

Multi-tone Alarm Sounders "A" and Beacons "Q"



Multi-Tone Alarm Sounders „A“

Size 1



ASS-P



5 tones

Size 2



ASS-T



32 tones

ASM



32 tones

Size 3



ASL



62 tones

Size 4



ASX

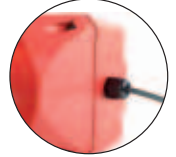
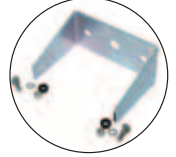
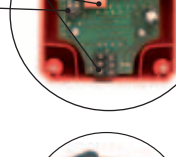


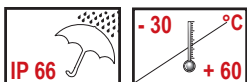
62 tones

Features

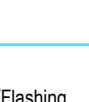
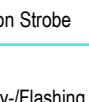
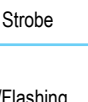
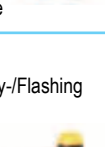
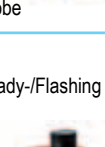
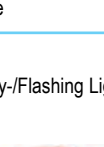
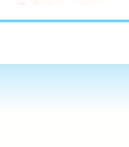
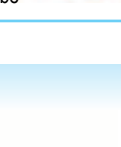
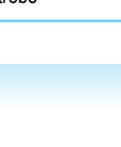
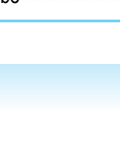
- comprehensive range of standard to high output alarm sounders in cubic design
- 3 tones externally switchable
- for applications in the industry, process control, fire alarm, marine etc.
- versatile installation and mounting options
- complete offering of sound-light combinations
- tone table includes international and standardized signal tones for fire and gas alarm and other applications
- optional/customized tones/tone tables possible upon 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** (accessory type AB1-AB4, for mounting of alarm sounders or beacons in specific direction, on mounting platforms, devices etc.) 
- electrical connection via cage clamp** 
- tone selection via dip switch**
volume control by potentiometer (sizes 1 – 3) 
- flat gaskets** for correct IP66 installation on smooth surfaces (accessory type AG1-AG4) 
- mounting kit AMK** (for mounting/combination of 2 or more same size sounders or beacons) 

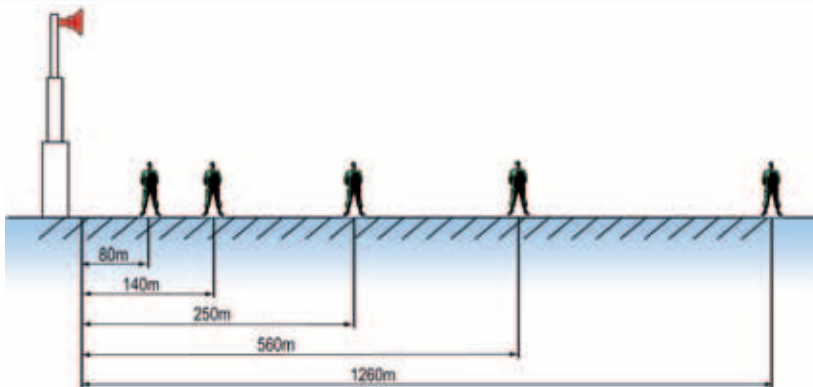


Overview Multi-Tone Alarm Sounders „A“ / Beacons „Q“

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 ~103 dB  ASS-T ~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 ~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 ~120 dB 	ASL + QDL LED Steady-/Flashing  ASL + QBL LED Strobe 	ADL LED Steady-/Flashing  ACL LED Strobe 	QSL LED Steady-/Flashing  QCL LED Strobe 	QDL LED Steady-/Flashing  QBL LED Strobe 
4	ASX ~127 dB 	ASX + QDX LED Steady-/Flashing  ASX + QBX LED Strobe 	ADX LED Steady-/Flashing  ACX LED Strobe 	QSX LED Steady-/Flashing Light  QCX LED Strobe 	QDX LED Steady-/Flashing Light  QBX LED Strobe 



Signal Recognition



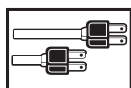
Sounder Type	max. sound pressure level dB (A) in 1 m	effective range of signal recognition (min. 65 dB) in m	approx. area of signal recognition (min. 65 dB) in m ²
ASS-P	103	80	20.000
ASS-T	108	140	62.000
ASM	113	250	200.000
ASL	120	560	1.000.000
ASX	127	1.260	5.000.000

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 above 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 tone used.

The directive efficiency of the sounder increases with an increasing tone frequency.

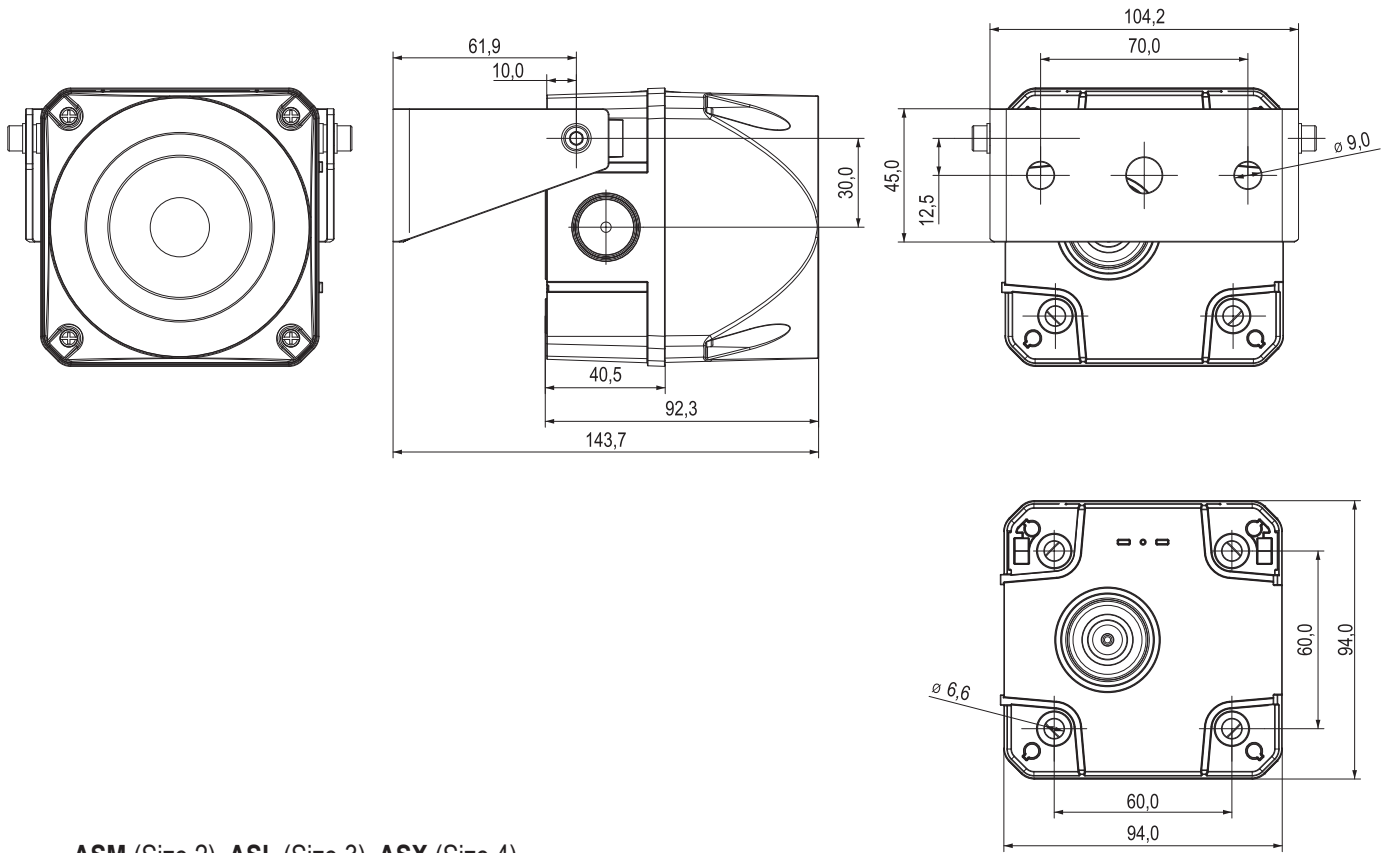


Technical data

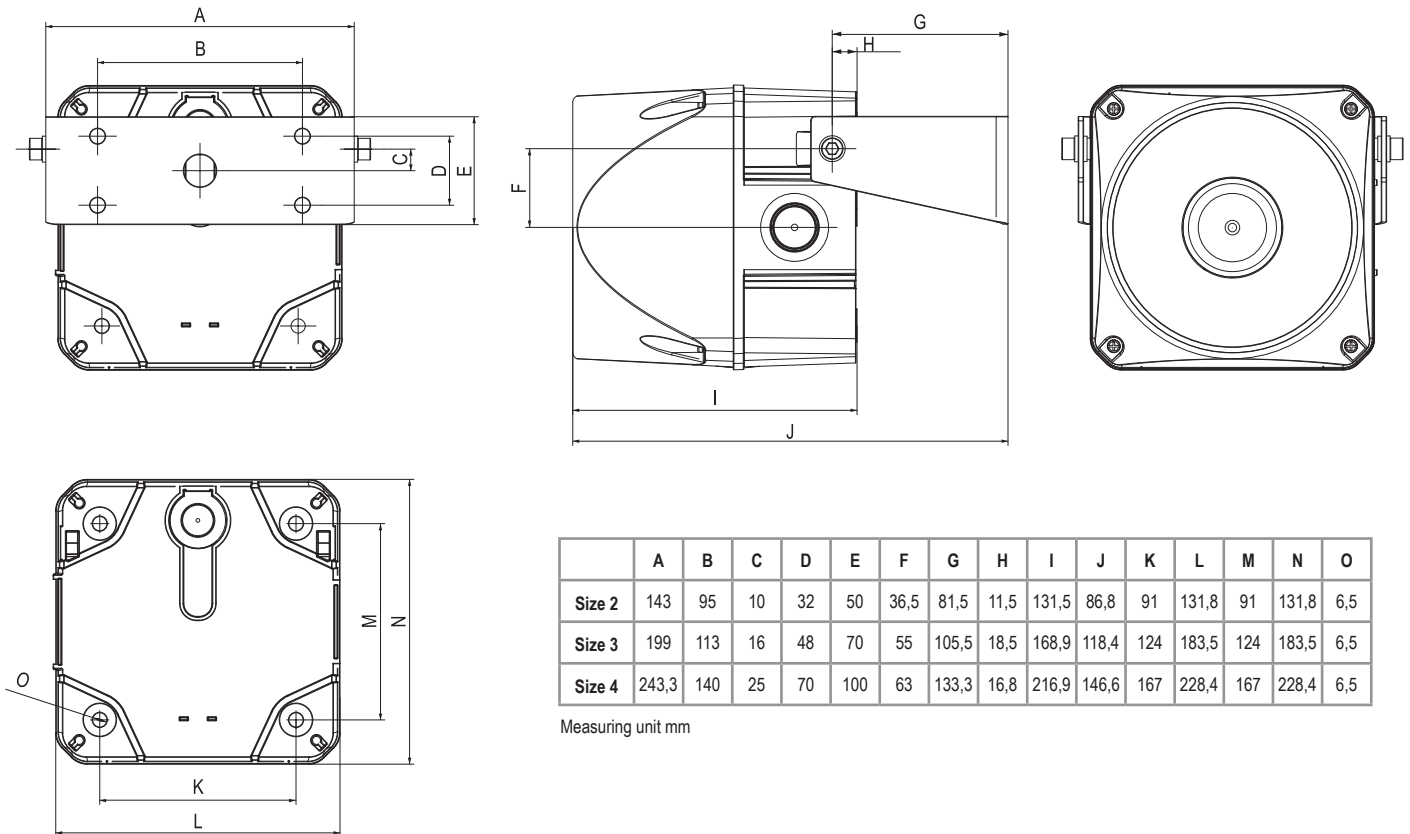
Type	ASS-P Size 1	ASS-T Size 1	ASM Size 2	ASL Size 3	ASX Size 4
Housing	polycarbonate				
Housing colour	red (RAL 3000)				
Mounting	sound outlet horizontal or downwards				
Terminals	up to 2,5 mm ² single wire				
Temperature range	-30° to +60° C				
Cable entry	grommet from back, 5 - 10 mm				
Cable conduit	cable gland M20x1,5 from side, 5 - 12 mm				
Duty cycle factor	100 %				
Tone selection	by DIP-switch				
Number of tones	5	32	32	62	62
Tone frequency	Hz				
Alarm stages	---	3 externally switchable			
Sound pressure	< 103 dB	< 108 dB	< 113 dB	< 120 dB	< 127 dB
Volume control	adjustable by potentiometer				---
Relative humidity	90% at 20° C				
Weight	kg	kg	kg	kg	kg



ASS-P (Size 1), ASS-T (Size 1)



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



Multi-Tone Alarm Sounders „A“

Tone table													
STAGE 1 S1	tone type	frequency Hz	repeat rate	tone drawing	DIP switch	specific application	ASS-P	ASS-T	ASM	ASL	ASX	STAGE 2 S2	STAGE 3 S3
							max dB	max dB	max dB	max dB	max dB		
Tone 1	sweeping	500 - 1200 Hz	3 sec up+down		0 0 0 0 0								
Tone 2	alternating	2400 / 2900 Hz	@ 2 Hz		0 0 0 0 1								
Tone 3	alternating	440 / 554	@ 0,4 / 0,1 Hz		0 0 0 1 0	AFNOR France							
Tone 4	alternating	554 / 440 Hz	@ 0,5 Hz 1 sec on, 1 sec off.		0 0 0 1 1	Swedish alarm							
Tone 5	alternating	800 / 1000 Hz	@ 0,25 sec.		0 0 1 0 0								
Tone 6	alternating	800 / 1000 Hz	@ 0,5 sec. @ 1 Hz		0 0 1 0 1	fire alarm							
Tone 7	continuous	2400 Hz			0 0 1 1 0								
Tone 8	continuous	660 Hz			0 0 1 1 1	Swedish alarm							
Tone 9	continuous	970 Hz			0 1 0 0 0	PFEER toxic gas							
Tone 10	intermittent	660 Hz	1,8 sec on - off		0 1 0 0 1	Swedish alarm							
Tone 11	intermittent	660 Hz	150 msec on-off		0 1 0 1 0	Swedish alarm							
Tone 12	intermittent	660 Hz	@ 1 Hz, 0,5 sec on 0,5 sec off		0 1 0 1 1	Swedish alarm							
Tone 13	intermittent	970 Hz	0,5 Hz (1 sec on, 1 sec off)		0 1 1 0 0	PFEER Alarm							
Tone 14	saw	1200 - 500 Hz	1 sec (PFEER)		0 1 1 0 1	evacuation Germany							
Tone 15	sweeping	2400 - 2900 Hz	@ 7 Hz		0 1 1 1 0								
Tone 16	sweeping	2400 - 2900 Hz	@ 1 Hz		0 1 1 1 1								
Tone 17	sweeping	2400 - 2900 Hz	@ 50 Hz		1 0 0 0 0								
Tone 18	sweeping	800 - 1000 Hz	@ 1 Hz		1 0 0 0 1								
Tone 19	sweeping	800 - 1000 Hz	@ 7 Hz		1 0 0 1 0								
Tone 20	sweeping	800 - 1000 Hz	@ 50 Hz		1 0 0 1 1								
Tone 21	saw	500 - 1200 Hz	@ in 3 sec. 0,5 sec off		1 0 1 0 0								
Tone 22	bell				1 0 1 0 1								
Tone 23	chime	970 / 800 Hz	repeating ding-dong		1 0 1 1 0								
Tone 24	continuous	370 Hz			1 0 1 1 1	horn (USA)							
Tone 25	continuous	470 Hz			1 1 0 0 0	horn (USA)							
Tone 26	continuous	554 Hz			1 1 0 0 1								
Tone 27	intermittent	1000 Hz	@ 1 Hz		1 1 0 1 0								
Tone 28	intermittent	2500 Hz	0,5 sec.		1 1 0 1 1								
Tone 29	intermittent	800 Hz	0,25 on 1 sec off		1 1 1 0 0								
Tone 30	sweeping	1400 - 1600 Hz	1 sec/1600-1400/0,5 sec		1 1 1 0 1	NF 48-265							
Tone 31	sweeping	660 - 1200 Hz	@ 1 Hz		1 1 1 1 0								
Tone 32	continuous	800 Hz				„BT“-Hupenton ??							
Tone 33	intermittent	2400 Hz	@ 1 Hz										
Tone 34	continuous	440 Hz											
Tone 35	sweeping	500 - 1200 - 500 Hz	@ 0,3 Hz										
Tone 36	intermittent	1000 Hz	@ 1 Hz										
Tone 37	intermittent	1000 Hz	10/40/10 sec. rising constant, fall			Industrial Alarm Germany							
Tone 38	continuous	1000 Hz											
Tone 39	sweeping	1200 - 500 Hz	@ 1 Hz			evacuation Germany							
Tone 40	intermittent	1400 Hz	0,25 sec.			fast rising volume							
Tone 41	fast siren	250 - 1200 Hz	0,085 sec.										
Tone 42	alternating	2500 - 3100 Hz											
Tone 43	fast whoop	500 - 1000 Hz	0,15 sec.										
Tone 44	whoop	500 - 1200 Hz	3 sec sweep, 0,5 sec off										
Tone 45	slow whoop	500 - 1000 Hz	4,5 sec										
Tone 46	intermittent	720 Hz	0,7/0,3 sec			Ind. Alarm Germany							
Tone 47	alternating	800 - 1000 Hz	0,5 sec			fire alarm							
Tone 48	alternating	1000 - 2000 Hz	@ 1 Hz (500-500 ms)			Singapore							
Tone 49	alternating	240 - 2850 Hz	@ 2 Hz (250-250 ms)										
Tone 50	whoop	2400 - 2900 Hz	@ 3 Hz										
Tone 51	intermittent	2850 Hz	0,5 s on/off x 3/1,5 s off			ISO 8201							
Tone 52	sweeping	300 - 1200 Hz	@ 1 Hz										
Tone 53	intermittent	420 Hz	0,625 s on/off			Australia alert tone							
Tone 54	whoop	422 - 775 Hz	sweep 0,85 s, 1 s delay, repeat										
Tone 55	alternating	500 - 1200 Hz	3,75 s - 0,25 s off										
Tone 56	alternating	510 - 610 Hz	@ 2 Hz (250-250 ms)										
Tone 57	alternating	550 - 1000 Hz	0,7 - 0,33 sec										
Tone 58	chime	554/440 Hz	ding dong repeating										
Tone 59	intermittent	660 Hz	150 msec on/off										
Tone 60	sweeping	670 - 725 Hz	@ 0,9 sec										
Tone 61	intermittent	720 Hz	0,7 s on/off										
Tone 62	sweeping	920 - 750 Hz	@ 0,9 sec										



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, 5 tones	103	24-48 V AC/DC			874 060 408
			110/120 V AC			874 060 310
			230/240 V AC			874 060 313
ASS-T	multi-tone alarm sounder size 1, 32 tones	108	24-48 V AC/DC			874 160 408
			110/120 V AC			874 160 310
			230/240 V AC			874 160 313
ASM	multi-tone alarm sounder size 2, 32 tones	113	24-48 V AC/DC			874 260 408
			110/120 V AC			874 260 310
			230/240 V AC			874 260 313
ASL	multi-tone alarm sounder size 3, 62 tones	120	24-48 V AC/DC			874 360 408
			110/120 V AC			874 360 310
			230/240 V AC			874 360 313
ASX	multi-tone alarm sounder size 4, 62 tones	127	24-48 V AC/DC			874 460 408
			110/120 V AC			874 460 310
			230/240 V AC			874 460 313



Accessories

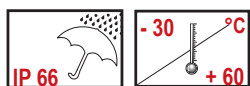
Type	Denomination				Order No.
AMK	mounting kit for combinations of multi-tone alarm sounders „A“ and/or beacons „Q“				874 010 900
AG1	flat gasket for size 1 multi-tone alarm sounders „A“ and/or beacons „Q“				874 021 900
AG2	flat gasket for size 2 multi-tone alarm sounders „A“ and/or beacons „Q“				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

Combinations Multi-Tone Alarm Sounder “A” – Beacons “Q”

	Size 1		Size 2		Size 3		Size 4
							
	 <103 dB	 <108 dB	 <113 dB		 <120 dB	 <127 dB	
	5 tones	32 tones	32 tones		62 tones	62 tones	
Multi-Tone Sounder	ASS-P+QDS	ASS-T+QDS	ASM+QDM		ASL+QDL	ASX+QDX	
+ LED-Steady-/Flashing Beacon	 ~ Cd	 ~ Cd	 ~ Cd		 ~ Cd	 ~ Cd	
Multi-Tone Sounder	ASS-P+QFS	ASS-T+QFS	ASM+QFM	Multi-Tone Sounder	ASL+QBL	ASX+QBX	
+ Xenon Strobe Beacon	 ~5 J	 ~5 J	 ~10 J	+ LED-Strobe Beacon	 ~ Cd	 ~ Cd	

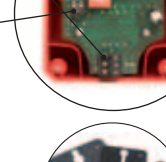
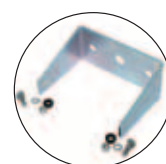
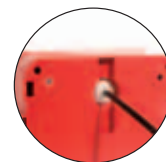
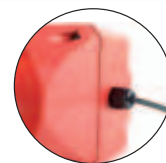
Features

- comprehensive range of standard and high output alarm sounders in combination with cubic design beacons in LED or Xenon technique
- 3 stage alarm/tones externally switchable
- for applications in the industry, process control, fire/gas alarm, marine etc.
- versatile installation and mounting options
- tone table includes international and standardized signal tones for fire/gas alarm and other applications
- sound and light separately switchable
- beacon options**
 - 1) in most up-to-date LED-technique**
(long lifetime, low nominal current, vibrationproof)
 - LED steady/flushing beacons (size 1 – 4)
 - LED strobe beacons (size 3 – 4)
 - 2) in conventional xenon technique**
(classic signalling with good signalling effect)
 - xenon strobe beacons up to 10 J strobe energy (size 1 – 2)
- optional/customized tones/tone tables upon request
- automatic synchronization in multi-sounder installations
- fit for plc applications (leakage, inrush current)

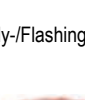
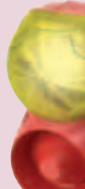
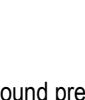


Accessories / Installation Options:

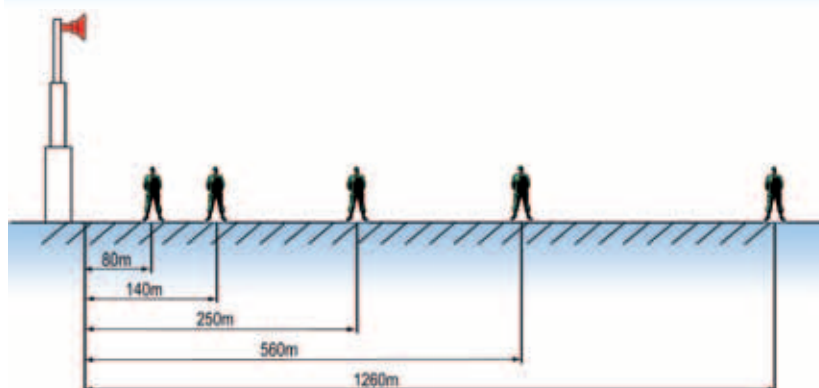
- lateral cable entry** on both sides with **cable gland** (accessory type AKV)
- grommet from back side** (included as standard)
- metal bracket kit** (accessory type AB1-AB4, for mounting of alarm sounders or beacons in specific direction, on mounting platforms, devices etc.)
- electrical connection via cage clamp**
- tone selection via dip switch**
volume control by potentiometer (sizes 1 – 3)
- flat gaskets** for correct IP66 installation on smooth surfaces (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 ~103 dB  ASS-T ~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 ~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 ~120 dB 	ASL + QDL LED Steady-/Flashing  ASL + QBL LED Strobe 	ADL LED Steady-/Flashing  ACL LED Strobe 	QSL LED Steady-/Flashing  QCL LED Strobe 	QDL LED Steady-/Flashing  QBL LED Strobe 
4	ASX ~127 dB 	ASX + QDX LED Steady-/Flashing  ASX + QBX LED Strobe 	ADX LED Steady-/Flashing  ACX LED Strobe 	QSX LED Steady-/Flashing Light  QCX LED Strobe 	QDX LED Steady-/Flashing Light  QBX LED Strobe 

Signal Recognition



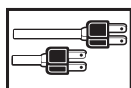
Sounder Type	max. sound pressure level dB (A) in 1 m	effective range of signal recognition (min. 65 dB) in m	approx. area of signal recognition (min. 65 dB) in m2
ASS-P	103	80	20.000
ASS-T	108	140	62.000
ASM	113	250	200.000
ASL	120	560	1.000.000
ASX	127	1.260	5.000.000

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 above 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 tone used. The directive efficiency of the sounder increases with an increasing tone frequency.

Combinations Multi-Tone Alarm Sounder “A” – Beacons “Q”

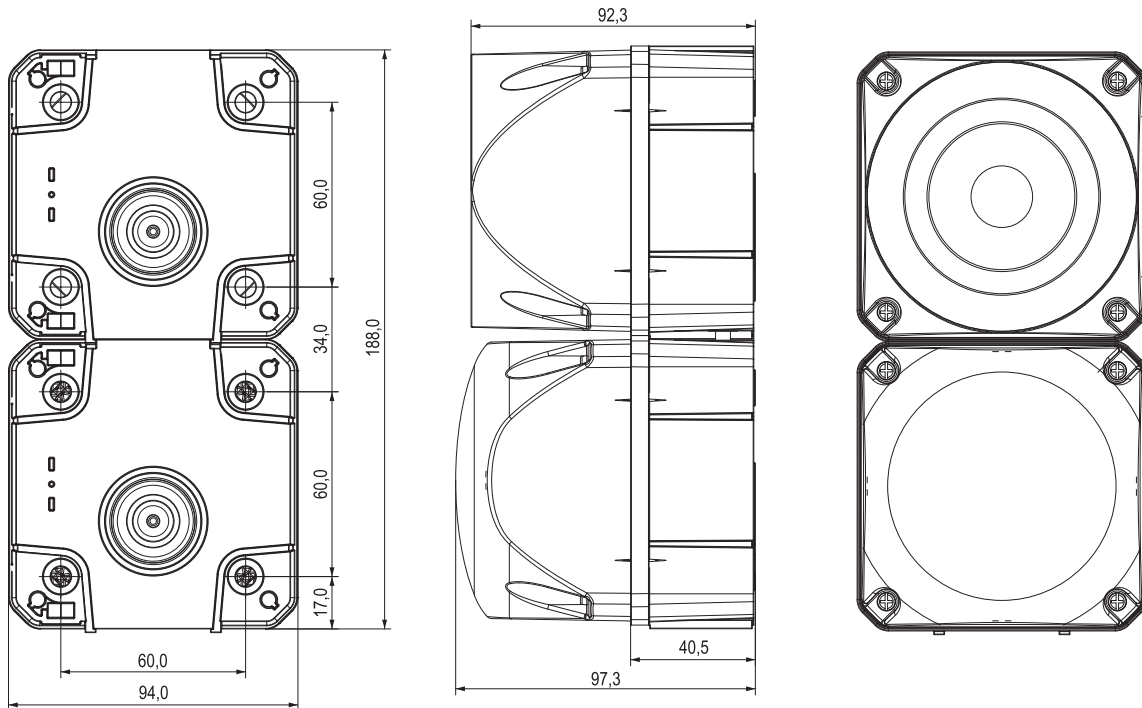


Technical Data

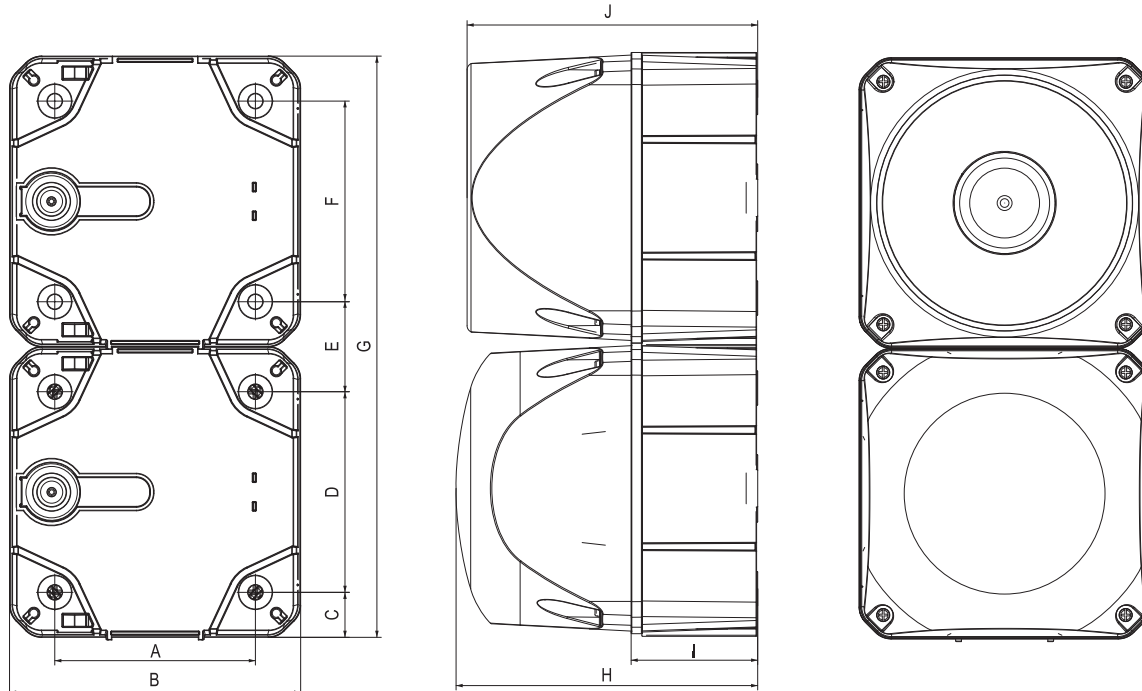
Type	ASS-P Size 1	ASS-T Size 1	ASM Size 2	ASL Size 3	ASX Size 4
Housing	polycarbonate				
Housing colour	red (RAL 3000)				
Mounting	sound outlet horizontal or downwards				
Terminals	up to 2,5 mm ² single wire				
Temperature range	-30° to +60° C				
Cable entry	grommet from back, 5 - 10 mm				
Cable conduit	cable gland M20x1,5 from side, 5 - 12 mm				
Duty cycle factor	100 %				
Tone selection	by DIP-switch				
Number of tones	5	32	32	62	62
Tone frequency	Hz				
Alarm stages	3 externally switchable				
Sound pressure	< 103 dB	< 108 dB	< 113 dB	< 120 dB	< 127 dB
Volume control	adjustable by potentiometer				---
Relative humidity	90% at 20° C				
Weight	kg	kg	kg	kg	kg

Type	QDS Size 1	QDM Size 2	QDL Size 3	QDX Size 4	QFS Size 1	QFM Size 2	QBL Size 3	QBX Size 4
Housing	polycarbonate							
Housing colour	red (RAL 3000)							
Lens colour	amber, red, clear, blue, green, yellow							
Cable entry	grommet from back, 5 - 10 mm							
Cable conduit	cable gland M20x1,5 from side, 5 - 12 mm							
Mounting								
Duty cycle factor	100 %							
Terminals	up to 2,5 mm² single wire							
Temperature range	-30° to +60° C							
Light source	LED				xenon tube		LED	
Life time (light source)	h				h		h	
Flashing/Strobe frequency	~ 1 Hz				~ 1 Hz		??	
Light intensity	Cd	Cd	Cd	Cd	---		Cd	Cd
Strobe energy	---				~ 5 J	~ 10 J	---	
Relative Humidity	90% at 20° C				90% at 20° C			
Weight	kg	kg	kg	kg	kg	kg	kg	kg

ASS-P+QDS (Size 1), ASS-P+QFS (Size 1), ASS-T+QDS (Size 1), ASS-T+QFS (Size 1)



ASM+QDM/QFM (Size 2), ASL+QDL/QBL (Size 3), ASX+QDX/QBX (Size 4)



	A	B	C	D	E	F	G	H	I	J
Size 2	91	132	20,4	91	40,8	91	263,6	136,8	57,4	131,8
Size 3	124	183,7	29,7	124	59,4	124	366,8	175,8	72,5	168,9
Size 4	167	228,4	30,7	167	61,4	167	456,8	223,4	90,8	216,9

Measuring unit mm

Combinations Multi-Tone Alarm Sounder “A” – Beacons “Q”

Tone table													
STAGE 1 S1	tone type	frequency Hz	repeat rate	tone drawing	DIP switch	specific application	ASS-P	ASS-T	ASM	ASL	ASX	STAGE 2 S2	STAGE 3 S3
							max dB	max dB	max dB	max dB	max dB		
Tone 1	sweeping	500 - 1200 Hz	3 sec up+down		0 0 0 0 0								
Tone 2	alternating	2400 / 2900 Hz	@ 2 Hz		0 0 0 0 1								
Tone 3	alternating	440 / 554	@ 0,4 / 0,1 Hz		0 0 0 1 0	AFNOR France							
Tone 4	alternating	554 / 440 Hz	@ 0,5 Hz 1 sec on, 1 sec off.		0 0 0 1 1	Swedish alarm							
Tone 5	alternating	800 / 1000 Hz	@ 0,25 sec.		0 0 1 0 0								
Tone 6	alternating	800 / 1000 Hz	@ 0,5 sec. @ 1 Hz		0 0 1 0 1	fire alarm							
Tone 7	continuous	2400 Hz			0 0 1 1 0								
Tone 8	continuous	660 Hz			0 0 1 1 1	Swedish alarm							
Tone 9	continuous	970 Hz			0 1 0 0 0	PFEER toxic gas							
Tone 10	intermittent	660 Hz	1,8 sec on - off		0 1 0 0 1	Swedish alarm							
Tone 11	intermittent	660 Hz	150 msec on-off		0 1 0 1 0	Swedish alarm							
Tone 12	intermittent	660 Hz	@ 1 Hz, 0,5 sec on 0,5 sec off		0 1 0 1 1	Swedish alarm							
Tone 13	intermittent	970 Hz	0,5 Hz (1 sec on, 1 sec off)		0 1 1 0 0	PFEER Alarm							
Tone 14	saw	1200 - 500 Hz	1 sec (PFEER)		0 1 1 0 1	evacuation Germany							
Tone 15	sweeping	2400 - 2900 Hz	@ 7 Hz		0 1 1 1 0								
Tone 16	sweeping	2400 - 2900 Hz	@ 1 Hz		0 1 1 1 1								
Tone 17	sweeping	2400 - 2900 Hz	@ 50 Hz		1 0 0 0 0								
Tone 18	sweeping	800 - 1000 Hz	@ 1 Hz		1 0 0 0 1								
Tone 19	sweeping	800 - 1000 Hz	@ 7 Hz		1 0 0 1 0								
Tone 20	sweeping	800 - 1000 Hz	@ 50 Hz		1 0 0 1 1								
Tone 21	saw	500 - 1200 Hz	@ in 3 sec. 0,5 sec off		1 0 1 0 0								
Tone 22	bell				1 0 1 0 1								
Tone 23	chime	970 / 800 Hz	repeating ding-dong		1 0 1 1 0								
Tone 24	continuous	370 Hz			1 0 1 1 1	horn (USA)							
Tone 25	continuous	470 Hz			1 1 0 0 0	horn (USA)							
Tone 26	continuous	554 Hz			1 1 0 0 1								
Tone 27	intermittent	1000 Hz	@ 1 Hz		1 1 0 1 0								
Tone 28	intermittent	2500 Hz	0,5 sec.		1 1 0 1 1								
Tone 29	intermittent	800 Hz	0,25 on 1 sec off		1 1 1 0 0								
Tone 30	sweeping	1400 - 1600 Hz	1 sec/1600-1400/0,5 sec		1 1 1 0 1	NF 48-265							
Tone 31	sweeping	660 - 1200 Hz	@ 1 Hz		1 1 1 1 0								
Tone 32	continuous	800 Hz				„BT“-Hupenton ??							
Tone 33	intermittent	2400 Hz	@ 1 Hz										
Tone 34	continuous	440 Hz											
Tone 35	sweeping	500 - 1200 - 500 Hz	@ 0,3 Hz										
Tone 36	intermittent	1000 Hz	@ 1 Hz										
Tone 37	intermittent	1000 Hz	10/40/10 sec. rising constant, fall			Industrial Alarm Germany							
Tone 38	continuous	1000 Hz											
Tone 39	sweeping	1200 - 500 Hz	@ 1 Hz			evacuation Germany							
Tone 40	intermittent	1400 Hz	0,25 sec.			fast rising volume							
Tone 41	fast siren	250 - 1200 Hz	0,085 sec.										
Tone 42	alternating	2500 - 3100 Hz											
Tone 43	fast whoop	500 - 1000 Hz	0,15 sec.										
Tone 44	whoop	500 - 1200 Hz	3 sec sweep, 0,5 sec off										
Tone 45	slow whoop	500 - 1000 Hz	4,5 sec										
Tone 46	intermittent	720 Hz	0,7/0,3 sec			Ind. Alarm Germany							
Tone 47	alternating	800 - 1000 Hz	0,5 sec			fire alarm							
Tone 48	alternating	1000 - 2000 Hz	@ 1 Hz (500-500 ms)			Singapore							
Tone 49	alternating	240 - 2850 Hz	@ 2 Hz (250-250 ms)										
Tone 50	whoop	2400 - 2900 Hz	@ 3 Hz										
Tone 51	intermittent	2850 Hz	0,5 s on/off x 3/1,5 s off			ISO 8201							
Tone 52	sweeping	300 - 1200 Hz	@ 1 Hz										
Tone 53	intermittent	420 Hz	0,625 s on/off			Australia alert tone							
Tone 54	whoop	422 - 775 Hz	sweep 0,85 s, 1 s delay, repeat										
Tone 55	alternating	500 - 1200 Hz	3,75 s - 0,25 s off										
Tone 56	alternating	510 - 610 Hz	@ 2 Hz (250-250 ms)										
Tone 57	alternating	550 - 1000 Hz	0,7 - 0,33 sec										
Tone 58	chime	554/440 Hz	ding dong repeating										
Tone 59	intermittent	660 Hz	150 msec on/off										
Tone 60	sweeping	670 - 725 Hz	@ 0,9 sec										
Tone 61	intermittent	720 Hz	0,7 s on/off										
Tone 62	sweeping	920 - 750 Hz	@ 0,9 sec										



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, 5 tones	103	24-48 V AC/DC			874 060 408
			110/120 V AC			874 060 310
			230/240 V AC			874 060 313
ASS-T	multi-tone alarm sounder size 1, 32 tones	108	24-48 V AC/DC			874 160 408
			110/120 V AC			874 160 310
			230/240 V AC			874 160 313
ASM	multi-tone alarm sounder size 2, 32 tones	113	24-48 V AC/DC			874 260 408
			110/120 V AC			874 260 310
			230/240 V AC			874 260 313
ASL	multi-tone alarm sounder size 3, 64 tones	120	24-48 V AC/DC			874 360 408
			110/120 V AC			874 360 310
			230/240 V AC			874 360 313
ASX	multi-tone alarm sounder size 4, 64 tones	127	24-48 V AC/DC			874 460 408
			110/120 V AC			874 460 310
			230/240 V AC			874 460 313

Type	Denomination	Light Source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing red
QDS	LED steady-/flashing beacon size 1	LED ~ Cd	24-48 V AC/DC			874 16C 408
			110/120 V AC			874 16C 310
			230/240 V AC			874 16C 313
QDM	LED steady-/flashing beacon size 2	LED ~ Cd	24-48 V AC/DC			874 26C 408
			110/120 V AC			874 26C 310
			230/240 V AC			874 26C 313
QDL	LED steady-/flashing beacon size 3	LED ~ Cd	24-48 V AC/DC			874 36C 408
			110/120 V AC			874 36C 310
			230/240 V AC			874 36C 313
QDX	LED steady-/flashing beacon size 4	LED ~ Cd	24-48 V AC/DC			874 46C 408
			110/120 V AC			874 46C 310
			230/240 V AC			874 46C 313

QFS	xenon strobe beacon size 1	xenon tube ~ 5 J	24-48 V AC/DC			874 56C 408
			110/120 V AC			874 56C 310
			230/240 V AC			874 56C 313
QFM	xenon strobe beacon size 2	xenon tube ~ 10 J	24-48 V AC/DC			874 66C 408
			110/120 V AC			874 66C 310
			230/240 V AC			874 66C 313
QBL	LED strobe beacon size 3	LED ~ Cd	24-48 V AC/DC			874 76C 408
			110/120 V AC			874 76C 310
			230/240 V AC			874 76C 313
QBX	LED strobe beacon size 4	LED ~ Cd	24-48 V AC/DC			874 86C 408
			110/120 V AC			874 86C 310
			230/240 V AC			874 86C 313

Colour code for Lens

C

1	amber	5	blue
2	red	6	green
4	clear	7	yellow



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

How to order Multi-Tone Alarm Sounder „A“ with same size Beacon „Q“

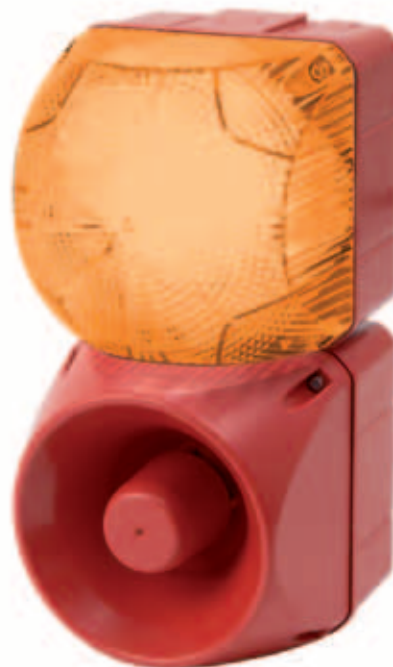
Multi-tone sounders „A“ (Size 1 - 4) can be combined with same size

- LED steady/flashing beacons „Q“ (size 1 - 4) or
- xenon strobe beacons „Q“ (size 1 - 2) or
- LED strobe beacons „Q“ (size 3 - 4)

Typical configuration:

**ASM multi-tone sounder (size 2) 24-48 V AC/DC +
QDM led beacon (size 2), amber, 48 V AC/DC**

type	order no.	product
ASM	874 260 408	multi-tone alarm sounder size 2
QDM	874 261 408	led steady/flashing beacon size 2
AMK	874 010 900	mounting kit for multi-tone alarm sounders „A“ and/or beacons „Q“



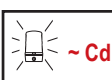
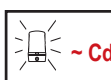
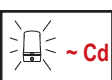
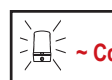
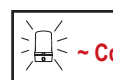
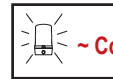
QDS (QFS) + ASS-P (ASS-T)



QDM + QDM + ASM



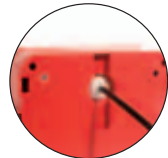
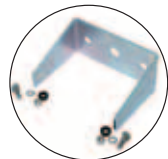
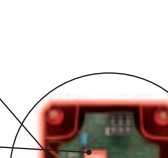
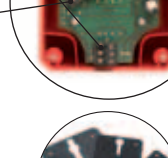
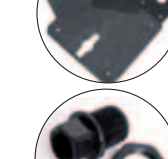
Multi-tone Alarm Sounders “A” with Light Indicator

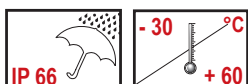
	Size 1		Size 2		Size 3	Size 4
						
						
	<103 dB	<108 dB	<113 dB	<120 dB	<127 dB	
	5 tones	32 tones	32 tones	62 tones	62 tones	
Multi-tone alarm sounder + LED steady/flashing light indicator	ADS-P	ADS-T	ADM	ADL	ADX	
						
	~ Cd	~ Cd	~ Cd	~ Cd	~ Cd	
Multi-tone alarm sounder + LED strobe light indicator (2 strobe patterns)			ACM	ACL	ACX	
						
			~ Cd	~ Cd	~ Cd	

Features

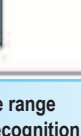
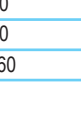
- comprehensive range of visual-audible signalling products with dominant audible multi-tone sounder and additional visual light indicator
- 3 tones externally switchable
- for most different visual-audible signalling requirements in the industry, process control, fire/gas alarm, marine etc.
- light indicators in most up-to-date LED technique (long lifetime, low current consumption, vibration proof):
 - LED steady/flashing light indicators or
 - LED strobe light indicators (2 strobe patterns – double/multi strobe)
- versatile installation and mounting options
- tone and light separately switchable
- tone table includes international and standardized signal tones for fire/gas alarm and other applications
- optional/customized tones/tone tables upon request
- fit for plc applications (leakage, inrush current)

Accessories / Installation Options:

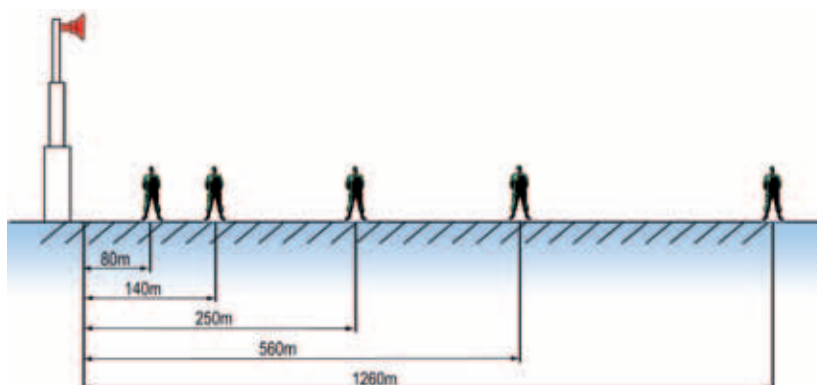
- lateral cable entry** on both sides with **cable gland** (accessory type AKV) 
- grommet from back side** (included as standard) 
- metal bracket kit** (accessory type AB1-AB4, for mounting of alarm sounders or beacons in specific direction, on mounting platforms, devices etc.) 
- electrical connection via cage clamp** 
- tone selection via dip switch**
volume control by potentiometer (sizes 1 – 3) 
- flat gaskets** for correct IP66 installation on smooth surfaces (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 ~103 dB 	ASS-P + QDS LED Steady-/Flashing ASS-P + QFS ~5 J Xenon Strobe 	ADS-P LED Steady-/Flashing 	QSS LED Steady-/Flashing 	QDS LED Steady-/Flashing 
	ASS-T ~108 dB 	ASS-T + QDS LED Steady-/Flashing ASS-T + QFS ~5 J Xenon Strobe 	ADS-T LED Steady-/Flashing 	QTS ~5 J Xenon Strobe 	QFS ~5 J Xenon Strobe 
2	ASM ~113 dB 	ASM + QDM LED Steady-/Flashing 	ADM LED Steady-/Flashing 	QSM LED Steady-/Flashing 	QDM LED Steady-/Flashing 
		ASM + QFM ~10 J Xenon Strobe 	ACM LED Strobe 	QTM ~10 J Xenon Strobe 	QFM ~10 J Xenon Strobe 
3	ASL ~120 dB 	ASL + QDL LED Steady-/Flashing 	ADL LED Steady-/Flashing 	QSL LED Steady-/Flashing 	QDL LED Steady-/Flashing 
		ASL + QBL LED Strobe 	ACL LED Strobe 	QCL LED Strobe 	QBL LED Strobe 
4	ASX ~127 dB 	ASX + QDX LED Steady-/Flashing 	ADX LED Steady-/Flashing 	QSX LED Steady-/Flashing Light 	QDX LED Steady-/Flashing Light 
		ASX + QBX LED Strobe 	ACX LED Strobe 	QCX LED Strobe 	QBX LED Strobe 

Signal Recognition



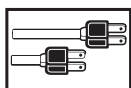
Sounder Type	max. sound pressure level dB (A) in 1 m	effective range of signal recognition (min. 65 dB) in m	approx. area of signal recognition (min. 65 dB) in m2
ASS-P	103	80	20.000
ASS-T	108	140	62.000
ASM	113	250	200.000
ASL	120	560	1.000.000
ASX	127	1.260	5.000.000

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 above 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 tone used. The directive efficiency of the sounder increases with an increasing tone frequency.

Multi-tone Alarm Sounders “A” with Light Indicator



Technical Data

Type	ADS-P Size 1	ADS-T Size 1	ADM Size 2	ADL Size 3	ADX Size 4	ACM Size 2	ACL Size 3	ACX Size 4
Housing	polycarbonate							
Housing colour	Multi-tone sounder red (RAL 3000), Light-indicator black							
Lens colour	amber, red, clear, blue, green, yellow							
Mounting	sound outlet horizontal or downwards							
Terminals	up to 2,5 mm² single wire							
Cable entry	grommet from back, 5 - 10 mm							
Cable conduit	cable gland M20x1,5 from side, 5 - 12 mm							
Duty cycle factor	100 %							
Tone type selection	by DIP switch							
Number of tones	5	32	32	62	62	32	62	62
Tone frequency	Hz					Hz		
Alarm stages	---	3 externally switchable						
Sound pressure	< 103 dB	< 108 dB	< 113 dB	< 120 dB	< 127 dB	< 113 dB	< 120 dB	< 127 dB
Volume control	by potentiometer				---	by potentiometer		---
Light source	LED							
Life time (light source)	~ 100.000 h							
Type of Light	steady or flashing					LED strobe (double or multi-strobe)		
Flashing/Strobe frequency	~ 1 Hz					~ Hz		
Light Intensity	Cd	Cd	Cd	Cd	Cd	Cd	Cd	Cd
Temperature range	-30° to +60° C							
Relative humidity	90% at 20° C							
Weight	kg	kg	kg	kg	kg	kg	kg	kg

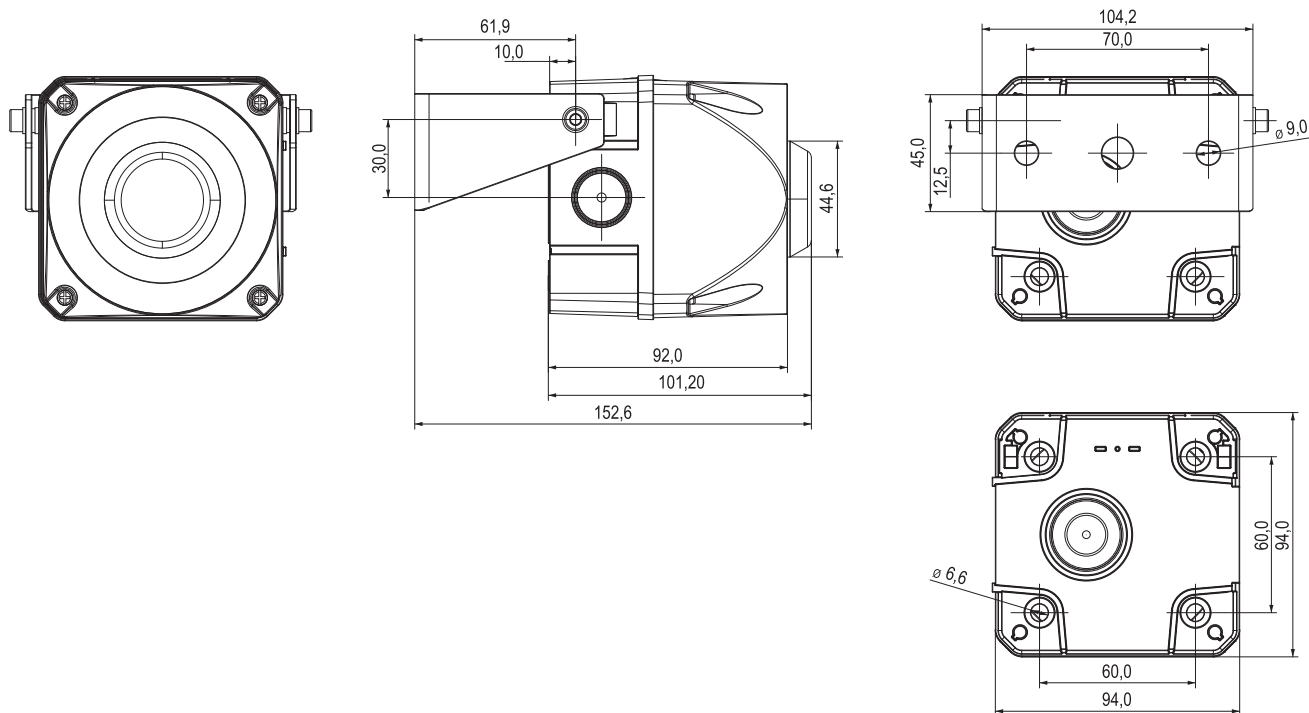
ADS-P/ADS-T



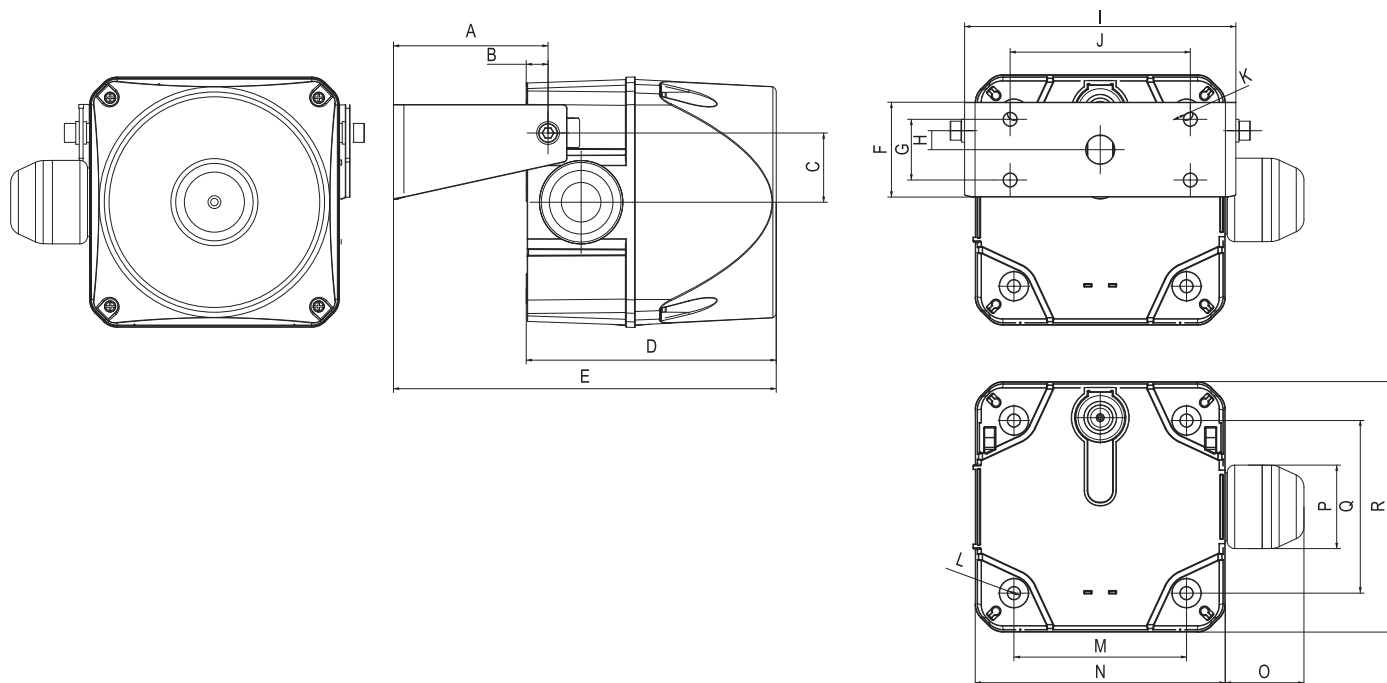
ADM



ADS-P (Size 1), ADS-T (Size 1)



ADM (Size 2), ACM (Size 2), ADL (Size 3), ACL (Size 3), ADX (Size 4), ACX (Size 4)



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Size 2	81,5	11,5	36,5	131,8	201,8	50	32	10	143	95	7	6,5	91	132	41,5	44	91	132
Size 3	105,5	18,5	55	168,9	255,9	70	48	16	199	112	9	6,5	124	183,5	55,5	64	124	183,5
Size 4	133,3	16,8	63	216,9	333,5	100	70	25	243,3	140	9	6,5	167	228,4	55,5	64,4	167	228,4

Measuring unit mm

Multi-tone Alarm Sounders “A” with Light Indicator

Tone table													ASS-P	ASS-T	ASM	ASL	ASX		
STAGE 1 S1	tone type	frequency Hz	repeat rate	tone drawing	DIP switch	specific application	max dB	max dB	max dB	max dB	max dB	STAGE 2 S2	STAGE 3 S3						
Tone 1	sweeping	500 - 1200 Hz	3 sec up+down		0 0 0 0 0														
Tone 2	alternating	2400 / 2900 Hz	@ 2 Hz		0 0 0 0 1														
Tone 3	alternating	440 / 554	@ 0,4 / 0,1 Hz		0 0 0 1 0	AFNOR France													
Tone 4	alternating	554 / 440 Hz	@ 0,5 Hz 1 sec on, 1 sec off.		0 0 0 1 1	Swedish alarm													
Tone 5	alternating	800 / 1000 Hz	@ 0,25 sec.		0 0 1 0 0														
Tone 6	alternating	800 / 1000 Hz	@ 0,5 sec. @ 1 Hz		0 0 1 0 1	fire alarm													
Tone 7	continuous	2400 Hz			0 0 1 1 0														
Tone 8	continuous	660 Hz			0 0 1 1 1	Swedish alarm													
Tone 9	continuous	970 Hz			0 1 0 0 0	PFEER toxic gas													
Tone 10	intermittent	660 Hz	1,8 sec on - off		0 1 0 0 1	Swedish alarm													
Tone 11	intermittent	660 Hz	150 msec on-off		0 1 0 1 0	Swedish alarm													
Tone 12	intermittent	660 Hz	@ 1 Hz, 0,5 sec on 0,5 sec off		0 1 0 1 1	Swedish alarm													
Tone 13	intermittent	970 Hz	0,5 Hz (1 sec on, 1 sec off)		0 1 1 0 0	PFEER Alarm													
Tone 14	saw	1200 - 500 Hz	1 sec (PFEER)		0 1 1 0 1	evacuation Germany													
Tone 15	sweeping	2400 - 2900 Hz	@ 7 Hz		0 1 1 1 0														
Tone 16	sweeping	2400 - 2900 Hz	@ 1 Hz		0 1 1 1 1														
Tone 17	sweeping	2400 - 2900 Hz	@ 50 Hz		1 0 0 0 0														
Tone 18	sweeping	800 - 1000 Hz	@ 1 Hz		1 0 0 0 1														
Tone 19	sweeping	800 - 1000 Hz	@ 7 Hz		1 0 0 1 0														
Tone 20	sweeping	800 - 1000 Hz	@ 50 Hz		1 0 0 1 1														
Tone 21	saw	500 - 1200 Hz	@ in 3 sec. 0,5 sec off		1 0 1 0 0														
Tone 22	bell				1 0 1 0 1														
Tone 23	chime	970 / 800 Hz	repeating ding-dong		1 0 1 1 0														
Tone 24	continuous	370 Hz			1 0 1 1 1	horn (USA)													
Tone 25	continuous	470 Hz			1 1 0 0 0	horn (USA)													
Tone 26	continuous	554 Hz			1 1 0 0 1														
Tone 27	intermittent	1000 Hz	@ 1 Hz		1 1 0 1 0														
Tone 28	intermittent	2500 Hz	0,5 sec.		1 1 0 1 1														
Tone 29	intermittent	800 Hz	0,25 on 1 sec off		1 1 1 0 0														
Tone 30	sweeping	1400 - 1600 Hz	1 sec/1600-1400/0,5 sec		1 1 1 0 1	NF 48-265													
Tone 31	sweeping	660 - 1200 Hz	@ 1 Hz		1 1 1 1 0														
Tone 32	continuous	800 Hz				„BT“-Hupenton ??													
Tone 33	intermittent	2400 Hz	@ 1 Hz																
Tone 34	continuous	440 Hz																	
Tone 35	sweeping	500 - 1200 - 500 Hz	@ 0,3 Hz																
Tone 36	intermittent	1000 Hz	@ 1 Hz																
Tone 37	intermittent	1000 Hz	10/40/10 sec. rising constant, fall			Industrial Alarm Germany													
Tone 38	continuous	1000 Hz																	
Tone 39	sweeping	1200 - 500 Hz	@ 1 Hz			evacuation Germany													
Tone 40	intermittent	1400 Hz	0,25 sec.			fast rising volume													
Tone 41	fast siren	250 - 1200 Hz	0,085 sec.																
Tone 42	alternating	2500 - 3100 Hz																	
Tone 43	fast whoop	500 - 1000 Hz	0,15 sec.																
Tone 44	whoop	500 - 1200 Hz	3 sec sweep, 0,5 sec off																
Tone 45	slow whoop	500 - 1000 Hz	4,5 sec																
Tone 46	intermittent	720 Hz	0,7/0,3 sec			Ind. Alarm Germany													
Tone 47	alternating	800 - 1000 Hz	0,5 sec			fire alarm													
Tone 48	alternating	1000 - 2000 Hz	@ 1 Hz (500-500 ms)			Singapore													
Tone 49	alternating	240 - 2850 Hz	@ 2 Hz (250-250 ms)																
Tone 50	whoop	2400 - 2900 Hz	@ 3 Hz																
Tone 51	intermittent	2850 Hz	0,5 s on/off x 3/1,5 s off			ISO 8201													
Tone 52	sweeping	300 - 1200 Hz	@ 1 Hz																
Tone 53	intermittent	420 Hz	0,625 s on/off			Australia alert tone													
Tone 54	whoop	422 - 775 Hz	sweep 0,85 s, 1 s delay, repeat																
Tone 55	alternating	500 - 1200 Hz	3,75 s - 0,25 s off																
Tone 56	alternating	510 - 610 Hz	@ 2 Hz (250-250 ms)																
Tone 57	alternating	550 - 1000 Hz	0,7 - 0,33 sec																
Tone 58	chime	554/440 Hz	ding dong repeating																
Tone 59	intermittent	660 Hz	150 msec on/off																
Tone 60	sweeping	670 - 725 Hz	@ 0,9 sec																
Tone 61	intermittent	720 Hz	0,7 s on/off																
Tone 62	sweeping	920 - 750 Hz	@ 0,9 sec																



Order data & Accessories

Type	Denomination	Max. Sound pressure (dB A)	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing red
ADS-P	multi-tone alarm sounder size 1 with LED steady-/flashing indicator 5 tones	103	24 V AC/DC			875 06C 408
			110/120 V AC			875 06C 310
			230/240 V AC			875 06C 313
ADS-T	multi-tone alarm sounder size 1 with LED steady-/flashing indicator 32 tones	108	24 V AC/DC			875 16C 408
			110/120 V AC			875 16C 310
			230/240 V AC			875 16C 313
ADM	multi-tone alarm sounder size 2 with LED steady-/flashing indicator 32 tones	116	24 V AC/DC			875 26C 408
			110/120 V AC			875 26C 310
			230/240 V AC			875 26C 313
ADL	multi-tone alarm sounder size 3 with LED steady-/flashing indicator 64 tones	120	24 V AC/DC			875 36C 408
			110/120 V AC			875 36C 310
			230/240 V AC			875 36C 313
ADX	multi-tone alarm sounder size 4 with LED steady-/flashing indicator 64 tones	127	24 V AC/DC			875 46C 408
			110/120 V AC			875 46C 310
			230/240 V AC			875 46C 313
ACM	multi-tone alarm sounder size 2 with led strobe light indicator 32 tones	113	24 V AC/DC			875 66C 408
			110/120 V AC			875 66C 310
			230/240 V AC			875 66C 313
ACL	multi-tone alarm sounder size 3 with led strobe light indicator 32 tones	120	24 V AC/DC			875 76C 408
			110/120 V AC			875 76C 310
			230/240 V AC			875 76C 313
ACX	multi-tone alarm sounder size 4 with led strobe light indicator 32 tones	127	24 V AC/DC			875 86C 408
			110/120 V AC			875 86C 310
			230/240 V AC			875 86C 313



Accessories

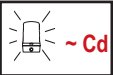
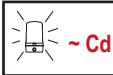
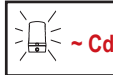
Type	Denomination				Order No.
AMK	mounting kit for combinations of multi-tone alarm sounders „A“ and/or beacons „Q“				874 010 900
AG1	flat gasket for size 1 multi-tone alarm sounders „A“ and/or beacons „Q“				874 021 900
AG2	flat gasket for size 2 multi-tone alarm sounders „A“ and/or beacons „Q“				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

Colour code for Lens

C

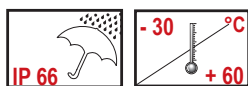
1	amber	5	blue
2	red	6	green
4	clear	7	yellow

Beacons "Q" with Buzzer Indicator

	Size 1	Size 2	Size 3	Size 4
				
	 <85 dB	 <100 dB	 <105 dB	 <105 dB
	2 tones	2 tones	3 tones	3 tones
LED Steady/ Flashing Beacons + Buzzer Indicator	QSS  ~ Cd	QSM  ~ Cd	QSL  ~ Cd	QSX  ~ Cd
Xenon-Strobe Beacon + Buzzer Indicator	QTS  ~5 J	QTM  ~10 J	LED-Strobe Beacon + Buzzer Indicator	QCX  ~ Cd

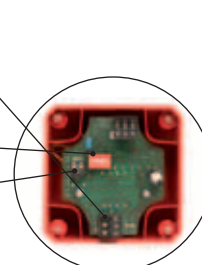
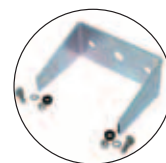
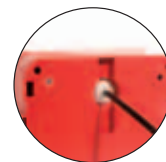
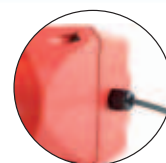
Features

- comprehensive range of visual-audible signalling products with dominant beacon and additional buzzer indicator
- for most different visual -audible signalling requirements in the industry, process control, fire/gas alarm, marine etc.
- buzzer indicators with up-to-date piezo technique
 - 2 tones – steady/pulsing tone (size 1 – 2)
 - 3 tones – steady/pulsing/wobble tone (size 3 – 4)
- versatile installation and mounting options
- light and tone separately switchable
- beacon options**
 - in most up-to-date LED technique**
(long lifetime, low current consumption, vibration proof):
 - LED steady/flashing beacons (size 1 – 4) and
 - LED strobe beacons - 3 strobe patterns – double/multi strobe (size 3 – 4) or
 - in conventional xenon strobe technique**
(classic signalling with good signalling effect):
 - xenon strobe beacons with ~5 J to 10 J strobe energy (size 1 – 2)
- fit for plc applications (leakage, inrush current)

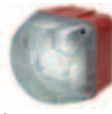
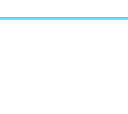
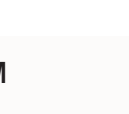


Accessories / Installation Options:

- lateral cable entry** on both sides with **cable gland** (accessory type AKV)
- grommet from back side** (included as standard)
- metal bracket kit** (accessory type AB1-AB4, for mounting of alarm sounders or beacons in specific direction, on mounting platforms, devices etc.)
- electrical connection via cage clamp**
- tone selection via dip switch**
volume control by potentiometer (sizes 1 – 3)
- flat gaskets** for correct IP66 installation on smooth surfaces (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 ~103 dB 	ASS-P + QDS LED Steady-/Flashing ASS-P + QFS ~5 J Xenon Strobe 	ADS-P LED Steady-/Flashing 	QSS LED Steady-/Flashing 	QDS LED Steady-/Flashing 
	ASS-T ~108 dB 	ASS-T + QDS LED Steady-/Flashing ASS-T + QFS ~5 J Xenon Strobe 	ADS-T LED Steady-/Flashing 	QTS ~5 J Xenon Strobe 	QFS ~5 J Xenon Strobe 
2	ASM ~113 dB 	ASM + QDM LED Steady-/Flashing 	ADM LED Steady-/Flashing 	QSM LED Steady-/Flashing 	QDM LED Steady-/Flashing 
		ASM + QFM ~10 J Xenon Strobe 	ACM LED Strobe 	QTM ~10 J Xenon Strobe 	QFM ~10 J Xenon Strobe 
3	ASL ~120 dB 	ASL + QDL LED Steady-/Flashing 	ADL LED Steady-/Flashing 	QSL LED Steady-/Flashing 	QDL LED Steady-/Flashing 
		ASL + QBL LED Strobe 	ACL LED Strobe 	QCL LED Strobe 	QBL LED Strobe 
4	ASX ~127 dB 	ASX + QDX LED Steady-/Flashing 	ADX LED Steady-/Flashing 	QSX LED Steady-/Flashing Light 	QDX LED Steady-/Flashing Light 
		ASX + QBX LED Strobe 	ACX LED Strobe 	QCX LED Strobe 	QBX LED Strobe 

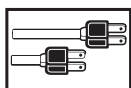


QSS



QSM





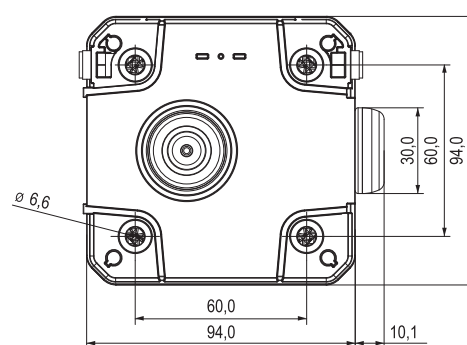
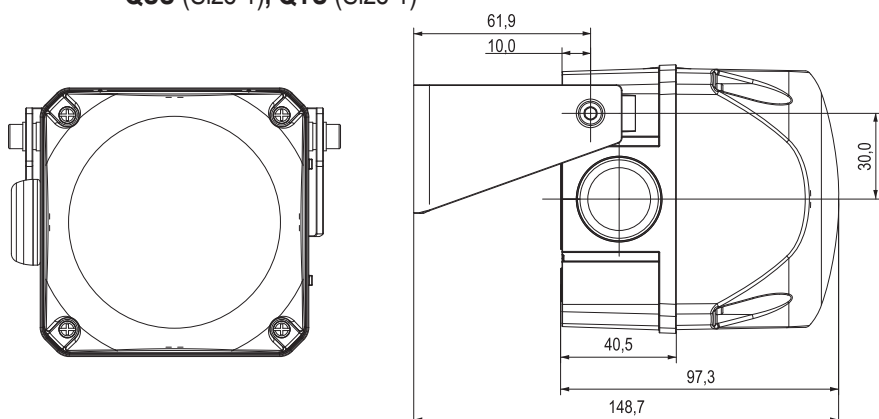
Technical Data

Type	QSS Size 1	QSM Size 2	QSL Size 3	QSX Size 4	QTS Size 1	QTM Size 2	QCL Size 3	QCX Size 4
Housing	polycarbonate							
Housing colour	beacon red (RAL 3000), buzzer indicator black							
Lens colour	amber, red, clear, blue, green, yellow							
Cable entry	grommet from back, 5 - 10 mm							
Cable conduit	cable gland M20x1,5 from side, 5 - 12 mm							
Mounting								
Duty cycle factor	100 %							
Terminals	up to 2,5 mm² single wire							
Number of tones	2		3		2		3	
Tone frequency	3.500 Hz	3.300 Hz			3.500 Hz	3.300 Hz		
Volume control	---	by potentiometer			---	by potentiometer		
Sound pressure	80 dB	80-100 dB	85-105 dB		80 dB	80-100 dB	85-105 dB	
Light source	LED				Xenon tube		LED	
Lifetime (light source)	h				h		h	
Flashing/Strobe frequency	1,4 Hz				~ 1 Hz		??	??
Light intensity	Cd	Cd	Cd	Cd	Cd	Cd	Cd	Cd
Strobe energy	---				~5 J	~10 J	---	
Temperature range	-30° to +60° C				-30° to +60° C			
Relative Humidity	90% at 20° C				90% at 20° C			
Weight	kg	kg	kg	kg	kg	kg	kg	kg

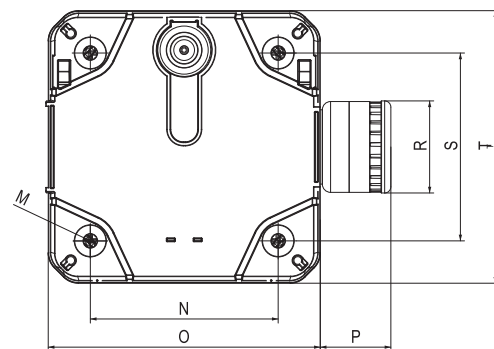
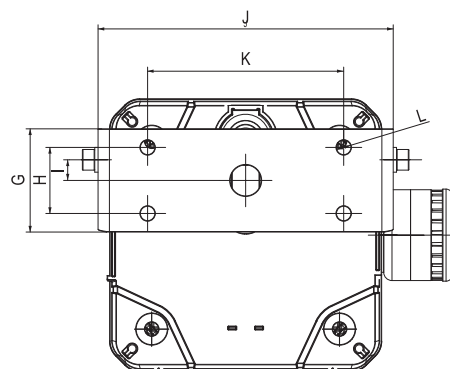
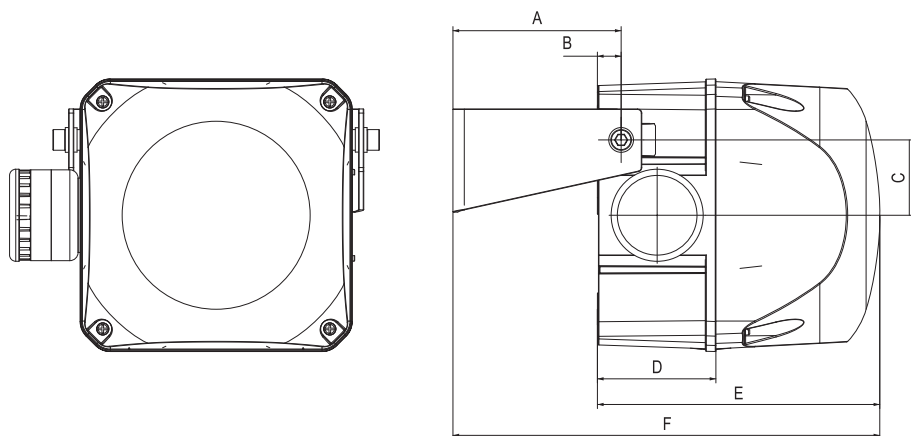
QSL/QCL



QSS (Size 1), QTS (Size 1)



QSM/QTM (Size 2), QSL/QCL (Size 3), QSX/QCX (Size 4)



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
Size 2	81,5	11,5	36,5	57,4	136,8	206,8	50	32	10	143	95	7	6,5	91	131,2	44	34,2	44,8	91	132
Size 3	105,5	18,5	55	72,5	175,8	262,8	70	48	16	199	112	9,5	6,5	124	183,4	64	43,7	64,6	124	183,7
Size 4	133,3	16,8	63	90,8	223,4	340	100	70	25	243,3	140	9	6,5	167	228,4	64,4	44,5	64,6	167	228,4

Measuring unit mm

Beacons "Q" with Buzzer Indicator



Order data

Type	Denomination	Light Source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing red
QSS	LED Steady-/Flashing Beacon size 1 with buzzer indicator	LED Cd	24 V AC/DC			876 16C 408
			110/120 V AC			876 16C 310
			230/240 V AC			876 16C 313
QSM	LED Steady-/Flashing Beacon size 2 with buzzer indicator	LED Cd	24 V AC/DC			876 26C 408
			110/120 V AC			876 26C 310
			230/240 V AC			876 26C 313
QSL	LED Steady-/Flashing Beacon size 3 with buzzer indicator	LED Cd	24 V AC/DC			876 36C 408
			110/120 V AC			876 36C 310
			230/240 V AC			876 36C 313
QSX	LED Steady-/Flashing Beacon size 4 with buzzer indicator	LED Cd	24 V AC/DC			876 46C 408
			110/120 V AC			876 46C 310
			230/240 V AC			876 46C 313
QTS	xenon strobe beacon size 1 with buzzer indicator	xenon-tube ~5 J	24 V AC/DC			876 56C 408
			110/120 V AC			876 56C 310
			230/240 V AC			876 56C 313
QTM	xenon strobe beacon size 2 with buzzer indicator	xenon-tube ~10 J	24 V AC/DC			876 66C 408
			110/120 V AC			876 66C 310
			230/240 V AC			876 66C 313
QCL	LED strobe beacon size 3 with buzzer indicator	LED Cd	24 V AC/DC			876 76C 408
			110/120 V AC			876 76C 310
			230/240 V AC			876 76C 313
QCX	LED strobe beacon size 4 with buzzer indicator	LED Cd	24 V AC/DC			876 86C 408
			110/120 V AC			876 86C 310
			230/240 V AC			876 86C 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

Colour code for Lens

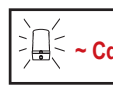
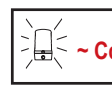
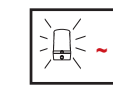
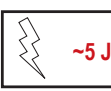
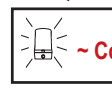
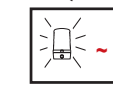
1	amber	5	blue
2	red	6	green
4	clear	7	yellow

C

LED-Steady-/Flashing Beacons "Q"

Xenon Strobe Beacons "Q", LED-Strobe Beacons "Q"

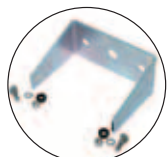
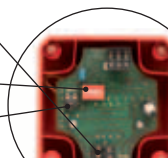


	Size 1	Size 2	Size 3	Size 4
LED Steady-/Flashing Beacons	 QDS 	 QDM 	 QDL 	 QDX 
Xenon Strobe Beacons	QFS 	QFM 		
LED Strobe Beacons			QCL 	QCX 

Features

- comprehensive range of cubic design beacons in LED and xenon technique
- in modern LED strobe technique**
(long lifetime, low current consumption, vibration proof)
 - LED steady/flashing beacons in size 1 – 4
 - LED strobe beacons in size 3 – 4
 most modern LED technique with high signalling effect
 3 strobe patterns (double and multi-strobe, externally switchable or
- in conventional xenon strobe technique**
(classic signalling with good signalling effect)
 - Xenon strobe beacons in size 1 – 2
- for applications in the industry, process control, fire/gas alarm, marine etc
- by combining eg LED steady beacons (up to 4 sizes) traffic control signals (eg red-amber-green) but also individual colour combinations for industrial or general applications can be realized
- unique beacon/lens design
- versatile installation and mounting options
- 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** (accessory type AB1-AB4, for mounting of alarm sounders or beacons in specific direction, on mounting platforms, devices etc.) 
- electrical connection via cage clamp** 
- tone selection via dip switch**
volume control by potentiometer (sizes 1 – 3) 
- flat gaskets** for correct IP66 installation on smooth surfaces (accessory type AG1-AG4) 
- mounting kit AMK** (for mounting/combination of 2 or more same size sounders or beacons) 



LED-Steady-/Flashing Beacons "Q"

Xenon Strobe Beacons "Q", LED-Strobe Beacons "Q"

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 ~103 dB 	ASS-P + QDS LED Steady-/Flashing ASS-P + QFS ~5 J Xenon Strobe 	ADS-P LED Steady-/Flashing 	QSS LED Steady-/Flashing 	QDS LED Steady-/Flashing 
	ASS-T ~108 dB 	ASS-T + QDS LED Steady-/Flashing ASS-T + QFS ~5 J Xenon Strobe 	ADS-T LED Steady-/Flashing 	QTS ~5 J Xenon Strobe 	QFS ~5 J Xenon Strobe 
2	ASM ~113 dB 	ASM + QDM LED Steady-/Flashing 	ADM LED Steady-/Flashing 	QSM LED Steady-/Flashing 	QDM LED Steady-/Flashing 
		ASM + QFM ~10 J Xenon Strobe 	ACM LED Strobe 	QTM ~10 J Xenon Strobe 	QFM ~10 J Xenon Strobe 
3	ASL ~120 dB 	ASL + QDL LED Steady-/Flashing 	ADL LED Steady-/Flashing 	QSL LED Steady-/Flashing 	QDL LED Steady-/Flashing 
		ASL + QBL LED Strobe 	ACL LED Strobe 	QCL LED Strobe 	QBL LED Strobe 
4	ASX ~127 dB 	ASX + QDX LED Steady-/Flashing 	ADX LED Steady-/Flashing 	QSX LED Steady-/Flashing Light 	QDX LED Steady-/Flashing Light 
		ASX + QBX LED Strobe 	ACX LED Strobe 	QCX LED Strobe 	QBX LED Strobe 

How to order Beacons „Q“ as traffic control signaling solution

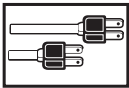
LED steady-/flashing beacons „Q“ (size 1-4),
xenon strobe beacons „Q“ (size 1-2) and/or
LED strobe beacons „Q“ (size 3-4)
can be combined with same size
LED steady-/flashing beacons „Q“ (size 1-4),
xenon strobe beacons „Q“ (size 1-2) and/or
LED strobe beacons „Q“ (size 3-4).

Typical configuration:

QDM led steady/flashing beacon (size 2), red, 230 V AC +
QDM led steady/flashing beacon (size 2), amber, 230 V AC +
QDM led steady/flashing beacon (size 2), green, 230 V AC



type	order no.	product
QDM	874 262 313	LED steady/flashing beacon - size 2
QDM	874 262 313	LED steady/flashing beacon - size 2
QDM	874 262 313	LED steady/flashing beacon - size 2
AMK	874 010 900	2 pcs. mounting kit for combination of multi-tone alarm sounders "A" and/or beacons "Q"

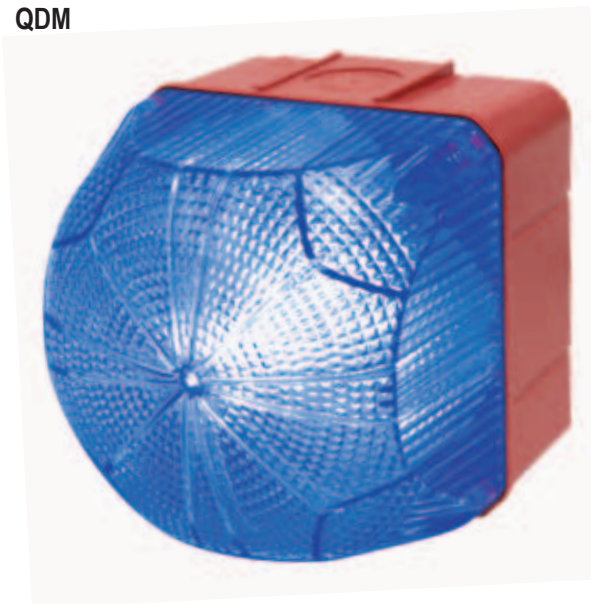


Technical Data

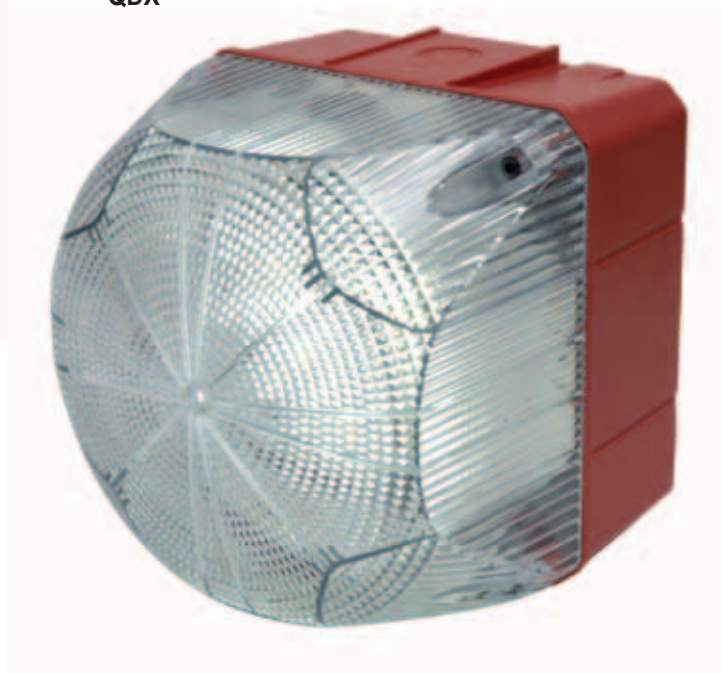


Type	QDS Size 1	QDM Size 2	QDL Size 3	QDX Size 4	QFS Size 1	QFM Size 2	QBL Size 3	QBX Size 4
Housing	polycarbonate							
Housing colour	red (RAL 3000)							
Lens colour	amber, red, clear, blue, green, yellow							
Cable entry	grommet from back, 5 - 10 mm							
Cable conduit	cable gland M20x1,5 from side, 5 - 12 mm							
Mounting								
Duty cycle factor	100 %							
Terminals	up to 2,5 mm² single wire							
Temperature range	-30° to +60° C							
Light source	LED				xenon tube		LED	
Life time (light source)	h				h		h	
Flashing/Strobe frequency	~ 1 Hz				~ 1 Hz		??	
Light intensity	Cd	Cd	Cd	Cd	Cd		Cd	Cd
Strobe energy	---				~ 5 J	~ 10 J	---	
Relative Humidity	90% at 20° C				90% at 20° C			
Weight	kg	kg	kg	kg	kg	kg	kg	kg

QDM



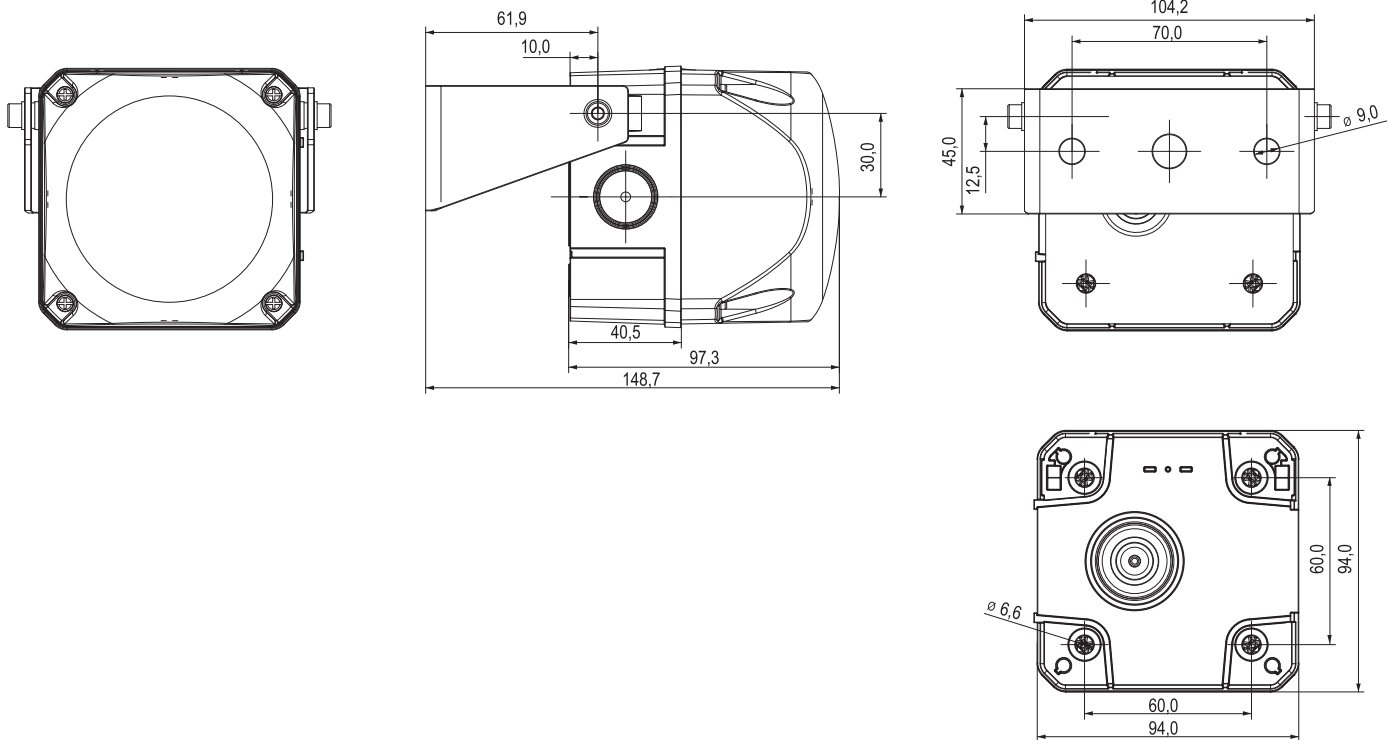
QDX



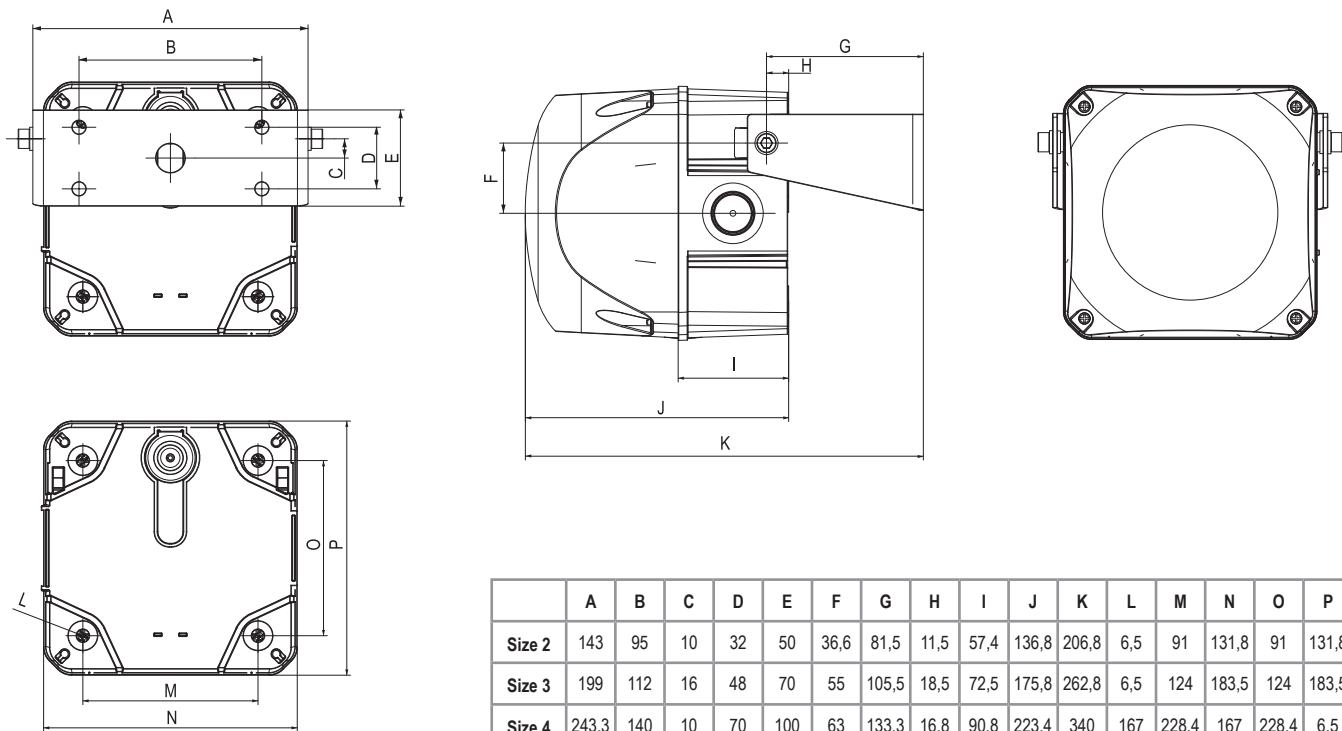
LED-Steady-/Flashing Beacons "Q"

Xenon Strobe Beacons "Q", LED-Strobe Beacons "Q"

QDS (Size 1), QFS (Size 1)



QDM (Size 2), QFM (Size 2), QDL (Size 3), QCL (Size 3), QDX (Size 4), QCX (Size 4)



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Size 2	143	95	10	32	50	36,6	81,5	11,5	57,4	136,8	206,8	6,5	91	131,8	91	131,8
Size 3	199	112	16	48	70	55	105,5	18,5	72,5	175,8	262,8	6,5	124	183,5	124	183,5
Size 4	243,3	140	10	70	100	63	133,3	16,8	90,8	223,4	340	167	228,4	167	228,4	6,5

Measuring unit mm



Order data



Type	Denomination	Light Source	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing red
QDS	LED steady-/flashing beacon - size 1	LED Cd	24-48 V AC/DC			874 16C 408
			110/120 V AC			874 16C 310
			230/240 V AC			874 16C 313
QDM	LED steady-/flashing beacon - size 2	LED Cd	24-48 V AC/DC			874 26C 408
			110/120 V AC			874 26C 310
			230/240 V AC			874 26C 313
QDL	LED steady-/flashing beacon - size 3	LED Cd	24-48 V AC/DC			874 36C 408
			110/120 V AC			874 36C 310
			230/240 V AC			874 36C 313
QDX	LED steady-/flashing beacon - size 4	LED Cd	24-48 V AC/DC			874 46C 408
			110/120 V AC			874 46C 310
			230/240 V AC			874 46C 313
QFS	xenon strobe beacon - size 1	xenon tube 5 J	24-48 V AC/DC			874 56C 408
			110/120 V AC			874 56C 310
			230/240 V AC			874 56C 313
QFM	xenon strobe beacon - size 2	xenon tube 10 J	24-48 V AC/DC			874 66C 408
			110/120 V AC			874 66C 310
			230/240 V AC			874 66C 313
QBL	LED strobe beacon - size 3	LED Cd	24-48 V AC/DC			874 76C 408
			110/120 V AC			874 76C 310
			230/240 V AC			874 76C 313
QBX	LED strobe beacon - size 4	LED Cd	24-48 V AC/DC			874 86C 408
			110/120 V AC			874 86C 310
			230/240 V AC			874 86C 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

Colour code for Lens

C

1	amber	5	blue
2	red	6	green
4	clear	7	yellow

How to order Beacons „Q“
please refer to page 28.



HEADQUARTER

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