



ConditionSensor Interface CSI-C-11

Description

The ConditionSensor Interface CSI-C-11 is used to transmit digital sensor signals (Hydac Sensor Interface HSI) into a network protocol (HSI TCP/IP or Modbus® TCP), which can be transmitted to a stationary (i.e. PC) or mobile device (i.e. smartphone) via network cable (LAN) or wireless connection (W-LAN). Moreover, the CSI-C-11 is equipped with an internal memory and can be used as a data logger.

At the interface module, up to two sensors can be connected via M12 connector and supplied with power. In addition, the CSI-C-11 is equipped with an Ethernet connector (M12x1 socket), which allows the integration of connected sensors into company networks or superior condition monitoring (CM) and control systems (PLC). The CSI-C-11 serves as a supplement to the HYDAC ContaminationSensor Module CSM Economy. Thanks to its integrated mounting plate (for wall mounting, for example), it can also be used independently of the CSM-E.

Special Features

- 2 input channels for HYDAC SMART sensors
- Direct connection of the sensors via M12x1 connectors
- Easy network and system integration due to industrial network connectors (M12x1)
- Wireless transmission and visualization of the measured values via W-LAN and FluMoS / FluMoS mobile
- Storage of the measured data directly on the CSI-C-11 (data logger)
- Wireless parameterisation of the interface (i.e. IP address, subnet mask) via W-LAN and FluMoS mobile
- Integrated mounting plate for wall fastening or directly on the HYDAC ConditionSensor Module CSM Economy
- Due to a high protection class of IP 66 no switch cabinet for installation required

Technical specifications

Input data	
HSI interface	HYDAC Sensor Interface for digital coupling of sensors
Output data	
Ethernet 10 Base-T / 100 Base-TX W-LAN (HSI only) 2,4 GHz, IEEE 802.11 b/g/n	Protocol: – HSI TCP/IP (Port 49322) – Modbus® TCP (Port 502)
Ambient conditions	
Operating temperature range	-25 ... +85 °C
Storage temperature range	-30 ... +85 °C
Relative humidity	0 ... 70 %, non-condensing
CE - marked	EN 61000-6-2, EN 61000-6-4
Protection class according to DIN 40050	IP 66
Other data	
Supply voltage	12 ... 24 V DC ± 10 %
Current requirement (module)	100 mA (plus the consumption of the connected sensors)
Sensor supply	12 ... 24 V DC (looped through)
Electrical connection	– Supply voltage: Connector, M12, 5-pole, male – SMART Sensor 1: Connector, M12, 8-pole, female – SMART Sensor 2: Connector, M12, 5-pole, female – LAN: Connector, M12, 4-pole, coding D (according to IEC61076-2-101), female – W-LAN antenna: Connector, RP-SMA socket, female
Parameterisation	via connector M12x1, 5-pole acc. to DIN VDE 0627 or W-LAN (FluMoS mobile)
Dimensions	131 x 77.5 x 35.5 mm
Housing	die cast aluminium
Weight	≈ 360 g
Internal measurement data memory	
Size	64 MB
Measurement interval 60 s	> 1300 days (with CS1000 + HLB1400)
Measurement interval 60 min	> 83000 days (with CS1000 + HLB1400)

Model code

CSI - C - 11 - 000

Product series

CSI = ConditionSensor Interface

Housing

C = Aluminium housing

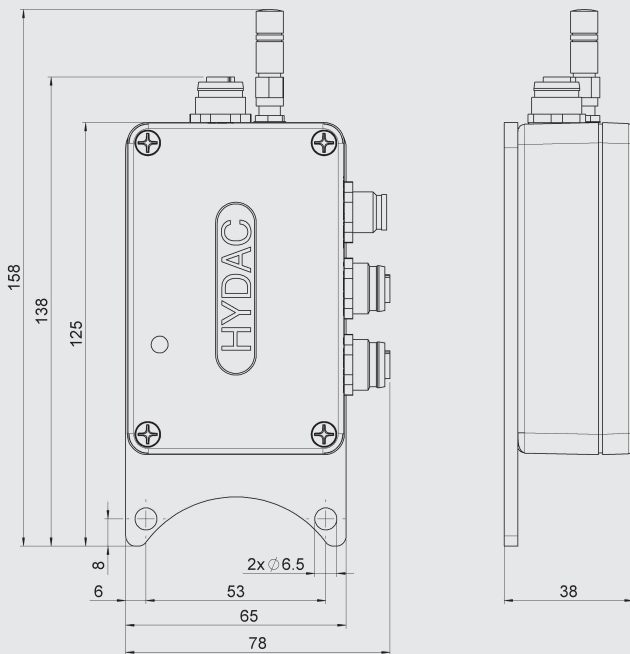
Output type

11 = HSI → Ethernet / W-LAN

Modification

000 = Standard

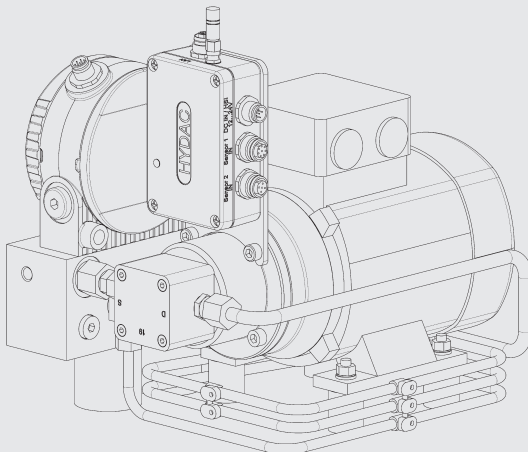
Dimensions



All dimensions in mm.

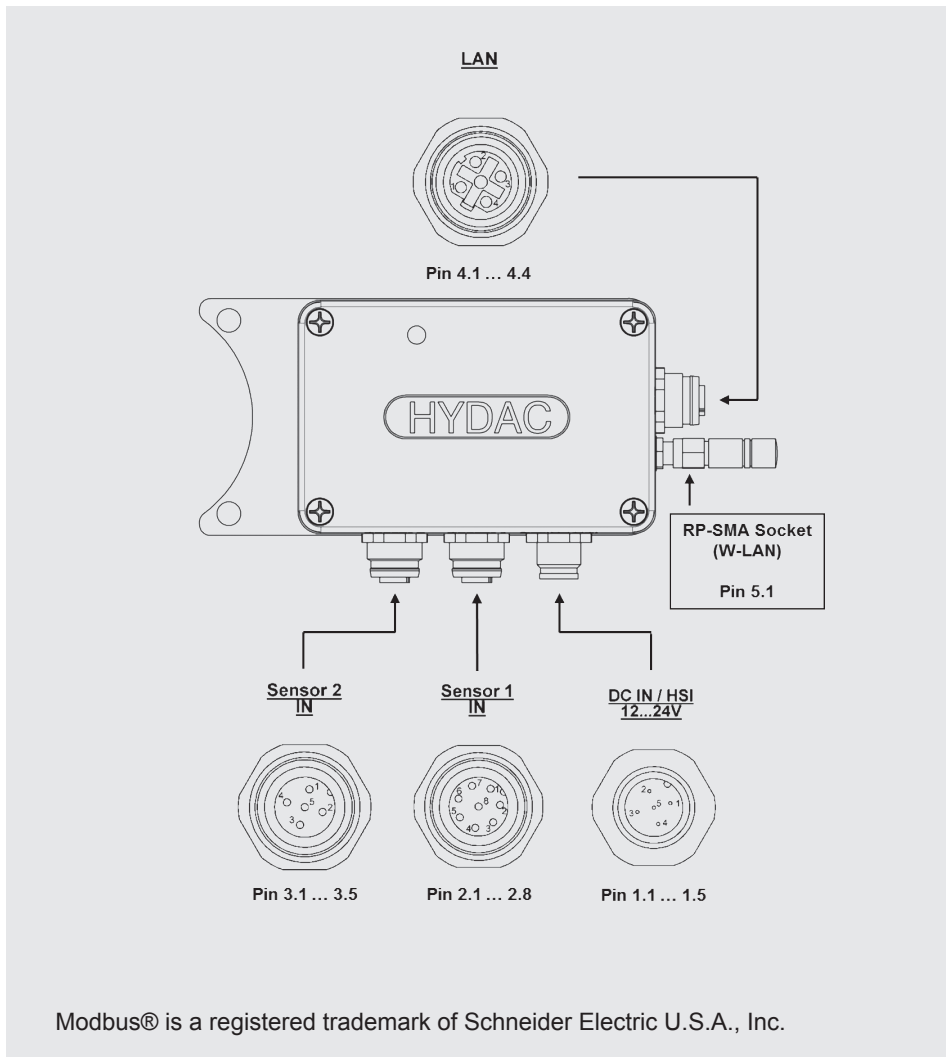
Example of use:

HYDAC ContaminationSensor Module CSM Economy



Plug Pin Assignment

Pin	Signal	Description	
1.1	Vin 12 ... 24 V DC	Device (CSI-C-11)	Power supply +
1.2	---	Device (CSI-C-11)	n.a.
1.3	GND	Device (CSI-C-11)	Power supply GND
1.4	---	Device (CSI-C-11)	n.a.
1.5	HSI	Device (CSI-C-11)	Parameterisation
2.1	S1 12 ... 24 V DC	Sensor 1	Power supply +
2.1	---	Sensor 1	n.a.
2.3	S1 GND	Sensor 1	Power supply GND
2.4	---	Sensor 1	n.a.
2.5	S1 HSI	Sensor 1	HSI signal
2.6	---	Sensor 1	n.a.
2.7	---	Sensor 1	n.a.
2.8	---	Sensor 1	n.a.
3.1	S2 12 ... 24 V DC	Sensor 2	Power supply +
3.2	---	Sensor 2	n.a.
3.3	S2 GND	Sensor 2	Power supply GND
3.4	---	Sensor 2	n.a.
3.5	S2 HSI	Sensor 2	HSI signal
4.1	ETH TX+	Netzwerk (LAN)	Ethernet port data transmission +
4.2	ETH RX+	Netzwerk (LAN)	Ethernet port data receive +
4.3	ETH TX-	Netzwerk (LAN)	Ethernet port data transmission -
4.4	ETH RX-	Netzwerk (LAN)	Ethernet port data receive -
5.1	ANT	Netzwerk (W-LAN)	RP-SMA-socket W-LAN-antenna



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Accessories

Designation	Part-No.
Supply voltage	
PS5 power supply 100 – 240V AC, 50-60 Hz, 1,1 A, IP40; connector M12, 5-pole, female	3399939
ZBE47S-05 connecting cable, connector 5-pole with cable, length = 5 m	3527626
ZBE47S-10 connecting cable, connector 5-pole with cable, length = 10 m	3527627
Sensor connection cable for CSM-E	
ZBE43-005 connecting cable CSI-C-11, coupling / plug 8-pole, length = 0.5 m	4193544
ZBE30-005 connecting cable CSI-C-11, coupling / plug 5-pole, length = 0.5 m	4193586
Network cable (LAN)	
ZBE 45-05 network cable (Patch), connector 4-pole, coding D / connector RJ45, length = 5 m	3346100
ZBE 45-10 network cable (Patch), connector 4-pole, coding D / connector RJ45, length = 10 m	3346101

Note

The information in this brochure relates to the operating conditions and applications described.

In the event of deviating applications and/or operating conditions, please contact the representative HYDAC department concerned.

Subject to technical modifications

HYDAC FILTER SYSTEMS GMBH

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