

## Accessories for FTTO Installation Components

A Multitude of Installation Options – Simply  
Illustrated

Version 2.3



## **What This Guide Sets Out to Achieve**

As a specialist for fiber optic-based transmission systems, MICROSENS offers the broadest portfolio of network components designed for professional integration in wall ducts, underfloor systems, walls and desks currently available on the market.

We offer an extensive portfolio of installation accessories for installing our components. This document contains recommendations on how to expand an existing installation as well as how to realize a brand-new setup.

The goal is to identify the perfect accessories for the given installation environment (e.g. cable duct and socket from manufacturer xy). This is aimed at achieving an optimal result when it comes to mechanical stability, an installation which conforms to all the current standards and an attractive design.

MICROSENS installation systems – no compromises!

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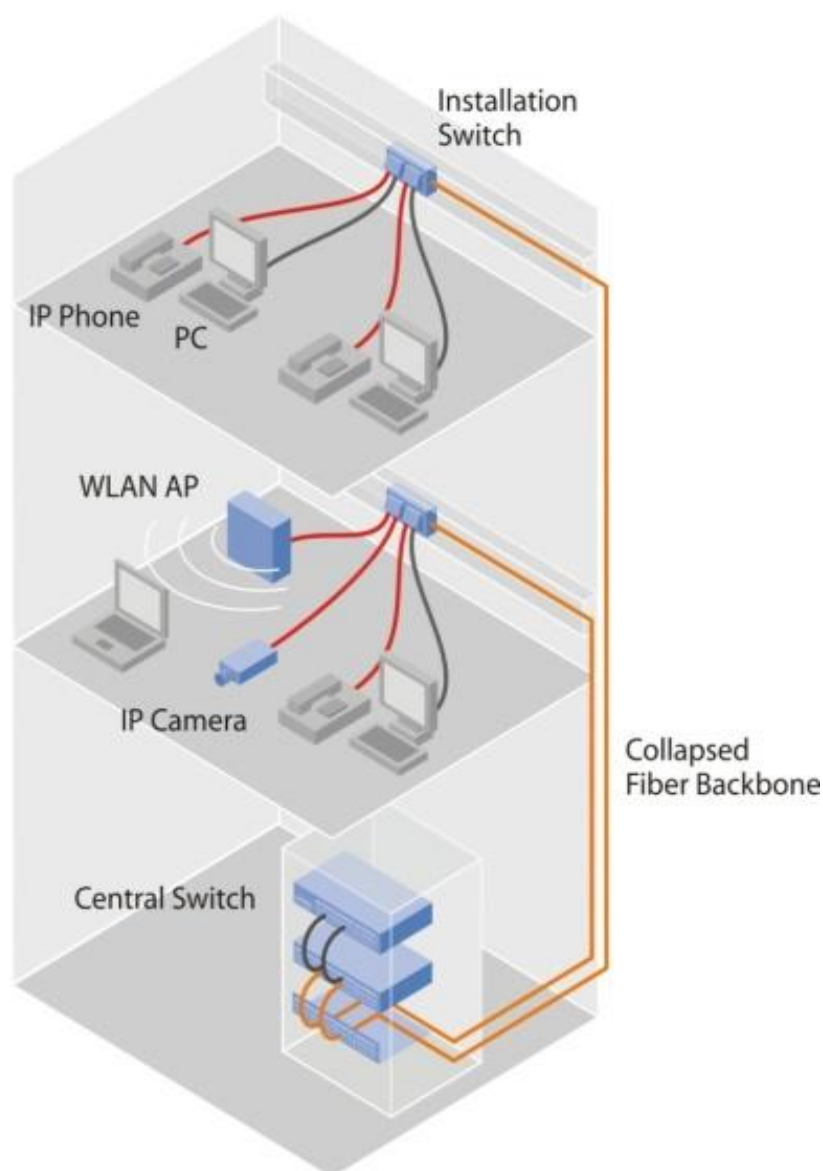
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## 1. Introduction Fiber To The Office (FTTO)

Fiber To The Office (FTTO) is a standard compliant and decentralized networking concept for modern office environments that intelligently combines the benefits of fiber optic and copper based cabling technologies.

In contrast to a classic Structured Cabling Network (SCN), FTTO deploys fiber optic cables throughout – all the way from the central wiring closet to the workplace area. Copper cabling is only used to connect IP terminal equipment via MICROSENS Micro Switches.

Intelligent energy usage and low space requirements compared to copper cabling noticeably impact economic results. FTTO completely cuts out the costs of maintaining classical technical rooms on each floor, with their high space and cooling requirements. For more information on our FTTO concept, please refer to [www.microsens.de/ftto](http://www.microsens.de/ftto)



Application Outline FTTO Concept

## 2. Introduction System 45 x 45

Future-orientated cabling concepts are distinguished primarily by their flexibility. With System 45 x 45, MICROSENS provides the most compact installation solution for active network components currently available on the market.

The System 45 x 45 is based on the basic dimensions of 45 x 45 mm. This design is distributed worldwide and allows the use of national and international installation systems. Alongside standard wall duct and underfloor installation, desk and laboratory installation as well as room pillar and concealed installation are now widespread.

The main advantage of the System 45 x 45 is its cost efficiency compared to traditional systems – cutting installation costs by around 50 %. The components no longer need to be fastened with screws, but are simply snapped into specially-designed device supports or sockets. This considerably reduces installation time.

The installation components offered by MICROSENS come in two different designs: horizontal and vertical. The devices are supplied for a perfect fit – no need to make any alterations or waste time putting the equipment together on-site. This not only reduces installation times but also significantly increases the durability of the components.



MICROSENS Gigabit Ethernet  
Micro Switch Generation 6



Micro Switch in cable duct  
with 45 mm track

System 45 x 45 – never has it been easier or quicker to install and integrate your equipment!

### Fitting Micro Switch in Adapter Plate



Fasten adapter plate on socket



Insert Micro Switch at an angle into adapter plate upon connection of network and power



Insert switch into the allocated adapter plate openings



Click switch into adapter plate



Snap plastic cover into switch

### 3. Greater Security for Your Micro Switch Safe

A number of our installation sets allow you to install or remove your Micro Switch without the need for tools. However, in order to make the unauthorized removal of a Micro Switch more difficult, especially in public environments, MICROSENS also offers a mechanical locking device.

#### Step 1



First of all, the switch is installed and brought into position without the need for tools. In the illustrated example, however, the switch could easily be removed by simply sliding it sideways.

#### Step 2



To prevent being able to slide the switch over, a locking device is screwed onto the mounting plate at the designated position. Now the switch can no longer simply be removed without tools. Removal is only possible after unscrewing the locking device.

#### Step 3



If you use a mounting plate designed to take up to three modules, the next step is to insert a blind cover as shown in the illustration.


This step is not necessary, if you are mounting a plate to take up a double module.

#### Step 4



Now insert the cover frame to finish off the installation.

The product No. of the locking device, consisting of one locking bar and two screws, is MS140099. This can be combined with the following installation sets: MS140029-xx, MS140069-xx, MS140040F2-xx, MS140040BR2-xx, MS140040HW2 und MS140040UP2.

|                                                                                     | Remark                                                                                              | Art. No. |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|----------|
|  | Locking device for MICROSENS 2-socket + 3-socket adapter consisting of one locking bar and 2 screws | MS140099 |

## 4. Duct Installation

For wall duct installation where the track or socket is not fitted with a 45 mm rail, MICROSENS offers a series of adapters. The art of combining device supports or sockets with the desired wall ducts requires additional information which MICROSENS will be familiarizing you with on the following pages.

### Installation Example MS140029



Adapter plate + E2 Socket  
in OBO BETTERMANN GEK BR-Duct



Insert switch



Apply cover frame

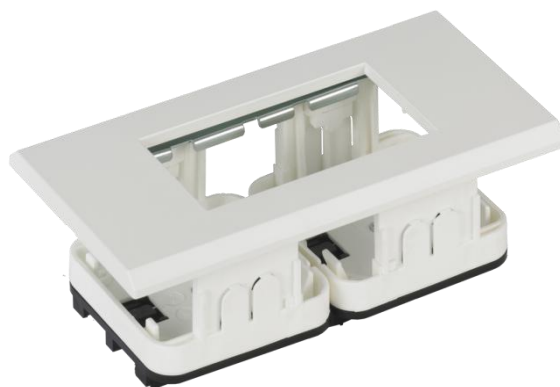




### 4.1. Installation Set with Universal Device Support for Ducts with an Anchor Rail

MICROSENS' MS140040BR2 installation set is suitable for all wall ducts with an anchor rail located along the back of the cable duct – be it a C-rail, 35 mm combi-rail or 35 mm hat rail.

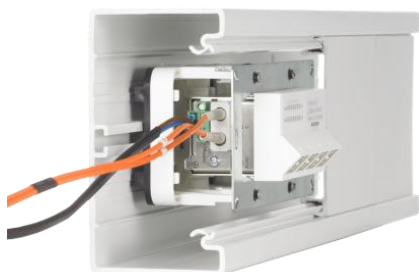
This universal set, which replaces the device casing, has an open design, offering plenty of room for power and network connections. The set provides a variable height-adjustment (47, 50, 52 or 55 mm) to compensate for different inner duct heights. No further installation components are required.

The cover frame is designed to overlap the area cut out of the upper duct section (duct cover).

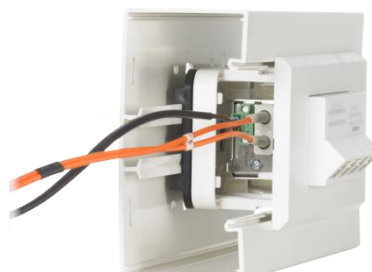


| Image                                                                               | Remark                                                                                                       | Art. No.       |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------|
|  | Installation set consisting of cover frame (168 x 85 mm), adapter plate and 2x device support, pre-assembled |                |
|                                                                                     | Color: pure white                                                                                            | MS140040BR2    |
|                                                                                     | Color: Aluminum color                                                                                        | MS140040BR2-AL |
|                                                                                     | Color: graphite grey                                                                                         | MS140040BR2-GT |
|  | Separate cover frame                                                                                         |                |
|                                                                                     | Color: pure white                                                                                            | MS140070-RW    |
|                                                                                     | Color: Aluminum color                                                                                        | MS140070-AL    |
|                                                                                     | Color: graphite grey                                                                                         | MS140070-GT    |

\*Further colors upon request



Assembly on C-rail tehalit duct



Assembly on Combi-Rail GEK duct



## 4.2. Installation Set for Front-Locking tehalit Ducts

The MS140040F2 set is ideal for all front-locking wall ducts manufactured by Hager (tehalit). This set, which replaces the device casing, has an open design, offering plenty of room for power and network connections. No further installation components are required.

The cover frame fits flush with the upper duct, i.e. it does not overlap the cut-out section.

The set consists of a triple-socket bracket with a matching cover, including the 45 x 45 blind cover which is required to install the Micro Switch. A locking bar which can be used to secure your Micro Switch is also available.



| Image                                                                               | Remark                                                                                                                | Art. No.      |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------|
|  | Installation set consisting of a 3-socket cover frame (184 x 86 mm), a front-locking mounting bracket, 1x blind cover |               |
|                                                                                     | Color: pure white                                                                                                     | MS140040F2    |
|                                                                                     | Color: aluminum color                                                                                                 | MS140040F2-AL |
|                                                                                     | Color: graphite grey                                                                                                  | MS140040F2-GT |
|  | Locking device for MICROSENS 2-socket + 3-socket adapters, consisting of a locking plate, incl. 2 screws              | MS140099      |

\*Further colors upon request



Finished installation in tehalit duct

### 4.3. Wall Ducts with Standard E2 Sockets

With the MS140029 MICROSENS offers a mounting set for installing MICROSENS Micro Switches in cable ducts or enclosures which do not support the modular 45 mm installation system.

The set consists of two components, an adapter plate with a 45 x 45 track, which is used to insert a Micro Switch without the need for any further tools and a cover frame, which fits the switch perfectly. The newly-designed adapter plate, which can also be used in combination with a locking device to secure your Micro Switch (please refer to MS140099), has now been specially reinforced to make it resistant to bending.

Installation requires a MICROSENS adapter set and an original E2 mounting box supplied by the respective cable duct manufacturer (not included). A table listing all compatible E2 (double) mounting boxes is available on page 18f.



| Image | Remark                                                                                                   | Art No.     |
|-------|----------------------------------------------------------------------------------------------------------|-------------|
|       | Universal installation set for E2 device casing consisting of adapter plate and cover frame              |             |
|       | Color: pure white                                                                                        | MS140029    |
|       | Color: aluminum color                                                                                    | MS140029-AL |
|       | Separate cover frame                                                                                     |             |
|       | Color: pure white                                                                                        | MS140070-RW |
|       | Color: aluminum color                                                                                    | MS140070-AL |
|       | Color: graphite grey                                                                                     | MS140029-GT |
|       | Locking device for MICROSENS 2-socket + 3-socket adapters, consisting of a locking plate, incl. 2 screws | MS140099    |

\*Further colors upon request



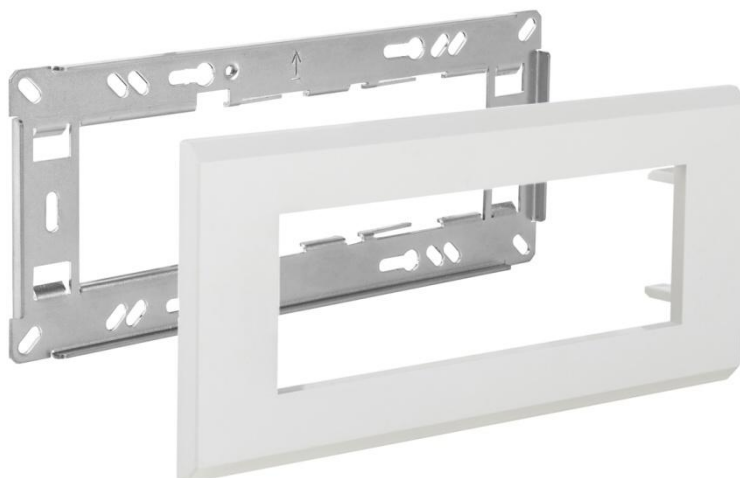
Micro Switch with cover, installed in E2 device casing

### 4.4. Flush Right Socket Installation

Fiber optic cables only have a limited bending radius. MICROSENS now offers a solution which allows you to install your Micro Switch flush right – leaving plenty of space in your socket for the fiber optic cabling.

The set consists of three components and includes an adapter plate with a 45 mm track which allows you to install your Micro Switch without the need for any further tools. The plate has been specially reinforced for improved bend resistance and stability. An optional locking device which can be used to secure your Micro Switch is also available. The set also includes a cover frame and a blind cover which fits over the switch perfectly.

Not included in the set are compatible triple sockets which are available from Legrand, Bticino and OBO-Bettermann.























| Image | Remark                                                                                                   | Art. No.    |
|-------|----------------------------------------------------------------------------------------------------------|-------------|
|       | Installation set consisting of a cover frame (184 x 86 mm), mounting bracket, 1x blind cover             |             |
|       | Color: pure white                                                                                        | MS140069    |
|       | Color: aluminum color                                                                                    | MS140069-AL |
|       | Color: graphite grey                                                                                     | MS140069-GT |
|       | Locking device for MICROSENS 2-socket + 3-socket adapters, consisting of a locking plate, incl. 2 screws | MS140099    |



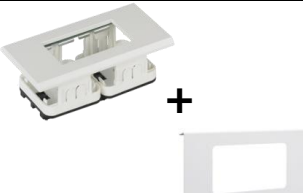


\*Further colors upon request







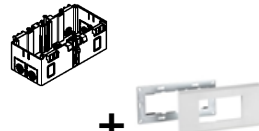
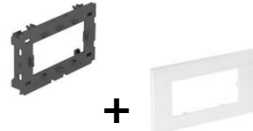
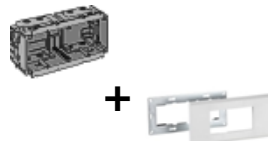
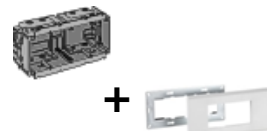
## 4.5. tehaliit Wall Ducts

| Duct                                                                                                                                | Socket/<br>Device Support | Suitable<br>MICROSENS<br>Installation Set | Image                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------------------------------|---------------------------------------------------------------------------------------|
| tehalit.BRS duct profiles with 70 mm height, 80 mm top, molded parts, front-locking device installation<br>Type: BRS65xxx           | Included in MICROSENS set | MS140040F2                                |    |
| tehalit.BRS duct profiles with 85 mm height, 80 mm top, molded parts, front-locking device installation<br>Type: BRS85xxx           | Included in MICROSENS set | MS140040F2                                |    |
| tehalit.BRS duct profiles with 100 mm height, 80 mm top, molded parts, front-locking device installation<br>Type: BRS100xxx         | Included in MICROSENS set | MS140040F2                                |    |
| tehalit.BRA duct profiles with 70 mm height, 80 mm top, molded parts, front-locking device installation<br>Type: BRA65xxx (w/o 65b) | Included in MICROSENS set | MS140040F2                                |  |
| tehalit.BR duct profiles with 70 mm height, molded parts, C-Profile device installation<br>Type: BR70100                            | Included in MICROSENS set | MS140040BR2                               |  |
| tehalit.BR duct profile double compartment, molded parts, C-Profile device installation<br>Type: BR70214                            | Included in MICROSENS set | MS140040BR2                               |  |
| tehalit.BRN duct profiles 70 mm height, molded parts, C-Profile device installation<br>Type: BRN70xxx                               | Included in MICROSENS set | MS140040BR2                               |  |

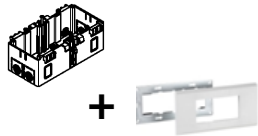


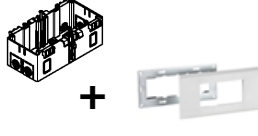
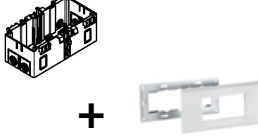
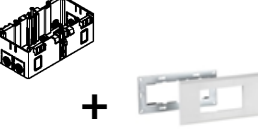

| Duct                                                                                                                      | Socket/<br>Device Support | Suitable<br>MICROSENS<br>Installation Set          | Image                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| tehalit.BRHN duct profiles with 70 mm height, molded parts, C-Profile device installation<br>Type: BRHN70xxx              | Included in MICROSENS set | MS140040BR2                                        |                                                                                            |
| tehalit.BRH duct profiles with 70 mm height, molded parts, C-Profile device installation<br>Type: BRHN70132               | Included in MICROSENS set | MS140040BR2<br>Add cover frame MS140075-BRH        |  +      |
| tehalit.BR duct profiles with 70 mm height, Molded parts, C-Profile device installation<br>Type: BR70130                  | Included in MICROSENS set | MS140040BR2<br>Add cover frame MS140075-RW         |  +     |
| tehalit.BR duct profiles with 85 mm height, molded parts, C-Profile device installation<br>Type: BR85130                  | Included in MICROSENS set | MS140040BR2<br>Add cover frame MS140075-RW         |  +  |
| tehalit.BRS duct profiles with 70 mm height, 120 mm top, molded parts, C-Profile device installation<br>Type: BRS65xxxB   | Included in MICROSENS set | MS140040BR2<br>Add cover frame R9282xxx (by Hager) |  +  |
| tehalit.BRS duct profiles with 85 mm height, 120 mm top, molded parts, C-Profile device installation<br>Type: BRS85210B   | Included in MICROSENS set | MS140040BR2<br>Add cover frame R9282xxx (by Hager) |  +  |
| tehalit.BRS duct profiles with 100 mm height, 120 mm top, molded parts, C-Profile device installation<br>Type: BRS100210B | Included in MICROSENS set | MS140040BR2<br>Add cover frame R9282xxx (by Hager) |  +  |

| Duct                                                                                                                    | Socket/<br>Device Support | Suitable<br>MICROSENS<br>Installation Set                 | Image                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------------------|
| tehalit.BRA duct profiles with 70 mm height, 120 mm top, molded parts, C-Profile device installation<br>Type: BRA65xxxB | Included in MICROSENS set | MS140040BR2<br><br>Add cover frame BRA1202Rxxx (by Hager) |    |
| tehalit.BRH duct profiles with 70 mm height, molded parts, C-Profile device installation<br>Type: BRH70172              | Included in MICROSENS set | MS140040BR2<br><br>Add cover frame R6492xxx (by Hager)    |    |
| tehalit.BR duct profiles with 70 mm height, molded parts, C-Profile device installation<br>Type: BR70170                | Included in MICROSENS set | MS140040BR2<br><br>Add cover frame L917290xx (by Hager)   |    |
| tehalit.BR duct profiles with 85 mm height, molded parts, C-Profile device installation<br>Type: BR85170                | Included in MICROSENS set | MS140040BR2<br><br>Add cover frame L917290xx (by Hager)   |  |
| tehalit.BR duct profile double compartment, molded parts, C-Profile device installation<br>Type: BR70214                | Included in MICROSENS set | MS140040F2                                                |  |

## 4.6. OBO BETTERMANN Wall Ducts


| Duct                                                                                                      | Socket/<br>Device Support                                                                                             | Suitable<br>MICROSENS<br>Installation Set | Image                                                                                 |
|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------|---------------------------------------------------------------------------------------|
| Rapid 80<br>Device installation duct<br>(plastic, steel or<br>aluminum,<br>various sizes and variants)    | Set replaces socket<br>71GD7<br><br>Recommended model<br><br>No need to cut holes out<br>for cable routing            | MS140038-RP80<br><br>2-component set      |    |
| Rapid 80<br>Device installation duct<br>(plastic, steel or<br>aluminum,<br>various sizes and variants)    | Set replaces socket<br>71GD7<br><br>Recommended model<br><br>No need to cut holes out<br>for cable routing            | MS140039-RP80<br><br>3-component set      |    |
| Rapid 80<br>Device installation duct<br>(plastic, steel or<br>aluminum,<br>various sizes<br>and variants) | Front-locking device<br>installation socket<br>by OBO BETTERMANN<br><br>Type: 71GD7                                   | MS140029                                  |    |
| Rapid 45<br>Device installation duct<br>(plastic, steel or<br>aluminum,<br>various sizes<br>and variants) | No socket required, the<br>Micro Switch fits the<br>45 mm rail of the Rapid45<br>ducts without any further<br>adapter | Not required                              |   |
| BK70xxx<br><br>(older models)                                                                             | Socket for PVC ducts<br>series GEK<br>by OBO BETTERMANN<br><br>Type: 2390 8T2                                         | MS140029                                  |  |
| GEK 70xxx ducts<br><br>(older models)                                                                     | Not required                                                                                                          | MS140035                                  |  |
| GES 70xxx ducts<br><br>(older models)                                                                     | GED-2                                                                                                                 | MS140029                                  |  |
| GEA 70xxx ducts PVC<br><br>(older models)                                                                 | GED-2                                                                                                                 | MS140029                                  |  |



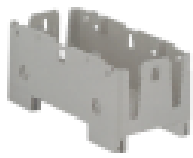
| Duct                                         | Socket/<br>Device Support                                                     | Suitable<br>MICROSENS<br>Installation Set | Image                                                                                 |
|----------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------|---------------------------------------------------------------------------------------|
| BS70xxx<br>(older models)                    | Socket for PVC ducts<br>series GEK<br>by OBO BETTERMANN<br><br>Type: 2390 8T2 | MS140029                                  |    |
| BBA70xxx<br>(older models)                   | Not required                                                                  | MS140040BR2                               |    |
| BBST70xxx<br>(older models)                  | Not required                                                                  | MS140040BR2                               |    |
| BS90xxx<br>(older models)                    | Socket for PVC ducts<br>series GEK<br>by OBO BETTERMANN<br><br>Type: 2390 8T2 | MS140029                                  |  |
| GEA 55110 S<br>(older models)                | Socket for PVC ducts<br>series GEK<br>by OBO BETTERMANN<br><br>Type: 2390 8T2 | MS140029                                  |  |
| GEA 55135 O<br>(older models)                | Socket for PVC ducts<br>series GEK<br>by OBO BETTERMANN<br><br>Type: 2390 8T2 | MS140029                                  |  |
| 6 WIK 2<br><br>(older model<br>by Ackermann) | Not required                                                                  | MS140040BR2                               |  |

## 4.7. Device Casing Overview Sorted by Duct Manufacturer



### Baukulit

| Image                                                                             | Type/Article No.                  | Remark                                                                                                     | Suitable MICROSENS Installation Set |
|-----------------------------------------------------------------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------|
|  | KFR/44<br>362-104<br>44 mm height | <ul style="list-style-type: none"> <li>• Front-locking socket</li> <li>• Manufacturer Spelsberg</li> </ul> | MS140029                            |




### Dahl

| Image                                                                              | Type/Article No. | Remark                                                                                                        | Suitable MICROSENS Installation Set |
|------------------------------------------------------------------------------------|------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------|
|  | GK/D             | <ul style="list-style-type: none"> <li>• For Dahl GKB and LKO ducts</li> <li>• No longer available</li> </ul> | MS140029                            |

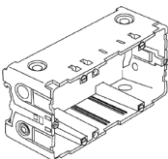

### GGK

| Image                                                                               | Type/Article No.                  | Remark                                                                                                                                                                           | Suitable MICROSENS Installation Set |
|-------------------------------------------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
|  | GED 50/2                          | <ul style="list-style-type: none"> <li>• For installation of 80 mm devices in cable routing duct systems and device installation duct systems with DIN-mounting rails</li> </ul> | MS140040BR2<br>* replaces socket    |
|  | KFR/44<br>362-104<br>44 mm height | <ul style="list-style-type: none"> <li>• Front-locking socket</li> <li>• Manufacturer Spelsberg</li> </ul>                                                                       | MS140029                            |

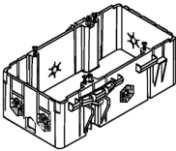


**Hager (tehalit)**

| Image                                                                             | Type/Article No.                                    | Remark                                                                                                                                      | Suitable<br>MICROSENS<br>Installation Set                      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
|  | L4719SCHW<br>EAN = 4 012740 264549<br>142 x 71 x 55 | <ul style="list-style-type: none"> <li>For wall ducts from 100 mm top and C-rail, e.g. BR70130</li> </ul>                                   | MS140029<br>* MS140040BR2 is recommended for new installations |
|  | G2737<br>EAN = 4 012740 885379<br>142 x 64 x 50     | <ul style="list-style-type: none"> <li>For wall ducts from 80 mm top and C-rail, e.g. BR70100 and BR 70214</li> </ul>                       | MS140029<br>* MS140040BR2 is recommended for new installations |
|  | G2860<br>EAN= 4012740220057<br>142 x 64 x 42        | <ul style="list-style-type: none"> <li>Device installation socket, front-locking, duplex (polyamide) halogen-free, old no. G2705</li> </ul> | MS140029                                                       |




**Kleinhuis**

| Image                                                                               | Type/Article No.                      | Remark                                                                                                                               | Suitable<br>MICROSENS<br>Installation Set |
|-------------------------------------------------------------------------------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|  | KED265<br>142 x 71 x 59               | <ul style="list-style-type: none"> <li>For BS- ducts with 80 mm and 112 mm cable top</li> </ul>                                      | MS140040BR2<br>* replaces socket          |
|  | KD2/50<br>382 450 01<br>142 x 71 x 59 | <ul style="list-style-type: none"> <li>For BS- ducts with 80 mm and 112 mm cable top</li> <li>Manufacturer Spelsberg</li> </ul>      | MS140040BR2<br>* replaces socket          |
|                                                                                     | KED65D                                | <ul style="list-style-type: none"> <li>For BS- ducts with 80 mm and 112 mm cable top</li> <li>2 units required per switch</li> </ul> | MS140029                                  |

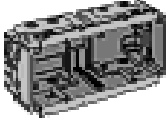

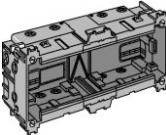

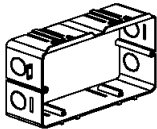
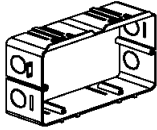
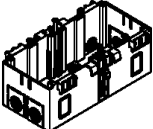
**Niedax**

| Image                                                                              | Type/Article No.                                   | Remark                                                                                                                                                                                          | Suitable<br>MICROSENS<br>Installation Set |
|------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|   | GDHR 50-2<br>142 x 82 x 52                         | <ul style="list-style-type: none"> <li>Front-locking, device installation ducts GK78, installation width 78 mm, steel/Aluminum</li> </ul>                                                       | MS140029                                  |
|   | KD2 Cam Lock 12 mm<br>362 404 01                   | <ul style="list-style-type: none"> <li>Front-locking, device installation ducts GK78, installation width 78 mm, steel/Aluminum</li> <li>44 mm height</li> <li>Manufacturer Spelsberg</li> </ul> | MS140029                                  |
|  | KD2/52 (type 52 mm)<br>382 052 01<br>142 x 70 x 56 | <ul style="list-style-type: none"> <li>For device installation ducts GK100, installation width 110 mm, steel</li> <li>Manufacturer Spelsberg</li> </ul>                                         | MS140040BR2<br>* replaces socket          |



**Nowaplast**

| Image                                                                               | Type/Article No.                            | Remark                                                                                                                                                                           | Suitable<br>MICROSENS<br>Installation Set |
|-------------------------------------------------------------------------------------|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|  | KD2/52<br>382 052 01<br>142 x 70 x 56       | <ul style="list-style-type: none"> <li>Wall ducts PVC/Aluminum/steel, FB, device installation ducts, HSG device installation ducts</li> <li>Manufacturer Spelsberg</li> </ul>    | MS140040BR2<br>* replaces socket          |
|  | KD2 Hook Lock<br>362 104 01<br>44 mm height | <ul style="list-style-type: none"> <li>Front-locking, BR wall ducts, installation width 80 mm, BR-PVC, BR-Aluminum, BR-Steel profiled</li> <li>Manufacturer Spelsberg</li> </ul> | MS140029                                  |
|  | KD2 Cam Lock 12 mm<br>362 194 01            | <ul style="list-style-type: none"> <li>Front-locking, BR wall ducts, installation width 80 mm, BR-PVC, BR-Aluminum, BR-Steel profiled</li> <li>Manufacturer Spelsberg</li> </ul> | MS140029                                  |



**OBO  
BETTERMANN**

| Image                                                                               | Type/Article No.                                     | Remark                                                                                                     | Suitable<br>MICROSENS<br>Installation Set                                |
|-------------------------------------------------------------------------------------|------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
|                                                                                     | 71GD2<br><br>35172NV<br><br>160 x 74 x 42,5          | <ul style="list-style-type: none"> <li>• Front-locking</li> </ul>                                          | MS140029                                                                 |
|    | 71GD3<br><br>35172PV<br><br>150 x 74 x 47,5          | <ul style="list-style-type: none"> <li>• Front-locking</li> </ul>                                          | MS140029                                                                 |
|    | 71GD7<br><br>37087BV<br><br>142 x 76 x 51            | <ul style="list-style-type: none"> <li>• Front-locking,<br/>for S990 cover range</li> </ul>                | MS140029                                                                 |
|   | 71GD9<br><br>142 x 76 x 51                           | <ul style="list-style-type: none"> <li>• front-locking,<br/>for S990 cover range</li> </ul>                | MS140029                                                                 |
|  | 7GD8Z<br><br>35172V4<br><br>142 x 71 x 62            | <ul style="list-style-type: none"> <li>• Type 55 mm<br/>for 110 mm duct<br/>systems with C-rail</li> </ul> | MS140029<br><br>* MS140040BR2 is<br>recommended for new<br>installations |
|  | GED-2 (PVC)<br><br>6257 60 5<br><br>141 x 78 x 48    | <ul style="list-style-type: none"> <li>• Steel/Aluminum<br/>wall ducts series<br/>GES/GEA</li> </ul>       | MS140029                                                                 |
|  | GED-2 HF (ABS)<br><br>6257 62 5<br><br>141 x 78 x 48 | <ul style="list-style-type: none"> <li>• Steel/Aluminum<br/>wall ducts series<br/>GES/GEA</li> </ul>       | MS140029                                                                 |
|  | 2390/8T2<br><br>6270 77 8<br><br>141 x 81 x 52       | <ul style="list-style-type: none"> <li>• PVC wall ducts<br/>series GEK</li> </ul>                          | MS140029                                                                 |


**Rehau**

| Image                                                                             | Type/Article No. | Remark                                                                                                                                                   | Suitable MICROSENS Installation Set |
|-----------------------------------------------------------------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
|  | KD2/55           | <ul style="list-style-type: none"> <li>Wall ducts PVC/Aluminum/steel, signo BK, BS, BA, FBK window sill ducts</li> <li>Manufacturer Spelsberg</li> </ul> | MS140040BR2                         |
|                                                                                   | 382 055 01       |                                                                                                                                                          | * replaces socket                   |
|                                                                                   | 142 x 70 x 59    |                                                                                                                                                          |                                     |
|  | KD2 Hook Lock    | <ul style="list-style-type: none"> <li>Wall ducts PVC/Aluminum/steel, signo BK, BS, BA</li> <li>Manufacturer Spelsberg</li> </ul>                        | MS140040BR2                         |
|                                                                                   | 362 104 01       |                                                                                                                                                          | * replaces socket                   |
|                                                                                   | 142 x 70 x 59    |                                                                                                                                                          |                                     |

**Spelsberg**

| Image                                                                               | Type/Article No.    | Remark                                                                                           | Suitable MICROSENS Installation Set |
|-------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------|-------------------------------------|
|  | TA55-2              | <ul style="list-style-type: none"> <li>Type 55 mm for 110 mm duct systems with C-rail</li> </ul> | MS140040BR2                         |
|                                                                                     | 392 055 01          |                                                                                                  | * replaces socket                   |
|                                                                                     | 142 x 70 x 61       |                                                                                                  |                                     |
|  | TA50-2 (Type 50 mm) | <ul style="list-style-type: none"> <li>For FB device installation ducts PVC</li> </ul>           | MS140040BR2                         |
|                                                                                     | 392 050 01          |                                                                                                  | * replaces socket                   |
|                                                                                     | 142 x 70 x 56       |                                                                                                  |                                     |


**Stago**

| Image                                                                               | Type/Article No. | Remark                                                                                                 | Suitable MICROSENS Installation Set |
|-------------------------------------------------------------------------------------|------------------|--------------------------------------------------------------------------------------------------------|-------------------------------------|
|  | KFR/44           | <ul style="list-style-type: none"> <li>Front-locking socket</li> <li>Manufacturer Spelsberg</li> </ul> | MS140029                            |
|                                                                                     | 362-104          |                                                                                                        |                                     |
|                                                                                     | 44 mm height     |                                                                                                        |                                     |

**Thorsman**

| Image | Type/Article No. | Remark                                                                   | Suitable<br>MICROSENS<br>Installation Set |
|-------|------------------|--------------------------------------------------------------------------|-------------------------------------------|
|       | MIB-A2           | <ul style="list-style-type: none"> <li>• Front-locking socket</li> </ul> | MS140029                                  |
|       | 142 x 79 x 45    |                                                                          |                                           |

**Van Geel**

| Image                                                                             | Type/Article No. | Remark                                                                         | Suitable<br>MICROSENS<br>Installation Set |
|-----------------------------------------------------------------------------------|------------------|--------------------------------------------------------------------------------|-------------------------------------------|
|  | KFR/44           | <ul style="list-style-type: none"> <li>• Front-locking socket</li> </ul>       | MS140029                                  |
|                                                                                   | 362-104          | <ul style="list-style-type: none"> <li>• Manufacturer<br/>Spelsberg</li> </ul> |                                           |
|                                                                                   | 44 mm height     |                                                                                |                                           |

\* The sides of some sockets are fitted with a mechanism for screw fastening which is required to fix the socket in place in the duct. The sides of these device casings should not be altered. However, as the switch requires sufficient space for the cabling, we recommend alternatively using an MS140040BR2 set (device casing not required).

## 5. Power Supply Installation

Installation components with Power-over-Ethernet functionality require 48 VDC (resp. a 54 VDC power supply for PoE+). This is generally achieved by using an external power supply which is integrated during installation.



Power Supply MS700710

### 5.1. Installation in Wall Ducts

#### 5.1.1. Installation on a C-Rail, 35 mm Combi-Rail or 35 mm Hat Rail

MICROSENS offers a universal installation adapter for the MS700710 power supply which makes light work of installation on a C-rail, 35 mm combi-rail or a 35 mm hat rail. The installation adapter is screwed onto the power supply and is then simply snapped onto the respective duct. This is shown in the illustration below. The installation set (power supply not included) can be ordered by quoting the article No.: **MS-140075-UNI**. A combi-set, consisting of an MS700710 power supply and an MS140075-UNI installation set can be ordered by quoting the article No.: **MS700710-UNI**.



MS700710 power supply mounted on an MS140075-UNI installed on a C-Rail



MS700710 power supply mounted on an MS140075-UNI installed on a Combi-Rail










## 5.1.2. Installation on Front-Locking tehalit Ducts

MICROSENS offers a special installation set for front-locking tehalit ducts. The bracket and corresponding power supply are simply snapped onto the assembly track and covered using one of the manufacturer's standard wall duct covers. This installation set can be ordered by quoting the following product number: **MS140075-10F**.



MS700710 power supply installed in a tehalit duct using an MS140075-10F power supply bracket

| Image | Remark                                                                                                                                                                                                                                                             | Art. No.        |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
|       | MS700710 power supply, incl. universal installation set for C-rail, 35 mm combi-rail and 35 mm hat rail installation<br><br>54V/1.2A 65W for PoE+ 45 x 45 Micro Switch                                                                                             | MS700710-UNI    |
|       | MS700710 power supply, incl. universal installation set for C-rail, 35 mm combi-rail and 35 mm hat rail installation<br><br>54V/1.2A 65W for PoE+ 45 x 45 Micro Switch,<br>3x1.5 mm <sup>2</sup> with pre-installed WAGO plug + connector                          | MS700710-UNI-WG |
|       | MS700710 power supply, incl. universal installation set for C-rail, 35 mm combi-rail and 35 mm hat rail installation<br><br>54V/1.2A 65W for PoE+ 45 x 45 Micro Switch<br>3x1.5 mm <sup>2</sup> cable with pre-installed Wieland connector at one end              | MS700710-UNI-WL |
|       | Universal installation set for MS700710 power supply, designed for C-rail, 35 mm combi-rail and 35 mm hat rail installation                                                                                                                                        | MS140075-UNI    |
|       | MS700710 power supply, incl. installation set for front-locking Hager (tehalit) wall ducts with 80 mm cover track, pre-installed<br><br>54V/1.2A 65W for PoE+ 45 x 45 Micro Switch                                                                                 | MS700710-FTH    |
|       | MS700710 power supply, incl. installation set for front-locking Hager (tehalit) wall ducts with 80 mm cover track, pre-installed<br><br>54V/1.2A 65W for PoE+ 45 x 45 Micro Switch<br><br>3x1.5 mm <sup>2</sup> cable with pre-installed WAGO connector at one end | MS700710-FTH-WG |

| Image                                                                               | Remark                                                                                                                                                                                                                                                                                               | Art. No.        |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
|    | <p>MS700710 power supply, incl. installation set for front-locking Hager (tehalit) wall ducts with 80 mm cover track, pre-installed</p> <p>54V/1.2A 65W for PoE+ 45 x 45 Micro Switch</p> <p>3x1.5 mm<sup>2</sup> cable with pre-installed Wieland connector at one end</p>                          | MS700710-FTH-WL |
|    | Installation set for front-locking Hager (tehalit) wall ducts with 80 mm cover track, for MS700710 power supply                                                                                                                                                                                      | MS140075-10F    |
|                                                                                     | Power supply installation set for wall duct socket. Set consists of an installation plate, a power supply bracket, a cover frame and 2x blind cover                                                                                                                                                  | MS140076        |
|    | Installation set for Legrand wall duct systems, consisting of an MS700710 power supply, front-locking adapter, frame cover, 2x blind cover, pre-installed                                                                                                                                            | MS700710-LGF    |
|   | <p>Installation set for Legrand wall duct systems, consisting of an MS700710 power supply, front-locking adapter, cover frame, 2x blind cover, pre-installed</p> <p>54V/1.2A 65W for PoE+ 45 x 45 Micro Switch</p> <p>3x1.5 mm<sup>2</sup> cable with pre-installed WAGO connector at one end</p>    | MS700710-LGF-WG |
|  | <p>Installation set for Legrand wall duct systems, consisting of an MS700710 power supply, front-locking adapter, cover frame, 2x blind cover, pre-installed</p> <p>54V/1.2A 65W for PoE+ 45 x 45 Micro Switch</p> <p>3x1.5 mm<sup>2</sup> cable with pre-installed Wieland connector at one end</p> | MS700710-LGF-WL |
|  | WAGO-WINSTA® MIDI socket, fits WAGO connectors                                                                                                                                                                                                                                                       | MS190261-F      |
|  | Wieland Gesis connector socket, fits Wieland connectors                                                                                                                                                                                                                                              | MS190260-F      |