

# FlowSWing PPB-02

# Acoustic pedestrian push-button

- Intended for blind, partially sighted and disabled people with combined defects (blindness, deafness) for higher safety of pedestrians
- Acoustic and vibration signalization of intersection state
- Automatic control of volume of acoustic output depending on surrounding noise
- Digital recorded reports up to 2,5 minutes of phonic messages
- Possibility to disconnect acoustic signalling outside the pedestrian way
- Possibility of acoustic output intensity time setting
- Tactile elements describing the crossing
- Remote administration and monitoring
- Possibility to use inner and outer loudspeaker at the same time



#### **GENERAL DESCRIPTION**

**PPB-02** is an acoustic pedestrian push-button, serving for requesting of green signal on pedestrian crossings equipped with light signalling equipment (SSZ). The push button includes source of acoustic signalling, which through its unique and non-interchangeable sound warns blind and partially sighted pedestrians about light signalling status and contributes to their better orientation within intersection area. The push button includes the blinds' transmitter receiver, tactile elements and haptic switch.

# TECHNICKÝ POPIS

All-plastic compact unit of the pedestrian push-button is made of mechanically resistant polycarbonate with colour stability and resistance against various temperatures. On the front reflective yellow cover there is a hand symbol (or another symbol according to national customs) with a touch sensor.

Touching the sensor will switch-on the red text "WAIT PLEASE" (or another in local language). The voice output serves for this purpose for blind pedestrians. When a bottom pushbutton is pressed, or when command from blinds' transmitter is detected, the push button responds with clicking, or playing a preselected record for up to 30 seconds. As soon as the pedestrian gets green (signal "go"), the "WAIT, PLEASE" sign

turns off and the built-in loudspeaker starts clicking at a fast rhythm. In locations where split crossing is situated and where pedestrian pushbuttons are located for both directions on one post, or in cases, the acoustic signalling devices are less than 4 m away from each other and sound signal can be hardly identified, there are such push buttons installed for blind persons, which have a function of disconnecting of competitive acoustic signalization. The blind person disconnects (for time of pressing) the acoustic signal of the closest push-button by pressing a bottom pushbutton, hence the person hears the signal only in direction of walk, which corresponds to the respective pushbutton. The great advantage of the GuideSWing PPB-02 is the automatic control of volume of acoustic output





at the whole intersection according to the level of surrounding noise (the loudest point of intersection). To assure night-time calm, it is possible to limit the maximum volume or shut down the sound by the integrated real time circuit. When the blind transmitter command is recorded, pushbuttons on crossing pass to daily mode with higher volume level for preset time. The blind person can further increase the volume by repeated pressing the transmitter push button. For needs of handicapped people with combined defects (blindness, deafness) the button in its bottom part is equipped

with a switch having a vibrating arrow shaped relief flat button, showing the direction of crossing. After its activation, by pressing, it pulses twice and also sends a request of pedestrian crossing. The bottom haptic switch vibrates in the rhythm of the acoustic signalling, slowly at the "STOP" signal and quickly at the "GO" signal.

On the side of the push-button, there is set a vertical tactile relief with symbols according to the norm ÖNORM V 2100. Such relief describes the intersection according to a particular traffic engineering situation, such as the number of road

lanes, tram tracks, cycling trails, or provides other additional information. The push-buttons at an intersection are interconnected which allows their remote administration (supervision diagnostics or also remote setting by operator). They mutually share information for example about the level of noise in the surrounding or activation of the request or command of the blinds' transmitter. As an additional source of acoustic signal, an external loudspeaker can be connected to the PPB-02 simultaneously and located at the top of the post and pointing to the direction of crossing.

### **BASIC TECHNICAL PARAMETERS**

Operating temperature	−40 °C to +70 °C
Supply voltage	24 V DC -20 / +40 %
Powerinput	up to 10 W (without audio for external loudspeaker)
Cable connection	20 × 0,35 mm <sup>2</sup>
Protection by enclosure	IP 54, IK 9
Dimensions	90 × 226 × 75 mm
Cover colour	reflective yellow, black
Fastening	M6 hexagonal socket head screws
Sound	digital sound or recorded reports (minimum of 5 reports of 30 seconds each)
Audio output	min. 30 až 95 dBA v 1 m (internal loudspeaker)
	min. 40 až 110 dBA v 1 m (external loudspeaker)
Volume control	automatic/manual
Communication	RS-485

#### **OPTIONAL ACCESSORIES**

## External loudspeaker

Type: Visaton DK 115 S	max. volume: 110 dB	
External antenna of blinds' signal receiver		
Type: rod antenna 150–433 MHz	connector: SMA Male	
Converter RS-485/USB		
Type: TEDIA UC-485	connector: USB	
Dimensions	90 × 226 × 75 mm	
Converter RS-485/Ethernet		
Type: Moxa NPort 5130	connector: DB9	

