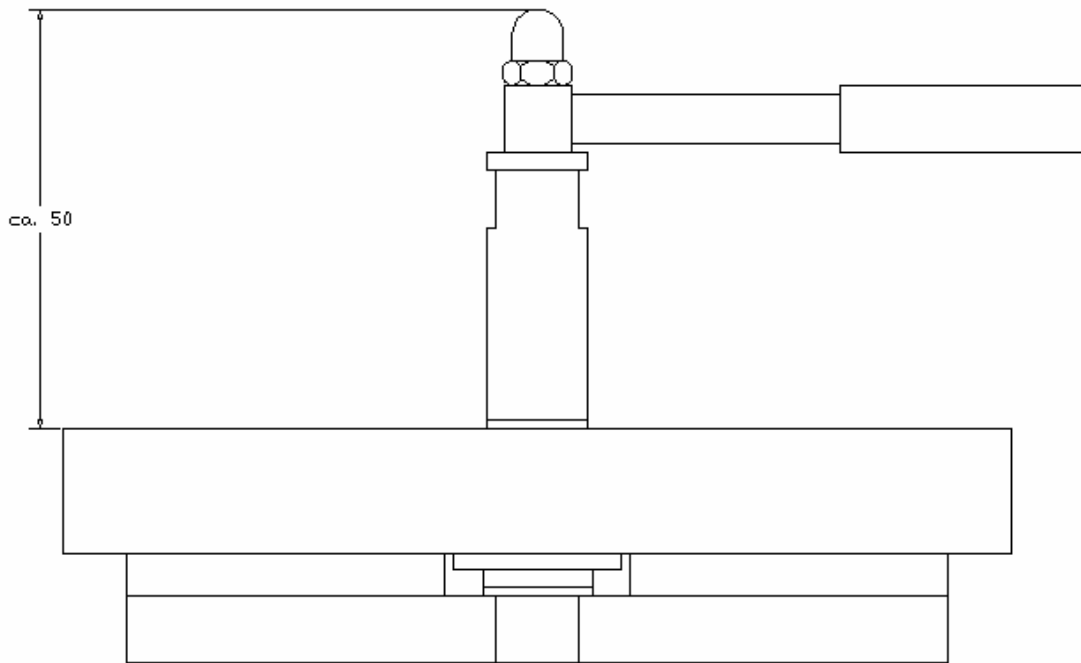




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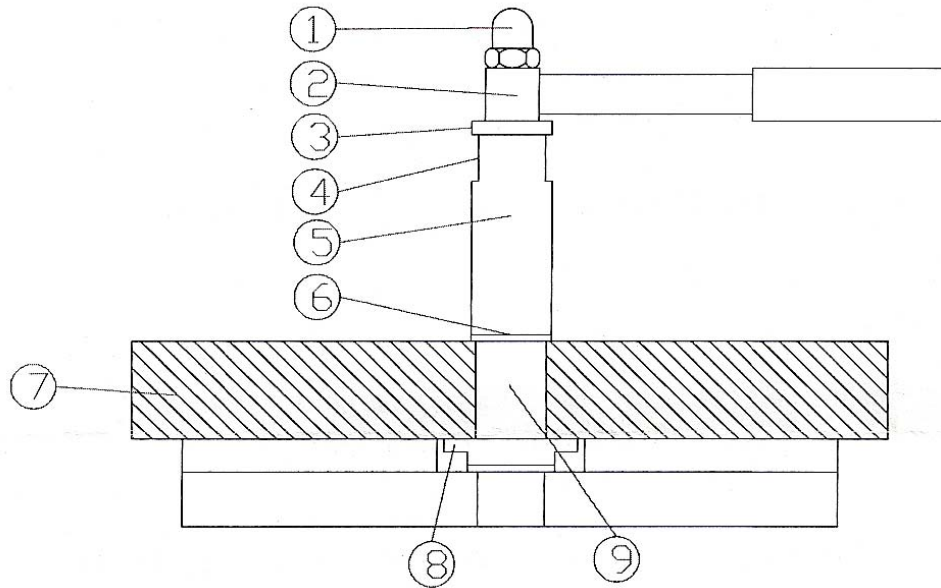
Centrally Operated Window Wiper Type “WP2L”



Installation / Operation / Maintenance Instruction

Instruction #: **1020.3**
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Approved: **F. Bongiorno.**





I. APPLICATION

Series “WP2L” window wipers are built into the circular sight glass to prevent crystallization of the media inside the vessel onto the inner side of the glass plate or to keep the side glass free of dust and / or dirt.

They are mounted into round glass plates with a centric hole of 10.5mm in diameter. The wiper is provided with 2 blades diametrically opposed on either side of the center hole and is turned by a Stainless Steel handle.

II. STORAGE AND HANDLING

All units should be inspected for damage upon receipt. Units should be stored where they will be protected from physical damage. Particular care should be taken to protect threaded end connections, seals, bushings and blade from damage.

III. PREPARATION

1. Before starting installation, ensure that glass disc is not damaged.
2. Check that all necessary parts are on-hand. Each assembly should include the parts as on the drawing.
3. Wiper must be installed prior to installing sight-glass, gaskets and exterior glass cover.

IV. ASSEMBLY INSTRUCTION

1. Put the sight glass lens with the wiper on the gasket on the base flange.
2. Center the lens. The wiper blades should not touch the flange while operating the wiper.
3. Place the gasket and the cover flange on the lens and tighten the nuts of the cover flange. The maximum tightening torque of the nuts is 6.2in-lb.

V. OPERATING INSTRUCTION

1. The correctly mounted sight glass disc with wiper mechanism may only be used within the temperature & pressure ranges specified below. If the given limits are not respected, the glass discs may fail.
2. Avoid spraying of the hot sight glasses with cold fluid – failure could result.
3. The drive / spindle housing should be periodically checked and tightened, if necessary to ensure a good seal. **DO NOT ATTEMPT TO TIGHTEN WHILE THE VESSEL IS UNDER PRESSURE OR VACUUM. WAIT UNTIL THE VESSEL IS AT ATMOSPHERIC PRESSURE BEFORE ATTEMPTING TO TIGHTEN THE WIPER.**
4. The wiper handle should be operated clock-wise. It is important to avoid undue vertical force – either up or down – or sideways force on the wiper shaft as such forces will impair the wiper operation and could lead to failure of the glasses.
5. If required, necessary steps have to be undertaken that no transfer of static electricity from the operator onto the wiper mechanism can occur.

VI. MAINTENANCE INSTRUCTION

1. Before the removing the glass lens you must ensure that:
 - the wiper and its attachments are not hot.
 - the sight glass is not under any pressure
 - opening the sight glass does not release hazardous agents
2. Hold the handle (pos.1) with a wrench and unscrew the cap nut (pos.1) and then the handle (pos.2) carefully.

CAUTION: The handle and bushing (pos.3) are under spring tension (pos.5). The handle should be unscrewed carefully so as not to release the bushing and spring too quickly.

3. Reassembly should be carried out in the reverse order. The position of the handle can be locked with the cap nut. The handle and the nut should be fixed with Loctite 248. The maximum tightening torque of the nuts is 6.2in-lb.

VII. PRESSURE & TEMPERATURE RATING OF WIPER “WP2L” ASSEMBLIES:

GLASS DIMENSION		UNSUPPORTED DIA	MAXIMUM WORKING PRESSURE
OD	THICKNESS		
3.093”	3/8”	2.50”	20 PSIG/ FV
4.093”	1/2”	3.50”	20 PSIG/ FV
6.093”	1/2”	5.12”	20 PSIG/ FV
84 mm	9 mm	2.40”	30 PSIG/ FV
95 mm	15 mm	4.20”	75 PSIG/ FV
99 mm	15 mm	4.35”	75 PSIG/ FV
125 mm	15 mm	4.00”	60 PSIG/ FV
175mm	15 mm	6.00”	30 PSIG/ FV

Maximum allowed temperature:

- Wipers with **Tempered Soda Lime** glass discs: **302° F [150° C]**
- Wipers with **Tempered Borosilicate** glass discs:
 - **Silicone** wiper blade: **356° F [180° C]**
 - **Teflon** wiper blade: **392° F [200° C]**