

Specifications

Optical data

Operating range/scanning range ¹⁾
 Light source
 Wavelength

Throughbeam operation

400mm
 LED (modulated light)
 680nm (visible red light)

Scanner operation

120mm

Timing

Switching frequency ²⁾
 Response time
 Delay before start-up

1500Hz
 0.3ms
 ≤ 100ms

Electrical data

Operating voltage U_B
 Residual ripple
 Bias current
 Switching output
 Function characteristics
 Signal voltage high/low
 Output current
 Sensitivity

10 ... 30VDC (incl. residual ripple)
 ≤ 10% of U_B
 ≤ 15mA
 PNP or NPN transistor output
 light/dark switching via selector switch
 $\geq (U_B - 2.5V) / \leq 2.5V$
 max. 300mA
 adjustable via 12-turn potentiometer

Indicators

LED green
 LED yellow

sufficient performance reserve
 switching output activated

Mechanical data

Housing
 Weight
 Connection type

PBTP (polybutylenterephthalate)
 18g without cable
 M8 connector, 3-pin or 4-pin
 or cable (PVC) 2m, 4x0.25mm²
 clamp

Fibre optic cable connection

Environmental data

Ambient temp. (operation/storage)
 Protective circuit ³⁾
 Protection class
 Standards applied

-25°C ... +55°C / -40°C ... +70°C
 2, 3
 IP 64
 IEC 60947-5-2

Options

Warning output warn

PNP or NPN transistor output
 Function: transistor is activated, if the performance reserve is sufficient

1) Scanning range relative to white 90%

2) With a duty cycle of 1:1

3) 2=polarity reversal protection, 3=short-circuit protection for all outputs

Tables

Throughbeam operation

Type	Operating range
KF 2000/2 LS.4-01	300mm
KF 2000/2 LS.4-02	400mm
KF 2000/2 LS.5-03	400mm

Scanner operation

Type	Scanning range ¹⁾
KF 2000/2 RT.4-04	100mm
KF 2000/2 RT.4-05	120mm
KF 2000/1 RT.4-06	25mm
KF 2000/2 RT.5-07	100mm

1) Relative to white 90%

Diagrams

Order guide

	Designation	Part No.
With cable connection, PNP switching output	LVSr 424/P-204	501 03515
With cable connection, NPN switching output	LVSr 424/N-204	501 03516
With M8 connector, 4-pin PNP switching output	LVSr 424/P-204-S8	501 03475
With M8 connector, 4-pin NPN switching output	LVSr 424/N-204-S8	501 07069
With M8 connector, 3-pin PNP switching output	LVSr 424/P-203-S8	501 02992

Remarks