

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

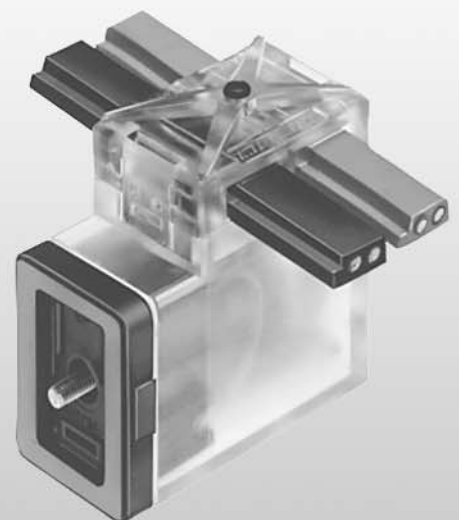
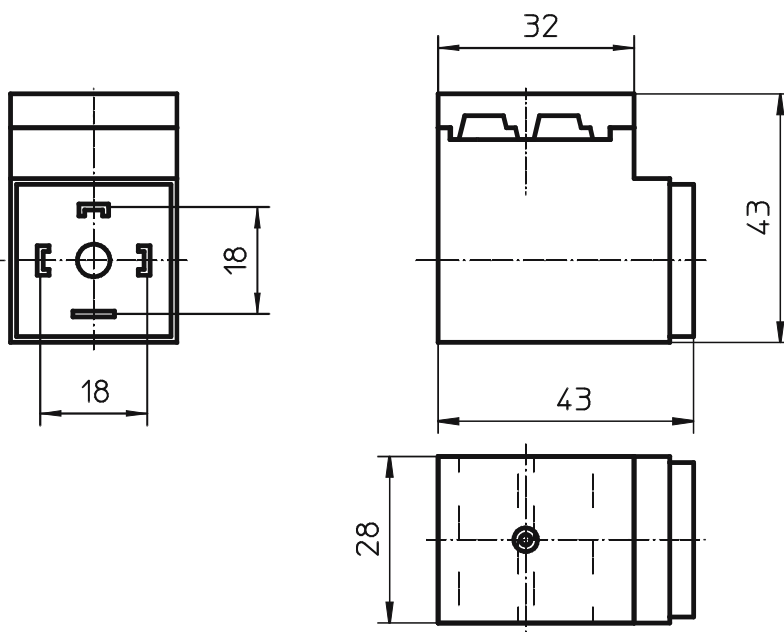
Advantages

- 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



GEMÜ 4192

Technical data

Working conditions

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

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)
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General information

Protection class EN 60529	IP 65
Mounting position	optional

Approvals

AS-Interface cert.no.	21001 (connection A2, E2) connection A1 in preparation
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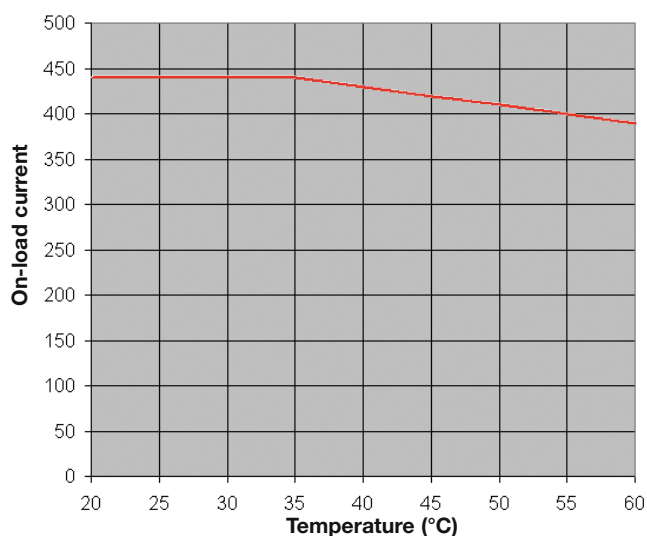
Directives

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

Materials

Housing	PMMA
Seal	NBR
Fastening screw	A2

Derating diagram (standard design)



Order data

Version	Code	Display	Code
Design A	4190	AS-Interface voltage = green LED	
Design B / Industrial standard	4192	Output signal = yellow LED	1

Field bus system	Code	Supply voltage	Code
AS-Interface	A	24 V DC	24=

Connection	Code	Contact version	Code
1 output (yellow AS-Interface cable)	A1	Design A (GEMÜ 4190)	-
1 output (yellow + black AS-Interface cable)	A2	Design B (GEMÜ 4192)	DIN
1 output/2 inputs (yellow + black AS-Interface cable)	E2	Industrial standard (GEMÜ 4192)	IS

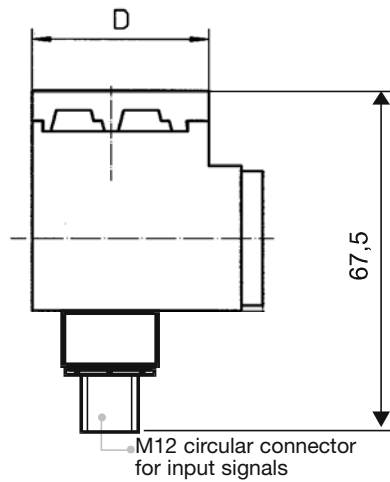
Note

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

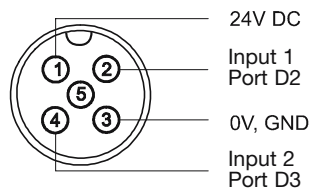
When selecting the external power supply, observe the minimum starting voltage of the solenoid valve used.

Order example	4192	A	Z	A2	1	24=	DIN
Version (Code)	4192						
Field bus system (Code)		A					
			Z				
Connection (Code)				A2			
Display (Code)					1		
Supply voltage (Code)						24=	
Contact version (Code)							DIN

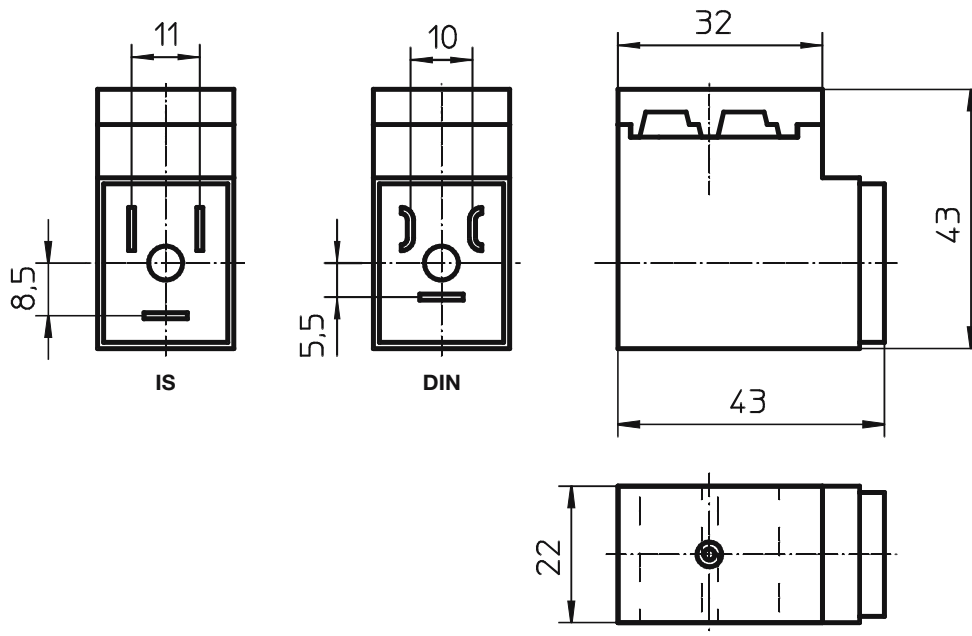
Dimensions of optional connection E2



M12 circular plug pin assignment



Dimensions GEMÜ 4192



GEMÜ® VALVES, MEASUREMENT
AND CONTROL SYSTEMS