

V163N

INTERNAL THREADED END-CONNECTION LINEAR VALVE PN16

PRODUCT DATA



APPLICATION

Single seated control or shut-off valve for:

- hot water;
- chilled water;;
- domestic hot water;

in heating, ventilation, air conditioning systems, and open circuits.

Operated by electric linear actuators (e.g. AL0620 and AL1820)

FEATURES

- Brass body with internal 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: Stem up to close port A-AB

Nominal pressure rating:

Flow characteristic: equal percentage: port A-AB

linear: port B-AB

Rangeability: 50:1

Leakage rate: \leq 0.05% of k_{vs}

Stroke: 20 mm

Valve body:

Pipe connections: Internal threading as per ISO228

Material: **Brass**

Dimensions: See Fig. 1 on page 2

Trim:

DN15: stainless steel Seat:

DN20...50: body integrated

Pluq: **Brass**

Stainless steel Stem:

Spring-loaded carbon fiber Packing:

reinforced PTFE V-rings

Medium temperature and

pressure:

2 to 120 °C max. 1600 kPa Water

120 to 170 °C max. 1490 kPa

Max. temperature differential in alternating hot/cold

water use:

60 K 50%

Maximum glycol concentration

V163N Data Sheet

SIZES AND FLOW CAPACITIES

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

Order Number	Valve size	k _{VS} m ³ /h
V163N-15-2.5	DN15	2.5
V163N-15-4.0	DN15	4
V163N-20-6.3	DN20	6.3
V163N-25-10	DN25	10
V163N-32-16	DN32	16
V163N-40-25	DN40	25
V163N-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.

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

DIMENSIONS

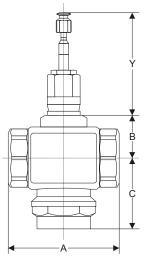


Fig. 1. Dimensions

Table 3. Dimensions (in mm)

valve size	Α	В	С	Y
DN15	83		65	
DN20	83		65	
DN25	103	40	66.5	107
DN32	106	40	72.5	107
DN40	120		77	
DN50	134		83.5	

For actuator dimensions, please refer to:

AL0620-24-x,	-230-x	TA200898
AL0620-P-x		TA200900
AL1820-24-K	-230-K	TA200905
ΔI 1820-P-K		TA20001

Please send any comments about this or any other Trend technical publication to techpubs@trendcontrols.com

© 2012 Honeywell Technologies Sàrl, ECC Division. All rights reserved. Manufactured for and on behalf of the Environmental and Combustion Controls Division of Honeywell Technologies Sàrl, Z.A. La Pièce, 16, 1180 Rolle, Switzerland by its Authorized Representative, Trend Control Systems Limited.

Trend Control Systems Limited reserves the right to revise this publication from time to time and make changes to the content hereof without obligation to notify any person of such revisions or changes.

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-americas.com