



Type **VZT.4**

System test device MIREL VZT provides primarily this functions:

code current simulation of line-type train protection, including their modulation for code sensors MIREL SN and simulation of signals from incremental axle speed sensor.

Apart from essential functions, it can carry out also secondary functions:

automatic execution of entire test procedures (scripts), option of manual setting for all output quantities, accessories integrity check for infrastructure simulations, power supply check as well as simulation of incremental axle speed sensor power input, simulation of LS, EVM and also SHP infrastructures, simulation of analogue current loops 4-20mA.

The tester disposes a control user interface and for its control it is necessary to connect to a PC with MAP software with VZTUI module.



Nomenclature



Modifications

Designation	Software version	Supply voltage [VDC]	Modification	Dimensions W x H x T [mm]	Weight [kg]
VZT.4.01A	01	5	Α	420 x 174 x 331	8,4

Modifications prepared for new applications

No record.

Accessories standard set

Designation	Description	Number of pieces	Notes
KSV.1.1	Simulated code transmitter of infrastructure LS and EVM	2	1)
PKSV.2.10	Connecting conductor of simulated code transmitter – length 10 m	1	
PIRC.1.8	Connecting conductor for axle speed sensor simulation – length 8 m	1	
ATM.4.01B	Communication interface with computer – length 15m	1	
PBUSB.1.1	Portable power supply source of control electronics	2	
	Resistant plastic case	1	
	Operating and maintenance manual of MIREL VZT test device	1	

¹⁾ VZT.4 tester is factory-calibrated for the delivered KSV transmitters. In the case of replacing the original KSV transmitters with a new spare part, it is necessary to re-calibrate the VZT.4 tester for the new KSV transmitters.

Optional accessories to the standard set

Designation	Description	Notes
KS.0	Code simulation loop	2)
KSP.1.1	Simulator SHP rail infrastructure length 8 m	
KSPD.1.1	Holder of KSP accessories for MIREL SHPA antennas	1)
PKS.10	Wiring conductor of code simulation loops – 10 m length	2)
PPIRC.1.12	Extension cable for axle speed sensor simulation – length 12 m	
PPIRC.1.20	Extension cable for axle speed sensor simulation – length 20 m	
PST.1.8	Connection cable for pressure sensor simulation – length 8 m	
WSR.1.3	Reducer piece from 8-pin WAGO connector to HARTING, type HAN10ESS	
WSRR.1.0	Reducer piece from 8-pin WAGO connector to 6 pin WAGO connector	3)
WSR.0.0	Reducer piece from 6-pin WAGO connector to connector of LTV11 sensors	
WSR.0.1	Reducer piece from 6-pin WAGO connector to HARTING, type HAN6ESS	
WSR.0.2	Reducer piece from 6-pin WAGO connector to SECHERON, type ITT-VEAM	
WSR.0.4	Reducer piece from 6-pin WAGO connector to HARTING, type HANQ12M	
WSR.0.6	Reducer piece from 6-pin WAGO connector to HARTING, type HAN10ESS, only for TRAXX BT	
WSR.0.7	Reducer piece from 6-pin WAGO connector to HARTING, type HAN10DDD	
WSR.0.8	Reducer piece from 6-pin WAGO connector to ILME, type MIXO	
WSR.0.9	Reducer piece from 6-pin WAGO connector to HARTING, type HAN12DD	
WSR.0.10	Reducer piece from 6-pin WAGO connector to HARTING, type HAN10EE	
WSR.0.11	Reducer piece from 6-pin WAGO connector to GIMOTA, type GR601	
WSR.0.12	Reducer piece from 6-pin WAGO connector to HARTING, type HAN10EE, only for TRAXX DE F140	
WSR.0.13	Reducer piece from 6-pin WAGO connector to HARTING, type HANQ12M	

^{1) 2} pieces of holders KSPD.1.1 are required for mounting the KSP accessories to the MIREL SHPA antenna

Specifications

Catalogue sheet was prepared based on the following specifications:

Number	Version	Title
2339VZT	210903	VZT.4 Technical conditions
2337VZT	230413	VZT.4 Operating and maintenance manual
2296MAP	210712	MAP Catalogue sheet

Usage

MIREL VZ1 - train protection system

MIREL RM1 – registration speed meter

MIREL RM2 – integrated on-board system

MIREL RS812 - control system

MIREL RS813 - control system

MIREL RS361 - control system

MIREL RS363 - control system



²⁾ Accessories for check of correct compensating coil orientation
³⁾ Accessories WSRR serves as an adapter piece for connection of WSR.0.x reducers terminated with a 6-wire connection or as an adapter for connection to vehicles on which the MIREL IRC is connected using a 6-pin WAGO connector



Modifications prepared for new applications

No record.

