



# HYDRAWISE FLOW METER SHIELDED COMMUNICATION CABLE

# HC-FMC0210xxx Direct Burial

INSULATION: PVC V90 to AS/NZS 3808:2000 - Yellow and Grey Cores

SHEATH: Aluminium Shield and PE Sheath

SHEATH COLOUR: Blue (PMS280C)

SIZE: 1.0mm<sup>2</sup> - Twisted 2 Core with Drain Wire

#### SCOPE:

This specification covers requirements for a direct burial shielded cable designed to communicate signals between a Hunter Industries Hydrawise flow meter and Hydrawise Irrigation Controllers models HC, HPC, Pro-HC and HCC. The cable utilizes stranded insulated conductors, aluminium shield and drain wire to minimize electrical, magnetic, and radio frequency interference.

#### **PHYSICAL SPECIFICATIONS:**

1.0mm<sup>2</sup> 2 cores of 7/0.43 multi stranded class 2 plain copper conductor to AS1125, insulated with V90 PVC insulation, are sheathed with a PE sheath. This cable is suitable for direct burial. Insulation and sheath are UV stabilised.

# MANUFACTURER'S IDENTIFICATION:

Surface marked with HYDRO CONNECT HYDRAWISE FLOW METER DIRECT BURIAL COMMUNICATION CABLE , HC-FMC0210  $\,$  2 core 1.0mm², batch number, sequential meterage every 1 meter  $\,$  001M  $\,$  >I $\,$ < , RoHS.

Printed on sheath, low number on bottom of spool, high number on top.

# **SPLICING RECOMMENDATIONS**

It is not recommended that communication cable be joined between the Hydrawise flow meter and the Hydrawise Irrigation Controller. The maximum recommended cable length between the flow meter and controller is 300m.

#### **DRAIN WIRE GROUNDING**

The drain wire permits a continuous, low-resistance connection to the cable's metallic shield, resulting in very effective grounding.

Rules for grounding shielded cable:

- One end of the drain wire needs to be connected to ground, never connect both ends to ground.
- Cable grounding should be isolated from other grounding systems.
- Ground the drain wire via the shortest route.

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		Number of Strands x		Max D.C. Resistance			
	Number	Wire Dia	Area	at 20°C	Thickness	Thickness	Nominal
Code	of Cores	(mm)	$(mm^2)$	$(m\Omega/m)$	(mm)	(mm)	O.D. (mm)
Circular 2 Core & Drain							
HC-FMC0210xxx	2	7/0.43	1.0	21.2	0.40	1.2	7.0

## **CONSTRUCTION:**

# Pack Size:

100 and 300 metres. Other custom pack sizes available upon request.

## **Conductors:**

 $1.0 \text{mm}^2$  bunched plain annealed Cu Class 2 7/0.43 conductors conforming to AS1125. Maximum DC resistance of conductors at 20°C 21.2  $\Omega/\text{km}$ 

# Insulation:

V90 PVC insulation nominal thickness 0.4mm, yellow and grey.

## Cable Assembly:

The insulated conductors and the drain wire are twisted together with a 75mm maximum lay. PP fillers are inserted in the valleys to ensure roundness.

#### Shield:

50μ Aluminium PET/23μ Polyester Tape and Drain Wire 7/0.25TAC

## Sheath:

Blue PE sheath nominal thickness 1.2mm, UV stabilised.

