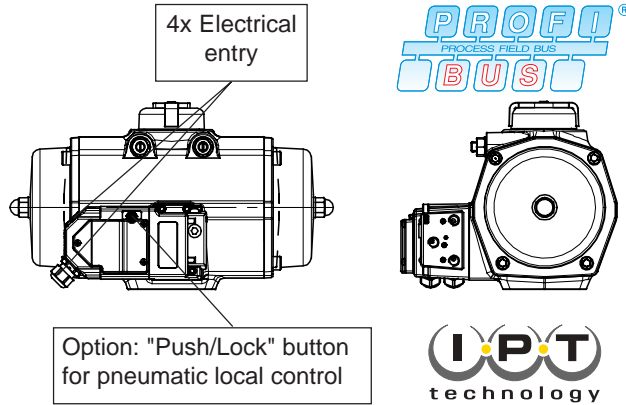


FieldQ valve actuator with Profibus™-PA "Open / Closed" Function module

Description

This FieldQ function module offers an integrated concept for valve automation. Its compact and robust construction incorporates basic control and feedback functionality and communicates through the Profibus® PA protocol.



General specifications

Material housing	: Aluminium alloy
Electrical connections	: Internal terminal strip.
Optional quick connectors	: <i>minifast</i> ® or <i>euromast</i> ®
Cable entries	: 4x M20x1.5 or 4x 1/2"NPT
Enclosure	: IP65 / NEMA 4
Finish	: Epoxy primer and two component polyurethane top coating
Temperature	: -20° to +50°C / -4° to 122°F
Dimensions	: See 1.603.01 for ISO 5211 (metric & UNC) See 1.603.02 for DIN 3337

Features

- Digital communication through **Profibus® PA**.
- Profibus™-PA protocol according **V3.0 profile**
- **Integrated diagnostics**.
- **Basic actuator functions** for fail safe (spring return) or double acting applications.
- All the control and feedback by **2-wire connection**. No need for extra power supply.
- **IPT-technology** (Intelligent Position Tracking).
- **Initialization by Profibus™-PA** or **Push-button** 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 or by Profibus™-PA.
- **Feedback can be reversed** by pressing the opposite button of the actual position for 5 seconds or by Profibus™-PA.
- **Indication LED** for "Status", which indicates initialization procedure running (blinking), successful initialization procedure (LED is on) or a failed initialization (flashing). "Open" and "Closed" position LED's are disabled.
- Function module **can be easily plugged in** the pneumatic control module.

Hazardous area executions:

Intrinsically safe

- **ATEX** : II 1 G EEx ia IIC T4..T6 for use in Zone 0,1 and 2.
- **FM/CSA** : Intrinsically safe, Class 1, Div. 1, group A, B, C, & DT4/T6
: Class 1, Zone 0, AEx ia IIC T4...T6
Intrinsically safe according FISCO model.

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 Profibus® PA wiring. Four cable entries are available for this purpose.

Communication Protocol:

Profibus approval	: Available from PNO
Communication protocol	: Profibus® PA (V3.0 profile)
Transmission	: MBP, IEC 61158-2
Maximum current	: 15,5mA from bus

Function blocks

- Physical block
- Transducer block
- AO : Control & feedback of actuator
- DO : Auxiliary 1 output.
- DI : Auxiliary 1 input
- AI : 2x Available, position and temperature.

Diagnostics and Alerts

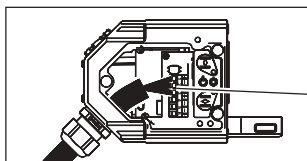
Applicable diagnostics include:

- Break Times - Open and Close, Average and Current
- Travel Times - Open and Close, Average and Current
- Cycle Counts - Controller, Solenoid, Actuator, and Valve
- Time in Position
- Various internal electronic health tests

Options

- Pneumatic manual control : "Push/Lock" button.

Profibus PA™ terminal wiring connection:



Standard PI-filter present.
For intrinsically safe wiring see C0240-09.

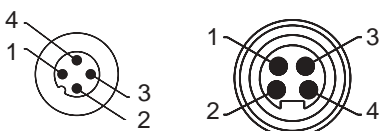
Terminal	Description
1	+
2	Shield PA 1 Signal
3	-
4	+
5	Shield PA 2 Signal
6	-

Wiring dimensions

Cable range	: 0.14 - 1.5mm ² or 26-14 AWG
For massive copper	: 2.5mm ² max.

Quick connector pinouts: (male chassis part)

Nr euromast®	minifast®	Color
1 = PA signal +	= PA signal +	Brown
2 = Shield	= Shield	Green/Yellow
3 = PA signal -	= PA signal -	Blue
4 = Not connected	= Not connected	Grey



Views from above