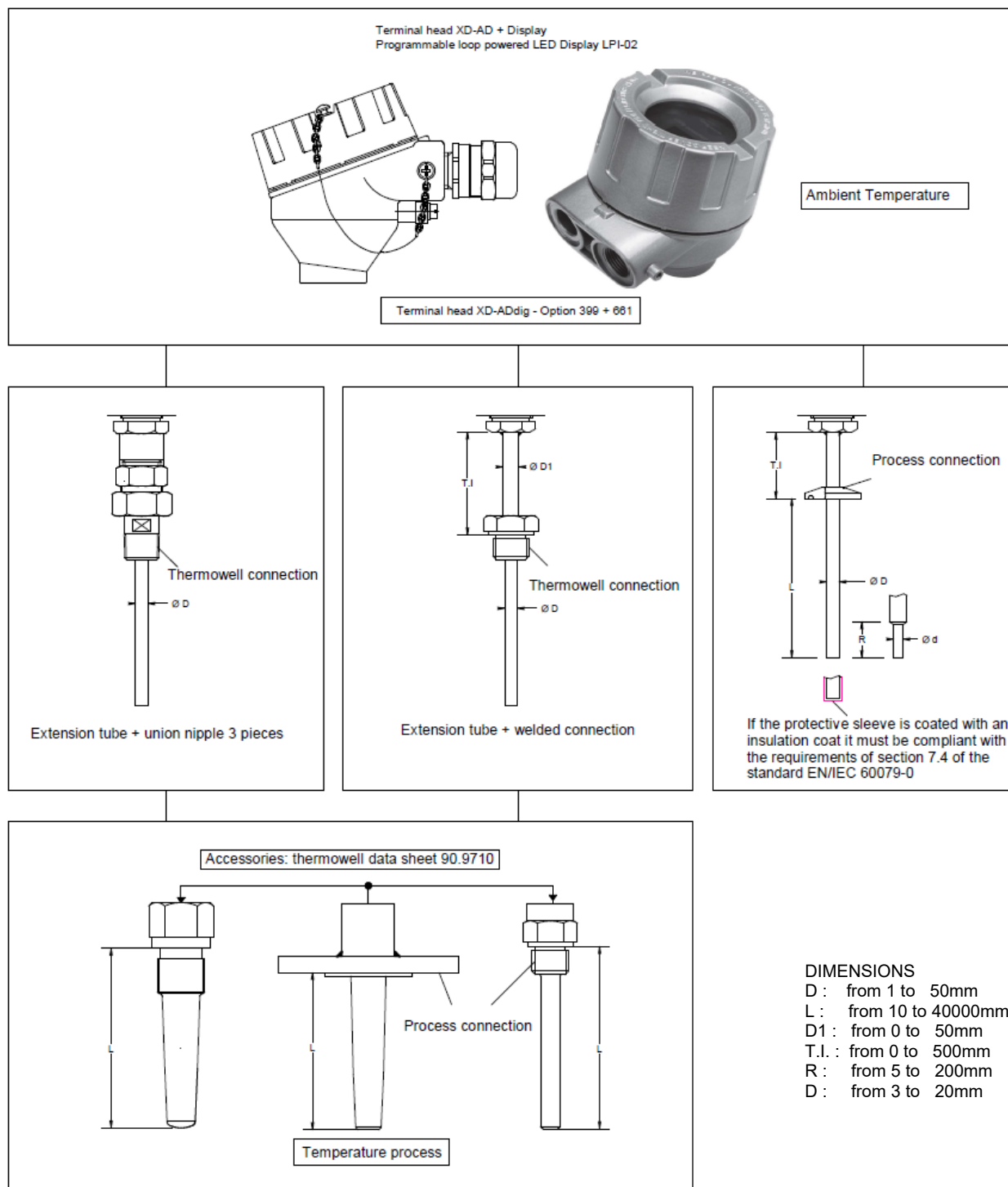
Dimensions



DIMENSIONS

D : from 1 to 50mm
 L : from 10 to 40000mm
 D1 : from 0 to 50mm
 T.I. : from 0 to 500mm
 R : from 5 to 200mm
 D : from 3 to 20mm

Dimensions



The protective sleeve is available in various lengths and with various process connections : fitting, flange, Clamp, weld in...and is made from steel, stainless steel, Hastelloy,etc and has a minimum wall thickness of 1 mm, or the measuring insert is made in mineral insulated cable.

In case of a wall thickness less than 1 mm, the instrument may not be exposed to environmental conditions which may negatively affect the partition wall.
 A thermowell with a suitable minimum wall thickness can be used alternatively

JUMO GmbH & Co. KG
 Adresse de livraison :
 Mackenrodtstraße 14
 36039 Fulda, Allemagne
 Adresse postale :
 36035 Fulda, Allemagne
 Tél. : +49 661 6003-0
 Fax. : +49 661 6003-607
 E-Mail : mail@jumo.net
 Internet : www.jumo.net

JUMO-REGULATION SAS
 7 rue des Drapiers
 B.P. 45200
 57075 Metz Cedex 3, France
 Tél. : +33 3 87 37 53 00
 E-Mail : info.fr@jumo.net
 Internet : www.jumo.fr

JUMO AUTOMATION
 S.P.R.L. / P.G.M.B.H. / B.V.B.A
 Industriestraße 18
 4700 Eupen, Belgique
 Tél. : +32 87 59 53 00
 Fax. : +32 87 74 02 03
 E-Mail : info@jumo.be
 Internet : www.jumo.be

JUMO
 Mess- und Regeltechnik AG
 Laubisrütistrasse 70
 8712 Stäfa, Suisse
 Tél. : +41 44 928 24 44
 Fax. : +41 44 928 24 48
 E-Mail : info@jumo.ch
 Internet : www.jumo.ch



Order details 903520/10

903520/10		(1) Basic type
		RTD temperature probe type I.I.R (ceramic terminal block)
		RTD temperature probe type I.I.R.420 (built in temperature transmitter)
		(2) Operating temperature (additional versions upon request)
x	106	-270 à +600 °C (Cernox sensor)
x x	107	-200 à +200 °C (wire-wound temperature sensor)
x x	116	-200 à +200 °C (wire-wound temperature sensor)
x	362	-50 à +100 °C (Digital sensor)
x x	386	-50 à +260 °C (thin film temperature sensor)
x x	402	-50 à +400 °C (thin film temperature sensor)
x x	415	-50 à +600 °C (thin film temperature sensor)
		(3) Measuring insert (additional versions upon request)
x x	1001	1× Pt100 3-wire circuit
x x	1003	1× Pt100 2-wire circuit
x x	1011	1× Pt100 4-wire circuit
x x	2001	2x Pt100 3-wire circuit (only in conjunction with transmitter 867 and 868)
x	2003	2× Pt100 2-wire circuit
x	2011	2× Pt100 4-wire circuit (only in conjunction with terminal head 394 or 104)
x	1560	1x Digital Sensor DS18B20
x	1850	1x Cernox 4-wire circuit
		(4) Tolerance class according to EN 60751:2009/CEI 60751:2008 (additional versions upon request)
x	1	Classe B (standard) (-50 to +500 °C)
x	2	Classe A (-30 to +300 °C)
x	3	Classe AA (0 to 150 °C)
x	9	According to customer specification
		(5) Protection tube diameter D in mm (additional versions upon request, D de 1 to 50 mm)
x x	3	Ø 3
x x	6	Ø 6
x x	9	Ø 9
x x	11	Ø 11
x x	15	Ø 15
x x	..	Specification in plain text
		(6) Insertion length EL in mm (EL up to 1000 mm)
x x	100	100 mm
x x	200	200 mm
x X	...	Specification in plain text
		(7) Process connection (additional versions upon request)
x x	000	Without
x x	104	ScREW connection 1/2"G
x x	106	ScREW connection 1"G
x x	144	ScREW connection 1/2-14 NPT
x x	252	Sliding fitting connection 1/4"G
x x	254	Sliding fitting connection 1/2"G
		(8) Protection tube material
x x	24	Stainless steel AISI 316 L (1.4404)
x x	26	Stainless steel AISI 316 Ti (1.4571)
x x	60	Titanium, upon request
x x	80	Inconel, upon request

JUMO GmbH & Co. KG
Adresse de livraison :
Mackenrodtstraße 14
36039 Fulda, Allemagne
Adresse postale :
36035 Fulda, Allemagne
Tél. : +49 661 6003-0
Fax. : +49 661 6003-607
E-Mail : mail@jumo.net
Internet : www.jumo.net

JUMO-REGULATION SAS
7 rue des Drapiers
B.P. 45200
57075 Metz Cedex 3, France
Tél. : +33 3 87 37 53 00
E-Mail : info.fr@jumo.net
Internet : www.jumo.fr

JUMO AUTOMATION
S.P.R.L. / P.G.M.B.H. / B.V.B.A
Industriestraße 18
4700 Eupen, Belgique
Tél. : +32 87 59 53 00
Fax. : +32 87 74 02 03
E-Mail : info@jumo.be
Internet : www.jumo.be

JUMO
Mess- und Regeltechnik AG
Laubisrütistrasse 70
8712 Stäfa, Suisse
Tél. : +41 44 928 24 44
Fax. : +41 44 928 24 48
E-Mail : info@jumo.ch
Internet : www.jumo.ch



Order details 903520/15

903520/15		(1)	Basic type
			RTD temperature probe type I.I.R.420 (Fiel mounted HART temperature transmitter)
			RTD temperature probe type I.I.R.420 (Terminal head + digital display)
		(2)	Operating temperature (additional versions upon request)
x	x	107	-200 à +200 °C (wire-wound temperature sensor)
x	x	116	-200 à +200 °C (wire-wound temperature sensor)
x	x	386	-50 à +260 °C (thin film temperature sensor)
x	x	402	-50 à +400 °C (thin film temperature sensor)
x	x	415	-50 à +600 °C (thin film temperature sensor)
		(3)	Measuring insert (additional versions upon request)
x	x	1001	1× Pt100 3-wire circuit
x	x	1003	1× Pt100 2-wire circuit
x	x	1011	1× Pt100 4-wire circuit
x		2001	2× Pt100 3-wire circuit (only in conjunction with Fiel mounted HART temperature transmitter)
x		2003	2× Pt100 2-wire circuit (only in conjunction with Fiel mounted HART temperature transmitter)
x		2011	2× Pt100 4-wire circuit (only in conjunction with Fiel mounted HART temperature transmitter)
		(4)	Tolerance class according to EN 60751:2009/CEI 60751:2008 (additional versions upon request)
x	x	1	Classe B (standard) (-50 to +500 °C)
x	x	2	Classe A (-30 to +300 °C)
x	x	3	Classe AA (0 to 150 °C)
		(5)	Protection tube diameter D in mm (additional versions upon request, D de 1 to 50 mm)
x	x	3	Ø 3
x	x	6	Ø 6
x	x	9	Ø 9
x	x	11	Ø 11
x	x	15	Ø 15
x	x	..	Specification in plain text
		(6)	Insertion length EL in mm (EL up to 1000 mm)
x	x	100	100 mm
x	x	200	200 mm
x	x	...	Specification in plain text
		(7)	Process connection (additional versions upon request)
x	x	000	Without
x	x	104	ScREW connection 1/2"G
x	x	106	ScREW connection 1"G
x	x	144	ScREW connection 1/2-14 NPT
x	x	252	Sliding fitting connection 1/4"G
x	x	254	Sliding fitting connection 1/2"G
		(8)	Protection tube material
x	x	24	Stainless steel AISI 316 L (1.4404)
x	x	26	Stainless steel AISI 316 Ti (1.4571)
x	x	60	Titanium, upon request
		(9)	Options
x		105	Fiel mounted HART temperature transmitter PR 7501A (aluminium housing)
x		106	Fiel mounted HART temperature transmitter PR 7501B (stainless steel housing)
x		107	Fiel mounted HART temperature transmitter Yoko YTA610 (aluminium housing)
x		108	Fiel mounted HART temperature transmitter Yoko YTA610 (aluminium housing)
	x	547	Terminal head BUZH + Display LED Ex
	x	924	Terminal head AB7 + Display LCD Ex

JUMO GmbH & Co. KG
Adresse de livraison :
Mackenrodtstraße 14
36039 Fulda, Allemagne
Adresse postale :
36035 Fulda, Allemagne
Tél. : +49 661 6003-0
Fax. : +49 661 6003-607
E-Mail : mail@jumo.net
Internet : www.jumo.net

JUMO-REGULATION SAS
7 rue des Drapiers
B.P. 45200
57075 Metz Cedex 3, France
Tél. : +33 3 87 37 53 00
E-Mail : info.fr@jumo.net
Internet : www.jumo.fr

JUMO AUTOMATION
S.P.R.L. / P.G.M.B.H. / B.V.B.A
Industriestraße 18
4700 Eupen, Belgique
Tél. : +32 87 59 53 00
Fax. : +32 87 74 02 03
E-Mail : info@jumo.be
Internet : www.jumo.be

JUMO
Mess- und Regeltechnik AG
Laubisrütistrasse 70
8712 Stäfa, Suisse
Tél. : +41 44 928 24 44
Fax. : +41 44 928 24 48
E-Mail : info@jumo.ch
Internet : www.jumo.ch



Note: For extra code transmitter please specify measuring range and, if applicable, output signal in plain text

Order code - - - - - - - / , ...^a
Order example 903520/15 - 402 - 1001 - 1 - 9 - 250 - 104 - 26 / 105

^a List extra codes in sequence and separate using commas.

JUMO GmbH & Co. KG
Adresse de livraison :
Mackenrodtstraße 14
36039 Fulda, Allemagne
Adresse postale :
36035 Fulda, Allemagne
Tél. : +49 661 6003-0
Fax. : +49 661 6003-607
E-Mail : mail@jumo.net
Internet : www.jumo.net

JUMO-REGULATION SAS
7 rue des Drapiers
B.P. 45200
57075 Metz Cedex 3, France
Tél. : +33 3 87 37 53 00
E-Mail : info.fr@jumo.net
Internet : www.jumo.fr

JUMO AUTOMATION
S.P.R.L. / P.G.M.B.H. / B.V.B.A
Industriestraße 18
4700 Eupen, Belgique
Tél. : +32 87 59 53 00
Fax. : +32 87 74 02 03
E-Mail : info@jumo.be
Internet : www.jumo.be

JUMO
Mess- und Regeltechnik AG
Laubisrütistrasse 70
8712 Stäfa, Suisse
Tél. : +41 44 928 24 44
Fax. : +41 44 928 24 48
E-Mail : info@jumo.ch
Internet : www.jumo.ch



Order details 903520/20

(1) Basic type	
RTD temperature probe type C97-EEEx.. (terminal head + Ex modular terminal block)	
(2) Operating temperature (additional versions upon request)	
x 107	-200 à +200 °C (wire-wound temperature sensor)
x 116	-200 à +200 °C (wire-wound temperature sensor)
x 386	-50 à +260 °C (thin film temperature sensor)
x 402	-50 à +400 °C (thin film temperature sensor)
x 415	-50 à +600 °C (thin film temperature sensor)
(3) Measuring insert (additional versions upon request)	
x 1001	1× Pt100 3-wire circuit
x 1003	1× Pt100 2-wire circuit
x 1011	1× Pt100 4-wire circuit
x 2001	2x Pt100 3-wire circuit
x 2003	2x Pt100 2-wire circuit
x 2011	2x Pt100 4-wire circuit (only with terminal head form BUSH)
(4) Tolerance class according to EN 60751:2009/CEI 60751:2008 (additional versions upon request)	
x 1	Classe B (standard) (-50 to +500 °C)
x 2	Classe A (-30 to +300 °C)
x 3	Classe AA (0 to 150 °C)
x 9	According to customer specification
(5) Protection tube diameter D in mm (additional versions upon request, D de 1 to 50 mm)	
x 3	Ø 3
x 6	Ø 6
x 9	Ø 9
x 11	Ø 11
x 15	Ø 15
x ..	Specification in plain text
(6) Insertion length EL in mm (EL up to 1000 mm)	
x 100	100 mm
x 200	200 mm
x ...	Specification in plain text
(7) Process connection (additional versions upon request)	
x 000	Without
x 104	ScREW connection 1/2"G
x 106	ScREW connection 1"G
x 144	ScREW connection 1/2-14 NPT
x 252	Sliding fitting connection 1/4"G
x 254	Sliding fitting connection 1/2"G
(8) Protection tube material	
x 24	Stainless steel AISI 316 L (1.4404)
x 26	Stainless steel AISI 316 Ti (1.4571)
x 60	Titanium, upon request
(9) Option	
x 388	Terminal head form DNAG
x 392	Terminal head form BUZ85 (BFR)
x 394	Terminal head form BUSH
x 399	Terminal head form XD-AD
x 374	Inspection certificate 3.1 EN 10204 Material

JUMO GmbH & Co. KG
Adresse de livraison :
Mackenrodtstraße 14
36039 Fulda, Allemagne
Adresse postale :
36035 Fulda, Allemagne
Tél. : +49 661 6003-0
Fax. : +49 661 6003-607
E-Mail : mail@jumo.net
Internet : www.jumo.net

JUMO-REGULATION SAS
7 rue des Drapiers
B.P. 45200
57075 Metz Cedex 3, France
Tél. : +33 3 87 37 53 00
E-Mail : info.fr@jumo.net
Internet : www.jumo.fr

JUMO AUTOMATION
S.P.R.L. / P.G.M.B.H. / B.V.B.A
Industriestraße 18
4700 Eupen, Belgique
Tél. : +32 87 59 53 00
Fax. : +32 87 74 02 03
E-Mail : info@jumo.be
Internet : www.jumo.be

JUMO
Mess- und Regeltechnik AG
Laubisrütistrasse 70
8712 Stäfa, Suisse
Tél. : +41 44 928 24 44
Fax. : +41 44 928 24 48
E-Mail : info@jumo.ch
Internet : www.jumo.ch



Remarque : les convertisseurs de mesure ne sont pas autorisés – uniquement bornier»

Note: For extra code transmitter please specify measuring range and, if applicable, output signal in plain text

Order code - - - - - - - / , ...^a
Order example 903520/20 - 402 - 1001 - 1 - 9 - 250 - 104 - 26 / 388

^a List extra codes in sequence and separate using commas.

JUMO GmbH & Co. KG
Adresse de livraison :
Mackenrodtstraße 14
36039 Fulda, Allemagne
Adresse postale :
36035 Fulda, Allemagne
Tél. : +49 661 6003-0
Fax. : +49 661 6003-607
E-Mail : mail@jumo.net
Internet : www.jumo.net

JUMO-REGULATION SAS
7 rue des Drapiers
B.P. 45200
57075 Metz Cedex 3, France
Tél. : +33 3 87 37 53 00
E-Mail : info.fr@jumo.net
Internet : www.jumo.fr

JUMO AUTOMATION
S.P.R.L. / P.G.M.B.H. / B.V.B.A
Industriestraße 18
4700 Eupen, Belgique
Tél. : +32 87 59 53 00
Fax. : +32 87 74 02 03
E-Mail : info@jumo.be
Internet : www.jumo.be

JUMO
Mess- und Regeltechnik AG
Laubisrütistrasse 70
8712 Stäfa, Suisse
Tél. : +41 44 928 24 44
Fax. : +41 44 928 24 48
E-Mail : info@jumo.ch
Internet : www.jumo.ch



Order details 903520/30

903520/30		(1)	Basic type
			RTD temperature probe type TB97-XD.R (ceramic terminal block)
			RTD temperature probe type TB97-XD.R.420 (built in temperature transmitter)
		(2)	Operating temperature (additional versions upon request)
x		106	-270 à +600 °C (Cernox sensor)
x	x	107	-200 à +200 °C (wire-wound temperature sensor)
x	x	116	-200 à +200 °C (wire-wound temperature sensor)
x		362	-50 à +100 °C (Digital sensor)
x	x	386	-50 à +260 °C (thin film temperature sensor)
x	x	402	-50 à +400 °C (thin film temperature sensor)
x	x	415	-50 à +600 °C (thin film temperature sensor)
		(3)	Measuring insert (additional versions upon request)
x	x	1001	1× Pt100 3-wire circuit
x	x	1003	1× Pt100 2-wire circuit
x	x	1011	1× Pt100 4-wire circuit
x	x	2001	2× Pt100 3-wire circuit
x		2003	2× Pt100 2-wire circuit
x		2011	2× Pt100 4-wire circuit
x		1560	1x Digital Sensor DS18B20
x		1850	1x Cernox 4-wire circuit
		(4)	Tolerance class according to EN 60751:2009/CEI 60751:2008 (additional versions upon request)
x		1	Classe B (standard) (-50 to +500 °C)
x		2	Classe A (-30 to +300 °C)
x		3	Classe AA (0 to 150 °C)
x		9	Suivant indication client
		(5)	Protection tube diameter D in mm (additional versions upon request, D de 1 to 50 mm)
x	x	3	Ø 3
x	x	6	Ø 6
x	x	9	Ø 9
x	x	11	Ø 11
x	x	15	Ø 15
x	x	..	Specification in plain text
		(6)	Insertion length EL in mm (EL up to 1000 mm)
x	x	100	100 mm
x	x	200	200 mm
x	X	...	Specification in plain text
		(7)	Process connection (additional versions upon request)
x	x	000	Without
x	x	104	Scew connection 1/2"G
x	x	106	Scew connection 1"G
x	x	144	Scew connection 1/2-14 NPT
x	x	252	Sliding fitting connection 1/4"G
x	x	254	Sliding fitting connection 1/2"G
		(8)	Protection tube material
x	x	24	Stainless steel AISI 316 L (1.4404)
x	x	26	Stainless steel AISI 316 Ti (1.4571)
x	x	60	Titanium, upon request
x	x	80	Tantalum, upon request

JUMO GmbH & Co. KG
 Adresse de livraison :
 Mackenrodtstraße 14
 36039 Fulda, Allemagne
 Adresse postale :
 36035 Fulda, Allemagne
 Tél. : +49 661 6003-0
 Fax. : +49 661 6003-607
 E-Mail : mail@jumo.net
 Internet : www.jumo.net

JUMO-REGULATION SAS
 7 rue des Drapiers
 B.P. 45200
 57075 Metz Cedex 3, France
 Tél. : +33 3 87 37 53 00
 E-Mail : info.fr@jumo.net
 Internet : www.jumo.fr

JUMO AUTOMATION
S.P.R.L. / P.G.M.B.H. / B.V.B.A
 Industriestraße 18
 4700 Eupen, Belgique
 Tél. : +32 87 59 53 00
 Fax. : +32 87 74 02 03
 E-Mail : info@jumo.be
 Internet : www.jumo.be

JUMO
Mess- und Regeltechnik AG
 Laubisrütistrasse 70
 8712 Stäfa, Suisse
 Tél. : +41 44 928 24 44
 Fax. : +41 44 928 24 48
 E-Mail : info@jumo.ch
 Internet : www.jumo.ch



		(9)	Basic type
x		658	SIL and PL compatible (only in conjunction with JUMO SIL-certified safety temperature limiters and monitors According to data sheet 701150, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866 et 867)
x		659	SIL and PL compatible (only in conjunction with dTRANS T06 temperature transmitter according to data sheet 707071, not in conjunction with extra codes 330, 331, 333, 334, 335, 336, 337, 550, 551, 859, 866 et 867)
x	x	399	Terminal head form XD-AD (alu.)
x	x	541	Terminal head form XD-SD (stainless steel)
	x	330	1 analog transmitter (type 707031 according to data sheet 707030), output 4 to 20 mA, (only for measuring Insert 1× Pt100 in two or three-wire circuit, not in conjunction with extra codes 658 or 659)
	x	331	1 programmable transmitter (type 707014 according to data sheet 707010), output 4 to 20 mA/20 to 4 mA, (only for measuring insert 1× Pt100, not in conjunction with extra codes 658 or 659, suitable setup program part no. 00605080)
	x	336	1 programmable transmitter (type 707011 according to data sheet 707010), output 4 to 20 mA and HART® Interface (only for measuring insert 1× Pt100, not in conjunction with extra codes 658 or 659, suitable setup Program part no. 00605080)
	x	866	1 programmable two-channel transmitter with HART® (type 707080 according to data sheet 707080), output 4 to 20 mA, (not in conjunction with extra codes 658 or 659, suitable software available for free – Device Type Manager (DTM) for PACTware)
	x	867	1 programmable two-channel transmitter with HART®/SIL (type 707081 according to data sheet 707080), Output 4 to 20 mA, (not in conjunction with extra codes 658 or 659, suitable software available for free – Device Type - Manager (DTM) for PACTware)
x	x	374	Inspection certificate 3.1 EN 10204 Material

Note: For extra code transmitter please specify measuring range and, if applicable, output signal in plain text

Order code (1) (2) (3) (4) (5) (6) (7) (8) (9)
 - - - - - - - / , ...^a
 Order example 903520/30 - 402 - 1001 - 1 - 9 - 250 - 104 - 26 / 541

^a List extra codes in sequence and separate using commas.

JUMO GmbH & Co. KG
 Adresse de livraison :
 Mackenrodtstraße 14
 36039 Fulda, Allemagne
 Adresse postale :
 36035 Fulda, Allemagne
 Tél. : +49 661 6003-0
 Fax. : +49 661 6003-607
 E-Mail : mail@jumo.net
 Internet : www.jumo.net

JUMO-REGULATION SAS
 7 rue des Drapiers
 B.P. 45200
 57075 Metz Cedex 3, France
 Tél. : +33 3 87 37 53 00
 E-Mail : info.fr@jumo.net
 Internet : www.jumo.fr

JUMO AUTOMATION
 S.P.R.L. / P.G.M.B.H. / B.V.B.A
 Industriestraße 18
 4700 Eupen, Belgique
 Tél. : +32 87 59 53 00
 Fax. : +32 87 74 02 03
 E-Mail : info@jumo.be
 Internet : www.jumo.be

JUMO
 Mess- und Regeltechnik AG
 Laubisrütistrasse 70
 8712 Stäfa, Suisse
 Tél. : +41 44 928 24 44
 Fax. : +41 44 928 24 48
 E-Mail : info@jumo.ch
 Internet : www.jumo.ch



Order details 903520/35

903520/35		(1)	Basic type
			RTD temperature probe type TB97-XD-R.420 (Fiel mounted HART temperature transmitter)
			RTD temperature probe type TB97-XD-R.420 (Terminal head + digital display)
		(2)	Operating temperature (additional versions upon request)
x	x	107	-200 à +200 °C (wire-wound temperature sensor)
x	x	116	-200 à +200 °C (wire-wound temperature sensor)
x	x	386	-50 à +260 °C (thin film temperature sensor)
x	x	402	-50 à +400 °C (thin film temperature sensor)
x	x	415	-50 à +600 °C (thin film temperature sensor)
		(3)	Measuring insert (additional versions upon request)
x	x	1001	1× Pt100 3-wire circuit
x	x	1003	1× Pt100 2-wire circuit
x	x	1011	1× Pt100 4-wire circuit
x		2001	2× Pt100 3-wire circuit (only in conjunction with Fiel mounted HART temperature transmitter)
x		2003	2× Pt100 2-wire circuit (only in conjunction with Fiel mounted HART temperature transmitter)
x		2011	2× Pt100 4-wire circuit (only in conjunction with Fiel mounted HART temperature transmitter)
		(4)	Tolerance class according to EN 60751:2009/CEI 60751:2008 (additional versions upon request)
x	x	1	Classe B (standard) (-50 to +500 °C)
x	x	2	Classe A (-30 to +300 °C)
x	x	3	Classe AA (0 to 150 °C)
		(5)	Protection tube diameter D in mm (additional versions upon request, D de 1 to 50 mm)
x	x	3	Ø 3
x	x	6	Ø 6
x	x	9	Ø 9
x	x	11	Ø 11
x	x	15	Ø 15
x	x	..	Specification in plain text
		(6)	Insertion length EL in mm (EL up to 1000 mm)
x	x	100	100 mm
x	x	200	200 mm
x	X	...	Specification in plain text
		(7)	Process connection (additional versions upon request)
x	x	000	Without
x	x	104	ScREW connection 1/2"G
x	x	106	ScREW connection 1"G
x	x	144	ScREW connection 1/2-14 NPT
x	x	252	Sliding fitting connection 1/4"G
x	x	254	Sliding fitting connection 1/2"G
		(8)	Protection tube material
x	x	24	Stainless steel AISI 316 L (1.4404)
x	x	26	Stainless steel AISI 316 Ti (1.4571)
x	x	60	Titanium, upon request
		(9)	Options
x		105	Fiel mounted HART temperature transmitter PR 7501A (aluminium housing)
x		106	Fiel mounted HART temperature transmitter PR 7501B (stainless steel housing)
x		107	Fiel mounted HART temperature transmitter Yoko YTA610 (aluminium housing)
x		108	Fiel mounted HART temperature transmitter Yoko YTA610 (aluminium housing)
	x	399	Terminal head XD-AD + Display LED Ex 399 + 661
	x	661	Terminal head XD-AD + Display LED Ex 399 + 661

JUMO GmbH & Co. KG
Adresse de livraison :
Mackenrodtstraße 14
36039 Fulda, Allemagne
Adresse postale :
36035 Fulda, Allemagne
Tél. : +49 661 6003-0
Fax. : +49 661 6003-607
E-Mail : mail@jumo.net
Internet : www.jumo.net

JUMO-REGULATION SAS
7 rue des Drapiers
B.P. 45200
57075 Metz Cedex 3, France
Tél. : +33 3 87 37 53 00
E-Mail : info.fr@jumo.net
Internet : www.jumo.fr

JUMO AUTOMATION
S.P.R.L. / P.G.M.B.H. / B.V.B.A
Industriestraße 18
4700 Eupen, Belgique
Tél. : +32 87 59 53 00
Fax. : +32 87 74 02 03
E-Mail : info@jumo.be
Internet : www.jumo.be

JUMO
Mess- und Regeltechnik AG
Laubisrütistrasse 70
8712 Stäfa, Suisse
Tél. : +41 44 928 24 44
Fax. : +41 44 928 24 48
E-Mail : info@jumo.ch
Internet : www.jumo.ch



Note: For extra code transmitter please specify measuring range and, if applicable, output signal in plain text

Order code - - - - - - - / , ...^a
Order example 903520/35 - 402 - 1001 - 1 - 9 - 250 - 104 - 26 / 105

^a List extra codes in sequence and separate using commas.