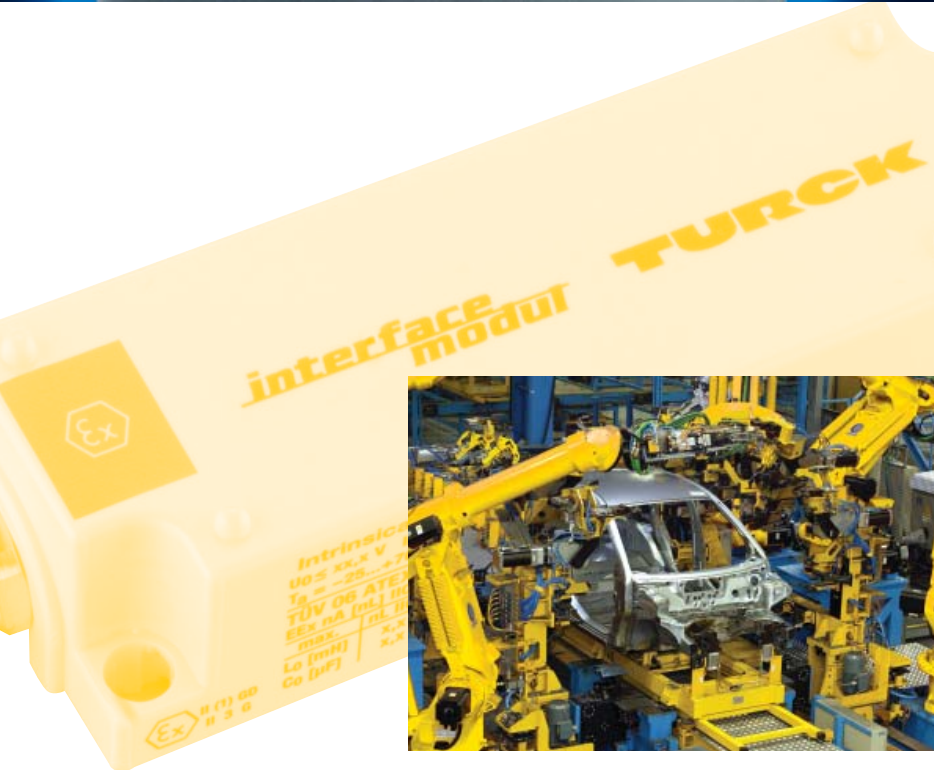


Industrial Automation

DECENTRALISED INTERFACE TECHNOLOGY

interface module cartridge Series








SELECTION TABLE OF DECENTRALISED INTERFACE TECHNOLOGY ON FIELDBUS STATIONS

The two tables show some examples of how the input signals from the explosion hazardous area can be connected via the IMC modules to the decentralised fieldbus stations.





Starting with the application concerned (table columns "Signal type"/"Field device"), the next column on the right shows the I.S. cable (blue) that is connected to the intrinsically safe side of the IMC module.

The "Connection cable" column shows the appropriate connection cable (grey) between the IMC module and the fieldbus station. The last column shows some suitable fieldbus stations from the TURCK range.

IMC modules in combination with compact piconet® fieldbus modules (miniature design)

| Signal type | Field device, Zone 1 or 0 | I.S. cable (blue) ¹ | IMC module, Zone 2 | Connection cable (grey) ¹ | Fieldbus module, safe area |
|---|---|--------------------------------|--|--------------------------------------|----------------------------|
|  EN 60947-5-6 | NAMUR sensor, contact with resistor circuitry | WWAK4.21-.../P00 | IMC-DI-22Ex-PNO/24VDC (NO = normally open) | WAK4-...-WAS4/P00 | SNNE-0800D-0002 |
| | | WWAK4.21-.../P00 | IMC-DI-22Ex-PNC/24VDC (NC = normally closed) | WAK4-...-WAS4/P00 | SNNE-0800D-0004 |
|  | Active transmitter; Current source | WWAK4.21-.../P00 | IMC-AI-11Ex-i/24VDC | WAK4-...-WAS4/P00 | SNNE-40A-0007 |
| | | WWAK4.21-.../P00 | IMC-AI-11Ex-i/L ² | WAK4-...-WAS4/P00 | SNNE-40A-0007 |
|  | Passive 2-wire transmitter; Current sink | WWAK4.21-.../P00 | IMC-AIA-11Ex-i/24VDC | WAK4-...-WAS4/P00 | SNNE-40A-0007 |
| | | WWAK4.21-.../P00 | IMC-AIA-11Ex-i/L ² | WAK4-...-WAS4/P00 | SNNE-40A-0007 |
|  | Analogue actuator, positioner, display | WWAK4.21-.../P00 | IMC-AO-11Ex-i/24VDC | WAK4-...-WAS4/P00 | SNNE-04A-0009 |
| | | WWAK4.21-.../P00 | IMC-AO-11Ex-i/L ² | WAK4-...-WAS4/P00 | SNNE-04A-0009 |
|  | Pilot light, solenoid valve, 4-wire transmitter | WWAK4.21-.../P00 | IMC-DO-11Ex/L ² | WAK4-...-WAS4/P00 | SNNE-0008D-0001 |

IMC modules in combination with compact FXDP fieldbus modules for PROFIBUS-DP

| Signal type | Field device, Zone 1 or 0 | I.S. cable (blue) ¹ | IMC module, Zone 2 | Connection cable (grey) ¹ | Fieldbus module, safe area |
|---|--|--------------------------------|--|--------------------------------------|---|
|  EN 60947-5-6 | NAMUR sensor, contact with resistor circuitry | WWAK4.21-.../P00 | IMC-DI-22Ex-PNO/24VDC (NO = normally open) | WAK4-...-WAS4/P00 | FXDP-IM8/16-0001 |
| | | WWAK4.21-.../P00 | IMC-DI-22Ex-PNC/24VDC (NC = normally closed) | WAK4-...-WAS4/P00 | FXDP-IM8/16-0001 |
|  | Pilot light, solenoid valve, 4-wire transmitter | WWAK4.21-.../P00 | IMC-DO-11Ex/L ² | WAK4-...-WAS4/P00 | FXDP-OM8/16-0001 |
|  EN 60947-5-6 | NAMUR sensor, contact with resistor circuitry (DI) | WWAK4.21-.../P00 | IMC-DI-11Ex-PNO/24VDC | WAK4-...-WAS4/P00 | FXDP-IOM8-0001 |
| | | WWAK4.21-.../P00 | IMC-DI-11Ex-PNC/24VDC | WAK4-...-WAS4/P00 | FXDP-XSG88-0001 (not for FXDP-CSG88-0001) |
|  | Pilot light, solenoid valve, 4-wire transmitter (DO) | WWAK4.21-.../P00 | IMC-DO-11Ex-PNO/24VDC | WAK4-...-WAS4/P00 | FXDP-XSG88-0001 (not for FXDP-CSG88-0001) |

¹) "...": Length in m
²) Loop-powered



DECENTRALISED INTERFACE TECHNOLOGY

interface module cartridge Series

- IP67 protection with screwed on connectors
- Mounting in Zone 2 - Application area in accordance with ATEX: II (1) GD, II 3 GD
- Ambient temperature -25 ... +70 °C
- Housing material (IMC module), Flammability class V-0 to UL 94
- Standard signals
- Plug & play connection technology, M12 connectors
- Compact design

Device functions:

- DI = Digital Input (isolating switching amplifier)
- AI = Analogue Input (analogue data transmitter, input)
- AIA = Analogue Input Active (isolating transducer)
- AO = Analogue Output (analogue data transmitter, output)
- DO = Digital Output (valve control module)

TURCK's new "interface module cartridge" (IMC) series is another innovative breakthrough in process automation: The I.S. barrier is moved from the mounting cabinet directly to the installation, thus making it possible to create further decentralised structures in the installation.

The exceptionally compact and rugged device series creates new options and possibilities for the user: In addition to your standard mounting cabinet solution, increase the flexibility of your system by using TURCK interface modules!

The vibration proof connectors ensure safe and reliable connections even in unfavourable ambient conditions.

The devices are provided with "Intrinsic safety" explosion protection in addition to galvanic isolation. Field use is made possible by means of approval to 3 GD, i.e. use in Zone 2 in the case of a risk of explosion on account of flammable dusts or gases.

Different lengths of connection cables are available as standard (see also selection table on other page). The I.S. cables (blue) are provided with premoulded connectors at one end. The connection cables (grey) are connector systems with premoulded male and female connectors at one end.

If the IMC modules are to be connected to devices with screw terminals, connection cables with only premoulded male and female connectors at one end are recommended.

DECENTRALISED INTERFACE TECHNOLOGY

interface module cartridge Series



| Isolating switching amplifier dual channel | Isolating switching amplifier dual channel | Analogue data transmitter, input, single channel |
|--|--|--|
| IMC-DI-22Ex-PNO/24VDC | IMC-DI-22Ex-PNC/24VDC | IMC-AI-11Ex-i/L |
| Ident no. 7560003 | Ident no. 7560010 | Ident no. 7560014 |
| Wiring diagram | Wiring diagram | Wiring diagram |



| Analogue data transmitter, input, single channel | Isolating transducer, single channel | Isolating transducer, single channel |
|--|--------------------------------------|--------------------------------------|
| IMC-AI-11Ex-i/24VDC | IMC-AIA-11Ex-i/L | IMC-AIA-11Ex-i/24VDC |
| Ident-Nr. 7560005 | Ident-Nr. 7560011 | Ident no. 7560009 |
| Wiring diagram | Wiring diagram | Wiring diagram |



| Analogue data transmitter, input, single channel | Analogue data transmitter, input, single channel | Solenoid driver, single channel |
|--|--|---------------------------------|
| IMC-AO-11Ex-i/L | IMC-AO-11Ex-i/24VDC | IMC-DO-11Ex/L |
| Ident no. 7560006 | Ident no. 7560007 | Ident no. 7560008 |
| Wiring diagram | Wiring diagram | Wiring diagram |

