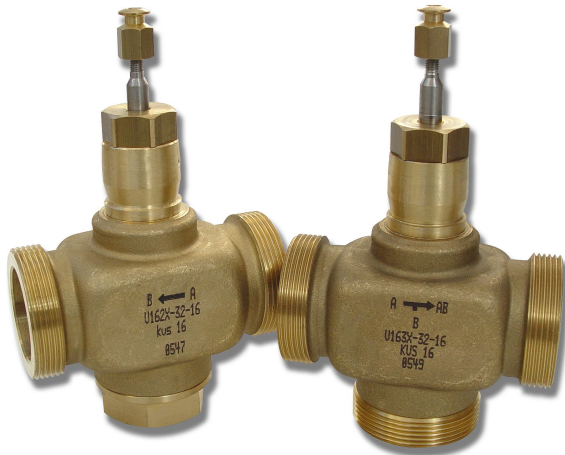


V162X, V163X

EXTERNAL THREADED END-CONNECTION LINEAR VALVE PN16

PRODUCT DATA



APPLICATION

These two-port and three-port valves are used for control of hot or chilled water in heating, ventilation and air conditioning systems and can be operated by electric linear actuators such as AL0620 and AL1820.

FEATURES

- Brass body with external threaded end connections
- Low seat leakage rate
- Self-adjusting packing
- Accurate positioning to ensure state-of-the-art temperature control
- Directly-coupled electric actuators for easy mounting
- Constant total flow throughout full plug travel

SPECIFICATIONS

Action:	V162X	Stem down to close port A-B
	V163X	Stem up to close port A-AB
Nominal pressure rating:		PN16
Flow characteristic:	V162X	equal percentage
	V163X	equal percentage: port A-AB linear: port B-AB
Rangeability:		50:1
Leakage rate:		≤0.05% of k_{vs}
Stroke:		20 mm
Valve body:		
Pipe connections:		External threading as per ISO228
Material:		Brass
Dimensions:		See Fig. 1 on page 4
Seat:		
V162X:		Stainless steel
V163X:		DN15: Stainless steel DN20...50: body integrated
Plug:		Brass
Stem:		Stainless steel
Packing:		Spring-loaded carbon fiber reinforced PTFE V-rings
Medium temperature and pressure:		
Water		2 to 120 °C max. 1600 kPa 120 to 170 °C max. 1490 kPa
Max. temperature differential in alternating hot/cold water use:		60 K
Maximum glycol concentration		50%

SIZES AND FLOW CAPACITIES

Table 1. Size and flow capacity (in m³/h)

order number	valve size	k _{vs} m ³ /h
V162X-15-0.6	DN15	0.6
V162X-15-1.0	DN15	1.0
V162X-15-1.6	DN15	1.6
V162X-15-2.5	DN15	2.5
V162X-15-4.0	DN15	4.0
V162X-20-6.3	DN20	6.3
V162X-25-10	DN25	10
V162X-32-16	DN32	16
V162X-40-25	DN40	25
V162X-50-40	DN50	40
V163X-15-2.5	DN15	2.5
V163X-15-4.0	DN15	4
V163X-20-6.3	DN20	6.3
V163X-25-10	DN25	10
V163X-32-16	DN32	16
V163X-40-25	DN40	25
V163X-50-40	DN50	40

INSTALLATION

Water should meet VDI2035 requirements.

Do not install valve with stem below the horizontal.

Fluid flow must correspond with the arrow direction on the valve body.

The installation of a strainer is strongly recommended.

The valve should be installed as stress-free as possible.

CLOSE-OFF PRESSURE RATINGS


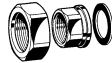
Electric Actuators

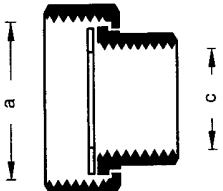
Table 2. Close-off pressure ratings (in kPa) of electric actuators

actuator		valve size					
type	force	DN15	DN20	DN25	DN32	DN40	DN50
AL0620	600 N	1600	1600	1000	700	460	260
AL1820	1800 N	-	-	1600	1600	1500	850

ACCESSORIES

V162X 2-port valves require 2 internal thread connection sets, V163X 3-port valves require 3 internal thread connection sets. All valves are supplied with the requisite number of connection sets. Spare connection sets are available as below.

connection	pipe size	DN	order number	connection set		description
internal thread	G 1/2"	15	ACCV-TC-15			consisting of 1 union nut, 1 tailpiece, and 1 gasket
	G 3/4"	20	ACCV-TC-20			
	G 1"	25	ACCV-TC-25			
	G 1-1/4"	32	ACCV-TC-32			
	G 1-1/2"	40	ACCV-TC-40			
	G 2"	50	ACCV-TC-50			

dimensions of connection sets			order number
	a	c	
	G 1-1/8"	G 1/2"	ACCV-TC-15
	G 1-1/4"	G 3/4"	ACCV-TC-20
	G 1-1/2"	G 1"	ACCV-TC-25
	G 2"	G 1-1/4"	ACCV-TC-32
	G 2-1/4"	G 1-1/2"	ACCV-TC-40
	G 2-3/4"	G 2"	ACCV-TC-50

DIMENSIONS

Table 3. Dimensions (in mm)

valve size	A	B	C (V163X only)	Y	
				V162X	V163X
DN15	80	40	55	89	107
DN20	90	40	55		
DN25	110	40	55		
DN32	120	40	55		
DN40	130	40	60		
DN50	150	40	65		

For actuator dimensions, please refer to:

AL0620-24-x, -230-x	TA200898
AL0620-P-x	TA200900
AL1820-24-K, -230-K	TA200905
AL1820-P-K	TA200901

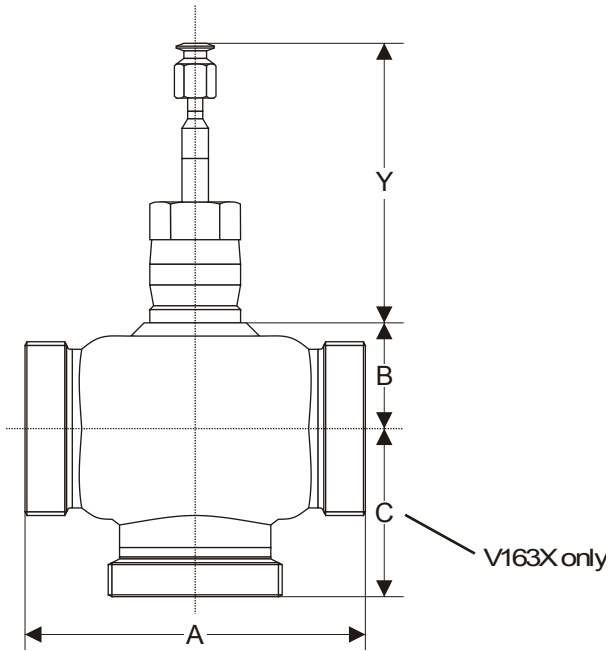


Fig. 1. Dimensions

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Trend Control Systems Limited

Albery House, Springfield Road, Horsham, West Sussex, RH12 2PQ, UK. Tel:+44 (0)1403 211888 Fax:+44 (0)1403 241608 www.trendcontrols.com

Trend Control System USA

6670 185th Avenue NE, Redmond, Washington 98052, USA. Tel:(425) 869-3900 Fax:(425) 869-8445 www.trend-america.com