



'AK FMH' Series

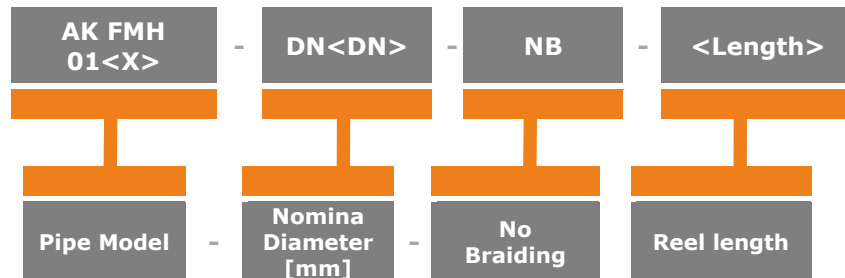
## Stainless Steel AISI316L Corrugated Flex Metal Hose

### General Specs

- Corrugated flex metal hose made of stainless steel 1.4404 / AISI 316L.
- Fittings (Brass, Steel, nickel).
- Hand tools for machining fittings.

### Applications

- Primary Circuit for Domestic Solar Hot Water.
- Heating Circuits for stoves.
- Cooling Circuits.



### Example

AK FMH 011 – DN16 – NB – 50

### Description

Corrugated flex metal hose model 'AK FMH 011' with nominal diameter of 16mm, no braiding, 50m reels.

**Main Features****AK FMH 011**

- Made of 1.4404 /AISI 316L steel.
- Conform to EN 10380.
- Service temperature -270 y +600°C.
- Thermal Conductivity (100°C): 16W/(m·K).
- Heating and cooling circuits for solar industry, water stoves, boilers, fusion energy sensor holders, ...

| Product Code     | Ø Nominal [mm] | Ø int. [mm] | Ø ext. [mm] | Bending radio (min, non recover) [mm] | Bending radio (dinamic, recovers) [mm] | Working Pressure [bares] | Fittings [inches] | thickness | Volume [l/m] | Surface [cm2/m] | Weight [gr/m] |
|------------------|----------------|-------------|-------------|---------------------------------------|--|--------------------------|-------------------|-----------|--------------|-----------------|---------------|
| AK FMH011DN12 NB | 12             | 12,6        | 16,7        | 20                                    | 165                                    | 14                       | 1/2"              | 0,18mm    | 0,17         | 722,95          | 104           |
| AK FMH011DN16 NB | 16             | 16,5        | 21,4        | 25                                    | 195                                    | 8                        | 3/4"              | 0,18mm    | 0,28         | 935,15          | 134           |
| AK FMH011DN20 NB | 20             | 20,5        | 26,7        | 30                                    | 225                                    | 8                        | 1"                | 0,18mm    | 0,44         | 1164,61         | 167           |
| AK FMH011DN25 NB | 25             | 25,6        | 31,7        | 35                                    | 260                                    | 8                        | 1.1/4"            | 0,20mm    | 0,65         | 1413,82         | 260           |
| AK FMH011DN32 NB | 32             | 33,2        | 40,8        | 48                                    | 365                                    | 12                       | 1.1/2"            | 0,30mm    | 1,12         | 2280,79         | 498           |

## Main Features

## AK FMH 012

- Made of 1.4404 /AISI 316L steel.
- Conform to EN 10380.
- Service temperature -270 y +600°C.
- Thermal Conductivity (100°C): 16W/(m·K).
- Heat exchangers.

| Product Code     | Ø Nominal [mm] | Ø int. [mm] | Ø ext. [mm] | Working Pressure [bares] | Fittings [inches] | thickness | Volume [l/m] | Surface [m <sup>2</sup> /m] |
|------------------|----------------|-------------|-------------|--------------------------|-------------------|-----------|--------------|-----------------------------|
| AK FMH012DN16 NB | 16             | 16,7        | 21,8        | 20                       | 1/2"              | 0,30mm    | 0,282        | 0,099                       |
| AK FMH012DN20 NB | 20             | 20,0        | 26,2        | 12                       | 3/4"              | 0,30mm    | 0,435        | 0,138                       |
| AK FMH012DN25 NB | 25             | 24,7        | 31,6        | 12                       | 1"                | 0,30mm    | 0,646        | 0,154                       |
| AK FMH012DN32 NB | 32             | 33,2        | 40,8        | 12                       | 1.1/4"            | 0,30mm    | 1,125        | 0,228                       |
| AK FMH012DN40 NB | 40             | 37,2        | 47,5        | 10                       | 1.1/2"            | 0,40mm    | 1,606        | 0,271                       |
| AK FMH012DN50 NB | 50             | 48,0        | 58,7        | 8                        | 2"                | 0,40mm    | 2,412        | 0,354                       |

# Installation

Following these instructions should be necessary for keeping pipe life.

### Think about "Live Length".

Live length refers to the flexible portion of the hose assembly. Be care with fittings, bending and repetitive flexing. Never attempt to compress/stretch a hose assembly

### Avoid abrasion.

Constant rubbing or external abrasion will damage surface. In case you can not avoid abrasión, choose some kind of external cover (PVC, rubber, armor casing,...).

### Avoid supporting weight.

The Hose assembly should never support weight of other elements (valves, piping, ...).

### Keep surfaces clean.

Proper cleaning removes corrosive materials and residual product which can attack the hose.

### Never torque a hose assembly.

Hose assemblies are not designed to withstand twisting or torsional forces. Torque can occur upon installation or when the hose is in use, through out of plane flexing. When installing a metal hose, always use two wrenches, one to hold the hose to prevent it from twisting and the other to tighten the fitting.

Always make sure that movement stays in the same plane as hose installation. Always use the proper hose length. Too short hose assemblies can exceed bend radius causing stress and premature failure. Use elbows to avoid too sharp bends.

