



**INSTRUCTIONS 1001-H00 e**

Section	1001
Effective	October 2005
Replaces	May 2005

Translation of the  
original instructions

# ***C Series Tear Detector Assembly***

**INSTALLATION**

**OPERATION**



This BLACKMER Instructions provides assistance for installation but it is not, in any circumstances, intended to replace the specific Instructions of the relevant equipment suppliers. Those Instructions must be read before fitting the equipment.

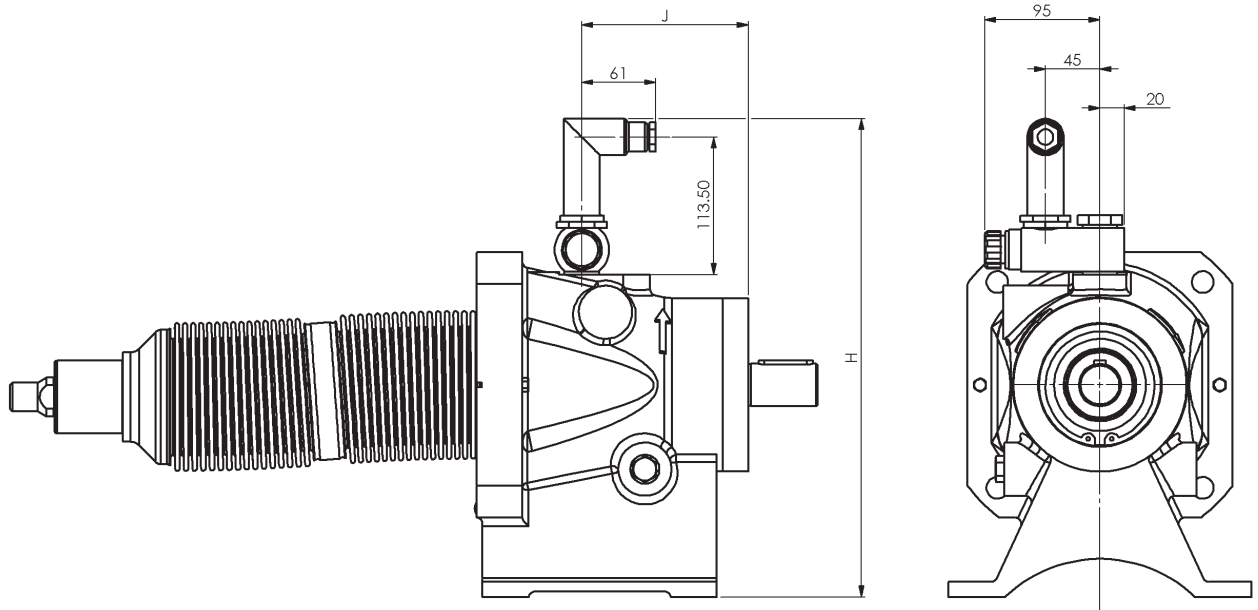
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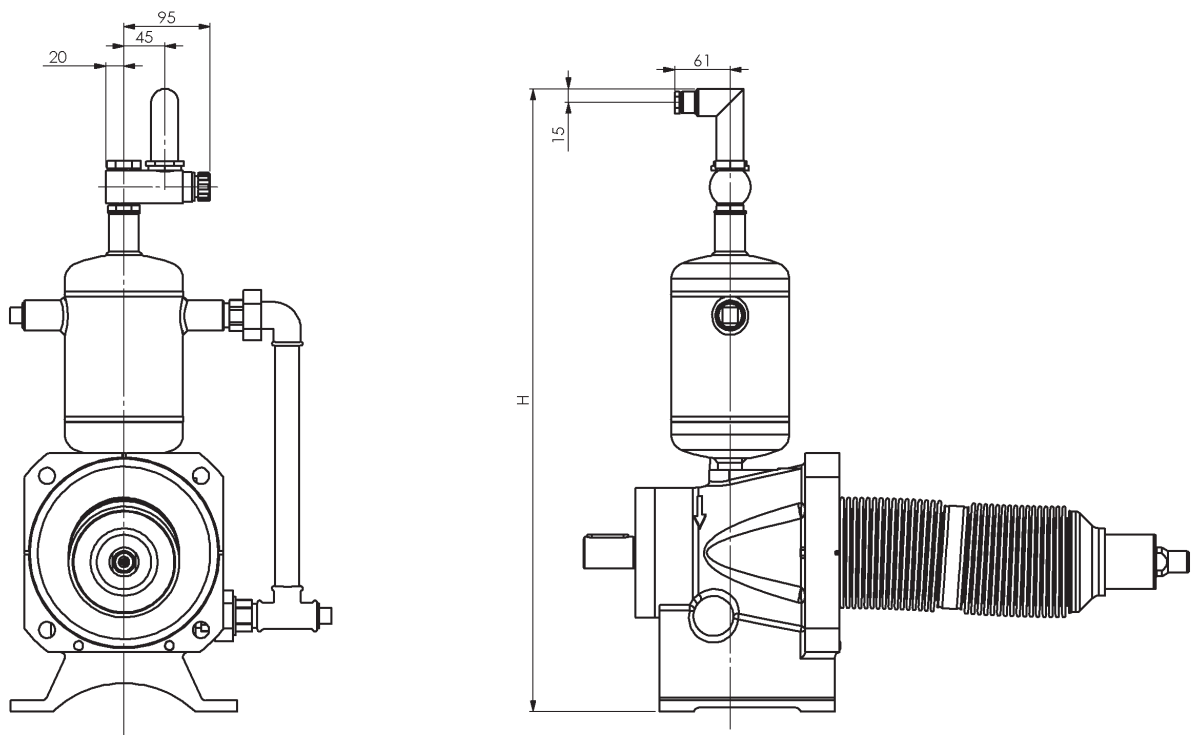
# 1. OVERALL DIMENSIONS

## 1.1 Standard version



	C1-C2	C4-C8	C12-C18	C24-C36
H	280	310	400	460
J	45	60	140	155

## 1.2 HT version



	C4 HT	C8 HT	C12 HT	C18 HT
H	550	550	690	690

## 2. EQUIPMENT SUPPLIED

Connection kit, composed of :

- 1 hollow screw,
- 1 coupling,
- 2 BS rings (1/2" gas),
- 1 male-female reducing nipple (3/4" x 1/4") (for HT pumps only).

Capacitive detector :

\* KI0024

## 3. INSTALLATION

### 3.1 Conditions for Installation of Pump

In order to ensure optimal detection and non-pollution of the product when the bellows are torn, the pump should be under pressure on suction side.

### 3.2 Installation of Capacitive Sensor

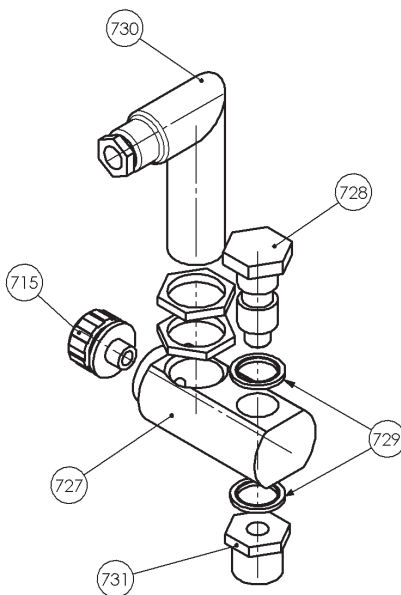
3.2.1 Remove the breather 715 from the bearing.

3.2.2 Screw the capacitive sensor 730, with its plastic nuts, into the metal coupling 727, sealing with PTFE compound (Loctite® 572\* type).

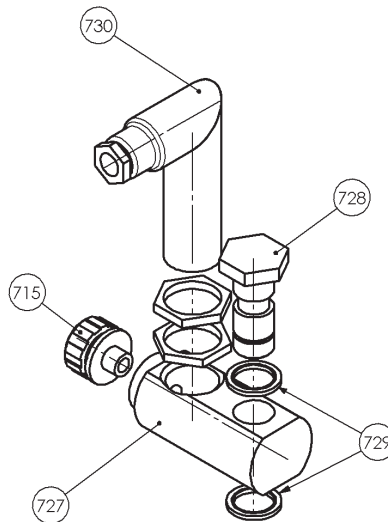
NOTE: The sensor is to be oriented in accordance with the type of pump on which it is mounted, the latter being given for guidance purposes only.

3.2.3 Connect the assembly to the pump by means of the hollow screw 728 secured with BS rings 729. If the assembly has a 3/4" thread, first fit the male-female reducing nipple 731 to the bearing surface applying PTFE compound (Loctite® 572\* type). Use PTFE compound to lock all other threads.

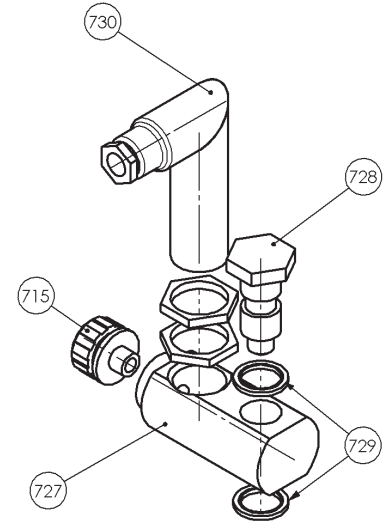
3.2.4 Screw in the breather tube 715.



**Assembly of tear detector  
3/4" cyl. gas fitting  
(C12\_HT & C18\_HT)**



**Assembly of tear detector  
1/2" cyl. gas fitting  
(C4\_HT, C8\_HT, C24i & C36i)**



**Assembly of tear detector  
1/4" cyl. gas fitting  
(C1i, C2i, C4\_, C8\_, C12\_ & C18\_)**

NOTA :

- Capacitive sensor threads (and threads of reducing nipple for HT versions) sealed with PTFE compound (Loctite® 572\* type)
- All other threads locked with PTFE compound (Loctite® 572\* type).

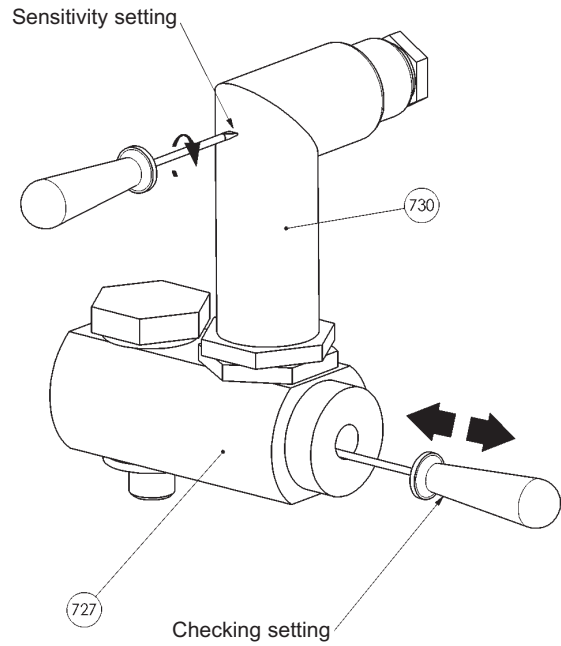
\* Loctite® is a registered trademark.

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## 4. CONNECTION OF ELECTRICAL EQUIPMENT

Make the electrical connections in accordance with the technical manual supplied with the capacitive sensor.

Set the sensitivity of the sensor **730** to maximum, then reduce it gradually until the coupling **727** is no longer detected. Check the sensitivity by passing the screwdriver (used for making the setting) through the 1/4" gas port provided for the breather tube (leave the screwdriver in contact with the bottom so as to simulate a small flow of liquid). Transition from the open state to the closed state (and inversely) should be immediate when the screwdriver is inserted.



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## 5. USE

As soon as oil is detected by the tear detector assembly, stop the pump immediately, then check by visual inspection that oil is effectively present in the metal coupling (remove the breather tube if necessary).

If this is not the case, check the sensitivity setting.

In the case where a leak is effectively detected, disassemble the pump in accordance with the instructions in the technical manual and replace the bellows. Also check the state of the detector assembly and, more particularly, that of the sensor and the seals which might have been damaged by contact with the product.