

VN3 SERIES ELECTRIC CONTROL VALVES FOR USE WITH FAN COIL UNITS

PRODUCT INFORMATION

APPLICATION

VN3 series electric ball valves can be used in residential and commercial buildings to control the flow of hot or cold fluids. Each set includes an electric actuator and a valve body.

The actuator will receive a 0–10V analog signal that controls the valve opening and a 0–10V feedback signal indicates the opening of the valve. The 0–10V control signal adopts incremental control, so when the control signal increases, the valve opening increases accordingly. The valve is fully closed at 0V and fully open at 10V. The **VN3** series offer a wide range of screw thread connection standards for different regions, with two-way and three-way valve bodies to cover most building control applications.



TECHNICAL PARAMETERS

ACTUATOR

Operating power supply:	24VAC±10%, 50/60Hz
Control mode:	Modulating, Non-spring return
Control signal:	0–10V DC (Input resistance 200KΩ)
Feedback signal:	0–10V DC (Max. 1mA)
Working temperature:	0–65°C
Working relative humidity:	10%–90%RH Non-condensing
Power rating:	≤5W
Actuation time:	Open≤40s, Closed ≤40s
Protection rating:	IP42

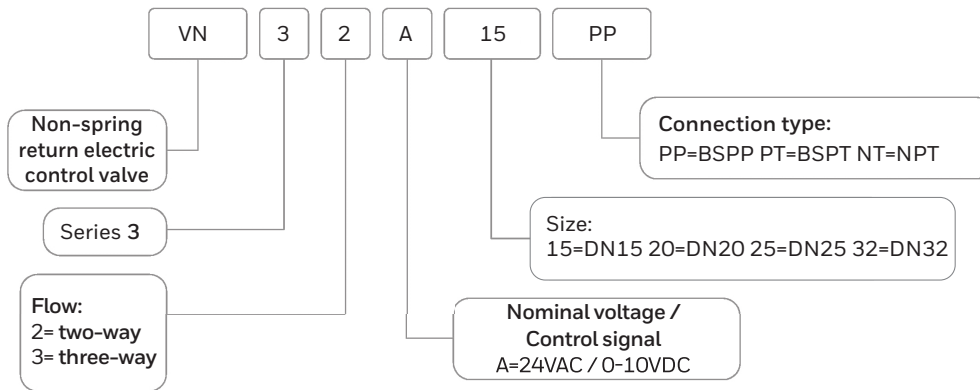
VALVE BODY

Applicable medium:	Cold or hot water or 50% glycol solution
Medium temperature range:	0–94°C
Working temperature:	0–65°C
Working relative humidity:	10%–90% RH
Transportation and storage temperature:	-40–65°C, 10%–90% RH Non-condensing
Nominal pressure:	PN20
Leakage rate:	0.05% Kvs
Materials:	Valve body and ball – forged brass (HPb59-1) Valve stem – stainless steel (0Cr18ni9) Valve seat – polytetrafluoroethylene (PTFE) Sealing O-ring – Ethylene Propylene Diene Monomer (EPDM)

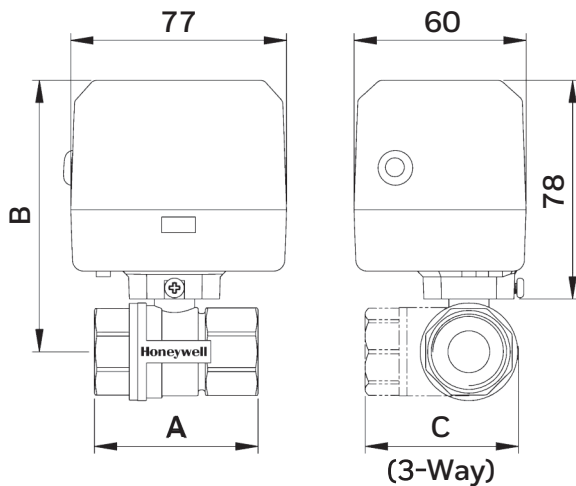
ORDERING PART NUMBERS

PART NUMBER	VOLTAGE	FLOW	SIZE	CONNECTION TYPE	NOMINAL FLOW RATING (Kvs)	CLOSE-OFF DIFFERENTIAL PRESSURE	
						(PSI)	(MPa)
VN32A15PP	24Vac±10%	2-way	DN15, 1/2"	BSPP	2.0±10%	87	0.6
VN32A15PT	24Vac±10%	2-way	DN15, 1/2"	BSPT	2.0±10%	87	0.6
VN32A15NT	24Vac±10%	2-way	DN15, 1/2"	NPT	2.0±10%	87	0.6
VN32A20PP	24Vac±10%	2-way	DN20, 3/4"	BSPP	3.2±10%	87	0.6
VN32A20PT	24Vac±10%	2-way	DN20, 3/4"	BSPT	3.2±10%	87	0.6
VN32A20NT	24Vac±10%	2-way	DN20, 3/4"	NPT	3.2±10%	87	0.6
VN32A25PP	24Vac±10%	2-way	DN25, 1"	BSPP	5.7±10%	87	0.6
VN32A25PT	24Vac±10%	2-way	DN25, 1"	BSPT	5.7±10%	87	0.6
VN32A25NT	24Vac±10%	2-way	DN25, 1"	NPT	5.7±10%	87	0.6
VN32A32PP	24Vac±10%	2-way	DN32, 1 1/4"	BSPP	10.0±10%	87	0.6
VN32A32PT	24Vac±10%	2-way	DN32, 1 1/4"	BSPT	10.0±10%	87	0.6
VN32A32NT	24Vac±10%	2-way	DN32, 1 1/4"	NPT	10.0±10%	87	0.6
VN33A15PP	24Vac±10%	3-way	DN15, 1/2"	BSPP	3.2±10%	87	0.6
VN33A15PT	24Vac±10%	3-way	DN15, 1/2"	BSPT	3.2±10%	87	0.6
VN33A15NT	24Vac±10%	3-way	DN15, 1/2"	NPT	3.2±10%	87	0.6
VN33A20PP	24Vac±10%	3-way	DN20, 3/4"	BSPP	4.6±10%	87	0.6
VN33A20PT	24Vac±10%	3-way	DN20, 3/4"	BSPT	4.6±10%	87	0.6
VN33A20NT	24Vac±10%	3-way	DN20, 3/4"	NPT	4.6±10%	87	0.6
VN33A25PP	24Vac±10%	3-way	DN25, 1"	BSPP	6.7±10%	87	0.6
VN33A25PT	24Vac±10%	3-way	DN25, 1"	BSPT	6.7±10%	87	0.6
VN33A25NT	24Vac±10%	3-way	DN25, 1"	NPT	6.7±10%	87	0.6
VN33A32PP	24Vac±10%	3-way	DN32, 1 1/4"	BSPP	14.0±10%	87	0.6
VN33A32PT	24Vac±10%	3-way	DN32, 1 1/4"	BSPT	14.0±10%	87	0.6
VN33A32NT	24Vac±10%	3-way	DN32, 1 1/4"	NPT	14.0±10%	87	0.6

PRODUCT IDENTIFICATION SYSTEM

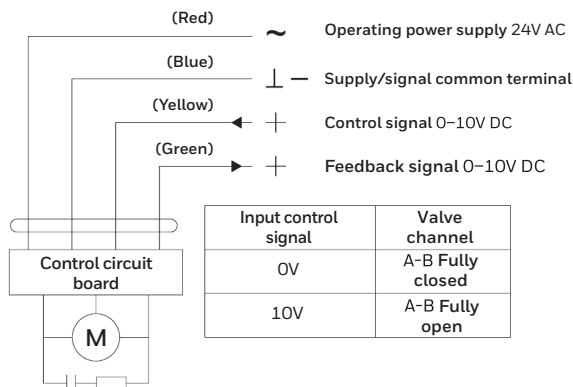


DIMENSIONS (mm)



PART NUMBERS	DIMENSIONS (mm)		
	A	B	C
VN32A15XX	51.5	100	—
VN33A15XX	56	100	42
VN32A20XX	60	100	—
VN33A20XX	67	100	53
VN32A25XX	66	105	—
VN33A25XX	83	105	62
VN32A32XX	77.5	105	—
VN33A32XX	87	105	72

WIRING DIAGRAM



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All specifications are subject to change without notice.

HBT-G.C.-Building-FDFVM-Mar-2024-EN01

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