

1 **UK-TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
UKSI 2016:1107 (as amended) – Schedule 3A, Part 1**

3 UK-Type Examination Certificate Number: **BAS21UKEX0779X**

4 Product: **Type 28, 78, 88 & 98 Solenoid Operator**

5 Manufacturer: **Bifold Fluidpower Limited**

6 Address: **Broadgate, Oldham Broadway Business Park, Chadderton, Oldham, Greater Manchester, OL9 9XA**

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

8 SGS Baseefa, Approved Body number 1180, in accordance with Regulation 43 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), 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 Schedule 1 of the Regulations.

The examination and test results are recorded in confidential Report No. **GB/BAS/ExTR21.0210/00**

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:


EN IEC 60079-0:2018 EN 60079-11:2012 EN 60079-31:2014

except in respect of those requirements listed at item 18 of 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 UK-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations 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:

 **Refer to Schedule**

SGS Baseefa Customer Reference No. **1688**

Project File No. **21/0541**

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R S Sinclair

R S SINCLAIR
TECHNICAL MANAGER
On behalf of SGS Baseefa Limited

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Schedule

14

Certificate Number BAS21UKEX0779X

15 Description of Product

The Type 28, 78, 88 & 98 Solenoid Operator comprises a stainless steel cylindrical enclosure within which is mounted an encapsulated coil. The coil is used to operate an armature within the enclosure, which is used to control valves to which the Solenoid Operator may be attached. The enclosure cover may be fitted with a pushbutton which is used to mechanically operate the valve.

Facilities for connection to the encapsulated coil are provided within the enclosure and threaded boss, which forms part of the enclosure, permits cable entry via a gland or conduit.

The following models are covered by this certificate:

Types 78, 88 & 98 Solenoid Operator

⊕ II 1GD Ex ia IIC T4 Ga
Ex ta IIIC T₂₀₀133°C Da
-60°C ≤ Ta ≤ +95°C

or

⊕ II 1GD Ex ia IIC T6 Ga
Ex ta IIIC T₂₀₀98°C Da
-60°C ≤ Ta ≤ +60°C

Type 28 Solenoid Operator

⊕ II 2GD Ex ia IIC T4 Gb
Ex ta IIIC T133°C Db
-60°C ≤ Ta ≤ +95°C

or

⊕ II 2GD Ex ia IIC T6 Gb
Ex ta IIIC T98°C Db
-60°C ≤ Ta ≤ +60°C

All Model No's. are assigned the parameters

$U_i = 31V$ dc $I_i = 210mA$ $P_i = 1.5W$ $C_i = 0\mu F$ $L_i = 0mH$

16 Report Number

GB/BAS/ExTR21.0210/00

17 Specific Conditions of Use

1. The installation must use a suitably certified cable gland to ensure that the required degree of protection provided by the enclosure is maintained.

18 Essential Health and Safety Requirements

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
13	LVD type requirements
14	Overloading of equipment (protection relays, etc.)
21 (1)	External effects
21 (2)	Aggressive substances, etc.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
200-109-Exia	1 of 1	G	01/02/22	Coil Winding and Encapsulation Detail: Intrinsically Safe (ia) For Model FP Solenoids 28, 78, 88 & 98
0-SC0040	1 of 1	0	25/11/2021	Type 28, 78, 88 & 98 Solenoid Operator Ex i – General Assembly
0-SL0028	1 of 1	4	28/01/22	Type 28 Solenoid Housing Label Exia
0-SL0002	1 of 1	3	28/01/22	Type 78, 88 & 98 Solenoid Label Exia

These drawings are common to Baseefa02ATEX0124X and IECEx BAS 09.0092X.