

## FRA

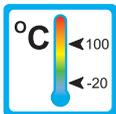
### Operation

The models FRA are impeller flow indicators



### Application

The flow indicators model FRA are used to indicate flow of liquid media.



Areas of application :



– Coolingsystems and cooling-circuits

– Mechanical Engineering

– Watertreatment



– Pharma industry

– Research and development

### Features

The FRA series proves itself through reliable function and easy handling.

Further characteristics of this sturdy type are:

- universal orientation
- high reliability
- threaded connection

### Installation hints

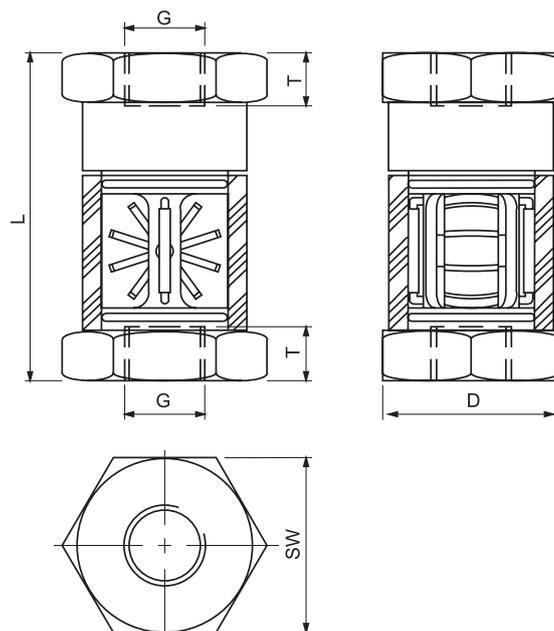
The installation of the flow indicator can be done in any way in the system. The flow direction must be observed. In case of very low flow we suggest a vertical mounting.

The flow indicator must not be used as a supporting part in a pipe construction!

The medium must not contain any solid particles! We recommend the installation of strainers type SFD or type SFM.



## Technical Data



### Summary of types FRA

| Type   | Flowrate<br>min. H <sub>2</sub> O<br>[l/min] | Flowrate<br>max. H <sub>2</sub> O<br>[l/min] | Overall dimensions mm |    |    |    |     | Weight<br>approx.<br>[g] |
|--------|--|--|-----------------------|----|----|----|-----|--------------------------|
|        |  |  | G                     | SW | D  | T  | L   |                          |
| FRA-8  | 0,7  | 4  | 1/4"                  | 36 | 30 | 12 | 71  | 300                      |
| FRA-10 | 0,8  | 8  | 3/8"                  | 36 | 30 | 14 | 75  | 300                      |
| FRA-15 | 1,4  | 12   | 1/2"                  | 46 | 40 | 14 | 86  | 600                      |
| FRA-20 | 1,4  | 25   | 3/4"                  | 46 | 40 | 16 | 95  | 600                      |
| FRA-25 | 1,7  | 40   | 1"                    | 46 | 40 | 18 | 105 | 600                      |
| FRA-32 | 8,0  | 80   | 1 1/4"                | 70 | 65 | 20 | 120 | 1500                     |
| FRA-40 | 8,0  | 100  | 1 1/2"                | 70 | 65 | 22 | 130 | 1600                     |

| Operating data              | FRA                 |                 |
|-----------------------------|---------------------|-----------------|
| Operating pressure max.:    | PN 16 bar           |                 |
| Operating temperature max.: | 100 °C              |                 |
| Pressure drop:              | 0,25 bar            |                 |
| Material                    | Brass               | Stainless Steel |
| Body:                       | Brass nickel-plated | 1.4305          |
| Rotor (DN 8 to DN 25):      | POM red             | POM red         |
| Rotor (DN 32 to DN 40):     | Nylon white         | Nylon white     |
| Wiper:                      | NBR                 | Viton           |
| Gaskets:                    | NBR                 | Viton           |

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