



Traffic engineering

Signal requesting devices

Our expertise for the networks of
today and tomorrow

www.langmatz.de



▲ Plastic granulate

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Langmatz –

Our expertise for the networks of today and tomorrow

The specialist for technical system solutions

Langmatz technical system solutions are considered the gold standard of modern infrastructure in telecommunications and energy networks. Langmatz's customers include energy providers, local councils, public utilities, and telecommunication companies.

"Made in Germany" is our guiding principle. One of our greatest strengths is that we carry out all processes at our sites in Germany. From design and development supported by the latest 3D printing technology, prototype and mould making, to production and installation.

Our quality management system (QMS) forms the daily basis for meeting our challenging goals. As standards are often not enough for us, we have evolved extensive testing processes and integrated special testing methods into our quality processes. These include regular checks in our material and product testing laboratory, which is equipped with a special static load hydraulic press for manholes.

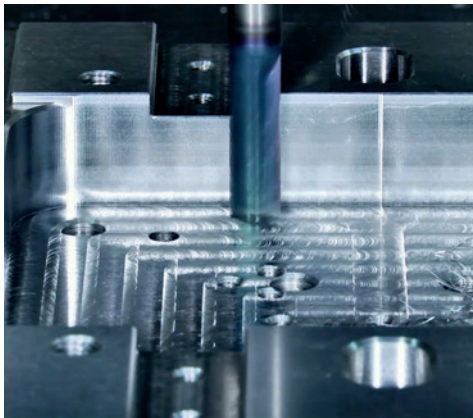
The core elements of our corporate strategy include qualified employees, national supply chains, and Made in Germany manufacturing with state-of-the-art production facilities.



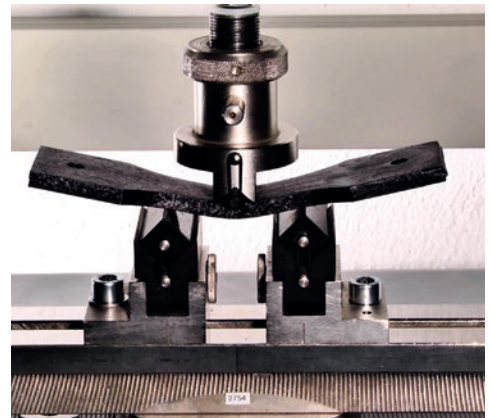
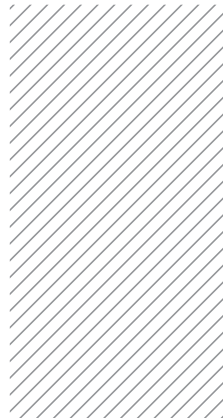
▲ Injection moulding



▲ Labelling laser



▲ Mould and tool making



▲ Product and materials testing laboratory

Ongoing digitalisation requires technologically mature systems for the networked towns and cities of today. We are one of the most innovative companies in Germany and, as such, we are the perfect partner to implement your projects.

Your partner Langmatz –

Digitally networked environments are our future

A fundamental structural transformation is taking place in towns, cities and rural areas. Digitalisation, climate protection and the energy and mobility transition require new concepts for a functional urban infrastructure in which people can enjoy life. This approach has given rise to the idea of the Smart City and the Smart Village – the vision of digitally networked environments. Langmatz has looked

into these requirements in detail and developed future-centric solutions for energy and data connectivity, as well as transport infrastructure. In doing so, we have placed great importance on ensuring that our systems boast a high level of security, can be integrated seamlessly into the cityscape, and are particularly user-friendly.

We offer a broad-based portfolio of high-quality products for the many different requirements of the cities and towns of today and tomorrow:

- ▲ Polycarbonate manholes
- ▲ Underground distribution systems
- ▲ Outdoor cabinets and outdoor pedestals
- ▲ Building cable & pipe entry systems
- ▲ Fuse boxes
- ▲ Signal requesting devices
- ▲ Radio ripple control receivers



Your partner Langmatz – For future-centric solutions

Traffic infrastructure – What drives us

Cities, municipalities and utilities wish to improve the quality of life of citizens with new digital solutions. However, both digital infrastructure and smart technologies require

housing that meet the specific requirements. Together we will find the right solution for your application.



Vandalism
protection



Cost-efficient



Suitable for the
visually impaired



Designed for the
cityscape



Traffic safety

Langmatz signal requesting devices – Standard-compliant and cost-efficient

Making roads safer together

Germany's road network continues to grow and traffic density is constantly on the rise. Studies show that pedestrians are particularly at risk in urban traffic, especially senior citizens, visually impaired and blind people. The persistently high number of pedestrians killed in traffic is a subject of increasing public scrutiny. The situation is also becoming more dangerous due to technological progress and the noise reduction it entails for many different vehi-

cles. Langmatz has been helping to improve road safety for over 30 years with its innovative products. They include modern signal requesting devices for traffic light installations that ensure safe crossing of roads. They are user-friendly and meet all common standards, but also protect your investment in future thanks to their modern, urban design.



Future-centric and in harmony with the cityscape – The right decision for every situation

Well-thought-out!

The housing design of Langmatz signal requesting devices was developed to meet the specific needs of pedestrians, particularly the blind and visually impaired. Ergonomically perfect design, user-oriented functions and high-quality surfaces characterise these modern, urban housings. Their shape, size and colour etc. have been chosen so that they can be clearly identified from a long distance. Yellow is considered the ideal signal colour because it can best be

distinguished from grey, and its informative character adequately visualises the hazardous situation. Of course, the range of Langmatz signal requesting devices encompasses all versions of standard symbols and texts, but is also individually adaptable. The vandal-proof and extremely temperature-resistant polycarbonate top covers (-25 ° to +60 °C) are available with a push-button or sensor and optionally also without visual feedback.

What sets our signal requesting devices apart

- ▲ Cost-efficient solutions
- ▲ Secure investment through universal voltage technology
- ▲ High level of protection against vandalism
- ▲ Low-maintenance equipment
- ▲ Compliance with legal provisions and standards
- ▲ 5-year warranty
- ▲ Sustainable, future-centric concept
- ▲ Installation-friendly and low-maintenance

Technical advantages

- ▲ Easy installation
- ▲ Suitable for all conventional pole diameters
- ▲ Pole installation using screws, without removal of the vibration unit
- ▲ UV-resistant polycarbonate housing, without adhesive
- ▲ Good resistance to vandalism, without the need for additional parts
- ▲ Temperature-resistant from -25 ° to +60 °C
- ▲ Approved by all major signal engineering firms
- ▲ Complies with DIN 32981:2018-06, EN 50293
- ▲ Fast, error-free connection through colour-coded connection wires



▲ Secure investment, thanks to durable, vandal-proof design



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ZU VERMIETEN

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Signal requesting devices – Langmatz product overview

easyguide



easyguide – EK424
Signal requesting device

basicguide



basicguide – EK524
Signal requesting device

crossguide



crossguide EK533
Signal requesting device

soundguide



soundguide – EK598
Acoustic

soundguide plus



EK598
Acoustic signalling device



basic plus – EK523
Signal requesting device

Colour finishes of acoustic housings – Pole installation



crossguide

soundguide

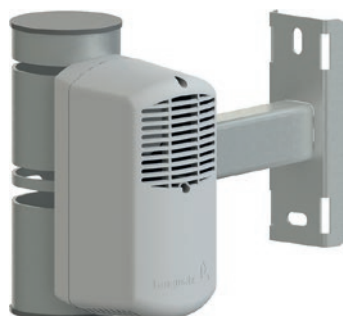
Signal chamber installation



crossguide

soundguide

Accessories



Pole cross arm



EK533

Acoustic signalling device



Standards and directives

▲ Langmatz fulfils the following standards and directives:

- DIN VDE 0832-100 / Hd638S1
- DIN VDE 0832-200 / EN50293
- DIN 32981 / ISO 23600
- ÖNORM V2100 and V2101 CSA and MUTCD

Universal voltage can be configured

- ▲ 230 V AC / 160 V dimming function
- ▲ 110 V AC, 40 V AC or DC, or 27 V dimming function
- ▲ 24V AC or DC w



Ideal entry-level version

The easyguide offers core basic functions for traffic signals at a value-for-money price. Pedestrians or cyclists can request signals either by pressing a large-surface push-button or by a capacitive sensor with a dynamic measuring principle.

Properties and technical data

- ▲ Universal voltage capability
- ▲ Compact design
- ▲ Easy to install
- ▲ Protection against vandalism without additional parts

Typical areas of application

- ▲ Cyclist signal request
- ▲ Passenger guidance systems
- ▲ Spare parts market



▲ easyguide – EK424



▲ LED feedback (optional)



▲ Rear mounting panel



▲ Optionally by push-button with isolated micro switch or sensor (capacitive)



▲ Approved by all major signal engineering firms



Our tough basic model

The signal requesting device with tactile signalling for the visually impaired. Signals are requested either using a large-surface push-button or by a capacitive sensor, which can be operated even with gloves on. Changes in the sensor's request zone, such as chewing gum or a layer of ice, are taken into account as part of the resonant circuit following a single request. This prevents continuous requests from occurring. Due to its easy installation, it is an ideal replacement for an older device and offers a particularly robust and standard-compliant solution.

Standard-compliant and compatible

- ▲ Complies with DIN 32981:2018-06, EN 50293
- ▲ Tactile crossing signal for the visually impaired by a pulsed vibrating push-button
- ▲ Optional: Loudspeaker for additional guide signal sound from the push-button
 - external acoustics required, e.g. soundguide

Particularly easy to install

- ▲ Coloured connection wires with assigned functions
- ▲ Pole installation without removal of the vibration unit
- ▲ Particularly variable as spare part and replacement
 - Thanks to predetermined breaking points, the screw spacing can be adjusted in order to use drill holes in poles

Properties and technical data

- ▲ Universal voltage capability
- ▲ Excellent protection against vandalism without additional parts

Typical areas of application

- ▲ Traffic signals with pedestrian requesting systems and tactile signalling for the visually impaired
- ▲ New construction / conversion



▲ Excellent mechanical strength due to integrated stainless steel protection



▲ Fixed default settings; the tactile crossing signal and an optionally integrated loudspeaker make it a solid basic version



▲ basicguide – EK524

soundguide plus

Perfect combination

The latest development from Langmatz: The soundguide plus is TÜV-tested and meets all standard requirements for a standard-compliant signal requesting device with its future-proof technology. The soundguide plus consists of the basic plus button and the soundguide as an acoustic unit. The complete package is rounded off by newly developed software. All settings are transmitted intuitively, securely and wirelessly via an encoded, access-secure Bluetooth dongle (KRITIS).

basic plus: standard-compliant and investment-optimised

The basic plus button is ideal for use on traffic signals with a pedestrian requesting system and tactile signalling for the visually impaired. When selecting the button, you can also choose between the standard and premium version. A loudspeaker is integrated in the premium version to play back the guide signal sound. Requests are also acknowledged acoustically. The tactile crossing signal for the visually impaired prevents misinterpretation and helps people with limited sense of touch with its pulsed vibrating button.

Perfectly combined

- ▲ Complies with DIN 32981:2018-06, EN 50293
- ▲ Acoustic settings by radio interface
- ▲ Signal can be requested optionally by a push-button or sensor
- ▲ Available with or without LED feedback

Highlights of the premium version

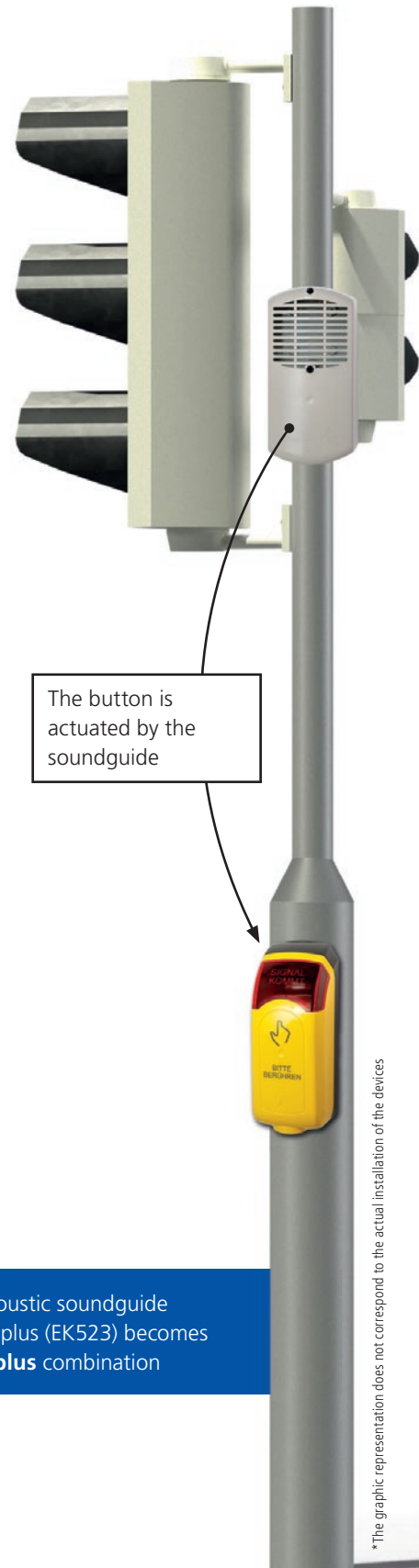
- ▲ Integrated loudspeaker (location signal from the push-button and acoustic acknowledgement of the request)
- ▲ Visual acknowledgement logic



▲ Acoustic soundguide
– EK598

▲ basic plus – EK523

Paired with the acoustic soundguide (EK598), the basic plus (EK523) becomes the **soundguide plus** combination



*The graphic representation does not correspond to the actual installation of the devices

Optimum acoustics

With the new soundguide, guide and pedestrian crossing signals are generated automatically on the basis of the level of traffic noise. The signals can be defined in accordance with a country's respective standard or according to the user's wishes using the software. The signals are emitted cost-effectively from only one housing in the specified

direction. The pedestrian crossing signal is thus emitted into the crossing, and the guide signal is emitted downwards around the pole location. A rear guide signal loudspeaker and its installation are not required with this development. The volume adapts to the actual noise level and so ideally protects residents from noise.

Developed for the future

- ▲ soundguide Manager (software)
- ▲ Intuitive interface
- ▲ Access-protected by encoded dongle (KRITIS)
- ▲ Presentation of acoustics and individual designation
- ▲ Volume adjustment of the pedestrian crossing signal by crossing length or individual adjustment
- ▲ All acoustics at a location can be selected by radio



▲ Optimised software ergonomics

Properties and technical data

- ▲ Universal voltage capability
- ▲ Compact design
- ▲ Protection against vandalism without additional parts
- ▲ Approved by all major signal engineering firms
- ▲ Easy installation on poles or in a signal chamber
- ▲ Traffic-noise-dependent guide and/or pedestrian crossing signal in accordance with RiLSA and DIN 32981



▲ EK598 – Rear view

Extremely adaptable

Thanks to its innovative features, the crossguide turns your traffic light controller into a talking traffic light. The device impresses with its tested technology and ensures safe crossing for pedestrians and the visually impaired. The added advantage: both voice prompts and signals can be individually entered and played back. Traffic noise-dependant acoustics are already integrated. In addition, it is perfectly protected against vandalism thanks to its sturdy construction. All settings are made with the software by USB cable. The acoustic signalling device receives its data from the crossguide and can be optionally selected as a pole or signal chamber installation.

Everything thought through

- ▲ Complies with DIN 32981:2018-06, EN 50293
- ▲ All functions can be set with the software by USB cable
- ▲ Module slot for subsequent functional extensions
- ▲ Special functions are included in the device as standard
- ▲ Internal loudspeaker
- ▲ Function to retrofit standard-compliant equipment for the visually impaired to older systems
- ▲ Actuation for OS + CS acoustic signalling device integrated
- ▲ The function can subsequently be modified at any time by simply replacing the top cover
- ▲ Optional: visual feedback approx. 270° at the side with text, e.g. "Wait for signal"
- ▲ Optional: can be equipped with gold-cap-buffered real-time clock for, night-time reduction or deactivation even if the control unit does not provide a signal etc.

Typical areas of application

- ▲ New construction / conversion / retrofitting
- ▲ Urban infrastructure

Features

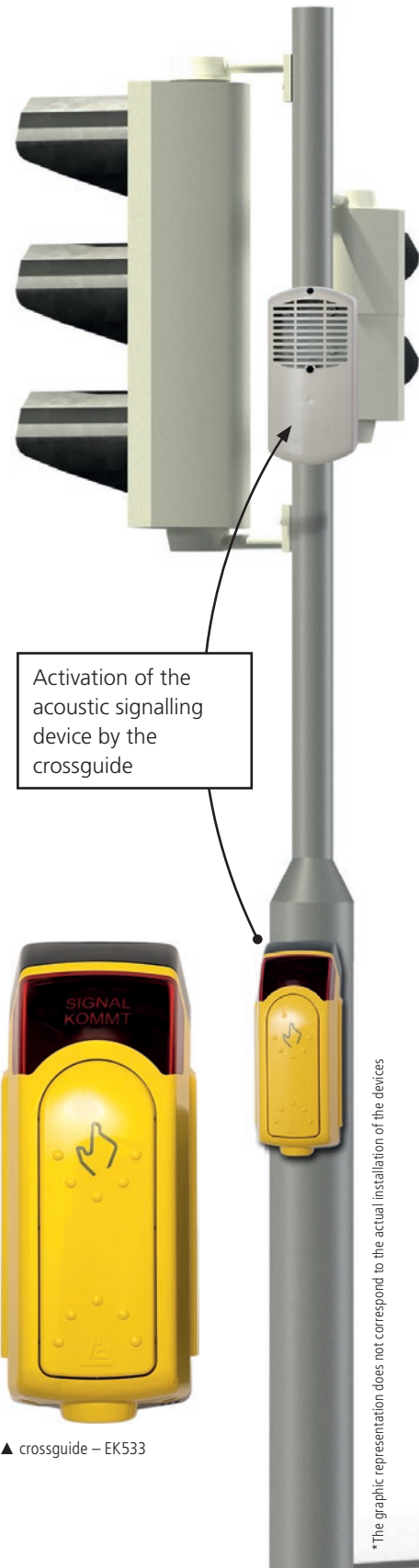
- ▲ Replaceable top cover
- ▲ Changeable function
- ▲ Voice prompts
- ▲ Pulse vibrator
- ▲ Function for retrofitting older system
- ▲ Standard tactile relief symbols
- ▲ Module slot



▲ Acoustic signalling device – EK533



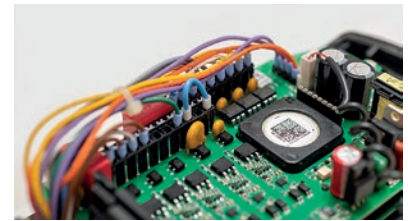
▲ crossguide – EK533



*The graphic representation does not correspond to the actual installation of the devices

Properties and technical data

- ▲ Universal voltage capability
- ▲ Compact design
- ▲ Protection against vandalism without additional parts
- ▲ Approved by all major signal engineering firms
- ▲ Tactile crossing signal for the visually impaired by pulsed vibrating push-button
- ▲ Signal request by vibrating push-button on the bottom of the device integrated into the tactile pedestrian crossing symbol
- ▲ Tactile pedestrian crossing symbols in accordance with DIN 32981 included in the accessories kit
- ▲ Tactile pedestrian crossing signal (by pulsed vibrating push-button) and / or acoustic pedestrian crossing signal
- ▲ Duration individually adjustable
- ▲ Guide and pedestrian crossing signal dependent on traffic noise
- ▲ Relief symbols according to ÖNORM V 2100 and V 2101 as accessories kit to indicate the exact conditions of the crossing
- ▲ Complies with standard DIN 32981 with a remote acoustic signalling device



▲ Individually adjustable duration



▲ Tactile crossing signal for the visually impaired by pulsed vibrating push-button



▲ Compact design and stainless steel protection against vandalism without additional parts

Persuasive details

- ▲ Suitable for all conventional pole diameters
- ▲ Pole installation using screws, without removal of the vibrator unit
- ▲ Fast, error-free connection through colour-coded connection wires with assigned function
- ▲ UV-resistant polycarbonate housing, without adhesive
- ▲ Temperature-resistant from -25 ° to +60 °C
- ▲ Sturdy design protects against vandalism
- ▲ Individual entry and playback of voice prompts and signal tones
- ▲ Traffic noise-dependant acoustics integrated










Acoustic signalling device module / RTC slot

- ▲ Output of the guide and/or pedestrian crossing signal from single housing in accordance with DIN 32981
- ▲ Actuation by the crossguide signal requesting device
- ▲ Different colours and designs for pole, signal chamber and cross arm installation
- ▲ Simple and inexpensive retrofitting of existing crossguide signal requesting devices



Signal requesting devices –

Overview of device functions

	Type 1	Type 2	Type 3	Type 4	Type 5
easyguide					
basicguide basic plus crossguide					

Designation: Signal requesting devices	easyguide EK 424					basicguide EK 524					basic plus EK523 from soundguide plus system										crossguide EK533				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5					
Types																									
Protection against vandalism	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Sensor request	✓	✓				✓					✓														
Push-button request			✓			✓	✓				✓					✓									
LED feedback		✓		✓		✓	✓				✓					✓									
Pulsed vibration + visually impaired request						✓	✓				✓					✓									
Acknowledgement logic for LED feedback																✓									
Acoustic request acknowledgement																✓									
Guide signal sound from button						✓ 1, 2	✓ 1, 2	✓ 1, 2	✓ 1, 2	✓ 1, 2						✓ 1	✓ 1	✓ 1	✓ 1	✓ 1	✓				
Acoustics integrated (CS + OS)																									
Tactile relief symbols						✓ 2	✓ 2	✓ 2	✓ 2	✓ 2	✓ 3	✓ 3	✓ 3	✓ 3	✓ 2	✓ 2	✓ 2	✓ 2	✓ 2	✓ 2	✓				
WAV: Voice prompt																									
RTC real-time clock optional																									

1: Connection to acoustic soundguide / 2: Equipment according to device version / 3: Optional

Designation:	Signal requesting device			Acoustics	Signal requesting device including acoustics
	easyguide EK424	basicguide EK524	basic plus EK523		
Nominal operating voltage	Universal voltage: 24V DC 24V AC 40V AC 110V AC 230V AC	Universal voltage: 24V DC 24V AC 40V AC 110V AC 230V AC	EK523 – Connection to soundguide	soundguide EK598 Universal voltage: 24VDC 24VAC 40VAC 110VAC 230VAC	crossguide EK533 Universal voltage: 24VDC 24VAC 40VAC 110VAC 230VAC
Max. feedback power consumption	2 W	2 W	0.5 W	–	0.5 W
Max. power consumption of vibration and/or acoustics	–	2 W	Actuated by soundguide	–	0.5 W
Max. power consumption	–	–	Actuated by soundguide	8 W	Approx. 7 W
Standards fulfilled	RILSA; DIN VDE 0832-100; DIN VDE 0832-200	RILSA; DIN VDE 0832-100; DIN VDE 0832-200; DIN 32981	RILSA; DIN VDE 0832-100; DIN VDE 0832-200; DIN 32981	RILSA; DIN VDE 0832-100; DIN VDE 0832-200; DIN 32981	RILSA; DIN VDE 0832-100, DIN VDE 0832-200, DIN 32981, ÖNORM V 2101
Housing colour	Yellow, similar to RAL 1023, solid colour	Yellow, similar to RAL 1023, solid colour	Yellow, similar to RAL 1023, solid colour	Grey; green; black	Yellow, similar to RAL 1023, solid colour
Protection class	II (double-insulated)	II (double-insulated)	II (double-insulated)	II (double-insulated)	II (double-insulated)
Leak test	DIN 32981:2018-06	DIN 32981:2018-06	DIN 32981:2018-06	DIN 32981:2018-06	DIN 32981:2018-06
Impact strength	IK 9	IK 10	IK 10	IK 10	IK 10
Max. current load (sensor)	80 mA	80 mA	80 mA	–	80 mA
Sensor current consumption	< 1 mA	< 1 mA	< 1 mA	–	< 1 mA
Auxiliary relay for sensor (optional)	230 V, 1 A	–	–	–	230 V, 1 A (additional module)
Safety	–	–	–	SIL 3	SIL 2
Mounting/installation	Screw fixing	Screw fixing	Screw fixing	Screw fixing, strap fastener or installation in signal chamber	Screw fixing
Operating temperature	-25 °C to +60 °C	-25 °C to +60 °C	-25 °C to +60 °C	-25 °C to +60 °C	-25 °C to +60 °C
Height x Width x Depth	155 x 76 x 76 mm (distance from pole)	196 x 84 x 62 mm / push-button 64 mm (distance from pole)	196 x 84 x 62 mm / push-button 64 mm (distance from pole)	184 x 96 x 115 mm (distance from pole)	250 x 95 x 60 mm (distance from pole)
Acknowledgement sound	–	–	Yes	–	Yes, individual sounds
Acoustic crossing signal	–	–	–	▲ All DIN 32981 requirements are met ▲ Elevation adjusted by simple indication of passage width.	▲ All DIN 32981 requirements are met. Elevation adjustment in dB increments
Guide signal	–	–	Loudspeaker in device: guide signal can be sounded by the soundguide	▲ All DIN 32981 requirements are met ▲ Customised settings are possible	▲ All DIN 32981 requirements are met. Customised settings are possible
Green flashing	–	–	–	–	▲ Acoustics in line with flashing mode are possible, individually configurable ▲ Doubling of the clock frequency, e.g. from 4 to 8 Hz, other sound

Awards



2009

German Materials Efficiency Prize
"From vehicle roof to manhole"



2010

Environmental Prize
"From vehicle roof to manhole"



2011

Bavarian Founder Award
"Succession" category



2012

Intertraffic Innovation Award
"Charging at the light pole"



2013

WPC Innovation Award
"Product Development & Product Design" category



2015

In the Top 3 – GreenTec Awards,
"Recycling & Resources" category



2019

Inno4wood Innovation Award



2021

Top Employer German SMEs 2021



2022

F.A.Z. Institute

21



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today and tomorrow**

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Gerne schicken wir Ihnen weitere detaillierte Produktinformationen für Ihre Planung zu.

Wenden Sie sich an Ihren Langmatz Berater vor Ort oder an unsere Zentrale.
Zahlreiche Datenblätter und Informationen gibt es auch auf unserer Homepage:

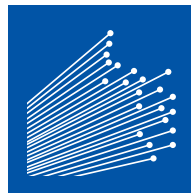
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Kabelschächte aus Kunststoff



Unterflurverteiler



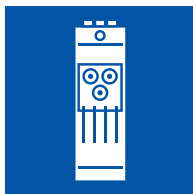
FTTx-Lösungen für Glasfasernetze



Outdoor-Gehäuse u. Outdoor-Sockel



Hauseinführungen



Sicherungskästen



Signal-Anforderungsgeräte



Funkrundsteuerempfänger

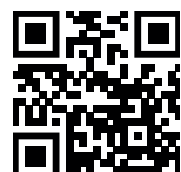
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