

Digital input modules
16 inputs
S20-DI-16/4



Digital input modules

16 inputs ■ **S20-DI-16/4**

- 16 digital inputs according to EN 61131-2 type 1 and type 3
- 24 V DC / 2,4 mA
- Connection of sensors in 2-, 3- and 4-wire technology
- Minimum update time < 100 μ s
- Filter times can be set in three steps: < 100 μ s, 1000 μ s or 3000 μ s
- Maximum input frequency: 5 kHz
- Electronic device nameplate
- Diagnostic and status indicators

Documentation

- Data sheet
- Application description

These modules are designed for use within an IndraControl S20 station. The digital input modules are used to connect 24 V DC sensors. The sensors can be connected with up to 4-wire connection technology. The filter times can be set on the module.

Technical data

| | S20-DI-16/4 |
|--|---|
| Local bus interface | |
| Designation | S20 local bus |
| Connection type | Connection for bus socket module |
| Supply for module electronics | |
| Supply voltage | 24 V DC |
| Supply voltage range | 19.2 ... 30 V DC (including all tolerances, incl. rippling) |
| Logic voltage U_{BUS} | 5 V DC (via bus socket module) |
| Current consumption of U_{BUS} | Max. 120 mA |
| Protective circuit | Overvoltage protection, reverse polarity protection |
| Digital inputs | |
| Connection technology of the sensors | 2-, 3- and 4-wire connection |
| Number | 16 |
| Connection type | Spring-cage connection with direct plug technology |
| Connection data solid / flexible / AWG | 0,2 ... 1,5 mm ² / 0,2 ... 1,5 mm ² / 24-16 |
| Interpretation | Acc. to EN 61131-2 type 1 and type 3 |
| Nominal input voltage U_{INenn} | 24 V DC |
| Max. Current consumption from U_I | 2 A per 8-input group |
| Nominal input current at U_{INenn} | 2,4 mA |
| Protective circuit inputs | Reverse polarity protection |
| Input filter configurable | 500 μ s (default); < 100 μ s |
| System times | |
| System bus cycle time | 2 μ s |
| Offset per module | 1 μ s |
| Load | |

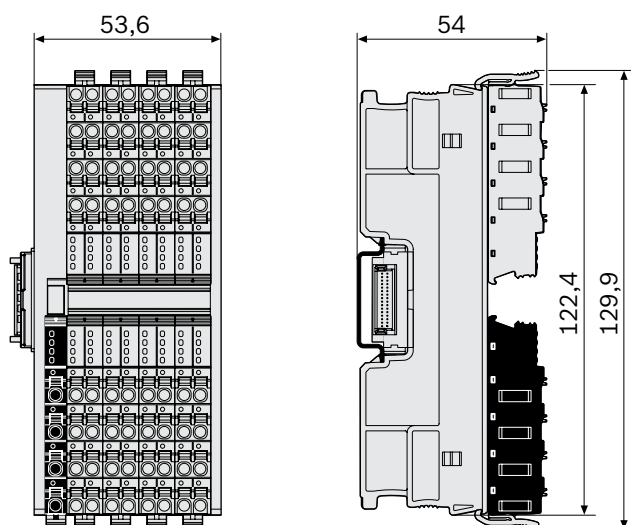
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| | |
|--|-----------------------------------|
| Vibration resistance | 5 g according to EN 60068-2-6 |
| Shock resistance | 25 g according to EN 60068-2-27 |
| Shock resistance (continuous shock) according to EN 60068-2-29 | 10 g according to EN 60068-2-29 |
| Emitted interference | Class B according to EN 61000-6-3 |
| Interference immunity | According to EN 61000-4 |
| Environmental conditions | |
| Permissible temperature (operation) | -25 °C ... +60 °C |
| Permissible humidity (operation) | 5 to 95%, no dewing |
| Permissible humidity (storage) | 5 to 95%, no dewing |
| Protection category | IP20 |

Dimensions

| | | S20-DI-16/4 |
|-------------------|------|-------------|
| Dimensions | | |
| Height H | [mm] | 129.9 |
| Width B | [mm] | 53.6 |
| Length T | [mm] | 54 |

**Ordering information**

| Type code | Description | Material number: |
|-------------|---|------------------|
| S20-DI-16/4 | IndraControl S20 digital input module, 16 inputs, complete with accessories (bus base module) | R911172532 |

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| Type code | Description | Material number: |
|-----------|------------------------------|------------------|
| S20-BS | Bus base module (spare part) | R911172540 |

Bosch Rexroth AG

Postfach 13 57
97803 Lohr, Germany
Bgm.-Dr.-Nebel-Str. 2
97816 Lohr, Germany
Tel. +49 9352 18-0
Fax +49 9352 18-8400
www.boschrexroth.com/electrics

Local contact information can be found at:

www.boschrexroth.com/adressen

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It must be remembered that our products are subject to a natural process of wear and aging.