

Level sensor and supports.  
Accessories. Additional System

**COD. AS1A00S2D001, AS1A00S2D003, AS1A00S2D004,  
AS1A00S2D005, ASDETROTUWT4, ASDETROTUWT5,  
ASDETROTUWT6, ASDETCAPEND1, ASDETCAPEND2, ASDETFIN**

## TECHNICAL SPECIFICATIONS

5 types of sensors indicating max-min grain level inside the silo.

### A SY-SM1 MEMBRANE LEVEL SENSOR:

- Used as min-level detector, en productos pulverulentos y granulados de flujo fácil y con un peso específico entre 300 y 2500 kg/m<sup>3</sup>. It is not recommended as max-level detector.

**OPERATION** The pressure applied by the grain on a membrane, activates a switch and sends a signal.

- They are very robust and do not require power.
- Easy assembly, it adapts perfectly to the wavy shape of the body sheet and hopper.
- It incorporates a regulation column, which allows the adjustment of the sensitivity.

### B SY-DP1 PENDULAR LEVEL SENSORS:

- Used as max-level detector.

**OPERATION** Due to the slope generated by the grain, the cone is displaced, activating a switch located at the end of the bar.

- Installed on the roof with a flange support.
- Robust and simple and do not need power and maintenance.
- The connection to the silo is done with a flange support.

### C SY-DR1 ROTATIVE LEVEL SENSORS

- Used as max-level, intermediate and min-level detector

**OPERATION** The blade is turning until the grain blocks the movement, and afterwards, sends a signal.

- Detects maximum level if they are installed on the roof, the intermediate level if they are installed in the body and the minimum level if they are installed at the silo hopper.
- Sensitive: feeding and maintenance are basic.
- Operation: 2 modes depending on the density of stored material.
- Installation: on a silo roof with a flange support and 1m extension kit. It adaptes to body and hopper.

### D CAPACITIVE LEVEL SENSORS

- Used as max-level and min-level detector.

**OPERATION** Generate a signal while changing the conductivity of the surrounding environment of the device.

- Supplier : Endress Hauser
- Power is needed.
- Connection to the silo is done by a thread 1 1/2" for the max-level detector and 1" for the min-level detector.

### E LIMIT SWITCH SENSORS

- Detects if the access door located in the silo wall is closed or open.

**OPERATION** When the door is closed, press the button that activates the mechanism.

- Model ZCK-M1 with push button.
- It is installed between both leaves of the door, in the frame, so that the device sends the signal from the interior leaf, by means of a cable.

A



II 1/2D Ex ta/tb IIIC T80° Da/Db

B



II 1/2D Ex ta/tb IIIC T<sub>200</sub> 80°C/80°C Da/Db

C



II 1/2D Ex ta/tb IIIC T<sub>200</sub> 80°C/80°C Da/Db

D



E



## LEVEL SENSOR SUPPORTS

## ACCESSORIES CYLINDER



FILE 5.19  
VERSION 3. 11/0/2023

COD. ASSOPBRIDN80 ASSOPMEM  
ASSOPROSTECH ASSOPAR

## TECHNICAL SPECIFICATIONS

They are classified according to silo connection.

Supports:

- A** SY-SM1 MEMBRANE DETECTOR & ROTATIVE SY-DR1  
These sensors are installed over the bodysheet and hopper without any support.

- B** ROTATIVE LEVEL INDICATOR SUPPORT  
To connect rotative and capacitive level detectors (minimum capacity).

### PARTS AND MATERIALS

- Painted sheet. S275 JR e= 5mm.
- Thread.
- $\varnothing(\text{ext}) = 55\text{mm}$ .
- DIN 2986.
- Female thread BSP GAS 1 1/2".

- C** THREADED SUPPORT FOR ROOF/ HOPPER  
To capacitive and rotative detectors with extension.

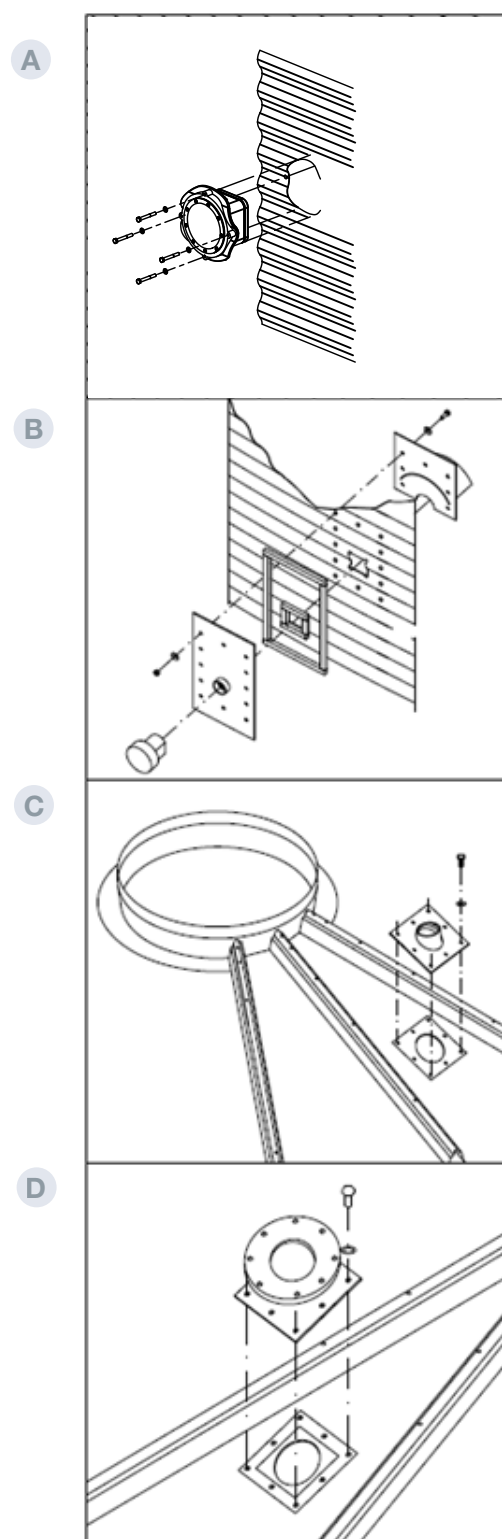
### PARTS AND MATERIALS

- Painted sheet. S275 JR e= 3mm.
- Thread.
- $\varnothing(\text{ext}) = 55\text{mm}$ .
- DIN 2986.
- Female thread BSP GAS 1 1/2" ó 1".
- To change thread 1 1/2" to 1" it's necessary an adapter.

- D** FLANGE SUPPORT  
To rotative with extension, pendular, radar or special detectors.

### PARTS AND MATERIALS

- Steel sheet fixed on the roof. Galvanised sheet S275 JR. e= 5mm
- Galvanised steel pipe. S275 JR.  $\varnothing(\text{ext}) = 106\text{mm}$ . e= 6mm.
- Circular steel sheet defined by the customer. Galvanised steel. S275 JR. e= 5mm
- PN 100 DR 16. Geometry according to PN 60, PN 100 o PN 200.





**Offices and Factory:**

Ctra. de Arenas km. 2.300  
13210 Villarta de San Juan • Ciudad Real - Spain  
T: +34 926 6

**Madrid Office:**

C/Azcona, 37 • 28028 Madrid - Spain  
T: +34 91 726 43 04

[symaga@symaga.com](mailto:symaga@symaga.com)  
[www.symaga.com](http://www.symaga.com)