

# FLUENTA CABLES

# HAZARDOUS AREA APPROVED POWER & COUPLING CABLES

#### PRODUCT INFORMATION

Whether it is providing power to our FGM 160 Field Computer or connecting it to our transducers, Fluenta cables have been specifically designed to work with our equipment and ensure readings of the highest accuracy and precision possible. They offer optimal conditions for signal transmission and eliminate external interference which might degrade or interrupt data transmission, enabling the user to squeeze out every ounce of performance from the system.

While we offer a range of standard lengths, they can be customised as per customer requirements up to

a maximum length of 50 meters for the TFS system and 20 meters for the FlarePhase system.

Furthermore, Fluenta cables meet the most stringent safety requirements to ensure safe operation while being deployed in even the most hazardous of conditions. They have been certified for use in hazardous areas with our FGM 160 Computer and the full range of transducer options that we offer and are mandatory to use with our products to ensure full compliance. They are also intrinsically safe.

#### **FLUENTA CABLE TYPES**

### **FGM160 Power Cable**

To provide power to our FGM 160 Field Computer, Fluenta uses an RFOU(i) cable which is a flame retardant, mud resistant, halogen-free cable suitable to be used as a fixed installation for instrumentation, communication, control and alarm systems in EX (zone 0, 1 & 2). It is constructed of a tinned, annealed, stranded copper as the conductor, followed by 8 layers of protection; an EP-rubber insulation, polyester tape, 3-layers of PETP-tape, a flame retardant and halogen-free thermoset compound bedding, tinner copper wire braid for armour and a flame retardant, halogen-free and mud resistant thermoset compound as the outer most layer.

While Fluenta prefers the usage of this cable as the Power Cable, alternatives may also be available on request if additional specifications are required.

#### **Transducer Coupling Cable**

Coupling between the transducers and the FGM 160 field computer is provided with either a RFOU(c) cable and/or a RFOU(i) cable. Is it mandatory for the coupling to be done only by Fluenta supplied cables.

Both are again flame retardant, mud resistant, halogen-free cables which are suitable for use as a fixed installation for instrumentation, communication, control and alarm systems in EX (zone 0, 1 & 2). Similar to the RFOU(i), the RFOU(c) also contains a tinned, annealed, stranded copper as the conductor, but instead of 3 layers of PETP-tape, it contains 2 layers of PET-tape.

The cables are rated to an operating voltage of 250 Volts and can be operated up to a maximum conductor temperature of 90°C. Installation can also be carried out at a minimum temperature of -20°C.



# **FLUENTA CABLES SPECIFICATIONS**

	RFOU (i)	RFOU (c)
Operating voltage	250 V	250 V
Max operating conductor temperature	90°C	90°C
Min installation temperature	-20°C	-20°C
Min bending radius free installation	8*D	8*D
Min bending radius fixed installation	6*D	8*D

#### **Standards**

Design	IEC 60092-376 (2003-05)	IEC 60092-376 (2003-05)
Conductor	IEC 60228 class 2	IEC 60228 class 2
Insulation	IEC 60092-360	IEC 60092-351
Sheath	IEC 60092-361	IEC 60092-359
Flame Retardant	IEC 60332-2	IEC 60332-1
Halogen Free	IEC 60754-1,2	IEC 60754-1,2
Low Smoke	IEC 61034-1,2	IEC 61034-1,2
Mud Resistant	NEK TS 606:2009	NEK TS 606:2009

