

Active Optical Cable HDMI

Extend your HDMI 2.0 over long distances



Description

In the copper version, the performance of the HDMI 2.0 protocol decreases from 5 meters. Our HDMI 2.0 AOC (Active Optical Cable) is a plug-and-play hybrid cable with copper for the power supply and fiber for the signal. With this technology, you don't need an external power supply, just the power from your source.

Our HDMI 2.0 AOC will enable you to extend this signal up to a maximum of 100 meters without losing performance.

Main features

Main characteristics:

- 100 meters maximum with guaranteed performances.
- HDMI cordset is provided by Amphenol.
- Shock, vibration and traction resistance
- Improved EMI protection
- Mate with our HDMI4TV series (MIL-DTL-38999 series III type) with anti-decoupling device - Shell size 17

Environmental protection:

- Sealing (when mated): IP68 (temporary immersion)
- Salt spray:
 - 48 h - Aluminum shell with Nickel plating ✓
 - 500 h - Aluminum shell with Black zinc nickel plating ✓
 - 500 h - Aluminum shell with Olive drab cadmium plating
 - 500 h - Aluminum shell with Tin-zinc plating ✓ 
 - 500 h - Marine bronze shell ✓
- Humidity: 21 days, 43°C, 98% humidity
- Temperature range: - 40°C / + 85°C
- Cable material in polyurethane

✓: RoHS compliant

AOC HDMI wiring diagram

Câblage Wiring					
HDMI		Numéro de fil Wire number	HDMI		
N° contact Pin number	Nom du signal Signal name		N° contact Pin number	Nom du signal Signal name	
1	DATA2P	Fibre 1 Fiber	1	DATA2P	
3	DATA2N		3	DATA2N	
4	DATA1P	Fibre 2 Fiber	4	DATA1P	
6	DATA1N		6	DATA1N	
7	DATA0P	Fibre 3 Fiber	7	DATA0P	
9	DATA0N		9	DATA0N	
10	CLKP	Fibre 4 Fiber	10	CLKP	
12	CLKN		12	CLKN	
2, 5, 8, 11, 17	GND	1	2, 5, 8, 11, 17	GND	
13	CEC	2	13	CEC	
14	UTILITY	3	14	UTILITY	
15	SCL	4	15	SCL	
16	SDA	5	16	SDA	
18	HDMI_5V	6	18	HDMI_5V	
19	HOT_PLUG	7	19	HOT_PLUG	



Check that the AOC solution is compatible with the configuration.

Markets & Applications



C5ISR, Battlefield Communication



Ground Vehicles



Naval



Applications:

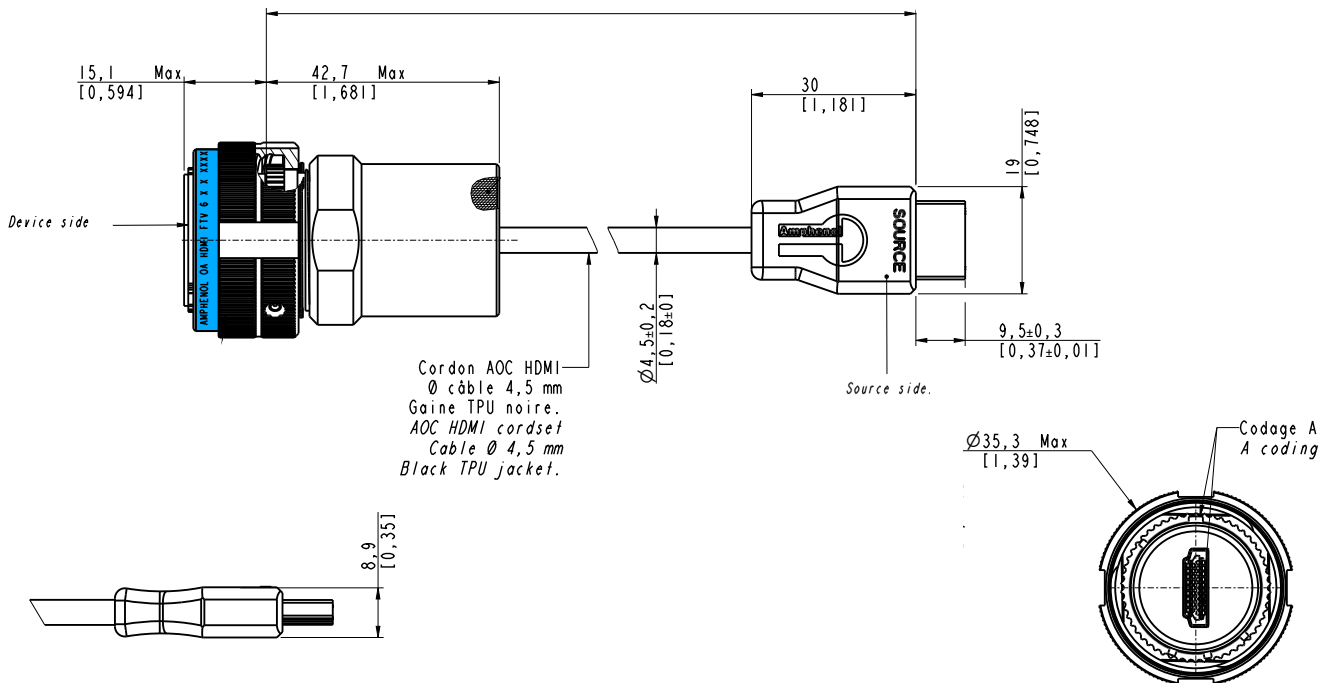
- Displays, Consoles, Visions systems, Situation awareness

Available configurations

Plug with cordset – Shell type 6

Part number type: **OA HDMI FTV 6 X X XXXX**

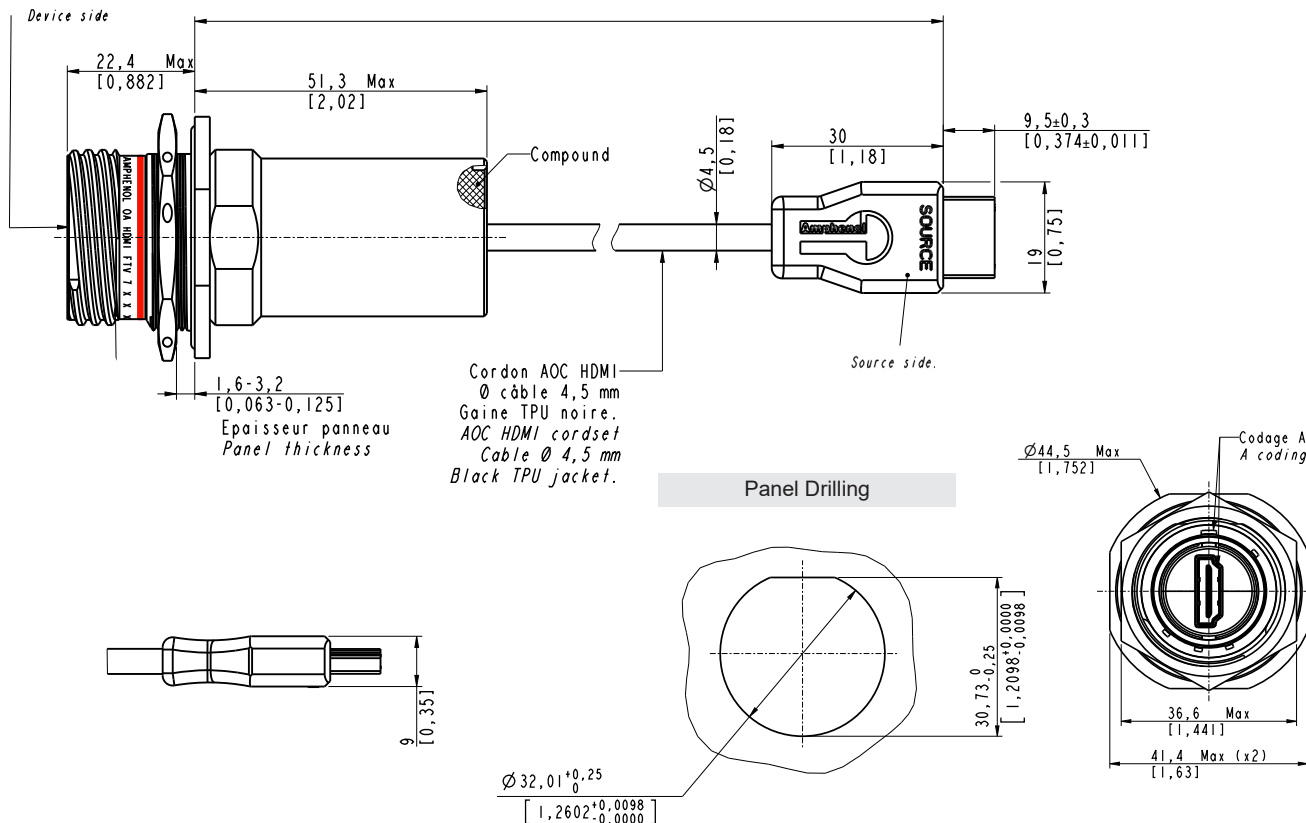
X: see the How to order to complete your part number



Jam nut receptacle – Shell type 7 - Hexagonal nut mounting

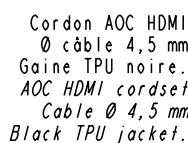
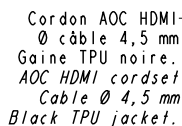
Part number type: **OA HDMI FTV 7 X X XXXX**

X: see the How to order to complete your part number



Square flange receptacle – Shell type 2 - Hexagonal nut mounting

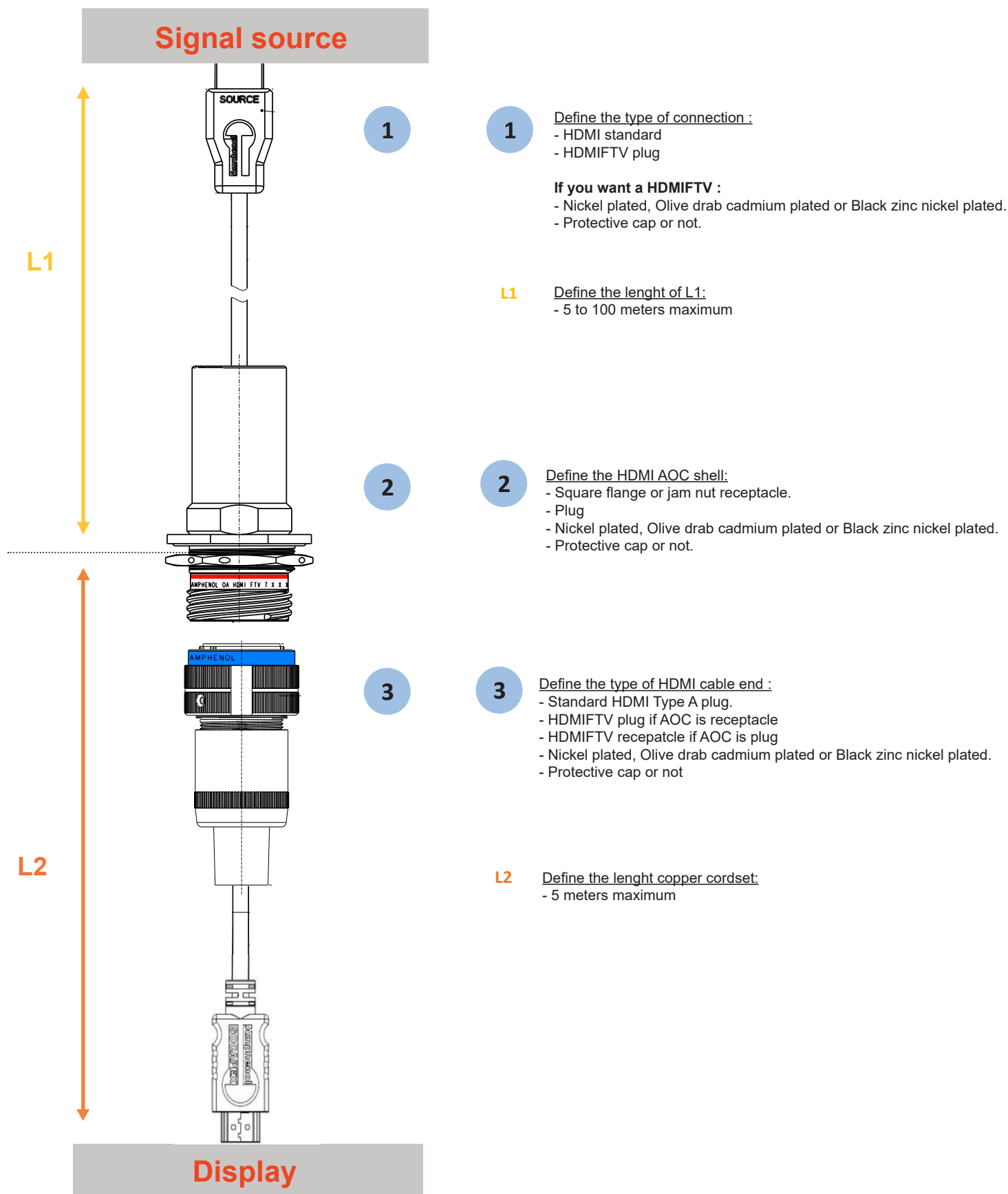
X: see the How to order to complete your part number

Part number type: **OA HDMI FTV 7 X X XXXX F312**



AOC HDMI selection guide

Define your own solution by selecting options in the scheme below



How to order - AOC HDMI

1.	2.	3.	4.	5.
Series	Shell type	Coding	Material and platings	Cordset length
OA HDMI FTV	2	A	G	30

1. Series
OA HDMI FTV

Optical Amplifier HDMI Field

2. Shell type
6
2
7

Plug

Square flange receptacle

Jam nut receptacle

3. Coding
A
B

Coding A

Coding B

4. Material and platings		
	Shell material	Shell plating
G	Aluminum	Olive drab cadmium
N		Nickel ✓
ZN		Black zinc nickel ✓
TZ		Tin Zinc ✓ 
BZ	Bronze ✓	
S	Inox	

 : RoHS compliant

✓ : RoHS compliant

5. Cordset length		
	Meters	Inch
0050	5 m	196,85
● 0075	7,5 m	295,27
● 0100	10 m	393,70
● 0150	15 m	590,55
● 0200	20 m	787,40
0300	30 m	1181,10
0400	40 m	1574,80
0500	50 m	1968,50
1000	100 m	3937,01

● Standard configurations available from stock in our distributors network.

Examples :

Part number	Description
OA HDMI FTV 6 A G 0500	Optical Amplifier HDMI field, plug, coding A, olive drab cadmium plating, 50 meters cordset length
OA HDMI FTV 2 B N 0300	Optical Amplifier HDMI field, square flange receptacle, coding B, nickel plating, 30 meters cordset length
OA HDMI FTV 7 A BZ 1000	Optical Amplifier HDMI field, jam nut receptacle, coding A, bronze shell, 100 meters cordset length



Discover a selection of products compatible with your AOC HDMI :

HDMI FTV



- Shell size 17
- Data transmission :
HDMI 2.0 protocol
18 Gbit/s with 6Gbit/s per lane
4K UHD at 60 Hz

