

AS-Interface Connector

Construction

The GEMÜ 4190 and GEMÜ 4192 connectors have an integrated AS-Interface and are used for direct control of solenoid valves.

An ASI flat cable (which is only installable in the correct manner) is directly mounted. Both connectors are available with signal inputs (M12) for position feedback as an option. AS-Interface voltage and output signal are optically indicated via LEDs.

The GEMÜ 4190 AS-Interface connector is available in design A according to DIN 43650/ISO4400 and the GEMÜ 4192 is available in design B according to industrial standard or DIN 43650/ISO 6952.

Features

- Choice of energy and data via the same or separate wires
- Inputs via M12 circular connector
- "Plug and play"
- Protection class IP 65

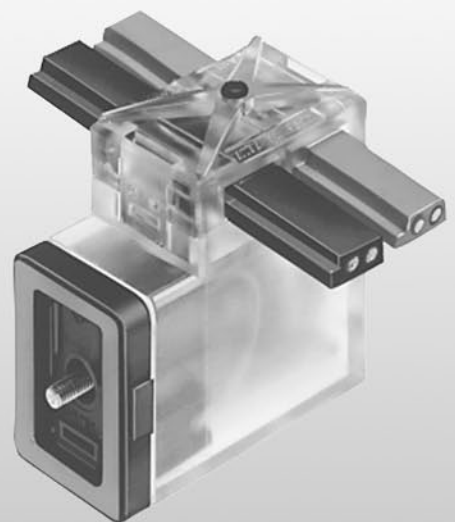
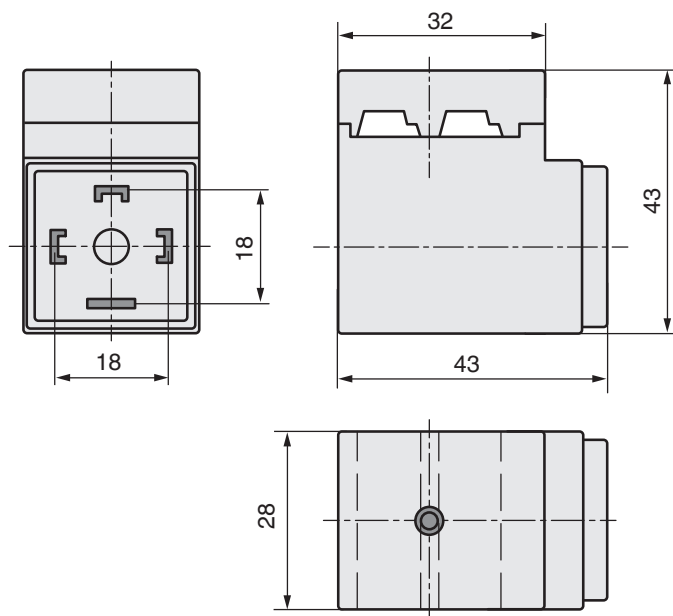
Advantages

- Field bus connection (AS-Interface)
- Direct control of solenoid valves
- Reduced cabling time
- Simple handling
- Easy to fit
- Indication of AS-Interface voltage and output signal via LEDs



GEMÜ 4190

Dimensions GEMÜ 4190 [mm]



GEMÜ 4192

Technical data

General information

Protection class EN 60529	IP 65
Mounting position	optional
Approvals	
AS-Interface cert.no.	21001 (connection A2, E2) connection A1 in preparation
Directives	
EC-EMC directive	89/336/EEC
Emission of interference	EN 50081-1
Immunity to interference	EN 50082-2
EC low voltage directive	73/23/EEC

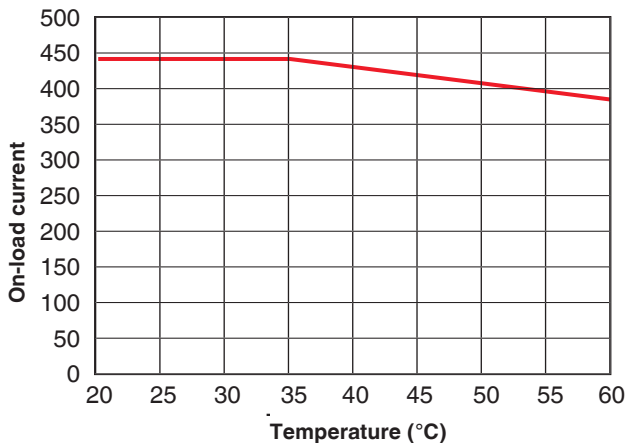
Working conditions

Ambient temperature	-10°C to +55°C
Storage temperature	-10°C to +55°C

Materials

Housing	PMMA
Seal	NBR
Fastening screw	A2

Derating diagram (standard design)



Electrical data

Operating voltage	
Power supply	26.5 to 31.6V DC
Current consumption	≤ 25 mA
External power supply	
AS-Interface cable, black	24V DC (20-28V DC)
Duty cycle	continuous duty
Switching output	
Voltage drop	typ. 2V DC
Output protection	integrated recovery diode
Reverse battery protection	yes
Output wiring	Port D0, PNP
Galvanically decoupled	yes
Short circuit proof	yes
With connection A1 (yellow AS-Interface cable)	
On-load current	≤ 150 mA
External power supply	not applicable
With connection A2, E2 (yellow and black AS-Interface cable)	
On-load current	max. 10 W
On-load current from black AS-Interface cable	see derating diagram
Signal inputs	
Input wiring	Port D2, PNP Port D3, PNP
Galvanically decoupled	yes
Current load	< 200 mA from AS-Interface power cable
Input current	2.4 mA / input
Input level	
High	+10 to +30V DC
Low	-30 to +2.5V DC
AS-Interface	
AS-Interface specification	2.04
AS-Interface profile	S.B.F
I/O-Code	B
I/D-Code	F
Electrical connection	
Switching output	Connector design A (4190) Connector design B (4192)
Signal inputs	5-pin M12 circular plug
Special features	
Optical indication	green LED (AS-Interface voltage) yellow LED (output signal)

Electrical connection (M12 circular plug)



- Pin 1: 24 V DC
- Pin 2: Input 1, Port D2
- Pin 3: 0 V, GND
- Pin 4: Input 2, Port D3
- Pin 5: nicht belegt

Order data

Version	Code
Design A	4190
Design B / Industrial standard	4192

Seal material	Code
NBR	2

Field bus	Code
AS-Interface	A

Indication	Code
LED green = AS-Interface LED yellow = output	1

Accessory	Code
Accessory	Z

Voltage	Code
24V DC auxiliary voltage	24

Connection	Code
1 output (yellow AS-Interface cable)	A1
1 output (yellow + black AS-Interface cable)	A2
1 output/2 inputs (yellow + black AS-Interface cable)	E2

Frequency	Code
DC voltage	DC

Housing material	Code
PMMA, transparent	4

Contact version	Code
Design A (GEMÜ 4190)	-
Design B (GEMÜ 4192) DIN EN 175301-803	DIN
Industrial standard (GEMÜ 4192)	IS

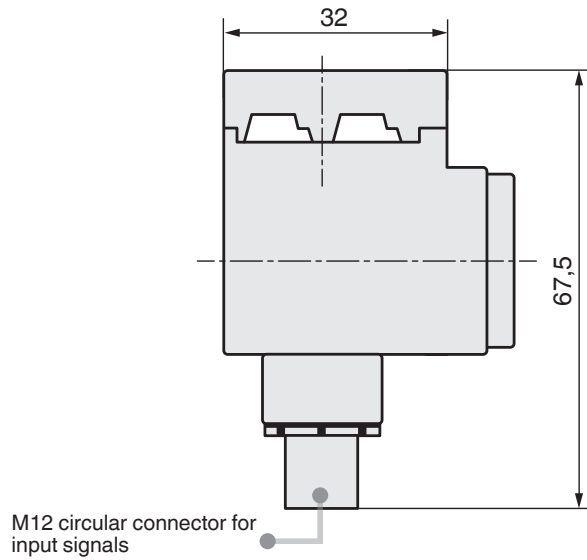
Note

Wire ends of the AS-Interface cable outside the plug must be properly insulated.

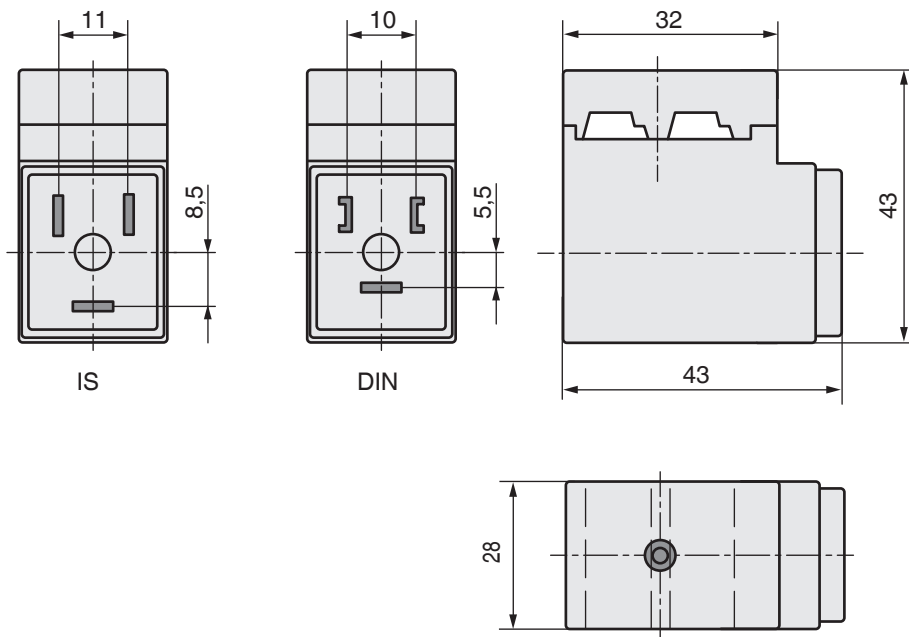
When selecting the external power supply, observe the minimum starting voltage of the solenoid valve used.

Order example	4192	A	Z	A2	4	2	1	24	DC	DIN
Version (Code)	4192									
Field bus (Code)		A								
Accessory (Code)			Z							
Connection (Code)				A2						
Housing material (Code)					4					
Seal material (Code)						2				
Indication (Code)							1			
Voltage (Code)								24		
Frequency (Code)									DC	
Contact version (Code)										DIN

Dimensions of optional connection E2 [mm]



Dimensions GEMÜ 4192 [mm]



For further products and accessories, please see our Product Range catalogue and Price list.
Contact GEMÜ.

GEMÜ® VALVES, MEASUREMENT
AND CONTROL SYSTEMS

