

[1]

EU-TYPE EXAMINATION CERTIFICATE

[2] Product Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

[3] EU-Type Examination Certificate Number: **DNV 20 ATEX 42333X** **Issue 0**

[4] Product: **Flameproof Feedback unit**

[5] Manufacturer: **PMV Automation AB**

[6] Address: **Korta Gatan 9
S-17514 Solna
Sweden**

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] DNV Product Assurance AS, notified body number 2460, in accordance with Article 17 and Article 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in confidential reports listed in item 16.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: **EN IEC 60079-0:2018 and EN 60079-1:2014**

Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12] The marking of the product shall include the following:

 **II 2 G Ex db IIB+H2 T6 or T5 Gb**



Date of issue:
2022-09-23



Bjørn Spongsveen
For DNV Product Assurance AS
The Certificate has been digitally signed.
See www.dnv.com/digitalsignatures for info

[13] **Schedule**

[14] **EU-Type Examination Certificate No:** **DNV 20 ATEX 42333X** **Issue 0**

[15] **Description of Product**

The equipment mounted on top of a valve positioner gives information about positioning via mechanical or inductive switches and / or rotating angle via potentiometer or current transmitter. The enclosure has two threaded entries of sizes ½ -14 NPT or M20 x 1,5. Certified cable glands need to be used.

Type designation

F5Ex Series

F5 Switch box ATEX IEC Model Code

AA = Product Type

F5

BB = Certificate

EX Explosion proof, ATEX, CSA, FM
 EA Explosion proof ATEX
 EB Explosion proof Inmetro
 EE Explosion proof IECEx
 EN Explosion proof CCC (China)

C = Cable entry

G 2 x M20 x 1.5
 N 1/2" NPT x 2

D = Surface Treatment

U Epoxy, ED
 M Tufram

EEE = Switches

XXX No Switches
 MEC 2 x SPDT Switches
 NAM 2 x NAMUR sensors
 PXY 2 x SPDT proximity Switches

FFF = Feedback

XXX No Feedback
 POT Potentiometer, 5 kOhms
 P1K Potentiometer, 1 kOhms
 P18 Potentiometer, 180 deg
 420 4-20 transmitter
 T18 4-20 transmitter, 180 deg
 T27 4-20 transmitter, 270 deg

GG = Spindle adapter two positions alphanumeric

** multiple options

HHH = Front Cover (3 positions any character)

*** different prints available

I = Function

D	Direct
R	Reverse

J = Indicator

A	Indicator
B	No Indicator
H	Dome Style

K = Temperature

Z	Nitrile, NBR -40°C .. + 85°C
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Electrical Data

Maximum voltage: 28 V DC
Current: 0 – 20 mA
Maximum power: 1 W

Ambient temperature:

T6 for Tamb: -20°C ... +50°C
T5 for Tamb: -20°C ... +60°C

Routine tests

None.

Warning marking:

WARNING – DO NOT OPEN WHEN ENERGIZED
TORQUE COVER BOLTS TO: 5.2lb*ft/7Nm
WARNING – POTENTIAL ELECTROSTATIC CHARGING

[16] **Report No.:** 176867-42333

[17] **Specific Conditions of Use**

- The flameproof joints are not intended to be repaired
- The special fasteners of the cover on the body are composed of 8 screws stainless steel 6H M6x16. The minimum property class of screws must be A2-70. The screws must be replaced with identical ones.
- M6 screws used for mounting F5Ex unit must not be able to enter threaded screw holes more than 7mm, see instruction.
- HAZARD – TO AVOID ELECTROSTATIC HAZARD, CLEAN THE DEVICE WITH A WET CLOTH – SEE INSTRUCTIONS

[18] **Essential Health and Safety Requirements**

Met by compliance with the requirements mentioned in item 9.

[19] Drawings and documents

Number	Title	Rev.	Date
Mechanical			
F5X-App1	Tolerances	3	2018-05-30
F5X-App2	Material specification	2	1998-09-01
F5X-App6	Critical enclosure dimensions	0	2018-11-22
F5X-App7	Shaft Certification drawing	1	2020-10-27
F5x-As001C	Assembly Drawing	0	2022-04-25
F5x-As101C	Internal View	0	2022-06-28
Other			
F5X-182C	Ratings	1	2022-04-26
F5X-App5	Marking plate	8	2022-07-07
F5A-011C-A	Marking plate for ATEX	0	2020-07-07
F5 Mandatory IOM Content	Mandatory IOM Content	4	2022-07-08
F5 Ex d ATEX IEC Model code	Model code	0	2020-06-16
Component List			
F5-2-4-9401	420 PCB Schematic	3	1999-01-08
F5-2-4-9501	MEC (PXY) Schematic	3	1995-02-22
F5-2-4-9502	420 MEC (PXY) Schematic	5	1995-01-12
F5-2-4-9503	POT MEC (PXY) Schematic	3	1995-01-12
F5-2-4-9504	NAM Schematic	2	1995-02-03
F5-2-4-9505	420 NAM Schematic	6	1995-02-22
F5-2-4-9506	POT NAM Schematic	4	1995-01-12
F5-2-4-9507	POT Schematic	3	1995-01-12
F5-2-4-9508	420 Schematic	4	1995-01-13
F5A-005C	PCB Coating	0	2018-12-18

[20] Certificate History

Issue	Description	Issue date	Report no.
0	Original issue	2022-09-23	176867-42333

END OF CERTIFICATE