RMA Kehl GmbH & Co. KG
Oststrasse 17
77694 Kehl / Rhein
Telefon : (07851) 868-0
Telefax : (07851) 868 113

PIPELINE EQUIPMENT

Operating and Maintenance Instructions for RMA-Blow-out gate valve type "KSR"

1) General Characteristics

This robust welded-steel wedge gate valve is designed for use in blow-out applications in gas pipelines.

2) Construction/Function/Delivery state

The housing and wedge sealing surfaces are hardened and milled and provide a metal-to-metal seal. The spindele thread is internal and the spindle is non-rising.

Flow direction is arbitrary. **The wedge gate valve must not be installed in a lying position i.e. the stem has to be vertically aligned**.

Unless otherwise agreed, reception tests are carried out in accordance with DIN 3230, part 5, test group PG 3.

The unit is supplied closed and the pipe ends are sealed with protection caps.

External surfaces are standard coated with PUR (Protegol 32-55) and tested at 15 KV to ensure pore exemption.

3) Installation and Operation

The protection caps must only be removed directly on site, the lead-in should be checked for dirt and cleaned, if necessary. For all welding operations standard pipe-line construction regulations apply. However, the housing may not be heated over 80°C.

After a hydrostatic test the residual water may be drawn off through the vent plug (31).

Forces and tensions from the external pipe-line are to be avoided. Foot-plates are only to be used for supporting the valve. The foot-plates must not bear the weight of the pipe-line.

When extension stems are to be used, these must not be exposed to lateral tension.

The valve is closed by turning the spindle clockwise. When closing, a noticeable and increasing resistance is felt. The end point is attained when the valve is completely sealed.

Fully-open position is attained at end stop.

.../2

RMA Kehl GmbH & Co. KG
Oststrasse 17
77694 Kehl / Rhein
Telefon : (07851) 868-0
Telefax : (07851) 868 113

4) Maintenance

Generally, maintenance of this type of valve is limited to the gearbox (when present). For this procedure, please refer to the manufacturer's operating and maintenance instructions.

5) Storage

We recommend storage indoors with the protection caps in place. Storage outdoors over a long period must be avoided, in particular in direct sunlight.

6) Exterior coating repair work

If damage to exterior PUR (Protegol 32-55) coating is noted, the damaged area may be repaired using the special repair compound of the same manufacturer "Protegol 32-55 L". When doing so, the manufacturer's instructions are to be followed.

Due to its fast reaction time, the repair compound is supplied in a small 0.5 kg kit (supplied by RMA).

7) Replacement of spindle U-seals

A replacement of the spindle U-seal is generally not necessary, nonetheless, the replacement procedure is described below.

All wedge gate valves are provided with an additional seal (26) on spindle (3) for isolation of interior. This seal enables replacement of the O-rings (13) on spindle (3) under full operating pressure.

Proceed as follows:

a) Open the valve until the end stop plate (5) on the lid is attained, in which case the additional seal (26) takes effect (leave in this position until the O-rings have been replaced).
b) Slightly loosen the safety vent screw (17) on the spindle flange in order to release the pressure between the additional sealing ring (26) and the spindle O-rings (13).
c) Loosen screws (16) on the flange and remove the guide bush (12).
d) Replace O-ring (13).
e) Reassemble the guide bush (12). (Lubrication of the spindle bearing may be done through the plug (30), if necessary.)
f) Spindle (9) may now be turned to closed position.

8) Appendix

- Drawing
- Operating instructions of the gearbox manufacturer

Rev. state Kehl October 2011
Technical modifications reserved