











Size 1		Size 2	Size 3	Size 4
				
ASS-P	ASS-T	ASM	ASL	ASX
				
103 dB	108 dB	113 dB	120 dB	127 dB
8 tones	32 tones	32 tones	63 tones	63 tones

Features

- Comprehensive range of standard to high output alarm sounders in cubic design
- 3 tones externally switchable (ASS-T, ASM, ASL, ASX)
- For applications in the industry, process control, fire alarm, marine, etc.
- Versatile installation and mounting options
- Complete offering of sound-light combinations
- Tone table includes international and standardized signal tones for fire and gas alarm and other applications
- Country specific or custom tone configurations and alarm frequencies available on request
- Automatic synchronization in multi sounder installations
- Fit for plc applications (leakage, inrush current)

Accessories / Installation Options:

- Lateral cable entry** on both sides with **cable gland** (accessory type AKV)

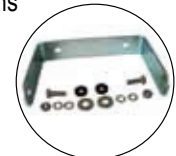


- Grommet from back side** (included as standard)



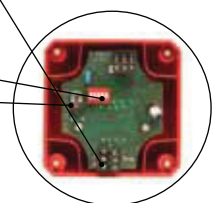
- Metal bracket kit**

for mounting of alarm sounders or beacons in specific direction, on mounting platforms, devices, etc. (accessory type AB1-AB4)



- Electrical connection via cage clamp**

- Tone selection via DIP switch**
- Volume control by potentiometer** (ASS-P, ASS-T, ASM, ASL)



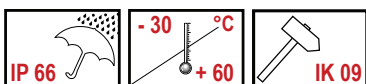
- Flat gasket**

for correct IP66 installation on smooth surfaces of the housing (accessory type AG1-AG4)























- mounting kit AMK**

for mounting/combination of 2 or more same size sounders or beacons

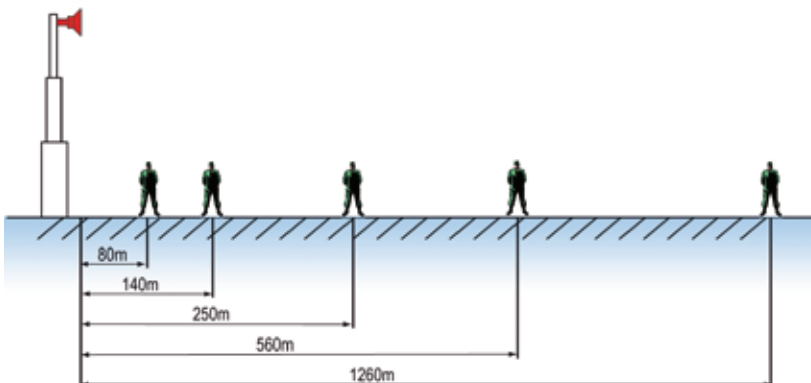


Overview Multi Tone Alarm Sounders „A“ / Beacons „Q“

Size	Multi Tone Alarm Sounders „A“	Multi Tone Alarm Sounders „A“ - Beacon „Q“	Multi Tone Alarm Sounder „A“ with Light Indicator	Beacons „Q“ with Buzzer Indicator	Beacons „Q“
1	ASS-P max. 103 dB  ASS-T max. 108 dB	ASS-P + QDS LED Steady/Flashing ASS-P + QFS ~5 J Xenon Strobe  ASS-T + QDS LED Steady/Flashing ASS-T + QFS ~5 J Xenon Strobe	ADS-P LED Steady/Flashing  ADS-T LED Steady/Flashing	QSS LED Steady/Flashing  QTS ~5 J Xenon Strobe	QDS LED Steady/Flashing  QFS ~5 J Xenon Strobe
2	ASM max. 113 dB 	ASM + QDM LED Steady/Flashing  ASM + QFM ~10 J Xenon Strobe	ADM LED Steady/Flashing  ACM LED Strobe	QSM LED Steady/Flashing  QTM ~10 J Xenon Strobe	QDM LED Steady/Flashing  QFM ~10 J Xenon Strobe
3	ASL max. 120 dB 	ASL + QDL LED Steady/Flashing  ASL + QBL LED Multi Strobe	ADL LED Steady/Flashing  ACL LED Strobe	QSL LED Steady/Flashing  QCL LED Multi Strobe	QDL LED Steady/Flashing  QBL LED Multi Strobe
4	ASX max. 127 dB 	ASX + QDX LED Steady/Flashing  ASX + QBX LED Multi Strobe	ADX LED Steady/Flashing  ACX LED Strobe	QSX LED Steady/Flashing  QCX LED Multi Strobe	QDX LED Steady/Flashing  QBX LED Multi Strobe



Signal Recognition

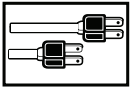


Sounder Type	Max. sound pressure level dB (A) in 1 m	Effective range of signal recognition (min. 65 dB) in m	Approx. area of signal recognition (min. 65 dB) in m ²
ASS-P	103	80	20.000
ASS-T	108	140	62.000
ASM	113	250	200.000
ASL	120	560	1.000.000
ASX	127	1.260	5.000.000

The sound pressure decreases depending on the distance between sounder and hearer (see also table „reduction of sound pressure over distance“ in the AUER catalogue).

The illustration shows the maximum distance at which a minimum sound pressure of 65 dB is achieved.

Assumptions here are ideal environmental conditions (wind, rain, humidity, fog, etc.) as well as type and frequency of the tone used. The directive efficiency of the sounder increases with an increasing tone frequency.



Technical data

Type	ASS-P Size 1	ASS-T Size 1	ASM Size 2	ASL Size 3	ASX Size 4
Housing	polycarbonate				
Housing colour	red RAL 3000				
Mounting	sound outlet horizontal or downwards				
Terminals	up to 2,5 mm ²				
Temperature range	-30 °C to +60 °C				
Cable entry	grommet from back, 5-10 mm cable gland M20x1,5 from side, 7-14 mm (accessory)				
Duty cycle factor	100%				
Tone selection	by DIP switch				
Number of tones	8	32	32	63	63
Tone frequency	500-4600 Hz	150-2900 Hz		150-3100 Hz	
Alarm stages	---	3 externally switchable			
Max. sound pressure	103 dB	108 dB	113 dB	120 dB	127 dB
Volume control	adjustable by potentiometer				---
Weight	0,3 kg	0,3 kg	0,6 kg	2,2 kg	3,5 kg

Size comparison



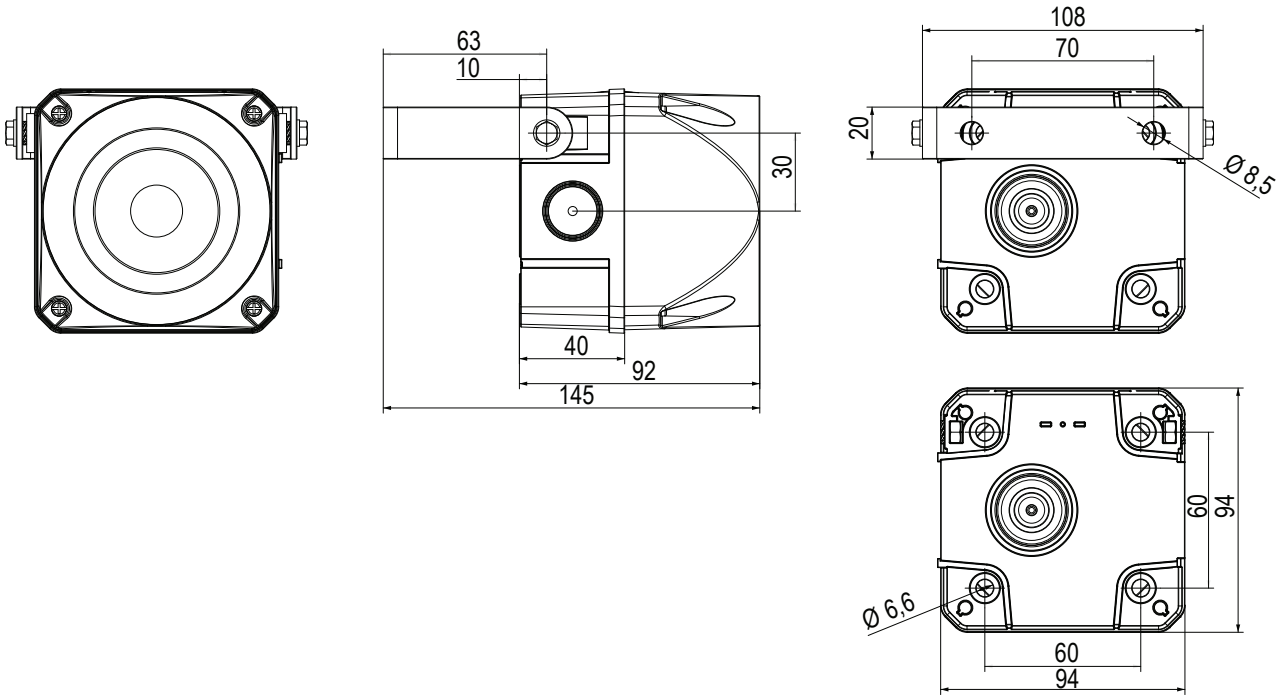
Size 1
94 mm

Size 2
132 mm

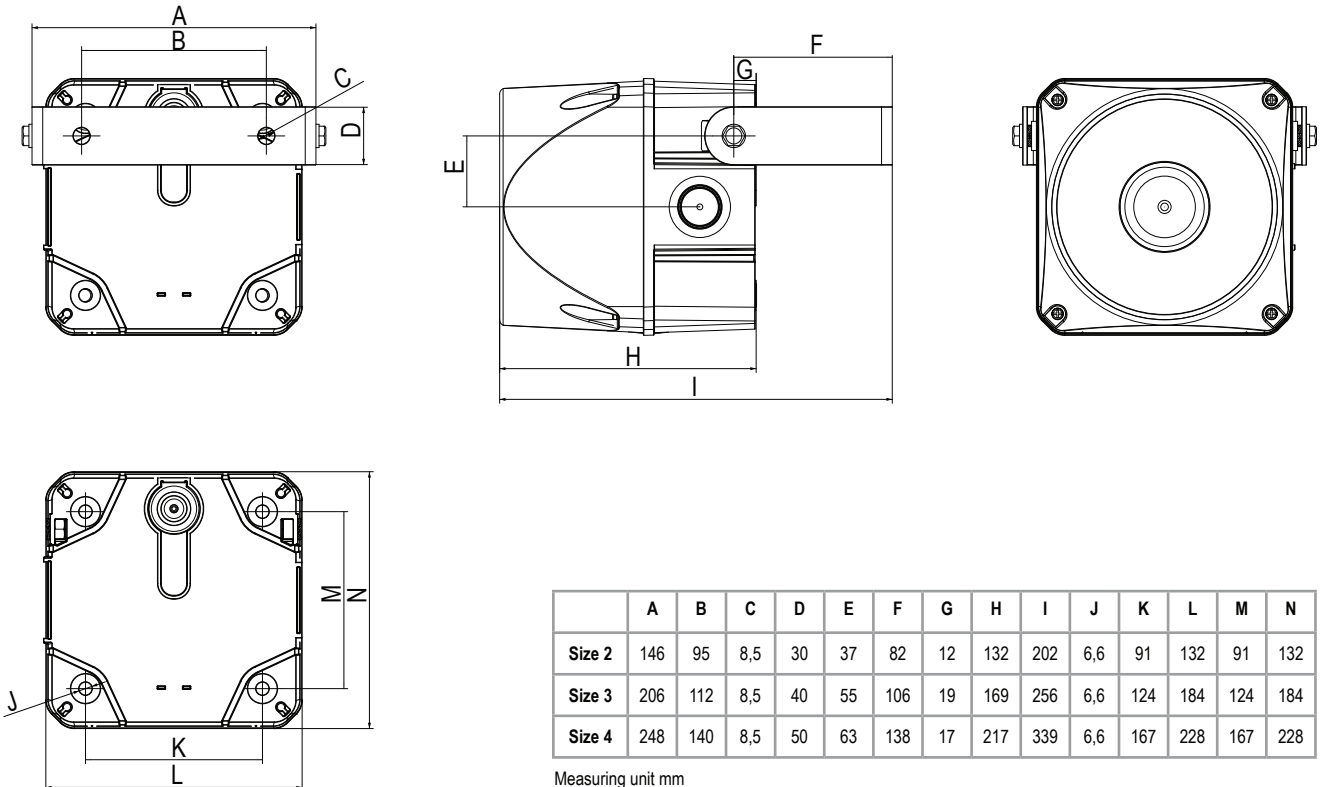
Size 3
184 mm

Size 4
228 mm

ASS-P/ASS-T (Size 1)



ASM (Size 2), ASL (Size 3), ASX (Size 4)











	A	B	C	D	E	F	G	H	I	J	K	L	M	N
Size 2	146	95	8,5	30	37	82	12	132	202	6,6	91	132	91	132
Size 3	206	112	8,5	40	55	106	19	169	256	6,6	124	184	124	184
Size 4	248	140	8,5	50	63	138	17	217	339	6,6	167	228	167	228

Measuring unit mm

Multi Tone Alarm Sounders „A“

Tone table											
STAGE 1 S1	Tone type	Frequency Hz	Pictogram	Repeat rate	Specific application	ASS-T	ASM	ASL	ASX	STAGE 2 S2	STAGE 3 S3
						max dB	max dB	max dB	max dB*		
Tone 01	continuous	660 Hz	—————		Swedish alarm	101	108	114	116	tone 16	tone 12
Tone 02	continuous	1000 Hz	—————		PFEER toxic gas	103	109	113	117	tone 16	tone 25
Tone 03	continuous	2400 Hz	—————			108	113	120	124	tone 21	tone 17
Tone 04	intermittent	420 Hz	- - - - -	0,625 s on / 0,625 s off	Australian alert AS1670	101	105	109	114	tone 21	tone 01
Tone 05	intermittent	660 Hz	- - - - -	1,8 s on / 1,8 s off	Swedish alarm	102	107	114	120	tone 21	tone 01
Tone 06	intermittent	660 Hz	- - - - -	0,15 s on / 0,15 s off	Swedish alarm	102	107	114	116	tone 16	tone 01
Tone 07	intermittent	970 Hz	- - - - -	1 s on / 1 s off	PFEER Alarm, BS5839-1:2002	101	109	113	118	tone 18	tone 01
Tone 08	intermittent	970 Hz (950)	- - - - -	0,5 s on / 0,5 s off x 3 then 1,5 s off	ISO 8201 low tone, US Temporal	101	109	113	120	tone 16	tone 03
Tone 09	intermittent	800 Hz	- - - - -	0,25 s on / 1 s off		102	107	112	120	tone 27	tone 03
Tone 10	intermittent	700 Hz	- - - - -	0,15 s on / 0,15 s off, total 1 min.	Swedish alarm SS 031711	103	107	112	118	tone 18	tone 02
Tone 11	intermittent	720 Hz	- - - - -	0,7 s on / 0,3 s off	Industrial Alarm Germany	103	108	111	119	tone 02	tone 29
Tone 12	intermittent	2400 Hz	- - - - -	0,5 s on / 0,5 s off		108	113	120	127	tone 03	tone 01
Tone 13	intermittent	2850 Hz	- - - - -	0,5 s on / 0,5 s off x 3 then 1,5 s off	ISO 8201 high tone, US Temporal	100	110	111	120	tone 03	tone 17
Tone 14	alternating	440 - 554 Hz	□ □ □ □	0,4 s (440Hz) / 0,1 s (554Hz)	AFNOR France, NFS 32-001	103	106	109	116	tone 16	tone 01
Tone 15	alternating	554 - 440 Hz	□ □ □ □	1 Hz	Swedish alarm	103	106	109	116	tone 01	tone 16
Tone 16	alternating	800 - 1000 Hz	□ □ □ □	2 Hz		103	109	113	120	tone 02	tone 09
Tone 17	alternating	2400 - 2900 Hz	□ □ □ □	2 Hz		108	113	120	125	tone 03	tone 01
Tone 18	alternating	1000 - 2000 Hz	□ □ □ □	1 Hz	Singapore	105	110	120	126	tone 02	tone 03
Tone 19	sweeping	500 - 1500 Hz	▲ ▲ ▲ ▲	10 Hz		102	109	119	121	tone 02	tone 01
Tone 20	sweeping	150 - 1000 Hz	▲ ▲ ▲ ▲	rising 10 s, 40 s on, falling 10 s	Industrial Alarm Germany	103	109	114	116	tone 01	tone 29
Tone 21	continuous	400 Hz	—————	simulated horn		99	104	109	112	tone 16	tone 02
Tone 22	sweeping	500 - 1200 Hz	▲ ▲ ▲ ▲	rising in 3,75 s / 0,25 off	Australian evacuation AS 2220	106	109	117	120	tone 02	tone 09
Tone 23	sweeping	500 - 1200 Hz	▲ ▲ ▲ ▲	rising in 3,5 s / 0,5 s off	Netherlands NEN 2575:2000	106	109	117	121	tone 02	tone 09
Tone 24	sweeping	500 - 1200 Hz	▲ ▲ ▲ ▲	0,5 s on/0,5 s off x 3 / 1,5 s off	Australian AS1670 evacuation	105	109	117	120	tone 02	tone 09
Tone 25	sweeping	1200 - 500 Hz	▲ ▲ ▲ ▲	1 Hz	Evacuation GeminyDIN 33404-3	106	109	117	122	tone 02	tone 32
Tone 26	sweeping	500 - 1200 Hz	▲ ▲ ▲ ▲	0,3 Hz		106	109	117	122	tone 01	tone 32
Tone 27	sweeping	1400 - 1600 Hz	▲ ▲ ▲ ▲	rising in 1 s / falling in 0,5 s	NFC 48-265	101	111	119	124	tone 02	tone 09
Tone 28	sweeping	2400 - 2900 Hz	▲ ▲ ▲ ▲	1 Hz		108	113	120	123	tone 17	tone 03
Tone 29	bell					105	109	120	122	tone 16	tone 02
Tone 30	slow rise	500 - 2400 Hz	▲ ▲ ▲ ▲	siren rising in 3 s, then cont. 2400 Hz		108	113	120	126	tone 16	tone 01
Tone 31	slow rise	300 - 1200 Hz	▲ ▲ ▲ ▲	siren rising in 3 s, then cont. 1200 Hz		103	110	117	113	tone 16	tone 01
Tone 32	chime	970 - 800 Hz	□ □ □ □	repeating ding-dong, 1 Hz		102	109	113	119	tone 29	tone 01
Tone 33	continuous	340 Hz	—————			X	X	109	112	tone 16	tone 03
Tone 34	continuous	500 Hz	—————			X	X	109	112	tone 16	tone 03
Tone 35	continuous	825 Hz	—————			X	X	113	119	tone 16	tone 03
Tone 36	continuous	1500 Hz	—————			X	X	118	120	tone 18	tone 02
Tone 37	continuous	2850 Hz	—————			X	X	111	116	tone 21	tone 01
Tone 38	intermittent	660 Hz	- - - - -	0,5 s on / 0,5 s off	Swedish alarm	X	X	114	117	tone 02	tone 32
Tone 39	intermittent	680 Hz	- - - - -	0,875 s on / 0,675 s off		X	X	114	117	tone 03	tone 32
Tone 40	intermittent	950 Hz	- - - - -	1 s on / 1 s off		X	X	114	120	tone 02	tone 32
Tone 41	intermittent	1000 Hz	- - - - -	1 s on / 1 s off	PFEER general alarm	X	X	113	120	tone 16	tone 03
Tone 42	intermittent	800 Hz	- - - - -	4 ms on / 4 ms off		X	X	112	116	tone 58	tone 03
Tone 43	intermittent	825 Hz	- - - - -	0,5 s on / 0,5 s off		X	X	113	121	tone 16	tone 03
Tone 44	intermittent	825 Hz	- - - - -	2,5 s on, 2,5 s off x 7, then 7 s pulse	IMO SOLAS III/50+SOLAS III/6,4	X	X	113	120	tone 17	tone 02
Tone 45	alternating	440 - 554 Hz	□ □ □ □	1 Hz		X	X	109	115	tone 16	tone 01
Tone 46	alternating	825 - 1075 Hz	□ □ □ □	1 Hz		X	X	114	121	tone 48	tone 02
Tone 47	alternating	825 - 1025 Hz	□ □ □ □	2 Hz		X	X	114	121	tone 48	tone 03
Tone 48	alternating	2500 - 3100 Hz	□ □ □ □	0,5 Hz		X	X	117	121	tone 60	tone 03
Tone 49	alternating	2400 - 2850 Hz	□ □ □ □	2 Hz		X	X	120	124	tone 12	tone 03
Tone 50	alternating	500 - 900 Hz	□ □ □ □	2 Hz		X	X	114	118	tone 41	tone 02
Tone 51	alternating	1200 - 1400 Hz	□ □ □ □	25 Hz		X	X	119	122	tone 41	tone 02
Tone 52	sweeping	300 - 1200 Hz	▲ ▲ ▲ ▲	1 Hz		X	X	117	121	tone 03	tone 32
Tone 53	sweeping	500 - 1000 Hz	▲ ▲ ▲ ▲	0,15 Hz		X	X	114	120	tone 41	tone 02
Tone 54	sweeping	500 - 1200 Hz	▲ ▲ ▲ ▲	3 Hz		X	X	117	121	tone 41	tone 02
Tone 55	sweeping	700 - 1500 Hz	▲ ▲ ▲ ▲	0,3 Hz		X	X	119	122	tone 16	tone 02
Tone 56	sweeping	800 - 1000 Hz	▲ ▲ ▲ ▲	7 Hz		X	X	114	119	tone 16	tone 02
Tone 57	sweeping	800 - 1000 Hz	▲ ▲ ▲ ▲	50 Hz		X	X	114	90	tone 16	tone 02
Tone 58	sweeping	2400 - 2900 Hz	▲ ▲ ▲ ▲	7 Hz		X	X	120	123	tone 17	tone 03
Tone 59	sweeping	2400 - 2900 Hz	▲ ▲ ▲ ▲	50 Hz		X	X	120	90	tone 17	tone 03
Tone 60	sweeping	2400 - 2900 Hz	▲ ▲ ▲ ▲	3 Hz		X	X	120	125	tone 17	tone 03
Tone 61	slow rise	0 - 800 Hz	▲ ▲ ▲ ▲	siren rising 3 s, then cont 800 Hz		X	X	114	118	tone 16	tone 01
Tone 62	chime	554 - 440 Hz	□ □ □ □	repeating ding-dong, 1 Hz		X	X	109	116	tone 29	tone 01
Tone 63	chime	554 - 440 Hz	□ □ □ □	single ding-dong		X	X	109	116	tone 29	tone 01

* Specifications are provisional and subject to change.

Tone table ASS-P						
STAGE 1 S1	Tone type	Frequency Hz	Pictogram	Repeat rate	Specific application	Max dB
Tone 01	continuous	4600 Hz				103
Tone 02	continuous	1600 Hz				99
Tone 03	intermittent	4600 Hz		250 ms on / 250 ms off		103
Tone 04	intermittent	1600 Hz		250 ms on / 250 ms off		99
Tone 05	sweeping	1200 - 500 Hz		1 Hz	evacuation Germany DIN 33404-3	96
Tone 06	sweeping	500 - 1200 Hz		rising in 3 s / 0,5 s off	Netherlands NEN 2575:2000	98
Tone 07	alternating	800 - 1000 Hz		2 Hz		94
Tone 08	sweeping	500 - 1500 Hz		10 Hz		94



Order data

Type	Denomination	Max. sound pressure (dB A)	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order-No. Housing red
ASS-P	Multi tone alarm sounder size 1, 8 tones	103	24 V AC/DC	+/- 10%	0,100	874 060 405
			48 V AC/DC		0,075	874 060 408
			110/120 V AC		0,040	874 060 310
			230/240 V AC		0,040	874 060 313
ASS-T	Multi tone alarm sounder size 1, 32 tones	108	24 V AC/DC	+/- 10%	0,120	874 160 405
			48 V AC/DC		0,090	874 160 408
			110/120 V AC		0,042	874 160 310
			230/240 V AC		0,022	874 160 313
ASM	Multi tone alarm sounder size 2, 32 tones	113	24 V AC/DC	+/- 10%	0,120	874 260 405
			48 V AC/DC		0,090	874 260 408
			110/120 V AC		0,042	874 260 310
			230/240 V AC		0,022	874 260 313
ASL	Multi tone alarm sounder size 3, 63 tones	120	24-48 V AC/DC	+/- 10%	1,050	874 360 408
			110/120 V AC		0,170	874 360 310
			230/240 V AC		0,085	874 360 313
ASX	Multi tone alarm sounder size 4, 63 tones	127	24-48 V AC/DC	+/- 10%	2,000	874 460 408
			110/120 V AC		0,350	874 460 310
			230/240 V AC		0,170	874 460 313



Accessories

Type	Denomination	Order No.
AMK	Mounting kit for combinations of multi tone alarm sounders „A“ and/or beacons „Q“	874 010 900
AG1	Flat gasket for size 1 multi tone alarm sounders „A“ and/or beacons „Q“	874 021 900
AG2	Flat gasket for size 2 multi tone alarm sounders „A“ and/or beacons „Q“	874 022 900
AG3	Flat gasket for size 3 multi tone alarm sounders „A“ and/or beacons „Q“	874 023 900
AG4	Flat gasket for size 4 multi tone alarm sounders „A“ and/or beacons „Q“	874 024 900
AB1	Metal bracket kit for size 1 multi tone alarm sounders „A“ and/or beacons „Q“	874 031 900
AB2	Metal bracket kit for size 2 multi tone alarm sounders „A“ and/or beacons „Q“	874 032 900
AB3	Metal bracket kit for size 3 multi tone alarm sounders „A“ and/or beacons „Q“	874 033 900
AB4	Metal bracket kit for size 4 multi tone alarm sounders „A“ and/or beacons „Q“	874 034 900
AKV	Cable gland M20x1,5 for multi tone alarm sounders „A“ and/or beacons „Q“	698 800 026

DISTRIBUTOR

GEUKEN B.V.

Wattstraat 15a

2723 RA Zoetermeer / NETHERLANDS

Tel. +31 (0)79 361 60 70

Fax +31 (0)79 361 40 90

info@geuken.nl

www.geuken.nl

HEADQUARTERS

**J.AUER – FABRIK ELEKTRISCHER
MASCHINEN Ges.m.b.H.**

Perfektastraße 102

1230 Vienna / AUSTRIA

Tel. +43 (0)1 813 82 20

Fax +43 (0)1 815 99 51

office@auer-signal.com

www.auer-signal.com

SALES GERMANY

J.AUER – SIGNALGERÄTE GmbH

Sperberweg 11

41468 Neuss / GERMANY

Tel. +49 (0)2131 29 86 86-0

Fax +49 (0)2131 29 86 86-6

info@auer-signal.de

www.auer-signal.com