

V163F (38 mm) FLANGED LINEAR VALVE PN16

SPECIFICATION DATA



GENERAL

These three-port mixing valves are used for modulating control of hot/chilled water or steam in heating, ventilation, and air conditioning systems and can be operated by electric linear actuators V1838.

FEATURES

- Cast iron body with flanged end connections
- Low seat leakage rate
- Metal-to-metal seating for long life span
- Self-adjusting packing
- Accurate positioning to ensure state-of-the-art temperature control
- Easy mounting of direct-coupled electric actuators
- Constant total flow throughout entire plug travel

SPECIFICATIONS

Action	Stem up to close port A-AB
Nominal pressure rating	PN16
Flow characteristic	linear for ports A-AB and B-AB
Rangeability	50:1
Leakage rate	≤0.1 % of k_{VS} port A-AB ≤0.1 % of k_{VS} port B-AB
Stroke	38 mm
Valve body	
End connections	Flanged per ISO 7005-2
Material	Cast iron (GG25) PN16
Dimensions	See Fig. 1.
Trim	
Seat	Stainless steel
Plug	Stainless steel, skirt-guided
Stem	Stainless steel
Packing	Spring-loaded PTFE V-rings
Medium temperature and max. pressure	
PN16	2 ... 120 °C; max. 1600 Pa
	120 ... 150 °C; max. 1440 Pa
	150 ... 200 °C; max. 1280 Pa
	200 ... 220 °C; max. 1200 Pa
Maximum temperature differential in alternating hot/cold water use	60 K

SIZES AND FLOW CAPACITIES

Order Number	Valve Size		k _{vs}
V163F-100-160	PN16	DN100	160.0
V163F-125-250		DN125	250.0
V163F-150-360		DN150	360.0

INSTALLATION

- Water should meet VDI 2035 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.

ELECTRIC ACTUATORS

1800 N	
valve size	DN 100-150
model	AL1838

CLOSE-OFF PRESSURE RATINGS in kPa

actuator		valve size		
model	force	DN100	DN125	DN150
AL1838	1800 N	230	90	90

DIMENSIONS
Valve

Electric Actuators

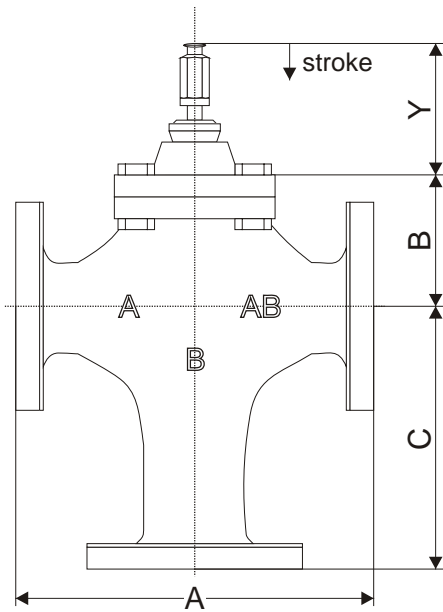


Fig. 1. V163F 38 mm (dimensions in mm)

valve size	A	B	C	Y*
DN100	350	184	220	170.5
DN125	400	219	245	
DN150	480		270	

* = Adjustment dimension. Port A-AB closed.

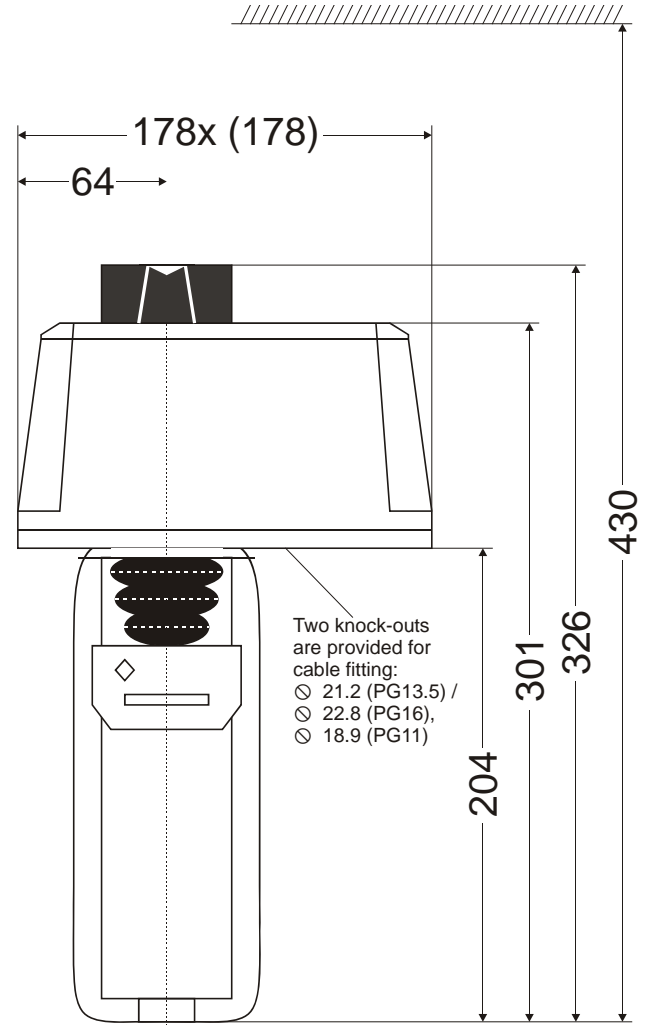


Fig. 2. AL1838 (dimensions in mm)

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