

# General Specifications

Model FU20  
Widebody type pH/ORP sensor

GS 12B06J03-00EN-P

## ■ Overview

The FU20 combination sensor exemplifies Yokogawa's commitment to delivering "Simply the Best" in sensor technology. Designed with a robust 26 mm widebody, the standard FU20 integrates four distinct measuring elements into a single, chemically resistant and unbreakable PPS 40GF body—ensuring durability and superior performance even in the most demanding environments.

Installation is straightforward thanks to the integrated industrial  $\frac{3}{4}$ " tapered thread, collar body design and fitting options, while built-in temperature compensation helps extend sensor life by maintaining measurement stability under fluctuating conditions.

Ideal for general-purpose applications with stable pressure and temperature, the FU20 has consistently demonstrated superior performance and reliability. In fact, it is a highly effective solution for approximately 90% of known pH and redox measurement applications—making it a smart, cost-effective choice for users seeking simplicity without compromising accuracy.

For processes involving strong acids or where PPS material compatibility falls short, the FU20-FTD variant offers a PVDF body that enhances chemical resistance, expanding the sensor's suitability across a broader range of even the most demanding applications.

## ■ Features

- **Durable Design:** Long-life Ag/AgCl reference system with double junction and ion-trap for extended performance in harsh environments.
- **Reliable Measurements:** PTFE diaphragm reduces fouling; integrated Pt1000 ensures accurate temperature compensation.
- **Dual Functionality:** Platinum ORP/LE electrode enables precise pH and ORP readings.
- **Safe Materials:** FDA-approved polymerized electrolyte.
- **Flexible Installation:** Supports in-line, immersion, off-line, and any-angle mounting (including upside down).
- **Easy Setup:** VP connector simplifies installation
- **High Quality:** all sensors include a Quality Certificate.

### Digital Advantage with SENCOM SMART Platform

- Off-line calibration to minimize process disruption
- Simplified asset and condition monitoring
- Supports statistical process control
- Enhanced visibility in extreme conditions
- For full details, refer to General Specification  
**GS 12A06S01-01EN.**



## ■ 1. General Specification FU20

### 1.1 Measuring elements

Sensor type	: pH glass electrode
Reference system	: Silver/Silver Chloride (Ag/AgCl) reference
Reference liquid	: FDA approved KCl
Electrode type	: Solid Platinum electrode
Temperature sensor	: Pt1000 temperature sensor (IEC 751)

### 1.2 Wetted parts

Wetted parts	
Sensor body	: PPS GF40 for type NPT, FSM, RCD, RCF : PVDF GF20+TZ4 for type FTD, MTD
Earthing/ORP pin	: Solid Platinum
Glass Membrane	: G-glass
Glass tube	: Lead-free glass
O-ring	: FKM, FFKM (model dependent)
Reference junction	: Porous PTFE

### 1.3 Functional specifications (at 25°C)

Isothermal point	: pH 7 / 3.3m KCl
Glass impedance range	
- Dome shape	: 100-300 MΩ
- Flat Surface	: 500-1000 MΩ
Junction resistance	: < 10 kΩ
Liquid outlet	: non-flow double junction
Asymmetry potential	: 8 ± 15 mV
Linearity pH (Slope)	: > 96 % (of theoretical value)

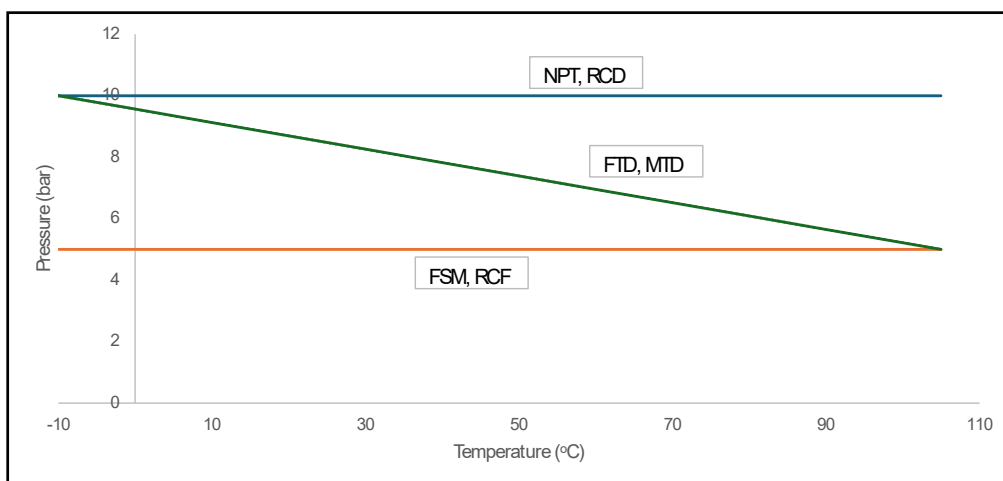
**Note:** The temperature sensor included in the FU20 is designed for process compensation and for indication. It is NOT designed for process temperature control.

### 1.4 Dynamic specifications (at 25°C)

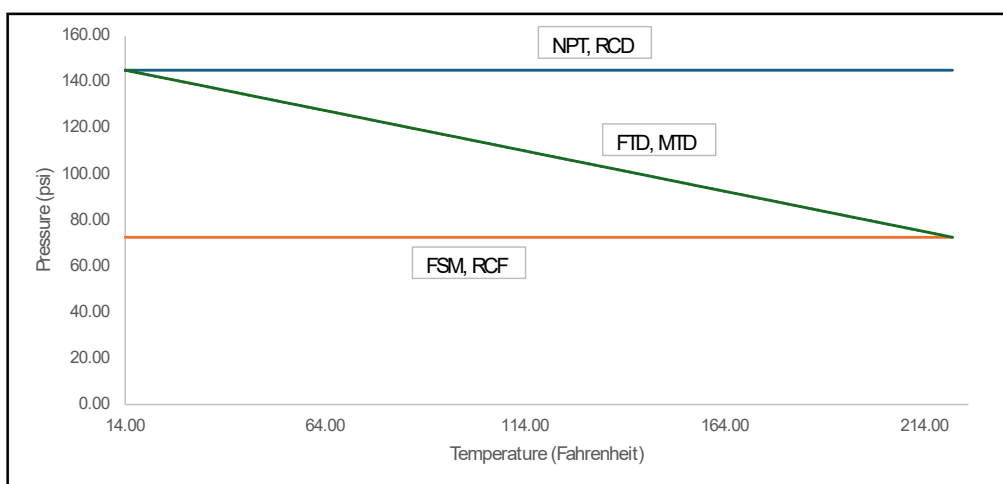
Response time pH step (7 to 4)	: < 15 sec for 90%
Response time temp step (10°C)	
- Dome shape	: < 1 min for 90%
- Flat Surface	: < 4 min for 90%
Stabilization time (0.02 pH unit/10 s)	: < 2 minutes

### 1.5 Operating range

pH	: 0 to 14
ORP	: -1500 to 1500 mV
rH	: 0 to 100
Temperature	
- Dome shape	: -10°C to 105°C (14°F to 221°F)
- Flat surface	: 15°C to 105°C (59°F to 221°F)
Pressure (see Figures 1a and 1b)	
- For NPT, RCD	: 1.5 kPa - 1000 kPa (at 25°C to 105°C)
- For FSM, RCF	: 1.5 kPa - 500 kPa (at 25°C to 105°C)
- For FTD, MTD	: 1.5 kPa - 1000 kPa (at 25°C) 1.5kPa - 500 kPa (at 105°C)
Conductivity	: > 50 μS/cm



**Figure 1a:** Pressure (bar) & Temperature (°C) range FU20



**Figure 1b:** Pressure (psi) & Temperature (°F) range FU20

**Note:** The pH operating range at room temperature is 0-14pH, but at high temperatures the lifetime will be seriously shortened outside 2-12 pH range.

**Note:** The upper process temperature for the intrinsically safe version is limited by the ambient temperature (Tamb.) defined for each temperature class (T3, T4, T5 and T6)

## 1.6 Enviromental conditions

Storage temp. : -15 to 50 °C (5 to 122 °F)

Ingress Protection : IP67

## 1.7 Mechanical specifications

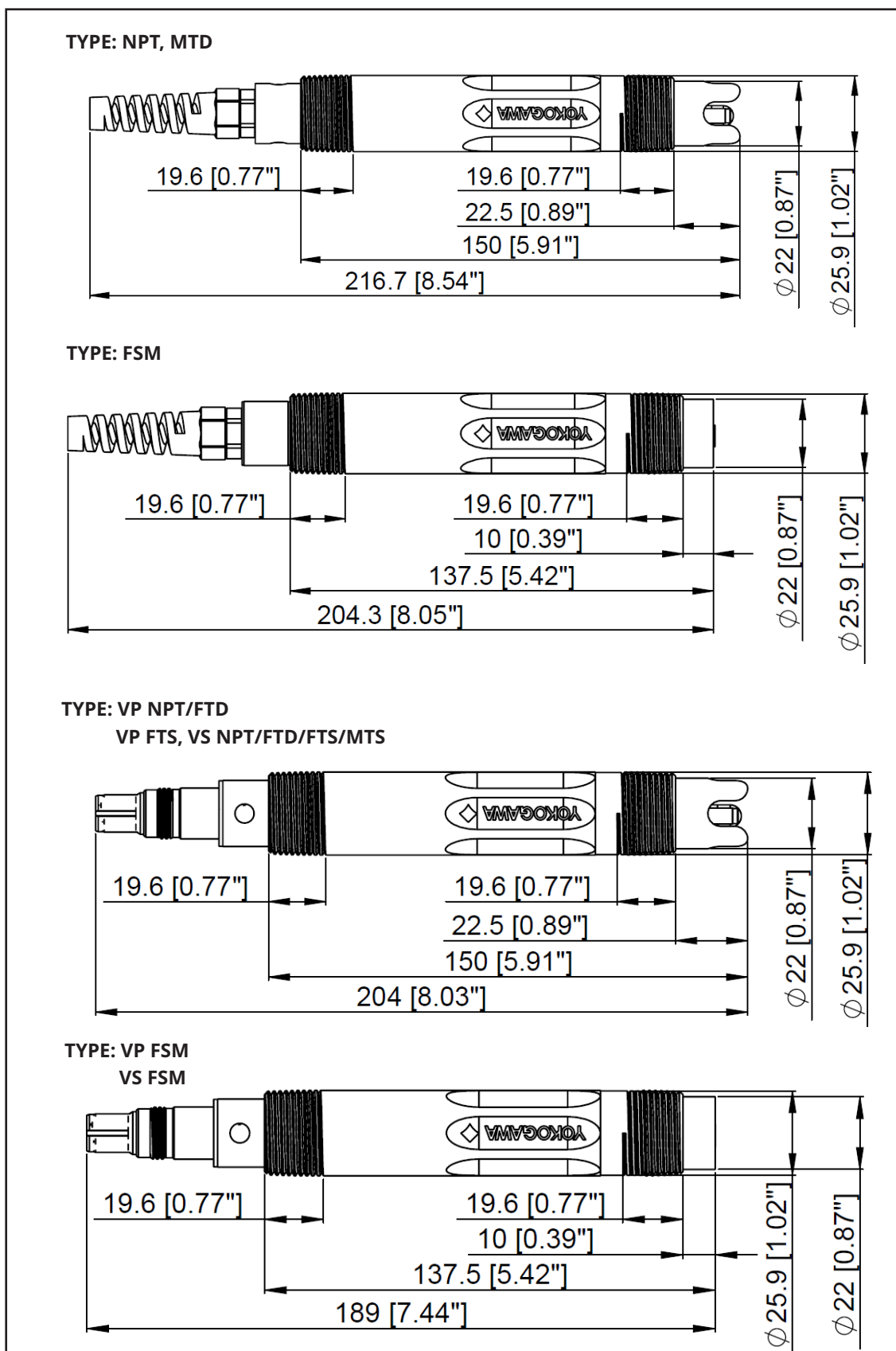
Max. torque on sensor body : -NPT, FSM, RCD, RCF 12 Nm  
-FTD, MTD 8Nm

**Table 1: Regulatory compliance**

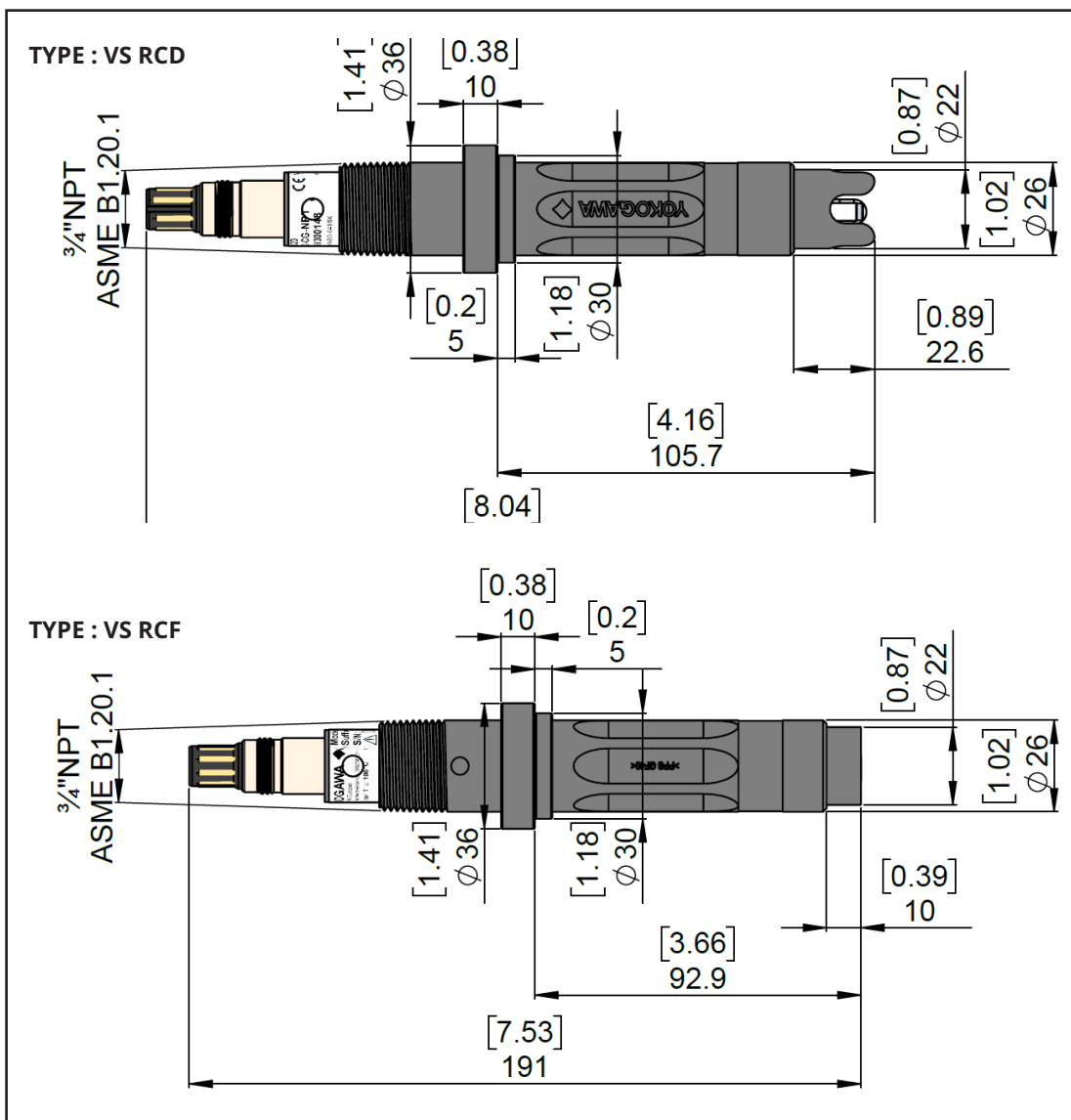
Item	Description, Approval, Certification
ATEX (EU, UK)	ATEX approval (Issue No. 2): DEKRA 11ATEX0014 X CE 0344 0 Ex II 1 G Ex ia IIC T3...T6 Ga Applied standards: • EN IEC 60079-0 • EN 60079-11 For specific conditions of use, see certificate.
IECEX	IECEX approval (Issue No. 1): IECEX DEK 11.0064X Ex ia IIC T3...T6 Ga Applied standards: • IEC 60079-0 • IEC 60079-11 For specific conditions of use, see certificate.
FM (Canada)	FM approval Canada: FM20CA0062X IS SI CL I, DIV 1, GP ABCD, T3...T6 CL I, ZN 0, Ex ia IIC, T3...T6 Ga Control Drawing: D&E 2020-023-A51 Applied standards: • CAN/CSA-C22.2 No. 60079-0 • CAN/CSA-C22.2 No. 60079-11 • CAN/CSA-C22.2 No. 61010-1 For specific conditions of use, see certificate.
FM (United States)	FM approval United States: FM20US0123X IS CL I, DIV 1, GP ABCD, T3...T6 CL I, ZN 0, AEx ia IIC, T3...T6 Ga Control Drawing: D&E 2020-023-A50 Applied standards: • FM Class 3600 • FM Class 3610 • FM Class 3810 • ANSI/ISA 60079-0 • ANSI/ISA 60079-11 • ANSI/ISA 61010-1 For specific conditions of use, see certificate.
NEPSI (China)	NEPSI approval: GYJ21.2891X Ex ia IIC T3...T6 Ga Applied standards: • GB 3836.1 • GB 3836.4 • GB 3836.20 For specific conditions of use, see certificate.
PESO (India)	PESO approval (Issue No. 2): DEKRA 11ATEX0014 X PESO approval is based on ATEX approval Equipment reference numbers: P512760/1 Applied standards: • EN IEC 60079-0 • EN 60079-11 For specific conditions of use, see certificate.

Item	Description, Approval, Certification
TS (Taiwan)	TS approval: IECEX DEK 11.0064X TS Safety Label is based on IECEX approval Identification Number: TD04000C Applied standards: • IEC 60079-0 • IEC 60079-11 For specific conditions of use, see certificate.
KCs (Korea)	Korea Ex certificates (Issue No. 1): IECEX DEK 11.0064X Korea Ex certificate is based on IECEX approval and applicable for the following models: FU20-VP-CG: 21-KA4BO-0416X FU20-VS-CG: 21-KA4BO-0417X FU20-**-CG: 21-KA4BO-0418X Applied standards: • IEC 60079-0 • IEC 60079-11 • KS C IEC 60079-14 For specific conditions of use, see certificate.
EAC Ex (Russia)	EAC Ex certificate: RU C-NL.AA87.B.00229/19 0Ex ia IIC T6...T3 Ga X Applied standards: • GOST 31610.0 (IEC 60079-0) • GOST 31610.11 (IEC 60079-11) • GOST IEC 60079-14 For specific conditions of use, see certificate.

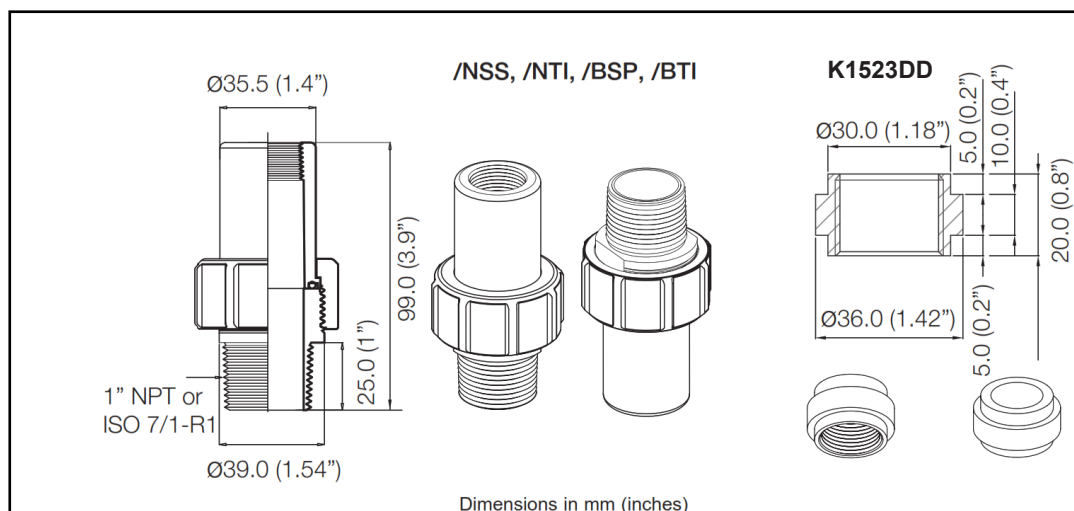
## ■ 2. Dimensions



**Figure 2:** Dimensions FU20 non-collar body



**Figure 3:** Dimensions FU20 collar body



**Figure 4:** Dimensions 1" FU20 adapter Stainless Steel & Titanium and FU20 adapter K1523DD for FF40, FS40 and FD40 fittings (/FPS option)

### ■ 3. Model Codes & Parts

**Table 2: Model & Suffix codes FU20**

Model	Suffix Code	Option code	Description		
FU20			Wide Body sensor		
Cable length	-03		3 m cable	available for -NPT, FSM, FTD, MTD (MTD only in 5 m)	
	-05		5 m cable		
	-10		10 m cable		
	-20		20 m cable		
	-VP		No Cable; VarioPin connector; available for -NPT, FTD, FSM		
	-VS		No Cable; VarioPin connector with ID-chip available for -NPT, FTD, RCD, FSM, RCF		
Temperature Sensor	-CG		Pt1000, IS for KCs		
	-T1		Pt1000, IS for ATEX/IECEX/FM-US/FM-CAN/NEPSI/PESO/TS/EACEx		
Model	-NPT		PPS body / Tapered Thread / Dome shaped		
	-RCD		PPS Collar body / Tapered Thread / Dome shaped (for use with FF40 fittings without the need for the /FPS adapter)		
	-FSM		PPS body / Tapered Thread / Flat Surface		
	-RCF		PPS Collar body / Tapered Thread / Flat Surface (for use with FF40 fittings without the need for the /FPS adapter)		
	-FTD		PVDF body / Tapered Thread / Dome shaped		
	-MTD		PVDF body / Tapered Thread / Dome shaped / FFKM O-ring in diaphragm		
Options		/NSS /NTI /BSS /BTI /HCNF	Material	Process Connection	Part No.
			SS316	1" NPT	K1547PK
			Titanium	1" NPT	K1547PM
			SS316	1" BSP	K1547PL
			Titanium	1" BSP	K1547PN
			Complete Hastelloy cleaning system		K1547PJ

**Note:** Suffix -FTS -MTS are not included in this manual. For specifications of these models check GS12B06J03-05EN-P and IM12B06J03-05EN-P.

**Note:** For model codes -RCD, - RCF and - MTD ATEX and FM approval is requested and approval is pending (expected completion in the coming months).

Table 3: Spare parts FU20 &amp; cleaning system

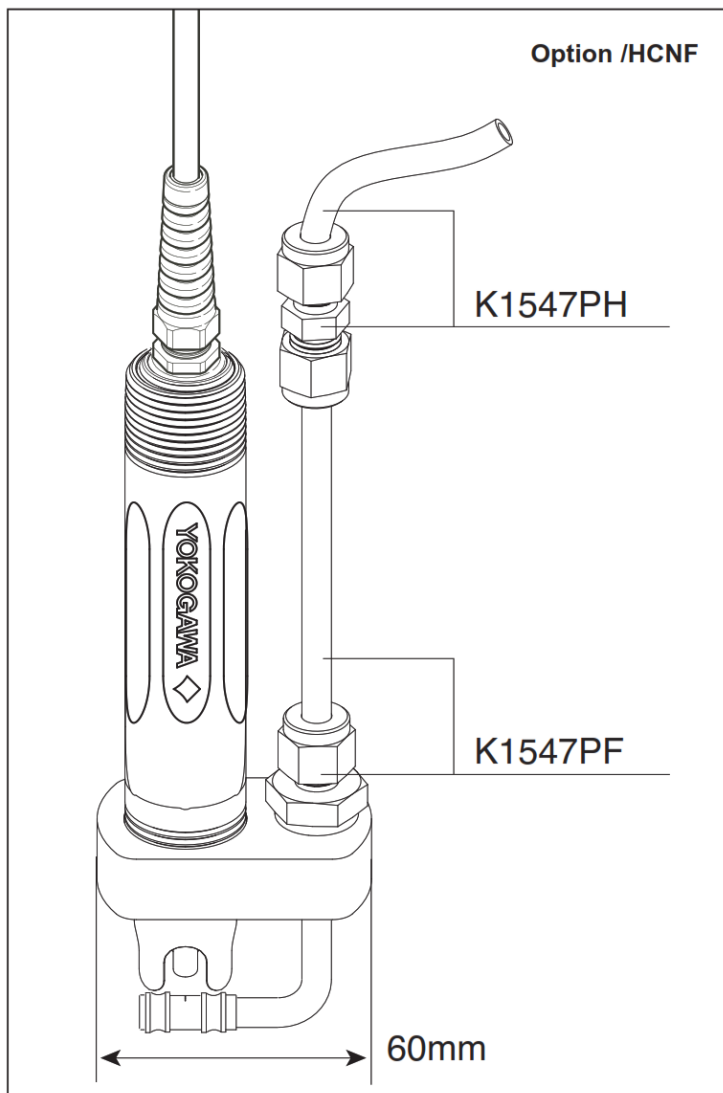
Spare part		Description
K1523DD	FU20	/FPS Adapter for FF40, FS40 and FD40 fittings (PPO)
K1547PK		/NSS 1" NPT, Stainless Steel adapter (Viton O-ring)
K1547PL		/BSS ISO 7/1-R1, Stainless Steel adapter (Viton O-ring)
K1547PM		/NTI 1" NPT, Titanium adapter (Viton O-ring)
K1547PN		/BTI ISO 7/1-R1, Titanium adapter (Viton O-ring)
K1521JD		Holder for FU20 in FF20-S3* (SS)
K1521JE		Holder for FU20 in FF20-S3* (PVDF)
K1521JF		Holder for FU20 in FF20-S3* (PP)
K1500FR		Viton O-rings 29.82*2.62 (5 pcs) for 1" adapter
K1500FS		EPDM O-rings 29.82*2.62 (5 pcs) for 1" adapter
K1500FT		Silicone O-rings 29.82*2.62 (5 pcs) for 1" adapter
K1526RF		Protection CAP/WET-POCKET FU20 (10 PCS)
K1547PJ	Cleaning system for FU20	Hastelloy cleaning system (HCNF)
K1547PG		Hastelloy nozzle and mounting set (HCNF)
K1547PH		Nylon tube (10 metre) and tube mounting set for chemical cleaning system
K1521TA	Buffer Capsules (1 bottle= 80 capsules)	Buffer Capsules for pH 1.68 @25°C (80 pcs = 4000 mL)
K1521TB		Buffer Capsules for pH 4.01 @ 25°C (80 pcs = 4000 mL)
K1521TC		Buffer Capsules for pH 6.87 @ 25°C (80 pcs = 8000 mL)
K1521TD		Buffer Capsules for pH 10.01 @ 25°C (80 pcs = 8000 mL)
K1521TE		Buffer Capsules for pH 12.45 @ 25°C (8- pcs = 8000 mL)
K1521TF		Buffer Capsules Combo package for pH 4.01/6.87/10.01@ 25°C (3 bottles x 80 pcs each)
WU10-V-D-XX	Connection cables for Suffix -03, -05,-10, -20, -VP, -VS	Variopin cable (XX = 02, 05, 10, 15 and 20m)
WU10-V-S-XX		Variopin cable (XX = 02, 05, 10, 15 and 20m)
WE10-H-D-XX		Extension cable for SENCOM SMART ADAPTER SA11
BA11	Connection equipment for Suffix -VS	Active Junction box
SA11-P1		SENCOM SMART adapter
WU11		Interconnection cable
IB100		Interface box
K1522PS	Part K1522PS Protection sleeve	Protection sleeve for 3/4" NPT sensor



#### ■ 4. Cleaning system for FU20

Some applications require frequent cleaning of the electrode.

For these applications Yokogawa designed a chemical cleaning system that can either be used in the Yokogawa fitting range (HCN2, HCN3 or HCN4) or as back-end mounting option for the PH20 and FU20. The /HCNF option comes with a hastelloy cleaning nozzle, Stainless steel mounting and ferrules sets and a nylon tube of 10 meters.

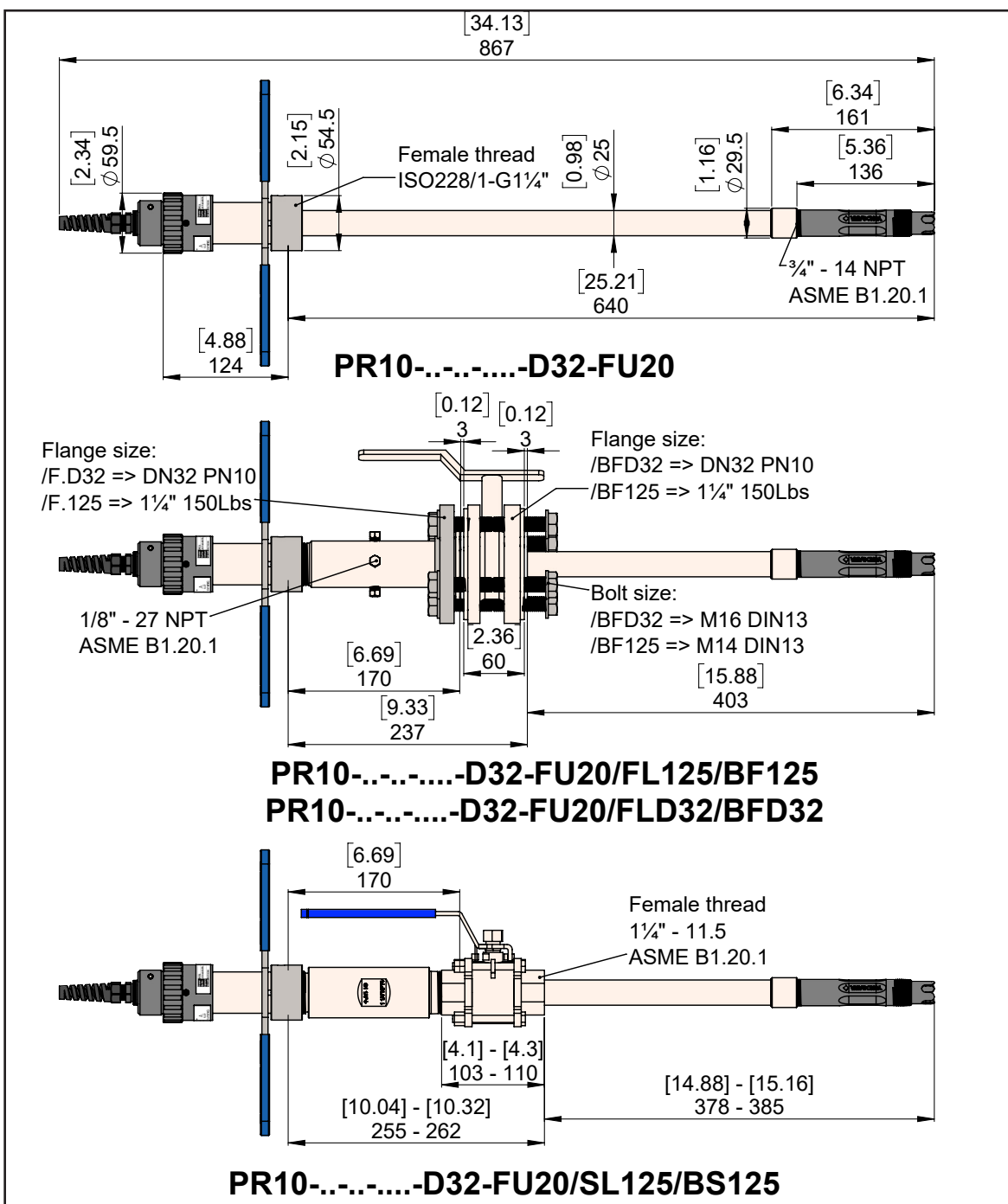


**Figure 5:** FU20 + / HCNF Option (Spray Cleaner)

## ■ Addendum 1: Typical Installations

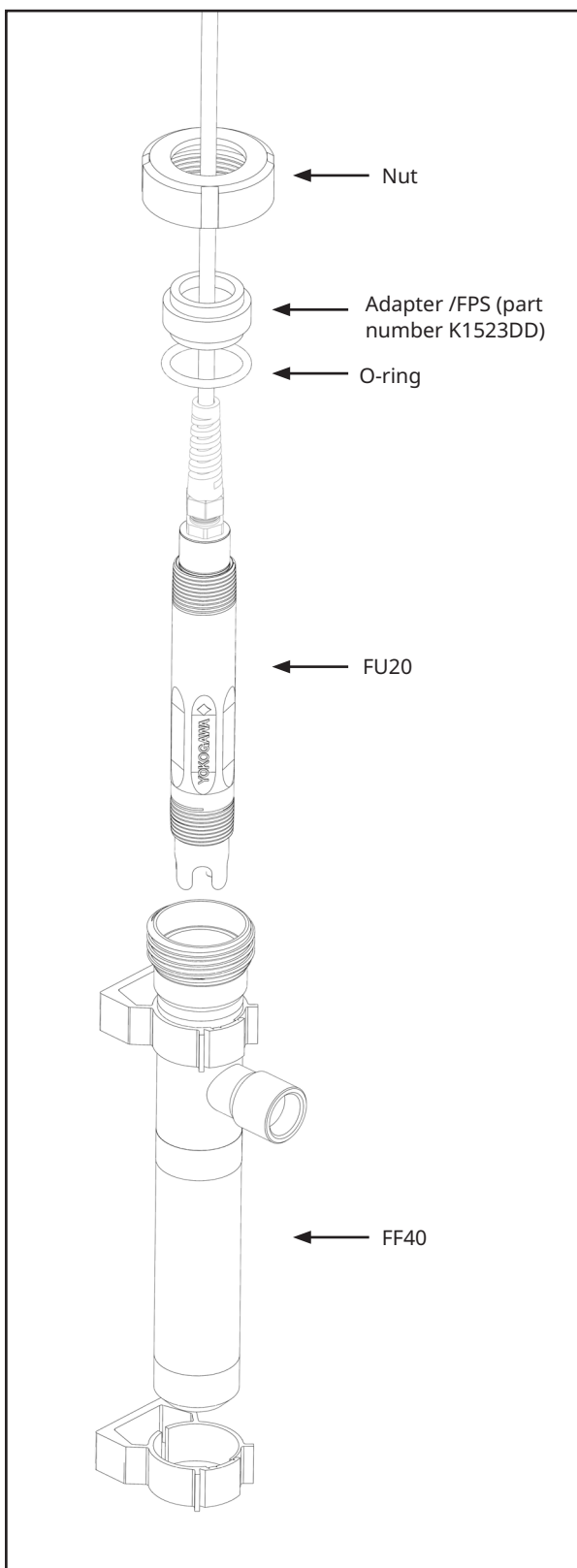
### Mounting the FU20 in PR10 retractable

1. Take the sensor out of the box and apply Teflon tape to the appropriate threaded end.
2. Bind the separate wires of the cable together with a piece of tape.
3. Take the fitting out of the box and remove the option(s), if necessary.
4. Release the pigtail (cable gland) completely. Do not undo the part in the metal tube!
5. Lead the sensor cable through the tube of the fitting, from the side where the knurled knob has been removed. Attach the sensor and cable as usual.
6. Hold the sensor still and turn the metal tube onto the sensor. Don't rotate the cell, but rotate the tube of the fitting, because the cable can be disconnected from the cell, when rotating it.
7. Lead the loose part of the pigtail onto the cable and screw it onto the fixed part.
8. Remove the tape.

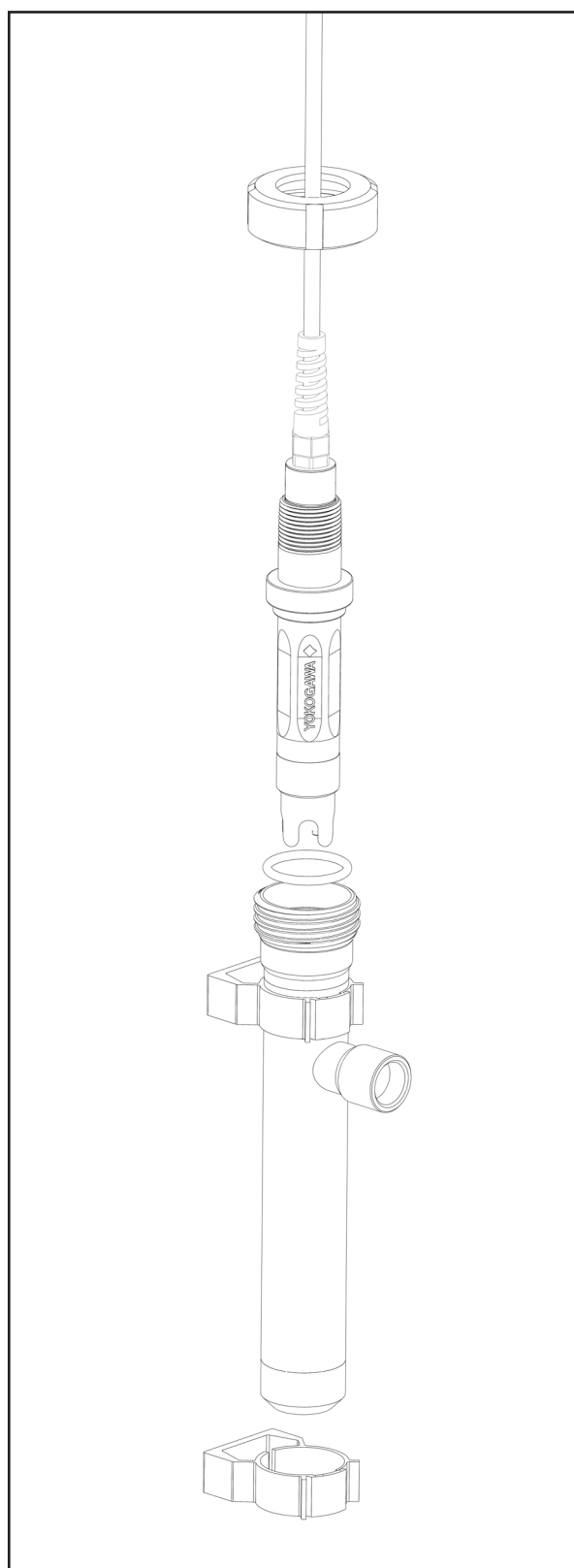


**Figure 6:** Dimensional drawing PR10...-D32 with mounted FU20 sensor units mm (inches)

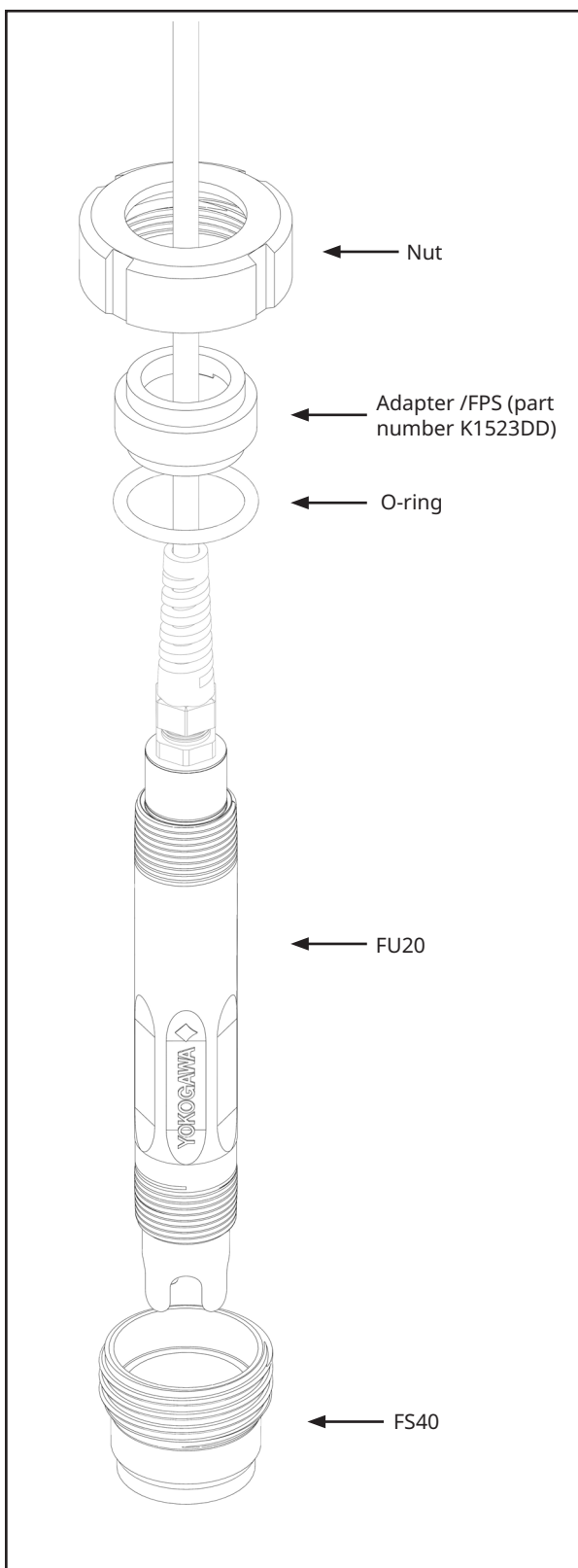
## Installation examples of FU20 with F\*40 fittings



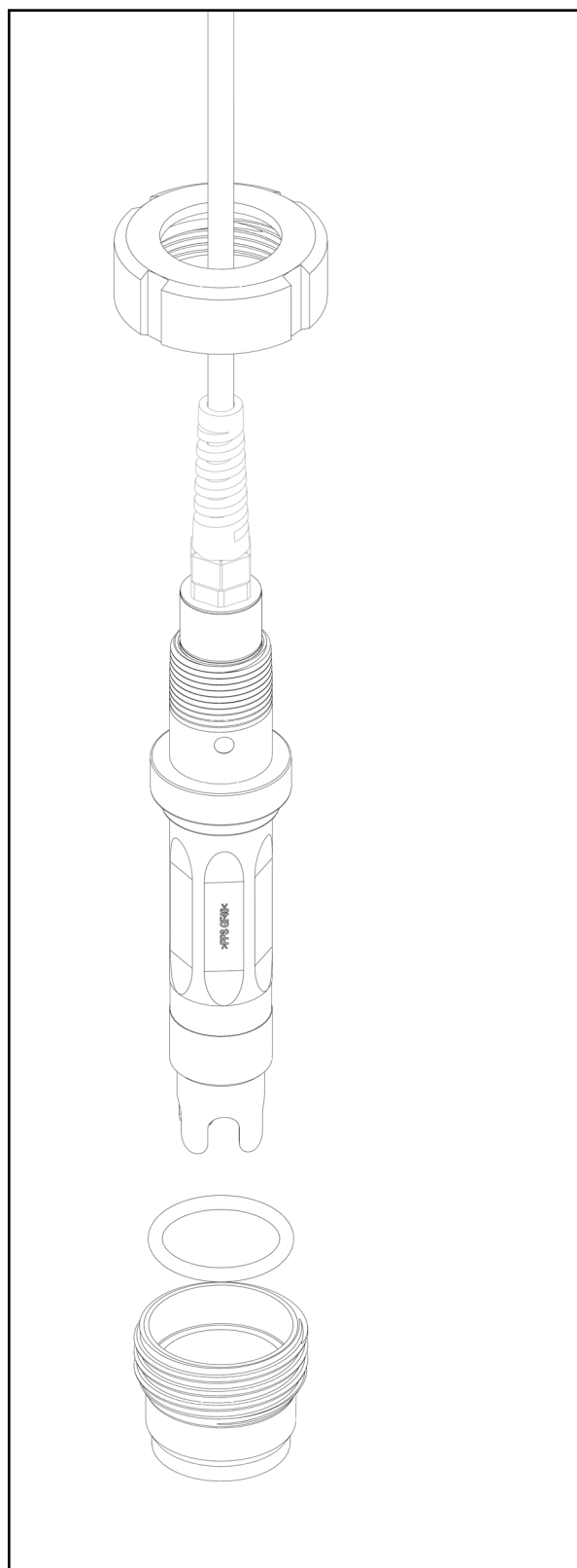
**Figure 7:** FF40 in combination with FU20 (non-collar body) using spare part number K1523DD adapter.



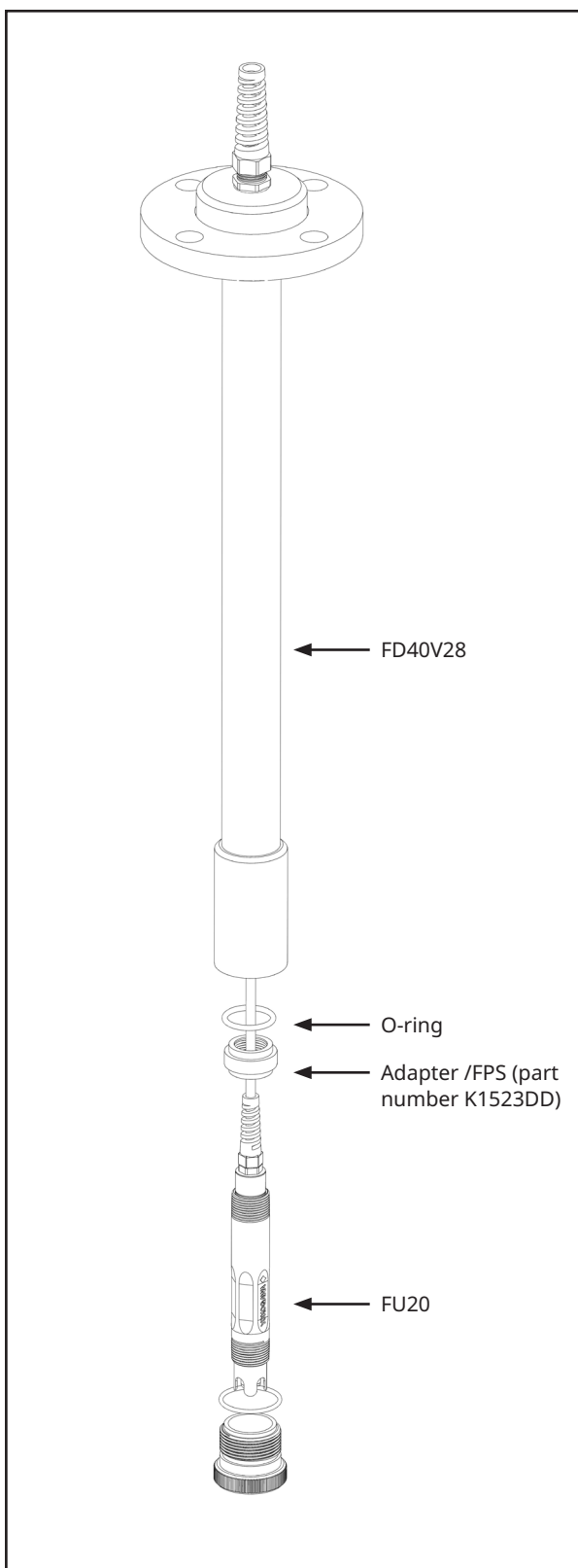
**Figure 8:** FF40 in combination with FU20 collar body (no adapter needed)



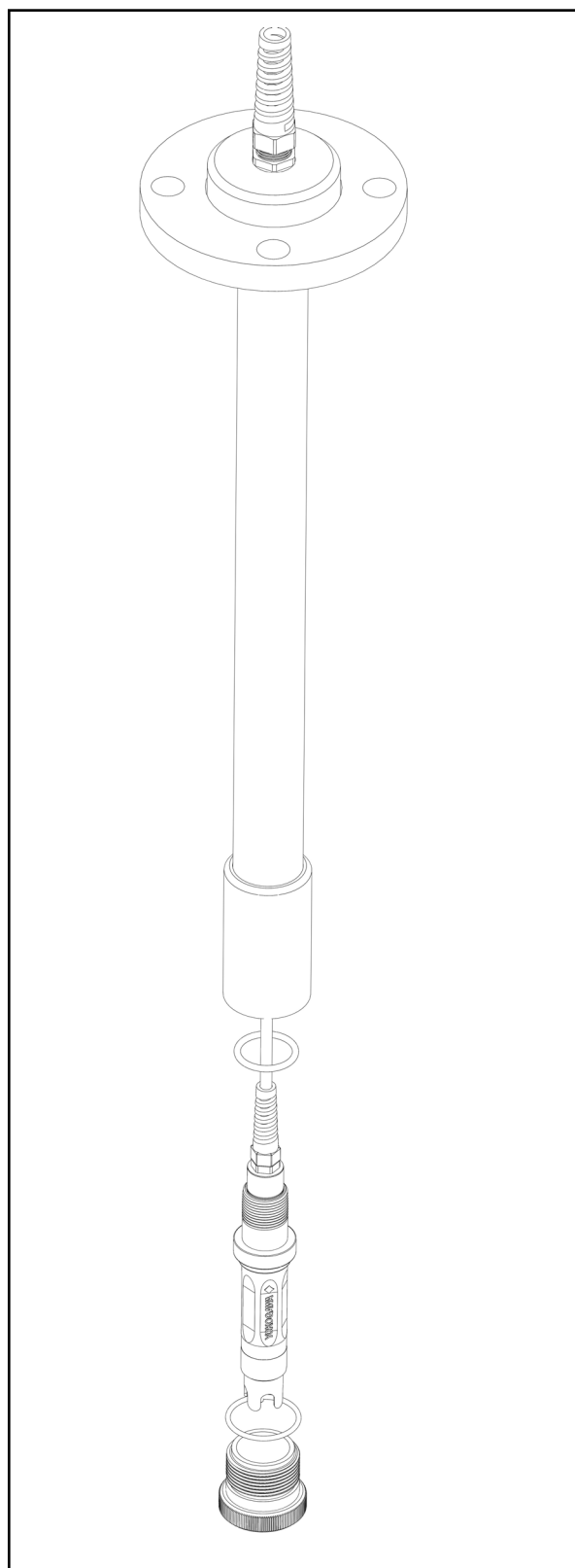
**Figure 9:** FS40 in combination with FU20 (non-collar body) using spare part number K1523DD adapter



**Figure 10:** FS40 in combination with FU20 collar body

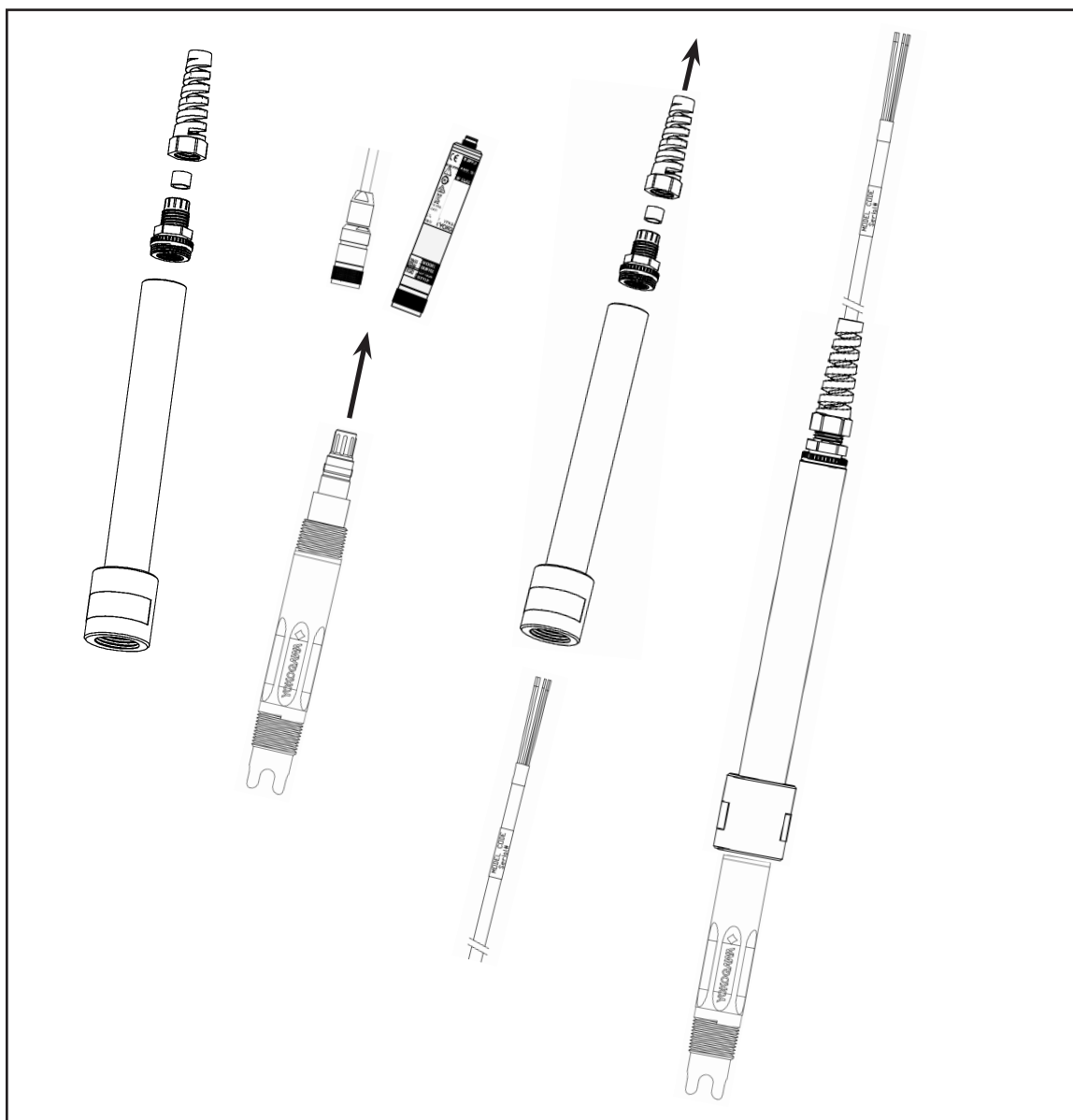


**Figure 11:** FD40V28 in combination with FU20 (non-collar body) using spare part number K1523DD adapter



**Figure 12:** FD40V28 in combination with FU20 collar body

### Installation examples using the K1522PS protection sleeve



**Figure 13:** Installation using the protection sleeve K1522PS

**Note:** For details on installation FU20 sensor using protection sleeve please use instruction from SD 12A06K01-00EN-P

## ■ Addendum 2: Available Models

**Table 4: FU20 Available models**

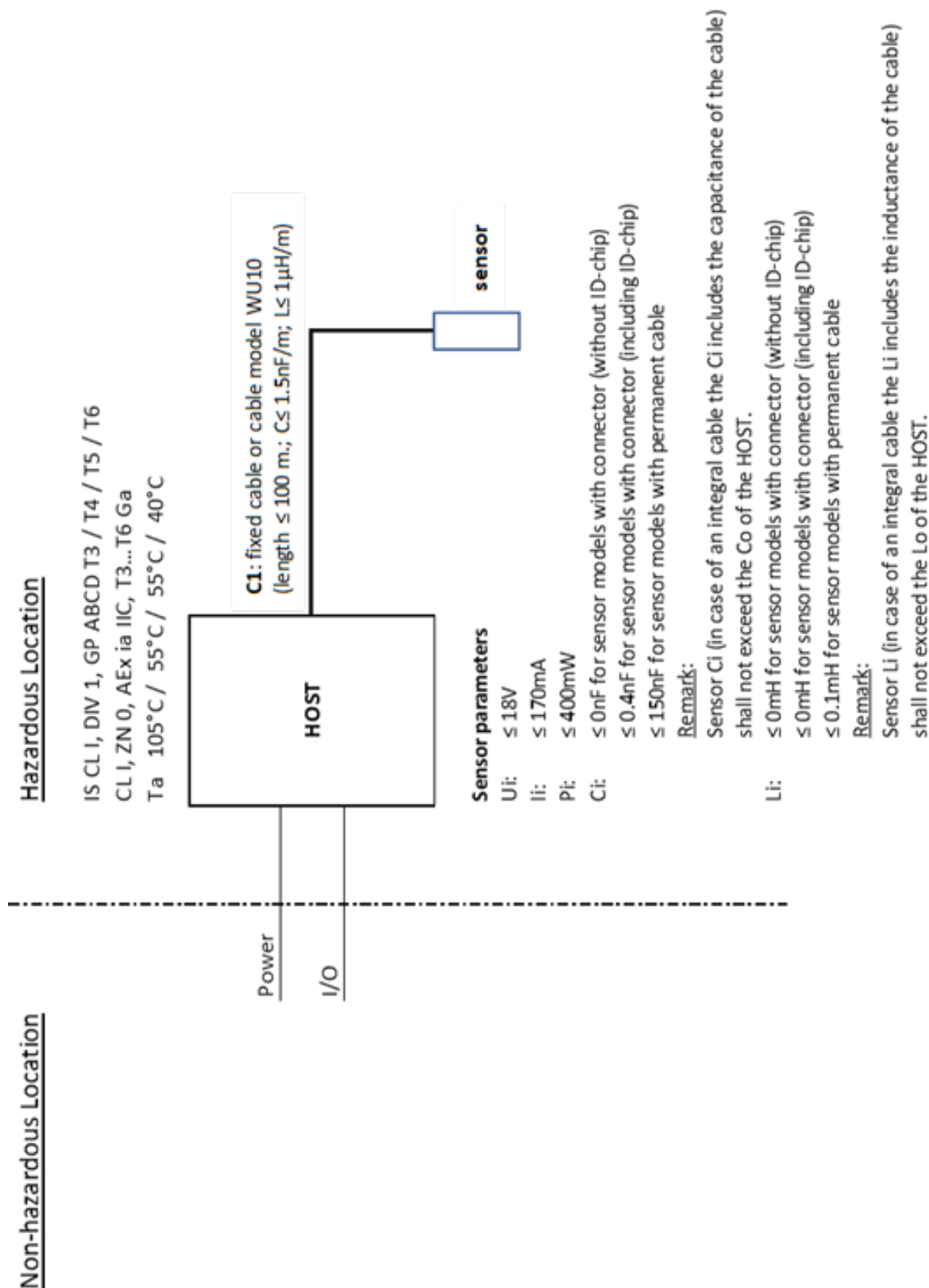
Available Models
FU20-03-CG-NPT
FU20-05-CG-NPT
FU20-10-CG-NPT
FU20-20-CG-NPT
FU20-03-CG-FSM
FU20-05-CG-FSM
FU20-10-CG-FSM
FU20-20-CG-FSM
FU20-VP-CG-NPT
FU20-VP-CG-FSM
FU20-VP-CG-FTD
FU20-VP-CG-FTS
FU20-VS-CG-NPT
FU20-VS-CG-FSM
FU20-VS-CG-FTD
FU20-VS-CG-FTS
FU20-VS-CG-MTS
FU20-03-T1-NPT
FU20-05-T1-NPT
FU20-10-T1-NPT
FU20-20-T1-NPT
FU20-03-T2-NPT*
FU20-05-T2-NPT*
FU20-10-T2-NPT*
FU20-20-T2-NPT*
FU20-03-T1-FSM
FU20-05-T1-FSM
FU20-10-T1-FSM
FU20-20-T1-FSM
FU20-03-T2-FSM*
FU20-05-T2-FSM*
FU20-10-T2-FSM*
FU20-20-T2-FSM*
FU20-VP-T1-NPT
FU20-VP-T2-NPT*

Available Models
FU20-VS-T1-NPT
FU20-VP-T1-FSM
FU20-VP-T2-FSM*
FU20-VS-T1-RCF
FU20-VS-T1-FSM
FU20-VP-T1-FTD
FU20-VS-T1-RCD
FU20-05-T1-MTD
FU20-VS-T1-FTD
FU20-VP-T1-FTS
FU20-VS-T1-FTS
FU20-VS-T1-MTS

\*Models with -T2 suffix will be discontinued within 2026.

## ■ Addendum 3: Control Drawings

Control drawing: D&E 2020-023-A50 (part 1)





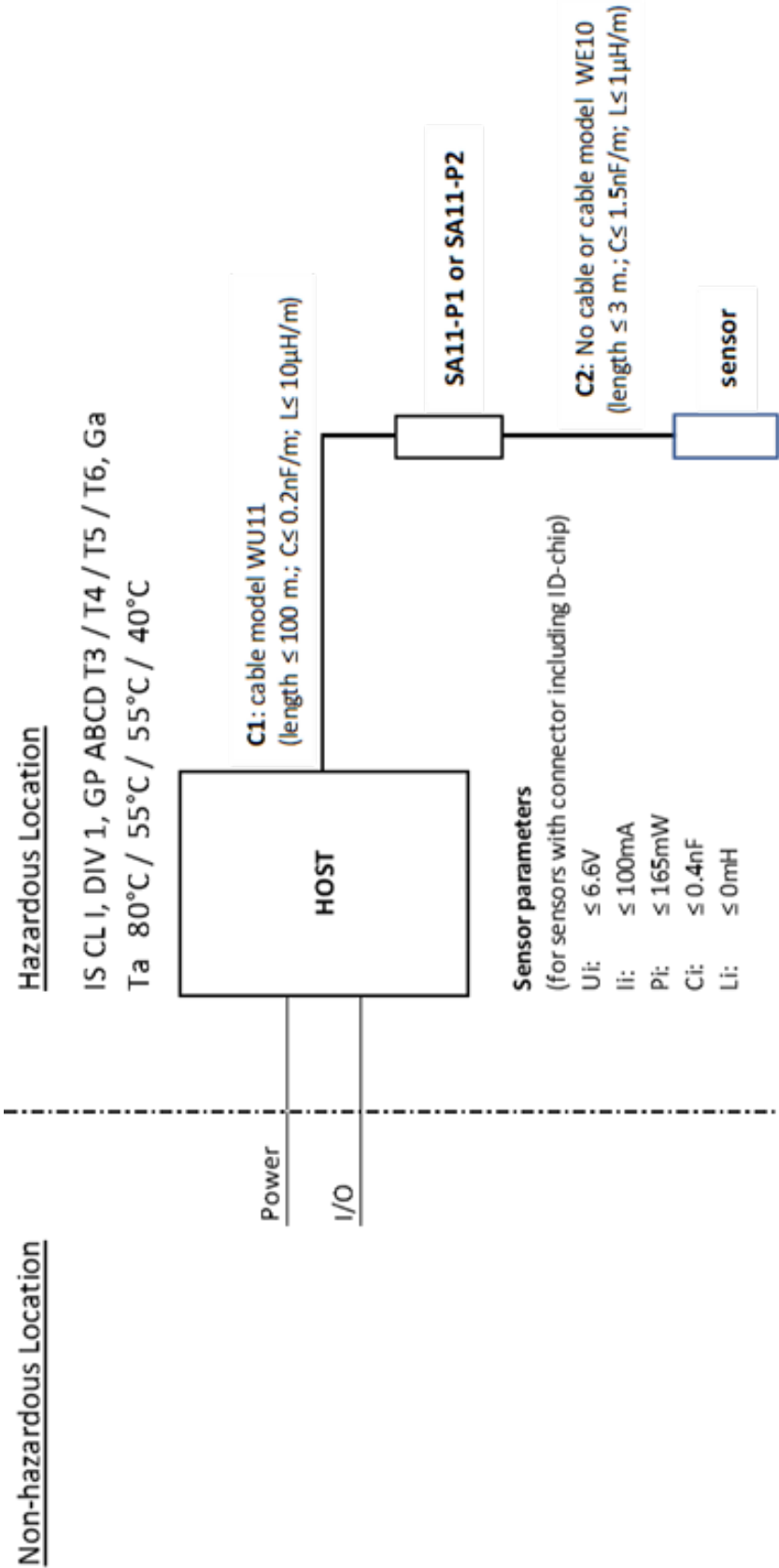
## Remarks:

1. No revision to this drawing without prior approval of FM.
2. Installation must be in accordance with the National Electrical Code (ANSI/NFPA 70), ANSI/ISA-RP12.06.01, and relevant local codes.
3. The sensor shall be installed to a certified intrinsically safe HOST with the following maximum values:  $U_o = 18\text{ V}$ ,  $I_o = 170\text{ mA}$ ,  $P_o = 400\text{ mW}$ .
4. The sensor does not provide isolation from earth. Installers shall take necessary measures to prevent the possibility of sparking resulting from differing earth potentials between the sensors and interconnecting equipment. This can be realized for example by selecting interconnecting equipment which provides input-to-output and input-to-earth isolation up to 500 V rms.
5. Sensor Model code:

**Table 5: Regulatory compliance**

Model	Suffix Codes	Option Codes
FU20	-ab-cd-efg	/h
ab	Connection type:	Two alphanumeric characters identifying the length of the permanent cable, each character from 0 to 9 VP Connector without ID-chip VS Connector with ID-chip
cd	Temperature sensor + Region:	T1 Pt1000, IS for ATEX/IECEX, FM-US, FM-CAN
efg	Type:	NPT PPS body/Tapered Thread/Dome shaped FSM PPS body/Tapered Thread/Flat Surface FTD PVDF body/Tapered Thread/Dome shaped
h	Option code:	Up to ten alphanumeric characters (A to Z, 0 to 9 or hyphen)

6. WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS
  - pH sensors containing accessible plastic parts and/or external conductive parts, must be installed and used in such a way, that dangers of ignition due to hazardous electrostatic charges cannot occur, especially in the case that the process medium is non-conductive.



**Remarks:**

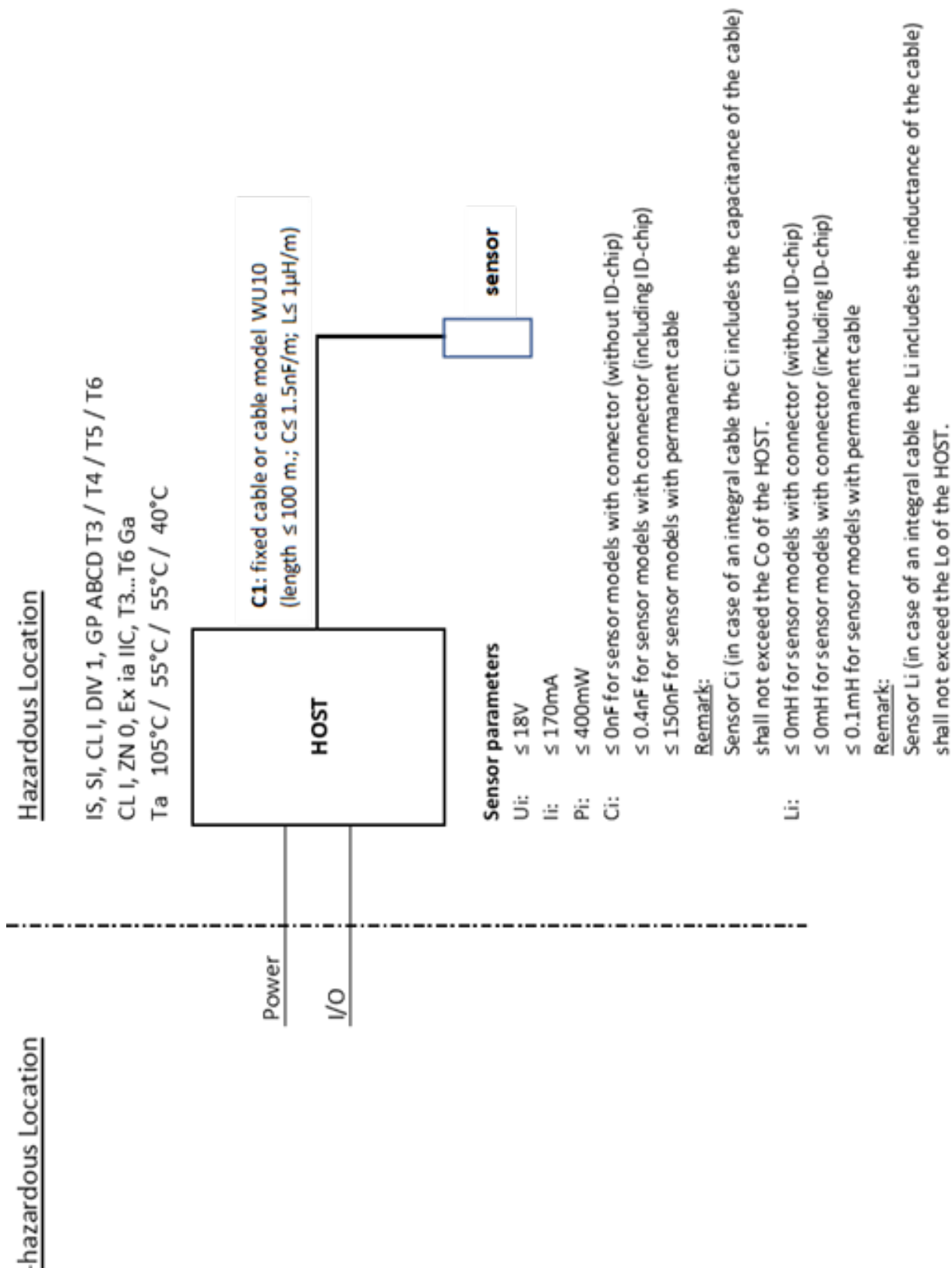
1. No revision to this drawing without prior approval of FM.
2. Installation must be in accordance with the National Electrical Code (ANSI/NFPA 70), ANSI/ISA-RP12.06.01, and relevant local codes.
3. The sensor shall be installed to a certified intrinsically safe Smart Adapter, model SA11-P1 with the following maximum values:  $U_o = 6.6 \text{ V}$ ,  $I_o = 100 \text{ mA}$ ,  $P_o = 165 \text{ mW}$ .
4. The installers shall take necessary measures to prevent the possibility of sparking resulting from differing earth potentials between the sensors and interconnecting equipment. The sensor itself does not provide 500 V rms isolation from earth, the interconnecting equipment Model SA11-P1 Smart Adapter however provide this required isolation.
5. Sensor Model code:

**Table 6: Regulatory compliance**

Model	Suffix Codes	Option Codes
FU20	-ab-cd-efg	/h
ab	Connection type:	VS Connector with ID-chip
cd	Temperature sensor + Region:	T1 Pt1000, IS for ATEX/IECEEx, FM-US, FM-CAN
efg	Type:	NPT PPS body/Tapered Thread/ Dome shaped
		FSM PPS body/Tapered Thread/Flat Surface
		FTD PVDF body/Tapered Thread Dome shaped
h	Option code:	Up to ten alphanumeric characters (A to Z, 0 to 9 or hyphen)

6. WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS
  - pH sensors containing accessible plastic parts and/or external conductive parts, must be installed and used in such a way, that dangers of ignition due to hazardous electrostatic charges cannot occur, especially in the case that the process medium is non-conductive.

Control drawing: D&amp;E 2020-023-A51 (part 1)



## Remarks:

1. No revision to this drawing without prior approval of FM.
2. Installation must be in accordance with the Canadian Electrical Code (CEC) CSA22.1, and relevant local codes.
3. The sensor shall be installed to a certified intrinsically safe HOST with the following maximum values:  $U_o = 18\text{ V}$ ,  $I_o = 170\text{ mA}$ ,  $P_o = 400\text{ mW}$ .
4. The sensor does not provide isolation from earth. Installers shall take necessary measures to prevent the possibility of sparking resulting from differing earth potentials between the sensors and interconnecting equipment. This can be realized for example by selecting interconnecting equipment which provides input-to-output and input-to-earth isolation up to 500 V rms.
5. Sensor Model code:

**Table 7: Regulatory compliance**

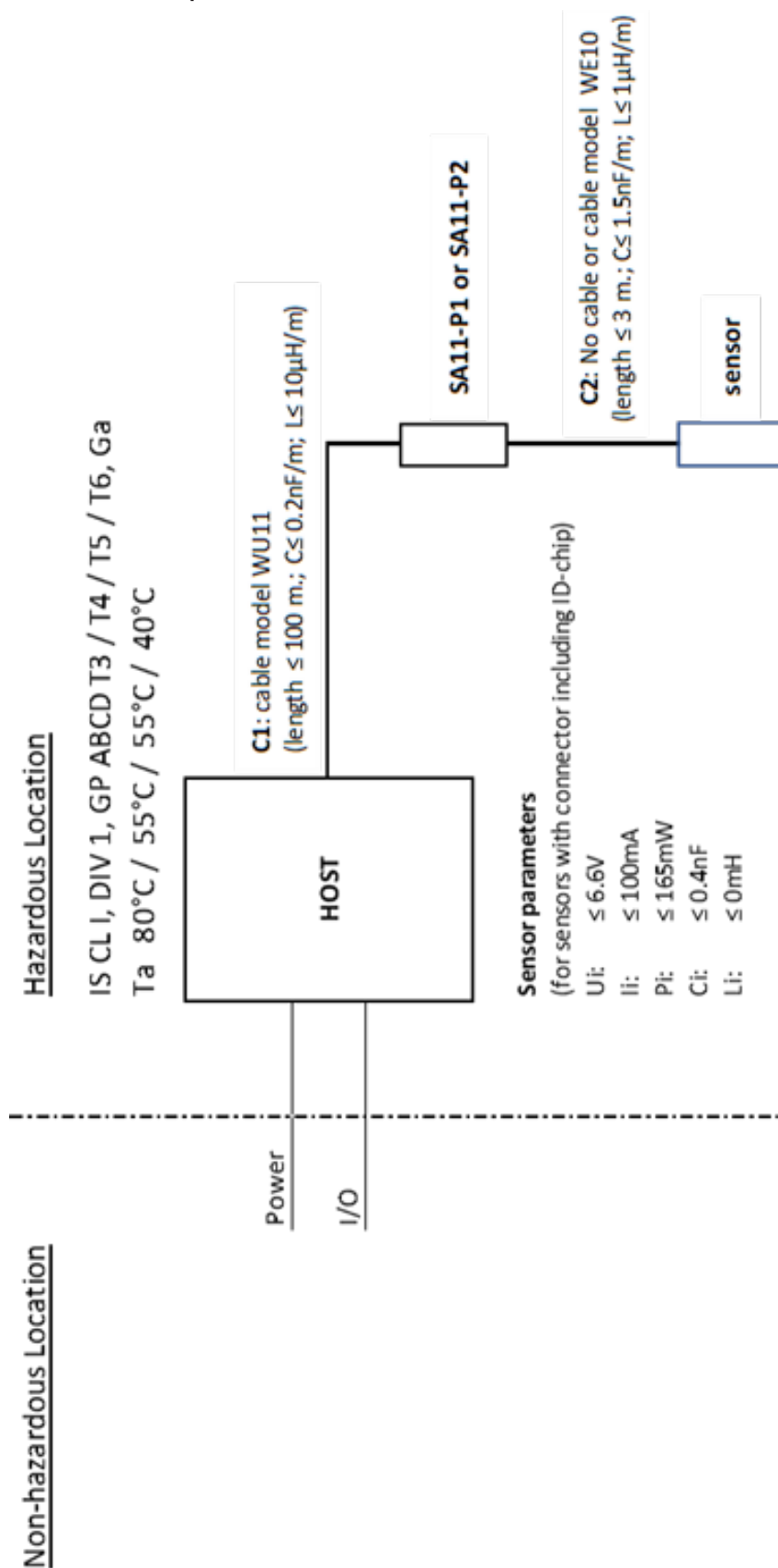
Model	Suffix Codes	Option Codes
FU20	-ab-cd-efg	/h
ab	Connection type:	Two alphanumeric characters identifying the length of the permanent cable, each character from 0 to 9 VP Connector without ID-chip VS Connector with ID-chip
cd	Temperature sensor + Region:	T1 Pt1000, IS for ATEX/IECEX, FM-US, FM-CAN
efg	Type:	NPT PPS body/Tapered Thread/ Dome shaped
		FSM PPS body/Tapered Thread/Flat Surface
		FTD PVDF body/Tapered Thread/ Dome shaped
h	Option code:	Up to ten alphanumeric characters (A to Z, 0 to 9 or hyphen)

6. WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS
  - pH sensors containing accessible plastic parts and/or external conductive parts, must be installed and used in such a way, that dangers of ignition due to hazardous electrostatic charges cannot occur, especially in the case that the process medium is non-conductive.

**AVERTISSEMENT – DANGER POTENTIEL DE CHARGES ÉLECTROSTATIQUES – VOIR LES INSTRUCTIONS**

Les sondes de pH contenant des pièces en plastique accessibles et / ou des pièces conductrices externes doivent être installées et utilisées de manière à éviter tout risque d'inflammation dû à des charges électrostatiques dangereuses, en particulier dans le cas où le fluide de procédé n'est pas conducteur.

Control drawing: D&amp;E 2020-023-A51 (part 2)



## Remarks:

1. No revision to this drawing without prior approval of FM.
2. Installation must be in accordance with the Canadian Electrical Code (CEC) CSA22.1, and relevant local codes.
3. The sensor shall be installed to a certified intrinsically safe Smart Adapter, model SA11-P1 with the following maximum values:  $U_o = 6.6 \text{ V}$ ,  $I_o = 100 \text{ mA}$ ,  $P_o = 165 \text{ mW}$ .
4. The installers shall take necessary measures to prevent the possibility of sparking resulting from differing earth potentials between the sensors and interconnecting equipment. The sensor itself does not provide 500 V rms isolation from earth, the interconnecting equipment Model SA11-P1 Smart Adapter however provide this required isolation.
5. Sensor Model code:

**Table 8: Regulatory compliance**

Model	Suffix Codes	Option Codes
FU20	-ab-cd-efg	/h
ab	Connection type:	Two alphanumeric characters identifying the length of the permanent cable, each character from 0 to 9 VS Connector with ID-chip
cd	Temperature sensor + Region:	T1 Pt1000, IS for ATEX/IECEX, FM-US, FM-CAN
efg	Type:	NPT PPS body/Tapered Thread/ Dome shaped
		FSM PPS body/Tapered Thread/Flat Surface
		FTD PVDF body/Tapered Thread Dome shaped
h	Option code:	Up to ten alphanumeric characters (A to Z, 0 to 9 or hyphen)

6. WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS
  - pH sensors containing accessible plastic parts and/or external conductive parts, must be installed and used in such a way, that dangers of ignition due to hazardous electrostatic charges cannot occur, especially in the case that the process medium is non-conductive.

**AVERTISSEMENT – DANGER POTENTIEL DE CHARGES ÉLECTROSTATIQUES – VOIR LES INSTRUCTIONS**

Les sondes de pH contenant des pièces en plastique accessibles et / ou des pièces conductrices externes doivent être installées et utilisées de manière à éviter tout risque d'inflammation dû à des charges électrostatiques dangereuses, en particulier dans le cas où le fluide de procédé n'est pas conducteur.

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