

- Unpacking** : All packaging material must be removed. The transport securing device of the float must be removed. If the float is packed separately, take off the top bolted joint and the top stop and then insert the float into the measuring tube.
- Assembling position** : Vertical
- Hints for Assembly** : Assemble tension-free! The connection tubes must be aligned. With flanges make sure the screw holes are in line. Avoid vibration. If necessary, support the tubes in front of and behind the Rotameter with braces. Avoid large volumes of gas downstream and upstream of the float (vibration due to compression).
- Commissioning** : When functioning properly, the float (1) rotates freely in the flow. With major floats made of plastic or metal, this can easily be seen in their rotation. If the float does not rotate, either the device is soiled or the vertical assembly requirement has been disregarded. This only applies to floats with notches. The scale mark to which the float adjusts its top edge is decisive for reading.
- Maintenance** : To clean the rotameter, remove it from the tube. After the removal of the two stops (6, 6a) and the float (1), the measuring tube (2) can be cleaned without removing it from the fitting. For cleaning we recommend using a bottle brush and soap and water solution. Make sure the measuring tube does not get scratched.
- Disassembly of the Measuring Tube** : Open both windows by unfastening and removing the fixing pins (20).
Remove the Allen screws (11) at the top and bottom.
Take off the sealing components (13 -17) at the top and bottom end of the sockets (8).
Only for G4 and G5 tubes: Lift the float by inserting a piece of sheet metal with triangular cutout (f) between the socket (8) and the bottom Teflon gasket (17). If necessary, the bottom end of the tube must be moved towards one of the windows by slightly shaking it.
Remove the measuring tube (2) together with the sealing components (13 -17) and the pressure flanges (13).
The measuring tube (2) can be pulled out of the sealing components (13 -17).
The circlip rings (10) must only be removed when you want to replace the socket (8).
- Assembly of the Measuring Tube** : The stops (14, 14a), the gasket (17), the sealing components (13 - 17), the hose ring (15) and the pressure flange must be pushed onto the face of the tube, as shown in the drawing. The tube with the two sealing units is pushed onto the fitting.
The tube with the gasket is mounted in the fitting using the four Allen screws (11).

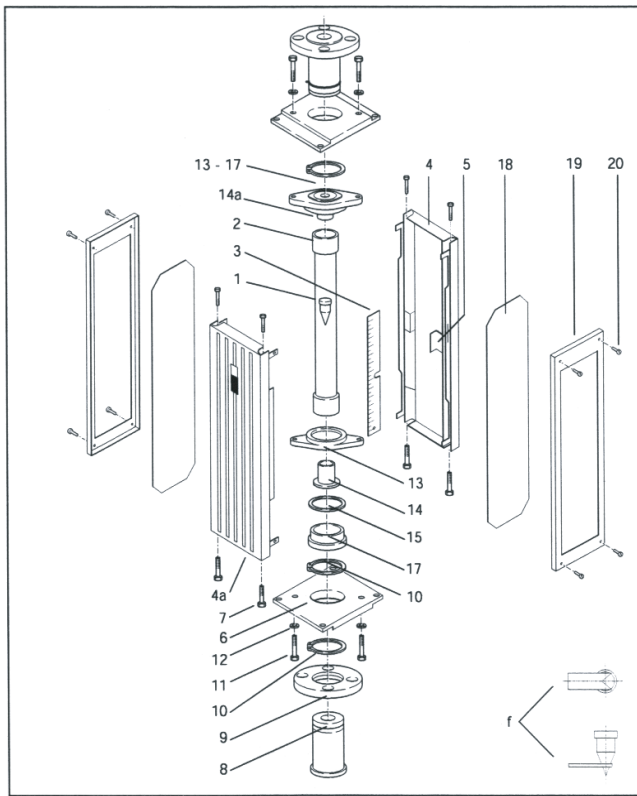
Safety hints

: The measuring tube is made of glass and therefore fragile. Avoid any damage coming from the outside. The specified maximum pressures must not be exceeded. Pressure peaks must not exceed the specified maximum pressure either. Pressure shock may hit the float against the top stop (6a) with high speed. This may result in the destruction of the stop and the measuring tube. Tension in the glass over 6N/mm² have to be avoided. Therefore the temperature difference in the glass may not exceed 40°C. Please avoid temperature shocks. ROTA YOKOGAWA gives no warranty for the improper use of flow meters having glass floats. Due to the uncontrollability of the material YOKOGAWA cannot guarantee that the material is fracture-proof. Further hints can be found in VDI/VDE 3513.

Caution

: The metering tube, the float and the scale must always be kept together.

Units with limit switches /GM1...GM2 : See instruction manual IM 1R1B19-E-H.



Position	Quantity	Description
1	1	Float
2	1	Metering Tube
3	1	Exchangable scale
4	1	Right side shell
4a	1	Left side shell
5	1	Scale holder
6	2	Socket holder
7	8	Allen screw
8	2	Socket
9	2	Union flange
10	4	Retaining ring
11	4	Hexagon screw
12	4	U-washer DIN 125
13	2	Pressure flange
14	1	Bottom stop
14a	1	Top stop
15	2	Rubber ring
17	2	Gasket
18	2	Window
19	2	Frame
20	8	Locking bolt

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