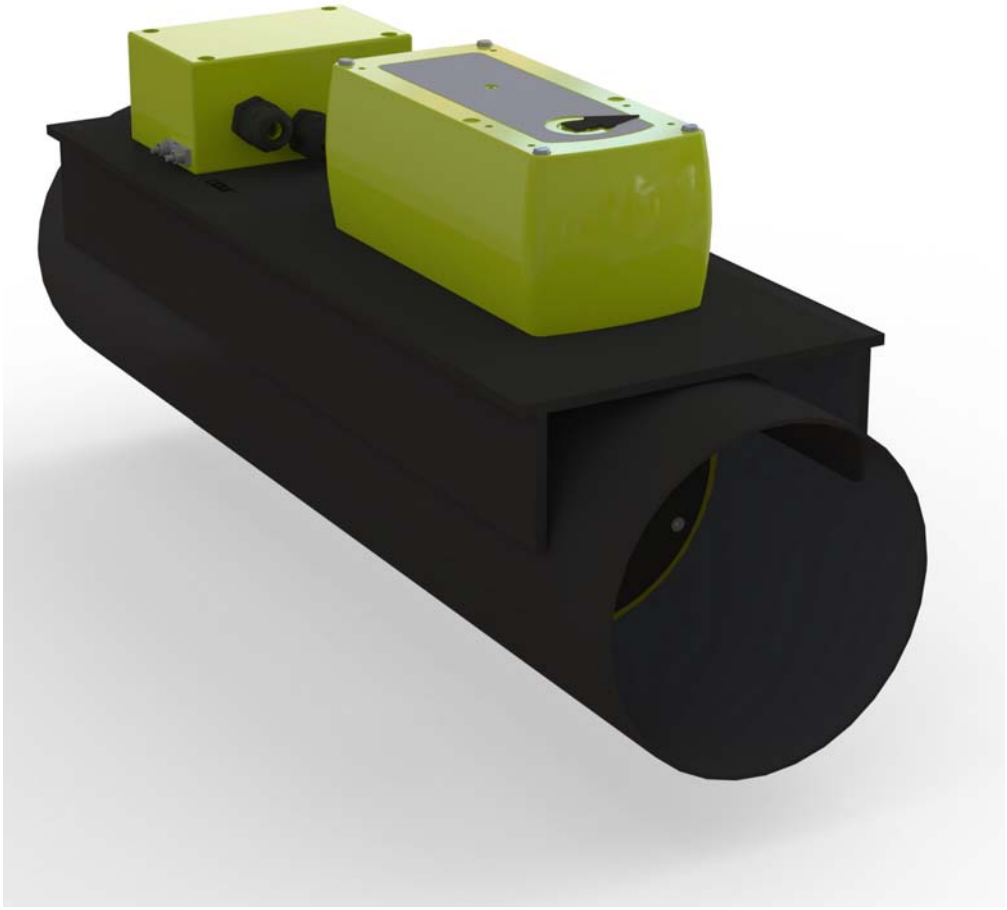
Additional operating instructions according to ATEX 2014/34/EU

Damper
DPEX



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Additional operating instructions according to ATEX 2014/34/EU for DPEX damper

Contents

Additional operating instructions according to ATEX 2014/34/EU for DPEX damper

General conditions

General description and instructions

These additional operating instructions must be observed prior to mounting and commissioning the device.

These additional operating instructions contain basic information regarding its use in areas subject to explosion hazards to be observed during assembly, operation and maintenance.

Prior to mounting and commissioning and during maintenance work, the present additional operating instructions must be read by the installer and the responsible skilled personnel/system operator!

Personnel qualification and training

The personnel for assembly, inspection and maintenance must have the relevant qualification for this work.
The area of responsibility, competence and monitoring of the personnel must be exactly regulated by the system operator. If the personnel does not have the required knowledge, it must be trained and instructed. Moreover, the system operator must ensure that the contents of the additional operating instructions are understood completely by the personnel.

Safety-conscious work

The safety instructions given in these additional operating instructions, the existing national and international regulations on explosion protection, accident prevention and the system operator's internal work, operating and safety regulations must be observed.

Designated use

The product has the following test number and ATEX marking:

II 2G Ex h IIC T6 Gb
II 2D Ex h IIIC T80°C Db EPS 11 ATEX 2 314 X

The devices have been designed for use in areas subject to explosion hazards according to ATEX of device group II, device category 2 for Zones 1 and 21, as well as device category 3 for Zones 2 and 22.

These devices are ONLY suitable for use in approved Ex zones. The operating safety of the devices is only guaranteed when used in accordance with their designated use. According to ATEX classification, the damper may only be used for media with a maximum temperature of up to 80 °C.

Special conditions

It must be ensured that all metal components and the conductive plastic material are properly and permanently connected to earth potential.
The attached and installed electrical devices must have a suitable explosion-proof design. The combination of electrical and non-electrical devices must be examined again from a safety point of view.

Type of ignition protection

The damper's type of ignition protection is guaranteed by its safe design.

Quality

The SCHAKO production facilities are certified according to the QM procedure EN ISO 9001.

Delivery and storage

Upon receipt, the devices must be checked for completeness and transport damage. If delivered incompletely or damaged, the forwarding company and the SCHAKO KG have to be informed immediately.

The device must not be exposed directly to weather, solar radiation and moisture.

Mounting information

Mounting, electrical connection work and commissioning must be carried out by skilled personnel only and in accordance with the recognised technical rules and the safety and accident prevention regulations.

Maintenance

Only a device subjected to proper maintenance and kept in perfect condition can guarantee safe and reliable operation.

When defective parts are replaced with spare parts, only SCHAKO original spare parts may be used. The SCHAKO KG cannot be held liable for any damage caused by using spare parts that are not original and will not give any warranty.

Hazard caused by non-observance of the Safety instructions

Non-observance of the safety instructions can result both in putting persons and the environment and operating units at risk. Likewise, non-observance of the safety instructions will result in the loss of any claims for damages.

Additional operating instructions according to ATEX 2014/34/EU for DPEX damper

Description

The **round, adjustable DPEX damper made of PPs-EL** is suitable for installation in **round supply and return air ducts for use with air contaminated with aggressive media**. It is used for regulating volumetric flows in ventilation and air-conditioning installations.
The DPEX damper can be used for airtight locking.
The DPEX damper can be used at temperatures between 0 °C and +55 °C.
Maximum duct pressure 1000 Pa.
For maintenance, service, retrofitting, etc., inspection openings in sufficient number and size must be provided on site.

Construction

Housing
- Plastic PPs-EL

Damper axle
- Plastic PP

Damper actuation
- Plastic PP

Damper blade
- Plastic PPs-EL

Damper leaf seal
- Silicone-free made of PUR, sealing airtight to DIN EN 1751, Class 3

Model

DPEX - with plastic damper leaf and silicon-free damper leaf seal

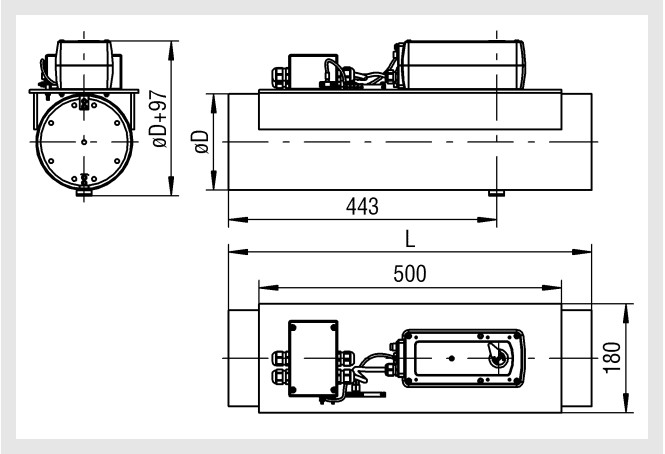
Accessories

Flat flange (-F4) (at an extra charge)
- on both sides, made of plastic PPs-EL

Models and dimensions

Dimensions

DPEX



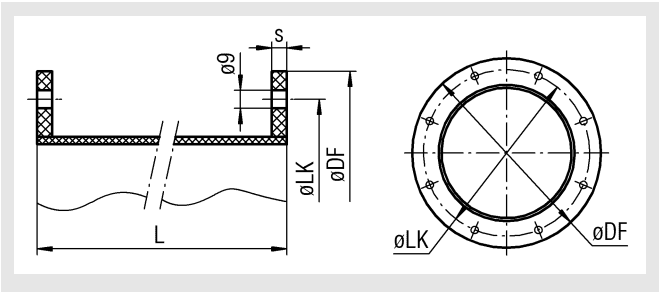
Available sizes for DPEX

NW	øD	L	Weight in kg
110	110	600	2,20
125	125		2,40
160	160		2,80
200	200		3,20
250	250		4,20
315	315	650	6,20
400	400		8,70

Additional operating instructions according to ATEX 2014/34/EU for DPEX damper

Dimensions of accessories

(at an extra charge):
Flat flange (-FF4), on both sides



Available sizes flat flange (-FF4)

NW	øD	øDF	øLK	s	Number of holes
110	110	170	150	10	4
125	125	185	165	10	8
160	160	230	200	10	8
200	200	270	240	10	8
250	250	320	290	10	12
315	315	395	350	10	12
400	400	480	445	10	16

NW 110 sealing airtight to DIN EN 1751 class 2
NW 125 – 400 sealing airtight to DIN EN 1751 class 3

Information regarding assembly and commissioning

Prior to being installed in the ventilation system, the device must be checked for damage. Damaged fire dampers must not be installed.

The device may only be used in accordance with its designated use in air ventilation systems for supply air and return air.

The device must be mounted only using approved fastening material.

No additional parts must be fastened to the device.

The device must be connected to the ventilation duct network on both sides in electrically conducting manner.

In order to avoid the risk of static charges, the device must be connected to the on-site equipotential bonding on the grounding connection provided for this purpose.

Make sure that the ventilation systems are not subjected to any anomalous operating conditions, such as vibrations, pressure surges or high proportions of solids in the medium.

For electrical connection diagrams, refer to the respective Schako additional information.

Electrical wiring and commissioning work must be performed by skilled personnel only.

Information regarding maintenance and inspection

Proper maintenance increases operational safety and the service life of the device. This is why the devices should be subjected to regular inspection.

If inspection dates are prescribed by law, they must be complied with.

The operating personnel must be informed, prior to starting maintenance and inspection work.

The personal safety measures must be looked up in the safety data sheet. Hazard caused by contact or inhaling hazardous substances must be excluded by taking appropriate safety measures.

Prior to maintenance or inspection, all system components up- and downstream of the device must be switched off and secured against being switched on again.

Additional operating instructions according to ATEX 2014/34/EU for DPEX damper

The following inspection criteria must be observed:

- Visual inspection of the device
- Check the fastening of the device
- Check the electrical connections
- Check the grounding connection for tight fit and good contact
- Functional check
- For additional inspections, please refer to the technical documentation or additional maintenance instructions

Use and electrical connection of actuators in areas subject to explosion hazards

Only ATEX-approved electrical equipment according to ATEX Directive 2014/34/EU for device group II as well as device category 2 for zones 1 and 21 and device category 3 for zone 2 and 22, such as actuators, terminal boxes and thermocouples as specified by SCHAKO may be used for devices from SCHAKO KG.

For the technical data and connection diagrams, please refer to the technical documentation.

The connection lines must be installed for permanent use and in such a way that they are sufficiently protected from mechanical and thermal damage.

Devices with explosion-protected drives and terminal boxes have to be attached over the external potential connecting terminal to the potential equalisation provided by the customer with at least 4 mm² cooper solid-core.

The electrical connection lines of the actuators must be connected in a terminal box according to ATEX Directive 2014/34/EU for device group II as well as device category 2 for zones 1 and 21 and device category 3 for zones 2 and 22 if the electrical connection is made in the area subject to explosion hazards.

The dimensioning of the conductor cross-sections must be observed.

The actuators are maintenance-free with respect to their function, but the relevant maintenance regulations according to ATEX directives or factory regulations must be observed.

Actuators

The description of the fields of application and the technical data for the actuator SCHISCHEK ExMax-…-S / -Y / -F / -SF / -YF can be found in the SCHISCHEK documentation at www.schischek.de

without spring return

- ExMax 5.10 (3-point activation)
- ExMax 5.10 - S (3-point activation, with one limit switch)
- ExMax 5.10 - Y (3-point activation and continuous control)

with spring return

- ExMax 5.10 - F (3-point activation)
- ExMax 5.10 - SF (3-point activation, with one limit switch)
- ExMax 5.10 - YF (3-point activation and continuous control)

Additional operating instructions according to ATEX 2014/34/EU for DPEX damper
Type designation

SCHAKO

Drosselklappe Typ DPEX

Baugröße .....

Baujahr .....

Auftragsnummer .....

Positionsnummer .....

Seriennummer .....

Ex II 2G Ex h IIC T6 Gb
II 2D Ex h IIIC T80°C Db

CE EPS 11 ATEX 2 314X

Additional operating instructions according to ATEX 2014/34/EU for DPEX damper

Order code

01	02	03	04	05	06
Type	Model	Nominal width	Duct connection	Actuator	Damper position
Example					
DPEX	-L	-200	-KA0	-E000	-NA

Example
DPEX-L-200-KA0-E000-NA

Damper type DPEX | round design | made of PPs-EL | airtight | electrically conductive | in nominal width NW 200 mm | without rubber lip seal | with manual adjustment made of stainless steel V2A, 1.4301 | without spring return actuator

Order details

01 - Type

DPEX = DPEX damper, round design, made of PPs-EL

02 - Model

L = sealing airtight

03 - Nominal width

110 = NW 110 mm
125 = NW 125 mm
160 = NW 160 mm
200 = NW 200 mm
250 = NW 250 mm
315 = NW 315 mm
400 = NW 400 mm

04 - Duct connection

KA0 = without rubber lip seal (standard)
FF4 = with flat flange made of PPs-EL, electrically conductive, on both sides

05 - Actuator

E000 = ohne Stellantrieb (Standard) mit Handverstellung aus Edelstahl V2A, 1.4301

without spring return
E120 = ATEX-AZ-K2, 2/3-point, OPEN/CLOSED
E122 = ATEX-AZ-ES-K2, 2/3-point, OPEN/CLOSED with 2 integrated limit switches
E124 = ATEX-S-K2, 0-10V, 4-20 mA, continuous

with spring return
E126 = ATEX-EF-K2, 2/3-point, OPEN/CLOSED
E128 = ATEX-EF-ES-K2, 2/3-point, OPEN/CLOSED with 2 integrated limit switches
E130 = ATEX-SF-K2, 0-10V, 4-20 mA, continuous

06 - Damper position

NA = no spring return actuator (standard)
NO = currentless OPEN - normally open
NC = currentless CLOSED - normally closed
(only for drives with spring return)

Please note!
Counter flanges (pair, loose) must be ordered separately!

Additional operating instructions according to ATEX 2014/34/EU for DPEX damper

Certificate of conformity

Konformitätsbescheinigung

(1)

(2) Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen – **Richtlinie 2014/34/EU**

(3) Bescheinigungsnummer

EPS 11 ATEX 2 314 X **Revision 3**

(4) Gerät: Drosselklappe Typ DKA-PP-EL-s, DPEX

(5) Hersteller: Schako KG

(6) Anschrift: Steigstraße 25-27
78600 Kolbingen
Deutschland

(7) Die Bauart dieses Gerätes sowie die verschiedenen zulässigen Ausführungen sind in der Anlage zu dieser Konformitätsbescheinigung festgelegt.

(8) Bureau Veritas Consumer Products Services Germany GmbH bescheinigt aufgrund einer freiwilligen Prüfung auf Basis der Richtlinie 2014/34/EU des Europäischen Parlaments und des Rates vom 26. Februar 2014 die Erfüllung der grundlegenden Sicherheits- und Gesundheitsanforderungen für die Konzeption und den Bau von Geräten und Schutzsystemen zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen gemäß Anhang II der Richtlinie. Die Ergebnisse der Prüfung sind in der vertraulichen Dokumentation unter der Referenznummer 10TH0561 festgelegt.

(9) Die grundlegenden Sicherheits- und Gesundheitsanforderungen werden erfüllt durch Übereinstimmung mit:

EN ISO 80079-36:2016 **EN ISO 80079-37:2016**

(10) Falls das Zeichen „X" hinter der Bescheinigungsnummer steht, wird auf besondere Bedingungen für die sichere Anwendung des Gerätes in der Anlage zu dieser Bescheinigung hingewiesen.

(11) Diese Konformitätsbescheinigung bezieht sich nur auf Konzeption und Prüfung des festgelegten Gerätes gemäß Richtlinie 2014/34/EU. Weitere Anforderungen dieser Richtlinie gelten für die Herstellung und das Inverkehrbringen dieses Gerätes. Diese Anforderungen werden nicht durch diese Bescheinigung abgedeckt.

(12) Die Kennzeichnung des Gerätes muss die folgenden Angaben enthalten:

II 2G Ex h IIC T6 Gb

II 2D Ex h IIIC T80°C Db

Zertifizierungsstelle Explosionsschutz

H. Schaffer

Hamburg, 27.05.2020

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Bescheinigungen ohne Unterschrift und Siegel haben keine Gültigkeit. Diese Bescheinigung darf nur unverändert weiterverbreitet werden. Auszüge oder Änderungen bedürfen der Genehmigung von Bureau Veritas Consumer Products Services Germany GmbH. EPS 11 ATEX 2 314 X, Revision 3.

BUREAU VERITAS Oehleckerring 40, 22419 Hamburg, Germany cps-hamburg@de.bureauveritas.com

Additional operating instructions according to ATEX 2014/34/EU for DPEX damper

Enclosure: Certificate of conformity

(13) **Anlage**

(14) **Konformitätsbescheinigung EPS 11 ATEX 2 314 X** Revision 3

(15) Beschreibung des Gerätes:

Die Drosselklappen dienen zur Verringerung oder Absperrung des Luftstromes in einer Lüftungsanlage.

(16) Referenznummer: 10TH0561

(17) Besondere Bedingungen:

Es muss sichergestellt werden, dass alle metallischen Teile sowie der leitfähige Kunststoff ordnungsgemäß und dauerhaft mit dem Erdpotential verbunden sind.

Die an - und eingebauten elektrischen Geräte müssen in geeigneter Weise explosionsgeschützt ausgeführt sein. Die Zusammenführung von elektrischen und nichtelektrischen Geräten muss erneut sicherheitstechnisch betrachtet werden.

(18) Grundlegende Sicherheits- und Gesundheitsanforderungen:

Durch Übereinstimmung mit Normen abgedeckt.

Zertifizierungsstelle Explosionsschutz

H. Schaffer

Hamburg, 27.05.2020

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