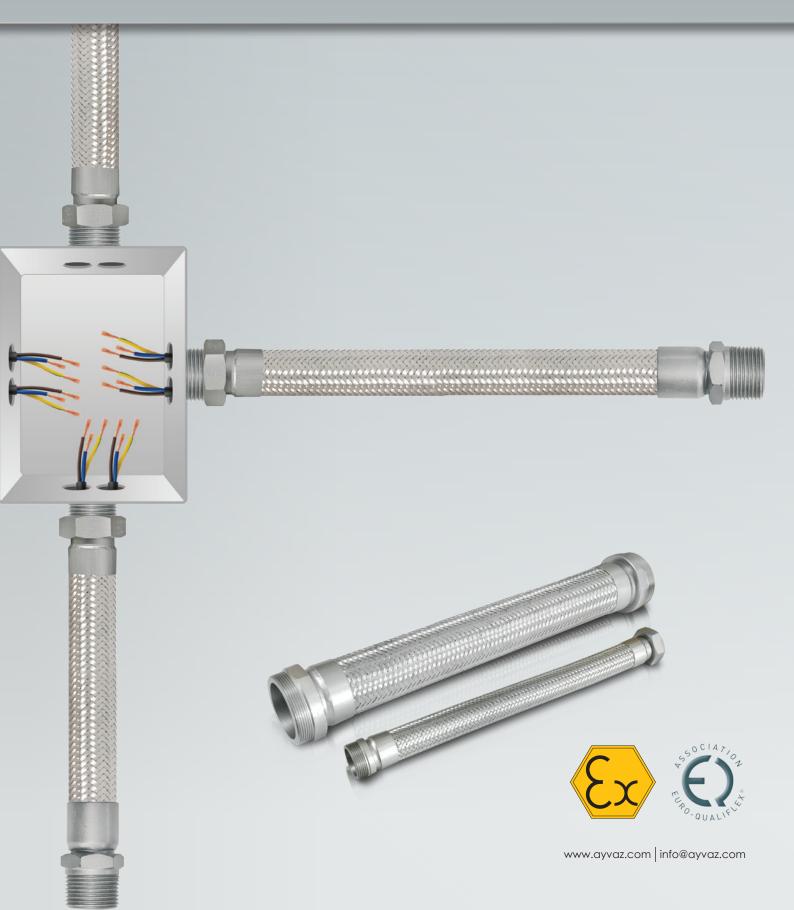


## FLEXIBLE, EX-PROOF PROTECTION HOSES



# **AYVAZ**

### FLEXIBLE, EX-PROOF PROTECTION HOSES

#### **Meaning of Explosion Proof**

The petroleum usually evaporates in normal temperature, and is dangerous enough to be ignited or explode by a tiny electric spark including open-close operation of a switch or a static spark according to its evaporative condition or temperature. Also, gases including LPG and LNG could cause the exactly same dangerous condition when leaked and mixed with the air. Where this phenomenon happens is called, "Hazardous area" and any electric equipment used there is required to be "Explosion-proof".

Explosion proof is a term used to describe electrical and non-electrical fixtures that are designed and constructed to both withstand explosions and prevent explosions from occurring.

#### **Explosion Proof Class Ratings**

#### Class I

Environments containing flammable gases or vapors.

#### Class II

Environments containing combustible dusts.

#### Class III

Environments containing easily ignitible fibers or flyings

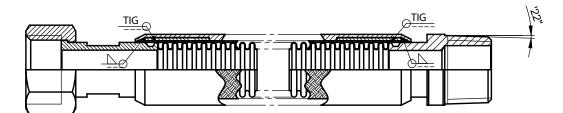
#### Flexible Metal Hose as Explosion Proof Apparatus

According to NFPA (National Fire Protection Association) "Apparatus enclosed in a case that is capable of withstanding an explosion of a specific gas or vapor that mayoccur within it and of preventing the ignition of a specified gas or vapor surrounding the enclosure by sparks, flashes, or explosion of the gas or vapor within, and that operates at such an external temperature that a surrounding flammable atmosphere will not be ignited thereby."

Ayvaz flexible metal hoses are widely used as a protective cover for electric cables which are potentially subjected to produce sparks or arcs. Main purpose of the hoses is to prevent.

#### **HOSE DIMENSIONS**

DN 32 (11/4")
DN 40 (11/2")
DN 50 (2")
DN 65(21/2")
DN 80 (3")
DN 100(4")



## Hazardous areas that needs explosion-proof electric apparatus.

- 1. Petro-based product factory
- 2. Petroleum refinery plant
- 3. Tunnel digging site (Methane gas)
- 4. LP gas filling-up station
- 5. Crude oil base, LNG base
- 6. Petro/natural gas stockpiling area
- 7. Thermal power plant
- 8. Dyeing Factory (Paint)

#### Service Life and Installation

Service life of the hose is mainly dependent on the working conditions, application angle and temperature, correct installation is also very influential on the service life. For optimum service life of the hose assembly following features should be provided; The hose line should be installed without exposed to twisting.

- No torsion stress must occur neither during the assembly, nor the operating. Otherwise, the service life of the hose falls.
- Both ends of the hose and the movement must be on the same plate.

• Only one end of the hose must be tightened first to be assured that no twisting on the hose assembly occurs. Afterwards, the hose must complete its movement for couple time while it is in neutral position under no torsions.

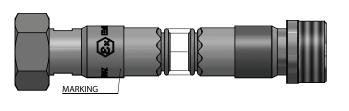
• Finally the other end of the hose must be connected.

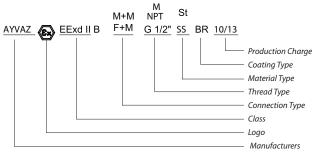


#### HOSE FEATURES

Hose Material:	Stainless Steel AISI 316L				
Braiding Material:	Stainless Steel AISI 304				
Fifings:	Carbon Steel – Stainless Steel				
Certificate:	IEP 13 ATEX 0184U				
Application:	ll 2 G Ex-e II C/Gb;I M2 II 2 G Ex-tb II C/Db; IP66/67				
Area:	Zone 1 &2; 21 & 22				
Temperature:	-20/+80 °C				







AYVAZ EX-PROOF CABLE PROTECTION SLEEVE TABLE								
L Length				Estamol Dis	Thursday Circ	Connection Type		
500 MM CODE	700 MM CODE	1000 MM CODE	- Internal Dia. External D		Thread Size	Connection Fittings		
AFH1-50	AFH1-70	AFH1-100	16	24	1/2"			
AFH2-50	AFH2-70	AFH2-100	20	29	3/4"			
AFH3-50	AFH3-70	AFH3-100	25	35	1"			
AFH4-50	AFH4-70	AFH4-100	32	44	11/4"	M-M M-F F-F		
AFH5-50	AFH5-70	AFH5-100	40	54	11/2"			
AFH6-50	AFH6-70	AFH6-100	50	66	2"			
AFH7-50	AFH7-70	AFH7-100	65	82	21/2"			
AFH8-50	AFH8-70	AFH8-100	80	100	3"			
AFH9-50	AFH9-70	AFH9-100	100	122	4''			





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