

UTA – Gastight shut-off damper



Overview

- For shut-off and balancing of air intake and exhaust ducts
- A closed damper fulfils the requirement of leakage class 3 (EN1751:2014) for size $\geq 300 \times 300$ mm (stainless steel seals) and for size $\geq 150 \times 150$ mm (silicon seals)
- Classification of casing leakage (EN1751:2014) class C
- The outer frame of galvanized, painted or stainless steel. Blades of galvanized or stainless steel with double sheet construction. Blades contain stainless steel spring seals for low leakage. Silicon sealing as an option
- Earthing stud as standard
- Electrical, pneumatical or manual operation system available
- UTA dampers can be supplied with connection pieces for round duct
- Maximum duct pressure for damper construction 5000 Pa and maximum air velocity of 15 m/s
- The normal operating temperature for the damper is from -50°C to $+80^{\circ}\text{C}$. Actuator and component selection can affect this temperature range. Other temperatures available on request
- Available as ATEX certified
- SIL 2 safety assessment certificate available for the damper on specific terms

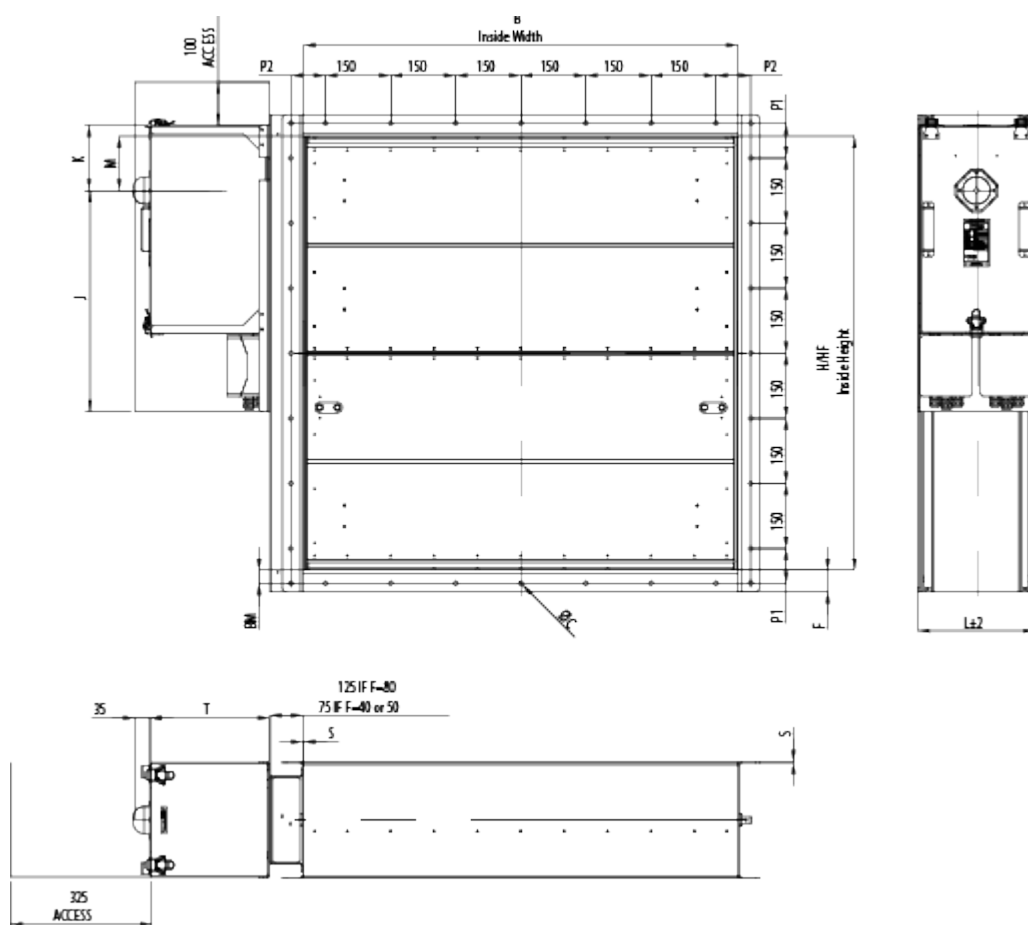
Specification

Halton UTA dampers are used to shut-off and balance airflow rates in high pressure ductworks. 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 UTA is used as a shut-off, gas and balancing damper in applications where tightness and reliability are important.

Dimensions and Material Thickness

UTA dampers meet international standards for both rectangular (width B 100-1200 mm with 25 mm division and height H 100-1600 mm with 50 mm division) and circular ducts (Ø200-1250 mm). Modular constructions up to 2500×2600 mm available. For bigger sizes, contact Halton Marine. Non-standard dimensions and flange drilling available on request. Standard flanges and drilling according to ISO 15138 standards. Frame thickness 3 or 5 mm. Blades are made of two sheets, each of them being 1 mm thick (sandwich design).

UTA, general drawings



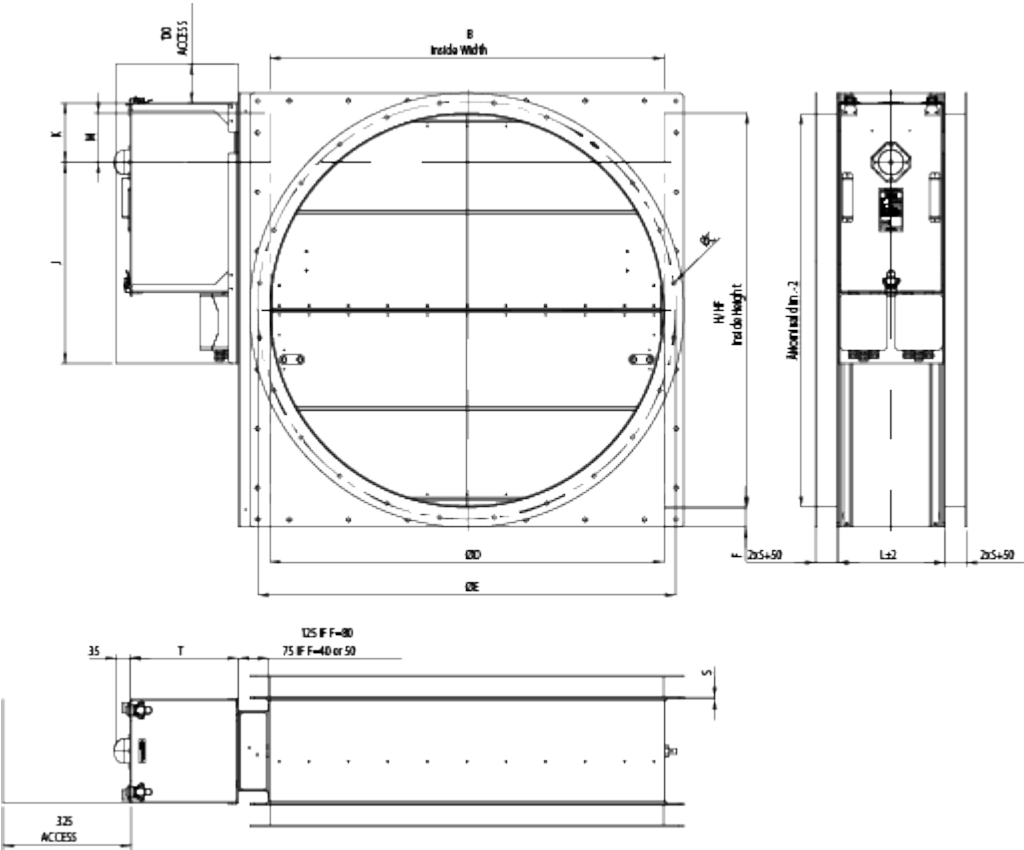
Actuator	J	K	T
AT100	430	150	145
AT100 + Halton smart override	510	150	255
AT200	510	150	165
AT200 + Halton smart override	510	150	275
AT300	510	180	190
AT300 + Halton smart override	510	180	300
Belimo BF	430	150	125
Belimo BF (Damper height<200)	430	90	125
Schischek S	430	150	145
Schischek S (Damper height<200)	430	90	145
Schischek S + Halton smart override	440	220	235
Schischek M	510	150	175
Schischek M + Halton smart override	440	220	165

H Normal height	HF Free height	M Drive
100	100	50
150	150	75
200	200	100
250	250	125
300	250	125
350	250	125
400	400	100
450	450	125
500	500	125
550	500	125
600	600	100
650	650	125
700	700	125
750	750	125
800	800	100
850	850	125
900	900	125
950	950	125
1000	1000	125
1050	1050	125
1100	1100	125
1150	1150	125
1200	1200	125
1250	1250	125
1300	1300	125
1350	1350	125
1400	1400	125
1450	1450	125
1500	1500	125
1550	1500	125

1600	1500	125
Material Thickness		Depth
5		L
3		270
5		275

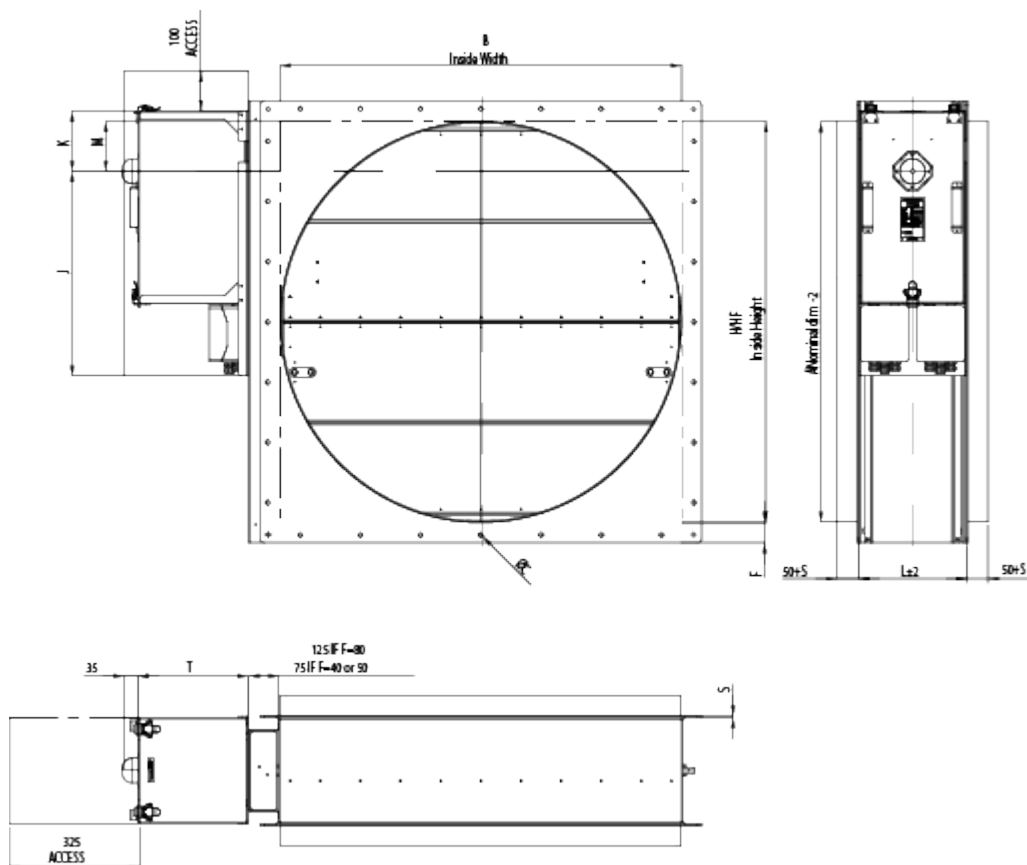
Flange dimensions according to ISO 15138

Dimensions	Ø C	F	P1	P2	BM
If the longest side ≤ 350	10	40	75...150	75...150	20
If the longest side 351...1000	12	50	75...150	75...150	30
If the longest side ≥ 1001	14	80	75...150	75...150	40



Flange dimensions according to ISO 15138

Nominal duct size (Ø D)	Bolt circle (Ø E)	Bolt hole size	No. of bolts
100	145	10	4
125	170	10	4
150	195	10	4
160	205	10	4
200	245	10	8
250	295	10	8
275	320	10	8
300	345	10	8
315	360	10	8
355	400	10	8
400	459	12	8
450	509	12	12
500	559	12	12
560	619	12	12
600	659	12	16
630	689	12	16
700	759	12	16
710	769	12	16
800	859	12	24
900	959	12	24
1000	1059	12	24
1120	1209	14	24
1200	1289	14	32
1250	1339	14	32
1400	1489	14	32



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AT100	430	150	145
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AT200	510	150	165
AT200 + Halton smart override	510	150	275
AT300	510	180	190
AT300 + Halton smart override	510	180	300
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Schischek M	510	150	175
Schischek M + Halton smart override	440	220	165

H Normal height	HF Free height	M Drive
100	100	50
150	150	75
200	200	100
250	250	125
300	250	125
350	250	125
400	400	100
450	450	125
500	500	125
550	500	125
600	600	100
650	650	125
700	700	125
750	750	125
800	800	100
850	850	125
900	900	125
950	950	125
1000	1000	125
1050	1050	125
1100	1100	125
1150	1150	125
1200	1200	125
1250	1250	125
1300	1300	125
1350	1350	125
1400	1400	125
1450	1450	125
1500	1500	125
1550	1500	125

1600	1500	125
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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)	Painted as an option
Blades	Steel	Galvanized
Blades	Stainless steel EN 1.4301 (AISI304), EN 1.4404 (AISI316L), EN 1.4432 (AISI316L)	–
Maintenance-free bearings	Oil bronze. Stainless steel EN 1.4404 (AISI316L) available as an option.	–
Shafts	Stainless steel EN 1.4404 (AISI316L)	–

Frame material thickness 3 or 5 mm.

Product Models

Halton UTA is available with following actuators:

- UTA-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).
- UTA-PNR: Pneumatic rotating actuator
- UTA-MAN: Manual handle

HSO: Halton Smart Override function for HVAC damper back-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 UTA dampers (kg) without an actuator. Frame thickness 3 mm.

HEIGHT (mm)	B / WIDTH (mm)											
	100	200	300	400	500	600	700	800	900	1000	1100	1200
100	7,5	10,3	13,2	16,0	18,8	21,7	24,5	27,4	30,2	33	35,9	38,7
200	10,8	13,6	16,5	19,3	22,2	25,0	27,8	30,7	33,5	36,4	39,2	42,0
300	14,1	17,0	19,8	22,7	25,5	28,3	31,2	34,0	36,9	39,7	42,5	45,4
400	18,7	22,0	25,3	28,6	31,9	35,2	38,5	41,8	45,1	48,4	51,6	54,9
500	22,5	25,8	29,1	32,4	35,7	39,0	42,3	45,6	48,8	52,1	55,4	58,7
600	27,1	30,9	34,6	38,3	42,1	45,8	49,6	53,3	57,0	60,8	64,5	68,3
700	30,9	34,6	38,4	42,1	45,9	49,6	53,3	57,1	60,8	64,6	68,3	72,0
800	35,5	39,7	43,9	48,1	52,3	56,5	60,7	64,8	69,0	73,2	77,4	81,6
900	39,3	43,5	47,7	51,9	56,1	60,2	64,4	68,6	72,8	77,0	81,2	85,4
1000	43,1	47,3	51,5	55,6	59,8	64,0	68,2	72,4	76,6	80,8	85,0	89,2
1100	47,7	52,3	57,0	61,6	66,2	70,9	75,5	80,2	84,8	89,4	94,1	98,7
1200	51,5	56,1	60,7	65,4	70,0	74,7	79,3	83,9	88,6	93,2	97,9	102,5
1300	56,1	61,2	66,2	71,3	76,4	81,5	86,6	91,7	96,8	101,9	107,0	112,1
1400	59,8	64,9	70,0	75,1	80,2	85,3	90,4	95,5	100,6	105,7	110,7	115,8
1500	63,6	68,7	73,8	78,9	84,0	89,1	94,2	99,3	104,3	109,4	114,5	119,6
1600	67,4	72,5	77,6	82,7	87,8	92,9	97,9	103,0	108,1	113,2	118,3	123,4

D2 ØD (mm)	WEIGHT kg
100	9
125	10
160	14
200	18
250	22
315	25
400	38
500	47
630	59
800	86
1000	109
1250	148

Flanges according to ISO 15138.

Weights of standard Halton UTA dampers (kg) without an actuator. Frame thickness 5 mm.

HEIGHT (mm)	B / WIDTH (mm)											
	100	200	300	400	500	600	700	800	900	1000	1100	1200
100	9,0	13,2	17,5	21,7	26,0	30,2	34,5	38,7	42,9	47,2	51,4	55,7
200	13,7	18,0	22,2	26,5	30,7	34,9	39,2	43,4	47,7	51,9	56,2	60,4
300	18,5	22,7	26,9	31,2	35,4	39,7	43,9	48,2	52,4	56,7	60,9	65,2
400	24,5	29,2	33,9	38,5	43,2	47,9	52,6	57,3	62,0	66,7	71,4	76,1
500	29,6	34,3	39,0	43,7	48,4	53,1	57,8	62,5	67,2	71,9	76,6	81,3
600	35,7	40,8	46,0	51,1	56,2	61,4	66,5	71,7	76,8	82,0	87,1	92,3
700	40,8	46,0	51,1	56,3	61,4	66,6	71,7	76,9	82,0	87,2	92,3	97,5
800	46,9	52,5	58,0	63,6	69,2	74,8	80,4	86,0	91,6	97,2	102,8	108,4
900	52,0	57,6	63,2	68,8	74,4	80,0	85,6	91,2	96,8	102,4	108,0	113,6
1000	57,2	62,8	68,4	74,0	79,6	85,2	90,8	96,4	102,0	107,6	113,2	118,8
1100	63,2	69,3	75,3	81,4	87,4	93,5	99,5	105,6	111,6	117,7	123,7	129,7
1200	68,4	74,5	80,5	86,6	92,6	98,7	104,7	110,7	116,8	122,8	128,9	134,9
1300	74,4	80,9	87,4	93,9	100,4	106,9	113,4	119,9	126,4	132,9	139,4	145,9
1400	79,6	86,1	92,6	99,1	105,6	112,1	118,6	125,1	131,6	138,1	144,6	151,1
1500	84,8	91,3	97,8	104,3	110,8	117,3	123,8	130,3	136,8	143,3	149,8	156,3
1600	90,0	96,5	103,0	109,5	116,0	122,5	129,0	135,5	142,0	148,5	155,0	161,4

D2 ØD (mm)	WEIGHT kg
100	12
125	13
160	19
200	24
250	26
315	36
400	54
500	68
630	84
800	121
1000	154
1250	212

Flanges according to ISO 15138.

Installation

Installation on wall or roof.

At wall installation the blade orientation must always be in horizontal plane.

Installation and maintenance instructions are with each damper delivery. Copies of Operation and Maintenance manuals are available from Halton Marine Sales offices and distributors.

Product Code

(S)=Shape of Connection

(A) Circular on one side

(C) Circular on both sides

(R) Rectangular

(W)=Width

100-1200

(H)=Height

100-1200

(D)=Diameter

100-1200

(SM)=Blade Seal Material

(SI) Silicon

(AS) Stainless Steel EN1.4404

(EX)=Atex Certification

(NA) No

(X1) ATEX Certified damper [please fill]

(SF)=Flange Option

(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

(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

(BM)=Bearing Material

(BR) Phosphor-bronze-iolite

(AS) Stainless steel EN1.4404

(RE)=Actuator

(E1) Electric – Belimo, BF24-2-HL

(E3) Electric – belimo, BF230-2-HL

(E7) Electric – Belimo, BF120-HL

(E12) Electric – Belimo, EF230A-S2

(E13) Electric – Belimo, EF24A-S2

(C5) Electric – Elodrive, CSQP-15A1E 24V – Blocked

(C6) Electric – Elodrive, CSQP-15A2E 120/230V – Blocked

(I1) InMax – Schischek, 15-SF

(I2) InMax – Schischek, 15-SF VAS

(I3) InMax – Schischek, 15-SF1 VAS

(I4) InMax – Schischek, 8-SF
 (I5) InMax – Schischek, 30-SF3
 (I6) InMax – Schischek, 15-SF1
 (I7) InMax – Schischek, 50-SF3
 (I8) InMax – Schischek, 8-SF VAS
 (P0) Pneumatic – Air Torque, AT101, Aluminium
 (P3) Pneumatic – Air Torque, AT104, AISI316
 (P4) Pneumatic – Air Torque, AT201 FA, Aluminium
 (P5) Pneumatic – Air Torque, AT204 FA, AISI316
 (Q5) Pneumatic – Air Torque, AT301 FA, Aluminium
 (Q6) Pneumatic – Air Torque, AT304 FA, AISI316
 (Q7) Pneumatic – Air Torque, AT351 FA, Aluminium, Module
 (Q8) Pneumatic – Air Torque, AT404 FA, AISI316, Aluminium, Module
 (U0) Pneumatic – Air Torque, AT301 FA STR, Aluminium
 (U1) Pneumatic – Air Torque, AT304 FA STR, AISI316
 (U2) Pneumatic – Air Torque, AT351 FA STR, Aluminium, Module
 (U3) Pneumatic – Air Torque, AT404 FA STR, AISI316, Module
 (Z2) Electric (EX) – Schischek, ExMax 15-SF
 (Z4) Electric (EX) – Schischek, ExMax 15-SF VAS
 (Z5) Electric (EX) – Schischek, ExMax 15-SF1 VAS
 (Z6) Electric (EX) – Schischek, ExMax 8-SF
 (Z7) Electric (EX) – Schischek, ExMax 15-SF1
 (Z6) Electric (EX) – Schischek, ExMax 8-SF VAS
 (Y1) Electric (EX) – Schischek, ExMax 30-SF3
 (Y3) Electric (EX) – Schischek, ExMax 50-SF3
 (MA) Manual

(AC)=Accessories

(E1) Junction box – Ensto, Plastic, IP66 & 67
 (E2) EX junction box – Malux, GRP, IP66, T6
 (L2) Limit switch 2 pcs – Bernstein, Plastic, IP65, 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
 (HO) Manual override handle – Halton, DOT
 following choices are automatically included in (HO)
 (O1) Manual override handle – Schischek, HV-SKU
 (O2) Smart override handle – Halton, HSO

(O3) Smart override handle – Halton, HSO

(O4) Smart override handle – Halton, HSO

Code example

UTA1/R-100-100,SM=SI,EX=NA,SF=NR,MA=AS,FM=A3,FI=NA,BM=AS,RE=P0,ZT=Y,AC=E1,HO