

CPK 1-12 und Festkabel ***CPK 1-12 and Fixed Cables***



- (de)** Anleitung zum Anschluss der Messkabel
an pH-/Redox-Messgeräte von
Endress+Hauser
- (en)** Instructions for cable connection
to Endress+Hauser pH/Redox transmitters



**Hinweis!**

- Kabel unbedingt trocken lagern.
- Bitte beachten Sie die folgenden Kabelspezifikationen:
 - Kapazität (Koax): $< 100 \text{ pF/m}$
 - Isolationswiderstand (Koax) $> 10^{14} \Omega\text{m}$
 - Kabelquerschnitt der Hilfsadern $0,5 \text{ mm}^2$

**Note!**

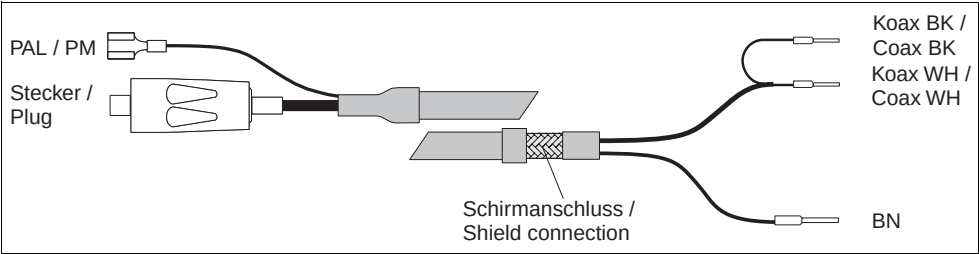
- Always keep cables dry.
- Please observe the following cable specifications:
 - Capacity (Coax): $< 100 \text{ pF/m}$
 - Insulation resistance (Coax) $> 10^{14} \Omega\text{m}$
 - Signal lines cross section 0.5 mm^2
- Farben nach DIN / IEC 757
- Colours acc. to DIN / IEC 757

DIN / IEC 757	deutsch	english
BK	schwarz	black
WH	weiß	white
GN	grün	green
YE	gelb	yellow
BN	braun	brown
BU	blau	blue
RD	rot	red

CPK 1

Aufbau des Messkabels

Measuring cable design



Anschluss des Messkabels

Measuring cable connection

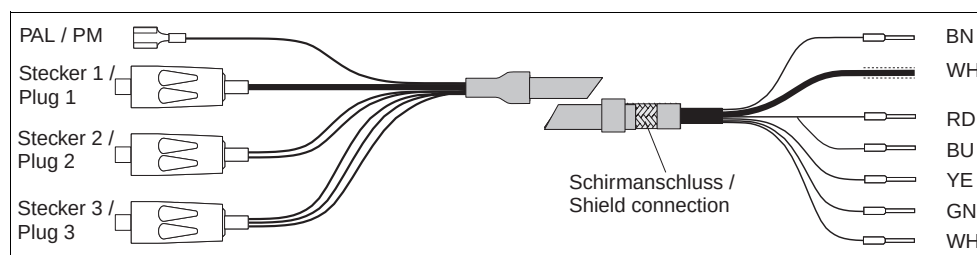
Kabel / Cable	
CPK 1	
Ader / Pin	Funktion / Function
Koax BK / Coax BK	Ref.
Koax WH / Coax WH	pH, Redox
BN ¹⁾	PAL / PM
PAL / PM	Fikts.-erde / Sol. GND
Schirm / Shield	PE

¹⁾ BN wird auf PAL geführt / BN is guided through to PM

CPK 2

Aufbau des Messkabels

Measuring cable design



Anschluss des Messkabels

Measuring cable connection

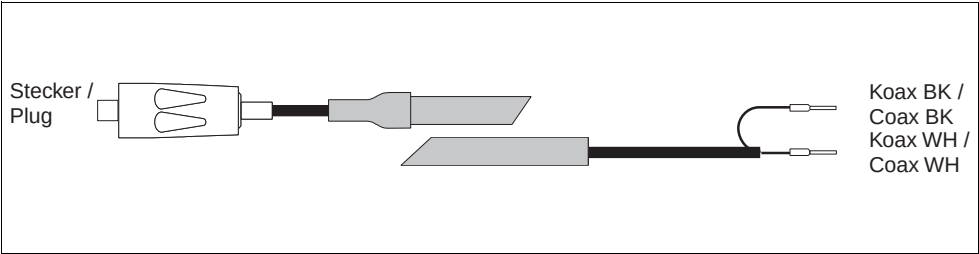
Kabel / Cable		
CPK 2		
Ader / Pin	Funktion / Function	Belegung / Assignm.
BN ¹⁾	PAL / PM	
WH	pH, Redox	Stecker 1 = Koax Plug 1 = Coax
RD	Redox, Ref.	Stecker 2 = Innenleiter Plug 2 = inner cond.
BU	Ref.	Stecker 2 = Schirm Plug 2 = Shield
YE	Temp. (Pt 100)	Stecker 3 = Schirm Plug 3 = Shield
GN	Temp. (Pt 100)	Stecker 3 = Innenleiter Plug 3 = inner cond.
WH	Temp. (Pt 100)	Stecker 3 = Schirm Plug 3 = Shield
Stecker 1	pH, Redox	
Stecker 2	Redox, Ref.	
Stecker 3	Temp. (Pt 100)	
PAL / PM	Fikts.-erde / Sol. GND	
Schirm / Shield	PE	

¹⁾ BN wird auf PAL geführt / BN is guided through to PM

CPK 3

Aufbau des Messkabels

Measuring cable design



Anschluss des Messkabels

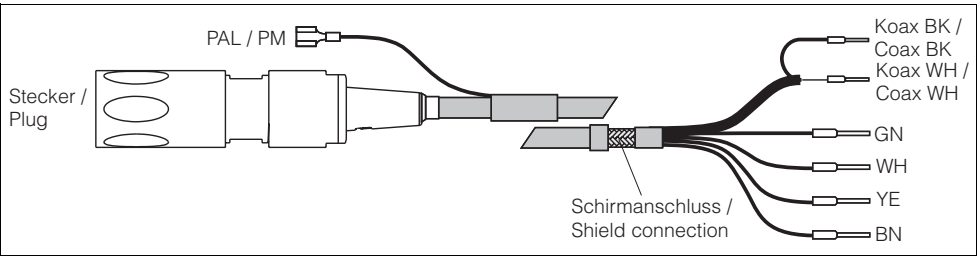
Measuring cable connection

Kabel / Cable	
CPK 3	
Ader / Pin	Funktion / Function
Koax BK / Coax BK	Ref.
Koax WH / Coax WH	pH

CPK 9

Aufbau des Messkabels

Measuring cable design



Anschluss des Messkabels

Measuring cable connection

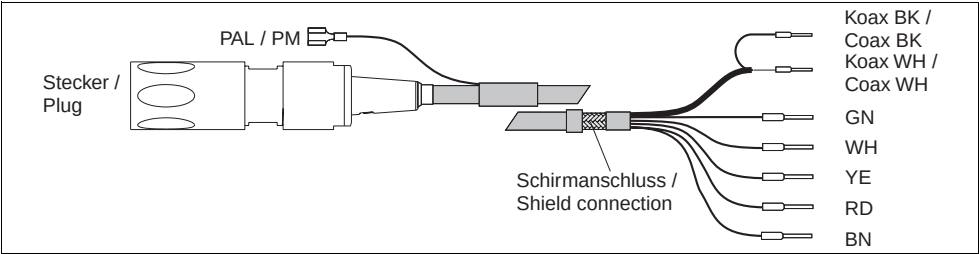
Kabel / Cable	
CPK 9	
Ader / Pin	Funktion / Function
Koax BK / Coax BK	Ref.
Koax WH / Coax WH	pH, Redox
GN	Temp. (Pt 100)
WH ¹⁾	Temp. (Pt 100)
YE ¹⁾	Temp. (Pt 100)
BN ²⁾	PAL / PM
PAL / PM	Flkts.-erde / Sol. GND
Schirm / Shield	PE

¹⁾ WH und YE im Stecker verbunden / WH and YE connected in plug
²⁾ BN wird auf PAL geführt / BN is guided through to PM

CPK 12

Aufbau des Messkabels

Measuring cable design



Anschluss des Messkabels

Measuring cable connection

Kabel / Cable	
CPK 12	
Ader / Pin	Funktion / Function
Koax BK / Coax BK	Ref.
Koax WH / Coax WH	pH, Redox ¹⁾ SRC ²⁾
GN	Temp. (Pt 100 / Pt 1000)
WH ³⁾	Temp. (Pt 100 / Pt 1000)
YE ³⁾	Temp. (Pt 100 / Pt 1000)
RD	DRN
BN ⁴⁾	PAL / PM
PAL / PM	Flkts.-erde / Sol. GND
Schirm / Shield	PE

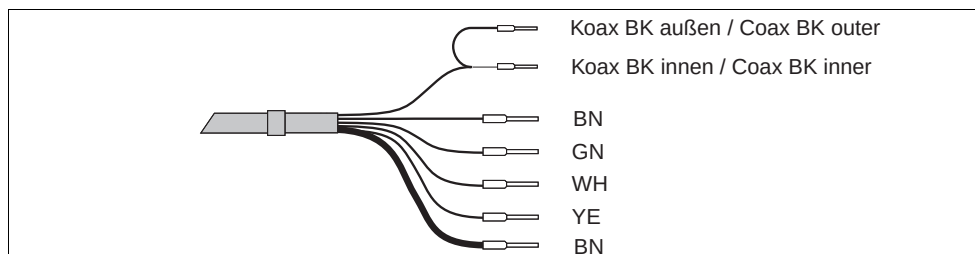
¹⁾ bei Glassensor / with glass sensor
²⁾ bei IsFET-Sensor / with IsFET sensor
³⁾ WH und YE im Stecker verbunden / WH and YE connected in plug
⁴⁾ BN wird auf PAL geführt / BN is guided through to PM

Messkabel zu EcoFit CPA 640

Measuring cable to EcoFit CPA 640

Aufbau des Messkabels

Measuring cable design



Anschluss des Messkabels

Measuring cable connection

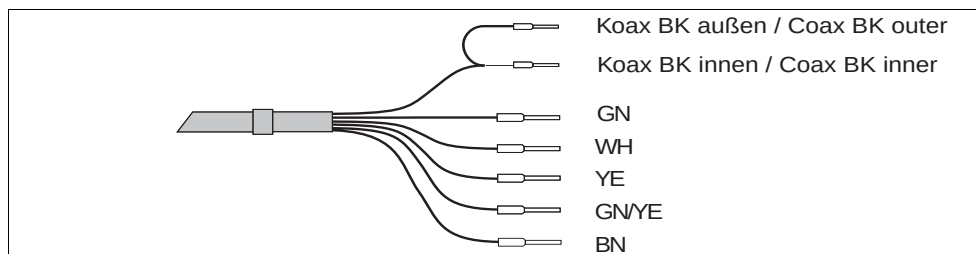
Kabel / Cable	
Messkabel zu CPA 640 / Meas. cable to CPA 640	
Ader / Pin	Funktion / Function
Koax BK _{außen} / Coax BK _{outer}	Ref.
Koax BK _{innen} / Coax BK _{inner}	pH
BN	PAL / PM
GN	Temp. (Pt 100)
WH	Temp. (Pt 100)
YE	Temp. (Pt 100)
BN _{dick} / BN _{thick}	PE

Festkabel zu OrbiPac W CPF 81

Fixed cable to OrbiPac W CPF 81

Aufbau des Messkabels

Measuring cable design



Anschluss des Messkabels

Measuring cable connection

Kabel	
Festkabel zu CPF81 / Fixed cable to CPF 81	
Ader / Pin	Funktion / Function
Koax BK _{außen} / Coax BK _{outer}	Ref.
Koax BK _{innen} / Coax BK _{inner}	pH
GN	Temp. (Pt 100)
WH ¹⁾	Temp. (Pt 100)
YE ¹⁾	Temp. (Pt 100)
GN / YE	PAL/PM
BN	PE

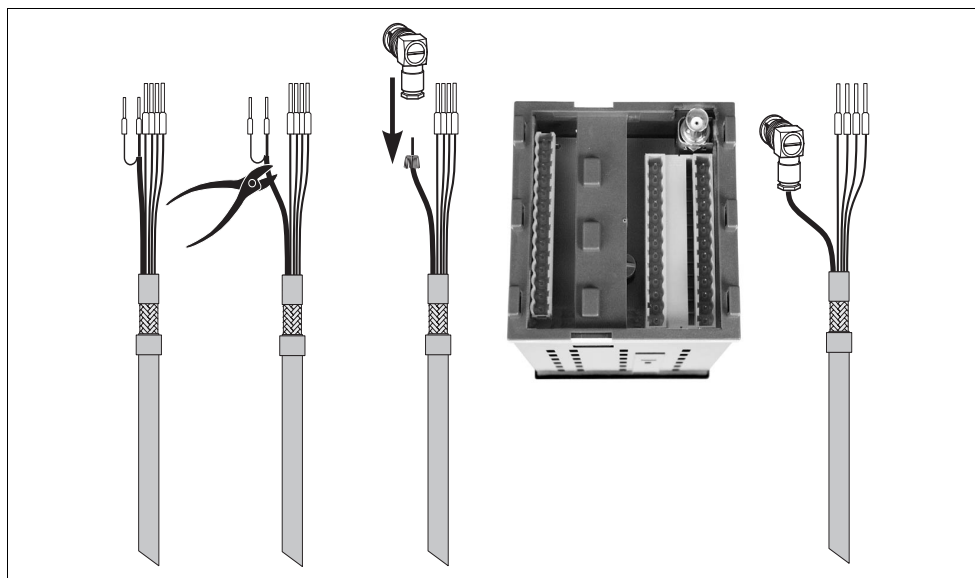
¹⁾ WH und YE im Stecker verbunden / WH and YE connected in plug

Kabelkonfektionierung für BNC- und Schirmanschluss

Cable termination for BNC and shield connection

Anschluss des BNC-Steckers

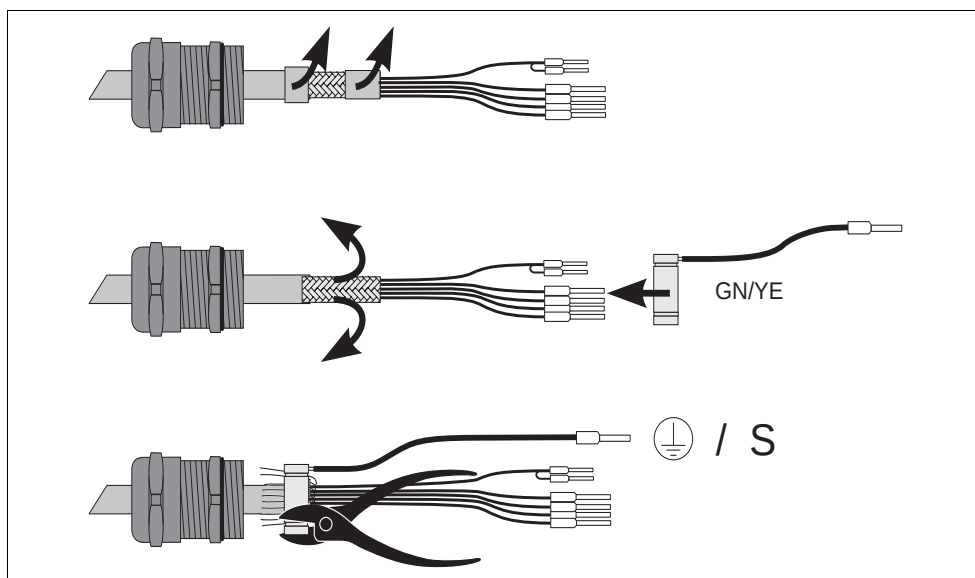
Connection of BNC plug



Liquisys M CPM 223

Schirman-schluss mit beiliegender Verlängerungs-litze

Shield connection with included extension wire



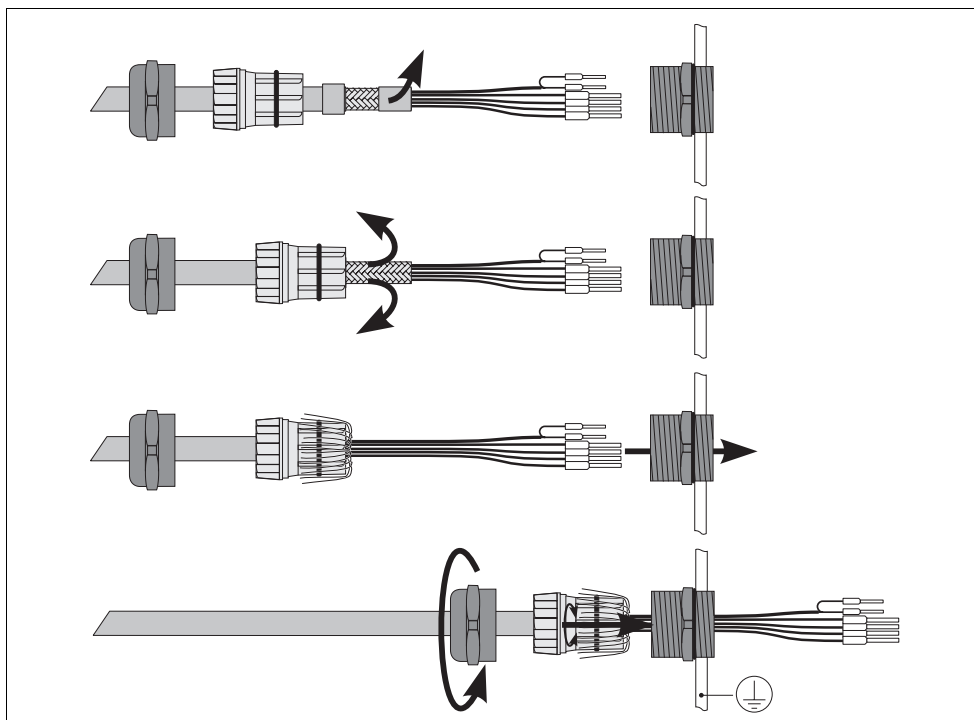
Liquisys M CPM 223 (ohne Pg-Verschraubung / without Pg cable gland)

Liquisys M CPM 253 (mit Pg-Verschraubung / with Pg cable gland)

Anschluss an Klemme "S" bzw. an PE-Verteilerleiste /
Connection to "S" terminal resp. to PE ground terminal

Schirm- anschluss mit Metall-Kabel- verschraubung

Shield connection using a metal cable gland



Mycom CPM 152
Mycom S CPM 153
MyPro CPM 431

Austria
☐ Endress+Hauser Ges.m.b.H.
 Wien
 Tel. (01) 8 80 56-0, Fax (01) 8 80 56-335

Belgium / Luxembourg
☐ Endress+Hauser S.A. / N.V.
 Bruxelles
 Tel. (02) 2 48 06 00, Fax (02) 2 48 05 53

Croatia
☐ Endress+Hauser GmbH+Co.
 Zagreb
 Tel. (01) 6 63 77 85, Fax (01) 6 63 78 23

Czech Republic
☐ Endress+Hauser Czech s.r.o
 Praha
 Tel. (02) 6 78 42 00, Fax (026) 6 78 41 79

Estonia
ELVI-Aqua
Tartu
Tel. (7) 44 16 38 Fax (7) 44 15 82

France
☐ Endress+Hauser S.A.
 Huningue
 Tel. (389) 69 67 68 Fax (389) 69 48 02

Great Britain
☐ Endress+Hauser Ltd.
 Manchester
 Tel. (0161) 2 86 50 00. Fax (0161) 9 98 18 41

Hungary
☐ Endress+Hauser Magyarország
 Budapest
 Tel. (01) 4 12 04 21 Fax (01) 4 12 04 24

Ireland
☐ Flomeaco Endress+Hauser Ltd.
 Clane / Co. Kildare
 Tel. (045) 86 86 15 Fax (045) 86 81 82

Latvia
Elekoms Ltd.
Riga
Tel. (07) 22 64 44, Fax (07) 21 28 94

Netherlands
☐ Endress+Hauser B.V.
 Naarden
 Tel. (025) 6 05 86 11, Fax (025) 6 05 88 25

<http://www.endress.com>

Portugal
☐ Endress+Hauser Lda.
 Cacem
 Tel. (219) 4 26 72 90, Fax (219) 4 26 72 99

Russia
☐ Endress+Hauser GmbH+Co
 Moscow
 Tel. (095) 1 58 75 64. Fax (095) 7 84 63 91

Spain
☐ Endress+Hauser S.A.
 Sant Just Desvern
 Tel (93) 4 80 33 66 Fax (93) 4 73 38 39

Switzerland
☐ Endress+Hauser Metso AG
 Reinach/BL 1
 Tel. (061) 7 15 75 75. Fax (061) 7 11 16 50

Ukraine
Photonika GmbH
Kiev
Tel. (44) 2 68 81 02 Fax (44) 2 69 08 05

Africa

Algeria
Symes Systemes et mesures
Annaba
Tel. (38) 88 30 03. Fax (38) 88 30 02

Morocco
Oussama S.A.
Casablanca
Tel. (02) 22 24 13 38. Fax (02) 2 40 26 57

Tunisia
Contrôle, Maintenance et Régulation
Tunis
Tel (01) 79 30 77 Fax (01) 78 85 95

Argentina
☐ Endress+Hauser Argentina S.A.
 Buenos Aires
 Tel. (11) 45 22 79 70, Fax (11) 45 22 79 09

Brazil
☐ Samson Endress+Hauser Ltda.
 Sao Paulo
 Tel. (011) 50 31 34 55. Fax (011) 50 31 30 67

Colombia
Colsein Ltda.
Bogota D.C.
Tel. (01) 2 36 76 59, Fax (01) 6 10 41 86

Ecuador
Insetec Cia. Ltda.
Quito
Tel. (02) 2 26 91 48. Fax (02) 2 46 18 33

Honduras
Automatizacion Y Control Industrial S.A. de C
San Pedro Sula, Cortes
Tel. 5 57 91 36 Fax 5 57 91 39

Paraguay
Incoel S.R.L.
Asuncion
Tel. (021) 21 39 89 Fax (021) 22 65 83

USA
☐ Endress+Hauser Inc.
 Greenwood, Indiana
 Tel. (317) 535-71 38. Fax (317) 535-84 98

Asia

Azerbaijan
Modcon Systems
Baku
Tel. (12) 92 98 59, Fax (12) 92 98 59

Cambodia
Comin Khmere Co. Ltd.
Phnom Penh
Tel. (23) 42 60 56, Fax (23) 42 66 22

Hong Kong

Mumbai
Tel. (022) 8 52 14 58, Fax (022) 8 52 19 27

Indonesia

TATSA CO.
Tehran
Tel. (021) 8 72 68 69, Fax(021) 8 74 77 61

Jordan
A.P. Parpas Engineering S.A.
Amman
Tel. (06) 5 53 92 83, Fax (06) 5 53 92 05

Kingdom of Saudi Arabia
Anasia Ind. Agencies
Jeddah
Tel. (02) 6 71 00 14. Fax (02) 6 72 59 29

Malaysia
☐ Endress+Hauser (M) Sdn. Bhd.
 Shah Alam, Selangor Darul Ehsan
 Tel. (03) 78 46 48 48. Fax (03) 78 46 88 00

Philippines
☐ Endress+Hauser Inc.
 Pasig City, Metro Manila
 Tel. (2) 6 38 18 71 Fax (2) 6 38 80 42

South Korea
☐ Endress+Hauser (Korea) Co., Ltd.
 Seoul
 Tel. (02) 6 58 72 00, Fax (02) 6 59 28 38

Taiwan
Kingjarl Corporation
Taipei
Tel. (02) 27 18 39 38 Fax (02) 27 13 41 90

United Arab Emirates
Descon Trading EST.
Dubai
Tel. (04) 2 65 26 51 Fax (04) 2 65 22 64

Vietnam
Tan Viet Bao Co. Ltd.
Ho Chi Minh City
Tel. (09) 8 33 52 25 Fax (09) 8 33 52 27

Australia
☐ Endress+Hauser PTY. Ltd.
 Sydney
 Tel. (02) 88 77 70 00. Fax (02) 88 77 70 99

All other countries
☐ Endress+Hauser GmbH+Co. KG
 Instruments International

Weil am Rhein, Germany
Tel. (07621) 975-02, Fax (07621) 975-345