

DIN EN 12368:2015-09 (E)

Traffic control equipment - Signal heads

Contents	Page
Foreword	4
Introduction	6
1 Scope	7
2 Normative references	7
3 Terms and definitions	7
4 Constructional Product Characteristics	8
4.1 General	8
4.2 Signal head	9
4.3 Performance under impact product characteristic	9
4.4 Constructional integrity product characteristic	9
5 Environmental, electromagnetic compatibility (EMC) and electrical product characteristics	9
5.1 Environmental characteristics	9
5.2 Electrical safety and EMC characteristics	10
6 Optical Product Characteristics	10
6.1 General	10
6.2 Diameter of signal lights	10
6.3 Luminous intensities of signal lights	10
6.4 Distribution of luminous intensity	11
6.5 Luminance uniformity	13
6.6 Maximum phantom signal	13
6.7 Colours of signal lights	13
6.8 Signal lights with symbols	14
6.9 Background screen of signal lights	14
6.10 Visible flicker	14
7 Constructional and environmental test methods	14
8 Optical test methods	17
8.1 General	17
8.2 Measurement of luminous intensities	17
8.3 Measurement of luminance for uniformity tests	18
8.4 Measurement of phantom signal	19
8.5 Measurement of the colour	20
8.6 Measurement of combined colours	20
9 Tolerances	21
10 Marking, labelling and product information	22
10.1 Marking and labelling	22
10.2 Product information	23
11 Assessment and verification of constancy of performance - AVCP	23
11.1 General	23
11.2 Type testing	24

11.2.1	General	24
11.2.2	Test samples, testing and compliance criteria	25
11.2.3	Test reports	27
11.2.4	Shared other party results	27
11.2.5	Cascading determination of the product-type results	28
11.3	Factory production control (FPC)	29
11.3.1	General	29
11.3.2	Requirements	29
11.3.3	Product specific requirements	32
11.3.4	Initial inspection of factory and of FPC	33
11.3.5	Continuous surveillance of FPC	33
11.3.6	Procedure for modifications	33
11.3.7	One-off products, pre-production products (e.g. prototypes) and products produced in very low quantity	34
Annex A (informative) Test, declarations and requirements		35
Annex ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Regulation		37
ZA.1 Scope and relevant characteristics		37
ZA.2 Procedure for AVCP of Traffic control equipment - Signal heads		38
ZA.2.1 System(s) of AVCP		38
ZA.2.2 Declaration of performance (DoP)		39
ZA.2.2.1 General		39
ZA.2.2.2 Content		39
ZA.2.2.3 Example of DoP		40
ZA.3 CE marking and labelling		42
Bibliography		45