

UTP 平衡阀



概述

- 用于平衡进气和排气压力
- 可进行 ATEX 认证。通过冲击测试。
- 闭合的阀防泄漏等级 EN 1751 1 级相符。测试尺寸为 1000×1000 mm。
- 外框可以镀锌、喷漆或选用不锈钢。镀锌或不锈钢的风叶具有双层结构。免维护的不锈钢轴套和转轴。
- 电动、气动或手动执行器可供选择
- UTP 阀配有用于圆形管道安装的连接件
- 阀门结构可适应的最大管道压力为 5000Pa，最大空气流速为 15m/s。如果管道压力过高，请联系浩盾船舶寻求最佳解决方案。
- 特定风闸可提供 SIL 2 安全认证

Dimensions and Material Thickness

UTP balancing dampers are manufactured to international standards for both rectangular (width B 100-1200 mm and height H 100-1600 mm, 1 mm division) and circular ducts (Ø100-1250 mm). Non-standard dimensions available on request.

Standard flange width 27 mm. Flanges and drilling also available according to ISO 15138 standards.

Modular construction sizes available up to 2400×3200 mm. Frame thicknesses from 3 mm to 10 mm. Standard frame thickness is 3 mm.

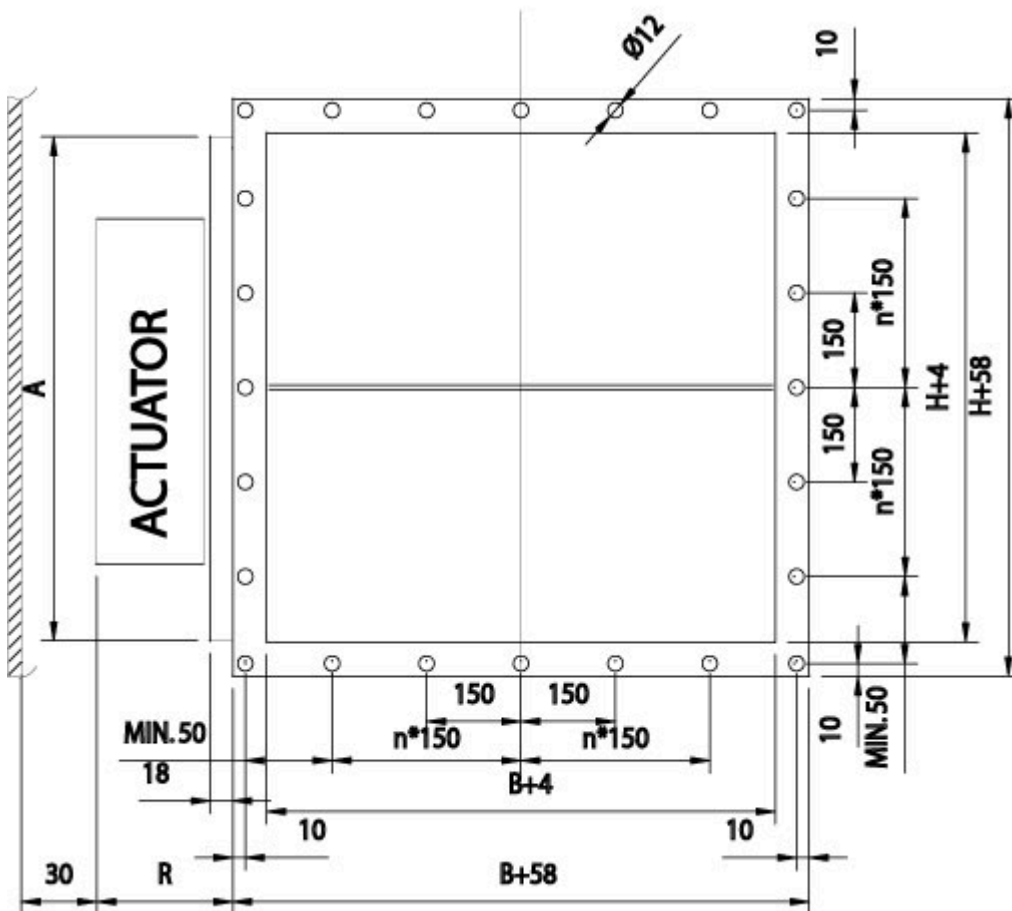
Blades are made of two sheets, each of them being 1 mm thick (sandwich design).

Actuator effect on dimensions

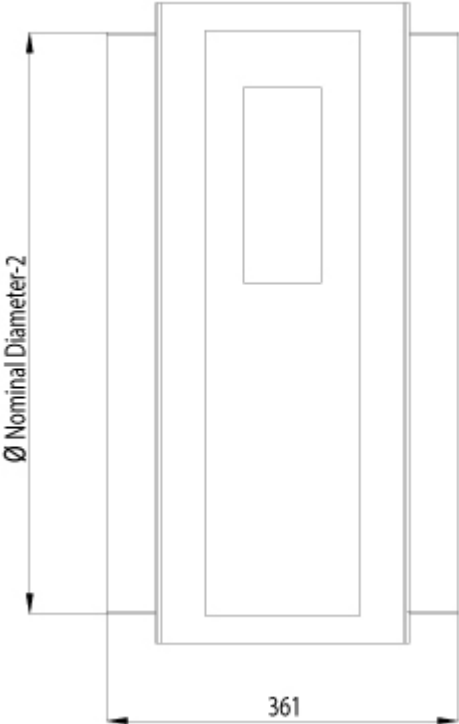
| ACTUATOR | | DIMENSIONS | |
|---------------|-----------------------------------|------------|------------------------------------|
| | | R | A |
| Manual | Handle | 95 | H |
| Electrical | BF230, BF24, BF120 | 100 | $H \leq 300 = 300$, $H > 300 = H$ |
| Pneumatic PNR | Pneumatic rotating actuator AT100 | 170 | $H \leq 300 = 300$, $H > 300 = H$ |

The above table contains only some examples of actuators and their effect on dimensions.

UTP, general drawings



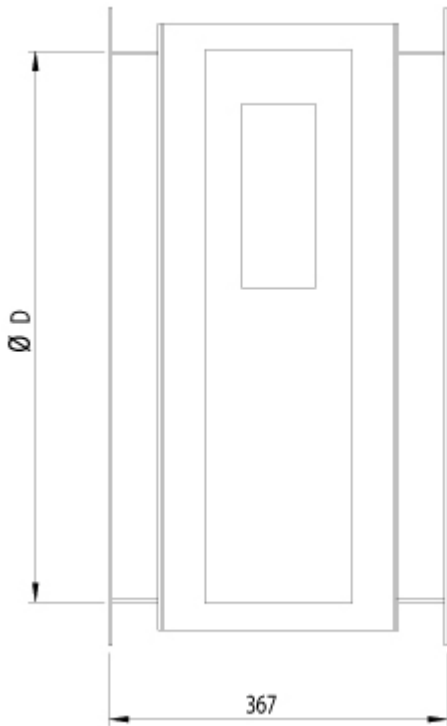
UTP circular connections



UTP, top



UTP circular, with connection flanges



| DAMPER HEIGHT | TOTAL DEPTH WITH BLADES OPEN |
|---------------|------------------------------|
| < 350 mm | 210 mm |
| ≥ 350 mm | 240 mm |

Material and Finishing

| PART | MATERIAL | FINISHING |
|--------------------------------------|---|-----------------------|
| Frame | Carbon steel | Painted or galvanized |
| Frame | Stainless steel EN 1.4301 (AISI304), EN 1.4404 (AISI316L), EN 1.4432 (AISI316L) | – |
| Blades | Steel | Galvanized |
| Blades | Stainless steel EN 1.4301 (AISI304), EN 1.4404 (AISI316L), EN 1.4432 (AISI316L) | – |
| Maintenance-free bearings and shafts | Stainless steel EN 1.4404 (AISI316L) | – |
| Shafts | Stainless steel EN 1.4404 (AISI316L) | – |

Product Models

Halton UTP is available with following actuators:

- UTP-EL: Electrical spring return actuator; standard actuators being 24 VAC/DC or 230 VAC or 120 VAC. Depending on the choice of actuator, the actuator might contain built-in open-closed limit switches. A wide range of Ex actuators available, including a one second closing time function as an option (for limited sizes).
- UTP-PNR: Pneumatic rotating actuator
- UTP-MAN: Manual handle

HSO: Halton Smart Override function for HVAC damper black-start available for PNR and EL models. With automatic reset function when power and/or pneumatic air supply is reinstated. A wide range of accessories available.

Weights

Weights of standard Halton Marine UTP dampers without an actuator (kg)

| H / HEIGHT (mm) | B / WIDTH (mm) | | | | | | | | | | | |
|-----------------|----------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
| 100 | 4 | 6 | 7 | 9 | 10 | 12 | 13 | 15 | 16 | 17 | 19 | 20 |
| 200 | 6 | 8 | 9 | 11 | 13 | 14 | 16 | 17 | 19 | 21 | 22 | 24 |
| 300 | 8 | 10 | 12 | 14 | 15 | 17 | 19 | 21 | 22 | 24 | 26 | 28 |
| 400 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 23 | 25 | 27 | 29 | 31 |
| 500 | 13 | 15 | 17 | 19 | 21 | 23 | 25 | 28 | 30 | 32 | 34 | 36 |
| 600 | 15 | 17 | 19 | 21 | 24 | 26 | 28 | 30 | 33 | 35 | 37 | 39 |
| 700 | 17 | 20 | 22 | 25 | 27 | 29 | 32 | 34 | 37 | 39 | 42 | 44 |
| 800 | 19 | 22 | 24 | 27 | 29 | 32 | 35 | 37 | 40 | 43 | 45 | 48 |
| 900 | 21 | 24 | 27 | 30 | 33 | 36 | 38 | 41 | 44 | 47 | 50 | 53 |
| 1000 | 23 | 26 | 29 | 32 | 35 | 38 | 41 | 44 | 47 | 50 | 53 | 56 |
| 1100 | 26 | 29 | 32 | 35 | 38 | 42 | 45 | 48 | 51 | 55 | 58 | 61 |
| 1200 | 27 | 31 | 34 | 37 | 41 | 44 | 48 | 51 | 54 | 58 | 61 | 64 |
| 1300 | 30 | 33 | 37 | 41 | 44 | 48 | 51 | 55 | 58 | 62 | 66 | 69 |
| 1400 | 32 | 35 | 39 | 43 | 47 | 50 | 54 | 58 | 61 | 65 | 69 | 73 |
| 1500 | 34 | 38 | 42 | 46 | 50 | 54 | 58 | 62 | 66 | 70 | 74 | 77 |
| 1600 | 36 | 40 | 44 | 48 | 52 | 56 | 60 | 65 | 69 | 73 | 77 | 81 |

| D2 ØD | WEIGHT |
|--------------|---------------|
| (mm) | kg |
| 100 | 7 |
| 125 | 8 |
| 160 | 11 |
| 200 | 12 |
| 250 | 17 |
| 315 | 19 |
| 400 | 26 |
| 500 | 34 |
| 630 | 44 |
| 800 | 59 |
| 1000 | 80 |
| 1250 | 110 |

Product Code

| | | | | |
|---|--|--|--|--|
| (S)=Shape of Connection | | | | |
| (A) Circular on one side | | | | |
| (C) Circular on two sides | | | | |
| (R) Rectangular | | | | |
| (W)=Width | | | | |
| 100-1200 | | | | |
| (H)=Height | | | | |
| 100-1600 | | | | |
| (D)=Diameter | | | | |
| 100-1250 | | | | |
| (EX)=Atex Class | | | | |
| (NA) No | | | | |
| (X1) ATEX certified damper | | | | |
| (SF)=Flange Option | | | | |
| (H0) Eurovent flange in circular connections | | | | |
| (H1) Eurovent flange + loose flange in circular connections | | | | |
| (HA) Eurovent flanges | | | | |
| (HB) Eurovent flanges + counter flanges (2 sides) | | | | |
| (HC) Eurovent flanges + counter flange (1 side) | | | | |
| (N0) ISO15138 flange drilling in circular connection | | | | |
| (N1) ISO15138 flange drilling + Loose flange in circular connection | | | | |
| (NA) Circular connections without flanges | | | | |
| (NR) ISO15138 flange drilling | | | | |
| (MA)=Material Blades | | | | |
| (AS) Stainless steel 1 mm EN1.4404 | | | | |
| (CS) Carbon steel 1 mm | | | | |
| (LS) Stainless steel 1 mm EN1.4432 | | | | |
| (SS) Stainless steel 1 mm EN1.4301 | | | | |
| (FM)=Frame Material | | | | |

| | | | |
|---|--|--|--|
| (A3) Stainless steel 3 mm EN1.4404 | | | |
| (A5) Stainless steel 5 mm EN1.4404 | | | |
| (C3) Carbon steel 3 mm | | | |
| (C5) Carbon steel 5 mm | | | |
| (L3) Stainless steel 3 mm EN1.4432 | | | |
| (L5) Stainless steel 5 mm EN1.4432 | | | |
| (S3) Stainless steel 3 mm EN1.4301 | | | |
| (S5) Stainless steel 5 mm EN1.4301 | | | |
| (FI)=Finishing | | | |
| (HG) Hot galvanized | | | |
| (NA) Acid treatment | | | |
| (PN) Standard painting grey RAL7001 | | | |
| (PX) Special Painting C5-M ISO12944 | | | |
| (BR)=Bearing Material | | | |
| (BR) Bronze JM5 | | | |
| (MS) Brass | | | |
| (AS) Stainless steel EN1.4404 | | | |
| (RE)=Actuator | | | |
| (E1) Electric – Belimo, BF24-2-HL | | | |
| (E3) Electric – Belimo, BF230-2-HL | | | |
| (E7) Electric – Belimo, BF120-HL | | | |
| (I1) InMax – Schischek, 15-SF | | | |
| (I2) InMax – Schischek, 15-SF VAS | | | |
| (I3) InMax – Schischek, 15-SF1 VAS | | | |
| (I4) InMax – Schischek, 8-SF-1 | | | |
| (I6) InMax – Schischek, 15-SF-1 | | | |
| (I9) InMax – Schischek, 5.10-SF | | | |
| (I10) InMax – Schischek, 5.10-SF VAS | | | |
| (I11) InMax – Schischek, 8-SF-1 VAS | | | |
| (P0) Pneumatic – Air Torque, AT101, Aluminium | | | |
| (P3) Pneumatic – Air Torque, AT104, AISI316 | | | |

| | | | | |
|---|--|--|--|--|
| (Q1) Pneumatic – Air Torque, AT201, Aluminium | | | | |
| (Q2) Pneumatic – Air Torque, AT204, AISI316 | | | | |
| (Z2) Electric (EX) – Schischek, ExMax 15-SF | | | | |
| (Z3) Electric (EX) – Schischek, ExMax 5-10SF | | | | |
| (Z4) Electric (EX), Schischek, ExMax 15-SF VAS | | | | |
| (Z5) Electric (EX) – Schischek, ExMax 15-SF1 VAS | | | | |
| (Z6) Electric (EX) – Schischek, ExMax 8-SF1 | | | | |
| (Z7) Electric (EX) – Schischek, ExMax 15-SF1 | | | | |
| (Z10) Electric (EX) – Schischek, ExMax 5.10-SF VAS | | | | |
| (Z11) Electric (EX) – Schischek, ExMax 8-SF1 VAS | | | | |
| (C1) Electric – Elodrive, CSQP-05A1E 24V | | | | |
| (C2) Electric – Elodrive, CSQP-05A2E 120/230V | | | | |
| (C3) Electric – Elodrive, CSQP-10A1E 24V | | | | |
| (C4) Electric – Elodrive, CSQP-10A2E 120/230V | | | | |
| (C5) Electric – Elodrive, CSQP-15A1E 24V – Blocked | | | | |
| (C6) Electric – Elodrive, CSQP-15A2E 120/230V – Blocked | | | | |
| (A7) Electric – Belimo, SF24A-S2 | | | | |
| (A9) Electric – Belimo, SF230A-S2 | | | | |
| (MA) Manual handle | | | | |
| (NA) Not Assigned | | | | |
| (AC)=Accessories | | | | |
| (BC) Belimo Casing | | | | |
| (E1) Junction box – Ensto, Plastic, IP66 & 67 | | | | |
| (E2) EX junction box – Cooper, GRP, IP66, T6 | | | | |
| (E5) Cable connectors – Wieland & Hensel (Shutoff) | | | | |
| (L2) Limit switch 2 pcs – Bernstein, Plastic, IP66, Mechanical | | | | |
| (L4) EX Limit switch 2 pcs – Bartec, Plastic, IP66, Mechanical | | | | |
| (L5) EX Limit switch 4 pcs – Bartec, Plastic, IP66, Mechanical | | | | |
| (L6) EX Magnetic switch 2 pcs – Elobau, AISI6118, Magnetic | | | | |
| (L7) EX Magnetic switch 4 pcs – Elobau, AISI6118, Magnetic | | | | |
| (L8) EX Magnetic switch 2 pcs – Pepperl & Fuchs, AISI303, Inductive | | | | |
| (L9) EX Magnetic switch 4 pcs – Pepperl & Fuchs, AISI303, Inductive | | | | |

| | | | | | |
|--|--|--|--|--|--|
| (M1) Solenoid valve – SMC, Aluminium, 24 VDC | | | | | |
| (M2) Solenoid valve – SMC, Aluminium, 230 VAC | | | | | |
| (M3) EX solenoid valve – ASCO, Brass, 24 VDC | | | | | |
| (M4) EX solenoid valve – ASCO, Brass, 230 VAC | | | | | |
| (M5) EX solenoid valve – Bifold, AISI316, 24 VDC | | | | | |
| (P1) Manual pneumatic valve – SMC, Aluminium | | | | | |
| (P2) Manual pneumatic valve – Bifold, AISI316 | | | | | |
| (S3) Limit switch open/Close – Belimo, SN2, Mechanical | | | | | |
| (SC) Cover box – Stainless steel | | | | | |
| (ST) Pneumatic tubing & fittings – AISI316 | | | | | |
| (ED) Manual over-ride handle – Halton DOT or HV-SKU | | | | | |
| (O1) Smart override handle – Halton, HSO Schischek | | | | | |
| (O2) Smart override handle – Halton, HSO Pneumatic | | | | | |
| Code example | | | | | |
| UTP/R-500-500,SF=HA,MA=CS,FM=C3,FI=HG,BM=AS,RE=MA,ZT=N,AC=E1 | | | | | |