



Technical description

Material

Body and parts in contact with liquid : dezincification-resistant brass.

Brass Alloy no. CW602N

Gaskets: EPDM. The wheel can be lead-sealed.

Functions

Control, shutoff, flow measurement. (A drain valve is available as an accessory.)

Max. working pressure:

STV, STVM, STVF, STVU

PN20 = 2.0 Mpa = 20 bar

STVK

PN16 = 1.6 Mpa = 16 bar

Max. working temperature:

STV, STVM, STVF, STVU

+120 °C

STVK

+95 °C

Min. working temperature:

STV, STVM, STVF, STVU

-30 °C

STVK

-30 °C

Flow measurement

The measuring instrument connects to test ports of the valves. The instrument is pre-programmed with the characteristics of all our balancing valves and measuring station. Pressure drop and flow readings can be read off on the display .

If you do not have access to the MMA instrument, you can use other common marks of instrument for pressure drop diagram in the instruction for each type of valve.

Pre-setting

The valve can be balanced to the desired flow or Kv value with the aid of the diagram and the wheel setting.

Wheel balancing is complete, the inner stem is turned clockwise to the stop to limit the maximum flow of the valve.

Measurement accuracy

The accuracy is highest when the valve is fully open.

You should therefore choose a valve that can be open at least three turns at the calculated pre-setting value.

Media

Water in closed circuits. The flowing additives are permitted:

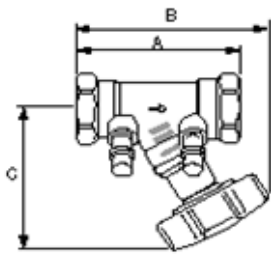
- max 50 % glycol for frost protection

- oxygen-binding agents for water treatment

Correction for liquids

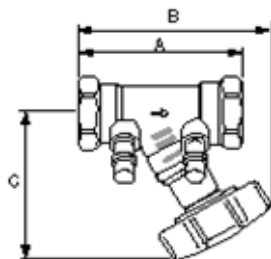
Applies to liquids other than water. Correct the measured flow (Q) by the density in ton/m^3 according to the formula:

STV. Threaded, without drain valve



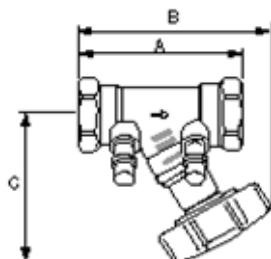
Ref.	DN	A	B	C	kvs	Weight kg	Part No.
STV 10	10	80	108	95	2.80	0.45	489 25 41
STV 15	15	86	111	95	3.55	0.53	489 25 42
STV 20	20	90	114	95	5.10	0.58	489 25 43
STV 25	25	102	120	96	8.80	0.77	489 25 44
STV 32	32	120	126	96	13.10	1.20	489 25 45
STV 40	40	132	138	108	19.50	1.50	489 25 46
STV 50	50	154	148	111	31.50	2.30	489 25 47
Drain valve AV 15						0.06	446 42 35

STVM. Threaded, with drain valve



Ref.	DN	A	B	C	kvs	Weight kg	Part No.
STVM 10	10	80	108	95	2.80	2.36	489 25 48
STVM 15	15	86	111	95	3.55	1.56	489 25 49
STVM 20	20	90	114	95	5.10	0.58	489 25 50
STVM 25	25	102	120	96	8.80	0.77	489 25 51
STVM 32	32	120	126	96	13.10	1.2	489 25 52
STVM 40	40	132	138	108	19.50	1.5	489 25 53
STVM 50	50	154	148	111	31.50	2.3	489 25 54

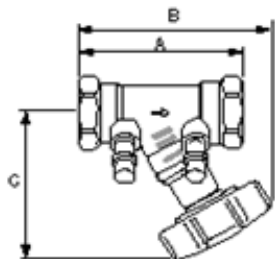
STVF. With extended test port and extended bonnet



Ref.	DN	A	B	C	kvs	Weight kg	Part No.
STVF 15	15	86	123	121	3.55	0.70	489 25 55
STVF 20	20	90	105	121	5.10	0.73	489 25 56
STVF 25	25	102	117	121	8.80	0.92	489 25 57
STVF 32	32	120	135	121	13.10	1.19	489 25 58
Drain valve AV 15						0.06	446 42 35

Kvs = m³/h at a pressure drop of 1 bar and fully open valve.

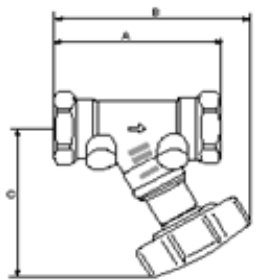
STVK. With compression fitting. With drain valve



Ref.	DN	A	B	C	Weight kg	Part No.
STVK 10	10	108	122	95	0.55	489 25 83
STVK 15	15	116	126	95	0.68	489 25 85
STVK 20	20	130	134	95	0.85	489 25 86
Drain valve AV 15					0.06	446 42 35



STVU. Threaded, without test ports and drain valve



Ref.	DN	A	B	C	Weight kg	Part No.
STVU 10	10	80	108	95	0.47	489 25 58
STVU 15	15	86	111	95	0.53	489 25 59
STVU 20	20	90	114	95	0.57	489 25 60
STVU 25	25	102	120	96	0.76	489 25 61
STVU 32	32	120	126	96	1.05	489 25 62
STVU 40	40	132	138	108	1.45	489 25 63
STVU 50	50	154	148	111	2.25	489 25 64



Kvs = m³/h at a pressure drop of 1 bar and fully open valve.

Accessories

**STV, STVM, STVF, STVK,
STV, STVU, STVC**
Measuring points



**STV, STVM, STVF, STVK,
STV, STVU, STVC**
Nipple extender



MMA No.		
9000689	MNR	Measuring nipple red
9000690	MNB	Measuring nipple blue

MMA No.		
9000699	MNF	Nipple extender

**STV, STVM, STVF, STVK, STVU
STV, STVU, STVC**
**Handwheel for threaded
for flanged**



STV
Insulation



MMA No.		
9000693	RG	Digital Handwheel for DN 15 ~ DN 50
9000694	RF	Digital Handwheel for DN 65 ~ DN 300

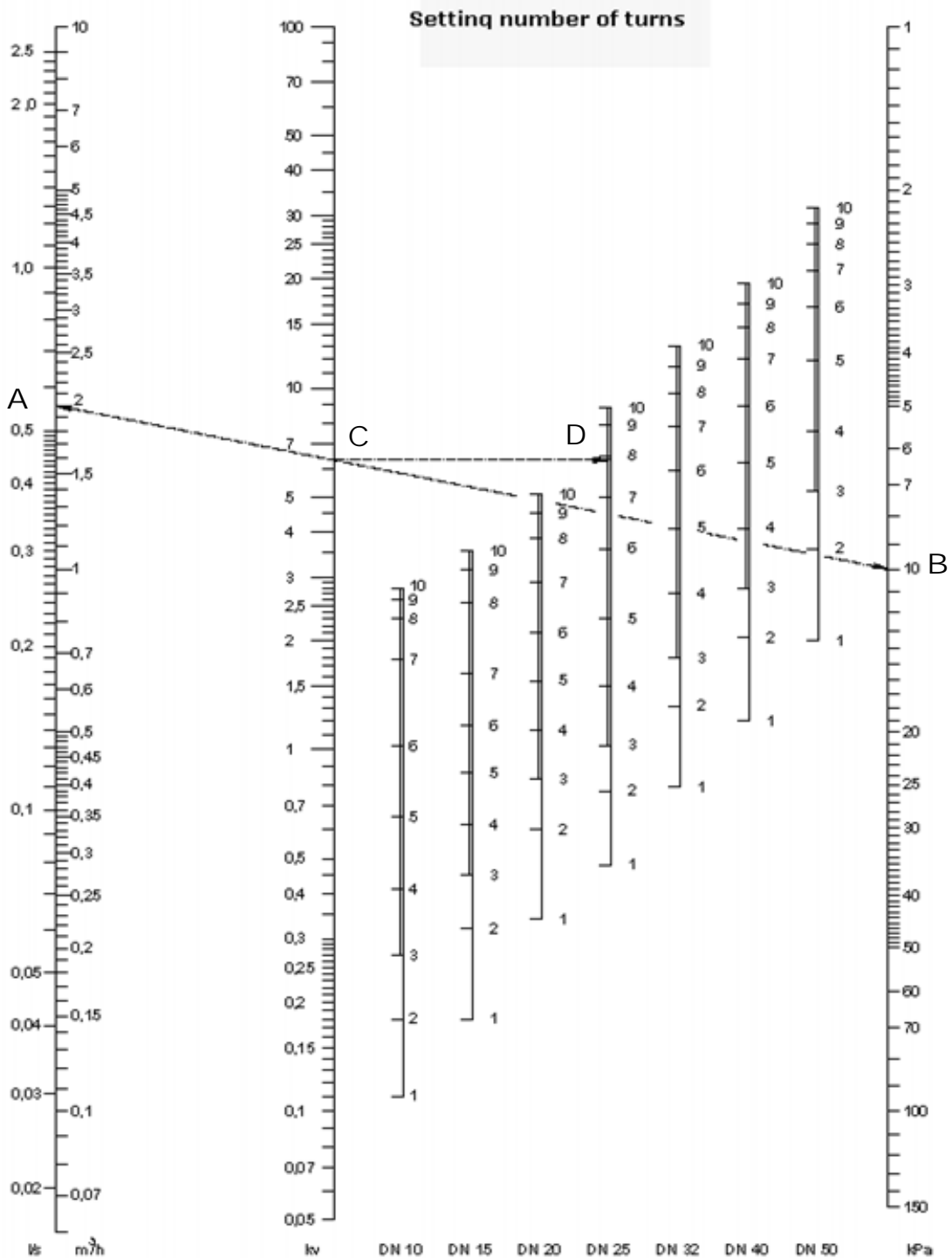
MMA No.			
3514401	IS 10-12	Insulation for	STV 10-20
3514501	IS 25		STV 25
3514601	IS 32		STV 32
3514701	IS 40		STV 40
3514801	IS 50		STV 50

Drin valve for STV 10-50

Weight: 0.06 kg
Max. working presure: 1.0 Mpa = 10 bar
Max. working temperature: 90 °C
Material: Brass 5170



MMA No.		
4051801	AV15	Drain valve



Choosing a suitable size of valve and determining the valve setting

Determine the required flow in the circuit (A) and the pressure drop (B). Draw a line between these two values. Read off the required Kv figure (C) on the Kv scale.

Determine the valve setting (turns) for the valve in question by drawing a horizontal line (D) from intersection point on the Kv scale to the scale turns for the valve in question.

We recommend that the chosen valve should be open at least three turns.

Example: The DN 25 valve requires to be open 7.9 turns for a Kv value of 6.4 at a flow rate of 0.55 l/s and pressure drop of 10 kpa.