



# FRS

## District heating valve

2-way valve for district heating, primarily developed to replace the well-known STL-valves.

- Replacement valve for STL-valves
- Sizing DN15...DN65
- Tight close-off (PTFE-sealing)
- Pressure rating PN16
- Media temperature -5...+150°C
- Kv value 0.6...20
- Max. diff. pressure 1.6 MPa
- For RVA... model actuators

Regin's FRS-valves are constructed to regulate hot and cold water together with RVA...-actuators. There are also adapters that allow the valves to be used with other actuator brands.

The valves are available in DIN-standard lengths.

### Force

For FRS32-10, FRS32-16, FRS40-10, FRS40-16, FRS40-20, FRS50-10, FRS50-16, FRS50-20, FRS65-10, FRS65-16 and FRS65-20, the following force is required:

At differential pressure	Force
6 bar	570 N
8 bar	755 N
10 bar	944 N
12 bar	1133 N
14 bar	1322 N
16 bar	1511 N

**Models**

Model	Connection	Kvs	Actuator
FRS15-0.6	DN15	0.6	RVA5...
FRS15-1.0	DN15	1.0	RVA5...
FRS15-1.6	DN15	1.6	RVA5...
FRS15-2.5	DN15	2.5	RVA5...
FRS20-0.6	DN20	0.6	RVA5...
FRS20-1.0	DN20	1.0	RVA5...
FRS20-1.6	DN20	1.6	RVA5...
FRS20-2.5	DN20	2.5	RVA5...
FRS20-4.0	DN20	4.0	RVA5...
FRS25-0.6	DN25	0.6	RVA5...
FRS25-1.0	DN25	1.0	RVA5...
FRS25-1.6	DN25	1.6	RVA5...
FRS25-2.5	DN25	2.5	RVA5...
FRS25-4.0	DN25	4.0	RVA5...
FRS32-0.6	DN32	0.6	RVA5...
FRS32-1.0	DN32	1.0	RVA5...
FRS32-1.6	DN32	1.6	RVA5...
FRS32-2.5	DN32	2.5	RVA5...
FRS32-4.0	DN32	4.0	RVA5...
FRS32-6.3	DN32	6.3	RVA5...
FRS32-10	DN32	10	RVA18...
FRS32-16	DN32	16	RVA18...
FRS40-0.6	DN40	0.6	RVA5...
FRS40-1.0	DN40	1.0	RVA5...
FRS40-1.6	DN40	1.6	RVA5...
FRS40-2.5	DN40	2.5	RVA5...
FRS40-4.0	DN40	4.0	RVA5...
FRS40-6.3	DM40	6.3	RVA5...
FRS40-10	DN40	10	RVA18
FRS40-16	DN40	16	RVA18
FRS40-20	DN40	20	RVA18
FRS50-6.3	DN50	6.3	RVA5...
FRS50-10	DN50	10	RVA18...
FRS50-16	DN50	16	RVA18...
FRS50-20	DN50	20	RVA18...
FRS65-6.3	DN65	6.3	RVA5...
FRS65-10	DN65	10	RVA18...
FRS65-16	DN65	16	RVA18...
FRS65-20	DN65	20	RVA18...

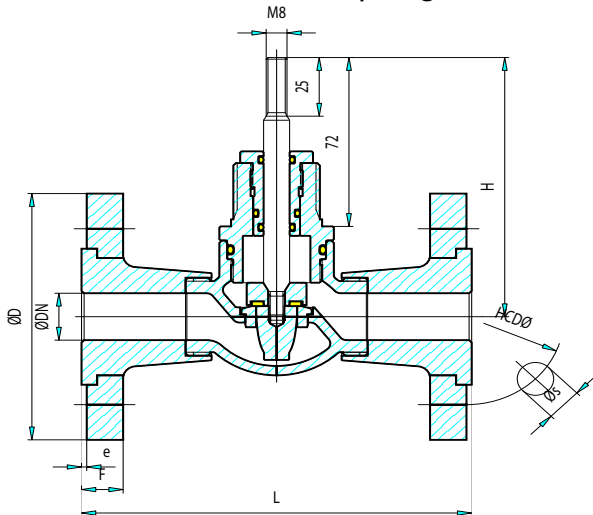
**Technical data**

Pressure rating	PN16
Flow characteristic	Equal percentage
Max. diff. pressure	1.6 MPa
Stroke	20 mm
Temperature range	-5...+150°C
Media	Hot, cold and glycol-mixed water or steam
Connection	Flanges according to ISO 7005-2
Rangeability	100:1
Max. leakage	0.0% of Kv (PTFE-sealing)

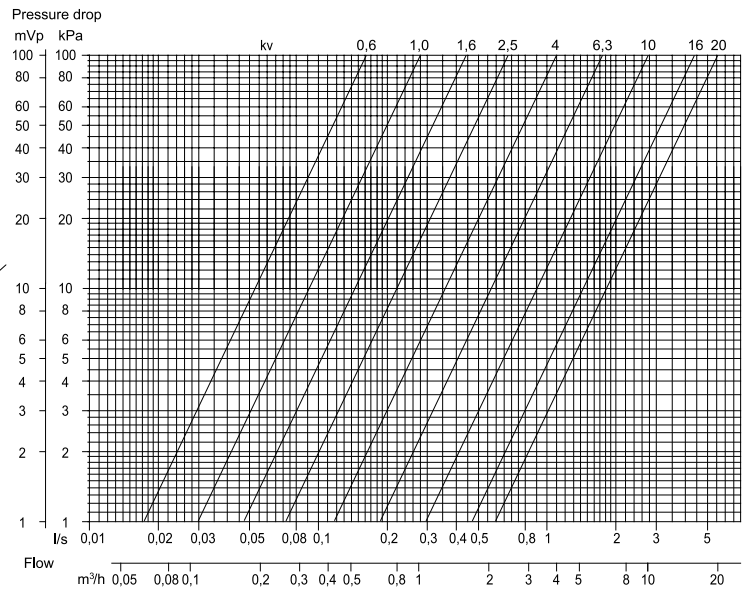
**Material**

Body	Gunmetal 1400 LG2
Disc, stem and seat	Stainless steel 303S31
Packing box	Dezincification resistant brass CW 602N
Cone sealing	PTFE (carbon-filled, 25 % carbon)
Flange	Epoxy-coated steel
Flange-hub	Epoxy-coated steel (DN20-40), gunmetal 1400 LG2 (DN50-65)
O-rings	Viton

## Dimensions & Pressure drop diagram

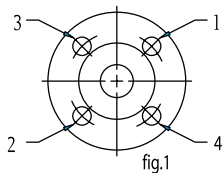


DN	ØD	L	F	e	H	ØHCD	Øs (x4)
15	95	130	16	2	110	65	14
20	105	142	16	2	110	75	14
25	115	156	16	2	115	85	14
32	140	165	18	2	115	100	18
40	150	170	18	3	115	110	18
50	165	214	20	3	115	125	18
65	185	214	20	3	115	145	18



## Mounting

- 1 The mounting surfaces should be free from dirt and rough areas.
- 2 The valve should be mounted so the arrow on the body is pointing in the flow direction.
- 3 Adjust the connection between the valve and the counter flange to minimise the tension between them.
- 4 Tighten the bolts cross-wise, according to fig. 1.
- 5 Tighten one side at a time.
- 6 After the valve has been tested, the bolts should be tightened again according to fig. 1.



- 1 Valve
- 2 Nut
- 3 Packing (fixed on new valves)
- 4 Bolt

