Assembly guide

1. Parts list
2. Subsection assembly
3. Final assembly
4. Parts list

|  |  |
| --- | --- |
| 1. polystyrene box |  |
| 1. Electrical box |  |
| 1. PVC Pipe cut to length 2. PVC Pipe cut to length |  |
| 1. PVC Coupling 2. Male adapter 3. Female adapter |  |
| 1. PVC reducer bushing 2. PVC cap |  |
| 1. Cable Gland PG13.5 2. PVC Coupling |  |
| 1. PVC Pipe 3/4” cut to 50mm length (x1) 2. PVC Pipe 3/4” cut to 70mm length (x1) 3. L shape clamp (x2) and screws 4. Teflon |  |

1. Subsection assembly

2.1 Buoy

|  |  |
| --- | --- |
| * Mark the center of the base and cap of the 10L box. * Drill a 47mm diameter hole for the box base. This corresponds to the diameter of accessory f). * Drill a 56mm diameter hole for the box cap. This corresponds to the diameter of accessory e). |  |
| * Insert the male adapter (f) into the box base and join them with your preferred elastic sealant. * Insert the coupling (e) to the box cap and join them with your preferred elastic sealant. |  |
| * Inside the box, weld the female adapter (g) with PVC pipe (d) to join the male adapter (f) and coupling (e). |  |
| * Use Teflon on the male adapter (f) thread and adjust the female adapter (g). |  |
| * Finally, weld the bottom section of the remaining male adapter (f) using a small piece of PVC pipe. |  |

2.2 Electronic devices protection

|  |  |
| --- | --- |
| * Mark the center of the top and bottom sections of the box (b) (140mm x 80mm side). * For the bottom section, drill a 1/2” diameter hole and clean the borders. The cable gland (j) will be placed here. * For the top section, drill a 1/4" diameter hole where the antenna will be located. |  |
| * Weld the reducer bushing (h) to the 50mm section of 3/4” PVC pipe (I). |  |
| * Weld the top section of the 3/4” PVC pipe to the coupling (k). |  |
| * Take the thread of element (j) and insert it into the top section of the coupling (k). Use your preferred sealant to join them. |  |
| * Adjust accessory (j) to the box (b) and the thread from the earlier step. |  |
| * Finally, to protect the accessory (j) and increase the box stability, a 70mm section of PVC pipe (m) is added and secured with an L shape clamp and screws (n). |  |

2.3 Sensor probe protection

|  |  |
| --- | --- |
| * Weld the cap (i) to one side of the PVC pipe (c). |  |
| * On the other side, place the female accessory (g). |  |

1. Final assembly

|  |  |
| --- | --- |
| * Take the buoy and probe protection from sections 2.1 and 2.3 and assemble them by screwing the male and female accessories. |  |
| * Finally, grab the electronics protection from section 2.2 and adjust the accessory (e) to the accessory (h). |  |