

취급설명서

BB2 Control Box



SECHANG INSTRUMENTS

1.

BB2 Control Box .
 , & “Fiber
” “Particle ” . , 水
Suspended solids, Dissolved oxygen, pH, ORP, Flow .
 .
 .
 , , (Diagnostic information) , 4 RS485
 . BB2 Control Box 4 ~ 20mA
 , Profibus()
Fieldbus .

2.

BB2 Control Box 16-bit .
ON , , ,
 . 10 BB2
 . , 가
 .
BB2 control box
 ,
Slot .
BB2 .
가 BB2
 . , ,
 .
 , BB2 Control Box OFF ,
가 , 가 (가 empty slot) .

3.

BB2 control box	6			
BB2 control box	7			
BB2 control box	8 ~ 12			
BB2	13 ~ 15			

4. BB2 Control Box

Authorization Number가 Cerlic Return

Aluminum handrail mounting plate predrilled for BB2
or solenoid valves w/ u-bolts, outside US version P/N 10605533

Aluminum handrail mounting plate predrilled for BB2
or solenoid valves w/ u-bolts, US version P/N 31204049

33 ft. (10m) cable for. Connection cable with plug-in. P/N 20805510

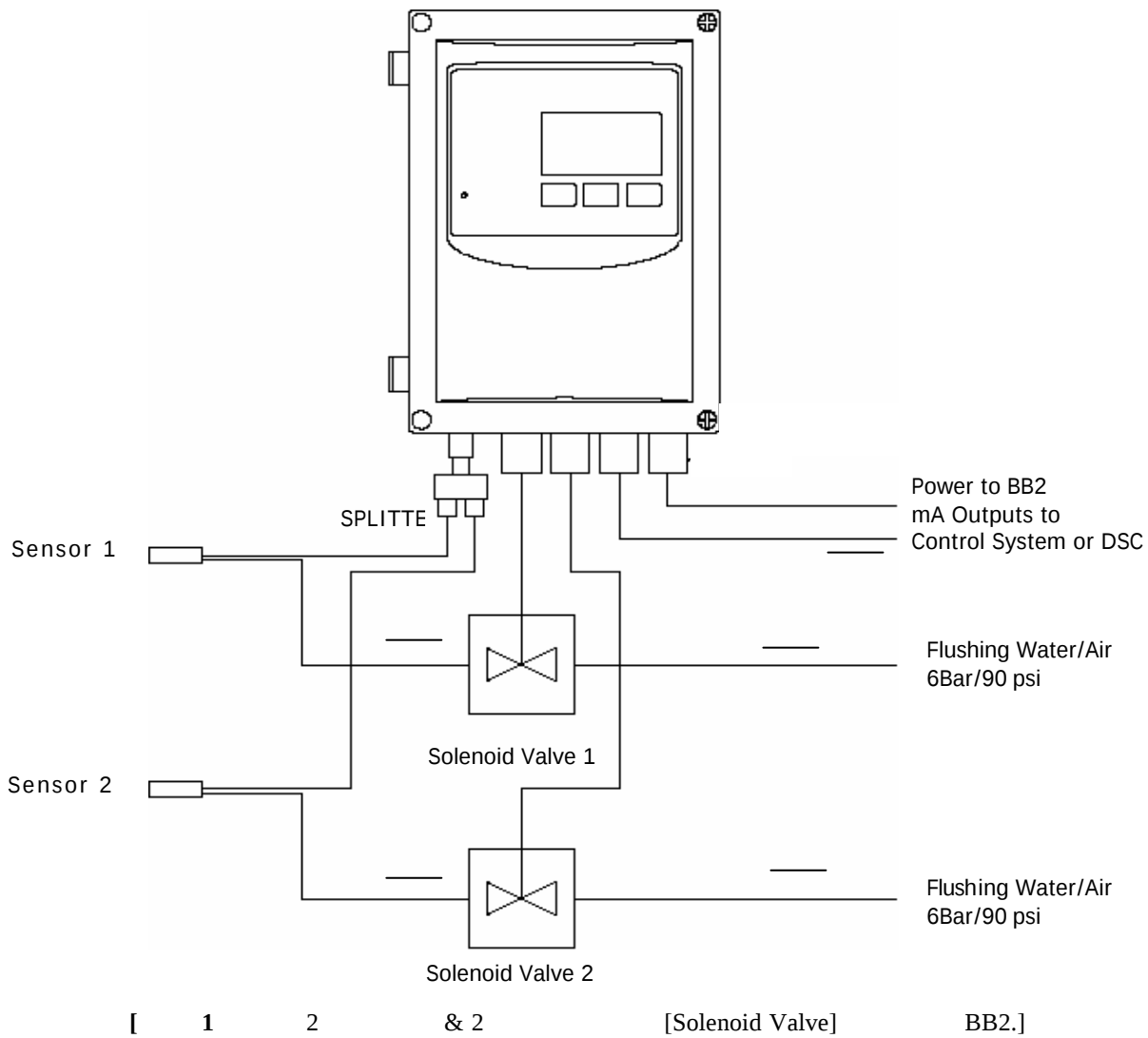
Y-Splitter for two sensors to one BB2 control box P/N 21505534

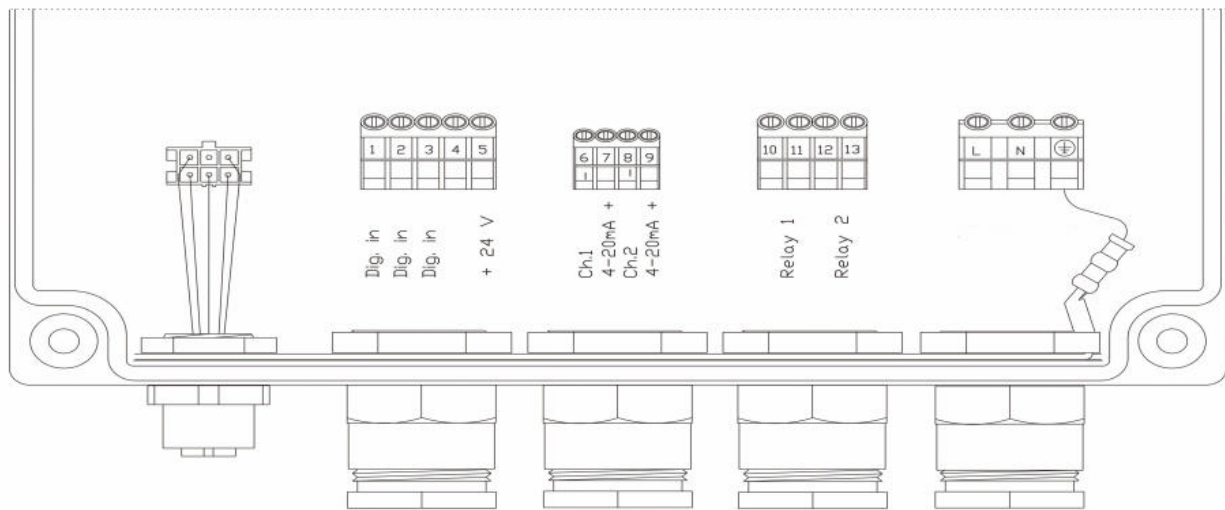
Solenoid valve for flushing P/N 11705516

5. BB2 control box

BB2

가





- 2: 1 2 3 4 5
- 1: 1 2 (Y-splitter) .
- 2: (1 ~ 5)
- 3: 4 ~ 20mA (6 ~ 9). . ()
- 4: (10 ~ 13)
- 5: [L(load or power), N(neutral), △(ground)]

:

BB2 control box

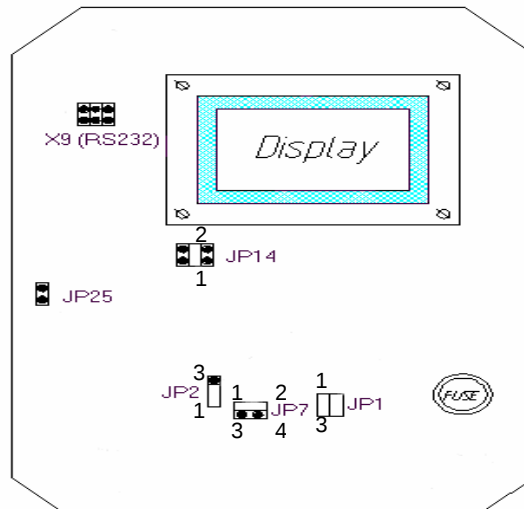
30

. 가

2 BB2 , SCADA DCS

BB2 control box Field Bus communication module

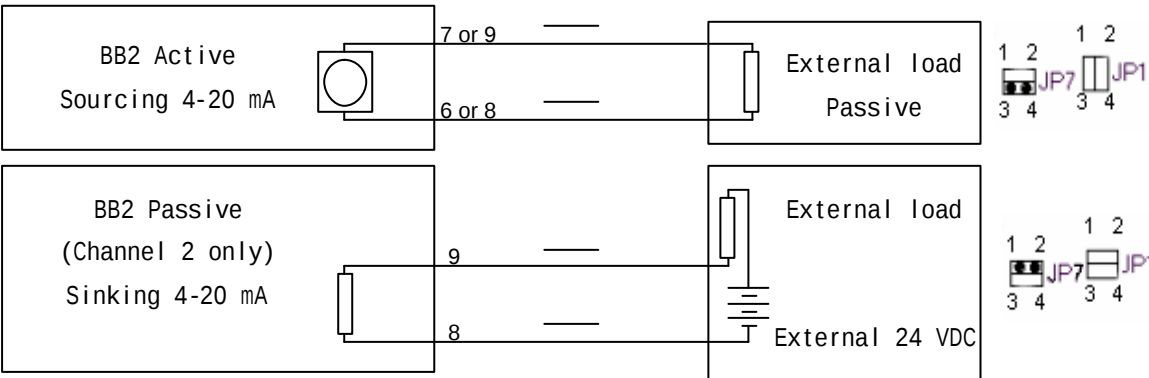
7. (jumpers)

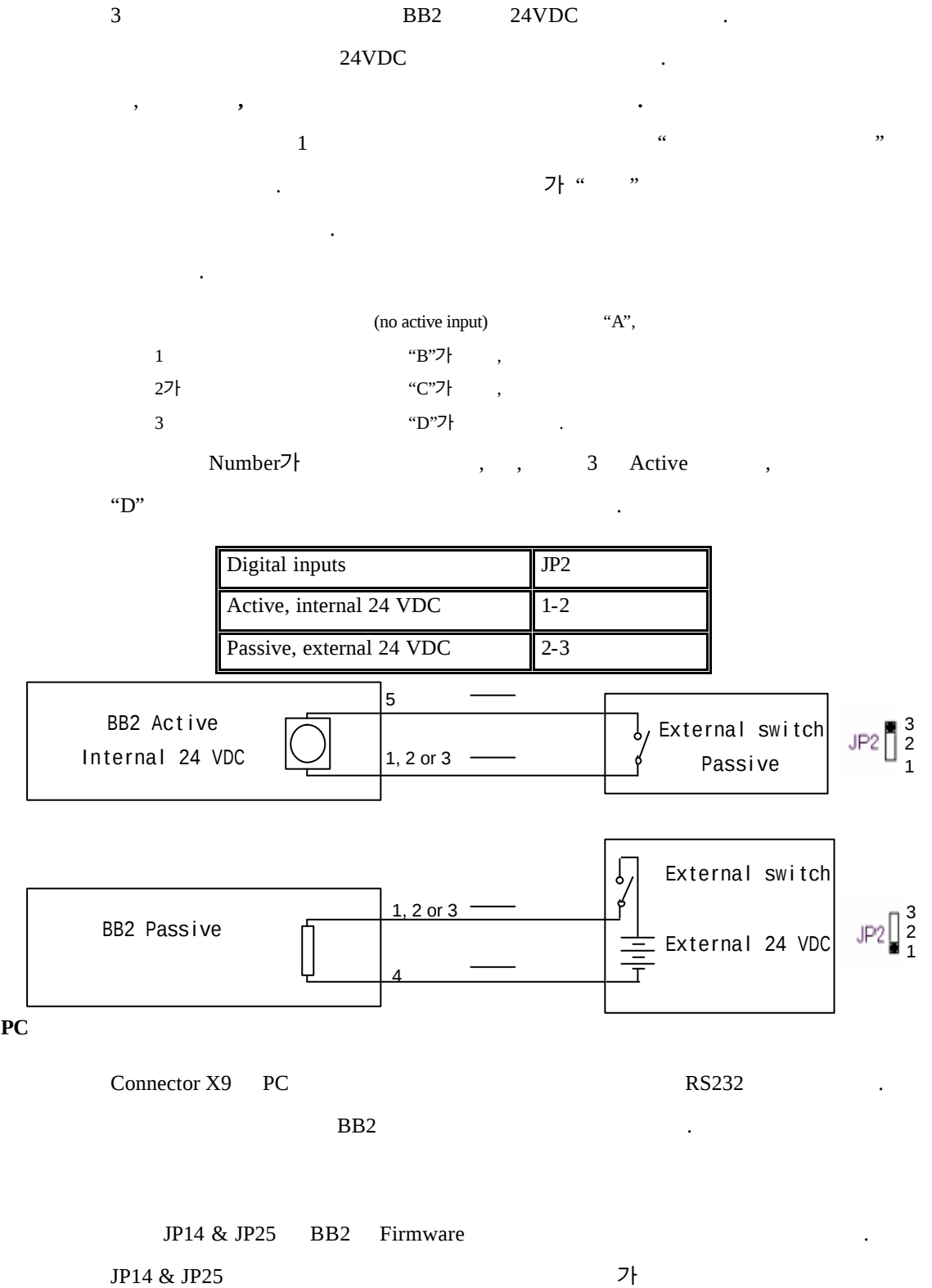


BB2 5 가 .

BB2 Active .
24VDC (Self Power) .
, 2 Common Ground .
2 JP1 JP7 , Passive ,
(max)24VDC , 4-20 mA .
(Loop Power) .

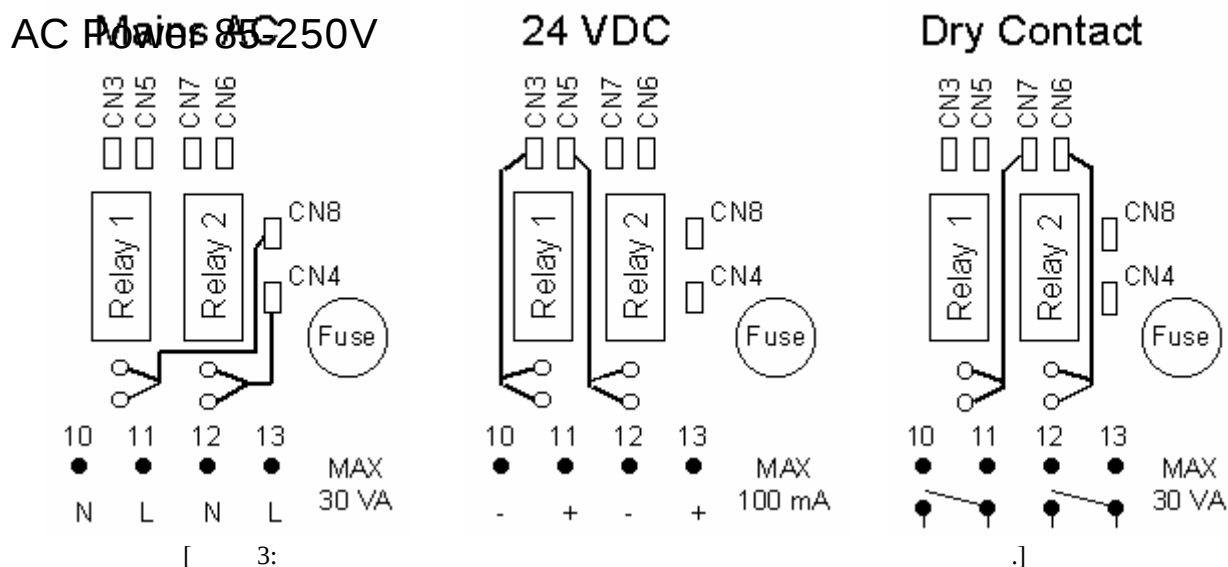
Analog Output channel 2	JP1	JP7
Active, sourcing	1-3 and 2-4	1-2
Passive, sinking	1-2 and 3-4	3-4





8.

BB2 가
Dry Contacts, 24VDC output,
Mains AC output .
(Solenoids) 24VDC



(Open Contact).

(3).

24 VDC

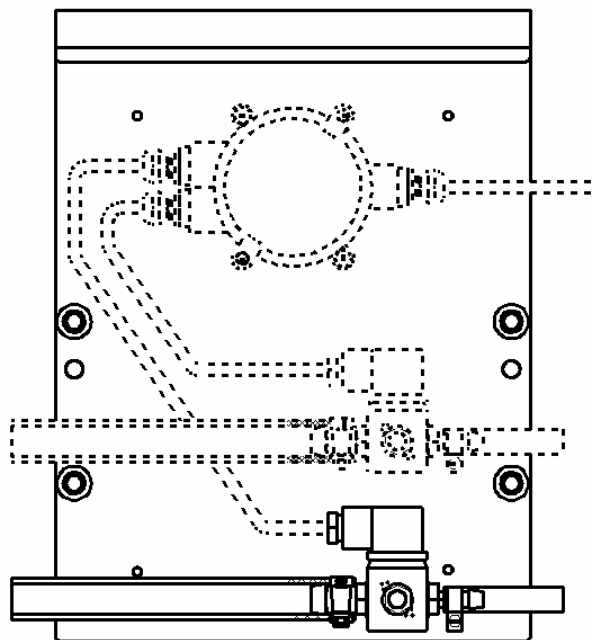
9.

External Alarms, Flushing, Brush signals

(3) CN 3, 4, 5, 6, 7, 8
1 2 . (2)
“Settings/Alarm Relay”

10.

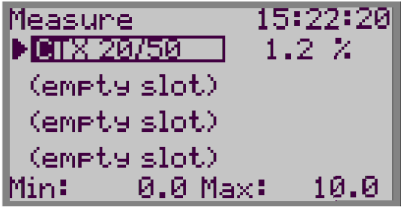
- 가 가 .
- Air Water , 10m 0.25 " .
- BB2 가 .
- BB2 1 2 .
1. (3) CN 3, 4, 5, 6, 7, 8 .
 2. 1 2 . (Relay 1 – terminals 10/11 or Relay 2 – terminals 12/13). : 1 , 2 .
 3. “Settings/Cleaning/Relay” . ()
 4. 120 psig 8 bars .
- 2 Mounting plate .
- 가 .



Mounting plate 10605533 (non US version) with two solenoid valves 11705516, and a junction box

11.

名 Bar indicating
BB2 가 No Transmitter
. 1 ~ 4
()
☐ 
☐ empty slot
☐
(No Transmitter),



가
ENTER

Menu Menu

BB2 가
BB2

5 ~ 10

“Time-out”

5 ~ 10 Main Menu,

Menu

1. BB2 menu: BB2 control box

5

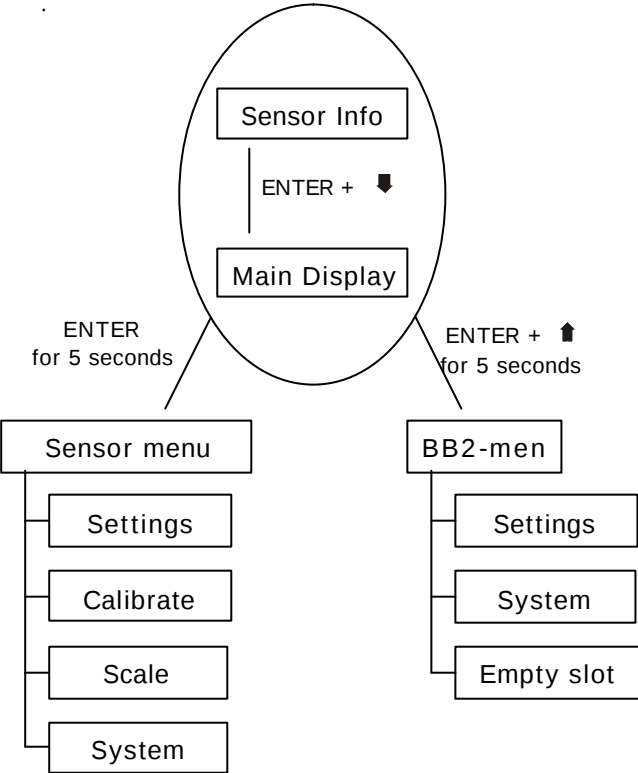
BB2

↑

ENTER
2. Sensor menus:

5

ENTER



() , ENTER

(➤)가 ENTER

(⏪)가 , ENTER

(✓) 가 , ↓

/ , 가 ↑ ENTER

BB2

가
, ENTER

list indicator (가)가
가
(Value)가
가, ENTER
ZERO

Dialogs

BB2 가 .

ENTER 가 , ENTER

가 , .

.

ENTER 5

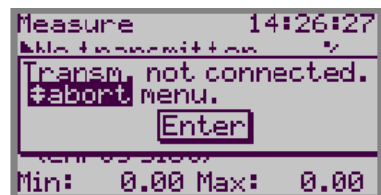
No transmitter가 ,

가 (➤)

ENTER 5

.

“abort” “show” ENTER



12. BB2 Control box

↑ ENTER 5 BB2 가
. ENTER 5 ,
. .

Setup

- Language English or Swedish
- System , mm : inch, m³ : Gallon, °C : °F
- Date
- Time
- Contrast .
- Formats “Formats” 가 “ENTER” .
- Temp °F °C
- Date YY-MM-DD, MM/DD/YY, or DD-MM-YY
- Time TT:MM:SS, or TT:MM
- Fieldbus “Fieldbus” 가 “ENTER” .
- DP address Node address in a Profibus network
- Transmitter 1 – 4, Transmitter using the fieldbus
- Fieldbus type Installed fieldbus module
- Out sig 1 4-20 mA, or 20–4 mA
- Out sig 2 4-20 mA, or 20–4 mA
- Serial log RS232 .
- Off, Slot 1 – Slot 4 or All.
- Interval min
- 0 –999 ..

System

Version	, (Read Only)
Serial	Circuit board S/N (Read Only)
Box temp	BOX, (Read Only)
Box heat	가 t ON / OFF, (Read Only)
Fieldbus	Fieldbus, ENTER.
Correct type	Yes or no, (Read Only)
Installed	Yes or no, (Read Only)
Hardwarefail	Yes or no, (Read Only)
Initialised	Yes or no, (Read Only)
Online	Yes or no, (Read Only)
Software v.	Fieldbus module, (Read Only)
Outdata	Last data sent to master, (Read Only)
Err Cmd	Last error, (Read Only)
Err Cmd 1	Last error, (Read Only)
Test	, “ENTER”.
Relay1	Off / On, 가.
Relay2	Off / On, 가.
Analog 1 mA	Current of analog output 1, (Read Only)
Analog 2 mA	Current of analog output 2, (Read Only)
Panel LED	Green / Red
Box heat	Off / On, (Read Only) 가.

Empty Slot

slot 1	Forget the previously installed transmitter in slot 1
slot 2	Forget the previously installed transmitter in slot 2
slot 3	Forget the previously installed transmitter in slot 3
slot 4	Forget the previously installed transmitter in slot 4

13. Getting started

가 , 30 가
 , 가 .
 BB2가 .
 가 .
 > “ENTER” 가
 BB2 Control Box .
 >  and ENTER 5 . BB2-menu 가 .
 > “Settings” , ENTER .
 > Control box .
 > 가  and ENTER .
 >  /  .
 > ENTER 5 가 .
 > “CALIBRATE” .
 > Highest level 가  .
 “ENTER” .
 > “SETTINGS” .
 > “Cleaning”
 가 가 가 .
 > “SCALE” .
 > , 4 ~ 20mA
 가 .

14. (BB2 control box)

Manufacturer	Cerlic Controls AB, Solna, Sweden
Name	BB2
Measurement	See drawing in section 17
Enclosure	NEMA4 (IP65)
Weight	2.8 lbs (1,3 kg)
Supply voltage	85 – 250 V AC, 50 – 60 Hz
Fuse	3.15 A Slow 250V 4 x 20mm
Power Usage	20 Watts (0.180 Amps @ 110V)
Ambient temp	-4 – +122 °F (-20 – +50 °C)
Internal Heating	Full power below 63 °F (17 °C), Off above 66 °F (19 °C)
Storage temp	32 - +140°F (0 – 60 °C)
Connected sensors	Displayed on the screen at start-up
Output signals	Two (2) 4 – 20 mA (20 – 4 mA), galvanic isolated, 500 ohm
Relays	Selectable function, 85-250VAC max 30VA, 24VDC max 100mA or Dry contacts 250VAC / 30VDC, max 30 VA, normally open

(BB2 control box)

Aluminum handrail mounting plate predrilled for BB2 P/N 10605533

or solenoid valves w/ u-bolts, outside US version

Aluminum handrail mounting plate predrilled for BB2 P/N 31204049

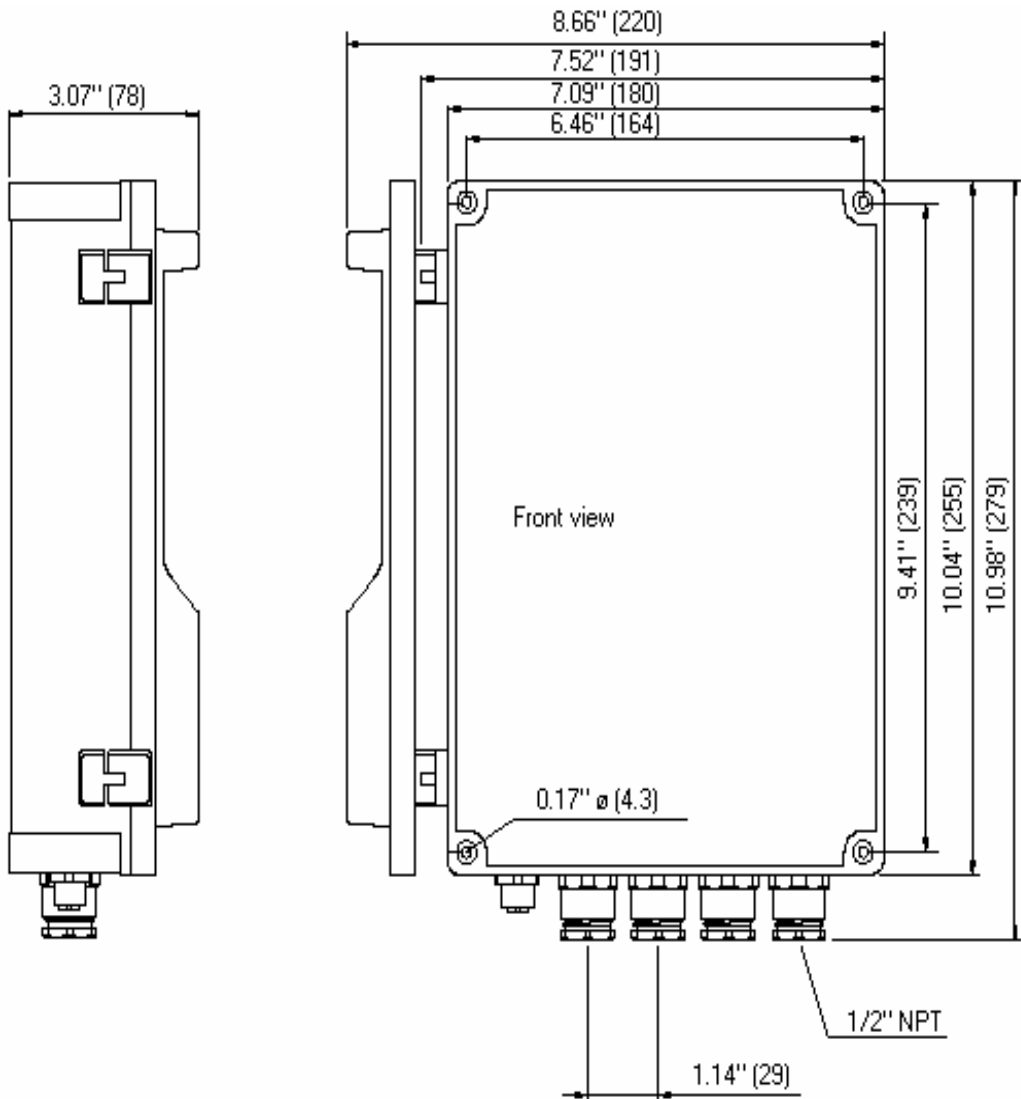
or solenoid valves w/ u-bolts, US version

33 ft. (10m) cable for. Connection cable with plug-in. P/N 20805510

Y-Splitter for two sensors to one BB2 control box P/N 21505534

Solenoid valve for flushing P/N 11705516

15. Dimensions



Appendix 1. (Electromagnetic Compatibility)

BB2 control box (EMC), CE
BB2 .

Mains Power Supply

L =ElectricPhase
N =Zero
 $\perp$ = Protector Ground

Connecting Cables

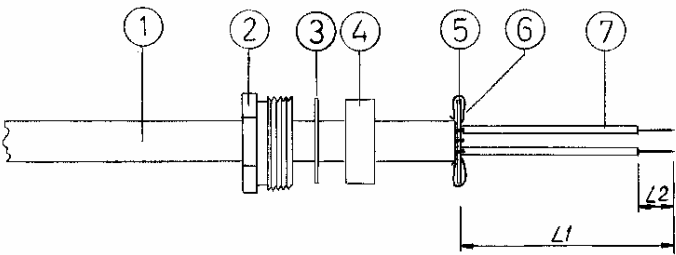
, “Appendix 2” .

Installation Rekommendations

가

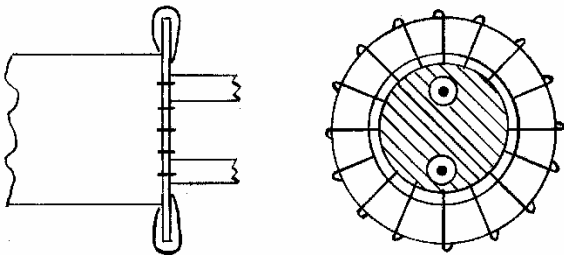
[capacitor (10nF/3000 V)]

Appendix 2: (with Fitting)



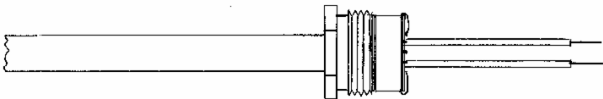
[1:]

- 1. Fitting (2), Washer (3), Rubber-sleeve, (4) Washer (5)
- 2. 90 mm (L1)
- 3. 7 mm (L2)



[2: Washer]

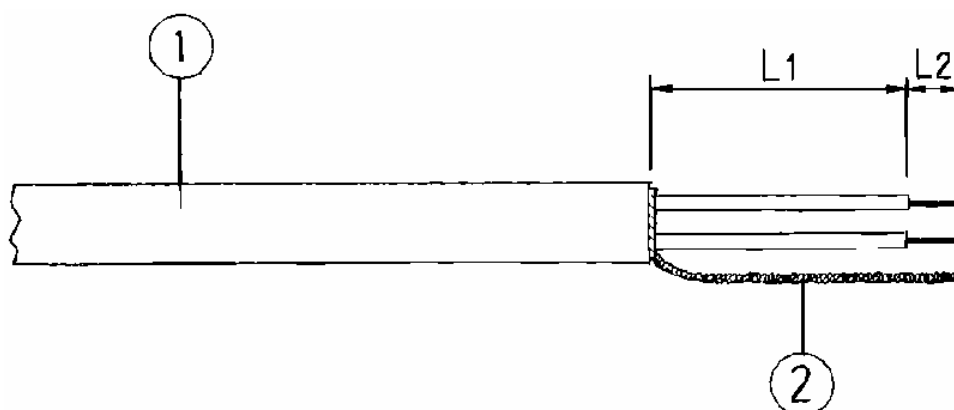
- 4. 20mm
- 5. Washer (5)
- (2)



[3]

- 6. Washer

Appendix 3: (without Fitting)



[1]

1. 90 mm (L1) .

2. .

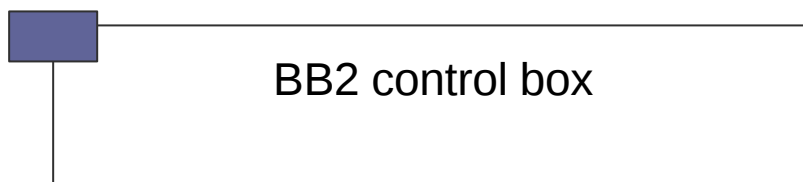
3. L1 & L2.

L1 25 mm .

4. . L2 (10mm).

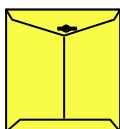
5. .

6. (2) .



1 : 2002 12 12

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:
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“ Cerlic controls ”

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