
Instruction Manual

Model WU10
VP cable



Specifications WU10-V-S-□-□

Single Coax

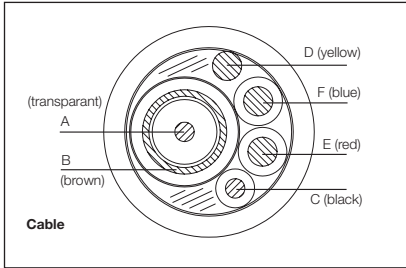


Figure 1

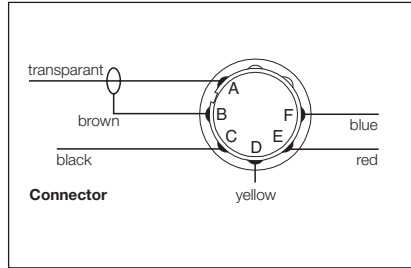


Figure 2

Description	: Multi core shielded cable with one low-noise coax and three insulated wires
Max. temperature	: 90 °C continuously and 105 °C for max. 1000 hr.
Sheath	: PVC
Colour	: Black
Diameter	: 6.5 mm
Internal insulation	: HDPE (Polyethylene)
Isolation resistance	: > 1.5×10^{13} Ohm between E, F and overall shield > 0.5×10^{13} Ohm between D and overall shield > 1.5×10^{14} Ohm between A and overall shield
Capacity	: <100 pF/m between A and overall shield <120 pF/m between A and B <350 pF/m between B and overall shield
Resistance	: <100 Ohm/km for A <45 Ohm/km for wire C, E and F <100 Ohm/km for wire D
Coaxial cable	: Brown Thermoplastic Rubber sheath. : After termination core lead insulation transparent and shield insulated with brown cover : Diameter 3.3 mm
Wire D	: Bare drain wire covered with Yellow insulation after termination (overall shield)
Wire C	: Black cover diameter 1.2 mm
Wire E	: Red cover diameter 1.5 mm
Wire F	: Blue cover diameter 1.5 mm

Connections

Connections of VP single coax cable

The numbers in the table refer to the numbers of the terminals in the instrument.

	Transparent	Brown	Black	Yellow	Red	Blue		
	A	B	C	D	E	F	Jumper	Instrument
FU24/FU20: pH+ORP(rH)	15	13	16	14	11	12		PH202 / PH402
FU24/FU20: pH / ref	15	13	16	14	11	12		
FU24/FU20: ORP / ref	-	13	16	15	11	12	13-14	PH450 / PH150
FU24/FU20: ORP / pH	13	-	16	15	11	12	15-14	
Polagraphic DO sensor (OXYgold)	17	18	-	14	11	12	-	DO202 DO402
Galvanic DO sensor	13	15	-	(14)	11	12	-	
2-electrode conductivity sensor	15	16	13	14	11	12	13-14	SC402 / SC202 SC450 / SC150
4-electrode conductivity sensor	16	15	13	14	11	12	-	

Tabel 1

The numbers (11- 17) in the table refer to the numbers on the terminals in EXA Instruments. Other instruments are indicated in the following tables

PH100				
function	pin ID	Color	name	number
pH	A	Transparent	GE	12
Ref	B	Brown	RE	14
	C	Black		
Ground el.	D	Yellow	SE	16
TC	E	Red	T1	17
TC	F	Blue	T2	18

Tabel 2

SC100				
function	pin ID	Color	name	number
I-high	A	Transparent	16	15
Y-high	B	Brown	15	11
V-low	C	Black	S	13
I-low	D	Yellow	14	14
TC	E	Red	T1	17
TC	F	Blue	T2	18

Tabel 3

Specifications WU10-V-D-□-□

Dual Coax

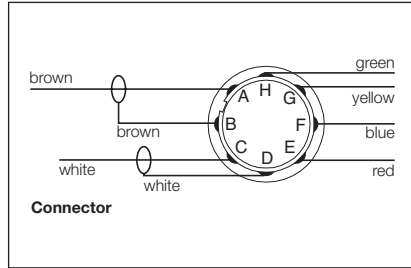
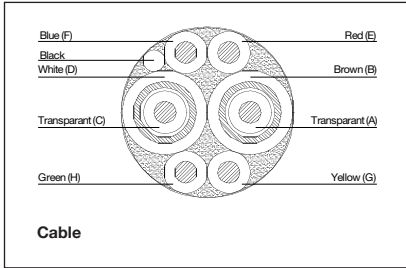


Figure 3

Figure 4

Description	: Multi core shielded cable with two low-noise coaxes and four insulated wires
Max. temperature	: 105 °C continuously and 125 °C for max. 3000 hr.
Sheath	: Thermoplastic Rubber sheath copper stabilized
Colour	: Black
Diameter	: 7 mm
Internal insulation	: Thermoplastic Rubber sheath copper stabilized
Isolation resistance	: > 1.5×10^{13} Ohm between E, F, G, H and overall shield > 0.5×10^{13} Ohm between black wire and overall shield > 1.5×10^{14} Ohm between A and overall shield
Capacity	: <90 pF/m between A, C and overall shield <120 pF/m between A and B and between C and D <350 pF/m between B, D and overall shield
Resistance	: <100 Ohm/km for A and C <45 Ohm/km for wire C, E and F <100 Ohm/km for wire D
Coaxial cables	: Brown or white Thermoplastic Rubber sheath copper stabilized. : After termination core lead insulation transparent and shield insulated with brown or white cover : Diameter 2.7 mm
Black wire (drain)	: Bare drain wire covered with Black insulation after termination (overall shield)
Wire E	: Red cover diameter 1.4 mm
Wire F	: Blue cover diameter 1.4 mm
Wire G	: Yellow cover diameter 1.4 mm
Wire H	: Green cover diameter 1.4 mm

Flame retardant in accordance to IEC 60332-1

Connections

Connections of VP dual coax cable

The numbers in the table refer to the numbers of the terminals in the instrument.

	Transparent (Brown core)		Transparent (White core)						Jumper	Instrument	
	Brown	White	White	Red	Blue	Yellow	Green	Black			
	A	B	C	D	E	F	G	H			
SC24V pH + pNA + ORP(rH)	15	16	13	17	11	12	14	-	(63) (3)	none	
FU24/FU20: pH + ORP(rH)	15	13	16	14	11	12	-	-	(63) (3)	-	PH202 PH402 PH450 PH150
FU24/FU20: pH / ref	15	13	16	14	11	12	-	-	(63) (3)	-	
FU24/FU20: ORP / ref	-	13	16	15	11	12	-	-	(63) (3)	13-14	
FU24/FU20: ORP / pH	13	-	16	15	11	12	-	-	(63) (3)	15-14	
Polagraphic DO sensor (OXYgold)	17	18	-	14	11	12	-	-	(63) (3)	-	DO202 DO402
Galvanic DO sensor	13	15	-	(14)	11	12	-	-	(63) (3)	-	
2-electrode conductivity sensor	15	16	13	14	11	12	-	-	(63) (3)	13-14 15-16	SC402 SC202
4-electrode conductivity sensor	16	15	13	14	11	12	-	-	(63) (3)	-	SC450 SC150

Table 4

The numbers (11- 17) in the table refer to the numbers on the terminals in EXA Instruments. Other instruments are indicated in the following tables

Model and Suffix codes

Model	Suffix Code	Description
WU10		Sensor cable
Connector type	-V	Variopin
Cable type	-S	Single Coax
	-D	Dual Coax
Cable length	-02	2 meters
	-05	5 meters
	-10	10 meters
	-15	15 meters
	-20	20 meters

Pin lay-out for Variopin sensors

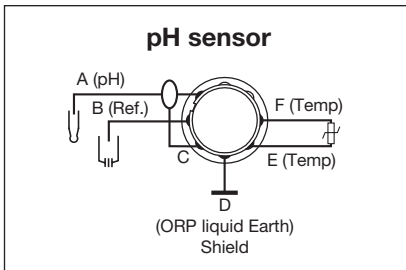


Figure 5

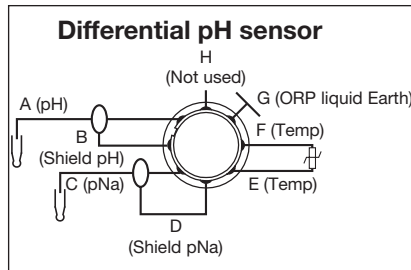


Figure 6

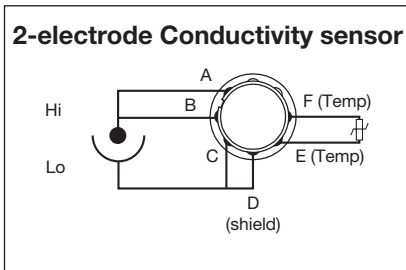


Figure 7

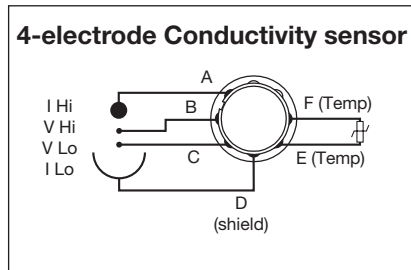


Figure 8

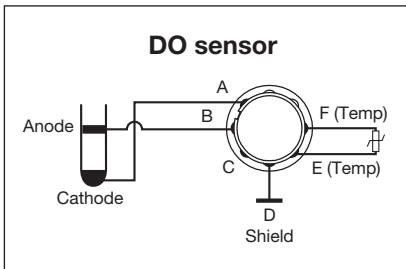


Figure 9

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