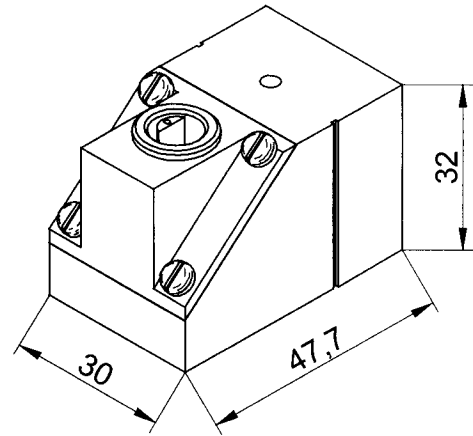


□ PARTICULAR DATA

- ⇒ Probe with increased acoustic power (typical + 12 db) providing a better signal to noise ratio.

□ GENERAL DATA

- ⇒ Clamp-on probe for liquid flowmeting.
- ⇒ Not affected by pressure or corrosive fluids.
- ⇒ Suitable from DN 20 to DN 500 (in Reflex mode) or DN 1000 (in Direct mode).
- ⇒ Pipe material : steel, stainless steel, cast iron, cement lined..., plastic (PVC, PEHD...), concrete excluded.
- ⇒ Min./Max. temperature for continuous use : - 50° C / + 180° C (+ 200° C Peak)
- ⇒ Associated to a safety barrier BZ 01, these probes can be certified EEx ia IIB T3.
- ⇒ They can be also certified EEx m IICT6



view with Lemo connector

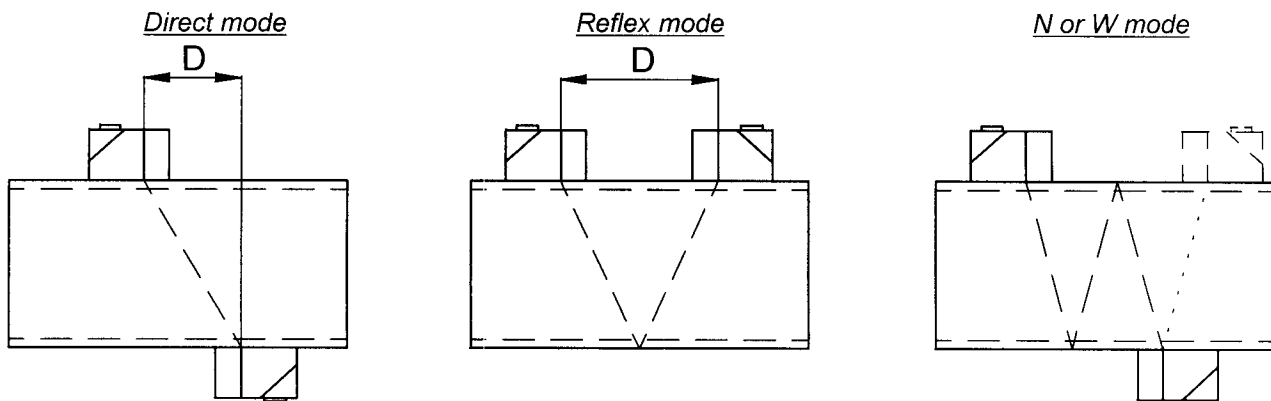


Figure 1

□ CHOICE OF OPERATING MODES

- ⇒ **REFLEX** Recommended mode (accurate and easier to install).
- ⇒ **DIRECT** Less accurate mode : corroded pipe, absorbant fluid, multiproduct applications.
- ⇒ **OTHER (N or W)** Small pipes.

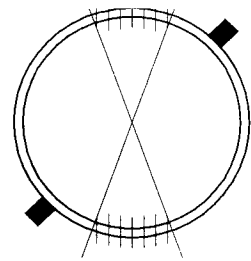
□ PROBES LOCATION

- ⇒ When possible, position probes upstream from a hydraulic disturbance.
- ⇒ When possible, respect minimum straight length :

10 Ø upstream

3 Ø downstream where Ø is diameter of the pipe

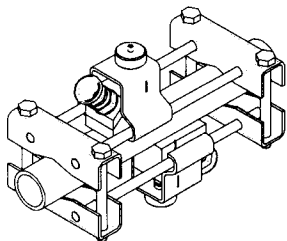
- ⇒ On an horizontal pipe, avoid to install probes on the top (bubbles) or bottom (deposit) of the pipe.
- ⇒ On a vertical pipe, there is no restriction for probes location.
- ⇒ For both modes, distance **D** (cf. *fig. 1*) is measured from the marks engraved on the probe.
- ⇒ Precision on interprobe distance :
 - Axial +/- 2 % x Ø
 - Angular +/- 2°
- ⇒ Our digital flowmeters calculate and display the value of **D**.
 - See user guide manual of the unit.



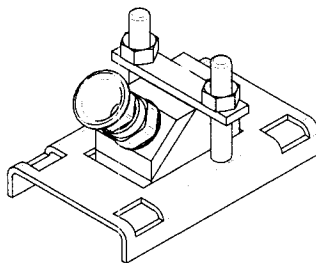
□ PROBES INSTALLATION

- ⇒ Clean up pipe prior to fitting the probes (rust ...).
A good quality painted surface does not affect the installation.
- ⇒ Temporary measurements :
Apply plenty of coupling agent between probe and pipe surface.
For lack of coupling gel, use grease for mechanics.
- ⇒ Permanent measurements :
Perform the coupling with the recommended elastomer tape (**ACC_KIT**).
Firmly strap the probes with the supplied stainless steel belts or use our support ref. **1517** (pipes ≥ 4") or **1516** (pipes ≤ 6").
 - Lubricate each face of the elastomer for ease of operation.
 - These probes can be used with the supports shown below.

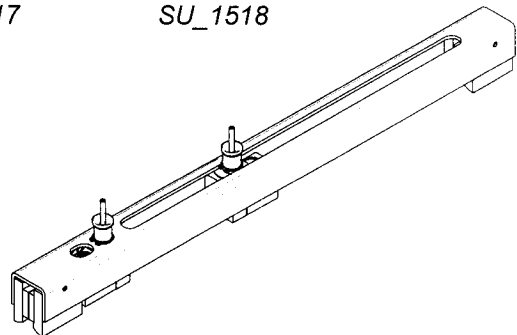
*Industrial support
SU_1516*



*Support to be welded
or to be strapped SU_1517*



*Magnetic ruler
SU_1518*



□ CONNECTIONS

- ⇒ Standard probes are supplied with fast Lemo connectors. Always use cables recommended by **ULTRAFLUX**. For industrial or heavy duty application, upon request, probes can be delivered with waterproof gland and cable (length to be determined). This is the only solution for Ex m.

□ COMMISSIONING

- ⇒ When commissioning, if the acoustic power transmitted appears poor, do as follow :
 - Check probe coupling and distance **D**.
 - Change the probes location.
 - Change from **REFLEX** mode to **DIRECT** mode.

□ MAINTENANCE

Each 6 months, check the coupling conditions. Refer to the associated converter information.