

## VALLOX Pureo

### ACCESSORIES

PRODUCT INFORMATION			
Product code	Model	Product name	Technical name
3614010	Vallox Pureo TX 500	Electric post-heater (D 315)	CV 31-120-3 MQXL
3614020	Vallox Pureo TX 900	Electric post-heater (D 400)	CV-40-120-3-MQXL
3614030	Vallox Pureo TX 1300	Electric post-heater (800x400 mm)	VFL-MQXL400V~17kW
3614040	Vallox Pureo TX 1800	Electric post-heater (1000x400 mm)	VFL-MQXL400~24kW

#### -MQXL

- A duct heater with integrated control for external 0...10 V control voltage.
- The -MQXL model also features an integrated electronic flow switch that further simplifies the installation as it can be installed as a “standalone” unit.
- The heater is equipped with an integrated relay with a potential-free alarm contact, which indicates a loss of voltage or whether the manually resettable overheating protection device has tripped.

#### CV -MQXL, casing

- Aluzinc-coated sheet steel and heating element
- of stainless steel, EN 1.4301.
- The duct heaters meet the air tightness class D requirements as per EN 15727.
- An integrated electronic flow switch and an integrated relay with a potential-free alarm contact, which indicates a loss of voltage or whether the manually resettable overheating protection device has tripped.
- Adjusted with an internal regulator for an external 0–10 V control signal.



## VFL

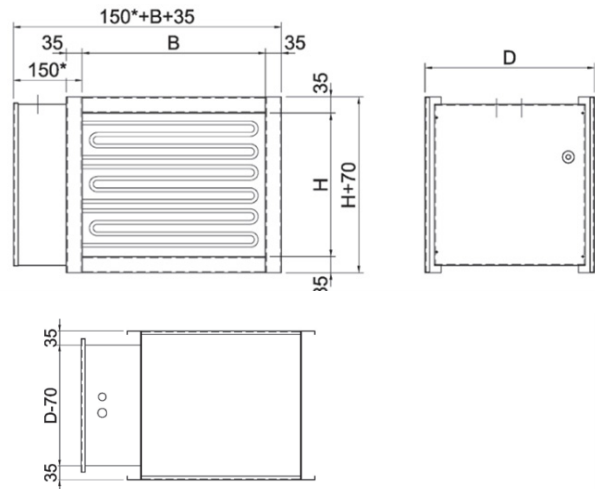
- Rectangular electric duct heaters with integrated control equipment for an external 0–10 V control signal.
- Duct heaters with integrated control equipment are supplied ready for installation.

### The advantages:

- Minimum amount of cabling — fully connected control equipment
- Easy installation — reduced installation cost
- Minimum risk of misconnections during installation
- Accurate settings.

## -MQXL

- Connected to external 0–10 V control signal.
- Includes a potential-free alarm contact, which indicates whether the manually resettable overheating protection device has tripped.
- The heater includes an integrated electronic flow switch.
- The casing is made of aluzinc-coated sheet steel AZ 185, which meets the requirements for corrosivity class C4.
- Heating elements of stainless steel, EN 1.4301.
- Includes a potential-free alarm contact, which indicates whether the manually resettable overheating protection device has tripped.
- The heater includes an integrated electronic flow switch. Control by means of a built-in regulator for an external 0–10 V control signal.



## PRODUCT INFORMATION

Product code	Model	Product name	Technical name
3617050	Vallox Pureo TX 500	Circulation unit TX 500	GRB301 KVS 0.63
3617060	Vallox Pureo TX 900	Circulation unit TX 900	GRB301 KVS 2.5
3617070	Vallox Pureo TX 1300	Circulation unit TX 1300	GRB301 KVS 4
3617080	Vallox Pureo TX 1800	Circulation unit TX 1800	GRA311 Dn20 KVS 6.3

## CIRCULATION UNITS WITH 2-WAY VALVE FUNCTION

GRB300 is a compact but powerful circulation unit, designed to fit in small spaces without room for compromises. The circulation unit is intended for heating circuits where control of outgoing flow and temperature is required. The heating water produced in the heat source is mixed to the desired set temperature and then delivered to the heating receiver, such as air convector units.

### The advantages:

- Compact design
- Variable primary flow and constant secondary flow
- 21 different flow settings directly in the pump – no balancing valve needed
- Feedback on power consumption of the pump
- High class insulation of hydronic parts
- Easy to install with an adjustable wall bracket
- Pretested and ready to install



### Technical specifications:

#### Circulation unit, in general:

- Pressure class: PN 10
- Working pressure: 1.0 MPa (10 bar)
- Media temperature: max. +95°C, min. +5°C
- Ambient temperature: max. +40°C, min. 0°C
- Connections: Internal thread (G), ISO 228/1, External thread (G), ISO 228/1
- Insulation: EPP  $\lambda$  0.036 W/mK
- Media: Heating water (in accordance with VDI2035) Water/glycol mixtures, max. 50%.
- Water/glycol mixtures affect the performance of the pump. In applications that use water/glycol mixtures, the pump performance should be considered.

#### Material in contact with water:

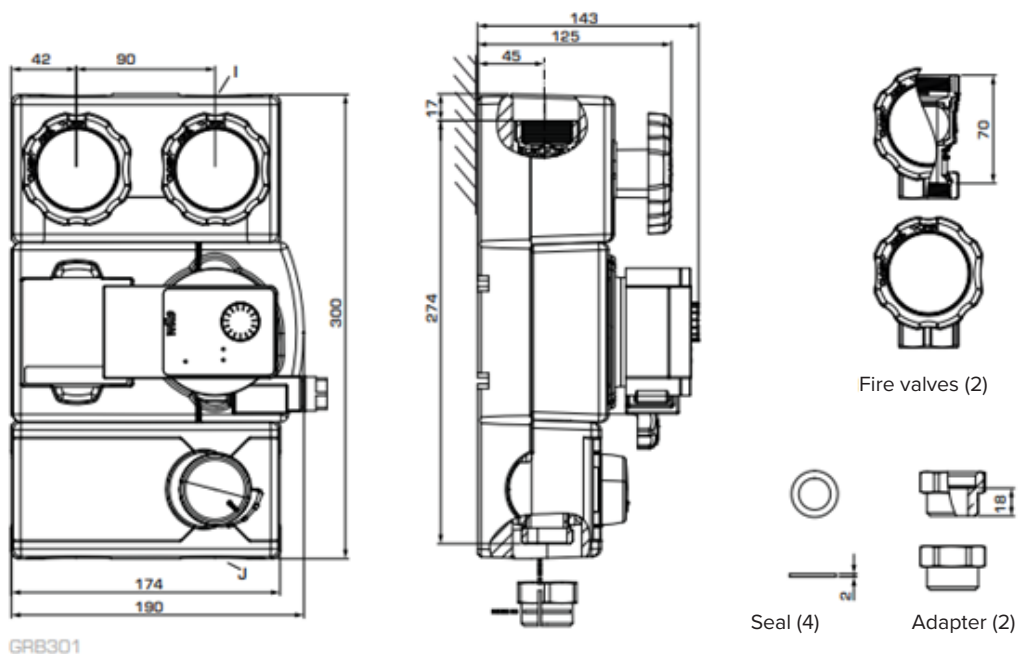
- Components: Steel, cast iron, brass
- Sealing material: PTFE, aramid fibre, EPDM
- EEI (Energy Efficiency Index)
- Wilo circulation pump: <0.20
- Conformities and certificates:
- LVD 2014/35/EU SI 2016 no. 1101
- EMC 2014/30/EU SI 2016 no. 1091
- RoHS3 2015/863/EU SI 2012 no. 3032
- ErP 2009/125/EU SI 2010 no. 2617
- PED 2014/68/EU, article 4.3 / SI 2016 No. 1105 (UK)

#### Integrated mixing valve:

- Valve type: Mixing valve VRD138
- Max. differential pressure drop: 100 kPa (1 bar)
- Close off pressure: 200 MPa (2 bar)
- Leak rate in % of flow\*: < 0.05%
- \* Differential pressure 100kPa (1 bar)

### Integrated circulation pump:

- Type: Wilo Yonos PICO 15/1-6 130
- Power supply: 230 ± 10% V AC, 50/60 Hz
- Power consumption: 4–40 W
- Enclosure rating: IP X4D
- Insulation class: F
- EEI (Energy Efficiency Index): <0.20



SERIES GRB300							
Product code	Reference	DN	Kvs*	Pump	Connections		Weight kg
					I	J	
61045100	GRB301	20	0.4	Wilo Yonos PICO 15/1-6	G 1"	G 1"	4.7
61045200			0.63				
61045300			1.0				
61045400			1.6				
61045500			2.5				
61045600			4.0				

\* Kvs value m³/h with 1 bar pressure drop

## PRODUCT INFORMATION

Product code	Model	Product name	Technical name
3610010	Vallox Pureo TX 500	Damper (D 315mm)	FG SPBA-3L
3610020	Vallox Pureo TX 900	Damper (D 400mm)	FG SPBA-3L
3610030	Vallox Pureo TX 1300	Damper (800x400 mm)	FG SPBA-3L
3610040	Vallox Pureo TX 1800	Damper (1000x400 mm)	FG SPBA-3L

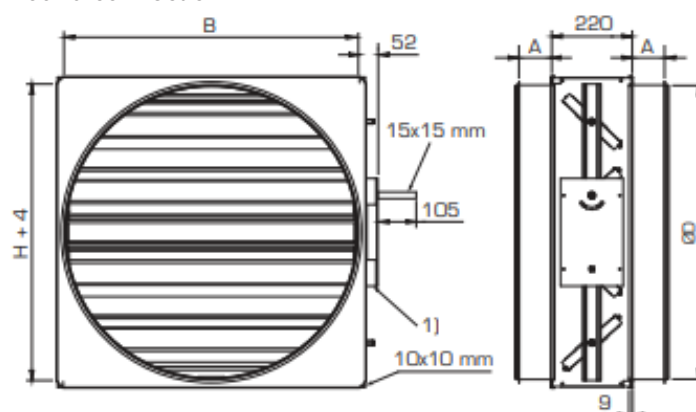
## REGULATION AND SHUT-OFF DAMPER SPBA

Multileaf dampers are used as regulation, shut-off and mixing dampers in air handling systems and units. Multileaf dampers are mounted on rectangular ducts and units by means of a slip joint or a flange joint, and to circular ducts with sealed spigots. Multileaf dampers are equipped with a base for an actuator and an external position indicator.

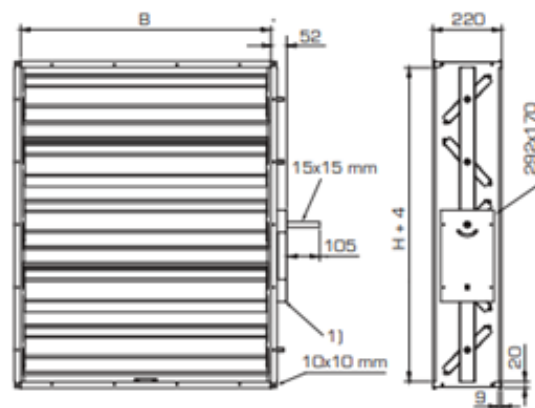
### Technical specifications:

- Leakage class CEN3
- Blades insulated
- Robust structure
- Joining profile, circular joint
- Motor base included
- Broad range of actuators
- Made of galvanised steel
- Width of casing 220 mm
- thermal transmittance  $U_m = 4 \text{ W/m}^2 \text{ K}$

Round connection



Joining profile



1) Motor base

## PRODUCT INFORMATION

Product code	Model	Product name	Technical name
3611010	Vallox Pureo TX 500	Silencer (D 315 mm)	BDER-71-031-100
3611020	Vallox Pureo TX 900	Silencer (D 400 mm)	BDER-71-040-100
3611030	Vallox Pureo TX 1300	Silencer (D 500 mm)	BDER-71-050-100
3611040	Vallox Pureo TX 1800	Silencer (D 630 mm)	BDER-71-063-100

## RECTANGULAR SILENCER BDER

Rectangular BDER silencers are suitable for use as universal absorbers in air-conditioning systems and in conjunction with controllers, particularly where a small absorber size and good attenuation values are required. BDER-71 is a standard model with fixed casing. The interior of the absorber is designed to provide optimum attenuation performance. If the absorber is used together with a flow measuring device, the safety distance required to ensure a reliable measurement of the air flow must be determined on a case-by-case basis.



### Product information:

- Efficient attenuation
- Small size
- Migration of absorbent fibres prevented
- M1 cleanliness class
- Tightness class D (EN 12237)

### Construction:

Rectangular BDER silencers consist of a galvanised sheet metal casing, absorbent material (polyester fibre) and end pieces conforming to SFS 3282, with rubber gaskets. The silencers are certified for cleanliness class M1.

### Use and maintenance:

The product requires no maintenance other than cleaning with a nylon brush as part of normal duct cleaning. The frequency of cleaning should be the same as that specified for the entire ventilation system.

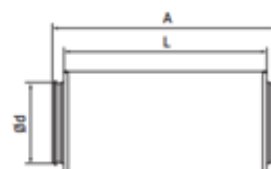
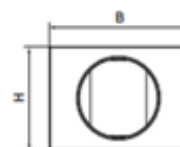
## DIMENSIONS AND WEIGHTS

Size	Length	Dimensions (mm)					Weight (kg)
		ød	L	A	B	H	
031	-100	315	1000	1095	460	370	11.4
040	-100	400	1000	1095	520	455	17.4
050	-120	500	1202	1316	661	561	35.9
063	-120	630	1202	1316	791	685	44.1

## SOUND-DAMPENING

Size	Length	Sound-dampening (dB) at medium frequency of the octave band							
		63	125	250	500	1000	2000	4000	8000
031	-100	6	6	10	19	30	27	16	14
040	-100	4	5	9	22	26	21	16	12
050	-120	4	4	13	23	39	35	21	15
063	-120	3	4	11	19	33	24	16	13

BDER-71  
Dimensions and weights



## PRODUCT INFORMATION

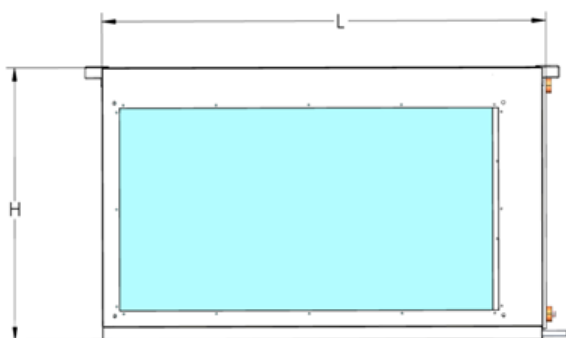
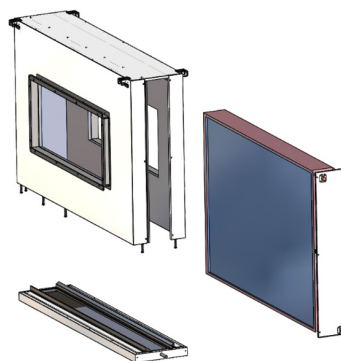
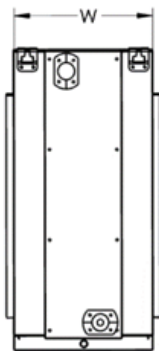
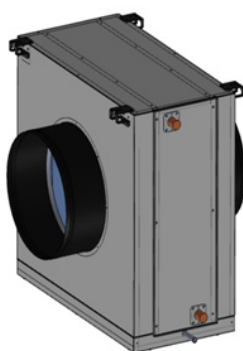
Product code	Model	Product name	Technical name
3615010	Vallox Pureo TX 500	Cooling radiator (D 315mm)	BM018VLCW01
3615020	Vallox Pureo TX 900	Cooling radiator (D 400mm)	BM032VLCW01
3615030	Vallox Pureo TX 1300	Cooling radiator (800x400 mm)	BM047VLCW01
3615040	Vallox Pureo TX 1800	Cooling radiator (1000x400 mm)	BM065VLCW01

Vallox Pureo TX 500 and TX 900 cooling radiators have round duct outlets (ø 315, ø 400). Vallox Pureo TX 1300 and TX 1800 cooling radiators have rectangular outlets (800x400 mm, 1000x400 mm). The outlet connections match the size of the connections of the units.

- Material of enclosure: painted aluzinc steel.
- Drainage tray of stainless steel.
- Draining nozzle pipe ø 19 mm.
- 4 mounts.

## DIMENSIONS AND WEIGHTS

Unit	Radiator type	Radiator dimensions (mm)			Unit dimensions (mm)			
		Ldmax	HR	TR	L	W	H	Duct connection
Pureo 500 CW	M 25x22-3/8 C S 18T 4R 610A 2.5P 9NC	745	500	145	755	350	572	ø 315
Pureo 900 CW	M 25x22-3/8 C S 24T 4R 740A 2.5P 16NC	880	650	145	890	350	722	ø 400
Pureo 1300 CW	M 25x22-3/8 C S 30T 4R 1245A 3P 30NC	1400	800	145	1405	350	872	400 x 800
Pureo 1800 CW	M 25x22-3/8 C S 36T 4R 1500A 3.2P 36NC	1655	950	145	1660	500	1022	400 x 1000



PRODUCT INFORMATION			
Product code	Model	Product name	Technical name
3610050	Vallox Pureo TX 500	Damper actuator 4 Nm	Belimo LF24.1.
3610050	Vallox Pureo TX 900	Damper actuator 4 Nm	Belimo LF24.1.
3610050	Vallox Pureo TX 1300	Damper actuator 4 Nm	Belimo LF24.1.
3610050	Vallox Pureo TX 1800	Damper actuator 4 Nm	Belimo LF24.1.

A rotary actuator with a safety function for the adjustment of dampers in air conditioning systems.

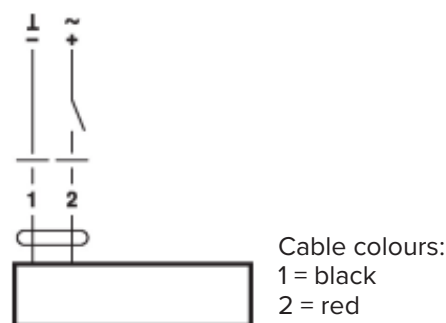
- Size of damper max. 0.8 m<sup>2</sup>
- Torque motor 4 Nm
- Nominal voltage AC/DC 24 V
- Control open-closed

### Technical specifications:

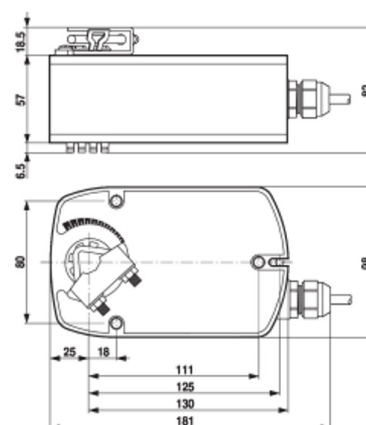
- Electrical data Nominal voltage AC/DC 24 V
- Nominal voltage frequency 50/60 Hz
- Nominal voltage range AC 19.2...28.8 V / DC 21.6...28.8 V
- Power consumption in operation 5 W
- Power consumption in rest position 2.5 W
- Power consumption for wire sizing 7 VA
- Power consumption for wire sizing note I<sub>max</sub> 5.8 A @ 5 ms
- Connections Cable 1 m, 2 x 0.75 mm<sup>2</sup>
- Parallel operation Yes (note the performance data)
- Operational data Torque motor 4 Nm
- Torque fail-safe 4 Nm
- Direction of motor motion selectable by mounting L/R
- Direction of fail-safe motion selectable by mounting L/R
- Manual override No
- Angle of rotation max. 95°
- Angle of rotation - note: Can be adjusted 37–100% by integrated mechanical end stop
- Running time motor 40...75 s / 90°
- Running time fail-safe <20 s / 90° <20 s @ -20...50°C / <60 s @ -30°C
- Sound power level, motor 50 dB(A)
- Mechanical interface Universal shaft clamp 8...16 mm
- Position indication Mechanical
- Service life min. 60,000 fail-safe positions
- Safety data Protection class IEC/EN III, Low voltage (SELV)
- Degree of protection IEC/EN IP54
- EMC CE according to 2014/30/EU
- Low voltage directive CE according to 2014/35/EU
- Certification IEC/EN IEC/EN 60730-1 and IEC/EN 60730-2-14
- Mode of operation Type 1.B
- Rated impulse voltage supply / control 0.8 kV
- Pollution degree 3
- Ambient temperature -30...50°C
- Storage temperature -40...80°C
- Ambient humidity max. 95% RH, non-condensing
- Maintenance maintenance-free
- Weight 1.4 kg



Schematic diagrams  
AC/DC 24 V, open-closed



Dimensional drawings





## PRODUCT INFORMATION

Product code	Model	Product name	Technical name
3612010	Vallox Pureo TX 500	Filter F7 (490 x 592 x 535 mm)	SG70-56x535-8
3612020	Vallox Pureo TX 500	Filter M5 (490 x 592 x 535 mm)	PG50-56x535-8
3612030	Vallox Pureo TX 900, 1300, 1800	Filter F7 (592 x 592 x 535 mm)	SG70-66x535-10
3612040	Vallox Pureo TX 900, 1300, 1800	Filter M5 (592 x 592 x 535 mm)	PG50-66x535-10
3612050	Vallox Pureo TX 1300	Filter F7 (287 x 592 x 535 mm)	SG70-36x535-4
3612060	Vallox Pureo TX 1300	Filter M5 (287 x 592 x 535 mm)	PG50-36x535-4

### F7 advantages:

- Low pressure drop
- Excellent dust binding capacity
- Good moisture resistance
- High filtering efficiency
- Tested for food contact in accordance with the CE 1935/2004 standard

### Features:

- Filtering grades ISO 16890: 2016
- Filtering material: Nanofibre
- Frame material: Metal and plastic
- End pressure drop: 300 Pa
- Heat resistance (constant) 80°
- Moisture resistance 100%RH

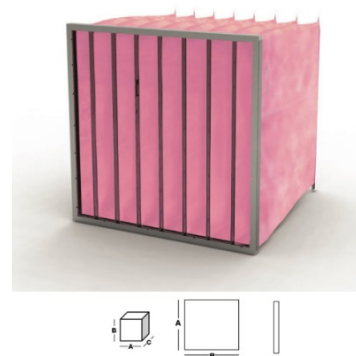


### M5 advantages:

- Low pressure drop
- Excellent dust binding capacity
- Good moisture resistance
- High filtering efficiency
- Tested for food contact in accordance with the CE 1935/2004 standard

### Features:

- Filtering grades ISO 16890: 2016
- Filtering material: Nanofibre
- Frame material: Metal and plastic
- End pressure drop: 300 Pa
- Heat resistance (constant) 80°
- Moisture resistance 100%RH



## PRODUCT INFORMATION

Product code	Model	Product name	Technical name
3613010	Vallox Pureo	Odour trap	Wavin HepvO 32 odour trap 3045616

The functioning of the odour trap (includes a knuckle bend and running adaptor) is based on membrane technology, and it contains no water. This means that the product is silent and does not cause any gurgling sounds in the drain. The membrane structure also efficiently prevents foaming. The water seal has excellent flow characteristics, compared to a normal water seal.



## PRODUCT INFORMATION

Product code	Model	Product name
3616010	Vallox Pureo TX 500	Cooling valve (DN20 KVS 4.00)
3616020	Vallox Pureo TX 900	Cooling valve (DN25 KVS 6.30)
3616030	Vallox Pureo TX 1300	Cooling valve (DN32 KVS 10.00)
3616040	Vallox Pureo TX 1800	Cooling valve (DN40 KVS 16.00)

The valve's closing force from gate A to gate AB is provided by the integrated return spring. The valve comes with a screwed manual adjustment knob for manual control of the valve and protection of the valve stem. This enables filling the system, and the heating/cooling system can be used while the construction work is still ongoing without using controllers or valve motors.

### VSMF-320-4.0E DN 20 Kv 4

- External thread R 3/4", flat sealing connections
- Connectors: L15UK Red metal
- T max 120°C
- Stroke 6.5 mm PN 16



### V5833A2xxx Red metal

- Material Red metal
- Size DN25 (1"), DN32 (1 1/4"), DN40 (1 1/2")
- Trim: Stem Stainless steel, Plug Brass

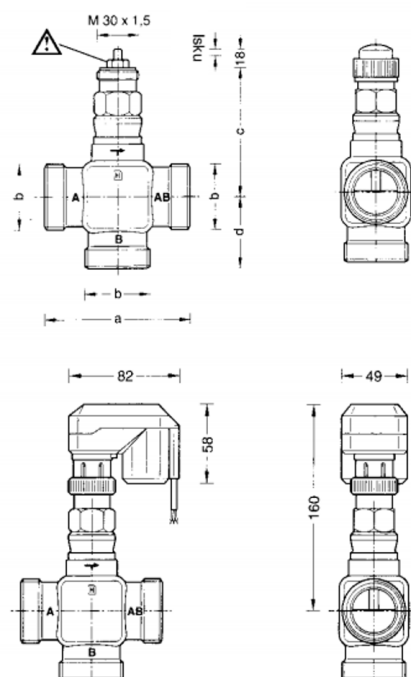


## PRODUCT INFORMATION

DN	a	b	b	d
20	66	G3/4"		33
25	105	G1 1/2"	92	52.5
32	105	G2"	92	52.5
40	130	G2 1/4"	98	65.0

### V5853A Dimensions (mm)

DN25...DN40



## PRODUCT INFORMATION

Product code	Model	Product name	Technical name
3616050	Vallox Pureo TX 500, 900, 1300, 1800	Cooling valve actuator	NRD24-SR-SI

The drive of a synchronous motor is converted into linear motion of the actuator stem by using a spur gear transmission. The actuator and valve are directly connected by a nut. An integrated mechanism limits the stem force. Installed microswitches switch off the actuator precisely when the specified stem force is reached.

### Technical specifications:

- Voltage AC/DC 24 V
- Power consumption (running) 1.5 W
- Power consumption for wire sizing 3 VA
- Connection supply control: Cable 1 m, 4 x 0.75 mm<sup>2</sup>
- Force 500 N
- Type of control DC 0...10 V
- Manual override
- Temporary and permanent gear train disengagement with rotary knob on the housing
- Stroke 5.5 mm
- Running time (motor) 35 s / 5.5 mm
- Product category IP40



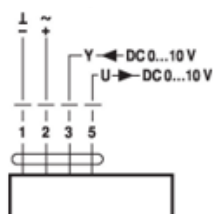
## ELECTRIC INSTALLATION



Supply from isolating transformer. Parallel connection of other devices possible. Observe the performance data. The actuator is activated with a standard control signal 0...10 V.

### Wiring diagrams

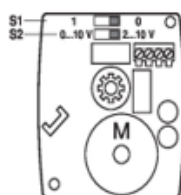
AC/DC 24 V, modulating



### Cable colours:

- 1 = black
- 2 = red
- 3 = white
- 5 = orange

## OPERATING CONTROLS AND INDICATORS



S1		
0*		Y = 0%
1		Y = 100%
S2		
2 ... 10 V*		
0 ... 10 V		

# VALLOX

[www.vallox.com](http://www.vallox.com)

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