WILDEBOER BAUTEILE GMBH

Price list 2025

As at: 2025-05



▶ Trust you can build in.



Contents

General information
Useful information General notes
Air distribution
Decentralised ventilation
WiVent-B ventilation unit3
Air grilles SG/SGS louvre grilles/strips 4 AG/AGSLouvre grilles/strips 8 ABG/ACGProfile louvre grilles/strips 11 ATG gymnasium grilles/strips 14 ABF floor grilles/strips 16 ASG sight protection grille 17 ALG light protection grille 18 SR pipe grille 19 SK duct grille 20 Air diffusers 21 DX swirl diffusers 23
DT swirl diffusers 28 DV swirl diffusers 30 DSQ swirl diffusers 33 DF swirl diffusers 34 AS Slot diffusers 37
Air valves VS air valves
Mechanical volume flow controllers and limiters VK2 Volume Flow Controller
Electronic volume flow and pressure controllers
VKEI Volume Flow Controller 44 VREI Volume Flow Controller 46 VREI-N Volume Flow Controller 47 VKup Volume flow controller 50 VRup Volume flow controller 52 VRpro volume flow controller 53 DKpro Pressure controller 54 DRpro volume flow controller 56
Multileaf dampers and pressure relief dampers
JKS multileaf damper
Weather resistant louvres and combinations
AWK weather resistant louvre

Fire protection

Fire dampers	
FK90 fire damper (series FK92)	77
Ü-FK (series OR4) fire damper for air transfer applications	70
Ü-FK (series OR32) fire damper for air transfer	
applications	8
FK90 fire damper (series FK92) in short length	92
Ü-FK (series OR4) fire damper for air transfer	
applications in short length	. 94
Ü-FK (series OR32) fire damper for air transfer	
applications in short length	. 96
FK90K fire damper (series FK92K)	
FR90 fire damper (series FR92)	
Ü-FR (series OR4) fire damper for air transfer	
applications	12
Ü-FR (series OR32) fire damper for air transfer	
applications	122
FR90 fire damper (series FR92K)	126
FK90 fire damper for commercial kitchen exhaus	
air (series FK90 kitchen)	
FKU30 fire damper (series FKU31) for suspended	
ceilings	
FKU90 fire damper (series FKU91) for suspended	
ceilings	
Cellings	153
Fire protection valves	
BV90 fire protection valve (series BV92)	135
Curaliza autumatian and amalia musta atian	
Smoke extraction and smoke protection	176
EK90 smoke control damper (series EK92)	
EKM90 smoke control damper	
JR smoke protection damper	. 14
Smoke detectors	
RL4 smoke detectors for ventilation ducts	142
OR4 smoke detector	
OR4 smoke detector and release device	
OR32 Smoke detector and release device	144
Products for DIN 18017-03	
TS18 TopSchott	145
·	
Noise protection	
Sound attenuator	
	1/6
SE-A absorber splitters	140
SE-B broadband splitters	
SKE sound attenuator	
SKE-V Sound attenuator for volume flow and	
pressure controllers	162
SRC duct silencer	163
Building control system	
Building control system	
Communication system Wildeboer-Net	
Wildeboer-Net system components	
BS2 bus system	165
KS2 compact controller	
System solutions in the control cabinet	

1.1 Useful information

1.1.1 General notes

All previous price lists are rendered invalid with the publication of this price list. No liability is accepted for any printing errors. Prices are quoted in € (EURO) ex works, plus statutory value added tax (VAT). Otherwise our General Terms and Conditions of Delivery and Payment apply. Our customer service conditions apply to customer service calls. An individual and spare parts price list applies to spare parts. The place of jurisdiction for all parties involved is Leer/Ostfriesland.

For your attention!

Additional prices always apply to original equipment ex works.

If the order includes various components with delivery times of different lengths, delivery will take place according to the product with the longest delivery time.

User manuals with detailed application instructions as well as usability certificates for fire protection products are available for all products in this price list; these are expressly referred to here. Copies of the documents are available. Any variation from the specifications or special use of fire protection products must be agreed with the responsible building authority. Documents online

We always reserve the right to make design changes due to technical advances. Our documents are constantly updated to reflect the latest technical developments, so they can always be requested if necessary. This must be observed when using the product. In special cases, we will issue an express written confirmation of use. All other technical specifications are to be regarded as recommendations.

1.1.2 Express service



We offer you fast product delivery with our express service. Delivery can usually take place within 72 hours after confirmed receipt of order. Non-working days are excluded, subject to prior sale. Please contact our order processing department if you have any questions.

1.1.3 RAL colours

Colour shades of surface coatings correspond to the RAL-CLASSIC colour chart. The prices stated in this price list for RAL colour shades are always additional prices and apply to other customary or standard colour shades according to this colour chart. Pearl and luminous colours according to the RAL colour chart are excluded from this, as are RAL colour shades 9006 and 9007. More than 100 colours are available. For other or special colour shades, structures, gloss levels, in particular for colour shades corresponding to other colour charts, the delivery possibilities and prices must be agreed with us in each individual case. Please contact our order processing department if you have any questions.

Colour sample cards always contain colour tolerances, which can sometimes result in visibly recognisable colour deviations despite the same colour number. Colour variations can never be totally avoided for technical reasons; this is particularly the case for colours RAL 9006 and RAL 9007. It is always advisable to specially match colours in conjunction with surrounding colours, for example, suspended ceilings. We accept no liability for on-site or customer painting of our unpainted products.

1.1.4 Tips for navigation in the PDF

You navigate in this PDF file using links. In most PDF readers, once a link has been selected, the key combination "Alt + arrow left" can be used to return to the previous view/page.

1.1.5 QR codes on product pages

The individual product pages feature QR codes which can either be scanned or clicked. Using the QR codes, you directly access the configuration page of the respective product in Wildeboer Connect. This is where you can make various settings and adjustments.

The implemented functions include:

- Product configurator with customer-specific net prices
- · Comprehensive information on products and orders
- · Transparent real-time order tracking
- Upgraded user management

1.1.6 General terms of delivery and payment

Our current general terms and conditions of delivery and payment can be found at:

www.wildeboer.de/agb

1.1.7 Contacts

We aim to always provide personal advice and expert service. You will find the contact details for the respective areas listed below.

Quotations



Telephone:

+ 49 4951 - 950 100



E-mail:

angebote@wildeboer.de

Order processing



Telephone:

+ 49 4951 - 950 150



E-mail:

info@wildeboer.de

Technical Support



E-mail:

tb@wildeboer.de

To help you find the right contact person, we have integrated a postcode search on our website. www.wildeboer.de/kontakt

2.1 Decentralised ventilation

2.1.1 WiVent-B ventilation unit



- Ventilation unit ready for connection as master and slave version for supply air, exhaust air and secondary air mode
- · For horizontal installation on the parapet of a façade
- With front-facing vertical supply air and exhaust air openings
- · Unit casing made of galvanized sheet steel
- Dimensions (B x H x T): 2000 x 800 x 380 mm

Configure your product here





1 Unit version

M Master unit with room air sensor

S Slave unit

6 Exhaust air filter

E1 ISO ePM10 50 % E2 ISO Coarse 85 %

- 2 Position of external air & exit air connecting piece
 - O lop
 - **M** Middle

- 7 Condensation discharge
 - KG Using incline
 - **KP** Using condensation pump

- 3 Heating/cooling unit
 - **H** Heat only

HK Heating and cooling

- 8 Room control unit
 - None
 - **A** Analogue
 - **D5** Digital, 5 m cable length
 - Digital, 10 m cable length
 - **D2** Digital, 20 m cable length

- 4 Heat exchanger
 - W Heat exchanger
 - **E** Enthalpy exchanger

- 9 Colour
 - Standard:
 - **ST** RAL 9010
 - Option:
 - SF RAL...

5 Outdoor air filter

O1 ISO ePM1 70 %

O2 ISO ePM10 50 %

Price available on request

Discount group D

Accessories WiVent-B ventilation unit

Description	Price
Façade feedthrough with cover element	on request
Façade feedthrough with weather resistant louvre	on request
Cover plate (width: 110 2000 mm, height: 800 mm)	on request
Floor panel (width: 110 2000 mm, height: 35 160 mm)	on request
Termination unit remote from the unit	on request
Floor panels for termination unit	on request
Cover sheet on the unit	on request
Floor panel for cover sheet	on request
Unit feet for WiVent-B, height 47 67 mm (pack of 5)	on request
Unit feet for WiVent-B, height 62 82 mm (pack of 5)	on request
Unit feet for WiVent-B, height 77 127 mm (pack of 5)	on request
Unit feet for WiVent-B, height 110 161 mm (pack of 5)	on request
Installation set for WiVent-B	on request

2.2 Air grilles

2.2.1 SG/SGS louvre grilles/strips



- · For supply air and exhaust air with horizontal or vertical front blades
- · Made of galvanised steel

SG/SGS louvre grille: Widths B: 225 ... 1225 mm Heights H: 75 ... 525 mm

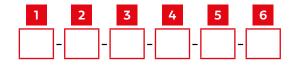
SG/SGS Louvre grille belt: Widths B: 1425 ... 2025 mm (single-piece)

Configure your product here



Greater widths possible using split grille strips.

Heights H: 75 ... 325 mm



1 Air grilles

SG With horizontal front bladesSGS With vertical front blades

4 Dimensions W [mm] x H [mm]

2 Design

O Single-row without quantity controlM Single-row with quantity control

S Single-row with slot slider

DO Double-row without quantity controlDM Double-row with quantity control

DS Double-row with slot slider

3 Fastening type

Standard:

V Concealed screw fastening

Louvre grille belt:

Surcharge for concealed screw fastening: +15 %

Option:

W Counterpunched holes

5 Installation subframes

Standard:

Without installation subframe

Option:

ER With installation subframe

6 Colour

Standard:

RAL 9010

Option:

RAL...



For further information see > page 1.

SG	Golovie grille											
	Z	3			5	6						
W	idth [mm]	Height [mm]	SG-O	SG-M	SG-S	SG-DO	SG-DM	SG-DS	ER	RAL colour		

4					5	6			
Width [mm]	Height [mm]	SG-O	SG-M	SG-S	SG-DO	SG-DM	SG-DS	ER	RAL colour
225		16	31	29	28	37	41	6	16
325		17	36	33	28	45	46	6	17
425		17	40	36	29	52	48	9	17
525	125	18	45	36	33	62	52	9	21
625	125	19	50	37	36	70	55	9	21
825		28	62	50	48	88	71	10	30
1025		29	75	55	54	100	84	13	31
1225		31	84	64	59	118	94	13	33
225		19	37-	37	31	46	51	6	21
325		19	41	41	36	52	54	9	21
425		21	50	41	40	64	62	9	22
525	225	21	54	48	45	71	68	9	25
625		28	62	51	48	83	75	10	30
825		37	77:-	66	69	109	94	13	43
1025		40	94	76	86	122	122	13	45
1225		45	105	89	104	139	147	15	47
325		23	50	48	41	64	64	9	26
425		28	55	51	48	75	71	9	30
525		31	66	55	51	86	80	10	33
625	325	35	71	62	54	94	86	10	37
825		46	95	83	87	128	120	13	51
1025		52	110	93	94	145	135	13	59
1225		54	123	104	109	158	156	15	62
625		52	95	-	120	139	-	13	51
825	425	75	123	-	163	188	-	13	74
1025	425	86	144	-	188	215	-	15	85
1225		89	164	-	216	243	-	16	93
1025	525	95	158	-	212	241	-	15	98
1225	323	106	182	-	243	278	-	16	107

SG louvre grille strip Discount group L

	_			11-	+ <mark>2</mark>			5	6
Width [mm]	Height [mm]	SG-O	SG-M	SG-S	SG-DO	SG-DM	SG-DS	ER	RAL colour
1425		58	136	128	112	252	252	58	38
1625	125	64	155	139	128	287	269	64	38
1825	125	75	174	156	145	326	302	75	38
2025		83	193	173	157	360	337	83	38
1425		76	164	149	149	285	268	76	48
1625	225	87	182	171	169	327	304	87	48
1825		97	205	192	193	366	343	97	48
2025		106	231	210	212	404	377	106	48
1425		94	178	182	184	313	292	94	62
1625	325	106	205	209	209	357	374	106	62
1825		118	231	232	231	404	384	118	62
2025		133	254	256	260	443	414	133	62
Centre	125	77	185	171	149	348	331	30	38
sections	225	98	222	205	204	389	370	31	48
2000	325	122	243	254	244	432	408	33	62
F.,	125	37	95	88	77	178	171	16	38
End sections 950 – 1010	225	51	112	104	100	197	191	17	48
330 - 1010	325	60	135	116	124	217	209	21	62
F.,	125	58	138	127	112	262	250	22	38
End sections 1070 – 1490	225	76	165	155	149	291	274	23	48
1070 - 1490	325	93	180	191	182	320	304	29	62
End coations	125	76	182	169	146	343	327	30	38
End sections 1550 – 1970	225	97	215	204	202	384	368	31	48
1330 - 1370	325	120	240	226	243	424	404	33	62

SGS louvre grille Discount group L

<u>4</u>				1	+ 2			5	6
Width [mm]	Height [mm]	SGS-O	SGS-M	SGS-S	SGS-DO	SGS-DM	SGS-DS	ER	RAL colour
225		13	25	28	25	36	41	6	16
325		17	33	31	28	46	42	6	17
425		19	37	33	33	52	46	9	17
525	75	25	46	37	35	60	48	9	30
625	/5	27	50	45	41	69	54	9	31
825		29	59	48	51	88	68	10	35
1025		33	69	58	58	106	80	13	43
1225		35	80	62	66	118	89	13	45
225		13	28	28	27	41	42	6	16
325		18	33	33	29	48	46	6	21
425		19	41	36	35	59	50	9	25
525	125	25	46	41	41	66	58	9	30
625	125	29	52	46	45	75	59	9	35
825		33	62	54	58	95	79	10	43
1025		36	76	60	66	110	88	13	46
1225		42	87	70	75	127	100	13	48
225		18	36	36	36	58	54	6	21
325		19	37	37	41	59	58	9	25
425		25	46	45	46	69	64	9	30
525	225	28	52	48	52	80	75	9	33
625	225	31	59	54	59	88	80	10	37
825		37	77	66	75	110	98	13	47
1025		46	88	75	86	128	115	13	54
1225		50	100	87	97	145	138	15	62
325		25	46	45	50	75	68	9	30
425		28	52	50	58	83	77	9	33
525	325	33	59	58	66	93	87	10	38
625		36	69	62	75	106	98	10	46
825		46	88	76	94	127	122	13	54
1025		52	100	88	109	145	140	13	64
1225		60	118	103	127	165	163	15	74

SGS louvre grille strip

Discount group L

SGS louvre grille strip Discount group												
4				1	+ 2			5	6			
Width [mm]	Height [mm]	sgs-o	SGS-M	sgs-s	SGS-DO	SGS-DM	SGS-DS	ER	RAL colour			
1425		59	115	109	112	174	171	19	35			
1625	75	68	132	122	127	197	193	24	35			
1825	/3	76	147	138	140	223	215	25	35			
2025		84	164	151	153	249	240	32	35			
1425		64	132	118	127	193	193	24	38			
1625	125	75	147	136	145	223	215	25	38			
1825	123	83	165	155	162	241	241	32	38			
2025		93	180	171	180	269	273	35	38			
1425		75	153	145	151	226	241	25	48			
1625	225	83	174	162	175	260	273	32	48			
1825	223	93	192	180	197	289	304	35	48			
2025		98	212	202	217	320	343	37	48			
1425	325	93	184	173	212	304	308	32	62			
1625		104	207	193	243	346	351	35	62			
1825		116	232	217	273	386	396	37	62			
2025		128	260	241	301	429	437	41	62			
6	75	83	164	151	153	241	240	32	35			
Centre sec- tion	125	89	180	165	175	273	268	34	38			
2000	225	98	212	198	212	313	338	35	48			
2000	325	128	254	234	301	425	435	38	62			
	75	40	80	77	79	122	116	17	35			
End section	125	46	89	84	88	138	136	18	38			
950 1010	225	51	112	98	112	162	173	19	48			
	325	64	132	120	149	215	222	24	62			
	75	59	118	113	115	180	178	19	35			
End section	125	68	135	122	133	207	197	25	38			
1070 1490	225	76	164	149	162	234	252	27	48			
	325	95	197	182	225	313	320	32	62			
	75	80	157	149	175	240	234	32	35			
End section	125	89	178	164	210	268	262	34	38			
1550 1970	225	98	207	196	226	310	328	35	48			
	325	109	226	210	266	374	382	33	54			

2.2.2 AG/AGS Louvre grilles/strips



- · For supply air and exhaust air with horizontal or vertical front blades
- Made of aluminium

AG/AGS louvre grille: Widths B: 225 ... 1225 mm

Heights H: 75 ... 525 mm

AG/AGS Louvre grille belt: Widths B: 1425 ... 2025 mm (single-piece)

 ${\it Greater widths possible using split grille strips}.$

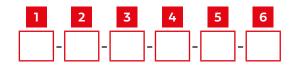
Heights H: 75 ... 325 mm



Configure

your product

here



1 Air grilles

AG With horizontal front blades
AGS With vertical front blades

4 Dimensions

W [mm] x **H** [mm]

2 Design

O Single-row without quantity control

M Single-row with quantity control

S Single-row with slot slider

DO Double-row without quantity controlDM Double-row with quantity control

DS Double-row with slot slider

5 Installation subframes

Standard:

Without installation subframe

Option:

ER With installation subframe

3 Fastening type

Standard:

V Concealed screw fastening

i Louvre grille belt:

Surcharge for concealed screw fastening: +15 %

Option:

W Counterpunched holes

6 Colour

Standard:

Aluminium, silver anodised

Option:

RAL...

For further information see **page 1**.

AG louvre grille	AG louvre grille											
4				5	6							
Width [mm]	Height [mm]	AG-O	AG-M	AG-S	AG-DO	AG-DM	AG-DS	ER	RAL colour			

4				11+2								
Width [mm]	Height [mm]	AG-O	AG-M	AG-S	AG-DO	AG-DM	AG-DS	ER	RAL colour			
225		24	47	46	38	58	57	6	31			
325		32	58	51	46	71	66	6	33			
425		37	66	57	55	87	77	9	35			
525	125	39	79	63	75	110	97	9	37			
625	125	41	87	66	82	126	110	9	39			
825		51	105	79	102	155	135	10	55			
1025		62	121	97	118	190	163	13	62			
1225		66	139	110	137	217	185	13	66			
325		41	75	66	63	96	87	9	43			
425		50	87	75	71	110	101	9	46			
525		57	102	85	96	139	121	9	48			
625	225	63	114	95	110	159	139	10	55			
825		71	138	110	133	198	171	13	82			
1025		87	165	133	160	243	209	13	85			
1225		97	190	155	184	281	246	15	94			
425		59	107	89	101	151	118	9	59			
525		71	126	105	117	171	151	10	63			
625	325	79	142	114	133	197	170	10	74			
825	323	95	176	118	163	246	205	13	101			
1025		112	209	160	198	294	250	13	113			
1225		126	246	184	230	352	288	15	120			
625		99	176	-	159	234	-	13	101			
825	425	117	210	-	197	294	-	13	147			
1025	425	142	256	-	242	355	-	15	167			
1225		159	296	-	279	415	-	16	185			
1025	525	168	302	-	281	417	-	15	192			
1225	323	190	347	-	296	475	-	16	213			

AG louvre grille strip	Discount aroup L
AG 100VIE GITTLE SCITO	Discoulit aloub L

4	1			5	6				
Width [mm]	Height [mm]	AG-O	AG-M	AG-S	AG-DO	AG-DM	AG-DS	ER	RAL colour
1425		200	354	338	248	398	392	21	77
1625	125	234	401	384	279	453	443	22	77
1825	125	258	451	430	314	510	501	29	77
2025		286	501	475	351	563	552	31	77
1425		238	430	406	319	501	494	22	99
1625	225	273	489	464	355	574	561	29	99
1825	225	305	545	520	405	639	628	31	99
2025		338	604	578	450	710	698	33	99
1425		279	513	489	384	618	591	29	120
1625		319	585	555	435	702	677	31	120
1825	325	355	661	628	490	786	752	33	120
2025		397	729	692	541	874	840	35	120
Centre sec-	125	281	494	469	343	555	545	31	77
tion	225	335	599	573	442	698	687	33	99
2000	325	392	719	682	538	861	833	35	120
E	125	145	250	238	176	281	275	16	77
End section 950 1010	225	168	305	293	223	355	351	17	99
930 1010	325	198	367	347	273	435	432	21	120
F.,	125	210	368	354	256	415	406	22	77
End section 1070 1490	225	250	447	426	334	526	514	23	99
10/0 1490	325	293	535	510	401	647	628	29	120
F.,	125	289	501	475	351	563	552	31	77
End section 1550 1970	225	338	602	577	450	711	698	32	99
1550 1570	325	393	729	692	541	874	846	33	120

AGS louvre grille Discount group L

4				1	+ 2			5	6
Width [mm]	Height [mm]	AGS-O	AGS-M	AGS-S	AGS-DO	AGS-DM	AGS-DS	ER	RAL colour
225		33	57	51	38	59	57	6	31
325		39	66	62	46	71	66	6	37
425		46	80	66	57	87	79	9	46
525	75	57	95	79	63	101	87	9	55
625	/3	63	102	85	72	112	96	9	62
825		77	126	107	89	138	117	10	70
1025		91	151	121	102	163	137	13	82
1225		105	176	145	120	190	163	13	85
225		37	59	55	41	66	62	6	31
325		46	72	66	51	80	72	6	39
425		51	91	72	63	99	82	9	48
525	125	63	102	80	72	114	97	9	59
625	125	67	114	91	85	130	110	9	70
825		85	142	114	102	159	137	10	82
1025		99	168	133	118	190	168	13	87
1225		114	197	158	139	223	189	13	99
325		51	89	75	66	102	89	9	47
425		63	107	89	79	120	105	9	59
525		71	121	101	91	139	130	9	66
625	225	79	139	110	110	165	151	10	74
825		101	175	135	129	203	181	13	93
1025		117	205	163	151	239	198	13	110
1225		133	239	189	179	281	246	15	121
425		70	121	101	95	146	121	9	66
525		80	142	114	110	168	155	10	77
625	325	95	165	129	130	200	170	10	87
825	323	114	205	158	158	247	229	13	110
1025		137	246	184	184	294	256	13	128
1225		158	281	210	216	346	289	15	147

AGS louvre grille strip

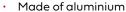
Discount group L

4			1+2						6
Width [mm]	Height [mm]	AGS-O	AGS-M	AGS-S	AGS-DO	AGS-DM	AGS-DS	ER	RAL colour
1425		137	234	223	158	254	250	17	70
1625	75	158	259	250	177	285	283	22	70
1825	/5	176	296	285	200	322	319	23	70
2025		195	329	322	218	355	354	29	70
1425		151	258	250	184	294	293	21	77
1625	125	171	296	283	205	336	327	22	77
1825	125	190	334	318	234	377	371	29	77
2025		210	371	354	256	417	410	31	77
1425		177	317	298	234	371	368	22	99
1625	225	203	359	342	269	423	415	29	99
1825	225	229	406	385	297	472	465	31	99
2025		250	451	426	329	528	515	33	99
1425		205	381	359	283	456	435	29	120
1625	325	238	431	410	323	515	495	31	120
1825	325	259	486	463	361	581	555	32	120
2025		293	541	514	398	647	620	35	120

2.2.3 ABG/ACG Profile louvre grilles/strips

For supply air and exhaust air with fixed and straight profile louvre grilles or profile louvre grilles with 15° inclination, and with individually adjustable stream directing blades in double row

Configure your product here



ABG/ACG louvre grille: Widths B: 225 ... 1225 mm Heights H: 75 ... 425 mm

ABG/ACG Louvre grille belt: Widths B: 1425 ... 2025 mm (single-piece)

Greater widths possible using split grille strips.

Heights H: 75 ... 325 mm



1 Air grilles

ABG With fixed straight profile blades
ACG With fixed 15° inclined profile blades

4 Dimensions

W [mm] x **H** [mm]

2 Design

O Single-row without quantity control

M Single-row with quantity control

S Single-row with slot slider

DO Double-row without quantity control

DM Double-row with quantity control

DS Double-row with slot slider

5 Installation subframes

Standard:

Without installation subframe

Option:

ER With installation subframe

3 Fastening type

Standard:

V Concealed screw fastening

Profile louvre grille strip:

Surcharge for concealed screw fastening: +15 %

Option:

i

W Counterpunched holes

6 Colour

Standard:

Aluminium, silver anodised

Option:

RAL...

For further information see ▶ page 1.

ABG/ACG profile louvre grille

ABG/ACG profi	_			1	+ 2			5	6
_	_	100.0	400.14			456 514	400.00		
Width [mm]	Height	ABG-O	ABG-M	ABG-S	ABG-DO	ABG-DM	ABG-DS	ER	RAL colour
	[mm]	ACG-O	ACG-M	ACG-S	ACG-DO	ACG-DM	ACG-DS		
225		38	62	57	55	85	77	6	31
325		41	71	63	58	97	87	6	37
425		49	87	70	67	112	97	9	46
525	75	57	99	80	71	126	107	9	55
625	/3	59	110	87	85	137	118	9	62
825		71	130	109	102	165	146	10	70
1025		87	155	126	118	193	167	13	82
1225		99	177	146	133	221	197	13	85
225		46	77	66	66	95	85	6	31
325		55	88	79	71	112	101	6	39
425		63	105	87	87	130	112	9	48
525	125	70	118	99	97	150	127	9	59
625	123	82	133	107	105	167	142	9	70
825		101	163	133	130	206	176	10	82
1025		118	193	158	151	243	206	13	87
1225		133	221	179	175	277	238	13	99
325		77	125	102	101	147	129	9	47
425		89	146	118	118	176	151	9	59
525		105	167	137	133	200	176	9	66
625	225	118	187	151	147	230	197	10	74
825		147	234	189	190	286	243	13	93
1025		175	277	229	221	338	289	13	110
1225		198	314	263	254	392	338	15	121
425		118	185	151	151	226	197	9	66
525		139	214	177	175	259	223	10	77
625	325	158	243	198	193	297	250	10	87
825	323	195	304	243	248	371	311	13	110
1025		234	361	289	293	440	368	13	128
1225		273	423	335	336	513	430	15	147
625		195	298	-	234	355	-	13	101
825	425	230	371	-	293	407	-	13	147
1025	723	273	443	-	342	480	-	15	167
1225		304	510	-	384	549	-	16	185

ABG/ACG profile louvre grille strip

ABG/ACG profil	le louvre grille	strip							Discount group L
4				1	+ 2			5	6
110 H. F. 3	Height	ABG-O	ABG-M	ABG-S	ABG-DO	ABG-DM	ABG-DS		5
Width [mm]	[mm]	ACG-O	ACG-M	ACG-S	ACG-DO	ACG-DM	ACG-DS	ER	RAL colour
1425		137	248	243	206	323	305	17	70
1625	75	155	281	277	235	368	354	22	70
1825	/5	176	319	306	264	415	393	23	70
2025		197	354	338	293	461	440	29	70
1425		187	305	302	258	405	384	21	77
1625	125	210	351	343	297	465	435	22	77
1825	125	235	392	384	335	515	490	29	77
2025		264	432	426	368	574	543	31	77
1425		277	440	434	376	574	539	22	99
1625	225	318	501	494	430	656	616	29	99
1825	225	354	561	555	482	736	689	31	99
2025		392	623	618	535	816	766	33	99
1425		371	577	573	501	748	698	29	118
1625	725	425	656	647	573	854	798	31	118
1825	325	475	736	727	639	957	896	32	118
2025		528	816	807	712	1062	991	35	118
	75	193	-	-	-	-	-	29	70
Centre sec-	125	258	-	-	-	-	-	31	77
2000	225	390	-	-	-	-	-	32	99
2000	325	520	-	-	-	-	-	35	118
	75	99	-	-	-	-	-	15	70
End section	125	130	-	-	-	-	-	16	77
950 1010	225	197	-	-	-	-	-	17	99
	325	264	-	-	-	-	-	21	118
	75	145	-	-	-	-	-	17	70
End section	125	197	-	-	-	-	-	22	77
1070 1490	225	289	-	-	-	-	-	23	99
	325	390	-	-	-	-	-	29	118
	75	189	-	-	-	-	-	29	70
End section	125	256	-	-	-	-	-	31	77
1550 1970	225	384	-	-	-	-	-	32	99
	325	513	-	-	-	-	-	33	118

2.2.4 ATG gymnasium grilles/strips

 For supply air and exhaust air in gymnasiums with fixed, horizontal profile louvre grilles, and with individually adjustable stream deflection blades in double row

Configure your product here



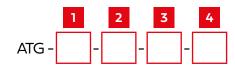
· Made of aluminium, silver anodised

ATG Gymnasium grille: Widths B: 325 ... 1225 mm Heights H: 125 ... 325 mm

ATG Gymnasium grille belt: Widths B: 1425 ... 2025 mm (one-piece)

Larger widths possible via split mesh belts. Heights H: 125 ... 325 mm





1 Design

O Single-row without flow control

M Single-row with flow control

S Single-row with hit-and-miss damperD0 Double-row without flow control

DM Double-row with flow control

DS Double-row with hit-and-miss damper

3 Dimensions

W [mm] x **H** [mm]

2 Fastening type

Option:

W Counterpunched holes

4 Installation subframes

Standard:

Without installation subframe

Option:

ER With installation subframe

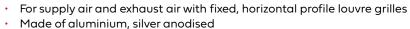
ATG gymnasium grilles

3	3		1					
Width [mm]	Height [mm]	ATG-O	ATG-M	ATG-S	ATG-DO	ATG-DM	ATG-DS	ER
325		68	105	89	85	126	109	6
425		80	122	105	99	146	126	9
525		93	138	117	109	167	146	9
625	125	105	155	129	124	191	166	9
825		126	191	159	155	230	200	10
1025		147	223	188	185	272	237	13
1225		173	262	220	215	311	277	13
325		103	146	127	122	173	154	9
425		122	175	147	144	201	181	9
525		134	198	171	159	236	209	9
625	225	152	217	188	176	262	230	10
825		180	265	220	223	321	278	13
1025		213	311	265	256	375	326	13
1225		240	367	301	297	434	380	15
425		159	223	193	193	265	236	9
525		180	256	217	215	303	265	10
625	725	198	281	237	232	339	294	10
825	325	237	346	285	290	411	352	13
1025		277	411	328	330	486	415	13
1225		311	473	375	380	556	471	15

ATG aymnasium arille strip	Discount aroup L

3								4
Width [mm]	Height [mm]	ATG-O	ATG-M	ATG-S	ATG-DO	ATG-DM	ATG-DS	ER
1425		221	339	327	297	416	405	21
1625	75	248	375	368	326	460	445	22
1825	/5	277	442	434	362	503	493	29
2025		297	454	442	395	547	535	31
1425		310	469	454	411	564	547	22
1625	225	352	525	511	462	636	615	29
1825	225	388	586	568	511	699	681	31
2025		427	643	623	559	766	741	33
1425		405	601	586	526	721	701	29
1625		458	675	657	597	808	786	31
1825	325	503	756	734	662	894	869	32
2025		559	833	808	721	980	952	35
Centre sec-	125	297	-	-	-	-	-	31
tion	225	427	-	-	-	-	-	32
2000	325	559	-	-	-	-	-	35
	125	171	-	-	-	-	-	16
End section 950 1010	225	240	-	-	-	-	-	17
950 1010	325	310	-	-	-	-	-	21
	125	252	-	-	-	-	-	22
End section 1070 1490	225	359	-	-	-	-	-	23
10/0 1490	325	462	-	-	-	-	-	29
F . 1	125	326	-	-	-	-	-	31
End section 1550 1970	225	458	-	-	-	-	-	32
1550 1570	325	599	-	-	-	-	-	33

2.2.5 ABF floor grilles/strips



ABG Floor grille: Widths B: 225 ... 1225 mm Heights H: 75 ... 425 mm

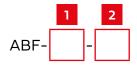
ABG floor grille strip: Widths B: 1425 ... 2025 mm (one-piece)

Larger widths possible via split mesh belts. Heights H: 75 ... 325 mm

Configure your product here



Discount group L



Design

Single-row without flow control 0

Single-row with hit-and-miss damper

Dimensions W [mm] x H [mm]

ABF floor grilles

ABF floor grille	Discount group L
2	

ABF floor grille		Discount group L				
2	3					
Width [mm]	Height [mm]	ABF-O	ABF-S			
225		55	71			
325		66	87			
425		77	101			
525	75	87	112			
625	/5	97	126			
825		118	151			
1025		139	179			
1225		163	209			
225		66	87			
325		80	102			
425		95	118			
525	125	105	130			
625		118	146			
825		146	179			
1025		171	210			
1225		193	258			
325		107	133			
425		126	155			
525		142	176			
625	225	160	197			
825		195	234			
1025		230	281			
1225		264	327			
425		155	190			
525		184	223			
625	325	209	248			
825	323	258	304			
1025		302	355			
1225		347	410			
625		258	-			
825	425	306	-			
1025	425	361	-			
1225		413	-			

E .	2				
Width [mm]	Height [mm]	ABF-O	ABF-S		
1425		223	335		
1625	75	256	384		
1825	/5	283	425		
2025		318	472		
1425		275	393		
1625	125	306	450		
1825	125	347	503		
2025		385	555		
1425		368	530		
1625	225	419	602		
1825		472	678		
2025		519	749		
625		480	682		
825	325	545	777		
1025	323	616	879		
1225		681	975		
6	75	314	-		
Centre sec- tion	125	384	-		
2000	225	514	-		
2000	325	677	-		
	75	158	-		
Centre sec- tion	125	197	-		
950 1010	225	263	-		
250 1010	325	342	-		
Ct	75	234	-		
Centre sec- tion	125	283	-		
1070 1490	225	384	-		
	325	503	-		
Ct	75	305	-		
Centre sec- tion	125	371	-		
1550 1970	225	510	-		
	325	666	-		

2.2.6 ASG sight protection grille



- with fixed V-shaped profile louvre grilles
- Made of aluminium, silver anodised

Widths B: 225 ... 1225 mm

· Heights H: 125 ... 525 mm

Configure your product here



ASG-

Design

Standard:

Without blind frame

Option:

With frame

Blind frames and installation subframes cannot be combined with each other.

Installation subframes

Standard:

Without installation subframe

Option:

With installation subframe ER

Blind frames and installation subframes cannot be combined with each other.

Dimensions **W** [mm] x **H** [mm] Colour

Standard:

Aluminium, silver anodised

Option:

RAL...

For further information see > page 1.

ASG sight protection grille

	2]	3	4
Width [mm]	Height [mm]	ASG	ASG-T	ER	RAL colour
225		37	51	6	30
325		39	59	6	37
425		50	67	9	46
525	125	57	79	9	53
625	125	63	89	9	64
825		79	110	10	77
1025		95	121	13	80
1225		110	146	13	89
325		51	72	9	45
425		63	87	9	53
525		71	97	9	62
625	225	80	110	10	67
825		102	133	13	85
1025		120	155	13	101
1225		139	179	15	113
425		77	102	9	62
525		89	114	10	70
625	325	102	130	10	80
825	323	121	159	13	101
1025		151	185	13	117
1225		171	216	15	136
625		120	151	13	93
825	425	151	184	13	136
1025	425	177	217	15	153
1225		208	254	16	169
1025	525	205	250	15	177
1225	525	239	285	16	194

2.2.7 ALG light protection grille



- With fixed W-shaped profile louvre grilles
- Made of aluminium, silver anodised

Widths B: 225 ... 1225 mm

Heights H: 125 ... 525 mm

Configure your product here





Design

Standard:

Without blind frame

Option:

With frame

Blind frames and installation subframes cannot be combined with each other.

Installation subframes

Standard:

Without installation subframe

Option:

ER With installation subframe

Blind frames and installation subframes cannot be combined with each other.

Dimensions **W** [mm] x **H** [mm]

ALG light protection grille

	2		3	
Width [mm]	Height [mm]	ALG	ALG-T	ER
225		59	77	6
325		67	89	6
425		79	99	9
525	125	89	110	9
625	125	97	120	9
825		112	145	10
1025		133	165	13
1225		151	189	13
325		80	105	9
425		96	114	9
525		110	130	9
625	225	118	146	10
825		145	171	13
1025		168	203	13
1225		190	230	15
425		112	137	9
525		126	154	10
625	325	142	170	10
825	323	170	203	13
1025		203	239	13
1225		230	272	15
625		163	197	13
825	425	198	234	13
1025	425	234	273	15
1225		272	314	16
1025	525	269	311	15
1225	323	309	355	16

2.2.8 SR pipe grille



· For installation in ventilation pipelines for supply and exhaust air

 With individually adjustable, horizontal or vertical stream deflection grilles and slot slider

Made of galvanised steel

Widths B: 425 ... 1025 mm
 Heights H: 75 ... 225 mm

Configure your product here



1 2

Grille arrangement

SR With horizontal blades

SRS With vertical blades

Dimensions
W [mm] x H [mm]

SR pipe grille

	2]
Width [mm]	Height [mm]	SR	SRS
425		-	47
525		-	51
625	75	-	55
825		-	85
1025		-	95
425		48	52
525		52	58 <i>.</i> -
625	125	57:-	66
825		90	101
1025		103	112
425		51	56
525	225	57:-	65
625	225	66	75
825		98	107

2.2.9 SK duct grille



- · For installation in ventilation ducts for supply and exhaust air
- With individually adjustable, horizontal or vertical stream deflection grilles and slot slider
- Made of galvanised steel
- · Widths B: 425 ... 1025 mm
- Heights H: 75 ... 325 mm

Configure your product here





Grille arrangement

SK With horizontal blades

SKS With vertical blades

2

*Dimensions*W [mm] x H [mm]

SK duct grille

	2]
Width [mm]	Height [mm]	SK	SKS
425		36	40
525		38	45
625	125	38	52
825		52	58
1025		57:-	68
425		43	49
525	225	49	54
625	223	52	58
825		66	74
425		52	54
525	325	57:-	60
625	323	60	69
825		81	86

2.3 Air diffusers

2.3.1 LFQ linear air diffusers



- · For supply air and exhaust air
- · Square front plate with slot-shaped, fixed air deflection blades
- Made of galvanised steel, powder coated, colour RAL 9010 or different RAL colour
- Nominal sizes: 325 ... 625 mm
- · Hole pattern: 325 ... 600 mm

Configure your product here





Front plate

Q With central fastening

QW With counterpunched hole fastening

5 Nominal connection width

For further information see 🕨 LFQ user manual

2 Front plate size

, . . .

400

500

600

625

6 Installation parts for plenum box

Standard:

Without installation parts

Option:

D With damper

L With air deflector plate

DL With damper and air deflector plate

3 Front plate

Standard:

ST Front plate and cap RAL 9010

Option:

FL Front plate RAL ..., Cap RAL 9017

FS Front plate and cap RAL ...

R Galvanized version

For further information see > page 1

7 Colour of plenum box

Standard:

 ${\bf VK}~{\sf Galvanised}$

Option:

KL Box exterior in RAL ...

SK Black inside and outside

4 Connecting piece

Standard:

Without plenum box

Option:

K1 One side-entry connecting piece

K2 Two side-entry connecting pieces

K3 Upper connecting piece

Lip seal

Standard:

Without lip seal

Option:

LD With lip seal

LFQ air diffuser with *plenum box K1* and K3

Discount group L

1 +	+ 2		3			4		5		6		7	8
Size	LFQ/ LFQW	FL	FS	R	Size	Nozzle	K1 / K3	Nozzle change	D	L	DL	KL / SK	LD
325	40	26	32	-	325	160	41	16	9	10	19	38	5
400	50	31	37	-	400	200	45	17:-	14	10	24	45	5
500	61	37	43	-	500	200	54	23	14	10	24	46	5
600	75	45	51	-	600	250	56	24	16	10	26	48	5
625	77:-	45	51	-	600	250	56	24	16	10	26	48	5

LFQ air diffuser with *plenum box K2*

1 -	+ 2		3			4		5		6		7	8
Size	LFQ/ LFQW	FL	FS	R	Size	Nozzle	К2	Nozzle change	D	L	DL	KL / SK	LD
325	40	26	32	-	325	DN	65 <i>-</i> -	-	18	10	28	38	10
400	50	31	37	-	400	DN	70	-	28	10	38	45	10
500	61	37	43	-	500	DN	83	-	28	10	38	46	10
600	75	45	51	-	600	DN	88	-	32	10	42	48	10
625	77:-	45	51	-	600	DN	88	-	32	10	42	48	10

2.3.2 DX swirl diffusers



- For supply air and exhaust air
- Circular or square front plate with radially aligned, repositionable air deflection blades
- Made of galvanised steel, powder coated, colour RAL 9010 or different RAL
- Nominal sizes: 325 ... 825 mm
- Hole pattern: 325 ... 800 mm





	1		2		3		4		5		6		7		8		9		10	
DX-		-		-		-		-		-		-		-		-		-		

Front plate shape

Q0 Square with circular hole pattern

Square with rectangular hole pattern Q1

RO Circular Connecting piece

Standard:

Without plenum box

Option:

К1 Square, one side-entry connecting piece

- K2 Square, two side-entry connecting pieces
- КЗ Square, upper connecting piece
- R1 Circular, one side-entry connecting piece

For further information see > DX user manual

Circular, upper connecting piece

Front plate size

325 800

400 825

500

600 625

Front plate

Standard:

ST Front plate RAL 9010, cap RAL 9010

Option:

FL Front plate RAL ..., Cap RAL 9017

Front plate and cap RAL... FS

For further information see ▶ page 1

Installation parts for plenum box

Nominal connection width

Standard:

Without installation parts

Option:

D With damper

With air deflector plate

With damper and air deflector plate

Direction of air flow

ML Supply air with black blades

WL Supply air with white blades

OL Exhaust air (without blades) Colour of plenum box

Standard:

VK Galvanised

Option:

KL Box exterior in RAL ...

Black inside and outside

Number of blades

64

Hole pattern 500

Hole pattern 500, hole pattern 600 24

28 Hole pattern 600

32 Hole pattern 600

56 Hole pattern 800

Hole pattern 800

Lip seal

Standard:

Without lip seal

Option:

With lip seal LD

DXQ0 supply air with plenum box K1 and K3

Discount group L

	2 + 5		1+4	E	3		6		7		8		9	10
Size	Hole pattern	Number of slats	DXQ0-ML / DXQ0-WL	FL	FS	Size	Nozzle	K1 / K3	Nozzle change	D	L	DL	KL / SK	LD
325	325	8	67:-	26	32	325	160	41	16	9	10	19	38	5
400	400	16	77:-	31	37	400	200	45	17:-	14	10	24	45	5
500	500	20	85	37	43	500	200	54	23	14	10	24	46	5
300	300	24	88	37	43	500	200	54	23	14	10	24	46	5
	325	8	97	45	51	325	160	41	16	9	10	19	38	5
	400	16	97	45	51	400	200	45	17	14	10	24	45	5
	500	20	97	45	51	500	200	54	23	14	10	24	46	5
600	300	24	97	45	51	500	200	54	23	14	10	24	46	5
		24	92	45	51	600	250	56	24	16	10	26	48	5
	600	28	92	45	51	600	250	56	24	16	10	26	48	5
		32	93	45	51	600	250	56	24	16	10	26	48	5
	325	8	97	45	51	325	160	41	16	9	10	19	38	5
	400	16	97	45	51	400	200	45	17:-	14	10	24	45	5
	500	20	97	45	51	500	200	54	23	14	10	24	46	5
625	300	24	97	45	51	500	200	54	23	14	10	24	46	5
		24	92	45	51	600	250	56	24	16	10	26	48	5
	600	28	92	45	51	600	250	56	24	16	10	26	48	5
		32	93	45	51	600	250	56	24	16	10	26	48	5
800	800	56	153	62	93	800	315	73	33	16	12	28	63	8
800	800	64	158	62	93	800	315	73	33	16	12	28	63	8
825	800	56	153	62	93	800	315	73	33	16	12	28	63	8
025	800	64	158	62	93	800	315	73	33	16	12	28	63	8

DXQ0 supply air with plenum box K2

	2 + 5	ĺ	1+4	E	3		6		7		8		9	10
Size	Hole pattern	Number of slats	DXQ0-ML / DXQ0-WL	FL	FS	Size	Nozzle	К2	Nozzle change	D	L	DL	KL / SK	LD
325	325	8	67	26	32	325	DN	65	-	18	10	28	38	10
400	400	16	77:-	31	37	400	DN	70	-	28	10	38	45	10
500	500	20	85	37	43	500	DN	83	-	28	10	38	46	10
300	300	24	88	37	43	500	DN	83	-	28	10	38	46	10
	325	8	97	45	51	325	DN	65	-	18	10	28	38	10
	400	16	97	45	51	400	DN	70	-	28	10	38	45	10
	500	20	97	45	51	500	DN	83	=	28	10	38	46	10
600	300	24	97	45	51	500	DN	83	-	28	10	38	46	10
		24	92	45	51	600	DN	88	-	32	10	42	48	10
	600	28	92	45	51	600	DN	88	-	32	10	42	48	10
		32	93	45	51	600	DN	88	=	32	10	42	48	10
	325	8	97	45	51	325	DN	65 <i>-</i> -	•	18	10	28	38	10
	400	16	97	45	51	400	DN	70	-	28	10	38	45	10
	500	20	97	45	51	500	DN	83	-	28	10	38	46	10
625	300	24	97	45	51	500	DN	83	ï	28	10	38	46	10
		24	92	45	51	600	DN	88	-	32	10	42	48	10
	600	28	92	45	51	600	DN	88	-	32	10	42	48	10
		32	93	45	51	600	DN	88	-	32	10	42	48	10
800	800	56	153	62	93	800	DN	119	-	32	12	44	63	16
800	800	64	158	62	93	800	DN	119	-	32	12	44	63	16
825	800	56	153	62	93	800	DN	119	-	32	12	44	63	16
625	800	64	158	62	93	800	DN	119	-	32	12	44	63	16

DXQ0 exhaust air with plenum box K1 and K3

Discount group L

		•		_					_					
	2 + 5		1 + 4	E	3		6		7		8		9	10
Size	Hole pattern	Number of slats	DXQ0-OL	FL	FS	Size	Nozzle	K1 / K3	Nozzle change	D	٦	DL	KL / SK	LD
325	325	8	43	26	32	325	160	41	16	9	10	19	38	5
400	400	16	49	31	37	400	200	45	17:-	14	10	24	45	5
500	500	20	53	37	43	500	200	54	23	14	10	24	46	5
300	300	24	53	37	43	500	200	54	23	14	10	24	46	5
	325	8	58	45	51	325	160	41	16	9	10	19	38	5
	400	16	58	45	51	400	200	45	17	14	10	24	45	5
	500	20	58	45	51	500	200	54	23	14	10	24	46	5
600	300	24	58	45	51	500	200	54	23	14	10	24	46	5
		24	58	45	51	600	250	56	24	16	10	26	48	5
	600	28	58	45	51	600	250	56	24	16	10	26	48	5
		32	58	45	51	600	250	56	24	16	10	26	48	5
	325	8	58	45	51	325	160	41	16	9	10	19	38	5
	400	16	58	45	51	400	200	45	17	14	10	24	45	5
	500	20	58	45	51	500	200	54	23	14	10	24	46	5
625	300	24	58	45	51	500	200	54	23	14	10	24	46	5
		24	58	45	51	600	250	56	24	16	10	26	48	5
	600	28	58	45	51	600	250	56	24	16	10	26	48	5
		32	58	45	51	600	250	56	24	16	10	26	48	5
800	800	56	102	62	93	800	315	73	33	16	12	28	63	8
800	800	64	105	62	93	800	315	73	33	16	12	28	63	8
825	800	56	102	62	93	800	315	73	33	16	12	28	63	8
625	800	64	105	62	93	800	315	73	33	16	12	28	63	8

DXQ0 exhaust air With plenum box K2

	2 + 5		1+4	E	3		6		7		8		9	10
Size	Hole pattern	Number of slats	DXQ0-OL	FL	FS	Size	Nozzle	К2	Nozzle change	D	L	DL	KL / SK	LD
325	325	8	43	26	32	325	DN	65	-	18	10	28	38	10
400	400	16	49	31	37	400	DN	70	-	28	10	38	45	10
500	500	20	53	37	43	500	DN	83	-	28	10	38	46	10
300	300	24	53	37	43	500	DN	83	-	28	10	38	46	10
	325	8	58	45	51	325	DN	65	-	18	10	28	38	10
	400	16	58	45	51	400	DN	70	-	28	10	38	45	10
	500	20	58	45	51	500	DN	83	-	28	10	38	46	10
600	300	24	58	45	51	500	DN	83	-	28	10	38	46	10
		24	58	45	51	600	DN	88	-	32	10	42	48	10
	600	28	58	45	51	600	DN	88	-	32	10	42	48	10
		32	58	45	51	600	DN	88	-	32	10	42	48	10
	325	8	58	45	51	325	DN	65	-	18	10	28	38	10
	400	16	58	45	51	400	DN	70	-	28	10	38	45	10
	500	20	58	45	51	500	DN	83	-	28	10	38	46	10
625	300	24	58	45	51	500	DN	83	-	28	10	38	46	10
		24	58	45	51	600	DN	88	-	32	10	42	48	10
	600	28	58	45	51	600	DN	88	-	32	10	42	48	10
		32	58	45	51	600	DN	88	-	32	10	42	48	10
800	800	56	102	62	93	800	DN	119	-	32	12	44	63	16
800	800	64	105	62	93	800	DN	119	-	32	12	44	63	16
825	800	56	102	62	93	800	DN	119	-	32	12	44	63	16
025	800	64	105	62	93	800	DN	119	-	32	12	44	63	16

DXQ1 supply air with plenum box K1 and K3

Discount group L

	2 + 5		1 + 4	E	3		6		7		8		9	10
Size	Hole pattern	Number of slats	DXQ1-ML / DXQ1-WL	FL	FS	Size	Nozzle	K1 / K3	Nozzle change	D	L	DL	KL / SK	LD
325	325	8	101	26	32	325	160	41	16	9	10	19	38	5
400	400	16	115	31	37	400	200	45	17:-	14	10	24	45	5
500	500	28	132	37	43	500	200	54	23	14	10	24	46	5
	325	8	146	45	51	325	160	41	16	9	10	19	38	5
600	400	16	146	45	51	400	200	45	17	14	10	24	45	5
800	500	28	146	45	51	500	200	54	23	14	10	24	46	5
	600	44	141	45	51	600	250	56	24	16	10	26	48	5
	325	8	146	45	51	325	160	41	16	9	10	19	38	5
625	400	16	146	45	51	400	200	45	17:-	14	10	24	45	5
025	500	28	146	45	51	500	200	54	23	14	10	24	46	5
	600	44	141	45	51	600	250	56	24	16	10	26	48	5
800	800	84	228	62	93	800	315	73	33	16	12	28	63	8
825	800	84	228	62	93	800	315	73	33	16	12	28	63	8

DXQ1 supply air with plenum box K2

Discount group L

	2 + 5		1+4	E	3		6		7		8		9	10
Size	Hole pattern	Number of slats	DXQ1-ML / DXQ1-WL	FL	FS	Size	Nozzle	К2	Nozzle change	D	L	DL	KL / SK	LD
325	325	8	101	26	32	325	DN	65	-	18	10	28	38	10
400	400	16	115	31	37	400	DN	70	-	28	10	38	45	10
500	500	28	132	37	43	500	DN	83	-	28	10	38	46	10
	325	8	146	45	51	325	DN	65	-	18	10	28	38	10
600	400	16	146	45	51	400	DN	70	-	28	10	38	45	10
800	500	28	146	45	51	500	DN	83	-	28	10	38	46	10
	600	44	141	45	51	600	DN	88	-	32	10	42	48	10
	325	8	146	45	51	325	DN	65 <i>-</i> -	-	18	10	28	38	10
625	400	16	146	45	51	400	DN	70	ī	28	10	38	45	10
625	500	28	146	45	51	500	DN	83	-	28	10	38	46	10
	600	44	141	45	51	600	DN	88	-	32	10	42	48	10
800	800	84	228	62	93	800	DN	119	ī	32	12	44	63	16
825	800	84	228	62	93	800	DN	119	-	32	12	44	63	16

DXQ1 exhaust air with plenum box K1 and K3

	2 + 5		1+4	E	3		6		7		8		9	10
Size	Hole pattern	Number of slats	DXQ1-OL	FL	FS	Size	Nozzle	к1 / к3	Nozzle change	D	L	DL	KL / SK	LD
325	325	8	64	26	32	325	160	41	16	9	10	19	38	5
400	400	16	72	31	37	400	200	45	17:-	14	10	24	45	5
500	500	28	81	37	43	500	200	54	23	14	10	24	46	5
	325	8	92	45	51	325	160	41	16	9	10	19	38	5
600	400	16	92	45	51	400	200	45	17	14	10	24	45	5
800	500	28	92	45	51	500	200	54	23	14	10	24	46	5
	600	44	89	45	51	600	250	56	24	16	10	26	48	5
	325	8	92	45	51	325	160	41	16	9	10	19	38	5
625	400	16	92	45	51	400	200	45	17	14	10	24	45	5
625	500	28	92	45	51	500	200	54	23	14	10	24	46	5
	600	44	89	45	51	600	250	56	24	16	10	26	48	5
800	800	84	130	62	93	800	315	73	33	16	12	28	63	8
825	800	84	130	62	93	800	315	73	33	16	12	28	63	8

DXQ1 exhaust air with plenum box K2

Discount group L

	2 + 5		1+4	E	3		6		7		8		9	10
Size	Hole pattern	Number of slats	DXQ1-OL	FL	FS	Size	Nozzle	К2	Nozzle change	D	L	DL	KL/ SK	LD
325	325	8	64	26	32	325	DN	65	-	18	10	28	38	10
400	400	16	72	31	37	400	DN	70	-	28	10	38	45	10
500	500	28	81	37	43	500	DN	83	=	28	10	38	46	10
	325	8	92	45	51	325	DN	65	ı	18	10	28	38	10
600	400	16	92	45	51	400	DN	70	-	28	10	38	45	10
800	500	28	92	45	51	500	DN	83	-	28	10	38	46	10
	600	44	89	45	51	600	DN	88	-	32	10	42	48	10
	325	8	92	45	51	325	DN	65	-	18	10	28	38	10
625	400	16	92	45	51	400	DN	70	=	28	10	38	45	10
025	500	28	92	45	51	500	DN	83	-	28	10	38	46	10
	600	44	89	45	51	600	DN	88	-	32	10	42	48	10
800	800	84	130	62	93	800	DN	119	1	32	12	44	63	16
825	800	84	130	62	93	800	DN	119	ï	32	12	44	63	16

DXR0 supply air with plenum box R1 and R3

Discount group L

	2 + 5		1 + 4	E	<u>~</u>		6		7		8		9	10
Size	Hole pattern	Number of slats	DXR0-ML / DXR0-WL	FL	FS	Size	Nozzle	R1 / R3	Nozzle change	D	L	DL	KL / SK	LD
325	325	8	67	26	32	325	160	48	16	9	10	19	38	5
400	400	16	77:-	31	37	400	200	54	17:-	14	10	24	45	5
500	500	20	85	37	43	500	200	60	23	14	10	24	46	5
300	300	24	88	37	43	500	200	60	23	14	10	24	46	5
		24	92	45	51	600	250	69	24	16	10	26	48	5
600	600	28	92	45	51	600	250	69	24	16	10	26	48	5
		32	93	45	51	600	250	69	24	16	10	26	48	5
800	800	56	153	62	68	800	315	83	33	16	16	32	63	8
800	800	64	158	62	68	800	315	83	33	16	16	32	63	8

DXRO exhaust air with plenum box R1 and R3

	2 + 5		1 + 4	E	3		6		7		8		9	10
Size	Hole pattern	Number of slats	DXR0-OL	FL	FS	Size	Nozzle	R1 / R3	Nozzle change	D	L	DL	KL / SK	LD
325	325	8	43	26	32	325	160	48	16	9	10	19	38	5
400	400	16	49	31	37	400	200	54	17:-	14	10	24	45	5
500	500	20	53	37	43	500	200	60	23	14	10	24	46	5
300	300	24	53	37	43	500	200	60	23	14	10	24	46	5
		24	58	45	51	600	250	69	24	16	10	26	48	5
600	600	28	58	45	51	600	250	69	24	16	10	26	48	5
		32	58	45	51	600	250	69	24	16	10	26	48	5
800	800	56	102	62	68	800	315	83	33	16	16	32	63	8
800	800	64	105	62	68	800	315	83	33	16	16	32	63	8

2.3.3 DT swirl diffusers



- For supply air and exhaust air
- Circular and square front plate with high-performance, progressively twisted
- Made of galvanised steel, powder coated, colour RAL 9010 or different RAL
- Nominal sizes: 325 mm ... 625 mm
- Hole pattern: 325 mm ... 600 mm





	1		2		3		4		5		6		7		8		9
DT-]-[-		-		-		-		-		_		-	

Front plate shape

square Q

circular

Nominal connection width

For further information see > DT user manual

Front plate size

325 525

350 600 400 625

425

500

Installation parts for plenum box

Standard:

Without installation parts

Option:

D With damper

L With air deflector plate

DL With damper and air deflector plate

Hole pattern size

325

400

500

600

Colour of plenum box

Standard:

VK Galvanised

Option:

KL Box exterior in RAL ...

SK Black inside and outside

Colour of front plate

Standard:

ST Front plate RAL 9010, cap RAL 9010

Option:

Front plate RAL ..., Cap RAL 9017 FL

Front plate and cap RAL...

For further information see ▶ page 1

Lip seal

Standard:

Without lip seal

Option:

With lip seal LD

Connecting piece

Standard:

Without plenum box

Option:

KΊ Square, one side-entry connecting piece

К2 Square, two side-entry connecting pieces

К3 Square, upper connecting piece

R1 Circular, one side-entry connecting piece

R3 Circular, upper connecting piece

DTQ0 with *plenum box K1* and K3

Discount group L

2	+ 3	1		•		5		6		7		8	9
Size	Hole pattern	DTQ0	FL	FS	Size	Nozzle	K1 / K3	Nozzle change	D	L	DL	KL / SK	LD
325	325	55	26	32	325	160	41	16	9	10	19	38	5
400	400	61	31	37	400	200	45	17:-	14	10	24	45	5
500	500	72	37	43	500	200	54	23	14	10	24	46	5
	325	78	45	51	325	160	41	16	9	10	19	38	5
600	400	78	45	51	400	200	45	17:-	14	10	24	45	5
000	500	78	45	51	500	200	54	23	14	10	24	46	5
	600	76	45	51	600	250	56	24	16	10	26	48	5
	325	78	45	51	325	160	41	16	9	10	19	38	5
625	400	78 <i>-</i>	45	51	400	200	45	17:-	14	10	24	45	5
025	500	78 <i>-</i> -	45	51	500	200	54	23	14	10	24	46	5
	600	76	45	51	600	250	56	24	16	10	26	48	5

DTQ0 with plenum box K2

Discount group L

2	+ 3	1		1		5		6		7		8	9
Size	Hole pattern	DTQ0	FL	FS	Size	Nozzle	К2	Nozzle change	D	L	DL	KL / SK	LD
325	325	55	26	32	325	DN	65	-	18	10	28	38	10
400	400	61	31	37	400	DN	70	-	28	10	38	45	10
500	500	72	37	43	500	DN	83	-	28	10	38	46	10
	325	78	45	51	325	DN	65	-	18	10	28	38	10
600	400	78	45	51	400	DN	70	-	28	10	38	45	10
000	500	78	45	51	500	DN	83	-	28	10	38	46	10
	600	76	45	51	600	DN	88	-	32	10	42	48	10
	325	78	45	51	325	DN	65	-	18	10	28	38	10
625	400	78	45	51	400	DN	70	-	28	10	38	45	10
025	500	78	45	51	500	DN	83	-	28	10	38	46	10
	600	76	45	51	600	DN	88	-	32	10	42	48	10

DTR0 with *plenum box R1* and *R1*

Discount group L

2	+ 3	1	4	1		5		6		7		8	9
Size	Hole pattern	DTR0	FL	FS	Size	Nozzle	R1 / R3	Nozzle change	D	L	DL	KL / SK	LD
325	325	55	26	32	325	160	48	16	9	10	19	38	5
400	400	61	31	37	400	200	54	17:-	14	10	24	45	5
500	500	72	37	43	500	200	60	23	14	10	24	46	5
600	600	76	45	51	600	250	69	24	16	10	26	48	5

DTQ0 in version as enlarged front plate

2	+3	1		7
Size	Hole pattern	DTQ0	FL	FS
350	325	58	30	58
425	400	67	33	67
525	500	76	39	76
625	600	76	45	76

DV swirl diffusers 2.3.4



- For supply air and exhaust air
- Circular or square front plate with radially and asymmetrically aligned air deflection blades
- Made of galvanised steel, powder coated, colour RAL 9010 or different RAL
- Nominal sizes: 325 ... 825 mm
- Hole pattern: 325 ... 800 mm





10

Front plate shape

Q square with circular hole pattern

R0 Circular Connecting piece

Standard:

Without plenum box

Option:

- K1 Square, one side-entry connecting piece
- K2 Square, two side-entry connecting pieces
- КЗ Square, upper connecting piece
- R1 Circular, one side-entry connecting piece

For further information see > DV user manual

R3 Circular, upper connecting piece

Front plate size

325 800

400 825

500

600 625

Hole pattern size

325

400

500

600 800

Standard: Without installation parts

Nominal connection width

Option:

Standard:

Option:

VK

KL

D With damper

Colour of plenum box

Galvanised

With air deflector plate L

Box exterior in RAL...

Black inside and outside

Installation parts for plenum box

With damper and air deflector plate

Colour of front plate

Standard:

S1 Front plate and cap RAL 9010, blade RAL 7016

Option:

S2 Front plate, cap RAL 9010; blade RAL 9010

S3 Front plate, cap RAL; blade RAL 7016

Front plate, cap RAL; blade RAL 9010 **S4** FL

Front plate, blade RAL; cap RAL 9017 FS

Front plate, blade and cap RAL ... For further information see ▶ page 1.

Lip seal

Without lip seal

Option:

With lip seal

Direction of air flow

Supply air (with blades)

OL Exhaust air (without blades)

Standard:

DVQ0 supply air with plenum box K1 and K3

Discount group L

	2 + 3		1 + 5		4			6		7		8		9	10
Size	Hole pattern	Number of slats	DVQ0-ML	S2 / S3 / S4	FL	FS	Size	Nozzle	К1 / К3	Nozzle change	D	L	DL	KL / SK	LD
325	325	8	125	26	40	46	325	160	41	16	9	10	19	38	5
400	400	16	142	31	45	51	400	200	45	17	14	10	24	45	5
500	500	24	165	37	52	58	500	200	54	23	14	10	24	46	5
	325	8	180	45	61	67	325	160	41	16	9	10	19	38	5
600	400	16	190	45	61	67	400	200	45	17	14	10	24	45	5
800	500	24	184	45	61	67	500	200	54	23	14	10	24	46	5
	600	32	180	45	61	67	600	250	56	24	16	10	26	48	5
	325	8	180	45	61	67	325	160	41	16	9	10	19	38	5
625	400	16	190	45	61	67	400	200	45	17:-	14	10	24	45	5
625	500	24	184	45	61	67	500	200	54	23	14	10	24	46	5
	600	32	180	45	61	67	600	250	56	24	16	10	26	48	5
800	800	32	275	62	83	108	800	315	73	33	16	12	28	63	8
825	800	32	275	62	83	108	800	315	73	33	16	12	28	63	8

DVQ0 supply air with plenum box K2

Discount group L

	2+3		1+5		4			6		7		8		9	10
Size	Hole pattern	Number of slats	DVQ0-ML	S2 / S3 / S4	FL	FS	Size	Nozzle	К2	Nozzle change	D	L	DL	KL / SK	LD
325	325	8	125	26	40	46	325	DN	65	-	18	10	28	38	10
400	400	16	142	31	45	51	400	DN	70	ī	28	10	38	45	10
500	500	24	165	37	52	58	500	DN	83	-	28	10	38	46	10
	325	8	180	45	61	67	325	DN	65	-	18	10	28	38	10
600	400	16	190	45	61	67	400	DN	70	-	28	10	38	45	10
800	500	24	184	45	61	67	500	DN	83	-	28	10	38	46	10
	600	32	180	45	61	67	600	DN	88	=	32	10	42	48	10
	325	8	180	45	61	67	325	DN	65	-	18	10	28	38	10
625	400	16	190	45	61	67	400	DN	70	-	28	10	38	45	10
625	500	24	184	45	61	67	500	DN	83	-	28	10	38	46	10
	600	32	180	45	61	67	600	DN	88	-	32	10	42	48	10
800	800	32	275	62	83	108	800	DN	119	-	32	12	44	63	16
825	800	32	275	62	83	108	800	DN	119	-	32	12	44	63	16

DVQ0 exhaust air with plenum box K1 and K3

	2 + 3		1+5	<u> </u>	4		6		7		8		9	10
Size	Hole pattern	Number of slats	DVQ0-OL	FL	FS	Size	Nozzle	K1 / K3	Nozzle change	D	L	DL	KL / SK	LD
325	325	8	68	26	32	325	160	41	16	9	10	19	38	5
400	400	16	75	31	37	400	200	45	17:-	14	10	24	45	5
500	500	24	88	37	43	500	200	54	23	14	10	24	46	5
	325	8	105	45	51	325	160	41	16	9	10	19	38	5
600	400	16	102	45	51	400	200	45	17	14	10	24	45	5
800	500	24	101	45	51	500	200	54	23	14	10	24	46	5
	600	32	94	45	51	600	250	56	24	16	10	26	48	5
	325	8	105	45	51	325	160	41	16	9	10	19	38	5
625	400	16	102	45	51	400	200	45	17:-	14	10	24	45	5
025	500	24	101	45	51	500	200	54	23	14	10	24	46	5
	600	32	94	45	51	600	250	56	24	16	10	26	48	5
800	800	32	163	62	87	800	315	73	33	16	12	28	63	8
825	800	32	163	62	87	800	315	73	33	16	12	28	63	8

DVQ0 exhaust air with plenum box K2

Discount group L

	2 + 3		1+5	<u> </u>	4		6		7		8		9	10
Size	Hole pattern	Number of slats	DVQ0-OL	FL	FS	Size	Nozzle	К2	Nozzle change	D	L	DL	KL / SK	LD
325	325	8	68	26	32	325	DN	65	-	18	10	28	38	10
400	400	16	75	31	37	400	DN	70	-	28	10	38	45	10
500	500	24	88	37	43	500	DN	83	-	28	10	38	46	10
	325	8	105	45	51	325	DN	65	ì	18	10	28	38	10
600	400	16	102	45	51	400	DN	70	-	28	10	38	45	10
800	500	24	101	45	51	500	DN	83	-	28	10	38	46	10
	600	32	94	45	51	600	DN	88	-	32	10	42	48	10
	325	8	105	45	51	325	DN	65	-	18	10	28	38	10
625	400	16	102	45	51	400	DN	70	-	28	10	38	45	10
025	500	24	101	45	51	500	DN	83	-	28	10	38	46	10
	600	32	94	45	51	600	DN	88	-	32	10	42	48	10
800	800	32	163	62	87	800	DN	119	-	32	12	44	63	16
825	800	32	163	62	87	800	DN	119	ı,	32	12	44	63	16

DVQ0 supply air with plenum box R1 and R3

Discount group L

2 + 3		1+5	4			6			7	8		9	10		
Size	Hole pattern	Number of slats	DVR0-ML	S2 / S3 / S4	FL	FS	Size	Nozzle	R1 / R3	Nozzle change	D	L	DL	KL/ SK	LD
325	325	8	125	26	40	46	325	160	48	16	9	10	19	38	5
400	400	16	142	31	45	51	400	200	54	17:-	14	10	24	45	5
500	500	24	165	37	52	58	500	200	60	23	14	10	24	46	5
600	600	32	180	45	61	67	600	250	69	24	16	10	26	48	5
800	800	32	275	62	83	89	800	315	83	33	16	16	32	63	8

DVRO exhaust air with plenum box R1 and R3

2+3			1+5		4	6			7	8			9	10
Size	Hole pattern	Number of slats	DVR0-OL	FL	FS	Size	Nozzle	R1 / R3	Nozzle change	D	L	DL	KL / SK	LD
325	325	8	68	26	32	325	160	48	16	9	10	19	38	5
400	400	16	75	31	37	400	200	54	17:-	14	10	24	45	5
500	500	24	88	37	43	500	200	60	23	14	10	24	46	5
600	600	32	94	45	51	600	250	69	24	16	10	26	48	5
800	800	32	163	62	68	800	315	83	33	16	16	32	63	8

2.3.5 DSQ swirl diffusers



- For supply air and exhaust air
- Square front plate with fixed, large-scale radially aligned air deflection blades
- Made of galvanised steel, powder coated, colour RAL 9010 or different RAL

Nominal sizes: 325 ... 625 mm

Configure your product



	1	2	3	4	5	6	7
DSQ-		-	-]-[_	-	-

Front plate size

325

400

500

600 625

Installation parts for plenum box

Standard:

Without installation parts

Option:

D With damper

L With air deflector plate

DL With damper and air deflector plate

Colour of front plate

Standard:

ST Front plate RAL 9010

Option:

FL Front plate RAL ...; cap RAL 9017

Front plate and cap RAL

For further information see page 1.

Colour of plenum box

Standard:

VK Galvanised

Option:

ΚL Box exterior in RAL ...

Black inside and outside

Connecting piece

Standard:

Without plenum box

Option:

KΊ Square, one side-entry connecting piece

К2 Square, two side-entry connecting pieces

К3 Square, upper connecting piece Lip seal

Standard:

Without lip seal

Option:

LD With lip seal

Nominal connection width

For further information see DSQ user manual

DSQ with plenum box K1 and K3

Discount group L

		2	2 3				4	5			6	7
Size	DSQ	FL	FS	Size	Nozzle	К1 / К3	Nozzle change	D	L	DL	KL / SK	LD
325	77	26	32	325	160	41	16	9	10	19	38	5
400	86	31	37	400	200	45	17:-	14	10	24	45	5
500	101	37	43	500	200	54	23	14	10	24	46	5
600	107-	45	51	600	250	56	24	16	10	26	48	5
625	107-	45	51	600	250	56	24	16	10	26	48	5

DSQ with plenum box K2

	1 2		3			4		5	6	7		
Size	DSQ	FL	FS	Size	Nozzle	К2	Nozzle change	D	L	DL	KL / SK	LD
325	77:-	26	32	325	DN	65	-	18	10	28	38	10
400	86	31	37	400	DN	70	-	28	10	38	45	10
500	101	37	43	500	DN	83	-	28	10	38	46	10
600	107	45	51	600	DN	88	-	32	10	42	48	10
625	107	45	51	600	DN	88	-	32	10	42	48	10

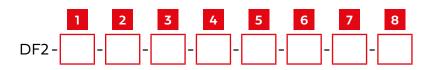
2.3.6 DF swirl diffusers



- · For supply air and exhaust air
- Circular and square front plate with radial deflector blades as air deflection elements
- Made of galvanised sheet steel, powder coated, colour RAL 9010 or different RAL colour
- Size: DN100 ... DN355

Configure your product here





Front plate shape

RO Circular

Q0 Square, smallH0 Square 600

GO Square 625

5 Nominal connection width

For further information see > DF user manual

2 Front plate size

100 315

125 355

160

200

250

6 Installation parts for plenum box

Standard:

Without installation parts

Option:

D With damper

L With air deflector plate

DL With damper and air deflector plate

3 Colour of front plate

Standard:

ST Front plate RAL 9010, cap RAL 9010

Option:

FL Front plate RAL; cap RAL 9017

FS Front plate and Cap RAL...

For further information see > page 1

7 Colour of plenum box

Standard:

VK Galvanised

Option:

KL Box exterior in RAL ...

SK Black inside and outside

4 Connecting piece

Standard:

Without

Option:

34

L With perforated plate

R With reduction

RK With clamping reduction

K4 Square plenum box with side-entry

connecting piece

8 Lip seal

Standard:

Without lip seal

Option:

LD With lip seal

DFRO with plenum box K4

Discount group L

1 -	+ 2	3	3		4		5	6		7	8	
Size	DFRO	FL	FS	Size	Nozzle	К4	Nozzle change	D	L	DL	KL / SK	LD
100	25	22	29	325	100	48	-	8	10	18	38	5
125	29	22	29	325	100	48	16	8	10	18	38	5
160	31	22	29	325	125	48	16	8	10	18	38	5
200	39	26	33	400	160	54	17:-	10	10	20	45	5
250	46	26	33	500	200	62 <i>.</i> -	23	10	10	20	46	5
315	57:-	31	38	500	250	62 <i>.</i> -	23	10	10	20	46	5
355	74	33	40	600	280	70	24	14	10	24	48	8

DFQ0 with plenum box K4

Discount group L

1	+ 2	E	3		4		5		6		7	8
Size	DFQ0	FL	FS	Size	Nozzle	К4	Nozzle change	D	L	DL	KL / SK	LD
100	25	22	29	325	100	48	-	8	10	18	38	5
125	31	22	29	325	100	48	16	8	10	18	38	5
160	35	22	29	325	125	48	16	8	10	18	38	5
200	40	26	33	400	160	54	17:-	10	10	20	45	5
250	50	26	33	500	200	62	23	10	10	20	46	5
315	59	31	38	500	250	62	23	10	10	20	46	5
355	80	33	40	600	280	70	24	14	10	24	48	8

DFHO and **DFGO** with **plenum box K4**

1	+ 2	E	3		4		5	6		7	8	
Size	DFH0 / DFG0	FL	FS	Size	Nozzle	К4	Nozzle change	D	L	DL	KL / SK	LD
100	46	45	52	325	100	48	-	8	10	18	38	5
125	51	45	52	325	100	48	16	8	10	18	38	5
160	55	45	52	325	125	48	16	8	10	18	38	5
200	58	45	52	400	160	54	17:-	10	10	20	45	5
250	67-	45	52	500	200	62	23	10	10	20	46	5
315	78	45	52	500	250	62	23	10	10	20	46	5
355	104	45	52	600	280	70	24	14	10	24	48	8

DFRO with plenum box K4

Discount group L

1 -	+ <mark>2</mark>	3	3	4				
Size	DFR0	FL	FS	L	R	RK		
100	25	22	29	1	-	-		
125	29	22	29	2	9	35		
160	31	22	29	2	10	41		
200	39	26	33	2	17:-	45		
250	46	26	33	2	24	49		
315	57:-	31	38	6	30	53		
355	74	33	40	8	35	59		

DFQ0 with connecting element L, R or RK

Discount group L

<u> </u>	H <mark>2</mark>	2	3	4			
Size	DFQ0	FL	FS	L	R	RK	
100	25	22	29	1	-	-	
125	31	22	29	2	9	35	
160	35	22	29	2	10	41	
200	40	26	33	2	17:-	45	
250	50	26	33	2	24	49	
315	59	31	38	6	30	53	
355	80	33	40	8	35	59	

DFHO and DFGO with connecting element L, R or RK

1 -	+ 2		3	4			
Size	DFH0 / DFG0	FL	FS	L	R	RK	
100	46	45	52	1	-	-	
125	51	45	52	2	9	35	
160	55	45	52	2	10	41	
200	58	45	52	2	17:-	45	
250	67:-	45	52	2	24	49	
315	78	45	52	6	30	53	
355	104	45	52	8	35	59	

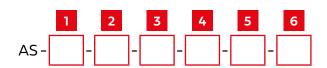
2.3.7 AS Slot diffusers



- · For supply air and exhaust air
- With blind frame
- Made of aluminium in 1 ... 4 rows side-by-side
- Standard single length: L = 400 ... 2000 mm
- · Slot diffuser tapes: L > 2000 mm

Configure your product





Slotted rows

1 1-row
 2 2-row

3 3-row

4 4-row

4 Connecting piece

O Without plenum box

K With plenum box

2 Direction of air flow

Z Supply air (with radiating element)

A Exhaust air (without radiating element)

5 Dimensions

Length L = ... mm

Frame

B With frame

6 Colour RAL...

For further information see > page 1.

AS slot diffusers with plenum box

5		1	- 4			11-	- 4		6
Length L [mm]		AS-A	-В-К						
from 400 mm to	1- row	2- row	3- row	4- row	1- row	2- row	3- row	4- row	RAL
600	109	134	166	195	126	173	219	264	96
700	117	144	175	207	134	183	235	278	102
800	120	151	185	226	142	195	246	302	104
900	126	165	200	237	149	206	263	320	110
1000	134	170	211	250	154	219	275	339	117
1100	138	182	226	271	166	235	297	361	120
1200	149	192	241	275	175	246	318	387	126
1300	154	200	255	306	183	261	338	414	134
1400	165	211	272	322	193	274	355	435	138
1500	170	226	288	343	202	289	376	462	147
1600	178	235	302	361	211	302	395	485	151
1700	185	243	314	376	226	318	415	511	158
1800	193	250	329	395	230	338	435	534	165
1900	200	263	345	416	241	345	457	563	170
2000	207	272	361	435	250	360	477	584	178

AS slot diffusers without plenum box

Discount group L

5		1	- 4			1	- 4		6
Length L [mm]		AS-A	-B-0						
from 400 mm to	1- row	2- row	3- row	4- row	1- row	2- row	3- row	4- row	RAL
600	47	70	95	103	67	104	147	185	96
700	53	74	103	126	70	115	154	200	102
800	54	82	110	138	78	123	168	219	104
900	62	88	118	149	82	131	182	235	110
1000	67	96	126	159	88	142	195	250	117
1100	70	103	137	173	95	151	211	271	120
1200	74	109	147	183	102	159	226	288	126
1300	81	115	154	195	104	173	240	306	134
1400	83	120	166	207	115	182	250	322	138
1500	88	126	175	226	120	193	271	341	147
1600	95	131	185	235	126	206	278	360	151
1700	99	138	195	246	131	211	297	376	158
1800	103	147	206	257	138	226	312	395	165
1900	109	151	217	272	147	237	325	414	170
2000	115	154	226	278	152	246	341	429	178

AS Slot diffusers *End caps* (prices for 1 pair)

ASEKB with	RAL			
1- row	2- row	3- row	4- row	
14	16	18	21	15

2.4 Air valves

2.4.1 VS air valves



- · For supply air and exhaust air
- Made of sheet steel, powder coated, colour RAL 9010 (white)
- · Installation subframe galvanized
- Sizes: DN80 ... DN200

Configure your product here



VS - -

1 Design

A Exhaust air
Z Supply air

Nominal size 80

100 125

160 200

2	
Nominal size	VSA / VSZ
80	4.80
100	6.80
125	8.80
160	13.60
200	20.20

2.5 Mechanical volume flow controllers and limiters

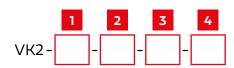
2.5.1 VK2 Volume Flow Controller



- Maintenance-free, mechanical controller without auxiliary power supply for constant volume flows
- For freely positionable installation in ventilation ducts for supply and exhaust air
- · Casing and control mechanism made of galvanized sheet steel
- · Widths B: 200 mm ... 600 mm
- Heights H: 100 mm ... 300 mm

Configure your product here





Dimensions
W [mm] x H [mm]

3 Acoustic insulation
Standard:
Without acoustic insulation
Option:
DS With acoustic insulation

2 Actuator
Standard:
Without drive
Option:

M1 230 V AC two-point/three-point actuator
 M2 24 V AC/DC two-point/three-point actuator

M3 24 V AC/DC continuous actuator

4 Set points
Standard:
Without presets

Option: Volumetric flow $\dot{V} = ... \text{ m}^3/\text{h}$

i For SKB-V sound attenuator for volume flow and pressure controller see ▶ Seite <?>.

VK2 Volume Flow Controller

Discount group V

				2		3
Width [mm]	Height [mm]	VK2	M1	M2	M3	DS
	100	144	154	154	204	120
200	150	149	154	154	204	121
	200	165	186	186	270	128
	100	147-	154	154	204	126
	150	152	154	154	204	126
300	200	167	154	154	204	128
	250	229	186	186	270	133
	300	333	237	237	340	134
	200	175	154	154	204	130
400	250	231	186	186	270	134
	300	341	186	186	270	136
	200	182	154	154	204	142
500	250	239	186	186	270	142
	300	347	186	186	270	145
	200	209	154	154	204	147
600	250	246	237	237	340	149
	300	357:-	237	237	340	152

i All specified prices for M1, M2, M3 apply to original equipment ex works.

2.5.2 VR1 Volume Flow Controller



- Maintenance-free, mechanical controller without auxiliary power supply for constant volume flows
- For freely positionable installation in ventilation pipelines for supply and exhaust air
- · Casing and control mechanism made of galvanized sheet steel
- Sizes: DN80 ... DN315

Configure your product



Nominal size

80 250 100 315

125

160 200 4 Acoustic insulation

Standard:

Without acoustic insulation

Option:

DS With acoustic insulation

2 Actuator

Standard:

Without drive

Option:

M1 230 V AC two-point/three-point actuator

M2 24 VAC/DC two-point/three-point actuator

M3 24 VAC/DC continuous actuator

5 Set points

Standard:

Without presets

Option:

Volume flow $\dot{V} = ... \text{ m}^3/\text{h}$

3 Lip seal

Standard:

Without lip seal

Option:

LD with two lip seals

For SRC duct silencer for volume flow and pressure controller see > page 163.

VR1 Volume Flow Controller

Discount group V

<u> </u>			2	3	4	
Nominal size	VR1	M1	M2	M3	LD	DS
80	89	154	154	204	14	89
100	89	154	154	204	14	95
125	95	154	154	204	14	103
160	99	154	154	204	14	109
200	104	154	154	204	14	121
250	115	154	154	204	14	134
315	138	154	154	204	16	152

i All specified prices for M1, M2, M3 apply to original equipment ex works.

2.5.3 VR1-N Volume Flow Controller



- Maintenance-free, mechanical controller without auxiliary power supply for constant volume flows
- · For use at low flow velocities and variable pressures
- For freely positionable installation in ventilation pipelines for supply and exhaust air
- Casing and control mechanism made of galvanized sheet steel
- Sizes: DN80 ... DN315

Configure your product



Nominal size

80 250 100 315 125

160 200 4 Acoustic insulation

Standard: without acoustic insulation

Option

DS With acoustic insulation

2 Actuator

Standard: Without drive

Ontinoot a

Option:

M1 230 V AC two-point/three-point actuator

M2 24 VAC/DC two-point/three-point actuator

M3 24 VAC/DC continuous actuator

5 Set points

Standard:

Without presets

Option:

Volume flow $\dot{V} = ... \text{ m}^3/\text{h}$

3 Lip seal

Standard:

Without lip seal

Option:

LD With two lip seals

i For SRC duct silencer for volume flow and pressure controller see > page 163.

VR1-N Volume Flow Controller

Discount group V

1			2		3	4
Nominal size	VR1-N	M1	M2	M3	LD	DS
80	89	154	154	204	14	89
100	89	154	154	204	14	95
125	95	154	154	204	14	103
160	99	154	154	204	14	109
200	104	154	154	204	14	121
250	115	154	154	204	14	134
315	138	154	154	204	16	152

i All specified prices for M1, M2, M3 apply to original equipment ex works.

2.5.4 VRL1 volume flow limiter



- Maintenance-free, mechanical controller without auxiliary power supply for constant volume flows
- For freely positionable installation in ventilation pipelines for supply and exhaust air
- Casing and control mechanism made of special anti-static and microberesistant plastic
- · With lip seals on both sides
- Sizes: DN80 ... DN250

Configure your product



	1		2		3
VRL1-		-		-	

Nominal size 80 100 125 160 200 250

3 Actuator Standard: Without drive Option:

M1 230 V AC two-point/three-point actuatorM2 24 V AC/DC two-point/three-point actuator

M3 24 VAC/DC continuous actuator

2 Accessories Standard: Without accessories Option:

S with sliding sleeveR with duct sleeve

i For SRC duct silencer for volume flow and pressure controller see > page 163.

VRL1 volume flow limiter

Di	sc	ou	nt	ar	ou	۱۵	/
-	50	u	,,,	9'	u	ρ,	

1			2	3		
Nominal size	VRLI	S	R	M1	M2	M3
80	29.90	46	34	183	210	274
100	31.10	47	36	183	210	274
125	36.40	52	40	183	210	274
160	44.40	58	49	183	210	274
200	60.90	73	69	183	210	274
250	78.40	89	85	183	210	274

All specified prices for M1, M2, M3 apply to original equipment ex works.

Accessories VRL1 volume flow limiter

Ordering data	Description	Price
ВК1	Drilling template for sizes DN80 - DN125 with 1 inspection cover	11
BG1	Drilling template for sizes DN160 - DN250 with 1 inspection cover	11
BK10	Drilling template for sizes DN80 - DN125 with 10 inspection cover	46
BG10	Drilling template for sizes DN160 - DN250 with 10 inspection cover	59

2.6 Electronic volume flow and pressure controllers

2.6.1 VKE1 Volume Flow Controller



- Maintenance-free, electronic volume flow controller for constant and variable volume flows
- For freely positionable installation in ventilation ducts for supply and exhaust
- Casing and control mechanism made of galvanized sheet steel
- Widths B: 200 mm ... 800 mm
- Heights H: 100 mm ... 400 mm

Configure your product here



Dimensions **W** [mm] x **H** [mm] Operation mode Standard: 01 Variable, 0 ... 10 V Option:

> ко Constant 4P 4-point

Variable, <2 V, 2 ... 10 V 21 Variable, <2 V, 2 ... 8 V, >8 V

Actuator Standard:

> Actuator 24 V AC/DC (with display screen) MΊ Option:

Actuator 24 V AC/DC (without display screen)

Set points

Constant reference volume flow OVF_{const} = Minimum reference volume flow $\mathbf{OVF}_{\mathbf{min}}$ = 1st mean reference volume flow **OVF**_{mid1} = 2nd mean reference volume flow OVF_{mid2} = Maximum reference volume flow $OVF_{max} =$ Entries depend on operation mode

Acoustic insulation

Standard:

Without acoustic insulation

Option:

With acoustic insulation

For SKB-V sound attenuator for volume flow and pressure controller see > Seite <?>.

VKE1 volume flow controller

Discount group V

_	Veoritroller			ant group v
		<u> </u>	2	3
Width [mm]	Height [mm]	VKE1-M1	VKE1-M2	DS
200	100	509	468	126
200	200	563	522	133
300	100	522	481	128
	200	580	539	140
	300	616	575	143
	100	534	493	139
400	200	597	556	144
400	300	632	591	149
	400	680	639	153
	100	542	501	145
500	200	610	569	151
300	300	647	606	155
	400	694	653	163
	100	557	516	149
600	200	631	590	157
000	300	661	620	164
	400	711	670	166
	200	643	602	164
700	300	673	632	167
	400	728	687	174
	200	661	620	167
800	300	689	648	180
	400	744	703	182

Accessories VKE1 volume flow controller

Ordering data	Description	Price
SM-01	Interface module	80

2.6.2 VRE1 Volume Flow Controller



- Maintenance-free, electronic volume flow controller for constant and variable volume flows
- For freely positionable installation in ventilation pipelines for supply and exhaust air
- · Casing and control mechanism made of galvanized sheet steel
- Sizes: DN100 ... DN400

Configure your product



1 Nominal size

100 315 125 400

160

200

250

4 Acoustic insulation

Standard:

Without acoustic insulation

Option:

DS With acoustic insulation

2 Actuator

Standard:

M1 Actuator 24 V AC/DC (with display screen)

Option:

M2 Actuator 24 V AC/DC (without display screen)

5 Operation mode

Standard:

01 Variable, 0 ... 10 V

Option:

KO Constant

4P 4-point

21 Variable, <2 V, 2 ... 10 V

28 Variable, <2 V, 2 ... 8 V, >8 V

3 Lip seal

Standard:

Without lip seal

Option:

LD With two lip seals

6 Set points

Constant reference volume flow **OVF**_{const} = Minimum reference volume flow **OVF**_{min} =

1st mean reference volume flow **OVF**_{mid} =

2nd mean reference volume flow OVF_{mid2} =

Maximum reference volume flow **OVF**_{max} =

Entries depend on operation mode

i For SRC duct silencer for volume flow and pressure controller see > page 163.

VRE1 volume flow controller

Discount group V

1	2		3	4
Nominal size	VRE1-M1 VRE1-M2		LD	DS
100	455	424	13	94
125	457:-	426	13	98
160	461	430	13	112
200	473	442	13	128
250	485	454	13	141
315	503	472	16	160
400	524-	493-	16	191-

Accessories VRE1 volume flow controller

Ordering data	Description	Price
SM-01	Interface module	80

2.6.3 **VRE1-N Volume Flow Controller**



- Maintenance-free, electronic volume flow controller for constant and variable volume flows at low flow velocities
- For freely positionable installation in ventilation pipelines for supply and exhaust air
- Casing and control mechanism made of galvanized sheet steel
- Sizes: DN100 ... DN400

Configure your product



VRE1-N

Nominal size

315 100 125 400

160

200 250

Acoustic insulation

Standard:

Without acoustic insulation

Option:

DS With acoustic insulation

Actuator

Standard:

MΊ Actuator 24 V AC/DC (with display screen)

Option:

M2 Actuator 24 V AC/DC (without display screen)

Operation mode

Standard:

01 Variable, 0 ... 10 V

Option:

ко Constant

4P 4-point

Variable, <2 V, 2 ... 10 V 21

Variable, <2 V, 2 ... 8 V, >8 V

Lip seal

Standard:

Without lip seal

Option:

With two lip seals

Set points

Constant reference volume flow $OVF_{const} =$ Minimum reference volume flow $OVF_{min} =$

1st mean reference volume flow $\mathbf{OVF}_{\mathbf{mid1}}$ =

2nd mean reference volume flow OVF_{mid2} =

Maximum reference volume flow $\mathbf{OVF}_{\mathbf{max}}$ =

Entries depend on operation mode

For SRC duct silencer for volume flow and pressure controller see > page 163.

VRE1-N volume flow controller

Discount group V

1	2		3	4
Nominal size	VRE1-N-M1 VRE1-N-M2		LD	DS
100	455	424	13	94
125	457:-	426	13	98
160	461	430	13	112
200	473	442	13	128
250	485	454	13	141
315	503	472	16	160
400	524	493	16	191

Accessories VRE1-N volume flow controller

Ordering data	Description	Price
SM-01	Interface module	80

2.6.4 VKup Volume flow controller



- Maintenance-free, electronic volume flow controller for constant and variable volume flows
- · For freely positionable installation in ventilation ducts for supply and exhaust air
- Casing and control mechanism made of galvanized sheet steel; measuring cross made of aluminium
- Widths: 200 ... 1000 mm
- · Heights: 100... 1000 mm

Configure your product



Dimensions
W [mm] x H [mm]

4 Operation mode
Standard:
01 Variable, 0 ... 10 V
Option:

K01 Constant (U = 0 ... 10 V) K21 Constant (U = 2 ... 10 V)

3P 3-level

21 Variable, 2 ... 10 V
VA Adjustable setting
Lower limit UG =
Upper limit OG =

2 Communication type
Standard:
AN Analogue

Option:
MP MP-Bus
KNX KNX-Bus

MOD Modbus, BACnet, MP-Bus

5 Set points

Constant reference volume flow $V_{const} = Minimum$ reference volume flow $V_{min} = Average$ reference volume flow $V_{mid} = Maximum$ reference volume flow $V_{max} = Average$

3 Acoustic insulation

Standard:

Without acoustic insulation

Option:

DS With acoustic insulation

6 System height

Values from 0 ... 3000 m **AH=**

- For SKB-V sound attenuator for volume flow and pressure controller see ▶ Seite <?>.
- For accessories see ▶ page 57.

VKup Volume flow controller

vitop volume now controller						
				2		4
Width [mm]	Height [mm]	AN	MP	KNX	MOD	DS
200	100	582	610	747	689	129
200	200	639	667	804	746	136
	100	587	615	752	694	131
300	200	664	677	813	760	144
	300	713	726	862	809	146
	100	595	623	760	702	143
400	200	672	685	821	768	147
400	300	725	738	874	821	153
	400	773	786	922	869	157
	200	730	743	879	826	154
500	300	786	799	935	882	159
500	400	835	848	984	931	167
	500	933	946	1082	1029	186
	200	742	755	891	838	161
600	300	796	809	945	892	168
800	400	848	861	997	944	170
	500	1	943	-	-	191
700	300	806	819	955	902	171
800	300	816	829	965	912	184
800	400	874	887	1023	970	186
	500	-	1005	-	-	233
1000	600	-	1072	-	-	249
	1000	-	1310	-	-	286

2.6.5 VKpro Volume flow controller



- Maintenance-free, electronic volume flow controller for constant and variable volume flows
- For freely positionable installation in ventilation ducts for supply and exhaust air
- Casing and control mechanism made of galvanized sheet steel; measuring cross made of aluminium
- · Widths B: 200 mm ... 1000 mm
- Heights H: 100 mm ... 1000 mm

Configure your product



Dimensions
W [mm] x H [mm]

Operation mode
Standard:
01 Variable, 0 ... 10 V
Option:
K01 Constant (U = 0 ... 10 V)
K21 Constant (U = 2 ... 10 V)

21 Variable, 2 ... 10 V
VA Adjustable setting
Lower limit UG =
Upper limit OG =

Constant reference volume flow V_{const} = Minimum reference volume flow V_{min} =

Maximum reference volume flow V_{max} =

Actuator and differential pressure sensor

5DN Standard actuator, 500 Pa dynamic

5DF Spring return actuator, 500 Pa dynamic

5DQ High-speed actuator, 500 Pa dynamic 6SN Standard actuator, 600 Pa static 6SF Spring return actuator, 600 Pa static

6SQ High-speed actuator, 600 Pa static

Working direction of spring return actuator NC Normally closed

NO Normally open

7 System height

Set points

Values from 0 ... 3000 m **AH=**

4 Acoustic insulation

Standard:

Without acoustic insulation

Option:

DS With acoustic insulation

- For SKB-V sound attenuator for volume flow and pressure controller see ▶ <u>Seite <?>.</u>
- For accessories see ▶ page 57.

VKpro Volume flow controller											
1				2				4			
Width [mm]	Height [mm]	5DN	5DF	5DQ	6SN	6SF	6SQ	DS			
200	100	766	984	938	1107	1325	1279	129			
200	200	815	1033	987	1156	1374	1328	136			
	100	773	991	945	1114	1332	1286	131			
					1						

Width [mm]	Height [mm]	5DN	5DF	5DQ	6SN	6SF	6SQ	DS
200	100	766	984	938	1107	1325	1279	129
200	200	815	1033	987	1156	1374	1328	136
	100	773	991	945	1114	1332	1286	131
300	200	829	1042	996	1170	1383	1337	144
	300	877	1090	1044	1218	1431	1385	146
	100	780	998	952	1121	1339	1293	143
400	200	838	1051	1005	1179	1392	1346	147
400	300	889	1102	1056	1230	1443	1397	153
	400	937	1150	1104	1278	1491	1445	157
	200	895	1108	1062	1236	1449	1403	154
500	300	946	1159	1113	1287	1500	1454	159
300	400	998	1211	1266	1339	1552	1607	167
	500	1097	1310	1365	1438	1651	1706	186
	200	907	1120	1074	1248	1461	1415	161
600	300	961	1174	1128	1302	1515	1469	168
000	400	1015	1228	1283	1356	1569	1624	170
	500	1127	1310	1378	1468	1651	1719	191
700	300	971	1184	1239	1312	1525	1580	171
800	300	982	1195	1250	1323	1536	1591	184
330	400	1039	1252	1307	1380	1593	1648	186
	500	1189	1372	1440	1530	1713	1781	233
1000	600	1256	1439	1507	1597	1780	1848	249
	1000	1496	1679	-	1837	2020	_	286

2.6.6 VRup Volume flow controller



- Maintenance-free, electronic volume flow controller for constant and variable volume flows
- For freely positionable installation in ventilation pipelines for supply and exhaust air
- Casing and control mechanism made of galvanized steel; measuring cross made of aluminium
- Sizes: DN100 ... DN400

Configure your product



	1	2		3		4		5		6		7
VRup-		-	-		-		-		-		-	

Nominal size

100 400

125 160

200

250

315

5 Operation mode

Standard:

01 Variable, 0 ... 10 V

Option:

KO1 Constant (U = 0 ... 10 V)

K21 Constant (U = 2 ... 10 V)

3P 3-level

21 Variable, 2 – 10 V

/A Adjustable setting Lower limit UG =

Lower limit UG = Upper limit OG =

Communication type

Standard:

AN Analogue

Option:

MP MP-Bus

KNX KNX-Bus

MOD Modbus, BACnet, MP-Bus

6 Set points

Constant reference volume flow V_{const} = Minimum reference volume flow V_{min} =

Average reference volume flow $V_{mid} =$

Maximum reference volume flow V_{max} =

3 Lip seal

Standard:

Without lip seals

Option:

LD With two lip seals

7 System height

Values from 0 ... 3000 m **AH=**

4 Acoustic insulation

Standard:

Without acoustic insulation

Option:

BD For on-site insulation

DS With acoustic insulation

■ For SRC duct silencer for volume flow and pressure controller see ▶ page 163.

■ For accessories see ▶ page 57.

VRup Volume flow controller

1		2		3	4	
Nominal size	AN	MP	KNX	MOD	LD	DS
100	430	476	684	620	13	102
125	431	477	685	621	13	109
160	437	478	689	624	13	119
200	448	493	702	638	13	130
250	461	506	717	652	13	144
315	488	524	725	660	16	162
400	519	556	754	692	16	201

2.6.7 VRpro volume flow controller



- Maintenance-free, electronic volume flow controller for constant and variable volume flows
- For freely positionable installation in ventilation pipelines for supply and exhaust air
- Casing and control mechanism made of galvanized steel; measuring cross made of aluminium
- Size: DN100 ... DN400

Configure your product here



	1		2		3		4		5		6		7		8
VRpro-		-		-		-		-		-		-		-	

Nominal size

100 315 125 400

160 200

250

Acoustic insulation

Standard:

Without acoustic insulation

Option:

BD For on-site insulation With acoustic insulation

Actuator and differential pressure sensor

5DN Standard actuator, 500 Pa dynamic

5DF Spring return actuator, 500 Pa dynamic

5DQ High-speed actuator, 500 Pa dynamic

6SN Standard actuator, 600 Pa static

6SF Spring return actuator, 600 Pa static

6SQ High-speed actuator, 600 Pa static

Operation mode

Standard:

01 Variable, 0 ... 10 V

Option:

K01 Constant (U = 0 ... 10 V)

K21 Constant (U = 2 ... 10 V)

Variable, 2 ... 10 V 21 VA

Adjustable setting Lower limit UG =

Upper limit OG =

Working direction of spring return actuator

NC Normally closed

NO Normally open Set points

Constant reference volume flow **V** const = Minimum reference volume flow $V_{min} =$

Maximum reference volume flow V_{max} =

Lip seal

Standard:

Without lip seals

Option:

With two lip seals

System height

Values from 0 ... 3000 m AH = ...

■ For accessories see ▶ page 57.

■ For SRC duct silencer for volume flow and pressure controller see ▶ page 163.

VRpro volume flow controller

1			<u> </u>	2			4	5
Nominal size	5DN	5DF	5DQ	6SN	6SF	6SQ	LD	DS
100	597	866	761	977	1246	1141	13	102
125	602	869	764	982	1249	1144	13	109
160	622	892	787-	1002	1272	1167	13	119
200	624	898	793	1004	1278	1173	13	130
250	639	916	811	1019	1296	1191	13	144
315	685	931	885	1065	1311	1265	16	162
400	716	968	922	1096	1348	1302	16	201

2.6.8 **DKpro Pressure controller**



- Maintenance-free, electronic pressure controller for constant and variable pressures
- For freely positionable installation in ventilation ducts for supply and exhaust
- Casing and control mechanism made of galvanized sheet steel; measuring cross made of aluminium
- Widths B: 200 mm ... 1000 mm
- Heights H: 100 mm ... 1000 mm

Configure your product



DKpro

Dimensions **W** [mm] x **H** [mm] Operation mode Standard: Variable, 0 ... 10 V Option: KO1 Constant (U = 0 ... 10 V) K21 Constant (U = 2 ... 10 V)

Variable, 2 - 10 V VA Adjustable setting Lower limit UG = Upper limit OG =

Actuator and differential pressure sensor **5DN** Standard actuator, 500 Pa dynamic 5DF Spring return actuator, 500 Pa dynamic **5DQ** High-speed actuator, 500 Pa dynamic 1SN Standard actuator, 75 Pa static 1SF Spring return actuator, 75 Pa static **1SQ** High-speed actuator, 75 Pa static **6SN** Standard actuator, 600 Pa static 6SF Spring return actuator, 600 Pa static

6SQ High-speed actuator, 600 Pa static

Set points Constant reference pressure P_{const} = Minimum reference pressure P_{min} = Maximum reference pressure P_{max} =

Working direction of spring return actuator Normally closed

NO Normally open System height Values from 0 ... 3000 m AH=

Acoustic insulation Standard:

> Without acoustic insulation Option:

With acoustic insulation

- For SKB-V sound attenuator for volume flow and pressure controller see ▶ Seite <?>.
- For accessories see ▶ page 57.

DKpro Pressure	e controller	Discount group V
1	2	4

1					E	2					4
Width [mm]	Height [mm]	5DN	5DF	5DQ	1SN	1SF	1SQ	6SN	6SF	6SQ	DS
200	100	881	1091	1048	1140	1350	1307	1157	1367	1324	136
200	200	949	1159	1116	1208	1418	1375	1225	1435	1392	144
	100	890	1100	1057	1149	1359	1316	1166	1376	1333	140
300	200	966	1171	1128	1225	1430	1387	1242	1447	1404	153
	300	1036	1241	1198	1295	1500	1457	1312	1517	1474	155
	100	899	1109	1066	1158	1368	1325	1175	1385	1342	151
400	200	977	1182	1139	1236	1441	1398	1253	1458	1415	157
400	300	1051	1256	1213	1310	1515	1472	1327	1532	1489	164
	400	1118	1323	1280	1377	1582	1539	1394	1599	1556	166
	200	1007	1212	1169	1266	1471	1428	1283	1488	1445	172
500	300	1084	1289	1246	1343	1548	1505	1360	1565	1522	175
500	400	1154	1359	1435	1413	1618	1694	1430	1635	1711	184
	500	1246	1451	1527	1505	1710	1786	1522	1727	1803	197
	200	1021	1226	1183	1280	1485	1442	1297	1502	1459	180
600	300	1098	1303	1260	1357	1562	1519	1374	1579	1536	186
800	400	1172	1377	1453	1431	1636	1712	1448	1653	1729	189
	500	1284	1459	1548	1543	1718	1807	1560	1735	1824	205
700	300	1113	1318	1394	1372	1577	1653	1389	1594	1670	193
800	300	1128	1333	1409	1387	1592	1668	1404	1609	1685	204
800	400	1207	1412	1488	1466	1671	1747	1483	1688	1764	205
	500	1362	1537	1626	1621	1796	1885	1638	1813	1902	248
1000	600	1456	1631	1720	1715	1890	1979	1732	1907	1996	260
	1000	1790	1965	-	2049	2224	-	2066	2241	-	289

2.6.9 DRpro volume flow controller



- Maintenance-free, electronic pressure controller for constant and variable
- For freely positionable installation in ventilation pipelines for supply and exhaust air
- Casing and control mechanism made of galvanized steel; measuring cross made of aluminium
- Size: DN100 ... DN400

Configure your product



	1	2		3	4	5	6	7	8
DRpro -		-]-[-	-	-]-]-

Nominal size

100 315

125 400 160

200 250

Acoustic insulation

Standard:

Without acoustic insulation

Option:

BD For on-site insulation

With acoustic insulation

Actuator and differential pressure sensor

5DN Standard actuator, 500 Pa dynamic

5DF Spring return actuator, 500 Pa dynamic

5DQ High speed actuator, 500 Pa dynamic

1SN Standard actuator, 75 Pa static

1SF Spring return actuator, 75 Pa static

1SQ High-speed actuator, 75 Pa static

6SN Standard actuator, 600 Pa static **6SF** Spring return actuator, 600 Pa static

6SQ High-speed actuator, 600 Pa static

NO Normally open Operation mode

Standard:

01 Variable, 0 – 10 V

Option:

K01 Constant (U = 0 - 10 V)

K21 Constant (U = 2 - 10 V)

Variable, 2 – 10 V 21

Adjustable setting

Lower limit UG = Upper limit OG =

Working direction of spring return actuator

NC Normally closed

Set points

Constant reference volume flow P_{const} = Minimum reference volume flow P_{min} =

Maximum reference volume flow P_{max} =

Lip seal

Standard:

Without lip seals

Option:

With two lip seals

System height

Values from 0 ... 3000 m **AH = ...**

- For SRC duct silencer for volume flow and pressure controller see ▶ page 163.
- For accessories see ▶ page 57.

315

400

846.-

882.-

1040.-

1076.-

DRpro Pressure controller Discount group V 1 2 4 5 5DN 1SN 1SF 1SQ LD Nominal size 5DF 5DQ 6SN 6SF 6SQ DS 100 771.-987.-860.-1026.-1242.-1115.-1043.-1259.-1132.-13.-107:-125 776.-992.-865.-1031.-1247:-1120.-1048.-1264.-1137:-13.-115.-160 791.-1007.-880.-1046.-1262.-1135.-1063.-1279.-1152.-13.-125.-200 795.-1011.-884.-1050.-1266.-1139.-1067.-1283.-1156.-13.-137:-250 811.-1027-900.-1066.-1282.-1155.-1083.-1299.-1172.-13.-152.-

1295.-

1331.-

1185.-

1221.-

1118.-

1154.-

1312.-

1348.-

1202.-

1238.-

16.-

16.-

Accessories Volume flow and pressure controllers (XXup/XXpro)

1101.-

1137:-

930.-

966.-

Discount group V

170.-

213.-

Ordering data	Description	Price
VD	VD volume flow measuring device, dynamic (specify size of pressure controller when ordering)	414
VS	VS volume flow measuring device, static (specify size of pressure controller when ordering)	550

Ordering data	Description	Price
ZUB 0102	ZTH-EU programming unit (including USB, ZK1-GEN, ZK2-GEN)	721
ZUB 0105	ZK4-GEN connection cable, 5 m	80
ZUB 0101	Pressure tapping set	43

2.7 Multileaf dampers and pressure relief dampers

2.7.1 JKS multileaf damper



- Maintenance-free control and shut-off dampers for ventilation and air conditioning systems
- Made of galvanised sheet steel
- Leaktightness according to DIN EN 1751: Casing class C, shut-off damper class 1
- Widths B: 200 mm ... 1200 mm (in 1-mm increments)
- Heights H: 100 mm ... 1500 mm (in 5-mm increments)
- · Construction length L: 120 mm

Configure your product here



Dimensions
W [mm] x H [mm]

5 Limit switch Standard: Without Option:

S1 With 1 switchS2 With 2 switches

2 Blade coupling GG Counter-rotat

GG Counter-rotation **GL** Synchronisation

6 Installation subframes

Standard: Without Option:

MR Wall installation subframe

Actuator
Standard: Without

Option:

With actuating lever and locking device

Reversing actuators:
MBN230 230 V AC
MBN24 24 V AC/DC

Emergency spring return actuators:

MBF230 230 V AC MBF24 24 V AC/DC

Continuously variable actuators:

MBN24-SR 24 VAC/DC

MBF24-SR 24 VAC/DC, spring return actuator

High-speed actuators: MBQ24 24 V AC/DC

For assignment of actuators see

JKS/JLS user manual

Working direction of spring return actuator
NC Normally closed

NO Normally open

58

- For surcharges see ▶ page 62.
- For accessories see ▶ page 63.

7 Counter flange Standard:

Without Option:

1GF 1 x counter flange2GF 2 x counter flange

JKS multileaf	f									Disco	unt group L
					,	Width [mm]				
Height [mm]	200	300	400	500	600	700	800	900	1000	1100	1200
100	93	95	99	101	104	109	111	114	116	119	122
200	126	131	135	138	143	146	151	153	159	162	166
300	155	161	166	171	175	181	184	189	194	197	203
400	187	193	197	203	210	215	219	225	231	235	242
500	210	215	220	226	233	239	245	251	256	263	268
600	242	249	255	262	270	276	283	290	297	304	311
700	251	256	264	271	281	287	293	300	306	316	322
800	277	284	293	300	309	316	325	332	339	348	355
900	303	312	320	328	338	347	355	364	372	382	389
1000	329	338	348	356	367	377	385	396	404	414	425
1100	348	356	367	377	386	397	406	415	426	435	445
1200	375	384	394	404	415	426	436	447	456	467	478
1300	398	409	420	433	444	455	466	477	487	499	510
1400	406	418	429	440	454	465	477	487	499	510	521
1500	433	444	456	467	480	492	505	516	529	542	552

Intermediate sizes are priced at the next higher or next wider standard size.

2.7.2 JLS multileaf damper



- Maintenance-free control and shut-off dampers for ventilation and air conditioning systems made of galvanised sheet steel
- Leaktightness according to DIN EN 1751: Casing class C, GL: Shut-off damper class 2, GG: Shut-off damper class 4 (airtight according to DIN 1946-4)
- Widths B: 200 mm ... 1200 mm (in 1-mm increments)
- · Heights H: 100 mm ... 1500 mm (in 5-mm increments)
- · Construction length L: 120 mm

Configure your product



 1
 2
 3
 4
 5
 6
 7

 JLS

Dimensions
W [mm] x H [mm]

5 Limit switch
Standard:
Without
Option:
S1 With 1

S1 With 1 switchS2 With 2 switches

2 Blade coupling
GG Counter-rotation
GL Synchronisation

6 Installation subframes
Standard:
Without

MR Wall installation subframe

3 Actuator Standard: Without Option:

F With actuating lever and locking device

Reversing actuators:
MBN230 230 V AC
MBN24 24 V AC/DC

Emergency spring return actuators:

MBF230 230 VAC **MBF24** 24 VAC/DC

Continuously variable actuators:

MBN24-SR 24 VAC/DC

MBF24-SR 24 VAC/DC, spring return actuator

High-speed actuators: MBQ24 24 V AC/DC

For assignment of actuators see

▶ JKS/JLS user manual

Working direction of spring return actuator
NC Normally closed

NO Normally open

■ For surcharges see ▶ page 62.

■ For accessories see ▶ page 63.

7 Counter flange

Standard: Without

Option:

Option:

1GF 1 x counter flange2GF 2 x counter flange

JLS multileaf dampers with **GL** synchronisation

Discount group L

1+2					,	Width [mm]				
Height [mm]	200	300	400	500	600	700	800	900	1000	1100	1200
100	115	118	123	126	132	135	139	144	148	153	157
200	161	166	172	179	184	189	196	202	209	216	220
300	202	211	218	226	234	242	249	256	266	273	281
400	244	252	263	271	282	292	302	311	320	331	340
500	283	296	306	319	331	342	353	365	376	387	399
600	290	302	313	326	336	349	361	372	383	397	406
700	327	340	353	367	380	393	406	419	432	447	459
800	336	350	364	378	392	405	420	433	447	462	476
900	371	385	400	415	432	447	462	478	493	508	524
1000	389	404	420	436	452	469	485	501	516	534	549
1100	427	444	462	479	498	515	531	549	567	585	602
1200	461	478	498	516	536	554	572	593	611	631	650
1300	492	513	532	552	572	594	615	635	654	675	696
1400	502	524	545	565	587	609	630	650	670	693	712
1500	534	556	579	601	625	647	669	693	713	735	759

i Intermediate sizes are priced at the next higher or next wider standard size.

JLS multileaf dampers with **GG** counter-rotation

Discount group L

1+2					١	Width [mm]				
Height [mm]	200	300	400	500	600	700	800	900	1000	1100	1200
200	180	187	194	201	209	213	220	227	234	242	248
300	230	239	248	256	266	275	283	290	299	311	319
400	281	290	298	311	320	333	343	353	364	376	385
500	327	340	351	365	378	390	404	416	429	443	455
600	380	396	409	425	438	454	469	484	499	515	530
700	427	444	461	477	494	513	529	545	563	580	596
800	474	492	510	530	549	568	586	606	625	644	664
900	520	539	561	581	603	625	646	666	688	710	732
1000	565	588	611	635	659	681	704	727	751	775	798
1100	619	646	670	696	720	747	771	797	821	849	875
1200	668	696	724	749	778	804	831	860	885	914	941
1300	716	744	774	803	833	861	891	920	950	979	1009
1400	761	792	824	854	887	919	950	981	1013	1045	1076
1500	810	842	876	908	943	977	1009	1042	1076	1110	1143

i Intermediate sizes are priced at the next higher or next wider standard size.

JKS/JLS multileaf dampers **Actuators**

Discount group L

3 Ordering data	Description		Price
F	Adjusting lever and locking device		17
		5 Nm	185
MBN230	270 VAC reversing actuator	10 Nm	232
MBN230	230 V AC reversing actuator	20 Nm	256
		40 Nm	301
		5 Nm	185
MBN24	24 V AC/DC reversing actuator	10 Nm	232
MDN24	24 V AC/ DC reversing dctodtor	20 Nm	256
		40 Nm	301
		5 Nm	255
MBN24-SR	24 V AC/DC continuously variable actuator	10 Nm	360
MBN24-3R	24 V AC/ DC COntinioodsiy variable actuator	20 Nm	366
		40 Nm	390
		10 Nm	395
MBF230	230 VAC emergency spring return actuator	20 Nm	414
		30 Nm	765
		10 Nm	338
MBF24	24 V AC/DC emergency spring return actuator	20 Nm	361
		30 Nm	669
		10 Nm	382
MBF24-SR	24 V AC/DC emergency and continuously variable spring return actuator	20 Nm	423
		30 Nm	716
MBQ24	24 V AC/DC reversible high-speed actuator	8 Nm	376
I*IBQ24	24 V AC/ DC Teversible Hight-speed actuator	16 Nm	408

JKS/JLS multileaf dampers *Limit switch*

5 Ordering data	Description	Price
S1	Auxiliary switch with 1 switch (for MBN230, MBN24, MBN24-SR and MBQ24)	60
S2	Auxiliary switch with 2 switches (for MBN230, MBN24, MBN24-SR and MBQ24)	78
S2	Auxiliary switch with 2 switches (for MBF230, MBF24, MBF24-SR)	114

- i
- No auxiliary switch S2 (S2A-F) for actuator MBF230, MBF24, MBF24-SR size 4.
- All prices quoted refer to original equipment ex works.

MR wall installation subframes and **GF** counter flanges

Discount group L

6 + 7					,	Width [mm]				
Height [mm]	200	300	400	500	600	700	800	900	1000	1100	1200
100	31	32	35	38	38	45	46	49	49	53	53
200	31	32	35	38	38	45	46	49	49	53	53
300	32	35	38	38	45	46	48	53	53	61	61
400	33	37	38	43	46	47	48	53	53	61	61
500	37	38	43	45	47	48	49	55	55	63	63
600	39	45	47	48	49	53	54	63	63	66	66
700	45	47	49	49	54	55	62	66	66	69	69
800	45	47	49	49	54	55	62	66	66	69	69
900	48	49	53	54	61	63	66	69	69	74	74
1000	48	49	53	54	61	63	66	69	69	74	74
1100	53	54	61	62	63	66	67	71	71	78	78
1200	55	61	63	66	67	69	71	78	78	82	82
1300	55	61	63	66	67	69	71	78	78	82	82
1400	63	64	66	69	71	71	78	80	80	85	85
1500	63	64	66	69	71	71	78	80	80	85	85

i

Intermediate sizes are priced at the next higher or next wider standard size.

Accessories, JKS/JLS multileaf dampers

Ordering data	Description	Price
ZUB 0123	Tabs for assembly Same widths one on top of the other: Width < 1000 mm Same heights next to each other: Height < 1000 mm	31
ZUB 0124	Tabs for assembly Same widths one on top of the other: Width ≥ 1000 mm Same heights next to each other: Height ≥ 1000 mm	48

2.7.3 JK multileaf damper



- Control and shut-off dampers for air conditioning systems
- Made of galvanized sheet steel
- Widths B: 400 mm ... 2000 mm
- Heights H: 180 mm ... 1995 mm
- Construction length

L: 180 mm (heights and widths in 1-mm increments)





Bushes

Ν Made of plastic Made of brass

Actuator

Standard: Without

Option:

F Locking device

Electrically reversing actuator:

MO 100 ... 240 VAC

24 VAC/DC MI

M2 100 ... 240 V AC + 1 auxiliary switches

M3 100 ... 240 V AC + 2 auxiliary switches

M4 24 VAC/DC + 1 auxiliary switches

24 V AC/DC + 2 auxiliary switches M5

Spring return actuators:

M6 230 VAC + integrated limit switch

M7 24 VAC/DC + integrated limit switch

Axle extension for on-site actuators:

A1 18 mm Ø (for actuators M0 ... M5)

12 x 12 mm (for actuators M6 and M7) Α2

12 mm Ø, 150 mm long (for adjusting lever)

Dimensions

W [mm] x **H** [mm] x **L** [mm]

Installation subframes

Standard:

Without installation subframe

Option:

MR Wall installation frame

Blade direction

Counter-rotating linkage

Linkage in the same direction

Internal linkage

Accessories

Standard: Without

Option:

1GF 1 x counter flange

2GF 2 x counter flange

■ For surcharges see ▶ page 75. ■ For accessories see ▶ page 75. JK multileaf dampers with bushes N made of plastic

Discount group L

2					Width [mm]				
Height [mm]	400	600	800	1000	1200	1400	1600	1800	2000
180	86	99	103	115	128	136	146	153	159
345	103	113	122	133	147	155	167	180	187
510	140	150	165	180	189	204	216	226	235
675	167	186	198	201	232	247	256	270	281
840	202	220	235	252	267	284	302	314	327
1005	234	248	270	290	314	333	346	362	377
1170	261	281	304	320	338	362	384	399	416
1335	290	312	335	353	378	400	421	438	459
1500	320	343	369	390	416	445	464	488	505
1665	356	378	401	428	459	486	508	529	549
1830	387	409	438	464	499	531	549	570	587
1995	419	445	474	501	536	570	593	615	633

Intermediate sizes in increments of 1 mm are available for construction length 180 mm. Intermediate sizes are priced at the next higher or next wider standard size.

JK multileaf dampers with bushes M made of brass

Discount group L

2					Width [mm]				
Height [mm]	400	600	800	1000	1200	1400	1600	1800	2000
180	94	101	111	118	133	150	154	164	167
345	111	118	128	136	150	165	175	180	189
510	154	164	172	187	196	210	218	225	233
675	189	203	218	230	244	255	266	276	284
840	230	247	259	271	284	302	314	326	338
1005	267	282	302	319	338	353	369	383	396
1170	303	319	342	356	372	396	414	427	440
1335	338	358	378	397	419	437	458	474	490
1500	376	397	421	440	463	490	508	529	544
1665	419	438	461	485	513	538	556	577	595
1830	455	476	502	529	558	587	606	622	639
1995	494	520	546	570	603	632	658	677	695

Intermediate sizes in increments of 1 mm are available for construction length 180 mm.
Intermediate sizes are priced at the next higher or next wider standard size.

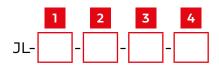
2.7.4 JL multileaf damper



- Control and shut-off dampers in ventilation and air conditioning systems, in particular in hospitals
- Made of galvanised sheet steel
- Air tight as per DIN 1946-4 and leak tightness class 4 as per EN 1751 at 100 [Pa] static pressure difference.
- Widths B: 200 mm ... 2000 mm
- Heights H: 180 mm ... 1995 mm
- Construction length L: 180 mm

Configure your product here





Dimensions B [mm] x H [mm] Installation subframes Standard: Without Option:

MR Wall installation subframe

Actuator Standard:

> Without Option:

Locking device

Electrically reversing actuators:

M0 100 ... 240 V AC

24 VAC/DC MΊ

M2 100 ... 240 VAC + 1 auxiliary switches

M3 100 ... 240 V AC + 2 auxiliary switches

Μ4 24 V AC/DC + 1 auxiliary switches

M5 24 VAC/DC + 2 auxiliary switches

Spring return actuators:

M6 230 V AC + integrated limit switch 24 V AC/DC + integrated limit switch M7

Axle extension for on-site actuators: Αī

18 mm Ø (for actuators M0 ... M5) Α2 12 x 12 mm (for actuators M6 and M7)

12 mm Ø, 150 mm long (for adjusting lever)

Accessories

Standard:

Without

Option:

1GF 1 x counter flange 2GF 2 x counter flange

■ For surcharges see ▶ page 75.

■ For accessories see ▶ page 75.

JL multileaf Discount group L

1		Width [mm]												
Height [mm]	200	300	400	500	600	700	800	1000	1200	1400	1600	1800	2000	
180	162	165	165	170	178	188	196	214	ı	ı	ı	-	-	
345	208	209	214	223	234	243	256	276	287	307	325	343	362	
510	277	281	283	295	308	321	335	359	375	400	426	451	476	
675	349	352	356	368	382	400	413	443	467	497	524	556	585	
840	415	419	421	444	455	478	494	529	557	591	627	661	694	
1005	478	486	490	517	531	557	573	614	675	717	760	800	845	
1170	526	553	579	597	627	644	675	723	767	813	860	909	953	
1335	575	610	653	674	701	723	756	809	858	911	961	1015	1066	
1500	625	666	717	745	776	802	834	896	948	1005	1063	1117	1176	
1665	675	722	788	817	850	879	913	978	1037	1102	1162	1224	1287	
1830	725	781	858	868	927	950	994	1063	1128	1195	1263	1330	1398	
1995	809	860	929	963	999	1038	1073	1146	1220	1292	1364	1437	1507	

2.7.5 UK pressure relief damper



- For ventilation and air conditioning systems
- · For installation between ventilation ducts and on walls inside a building
- Made of galvanised sheet steel
- · Widths B: 200 mm ... 1600 mm
- · Heights H: 263 mm ... 1665 mm

Configure your product





Dimensions
W [mm] x H [mm]

Counter flange
Standard:
Without
Option:

1GF 1 x counter flange2GF 2 x counter flange

2 Installation subframes
Standard:
Without
Option:

MR Wall installation subframe

i For accessories see ▶ page 75.

UK pressure relief dampers with flanges

		ip er s itriei						J 1
1				Width	[mm]			
Height [mm]	200	400	600	800	1000	1200	1400	1600
263	65	69	77	90	113	123	135	142
345	77	83	90	103	135	147	161	164
428	90	97	110	118	161	175	193	194
510	103	110	123	137	188	197	219	221
675	114	123	134	147	212	227	246	249
840	127	137	149	165	239	254	272	272
1005	142	148	165	182	265	279	300	299
1170	165	177	194	216	320	332	357	351
1335	193	202	224	246	362	385	408	408
1500	219	227	254	283	416	442	473	467
1665	243	255	283	310	466	495	516	518

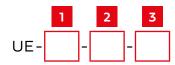
2.7.6 UE Pressure relief damper



- For ventilation and air conditioning systems
- · With blind frames for installation in walls
- · Made of galvanised sheet steel
- · Widths B: 200 mm ... 1600 mm
- · Heights H: 263 mm ... 1665 mm

Configure your product





- Direction of air flow
 - 1 For exit air
 - 2 For supply air

3 Installation subframes

Standard:

Without

Option:

MR Wall installation subframe

- Dimensions
 W [mm] x H [mm]
- i For accessories see ▶ page 75.

UE pressure relief dampers with angle frame for wall installation
Discount group L

2				Width	[mm]			
Height [mm]	200	400	600	800	1000	1200	1400	1600
263	46	46	51	59	77	81	90	99
345	52	59	65	69	97	105	114	127
428	65	69	77	83	123	130	142	153
510	76	78	87	97	144	153	163	178
675	84	90	99	108	163	177	191	205
840	97	100	113	123	188	201	212	226
1005	105	113	125	125	211	223	239	251
1170	128	134	147	163	256	271	287	303
1335	147	157	174	193	300	320	337	361
1500	168	177	196	221	345	368	390	416
1665	188	196	223	246	390	416	443	467

2.8 Weather resistant louvres and combinations

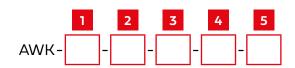
2.8.1 AWK weather resistant louvre



- · For external air and for exit air of ventilation and air conditioning systems
- Frame and blades made of extruded aluminium profiles, protective grille made of stainless steel
- · Option: with additional fly screen
- Widths B: 225 mm ... 1225 mm
- · Heights H: 125 mm ... 525 mm

Configure your product here





Fly screen

Standard:

Without

Option:

F With additional fly screen

4 Colour

Standard:

Without, silver anodised

Option:

RAL.

For further information see page 1

2 Dimensions

W [mm] x **H** [mm]

5 Installation frames

Standard:

With counter punched holes

Option:

OB Without counter-punched holes

3 Installation subframes

Standard:

Without

Option:

ER With installation subframe

i For accessories see ▶ page 75.

AWK weather resistant louvre with 16 mm mesh size

Discount group L

2		Width [mm]											
Height [mm]	225	325	425	525	625	825	1025	1225					
125	39	46	50	53	64	71	79	80					
225	55	64	70	75 <i>-</i> -	81	94	103	113					
325	72	80	87	94	102	117:-	130	140					
425	87	99	107	113	122	140	155	169					
525	107	115	122	132	146	165	181	198					

j Surcharge for varying from RAL colour shade: +65 %.

AWK**-F** weather resistant louvre with 16 mm mesh size

Discount group L

2	Width [mm]									
Height [mm]	225	325	425	525	625	825	1025	1225		
125	49	53	63	67	72	85	90	101		
225	68	75	81	88	99	115	122	133		
325	85	99	107	115	122	140	153	167		
425	107	118	128	136	147	167	187	203		
525	128	138	147	159	171	197	218	237		

i Surcharge for varying from RAL colour shade: +65 %.

ER installation subframe

3	Width [mm]									
Height [mm]	225	325	425	525	625	825	1025	1225		
125	6	6	9	9	9	10	13	13		
225	6	9	9	9	10	13	13	15		
325	9	9	9	10	10	13	13	15		
425	9	9	10	10	13	13	15	16		
525	9 -	10 -	10 -	13 -	13 -	15 -	15 -	16 -		

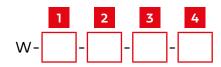
2.8.2 W weather resistant louvre



- · For external air and for exit air of ventilation and air conditioning systems
- · Frame and blades made of galvanized sheet steel
- Widths B: 300 mm ... 2100 mm (in 1-mm increments)
- Heights H: 345 mm ... 2078 mm (in 1-mm increments)

Configure your product





Dimensions
W [mm] x H [mm]

Colour
Standard:
Without
Option:
RAL ...

For further information see > page 1

Installation subframe
Standard:
Without
Option:
M With wall installation subframe

4 Installation frames
Standard:
With front frame holes
Option:
OB Without front frame holes

For accessories see ▶ page 75.

W weather resistant louvre

ח	icco	unt	aroi	ın I

	1	Width [mm]									
امنوا	+ []	300	500	700	900	1100	1300	1500	1700	1900	
Heigr	nt [mm]	400	600	800	1000	1200	1400	1600	1800	2000	2100
	345	53	66	71	83	93	102	121	145	165	178
428	510	67	79	89	101	111	126	151	173	198	213
593	675	80	94	105	118	129	151	177	201	230	240
758	840	94	107	120	138	151	175	201	230	262	272
923	1005	107	121	138	153	167	199	230	262	290	302
1088	1170	118	138	153	168	186	222	253	288	317	333
1253	1335	136	151	167	190	207	248	279	314	347	366
1418	1500	147	165	185	207	226	271	306	341	378	393
1583	1665	161	182	201	224	248	295	331	373	413	430
1748	1830	173	194	219	243	263	317	357	400	440	457
1913	1995	185	213	235	262	283	341	384	426	470	488
2078		193	217	243	267	297	353	398	439	482	503

i

- \blacksquare Surcharge for varying from RAL colour shade: +50 %.
- The price for the next highest or the next widest standard size applies as the price for intermediate sizes in 1-mm increments.

2.8.3 AW weather resistant louvre



- · For external air and for exit air of ventilation and air conditioning systems
- Frame and blades made of extruded aluminium profiles with untreated surfaces
- Widths B: 300 mm ... 2100 mm (in 1-mm increments)
- · Heights H: 345 mm ... 2078 mm (in 1-mm increments)

Configure your product



Dimensions
W [mm] x H [mm]

3 Colour Standard: Without Option: RAL ...

For further information see > page 1

Installation subframes
Standard:
Without
Option:
MR With wall installation subframe

4 Installation frames
Standard:
With front frame holes
Option:
OB Without front frame holes

. .

For accessories see ▶ page 75.

AW weather resistant louvre

v weather resis	tant louvr	e							Discour	it group L
					Width	[mm]				
	700	F00	700	900	1100	1700	1500	1700	1000	

	•	width [illin]									
امادا	. t []	300	500	700	900	1100	1300	1500	1700	1900	
Height [mm]		400	600	800	1000	1200	1400	1600	1800	2000	2100
	345	94	113	128	146	162	196	213	230	247	255
428	510	104	128	147	167	193	248	271	296	316	327
593	675	131	155	186	216	239	306	335	365	390	401
758	840	162	202	239	273	310	380	414	445	476	493
923	1005	188	233	273	312	353	436	474	508	544	563
1088	1170	217	264	310	353	396	493	536	572	611	632
1253	1335	242	295	343	390	437	548	595	638	680	701
1418	1500	270	321	377	429	481	608	655	701	747	770
1583	1665	298	353	412	470	525	662	716	766	814	838
1748	1830	319	383	445	508	570	717	776	827	883	913
1913	1995	345	414	479	548	610	774	836	892	951	981
2078		360	429	495	570	632	799	867	923	986	1015

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- \blacksquare Surcharge for varying from RAL colour shade: +50 %.
- The price for the next highest or the next widest standard size applies as the price for intermediate sizes in 1-mm increments.

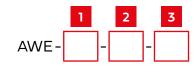
2.8.4 AWE weather resistant louvre



- · For external air and for exit air of ventilation and air conditioning systems
- Frame and blades made of extruded aluminium profiles with silver anodised surfaces
- · Widths B: 300 mm ... 2100 mm (in 1-mm increments)
- Heights H: 345 mm ... 2078 mm (in 1-mm increments)

Configure your product





Dimensions
W [mm] x H [mm]

Installation frames
Standard:
With front frame holes
Option:

OB Without front frame holes

2 Installation subframes
Standard:
Without

Option:

MR With wall installation subframe

i For accessories see ▶ page 75.

AWE weather resistant louvre

_						
\Box	icc	α	ınt	aro	ıın l	1

	1	Width [mm]									
Hoigh	nt [mm]	300	500	700	900	1100	1300	1500	1700	1900	
neigi	ic [iiiiii]	400	600	800	1000	1200	1400	1600	1800	2000	2100
	345	128	151	177	198	222	267	290	314	337	347
428	510	147	175	201	231	263	338	371	406	432	448
593	675	184	216	253	295	330	422	461	497	534	554
758	840	222	278	328	375	426	521	568	608	653	672
923	1005	262	318	375	430	485	599	649	695	748	769
1088	1170	297	360	426	485	541	676	732	785	847	865
1253	1335	330	400	471	536	601	750	818	872	929	1038
1418	1500	370	441	518	591	661	830	898	960	1022	1054
1583	1665	406	485	563	645	719	903	977	1048	1116	1149
1748	1830	437	523	608	695	775	980	1063	1133	1209	1248
1913	1995	472	567	655	750	834	1057	1144	1222	1300	1341
2078		491	586	679	775	868	1098	1185	1264	1346	1390

The price for the next highest or the next widest standard size applies as the price for intermediate sizes in 1-mm increments.

2.8.5 Weather resistant louvre combinations



- For external air and for exit air
- Combination of weather resistant louvre with a multileaf damper or a pressure relief damper
- Widths B: 400 ... 2000 mm
- · Heights H: 345 ... 1995 mm







Dimensions **W** [mm] x **H** [mm] Installation subframes Standard:

Without Option:

MR With wall installation subframe

Weather resistant louvre

Option:

w Steel, galvanised AW

▶ page 71 Aluminium, untreated ▶ page 72

AWE Aluminium, silver anodised ▶ page 73

Counter flange

Standard: Without

Option:

GF With counter flange

Combined component

Option:

JK-N180 ▶ page 64

JK-N180G ▶ page 64

JK-N180I ▶ page 64

JK-M180 ▶ page 64

JK-M180G ▶ page 64

JK-M180I ▶ page 64

JL ▶ page 66

UKI ▶ page 67

UK2 ▶ page 67 Installation frames Standard:

With front frame holes

Option:

OB Without front frame holes

Actuator

Standard:

Without

Option:

Locking device

Electrically reversing actuator:

MO 100 ... 240 VAC

MΊ 24 VAC/DC

M2 100 ... 240 V AC and 1 auxiliary switch

М3 100 ... 240 VAC and 2 auxiliary switch

Μ4 24 V AC/DC and 1 auxiliary switches

24 VAC/DC and 2 auxiliary switches M5

Spring return actuators:

M6 230 VAC and integrated limit switches

24 V AC/DC and integrated limit switches

Axle extension for on-site actuators:

Δ1 18 mm Ø (for actuators M0 ... M5)

Α2 12 x 12 mm (for actuators M6 and M7) Α3 12 mm Ø, 150 mm long (for adjusting lever)

For accessories see ▶ page 75.

Colour shade (for W and AW)

Standard:

Without

Option:

For further information see ▶ page 1

Assignment of weather resistant louvre combinations

	size of the nation		size of the istant louvre		size of the af damper	Nominal size of the JL multileaf damper		Nominal size of the UK louvre	
Width B [mm]	Height H [mm]	Width B [mm]	Height H [mm]	Width B [mm]	Height H [mm]	Width B [mm]	Height H [mm]	Width B [mm]	Height H [mm]
400	345	500	428	400	345	400	345	400	345
600	510	700	593	600	510	600	510	600	510
800	675	900	758	800	675	800	675	800	675
1000	840	1100	923	1000	840	1000	840	1000	840
1200	1005	1300	1088	1200	1005	1200	1005	1200	1005
1400	1170	1500	1253	1400	1170	1400	1170	1400	1170
1600	1335	1700	1418	1600	1335	1600	1335	1600	1335
1800	1500	1900	1583	1800	1500	1800	1500	-	1500
2000	1665	2100	1748	2000	1665	2000	1665	-	1665
-	1830	-	1913	-	1830	-	1830	-	-
_	1995	-	2078	-	1995	-	1995	-	-

i

Specify the air direction of the UK louvre:

- Weather protection grille aspirating: **UK1**
- Weather protection grille blowing out: **UK2**

Assembly of weather resistant louvre combinations

		rou	

1	Width [mm]									
Height [mm]	400	600	800	1000	1200	1400	1600	1800	2000	
345	22	35	38	43	48	50	53	55	56	
510	35	42	48	50	55	56	60	61	66	
675	38	48	52	56	60	63	68	71	73	
840	43	50	56	60	66	71	73	74	79	
1005	48	55	60	66	71	73	78	80	87	
1170	50	56	63	71	73	78	81	89	92	
1335	52	60	66	73	78	81	89	92	97	
1500	55	61	71	74	80	89	92	97	102	
1665	56	66	73	78	87	92	97	101	106	
1830	56	68	74	80	90	96	99	106	110	
1995	60	71	78	87	92	99	106	110	115	

Accessories: Multileaf dampers, pressure relief dampers and weather resistant louvres

Adjustment devices and electric actuators

Discount group L

Ordering data	Description	Price
F	Locking device for adjusting lever	16
MO	Reversing actuator, 100 240 V AC	182
M1	Reversing actuator, 24 V AC/DC	182
M2	Reversing actuator, 100 240 V AC with auxiliary switch	216
M3	Reversing actuator, 100 240 V AC, with two auxiliary switches	229
M4	Reversing actuator, 24 V AC/DC with auxiliary switch	216
M5	Reversing actuator, 24 V AC/DC, with two auxiliary switches	229
M6	Spring return actuator, 230 V AC, with integrated limit switches	355
M7	Spring return actuator, 24 V AC/DC, with integrated limit switches	337

Axle extension for on-site actuators

Ordering data	Description	Price
A1	JK, JL: 18 mm diameter for actuators M0 M5	32
A2	JK, JL: 12 x 12 mm for actuators M6 and M7	32
А3	JK, JL: 12 mm diameter, 150 mm long (for adjusting lever)	32

Tabs for assembly

Discount group L

Ordering data	Description	Price
ZUB 0123	For JK, JL and UK Same widths one on top of the other: Width < 1000 mm Same heights next to each other: Height < 1000 mm	31
ZUB 0124	For JK, JL and UK Same widths one on top of the other: Width ≥ 1000 mm Same heights next to each other: Height ≥ 1000 mm	48
ZUB 0129	For UE, W, AW and AWE Same widths one on top of the other: Width < 1000 mm Same heights next to each other: Height < 1005 mm	31
ZUB 0130	For UE, W, AW and AWE Same widths one on top of the other: Width ≥ 1000 mm Same heights next to each other: Height ≥ 1005 mm	48

MR wall installation frame and **GF** counter flange

								Width	[mm]						
Heigh	nt [mm]	200	300	400	500	600	700	800	900	1100	1300	1500	1700	1900	
									1000	1200	1400	1600	1800	2000	2100
180		30	31	32	35	38	39	45	48	53	61	63	67	71	74
263		31	32	35	38	38	45	46	49	53	62	66	70	74	78
345		32	35	38	38	45	46	48	53	61	63	67	71	78	79
428		33	37	38	43	46	47	48	53	61	66	69	74	79	80
510		37	38	43	45	47	48	49	55	63	66	70	77	80	83
593	675	39	45	47	48	49	53	54	63	66	70	77	80	85	86
758	840	45	47	49	49	54	55	62	66	69	74	80	83	86	93
923	1005	48	49	53	54	61	63	66	69	74	79	83	87	93	97
1088	1170	53	54	61	62	63	66	67	71	78	82	86	93	98	99
1253	1335	55	61	63	66	67	69	71	78	82	86	93	98	101	103
1418	1500	63	64	66	69	71	71	78	80	85	89	97	101	105	107
1583	1665	66	67	70	71	77	79	80	85	89	97	99	105	111	113
1748	1830	69	71	74	78	80	82	83	87	94	99	103	110	114	115
1913	1995	71	74	78	80	83	83	86	93	99	103	107	113	117	121
	2078	74	78	80	82	83	86	89	97	102	105	111	115	120	123

The price for the next highest or the next widest standard size applies as the price for intermediate sizes in 1-mm increments.

Fire protection

3 Fire protection

3.1 Fire dampers

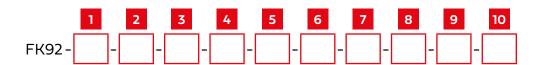
3.1.1 FK90 fire damper (series FK92)



- Maintenance-free fire damper according to EN 15650
- Fire classifications: EI 30/60/90/120 ($v_e h_{o_i} i \Leftrightarrow o$) S C10000
- Leak tightness C according to DIN EN 1751
- Widths: 200 mm ... 1500 mm and heights: 200 mm ... 800 mm (in 5-mm increments)
- Widths: 200 mm ... 1000 mm and heights: 200 mm ... 1000 mm (in 5-mm increments)
- · Lengths: 400 mm and 500 mm

Configure your product here





Dimensions

W [mm] x **H** [mm] x **L** [mm]

i Also available in short length ▶ page 92.

4 Casing design

Standard:

Casing made of galvanized sheet steel

Option:

Casing inside and outside with epoxy resin powder coating

2 Installation and mounting frame

Standard:

Without installation subframe and mounting frame

Option for L = 400 mm and L = 500 mm:

ER1 For metal stud walls

ER8 For wooden walls and ceilings and for ceilings with

steel frames

AR2 For remote from walls and ceilings

Option for L = 500:

ER4 For sliding ceiling connection

5 Additional casing openings

Standard: Without

Option:

132 mm Ø with cover; installation position:

top, bottom, top + bottom

3 Damper blade design

Standard:

Metal frame made of galvanized steel

Option:

Metal frame made from 1.4301 stainless steel

Galvanised metal cover

Metal frame and metal cover made of 1.4301 stainless

steel

6 Release temperature

Standard:

70 °C

Option:

95 °C

70 °C corrosion-resistant

Limit switch for thermal-mechanical release mechanism (TMA)

Standard:

Without limit switch

Option:

E-ZU One limit switch CLOSED **E-AUF** One limit switch OPEN

E-ZU+AUF Two limit switches CLOSED+OPEN

EX-ZU One explosion-protected limit switch CLOSED
EX-AUF One explosion-protected limit switch OPEN
EX-ZU+AUF Two explosion-protected limit switches

CLOSED+OPEN

Actuators and release elements

Standard:

Thermal-mechanical release mechanism (TMA)

Option:

M220-9/H Actuator 230 V (Standard)
M24-9/H Actuator 24 V (Standard)

M220-10/HActuator 230 VM24-10/HActuator 24 VM220-11/HActuator 230 VM24-11/HActuator 24 V

GU24 With magnetic clamp on TMA WU220 With magnetic clamp on TMA G24 With lifting solenoid on TMA W220 With lifting solenoid on TMA Р With pneumatic cylinder on TMA P2 With pneumatic cylinder on TMA N/Ex Explosion-protected TMA EM-1 Explosion-protected actuator RM-1 Explosion-protected actuator EM-2 Explosion-protected actuator

■ Corresponding price tables ▶ from page 82.

■ Further accessories ▶ from page 109.

9 Smoke detector

Standard:

Without

Option:

4B OR4 basic

4P OR4 pro

Ü-FK (series OR4) for air transfer applications

NO OR32 standard

N2 OR32 with MC and relay module

Ü-FK (series OR32) for air transfer applications

Installed accessories

Standard:

Without

Option:

Al AB-01 connection box for spring return actuators

with 24 VAC/DC

A3 AB-02 connection box for spring return actuators with 230 V AC

Fire protection

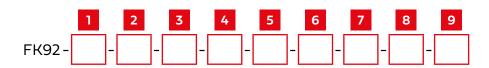
Ü-FK (series OR4) fire damper for air transfer applications 3.1.2



- Maintenance-free fire damper according to EN 15650
- Fire classifications: EI 30/60/90/120 ($v_e h_{or} i \Leftrightarrow o$) S C10000
- General Building Inspectorate Approval / General Type Approval: Z-6.50-2132
- With electric actuator or magnetic clamp 230 VAC or 24 VAC/DC
- With OR4 smoke detector
- Widths B: 200 mm ... 1500 mm (in 5-mm increments)
- Heights H: 200 mm ... 800 mm (in 5-mm increments)
- Lengths L: 400 mm and 500 mm

Configure your product here





Dimensions

W [mm] x **H** [mm] x **L** [mm]

Release temperature

Standard:

70 °C

Installation and mounting frame

Standard:

Without installation subframe and mounting frame

Option for L = 400 mm and L = 500 mm:

ER1 for metal stud walls

ER8 for wooden walls and ceilings and for ceilings

with steel frames

AR2 for remote from walls and ceilings

Limit switch for thermal-mechanical release mechanism (TMA) in conjunction with magnetic clamp

Standard:

Without limit switch

Option:

E-ZU One limit switch CLOSED E-AUF One limit switch OPFN

E-ZU+AUF Two limit switches CLOSED+OPEN

Damper blade design

Standard:

Metal frame made of galvanized steel

Option:

Galvanized metal cover

Actuators and release elements

M220-9/H Actuator 230 V (Standard) M24-9/H Actuator 24 V (Standard)

M220-10/H Actuator 230 V M24-10/H Actuator 24 V M220-11/H Actuator 230 V M24-11/H Actuator 24 V

GU24 With magnetic clamp on TMA WU220 With magnetic clamp on TMA

Casing design

Standard:

Casing made of galvanized sheet steel

Smoke detector

For installation in extension VEUFK02

Standard:

Without

Option:

4B OR4 basic

4P OR4 pro

Actuator position: Standard:

Right (installation position OR4 in extension: right)

Option:

Left (installation position OR4 in extension: left) Bottom (installation position OR4 in extension:

right)

Prices for extension VEUFK02 must also be taken into account

Additional casing openings

Standard:

Without

Option:

132 mm Ø with cover; installation position:

top, bottom, top + bottom

Further accessories > from page 109.

Discount group B

Description	Price
Additional price for factory assembly and wiring of FK92 and OR4	132

- Suitable extension VERL page 109.
 Suitable extension VEUFK02
- ▶ page 111. Suitable protective grilles ▶ page 113.

80

Fire protection

Ü-FK (series OR32) fire damper for air transfer applications 3.1.3



- Maintenance-free fire damper according to EN 15650
- Fire classifications: EI 30/60/90/120 ($v_e h_{or} i \Leftrightarrow o$) S C10000
- General Building Inspectorate Approval / General Type Approval: Z-6.50-2132
- With electric actuator or magnetic clamp 230 VAC or 24 VAC/DC
- With OR32 smoke detector for use in particularly confined spaces
- Widths B: 200 mm ... 1500 mm (in 5-mm increments)
- Heights H: 200 mm ... 800 mm (in 5-mm increments)
- Lengths L: 400 mm and 500 mm

Configure your product



	1	2	3	4	5	6	7	8	9
FK92-	_		-	-]-]-		-	-

Dimensions

W [mm] x **H** [mm] x **L** [mm]

Nominal temperature

Standard:

70 °C

Installation and mounting frame

Standard:

Without installation subframe and mounting frame

Option for L = 400 mm and L = 500 mm:

ER1 For metal stud walls

ER8 For wooden walls and ceilings and for ceilings with

steel frames

AR2 For remote from walls and ceilings

Limit switch for thermal-mechanical release mechanism (TMA) in conjunction with magnetic clamp

Standard:

Without limit switch

Option:

E-ZU One limit switch CLOSED

E-AUF One limit switch OPFN

E-ZU+AUF Two limit switches CLOSED+OPEN

Damper blade design

Standard:

Metal frame made of galvanized steel

Option:

Galvanized metal cover

Actuators and release elements

M220-9/H Actuator 230 V (Standard) M24-9/H Actuator 24 V (Standard)

M220-10/H Actuator 230 V M24-10/H Actuator 24 V M220-11/H Actuator 230 V M24-11/H Actuator 24 V

GU24 With magnetic clamp on TMA WU220 With magnetic clamp on TMA

Casing design

Standard:

Casing made of galvanized sheet steel

Smoke detector

Standard:

Without

Option:

NO OR32 standard

N₂ OR32 with MC and relay module

Additional casing openings

Standard:

90 mm diameter for installation of the OR32 smoke detector

Opening at the top for OR32 - (actuator position left) Option:

Opening left for OR32 - (actuator position below) Opening right for OR32 - (actuator position left)

Further accessories > from page 109.

Discount group B

Description	Price
Additional price for factory assembly and wiring of FK92 and OR32	132



Suitable protective grilles

page 113.

FK90 fire damper (series FK92) Construction lengths 400 and 500 mm

Discount group B

1	lengens		14 300					W	idth [m	ml						ount g	
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	184	184	184	184	184	186	186	193	193	199	206	214	216	223	230	233	240
225	185	185	185	185	185	190	190	195	195	200	207:-	216	219	229	233	237:-	243
250	185	185	185	185	185	190	190	195	195	200	207:-	216	219	229	233	237:-	243
275	185	185	185	185	185	193	193	198	198	201	210	217:-	222	230	235	240	246
300	186	186	186	186	186	193	193	199	199	202	213	219	223	230	235	243	248
325	190	190	190	190	190	195	195	200	200	207	215	223	229	233	240	248	253
350	193	193	193	193	193	198	198	202	202	213	216	224	230	237	245	251	256
375	194	194	194	194	194	200	200	206	206	214	219	229	232	240	249	255	262
400	195	195	195	195	195	201	201	210	210	216	223	231	235	245	255	261	264
450	200	200	200	200	200	207	207	215	215	222	230	240	245	253	262	267	271
500	206	206	206	206	206	215	215	219	219	229	235	246	251	262	269	277	283
550	215	215	215	215	215	222	222	229	229	235	246	256	263	271	280	290	297
600	216	216	216	216	216	224	224	231	231	240	249	262	267	277:-	286	295	302
650	223	223	223	223	223	232	232	240	240	249	261	272	278	290	299	310	317:-
700	229	229	229	229	229	235	235	246	246	255	264	278	283	297	307	317:-	329
750	232	232	232	232	232	240	240	251	251	262	271	283	291	302	314	325	335
800	235	235	235	235	235	246	246	256	256	267:-	278	291	298	310	322	331	341
850	263	263	263	263	263	274	274	283	283	295	306	318	326	338	349	360	369
900	291	291	291	291	291	301	301	311	311	323	333	346	354	366	377:-	387	395
950	317:-	317:-	317:-	317	317:-	328	328	338	338	349	360	373	379	392	403	414	423
1000	344	344	344	344	344	354	354	363	363	376	386	399	407-	418	430	440	448

1						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	246	251	257:-	263	271	278	278	283	291	301	310	322
225	249	256	263	269	277:-	282	282	291	299	307-	315	330
250	249	256	263	269	277:-	282	282	291	299	307-	315	330
275	251	257:-	264	271	278	286	286	295	302	311	318	333
300	255	262	266	272	280	288	288	297:-	305	313	322	335
325	257:-	264	271	278	286	295	295	302	311	318	330	344
350	263	269	277:-	282	291	299	299	307	315	328	337	349
375	267	274	280	288	297:-	305	305	313	322	333	344	355
400	271	278	283	291	301	310	310	317:-	329	338	347	363
450	280	288	297-	305	313	322	322	331	341	353	366	379
500	291	299	307-	315	325	335	335	345	355	369	379	395
550	305	313	321	330	339	351	351	363	373	386	400	416
600	311	318	330	338	347:-	360	360	370	378	393	410	426
650	329	337	346	354	367	378	378	387	398	415	431	453
700	338	346	355	366	377	387	387	400	414	429	445	464
750	345	354	366	375	386	400	400-	414	426	441	457	479
800	353	363	375	386	398	410	410	424	439	455	471	494
850	379	392	402	414	-	-	-	-	-	-	-	-
900	408	421	430	441	-	-	-	-	-	-	-	-
950	433	446	456	469	-	-	-	-	-	-	-	-
1000	461	472	482	494	-	-	-	-	-	-	-	-

i Intermediate sizes are priced at the next higher or next wider standard size.

FK90 fire dampers (series FK92) with *galvanised metal cover* Construction lengths 400 and 500 mm

1+3	lengens							Wi	idth [m	m]							
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	193	193	193	193	193	195	195	201	201	210	216	223	229	233	240	246	251
225	194	194	194	194	194	199	199	206	206	214	219	229	231	237	245	249	256
250	194	194	194	194	194	199	199	206	206	214	219	229	231	237	245	249	256
275	195	195	195	195	195	200	200	207	207	214	219	229	232	239	248	253	257
300	195	195	195	195	195	201	201	210	210	215	222	230	233	240	249	255	262
325	199	199	199	199	199	206	206	214	214	219	224	233	237	245	253	257	264
350	200	200	200	200	200	207	207	215	215	222	229	235	240	249	256	263	269
375	201	201	201	201	201	210	210	216	216	223	230	239	245	253	262	267	274
400	206	206	206	206	206	214	214	219	219	226	233	243	248	256	266	271	278
450	213	213	213	213	213	217	217	224	224	232	240	251	256	266	274	280	283
500	216	216	216	216	216	224	224	230	230	239	248	257	264	274	282	291	298
550	224	224	224	224	224	231	231	239	239	248	257	269	274	283	295	302	311
600	229	229	229	229	229	235	235	243	243	253	263	274	280	291	301	310	317
650	233	233	233	233	233	245	245	253	253	263	271	286	291	302	314	325	335
700	239	239	239	239	239	249	249	257	257	267	278	291	298	311	322	333	345
750	245	245	245	245	245	255	255	263	263	274	283	298	306	317	330	339	351
800	249	249	249	249	249	257	257	267	267	279	291	305	313	325	338	347	357
850	277	277	277	277	277	286	286	298	298	310	321	335	342	355	367	377	387
900	306	306	306	306	306	315	315	328	328	339	349	363	371	384	395	407	416
950	333	333	333	333	333	344	344	355	355	367	377	392	399	410	424	433	443
1000	361	361	361	361	361	371	371	382	382	394	406	421	426	439	453	462	471

1+3						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	257	264	271	277	283	291	291	299	306	315	325	338
225	263	269	277	282	290	297	297	305	313	322	333	346
250	263	269	277	282	290	297	297	305	313	322	333	346
275	264	271	278	283	291	299	299	307	315	328	337	349
300	267	272	279	286	295	302	302	311	318	330	339	351
325	271	278	283	291	299	307	307	317	328	337	346	360
350	277	282	290	297	305	313	313	322	333	344	353	369
375	280	288	295	301	311	318	318	330	338	349	360	375
400	283	291	299	306	315	325	325	335	345	354	366	382
450	295	302	311	318	330	338	338	347	357	370	383	398
500	306	314	322	331	341	351	351	363	373	386	398	415
550	318	330	338	346	357	369	369	379	391	407	421	439
600	328	337	345	354	366	377	377	386	395	414	430	448
650	344	353	363	371	384	395	395	407	418	433	454	472
700	353	363	373	383	394	407	407	421	432	448	464	487
750	363	373	383	393	407	418	418	432	447	463	481	502
800	370	382	393	406	418	430	430	446	461	479	495	518
850	399	410	423	433	-	-	-	-	-	-	-	-
900	429	440	453	463	-	-	-	-	-	-	-	-
950	456	469	479	491	-	-	-	-	-	-	-	-
1000	485	495	507	519	-	-	-	-	-	-	-	-

i Intermediate sizes are priced at the next higher or next wider standard size.

FK90 fire dampers (series FK92) with *powder coated casing* Construction lengths 400 and 500 mm

	Discount group B														тоар В		
1 + 4								Wi	dth [m	m]							
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	257	257	257	257	257	263	263	269	269	278	288	298	302	311	318	329	337
225	257	257	257	257	257	266	266	272	272	282	291	302	307	317	328	333	339
250	257	257	257	257	257	266	266	272	272	282	291	302	307	317	328	333	339
275	262	262	262	262	262	267	267	277	277	283	294	305	310	318	330	337	345
300	262	262	262	262	262	269	269	278	278	286	295	307	313	322	331	339	346
325	264	264	264	264	264	272	272	282	282	291	298	311	317	328	337	345	353
350	269	269	269	269	269	277	277	283	283	295	302	315	321	331	344	351	360
375	271	271	271	271	271	279	279	288	288	298	307	318	328	338	349	355	366
400	274	274	274	274	274	282	282	291	291	301	311	322	330	344	355	363	370
450	280	280	280	280	280	290	290	298	298	310	318	337	344	354	367	373	379
500	288	288	288	288	288	298	298	307	307	318	331	345	353	366	378	386	395
550	298	298	298	298	298	307	307	318	318	331	345	360	367	379	393	406	415
600	302	302	302	302	302	313	313	325	325	338	349	367	373	386	400	413	423
650	313	313	313	313	313	325	325	337	337	349	363	382	390	406	421	432	447
700	318	318	318	318	318	331	331	345	345	355	370	390	398	414	430	446	461
750	325	325	325	325	325	338	338	351	351	366	379	398	408	424	440	455	469
800	331	331	331	331	331	345	345	357	357	373	387	407	418	432	453	464	479
850	369	369	369	369	369	383	383	398	398	414	429	446	456	472	490	503	517
900	408	408	408	408	408	422	422	437	437	453	467	486	495	512	528	542	554
950	445	445	445	445	445	459	459	472	472	490	503	522	531	547	563	578	592
1000	481	481	481	481	481	495	495	510	510	526	541	559	569	585	602	616	629

1+4						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	345	353	360	370	379	390	390	398	408	422	432	453
225	349	357	367	377	386	395	395	407	418	431	445	462
250	349	357	367	377	386	395	395	407	418	431	445	462
275	353	362	370	378	390	400	400	413	422	433	448	464
300	355	366	373	382	391	403	403	415	426	440	453	469
325	363	371	379	390	400	413	413	423	433	448	462	481
350	369	378	386	395	407	418	418	431	445	456	471	490
375	373	383	393	402	414	426	426	439	453	464	481	501
400	379	390	398	408	422	432	432	447	461	472	487	507
450	391	403	414	424	439	453	453	464	479	494	510	531
500	408	421	430	441	455	469	469	482	497	517	531	554
550	426	439	451	462	478	490	490	506	523	541	561	584
600	433	448	461	472	487	502	502	517	529	553	573	600
650	457	471	486	497	514	529	529	544	557	580	604	633
700	471	486	497	510	528	544	544	561	577	600	621	652
750	482	497	510	525	541	559	559	577	597	618	640	671
800	494	507	523	539	557	573	573	594	615	638	661	690
850	531	547	562	578	-	-	-	-	-	-	-	-
900	572	588	602	618	-	-	-	-	-	-	-	-
950	608	624	639	655	-	-	-	-	-	-	-	-
1000	645	661	676	692	-	-	-	-	-	-	-	-

i Intermediate sizes are priced at the next higher or next wider standard size.

FK90 fire dampers (series FK92) with *powder coated casing and metal frame made of stainless steel* Construction lengths 400 and 500 mm

CONSCIOCTION	Little lengths 400 that 300 mm																
1,3,4								Wi	dth [m	m]							
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	305	305	305	305	305	311	311	318	318	330	339	353	360	370	379	390	398
225	307	307	307	307	307	315	315	322	322	333	345	357	366	377	387	395	403
250	307	307	307	307	307	315	315	322	322	333	345	357	366	377	387	395	403
275	307	307	307	307	307	317	317	328	328	337	346	360	367	378	390	400	408
300	310	310	310	310	310	318	318	330	330	339	349	363	370	382	393	402	413
325	313	313	313	313	313	322	322	333	333	345	353	370	377	386	400	408	418
350	317	317	317	317	317	329	329	338	338	349	357	373	382	393	406	415	424
375	321	321	321	321	321	331	331	344	344	353	363	378	386	400	414	422	431
400	325	325	325	325	325	335	335	345	345	357	370	383	391	407	422	430	439
450	333	333	333	333	333	344	344	353	353	369	379	398	406	421	432	441	453
500	341	341	341	341	341	353	353	363	363	378	391	408	418	432	448	461	471
550	353	353	353	353	353	366	366	378	378	391	408	424	433	451	464	479	491
600	357	357	357	357	357	371	371	384	384	400	415	432	445	461	474	488	502
650	371	371	371	371	371	386	386	400	400	415	430	453	462	481	497	514	529
700	378	378	378	378	378	393	393	408	408	422	439	462	471	490	510	528	544
750	386	386	386	386	386	402	402	415	415	432	448	471	485	502	522	538	555
800	393	393	393	393	393	408	408	423	423	441	461	482	495	517	536	550	568
850	438	438	438	438	438	454	454	471	471	490	507	529	541	560	580	597	610
900	482	482	482	482	482	501	501	518	518	537	553	575	588	607	625	644	658
950	526	526	526	526	526	544	544	560	560	580	597	618	632	652	670	687	702
1000	570	570	570	570	570	588	588	604	604	624	640	662	674	694	714	732	746

1,3,4						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	408	418	426	437	448	462	462	472	486	501	517	536
225	414	424	433	446	457	470	470	482	495	510	525	546
250	414	424	433	446	457	470	470	482	495	510	525	546
275	418	429	439	448	462	472	472	487	501	517	530	550
300	422	431	441	453	464	479	479	491	505	521	536	555
325	429	440	451	461	472	487	487	502	517	530	546	569
350	437	448	457	470	482	495	495	510	525	541	557	583
375	445	455	467	478	490	505	505	521	536	550	569	592
400	451	462	472	486	501	514	514	529	544	562	577	602
450	464	479	490	503	521	536	536	550	568	585	604	632
500	485	497	510	523	538	555	555	572	588	610	632	656
550	506	521	534	546	567	583	583	602	618	641	664	690
600	518	530	545	561	577	597	597	613	629	654	679	709
650	544	559	573	588	608	629	629	645	658	687	718	750
700	561	573	588	604	623	645	645	664	686	713	736	769
750	572	588	606	622	641	662	662	685	706	733	759	796
800	585	604	622	639	658	679	679	705	728	754	784	821
850	632	652	669	687	1	1	-	-	-	-	-	-
900	677	695	714	733	-	-	-	-	-	-	-	-
950	721	740	757	776	-	-	-	-	-	-	-	-
1000	765	784	801	821	-	-	-	-	-	-	-	-

i Intermediate sizes are priced at the next higher or next wider standard size.

FK90 fire dampers (series FK92) with powder coated casing and metal frame made of stainless steel and metal cover made of stainless steel Construction lengths 400 and 500 mm

1,3,4								Wi	dth [m	m]							
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	321	321	321	321	321	329	329	337	337	346	357	371	378	390	400	410	421
225	322	322	322	322	322	331	331	341	341	351	363	378	384	395	408	416	424
250	322	322	322	322	322	331	331	341	341	351	363	378	384	395	408	416	424
275	325	325	325	325	325	335	335	345	345	354	367	379	386	400	413	421	430
300	328	328	328	328	328	337	337	346	346	357	370	383	390	402	414	424	432
325	331	331	331	331	331	341	341	351	351	363	373	390	395	408	421	431	441
350	337	337	337	337	337	345	345	355	355	370	378	394	402	415	426	439	448
375	338	338	338	338	338	349	349	360	360	373	383	398	407	422	433	446	455
400	344	344	344	344	344	353	353	366	366	377	390	403	413	429	446	454	462
450	351	351	351	351	351	363	363	373	373	386	400	421	426	441	457	467	474
500	360	360	360	360	360	373	373	383	383	398	414	431	440	456	471	486	495
550	373	373	373	373	373	384	384	398	398	414	430	448	457	474	490	503	519
600	378	378	378	378	378	391	391	406	406	422	437	457	467	486	501	517	529
650	391	391	391	391	391	407	407	421	421	439	454	474	487	505	523	539	557
700	398	398	398	398	398	414	414	430	430	446	462	487	497	518	537	555	573
750	407	407	407	407	407	422	422	439	439	455	472	497	507	530	550	569	585
800	414	414	414	414	414	431	431	447	447	467	486	507	522	541	563	580	599
850	461	461	461	461	461	478	478	497	497	518	536	559	570	591	610	630	645
900	509	509	509	509	509	528	528	545	545	567	584	607	621	640	661	678	693
950	555	555	555	555	555	573	573	591	591	610	630	653	665	686	706	724	740
1000	601	601	601	601	601	621	621	638	638	658	676	700	713	733	753	770	785

1,3,4						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	430	440	453	461	472	487	487	498	510	528	541	563
225	437	447	457	470	482	495	495	507	522	538	554	575
250	437	447	457	470	482	495	495	507	522	538	554	575
275	440	453	462	472	487	501	501	514	529	544	561	583
300	446	455	467	474	490	503	503	519	534	547	567	585
325	454	463	474	486	501	514	514	529	544	561	577	600
350	461	471	485	495	507	522	522	538	554	570	588	613
375	467	481	490	502	518	531	531	547	563	583	600	623
400	472	487	498	510	528	541	541	557	573	591	608	637
450	488	503	518	531	547	563	563	580	599	617	638	664
500	510	523	537	553	569	585	585	604	622	645	664	692
550	534	547	562	577	597	615	615	634	654	678	700	730
600	545	561	575	591	608	630	630	645	662	688	718	749
650	573	588	604	621	640	661	661	679	695	725	754	790
700	588	606	622	638	656	679	679	701	722	750	775	814
750	604	621	639	655	678	698	698	721	746	772	801	838
800	617	637	655	674	695	718	718	740	767	798	825	864
850	665	686	703	724	-	-	-	-	-	-	-	-
900	714	734	753	774	-	-	-	-	-	-	-	-
950	760	781	799	818	-	-	-	-	-	-	-	-
1000	806	825	846	865	-	-	-	-	-	-	-	-

Intermediate sizes are priced at the next higher or next wider standard size.

Installation subframe ER1 for FK90 fire dampers (series FK92) Construction lengths 400 and 500 mm

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2								Wi	idth [m	m]							Toup 2
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	138	138	138	138	138	144	144	146	146	151	157:-	163	165	170	173	179	183
225	141	141	141	141	141	145	145	147	147:-	153	158	165	166	173	179	182	184
250	141	141	141	141	141	145	145	147	147:-	153	158	165	166	173	179	182	184
275	141	141	141	141	141	145	145	147	147:-	155	162	166	170	173	179	183	185
300	144	144	144	144	144	146	146	151	151	157:-	162	166	170	174	182	184	189
325	145	145	145	145	145	147:-	147:-	153	153	158	163	170	171	176	183	189	191
350	146	146	146	146	146	151	151	155	155	162	165	171	174	182	185	190	197-
375	146	146	146	146	146	153	153	157:-	157:-	163	166	173	176	184	190	193	199
400	147:-	147	147	147	147	155	155	158	158	165	170	174	179	185	193	199	202
450	153	153	153	153	153	157:-	157:-	163	163	170	173	183	185	191	199	205	208
500	157:-	157:-	157:-	157:-	157:-	163	163	166	166	173	179	189	190	199	206	210	215
550	163	163	163	163	163	167-	167-	173	173	179	185	197	200	206	213	219	224
600	165	165	165	165	165	171	171	176	176	184	190	199	205	210	218	224	229
650	170	170	170	170	170	176	176	183	183	190	199	208	210	219	226	237:-	243
700	173	173	173	173	173	182	182	185	185	193	202	210	217:-	224	232	243	249
750	176	176	176	176	176	184	184	190	190	199	206	217:-	223	229	241	248	255
800	182	182	182	182	182	189	189	193	193	205	210	219	226	237:-	245	251	259

2						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	185	190	197	202	206	210	210	217:-	223	229	237	245
225	190	193	200	205	210	215	215	223	226	237	242	250
250	190	193	200	205	210	215	215	223	226	237	242	250
275	191	197:-	202	206	210	218	218	223	229	239	243	251
300	193	199	205	208	213	218	218	224	231	241	245	255
325	197-	202	208	210	218	223	223	229	239	243	250	262
350	202	206	210	215	223	226	226	237	242	249	257:-	265
375	205	208	213	218	224	231	231	241	245	251	259	270
400	206	210	217:-	223	229	237	237	243	249	257	265	277:-
450	213	218	224	231	239	245	245	251	259	269	277:-	288
500	223	226	232	241	248	255	255	262	270	279	288	302
550	231	241	245	250	259	265	265	277:-	285	295	303	318
600	239	243	250	257:-	265	274	274	281	288	301	312	323
650	249	257:-	263	269	279	288	288	296	303	314	328	343
700	257	263	270	277:-	286	296	296	304	314	327-	337-	354
750	262	269	279	286	295	303	303	314	323	337	349	362
800	269	277	286	295	303	312	312	322	335	346	357:-	377



[•] Intermediate sizes are priced at the next higher or next wider standard size.

Surcharge for factory assembly with FK90 fire damper: +55.-

Installation subframe ER8 for FK90 fire dampers (series FK92) Construction lengths 400 and 500 mm

2								Wi	idth [m	m]							Toup 2
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	138	138	138	138	138	144	144	146	146	151	157:-	163	165	170	173	179	183
225	141	141	141	141	141	145	145	147	147:-	153	158	165	166	173	179	182	184
250	141	141	141	141	141	145	145	147	147:-	153	158	165	166	173	179	182	184
275	141	141	141	141	141	145	145	147	147:-	155	162	166	170	173	179	183	185
300	144	144	144	144	144	146	146	151	151	157:-	162	166	170	174	182	184	189
325	145	145	145	145	145	147:-	147:-	153	153	158	163	170	171	176	183	189	191
350	146	146	146	146	146	151	151	155	155	162	165	171	174	182	185	190	197-
375	146	146	146	146	146	153	153	157:-	157:-	163	166	173	176	184	190	193	199
400	147:-	147	147	147	147	155	155	158	158	165	170	174	179	185	193	199	202
450	153	153	153	153	153	157:-	157:-	163	163	170	173	183	185	191	199	205	208
500	157:-	157:-	157:-	157:-	157:-	163	163	166	166	173	179	189	190	199	206	210	215
550	163	163	163	163	163	167-	167-	173	173	179	185	197	200	206	213	219	224
600	165	165	165	165	165	171	171	176	176	184	190	199	205	210	218	224	229
650	170	170	170	170	170	176	176	183	183	190	199	208	210	219	226	237:-	243
700	173	173	173	173	173	182	182	185	185	193	202	210	217:-	224	232	243	249
750	176	176	176	176	176	184	184	190	190	199	206	217:-	223	229	241	248	255
800	182	182	182	182	182	189	189	193	193	205	210	219	226	237:-	245	251	259

2						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	185	190	197	202	206	210	210	217:-	223	229	237	245
225	190	193	200	205	210	215	215	223	226	237	242	250
250	190	193	200	205	210	215	215	223	226	237	242	250
275	191	197:-	202	206	210	218	218	223	229	239	243	251
300	193	199	205	208	213	218	218	224	231	241	245	255
325	197-	202	208	210	218	223	223	229	239	243	250	262
350	202	206	210	215	223	226	226	237	242	249	257:-	265
375	205	208	213	218	224	231	231	241	245	251	259	270
400	206	210	217:-	223	229	237	237	243	249	257	265	277:-
450	213	218	224	231	239	245	245	251	259	269	277:-	288
500	223	226	232	241	248	255	255	262	270	279	288	302
550	231	241	245	250	259	265	265	277:-	285	295	303	318
600	239	243	250	257:-	265	274	274	281	288	301	312	323
650	249	257:-	263	269	279	288	288	296	303	314	328	343
700	257	263	270	277:-	286	296	296	304	314	327-	337-	354
750	262	269	279	286	295	303	303	314	323	337	349	362
800	269	277	286	295	303	312	312	322	335	346	357:-	377

- Intermediate sizes are priced at the next higher or next wider standard size.
- Surcharge for factory assembly with FK90 fire damper: +55.-

Mounting frame AR2 for FK90 fire dampers (series FK92) Construction lengths 400 and 500 mm

CONSCIOUN	biscount group B																
2								W	dth [m	m]							
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	357	362	365	369	371	375	381	383	387	393	401	408	416	423	430	439	443
225	362	365	369	371	375	381	383	387	390	398	406	413	419	426	434	441	449
250	365	369	371	375	381	383	387	390	393	401	408	416	423	430	439	443	453
275	369	371	375	381	383	387	390	393	398	406	413	419	426	434	441	449	456
300	371	375	381	383	387	390	393	398	401	408	416	423	430	439	443	453	459
325	375	381	383	387	390	393	398	401	406	413	419	426	434	441	449	456	462
350	381	383	387	390	393	398	401	406	408	416	423	430	439	443	453	459	467
375	383	387	390	393	398	401	406	408	413	419	426	434	441	449	456	462	470
400	387	390	393	398	401	406	408	413	416	423	430	439	443	453	459	467	474
450	393	398	401	406	408	413	416	419	423	430	439	443	453	459	467	474	480
500	401	406	408	413	416	419	423	426	430	439	443	453	459	467	474	480	488
550	408	413	416	419	423	426	430	434	439	443	453	459	467	474	480	488	495
600	416	419	423	426	430	434	439	441	443	453	459	467	474	480	488	495	503
650	423	426	430	434	439	441	443	449	453	459	467	474	480	488	495	503	510
700	430	434	439	441	443	449	453	456	459	467	474	480	488	495	503	510	518
750	439	441	443	449	453	456	459	462	467	474	480	488	495	503	510	518	526
800	443	449	453	456	459	462	467	470	474	480	488	495	503	510	518	526	531

2						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	453	459	467	474	480	488	495	503	510	518	531	546
225	456	462	470	477	486	493	499	507	513	521	535	549
250	459	467	474	480	488	495	503	510	518	526	539	553
275	462	470	477	486	493	499	507	513	521	528	544	558
300	467	474	480	488	495	503	510	518	526	531	546	561
325	470	477	486	493	499	507	513	521	528	535	549	565
350	474	480	488	495	503	510	518	526	531	539	553	568
375	477	486	493	499	507	513	521	528	535	544	558	572
400	480	488	495	503	510	518	526	531	539	546	561	577
450	488	495	503	510	518	526	531	539	546	553	568	582
500	495	503	510	518	526	531	539	546	553	561	577	591
550	503	510	518	526	531	539	546	553	561	568	582	598
600	510	518	526	531	539	546	553	561	568	577	591	605
650	518	526	531	539	546	553	561	568	577	582	598	613
700	526	531	539	546	553	561	568	577	582	591	605	618
750	531	539	546	553	561	568	577	582	591	598	613	626
800	539	546	553	561	568	577	582	591	598	605	618	633



[•] Intermediate sizes are priced at the next higher or next wider standard size.

[■] Factory-assembled.

700

750

800

624.-

633.

641.-

630.

639

647.-

634.

644.

653.-

640.

650.

658.-

645.-

656.-

665.-

652

660.

657.-

666.

Installation subframe ER4 for FK90 fire dampers (series FK92)

Installation length 500 mm Discount group B Width [mm] Height 200 225 250 275 300 325 350 375 400 450 500 550 600 650 700 750 800 [mm] 200 531.-539.-544. 547.-555.-560.-565.-570.-577.-588.-599.-608.-623.-633.-644.-656. 666. 225 538.-544. 547.-553. 560.-565. 570.-577.-582.-594.-605. 615.-625.-639.-647.-658. 672.-250 542.-547.-552. 558. 562.-568. 574.-581.-586.-598. 607.-618.-632.-641.-652.-665. 674.-275 546. 552. 558. 562. 566. 574.-581.-586. 589.-604. 613.-624.-634. 645.-657.-670.· 679.-300 549. 555. 561.-572.-580. 584. 589. 597.-606. 617.-630.-640. 652.-661.-673. 685. 566. 678. 325 555.-560. 566. 572.-580.-582.-588. 597.-600.-608. 624.-633. 644. 666. 690.-656. 350 560. 565. 570. 577.-582.-588. 594.-599. 605. 615.-639. 650. 658. 672.-682. 693. 626. 375 565.-570.-574. 581.-586.-594. 598.-604. 607.-618.-632. 641.-653. 665.-677.-687.-698. 586. 400 568.-574.-581.-591.-598. 604.-607.-614.-625.-634.-647.-657.-672.-679.-692.-701.-450 580.-584.-589.-597.-600.-605.-613.-617.-624.-633.-645.-656.-666.-678.-690.-700.-712.-500 588.-594.-598.-605.-608.-615.-618.-625.-633.-641.-653.-665.-677.-687.-698.-711.-720.-550 597.-604.-607.-613.-617.-625.-632.-634.-640.-652.-661.-674.-685.-696.-710.-719.-730.-600 605.-608.-615.-624.-626.-633. 639.-644.-650.-660.-673. 684.-694.-709.-718.-727.-738.-625. 650 615.-618.-632. 638.-641.-647.-653.-658. 672.-682. 693. 703.-717.-727.-737.-746.-

661.-

673.-

682.-

670.-

678.-

687.-

679.-

690.·

696.-

692.

700.

711.-

701.-

711.-

719.-

712.-

722.-

730.-

726.

733.

742.-

735.-

745.-

753.-

746.

756.

765.-

757.-

768.-

775.-

2						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	678	690	700	711	722	733	745	756	768	777	802	823
225	682	693	703	717	727	737	751	759	772	782	805	825
250	687	696	710	719	730	742	753	765	775	786	809	831
275	692	701	713	726	736	746	757	770	778	794	813	837
300	694	710	718	729	738	752	764	773	785	797	821	841
325	700	712	722	735	745	756	768	777	789	802	823	847
350	703	717	727	737	751	761	772	783	796	805	825	849
375	711	719	733	742	756	765	775	786	798	809	831	855
400	713	726	736	746	759	770	782	794	804	815	839	858
450	722	735	745	757	768	778	789	804	812	823	847	868
500	733	744	756	765	777	786	802	809	823	831	855	878
550	742	752	765	773	785	797	808	821	830	842	864	887
600	751	764	772	785	796	806	816	829	841	850	873	897
650	759	770	782	794	805	815	825	839	849	858	882	903
700	769	778	790	804	813	824	837	848	858	869	892	916
750	777	789	802	812	823	832	847	857	865	881	901	924
800	786	798	809	822	831	842	855	864	878	887	909	934

i

- Intermediate sizes are priced at the next higher or next wider standard size.
- Factory-assembled.

Discount group B

5 Additional casing openings	
Description	Price
132 mm diameter with cover; mounting position: top, bottom, top + bottom	0

Discount group B

6 Release temperature	
Description	Price
Coated release element 70°C	17:-
Coated release element 95°C	17:-
Release element for thermal-electrical release 95°C	38

Discount group B

7 Limit switch for thermal-mechanical release mechanism										
Ordering data	Description	Price								
E-ZU	Changeover with gold-plated contacts for 5 A at 250 V AC or 24 V DC	16								
E-AUF	Changeover with gold-plated contacts for 5 A at 250 V AC or 24 V DC	16								
E-ZU+AUF	Two changeovers with gold-plated contacts for 5 A at 250 V AC or 24 V DC	32								
EX-ZU	With normally closed contact and normally open contact for 6 A at \leq 250 V AC or 0.25 A at \leq 230 V DC	282								
EX-AUF	With normally closed contact and normally open contact for 6 A at \leq 250 V AC or 0.25 A at \leq 230 V DC	282								
EX-ZU+AUF	With normally closed contact and normally open contact for 6 A at \leq 250 V AC or 0.25 A at \leq 230 V DC	545								

Discount group B

8 Actuators and release elements										
Ordering data	Description	Price								
M220-9/H	Electric spring return actuator with 70°C release element, 230 V AC	359								
M24-9/H	Electric spring return actuator with 70°C release element, 24 V AC/DC	359								
M220-11/H	Electric spring return actuator with 70°C release element, 230 V AC	404								
M24-11/H	Electric spring return actuator with 70°C release element, 24 V AC/DC	404								
M220-10/H	Electric spring return actuator with 70°C release element, 230 V AC	359								
M24-10/H	Electric spring return actuator with 70°C release element, 24 V AC/DC	359								
M24-8	Electric spring return actuator with 70°C release element, 24 V AC/DC	661								
M24-8/MP	Electric spring return actuator with 70°C release element, 24 V AC/DC	847								
G24	Lifting solenoid 24 V DC	225								
W220	Lifting solenoid 230 V AC	275								
Р	Lift cylinder 4 8 bar	243								
P2	Lift cylinder 1.2 8 bar	307-								
GU24	Magnetic clamp 24 V DC	118								
WU220	Magnetic clamp 230 V AC	183								
N/Ex	Thermal-mechanical release mechanism (explosion-protected)	59								
EM-1	Electric spring return actuator with 70°C release element, 24 240 VAC/DC, 10 Nm	4181								
EM-2	Electric spring return actuator with 70°C release element, 24 240 VAC/DC, 15 Nm	4596								
RM-1	Electric spring return actuator with 70°C release element, 24 240 V AC/DC, 10 Nm	3730								

Discount group B

9 Smoke detector									
Ordering data Description									
4B	OR4 basic	913							
4P	OR4 pro	979							
NO	OR32 Standard	1006							
N2	OR32 with MC and relay module	1225							

■ Prices for extension VEUFK02 for OR4 must also be taken into account. Further accessories ▶ from page 111.

■ It is recommended to replace the smoke switch after an operating period of 8 years ▶ Price list for individual parts and spare parts.

Discount group B

10 Installed accessories										
Ordering data	Description	Price								
A1	AB-01 connection box for spring return actuators 24 V AC/DC	141								
A3	AB-02 connection box for spring return actuators with 230 V AC	141								

i All prices apply to original equipment ex works.

3.1.4 FK90 fire damper (series FK92) in short length



- Maintenance-free fire damper according to EN 15650
- Fire classifications: EI 30/60/90/120 ($v_e h_{o'} i \Leftrightarrow o$) S C10000
- Leak tightness C according to DIN EN 1751
- Widths B: 200 mm ... 1500 mm (in 5-mm increments)
- · Heights H: 200 mm ... 800 mm (in 5-mm increments)
- Short lengths: 346 mm and 355 mm

Configure your product



Dimensions

W [mm] x **H** [mm] x **L** [mm]

4 Casing design

Standard:

Casing made of galvanized sheet steel

Option:

Casing inside and outside with epoxy resin

powder coating

Installation and mounting frame

Standard:

Without installation subframe and mounting frame

Always required for L = 355 mm:

ER2 For rigid walls and ceilings

ER3 For metal stud walls

Option for L = 346 mm:

AR1 For mounting on rigid walls and ceilings

5 Additional casing openings

Standard:

Without

Option:

132 mm ø with cover; installation position: top, bottom,

top + bottom

3 Damper blade design

Standard:

Metal frame made of galvanized steel

Option:

Metal frame made from 1.4301 stainless steel

Galvanised metal cover

Metal frame and metal cover made of 1.4301 stainless steel

6 Release temperature

Standard:

70 °C

Option:

95 °C

70°C corrosion-resistant

Limit switch for thermal-mechanical release mechanism (TMA)

E-ZU One limit switch CLOSED **E-AUF** One limit switch OPEN

E-ZU+AUF Two limit switches CLOSED+OPEN

EX-ZU One EX-protected limit switch CLOSED

EX-AUF One EX-protected limit switch OPEN

EX-ZU+AUF Two explosion-protected limit switches

CLOSED+OPEN

9 Smoke detector

Standard:

Without

Option:

4B OR4 basic4P OR4 pro

倡

Ü-FK (series OR4) for air transfer applications

in short length

NO OR32 standard

N2 OR32 with MC and relay module

Ü-FK (series OR32) for air transfer applications in short length

8 Actuators and release elements

Standard:

Thermal-mechanical release mechanism (TMA)

Option:

M220-9/H Actuator 230 V (Standard)
M24-9/H Actuator 24 V (Standard)

M220-10/HActuator 230 VM24-10/HActuator 24 VM220-11/HActuator 230 VM24-11/HActuator 24 V

GU24 With magnetic clamp on TMA WU220 With magnetic clamp on TMA G24 With lifting solenoid on TMA W220 With lifting solenoid on TMA With pneumatic cylinder on TMA P2 With pneumatic cylinder on TMA N/Ex Explosion-protected TMA EM-1 Explosion-protected actuator RM-1 Explosion-protected actuator EM-2 Explosion-protected actuator

Installed accessories

Standard:

Without

Option:

AB-01 connection box for spring return actuators

24 V AC/DC

A3 AB-02 connection box for spring return actuators 230 VAC



- Corresponding price tables ▶ from page 98.
- Further accessories ▶ from page 109.

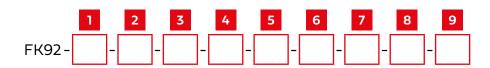
31.5 Ü-FK (series OR4) fire damper for air transfer applications in short length



- Maintenance-free fire damper according to EN 15650
- Fire classifications: EI 30/60/90/120 ($v_e h_o$, i \Leftrightarrow o) S C10000
- General Building Inspectorate Approval / General Type Approval: Z-6.50-2132
- With electric actuator or magnetic clamp 230 V AC or 24 V AC/DC
- With OR4 smoke detector
- Widths B: 200 mm ... 1500 mm (in 5-mm increments)
- · Heights H: 200 mm ... 800 mm (in 5-mm increments)
- Lengths L: 346 mm and 355 mm

Configure your product here





1 Dimensions

 $\boldsymbol{W}\left[mm\right]\boldsymbol{x}\,\boldsymbol{H}\left[mm\right]\boldsymbol{x}\,\boldsymbol{L}\left[mm\right]$

4 Casing design

Standard:

Casing made of galvanized sheet steel

Installation and mounting frame

Standard:

Without installation subframe and mounting frame

Always required for L = 355 mm:

ER2 for rigid walls and ceilings

ER3 for metal stud walls

Option:

Always required for L = 346 mm:

AR1 for mounting on rigid walls and ceilings

5 Additional casing openings

Standard:

Without

Option:

132 mm Ø with cover; installation position:

top, bottom, top + bottom

3 Damper blade design

Standard:

Metal frame made of galvanized steel

Option:

Galvanized metal cover

6 Release temperature

Standard:

70 °C

7 Limit switch for thermal-mechanical release mechanism (TMA) in conjunction with magnetic clamp

Standard:

Without limit switch

Option:

E-ZU One limit switch CLOSED **E-AUF** One limit switch OPEN

E-ZU+AUF Two limit switches CLOSED+OPEN

Actuators and release elements

M220-9/H Actuator 230 V (standard)

M24-9/H Actuator 24 V (standard)

M220-10/HActuator 230 VM24-10/HActuator 24 VM220-11/HActuator 230 VM24-11/HActuator 24 V

GU24 With magnetic clamp on TMA **WU220** With magnetic clamp on TMA

i Further accessories ▶ from page 109.

9 Smoke detector

For installation in extension VEUFK02

Standard: Without

Option:

4B OR4 basic4P OR4 proActuator position:Standard:

Right (installation position OR4 in extension: right)

Option:

Left (installation position OR4 in extension: left) **Bottom** (installation position OR4 in extension:

right)

Prices for extension VEUFK02 must also be taken into account

Description	Price
Additional price for factory assembly and wiring of FK92 and OR4	132

- i
- Suitable extension VERL
- ▶ page 109.
- Suitable extension VEUFK02
- ▶ page 111.
- Suitable protective grilles
- ▶ page 113.

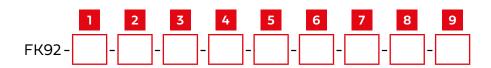
31.6 Ü-FK (series OR32) fire damper for air transfer applications in short length



- Maintenance-free fire damper according to EN 15650
- Fire classifications: EI 30/60/90/120 ($v_e h_{o_i} i \Leftrightarrow o$) S C10000
- General Building Inspectorate Approval / General Type Approval: Z-6.50-2132
- With electric actuator or magnetic clamp 230 V AC or 24 V AC/DC
- · With OR32 smoke detector for use in particularly confined spaces
- · Widths B: 200 mm ... 1500 mm (in 5-mm increments)
- · Heights H: 200 mm ... 800 mm (in 5-mm increments)
- Lengths L: 346 mm and 355 mm

Configure your product here





1 Dimensions

W [mm] x **H** [mm] x **L** [mm]

4 Casing design

Standard:

Casing made of galvanized sheet steel

2 Installation and mounting frame

Standard:

Without installation subframe and mounting frame Ontion:

Always required for L = 355 mm:

ER2 for rigid walls and ceilings

ER3 for metal stud walls

Option:

Always required for L = 346 mm:

AR1 for mounting on rigid walls and ceilings

5 Additional casing openings

Standard:

90 mm diameter for installation of the OR32 smoke detector

Opening at the top for OR32 - (actuator position left)
Option:

Opening left for OR32 - (actuator position below)
Opening right for OR32 - (actuator position left)

3 Damper blade design

Standard:

Metal frame made of galvanized steel

Option:

Galvanized metal cover

6 Release temperature

Standard:

70 °C

Limit switch for thermal-mechanical release mechanism (TMA) in conjunction with magnetic **clam**p

Standard:

Without limit switch

Option:

E-ZU One limit switch CLOSED E-AUF One limit switch OPEN

E-ZU+AUF Two limit switches CLOSED+OPEN

8 Actuators and release elements

M220-9/H Actuator 230 V (standard) M24-9/H Actuator 24 V (standard)

M220-10/H Actuator 230 V M24-10/H Actuator 24 V M220-11/H Actuator 230 V M24-11/H Actuator 24 V

GU24 With magnetic clamp on TMA WU220 With magnetic clamp on TMA

Further accessories ▶ from page 109.

Smoke detector

Standard: Without

Option:

NO OR32 standard

N2 OR32 with MC and relay module

Description	Price
Additional price for factory assembly and wiring of FK92 and OR32	132

- Suitable protective grilles
- ▶ page 113.

FK90 fire dampers (series FK92) in short length Construction lengths 346 and 355 mm

CONSCIOUN																count g	
1								Wi	dth [m	m]							
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	248	248	248	248	248	253	253	261	261	267	277	288	294	301	310	315	325
225	249	249	249	249	249	256	256	263	263	271	280	291	297	306	315	321	329
250	249	249	249	249	249	256	256	263	263	271	280	291	297	306	315	321	329
275	251	251	251	251	251	257	257	266	266	274	282	295	299	307	317	325	331
300	251	251	251	251	251	261	261	267	267	277	283	297	301	311	318	328	335
325	256	256	256	256	256	263	263	271	271	280	288	301	306	315	325	333	339
350	261	261	261	261	261	267	267	277	277	283	291	305	310	318	330	338	346
375	262	262	262	262	262	269	269	278	278	288	297	307	313	325	337	345	351
400	264	264	264	264	264	272	272	280	280	291	301	311	317	330	344	349	355
450	271	271	271	271	271	279	279	288	288	299	310	325	330	341	353	360	367
500	278	278	278	278	278	288	288	297	297	307	317	333	339	351	366	373	383
550	288	288	288	288	288	298	298	307	307	317	331	346	353	367	378	390	400
600	291	291	291	291	291	302	302	313	313	325	338	353	360	373	386	398	408
650	301	301	301	301	301	313	313	325	325	338	349	367	377	390	406	418	430
700	307	307	307	307	307	318	318	331	331	344	355	375	384	400	415	429	441
750	313	313	313	313	313	328	328	338	338	351	366	384	393	408	424	439	453
800	318	318	318	318	318	333	333	345	345	360	375	393	402	418	433	448	461

1						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	331	339	347	355	366	375	375	384	393	407	418	433
225	337	345	353	363	371	383	383	393	403	415	426	446
250	337	345	353	363	371	383	383	393	403	415	426	446
275	339	347	355	366	377	384	384	395	407	421	431	448
300	344	351	360	367	378	390	390	400	413	423	433	453
325	349	357	367	375	384	395	395	408	421	431	446	462
350	355	366	373	383	393	403	403	415	426	440	454	472
375	360	370	379	387	400	413	413	423	433	448	462	482
400	367	377	384	393	407	418	418	430	441	456	470	490
450	378	390	400	410	422	433	433	448	461	478	491	514
500	393	406	415	426	439	453	453	464	481	497	514	534
550	413	423	432	446	461	472	472	488	503	522	539	562
600	421	431	446	455	470	486	486	497	510	531	554	577
650	441	455	467	479	495	510	510	523	537	561	583	608
700	455	467	481	491	507	523	523	539	557	577	600	629
750	464	479	494	506	522	538	538	557	575	599	617	646
800	474	490	506	521	537	554	554	572	592	616	638	668

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- Intermediate sizes are priced at the next higher or next wider standard size.
- Prices do not include the installation subframe which is always required!

FK90 fire dampers (series FK92) in short length with *galvanised metal cover* Construction lengths 346 and 355 mm

1+3								W	dth [m	ml						ee ame g	
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	262	262	262	262	262	264	264	272	272	280	291	301	307	315	325	331	339
225	263	263	263	263	263	269	269	277	277	283	295	306	311	321	331	338	345
250	263	263	263	263	263	269	269	277	277	283	295	306	311	321	331	338	345
275	263	263	263	263	263	271	271	278	278	288	297	307	313	322	333	339	347
300	264	264	264	264	264	272	272	280	280	290	298	311	315	328	337	344	351
325	267	267	267	267	267	277	277	283	283	295	302	314	321	331	339	349	357
350	271	271	271	271	271	279	279	290	290	298	306	318	325	337	346	354	363
375	274	274	274	274	274	282	282	291	291	301	311	322	330	341	353	362	370
400	278	278	278	278	278	286	286	295	295	305	314	328	333	346	360	367	373
450	283	283	283	283	283	295	295	302	302	313	325	339	346	357	371	378	384
500	291	291	291	291	291	302	302	311	311	322	335	349	355	370	383	391	402
550	302	302	302	302	302	311	311	322	322	335	347	363	371	384	398	408	421
600	306	306	306	306	306	317	317	329	329	341	353	371	378	391	406	418	429
650	315	315	315	315	315	330	330	339	339	354	367	384	393	408	424	439	453
700	322	322	322	322	322	337	337	347	347	360	373	393	402	418	433	451	464
750	330	330	330	330	330	344	344	354	354	370	383	402	414	429	447	461	472
800	337	337	337	337	337	349	349	362	362	378	393	413	422	440	456	470	485

1+3						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	347	355	366	373	383	393	393	403	414	426	440	456
225	353	363	371	379	391	400	400	413	423	433	448	467
250	353	363	371	379	391	400	400	413	423	433	448	467
275	355	366	375	383	393	406	406	415	426	440	454	471
300	360	370	378	384	395	408	408	421	431	446	457	474
325	367	377	384	393	406	415	415	429	440	454	467	486
350	373	383	391	400	413	423	423	433	448	462	478	495
375	378	387	398	407	421	431	431	445	456	471	486	505
400	384	393	403	414	426	439	439	453	464	479	494	514
450	395	408	421	431	445	456	456	470	485	501	517	538
500	414	424	433	447	461	472	472	488	503	521	538	561
550	431	445	455	467	482	497	497	514	529	546	568	591
600	441	454	467	479	494	507	507	522	536	557	580	606
650	464	478	490	502	519	536	536	547	563	586	610	639
700	479	490	503	517	534	550	550	568	585	606	630	656
750	488	502	518	530	547	567	567	584	602	624	649	679
800	501	517	530	546	563	580	580	601	621	645	669	700



[•] Intermediate sizes are priced at the next higher or next wider standard size.

[•] Prices do not include the installation subframe which is always required!

FK90 fire dampers (series FK92) in short length with *powder coated casing* construction lengths 346 mm and 355 mm

CONSTRUCTION	icrigans	5 5 40 111	iiii ana	555 1111	••										רום	count g	тоир в
1+4								W	dth [m	m]							, and the second
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	346	346	346	346	346	353	353	363	363	377	386	402	408	421	431	441	454
225	349	349	349	349	349	357	357	369	369	379	393	408	415	429	441	451	461
250	349	349	349	349	349	357	357	369	369	379	393	408	415	429	441	451	461
275	351	351	351	351	351	362	362	371	371	383	395	413	418	431	446	454	464
300	353	353	353	353	353	363	363	377	377	386	398	414	422	433	447	457	469
325	357	357	357	357	357	369	369	379	379	393	403	421	429	441	455	464	478
350	363	363	363	363	363	373	373	384	384	398	408	426	432	448	462	472	486
375	367	367	367	367	367	378	378	390	390	402	414	431	440	455	471	482	491
400	370	370	370	370	370	382	382	393	393	407	421	433	446	462	481	488	498
450	379	379	379	379	379	391	391	403	403	418	431	454	462	479	494	503	514
500	390	390	390	390	390	403	403	414	414	431	447	464	474	494	510	522	536
550	403	403	403	403	403	415	415	431	431	447	464	486	495	512	530	545	561
600	408	408	408	408	408	423	423	439	439	455	471	494	503	522	539	557	572
650	422	422	422	422	422	440	440	455	455	472	488	514	525	546	568	584	602
700	431	431	431	431	431	447	447	464	464	481	498	525	537	559	580	600	618
750	440	440	440	440	440	456	456	472	472	491	510	537	550	572	597	615	633
800	447	447	447	447	447	464	464	482	482	503	523	547	563	585	608	629	645

1+4						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	464	474	487	497	510	525	525	538	553	569	585	608
225	471	485	495	506	521	536	536	550	563	583	599	622
250	471	485	495	506	521	536	536	550	563	583	599	622
275	474	487	501	510	525	539	539	555	570	586	604	629
300	481	491	503	514	529	544	544	561	575	592	610	633
325	488	501	514	523	539	555	555	570	586	606	622	648
350	497	510	522	536	550	563	563	583	599	617	637	662
375	503	518	530	544	559	575	575	592	608	630	646	674
400	512	525	538	553	569	585	585	602	618	639	656	686
450	529	544	559	573	592	608	608	629	645	668	687	718
500	550	568	580	597	615	633	633	652	671	694	718	749
550	575	592	607	623	645	662	662	685	706	732	754	788
600	588	606	622	638	656	679	679	698	716	746	774	807
650	618	637	653	671	692	716	716	733	752	784	816	853
700	638	654	671	687	713	733	733	757	783	808	838	876
750	652	671	688	708	732	754	754	781	805	834	865	905
800	668	687	708	730	752	774	774	801	830	861	890	933

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- Intermediate sizes are priced at the next higher or next wider standard size.
- Prices do not include the installation subframe which is always required!

FK90 fire dampers (series FK92) with in short length with *powder coated casing* and metal frame made of stainless steel -construction lengths 346 mm and 355 mm

1,3,4								Wi	dth [m	m]							
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	413	413	413	413	413	421	421	431	431	446	461	478	486	498	512	523	537
225	414	414	414	414	414	424	424	437	437	453	464	485	491	507	523	534	544
250	414	414	414	414	414	424	424	437	437	453	464	485	491	507	523	534	544
275	416	416	416	416	416	429	429	440	440	455	469	487	495	510	528	538	550
300	418	418	418	418	418	431	431	446	446	457	471	490	501	517	530	544	555
325	424	424	424	424	424	437	437	453	453	464	479	497	506	523	538	553	567
350	430	430	430	430	430	441	441	456	456	471	485	503	517	530	546	561	575
375	432	432	432	432	432	447	447	462	462	478	490	510	521	539	557	570	583
400	439	439	439	439	439	453	453	467	467	482	497	517	528	547	569	580	591
450	448	448	448	448	448	463	463	479	479	495	512	537	546	568	585	599	608
500	461	461	461	461	461	479	479	490	490	510	529	553	563	584	604	618	637
550	479	479	479	479	479	494	494	510	510	529	550	575	585	607	630	646	664
600	486	486	486	486	486	502	502	521	521	539	561	585	600	618	641	658	678
650	501	501	501	501	501	521	521	538	538	561	580	610	623	648	671	692	716
700	510	510	510	510	510	530	530	550	550	570	591	622	638	662	687	713	734
750	521	521	521	521	521	541	541	561	561	584	606	638	653	679	705	728	750
800	530	530	530	530	530	553	553	570	570	599	621	652	669	694	721	746	765

1,3,4						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	550	563	577	591	606	622	622	638	654	674	694	721
225	559	573	586	602	617	634	634	653	670	688	709	737
250	559	573	586	602	617	634	634	653	670	688	709	737
275	563	577	592	606	622	639	639	656	676	695	717	746
300	569	583	599	610	629	646	646	664	682	702	724	752
325	578	594	608	622	639	656	656	678	695	718	737	768
350	588	604	618	634	653	670	670	688	709	732	753	785
375	600	615	630	645	662	682	682	701	721	746	767	800
400	607	622	638	654	674	694	694	716	734	757	781	814
450	624	645	662	682	701	721	721	746	765	790	816	852
500	653	671	687	706	728	750	750	772	798	823	852	886
550	684	701	721	738	764	786	786	812	837	868	896	934
600	698	718	737	756	781	805	805	825	848	884	918	957
650	733	754	774	796	822	847	847	869	890	930	967	1014
700	754	774	796	816	841	870	870	898	924	957	993	1039
750	772	796	816	839	868	896	896	922	953	990	1025	1072
800	790	815	839	864	890	918	918	951	983	1021	1057	1106



- Intermediate sizes are priced at the next higher or next wider standard size.
- Prices do not include the installation subframe which is always required!

FK90 fire dampers (series FK92) in short length *with powder coating casing and metal frame and metal cover made of stainless steel* - construction lengths 346 mm and 355 mm

		/	111033 30			ion icng	,									count g	
1,3,4								W	dth [m	m]							
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	432	432	432	432	432	441	441	454	454	469	486	502	510	525	539	554	568
225	437	437	437	437	437	448	448	461	461	474	490	510	519	536	553	562	573
250	437	437	437	437	437	448	448	461	461	474	490	510	519	536	553	562	573
275	439	439	439	439	439	453	453	464	464	479	494	514	522	538	555	569	578
300	440	440	440	440	440	454	454	469	469	482	497	518	528	544	559	572	585
325	447	447	447	447	447	461	461	474	474	490	503	523	536	550	569	583	597
350	454	454	454	454	454	467	467	482	482	497	510	531	541	561	577	591	606
375	457	457	457	457	457	471	471	487	487	502	518	538	547	569	588	602	616
400	462	462	462	462	462	478	478	491	491	507	523	544	555	577	600	610	623
450	472	472	472	472	472	488	488	503	503	523	539	568	577	599	617	630	641
500	486	486	486	486	486	503	503	518	518	538	557	583	594	616	638	653	670
550	503	503	503	503	503	521	521	538	538	557	578	606	618	640	662	682	700
600	510	510	510	510	510	529	529	546	546	569	591	617	632	653	676	694	716
650	528	528	528	528	528	547	547	569	569	591	610	641	656	684	708	732	753
700	538	538	538	538	538	559	559	578	578	601	623	655	671	700	725	752	774
750	547	547	547	547	547	570	570	591	591	616	639	671	687	716	743	767	790
800	559	559	559	559	559	583	583	602	602	630	655	686	705	733	762	784	806

1,3,4						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	580	594	608	622	639	655	655	672	688	713	733	762
225	588	604	618	634	652	669	669	687	706	725	749	777
250	588	604	618	634	652	669	669	687	706	725	749	777
275	597	608	623	639	655	674	674	692	714	734	754	785
300	601	615	630	641	662	682	682	700	719	740	764	791
325	610	624	640	655	674	692	692	714	733	756	777	808
350	622	638	653	669	687	706	706	725	749	770	796	825
375	632	646	662	679	700	719	719	738	762	785	807	840
400	639	655	672	688	713	732	732	753	774	800	823	856
450	661	679	700	718	738	762	762	784	806	833	861	898
500	687	708	725	746	768	790	790	815	839	869	898	936
550	719	738	759	781	802	830	830	854	884	914	944	984
600	736	756	775	798	823	848	848	870	892	930	967	1010
650	772	796	816	838	865	890	890	917	938	980	1018	1066
700	798	816	839	861	887	917	917	946	976	1014	1048	1097
750	815	838	863	885	916	941	941	974	1005	1041	1080	1132
800	833	858	885	913	938	967	967	1001	1036	1076	1114	1165

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- Intermediate sizes are priced at the next higher or next wider standard size.
- Prices do not include the installation subframe which is always required!

Installation subframe ER2 for FK90 fire dampers (series FK92) in short length Installation length 355 mm

Installation is	engui s	33 111111														count g	тоир В
2								W	idth [m	m]							
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	132	132	132	132	132	134	134	138	138	141	145	152	155	159	164	167	174
225	134	134	134	134	134	137	137	139	139	142	149	155	157	161	167	170	175
250	134	134	134	134	134	137	137	139	139	142	149	155	157	161	167	170	175
275	134	134	134	134	134	137	137	141	141	145	149	156	157	161	167	174	177
300	134	134	134	134	134	138	138	141	141	145	152	157	159	164	170	174	178
325	137	137	137	137	137	139	139	142	142	149	152	159	161	167	174	177	179
350	138	138	138	138	138	141	141	145	145	152	155	161	164	170	175	178	184
375	138	138	138	138	138	142	142	146	146	152	157	161	166	174	178	182	185
400	139	139	139	139	139	142	142	149	149	155	159	164	167	177	179	184	186
450	142	142	142	142	142	146	146	152	152	157	164	174	175	179	185	189	195
500	145	145	145	145	145	152	152	157	157	161	167	177	179	185	193	196	201
550	152	152	152	152	152	157	157	161	161	167	177	184	185	195	199	204	214
600	155	155	155	155	155	159	159	166	166	174	178	185	189	196	203	211	217
650	159	159	159	159	159	166	166	174	174	178	184	195	197	204	215	221	225
700	161	161	161	161	161	170	170	177	177	182	186	197	201	211	219	225	235
750	166	166	166	166	166	174	174	178	178	185	195	201	208	217	224	233	239
800	170	170	170	170	170	177	177	182	182	189	197	208	214	221	230	236	242

2						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	177	179	184	186	195	197	197	201	208	215	221	230
225	178	184	185	193	196	201	201	208	214	221	225	235
250	178	184	185	193	196	201	201	208	214	221	225	235
275	179	184	186	193	197	203	203	211	217	221	229	236
300	182	185	189	195	199	203	203	214	219	224	230	239
325	184	186	195	197	203	211	211	217	221	229	235	243
350	186	193	196	201	208	214	214	221	225	233	240	250
375	189	196	199	203	211	217	217	224	230	236	243	257
400	195	197	201	208	215	221	221	225	235	240	248	259
450	199	203	211	217	224	230	230	236	242	250	259	270
500	208	214	219	224	233	239	239	243	254	262	270	282
550	219	224	229	235	242	250	250	259	268	276	284	297
600	222	229	235	240	248	258	258	262	269	280	294	305
650	235	240	244	254	261	269	269	277	282	295	308	322
700	240	244	254	259	269	277	277	284	295	305	316	331
750	243	254	261	268	277	284	284	294	304	316	324	341
800	250	259	268	276	282	294	294	301	311	324	335	352

i Intermediate sizes are priced at the next higher or next wider standard size.

Installation subframe ER2 with powder coating for FK90 fire dampers (series FK92) in short length Installation length 355 mm

installation is	enguis	55 111111													DISC	count g	тоир в
2								Wi	dth [m	m]							
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	184	184	184	184	184	185	185	193	193	197	203	214	217	222	229	235	240
225	184	184	184	184	184	189	189	195	195	201	208	217	219	225	235	239	242
250	184	184	184	184	184	189	189	195	195	201	208	217	219	225	235	239	242
275	185	185	185	185	185	193	193	196	196	201	208	219	221	229	235	240	243
300	185	185	185	185	185	193	193	197	197	203	211	219	224	229	236	242	248
325	186	186	186	186	186	195	195	201	201	208	214	222	225	233	240	243	254
350	193	193	193	193	193	196	196	203	203	211	217	224	229	236	243	250	258
375	195	195	195	195	195	199	199	204	204	214	219	229	233	240	248	257	261
400	196	196	196	196	196	201	201	208	208	217	222	230	235	243	254	259	265
450	199	199	199	199	199	208	208	214	214	221	229	240	243	254	261	268	270
500	203	203	203	203	203	214	214	219	219	229	236	243	250	261	269	277	282
550	214	214	214	214	214	221	221	229	229	236	243	258	261	270	279	286	295
600	217	217	217	217	217	224	224	233	233	240	250	261	268	277	284	294	301
650	224	224	224	224	224	233	233	240	240	250	259	270	277	286	299	309	317
700	229	229	229	229	229	236	236	243	243	257	265	277	282	295	308	317	327
750	233	233	233	233	233	240	240	250	250	261	270	282	290	304	316	323	334
800	236	236	236	236	236	243	243	257	257	268	277	290	297	309	322	331	341

2						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	243	250	258	262	270	277	277	284	290	301	309	322
225	248	258	261	269	276	282	282	290	299	308	316	327
250	248	258	261	269	276	282	282	290	299	308	316	327
275	250	259	265	269	277	284	284	294	301	309	319	331
300	254	261	268	270	279	286	286	295	304	315	323	334
325	259	265	270	277	284	294	294	301	309	319	328	341
350	262	269	277	282	290	299	299	308	316	324	335	351
375	268	273	279	286	295	304	304	315	322	331	341	356
400	270	277	284	290	301	309	309	317	327	337	348	362
450	279	286	295	304	311	322	322	331	341	352	363	378
500	290	299	308	316	324	334	334	342	356	368	378	396
550	304	311	322	328	338	351	351	362	374	384	399	417
600	311	319	327	335	348	359	359	368	378	392	408	426
650	327	335	345	355	364	375	375	384	399	415	429	450
700	335	345	356	363	375	384	384	400	411	426	443	462
750	342	355	363	374	384	399	399	410	424	442	457	477
800	352	363	374	382	399	408	408	421	439	455	471	491

i Intermediate sizes are priced at the next higher or next wider standard size.

Installation subframe ER3 for FK90 fire dampers (series FK92) in short length Installation length 355 mm

2								\A/:	dth [m]						ount g	
								VV	atn [m	111]							
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	208	208	208	208	208	211	211	216	216	223	230	240	245	252	255	263	269
225	209	209	209	209	209	213	213	220	220	227	232	245	247	254	262	267	273
250	209	209	209	209	209	213	213	220	220	227	232	245	247	254	262	267	273
275	209	209	209	209	209	213	213	222	222	227	234	246	248	255	263	269	274
300	211	211	211	211	211	216	216	223	223	229	235	247	252	259	266	271	280
325	212	212	212	212	212	220	220	227	227	232	240	252	254	262	269	278	283
350	216	216	216	216	216	222	222	229	229	235	245	254	259	267	274	281	288
375	218	218	218	218	218	223	223	230	230	240	247	255	262	271	280	288	292
400	220	220	220	220	220	227	227	234	234	245	252	261	263	274	285	290	298
450	226	226	226	226	226	232	232	240	240	248	255	269	274	285	293	300	306
500	230	230	230	230	230	240	240	247	247	255	266	278	283	292	302	309	319
550	240	240	240	240	240	247	247	255	255	266	274	288	293	306	316	325	333
600	245	245	245	245	245	253	253	261	261	271	281	293	300	309	320	332	341
650	252	252	252	252	252	262	262	269	269	281	290	306	313	325	336	348	358
700	255	255	255	255	255	266	266	274	274	288	298	313	319	333	346	355	368
750	262	262	262	262	262	271	271	281	281	292	305	319	327	341	354	363	377
800	266	266	266	266	266	278	278	288	288	300	310	327	335	348	361	375	385

2						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	278	283	290	298	305	313	313	320	328	340	348	361
225	280	288	293	302	309	317	317	327	336	346	355	370
250	280	288	293	302	309	317	317	327	336	346	355	370
275	283	290	299	305	313	320	320	332	340	348	360	375
300	285	292	300	306	316	322	322	333	342	354	362	377
325	290	299	306	310	320	332	332	341	348	360	370	385
350	293	302	309	317	327	336	336	346	355	367	379	394
375	300	307	316	322	333	342	342	351	361	375	385	401
400	306	313	320	328	340	348	348	358	368	380	393	406
450	316	322	333	342	351	361	361	375	385	396	407	426
500	328	336	346	354	363	377	377	386	399	414	426	445
550	342	351	361	370	383	394	394	406	420	434	449	469
600	349	360	368	379	393	403	403	415	423	441	461	480
650	368	379	387	399	412	423	423	436	447	466	484	508
700	379	387	399	407	422	436	436	449	465	481	495	521
750	386	399	407	422	434	449	449	463	477	494	515	537
800	396	407	421	434	447	461	461	476	493	510	530	554

i Intermediate sizes are priced at the next higher or next wider standard size.

Installation subframe ER3 with powder coated connection profile for FK90 fire dampers (series FK92) in short length Installation length 355 mm

2								Wi	dth [m	ml							
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	289	289	289	289	289	293	293	302	302	313	322	335	341	349	360	368	377
225	290	290	290	290	290	299	299	306	306	317	327	340	346	355	367	376	383
250	290	290	290	290	290	299	299	306	306	317	327	340	346	355	367	376	383
275	292	292	292	292	292	300	300	309	309	319	328	342	348	358	368	379	386
300	292	292	292	292	292	302	302	313	313	320	332	343	351	361	375	380	389
325	299	299	299	299	299	306	306	317	317	327	336	349	355	367	379	387	396
350	302	302	302	302	302	309	309	320	320	332	340	354	361	375	385	394	403
375	306	306	306	306	306	313	313	322	322	336	343	358	363	379	393	399	407
400	307	307	307	307	307	317	317	328	328	340	349	362	370	385	399	406	415
450	316	316	316	316	316	325	325	336	336	348	360	377	385	397	412	420	426
500	322	322	322	322	322	336	336	343	343	358	370	387	396	412	423	434	445
550	336	336	336	336	336	346	346	358	358	370	386	403	412	426	441	452	466
600	341	341	341	341	341	351	351	363	363	379	394	412	420	434	449	463	476
650	351	351	351	351	351	363	363	379	379	394	406	428	438	455	473	484	501
700	358	358	358	358	358	375	375	386	386	399	415	438	447	465	481	499	516
750	363	363	363	363	363	380	380	394	394	407	426	447	457	476	494	510	527
800	375	375	375	375	375	387	387	401	401	420	436	457	469	487	508	521	536

2						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	386	396	404	415	426	438	438	447	459	473	487	508
225	393	403	412	422	434	445	445	457	472	483	495	517
250	393	403	412	422	434	445	445	457	472	483	495	517
275	396	406	415	423	438	449	449	463	474	487	502	521
300	399	407	420	428	441	452	452	466	480	493	509	527
325	406	419	426	438	449	461	461	474	487	502	517	537
350	415	423	434	445	457	472	472	483	495	513	529	552
375	420	430	441	452	465	477	477	493	508	521	537	560
400	426	438	447	459	473	487	487	501	516	530	550	571
450	440	452	465	477	493	508	508	521	536	554	571	596
500	459	472	483	494	510	527	527	539	557	579	596	622
550	480	493	503	517	535	552	552	570	588	608	628	654
600	490	502	517	530	550	564	564	579	595	617	644	670
650	515	529	542	557	574	595	595	609	624	651	680	709
700	529	546	557	571	590	609	609	628	650	670	697	730
750	539	557	573	589	609	626	626	648	668	694	720	753
800	554	571	589	607	624	644	644	667	688	713	741	776

i Intermediate sizes are priced at the next higher or next wider standard size.

Mounting frame AR1 for FK90 fire dampers (series FK92) in short length Installation length 346 mm

2								Wi	idth [m	m]							
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	305	309	317	322	332	336	342	349	355	368	383	396	407	421	434	447	461
225	309	317	322	332	336	342	349	355	362	377	387	401	415	428	441	452	466
250	317	322	332	336	342	349	355	362	368	383	396	407	421	434	447	461	474
275	322	332	336	342	349	355	362	368	377	387	401	415	428	441	452	466	480
300	332	336	342	349	355	362	368	377	383	396	407	421	434	447	461	474	487
325	336	342	349	355	362	368	377	383	387	401	415	428	441	452	466	480	493
350	342	349	355	362	368	377	383	387	396	407	421	434	447	461	474	487	499
375	349	355	362	368	377	383	387	396	401	415	428	441	452	466	480	493	508
400	355	362	368	377	383	387	396	401	407	421	434	447	461	474	487	499	513
450	368	377	383	387	396	401	407	415	421	434	447	461	474	487	499	513	527
500	383	387	396	401	407	415	421	428	434	447	461	474	487	499	513	527	537
550	396	401	407	415	421	428	434	441	447	461	474	487	499	513	527	537	553
600	407	415	421	428	434	441	447	452	461	474	487	499	513	527	537	553	564
650	421	428	434	441	447	452	461	466	474	487	499	513	527	537	553	564	577
700	434	441	447	452	461	466	474	480	487	499	513	527	537	553	564	577	590
750	447	452	461	466	474	480	487	493	499	513	527	537	553	564	577	590	606
800	461	466	474	480	487	493	499	508	513	527	537	553	564	577	590	606	616

2						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	474	487	499	513	527	537	553	564	577	590	616	643
225	480	493	508	520	530	546	557	571	586	597	623	650
250	487	499	513	527	537	553	564	577	590	606	632	654
275	493	508	520	530	546	557	571	586	597	609	636	662
300	499	513	527	537	553	564	577	590	606	616	643	668
325	508	520	530	546	557	571	586	597	609	623	650	675
350	513	527	537	553	564	577	590	606	616	632	654	683
375	520	530	546	557	571	586	597	609	623	636	662	688
400	527	537	553	564	577	590	606	616	632	643	668	695
450	537	553	564	577	590	606	616	632	643	654	683	709
500	553	564	577	590	606	616	632	643	654	668	695	722
550	564	577	590	606	616	632	643	654	668	683	709	733
600	577	590	606	616	632	643	654	668	683	695	722	747
650	590	606	616	632	643	654	668	683	695	709	733	762
700	606	616	632	643	654	668	683	695	709	722	747	775
750	616	632	643	654	668	683	695	709	722	733	762	784
800	632	643	654	668	683	695	709	722	733	747	775	798

[•] The price applied for intermediate sizes is the next highest or next widest standard size.

[■] Factory-assembled.

Discount group B

5 Additional casing openings	
Description	Price
132 mm diameter with cover; mounting position: top, bottom, top + bottom	O. -

Discount group B

6 Release temperature	
Description	Price
Coated release element 70°C	17:-
Coated release element 95°C	17:-
Release element for thermal-electrical release 95°C	38

Discount group B

7 Limit switch for thermal-mechanical release mechanism									
Ordering data	Description	Price							
E-ZU	Changeover with gold-plated contacts for 5 A at 250 V AC or 24 V DC	16							
E-AUF	Changeover with gold-plated contacts for 5 A at 250 V AC or 24 V DC	16							
E-ZU+AUF	Two changeovers with gold-plated contacts for 5 A at 250 V AC or 24 V DC	32							
EX-ZU	With normally closed contact and normally open contact for 6 A at \leq 250 V AC or 0.25 A at \leq 230 V DC	282							
EX-AUF	With normally closed contact and normally open contact for 6 A at \leq 250 V AC or 0.25 A at \leq 230 V DC	282							
EX-ZU+AUF	With normally closed contact and normally open contact for 6 A at \leq 250 V AC or 0.25 A at \leq 230 V DC	545							

Discount group B

8 Actuators and release elements										
Ordering data	Description	Price								
M220-9/H	Electric spring return actuator with 70°C release element, 230 V AC	359								
M24-9/H	Electric spring return actuator with 70°C release element, 24 V AC/DC	359								
M220-11/H	Electric spring return actuator with 70°C release element, 230 V AC	404								
M24-11/H	Electric spring return actuator with 70°C release element, 24 V AC/DC	404								
M220-10/H	Electric spring return actuator with 70°C release element, 230 V AC	359								
M24-10/H	Electric spring return actuator with 70°C release element, 24 V AC/DC	359								
M24-8	Electric spring return actuator with 70°C release element, 24 V AC/DC	661								
M24-8/MP	Electric spring return actuator with 70°C release element, 24 V AC/DC	847								
G24	Lifting solenoid 24 V DC	225								
W220	Lifting solenoid 230 VAC	275								
Р	Lift cylinder 4 8 bar	243								
P2	Lift cylinder 1.2 8 bar	307-								
GU24	Magnetic clamp 24 V DC	118								
WU220	Magnetic clamp 230 V AC	183								
N/Ex	Thermal-mechanical release mechanism (explosion-protected)	59								
EM-1	Electric spring return actuator with 70°C release element, 24 240 V AC/DC, 10 Nm	4181								
EM-2	Electric spring return actuator with 70°C release element, 24 240 V AC/DC, 15 Nm	4596								
RM-1	Electric spring return actuator with 70°C release element, 24 240 VAC/DC, 10 Nm	3730								

Discount group B

9 Smoke dete	9 Smoke detector									
Ordering data	Description	Price								
4B	OR4 basic	913								
4P	OR4 pro	979								
NO	OR32 Standard	1006								
N2	OR32 with MC and relay module	1225								

■ Prices for extension VEUFK02 for OR4 must also be taken into account. Further accessories ▶ from page 111.

■ It is recommended to replace the smoke switch after an operating period of 8 years ▶ Price list for individual parts and spare parts.

Discount group B

10 Installed accessories									
Ordering data	Description	Price							
Al	AB-01 connection box for spring return actuators 24 V AC/DC	141							
A3	AB-02 connection box for spring return actuators with 230 V AC	141							

i All specified prices apply to original equipment ex works.

Accessories: FK90 fire dampers (series FK92)

Extension VERL for FK90 fire dampers (series FK92)

Installation length 175 mm Discount group												roup B					
								Wi	dth [m	m]							
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	62	62	62	64	64	66	66	66	66	68	76	76	78	80	82	82	82
225	62	64	64	66	66	66	66	68	68	76	76	78	80	82	82	84	84
250	62	64	64	66	66	66	66	68	68	76	76	78	80	82	82	84	84
275	64	64	64	66	66	68	68	76	76	76	78	80	80	82	84	86	86
300	64	66	66	68	68	76	76	76	76	78	78	80	82	82	86	86	90
325	66	66	66	76	76	76	76	78	78	78	80	82	82	84	86	90	90
350	66	68	68	76	76	76	76	78	78	78	80	82	82	84	86	90	92
375	66	68	68	76	76	78	78	78	78	80	80	82	82	86	86	90	92
400	68	76	76	76	76	78	78	78	78	80	82	82	84	86	90	90	92
450	76	76	76	78	78	80	80	80	80	82	82	86	86	90	92	92	94
500	78	78	78	80	80	82	82	82	82	82	86	90	90	90	92	94	96
550	78	80	80	82	82	82	82	82	82	86	90	92	92	92	94	96	106
600	80	80	80	82	82	84	84	86	86	86	90	92	92	94	96	106	106
650	80	82	82	86	86	86	86	90	90	90	92	94	96	96	106	108	108
700	82	84	84	90	90	90	90	92	92	92	94	96	96	106	108	108	108
750	82	86	86	90	90	90	90	92	92	92	94	96	106	108	108	110	112
800	84	90	90	92	92	92	92	94	94	94	96	106	106	108	110	112	116

						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	86	86	90	92	92	94	94	96	106	108	110	116
225	86	90	90	92	94	96	96	106	108	108	112	118
250	86	90	90	92	94	96	96	106	108	108	112	118
275	90	90	92	92	96	96	96	106	108	110	112	118
300	90	92	92	94	96	106	106	108	108	112	116	120
325	92	92	94	96	106	106	106	108	110	112	116	122
350	92	92	94	96	106	108	108	108	112	112	116	122
375	92	94	96	96	106	108	108	110	112	116	118	122
400	94	96	96	106	108	108	108	112	116	116	118	124
450	96	96	106	108	108	110	110	112	116	118	120	124
500	96	106	108	108	110	112	112	116	118	118	122	130
550	106	108	108	112	112	116	116	118	120	122	124	134
600	108	108	110	112	116	116	116	118	120	122	124	136
650	110	112	112	116	118	118	118	122	122	124	130	138
700	112	112	116	118	118	120	120	122	124	130	134	140
750	112	116	118	118	120	122	122	124	130	130	136	140
800	116	118	118	120	122	124	124	124	130	134	136	144

- Intermediate sizes are priced at the next higher or next wider standard size.
- Surcharge for extension VERL with powder coating: +40 %.

Extension VEUFK01 for OR32 for FK90 fire dampers (series FK92)

Discount group B Installation length 175 mm Width [mm] Height 200 225 250 275 300 325 350 375 500 550 600 650 700 750 800 400 450 [mm] 200 104.-104.-105.-105.-106.-113.-114.-106.-107.-107.-109.-110.-110.-111.-115.-117.-118.-225 104.-105.-105.-106.-106.-107.-107.-109.-110.-110.-111.-112.-113.-114.-115.-118.-119.-250 105.-105.-106. 106. 107.-107.-109. 110.-110.-110.-111.-113.-114.-115.-117.-118.-119.-275 105.-106. 106. 107.-107.-109.-110.-110.-110.-111.-112.-113.-114.-115.-118.-119.-120.-300 106.-106. 107.-107.-109.-110.-110.-110.-110.-111.-113.-114.-115.-117.-118.-119.-120.-325 106.-107.-107.-109.-110.-110.-110.-110.-111.-112.-113.-114.-115.-118.-119.-120.-120.-350 107.-107.-109. 110.-110.-110.-110.-111.-111.-113.-114.-115.-117.-118.-119.-120.-120.-375 107.-109. 110.-110.-110.-110.-111.-111.-112.-113.-114.-115.-118.-119.-120.-120.-121.-400 109.-110.-110.-110.-110.-111.-111.-112.-113.-114.-115.-117.-118.-119.-120.-120.-122.-450 110.-110.-110.-111.-111.-112.-113.-113.-114.-115.-117.-118.-119.-120.-122.-123.-120.-500 110.-113.-114.-114.-120.-123.-125.-111.-111.-112.-113.-115.-117.-118.-119. 120.-122.-550 111.-112.-113.-115.-115.-120.-113.-114.-114.-117.-118.-119.-120.-122.-123.-125.-126.-113.-113.-117.-118.-120.-125.-600 114.-114.-115.-115.-118.-119.-120.-122.-123.-126.-127.-119.-650 114.-114.-115. 115.-117.-118.-118.-119.-120.-120.-122.-123.-125.-126.-127.-128.-700 115.-115.-117.-118.-118.-119.-119.-120.-120.-120.-122.-123.-125.-126.-127.-128.-130. 750 117.-118.-118.-119.-119.-120.-120.-120.-120.-122.-123.-125.-126.-127.-128.-130.-130.-800 118.-119.-119. 120.-120.-120.-120.-121.-122.-123.-125. 126.-127.-128.-130.-130.-131.-

						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	119	120	120	122	123	125	127	128	129	130	131	135
225	120	120	121	122	123	126	127	128	129	130	133	135
250	120	120	122	123	125	127	128	129	130	130	133	136
275	120	121	122	123	125	127	128	129	130	131	134	136
300	120	122	123	125	126	128	129	130	130	131	135	137
325	121	122	123	125	127	128	129	130	131	133	135	137
350	122	123	125	126	127	129	130	130	131	133	136	138
375	122	123	125	127	128	129	130	131	133	134	136	138
400	123	125	126	127	128	130	130	131	133	135	137	139
450	125	126	127	128	130	130	131	133	135	136	138	139
500	126	127	128	130	130	131	133	135	136	137	139	141
550	127	128	130	130	131	133	135	136	137	138	139	142
600	128	130	130	131	133	135	136	137	138	139	141	144
650	130	130	131	133	135	136	137	138	139	139	142	145
700	130	131	133	135	136	137	138	139	139	141	144	146
750	131	133	135	136	137	138	139	139	141	142	145	147
800	133	135	136	137	138	139	139	141	142	144	146	149

Intermediate sizes are priced at the next higher or next wider standard size.

800

118.-

119.-

119.

120.-

120.-

120.-

120.-

Extension VEUFK02 for OR4 for FK90 fire dampers (series FK92)

Discount group B Installation length 175 mm Width [mm] Height 200 225 250 275 300 325 350 375 500 550 600 650 700 750 800 400 450 [mm] 200 104.-104.-105.-105.-106.-106.-107.-110.-111.-113.-114.-117.-107.-109.-110.-115.-118.-107.-110.-112.-113.-225 104.-105.-105.-106.-106.-107.-109.-110.-111.-114.-115.-118.-119.-105.-107.-110.-250 105.-106.-106. 107.-109. 110.-110.-111.-113.-114.-115.-117.-118.-119.-275 107.-105.-106. 106.-107.-109.-110.-110.-110.-111.-112.-113.-114.-115.-118.-119.-120.-300 106.-106. 107.-107.-109.-110.-110.-110.-110.-111.-113.-114.-115.-117.-118.-119.-120.-325 106.-107.-107.-109.-110.-110.-110.-110.-111.-112.-113.-114.-115.-118.-119.-120.-120.-350 107.-107.-109. 110.-110.-110.-110.-111.-111.-113.-114.-115.-117.-118.-119.-120.-120.-375 107.-109. 110.-110.-110.-110.-111.-111.-112.-113.-114.-115.-118.-119.-120.-120.-121.-400 109.-110.-110.-110.-110.-111.-111.-112.-113.-114.-115.-117.-118.-119.-120.-120.-122.-110.-450 110.-110.-111.-111.-112.-113.-113.-114.-115.-117.-118.-119.-120.-120.-122.-123.-500 110.-111.-111.-113.-114.-114.-118.-119. 120.-123.-112.-113.-115.-117.-120.-122.-125. 550 111.-112.-113.-113.-115.-115.-117.-118.-119.-120.-125.-114.-114.-120.-122.-123.-126.-113.-113.-117.-118.-120.-125.-600 114.-114.-115.-115.-118.-119.-120.-122.-123.-126. 127.-119.-114.-650 114.-115. 115.-117.-118.-118.-119.-120.-120.-122.-123.-125.-126.-127.-128.-700 115.-115.-117.-118.-118.-119.-119.-120.-120.-120.-122.-123.-125.-126.-127.-128.-130. 750 117.-118.-118.-119.-119.-120.-120.-120.-120.-122.-123.-125.-126.-127.-128.-130.-130.-

121.-

122.-

123.-

125.

126.-

127.-

128.-

130.-

130.-

131.-

						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	119	120	120	122	123	125	127	128	129	130	131	135
225	120	120	121	122	123	126	127	128	129	130	133	135
250	120	120	122	123	125	127	128	129	130	130	133	136
275	120	121	122	123	125	127	128	129	130	131	134	136
300	120	122	123	125	126	128	129	130	130	131	135	137
325	121	122	123	125	127	128	129	130	131	133	135	137
350	122	123	125	126	127	129	130	130	131	133	136	138
375	122	123	125	127	128	129	130	131	133	134	136	138
400	123	125	126	127	128	130	130	131	133	135	137	139
450	125	126	127	128	130	130	131	133	135	136	138	139
500	126	127	128	130	130	131	133	135	136	137	139	141
550	127	128	130	130	131	133	135	136	137	138	139	142
600	128	130	130	131	133	135	136	137	138	139	141	144
650	130	130	131	133	135	136	137	138	139	139	142	145
700	130	131	133	135	136	137	138	139	139	141	144	146
750	131	133	135	136	137	138	139	139	141	142	145	147
800	133	135	136	137	138	139	139	141	142	144	146	149

Intermediate sizes are priced at the next higher or next wider standard size.

Flexible connecting piece for FK90 fire dampers (series FK92)

								W	idth [m	m]							
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	74	79	79	82	82	85	85	86	86	89	94	99	101	103	107:-	111	114
225	79	80	80	85	85	87	87	93	93	94	98	101	103	107:-	111	114	117:-
250	79	80	80	85	85	87	87	93	93	94	98	101	103	107:-	111	114	117:-
275	80	83	83	86	86	89	89	94	94	98	99	103	105	111	114	117:-	118
300	82	85	85	89	89	93	93	97:-	97:-	99	102	107:-	110	113	115	118	121
325	83	86 <i>-</i>	86	93	93	94	94	98	98	99	103	107:-	111	114	117:-	118	123
350	85	87-	87 	93	93	97:-	97	98	98	101	103	110	111	114	117:-	120	123
375	86	89	89	94	94	98	98	99	99	102	105	111	113	115	118	121	126
400	86	93	93	97:-	97:-	98	98	101	101	103	107	113	114	117:-	120	123	126
450	89	94	94	99	99	101	101	103	103	107	111	114	117	120	123	128	130
500	94	98	98	102	102	103	103	107	107	111	114	117:-	120	123	128	130	131
550	99	101	101	107:-	107:-	110	110	113	113	114	117	121	123	128	130	134	136
600	101	103	103	110	110	111	111	114	114	117	120	123	126	130	134	136	138
650	105	110	110	113	113	114	114	118	118	120	126	129	130	134	138	141	145
700	107:-	111	111	115	115	117:-	117:-	120	120	123	128	130	134	137	141	145	146
750	111	114	114	118	118	120	120	123	123	128	130	134	136	141	145	147	149
800	114	117:-	117:-	121	121	123	123	126	126	130	131	136	138	144	146	149	152

	Width [mm]												
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500	
200	117:-	120	123	128	131	134	134	138	144	147:-	153	160	
225	120	123	128	130	134	138	138	144	146	152	157:-	162	
250	120	123	128	130	134	138	138	144	146	152	157:-	162	
275	121	126	129	131	136	141	141	145	149	153	160	163	
300	126	128	131	134	138	144	144	147	151	154	161	165	
325	126	129	131	136	138	145	145	147	152	157:-	162	167	
350	128	130	134	136	141	146	146	149	153	160	162	168	
375	128	131	134	137:-	144	147	147:-	151	153	161	165	169	
400	129	131	136	138	144	147	147:-	152	154	161	165	173	
450	131	136	138	144	147	151	151	154	160	165	168	175	
500	136	138	144	146	149	153	153	160	162	167	173	179	
550	141	144	147:-	149	153	160	160	162	167:-	173	179	183	
600	144	146	149	152	154	161	161	165	168	175	179	185	
650	147	151	153	154	161	165	165	168	175	179	184	190	
700	149	152	154	160	162	167:-	167:-	173	177:-	182	185	193	
750	152	154	160	162	165	168	168	175	179	184	190	194	
800	154	160	162	165	168	173	173	178	183	186	193	198	

i Intermediate sizes are priced at the next higher or next wider standard size.

Protective grille for FK90 fire dampers (series FK92)

	Width [mm]																
Height [mm]	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800
200	35	35	35	37:-	37	38	38	38	38	39	43	43	45	46	47	47	47
225	35	37	37	38	38	38	38	39	39	43	43	45	46	47	47	48	48
250	35	37	37	38	38	38	38	39	39	43	43	45	46	47	47	48	48
275	37:-	37	37	38	38	39	39	43	43	43	45	46	46	47:-	48	49	49
300	37:-	38 <i>-</i>	38 <i>-</i>	39	39	43	43	43	43	45	45	46	47:-	47	49	49	51
325	38	38 <i>-</i>	38	43	43	43	43	45	45	45	46	47	47	48	49	51	51
350	38	39	39	43	43	43	43	45	45	45	46	47	47:-	48	49	51	53
375	38	39	39	43	43	45	45	45	45	46	46	47	47:-	49	49	51	53
400	39	43	43	43	43	45	45	45	45	46	47:-	47	48	49	51	51	53
450	43	43	43	45	45	46	46	46	46	47	47	49	49	51	53	53	54
500	45	45	45	46	46	47	47:-	47	47:-	47	49	51	51	51	53	54	55
550	45	46	46	47	47	47	47	47	47:-	49	51	53	53	53	54	55	61
600	46	46	46	47	47:-	48	48	49	49	49	51	53	53	54	55	61	61
650	46	47	47	49	49	49	49	51	51	51	53	54	55	55	61	62	62
700	47:-	48	48	51	51	51	51	53	53	53	54	55	55	61	62	62	62
750	47:-	49	49	51	51	51	51	53	53	53	54	55	61	62	62	63	64
800	48	51	51	53	53	53	53	54	54	54	55	61	61	62	63	64	66

						Width	[mm]					
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
200	49	49	51	53	53	54	54	55	61	62	63	66
225	49	51	51	53	54	55	55	61	62 <i>-</i> -	62 <i>-</i> -	64	67
250	49	51	51	53	54	55	55	61	62 <i>.</i> -	62 <i>.</i> -	64	67
275	51	51	53	53	55	55	55	61	62	63	64	67:-
300	51	53	53	54	55	61	61	62	62	64	66	69
325	53	53	54	55	61	61	61	62	63	64	66	70
350	53	53	54	55	61	62	62	62	64	64	66	70
375	53	54	55	55	61	62	62	63	64	66	67	70
400	54	55	55	61	62	62	62	64	66	66	67	71
450	55	55	61	62	62	63	63	64	66	67	69	71
500	55	61	62 <i>-</i> -	62 <i>-</i> -	63	64	64	66	67	67	70	74
550	61	62	62 <i>-</i> -	64	64	66	66	67	69	70	71	77:-
600	62 <i>-</i>	62	63	64	66	66	66	67	69	70	71	78 <i>-</i>
650	63	64	64	66	67	67:-	67:-	70	70	71	74	79
700	64	64	66	67	67	69	69	70	71	74	77:-	80
750	64	66	67	67	69	70	70	71	74	74	78	80
800	66	67	67	69	70	71	71	71	74	77:-	78	82



- Intermediate sizes are priced at the next higher or next wider standard size.
- Surcharge for protective grille with powder coating in specific RAL colour: +75 %.

Loose accessories: FK90 fire dampers (series FK92)

Discount group B

Ordering data	Description	Price
ZUB 0302	Suspended ceiling position indicator, per pack of 2 pieces	30
ZUB 0336	FK90 connection brackets, per pack of 4 pieces	38
ZUB 0339	AW suspension bracket for mounting frame AR2, per pack of 6 pieces	91
ZUB 0412	AB-01 connection box for spring return actuators 24 V AC/DC	86
ZUB 0413	AB-02 connection box for spring return actuators with 230 V AC	86

Pipe connecting piece made of galvanised sheet steel with square connecting plate

Width [mm]	Height [mm]	Nozzle [mm]	Without lip seal	With lip seal
200	200	158	30	36
200	200	198	30	36
225	225	198	30	36
250	250	248	31	37
275	275	248	32	38
300	300	298	33	42
325	325	298	33	42
323	525	313	33	42
350	350	313	39	48
375	375	353	46	55

Fire protection

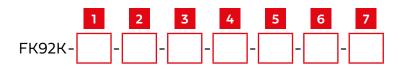
3.1.7 FK90K fire damper (series FK92K)



- Fire classifications: El 30/60/90 (ve ho, i \Leftrightarrow o) S C10000
- Leak tightness C according to DIN EN 1751
- Widths B: 100 mm ... 800 mm
- Heights H: 100 mm ... 250 mm
- Length L: 260 mm

Configure your product





Dimensions

W [mm] x **H** [mm] x **L** [mm]

Limit switch for

thermal-mechanical release mechanism (TMA)

Standard:

Without limit switch

Option:

E-ZU One limit switch CLOSED E-AUF One limit switch OPEN

E-ZU+AUF Two limit switches CLOSED+OPEN

Installation options

Standard:

Without

Option:

ER5 Installation subframe for sliding ceiling

Set of gaskets for installation remote from rigid walls and ceilings

Actuators and release elements

Standard:

Thermal-mechanical release mechanism (TMA)

Option:

M220-9/H Actuator 230 V M24-9/H Actuator 24 V

M220-10/H Actuator 230 V (Standard) M24-10/H Actuator 24 V (Standard)

M220-11/H Actuator 230 V M24-11/H Actuator 24 V

GU24 With magnetic clamp on TMA WU220 With magnetic clamp on TMA G24 With lifting solenoid on TMA W220 With lifting solenoid on TMA Р With pneumatic cylinder on TMA P2 With pneumatic cylinder on TMA

Casing design

Standard:

Connection profiles galvanised

Option:

Connection profiles with epoxy resin coating

Installed accessories

Standard:

Without

Option:

AB-01 connection box for spring return actuators Α2

24 V AC/DC

AB-02 connection box for spring return actuators

230 V AC

Nominal temperature

Standard:

70 °C

Option:

95 °C 70 °C corrosion-resistant

Further accessories ▶ page 118.

FK90K fire dampers (series FK92K)

Discount group B

1	Width [mm]											
Height [mm]	100	150	200	250	300	400	500	600	700	800		
100	247:-	247:-	247:-	255	262	278	294	311	327:-	343		
125	253	253	253	262	271	286	302	318	335	351		
150	263	263	263	272	282	298	315	331	349	366		
175	269	269	269	278	286	304	322	341	358	374		
200	273	273	273	283	293	311	328	345	362	381		
225	285	285	285	294	302	323	343	360	377:-	398		
250	295	295	295	306	315	337:-	357:-	375	393	413		

i The scope of delivery includes 4 FK90K angle brackets.

ER5 installation subframe for sliding ceiling connection

Discount group B

2		Width [mm]											
Height [mm]	100	150	200	250	300	400	500	600	700	800			
100	415	425	437	445	455	472	491	510	530	547			
125	422	430	440	451	459	477	497	517	536	553			
150	425	437	445	455	463	482	502	521	538	557			
175	430	440	451	459	469	487	506	525	544	562			
200	437	445	455	463	472	491	510	530	547	568			
225	440	451	459	469	477	497	517	536	553	572			
250	445	455	463	472	482	502	521	538	557	577			

i Factory-assembled

DS set of gaskets

Discount group B

DJ set of gus	biscount group t												
2		Width [mm]											
Height [mm]	100	150	200	250	300	400	500	600	700	800			
100	103	105	107	110	111	114	118	121	126	129			
125	105	107:-	109	110	111	115	118	123	126	130			
150	105	107-	110	111	113	117:-	120	123	128	130			
175	107-	109	110	111	114	117:-	121	125	129	131			
200	107:-	110	111	113	114	118	121	126	129	133			
225	109	110	111	114	115	118	123	126	130	133			
250	110	111	113	114	117:-	120	123	128	130	134			

i Factory-assembled

Discount group B

3 Casing design	
Description	Price
Connection profiles with epoxy resin coating	47

Discount group B

4 Release temperature	
Description	Price
Coated release element 70°C	17:-
Coated release element 95°C	17:-
Release element for thermal-electrical release 95°C	38

Discount group B

5 Limit switch for thermal-mechanical release mechanism							
Ordering data	Description	Price					
E-ZU	Changeover with gold-plated contacts for 5 A at 250 V AC or 24 V DC	16					
E-AUF	Changeover with gold-plated contacts for 5 A at 250 V AC or 24 V DC	16					
E-ZU+AUF	Two changeovers with gold-plated contacts for 5 A at 250 V AC or 24 V DC	32					

Discount group B

6 Actuators and release elements							
Ordering data	Description	Price					
M220-9/H	Electric spring return actuator with 70°C release element, 230 V AC	359					
M24-9/H	Electric spring return actuator with 70°C release element, 24 V AC/DC	359					
M220-11/H	Electric spring return actuator with 70°C release element, 230 V AC	404					
M24-11/H	Electric spring return actuator with 70°C release element, 24 V AC/DC	404					
M220-10/H	Electric spring return actuator with 70°C release element, 230 V AC	359					
M24-10/H	Electric spring return actuator with 70°C release element, 24 V AC/DC	359					
M24-8	Electric spring return actuator with 70°C release element, 24 V AC/DC	661					
M24-8/MP	Electric spring return actuator with 70°C release element, 24 V AC/DC	847					
G24	Lifting solenoid 24 V DC	225					
W220	Lifting solenoid 230 V AC	275					
Р	Lift cylinder 4 8 bar	243					
P2	Lift cylinder 1.2 8 bar	307-					
GU24	Magnetic clamp 24 V DC	118					
WU220	Magnetic clamp 230 V AC	183					

Discount group B

	2.500	ant group B
7 Installed ac	cessories	
Ordering data	Description	Price
A2	AB-01 connection box for spring return actuators 24 V AC/DC	141
A4	AB-02 connection box for spring return actuators with 230 V AC	141

i All prices quoted refer to original equipment ex works.

Loose accessories: FK90K fire dampers (series FK92K)

Protective grille for FK90K fire dampers (series FK92K)

Discount group B

		Width [mm]									
Height [mm]	100	150	200	250	300	400	500	600	700	800	
100	37	37	37	39	39	40	45	45	49	49	
125	37-	37-	37	39	39	40	45	45	49	49	
150	37-	37-	37	39	39	40-	45	45	49	49	
175	37:-	37-	37	39	39	40	45	45	49	49	
200	37-	37-	37	39	39	40	45	45	49	49	
225	37:-	37:-	37-	39	39	40	47	47	49	49	
250	37	37	37	39	39	40	47	47	49	49	

Flexible connecting piece for FK90K fire dampers (series FK92K)

Discount group B

		Width [mm]									
Height [mm]	100	150	200	250	300	400	500	600	700	800	
100	92	92	92	100	100	108	123	123	140	140	
125	92	92	92	100-	100	108	123	123	140	140	
150	92	92	92	100-	100	108	123	123	140	140	
175	92	92	92	100-	100	108	123	123	140	140	
200	92	92	92	100-	100	108	123	123	140	140	
225	96	96	96	106-	106	112	128	128	143	143	
250	96	96	96	106	106	112	128	128	143	143	

Accessories for FK90K fire dampers (series FK92K)

Ordering data	Description	Price			
ZUB 0304	FK90 angle brackets, pack of 4 pieces	16			
ZUB 0308	FK90 ceiling brackets, pack of 2 pieces	16			
ZUB 0305	ZUB 0305 FK90K connectors, pack of 4 pieces				
ZUB 0311	FK90K tabs, pack of 4 pieces				
ZUB 0307	FK90K cross connectors, pack of 2 pieces	16			
ZUB 0310	ZUB 0310 FK90K filling F1, in 1250 mm long strips				
ZUB 0412	ZUB 0412 AB-01 connection box for spring return actuators 24 V AC/DC				
ZUB 0413	AB-02 connection box for spring return actuators with 230 VAC	86			

Fire protection

3.1.8 FR90 fire damper (series FR92)



- Maintenance-free fire damper according to EN 15650
- Fire classifications: EI 30/60/90/120 ($v_e h_{o_i} i \Leftrightarrow o$) S C10000
- · Leak tightness C according to DIN EN 1751
- Sizes: DN100 ... DN800

Configure your product



	1	2	3	4	5	6	7	8	9
FR92-	-		-]-[-	-	-	-]-

Nominal size

100 200 355 630 125 224 400 710 250 450 800 140 160 280 500 180 315 560

4 Casing design

Standard:

Casing made of galvanized sheet steel

Option:

Casing inside and outside with epoxy resin powder coating

2 Installation and mounting frame

Standard:

Without installation subframe and mounting frame

Option:

RE100

RE150

RH100

RH150

RR100

RR150

ΑE

ER6

RV

Connection frame

- i
- ER6 frames are supplied factory-assembled.
- AE and RV are delivered for on-site installation.

5 Release temperature

Standard: 70 °C

Option:

95 °C

70 °C corrosion-resistant

3 Damper blade design

Standard:

Made of calcium silicate

Option:

Metal cover made of galvanized steel
Metal cover made of 1.4301 stainless steel

6 Limit switch for

Thermal-mechanical release mechanism (TMA)

Standard:

Without limit switch

Option:

E-ZU One limit switch CLOSED **E-AUF** One limit switch OPEN

E-ZU+AUF Two limit switches CLOSED+OPEN **EX-ZU** One explosion-protected limit switch

CLOSED

EX-AUF One EX-protected limit switch OPEN EX-ZU+AUF Two explosion-protected limit switches

CLOSED+OPEN

Actuators and release elements

Standard:

Thermal-mechanical release mechanism (TMA)

Option:

M220-9/H Actuator 230 V (Standard) M24-9/H Actuator 24 V (Standard) M220-10/F Actuator 230 V (Standard) M24-10/F Actuator 24 V (Standard)

M220-11/H Actuator 230 V M24-11/H Actuator 24 V

GU24 With magnetic clamp on TMA WU220 With magnetic clamp on TMA G24 With lifting solenoid on TMA W220 With lifting solenoid on TMA With pneumatic cylinder on TMA P2 With pneumatic cylinder on TMA

N/Ex EX-protected TMA

EM-1 Explosion-protected actuator Explosion-protected actuator RM-1 EM-2 Explosion-protected actuator

Smoke detector

Standard:

Without

Option:

- OR4 basic В
- OR4 pro
- Ü-FR (series OR4) for air transfer applications
- 0 OR32 standard
- OR32 with MC and relay module
- Ü-FR (series OR32) for air transfer applications
- Corresponding price tables ▶ from page 123.
 - Further accessories ▶ page 125.

Installed accessories

Standard:

Without Option:

AB-01 connection box for spring return actuators Α2

24 V AC/DC

AB-02 connection box for spring return actuators

230 V AC

31.9 Ü-FR (series OR4) fire damper for air transfer applications



- · Maintenance-free fire damper according to EN 15650
- Fire classifications: EI 30/60/90/120 ($v_e h_{o'}$ i \Leftrightarrow o) S C10000
- General Building Inspectorate Approval / General Type Approval: Z-6.50-2133
- With electric actuator or magnetic clamp 230 V AC or 24 V AC/DC
- With OR4 smoke detector
- Size: DN100 ... DN800





	1	2	3	4	5	6	7	8
FR92-		-	-	-]-[-	-]-

Nominal size

100 200 355 630 125 224 400 710 250 450 800 140 160 280 500 180 315 560

5 Release temperature

Standard: 70 °C

Installation and mounting frame

Standard:

Without installation subframe and mounting frame

Option:

RE100 RR150

RE150

RH100

RH150 RR100 ...

Limit switch for thermal-mechanical release mechanism (TMA) in conjunction with magnetic clamp

Standard:

Without limit switch

Option:

E-ZU One limit switch CLOSED **E-AUF** One limit switch OPEN

E-ZU+AUF Two limit switches CLOSED+OPEN

3 Damper blade design

Standard:

Made of calcium silicate

Option:

Metal cover made of galvanized steel

7 Actuators and release elements

M220-9/HActuator 230 V (Standard)M24-9/HActuator 24 V (Standard)M220-10/FActuator 230 V (Standard)M24-10/FActuator 24 V (Standard)

M220-11/H Actuator 230 V **M24-11/H** Actuator 24 V

GU24 With magnetic clamp on TMA WU220 With magnetic clamp on TMA

4 Casing design

Standard:

Casing made of galvanized sheet steel

8 Smoke detector

For installation in extension Ü-FR

Standard:

Without

Option:

B OR4 basic

P OR4 pro

Actuator position:

Standard:

Right (installation position OR4 in extension: top)

Option:

Left (installation position OR4 in extension: top)

Bottom (installation position OR4 in extension: top)

i Prices for extension Ü-FR must also be taken into

account

	3
Description	Price
Additional price for factory assembly and wiring of FR92 and OR4	132

- Suitable extension Ü-FR ▶ page 125. (An extension is always required for factory assembly)
- Suitable protective grilles ▶ page 125.

Ü-FR (series OR32) fire damper for air transfer applications 3.1.10



- Maintenance-free fire damper according to EN 15650
- Fire classifications: EI 30/60/90/120 ($v_e h_{or} i \Leftrightarrow o$) S C10000
- General Building Inspectorate Approval / General Type Approval: Z-6.50-2133
- With electric actuator or magnetic clamp 230 V AC or 24 V AC/DC
- With OR32 smoke detector for use in particularly confined spaces
- Size: DN100 ... DN800

Configure your product here



	1	2	3	4	5	6	7	8
FR92-	-	-	-]-	-	-	-]-

Nominal size

100 200 355 630 125 400 224 710 250 140 450 800 280 160 500 180 315 560

Release temperature

Standard: 70 °C

Installation and mounting frame

Standard:

Without installation subframe and mounting frame

Option:

RE100 RR150

RE150 RH100

RH150 RR100 Limit switch for thermal-mechanical release mechanism (TMA) in conjunction with magnetic clamp

Standard:

Without limit switch

Option:

E-ZU One limit switch CLOSED F-AUF One limit switch OPEN

E-ZU+AUF Two limit switches CLOSED+OPEN

Damper blade design

Standard:

Made of calcium silicate

Option:

Metal cover made of galvanized steel

Actuators and release elements

M220-9/H Actuator 230 V (Standard) M24-9/H Actuator 24 V (Standard) M220-10/F Actuator 230 V (Standard) M24-10/F Actuator 24 V (Standard) M220-11/H Actuator 230 V

M24-11/H Actuator 24 V

GU24 With magnetic clamp on TMA WU220 With magnetic clamp on TMA

Casing design

Casing made of galvanized sheet steel

Smoke detector

For installation in extension Ü-FR

Standard: Without

Option:

0 OR32 standard

OR32 with MC and relay module 2

Actuator position:

Standard:

Right (installation position OR32 in extension: top)

Option:

Left (installation position OR32: top) **Bottom** (installed position OR32: top)

Prices for extension Ü-FR must also be taken into account

Description	Price
Additional price for factory assembly and wiring of FR92 and OR32	132



- Suitable extension Ü-FR ▶ page 125. (An extension is always required for factory assembly)
- Suitable protective grilles ▶ page 125.

FR90 fire damper (series FR92)

Discount group B

1		2									
Nominal size	FR92	RE100	RE150	RH100	RH150	RR100	RR150	AE	ER6	RV	Connection frame
100	138	94	135	94	135	95	137-	119	541	150	74
125	140	101	143	101	143	102	145	129	552	160	77:-
140	143	106	153	106	153	108	155	137:-	561	167	79
160	143	110	158	110	158	111	160	144	575	177:-	80
180	151	118	168	118	168	119	171	157:-	586	190	83
200	151	125	178	125	178	126	181	165	600	200	86
224	169	130	192	130	192	132	195	179	617	214	91
250	175	142	208	142	208	144	211	196	636	231	95
280	190	158	229	158	229	160	232	215	660	253	101
315	197:-	175	254	175	254	177:-	258	239	688	281	109
355	242	242	357:-	242	357:-	-	-	300	802	312	117
400	263	267:-	394	267:-	394	-	-	338	844	357	128
450	341	302	443	302	443	-	-	385	896	406	141
500	365	337	497-	337	497-	-	-	436	951	459	154
560	425	382	567	382	567	-	-	500	1021	534	173
630	457-	442	658 <i>-</i>	442	658	-	-	585	1109	628	198
710	496	515	768	515	768	-	-	689	1215	729	226
800	557:-	610	909	610	909	-	-	819	1343	893	263

Surcharge for factory assembly with FR90 fire damper: +16. Factory-assembled frames cannot be sent by express delivery

			Ziscount group Z
3 + 4 _{Da}	mper blade and casing design		
Nominal	Casing: Standard	Casing: with epoxy resin coating	Casing: with epoxy resin coating
size	Damper blade: with metal cover made of galvanized steel	Damper blade: Standard	Damper blade: Metal cover made of stainless steel
100	30	66	101
125	30	67 . -	102
140	-	-	107
160	30	71	108
180	-	-	113
200	31	77	120
224	-	-	187
250	31	145	192
280	-	-	200
315	33	153	207-
355	48	160	224-
400	49	167:-	236
450	-	-	255
500	-	-	273
560	-	-	298
630	-	-	326
710	-	-	361
800	-	-	406

Discount group B

5 Release temperature	
Description	Price
Coated release element 70°C	17:-
Coated release element 95°C	17:-
Release element for thermal-electrical release 95°C	38

Discount group B

6 Limit switch for thermal-mechanical release mechanism								
Ordering data	Description	Price						
E-ZU	Changeover with gold-plated contacts for 5 A at 250 V AC or 24 V DC	16						
E-AUF	Changeover with gold-plated contacts for 5 A at 250 V AC or 24 V DC	16						
E-ZU+AUF	Two changeovers with gold-plated contacts for 5 A at 250 V AC or 24 V DC	32						
EX-ZU	With normally closed contact and normally open contact for 6 A at \leq 250 V AC or 0.25 A at \leq 230 V DC	282						
EX-AUF	With normally closed contact and normally open contact for 6 A at \leq 250 V AC or 0.25 A at \leq 230 V DC	282						
EX-ZU+AUF	With normally closed contact and normally open contact for 6 A at \leq 250 V AC or 0.25 A at \leq 230 V DC	545						

Discount group B

7 Actuators and release elements								
Ordering data	Description	Price						
M220-9/H	Electric spring return actuator with 70°C release element, 230 V AC	359						
M24-9/H	Electric spring return actuator with 70°C release element, 24 V AC/DC	359						
M220-11/H	Electric spring return actuator with 70°C release element, 230 V AC	404						
M24-11/H	Electric spring return actuator with 70°C release element, 24 V AC/DC	404						
M220-10/F	Electric spring return actuator with 70°C release element, 230 V AC	351						
M24-10/F	Electric spring return actuator with 70°C release element, 24 V AC/DC	351						
M24-8	Electric spring return actuator with 70°C release element, 24 V AC/DC	661						
M24-8/MP	Electric spring return actuator with 70°C release element, 24 V AC/DC	847						
G24	Lifting solenoid 24 V DC	225						
W220	Lifting solenoid 230 VAC	275						
P	Lift cylinder 4 8 bar	243						
P2	Lift cylinder 1.2 8 bar	307-						
GU24	Magnetic clamp 24 V DC	118						
WU220	Magnetic clamp 230 V AC	183						
N/Ex	Thermal-mechanical release mechanism (explosion-protected)	59						
EM-1	Electric spring return actuator with 70°C release element, 24 240 V AC/DC, 10 Nm	4181						
EM-2	Electric spring return actuator with 70°C release element, 24 240 V AC/DC, 15 Nm	4596						
RM-1	Electric spring return actuator with 70°C release element, 24 240 V AC/DC, 10 Nm	3730						

Discount group B

8 Smoke detector								
Ordering data	Description	Price						
В	OR4 basic	913						
P	OR4 pro	979						
0	OR32 Standard	1006						
2	OR32 with MC and relay module	1225						

■ Prices for extension Ü-FR for OR4 and OR32 must also be taken into account ▶ page 125.

■ It is recommended to replace the smoke switch after an operating period of 8 years ▶ Price list for individual parts and spare parts.

Discount group B

9 Installed ac	cessories	
Ordering data	Description	Price
A2	AB-01 connection box for spring return actuators 24 V AC/DC	141
A4	AB-02 connection box for spring return actuators with 230 V AC	141

i All prices quoted refer to original equipment ex works.

Loose accessories: FR90 fire dampers (series FR92)

Accessories for FR90 fire dampers (series FR92)

Discount group B

Nominal size	Protective grille	Extension Ü-FR	Saddle tee, loose	flexible connector
100	21	128	71	30
125	23	130	71	32
140	26	133	71	35
160	26	134	71	39
180	30	135	71	43
200	30	136	71	45
224	35	153	71	46
250	35	154	71	47
280	43	162	71	49
315	43	170	71	55
355	45	179	71	55
400	46	201	71	56
450	47	205	71	59
500	51	226	71	62
560	54	249	71	63
630	55	265	71	70
710	63	275	162	71
800	67:-	294	162	74

Accessories for FR90 fire dampers (series FR92)

Ordering data	Description	Price
ZUB 0347	PROMASEAL® Mastic fireproof sealant, cartridge of 310 ml	51
ZUB 0412	AB-01 connection box for spring return actuators 24 V AC/DC	86
ZUB 0413	AB-02 connection box for spring return actuators with 230 V AC	86

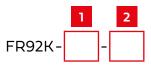
3.1.11 FR90 fire damper (series FR92K)



- Maintenance-free fire damper according to EN 15650
- Fire classifications: EI 30/60/90/120 ($v_e h_{o'} i \Leftrightarrow o$) S
- Leak tightness C according to DIN EN 1751
- Size: DN100 ... DN315

Configure your product here





Nominal size
100 315
125
160
200
250

2 Limit switch
Standard:
Without limit switch
Option:

ES With limit switch for on-site installation

Discount group B

•								
Nominal size	Price							
100	81							
125	82							
160	89							
200	95							
250	117:-							
315	143							

Discount group B

2 Limit switch		
Ordering data	Description	Price
ES	Limit switch with changeover contact ≤ 250 V AC / 5 A, 24 VDC / 5 A	16

Accessories: FR90 fire dampers (series FR92K)

Discount group B

Nominal size	AS	AR	S1	S2	RB
100	23	-	21	21	15
125	26	-	23	23	17:-
160	26	55	26	26	21
200	30	62	30	30	23

Please state the length when ordering AS: 55 mm (not available for DN200), 75 mm, 100 mm
 Please state the length when ordering RB: 50 mm, 100 mm

Fire protection

31.12 FK90 fire damper for commercial kitchen exhaust air (series FK90 kitchen)



- Fire classification: El 90 (v_e h_o, i ↔ o) S
- · General Building Inspectorate Approval: Z-41.3-670
- Leak tightness B according to DIN EN 1751
- Widths B: 275 mm ... 1500 mm
- · Heights H: 275 mm ... 800 mm

Configure your product here





Dimensions
W [mm] x H [mm]

Actuator
MAN Manual opening
MOT Motorised opening

2 Installation subframes
Standard:
Without installation subframe
Option:

Option: ER7

Direction of air flow
LR1 air direction from the operation side
LR2 air direction from the non-operation side

j Further accessories ▶ page 130.

Control unitStandard:

FKKUE-02 Option:

FKKUE-03 For connection to the Wildeboer-Net communication system

FK90 fire damper (series FK90 kitchen) for manual opening

Discount group K

1	Width [mm]													
Height [mm]	275	300	325	350	375	400	450	500	550	600	650	700	750	800
275	5466	5466	5478	5478	5496	5496	5509	5524	5546	5553	5570	5590	5603	5617
300	-	5472	5483	5483	5500	5500	5516	5530	5551	5560	5576	5596	5609	5624
325	-	-	5491	5491	5508	5508	5520	5536	5560	5567	5587	5603	5620	5633
350	-	-	-	5496	5515	5515	5530	5544	5566	5576	5596	5610	5631	5643
375	-	-	-	-	5517	5517	5536	5551	5569	5583	5605	5623	5638	5652
400	-	-	-	-	-	5523	5542	5560	5577	5590	5613	5638	5647	5663
450	-	-	-	-	-	-	5558	5570	5603	5610	5633	5655	5669	5683
500	-	-	-	-	-	-	-	5596	5620	5632	5652	5675	5692	5708
550	-	-	-	-	-	-	-	-	5643	5655	5679	5700	5719	5740
600	-	-	-	-	-	-	-	-	-	5669	5692	5715	5735	5755
650	-	-	-	-	-	-	-	-	-	-	5720	5749	5771	5792
700	-	-	-	-	-	-	-	-	-	-	-	5766	5790	5812
750	-	-	-	-	-	-	-	-	-	-	-	-	5808	5831
800	-	-	-	-	-	-	-	-	-	-	-	-	-	5850

1	Width [mm]											
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
275	5632	5646	5663	5676	5699	5715	5715	5734	5756	5777	5801	5835
300	5638	5652	5669	5683	5701	5720	5720	5741	5763	5786	5809	5841
325	5649	5665	5683	5697	5718	5734	5734	5756	5777	5801	5823	5859
350	5657	5675	5689	5708	5726	5750	5750	5770	5793	5813	5839	5875
375	5669	5686	5701	5718	5737	5758	5758	5785	5805	5831	5856	5890
400	5679	5699	5714	5732	5755	5772	5772	5797	5820	5842	5866	5907
450	5700	5719	5737	5758	5780	5802	5802	5824	5850	5879	5904	5945
500	5725	5749	5766	5785	5808	5831	5831	5858	5882	5909	5942	5982
550	5758	5780	5797	5821	5843	5872	5872	5897	5926	5958	5986	6031
600	5777	5795	5817	5839	5864	5889	5889	5909	5936	5973	6012	6055
650	5814	5837	5856	5879	5906	5931	5931	5959	5981	6020	6059	6111
700	5837	5857	5880	5900	5929	5958	5958	5984	6017	6053	6089	6141
750	5856	5879	5903	5926	5957	5982	5982	6016	6047	6083	6124	6172
800	5874	5899	5926	5950	5981	6012	6012	6039	6070	6114	6153	6208

Discount group K

4 Actuator		
Ordering data	Description	Price
MAN	Manual opening	0
мот	Motorised opening	1906

Discount group K

5 Control unit		
Ordering data	Description	Price
FKKUE-02	Control unit	0
FKKUE-03	Control unit for connection to the Wildeboer-Net communication system	0

All prices quoted refer to original equipment ex works.

ER7 installation subframe for FK90 fire dampers (series FK90 kitchen)

2	Width [mm]													
Height [mm]	275	300	325	350	375	400	450	500	550	600	650	700	750	800
275	143	143	147	147	150	150	158	165	168	173	175	182	186	188
300	-	146	148	148	153	153	159	165	168	173	176	184	187	191
325	-	-	150	150	155	155	160	166	173	174	179	186	191	194
350	-	-	-	153	158	158	165	167	174	176	184	188	193	200
375	-	-	-	-	159	159	166	168	175	179	187	193	196	202
400	-	-	-	-	-	160	167	173	176	182	188	196	202	205
450	-	-	-	-	-		173	175	186	188	194	202	208	211
500	-	-	-	-	-	-	-	182	191	193	202	209	213	218
550	-	-	-	-	-	-	-	-	200	203	209	216	223	227
600	-	-	-	-	-	-	-	-	-	208	213	222	227	232
650	-	-	-	-	-		-	-	-	-	223	230	240	247
700	-	-	-	-	-	-	-	-	-	-	-	235	247	253
750	-	-	-	-	-	-	-	-	-	-	-	-	252	259
800	-	1	-	-	-	-	-	-	1	1	-	1	-	263

2	Width [mm]											
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
275	194	200	205	209	213	222	222	226	232	242	247	255
300	196	202	208	211	216	222	222	227	234	245	248	259
325	200	205	211	213	222	226	226	232	242	247	254	266
350	205	209	213	218	226	230	230	240	246	253	261	269
375	208	211	216	222	227	234	234	245	248	255	263	274
400	209	213	220	226	232	240	240	247	253	261	269	281
450	216	222	227	234	242	248	248	255	263	273	281	292
500	226	230	235	245	252	259	259	266	274	283	292	306
550	234	245	248	254	263	269	269	281	289	299	307	322
600	242	247	254	261	269	278	278	285	292	305	317	328
650	253	261	267	273	283	292	292	300	307	319	333	348
700	261	267	274	281	290	300	300	309	319	332	342	360
750	266	273	283	290	299	307	307	319	328	342	354	368
800	273	281	290	299	307	317	317	327	340	351	362	383

i Surcharge for factory assembly with FK90 fire damper (series FK90 kitchen): +56.-

Accessories: FK90 fire damper (series FK90 kitchen)

Flexible connectors for FK90 fire dampers (series FK90 kitchen)

_					
1)	1	α	nt o	irou	nH
-	150	Ou,	116 4	ıı Ou	יו ע

		Width [mm]												
Height [mm]	275	300	325	350	375	400	450	500	550	600	650	700	750	800
275	140	140	147:-	147	153	153	157:-	159	167	171	181	186	189	194
300	-	147	150	150	154	154	159	166	172	177	182	187-	194	198
325	-	-	153	153	157:-	157:-	159	167	172	181	186	189	194	201
350	-	-	-	154	157:-	157:-	164	167	177:-	181	186	189	196	201
375	-	-	-	-	159	159	166	171	181	182	187	194	198	203
400	-	-	-	-	-	164	167	172	182	186	189	196	201	203
450	-	-	-	-	-	-	169	181	186	189	196	201	205	213
500	-	-	-	-	-	-	-	186	189	196	201	205	213	216
550	-	-	-	-	-	-	-	-	198	201	205	213	218	220
600	-	-	-	-	-	-	-	-	-	203	213	218	220	226
650	-	-	-	-	-	-	-	-	-	-	218	226	227 . -	234
700	-	-	-	-	-	-	-	-	-	-	-	227:-	234	235
750	-	-	-	-	-	-	-	-	-	-	-	-	239	240
800	-	-	-	1	-	-	1	-	-	-	-	-	-	248

		Width [mm]										
Height [mm]	850	900	950	1000	1050	1100	1150	1200	1250	1300	1400	1500
275	198	203	209	216	220	227:-	227:-	234	240	249	259	267
300	203	205	216	218	226	232	232	239	244	253	261	268
325	203	209	216	220	226	234	234	239	248	255	264	271
350	205	213	218	220	227:-	235	235	240	249	259	264	275
375	205	216	218	223	232	239	239	244	249	261	268	276
400	209	216	220	226	232	239	239	248	253	261	268	281
450	216	220	226	232	239	244	244	253	259	268	275	282
500	220	226	232	235	240	249	249	259	264	271	281	290
550	227:-	232	239	240	249	259	259	264	271	281	290	296
600	232	235	240	248	253	261	261	268	275	282	290	303
650	239	244	249	253	261	268	268	275	282	290	299	306
700	240	248	253	259	264	271	271	281	284	295	303	312
750	248	253	259	264	268	275	275	282	290	299	306	316
800	253	259	264	268	275	281	281	288	296	304	312	320

Accessories		
Ordering data	Description	Price
ZUB 0411	HM-02 manual release	176

Fire protection

3.1.13 FKU30 fire damper (series FKU31) for suspended ceilings



- · For suspended ceilings with 30 minute fire resistance period
- · Fire classification: K30U
- General Building Inspectorate Approval / General Type Approval: Z-41.3-714
- Size: 325, 400, 500, 600

Configure your product here



	1		2		3		4		5		6
FKU31-		-[-		-		-		-	

Nominal size

325

400

500 600 4 Actuators and release elements

Standard:

TM Thermal-mechanical

Option:

M1 Thermal-electrical, 230 VAC

M2 Thermal-electrical, 24 V AC/DC

K Release element 70°C corrosion-protected for

thermal mechanical release

2 Nominal connection width

125

160

200

250 315

3 Air deflector plate

Without air deflector plate

1 With air deflector plate

5 Limit switch for thermal-mechanical release

Standard:

Without limit switch

Option:

E-AUF One limit switch OPEN

E-ZU One limit switch CLOSED

6 Release element for suspended ceiling

Standard:

Without

Option:

AL Release element, 70 °C, in the suspended ceiling

i Suitable air diffusers ▶ <u>from page 21.</u>

FKU30 fire damper (series FKU31)

1+2+3										
Nominal size	Connecting piece DN	0	1							
325	125	292	-							
323	160	312	335							
400	160	358	384							
400	200	384	412							
500	200	456	487-							
300	250	495	529							
600 / 635	250	577:-	612							
600 / 625	315	639	683							

Discount group B

4 Actuators and release elements						
Ordering data	Description	Price				
MI	Electric spring return actuator with 70°C release element, 230 V AC	408				
M2	Electric spring return actuator with 70°C release element, 24 V AC/DC	408				
К	Release element 70°C corrosion-protected for thermal-mechanical release	20				

Discount group B

5 Limit switch for thermal-mechanical release							
Ordering data	Description	Price					
E-ZU	Changeover with gold-plated contacts for 5 A at 250 V AC or 24 V DC	16					
E-AUF	Changeover with gold-plated contacts for 5 A at 250 V AC or 24 V DC	16					
E-ZU+AUF	Two changeovers with gold-plated contacts for 5 A at 250 V AC or 24 V DC	32					

Discount group B

6 Release element for suspended ceiling						
Ordering data	Description	Price				
AL	Release element in the suspended ceiling	80				

i All prices quoted refer to original equipment ex works.

Ordering data	Description	Price
ZUB 0312	Extended central fastening for suspended ceilings $d \le 70$ mm, pack of 1 pc.	33
ZUB 0511	Fastening bracket 1 for FKU31, nominal size 325, for metal suspended ceilings, Promat 420.96, pack of 8 pcs.	16
ZUB 0512	Fastening bracket 2 for FKU31, nominal size 325, for suspended ceilings, OWA, pack of 4 pcs.	27:-
ZUB 0513	Fastening bracket 2 for FKU31, nominal size 400, for suspended ceilings, OWA, pack of 4 pcs.	35
ZUB 0514	Fastening bracket 2 for FKU31, nominal size 500, for suspended ceilings, OWA, pack of 4 pcs.	46
ZUB 0515	Fastening bracket 2 for FKU31, nominal size 600, for suspended ceilings, OWA, pack of 4 pcs.	55

Fire protection

3.1.14 FKU90 fire damper (series FKU91) for suspended ceilings



- For suspended ceilings with 90 minute fire resistance period
- Fire classification: K90U
- General Building Inspectorate Approval / General Type Approval: Z-41.3-714
- Size: 325, 400, 500, 600

Configure your product here



	1		2		3		4		5		6
FKU91-		-[-		_		-		-	

Nominal size

325

400

500 600 Actuators and release elements

Standard:

Thermal-mechanical

Option:

MΊ Thermal-electrical, 230 VAC

M2 Thermal-electrical, 24 VAC/DC

Release element 70°C corrosion-protected for

thermal mechanical release

Nominal connection width

125

160

200

250

315

Air deflector plate

Without air deflector plate

With air deflector plate

Limit switch for thermal-mechanical release

Standard:

Without limit switch

Option:

E-AUF One limit switch OPEN

E-ZU One limit switch CLOSED

Release element for suspended ceiling

Standard:

Without

Option:

Release element, 70 °C, in the suspended ceiling

Suitable air diffusers ▶ from page 21.

FKU90 fire damper (series FKU91)

1+2+3										
Nominal size	Connecting piece DN	0	1							
325	125	920	-							
325	160	985	1053							
400	160	1009	1080							
400	200	1090	1167:-							
500	200	1144	1224							
300	250	1235	1321							
600 / 625	250	1321	1414							
600 / 625	315	1453	1556							

Discount group B

4 Actuators and release elements						
Ordering data	Description	Price				
MI	Electric spring return actuator with 70°C release element, 230 V AC	408				
M2	Electric spring return actuator with 70°C release element, 24 V AC/DC	408				
К	Release element 70°C corrosion-protected for thermal-mechanical release	20				

Discount group B

5 Limit switch for thermal-mechanical release						
Ordering data	Description	Price				
E-ZU	Changeover with gold-plated contacts for 5 A at 250 V AC or 24 V DC	16				
E-AUF	Changeover with gold-plated contacts for 5 A at 250 V AC or 24 V DC	16				
E-ZU+AUF	Two changeovers with gold-plated contacts for 5 A at 250 V AC or 24 V DC	32				

Discount group B

6 Release element for suspended ceiling						
Ordering data	Description	Price				
AL	Release element in the suspended ceiling	80				

i All prices quoted refer to original equipment ex works.

Ord	ering data	Description	Price
ZUE	3 0312	Extended central fastening, pack of 1 piece	33

3.2 Fire protection valves

3.2.1 BV90 fire protection valve (series BV92)



- Maintenance-free fire protection valve as per EN 15650
- Fire classifications: EI30/60/90 (ve ho, i \Leftrightarrow o) S
- General Type Approval Z-41.8-697 for installation in suspended ceilings
- Sizes: DN100 ... DN200

Configure your product here



3 BV92-

Nominal size

100 125

160

200

Accessories

Standard:

Without accessories

Option:

F1 Backing board 50 mm thick F2 Backing board 30 mm thick

IM Insulating jacket Installation pipe

Limit switch

Standard:

Without limit switch

Option:

With limit switch Ε

Are included loose in the delivery

BV90 fire protection valve (series BV92)

	1	2	3						
Nominal size	BV92	E	F1	F2	IM	ER			
100	130	47	48	35	22	55			
125	141	47	55	42	22	55			
160	168	47	63	48	26	83			
200	188	47	70	55	27:-	105			

3.3 Smoke extraction and smoke protection

EK90 smoke control damper (series EK92) 3.3.1



- Maintenance-free smoke control damper according to EN 12101-8
- Fire classification:

EI90 (v_{edw} – $h_{odw'}$ i \Leftrightarrow o) S1500 Cmod HOT400/30 MA multi Leak tightness C according to DIN EN 1751

- Widths B: 200 mm ... 1500 mm (in 5-mm increments)
- Heights H: 200 mm ... 800 mm (in 5-mm increments)
- Lengths L: 350 mm ... 850 mm (in 5-mm increments)

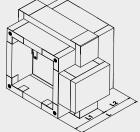
Configure your product here



EK92

Dimensions

W [mm] x **H** [mm] x **L** [mm]



Specify the total length when ordering: L = L1 + L2

5 Actuator

24 V AC/DC MΊ

M2 230 V AC

24 V AC/DC, continuously variable **M3**

Actuator accessories

Standard: Without Option:

KL

Terminal strip for motor drive

Additional casing for control units

Special design

Standard: Without Option:

EA special design

Shear protection brackets

For non-operation side attachment В For operation side attachment

Partial length L1

L1 = 330 ... 480 mm (in 5-mm increments)

Intermediate sizes are priced at the next higher or next wider standard size.

Flat casing frame

Standard:

Standard frame height

Option:

NL Motor drive left NR Motor drive right

EK90 smoke control damper (series EK92), construction length 600

			<u> </u>	<u> </u>		<i>"</i>														
1										Width	[mm]									
Height [mm]	200	250	300	350	400	450	500	550	600	650	700	750	800	900	1000	1100	1200	1300	1400	1500
200	1510	1545	1574	1610	1647	1682	1723	1758	1794	1830	1866	1901	1938	2007	2080	2154	2226	2297	2369	2442
250	1545	1581	1611	1649	1686	1723	1762	1800	1836	1874	1911	1946	1984	2058	2131	2204	2278	2352	2426	2498
300	1581	1619	1650	1687	1725	1762	1804	1841	1879	1916	1954	1991	2030	2105	2180	2256	2330	2406	2481	2556
350	1618	1655	1687	1725	1763	1802	1845	1883	1922	1959	1998	2036	2076	2152	2229	2307	2384	2461	2537	2613
400	1654	1693	1725	1763	1804	1844	1885	1924	1965	2004	2043	2081	2122	2200	2278	2358	2436	2513	2594	2672
450	1688	1727	1762	1802	1844	1883	1927	1967	2006	2048	2088	2127	2169	2247	2328	2409	2490	2569	2649	2731
500	1725	1768	1801	1841	1883	1923	1968	2011	2050	2091	2133	2173	2214	2295	2378	2461	2543	2625	2707	2787
550	1761	1802	1838	1881	1922	1965	2011	2051	2094	2135	2176	2218	2260	2343	2427	2511	2595	2678	2763	2846
600	1798	1839	1876	1920	1960	2004	2050	2094	2136	2179	2221	2264	2306	2390	2476	2564	2648	2733	2819	2904
650	1833	1876	1913	1958	2001	2044	2091	2135	2179	2222	2265	2309	2352	2439	2526	2613	2701	2787	2875	2961
700	1869	1913	1951	1996	2040	2085	2133	2176	2221	2265	2310	2353	2398	2488	2574	2665	2753	2843	2931	3018
750	1905	1950	1989	2034	2079	2125	2173	2218	2264	2309	2353	2399	2444	2535	2625	2716	2807	2896	2987	3077
800	1941	1987	2027	2073	2119	2165	2214	2260	2306	2352	2398	2444	2490	2582	2673	2768	2859	2951	3043	3135

Surcharges EK90 smoke control dampers (series EK92)

Discount group B

Description	Price
Surcharge for lengths >600 mm	10 %
No surcharge for lengths <600 mm	-
No surcharge for variant with reduced frame height	-

Discount group B

2 Special desi	gn	
Ordering data	Description	Price
EA	Special design	251

Discount group B

5 Actuator		
Ordering data	Description	Price
M3	Electrical drive motor 24 V, continuously variable	142

Discount group B

6 Actuator ac	cessories	
Ordering data	Description	Price
KL	Terminal strip for motor drive	31
Z	Additional casing for control units	184

i All prices quoted refer to original equipment ex works.

Protective grille for EK90 smoke control dampers (series EK92)

Discount group B

	series E																	Biscourit group B		
Height										Width	[mm]									
[mm]	200	250	300	350	400	450	500	550	600	650	700	750	800	900	1000	1100	1200	1300	1400	1500
200	35	35	37:-	38	38	39	43	43	45	46	47:-	47:-	47:-	49	53	54	55	62	63	66
250	35	37:-	38	38	39	43	43	45	46	47	47:-	48	48	51	53	55	61	62	64	67
300	37:-	38	39	43	43	45	45	46	47:-	47	49	49	51	53	54	61	62	64	66	69
350	38	39	43	43	45	45	46	47:-	47:-	48	49	51	53	53	55	62	62	64	66	70
400	39	43	43	45	45	46	47:-	47	48	49	51	51	53	55	61	62	64	66	67:-	71
450	43	43	45	46	46	47	47	49	49	51	53	53	54	55	62	63	64	67:-	69	71
500	45	45	46	47:-	47	47	49	51	51	51	53	54	55	61	62	64	66	67	70	74
550	45	46-	47:-	47:-	47	49	51	53	53	53	54	55	61	62	64	66	67	70	71	77:-
600	46	46	47:-	48	49	49	51	53	53	54	55	61	61	62	64	66	67	70	71	78
650	46	47	49	49	51	51	53	54	55	55	61	62	62	64	66	67	70	71	74	79
700	47	48	51	51	53	53	54	55	55	61	62	62	62	64	67	69	70	74	77:-	80
750	47	49	51	51	53	53	54	55	61	62	62	63	64	66	67	70	71	74	78	80
800	48	51	53	53	54	54	55	61	61	62	63	64	66	67	69	71	71	77	78	82

i Surcharge for protective grille with powder coating in specific RAL colour: +75 %.

3.3.2 EKM90 smoke control damper



- Maintenance-free smoke control damper according to EN 12101-8
- · Fire classification:
 - EI 90/120 (v_{edw} h_{odw} i \Leftrightarrow o) S1000 C $_{mod}$ HOT400/30 MA multi
- · Leaktightness according to DIN EN 1751: Casing class C
- Nominal widths NW: 200 mm ... 1200 mm (in 50-mm increments)
- Nominal heights NH: 200 mm ... 2000 mm (in 200-mm increments)
- Lengths L: 220 mm (all sizes)

Configure your product here



1 2 3 4 EKM90- - - - - -

Dimensions

NW [mm] x NH [mm]

3 Actuator accessories

Standard:

Without

Option:

KL Terminal strip for motor drive

2 Actuator

M1 24 VAC/DC

M2 230 V AC

M3 24 VAC/DC, continuously variable (for NH \leq 600 mm only)

4 Additional casing

Standard:

Without

Option:

M Additional casing/casing width extension for customer's own control units

EKM90 smoke control damper, series 220

Discount group B

Height	Width [mm]																
[mm]	200	250	300	350	400	450	500	550	600	650	700	750	800	900	1000	1100	1200
200	2200	2226	2251	2275	2299	2323	2346	2369	2390	2411	2433	2454	2477	2520	2561	2600	2637
400	2306	2330	2354	2378	2401	2422	2445	2467	2488	2509	2530	2552	2573	2616	2656	2696	2733
600	2517	2541	2565	2588	2610	2633	2654	2676	2697	2718	2739	2761	2781	2824	2864	2904	2942
800	2755	2779	2803	2826	2849	2871	2894	2916	2938	2959	2981	3002	3025	3068	3126	3196	3278
1000	2971	2994	3018	3057	3094	3117	3140	3178	3215	3253	3292	3331	3370	3449	3529	3604	3691
1200	3252	3277	3302	3326	3351	3374	3415	3457	3498	3539	3580	3630	3683	3787	3891	3992	4104
1400	4197	4225	4251	4276	4302	4328	4352	4377	4401	4424	4448	4482	4517	4586	4653	4715	4787
1600	4524	4549	4574	4600	4624	4648	4672	4696	4719	4741	4764	4809	4853	4940	5026	5105	5189
1800	4763	4789	4816	4842	4867	4892	4917	4941	4967	5020	5075	5121	5165	5255	5340	5456	5603
2000	5066	5095	5122	5149	5176	5202	5228	5253	5279	5304	5361	5408	5453	5611	5769	5928	6086

The price applied for intermediate sizes is the next widest standard size.

Surcharges, EKM90 smoke control damper

Discount group B

2 Actuator		
Ordering data	Description	Price
M3	Electrical drive motor 24 V, continuously variable (for NH ≤ 600 mm only)	142

Discount group B

3 + 4 Accessories										
Ordering data	Description	Price								
KL	Terminal strip for motor drive	29								
М	Casing width extension for customer's own control units with nominal height = 200 mm	128								
	Casing width extension for customer's own control units with nominal height = 400 mm	177								
	Casing width extension for customer's own control units with nominal height = 600 mm	226								
	Additional casing for customer's own control units with nominal height≥ 800 mm	62								

i All prices quoted refer to original equipment ex works.

Extension frame VK for EKM90 smoke control damper

Discount group B

Height								w	idth [m	m]							
[mm]	200	250	300	350	400	450	500	550	600	650	700	750	800	900	1000	1100	1200
200	48	51	55	57	61	64	66	70	73	75	79	82	85	91	97	103	110
400	61	64	66	70	73	75	79	82	85	88	91	94	97	103	110	115	121
600	73	75	79	82	85	88	91	94	97	101	103	106	110	115	121	128	134
800	85	88	91	94	97	101	103	106	110	112	115	119	121	128	134	139	146
1000	97	101	103	106	110	112	115	119	121	125	128	130	134	139	146	152	159
1200	110	112	115	119	121	125	128	130	134	137	139	143	146	152	159	165	170
1400	121	125	128	130	134	137	139	143	146	150	152	155	159	165	170	177	183
1600	134	137	139	143	146	150	152	155	159	161	165	168	170	177	183	189	195
1800	146	150	152	155	159	161	165	168	170	174	177	179	183	189	195	201	207
2000	159	161	165	168	170	174	177	179	183	186	189	192	195	201	207	214	219

The price applied for intermediate sizes is the next widest standard size.

Connecting frame A1 for EKM90 smoke control damper

Discount group B

Height								W	idth [m	m]							
[mm]	200	250	300	350	400	450	500	550	600	650	700	750	800	900	1000	1100	1200
200	78	79	81	82	85	86	87	89	90	91	94	95	96	99	103	106	109
400	82	83	86	87	88	90	91	93	95	96	97	99	101	104	107	110	113
600	87	88	89	91	93	94	96	97	99	101	102	104	105	109	111	114	118
800	90	93	94	96	97	98	101	102	103	105	106	107	110	112	115	119	122
1000	96	98	99	102	103	105	106	107	109	111	112	113	115	118	121	125	128
1200	102	103	104	105	107	109	110	112	113	115	117	118	120	122	126	129	133
1400	105	106	109	110	111	113	114	117	118	119	121	122	123	127	130	133	136
1600	110	111	113	114	115	118	119	120	122	123	125	127	128	131	135	137	141
1800	114	115	117	119	120	121	123	125	126	128	129	131	133	136	138	142	144
2000	118	120	121	123	125	126	128	129	130	133	134	135	137	139	143	146	150

The price applied for intermediate sizes is the next widest standard size.

Connecting frame A2 for EKM90 smoke control damper

Discount group B

Height								W	idth [m	m]							
[mm]	200	250	300	350	400	450	500	550	600	650	700	750	800	900	1000	1100	1200
200	62	65	69	71	74	78	80	83	87	89	93	96	98	105	111	117	123
400	74	78	80	83	87	89	93	96	98	102	105	107	111	117	123	129	136
600	87	89	93	96	98	102	105	107	111	114	117	120	123	129	136	142	147
800	98	102	105	107	111	114	117	120	123	127	129	133	136	142	147	154	160
1000	114	118	121	123	127	130	134	136	139	143	145	149	152	158	163	170	176
1200	127	130	134	136	139	143	145	149	152	154	158	161	163	170	176	182	189
1400	139	143	145	149	152	154	158	161	163	167	170	173	176	182	189	194	200
1600	152	154	158	161	163	167	170	173	176	179	182	185	189	194	200	207	213
1800	163	167	170	173	176	179	182	185	189	191	194	198	200	207	213	219	225
2000	176	179	182	185	189	191	194	198	200	203	207	209	213	219	225	231	238

i

The price applied for intermediate sizes is the next widest standard size.

Protective grille for EKM90 smoke control damper

Height								W	idth [m	m]							
[mm]	200	250	300	350	400	450	500	550	600	650	700	750	800	900	1000	1100	1200
200	45	48	50	54	56	59	62	65	67	71	73	77	79	85	90	96	102
400	56	59	62	65	67	71	73	77	79	82	85	88	90	96	102	107	113
600	67	71	73	77	79	82	85	88	90	94	96	99	102	107	113	119	125
800	79	82	85	88	90	94	96	99	102	105	107	111	113	119	125	130	136
1000	90	94	96	99	102	105	107	111	113	117	119	122	125	130	136	142	147
1200	102	105	107	111	113	117	119	122	125	128	130	134	136	142	147	153	159
1400	113	117	119	122	125	128	130	134	136	139	142	145	147	153	159	165	170
1600	125	128	130	134	136	139	142	145	147	151	153	157	159	165	170	176	182
1800	136	139	142	145	147	151	153	157	159	162	165	168	170	176	182	187	193
2000	147	151	153	157	159	162	165	168	170	174	176	179	182	187	193	199	205



- The price applied for intermediate sizes is the next widest standard size.
- \blacksquare Surcharge for protective grille with powder coating in specific RAL colour: +65 %.

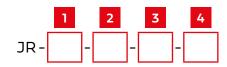
3.3.3 JR smoke protection damper



- · To prevent the spread of smoke via ventilation ducts
- · Made of galvanised sheet steel
- · General Building Inspectorate Approval or General Type Approval: Z-78.4-40
- Widths B: 200 mm ... 2000 mm
- · Heights H: 180 mm ... 1995 mm
- Construction length: 180 mm

Configure your product here





Dimensions
W [mm] x H [mm]

Installation subframes
Standard:
Without
Option:

MR With wall installation subframe

2 Actuator M6 230 V AC M7 24 V AC/DC Accessories counter flange
1GF 1 x counter flange
2GF 2 x counter flange

JR smoke protection damper construction length 180 mm

Discount group B

1+2							Width	[mm]						
Height [mm]	200	300	400	500	600	700	800	900	1000	1200	1400	1600	1800	2000
180	682	682	687	692	695	702	708	709	718	732	741	750	760	768
345	702	702	709	714	722	725	734	737	744	760	774	784	798	806
510	753	753	762	765	774	777	790	793	807	822	838	849	864	872
675	793	793	806	814	824	830	840	846	861	879	895	906	924	936
840	840	840	854	862	878	878	894	896	913	932	952	968	985	1002
1005	885	885	901	902	918	924	945	949	968	994	1015	1031	1053	1068
1170	927	927	945	946	965	972	992	993	1014	1036	1064	1087	1106	1124
1335	967	967	988	992	1014	1017	1038	1039	1062	1090	1117	1137	1164	1183
1500	1010	1010	1036	1036	1060	1062	1090	1090	1117	1145	1180	1201	1229	1248
1665	1060	1060	1084	1085	1110	1110	1137	1140	1169	1202	1236	1262	1287	1311
1830	1102	1102	1127	1130	1157	1162	1186	1192	1223	1262	1297	1321	1342	1365
1995	1149	1149	1177	1180	1209	1210	1239	1244	1272	1313	1353	1383	1408	1431

MR wall installation frames and GF counter flanges for JR smoke protection dampers

Discount group	В
Discount group	$\boldsymbol{\mathcal{L}}$

3 + 4	Width [mm]													
Height [mm]	200	300	400	500	600	700	800	900	1000	1200	1400	1600	1800	2000
180	30	31	32	35	38	39	45	48	48	53	61	63	67	71
345	32	35	38	38	45	46	48	53	53	61	63	67	71	78
510	37	38	43	45	47	48	49	55	55	63	66	70	77	80
675	39	45	47	48	49	53	54	63	63	66	70	77	80	85
840	45	47	49	49	54	55	62	66	66	69	74	80	83	86
1005	48	49	53	54	61	63	66	69	69	74	79	83	87	93
1170	53	54	61	62	63	66	67	71	71	78	82	86	93	98
1335	55	61	63	66	67	69	71	78	78	82	86	93	98	101
1500	63	64	66	69	71	71	78	80	80	85	89	97	101	105
1665	66	67	70	71	77	79	80	85	85	89	97	99	105	111
1830	69	71	74	78	80	82	83	87	87	94	99	103	110	114
1995	71	74	78	80	83	83	86	93	93	99	103	107	113	117

3.4 **Smoke detectors**

3.4.1 RL4 smoke detectors for ventilation ducts



- For activation of fans and for forwarding of signals to a central fire alarm system or the building management system
- With optical smoke switch
- Power supply 230 V AC \mid 24 V AC/DC
- VdS approval (G221008)

Configure your product here



Basic version Option:

basic RL4 basic variant **pro** RL4 pro variant

1						
Basic version	RL4					
basic	534					
pro	652					

- For accessories see ▶ page 143.
 - It is recommended to replace the smoke switch after an operating period of 8 years ▶ Price list for individual parts and spare parts.

Fire protection

3.4.2 OR4 smoke detector



- For activation of fire dampers and fans, and for forwarding of signals to a central fire alarm system or the building management system
- · With optical smoke switch
- Power supply 230 VAC | 24 VAC/DC
- · General Technical Approval: Z-78.6-250
- VdS approval (G221008)

Configure your product here





1 Basic version
Option:

basic OR4 basic variantpro OR4 pro variant

	1
Basic version	OR4
basic	913
pro	979

Accessories for RL4 smoke detector and OR4 smoke detector and release device

Discount group B

Ordering data	Description	Price
ZUBR ORSTU10	Pack saddle tee for DN 100	71
ZUBR ORSTU12	Pack saddle tee for DN 125	71
ZUBR ORSTU14	Pack saddle tee for DN 140	71
ZUBR ORSTU15	Pack saddle tee for DN 150	71
ZUBR ORSTU16	Pack saddle tee for DN 160	71
ZUBR ORSTU18	Pack saddle tee for DN 180	71
ZUBR ORSTU20	Pack saddle tee for DN 200	71
ZUBR ORSTU22	Pack saddle tee for DN 224	71
ZUBR ORSTU25	Pack saddle tee for DN 250	71
ZUBR ORSTU28	Pack saddle tee for DN 280	71
ZUBR ORSTU31	Pack saddle tee for DN 315	71
ZUBR ORSTU35	Pack saddle tee for DN 355	71
ZUBR ORSTU40	Pack saddle tee for DN 400	71
ZUBR ORSTU45	Pack saddle tee for DN 450	71
ZUBR ORSTU50	Pack saddle tee for DN 500	71
ZUBR ORSTU56	Pack saddle tee for DN 560	71
ZUBR ORSTU63	Pack saddle tee for DN 630	71
ZUBR ORSTU71	Pack saddle tee for DN 710	162
ZUBR ORSTU80	Pack saddle tee for DN 800	162

Accessories for RL4 smoke detector and OR4 smoke detector and release device

Discount group E

Ordering data	Description	Price
ZUB 0475	Cover for installation base (PU = 4 piece)	30

It is recommended to replace the smoke switch after an operating period of 8 years Price list for individual parts and spare parts.

3.4.3 OR32 smoke detector and release device

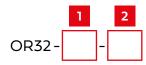


- For activation of fire dampers, smoke protection dampers, fans and for air transfer applications
- With optical smoke switch as per EN 54-7
- Supply voltage 230 V AC
- General Building Inspectorate Approval: Z-78.6-123
- Installation in air transfer applications:

with FK90 fire dampers: Type approval Z-6.50-2132 with FR90 fire dampers: Type approval Z-6.50-2133

Configure your product here





1 Basic version

KO Standard for installation in ventilation ducts

K2 With MC and relay module for installation in ventilation ducts

RO Standard for installation in ventilation ducts or circular ventilation ducts

R2 With MC and relay module for installation in ventilation ducts or circular ventilation ducts

2 Accessories

Standard:

Without accessories

Option:

T Control panel

Discount group B

1 Basic version		
Ordering data	Description	Price
КО	Standard for installation in ventilation ducts	1006
K2	With MC and relay module for installation in ventilation ducts	1225
R0	Standard for installation in ventilation ducts or circular ventilation ducts	1006
R2	With MC and relay module for installation in ventilation ducts or circular ventilation ducts	1225

Discount group B

2 Accessories		
Ordering data	Description	Price
Т	Control panel for operation display, manual release and reset	83

Accessories for OR32 smoke detector and release devices

Discount group B

Description	Price
Saddle socket, loose (DN 100 DN 630)	71
Saddle socket, loose (DN 710/DN 800)	162
Flanged collar, loose	71

It is recommended to replace the smoke switch after an operating period of 8 years Price list for individual parts and spare parts.

Fire protection

3.5 Products for DIN 18017-03

3.5.1 TS18 TopSchott



- Maintenance-free shut-off device against fire and smoke in ventilation systems according to or based on DIN 18017-3
- Leak tightness C according to DIN EN 1751
- General Building Inspectorate Approval / General Type Approval: Z-41.3-556
 ⇒ Fire classification: K30-18017 / K60-18017 / K90-18017
- VKF recognition no. 14204 ⇒ Fire classification: F90
- Size: DN80 ... DN200





TS18 -

1	Nominal size
	80
	100
	125
	140
	160
	180
	200

TS18 TopSchott

Discount group B

1					
Nominal size	TS18				
80	59				
100	68				
125	79				
140	87				
160	106				
180	118				
200	128				

Accessories for TS18 TopSchott

Ordering data	Description	Price
ZUB 0314	Mortar anchor (310 mm long), pack of 2 pieces	27:-

4 Noise protection

4.1 Sound attenuator

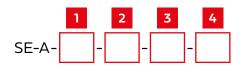
4.1.1 SE-A absorber splitters



- Absorber sound attenuator splitters for attenuation in the medium and higher frequency range
- Thickness of splitters: 100 mm ... 300 mm
- Nominal height: 100 mm ... 2500 mm (in 1-mm increments)
- Lengths: 500 mm, 750 mm, 1000 mm, 1250 mm and 1500 mm
- Greater heights and lengths can be produced by assembling several splitters together







- Thickness of splitters [mm]
 - 100 200 150 215 170 230 185 300

- 3 Length [mm] 500 1500 750
 - 1000 1250

2 Nominal height

100 mm ... 2500 mm

- 4 Perforated metal covering
 - Standard:

Without perforated sheet metal covering Option:

L4 With perforated metal covering, 4-sided

i The price applied for intermediate sizes is the next highest standard size.

SE-A absorber splitters Thickness of splitters 100 mm

300 18.50 23.70 29.50 34 37.40 350 20.70 25 31 35.30 39 400 22.90 27.50 34.10 38.80 42.80 450 25.10 30 37.20 42.30 46.60 500 27.20 32.60 40.30 45.80 50.40 550 27.60 33.10 40.50 47.10 53.50 600 28 33.50 40.70 48.40 57.20 650 28.30 35.80 43.40 51.60 61 700 30.20 38 46.10 54.80 64.70 750 32 40.30 48.80 58 68.40 800 33.80 42.50 51.50 61.20 72.20 850 34.30 43.10 52.20 65.60 75.90 900 34.80 45.30 54.80 68.80 79.70 950 <	Discount group 3					
[mm] 500 750 1000 1250 1500 150 13.40 16.70 21- 24.60 27.10 200 15.90 19.60 24.50 28.60 31.50 250 18.30 22.40 28- 32.70 35.80 300 18.50 23.70 29.50 34- 37.40 350 20.70 25- 31- 35.30 39- 400 22.90 2750 34.10 38.80 42.80 450 25.10 30- 37.20 42.30 46.60 500 27.20 32.60 40.30 45.80 50.40 550 2760 33.10 40.50 47.10 53.50 600 28- 33.50 40.70 48.40 57.20 650 28.30 35.80 43.40 51.60 61- 700 30.20 38- 46.10 54.80 64.70 750 32-	2 + 3	Length [mm]				
200 15.90 19.60 24.50 28.60 31.50 250 18.30 22.40 28- 32.70 35.80 300 18.50 23.70 29.50 34- 37.40 350 20.70 25- 31- 35.30 39- 400 22.90 27.50 34.10 38.80 42.80 450 25.10 30- 37.20 42.30 46.60 500 27.20 32.60 40.30 45.80 50.40 550 27.60 33.10 40.50 47.10 53.50 600 28- 33.50 40.70 48.40 57.20 650 28.30 35.80 43.40 51.60 61- 700 30.20 38- 46.10 54.80 64.70 750 32- 40.30 48.80 58- 68.40 800 33.80 42.50 51.50 61.20 72.20 850 34.30 <th></th> <th>500</th> <th>750</th> <th>1000</th> <th>1250</th> <th>1500</th>		500	750	1000	1250	1500
250 18.30 22.40 28- 32.70 35.80 300 18.50 23.70 29.50 34- 37.40 350 20.70 25- 31- 35.30 39- 400 22.90 27.50 34.10 38.80 42.80 450 25.10 30- 37.20 42.30 46.60 500 27.20 32.60 40.30 45.80 50.40 550 27.60 33.10 40.50 47.10 53.50 600 28- 33.50 40.70 48.40 57.20 650 28.30 35.80 43.40 51.60 61- 700 30.20 38- 46.10 54.80 64.70 750 32- 40.30 48.80 58- 68.40 800 33.80 42.50 51.50 61.20 72.20 850 34.30 43.10 52.20 65.60 75.90 900 34.80 <th>150</th> <th>13.40</th> <th>16.70</th> <th>21</th> <th>24.60</th> <th>27.10</th>	150	13.40	16.70	21	24.60	27.10
300 18.50 23.70 29.50 34 37.40 350 20.70 25 31 35.30 39 400 22.90 27.50 34.10 38.80 42.80 450 25.10 30 37.20 42.30 46.60 500 27.20 32.60 40.30 45.80 50.40 550 27.60 33.10 40.50 47.10 53.50 600 28 33.50 40.70 48.40 57.20 650 28.30 35.80 43.40 51.60 61 700 30.20 38 46.10 54.80 64.70 750 32 40.30 48.80 58 68.40 800 33.80 42.50 51.50 61.20 72.20 850 34.30 43.10 52.20 65.60 75.90 900 34.80 45.30 54.80 68.80 79.70 950 <	200	15.90	19.60	24.50	28.60	31.50
350 20.70 25 31 35.30 39 400 22.90 27.50 34.10 38.80 42.80 450 25.10 30 37.20 42.30 46.60 500 27.20 32.60 40.30 45.80 50.40 550 27.60 33.10 40.50 47.10 53.50 600 28 33.50 40.70 48.40 57.20 650 28.30 35.80 43.40 51.60 61 700 30.20 38 46.10 54.80 64.70 750 32 40.30 48.80 58 68.40 800 33.80 42.50 51.50 61.20 72.20 850 34.30 43.10 52.20 65.60 75.90 900 34.80 45.30 54.80 68.80 79.70 950 36.50 47.50 57.40 72.10 83.40 1000	250	18.30	22.40	28	32.70	35.80
400 22.90 2750 34.10 38.80 42.80 450 25.10 30- 37.20 42.30 46.60 500 27.20 32.60 40.30 45.80 50.40 550 27.60 33.10 40.50 47.10 53.50 600 28- 33.50 40.70 48.40 57.20 650 28.30 35.80 43.40 51.60 61- 700 30.20 38- 46.10 54.80 64.70 750 32- 40.30 48.80 58- 68.40 800 33.80 42.50 51.50 61.20 72.20 850 34.30 43.10 52.20 65.60 75.90 900 34.80 45.30 54.80 68.80 79.70 950 36.50 47.50 57.40 72.10 83.40 1000 38.20 49.70 60- 75.30 87.20 1100	300	18.50	23.70	29.50	34	37.40
450 25.10 30 37.20 42.30 46.60 500 27.20 32.60 40.30 45.80 50.40 550 27.60 33.10 40.50 47.10 53.50 600 28 33.50 40.70 48.40 57.20 650 28.30 35.80 43.40 51.60 61 700 30.20 38 46.10 54.80 64.70 750 32 40.30 48.80 58 68.40 800 33.80 42.50 51.50 61.20 72.20 850 34.30 43.10 52.20 65.60 75.90 900 34.80 45.30 54.80 68.80 79.70 950 36.50 47.50 57.40 72.10 83.40 1000 38.20 49.70 60 75.30 87.20 1100 41.60 54.10 65.30 81.90 94.80 1200	350	20.70	25	31	35.30	39
500 2720 32.60 40.30 45.80 50.40 550 2760 33.10 40.50 4710 53.50 600 28- 33.50 40.70 48.40 5720 650 28.30 35.80 43.40 51.60 61- 700 30.20 38- 46.10 54.80 64.70 750 32- 40.30 48.80 58- 68.40 800 33.80 42.50 51.50 61.20 72.20 850 34.30 43.10 52.20 65.60 75.90 900 34.80 45.30 54.80 68.80 79.70 950 36.50 47.50 57.40 72.10 83.40 1000 38.20 49.70 60- 75.30 87.20 1100 41.60 54.10 65.30 81.90 94.80 1200 45- 58.40 70.50 88.40 102.30 1300	400	22.90	27.50	34.10	38.80	42.80
550 2760 33.10 40.50 4710 53.50 600 28- 33.50 40.70 48.40 57.20 650 28.30 35.80 43.40 51.60 61- 700 30.20 38- 46.10 54.80 64.70 750 32- 40.30 48.80 58- 68.40 800 33.80 42.50 51.50 61.20 72.20 850 34.30 43.10 52.20 65.60 75.90 900 34.80 45.30 54.80 68.80 79.70 950 36.50 47.50 57.40 72.10 83.40 1000 38.20 49.70 60- 75.30 87.20 1100 41.60 54.10 65.30 81.90 94.80 1200 45- 58.40 70.50 88.40 102.30 1300 45.70 60.40 80- 98.40 113.80 1400 <t< th=""><th>450</th><th>25.10</th><th>30</th><th>37.20</th><th>42.30</th><th>46.60</th></t<>	450	25.10	30	37.20	42.30	46.60
600 28- 33.50 40.70 48.40 57.20 650 28.30 35.80 43.40 51.60 61- 700 30.20 38- 46.10 54.80 64.70 750 32- 40.30 48.80 58- 68.40 800 33.80 42.50 51.50 61.20 72.20 850 34.30 43.10 52.20 65.60 75.90 900 34.80 45.30 54.80 68.80 79.70 950 36.50 47.50 57.40 72.10 83.40 1000 38.20 49.70 60- 75.30 87.20 1100 41.60 54.10 65.30 81.90 94.80 1200 45- 58.40 70.50 88.40 102.30 1300 45.70 60.40 80- 98.40 113.80 1400 48.90 64.60 85.50 105.10 121.60 1500	500	27.20	32.60	40.30	45.80	50.40
650 28.30 35.80 43.40 51.60 61- 700 30.20 38- 46.10 54.80 64.70 750 32- 40.30 48.80 58- 68.40 800 33.80 42.50 51.50 61.20 72.20 850 34.30 43.10 52.20 65.60 75.90 900 34.80 45.30 54.80 68.80 79.70 950 36.50 47.50 57.40 72.10 83.40 1000 38.20 49.70 60- 75.30 87.20 1100 41.60 54.10 65.30 81.90 94.80 1200 45- 58.40 70.50 88.40 102.30 1300 45.70 60.40 80- 98.40 113.80 1400 48.90 64.60 85.50 105.10 121.60 1500 52.10 68.80 91- 111.90 129.40 1600	550	27.60	33.10	40.50	47.10	53.50
700 30.20 38- 46.10 54.80 64.70 750 32- 40.30 48.80 58- 68.40 800 33.80 42.50 51.50 61.20 72.20 850 34.30 43.10 52.20 65.60 75.90 900 34.80 45.30 54.80 68.80 79.70 950 36.50 47.50 57.40 72.10 83.40 1000 38.20 49.70 60- 75.30 87.20 1100 41.60 54.10 65.30 81.90 94.80 1200 45- 58.40 70.50 88.40 102.30 1300 45.70 60.40 80- 98.40 113.80 1400 48.90 64.60 85.50 105.10 121.60 1500 52.10 68.80 91- 111.90 129.40 1600 109.50 138.90 168.20 188.60 209-	600	28	33.50	40.70	48.40	57.20
750 32 40.30 48.80 58 68.40 800 33.80 42.50 51.50 61.20 72.20 850 34.30 43.10 52.20 65.60 75.90 900 34.80 45.30 54.80 68.80 79.70 950 36.50 47.50 57.40 72.10 83.40 1000 38.20 49.70 60 75.30 87.20 1100 41.60 54.10 65.30 81.90 94.80 1200 45 58.40 70.50 88.40 102.30 1300 45.70 60.40 80 98.40 113.80 1400 48.90 64.60 85.50 105.10 121.60 1500 52.10 68.80 91 111.90 129.40 1600 109.50 138.90 168.20 188.60 209	650	28.30	35.80	43.40	51.60	61
800 33.80 42.50 51.50 61.20 72.20 850 34.30 43.10 52.20 65.60 75.90 900 34.80 45.30 54.80 68.80 79.70 950 36.50 47.50 57.40 72.10 83.40 1000 38.20 49.70 60 75.30 87.20 1100 41.60 54.10 65.30 81.90 94.80 1200 45 58.40 70.50 88.40 102.30 1300 45.70 60.40 80 98.40 113.80 1400 48.90 64.60 85.50 105.10 121.60 1500 52.10 68.80 91 111.90 129.40 1600 109.50 138.90 168.20 188.60 209	700	30.20	38	46.10	54.80	64.70
850 34.30 43.10 52.20 65.60 75.90 900 34.80 45.30 54.80 68.80 79.70 950 36.50 47.50 57.40 72.10 83.40 1000 38.20 49.70 60 75.30 87.20 1100 41.60 54.10 65.30 81.90 94.80 1200 45 58.40 70.50 88.40 102.30 1300 45.70 60.40 80 98.40 113.80 1400 48.90 64.60 85.50 105.10 121.60 1500 52.10 68.80 91 111.90 129.40 1600 109.50 138.90 168.20 188.60 209	750	32	40.30	48.80	58	68.40
900 34.80 45.30 54.80 68.80 79.70 950 36.50 47.50 57.40 72.10 83.40 1000 38.20 49.70 60- 75.30 87.20 1100 41.60 54.10 65.30 81.90 94.80 1200 45- 58.40 70.50 88.40 102.30 1300 45.70 60.40 80- 98.40 113.80 1400 48.90 64.60 85.50 105.10 121.60 1500 52.10 68.80 91- 111.90 129.40 1600 109.50 138.90 168.20 188.60 209-	800	33.80	42.50	51.50	61.20	72.20
950 36.50 4750 5740 72.10 83.40 1000 38.20 49.70 60 75.30 87.20 1100 41.60 54.10 65.30 81.90 94.80 1200 45 58.40 70.50 88.40 102.30 1300 45.70 60.40 80 98.40 113.80 1400 48.90 64.60 85.50 105.10 121.60 1500 52.10 68.80 91 111.90 129.40 1600 109.50 138.90 168.20 188.60 209	850	34.30	43.10	52.20	65.60	75.90
1000 38.20 49.70 60 75.30 87.20 1100 41.60 54.10 65.30 81.90 94.80 1200 45 58.40 70.50 88.40 102.30 1300 45.70 60.40 80 98.40 113.80 1400 48.90 64.60 85.50 105.10 121.60 1500 52.10 68.80 91 111.90 129.40 1600 109.50 138.90 168.20 188.60 209	900	34.80	45.30	54.80	68.80	79.70
1100 41.60 54.10 65.30 81.90 94.80 1200 45 58.40 70.50 88.40 102.30 1300 45.70 60.40 80 98.40 113.80 1400 48.90 64.60 85.50 105.10 121.60 1500 52.10 68.80 91 111.90 129.40 1600 109.50 138.90 168.20 188.60 209	950	36.50	47.50	57.40	72.10	83.40
1200 45 58.40 70.50 88.40 102.30 1300 45.70 60.40 80 98.40 113.80 1400 48.90 64.60 85.50 105.10 121.60 1500 52.10 68.80 91 111.90 129.40 1600 109.50 138.90 168.20 188.60 209	1000	38.20	49.70	60	75.30	87.20
1300 45.70 60.40 80 98.40 113.80 1400 48.90 64.60 85.50 105.10 121.60 1500 52.10 68.80 91 111.90 129.40 1600 109.50 138.90 168.20 188.60 209	1100	41.60	54.10	65.30	81.90	94.80
1400 48.90 64.60 85.50 105.10 121.60 1500 52.10 68.80 91- 111.90 129.40 1600 109.50 138.90 168.20 188.60 209-	1200	45	58.40	70.50	88.40	102.30
1500 52.10 68.80 91- 111.90 129.40 1600 109.50 138.90 168.20 188.60 209-	1300	45.70	60.40	80	98.40	113.80
1600 109.50 138.90 168.20 188.60 209	1400	48.90	64.60	85.50	105.10	121.60
	1500	52.10	68.80	91	111.90	129.40
	1600	109.50	138.90	168.20	188.60	209
1700 116.20 147.30 178.30 199.90 221.50	1700	116.20	147.30	178.30	199.90	221.50
1800 122.80 155.60 188.50 211.20 234 <i>-</i>	1800	122.80	155.60	188.50	211.20	234
1900 132.30 168.40 204.40 229.70 255.10	1900	132.30	168.40	204.40	229.70	255.10
2000 139 176.70 214.50 241 267.60	2000	139	176.70	214.50	241	267.60
2100 145.60 185.20 224.70 252.50 280.20	2100	145.60	185.20	224.70	252.50	280.20
2200 152.30 193.50 234.80 263.80 292.70	2200	152.30	193.50	234.80	263.80	292.70
2300 158.90 201.90 244.90 275.10 305.20	2300	158.90	201.90	244.90	275.10	305.20
2400 165.50 210.30 255.10 286.40 317.70	2400	165.50	210.30	255.10	286.40	317.70
2500 172.20 218.70 265.20 297.70 330.20	2500	172.20	218.70	265.20	297.70	330.20

SE-A absorber splitters Thickness of splitters 150 mm

Discount group 3					
2 + 3	Length [mm]				
Height [mm]	500	750	1000	1250	1500
150	16.90	21.10	26.70	31.30	34.50
200	20.10	24.80	31.20	36.50	40.20
250	23.20	28.50	35.70	41.70	45.80
300	23.50	30.20	37.70	43.50	47.90
350	26.30	31.80	39.70	45.20	50
400	29.10	35.10	43.70	49.70	54.90
450	31.90	38.40	47.70	54.20	59.80
500	34.70	41.70	51.70	58.70	64.80
550	35.20	42.30	52	60.50	68.70
600	35.70	42.90	52.20	62.20	73.60
650	36.20	45.80	55.70	66.30	78.40
700	38.50	48.70	59.10	70.50	83.30
750	40.90	51.60	62.60	74.60	88.10
800	43.20	54.50	66.10	78.70	93
850	43.90	55.30	67	84.40	97.80
900	44.50	58.10	70.40	88.60	102.70
950	46.70	61	73.80	92.80	107.50
1000	48.90	63.80	77.10	97	112.40
1100	53.30	69.50	84	105.60	122.30
1200	57.70	75.10	90.70	114	132.10
1300	58.50	77.60	103.10	126.90	146.90
1400	62.60	83	110.20	135.60	157
1500	66.70	88.40	117.30	144.30	167
1600	122	155.30	188.50	212.80	237.10
1700	129.40	164.60	199.80	225.50	251.20
1800	136.80	173.90	211.10	238.20	265.30
1900	147.80	188.70	229.70	260	290.30
2000	155.20	198.10	241	272.70	304.40
2100	162.60	207.50	252.40	285.50	318.70
2200	169.90	216.80	263.70	298.20	332.80
2300	177.30	226.10	275	310.90	346.90
2400	184.70	235.50	286.30	323.60	361
2500	192	244.80	297.60	336.30	375.10

SE-A absorber splitters Thickness of splitters 170 mm

Discount group S

70 mm Discount group S					
2 + 3	Length [mm]				
Height [mm]	500	750	1000	1250	1500
150	18.30	22.90	28.90	34	37.50
200	21.70	27	33.90	39.60	43.60
250	25.10	31	38.80	45.30	49.80
300	25.50	32.80	41	47.30	52.10
350	28.60	34.60	43.10	49.20	54.40
400	31.60	38.20	47.50	54.10	59.80
450	34.70	41.70	51.90	59	65.10
500	37.70	45.30	56.20	63.90	70.50
550	38.30	46	56.50	65.80	74.90
600	38.90	46.70	56.80	67.70	80.10
650	39.40	49.80	60.60	72.20	85.40
700	41.90	53	64.40	76.70	90.70
750	44.50	56.20	68.20	81.20	96
800	47	59.30	72	85.70	101.30
850	47.70	60.20	73	91.90	106.60
900	48.40	63.30	76.70	96.50	111.90
950	50.80	66.30	80.30	101.10	117.20
1000	53.20	69.40	84	105.70	122.50
1100	58	75.60	91.50	115.10	133.40
1200	62.80	81.70	98.80	124.30	144
1300	63.70	84.50	112.30	138.30	160.20
1400	68.10	90.40	120.10	147.80	171.20
1500	72.60	96.30	127.80	157.30	182.10
1600	127	161.80	196.70	222.50	248.40
1700	134.70	171.60	208.40	235.80	263.10
1800	142.30	181.30	220.20	249	277.90
1900	154	196.90	239.80	272.10	304.40
2000	161.60	206.60	251.60	285.40	319.20
2100	169.40	216.40	263.50	298.80	334.10
2200	177	226.10	275.30	312	348.80
2300	184.70	235.80	287	325.30	363.60
2400	192.30	245.60	298.80	338.60	378.30
2500	200	255.30	310.50	351.80	393.10

SE-A absorber splitters Thickness of splitters 185 mm

103 11111	Discount group :					
2 + 3		Le	ngth [m	m]		
Height [mm]	500	750	1000	1250	1500	
150	18.40	24.30	29.80	34.90	39.70	
200	21.80	28.50	34.90	40.80	46.20	
250	25.20	32.80	40	46.60	52.80	
300	25.50	34.80	42.10	46.90	55.30	
350	28.50	36.70	44.20	52.10	57.70	
400	31.50	40.50	48.70	57.40	63.40	
450	34.60	44.20	53.20	62.60	69.10	
500	37.60	48	57.70	67.80	74.90	
550	38.50	48.80	59	69.90	79.40	
600	39.40	49.50	60.20	71.90	85.10	
650	40.30	52.90	64.30	76.70	90.70	
700	42.90	56.20	68.30	81.50	96.30	
750	45.50	59.60	72.40	86.20	102	
800	48.10	63	76.40	91	107.60	
850	48.90	63.90	77.50	97.60	113.20	
900	51.40	67.20	81.40	102.50	118.80	
950	53.90	70.40	85.30	107.30	124.50	
1000	56.40	73.60	89.20	112.20	130.10	
1100	61.50	80.30	97.20	122.20	141.70	
1200	66.60	86.80	104.90	132	152.90	
1300	67.50	89.70	119.20	146.90	170.10	
1400	72.30	96	127.50	157	181.80	
1500	77	102.20	135.70	167.10	193.50	
1600	130.80	166.80	202.80	229.80	256.80	
1700	138.70	176.80	214.90	243.50	272.10	
1800	146.50	186.80	227	257.10	287.30	
1900	158.60	203	247.50	281.20	315	
2000	166.50	213	259.60	294.90	330.20	
2100	174.50	223.10	271.80	308.80	345.70	
2200	182.30	233.10	283.90	322.40	360.90	
2300	190.20	243.10	296.10	336.10	376.10	
2400	198.10	253.10	308.20	349.80	391.40	
2500	206	263.10	320.30	363.40	406.60	

SE-A absorber splitters Thickness of splitters 200 mm

150	200 11111	Discount group 3						
[mm] 500 750 1000 1250 1500 150 18.80 24.50 30.50 35.20 41.90 200 22.30 28.80 35.70 41.10 48.80 250 25.90 33.20 41 47 55.80 300 27.50 35.10 43.10 47.90 55.90 350 29.10 36.90 45.20 53.20 62 400 32.30 40.70 49.80 58.60 68.20 450 35.40 44.50 54.40 63.90 74.40 500 38.50 48.30 59 69.30 80.60 550 39.40 49.90 59.40 72.30 84 600 40.20 51.40 63.70 77.40 90 550 39.40 49.90 68 82.60 96 700 43.70 58.40 72.30 87.80 101.90 750	2 + 3		Le	ngth [m	m]			
200 22.30 28.80 35.70 41.10 48.80 250 25.90 33.20 41- 47- 55.80 300 27.50 35.10 43.10 47.90 55.90 350 29.10 36.90 45.20 53.20 62- 400 32.30 40.70 49.80 58.60 68.20 450 35.40 44.50 54.40 63.90 74.40 500 38.50 48.30 59- 69.30 80.60 550 39.40 49.90 59.40 72.30 84- 600 40.20 51.40 63.70 77.40 90- 550 39.40 49.90 59.40 72.30 84- 600 40.20 51.40 63.70 77.40 90- 550 39.40 49.90 68- 82.60 96- 700 43.70 58.40 72.30 8780 101.90 750 46.30 </th <th>_</th> <th>500</th> <th>750</th> <th>1000</th> <th>1250</th> <th>1500</th>	_	500	750	1000	1250	1500		
250 25.90 33.20 41- 47- 55.80 300 2750 3510 4310 47.90 55.90 350 2910 36.90 45.20 53.20 62- 400 32.30 40.70 49.80 58.60 68.20 450 35.40 44.50 54.40 63.90 74.40 500 38.50 48.30 59- 69.30 80.60 550 39.40 49.90 59.40 72.30 84- 600 40.20 51.40 63.70 77.40 90- 650 41- 54.90 68- 82.60 96- 700 43.70 58.40 72.30 87.80 101.90 750 46.30 61.90 76.60 92.90 107.90 800 49- 65.40 80.80 98.10 113.80 850 49.70 66.30 82- 107- 119.80 950 54.80	150	18.80	24.50	30.50	35.20	41.90		
300 2750 3510 4310 4790 55.90 350 2910 36.90 45.20 53.20 62- 400 32.30 40.70 49.80 58.60 68.20 450 35.40 44.50 54.40 63.90 74.40 500 38.50 48.30 59- 69.30 80.60 550 39.40 49.90 59.40 72.30 84- 600 40.20 51.40 63.70 77.40 90- 650 41- 54.90 68- 82.60 96- 700 43.70 58.40 72.30 87.80 101.90 750 46.30 61.90 76.60 92.90 107.90 800 49- 65.40 80.80 98.10 113.80 850 49.70 66.30 82- 107- 119.80 950 54.80 73- 90.20 117.70 131.70 1000 57.40<	200	22.30	28.80	35.70	41.10	48.80		
350 2910 36.90 45.20 53.20 62- 400 32.30 40.70 49.80 58.60 68.20 450 35.40 44.50 54.40 63.90 74.40 500 38.50 48.30 59- 69.30 80.60 550 39.40 49.90 59.40 72.30 84- 600 40.20 51.40 63.70 7740 90- 650 41- 54.90 68- 82.60 96- 700 43.70 58.40 72.30 87.80 101.90 750 46.30 61.90 76.60 92.90 107.90 800 49- 65.40 80.80 98.10 113.80 850 49.70 66.30 82- 107- 119.80 950 54.80 73- 90.20 117.70 131.70 1000 57.40 76.40 94.30 123- 137.70 1100 62	250	25.90	33.20	41	47	55.80		
400 32.30 40.70 49.80 58.60 68.20 450 35.40 44.50 54.40 63.90 74.40 500 38.50 48.30 59 69.30 80.60 550 39.40 49.90 59.40 72.30 84 600 40.20 51.40 63.70 77.40 90 650 41 54.90 68 82.60 96 700 43.70 58.40 72.30 87.80 101.90 750 46.30 61.90 76.60 92.90 107.90 800 49 65.40 80.80 98.10 113.80 850 49.70 66.30 82 107 119.80 950 54.80 73 90.20 117.70 131.70 1000 57.40 76.40 94.30 123 137.70 1100 62.60 83.30 102.80 134 149.90 1200 </th <th>300</th> <th>27.50</th> <th>35.10</th> <th>43.10</th> <th>47.90</th> <th>55.90</th>	300	27.50	35.10	43.10	47.90	55.90		
450 35.40 44.50 54.40 63.90 74.40 500 38.50 48.30 59- 69.30 80.60 550 39.40 49.90 59.40 72.30 84- 600 40.20 51.40 63.70 7740 90- 650 41- 54.90 68- 82.60 96- 700 43.70 58.40 72.30 87.80 101.90 750 46.30 61.90 76.60 92.90 107.90 800 49- 65.40 80.80 98.10 113.80 850 49.70 66.30 82- 107- 119.80 900 52.20 69.70 86.10 112.40 125.80 950 54.80 73- 90.20 117.70 131.70 1100 57.40 76.40 94.30 123- 137.70 1100 62.60 83.30 102.80 134 149.90 1200	350	29.10	36.90	45.20	53.20	62		
500 38.50 48.30 59 69.30 80.60 550 39.40 49.90 59.40 72.30 84 600 40.20 51.40 63.70 77.40 90 650 41 54.90 68 82.60 96 700 43.70 58.40 72.30 8780 101.90 750 46.30 61.90 76.60 92.90 107.90 800 49 65.40 80.80 98.10 113.80 850 49.70 66.30 82 107 119.80 900 52.20 69.70 86.10 112.40 125.80 950 54.80 73 90.20 117.70 131.70 1100 57.40 76.40 94.30 123 137.70 1100 62.60 83.30 102.80 134 149.90 1200 67.70 90 111 144.70 161.90 140	400	32.30	40.70	49.80	58.60	68.20		
550 39.40 49.90 59.40 72.30 84- 600 40.20 51.40 63.70 77.40 90- 650 41- 54.90 68- 82.60 96- 700 43.70 58.40 72.30 87.80 101.90 750 46.30 61.90 76.60 92.90 107.90 800 49- 65.40 80.80 98.10 113.80 850 49.70 66.30 82- 107- 119.80 900 52.20 69.70 86.10 112.40 125.80 950 54.80 73- 90.20 117.70 131.70 1000 57.40 76.40 94.30 123- 137.70 1100 62.60 83.30 102.80 134- 149.90 1200 67.70 90- 111- 144.70 161.90 1300 71.40 96.80 123.90 155.40 176.90 1400	450	35.40	44.50	54.40	63.90	74.40		
600 40.20 51.40 63.70 77.40 90- 650 41- 54.90 68- 82.60 96- 700 43.70 58.40 72.30 8780 101.90 750 46.30 61.90 76.60 92.90 107.90 800 49- 65.40 80.80 98.10 113.80 850 49.70 66.30 82- 107- 119.80 900 52.20 69.70 86.10 112.40 125.80 950 54.80 73- 90.20 11770 131.70 1000 57.40 76.40 94.30 123- 137.70 1100 62.60 83.30 102.80 134- 149.90 1200 67.70 90- 111- 144.70 161.90 1400 76.40 103.50 132.40 166.10 189.10 1500 81.50 110.20 141- 176.80 201.20	500	38.50	48.30	59	69.30	80.60		
650 41- 54.90 68- 82.60 96- 700 43.70 58.40 72.30 87.80 101.90 750 46.30 61.90 76.60 92.90 107.90 800 49- 65.40 80.80 98.10 113.80 850 49.70 66.30 82- 107- 119.80 900 52.20 69.70 86.10 112.40 125.80 950 54.80 73- 90.20 117.70 131.70 1000 57.40 76.40 94.30 123- 137.70 1100 62.60 83.30 102.80 134- 149.90 1200 67.70 90- 111- 144.70 161.90 1400 76.40 103.50 132.40 166.10 189.10 1500 81.50 110.20 141- 176.80 201.20	550	39.40	49.90	59.40	72.30	84		
700 43.70 58.40 72.30 8780 101.90 750 46.30 61.90 76.60 92.90 107.90 800 49- 65.40 80.80 98.10 113.80 850 49.70 66.30 82- 107- 119.80 900 52.20 69.70 86.10 112.40 125.80 950 54.80 73- 90.20 117.70 131.70 1000 57.40 76.40 94.30 123- 13770 1100 62.60 83.30 102.80 134- 149.90 1200 67.70 90- 111- 144.70 161.90 1300 71.40 96.80 123.90 155.40 176.90 1400 76.40 103.50 132.40 166.10 189.10 1500 81.50 110.20 141- 176.80 201.20	600	40.20	51.40	63.70	77.40	90		
750 46.30 61.90 76.60 92.90 107.90 800 49- 65.40 80.80 98.10 113.80 850 49.70 66.30 82- 107- 119.80 900 52.20 69.70 86.10 112.40 125.80 950 54.80 73- 90.20 117.70 131.70 1000 57.40 76.40 94.30 123- 137.70 1100 62.60 83.30 102.80 134- 149.90 1200 67.70 90- 111- 144.70 161.90 1300 71.40 96.80 123.90 155.40 176.90 1400 76.40 103.50 132.40 166.10 189.10 1500 81.50 110.20 141- 176.80 201.20	650	41	54.90	68	82.60	96		
800 49- 65.40 80.80 98.10 113.80 850 49.70 66.30 82- 107- 119.80 900 52.20 69.70 86.10 112.40 125.80 950 54.80 73- 90.20 117.70 131.70 1000 57.40 76.40 94.30 123- 137.70 1100 62.60 83.30 102.80 134- 149.90 1200 67.70 90- 111- 144.70 161.90 1300 71.40 96.80 123.90 155.40 176.90 1400 76.40 103.50 132.40 166.10 189.10 1500 81.50 110.20 141- 176.80 201.20	700	43.70	58.40	72.30	87.80	101.90		
850 49.70 66.30 82 107- 119.80 900 52.20 69.70 86.10 112.40 125.80 950 54.80 73 90.20 117.70 131.70 1000 57.40 76.40 94.30 123 137.70 1100 62.60 83.30 102.80 134 149.90 1200 67.70 90 111 144.70 161.90 1300 71.40 96.80 123.90 155.40 176.90 1400 76.40 103.50 132.40 166.10 189.10 1500 81.50 110.20 141 176.80 201.20	750	46.30	61.90	76.60	92.90	107.90		
900 52.20 69.70 86.10 112.40 125.80 950 54.80 73- 90.20 117.70 131.70 1000 57.40 76.40 94.30 123- 137.70 1100 62.60 83.30 102.80 134- 149.90 1200 67.70 90- 111- 144.70 161.90 1300 71.40 96.80 123.90 155.40 176.90 1400 76.40 103.50 132.40 166.10 189.10 1500 81.50 110.20 141- 176.80 201.20	800	49	65.40	80.80	98.10	113.80		
950 54.80 73 90.20 11770 131.70 1000 57.40 76.40 94.30 123 13770 1100 62.60 83.30 102.80 134 149.90 1200 6770 90 111 144.70 161.90 1300 71.40 96.80 123.90 155.40 176.90 1400 76.40 103.50 132.40 166.10 189.10 1500 81.50 110.20 141 176.80 201.20	850	49.70	66.30	82	107	119.80		
1000 5740 76.40 94.30 123- 13770 1100 62.60 83.30 102.80 134- 149.90 1200 6770 90- 111- 144.70 161.90 1300 71.40 96.80 123.90 155.40 176.90 1400 76.40 103.50 132.40 166.10 189.10 1500 81.50 110.20 141- 176.80 201.20	900	52.20	69.70	86.10	112.40	125.80		
1100 62.60 83.30 102.80 134- 149.90 1200 67.70 90- 111- 144.70 161.90 1300 71.40 96.80 123.90 155.40 176.90 1400 76.40 103.50 132.40 166.10 189.10 1500 81.50 110.20 141- 176.80 201.20	950	54.80	73	90.20	117.70	131.70		
1200 67.70 90 111 144.70 161.90 1300 71.40 96.80 123.90 155.40 176.90 1400 76.40 103.50 132.40 166.10 189.10 1500 81.50 110.20 141 176.80 201.20	1000	57.40	76.40	94.30	123	137.70		
1300 71.40 96.80 123.90 155.40 176.90 1400 76.40 103.50 132.40 166.10 189.10 1500 81.50 110.20 141 176.80 201.20	1100	62.60	83.30	102.80	134	149.90		
1400 76.40 103.50 132.40 166.10 189.10 1500 81.50 110.20 141 176.80 201.20	1200	67.70	90	111	144.70	161.90		
1500 81.50 110.20 141 176.80 201.20	1300	71.40	96.80	123.90	155.40	176.90		
	1400	76.40	103.50	132.40	166.10	189.10		
1600 134 50 171 70 208 90 23710 265 30	1500	81.50	110.20	141	176.80	201.20		
15 1.50 17 1.70 200.50 257.10 205.50	1600	134.50	171.70	208.90	237.10	265.30		
1700 142.60 182- 221.30 251.20 281-	1700	142.60	182	221.30	251.20	281		
1800 150.70 192.30 233.80 265.30 296.70	1800	150.70	192.30	233.80	265.30	296.70		
1900 163.30 209.20 255.10 290.30 325.60	1900	163.30	209.20	255.10	290.30	325.60		
2000 171.40 219.50 267.50 304.40 341.30	2000	171.40	219.50	267.50	304.40	341.30		
2100 179.60 229.90 280.20 318.70 357.30	2100	179.60	229.90	280.20	318.70	357.30		
2200 187.70 240.10 292.60 332.80 373	2200	187.70	240.10	292.60	332.80	373		
2300 195.70 250.40 305.10 346.90 388.70	2300	195.70	250.40	305.10	346.90	388.70		
2400 203.80 260.70 317.60 361 404.40	2400	203.80	260.70	317.60	361	404.40		
2500 211.90 271 330 375.10 420.10	2500	211.90	271	330	375.10	420.10		

SE-A absorber splitters Thickness of splitters

2 + 3		Le	ngth [m	m]	
Height [mm]	500	750	1000	1250	1500
150	20.10	26.20	32.70	37.80	45
200	23.90	31	38.40	44.20	52.60
250	27.70	35.70	44.10	50.70	60.30
300	28	37.80	46.50	51.80	60.50
350	31.30	39.80	48.90	57.60	67.20
400	34.70	43.90	53.90	63.50	74
450	38.10	48.10	58.90	69.40	80.80
500	39.70	52.30	64	75.20	87.60
550	41.20	54	64.50	78.60	91.40
600	42.70	55.70	69.20	84.20	98
650	44.20	59.50	73.90	89.90	104.60
700	47.10	63.30	78.60	95.60	111.10
750	50	67.10	83.20	101.20	117.70
800	52.90	70.90	87.90	106.90	124.20
850	53.70	72	89.20	116.60	130.80
900	56.50	75.60	93.70	122.50	137.30
950	59.30	79.30	98.20	128.40	143.90
1000	62	83	102.70	134.20	150.40
1100	67.70	90.50	112	146.30	163.90
1200	73.30	97.90	121	158	177
1300	77.30	105.20	135	169.80	193.50
1400	82.70	112.50	144.40	181.50	206.90
1500	88.20	119.90	153.80	193.20	220.20
1600	140.30	179.60	219	249.30	279.70
1700	148.70	190.40	232	264.20	296.30
1800	157.20	201.10	245.10	279	312.90
1900	170.30	218.80	267.40	305.40	343.30
2000	178.70	229.60	280.50	320.20	359.90
2100	187.20	240.50	293.70	335.20	376.70
2200	195.70	251.20	306.80	350	393.30
2300	204.10	262	319.90	364.80	409.80
2400	212.60	272.70	332.90	379.70	426.40
2500	221	283.50	346	394.50	443

SE-A absorber splitters Thickness of splitters 230 mm

Discount group S

230 mm	Discount group S					
2 + 3		Le	ngth [m	m]		
Height [mm]	500	750	1000	1250	1500	
150	21.10	27.50	34.30	39.70	47.30	
200	25.10	32.50	40.40	46.50	55.30	
250	29.10	37.50	46.40	53.30	63.30	
300	30.30	39.30	47.70	56.30	65.80	
350	34	43.90	53.20	62.70	73.20	
400	37.70	48.50	58.60	69.10	80.60	
450	41.30	53.10	64.10	75.50	88	
500	45	57.80	69.60	81.90	95.40	
550	45.90	58.50	72.90	87.20	103.20	
600	46.70	62.90	78.20	93.50	110.60	
650	50	67.20	83.50	99.70	118	
700	53.30	71.50	88.80	106	125.40	
750	56.60	75.80	94.10	112.30	132.80	
800	59.80	80.10	99.40	118.60	140.20	
850	59.80	81.50	102.90	124.90	145.10	
900	62.90	85.70	108.10	131.20	152.40	
950	66	89.90	113.30	137.50	159.70	
1000	69.10	94	118.50	143.80	167	
1100	75.40	102.50	129.20	156.70	181.90	
1200	81.60	110.90	139.60	169.30	196.50	
1300	84.50	114.90	147.40	178.70	211	
1400	90.50	123	157.60	191.10	225.60	
1500	96.40	131	167.90	203.40	240.10	
1600	144.20	184.70	225.30	257	288.60	
1700	152.80	195.80	238.80	272.20	305.70	
1800	161.50	206.90	252.20	287.50	322.70	
1900	175.10	225.20	275.40	314.90	354.40	
2000	183.70	236.30	288.80	330.10	371.40	
2100	192.50	247.50	302.40	345.60	388.80	
2200	201.20	258.50	315.80	360.90	405.90	
2300	209.80	269.60	329.30	376.10	423	
2400	218.50	280.60	342.70	391.40	440	
2500	227.20	291.70	356.10	406.60	457.10	

SE-A absorber splitters Thickness of splitters 300 mm

2 + 3		Le	ngth [m	m]	
Height [mm]	500	750	1000	1250	1500
150	25.30	33	41.10	47.50	56.70
200	30.10	38.90	48.30	55.60	66.20
250	34.90	44.80	55.50	63.70	75.70
300	35.10	47	58.80	68.40	79.90
350	39.40	52.50	65.50	76.10	88.80
400	43.60	57.90	72.30	83.80	97.70
450	47.90	63.40	79	91.50	106.60
500	52.10	68.90	85.70	99.20	115.50
550	53.50	71.10	89.80	107.40	124.90
600	54.90	76.30	96.30	115.10	133.80
650	58.70	81.50	102.80	122.80	142.80
700	62.60	86.70	109.30	130.50	151.70
750	66.40	91.90	115.90	138.20	160.60
800	70.20	97.20	122.40	145.90	169.50
850	71.40	98.90	126.70	153.60	178.40
900	75.10	103.90	133.10	161.30	187.30
950	78.80	109	139.50	169	196.20
1000	82.50	114	145.90	176.80	205.10
1100	90.10	124.40	159.10	192.60	223.50
1200	97.50	134.50	171.90	208	241.30
1300	102.90	144.50	184.70	223.40	259.10
1400	110.20	154.60	197.50	238.90	276.90
1500	117.40	164.70	210.30	254.30	294.70
1600	159.50	204.50	261.90	313.90	369.60
1700	169.10	216.60	277.40	332.50	391.30
1800	178.60	228.80	292.90	351	413.10
1900	194.10	249.90	320.90	385.80	455.20
2000	203.70	262.10	336.50	404.40	477
2100	213.40	274.40	352.20	423.20	499.20
2200	222.90	286.60	367.80	441.80	520.90
2300	232.50	298.80	383.30	460.30	542.70
2400	242	311	398.90	478.90	564.40
2500	251.60	323.10	414.40	497.40	586.20

Perforated metal covering for SE-A absorber splitters

Discount group S

4	, , , , , , , , , , , , , , , , , , ,		Length [mm]		2.5count group 2
Height [mm]	500	750	1000	1250	1500
150	9.20	11.60	13.80	15	16
200	12.40	15.40	18.40	19.80	21.20
250	15.40	19.20	23	24.80	26.40
300	18.40	23	27.60	29.80	31.80
350	21.60	26.80	32.20	34.60	37
400	24.60	30.60	36.80	39.60	42.40
450	27.60	34.60	41.40	44.60	47.60
500	30.60	38.40	46	49.40	52.80
550	31.60	39.40	47.20	50.80	54.40
600	34.40	43	51.60	55.40	59.20
650	37.20	46.60	55.80	60	64.20
700	40	50	60	64.60	69
750	43	53.60	64.40	69.20	74
800	45.80	57.20	68.60	73.80	79
850	45.20	56.40	67.80	72.80	77.80
900	47.80	59.80	71.80	77:-	82.40
950	50.40	63	75.60	81.40	87
1000	53.20	66.40	79.60	85.60	91.60
1100	58.40	73	87.60	94.20	100.80
1200	63.80	79.60	95.60	102.80	110
1300	69	86.20	103.60	111.40	119
1400	74.40	93	111.40	119.80	128.20
1500	79.60	99.60	119.40	128.40	137.40
1600	42.50	53.10	63.70	68.50	73.30
1700	45.10	56.40	67.70	72.80	77.80
1800	47.80	59.70	71.70	77	82.40
1900	50.40	63	75.60	81.30	87
2000	53.10	66.30	79.60	85.60	91.60
2100	55.70	69.70	83.60	89.90	96.10
2200	58.40	73	87.60	94.10	100.70
2300	61	76.30	91.50	98.40	105.30
2400	63.70	79.60	95.50	102.70	109.90
2500	66.30	82.90	99.50	107:-	114.40

Accessories SE-A absorber splitters

Ordering data	Description	Price
ZUB 0572	Height connector set	13
ZUB 0573	Length connector	6

4.1.2 SE-B broadband splitters



- Broadband sound attenuator splitters for attenuation in the lower and medium frequency range
- Thickness of splitters: 100 mm ... 230 mm
- Nominal height: 100 mm ... 2500 mm (in 1-mm increments)
- Lengths: 500 mm, 750 mm, 1000 mm, 1250 mm and 1500 mm
- Greater heights and lengths can be produced by assembling several splitters together

Configure your product here



	1		2		3		4
SE-B-		-		-		-	

Thickness of splitters [mm]

100 200 150 215 170 230 185 3 Length [mm] 500 1500

> 750 1000 1250

Nominal height 100 mm ... 2500 mm 4 Perforated metal covering
Standard:

Without perforated sheet metal covering Option:

L with perforated metal covering, alternating between the sides

The price applied for intermediate sizes is the next highest standard size.

SE-B broadband splitters Thickness of splitters 100 mm

100 mm	Discount group 3							
2 + 3		Le	ngth [m	m]				
Height [mm]	500	750	1000	1250	1500			
150	14.80	16.40	19.80	22.80	25.30			
200	18.10	20	24.20	27.80	30.80			
250	21.40	23.70	28.50	32.70	36.30			
300	22	25.90	31.70	36.30	41.80			
350	24.90	29.30	35.90	41.10	47.30			
400	27.80	32.80	40.10	45.90	52.80			
450	30.70	36.20	44.30	50.70	58.30			
500	33.70	39.60	48.50	55.50	63.90			
550	34.60	40.60	50.10	58	66.70			
600	35.40	41.50	51.60	62.60	72			
650	36.20	44.60	55.40	67.20	77.30			
700	37	47.60	59.20	71.80	82.60			
750	39.30	50.70	63	76.40	87.80			
800	41.70	53.80	66.80	81	93.10			
850	42.80	54.50	67.70	82	96.30			
900	43.80	57.40	71.30	86.40	101.50			
950	46.10	60.40	75	90.80	106.70			
1000	48.30	63.30	78.60	95.20	111.90			
1100	52.80	69.30	86	104.20	122.40			
1200	57.30	75.10	93.30	113	132.70			
1300	59.30	79.30	100.60	119.20	140			
1400	63.60	85	107.80	127.80	150.10			
1500	67.90	90.80	115.10	136.40	160.20			
1600	72.30	96.60	122.50	145.20	170.50			
1700	76.60	102.40	129.80	153.80	180.60			
1800	80.90	108.10	137.10	162.40	190.70			
1900	93.60	123	152.90	181.50	213.20			
2000	98.10	129	160.40	190.30	223.60			
2100	102.80	135.10	167.90	199.20	234.10			
2200	107.40	141.10	175.30	208	244.40			
2300	111.90	147.10	182.80	216.80	254.80			
2400	116.50	153.10	190.20	225.70	265.20			
2500	121.10	159.10	197.70	234.50	275.50			

SE-B broadband splitters Thickness of splitters 150 mm

2 + 3		Le	ngth [m	m]	
Height	500	750	1000	1250	1500
[mm]					
150	18.10	22.20	27.30	31.10	36.60
200	22.10	26.90	33.20	37.70	44.30
250	26	31.70	39	44.20	52
300	26.60	33	39.70	46.40	52.50
350	30.20	37.30	44.90	52.40	59.20
400	33.70	41.70	50.10	58.40	66
450	37.20	46	55.20	64.40	72.80
500	40.70	50.30	60.40	70.40	79.50
550	41.60	51.10	62.40	72.30	81.40
600	42.50	51.90	64.40	77.90	87.80
650	43.30	55.70	69.10	83.60	94.20
700	46.30	59.50	73.80	89.30	100.50
750	49.30	63.30	78.50	94.90	106.90
800	52.20	67.10	83.20	100.60	113.30
850	53.20	72.30	84.40	102	119.60
900	56	76.10	88.90	107.40	126
950	58.90	80	93.40	112.90	132.40
1000	61.70	83.90	97.90	118.30	138.70
1100	67.50	91.70	107	129.30	151.70
1200	73.30	99.50	116	140.20	164.40
1300	79	107.20	125	151.10	177.10
1400	84.70	114.90	134	162	189.90
1500	90.40	122.70	143	172.80	202.60
1600	96.20	130.50	152.20	183.90	215.60
1700	101.90	138.30	161.20	194.70	228.30
1800	107.60	146	170.20	205.60	241
1900	117.40	159.70	186.60	225.60	264.70
2000	123.10	167.50	195.60	236.50	277.50
2100	128.90	175.30	204.70	247.60	290.40
2200	134.60	183.10	213.70	258.40	303.20
2300	140.30	190.80	222.70	269.30	315.90
2400	146	198.50	231.70	280.20	328.60
2500	151.80	206.30	240.70	291	341.40

SE-B broadband splitters Thickness of splitters 170 mm

170 mm				Discount	group S
2 + 3		Le	ngth [m	m]	
Height [mm]	500	750	1000	1250	1500
150	19.40	23.80	29.40	33.40	39.30
200	23.70	28.90	35.50	40.30	47.40
250	27.90	33.90	41.70	47.30	55.60
300	28.50	35.30	42.50	49.60	56.10
350	32.30	39.90	48	56	63.20
400	36	44.50	53.50	62.30	70.40
450	39.80	49.10	58.90	68.70	77.60
500	43.50	53.70	64.40	75.10	84.80
550	44.50	54.60	66.60	77.10	86.80
600	45.40	55.40	68.70	83.10	93.50
650	46.30	59.50	73.70	89.10	100.30
700	49.50	63.50	78.70	95.10	107
750	52.70	67.50	83.60	101.10	113.80
800	55.80	71.60	88.60	107.10	120.50
850	56.80	77.10	89.90	108.60	127.30
900	59.90	81.20	94.70	114.30	134
950	62.90	85.30	99.40	120.10	140.80
1000	66	89.40	104.20	125.90	147.60
1100	72.10	97.80	113.90	137.60	161.30
1200	78.20	106	123.50	149.20	174.80
1300	84.30	114.20	133.10	160.70	188.30
1400	90.40	122.50	142.60	172.20	201.80
1500	96.50	130.70	152.20	183.80	215.30
1600	102.70	139.10	161.90	195.50	229.10
1700	108.80	147.30	171.50	207.10	242.60
1800	114.90	155.50	181.10	218.60	256.10
1900	125.40	170.40	198.70	240.20	281.70
2000	131.50	178.60	208.30	251.70	295.20
2100	137.70	187	218	263.50	308.90
2200	143.80	195.20	227.60	275	322.40
2300	149.90	203.40	237.20	286.60	335.90
2400	156	211.60	246.70	298.10	349.50
2500	162.10	219.90	256.30	309.60	363

SE-B broadband splitters Thickness of splitters 185 mm

2 + 3		Le	ngth [m	m]	
Height [mm]	500	750	1000	1250	1500
150	20.40	25	30.90	35.10	41.30
200	24.80	30.30	37.30	42.30	49.80
250	29.30	35.60	43.80	49.60	58.30
300	29.90	37.10	44.50	52	58.80
350	33.90	41.90	50.30	58.60	66.20
400	37.80	46.70	56	65.30	73.70
450	41.70	51.50	61.70	71.90	81.20
500	45.70	56.20	67.40	78.60	88.70
550	46.70	57.10	69.70	80.60	90.80
600	47.70	58	71.90	86.90	97.80
650	48.60	62.30	77.10	93.20	104.90
700	51.90	66.50	82.30	99.40	111.90
750	55.20	70.70	87.50	105.70	119
800	58.50	74.90	92.70	112	126
850	59.50	80.70	94	113.50	133.10
900	62.70	85	99	119.50	140.10
950	65.90	89.30	104	125.60	147.10
1000	69.10	93.60	109	131.60	154.20
1100	75.60	102.30	119.20	143.80	168.50
1200	82	110.90	129.10	155.90	182.60
1300	88.30	119.50	139.10	167.90	196.70
1400	94.70	128.10	149.10	180	210.80
1500	101.10	136.70	159.10	192	224.90
1600	107.60	145.50	169.30	204.30	239.20
1700	114	154.10	179.30	216.30	253.30
1800	120.40	162.70	189.30	228.30	267.40
1900	131.50	178.30	207.90	251.10	294.40
2000	137.90	186.90	217.90	263.20	308.50
2100	144.30	195.70	228	275.40	322.80
2200	150.70	204.30	238	287.50	336.90
2300	157.10	212.90	248	299.50	351
2400	163.50	221.50	258	311.60	365.10
2500	169.90	230.10	268	323.60	379.20

SE-B broadband splitters Thickness of splitters 200 mm

Length [mm] Length [mm] Height [mm] 500 750 1000 1250 1500 150 20.80 26.20 32.40 36.80 43.30 200 25.30 31.70 39.10 44.40 52.20 250 29.80 37.30 45.80 51.90 61.40 300 30.90 38.80 46.60 54.40 61.40 350 34.90 43.80 52.60 61.30 69.20 400 38.90 48.80 58.50 68.20 77 450 43 53.80 64.50 75.20 84.80 500 47 58.80 70.50 82.10 92.60 550 47.20 59.80 72.80 84.20 94.80 600 47.30 60.70 75.10 90.70 102.10 650 50.80 65.10 80.50 97.30 109.50 700 54.30 69.50 86 <	
[mm] 500 750 1000 1250 1500 150 20.80 26.20 32.40 36.80 43.30 200 25.30 31.70 3910 44.40 52.20 250 29.80 37.30 45.80 51.90 61- 300 30.90 38.80 46.60 54.40 61.40 350 34.90 43.80 52.60 61.30 69.20 400 38.90 48.80 58.50 68.20 77- 450 43 53.80 64.50 75.20 84.80 500 47- 58.80 70.50 82.10 92.60 550 47.20 59.80 72.80 84.20 94.80 600 47.30 60.70 75.10 90.70 102.10 650 50.80 65.10 80.50 97.30 109.50 700 54.30 69.50 86 103.80 116.80 750 <t< th=""><th>2 + 3</th></t<>	2 + 3
200 25.30 31.70 39.10 44.40 52.20 250 29.80 37.30 45.80 51.90 61- 300 30.90 38.80 46.60 54.40 61.40 350 34.90 43.80 52.60 61.30 69.20 400 38.90 48.80 58.50 68.20 77- 450 43 53.80 64.50 75.20 84.80 500 47- 58.80 70.50 82.10 92.60 550 47.20 59.80 72.80 84.20 94.80 600 47.30 60.70 75.10 90.70 102.10 650 50.80 65.10 80.50 97.30 109.50 700 54.30 69.50 86 103.80 116.80 750 57.70 73.90 91.40 110.30 124.10 800 61.20 78.30 96.80 116.90 131.50 850	
250 29.80 37.30 45.80 51.90 61- 300 30.90 38.80 46.60 54.40 61.40 350 34.90 43.80 52.60 61.30 69.20 400 38.90 48.80 58.50 68.20 77- 450 43- 53.80 64.50 75.20 84.80 500 47- 58.80 70.50 82.10 92.60 550 47.20 59.80 72.80 84.20 94.80 600 47.30 60.70 75.10 90.70 102.10 650 50.80 65.10 80.50 97.30 109.50 700 54.30 69.50 86- 103.80 116.80 750 57.70 73.90 91.40 110.30 124.10 800 61.20 78.30 96.80 116.90 131.50 850 62.30 84.30 98.10 118.50 138.80 900	150
300 30.90 38.80 46.60 54.40 61.40 350 34.90 43.80 52.60 61.30 69.20 400 38.90 48.80 58.50 68.20 77- 450 43 53.80 64.50 75.20 84.80 500 47 58.80 70.50 82.10 92.60 550 47.20 59.80 72.80 84.20 94.80 600 47.30 60.70 75.10 90.70 102.10 650 50.80 65.10 80.50 97.30 109.50 700 54.30 69.50 86 103.80 116.80 750 57.70 73.90 91.40 110.30 124.10 800 61.20 78.30 96.80 116.90 131.50 850 62.30 84.30 98.10 118.50 138.80 900 65.60 88.80 103.30 124.70 146.10	200
350 34.90 43.80 52.60 61.30 69.20 400 38.90 48.80 58.50 68.20 77- 450 43- 53.80 64.50 75.20 84.80 500 47- 58.80 70.50 82.10 92.60 550 4720 59.80 72.80 84.20 94.80 600 4730 60.70 75.10 90.70 102.10 650 50.80 65.10 80.50 97.30 109.50 700 54.30 69.50 86- 103.80 116.80 750 57.70 73.90 91.40 110.30 124.10 800 61.20 78.30 96.80 116.90 131.50 850 62.30 84.30 98.10 118.50 138.80 950 68.90 93.30 108.50 131 153.50 1000 72.30 97.70 113.80 137.30 160.80 11	250
400 38.90 48.80 58.50 68.20 77- 450 43- 53.80 64.50 75.20 84.80 500 47- 58.80 70.50 82.10 92.60 550 4720 59.80 72.80 84.20 94.80 600 4730 60.70 75.10 90.70 102.10 650 50.80 65.10 80.50 97.30 109.50 700 54.30 69.50 86- 103.80 116.80 750 57.70 73.90 91.40 110.30 124.10 800 61.20 78.30 96.80 116.90 131.50 850 62.30 84.30 98.10 118.50 138.80 900 65.60 88.80 103.30 124.70 146.10 950 68.90 93.30 108.50 131 153.50 1000 72.30 97.70 113.80 137.30 160.80 <th< th=""><th>300</th></th<>	300
450 43 53.80 64.50 75.20 84.80 500 47 58.80 70.50 82.10 92.60 550 47.20 59.80 72.80 84.20 94.80 600 47.30 60.70 75.10 90.70 102.10 650 50.80 65.10 80.50 97.30 109.50 700 54.30 69.50 86 103.80 116.80 750 57.70 73.90 91.40 110.30 124.10 800 61.20 78.30 96.80 116.90 131.50 850 62.30 84.30 98.10 118.50 138.80 900 65.60 88.80 103.30 124.70 146.10 950 68.90 93.30 108.50 131 153.50 1000 72.30 97.70 113.80 137.30 160.80 1100 79 106.90 124.40 150.10 175.80	350
500 47- 58.80 70.50 82.10 92.60 550 47.20 59.80 72.80 84.20 94.80 600 47.30 60.70 75.10 90.70 102.10 650 50.80 65.10 80.50 97.30 109.50 700 54.30 69.50 86- 103.80 116.80 750 57.70 73.90 91.40 110.30 124.10 800 61.20 78.30 96.80 116.90 131.50 850 62.30 84.30 98.10 118.50 138.80 900 65.60 88.80 103.30 124.70 146.10 950 68.90 93.30 108.50 131- 153.50 1000 72.30 97.70 113.80 137.30 160.80 1100 79- 106.90 124.40 150.10 175.80 1200 85.70 115.80 134.80 162.60 190.40 <th>400</th>	400
550 47.20 59.80 72.80 84.20 94.80 600 47.30 60.70 75.10 90.70 102.10 650 50.80 65.10 80.50 97.30 109.50 700 54.30 69.50 86 103.80 116.80 750 57.70 73.90 91.40 110.30 124.10 800 61.20 78.30 96.80 116.90 131.50 850 62.30 84.30 98.10 118.50 138.80 900 65.60 88.80 103.30 124.70 146.10 950 68.90 93.30 108.50 131 153.50 1000 72.30 97.70 113.80 137.30 160.80 1100 79 106.90 124.40 150.10 175.80 1200 85.70 115.80 134.80 162.60 190.40	450
600 4730 60.70 75.10 90.70 102.10 650 50.80 65.10 80.50 97.30 109.50 700 54.30 69.50 86 103.80 116.80 750 57.70 73.90 91.40 110.30 124.10 800 61.20 78.30 96.80 116.90 131.50 850 62.30 84.30 98.10 118.50 138.80 900 65.60 88.80 103.30 124.70 146.10 950 68.90 93.30 108.50 131 153.50 1000 72.30 97.70 113.80 137.30 160.80 1100 79 106.90 124.40 150.10 175.80 1200 85.70 115.80 134.80 162.60 190.40	500
650 50.80 65.10 80.50 97.30 109.50 700 54.30 69.50 86- 103.80 116.80 750 57.70 73.90 91.40 110.30 124.10 800 61.20 78.30 96.80 116.90 131.50 850 62.30 84.30 98.10 118.50 138.80 900 65.60 88.80 103.30 124.70 146.10 950 68.90 93.30 108.50 131- 153.50 1000 72.30 97.70 113.80 137.30 160.80 1100 79- 106.90 124.40 150.10 175.80 1200 85.70 115.80 134.80 162.60 190.40	550
700 54.30 69.50 86- 103.80 116.80 750 57.70 73.90 91.40 110.30 124.10 800 61.20 78.30 96.80 116.90 131.50 850 62.30 84.30 98.10 118.50 138.80 900 65.60 88.80 103.30 124.70 146.10 950 68.90 93.30 108.50 131 153.50 1000 72.30 97.70 113.80 137.30 160.80 1100 79- 106.90 124.40 150.10 175.80 1200 85.70 115.80 134.80 162.60 190.40	600
750 57.70 73.90 91.40 110.30 124.10 800 61.20 78.30 96.80 116.90 131.50 850 62.30 84.30 98.10 118.50 138.80 900 65.60 88.80 103.30 124.70 146.10 950 68.90 93.30 108.50 131 153.50 1000 72.30 97.70 113.80 137.30 160.80 1100 79 106.90 124.40 150.10 175.80 1200 85.70 115.80 134.80 162.60 190.40	650
800 61.20 78.30 96.80 116.90 131.50 850 62.30 84.30 98.10 118.50 138.80 900 65.60 88.80 103.30 124.70 146.10 950 68.90 93.30 108.50 131 153.50 1000 72.30 97.70 113.80 137.30 160.80 1100 79 106.90 124.40 150.10 175.80 1200 85.70 115.80 134.80 162.60 190.40	700
850 62.30 84.30 98.10 118.50 138.80 900 65.60 88.80 103.30 124.70 146.10 950 68.90 93.30 108.50 131 153.50 1000 72.30 97.70 113.80 137.30 160.80 1100 79 106.90 124.40 150.10 175.80 1200 85.70 115.80 134.80 162.60 190.40	750
900 65.60 88.80 103.30 124.70 146.10 950 68.90 93.30 108.50 131- 153.50 1000 72.30 97.70 113.80 137.30 160.80 1100 79- 106.90 124.40 150.10 175.80 1200 85.70 115.80 134.80 162.60 190.40	800
950 68.90 93.30 108.50 131- 153.50 1000 72.30 97.70 113.80 137.30 160.80 1100 79- 106.90 124.40 150.10 175.80 1200 85.70 115.80 134.80 162.60 190.40	850
1000 72.30 97.70 113.80 137.30 160.80 1100 79- 106.90 124.40 150.10 175.80 1200 85.70 115.80 134.80 162.60 190.40	900
1100 79- 106.90 124.40 150.10 175.80 1200 85.70 115.80 134.80 162.60 190.40	950
1200 85.70 115.80 134.80 162.60 190.40	1000
	1100
1300 9270 12780 17520 17510 20510	1200
1300 124.00 143.20 173.10 203.10	1300
1400 99 133.80 155.60 187.70 219.80	1400
1500 105.70 142.80 166 200.20 234.40	1500
1600 112.50 151.90 176.60 213 249.40	1600
1700 119.10 160.90 187- 225.50 264.10	1700
1800 125.80 169.80 197.40 238.10 278.70	1800
1900 137.50 186.30 217- 262.10 307.10	1900
2000 144.20 195.30 227.40 274.60 321.80	2000
2100 151 204.40 238 287.40 336.70	2100
2200 157.60 213.40 248.50 299.90 351.40	2200
2300 164.30 222.40 258.90 312.50 366.10	2300
2400 171 231.30 269.30 325 380.70	2400
2500 177.60 240.30 279.70 337.50 395.40	2500

SE-B broadband splitters Thickness of splitters

2 + 3	Length [mm]										
Height [mm]	500	750	1000	1250	1500						
150	22.10	27.90	34.40	39.10	46.10						
200	26.90	33.80	41.60	47.30	55.60						
250	31.70	39.70	48.80	55.40	65.10						
300	32.80	41.30	49.70	58	65.60						
350	37.10	46.70	56.10	65.40	73.90						
400	41.40	52	62.40	72.80	82.20						
450	45.80	57.30	68.80	80.20	90.60						
500	50.10	62.70	75.20	87.60	98.90						
550	50.30	63.70	77.70	89.90	101.30						
600	50.40	64.70	80.20	96.90	109.10						
650	54.10	69.40	86	103.90	117						
700	57.80	74.10	91.80	110.90	124.80						
750	61.50	78.80	97.60	117.90	132.70						
800	65.20	83.50	103.40	124.90	140.50						
850	66.90	86.50	104.80	126.60	145.30						
900	68.60	91.10	110.40	133.30	153						
950	72	95.70	115.90	140	160.60						
1000	75.50	100.30	121.50	146.70	168.30						
1100	82.60	109.70	132.80	160.40	184						
1200	89.60	118.90	144	173.80	199.40						
1300	94.70	128.10	155.10	183.30	210.20						
1400	101.50	137.30	166.20	196.40	225.20						
1500	108.40	146.60	177.40	209.60	240.30						
1600	115.30	155.90	188.70	223	255.60						
1700	122.10	165.20	199.80	236.10	270.70						
1800	129	174.40	211	249.20	285.70						
1900	143.80	191.20	231.80	280.10	328.30						
2000	150.80	200.50	243	293.50	344						
2100	157.90	209.80	254.30	307.20	360.10						
2200	164.80	219.10	265.40	320.60	375.80						
2300	171.80	228.30	276.60	334	391.50						
2400	178.80	237.50	287.70	347.40	407.10						
2500	185.80	246.70	298.80	360.80	422.80						

SE-B broadband splitters Thickness of splitters 230 mm

230 mm				Discount	group 5							
2 + 3	Length [mm]											
Height [mm]	500	750	1000	1250	1500							
150	23.10	29.10	36	42.30	49.80							
200	28.10	35.30	43.40	51	60							
250	33.10	41.40	50.90	59.70	70.20							
300	35.30	44.60	54.60	66.20	76.40							
350	40	50.30	61.60	74.60	86.10							
400	44.60	56.10	68.60	83	95.70							
450	49.20	61.80	75.60	91.40	105.40							
500	53.90	67.60	82.60	99.90	115.10							
550	54.70	70.20	85.60	101.10	119.10							
600	55.50	72.70	88.50	109	123							
650	59.60	78	94.90	116.80	131.90							
700	63.60	83.30	101.30	124.70	140.70							
750	67.70	88.50	107.70	132.50	149.60							
800	71.70	93.80	114.10	140.30	158.40							
850	72.30	95.30	115.90	142.40	160.80							
900	72.90	96.80	122.10	144.50	169.30							
950	76.60	101.70	128.20	151.70	177.80							
1000	80.30	106.50	134.40	159	186.30							
1100	87.80	116.50	146.90	173.80	203.60							
1200	95.20	126.30	159.20	188.30	220.60							
1300	98.70	133.40	168.10	202.90	237.60							
1400	105.80	143	180.20	217.40	254.60							
1500	112.90	152.60	192.20	231.90	271.60							
1600	120.20	162.40	204.50	246.70	288.90							
1700	127.30	171.90	216.60	261.20	305.90							
1800	134.40	181.50	228.60	275.80	322.90							
1900	155.80	215.10	266.50	315.80	370.10							
2000	163.30	225.50	279.30	330.90	387.80							
2100	171	236	292.30	346.30	405.80							
2200	178.60	246.40	305.10	361.40	423.40							
2300	186.10	256.70	317.90	376.50	441.10							
2400	193.70	267.10	330.60	391.60	458.80							
2500	201.20	277.50	343.40	406.70	476.50							

Perforated metal covering for SE-B broadband splitters

Discount group S

4	letat covering for 32-2 bir		Length [mm]		Discount group 3
Height					
[mm]	500	750	1000	1250	1500
150	4.60	5.80	6.90	7.50	8
200	6.20	7.70	9.20	9.90	10.60
250	7.70	9.60	11.50	12.40	13.20
300	9.20	11.50	13.80	14.90	15.90
350	10.80	13.40	16.10	17.30	18.50
400	12.30	15.30	18.40	19.80	21.20
450	13.80	17.30	20.70	22.30	23.80
500	15.30	19.20	23	24.70	26.40
550	15.80	19.70	23.60	25.40	27.20
600	17.20	21.50	25.80	27.70	29.60
650	18.60	23.30	27.90	30	32.10
700	20	25	30	32.30	34.50
750	21.50	26.80	32.20	34.60	37
800	22.90	28.60	34.30	36.90	39.50
850	22.60	28.20	33.90	36.40	38.90
900	23.90	29.90	35.90	38.50	41.20
950	25.20	31.50	37.80	40.70	43.50
1000	26.60	33.20	39.80	42.80	45.80
1100	29.20	36.50	43.80	47.10	50.40
1200	31.90	39.80	47.80	51.40	55
1300	34.50	43.10	51.80	55.70	59.50
1400	37.20	46.50	55.70	59.90	64.10
1500	39.80	49.80	59.70	64.20	68.70
1600	42.50	53.10	63.70	68.50	73.30
1700	45.10	56.40	67.70	72.80	77.80
1800	47.80	59.70	71.70	77:-	82.40
1900	50.40	63	75.60	81.30	87
2000	53.10	66.30	79.60	85.60	91.60
2100	55.70	69.70	83.60	89.90	96.10
2200	58.40	73	87.60	94.10	100.70
2300	61	76.30	91.50	98.40	105.30
2400	63.70	79.60	95.50	102.70	109.90
2500	66.30	82.90	99.50	107	114.40

Accessories SE-B broadband splitters

Ordering data	Description	Price
ZUB 0572	Height connector set	13
ZUB 0573	Length connector	6

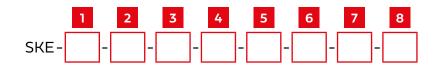
4.1.3 SKE sound attenuator



- Designed as absorber or broadband sound attenuator
- With built-in SE-A or SE-B splitters
- Widths B: 150 mm ... 4800 mm (in 1-mm increments)
- Heights H: 150 mm ... 3600 mm (in 1-mm increments)
- Lengths L: 500 mm, 750 mm, 1000 mm, 1250 mm and 1500 mm
- Greater widths, heights and lengths can be achieved by combining several sound attenuators.

Configure your product





Design

Α Absorber sound attenuators

В Broadband sound attenuators Frame profile

Standard: V10 frame profile

Option:

- 2 Frame profile S20, 20 mm in height
- 4 Frame profile S40, 40 mm in height

Width

150 mm ... 4800 mm

Higher leak tightness class

Standard:

No higher leak tightness class

Option:

2C Higher leak tightness class

Height

150 mm ... 3600 mm

Higher pressure level

Standard:

No higher pressure level

Option:

3A Higher pressure level

Length [mm]

500

*7*50

1000

1250

1500

Division

Standard:

Without division

Option:

В Divided in width

н Divided in height

The price for the SKE sound attenuator is composed as follows:

- Price for the SKE sound attenuator casing ▶ page 159.
- Number of splitters x Price for SE-A absorber splitters > page 146. or Number of splitters x Price for SE-B broadband splitters page 152.
- Intermediate sizes are priced at the next higher or next wider standard size.

SKE sound attenuator casing (construction length 500 mm)

2 -	- 3	.9 (20.131.					Width	B [mm]					t g. cop s
Length L [mm]	Height H [mm]	200	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400
	150	56	69.30	82.60	95.90	109.10	122.40	135.70	149	162.20	175.50	188.80	202.10
	200	59.40	72.60	85.90	99.20	112.50	125.70	139	152.30	165.60	178.80	192.10	205.40
	250	62.70	76	89.20	102.50	115.80	129.10	142.30	155.60	168.90	182.20	195.40	208.70
	300	66	79.30	92.50	105.80	119.10	132.40	145.60	158.90	172.20	185.50	198.70	212
	350	67.60	80.60	93.50	106.50	119.40	134	147.10	160.20	173.40	186.50	199.60	212.70
	400	70.90	83.80	96.80	109.70	122.70	135.60	148.60	161.50	174.50	187.40	200.40	213.30
	450	74.10	87.10	100	113	125.90	138.90	151.80	164.80	177.70	190.70	203.60	216.60
	500	77.30	90.30	103.20	116.20	129.10	142.10	155	168	181	193.90	206.90	219.80
	550	80.60	93.50	106.50	119.40	132.40	145.30	158.30	171.20	184.20	197.10	210.10	223
	600	83.80	96.80	109.70	122.70	135.60	148.60	161.50	174.50	187.40	200.40	213.30	226.30
	650	84.80	97.50	111	123.80	136.50	149.80	162.60	175.40	188.20	201	213.80	227.10
	700	85.80	98.10	112.30	124.80	137.30	151	163.70	176.30	188.90	201.60	214.20	227.90
500	750	88.90	101.20	113.50	125.80	138.10	152.20	164.80	177.20	189.70	202.20	214.60	228.70
300	800	91.90	104.20	116.50	128.80	141.10	153.40	165.80	178.10	190.40	202.70	215	229.50
	850	95	107.30	119.60	131.90	144.20	156.50	168.80	181.10	193.40	205.70	218	230.30
	900	98.10	110.40	122.70	135	147.30	159.60	171.90	184.20	196.50	208.80	221.10	233.40
	950	101.20	113.50	125.80	138.10	150.40	162.70	175	187.30	199.60	211.90	224.20	236.50
	1000	104.20	116.50	128.80	141.10	153.40	165.80	178.10	190.40	202.70	215	227.30	239.60
	1100	107.50	119.50	131.40	143.40	155.40	167.40	179.40	191.30	203.30	215.30	230.30	242.50
	1200	113.50	125.50	137.40	149.40	161.40	173.40	185.40	197.30	209.30	221.30	233.30	245.30
	1300	119.50	131.40	143.40	155.40	167.40	179.40	191.30	203.30	215.30	227.30	239.30	251.20
	1400	125.50	137.40	149.40	161.40	173.40	185.40	197.30	209.30	221.30	233.30	245.30	257.20
	1500	131.40	143.40	155.40	167.40	179.40	191.30	203.30	215.30	227.30	239.30	251.20	263.20
	1600	137.40	149.40	161.40	173.40	185.40	197.30	209.30	221.30	233.30	245.30	257.20	269.20
	1700	143.40	155.40	167.40	179.40	191.30	203.30	215.30	227.30	239.30	251.20	263.20	275.20
	1800	149.40	161.40	173.40	185.40	197.30	209.30	221.30	233.30	245.30	257.20	269.20	281.20

SKE sound attenuator casing (construction length 750 mm)

2 -	+ 3	Width B [mm]											
Length L [mm]	Height H [mm]	200	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400
	150	57.60	73.60	89.70	105.70	121.80	137.90	153.90	170	186.10	202.10	218.20	234.30
	200	61.60	77.60	93.70	109.80	125.80	141.90	158	174	190.10	206.20	222.20	238.30
	250	65.60	81.70	97.70	113.80	129.80	145.90	162	178	194.10	210.20	226.20	242.30
	300	69.60	85.70	101.70	117.80	133.90	149.90	166	182.10	198.10	214.20	230.30	246.30
	350	72.60	88.40	104.30	120.10	136	151.80	167.60	183.50	199.30	215.20	231	246.90
	400	76.60	92.40	108.20	124.10	139.90	155.80	171.60	187.40	203.30	219.10	235	250.80
	450	80.50	96.40	112.20	128	143.90	159.70	175.60	191.40	207.30	223.10	238.90	254.80
	500	84.50	100.30	116.20	132	147.80	163.70	179.50	195.40	211.20	227.10	242.90	258.70
	550	88.40	104.30	120.10	136	151.80	167.60	183.50	199.30	215.20	231	246.90	262.70
	600	92.40	108.20	124.10	139.90	155.80	171.60	187.40	203.30	219.10	235	250.80	266.70
	650	94.30	109.80	125.30	140.80	156.30	173	188.60	204.30	219.90	235.50	252	267.70
	700	96.10	111.30	126.40	141.60	156.80	174.40	189.80	205.20	220.60	236	253.10	268.70
750	750	99.90	115	130.20	145.40	160.60	175.70	190.90	206.10	221.30	236.40	254.30	269.70
750	800	103.70	118.80	134	149.20	164.40	179.50	194.70	209.90	225	240.20	255.40	270.60
	850	107.50	122.60	137.80	153	168.20	183.30	198.50	213.70	228.80	244	259.20	274.40
	900	111.30	126.40	141.60	156.80	171.90	187.10	202.30	217.50	232.60	247.80	263	278.20
	950	115	130.20	145.40	160.60	175.70	190.90	206.10	221.30	236.40	251.60	266.80	281.90
	1000	118.80	134	149.20	164.40	179.50	194.70	209.90	225	240.20	255.40	270.60	285.70
	1100	126.40	141.60	156.80	171.90	187.10	202.30	217.50	232.60	247.80	263	278.20	293.30
	1200	134	149.20	164.40	179.50	194.70	209.90	225	240.20	255.40	270.60	285.70	300.90
	1300	141.60	156.80	171.90	187.10	202.30	217.50	232.60	247.80	263	278.20	293.30	308.50
	1400	149.20	164.40	179.50	194.70	209.90	225	240.20	255.40	270.60	285.70	300.90	316.10
	1500	156.80	171.90	187.10	202.30	217.50	232.60	247.80	263	278.20	293.30	308.50	323.70
	1600	164.40	179.50	194.70	209.90	225	240.20	255.40	270.60	285.70	300.90	316.10	331.30
	1700	171.90	187.10	202.30	217.50	232.60	247.80	263	278.20	293.30	308.50	323.70	338.80
	1800	179.50	194.70	209.90	225	240.20	255.40	270.60	285.70	300.90	316.10	331.30	346.40

SKE sound attenuator casing (construction length 1000 mm)

2 -	- 3						Width	B [mm]					
Length L [mm]	Height H [mm]	200	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400
	150	59.90	78.40	96.90	115.40	133.90	152.40	170.90	189.40	207.90	226.40	244.90	263.40
	200	64.50	83	101.50	120	138.50	157:-	175.50	194	212.50	231	249.50	268
	250	69.20	87.60	106.10	124.60	143.10	161.60	180.10	198.60	217.10	235.60	254.10	272.60
	300	73.80	92.30	110.80	129.30	147.80	166.30	184.80	203.30	221.70	240.20	258.70	277.20
	350	76	94	111.90	129.80	150.10	168.30	186.50	204.70	222.90	241.10	259.30	277.50
	400	80.50	98.40	116.40	134.30	152.30	170.20	188.10	206.10	224	241.90	259.90	277.80
	450	85	102.90	120.90	138.80	156.70	174.70	192.60	210.50	228.50	246.40	264.40	282.30
	500	89.50	107.40	125.40	143.30	161.20	179.20	197.10	215	233	250.90	268.80	286.80
	550	94	111.90	129.80	147.80	165.70	183.60	201.60	219.50	237.50	255.40	273.30	291.30
	600	98.40	116.40	134.30	152.30	170.20	188.10	206.10	224	241.90	259.90	277.80	295.70
	650	99.70	117.10	136.60	154.30	171.90	189.50	207.20	224.90	242.50	261.60	279.30	297:-
	700	104.10	121.40	138.80	156.20	173.60	190.90	208.30	225.70	243.10	263.20	280.80	298.30
1000	750	108.40	125.80	143.20	160.50	177.90	195.30	212.70	230	247.40	264.80	282.20	299.50
1000	800	112.70	130.10	147.50	164.90	182.20	199.60	217:-	234.40	251.80	269.10	286.50	303.90
	850	117.10	134.50	151.80	169.20	186.60	204	221.30	238.70	256.10	273.50	290.80	308.20
	900	121.40	138.80	156.20	173.60	190.90	208.30	225.70	243.10	260.40	277.80	295.20	312.60
	950	125.80	143.20	160.50	177.90	195.30	212.70	230	247.40	264.80	282.20	299.50	316.90
	1000	130.10	147.50	164.90	182.20	199.60	217:-	234.40	251.80	269.10	286.50	303.90	321.30
	1100	146.20	163	179.80	196.60	213.40	230.20	247.10	263.90	280.70	297.50	314.30	331.10
	1200	154.60	171.40	188.20	205	221.80	238.60	255.50	272.30	289.10	305.90	322.70	339.50
	1300	163	179.80	196.60	213.40	230.20	247.10	263.90	280.70	297.50	314.30	331.10	347.90
	1400	171.40	188.20	205	221.80	238.60	255.50	272.30	289.10	305.90	322.70	339.50	356.40
	1500	179.80	196.60	213.40	230.20	247.10	263.90	280.70	297.50	314.30	331.10	347.90	364.80
	1600	188.20	205	221.80	238.60	255.50	272.30	289.10	305.90	322.70	339.50	356.40	373.20
	1700	196.60	213.40	230.20	247.10	263.90	280.70	297.50	314.30	331.10	347.90	364.80	381.60
	1800	205	221.80	238.60	255.50	272.30	289.10	305.90	322.70	339.50	356.40	373.20	390

SKE sound attenuator casing (construction length 1250 mm)

2 -	- 3		Width B [mm]										
Length L [mm]	Height H [mm]	200	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400
	150	63.40	84.50	105.60	126.70	147.80	168.90	190.10	211.20	232.30	253.40	274.50	295.60
	200	68.60	89.80	110.90	132	153.10	174.20	195.30	216.50	237.60	258.70	279.80	300.90
	250	73.90	95	116.20	137.30	158.40	179.50	200.60	221.70	242.90	264	285.10	306.20
	300	79.20	100.30	121.40	142.50	163.70	184.80	205.90	227:-	248.10	269.20	290.40	311.50
	350	81.80	102.20	122.60	143.10	166.20	186.90	207.70	228.50	249.20	270	290.80	313.30
	400	86.90	107.30	127.70	148.20	168.60	189	209.50	229.90	250.30	270.80	291.20	315.10
	450	92	112.40	132.80	153.30	173.70	194.10	214.60	235	255.50	275.90	296.30	316.80
	500	97.10	117.50	138	158.40	178.80	199.30	219.70	240.10	260.60	281	301.40	321.90
	550	102.20	122.60	143.10	163.50	183.90	204.40	224.80	245.20	265.70	286.10	306.50	327:-
	600	107.30	127.70	148.20	168.60	189	209.50	229.90	250.30	270.80	291.20	311.70	332.10
	650	112.40	132.80	153.30	173.70	194.10	214.60	235	255.50	275.90	296.30	316.80	337.20
	700	117.50	138	158.40	178.80	199.30	219.70	240.10	260.60	281	301.40	321.90	342.30
1250	750	122.60	143.10	163.50	183.90	204.40	224.80	245.20	265.70	286.10	306.50	327:-	347.40
1230	800	127.70	148.20	168.60	189	209.50	229.90	250.30	270.80	291.20	311.70	332.10	352.50
	850	132.80	153.30	173.70	194.10	214.60	235	255.50	275.90	296.30	316.80	337.20	357.60
	900	138	158.40	178.80	199.30	219.70	240.10	260.60	281	301.40	321.90	342.30	362.70
	950	143.10	163.50	183.90	204.40	224.80	245.20	265.70	286.10	306.50	327-	347.40	367.90
	1000	148.20	168.60	189	209.50	229.90	250.30	270.80	291.20	311.70	332.10	352.50	373
	1100	173.50	193.90	214.40	234.80	255.20	275.70	296.10	316.50	337	357.40	377.80	398.30
	1200	183.70	204.10	224.60	245	265.40	285.90	306.30	326.80	347.20	367.60	388.10	408.50
	1300	193.90	214.40	234.80	255.20	275.70	296.10	316.50	337	357.40	377.80	398.30	418.70
	1400	204.10	224.60	245	265.40	285.90	306.30	326.80	347.20	367.60	388.10	408.50	428.90
	1500	214.40	234.80	255.20	275.70	296.10	316.50	337	357.40	377.80	398.30	418.70	439.10
	1600	224.60	245	265.40	285.90	306.30	326.80	347.20	367.60	388.10	408.50	428.90	449.40
	1700	234.80	255.20	275.70	296.10	316.50	337	357.40	377.80	398.30	418.70	439.10	459.60
	1800	245	265.40	285.90	306.30	326.80	347.20	367.60	388.10	408.50	428.90	449.40	469.80

SKE sound attenuator casing (construction length 1500 mm)

Discount group S

2 -	- 3						Width	B [mm]					
Length L [mm]	Height H [mm]	200	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400
	150	63.60	86.10	108.50	131	153.40	175.90	198.30	220.80	243.30	265.70	288.20	310.60
	200	69.20	91.70	114.10	136.60	159.10	181.50	204	226.40	248.90	271.30	293.80	316.20
	250	74.90	97.30	119.80	142.20	164.70	187.10	209.60	232	254.50	276.90	299.40	321.80
	300	80.50	102.90	125.40	147.80	170.30	192.70	215.20	237.60	260.10	282.50	305	327.40
	350	83	104.70	126.30	150.60	172.70	194.70	216.80	238.80	260.90	282.90	306.80	329
	400	88.40	110.10	131.70	153.40	175	196.70	218.30	240	261.60	283.30	308.60	330.50
	450	93.80	115.50	137.10	158.80	180.40	202.10	223.70	245.40	267-	288.70	310.30	332
	500	99.20	120.90	142.50	164.20	185.90	207.50	229.20	250.80	272.50	294.10	315.80	337.40
	550	104.70	126.30	148	169.60	191.30	212.90	234.60	256.20	277.90	299.50	321.20	342.80
	600	110.10	131.70	153.40	175	196.70	218.30	240	261.60	283.30	304.90	326.60	348.20
	650	115.50	137.10	158.80	180.40	202.10	223.70	245.40	267:-	288.70	310.30	332	353.60
	700	120.90	142.50	164.20	185.90	207.50	229.20	250.80	272.50	294.10	315.80	337.40	359.10
1500	750	126.30	148	169.60	191.30	212.90	234.60	256.20	277.90	299.50	321.20	342.80	364.50
1300	800	131.70	153.40	175	196.70	218.30	240	261.60	283.30	304.90	326.60	348.20	369.90
	850	137.10	158.80	180.40	202.10	223.70	245.40	267:-	288.70	310.30	332	353.60	375.30
	900	142.50	164.20	185.90	207.50	229.20	250.80	272.50	294.10	315.80	337.40	359.10	380.70
	950	148	169.60	191.30	212.90	234.60	256.20	277.90	299.50	321.20	342.80	364.50	386.10
	1000	153.40	175	196.70	218.30	240	261.60	283.30	304.90	326.60	348.20	369.90	391.50
	1100	187.40	209.90	232.30	254.80	277.20	299.70	322.10	344.60	367	389.50	411.90	434.40
	1200	198.60	221.10	243.60	266	288.50	310.90	333.40	355.80	378.30	400.70	423.20	445.60
	1300	209.90	232.30	254.80	277.20	299.70	322.10	344.60	367	389.50	411.90	434.40	456.90
	1400	221.10	243.60	266	288.50	310.90	333.40	355.80	378.30	400.70	423.20	445.60	468.10
	1500	232.30	254.80	277.20	299.70	322.10	344.60	367	389.50	411.90	434.40	456.90	479.30
	1600	243.60	266	288.50	310.90	333.40	355.80	378.30	400.70	423.20	445.60	468.10	490.50
	1700	254.80	277.20	299.70	322.10	344.60	367	389.50	411.90	434.40	456.90	479.30	501.80
	1800	266	288.50	310.90	333.40	355.80	378.30	400.70	423.20	445.60	468.10	490.50	513

Discount group S

5 Frame profile		
Ordering data	Description	Surcharge
2	Frame profile S20, 20 mm in height	+15 %
4	Frame profile S40, 40 mm in height	+30 %

Discount group S

6 Higher leak tight	tness class	
Ordering data	Description	Surcharge
2C	Higher leak tightness class	+80 %

Discount group S

7 Higher pressure		
Ordering data	Description	Surcharge
3 A	Higher pressure level	+150 %

8 Division		
Ordering data	Description	Surcharge
В	Divided in width, assembled side by side	+30 %
Н	Divided in height, assembled on top of each other	+30 %

Noise protection

4.1.4 SKE-V Sound attenuator for volume flow and pressure controllers

With built-in SE-B broadband splitters

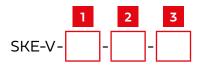
Thickness of splitters: 100 mm

200, 300, 400, 500, 600, 700, 800, 1000 mm Widths B: 100, 200, 250, 300, 400, 500, 600, 1000 mm Heights H:

1500 mm Length L:







Width B [mm]

200 600 300 700

400 800

500

1000

Perforated metal covering

Standard: without perforated metal covering

With perforated metal covering

Height H [mm]

150 400

200 500

250 600

300 1000

SKE-V sound attenuator

Discount group S

1 + 2	Number of splitters								
	1	1	2	2	3	3	4	5	
Height H [mm]		Sound attenuator width [mm]							
[]	200	300	400	500	600	700	800	1000	
150	93.40	105.40	-	-	-	-	-	-	
200	105	117:-	159.80	171.90	214.70	226.70	269.60	-	
250	-	128.50	176.90	188.90	237.20	-	-	-	
300	-	140.10	193.90	205.90	259.70	271.70	325.60	-	
400	-	-	213.10	225.10	282.60	294.60	352	-	
500	-	-	-	237.70	295.50	-	-	435	
600	-	-	-	-	-	-	-	487.50	
1000	-	-	-	-	-	-	-	693.60	

Perforated metal covering for SKE-V sound attenuators

3	Number of splitters								
	1	1	2	2	3	3	4	5	
Height H [mm]		Sound attenuator width [mm]							
[]	200	300	400	500	600	700	800	1000	
150	6.90	6.90	-	-	-	-	-	-	
200	9.20	9.20	18.40	18.40	27.60	27.60	36.80	-	
250	-	11.50	23	23	34.50	-	-	-	
300	-	13.80	27.60	27.60	41.40	41.40	55.20	-	
400	-	-	36.80	36.80	55.20	55.20	73.60	-	
500	-	-	-	46	69	-	-	115	
600	-	-	-	-	-	-	-	129	
1000	-	-	-	-	-	-	-	199	

Noise protection

4.1.5 SRC duct silencer



- · With lip seals
- Size: DN80 .. DN400
- · Lengths: 600 mm and 900 mm
- Packing thickness: 50 mm

Configure your product





Nominal size

80
100
125
160
200
250
315
400

SRC duct silencer

1+2	Length [mm]				
Nominal size	600 900				
80	72	-			
100	65	87			
125	71	97			
160	82	114			
200	107:-	136			
250	111	166			
315	132	173			
400	-	353			

5 Building control system

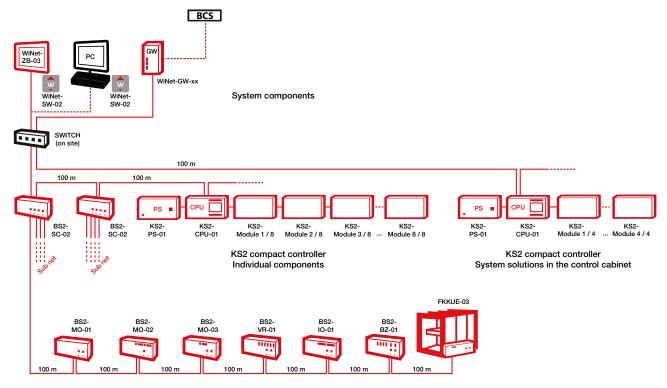
5.1 Communication system Wildeboer-Net



- For control, monitoring and analysis of connected modules
- · Automatic commissioning and address assignment
- With clear operating interface
- Functions, such as: Logged function test, release group and calendar control, fan shutdown, sequential circuits, etc.

Configure your product





BS2 bus controller

5.1.1 Wildeboer-Net system components

		Discount group G
Ordering data	Description	Price
WiNet-SW-02	Wildeboer-Net Software (Delivered on USB stick)	58
WiNet-ZB-03	Central operating unit with pre-installed Wildeboer-Net software WiNet-SW-02	5220
WiNet-GW-01	Gateway for BACnet/Modbus + OPC Server DA 2.0 with 200 data points	1508
WiNet-GW-02	Gateway for BACnet/Modbus + OPC Server DA 2.0 with 1100 data points	2552
WiNet-GW-03	Gateway for BACnet/Modbus + OPC Server DA 2.0 + LON with 200 data points	2088
WiNet-GW-04	Gateway for BACnet/Modbus + OPC Server DA 2.0 + LON with 1100 data points	3132
WiNet-GW-05	Gateway for BACnet/Modbus + OPC Server DA 2.0 + KNX with 200 data points	1740
WiNet-GW-06	Gateway for BACnet/Modbus + OPC Server DA 2.0 + KNX with 1100 data points	2784
WiNet-AP-01	Commissioning support for Wildeboer-Net	on request

5.1.2 BS2 bus system

		Discount group G
Ordering data	Description	Price
BS2-SC-02	Subnet controller	1392
BS2-VR-01	Volume flow and pressure controller module	812
BS2-MO-01	Motor module, connection type: 2 x AMP connector	580
BS2-MO-02	Motor module, connection type: 2 x plug-in screw terminals	580
BS2-MO-03	Motor module, connection type: 1 x AMP connector and 1 x plug-in screw terminal	580
BS2-IO-01	IO module	696
BS2-BZ-01	BMZ module	928

5.1.3 KS2 compact controller

		Discount group G
Ordering data	Description	Price
KS2-CP-01	Main control unit	1044
KS2-PS-01	Power unit	220
KS2-MO-04	Motor module	696
KS2-MR-01	Motor and smoke detector module	696
KS2-DI-01	Digital input module	418
KS2-MI-01	Multi-IO module	638
KS2-LA-01	Line termination	70
KS2-CO-01	Top hat rail connector	122

5.1.4 System solutions in the control cabinet

	Disc	count group G
Ordering data	Description	Price
WiNet control cabinet ZB-03	Control cabinet, pre-fabricated and ready for connection with central operating unit WiNet-ZB-03 and pre-installed Wildeboer-Net software WiNet-SW-02	5819
KS2 control cabinet 06/230	Control cabinet for connection of up to 6 x fire dampers, multileaf dampers or smoke protection dampers with 230 V AC spring return actuators and integrated limit switches	3119
KS2 control cabinet 06/24	Control cabinet for connection of up to 6 x fire dampers, multileaf damper or smoke protection dampers with 24 V AC/DC spring return actuators and integrated limit switches	3192
KS2 control cabinet 12/230	Control cabinet for connection of up to 12 x fire dampers, multileaf dampers or smoke protection dampers with 230 V AC spring return actuators and integrated limit switches	4589
KS2 control cabinet 12/24	Control cabinet for connection of up to 12 x fire dampers, multileaf damper or smoke protection dampers with 24 V AC/DC spring return actuators and integrated limit switches	4642
KS2 control cabinet 18/230	Control cabinet for connection of up to 18 x fire dampers, multileaf dampers or smoke protection dampers with 230 V AC spring return actuators and integrated limit switches	5419
KS2 control cabinet 18/24	Control cabinet for connection of up to 18 x fire dampers, multileaf damper or smoke protection dampers with 24 V AC/DC spring return actuators and integrated limit switches	5532
KS2 control cabinet 24/230	Control cabinet for connection of up to 24 x fire dampers, multileaf dampers or smoke protection dampers with 230 V AC spring return actuators and integrated limit switches	6253
KS2 control cabinet 24/24	Control cabinet for connection of up to 24 x fire dampers, multileaf damper or smoke protection dampers with 24 V AC/DC spring return actuators and integrated limit switches	6366

Accessories for Wildeboer-Net communication system

	Dis	count group B
Ordering data	Description	Price
ZUB 0412	AB-01 connection box for spring return actuators 24 V AC/DC	86
ZUB 0413	AB-02 connection box for spring return actuators with 230 VAC	86-

Always there for you

Locations & contact

