

TA's balancing valves are manufactured in a variety of types and dimensions to give the best possible function in different system arrangements.

Increased demands for measuring the water flow for accurate regulation of heating systems have been met by providing both the STH and STHT-GS series with measuring outlets. For this reason these valves have obliquely arranged seats so that the pressure outlets will not be affected by the water flow.

By measuring the pressure-drop across the valves the flow can easily be determined with the help of the pressure-drop diagram.

The pressure-drop nipples which are of the same type as on the STA-T valve, are placed under the valve and are well protected by the flanges. TA's differential pressure gauge is used for pressure-drop measurement.

Regarding dimensions, temperature and pressure classes, see the following table:

Designation	Dim.	Type	Max. temp. °C	Art.No.
ST	10-15	Male and female thread	100	75 188
ST	20-50	Female thread	120	52 188
STH	20-125	Flange PN 10	120	52 190
STHT-GS	20-150	Flange PN 16	150	52 191
STHT-R	20-100	Flange PN 16	150	52 192
Key	10-15	-	-	52 187
Handle	20-150	-	-	52 186

For connection alternatives, see the following pages.

Balancing valve ST Conn. DN 10 and 15

The valves can be provided with KOMBI coupling on the inlet side and FPL coupling on the outlet side.

The spindle is regulated with a detached key.

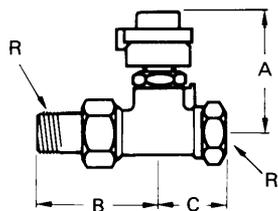
The valve is restricted to maximum opening at the desired value by altering the position of the ring. The scale marking on the ring is shown in the pressure-drop diagram.

The arrow on the valve body indicates the flow direction.

Technical Data

Pressure class PN 10
 Max. differential pressure . . . 100 kPa (10 m water column)
 Max. temperature 100° C
 Valve body AMETAL
 Spindle copper alloy SIS 5170
 Top piece copper alloy SIS 5170
 Scale ring Amide resin
 O-ring Butyl rubber
 Flow characteristics Logarithmic

**75 188
 Male and female thread**



Art.No.	Conn. DN	A	B	C	R	Weight kg
75 188-110	10	48	49	27	3/8	0,3
-115	15	49	57	32	1/2	0,35

Balancing valve ST Conn. DN 20-50

Manually operated flat slide valve with a control range of 180°. By turning the spindle the semi-circular flat slide is moved so that it shuts off a larger or smaller part of the flow area.

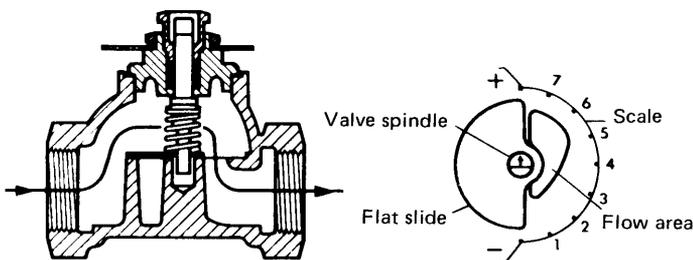
Setting is done by means of a separate control handle. When this is removed the valve setting cannot be altered. An arrow on the valve spindle shows the setting value.

The graduation marks on the scale are shown in the pressure-drop diagram for each valve size.

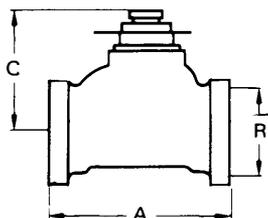
The arrow on the valve body indicates the flow direction.

Technical Data

Pressure class PN 10
 Max. differential pressure . . . 100 kPa (10 m water column)
 Max. temperature 120° C
 Valve body Cast iron SIS 0120
 Top piece Copper alloy SIS 5170
 Spindle Copper alloy SIS 5170
 Flat side Copper alloy SSI 5150
 Spindle seal Teflon-impregnated asbestos wool
 Flow characteristics Logarithmic



**52 188
 Female thread**



Art.No.	Conn. DN	A	R	C	Weight kg
52 188-020	20	100	20	3/4	1,3
-025	25	115	25	1	1,5
-032	32	130	32	1 1/4	2,0
-040	40	140	40	1 1/2	2,6
-050	50	165	50	2	3,9

Balancing valve ST Conn. DN 20–125

Manually operated flat slide valve with a control range of 180°. By turning the spindle the semi-circular flat slide is moved so that it shuts off a larger or smaller part of the flow area.

Setting is done by means of a separate control handle. When this is removed the valve setting cannot be altered. An arrow on the valve spindle shows the setting value.

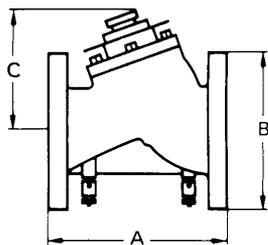
The graduation marks on the scale are shown in the pressure-drop diagram for each valve size.

The arrow on the valve body indicates the flow direction.

Technical Data, STH

Pressure class PN 10
 Flanges ISO/R 2084-1971
 Max. differential pressure . . . 150 kPa (15 m water column)
 Max. temperature 120° C
 Valve body Cast iron SIS 0120
 Top piece Cast iron SIS 0120
 Spindle Copper alloy SIS 5170
 Flat slide Copper alloy SIS 5150
 Spindle seal Teflon-impregnated asbestos wool
 Flow characteristics Logarithmic

52 190 Flange PN 10



Art.No.	Conn. DN	A	B	C	Weight kg
52 190-420	20	158	105	95	2,7
-425	25	158	115	95	3,8
-432	32	182	140	105	5,1
-440	40	182	150	105	5,7
-450	50	204	165	120	7,8
-465	65	225	185	130	13,2
-880	80	245	200	140	17,2
-890	100	270	220	155	20,6
-891	125	315	250	170	26,0

Balancing valve STHT-GS Conn. DN 20–150

Manually operated flat slide valve with a control range of 180°. By turning the spindle the semi-circular flat slide is moved so that it shuts off a larger or smaller part of the flow area.

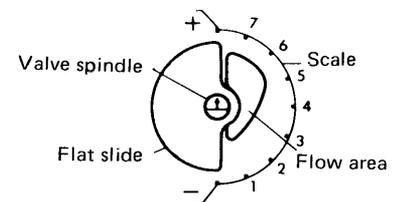
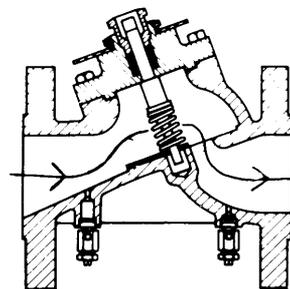
Setting is done by means of a separate control handle. When this is removed the valve setting cannot be altered. An arrow on the valve spindle shows the setting value.

The graduation marks on the scale are shown in the pressure-drop diagram for each valve size.

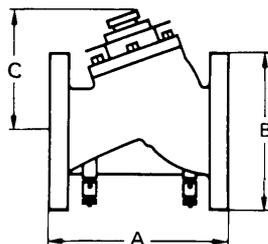
The arrow on the valve body indicates the flow direction.

Technical Data, STHT-GS

Pressure class PN 16
 Flanges ISO/R 2084-1971
 Max. differential pressure . . . 150 kPa (15 m water column)
 Max. temperature 150° C
 Valve body Nodular cast iron SIS 0717
 Top piece Nodular cast iron SIS 0717
 Spindle Stainless steel SIS 2346
 Flat slide Copper alloy SIS 5150
 Spindle seal Teflon-impregnated asbestos wool
 Flow characteristics Logarithmic



52 191 Flange PN 16



Art.No.	Conn. DN	A	B	C	Weight kg
52 191-420	20	158	105	95	4,0
-425	25	158	115	95	4,4
-432	32	182	140	105	6,5
-440	40	182	150	105	7,9
-450	50	204	165	120	9,7
-465	65	225	185	130	15,2
-880	80	245	200	140	22,0
-890	100	270	220	155	25,0
-891	125	315	250	170	29,0
-892	150	390	285	190	43

Balancing valve STHT-R Conn. DN 20–100

Manually operated flat slide valve with a control range of 180°. By turning the spindle the semi-circular flat slide is moved so that it shuts off a larger or smaller part of the flow area.

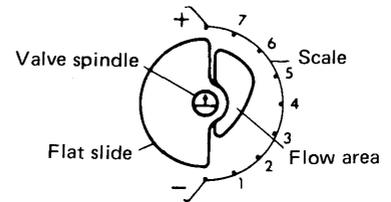
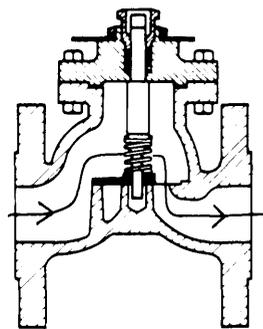
Setting is done by means of a separate control handle. When this is removed the valve setting cannot be altered. An arrow on the valve spindle shows the setting value.

The graduation marks on the scale are shown in the pressure-drop diagram for each valve size.

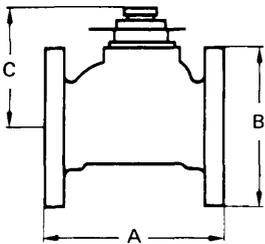
The arrow on the valve body indicates the flow direction.

Technical Data

Pressure class PN 16
 Flanges ISO/R 2084-1971
 Max. differential pressure . . . 100 kPa (10 m water column)
 Max. temperature 150° C
 Valve body Red brass SIS 5204
 Top piece Red brass SIS 5204
 Spindle Stainless steel SIS 2346
 Flat slide Copper alloy SIS 5204
 Spindle seal Teflon-impregnated asbestos wool
 Flow characteristics Logarithmic

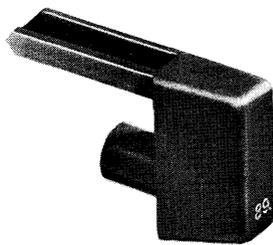


**52 192
Flange PN 16**



Art.No.	Conn. DN	A	B	C	Weight kg
52 192-420	20	125	105	120	5,0
-425	25	140	115	125	5,8
-432	32	150	140	135	7,9
-440	40	160	150	140	8,8
-450	50	170	165	150	11,8
-465	65	230	185	170	19,1
-880	80	245	200	200	26,0
-890	100	280	220	215	34,0

Control key 52 187-000 (DN 10–15)



Control handle 52 186-000 (DN 20–150)

