Technical documentation







STV Poppet valve

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FUNCTION AND USE

The sheet steel poppet valves are suitable for use in supply air and return air installations.

Around the poppet valve runs a cellular seal, which allows a perfect fit of the poppet valve and a secure seal.

A mounting ring is supplied for easy and quick installation of the poppet valves. This mounting ring is fastened to the ceiling with screws. The poppet valve is then mounted to the mounting ring by means of a bayonet catch.

the toilet valve can then be turned to achieve the required air volume. The air volume setting is fixed using a counter nut.

MODEL

STV-Zsupply airSTV-AReturn air

PROCESSING

Front frame

- -- Sheet steel (-SB)
 - Painted to RAL colour 9010 (white) (-9010, standard)
 - Painted to a freely selectable RAL colour (-xxxx, always with 4 digits)
- -- With circumferential foam seal.

Valve disc

-- Sheet steel (-SB), painted to the colour of the front frame.

Threaded spindle

-- Galvanised steel

Mounting ring

- -- Galvanised sheet steel.
- -- Fastening to the ceiling by means of screw mounting.
- -- With bayonet catch (for mounting the poppet valve to the mounting ring).

ACCESSORIES

Panelled cover plate (-PA)

- -- Sheet steel, painted to the colour of the poppet valve.
- -- Mounting ring firmly fitted to the panelled cover plate.

Saddle bracket (-SA)

- -- Galvanised sheet steel.
- -- Mounting ring firmly fitted to the saddle bracket.

MOUNTING

Screw mounting (-SM)

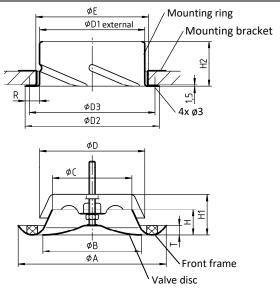
- Mounting ring fastening by means of screw mounting (-SM).
 - Without accessories: to the ceiling (with mounting bracket).
 - With accessories:firmly fitted to the panelled cover plate or saddle bracket.

STV TECHNICAL DOCUMENTATION

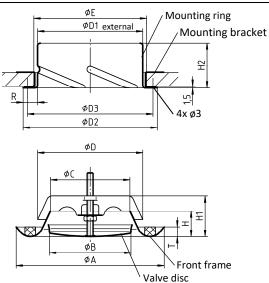
Function and use | Dimensions

DIMENSIONS

STV-Z (supply air)



STV-A (return air)



Available sizes of STV-Z / STV-A

NW	øΑ	øΒ		øΟ	øD	т	н	H1
		STV-Z	STV-A					
100	138	92	76	74	97.5	9	24	38
125	164	111	98	98	122.5	9	33	47
150	202	135	120	112	147.5	10	32	48
160	211	149	128	127	157.5	10	38	54
200	248	195	156	156	197.5	12	46	62

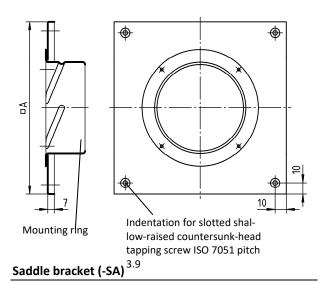
Available sizes of mounting ring

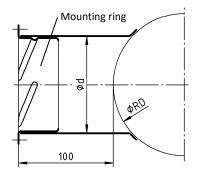
NW	ø D1 exter- nal	ø D2	ø D3	øΕ	R	H2
100	98	125	117	105	13.5	43
125	123	150	142	130	13.5	46
150	148	187	179	155	19.5	46
160	158	187	176	165	14.5	44
200	198	225	217	205	13.5	45



DIMENSIONS OF ACCESSORIES

Panelled cover plate (-PA)





Available sizes of accessories (-PA / -SA)

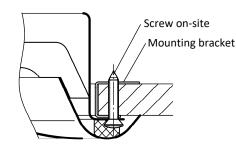
NW	□ A	ø RD	ød
100	185	150	100
125	210	200	125
150	285	200	150
160	285	200	160
200	285	250	200

Dimensions of accessories | Assembly detail

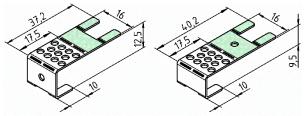
ASSEMBLY DETAIL

With mounting bracket:

For fastening the mounting ring with screw mounting (-SM).



Mounting bracket:



For models with screw mounting, 4 mounting brackets (mounting aids) are supplied loose.

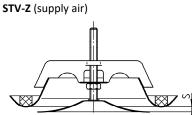
The mounting bracket is supplied loose and unbent. It will then be canted on site in order to fit the required ceiling depth. The single bore serves here as a marking for the ceiling depth T=12.5.

The mounting bracket can be shortened to 17.5 mm on site by removing the area marked in green.



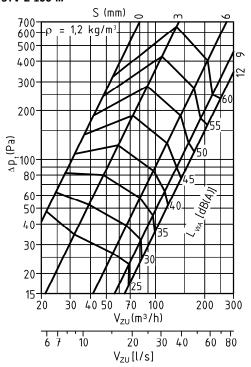
TECHNICAL DATA

Gap distance

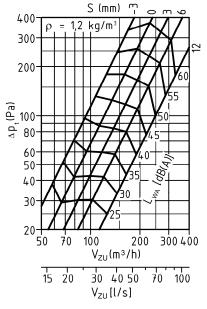


Pressure loss and noise level (supply air)

STV-Z-100-...



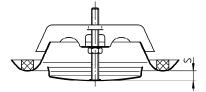
STV-Z-125-...



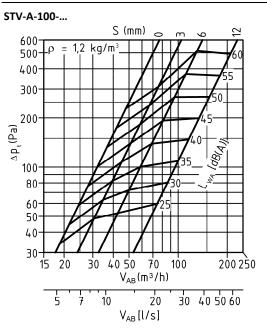
STV TECHNICAL DOCUMENTATION Technical data

Gap distance

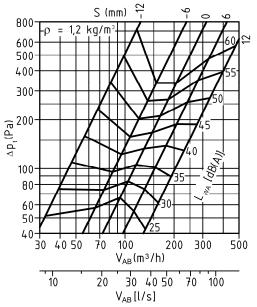
STV-A (return air)



Pressure loss and noise level (return air)



STV-A-125-...





Pressure loss and noise level (supply air)

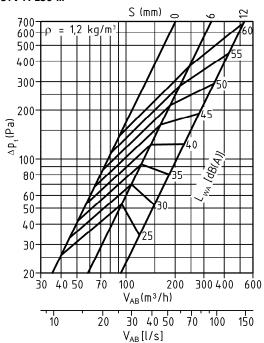
STV-Z-150-... S (mm) 9 600-= 1,2 kg/m³ Ļρ 500-400 300· 200 100 ∆p,(Pa) 80 60-ক্ট 50 40 30 30· 20 10 8. 70 100 200 300 400 600 ЗÖ 40 50 20 V_{zu}(m³/h) 67 10 20 30 40 50 70 100 150 V_{zu}[l/s] STV-Z-160-... S (mm) 🙅 500 \sim = 1,2 kg/m³ ρ 400 300 200 (Pa), 100. 100. 80. 60-50 40 30· 5 20 15 40 50 70 100 200 ЗÖО 500 800 25 30 $V_{zu}(m^3/h)$ 7 10 20 30 40 50 70 100 200 V_{ZU}[l/s]

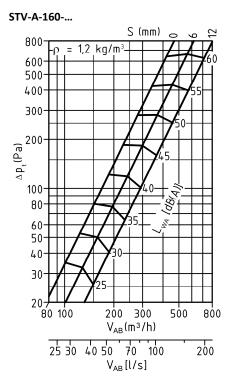
STV TECHNICAL DOCUMENTATION

Technical data |

Pressure loss and noise level (return air)

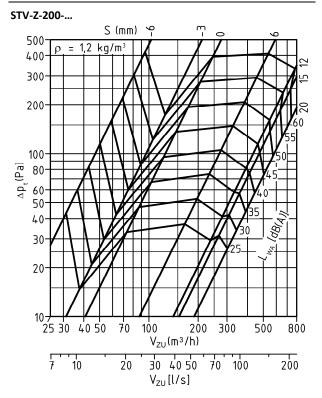








Pressure loss and noise level (supply air)

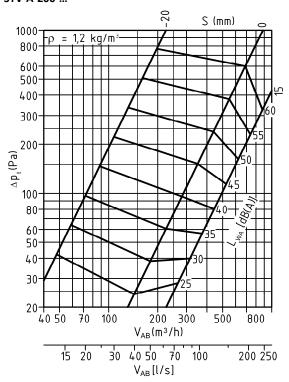


STV TECHNICAL DOCUMENTATION

Weight | Legend

Pressure loss and noise level (return air)

STV-A-200-...



WEIGHT

STV poppet valve with mounting ring

NW	Weight (kg)				
	STV-Z	STV-A			
100	0.25	0.25			
125	0.32	0.32			
150	0.45	0.45			
160	0.45	0.45			
200	0.65	0.65			

LEGEND

V _{ZU}	(m³/h) [l/s]	=	supply air volumetric flow
V _{AB}	(m³/h) [l/s]	=	return air volumetric flow
Δpt	(Pa)	=	Pressure loss
L _{WA}	[dB(A)]	=	A-weighted sound power level
			$(L_{WA} = L_{WA1} + KF)$
L _{W1}	[dB/Okt]	=	Sound power level / octave, relative to 1
			m ² of inflow area
KF	(-)	=	Correction factor
Q	(kg/m³)	=	Density
NW	(mm)	=	Nominal width
S	(mm)	=	gap width



STV ORDER CODE

01	02	03	04	05	06	07
Туре	Type of air	Nominal width	Material	Paint	Mounting	Accessories
Example						
STV	-Z	-100	-SB	-9010	-SM	-00

All fields must be filled when ordering.

Sample STV-Z-100-SB-9010-SM-00

STV poppet valve with mounting ring | For supply air | NW 100 | Sheet steel | Painted to RAL colour 9010 (white) | With screw mounting | Without accessories

ORDER DETAILS

01 - Type

STV = STV poppet valve with mounting ring

02 - Type of air

- Z = supply air
- A = Return air

03 - Nominal width

100= NW 100125= NW 125150= NW 150160= NW 160200= NW 200

04 - Material

SB = sheet steel

05 – Paint

- 9010 = painted to RAL colour 9010 (white) (standard).
- xxxx = RAL colour can be freely selected (always with 4 di gits).

06 - Mounting

SM = screw mounting with mounting bracket (standard).

07 - Accessories

- 00 = without accessories
- PA = panelled cover plate, made of sheet steel, painted to the colour of the poppet valve (mounting ring is firmly fitted to the panelled cover plate).
- SA = saddle bracket, made of galvanised sheet steel (mounting ring is firmly fitted to the saddle bracket).



SPECIFICATION TEXT

Poppet valve for supply air, consisting of a round sheet steel front frame (-SB) painted to RAL colour 9010 (white)

(-9010, standard) or painted to a freely selectable RAL colour (-xxxx, always with 4 digits), with circumferential foam seal. With adjustable valve disc made of sheet steel (painted to the colour of the front frame), for air volume regulation. Counter nut for securing the air volume setting and threaded spindle made of galvanised steel.

With mounting ring made of galvanised sheet steel and bayonet catch (for mounting the poppet valve to the mounting ring). Mounting ring fastening to the ceiling by means of screw mounting (-SM), with mounting bracket. Product: SCHAKO type STV-Z-...

--Poppet valve for return air, with adjustable valve disc. Product: SCHAKO type STV-A-...

Accessories (at an extra charge):

- --- Panelled cover plate (-PA), made of sheet steel, painted to the colour of the poppet valve (mounting ring is firmly fitted to the panelled cover plate).
- --- Saddle bracket (-SA), made of galvanised sheet steel (mounting ring is firmly fitted to the saddle bracket).