



- For 100 Mbit/s Ethernet with inherently safe "op is" fiber optic in Cl. I, II, III, Div.1 and Zone 0, 1 or 2
- Range up to 3.1 mi / 5 km (multi-mode) or up to 18.6 mi / 30 km (single-mode)
- Increased temperature range of -22 ... +158 °F / -30 to +75 °C
- Easy commissioning, no configuration required
- Installation in Cl. I, Div. 2, Zone 2 and safe area

MY R. STAHL 9721A



The Media Converter is used to convert electrical Ethernet signals (TX) into optical Ethernet signals (FX). The optical Ethernet signals are used for operation in hazardous areas of Cl. I, II, III Div. 1 and Zone 0, 1, 2 with the type of protection Ex "op is".

Therefore, conventional fiber optic cables can also be used in hazardous areas and may be connected and disconnected during operation (hot swap).


The Media Converter (multi-mode) is suitable for operation of Remote I/O systems IS1+ in Cl. I, Div. 1 and Zone 1.

	NEC® 500 CE Code Appendix J						CE Code Section 18 NEC® 505 NEC® 506						IECEX / ATEX					
	Class I		Class II		Class III		Class I			Class I								
Division	1	2	1	2	1	2	0	1	2	20	21	22	0	1	2	20	21	22
Ex interface	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Installation in		•						•							•			

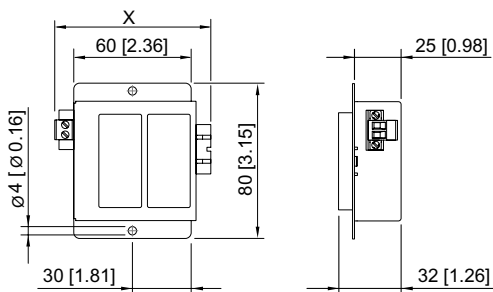
Selection Table							
Product variant	FX op is/TX SC media converter for Zone 2						
FO fiber type	FO transmission distance	Interface 1	Interface 2	Product Type	Art. No.	Weight lb	
Multi-mode	3.1 mi / 5 km [OM3, OM4] 2.8 mi / 4 km [OM1]	1 port, 100BASE-FX MM SC	1 Port, 100BASE-TX, RJ45	9721/13-11-14	220381	0.53 lb	
Product variant	Media converter FX op is / TX SC for Cl. I, Div. 2 and Zone 2						
FO fiber type	FO transmission distance	Interface 1	Interface 2	Product Type	Art. No.	Weight lb	
Single-mode	18.6 mi / 30 km [OS1, OS2]	1 port, 100BASE-FX SM SC	1 Port, 100BASE-TX, RJ45	9721/13-11-54	220382	0.53 lb	

Technical Data	
Explosion Protection	
FMus certificate	FM17US0054X
cFM certificate	FM17CA0030X
cFM certificate	FM17CA0030X
Marking cFMus	Class I, Div. 2, Groups A,B,C,D; Class I, Zone 2, AEx/Ex nA [op is] Group IIC T4 Gc Ta = -30 °C to +75 °C See Doc. 9721 6 031 001 1
IECEX gas explosion protection	Ex ec [op is T6 Ga] IIC T4 Gc
IECEX dust explosion protection	[Ex op is Da] IIIC
Certificates	ATEX (TUR), Canada (FM), China (NEPSI), IECEX (TUR), India (PESO), USA (FM)

Technical Data	
Explosion Protection	
Ship approval	ABS, BVIS, EU RO MR (DNV), KR, LR
Electrical Data	
Ethernet interface connection	RJ 45 plug connector
FO wavelength	1310 nm
FO attenuation	1 dB / km
FO bandwidth	800 MHz * km
FO connection type	SC plug connector
Transfer rate	10/100 Mbit/s Auto-negotiation
FO fiber cross-section	50/125 µm [min. OM2]
FO optical budget	12 dB
Operating mode	Half duplex, Full duplex Auto-MDI(X)
Auxiliary Power	
Nominal voltage V_{nom}	24 V DC
Max. current consumption	200 mA
Max. power consumption	2.5 W
Polarity reversal protection	Yes
Ambient Conditions	
Ambient temperature °F	-22°F ... +167°F
Ambient temperature °C	-30 °C ... +75 °C
Mechanical Data	
Enclosure material	Stainless steel, powder-coated
Degree of protection (IP)	IP20

Accessories				
Figure	Description	Product Type	Art. No.	Weight lb
FO patch cable				
	Patch cable for connection of IS1+ Ethernet CPU 9441 with media converter 9721; plug LC / SC; length 3.8 ft / 3 m	LWL Patch cable LC/SC 3m	220911	

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



	Dimension X
with fiber optic sockets and an auxiliary power connection	81 mm [3.19]
as described above with an installed fiber optic plug	116 mm [4.57]