ENGINEERING
TOMORROW

Radiator valves and radiator thermostats

Product overview
All you need to know about **choosing valves and thermostats**

Danfoss offers a wide product range and solutions for all kinds of heating systems.



Over 70 years
in innovating and manufacturing of radiator thermostats.

heating.danfoss.com

Danfoss has been manufacturing **innovative radiator thermostats** for over 70 years

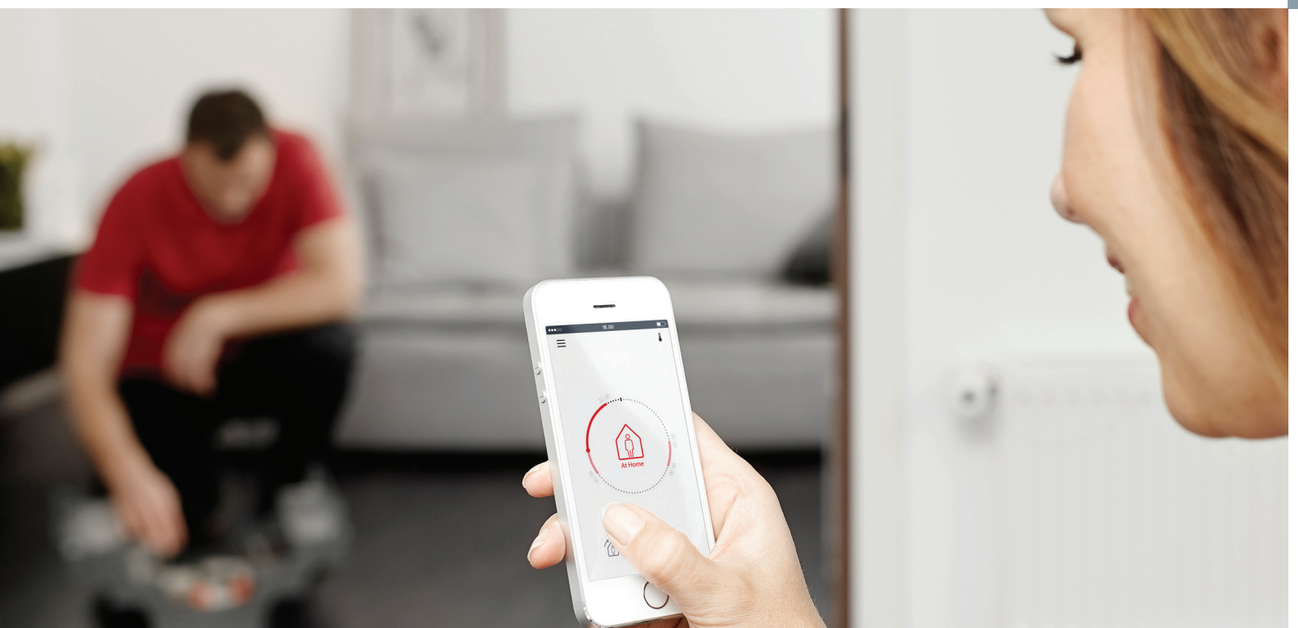
The industrial adventure began in the 1940s. Even back then, thermostats represented a revolution.

In 1943, Danfoss was one of the first companies in the world to design a radiator thermostat that could help homeowners control temperatures and avoid wasting energy. Thermostats were launched on the market as a mass produced item in 1952. The innovative principles underlying the product proved themselves and continue to set the standard today.

The world's only radiator thermostat with gas-filled sensor
One of the secrets of the radiator thermostat's service life of over 20 years is the gas charged, precision-manufactured sensors. Unlike other fillings, gas maintains a high regulating capacity and reactivity.

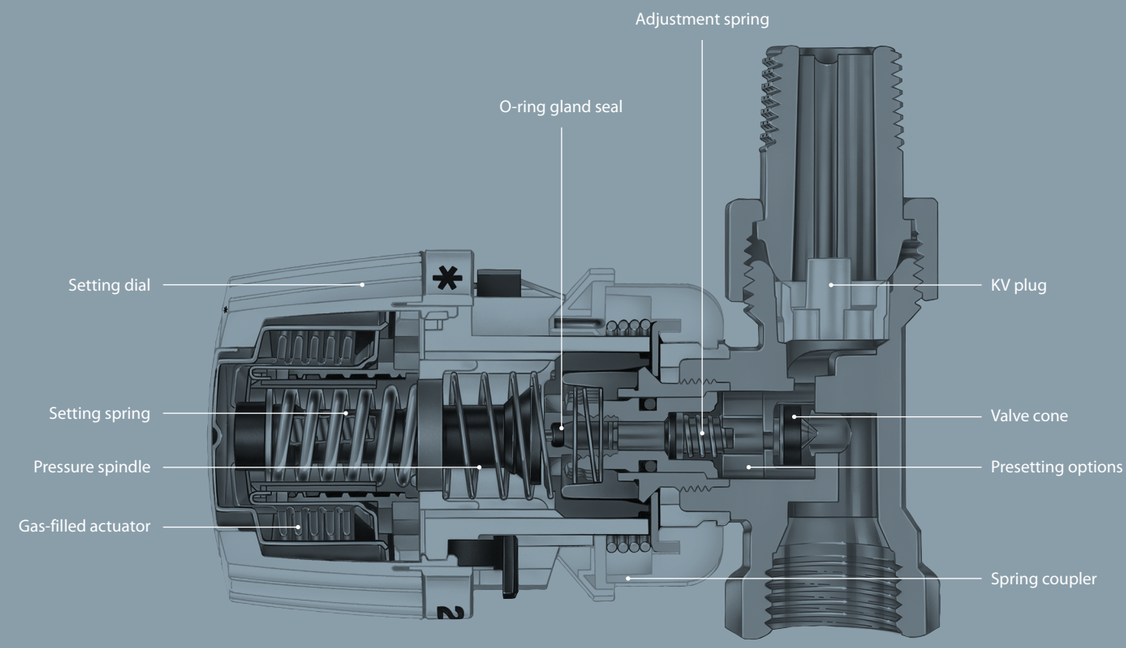
The gas-filled RA 2000 radiator thermostat enables a marked improvement on other automatic sensor principles currently available, where reaction time can be up to 70 percent slower. Danfoss thermostats therefore use free heat to the maximum and excess temperatures, after lowering the temperature at night, are minimal.

Up to 30% energy savings is the average European saving potential with intelligent radiator thermostats
In 2011, Danfoss introduced electronic radiator thermostats, which ensure optimal temperature control and comfort – around the clock. Among other things, the intelligent radiator thermostat has improved the control function (PID), the open window function, valve adjustment and programs for automatic temperature reduction – including lowering the temperature at night and when on vacation. Furthermore, it is now possible to control the temperature from your smartphone using the *Danfoss Link™ App*. Read more at smartheating.danfoss.com.



Radiator thermostat with gas-filled sensor

The best and quickest regulation...



... and the most precise temperature control on self-acting thermostats

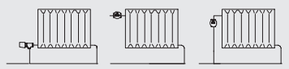
Continuous development over the decades



Danfoss maintains a constant focus on product innovation and optimization – especially where energy savings are concerned. Tradition, reliable operation and energy efficiency form the basis of our philosophy.

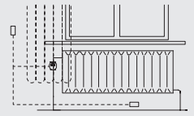


RA 2990





RA 2992





RA 2920



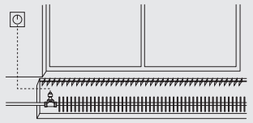
RA 2922



RA 5062/5/8



RA 5074



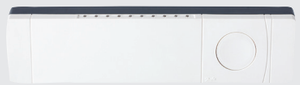
Danfoss Link™ CC Central Controller – PSU/NSU



Danfoss Link™ Connect Thermostat



Danfoss Link™ HC Hydronic Controller (5/10)



Danfoss Link™ RS Room Sensor



Danfoss Eco™ with Bluetooth® technology



Radiator thermostats RA 2000

Built-in sensor

Type	Code no.	Description
RA 2990	013G2990	Settings range 5→26°C. Built-in sensor

For use where the air in the room can circulate freely around the sensor.

Remote sensor

Type	Code no.	Description
RA 2992	013G2992	Settings range 5→26°C Remote sensor capillary tube 0-2 m

For use where the sensor is under a window sill, behind drapes, or similar.

Built-in and remote sensors – tamperproof

Type	Code no.	Description
RA 2920	013G2920	Control element with integrated sensor
RA 2922	013G2922	Control element with remote sensor capillary tube 0-2 m

Used where the thermostat is particularly at risk of damage.

Remote temperature adjusters

Type	Code no.	Description
RA 5062	013G5062	Settings range 8→28°C Remote dial capillary tube 0-2 m
RA 5065	013G5065	Settings range 8→28°C Remote dial 0-5 m capillary tube
RA 5068	013G5068	Settings range 8→28°C Remote dial 0-8 m capillary tube
RA 5074	013G5074	Settings range 8→28°C. Remote dial with remote sensor (2+2 m capillary tube)

For use where the radiator valve is hard to access, such as behind a screen, in a convector duct, below grilles, etc.

Intelligent radiator heating

Danfoss Link™ – intelligent indoor climate regulation, wireless control

Type	Code no.	Description
Danfoss Link™ CC, West – PSU	014G0286	Central Controller, Wi-Fi, incl. PSU power supply (in-wall) – West
Danfoss Link™ CC, West – NSU	014G0287	Central Controller, Wi-Fi, incl. NSU net adapter – West
Danfoss Link™ CC, East – PSU	014G0288	Central Controller, Wi-Fi, incl. PSU power supply (in-wall) – East
Danfoss Link™ CC, East – NSU	014G0289	Central Controller, Wi-Fi, incl. NSU net adapter – East
Danfoss Link™ Connect	014G0001	Connect Thermostat, valve connection type RA 2000, incl. batteries. Fit on radiator flow pipe
Danfoss Link™ Connect	014G0002	Connect Thermostat, RA + K (M30 x 1.5) adapters, incl. batteries. Fit on radiator flow pipe
Danfoss Link™ RS	014G0158	Room temperature sensor
Danfoss Link™ HC (5)	014G0103	Hydronic Controller, 5 outputs (24 V)
Danfoss Link™ HC (10)	014G0100	Hydronic Controller, 10 outputs (24 V)
Danfoss Link™ RU	088U0230	Repeater Unit – extending wireless transmission
Danfoss Link™ BSU	014G0262	For installation use only! Battery Pack for Central Controller, excl. batteries
Danfoss Link™ BR	014G0272	Boiler Relay
Danfoss Link™ DCM	086L2381	Kit for installing in liquid/water heat pump
Danfoss Link™ DCM AQ	086L2382	Kit for installing in DHP-AQ heat pump
Danfoss Link™ DLG	087H3241	Kit for ECL 110 and Danfoss Link™ Central Controller

Danfoss Eco™ – intelligent radiator thermostat, stand-alone, programmable, Bluetooth® control

Type	Code no.	Description
Danfoss Eco™, stand-alone	014G1000	Valve connection type RA 2000. Available for sales in DK only.
Danfoss Eco™, stand-alone	014G1001	Valve connection type RA + K (M30 x 1.5) adapters. Available for sale in all countries, except: DK, CH, RU, UK.

Danfoss Link™ Connect Thermostat and Danfoss Eco™ accessories

Type	Code no.	Description
Adapter	014G0250	For valves with RAV/RAVL connection
Adapter	014G0251	For valves with RA 2000 connection
Adapter	014G0252	For valves with M30 x 1.5 connection



RAS-C



RAS-CK



RAS-C2



RTW



RAX, Chrome



RAX, Inox



RAX, White



RAX, Black



RAX, Combi – Chrome/white

Do your old radiator thermostats look like this?

26 mm stand diameter:



Change to:



RA/VL 2950
RA/VL 2951

RA/VL 2952
RA/VL 2953

34 mm stand diameter:





RA/V 2960
RA/V 2961

RA/V 2962
RA/V 2963



013U0070



013G0290



FJVR, White



FJVR, Chrome

Radiator thermostats RAS-C/CK and RTW

Built-in sensors

Type	Code no.	Description
RAS-C	013G5040	Settings range 8→28°C. Built-in sensor
RAS-CK	013G5025	Settings range 8→28°C. Built-in sensor M30 x 1.5 connection
RAS-C2	013G6040	Settings range 8→28°C. Built-in sensor. RA connection
RTW	013G7110	Settings range 8→28°C. Built-in sensor. RA connection

Radiator thermostats RAX

Design built-in sensors

Type	Code no.	Description
RAX – Chrome	013G6170	Settings range 8→28°C. Built-in sensor
RAX – Inox	013G6171	Settings range 8→28°C. Built-in sensor
RAX – White/RAL 9016	013G6070	Settings range 8→28°C. Built-in sensor
RAX – Black/RAL 9005	013G6075	Settings range 8→28°C. Built-in sensor
RAX – Combi – Chrome/white	013G6176	Settings range 8→28°C. Built-in sensor
RAX-K – White/RAL 9016	013G6080	Settings range 8→28°C. Built-in sensor M30 x 1.5 connection
RAX-K – Chrome	013G6180	Settings range 8→28°C. Built-in sensor M30 x 1.5 connection

RAX can be used on all radiators fitted with Danfoss RA valves.
RAX-K can be used on all radiators fitted with TA valves (M30 x 1.5).
RAX settings: 0-✱-I-II-III-IIII.

Service thermostats

Sensor elements, type RA/VL*

Type	Code no.	Description
RA/VL 2950	013G2950	Settings range 5→26°C. Built-in sensor
RA/VL 2952	013G2952	Settings range 5→26°C. Remote sensor capillary tube 0-2 m
RA/VL 2951	013G2951	Settings range 5→26°C. Built-in sensor and compression gland
RA/VL 2953	013G2953	Settings range 5→26°C. Remote sensor capillary tube 0-2 m and compression gland

* When fitting a new service thermostat, the valve's compression gland should be replaced.
Used when fitting a new sensor element on existing Danfoss RAVL and RAV valves.

Sensor elements, type RA/V*

Type	Code no.	Description
RA/V 2960	013G2960	Settings range 5→26°C. Built-in sensor
RA/V 2962	013G2962	Settings range 5→26°C. Remote sensor capillary tube 0-2 m
RA/V 2961	013G2961	Settings range 5→26°C. Built-in sensor and compression gland
RA/V 2963	013G2963	Settings range 5→26°C. Remote sensor capillary tube 0-2 m and compression gland

* When fitting a new service thermostat, the valve's compression gland should be replaced.
Used when fitting a new sensor element on existing Danfoss RAVL and RAV valves.

Accessories – compression gland

Type	Code no.	Description
Compression gland	013U0070	For RAVL, RAV and FJVR (up to 2005)
Compression gland	013G0290	For RA 2000 and FJVR (from 2005)

Return temperature limiter FJVR

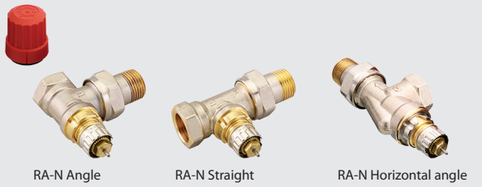
FJVR

Type	Code no.	Description
FJVR – White	003L1070	Settings range 10→80°C
FJVR – Chrome	003L1072	Settings range 10→50°C

Used for adjustment of return temperature from radiators and small underfloor heating circuits. The element is fitted to the FJVR valve or FHV-R wall box.

FJVR does not fulfill DS 469 requirements for room controls. For a small bathroom: if the primary source of heat in the room (radiator/heated towel rail) is controlled by room temperature, the secondary heat source (underfloor heating) is controlled by a return temperature limiter.

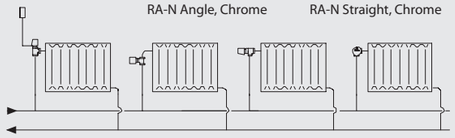
Radiator valves RA 2000



RA-N Angle | RA-N Straight | RA-N Horizontal angle

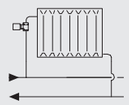
RA-N Right mounted angle | RA-N Left mounted angle | RA-N Angle, Press

RA-N Angle, Chrome | RA-N Straight, Chrome



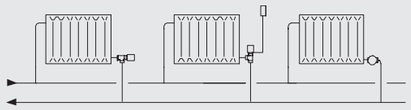


RA-U Angle | RA-U Straight | RA-UN Horizontal angle



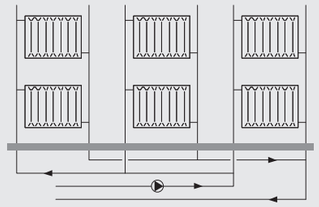


RA-UR Straight | RA-UR Angle | RA-UR Horizontal angle





RA-DV Angle | RA-DV Straight | dP tool™



Radiator valves RA 2000

RA-N radiator valves with presetting

Type	Code no.	Description
RA-N 10	013G0011	Rp 3/8 – angle
RA-N 10	013G0012	Rp 3/8 – straight
RA-N 10 UK	013G0151	Rp 3/8 – horizontal angle
RA-N 10	013G0231	Rp 3/8 – right mounted angle
RA-N 10	013G0232	Rp 3/8 – left mounted angle
RA-N 15	013G0013	Rp 1/2 – angle
RA-N 15	013G0014	Rp 1/2 – straight
RA-N 15 UK	013G0153	Rp 1/2 – horizontal angle
RA-N 15	013G0233	Rp 1/2 – right mounted angle
RA-N 15	013G0234	Rp 1/2 – left mounted angle
RA-N 20	013G0015	Rp 3/4 – angle
RA-N 20	013G0016	Rp 3/4 – straight
RA-N 20 UK	013G0155	Rp 3/4 – horizontal angle
RA-N 25	013G0037	Rp 1 – angle
RA-N 25	013G0038	Rp 1 – straight
RA-N 15 – Press	013G3237	15 mm – angle
RA-N 15 – Press	013G3238	15 mm – straight
RA-N 15 – Press	013G3239	15 mm – horizontal angle
RA-N 15 – Chrome	013G4247	Rp 1/2 – angle
RA-N 15 – Chrome	013G4248	Rp 1/2 – straight

For use in two-pipe systems. Fit on radiator supply pipe.

RA-U radiator valves with presetting

Type	Code no.	Description
RA-U 10	013G3231	Rp 3/8 – angle
RA-U 10	013G3232	Rp 3/8 – straight
RA-UN 10 UK	013G3041	Rp 3/8 – horizontal angle
RA-U 15	013G3233	Rp 1/2 – angle
RA-U 15	013G3234	Rp 1/2 – straight
RA-UN 15 UK	013G3043	Rp 1/2 – horizontal angle

For use in two-pipe systems. Reduced kvs value. Fit on radiator supply pipe.

RA-UR radiator valves with presetting

Type	Code no.	Description
RA-UR 10	013G3298	Rp 3/8 – straight
RA-UR 10	013G3299	Rp 3/8 – angle
RA-UR 10 UK	013G3297	Rp 3/8 – horizontal angle
RA-UR 15	013G3228	Rp 1/2 – straight
RA-UR 15	013G3229	Rp 1/2 – angle

For use in two-pipe systems. Reduced kvs value Fit on the return pipe.
Also for use when replacing FJVR valve on the radiator.

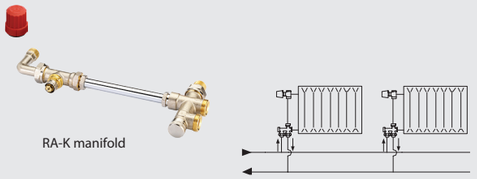
RA-DV dynamic radiator valves, *Dynamic Valve™*

Type	Code no.	Description
RA-DV 10 UK	013G7709	Rp 3/8 – horizontal angle
RA-DV 10	013G7711	Rp 3/8 – angle
RA-DV 10	013G7712	Rp 3/8 – straight
RA-DV 10	013G7717	Rp 3/8 – right mounted angle
RA-DV 10	013G7718	Rp 3/8 – left mounted angle
RA-DV 15 UK	013G7710	Rp 1/2 – horizontal angle
RA-DV 15	013G7713	Rp 1/2 – angle
RA-DV 15	013G7714	Rp 1/2 – straight
RA-DV 15	013G7719	Rp 1/2 – right mounted angle
RA-DV 15	013G7720	Rp 1/2 – left mounted angle
RA-DV 20	013G7715	Rp 3/4 – angle
RA-DV 20	013G7716	Rp 3/4 – straight
dP tool™ (accessories)	013G7855	Tool for pump optimization and delta P measurement of valve

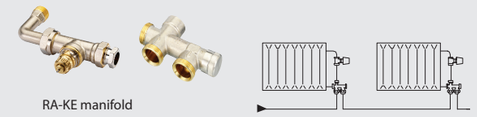
RA-DV is a pressure-independent radiator valve for use in two-pipe heating systems.
Presetting of maximum water flow of between 10-135 l/h.



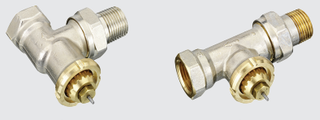
RA-G Angle | RA-G Straight



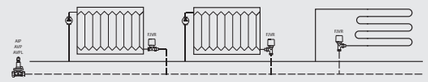
RA-K manifold



RA-KE manifold

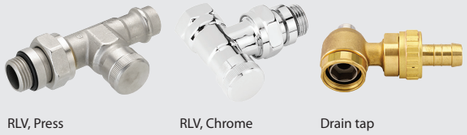


FJVR Angle | FJVR Straight





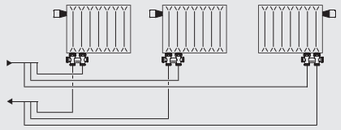
RLV Angle | RLV Straight



RLV, Press | RLV, Chrome | Drain tap



RLV-KD Straight | RLV-KD Angle



RA-G radiator valves

RA-G: high flow valves for one-pipe systems

Type	Code no.	Description
RA-G 15	013G1676	Rp 1/2 – angle
RA-G 15	013G1675	Rp 1/2 – straight
RA-G 20	013G1678	Rp 3/4 – angle
RA-G 20	013G1677	Rp 3/4 – straight
RA-G 25	013G1680	Rp 1 – angle
RA-G 25	013G1679	Rp 1 – straight

For use in gravity systems or in pumped one-pipe systems.. Fit on radiator supply pipe.

Radiator connectors

RA-K manifold assemblies for two-pipe systems with presetting

Type	Code no.	Description
RA-K	013G3363	Rp 1/2 valve housing. Straight + elbow
RA-K	013G3367	G 3/4 A connector with lockshield

Consists of RA-N valve housing, distributor connector and middle pipe. Fit on radiator supply pipe.

RA-KE manifold assemblies for one-pipe systems

Type	Code no.	Description
RA-KE	013G3362	Rp 1/2 valve housing. Straight + elbow
RA-KE	013G3366	G 3/4 A connector with lockshield

Consists of RA-FN valve housing, distributor connector and connection pipe.
Fit on radiator supply pipe.

Accessories for RA-K and RA-KE

Type	Code no.	Description
Middle pipe	013G3378	For RA-K and RA-KE Ø 15 x 650 mm
Middle pipe	013G3377	For RA-K and RA-KE Ø 15 x 950 mm
Pipe collar	192H0160	Double pipe collar

FJVR return valves

FJVR return valves

Type	Code no.	Description
FJVR 10	003L1009	Rp 3/8 – angle
FJVR 10	003L1010	Rp 3/8 – straight
FJVR 15	003L1013	Rp 1/2 – angle
FJVR 15	003L1014	Rp 1/2 – straight

Fit on the return pipe. The FJVR element is used for the valve.
FJVR does not fulfill DS 469 requirements for room controls. For a small bathroom: if the primary source of heat in the room (radiator/heated towel rail) is controlled by room temperature, the secondary heat source (underfloor heating) is controlled by a return temperature limiter.

RLV lockshield valves

RLV lockshield valves

Type	Code no.	Description
RLV 10	003L0141	Rp 3/8 – angle
RLV 10	003L0142	Rp 3/8 – straight
RLV 15	003L0143	Rp 1/2 – angle
RLV 15	003L0144	Rp 1/2 – straight
RLV 20	003L0145	Rp 3/4 – angle
RLV 20	003L0146	Rp 3/4 – straight
RLV 15 – Press	003L1824	Press 15 – straight
RLV 15 – Press	003L1825	Press 15 – angle
RLV 15 – Chrome	003L0273	Rp 1/2 – angle
RLV 15 – Chrome	003L0274	Rp 1/2 – straight
RLV	003L0152	Drain tap

Used for lockshield and draining of individual radiators. Fit to radiator return pipe.

RLV-KD

H-piece for universal radiators and radiators with built-in valves

Type	Code no.	Description
RLV-KD	003L0240	G 1/2 – straight
RLV-KD	003L0242	G 1/2 – angle

For use in two-pipe systems. With lockshield and draining.

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Design sets for use on heated towel rails and designer radiators

RAX/RTX set, Chrome:


Shut-off valve


RAX/RTX thermostat


Control valve

RAX/RTX set, White:


Shut-off valve


RAX/RTX thermostat


Control valve


VHX Duo, straight
RAX/RTX, White


VHX Duo, angle
RAX/RTX, Chrome


VHX Mono, straight
RAX/RTX, White


VHX, Mono, angle
RAX/RTX, Chrome

RAX sets: sensor and valves

Type	Code no.	Description
RAX set – Chrome	013G4003	Right mounted control valve/thermostat
RAX set – Chrome	013G4004	Left mounted control valve/thermostat
RAX set – Inox	013G4009	Right mounted control valve/thermostat
RAX set – Inox	013G4010	Left mounted control valve/thermostat
RAX set – White/RAL 9016	013G4007	Right mounted control valve/thermostat
RAX set – White/RAL 9016	013G4008	Left mounted control valve/thermostat

The valve set consists of a control valve (fit on return pipe), lockshield valve and thermostat.
RAX settings: 0-✱-I-II-III-IIII.

RTX sets with RTX return temperature limiter

Type	Code no.	Description
RTX set – Chrome	013G4132	Right mounted control valve/return temperature limiter
RTX set – Chrome	013G4133	Left mounted control valve/return temperature limiter
RTX set – Inox	013G4138	Right mounted control valve/return temperature limiter
RTX set – Inox	013G4139	Left mounted control valve/return temperature limiter
RTX set – White/RAL 9016	013G4136	Right mounted control valve/return temperature limiter
RTX set – White/RAL 9016	013G4137	Left mounted control valve/return temperature limiter

The set consists of a control valve (fit on return pipe), lockshield valve and return temperature limiter.
RTX settings: 0-✱-I-II-III-IIII.

VHX-DUO valve sets incl. RAX thermostat (c-c 50 mm) for two-pipe systems

Type	Code no.	Description
VHX-DUO – Chrome	013G4279	Angle
VHX-DUO – Chrome	013G4276	Straight
VHX-DUO – White/RAL 9016	013G4281	Angle
VHX-DUO – White/RAL 9016	013G4278	Straight

VHX-MONO valve sets incl. RAX thermostat (single connection supply/return) for two-pipe systems

Type	Code no.	Description
VHX-MONO – Chrome	013G4285	Angle
VHX-MONO – Chrome	013G4282	Straight
VHX-MONO – White/RAL 9016	013G4287	Angle
VHX-MONO – White/RAL 9016	013G4284	Straight

VHX-DUO valve sets incl. RTX return temperature limiter (c-c 50 mm) for two-pipe systems

Type	Code no.	Description
VHX-DUO – Chrome	013G4379	Angle
VHX-DUO – Chrome	013G4376	Straight
VHX-DUO – White/RAL 9016	013G4381	Angle
VHX-DUO – White/RAL 9016	013G4378	Straight

VHX-MONO valve sets incl. RAX thermostat (single connection supply/return) for two-pipe systems

Type	Code no.	Description
VHX-MONO – Chrome	013G4385	Angle
VHX-MONO – Chrome	013G4382	Straight
VHX-MONO – White/RAL 9016	013G4387	Angle
VHX-MONO – White/RAL 9016	013G4384	Straight

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