

- The RVO radiator valve is intended for use with pump-circulated hot water systems. It is made of AMETAL®, brass and heat-resistant plastic. The handwheel is made of acetal plastic. Determination and adjustment of the flow resistance is done directly from the Kv-scale (see nomogram page 10-9, 10-10).
- The handwheel is protected by a plastic cap during delivery and assembly.
- Valves with lockshield are preset in accordance with the Kv-scale.
- The valve body is die cast in AMETAL®, other parts being made of brass. The control spindle with specially shaped cone seals against the seat in the valve body and when regulated gives a flow directly proportional to the amount it is turned.
Spindle sealing is done by means of O-ring which can be replaced without having to drain off the system — a shoulder on the valve spindle sealing against the upper section when the spindle is fully screwed up.
- The valve can be locked in a particular preset position to prevent any unauthorised alteration of the valve setting. The circlip can be fitted during operation. (For fitting, see next page.)

Type	Art.No
Straight, with union and handwheel	75 161
Straight, with bent union and handwheel	75 162
Angle, with union and handwheel	75 163
Straight, with union and lockshield	75 164
Straight, with bent union and lockshield	75 165
Angle, with union and lockshield	75 166
Regulating key	52 187

All types of RVO valves can be connected to smooth tubes by means of the KOMBI compression coupling.

The KOMBI compression coupling consists of a thrust screw and cone. A support sleeve must be used. For further information, see the KOMBI sheets under section 4.

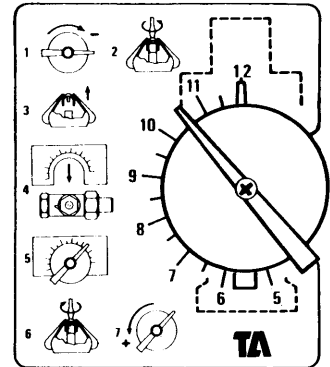
For connecting dimensions, see the following pages.

TECHNICAL DESCRIPTION

Application:	Heating installations. For potable water the TRIM programme is recommended, which is described under section 5.
Nominal pressure:	PN 10
Max. working pressure:	10 bar = 1.0 MPa ≈ 150 psi
Max. working temperature:	+90° C (194° F), water.
Material:	Valve body: die cast AMETAL® Other parts: brass Spindle sealing: O-ring Handwheel: Acetal-plastic
Surface treatment:	Nickel-plated as standard.
Testing:	Each valve is individually tested before despatch, both for seat sealing and overall leak-tightness.
Packing:	The valves are packed in cardboard boxes according to packing list.
Presetting:	Presetting adjustment for different pressure drop conditions is done by limiting the maximum lifting height of the valve cone whereby the area is adapted so that the desired maximum flow is obtained. A template with TA scale is used for presetting.

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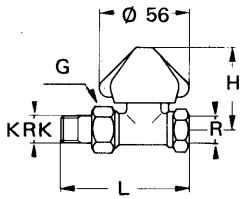
1. Close the valve
2. Loosen the handwheel screw.
3. Remove the handwheel with-out turning the valve spindle.
4. Place the template over the valve.
5. Fit on the handwheel so that it registers on the desired presetting value.
6. Tighten up the handwheel screw and open the valve.



Fitting circlip:

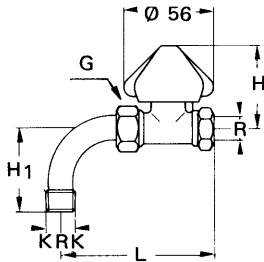
<p>1. Open valve fully against stop and remove the handwheel.</p>	<p>2. Fit circlip in handwheel so that a gap is obtained between the stop lug of the handwheel and one of the circlip ends, se figure.</p>	<p>3. Fit handwheel on spindle again in such a position that stop lug on valve body comes in gap between stop lug on handwheel and end of circlip. NOTE: The valve spindle must not be turned while fitting.</p>	<p>4. Tighten handwheel retaining screw. The valve is now locked in its open position.</p>

75 161 (RVO 82)
75 164 (RVO 85) lockshield



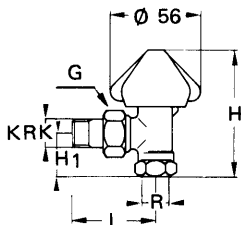
Article number	R KRK	L	L ₁	H	H ₁	G	Weight kg
75 161-108	1/4	67	8	57	-	M18x1,5	0,20
-410	3/8-1/4-3/8*	75	8	52	-	M22x1,5	0,20
-110	3/8	75	8	52	-	M22x1,5	0,20
-115	1/2	88	10	53	-	M26x1,5	0,23
-120	3/4	102	11	54	-	M34x1,5	0,39
75 161-910**	3/8	75	8	61	-	M22x1,5	0,22
75 164-110	3/8	75	8	48	-	M22x1,5	0,22
-115	1/2	88	10	49	-	M26x1,5	0,30
-120	3/4	102	11	50	-	M34x1,5	0,42

75 162 (RVO 83)
75 165 (RVO 86) lockshield



75 162-108	1/4	80	8	57	42	M18x1,5	0,21
-410	3/8-1/4-3/8*	95	8	52	48	M22x1,5	0,23
-110	3/8	95	8	52	48	M22x1,5	0,23
-115	1/2	104	10	53	56	M26x1,5	0,33
-120	3/4	119	11	54	65	M34x1,5	0,40
75 165-110	3/8	95	8	48	48	M22x1,5	0,24
-115	1/2	104	10	49	56	M26x1,5	0,32
-120	3/4	119	11	50	65	M34x1,5	0,52

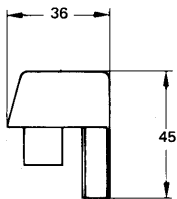
75 163 (RVO 81)
75 166 (RVO 84) lockshield



75 163-110	3/8	50	8	52	20	M22x1,5	0,20
-115	1/2	56	10	53	24	M26x1,5	0,28
-120	3/4	68	11	54	28	M34x1,5	0,43
75 166-110	3/8	50	8	48	20	M22x1,5	0,21
-115	1/2	56	10	49	24	M26x1,5	0,24
-120	3/4	68	11	50	28	M34x1,5	0,40

52 187 Regulating key (No. 89 lockshield)

52 187-000	-	-	-	-	-	-	0,01
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* 3/8-1/4-3/8 means that the flow-through area of the valve is restricted, giving a higher pressure drop corresponding to connection 8.

** 75 161-910 of AMETAL throughout, chromed.

All valves can be connected to smooth tubes by means of the KOMBI compression coupling.

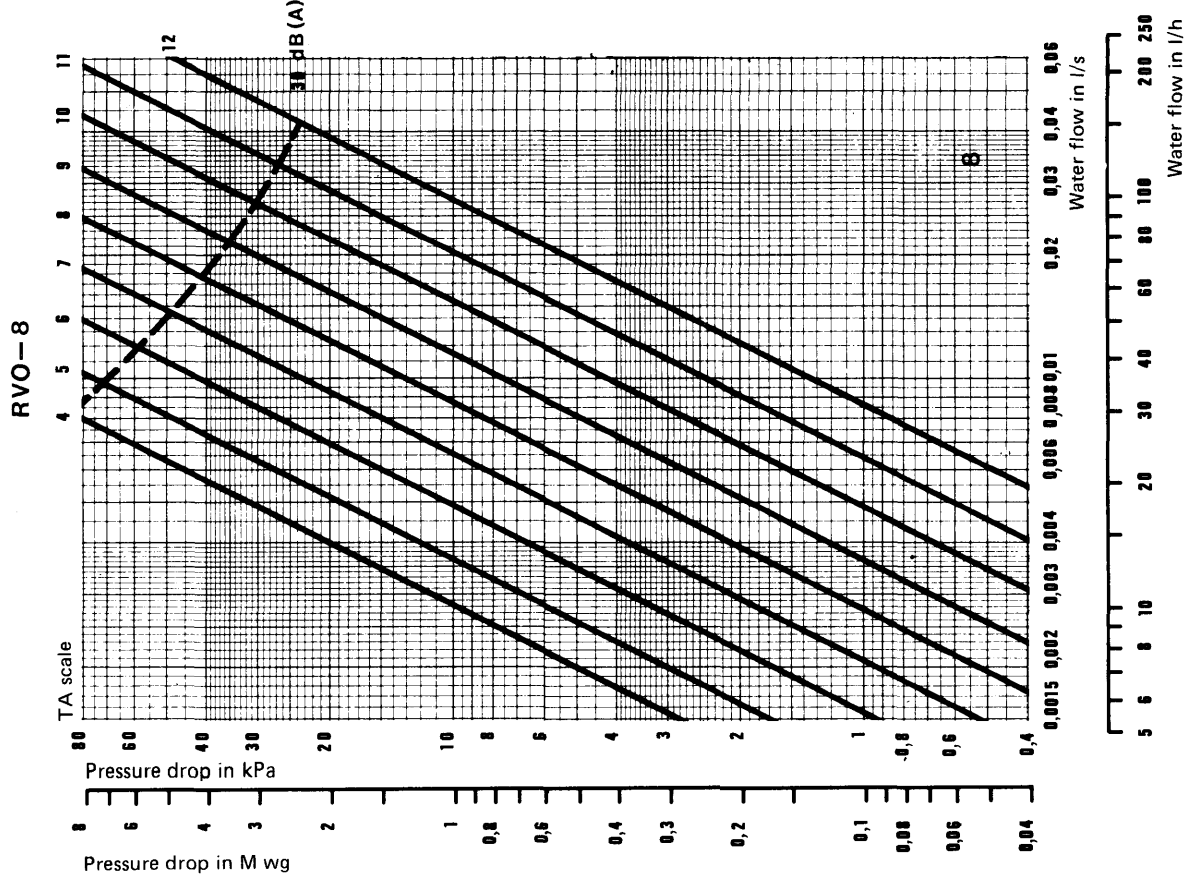
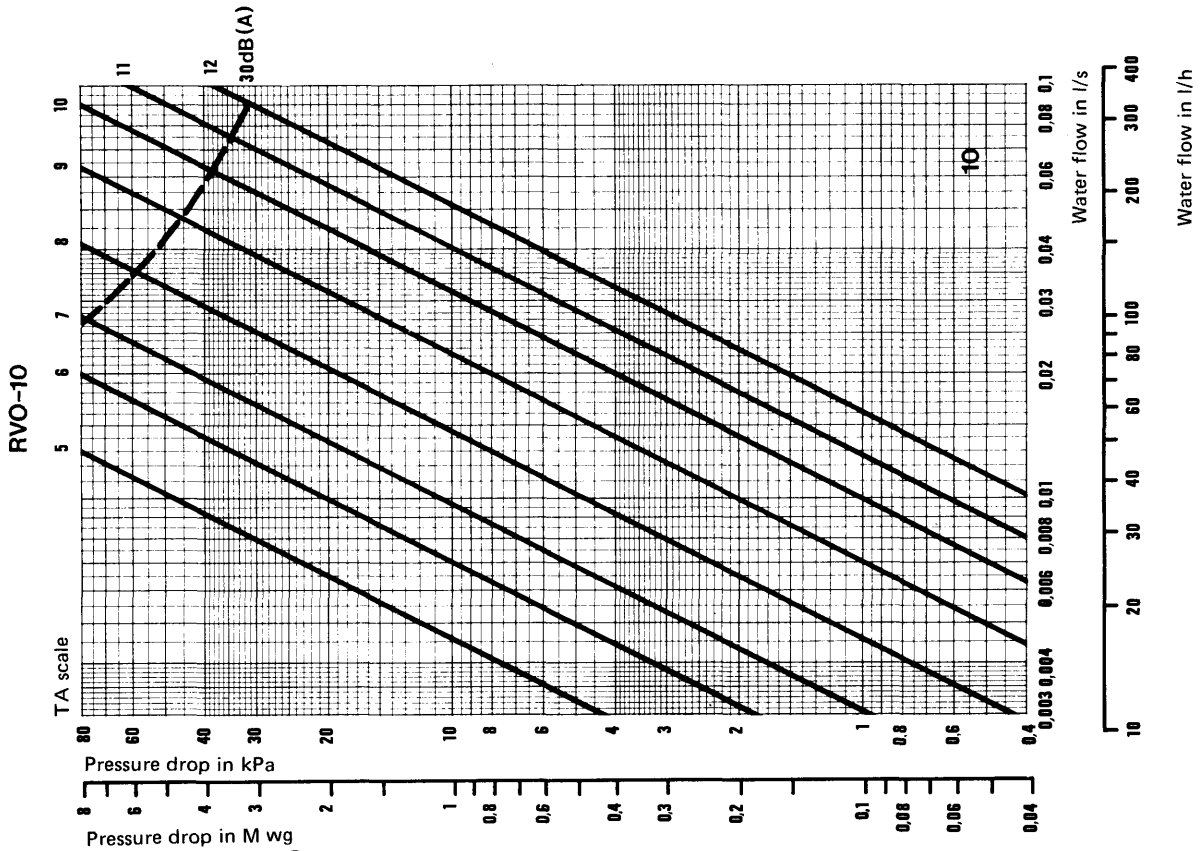
R = Cylindrical pipe thread
KRK = Short tapered pipe thread
H = Fully open valve

Connection R	Pipe (mm)
3/8"	8, 10, 12
1/2"	8, 10, 12, 15, 16
3/4"	15, 16, 18, 22

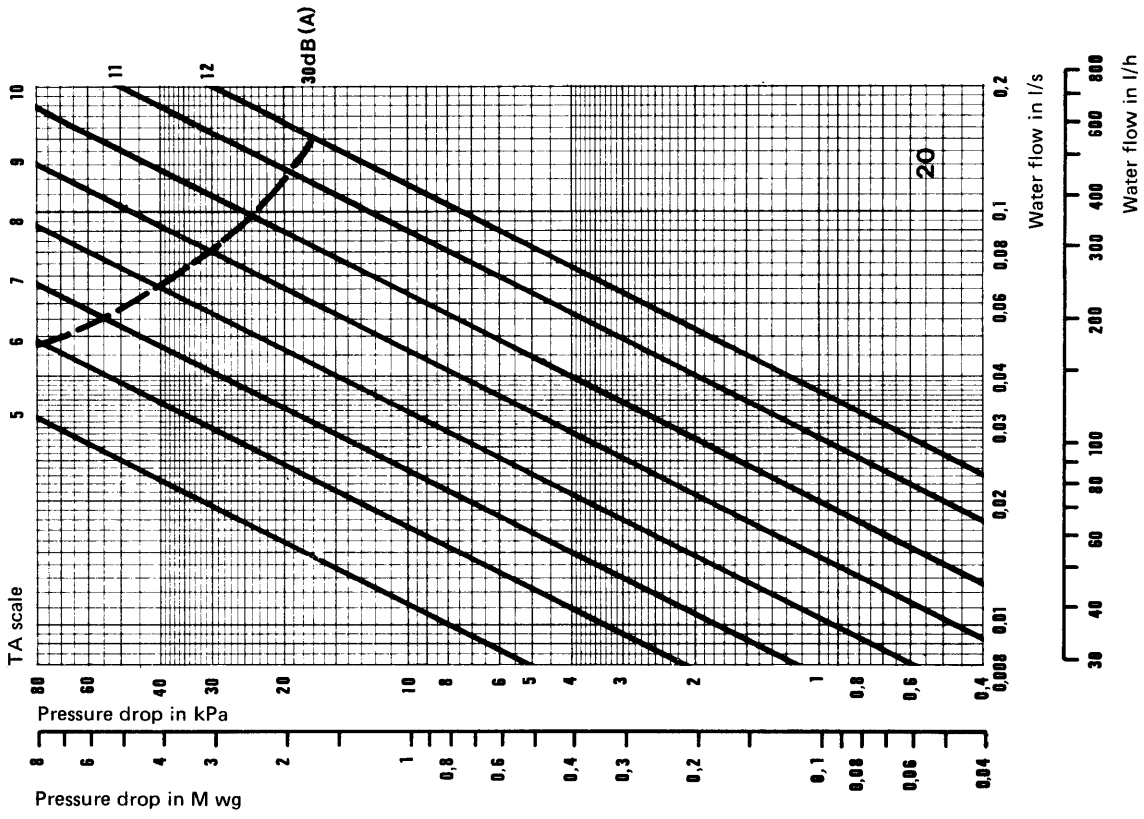
KOMBI ordered separately.

When ordering, specify article number of KOMBI coupling (53 235), connection R and pipe (mm).

Example: 53 235-10x8. Further information concerning KOMBI couplings can be found under section 4.



RVO-20



RVO-15

