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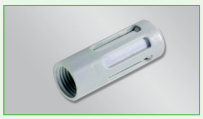
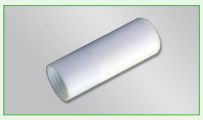
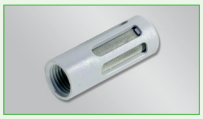
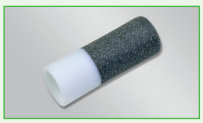
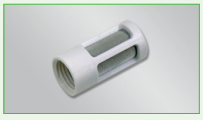
# Accessories

## Filter Caps for Humidity and Dewpoint Transmitters

The choice of appropriate filter cap is essential for the long term performance of the sensor in a certain application.
For assistance please contact your local support - http://www.epluse.com/en/service-support/locations-distributors/.

| FILTER NAME | CONSTRUCTION | FEATURES | APPLICATIONS | TYPE NO. |
|---|---|---|---|---|
| MEMBRANE  | Body: polycarbonate<br>Filter: PTFE membrane<br>Pores size: 1µm<br>Length: 34mm (1.34“) | Very good protection against fine dust<br>T range: -40…80°C (-40...176°F)<br>Response time $t_{10/90}$: 15s | Building automation<br>Dusty environment | HA010101 |
| STAINLESS STEEL SINTERED | Material: sintered stainless steel<br>Pores size: 10µm<br>Length: 33mm (1.30“) | For high mechanical stress and strong pollution<br>T range: -40…180°C (-40...176°F)<br>Response time $t_{10/90}$: 30s | Industrial process control<br>Agriculture<br>Life stock barns<br>Unsuitable for condensing environment | HA010103 (for plastic probes)<br>HA010117 (for metal probes) |
| PTFE  | Material: PTFE sintered<br>Pores size: 50µm<br>Length: 33mm (1.30“) | For very dirty, oily environment<br>T range: -40…180°C (-40...176°F)<br>Response time $t_{10/90}$: 14s | Industrial process control<br>Chemical industry<br>Very polluted environment<br>Unsuitable for condensing environment | HA010105 |
| METAL GRID  | Body: polycarbonate<br>Filter: stainless steel wire mesh<br>Pores size: 30µm<br>Length: 33mm (1.30“) | For low mechanical stress and low pollution level<br>For high RH / condensing environment<br>T range: -40…120°C (-40...248°F)<br>Response time $t_{10/90}$: 15s | Climate control<br>Dryers and humidifiers<br>HVAC | HA010106 |
| STAINLESS STEEL GRID | Body: stainless steel<br>Filter: stainless steel wire mesh<br>Pores size: 30µm<br>Length: 39mm (1.54”) | For average mechanical stress and low pollution level<br>For high RH / condensing environment<br>T range: -40…120°C (-40...248°F)<br>Response time $t_{10/90}$: 15s | Industrial process control<br>Clean rooms | HA010109 |
| $H_2O_2$  | Material: PTFE sintered<br>Pores size: 50µm<br>Length: 33mm (1.30“) | Catalytic filter for $H_2O_2$ environment<br>T range: -40…180°C (-40...176°F)<br>Response time $t_{10/90}$: 14s | Pharmaceutical<br>Biotech<br>Sterilization with $H_2O_2$ | HA010115 |
| PTFE STAINLESS STEEL | Body: stainless steel<br>Filter: PTFE membrane, replaceable<br>Pores size: 2µm<br>Length: 39mm (1.54”) | For average mechanical stress<br>High pollution levels<br>T range: -40…180°C (-40...176°F)<br>Response time $t_{10/90}$: 14s<br>Water ingression pressure > 0.5bar | For EE33-J and EE33-K in: Meteorology<br>Continuous high humidity<br>Condensing environment | HA010114: complete filter<br>HA010114ME: PTFE membrane |
| METAL GRID FOR EE08  | Body: polycarbonate<br>Filter: stainless steel wire mesh<br>Pores size: 30µm<br>Length: 25mm (1”) | For low mechanical stress<br>Low pollution level<br>For high RH / condensing environment<br>T range: -40…120°C (-40...248°F)<br>Response time $t_{10/90}$: 15s | Meteorology<br>Climate control | HA010113 |
| STAINLESS STEEL | Material: stainless steel<br>Openings: ø3mm<br>Length: 32mm (1.26”) | For moisture in oil transmitters and handhelds | Hydraulic, lubrication and isolation oil monitoring | HA010110 |



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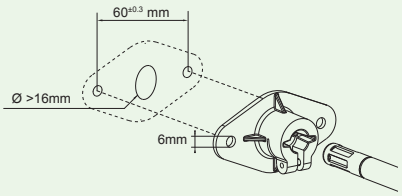
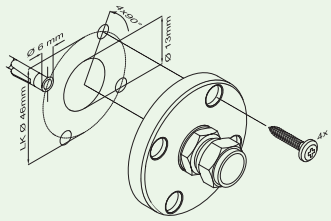
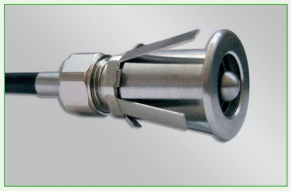
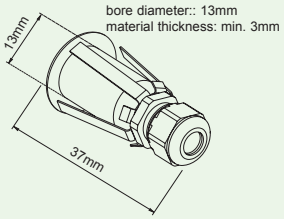
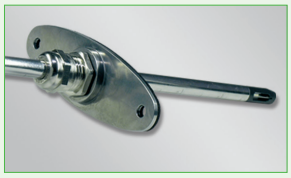
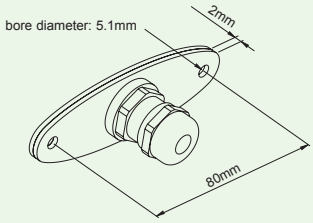
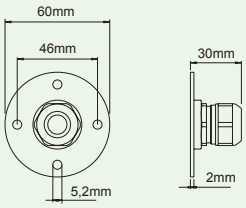
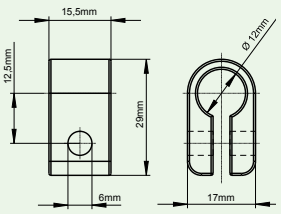
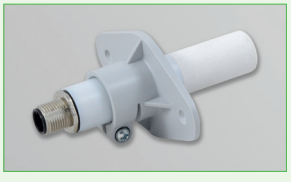
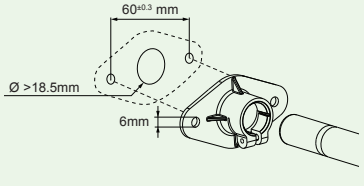
## Mounting Flanges

| NAME | SUITABLE FOR | DIMENSIONS (in mm) | ORDER CODE |
|---|---|---|---|
| Plastic mounting flange 12mm (0.47“)<br> | EE65, EE66<br>EE060, EE061<br>EE160<br>max. temperature: 60°C (140°F) |  | HA010202 |
| Stainless steel mounting flange 12mm (0.47“)<br> | EE23, EE31, EE33 |  | HA010201 |
| Stainless steel mounting flange 5mm (0.2“)<br>  | EE23 - model H<br>EE31 - model H |  | HA010208 |
| Stainless steel mounting flange 8mm (0.3“)<br>  | EE75<br>EE33-MFTJ (temperature probe) |  | HA010207 |
| Duct mounting kit<br> | EE07, EE071<br>EE220 |  | HA010209 |
| Wall mounting clip Ø12mm (0.47“)<br> | For all probes with Ø12mm (0.47“)<br>-35...105°C (-31...221°F) |  | HA010211 |
| Plastic mounting flange Ø18.5mm (0.73“)<br>  | EE871 |  | HA010212 |



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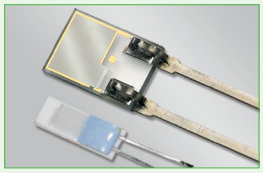
## LC Displays

| NAME | SUITABLE FOR | | ORDER CODE |
|---|---|---|---|
| LC display + cover | EE220 | metal | D07M |
| | | polycarbonate | D07P |
| | EE23 | metal | D03M |
| | | polycarbonate | D03P |
| | EE31, EE35, EE36 | metal | D05M |
| | | polycarbonate | D05P |
| | EE33 | metal | D05M |

## Power Supply Unit

| NAME | DESCRIPTION | SUITABLE FOR | ORDER CODE |
|---|---|---|---|
| Power supply adapter | External power supply suitable for Europe / US / UK / Korea / China<br><br>input: 100-240V AC / 50-60Hz 0.5A<br>output: 24V / 0.625A | HVAC and industrial transmitters | V03 |

## Replacement Sensors

| NAME | DESCRIPTION | SUITABLE FOR | ORDER CODE |
|---|---|---|---|
| Replacement sensors  | Replacement humidity sensor<br>Replacement temperature sensor | EE23, EE31 | FE09<br>FE09-HC01 (with coating)<br><br>TE38 |



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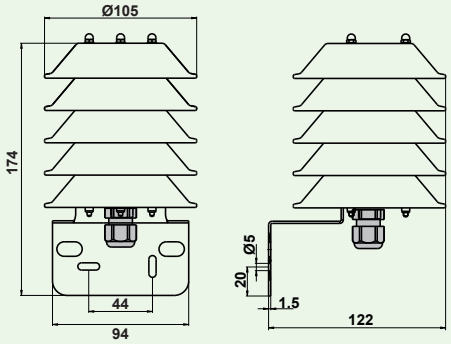
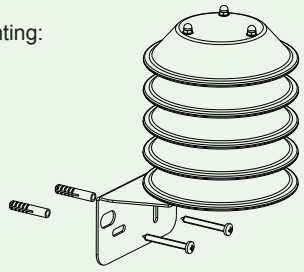
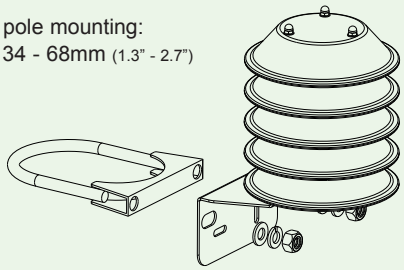
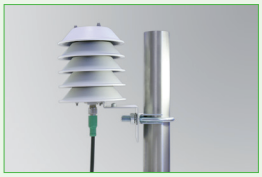
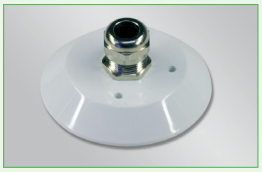
## Radiation Protection Shield

For outdoor applications the transmitters shall be equipped with radiation shield. This causes a forced ventilation which largely prevents overheating of the sensing probe in the sun and thus a distortion of the measured values.
All radiation shields are suitable for wall and pole mounting.

| NAME | SUITABLE FOR | DIMENSIONS / MOUNTING | ORDER CODE |
|---|---|---|---|
| Radiation shield for EE21 | EE21-xA2x | Example: HA010506   | HA010501 |
| Radiation shield with fixed clamping ring (M20x1.5) for probes with Ø12mm (0.47“) | EE23/31 with remote sensing probe<br>EE060<br>EE07, EE071<br>EE33-J (RH-Sensor) | mounting options:<br>- wall mounting:  <br>- pole mounting:<br>34 - 68mm (1.3” - 2.7”)  | HA010502 |
| Radiation shield with screw-in thread (M16x1.5)<br>cable gland for probes with Ø6mm (0.24“)  | EE08<br>EE33-J (T-Sensor) | | HA010506 |

## Dripping Water Protection

In applications with high humidity and condensation or for outdoor use, sensor probes should be protected against dripping water.

| NAME | SUITABLE FOR | DESCRIPTION | ORDER CODE |
|---|---|---|---|
| Dripping water protection cap  | All sensor probes with Ø12mm (0.47“) | Screw connection for probe fixation Ø85 mm (3.35“) | HA010503 |



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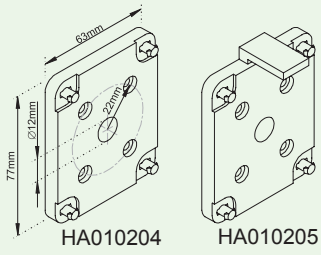
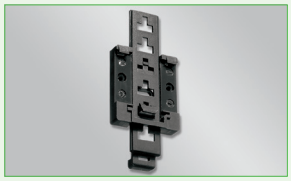
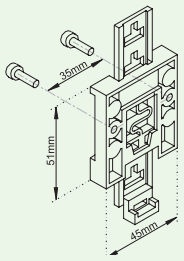
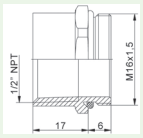
## Mounting and Connecting Aids

| NAME | SUITABLE FOR | DIMENSIONS / DESCRIPTION | ORDER CODE |
|---|---|---|---|
| Snap-in mounting flange for wall and duct mounting | EE16-T<br>EE21<br>EE65, EE66 |  HA010204 HA010205 | for wall mounting: HA010204<br>for duct mounting: HA010205 |
| Bracket for top-hat rail mounting[1]  [1] Note: Only for plastic housing, not for metal housing | EE220, EE23, EE31, EE35, EE36 |  | HA010203 |
| U.S. conduit screw adapter | General | Adapter M16x1.5 to ½"NPT (U.S. conduit fitting)  | HA011101 |
| Pressure tight screw connection | EE33-MFTJx<br>EE33-MFTKx | For probes with Ø12mm (0.47") and Ø6mm (0.24")<br><br>Probe assembly up to 20bar (300psi) | HA011102: ½"ISO, probe: Ø12mm (0.47")<br>HA011103: ½"NPT, probe: Ø12mm (0.47")<br>HA011104: ½"ISO, probe: Ø6mm (0.24")<br>HA011105: ½"NPT, probe: Ø6mm (0.24") |

## Reference Probes

| NAME | SUITABLE FOR | DESCRIPTION | ORDER CODE |
|---|---|---|---|
| Reference probe | EE220 | EE07 probes with defined measuring values to check the digital/analogue conversion of the EE220 basic unit (with test report)<br><br>probe 1: 90% RH / 5°C (41°F)<br>probe 2: 10% RH / 45°C (113°F) | HA010403 |



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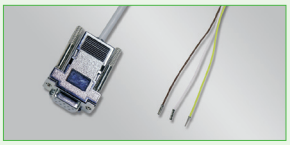
## Interface Convertors and Interface Cables

| NAME | SUITABLE FOR | DESCRIPTION | ORDER CODE |
|---|---|---|---|
| RS232 to RS485 | EE31, EE33 with RS485 interface | - Converter from RS232 to RS485<br>- Supports AutoPro, i.e. automatic adjustement of the Baudrate from 300 bps to 115200 bps<br>- Enables to control 256 data acquisition modules in a RS-485 network<br>- Solation 3000 Vrms | HA010603 |
| RS232 to USB | General | - High speed converter from RS232 to USB<br>- Certified: Microsoft WHQL approved | HA020110 |
| E2 to RS232 for EE07 | EE07 | Converter for E2-interface to RS232, incl. software for test and data<br>cable length: 2m (6.6ft) | HA011001 |
| E2 to RS232 for EE03 | EE03 | Converter for E2 interface to RS232, incl. software for test and data recording<br>cable length: 2m (6.6ft) | HA011002 |
| E2 to RS232 for EE08 | EE08 | Converter for E2-interface to RS232, incl. software für configuration, adjustement or test<br>cable length: 2m (6.6ft) | HA011005 |
| RS232 Interface Cable for Screw Terminals  | EE31, EE33,<br>EE35, EE36 | RS232 interface cable for connection to screw terminals on the board<br>cable length: 2m (6.6ft) | HA010301 |
| RS232 Interface Cable with Pin Connector | EE31, EE33,<br>EE35, EE36, EE371, EE381 | RS232 interface cable to connect directly on the board<br>cable length: 2m (6.6ft) | HA010304 |
| RS232 Interface Cable with External Plug | EE31, EE33, EE35, EE36 | RS232 interface cable to plug into the external socket on the housing C06<br>cable length: 2m (6.6ft) | HA010311 |



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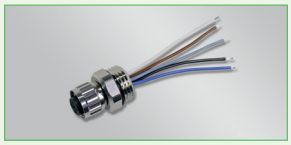
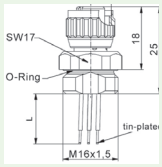
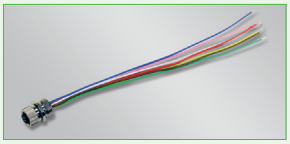
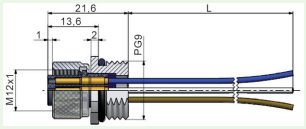
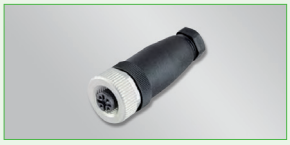
## Plugs / Sockets / Connecting Cables

| NAME | SUITABLE FOR | DESCRIPTI ON | ORDER CODE |
|---|---|---|---|
| Flange Coupling, 5 pins  | EE060 type PM<br>EE07<br>EE071<br>EE871 | M12x1 Flange Coupling for housing assembly<br>L = 50mm (2“)   | HA010705 |
| Flange Coupling, 8 pins  | EE08 type PV<br>EE08 type D | M12x1 Flange Coupling for housing assembly<br>L = 200mm (8“)   | HA010703 |
| Flange Receptacle, 8 pins  | EE08 type PV<br>EE08 type D<br>EE82 | Flange receptacle<br>8 pins, M12x1, suitable for customer-specific assembly, IP67 (NEMA 4) | HA010704 |
| Connecting Cable EE220/EE244 | EE07 - EE220/EE244<br>EE871 - EE244 | Connecting cable for remote measurement:<br>- EE07 with EE220/EE244<br>- EE871 with EE244<br>5 pins, M12x1 plug-socket, shielded (shield connected to pin 5) | HA010801 (2m / 6.6ft)<br>HA010802 (5m / 16.4ft)<br>HA010803 (10m / 32.8ft) |
| Connecting Cable, 5 pins | LOGPROBE20 - HUMLOG20 E<br>EE771, EE772, EE776<br>EE060 PM | Connecting cable for remote measurement:<br>- LOGPROBE20 mit HUMLOG20 E<br>- EE771, EE772, EE776<br>- EE060 PM<br>5 pins, M12x1 plug-socket, shielded | HA010816 (2m / 6.6ft)<br>HA010817 (5m / 16.4ft)<br>HA010818 (10m / 32.8ft) |
| Connecting Cable, 5 pins | EE060 type PM<br>EE07<br>EE071<br>EE82<br>EE871 | Connecting cable<br>5 pins, M12x1 socket - flying leads, shielded | HA010819 (1.5m / 3.3ft)<br>HA010820 (5m / 16.4ft)<br>HA010821 (10m / 32.8ft) |
| Connecting Cable, 8 pins | EE08 type PV<br>EE08 type D | Connecting cable<br>8 pins, M12x1 socket - flying leads, shielded | HA010322 (1.5m / 4.9ft)<br>HA010323 (3m / 9.8ft)<br>HA010324 (5m / 16.4ft)<br>HA010325 (10m / 32.8ft) |
| Connecting Cable OMNIPORT / OILPORT | OMNIPORT 20<br>OMNIPORT 30<br>OILPORT | Connecting cable for hand-held<br>5 pins, M12x1 plug-socket, unshielded | HA010813 (2m / 6.6ft)<br>HA010814 (5m / 16.4ft)<br>HA010815 (10m / 32.8ft) |



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