

UTP BALANCING DAMPER

For high pressure ductworks



MATERIALS

PART	MATERIAL	FINISHING
Frame	Carbon steel	Painted or galvanised
Frame	Stainless steel EN 1.4301 (AISI 304), EN 1.4404 (AISI 316L), EN 1.4432 (AISI 316L)	-
Blades	Steel	Galvanised
Blades	Stainless steel EN 1.4301 (AISI 304), EN 1.4404 (AISI 316L), EN 1.4432 (AISI 316L)	-
Maintenance-free bearings	Stainless steel EN 1.4404 (AISI 316L)	-
Shafts	Stainless steel EN 1.4404 (AISI 316L)	-

PRODUCT OPTIONS

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.

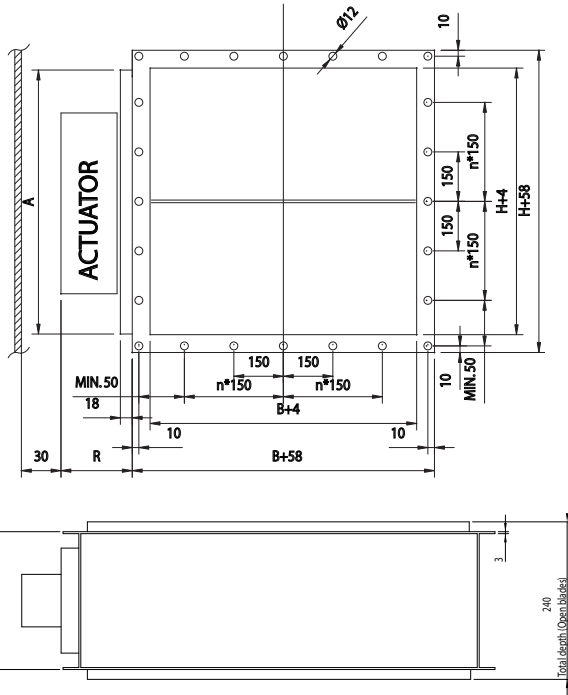
APPLICATIONS

Halton UTP dampers are used to balance airflow rates in high pressure ductwork. Dampers meet international standards for rectangular and round ducts. In the open position, the blades face the direction of flow and do not cause a significant pressure loss. The UTP is used as a balancing damper in applications where reliability is important.

FEATURES

- For balancing air intake and exhaust
- Shock tested
- Leakage class of a closed damper according to EN 1751:2014 class 1. Tested size 1000x1000 mm
- Classification of casing leakage (EN 1751:2014) class B
- The outer frame of galvanised, painted or stainless steel. Blades of galvanised or stainless steel with double sheet construction. Maintenance-free stainless steel bearings and shafts
- Electrical, pneumatic or manual operation system available
- UTP dampers can be supplied with connection pieces for round duct
- The maximum duct pressure for damper construction is 5000 Pa. The maximum air velocity is 15 m/s. In case of high duct pressure, contact Halton for finding the most suitable solution
- Temperature operation range up to +100°C, optionally up to +180°C
- Available as ATEX certified
- SIL 2 safety assessment certificate available on specific terms

GENERAL DRAWINGS



DAMPER H	TOTAL DEPTH WHEN BLADES OPEN
< 350 mm	210 mm
> 350 mm	240 mm

DIMENSIONS AND MATERIAL THICKNESS

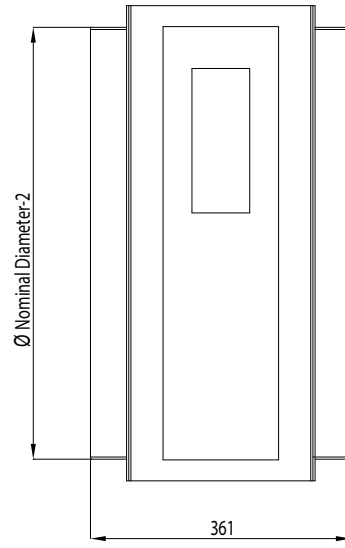
UTP balancing dampers are manufactured to international standards for both rectangular (width B 100-1200 mm and height H 100-1600 mm, 1 mm division) and circular ducts (Ø100-1250 mm). Non-standard dimensions available on request. Modular construction sizes available up to 2400x3200 mm. Standard flange width 27 mm. Flanges and drilling also available according to ISO 15138 standards. Frame thicknesses from 3 mm to 10 mm. Standard frame thickness is 3 mm. Blades are made of two sheets, each of being 1 mm thick (sandwich design).

ACTUATOR EFFECT ON DIMENSIONS

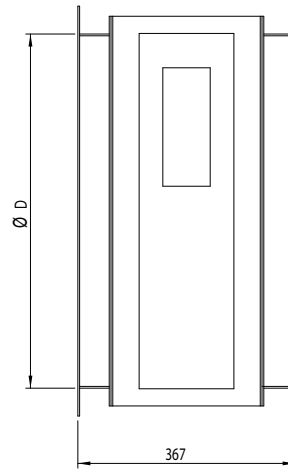
ACTUATOR		DIMENSIONS	
		R	A
Manual	Handle	95	H
Electrical	BF230, BF24, BF120	100	H < 300 = 300 H > 300 = H
Pneumatic PNR	Pneumatic rotating actuator AT100	170	H < 300 = 300 H > 300 = H

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

UTP CIRCULAR CONNECTIONS



UTP CIRCULAR, WITH CONNECTION FLANGES



WEIGHTS

STANDARD HALTON UTP DAMPERS (KG) WITHOUT AN ACTUATOR. FRAME THICKNESS 3 MM.

H / HEIGHT (mm)	B / WIDTH (mm)												D2 ØD (mm)	WEIGHT (kg)
	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	100	7
200	6	8	9	11	13	14	16	17	19	21	22	24	125	8
300	8	10	12	14	15	17	19	21	22	24	26	28	160	11
400	10	12	14	16	18	20	22	23	25	27	29	31	200	12
500	13	15	17	19	21	23	25	28	30	32	34	36	250	17
600	15	17	19	21	24	26	28	30	33	35	37	39	315	19
700	17	20	22	25	27	29	32	34	37	39	42	44	400	26
800	19	22	24	27	29	32	35	37	40	43	45	48	500	34
900	21	24	27	30	33	36	38	41	44	47	50	53	630	44
1000	23	26	29	32	35	38	41	44	47	50	53	56	800	59
1100	26	29	32	35	38	42	45	48	51	55	58	61	1000	80
1200	27	31	34	37	41	44	48	51	54	58	61	64	1250	110
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		

Examples of actuator weights:

- **UTP-EL** BF230 + 3.2 kg, ExMax/Redmax + 3.5 kg, CSQP + 3 kg.
- **UTP-PNR** AT100 + 2.1 kg, AT100 in AISI316 + 4.4 kg, AT50 + 1.2 kg.
- **UTP-MAN** + 1 kg.
- **Control enclosure** + 4 kg.

