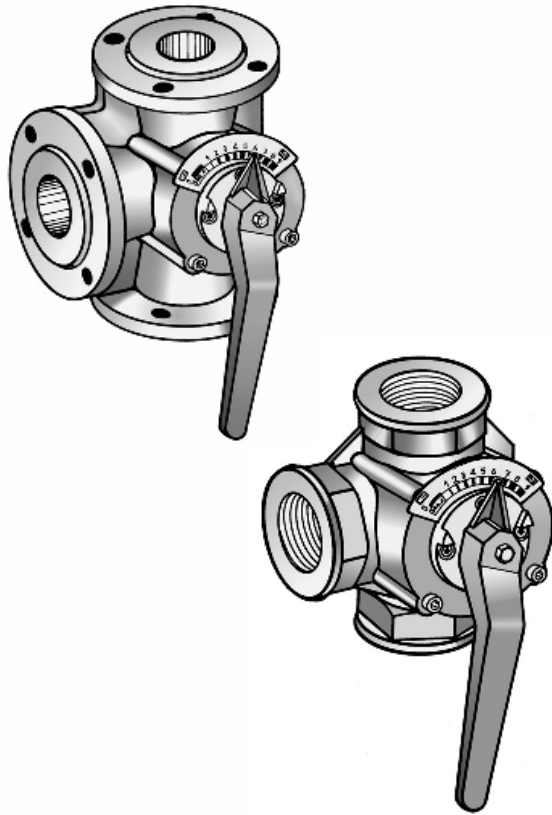


V5431A/F

3-WAY ROTARY VALVES PN 6

PRODUCT DATA



FEATURES

- Chrome-plated plug for long life.
- Optimized characteristic for supply water temperature control
- Protected against corrosion and blocking
- Reliable mounting for electrical actuators
- Clear position indicator
- Wide range of flow rates with suitable actuators

SPECIFICATIONS

Nominal static pressure	6 bar, 600 kPa
Maximum pressure drop	depending on type (see section "SPECIFICATION AND ORDER NUMBER" on page 2)
Leakage rate	1% of k_{vs}
Ports	Internal threads / flange in accordance with <u>DIN</u> EN 1092-2 depending on type (see section "SPECIFICATION AND ORDER NUMBER" on page 2)
Angle of rotation	90°
Internal threads	8 windings long
Packing	Double o-ring sealing
Material body	Cast iron
Material inner parts	Chrome-plated cast iron
Medium	Heating water according to VDI 2035 (oxygen concentration less than 0.2 g/m ³ , pH 8...9.5)
Water temperatures in the valve	2 to 130 °C, non-condensing
Weight	depend on type (see sections "DIMENSIONS WITH V5431A (mm)" and "DIMENSIONS WITH V5431F (mm)" on page 3)
Flow characteristic	equal percentage

APPLICATION

The V5431 A/F rotary valves provide water temperature control in heating and air conditioning applications.

These valves are designed for accurate mixing control of supply water temperature in heating and air conditioning systems.

Its sturdy construction ensures a long and reliable operating life when used in combination with M6061 actuators.

SPECIFICATION AND ORDER NUMBER

DN	kVS [m³/h]	Δp max [kPa]	Nominal torque [Nm]	OS no. Internal Thread	OS no. Flange	Torque [Nm] for reduced Δp (40 kPa)
15	4,0	100	10	V5431A1025	–	10
20	6,3	100	10	V5431A1033	V5431F1032	10
25	10	100	10	V5431A1041	V5431F1040	10
32	16	100	10	V5431A1058	V5431F1057	10
40	25	100	20	V5431A1066	V5431F1065	10
50	40	100	20	–	V5431F1073	20
65	63	100	20	–	V5431F1081	20
80	100	100	30	–	V5431F1099	20
100	160	100	40	–	V5431F1107	30
125	250	70	40	–	V5431F1115	30
150	630	50	40	–	V5431F1123	40

SUITABLE ACTUATORS

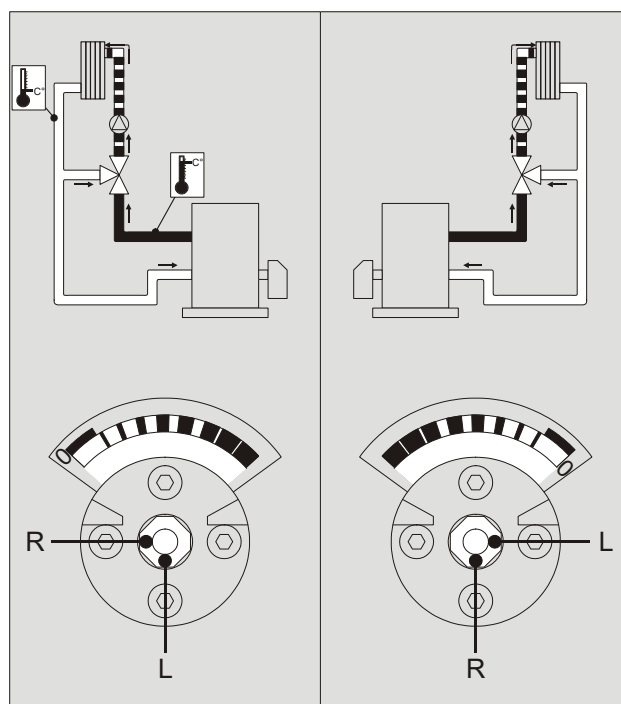
M6061A (24V; floating); M6061L (230V/240V; floating);
M7061E (0/2 to 10V modulating)

Torque [Nm]	OS no. 24 Vac floating	OS Number 230 Vac floating	OS no. 0/2...10 V
10	M6061A1013	M6061L1019	M7061E1012
20	M6061A1021	M6061L1027	M7061E1020
30	M6061A1039	M6061L1035	–
40	M6061A1047	M6061L1043	–

OPERATION

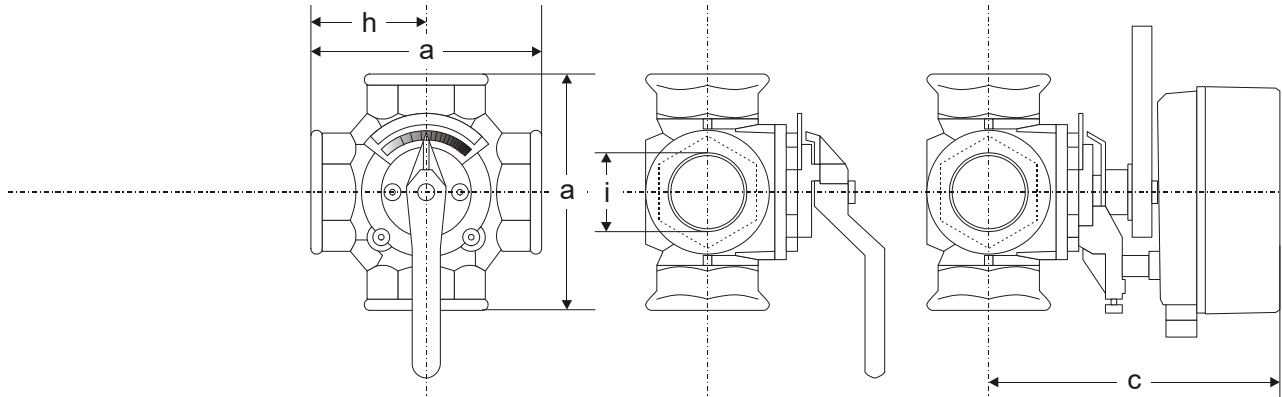
The valve controls a mixing water temperature with a rotating plug. The plug adjusts with two control curves the water flow of two inputs. The required flow water temperature is reached by adding a proportion of return water to the boiler hot water. For optimum control performance, the V5431 has special control characteristics.

MOUNTING



DIMENSIONS WITH V5431A (mm)

type	DN	a	c	SW	h	i	net weight
V5431A1025	15	110	179	41	55	R ½ in.	2.2 kg
V5431A1033	20	110	179	46	55	R ¾ in.	2.3 kg
V5431A1041	25	115	179	50	58	R 1 in.	2.4 kg
V5431A1058	32	140	188	60	70	R 1 ¼ in.	4.1 kg
V5431A1066	40	150	188	65	75	R 1 ½ in.	4.3 kg



DIMENSIONS WITH V5431F (mm)

type	DN	a	b	c	d	e	f	g	h	net weight
V5431F1032	20	140	15	179	65	90	50	4x11	70	3.5 kg
V5431F1040	25	150	15	179	75	100	60	4x11	75	4.0 kg
V5431F1057	32	160	17	188	90	120	70	4x14	80	6.6 kg
V5431F1065	40	170	16	188	100	130	80	4x14	85	7.1 kg
V5431F1073	50	190	16	202	110	140	90	4x14	95	9.8 kg
V5431F1081	65	210	16	219	130	160	110	4x14	105	12.3 kg
V5431F1099	80	250	18	219	150	190	128	4x18	125	21.4 kg
V5431F1107	100	270	18	240	170	210	148	4x18	135	26.5 kg
V5431F1115	125	310	20	267	200	240	178	8x18	155	42.0 kg
V5431F1123	150	330	20	274	225	265	202	8x18	165	49.0 kg

