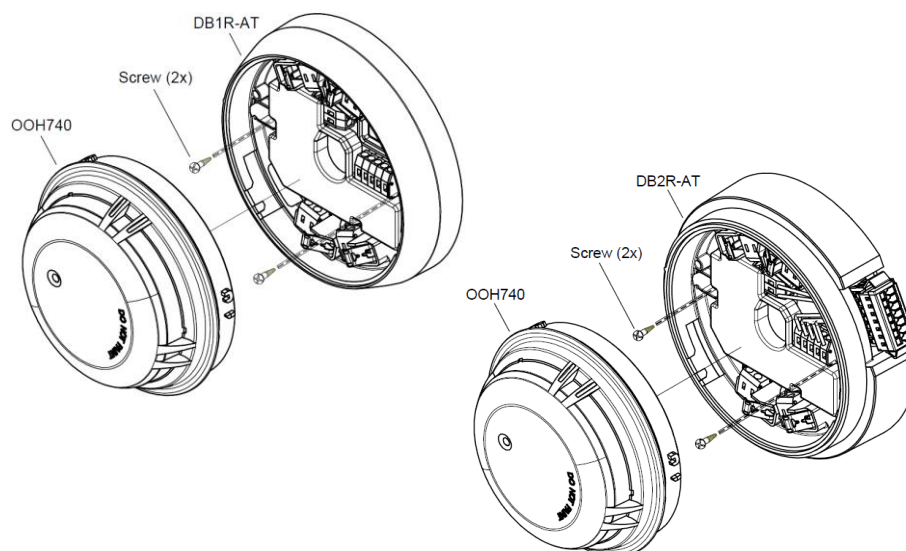


OOH740 for Rail

Automatic fire detector for rail application



- Signal processing with **ASAtechnology**
- Event-controlled detection behavior
- Evaluation of the criteria heat
- Quick response
- Highly developed immunity to deceptive phenomena
- Meets material requirements according EN45545-2
- Rail-proved by notified body acc. EN50155
- SIL2 approved acc. EN5012x standards

Design

- Resistant to environmental and interfering influences such as dust, fibers, insects, moisture, extreme temperatures, electromagnetic interference, corrosive vapors, vibration, artificial aerosols, and atypical fire phenomena

Features

- Shock resistant, protection against sabotage
- Signal processing with **ASA** *technology* (Advanced Signal Analysis)
- Time and process-dependent detection behavior
- High degree of immunity to faults in power electronics
- Protected electronics, high-quality components
- Sophisticated sensors and electronic monitoring
- The integrated line separator that locates the defective part on the detector bus of the control panel and isolates between two detectors
- Integrated alarm indicator (AI), 360° visibility
- Rail certified

Eco-friendly

- Environmentally friendly processing
- Reusable materials
- Electronic parts and synthetic materials can be easily separated

Use

OOH740 multi-sensor fire detector, neural ASA



Multi-sensor fire detector consisting of:

- Point detector
- Detector dust cap to protect the point detector during the construction phase

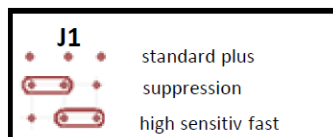
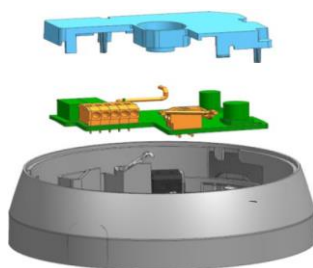
Function:

- Functions according to the scattered light principle with two sensors, optical forward and backward scattering
- Opto-electronic measuring chamber that obstructs disruptive extraneous light but provides excellent detection of both light and dark smoke particles
- Two additional heat sensors increase the point detector's immunity to deceptive phenomena
- Selectable detection behavior thanks to application-specific ASA parameter sets

Use:

- For early detection of flaming fires of solid and liquid substances, as well as of smoldering fires
- For early and reliable fire detection in an environment with deceptive phenomena
- Meets UL94-V0 requirements

Detector base DB1R-AT with PCB



Detector base consisting of:

- Protector top cover for PCB
- Base print (24V or 110V)
- Block terminals incl. metal clips
- Detector base

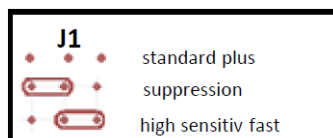
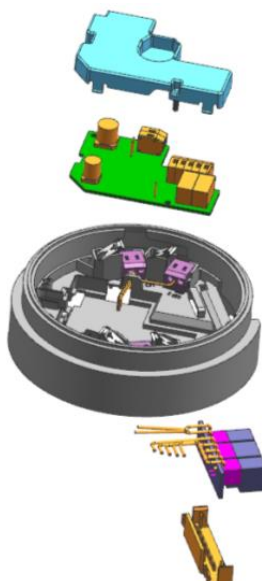
Function:

- Base for fire detector OOH740
- Adjustment of detection sensitivity (J1: standard, suppression, high sensitive fast)
- Signal evaluation through PCB (alarm, interference)
- Potential-free contacts for communication

Use:

- Meets UL94-V0 requirements

Detector base DB2R-AT with PCB



Detector base consisting of:

- Protector top cover for PCB
- Base print (24V or 110V)
- Detector base
- Block terminals incl. metal clips
- Wago plug incl. connector PCB
- Protector cover for Wago connector PCB

Function:

- Base for fire detector OOH740
- External connectivity through Wago plug
- Adjustment of detection sensitivity (J1: standard, suppression, high sensitive fast)
- Signal evaluation through PCB (alarm, interference)
- Potential-free contacts for communication

Use:

- Meets UL94-V0 requirements

Base attachment wet BA721 with Weidmüller connector



Base attachment wet consisting of:

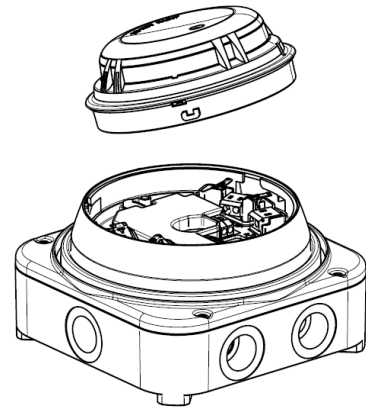
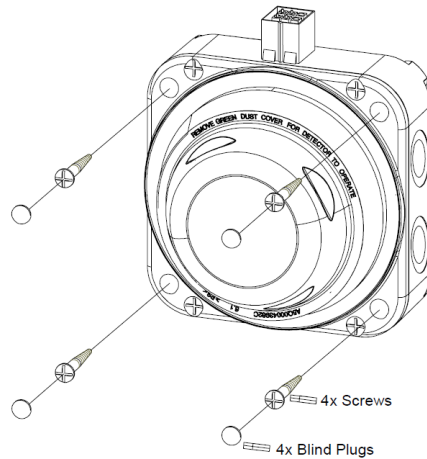
- Base wet
- Plug-in connector incl. crimp contacts
- Blind plugs
- Internal wiring

Function:

- Base attachment wet with additional integrated rubber seal for mounting in wet or humid environments
- For achieving a higher protection category
- For mounting in wet or humid environments
- Quick connectivity through plug-in connector

Use:

- Specially for humid and cold environments



(see separate datasheet – DSWxxxR-AT)

Type Overview

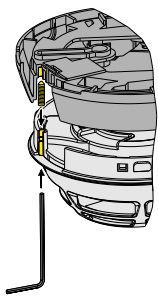
Type	Designation	Order no.	Weight [kg]
OOH740	Multi-sensor fire detector, ASA		0,124
DB1R-AT	Detector base		0,071
DB2R-AT	Detector base		0,076
DP024R-AT	Detector base print (PCB, 24V)		0,020
DP110R-AT	Detector base print (PCB, 110V)		0,023
DBC2R-AT	PCB for Wago connector		0,003
DBT1R-AT	Protector top cover for main PCB		0,008
DBT2R-AT	Protector cover for Wago connector PCB		0,002
WAGO	Plug-in connector Wago		0,002
Torroidal ferrite	Torroidal ferrite		0,010
Ferrite PCB	7x Multilayer Ferrite		0,0001
DB1 024R-AT	Complete Detector base 1, 24VDC Version		0,100
DB1 110R-AT	Complete Detector base 1, 110VDC Version		0,102
DB2 024R-AT	Complete Detector base 2, 24VDC Version		0,112
DB2 110R-AT	Complete Detector base 2, 110VDC Version		0,114
DS1 024R-AT	Complete Detector Set 1, 24VDC Version	6500007594	0,223
DS1 110R-AT	Complete Detector Set 1, 110VDC Version	6500007595	0,226
DS2 024R-AT	Complete Detector Set 2, 24VDC Version	6500007587	0,236
DS2 110R-AT	Complete Detector Set 2, 110VDC Version	6500007588	0,239
DSW024R-AT	Detector Set Wet, 24VDC	6500007569	0,500
DSW110R-AT	Detector Set Wet, 110VDC	6500007593	0,503
Accessories			
LP720	Detector locking device	S54319-F9-A1	0,001

Accessories

Detector locking device LP720



- For protection against theft of the point detector
- Set screw M3 x 12 mm prevents the point detector being unscrewed from the detector base
- Point detector can only be removed with the appropriate Allen key

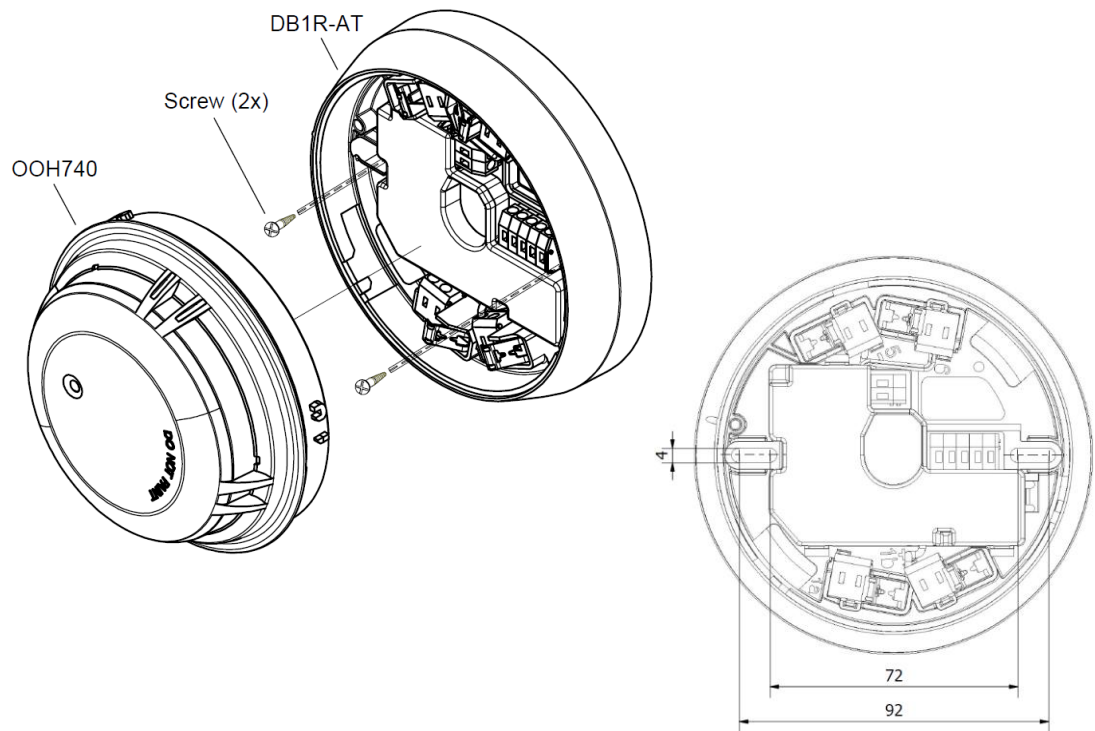


Installation

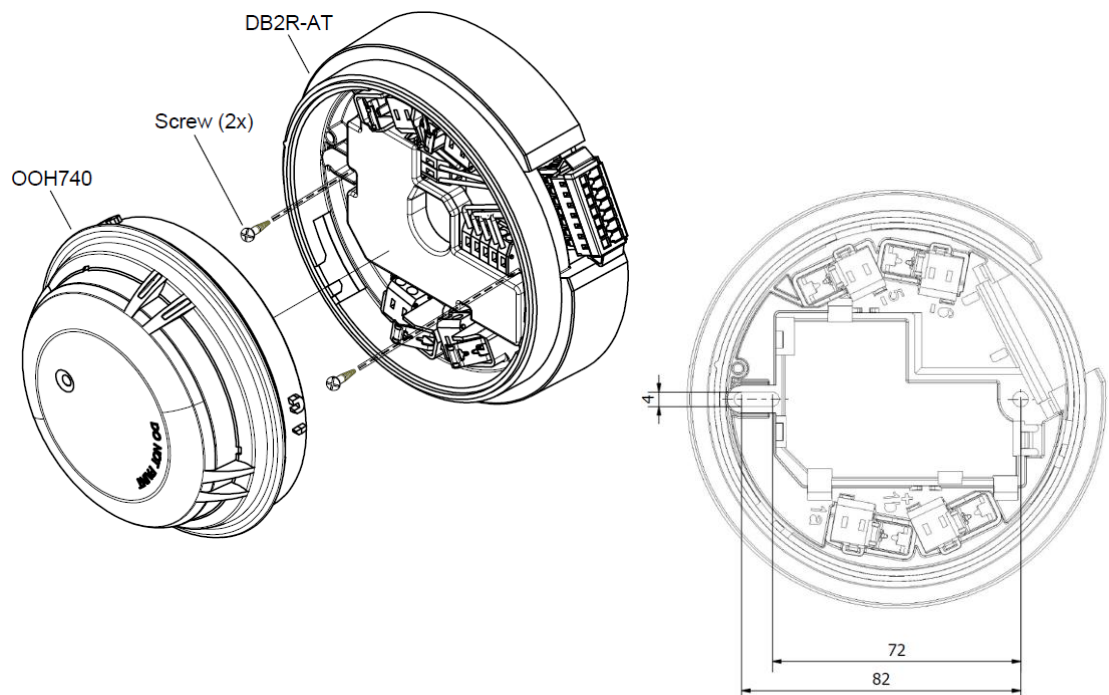
Detector Base DB1R-AT and DB2R-AT

Mounting of the detector base is achieved through 2 appropriate screws in the mounting slits provided for fixation.

- DB1R-AT:



- DB2R-AT:

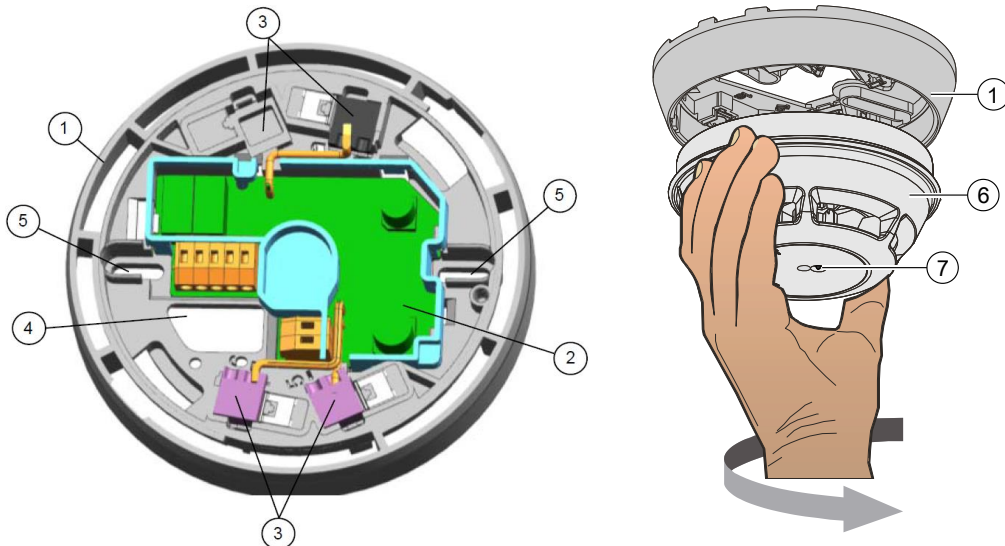


Detector and detector base

- Mounting slits allows fast and variant fixation
- Connection terminals for conductors up to max. 1.6 mm²

The detector can be screwed into the base easily either by hand or using the detector exchanger DX791 and the corresponding adapter FDUD491.

The internal alarm indicator is centered in the detector, which makes alignment of the point detector superfluous.



1 Detector base

2 Print and Cover

3 Connection terminals

4 Opening for cable entry

5 Mounting slits

6 Point detector


7 Internal alarm indicator

Safety

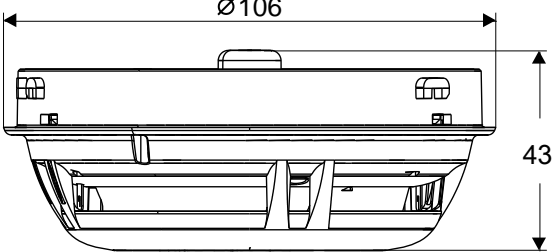
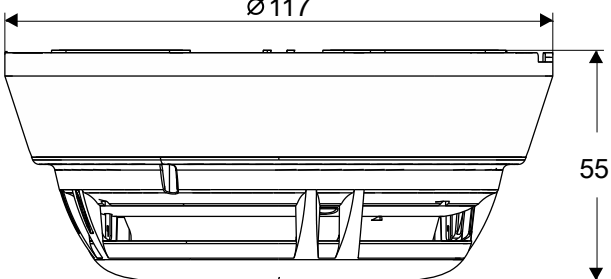
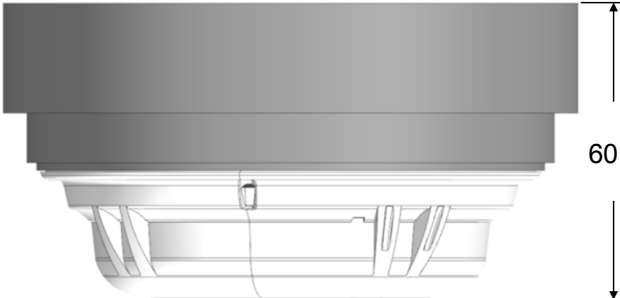
- Do not operate the device above the specified nominal voltage.
- Avoid touching the connection contacts in any case.
- Use of detector locking device (LP720) to prevent improper opening of the device is highly recommended.

Technical data

	OOH740 incl. Base
Operating voltage (modulated)	DC 19...30 V (24V Print Version) DC 70...140 V (110V Print Version)
Operating current (quiescent)	10...11 mA (24V Print Version) 3...3,5 mA (110V Print Version)
Max. number of external alarm indicators that can be connected	2
Operating temperature	-25...+55 °C
Rail specific approval	Temperature class OT4: -40...+70 °C
Storage temperature	-30...+70 °C
Air humidity (short-term moisture condensation permitted)	≤ 95 % rel.
Communication protocol	Potential-free contacts
Color	~RAL 9010 pure white
Weight	~0.230 kg
Protection category (IEC 60529)	IP40
Standards	CEA 4021, EN 54-5, EN 54-7, EN 54-17
Approvals OOH740 only:	
• VdS	G211070
• LPCB	126bh/05
• FM	3051081
• DNV GL (Marine)	MEDB00003UK
OOH740 incl. Base (DBxR-AT):	
• Standards	EN 50155, EN 50121-3-2, EN 61000-4-2/3/4/5/6, EN 60068-2-1/2/27/30, EN 61373, EN 45545-2
• TUEV	Test Report TÜV Austria EN50155 Railway applications Prüfbericht TÜV Austria EN50121-3-2, EN50155 EMV Prüfbericht AIT EN60068-2-27, EN61373 Schocktest Prüfbefund TÜV Austria ÖNORM EN 60068-2-1 SIL Report & Certificate acc. EN50126, EN50128, EN50129
Permissible wind speed	Max. 5 m/s

11		0786	OOH740	Siemens Switzerland Ltd; Gubelstrasse 22 CH-6301 Zug Technical data: see doc. A6V10305793
OOH740 - Smoke/heat detector incl. short-circuit isolator for use in fire detection and fire alarm systems installed in buildings.				
305/2011/EU (CPR): EN 54-5 / EN 54-7 / EN 54-17 ; 2014/30/EU (EMC): EN 50130-4 / EN 61000-6-3 ; 2011/65/EU (RoHS): EN 50581				
The declared performance and conformity can be seen in the Declaration of Performance (DoP) and the EU Declaration of Conformity (DoC), which is obtainable via the Customer Support Center: Tel. +49 89 9221-8000 or http://siemens.com/bt/download				
DoP No.: 0786-CPR-21094; DoC No.: CED-OOH740				

Dimensional drawings

OOH740	OOH740 with base DB1R-AT
	
	OOH740 with base DB2R-AT
	



The device is considered an electronics device for disposal in terms of European Directive 2012/19/EU and may not be disposed of as domestic garbage.

- Dispose of the device through channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.
- Dispose of empty batteries in designated collection points.

Issued by
Fire Safety Application Center Austria

Siemens AG Österreich
Smart Infrastructure
RC-AT SI BP FSAC
Siemensstraße 90
AT-1210 Wien
Tel. +43 51707-0
www.siemens.com

© Siemens Aktiengesellschaft Österreich, 2020
Technical specifications and availability subject to change without notice.