



Water Valves: WVO, WVFX, and AVTA

Precise control and durability For a long system lifetime

WVFX - Pressure Operated Water Valves

- Widest operating range in the industry
- Hand knob for easy field setting
- Precise pressure regulation
- Maintains constant pressure
- General purpose rugged valve to fit contractor needs

WVO - Pressure Operated Water Valves

- Designed for a long lifetime
- Precise pressure regulation
- Maintains constant pressure
- Compact size fits in small spaces

AVTA - Temperature Operated Water Valves

- Opens on temperature rise
- Needs no power supply - self acting
- Opening degree is not affected by pressure drop



Rugged

design

Long lifetime minimizes callbacks or warranty claims



Precise

control

Meets the needs of contractors and OEMs

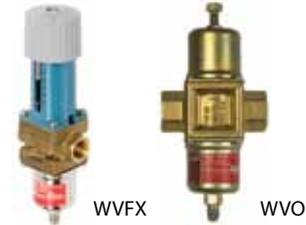




Pressure Operated Water Valves, Type WVFX and WVO

Pressure controlled water valves type WVFX and WVO are used for regulating the flow of water in refrigeration systems with water cooled condensers. Water valves regulate water flow thereby controlling and maintaining constant condensing pressure. At shut-down, cooling water flow is shut off automatically. WVFX valves are designed as wide-range, general purpose water valves, and are particularly popular among contractors. WVO valves are particularly popular among manufacturers due to their small size and narrow pressure range.

Model	Danfoss Ordering Code	Pipe Size [NPT]	Pressure Connection	Range (Psig)	Capillary tube length	Competitor Part No.
WVFX 10	003N5006	3/8"	1/4" M Flare	60 to 333	None	V46AA-1C ¹
WVFX 10	003N5005	3/8"	1/4" F Flare Nut	60 to 333	35"	V46AA-1C
WVFX 15	003N6006	1/2"	1/4" M Flare	60 to 333	None	V46AB-1C ¹
WVFX 15	003N6005	1/2"	1/4" F Flare Nut	60 to 333	35"	V46AB-1C
WVFX 20	003N7006	3/4"	1/4" M Flare	60 to 333	None	V46AC-1C ¹
WVFX 20	003N7005	3/4"	1/4" F Flare Nut	60 to 333	35"	V46AC-1C
WVFX 25	003N8005	1"	1/4" F Flare Nut	60 to 333	35"	V46AD-1C
WVO 10	003N8052	3/8"	1/4" F Flare Nut	90 to 145	35"	V46AA-1C
WVO 10	003N8056	3/8"	1/4" F Flare Nut	205 to 260	35"	V46AA-1C
WVO 15	003N8062	1/2"	1/4" F Flare Nut	90 to 145	35"	V46AB-1C
WVO 15	003N8066	1/2"	1/4" F Flare Nut	205 to 260	35"	V46AB-1C
WVO 20	003N8076	3/4"	1/4" F Flare Nut	205 to 260	35"	V46AC-1C



Specifications ²	Water side	Refrigerant Side
Max Working Pressure (Psig)	380	230
Max Test Pressure (Psig)	WVFX - 420; WVO - 550	350
Media	Fresh Water, Neutral Brine	CFC, HCFC, HFC (e.g. R-22, R-134a, R410A, R404A)
Opening Differential Pressure (Psig)	145	
Temperature Range °F	-13 to 265	

¹Competitor valve is equipped with a capillary tube. Danfoss offers a separate capillary tube (Ordering Code No. 060-007166)

²Specifications for code numbers listed in this brochure. For other variants, please contact Danfoss Application Engineering at 410-931-8250.

Temperature Operated Water Valves, Type AVTA

Temperature operated water valves regulate water flow based on the temperature acting on the sensor. AVTA water valves function effectively in refrigeration applications, opening to increase flow on temperature rise. The valve can be installed either in the cooling water supply or return line.

Model	Danfoss Ordering Code	Pipe Size [NPT]	Range (°F)	Capillary tube length	Competitor Part No.
AVTA 15	003N6115	1/2"	50 to 175	90 9/16"	V47AB5
AVTA 15	003N6182	1/2"	120 to 195	78 3/4"	V47AB3
AVTA 20	003N7120	3/4"	50 to 175	90 9/16"	V47AC6
AVTA 20	003N7182	3/4"	120 to 195	78 3/4"	V47AC3
AVTA 25	003N8125	1"	50 to 175	90 9/16"	V47AD1
AVTA 25	003N8182	1"	120 to 195	78 3/4"	V47AD2C

Water Side	
Max Working Pressure (Psig)	230
Max Test Pressure (Psig)	360
Media	Fresh Water, Neutral Brine
Differential Pressure (Psig)	0 to 145
Media being cooled	
Max. pressure on sensor (Psig)	360



Service parts

003N0278	AVTA service element adsorption charge; range: 50 to 175°F; 90 9/16" capillary tube
003N0062	AVTA service element universal charge; range: 120 to 195°F; 78 3/4" capillary tube
060-007166	39" capillary tube w/ 1/4" F Flare nut each end for WVO and WVFX
003N0388	Mounting bracket for WVFX, WVO or AVTA
003N0520	Plastic adjustment knob for AVTA and WVFX
003N0051	Brass bulbwell for 18mm diameter bulb; Mounting threads: 3/4"-14NPT; for AVTA with 50 to 175°F range
003N0053	Stainless steel (18/8) bulbwell for 18mm diameter bulb; Mounting threads: 3/4"-14NPT; for AVTA with 50 to 175°F range
003N0445	Nitrile (NBR) diaphragms for mineral oil; for AVTA 10/15
003N0446	Nitrile (NBR) diaphragms for mineral oil; for AVTA 20
003N0447	Nitrile (NBR) diaphragms for mineral oil; for AVTA 25
003N0157	Capillary tube gland, 1/2"-14NPT; for AVTA
003N0056	Capillary tube gland, 3/4"-14NPT; for AVTA
003N4006	Repair kit (two diaphragms, two o-rings, one rubber code, one tube grease); for AVTA 15
003N4007	Repair kit (two diaphragms, two o-rings, one rubber code, one tube grease); for AVTA 20
003N4008	Repair kit (two diaphragms, two o-rings, one rubber code, one tube grease); for AVTA 25

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