



V2400

Verafix

Pre-settable lockshield valve with retainable presetting

APPLICATION

The Verafix is a pre-settable radiator lockshield valve for the return connection of radiators or heat exchangers. It is used:

- in typical two-pipe heating systems
- in special applications in one-pipe heating systems for shut-off and regulation of individual radiators. Together with a draining adapter (see 'Accessories') radiators can be drained or filled with the system in operation. The presetting isn't affected by this.

Installation in supply also possible, draining/filling function isn't supported.

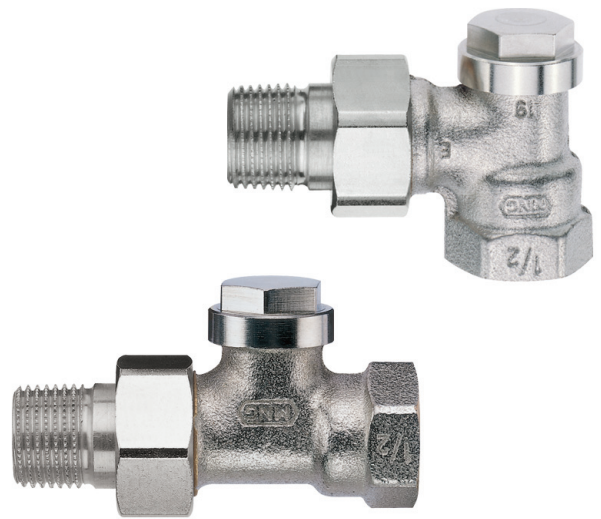
The lockshield valve is suitable for hot water and low pressure steam heating systems and cold water cooling systems.

FEATURES

- Retainable presetting, independent of draining or shut-off process
- Presetting, shut-off and draining/filling with one valve
- Presettable by stroke limitation
- Optional flow direction. Performance values apply for both directions
- Piston externally O-ring sealed
- Body dimensions to DIN3842
- Connection to all types of pipe DN10 - DN20
- Easy identification: protection cap with hexagon on top and collar to valve; also see illustration identification

SPECIFICATIONS

Medium:	Water, water-glycol mixture Low pressure steam Quality to VDI2035	
Operating temperature:	Water	2 - 130°C (36 - 266°F)
	Steam	max. 110°C (230°F)
Max. operating pressure:	Water	10.0 bar (145 psi)
	Steam	0.5 bar (7.3 psi)
k _{vs} (C _{vs})-value:	Straight DN10, DN15	1.25 (1.46)
	Angle DN10, DN15	1.70 (1.98)
	Straight, Angle DN20	1.80 (2.09)



DESIGN

The lockshield valve consists of:

- Valve housing PN10, DN10, 15 or 20 with
 - internal thread connection to DIN2999 (ISO7) or external thread connection to DIN/ISO228 on inlet
 - external thread connection to DIN/ISO228 with union-nut and radiator tailpiece (not V2406) on outlet
 - Body dimensions to DIN3842
- Valve insert
- Protection cap

MATERIALS

- Valve housing made of nickel-plated brass
- Valve insert made of brass with EPDM seals
- Tailpiece, protection cap and union-nut made of nickel-plated brass

FUNCTION

The Verafix connects the return of a radiator or heat exchanger to the heating loop and has the functions regulation, shut-off and draining/filling.

Regulation:

The flow can be regulated by presetting the Verafix to a certain value derived from the flow diagrams. By presetting, the opening between valve insert and valve seat is reduced. In this way the flow is throttled.

Draining:

Draining or filling of the radiator is carried out with the draining adapter (see 'Accessories'). Draining of individual radiators using the Verafix has no influence on the heating loop or other radiators in the loop.

Presetting isn't affected by shut-off or draining.

PLEASE NOTE:

- To avoid stone deposit and corrosion the composition of the medium should conform with VDI-Guideline 2035
- Additives have to be suitable for EPDM sealings
- System has to be flushed thoroughly before initial operation with all valves fully open
- Any complaints or costs resulting from non-compliance with above rules will not be accepted by Honeywell Home
- Please contact us if you should have any special requirements or needs

DIMENSIONS AND ORDERING INFORMATION

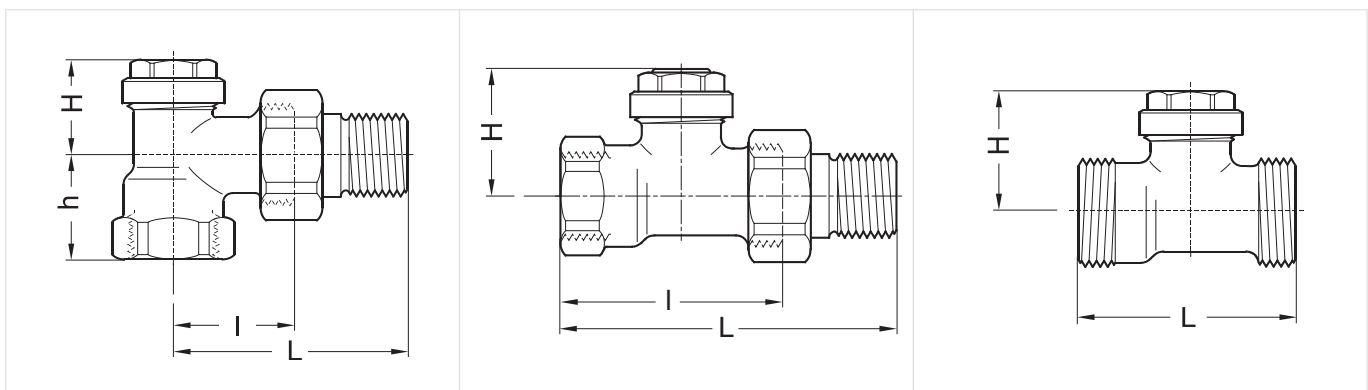


Fig. 1. Angle

Fig. 2. Straight

Fig. 3. Straight with external threads

Tab. 1 Dimensions and OS-Nos (OS=Ordering System)

Type	DN	Pipe connection	$k_{vs}(C_{vs})$ -value	L	I	H	h	OS-No.
Angle	10	Rp 3/8"	1.70 (1.99)	52	26	25	22	V2400E0010
	15	Rp 1/2"	1.70 (1.99)	58	29	25	26	V2400E0015
	20	Rp 3/4"	1.80 (2.09)	66	34	29	29	V2400E0020
Straight	10	Rp 3/8"	1.25 (1.46)	75	49	32	-	V2400D0010
	15	Rp 1/2"	1.25 (1.46)	80	51	32	-	V2400D0015
	20	Rp 3/4"	1.80 (2.09)	91	59	32	-	V2400D0020
Straight with external threads	15	G 3/4" AG	1.25 (1.46)	51	-	32	-	V2406D0015

Note: All dimensions in mm unless stated otherwise.

INSTALLATION EXAMPLE

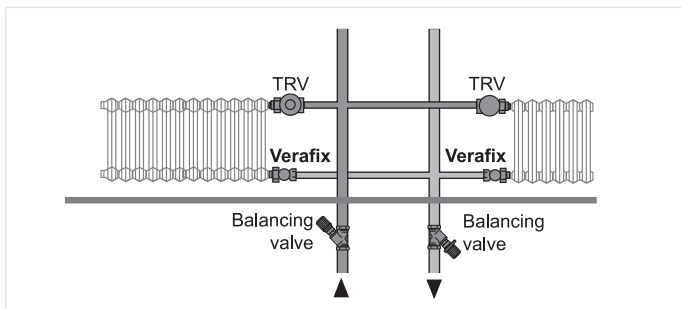


Fig. 4. Installation example heating system

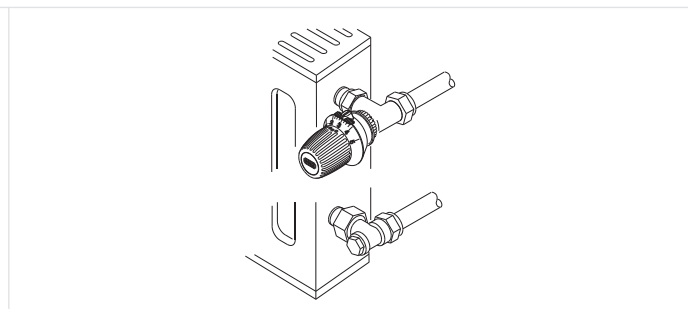
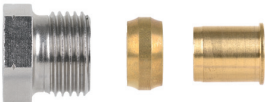




Fig. 5. Installation example radiator

ACCESSORIES

	Description	Dimension	Part No.	
	FIG3/8CS Compression fitting for COPPER and STEEL pipe Consisting of compression nut and compression ring. For valves with internal thread. Note: Support inserts have to be used for copper or soft steel pipe with 1.0 mm wall thickness. Max. operating temperature 120 °C, max. operating pressure 10 bar.			
		3/8", DN10	10 mm	FIG3/8CS10
		3/8", DN10	12 mm	FIG3/8CS12
		1/2", DN15	10 mm	FIG1/2CS10
		1/2", DN15	12 mm	FIG1/2CS12
		1/2", DN15	14 mm	FIG1/2CS14
		1/2", DN15	15 mm	FIG1/2CS15
		1/2", DN15	15 mm	FIG1/2CS15-10
		1/2", DN15	16 mm	FIG1/2CS16
		3/4", DN18	18 mm	FIG3/4CS18
	3/4", DN22	22 mm	FIG3/4CS22	
	FIG3/8CSS Compression fitting for COPPER and STEEL pipe Consisting of compression nut and compression ring and support insert. For valves with internal thread. Note: Support inserts have to be used for copper or soft steel pipe with 1.0 mm wall thickness. Max. operating temperature 120 °C, max. operating pressure 10 bar.			
		3/8", DN10	12 mm	FIG3/8CSS12
		1/2", DN15	12 mm	FIG1/2CSS12
		1/2", DN15	14 mm	FIG1/2CSS14
		1/2", DN15	15 mm	FIG1/2CSS15
		1/2", DN15	16 mm	FIG1/2CSS16
		1/2", DN15	18 mm	FIG1/2CSS18
		3/4", DN20	18 mm	FIG3/4CSS18
	FIG1/2M Compression fitting for MULTILAYER pipe. Consisting of compression nut, compression ring and support insert. For valves with internal thread. Note: Max. operating temperature 90°C, max. operating pressure 10 bar			
		1/2", DN15	16 mm	FIG1/2M16X2
	FEG3/4CS Compression fitting for COPPER and STEEL pipe. Consisting of one-piece (preassembled) nut. Soft sealing connection. For valves with external thread G ³ / ₄ ". Note: Reinforcing insert for copper or soft steel pipe with 1.0 mm wall thickness not required. Max. operating temperature 90°C, max. operating pressure 10 bar.			
		G ³ / ₄ ", 1 pcs.	10 mm	FEG3/4CS10
		G ³ / ₄ ", 1 pcs.	12 mm	FEG3/4CS12
		G ³ / ₄ ", 1 pcs.	14 mm	FEG3/4CS14
		G ³ / ₄ ", 10 pcs.	14 mm	FEG3/4CS14-10
		G ³ / ₄ ", 1 pcs.	15 mm	FEG3/4CS15
		G ³ / ₄ ", 10 pcs.	15 mm	FEG3/4CS15-10
		G ³ / ₄ ", 1 pcs.	16 mm	FEG3/4CS16
		G ³ / ₄ ", 1 pcs.	18 mm	FEG3/4CS18
	FEG3/4P Compression fitting for PEX pipe. Consisting of one-piece (preassembled) nut and reinforcing insert. Soft sealing connection. For valves with external thread G ³ / ₄ ". Note: Max. operating temperature 90°C, max. operating pressure 10 bar.			
		G ³ / ₄ ", 1 pcs.	12 x 1.1 mm	FEG3/4P12X1.1
		G ³ / ₄ ", 1 pcs.	16 x 1.5 mm	FEG3/4P16X1.5

	FEG3/4PM	Compression fitting for PEX and MULTILAYER pipe.		
		Consisting of one-piece nut with preassembled antitorison elastic compression ring and one-piece reinforcing insert. For valves with external thread G ³ / ₄ ".		
		Note: Max. operating temperature 90°C, max. operating pressure 10 bar.		
		G ³ / ₄ ", 1 pcs.	14 x 2 mm	FEG3/4PM14X2
		G ³ / ₄ ", 1 pcs.	16 x 2 mm	FEG3/4PM16X2
		G ³ / ₄ ", 10 pcs.	16 x 2 mm	FEG3/4PM16X2-10
		G ³ / ₄ ", 1 pcs.	16 x 2.2 mm	FEG3/4PM16X2.2
		G ³ / ₄ ", 1 pcs.	17 x 2 mm	FEG3/4PM17X2
		G ³ / ₄ ", 10 pcs.	17 x 2 mm	FEG3/4PM17X2-10
		G ³ / ₄ ", 1 pcs.	18 x 2 mm	FEG3/4PM18X2
	G ³ / ₄ ", 10 pcs.	18 x 2 mm	FEG3/4PM18X2-10	
	G ³ / ₄ ", 1 pcs.	20 x 2 mm	FEG3/4PM20X2	
	VA5201Axxx	Radiator tailpiece with thread up to collar		
		for valves DN10 (3/8")	VA5201A010	
		for valves DN15 (1/2")	VA5201A015	
		for valves DN20 (3/4")	VA5201A020	
	VA5204Bxxx	Extended radiator tailpiece, nickel-plated, to be shortened as required		
		3/8" x 70 mm (for DN10) thread approx. 50 mm	VA5204B010	
		1/2" x 76 mm (for DN15) thread approx. 65 mm	VA5204B015	
		3/4" x 70 mm (for DN20) thread approx. 60 mm	VA5204B020	
	VA3300	Draining adapter		
		for all sizes	VA3300A001	
	VA8300	Verafix-key		
		for all sizes	VA8300A001	

SERVICE PARTS

	VS3301A	Cover cap	
		for all sizes	VS3301A001
	VS3302A	Sealing ring for cover cap	
		for all sizes	VS3302A001
	VA2202Axxx	Pressure cap - for shutting off valves on radiator outlet	
		for valves DN10 (3/8")	VA2202A010
		for valves DN15 (1/2")	VA2202A015
		for valves DN20 (3/4")	VA2202A020
	VS1300	Exchange valve insert	
		Verafix type	VS1300VF02
	VA5090	Sealing ring for pressure cap	
		for valves DN10 (3/8")	VA5090A010
		for valves DN15 (1/2")	VA5090A015
		for valves DN20 (3/4")	VA5090A020

IDENTIFICATION

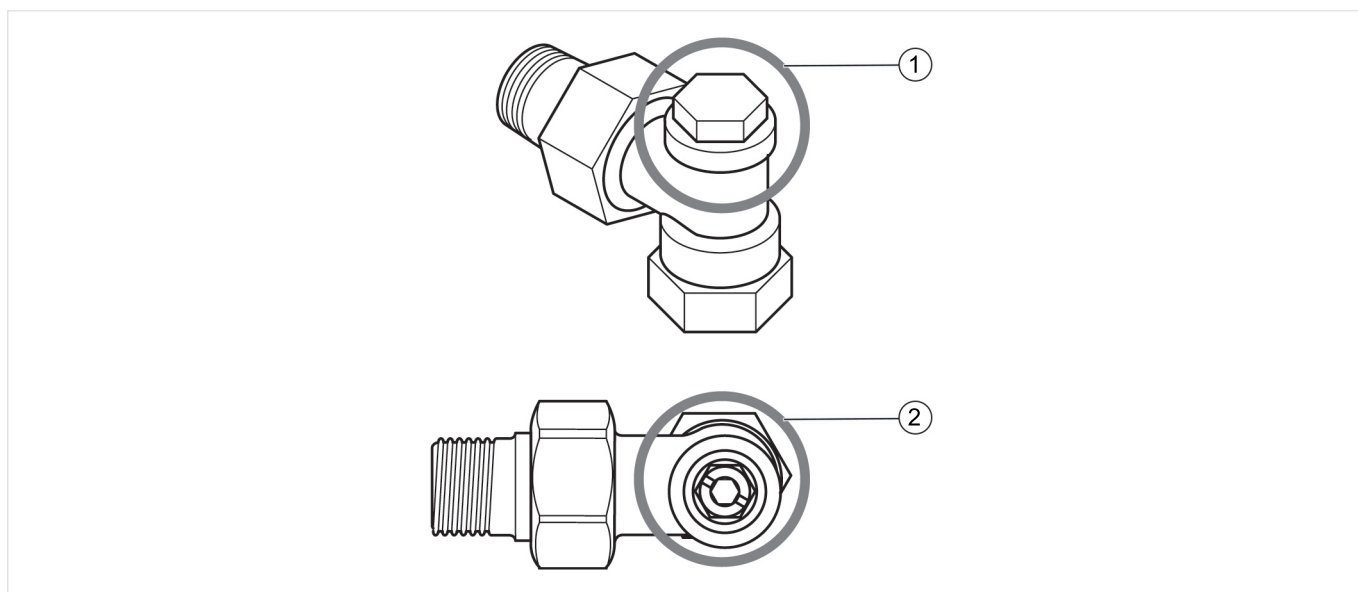
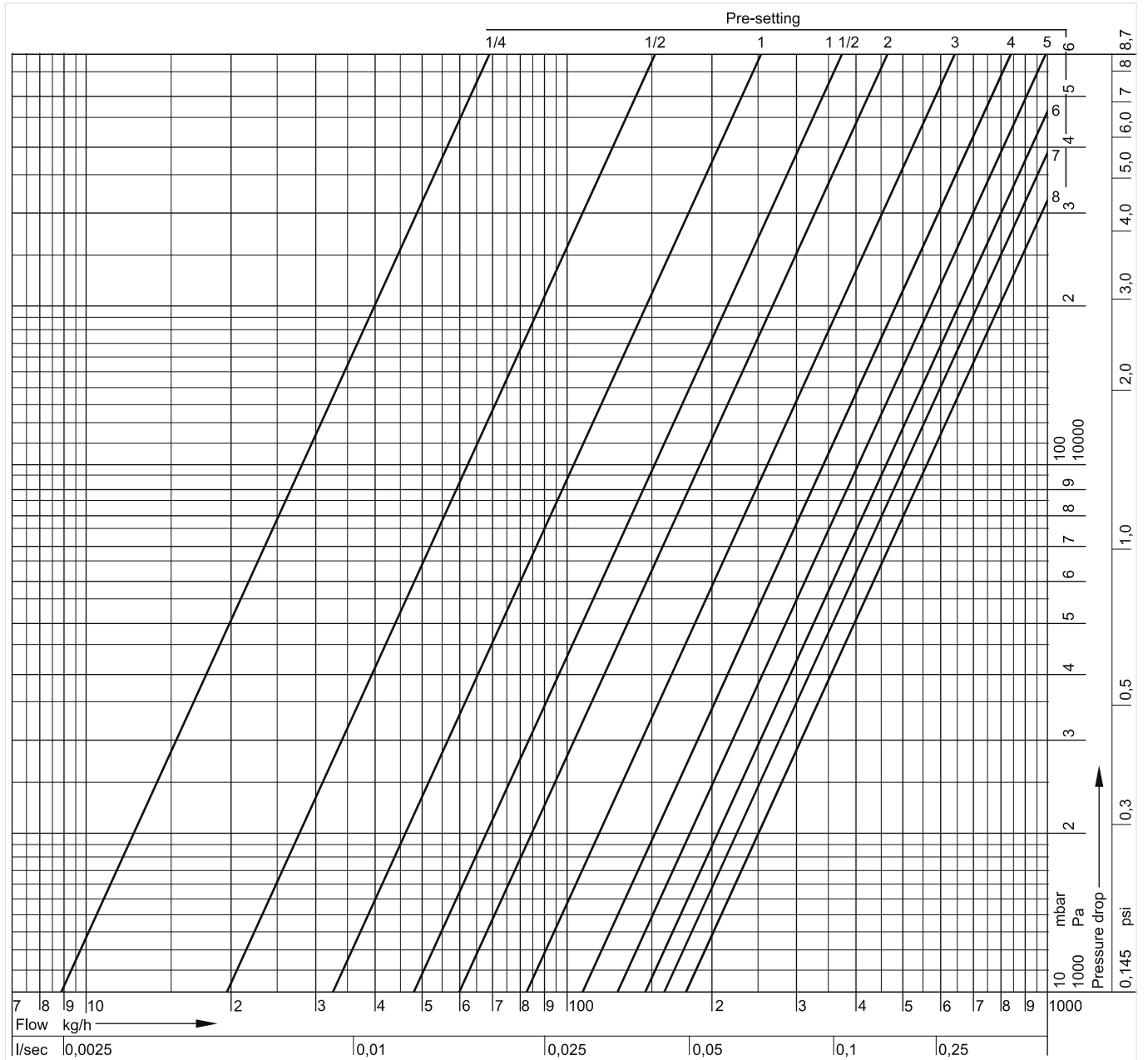


Fig. 6. Identification of Verafix

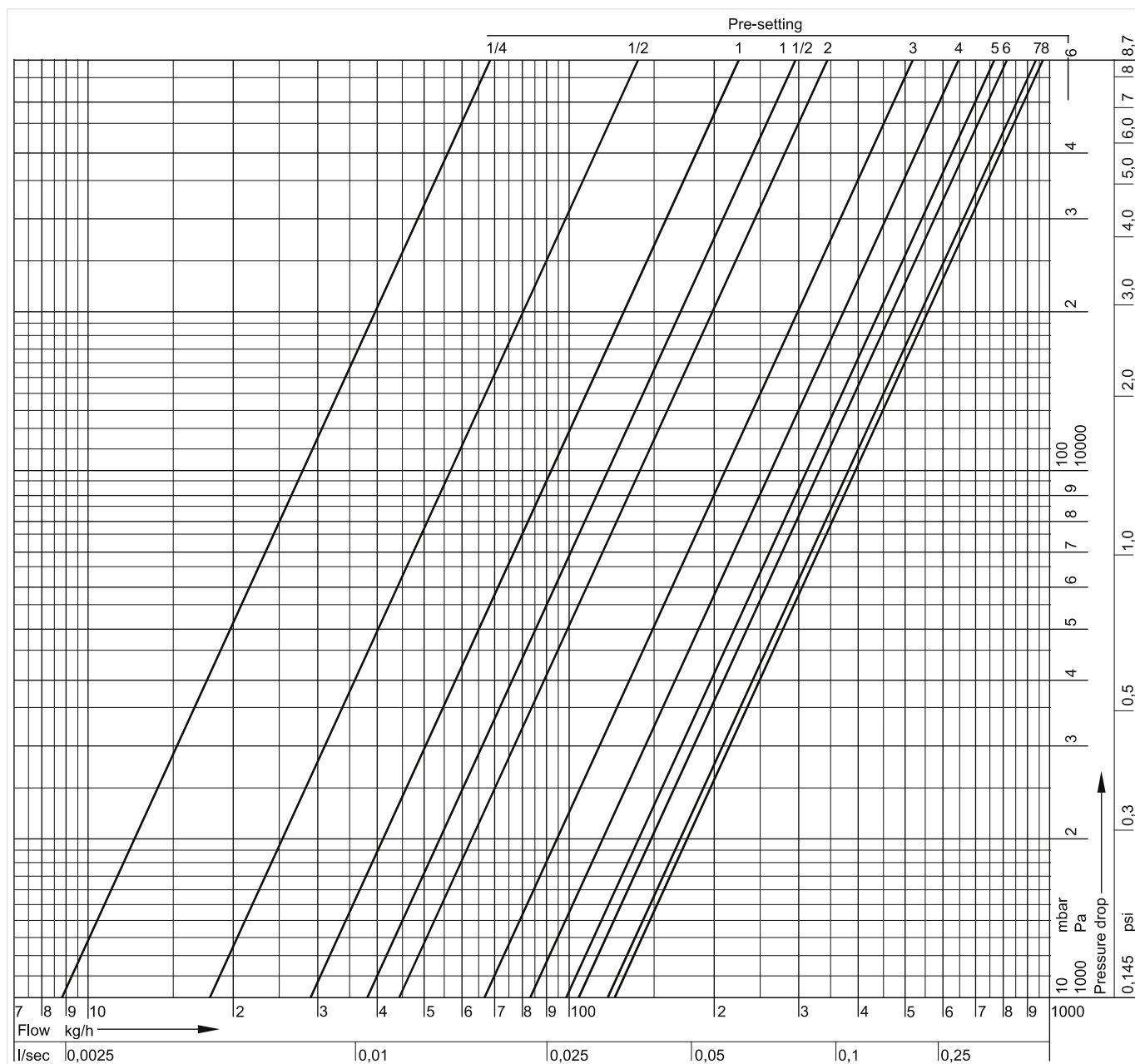
- 1) Protection cap fitted: protection cap with hexagon (SW19) on top and collar on valve side
- 2) Protection cap removed: valve insert with smooth rim, inside hexagon (SW10) and screwdriver slit in the centre

FLOW DIAGRAM FOR VERAFIX ANGLE, STRAIGHT, DN20 (V2400E0020, V2400D0020)



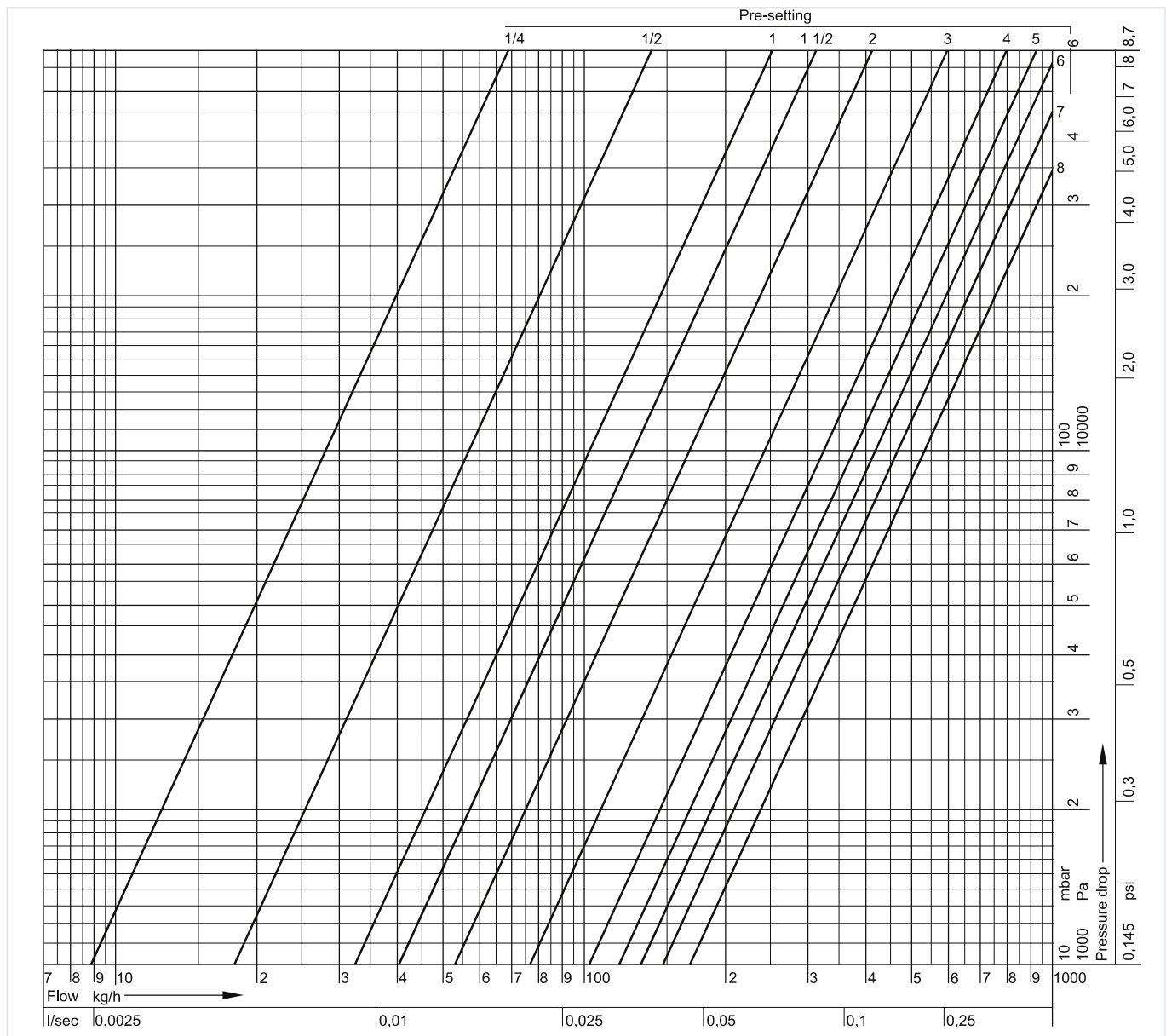
Turns of presetting screw	1/4	1/2	1	1 1/2	2	3	4	5	6	7	8 = open = k_{VS}
k_V-value	0.09	0.20	0.34	0.48	0.59	0.84	1.08	1.27	1.46	1.61	1.80
c_V-value	0.10	0.23	0.40	0.56	0.69	0.98	1.26	1.48	1.70	1.87	2.09

FLOW DIAGRAM FOR VERAFIX STRAIGHT, DN10 (V2400D0010), DN15 (V2400D0015)



Turns of presetting screw	1/4	1/2	1	1 1/2	2	3	4	5	6	7	8 = open = k_{vs}
k_v-value	0.09	0.18	0.29	0.38	0.45	0.68	0.84	0.98	1.05	1.21	1.25
cv-value	0.10	0.21	0.34	0.44	0.52	0.79	0.97	1.14	1.22	1.41	1.46

FLOW DIAGRAM FOR VERAFIX ANGLE, DN10 (V2400E0010), DN15 (V2400E0015)



Turns of presetting screw	1/4	1/2	1	1 1/2	2	3	4	5	6	7	8 = open = kvs
k_v-value	0.09	0.18	0.33	0.43	0.54	0.78	1.03	1.19	1.33	1.49	1.70
cv-value	0.10	0.21	0.38	0.51	0.63	0.91	1.20	1.38	1.55	1.73	1.98

For more information

homecomfort.resideo.com/europe



Ademco 1 GmbH
 Hardhofweg 40
 74821 MOSBACH
 GERMANY
 Phone: +49 6261 810
 Fax: +49 6261 81309

Manufactured for and on behalf of the
 Pittway Sàrl, La Pièce 4, 1180 Rolle, Switzerland
 by its Authorised Representative Ademco 1 GmbH
 ENOH-2200GE25 R0419
 Subject to change
 © 2019 Resideo Technologies, Inc.
 The Honeywell Home trademark is used under
 license from Honeywell International Inc.

