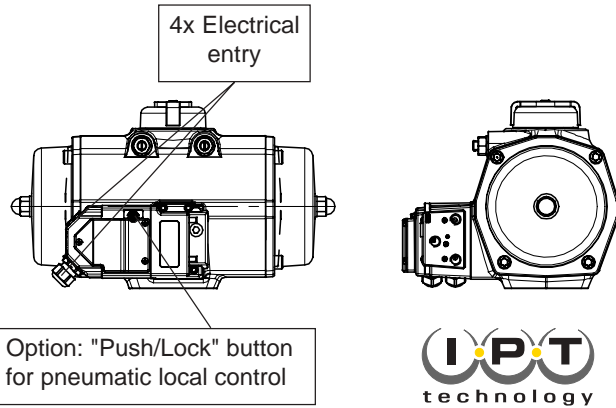


FieldQ valve actuator with Smart - Intrinsically safe - "Open / Closed" Function module

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.

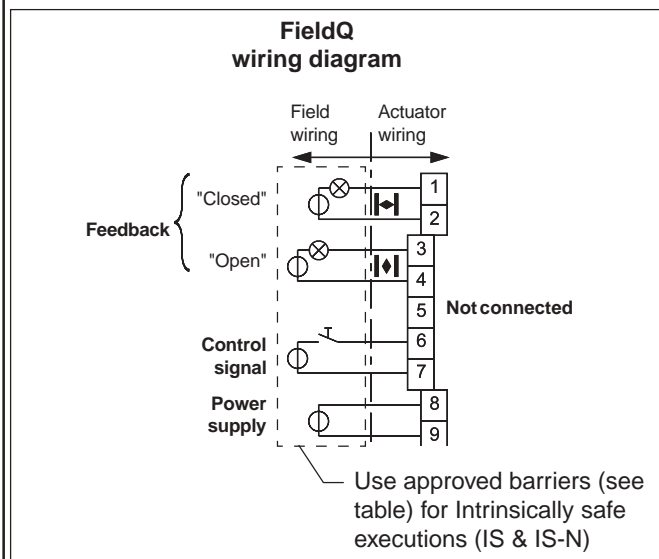


General specifications

- 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 +50°C / -4° to 122°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.



Wiring dimensions

- Cable range : 0.14 - 1.5mm² or 26-14 AWG
- For massive copper : 2.5mm² max.

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.
- **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.

Intrinsically safe approvals

- **ATEX** : II 1 G EEx ia IIC T4..T6 for Zone 0,1 and 2.
- **FM/CSA**: Intrinsically safe, Class 1, Div. 1, group A, B, C, & D T4...T6
: Class 1, Zone 0, AEx ia IIC T4...6

Short circuit monitoring and line break detection

A variation of this function module can be equipped with feedback according IEC 60947 part 5-6 (VDE 0660 sec. 212). This offers next to feedback short circuit monitoring and line break detection.

	Intrinsically safe	
	IS	IS-N (according IEC 60947-5-6)
Maximum barrier values:		
Voltage U _o	30VDC	30VDC
Current I _o	300mA	300mA
Power P _o	1.2W	1.2W
Power supply:		
Input voltage U _i	13.5-30 VDC	13.5-30 VDC
Minimum current I _i	32 mA	32 mA
Capacity C _i	12nF	12nF
Inductivity L _i	0mH	0mH
Control signal:		
Voltage U _i	6-30 VDC	6-30 VDC
Maximum current I _i	4.8 mA	4.8 mA
Capacity C _i	12nF	12nF
Inductivity L _i	0mH	0mH
Feedback switches:		
Voltage U _{i-max}	30VDC	IEC 60947-5-6
Current I _{i-max}	300 mA	IEC 60947-5-6
Power P _{p-max}	1.2 W	-/-
Current switched	-/-	IEC 60947-5-6
Current Not-switched	-/-	IEC 60947-5-6
Polarity:		
Dependent	Power supply	Power supply
Independent	Control signal + feedbackswitches.	Control signal + feedbackswitches.