Instruction Manual

Small- and Laboratory- Rotameters RAGK, RAGL

Assembling Position : Vertical

Hints for Assembly : Must be free of tension. Vibration must be avoided.

Commissioning : Reading point : conical float : top edge spherical float : top end

Maintenance : If the float does not move freely in the flow or if pollution can be seen in

the glas measuring tube the tube must be cleaned.

To clean the measuring tube, remove it from the fitting. First remove the protective cap, then unfasten the screws (13, RAGL) and take the measuring tube forward complete with all sealing components out of the fitting. With the RAGK type, the device must be removed from the tube and the head pieces must be screwed off the rear plate and pulled off the measuring tube. Now the stops (4) and (4a) can be removed and the float can be taken out of the tube.

CAUTION: The float can easily be lost. Please disassemble the device on a working surface where nothing can fall or roll off, such as trays or cardboard boxes. With RAGL / RAGK with valve the complete valve unit can be pulled forward after loosening the safety screw. All maintenance operations at the Rotameter (for example withdrawing of the valve gland or removal of the tube) are only permitted when the meter is fully drained and without pressure. Note: In case of a built-in valve, place the safety screw correctly into the designed bore. In case of a defect of the display unit, the cover of the display unit can be removed after loosening the cover screws. When the display unit is taken out, recalibration will be

necessary.

Hints for Cleaning : The measuring tube and float may be cleaned with alcohol. When cleaning a plastic float, please be careful when using solvents. Do

not leave plastic floats in solvents for lengthy periods of time. After cleaning the tube, blow it dry. If there is considerable dirt accumulation on the tube, wash it in hot soap and water solution. Use bottle brushes only when there is no risk of damaging the inside of the tube. Please rinse with distilled water or alcohol.

CAUTION: The tubes are calibrated individually. The measuring tube, the float and the scale must be kept together.

Safety Hints : The measuring tube is made of glass and therefore fragile. All

kinds of damage coming from the outside must be avoided. The maximum specified pressures must not be exceeded.

Tension in the glas over 6N/mm² have tobe avoided. Therefore the temperature difference in the glas may not exceed 40°C. Please avoid temperature shocks. ROTA YOKOGAWA does not give any warranty in

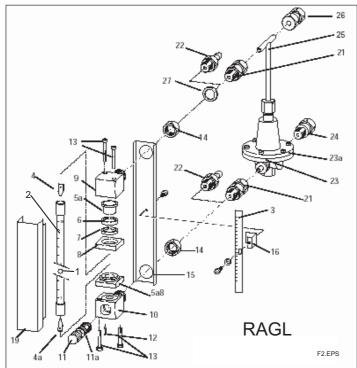
case the of improper use of Glas-Rotameter.

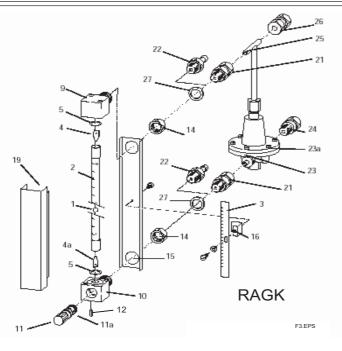
Units with limit switches /GI1...GI4 : See instruction manual IM 01R01B14-E-H.

Particularly the explanations at explosion proof must be regarded for

units with option /XE.







No.	Quantity RAGL	Quantity RAGK	Description
1	1	1	Float
2	1	1	Measuring tube
3	1	1	Exchangable scale
4	1	1	Top stop
4a	1	1	Bottom stop
5	-	2	O-ring gasket
5a	2	-	Gasket
6	2	-	Ring
7	2	-	Ring
8	2	-	Pressure lange
9	1	1	Top head
10	1	1	Bottom head
11	1	1	Complete valve
11a	2	2	O-ring
12	1	1	Screw
13	4	-	DIN 84 screw
14	2	2	Nut
15	1	1	Rear plate
16	1	1	Scale holder
19	1	1	Cover
21	2	2	Cutting ring threated joint
22	2	2	Hose nozzle
23	1	1	Differential pressure control
23a	1	1	Diaphragm
24	1	1	Cutting ring threated joint
25	1	1	Joining piece
26	1	1	Cutting ring threated joint

EUROPEAN HEADQUARTERS
Yokogawa Europe B.V.
Databankweg 20
3821 AL AMERSFOORT
The hetherlands
Tel. +31-33-4641 611
Fax +31-33-4641 610
E-mail: info@yokogawa.nl
www.yokogawa-europe.com

THE NETHERLANDS
Yokogawa Nederland B.V.
Hoofdveste 11
3992 DH HOUTEN
Tel. +31-30-635 77 77
Fax +31-30-635 77 70

AUSTRIA Yokogawa Ges.m.b.H. Central East Europe Franzosengraben 1 A-1030 WIEN Tel. +43-1-206 340 Fax +43-1-206 34 800

YOKOGAWA 🔷

BELGIUM Yokogawa Belgium N.V./S.A. Minervastraat 16 1930 ZAVENTEM Tel. +32-2-719 55 11 Fax +32-2-725 34 99

NORTHERN EUROPE Yokogawa Nordic A.B. Finlandsgatan 52, 2fl SE-164 74 Kista STOCKHOLM Tel. +46-8-477-1900 Fax +46-8-477-1999

FRANCE FRANCE Yokogawa France S.A. Vélizy Valley 18-20 Rue Grange Dame Rose 78140 VELIZY VILLACOUBLAY Tel. +33-1-39 26 10 00 Fax +33-1-39 26 10 30

GERMANY Yokogawa Deutschland GmbH Berliner Strasse 101-103 D-40880 RATINGEN Tel. +49-2102-4983 0 Fax +49-2102-4983 22

HUNGARY Yokogawa Hungaria Ltd. Alkotas Center 39 C 1123 BUDAPEST Tel. +36-1-355 3938 Fax +36-1-355 3897

ITALY Yokogawa Italia S.r.I. Vicolo D. Pantaleoni, 4 20161 MILANO Tel. +39-02-66 24 11 Fax +39-02-645 57 02

SPAIN/PORTUGAL Yokogawa Iberia S.A. C/Francisco Remiro, N°2, Edif. H 28028 MADRID Tel. +34-91-724 20 80 Fax +34-91-355 31 40

VINITED KINGDOM
Yokogawa United Kingdom Ltd.
Stuart Road, Manor Park,
RUNCORN
Cheshire WA7 1TR
Tel. +44-1-928 597100
Fax +44-1-928 597101

AUSTRALIA Yokogawa Australia Pty Ltd. Private mail bag 24 Centre Court D3 25-27 Paul Street North NORTH RYDE, N.S.W. 2113 Tel. +61-2-885 (699 Fax +61-2-888 1844

SINGAPORE Yokogawa Engineering Asia Pte. Ltd. 11, Tampinee Street 92 SINGAPORE. 528872 Tel. +65-783 9537 Fax +65-786 2606

Manufactured by: GERMANY Rota Yokogawa GmbH & Co. KG Rheinstrasse 8 D-79664 WEHR Tel. -49-7761-567 0 Fax +49-7761-567 126

SOUTH AFRICA Yokogawa South Africa (Pty) Itd. 67 Port Road, Robertsham Southdale 2135, JOHANNESBURG Tel. +27-11-680-5420 Fax +27-11-680-2922

UNITED STATES OF AMERICA Yokogawa Corporation of America 2 Darl Road NEWNAN, GA 30265-1040 Tel. +1-770-253 70 00 Fax +1-770-251 28 00



CENTRAL/EAST REGION
Via Yokogawa Ges.m.b.H.:
Czechia, Slovakia, Poland,
Croatia, Slovenia, Jugoslavia,
Bulgaria, Romania, Macedonia,
Bosnia & Herzegovina

Distributors in: Denmark, Finland, Greece, Norway, Portugal, Russian Federation, Sweden, Switzerland and Turkey.