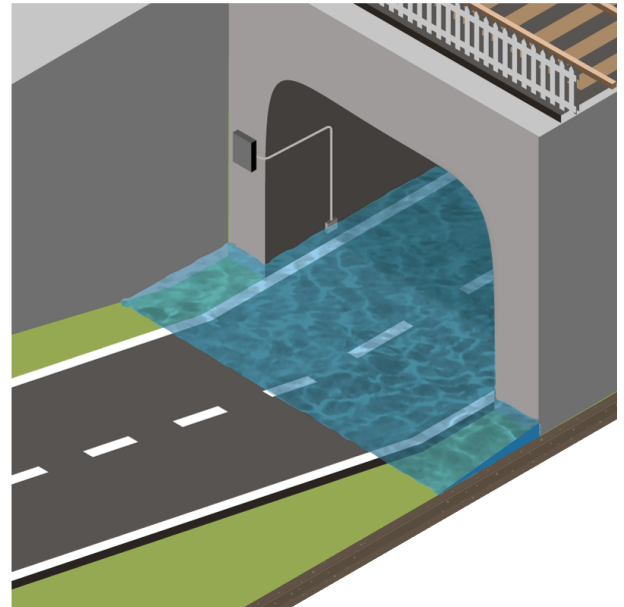


RAS flood alarm system

Underpass flood detection, complete set · Art. 7823120

TECHNICAL FEATURES

Complete RAS system for warning road users when an underpass or tunnel floods. A capacitive flood sensor installed at the low point detects rising water and signals the control unit, which immediately activates the LED message panel showing FLOODED TUNNEL, the two LED flashers and the red traffic light ahead of the structure. The set covers one approach; further warning devices can be added for the opposite direction. The control unit is the same as in the RAV overheight detection system, so both functions can share one installation.



RoHS
Compliant

WEEE
Marked

CE
Marked

230 V
Mains + battery

INCLUDED COMPONENTS		
1	7823100	RAS flood sensor, capacitive, 13 mm activation level
1	7820105	RAV/RAS control unit, fibreglass cabinet with post, timer, flashing control board and battery charging
1	7820110	Battery 12 V 18 Ah AGM for the control unit
1	7820109	RAV LED message panel, 2 lines, 100 mm characters, FLOODED TUNNEL
2	7820114	RAV Basic 201 LED flasher, 12 V external control
1	7820112	RAV red traffic light Ø200 mm, 12 V
1	7820108	RAV junction box, 3-4 outlets

SYSTEM DATA	
Article no.	7823120
Detection	Capacitive flood sensor at the low point, activation level 13 mm, 10 ÷ 35 Vdc, 975 mW
Power supply	100 ÷ 240 Vac mains; 12 V 18 Ah AGM battery backup with integrated charging (photovoltaic kit on request)
Control unit outputs	12 Vdc flashing output (flashers) and 12 Vdc steady output (message panel, traffic light)
Warning devices in set	LED message panel FLOODED TUNNEL, 2 x Ø200 mm LED flashers, 1 x Ø200 mm red traffic light
Expansion	Up to 2 message panels, 8 Basic 201 (or 4 Basic 304) flashers, 16 Ø200 mm traffic lights per control unit
Remote alarm	Optional 4G router to alert the responsible authority
Environment	Sensor IP65, -40 to +70 °C; control unit IP65, -10 to +55 °C; message panel IP55

RAS flood sensor

Capacitive sensor for the detection of underpass flooding

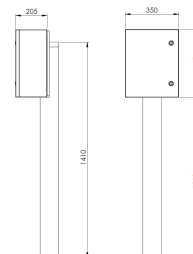
ELECTRICAL FEATURES	
Article no.	7823100
Detection technology	Capacitive
Power supply	10 ÷ 35 Vdc
Power consumption	975 mW
Connections	4 x 0.75 mm ² (power supply +/-; output)
Level of activation	13 mm ± 1 mm
Class of insulation	Class III
Conformity	NE 21 · IEC 60529 · EN 60068-2-27 / 64
MECHANICAL FEATURES	
IP degree of protection	IP65
Material	Steel
Dimensions	115 x 233 x 48 mm
Total weight	950 g
Operative temperature	-40 °C ÷ +70 °C



RAV/RAS control unit

Fibreglass cabinet with post, power supply, timer and flashing control board

ELECTRICAL FEATURES	
Article no.	7820105
Input voltage	100 ÷ 240 Vac
Input voltage sensors	12 Vdc
Output voltage projectors (flashing output)	12 Vdc
Output voltage display (steady output)	12 Vdc
Battery	12 V 18 Ah AGM (art. 7820110, included in this set)
Protection	Over-discharge cutoff; overvoltages; overcurrents
Insulation class	Class I
MECHANICAL FEATURES	
Operating temperature	-10 °C ÷ 55 °C
IP protection degree	IP65
Weight	25 kg
Dimensions	350 x 1495 x 205 mm (cabinet 350 x 445 mm, post Ø120 mm)
Material	Fibreglass



RAV LED message panel

Two-line fixed message display, FLOODED TUNNEL / HEIGHT EXCEEDED

OPTICAL FEATURES	
Article no.	7820109
Optic	Single-side
Number of lines displayed	2
Character height	101 mm
Distance between two contiguous pixels	16 mm
LED colour	Amber



ELECTRICAL FEATURES	
Power supply	12 Vdc
Power consumption	28 W
Insulation class	Class III
Wiring	Two power cables, one per message

MECHANICAL FEATURES	
IP protection degree	IP55
Dimensions	850 x 380 x 70 mm
Weight	7 kg
Operating temperature	-30 ÷ +85 °C
Housing material	EN AW 6060 aluminium alloy, matte black

RAV red traffic light Ø200 mm

Single red traffic light, 12 V, switched by the control unit

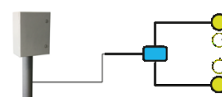
FEATURES	
Article no.	7820112
Colour	Red
Diameter	200 mm
Supply	12 V
Operation	Steady output from the RAV/RAS control unit
Max. per control unit	16



RAV junction box, 3-4 outlets

Distribution box for warning lights on one post

FEATURES	
Article no.	7820108
Outlets	3-4
Use	One feed from the control unit to the flashers and traffic light on the same post

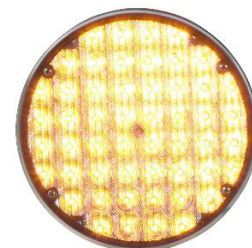


RAV Basic 201 LED flasher (2 pcs)

Ø200 mm LED flasher, 12 V external control, EN 12352 L8H/L8M

OPTICAL FEATURES

Article no.	7820114
Light source	52 SMD LEDs
Optics	Single-sided
Colour	Amber / Red
EN 12352 class	L8H/L8M
Duration of the optical group	> 50'000 hours



ELECTRICAL FEATURES

Supply	12 Vdc (11 ÷ 13 Vdc) or 12/24 Vdc (11 ÷ 30 Vdc)
Nominal power	7.8 W @ 12 Vdc
Nominal current	650 mA @ 12 Vdc
Protections	Reverse polarity; overvoltages
Operation	External control by the RAV/RAS control unit (steady or flashing)
Insulation class	Class III

MECHANICAL FEATURES

Operating temperature	-30 °C / +55 °C
Lens / body	Polycarbonate / PA6
IP protection class	IP65
Weight	500 g
Dimensions	Ø 200 mm x 25 mm
Fixing	4 rear inserts for bracket attachment
Wiring	Supplied with 5.1 m long 2x0.75 mm² cable