

## Data sheet: HBSC2 for CO<sub>2</sub>, Butane, etc.

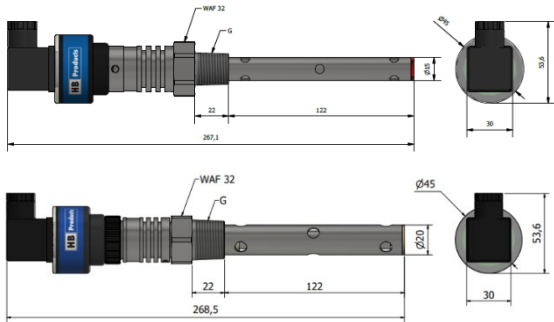
These Level Switches are designed for detecting liquid CO<sub>2</sub> in refrigeration systems. It can also be used to detect butane, isobutane, and propane.



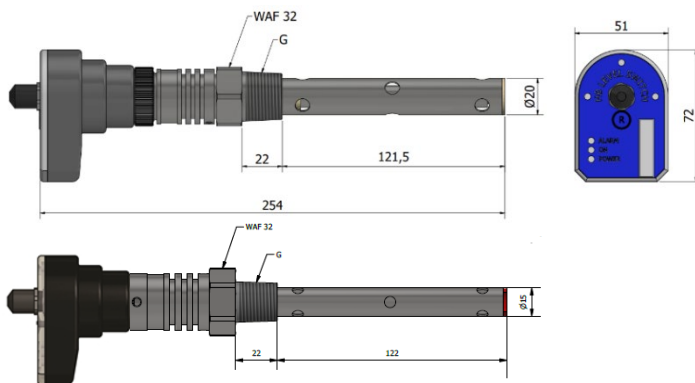
|                                                                            | HBSC2                                                                 | HBSC2-SSR-1                                                      | HBSC2-SSR-2                                                           |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------------------|
| Power supply                                                               |                                                                       |                                                                  |                                                                       |
| Voltage                                                                    | 24V AC/DC + 10%                                                       | 24V AC/DC + 10%                                                  | 90-240V AC                                                            |
| Max. current                                                               | 200 mA                                                                | 600 mA                                                           | 10 mA                                                                 |
| Plug connection                                                            | ISO 4400                                                              | M12, 5 pins – IEC 61076-2-101 A code                             | M12, 4 pins – IEC 61076-2-101 B code                                  |
| Output                                                                     |                                                                       |                                                                  |                                                                       |
| Transistor output                                                          | PNP/NPN                                                               | Solid-state 24V                                                  | Solid-state 240V                                                      |
| Contact function                                                           | NC or NO                                                              | NC or NO                                                         | NC or NO                                                              |
| Environmental conditions                                                   |                                                                       |                                                                  |                                                                       |
| Ambient temperature                                                        | -30°C to 50°C (-22°F to 122°F)                                        | -60°C to 50°C (-76°F to 122°F)                                   | -30°C to 50°C (-22°F to 122°F)                                        |
| Liquid temperature<br>*Depending on the physical conditions of the liquid. | -55°C to 50°C (-67°F to 122°F)                                        | -55°C to 50°C (-67°F to 122°F)                                   | -30°C to 50°C (-22°F to 122°F)                                        |
| Max. pressure                                                              | 150 bar (2175 psi)                                                    |                                                                  |                                                                       |
| Protection degree                                                          | IP54 *For outdoor and low temperature application use low temperature | IP66                                                             | IP54 *For outdoor and low temperature application use low temperature |
| Connector                                                                  | V track - set screw                                                   | Union                                                            | V track - set screw                                                   |
| Vibrations                                                                 | IEC 60068-2-6 (4g)                                                    |                                                                  |                                                                       |
| Mechanical specifications                                                  |                                                                       |                                                                  |                                                                       |
| Thread connections                                                         | 3/4" or 1/2" NPT and BSPP                                             |                                                                  |                                                                       |
| Size                                                                       | See the dimensional drawing below                                     |                                                                  |                                                                       |
| Material - mechanical part                                                 | AISI 304 / PTFE                                                       |                                                                  |                                                                       |
| Material - electronic part                                                 | Nylon 6 (PA)                                                          |                                                                  |                                                                       |
| House type                                                                 | Circular                                                              | Oval type front                                                  | Oval type front                                                       |
| Approvals                                                                  |                                                                       |                                                                  |                                                                       |
| EMC test                                                                   | EN 61000-2                                                            |                                                                  |                                                                       |
| Indication                                                                 |                                                                       |                                                                  |                                                                       |
| LED indication when detecting                                              | 4x red                                                                | 3x green                                                         | 3x green                                                              |
| Configurations                                                             |                                                                       |                                                                  |                                                                       |
| Configuration                                                              | Pre-set                                                               | HB Tool                                                          | Pre-set                                                               |
| Scope of supply                                                            |                                                                       |                                                                  |                                                                       |
| Package include                                                            | Mechanical and electrical part<br>ISO4400 screw connector             | Mechanical and electrical part<br>5 m cable with M12 plug A code | Mechanical and electrical part<br>5 m cable with M12 plug B code      |

## Dimensional drawing

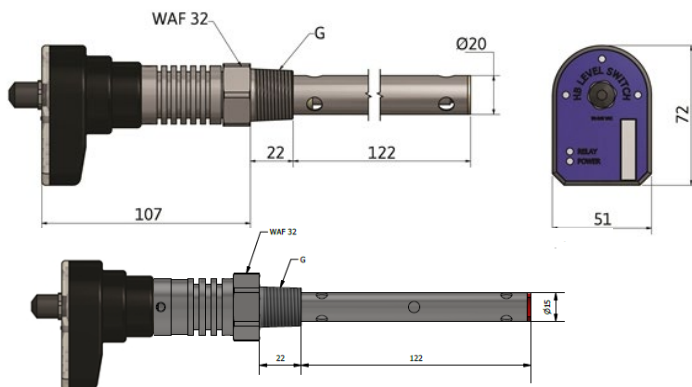
HBSC2 3/4" and 1/2"



HBSC2-SSR-1 3/4" and 1/2"



HBSC2-SSR-2 3/4" and 1/2"



For any inquiries or further information, please don't hesitate to contact us at [info@hbproducts.dk](mailto:info@hbproducts.dk).

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