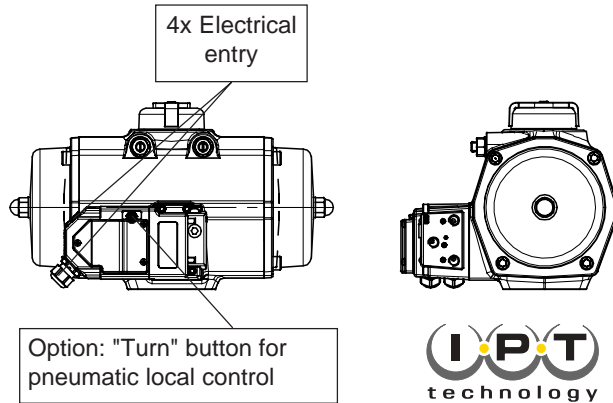


## FieldQ valve actuator with Smart "Open / Closed" Function module

### Description:

This FieldQ Smart function module offers, an integrated concept for "On/Off" valve automation. Its compact and robust construction incorporates IPT technology with auto-initialization for easy setting of feedback switches.



### General specifications

Material housing : Aluminium alloy  
 Cable entries : 4x M20x1.5 or 4x 1/2"NPT  
 Electrical connections : Internal terminal strip.  
 Enclosure : IP65 / NEMA 4  
 Finish : Epoxy primer and two component polyurethane top coating  
 Temperature : -20° to +80°C / -4° to 176°F  
 Dimensions : See 1.603.01 for ISO 5211 (metric & UNC)  
 See 1.603.02 for DIN 3337

### Construction

The function module is mounted at the side of the Pneumatic Control Module in front of the basic actuator housing. Inside are terminals available for connecting control and feedback wiring. Four cable entries are available for this purpose.

### Features

- **Basic actuator functions** for fail safe (spring return) or double acting applications.
- All the **control and feedback** wiring are led into one housing.
- **IPT-technology** (Intelligent Position Tracking).
- Push-button **automatic initialization** for easy setup of the actuator.  
**Pressing 4 seconds** simultaneously the "Open" and "Closed" button starts auto-initialization procedure and sets automatically the feedback limit switches.
- **Readjustable position feedback** by pressing the button of the actual position for 5 seconds.
- **Feedback can be reversed** by pressing the opposite button of the actual position for 5 seconds.
- **Three indication LED's** for "Status", "Open" and "Closed" position. Status LED indicates initialization procedure running (blinking), successful initialization procedure (LED is on) or a failed initialization (flashing).
- Function module **can be easily plugged in** the pneumatic control module.
- Modular functionality for **easy update** towards present and future bus systems.
- **All inputs and outputs are galvanic isolated** which offers greater flexibility for systems connection.

### Hazardous area executions:

#### Non-Sparking / Non-Incendive:

- **ATEX** : II 1 G EEx nA II T4..T6 for use in Zone 2.
- **FM/CSA** : Class1, Div. 2 group A, B, C & D T4...T6  
 : Class1, zone 2, IIC T4...T6

#### Intrinsically safe:

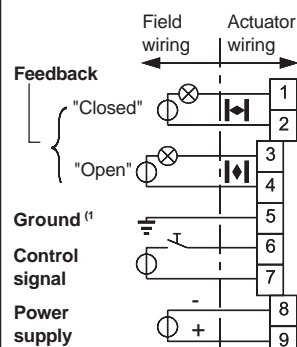
- For more information about intrinsically safe function modules, see sheet 1.604.011.

#### Short circuit monitoring and line break detection

- For more information about function modules with short circuit monitoring and line break detection (IEC 60947 part 5-6), see sheet 1.604.011

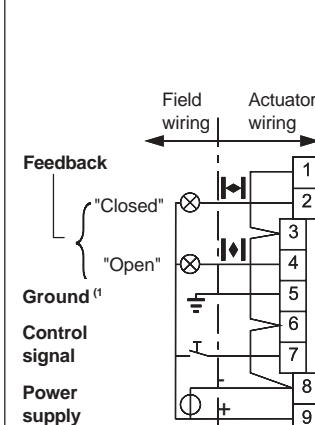
### Basic wiring diagram

On/Off Function Module FieldQ  
 For independent circuits of power supply, control signal, feedback "Open" and feedback "Closed".



### 5-Wire wiring diagram

On/Off Function Module FieldQ



### Wiring dimensions

Cable range : 0.14 - 1.5mm<sup>2</sup> or 26-14 AWG  
 For massive copper : 2.5mm<sup>2</sup> max.  
 († Ground only connected for 85/254VAC executions)

| FieldQ Smart/discrete Function Modules |  |                          |
|--|--|--------------------------|
|  | 24VDC                                  | 85/254VAC                |
| <b>Power supply:</b>                   |  |                          |
| Voltage                                | 24 VDC (±15%)                          | 85-254VAC 50/60Hz        |
| Max. Current                           | 110 mA                                 | -/-                      |
| Power nom.                             | 2,6                                    | 2.8W                     |
| <b>Control signal:</b>                 |  |                          |
| Voltage                                | 24 VDC (±15%)                          | 85-254VAC 50/60Hz        |
| Max. Current                           | 5 mA                                   | 2.5 mA at 115VAC         |
|  | -/-                                    | 5 mA at 230VAC           |
| <b>Feedback switches:</b>              |  |                          |
| Voltage                                | 0-30 VDC                               | 0-254 VDC/VAC<br>50/60Hz |
| Current (AC or DC)                     | 500mA max.                             | 150mA max.               |
| Power                                  | 15W                                    | 15W                      |
| Electric contacts                      | Potential free                         | Potential free           |
| <b>Polarity:</b>                       |  |                          |
| Dependent                              | Power supply                           | NA                       |
| Independent                            | Control signal<br>+ feedback switches. | NA                       |
| <b>Options:</b>                        |  |                          |
| Pneumatic manual control               | "Turn" button                          | "Turn" button            |