

# NXT SERIES



The Emerson NXT Series is a balanced ported valve designed for high efficiency R-410A air conditioning and heat pump applications. NXT Series valves operate over a wide range of conditions and applications, while offering excellent performance, superior reliability, and unparalleled valve life.

**FEATURES**

- Precision superheat control optimized for R-410 A systems
- Enhanced power element design offers extended valve life
- Stainless steel power element prevents corrosion and valve failure
- Stainless steel sensing bulb & capillary tubing prevents direct contact galvanic corrosion and provides better durability for handling and installation
- Laser etched identification markings for permanent legibility
- Hermetic, leak-free construction of all joints
- Compact size allows installation in limited spaces
- Bi-Flow capability allows one valve to control the superheat in both cooling and heating modes for close-coupled or packaged heat pump applications
- Balanced port construction compensates for changes in operating pressures due to varying ambients, gas defrost, heat reclaim, or widely varying evaporator loads
- External equalizer is standard
- Screens on ODF inlet connections

**SPECIFICATIONS**

Maximum working pressure (MWP)	.700 psig
R-410A operating range	-20° to +50F°
UR/CUR file number	SA 5312

**OPTIONS**

- High flow internal check valve (1-7 tons) allows reverse flow for heat pump applications, eliminating the need for external check valve and improving overall system efficiency
- Adjustable or non-adjustable superheat
- Bleed type pressure equalization available to accommodate PSC type compressors
- ODF connections are standard—Chatleff connections are available
- Standard external equalizer offerings—other configurations are available
  - 1/4" ODF
  - 1/8" tube with 45' Angle Cut
  - Stainless steel tube with 1/4" SAE flare nut

**NOMENCLATURE EXAMPLE: NAE 3ZAAODFB15%**

N	A	E	3	ZAA	ODF	B15%
SERIES	BODY TYPE	EQUALIZER	CAPACITY	REFRIGERANT CODE	CONNECTION TYPE	BLEED %
NXT	A= Adjustable Superheat, With Check, Straight-Through B= Adjustable Superheat, No Check, Straight-Through C= Non-Adjustable Superheat, With Check, Straight-Through D= Non-Adjustable Superheat, No Check, Straight-Through	E= External Equalizer	(In Tons)	ZAA= R-410A	ODF= Solder CHA= Chatleff	(Omit for None)

**ORDERING INFORMATION**

**ADJUSTABLE SUPERHEAT, STRAIGHT-THROUGH BODY STYLE, INDIVIDUALLY PACKAGED**

REFRIGERANT	CAPACITY (TONS)	CHECK VALVE	BLEED	INLET X OUTLET	BULB CAP TUBE LENGTH	EXTERNAL EQUALIZER	PCN	
R-410A	1/2		-	3/8 ODF X 3/8 ODF	30"	30" With Angle Cut	091064	
			15%	3/8 ODF X 3/8 ODF	30"	30" With Angle Cut	091065	
			-	3/8 ODF X 1/2 ODF	30"	1/4" ODF	091066	
	1		√	-	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091000
			√	15%	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091001
			√	-	Chatleff X Chatleff	5 ft	*5 ft With 1/4" SAE Flare Nut	091002
			√	-	3/8 ODF X 1/2 ODF	5 ft	5 ft With Angle Cut	091003
				-	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091004
				15%	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091005
			√	-	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091006
			√	15%	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091007
			√	-	Chatleff X Chatleff	5 ft	*5 ft With 1/4" SAE Flare Nut	091008
	1-1/2		√	-	3/8 ODF X 1/2 ODF	5 ft	5 ft With Angle Cut	091009
				-	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091010
				15%	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091011
			√	-	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091012
			√	15%	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091013
			√	-	Chatleff X Chatleff	5 ft	*5 ft With 1/4" SAE Flare Nut	091014
	2		√	-	3/8 ODF X 1/2 ODF	5 ft	5 ft With Angle Cut	091015
				-	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091016
				15%	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091017

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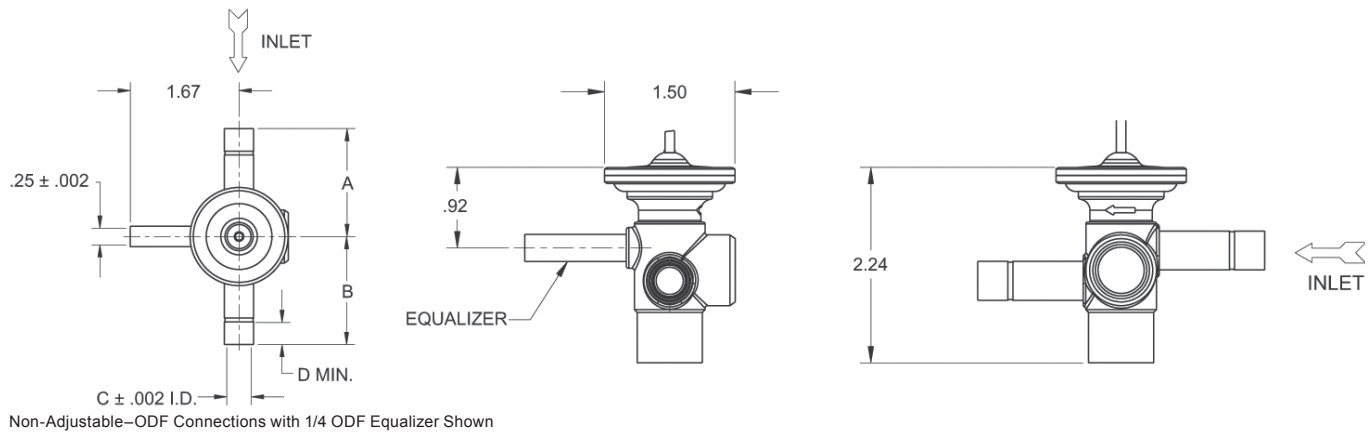
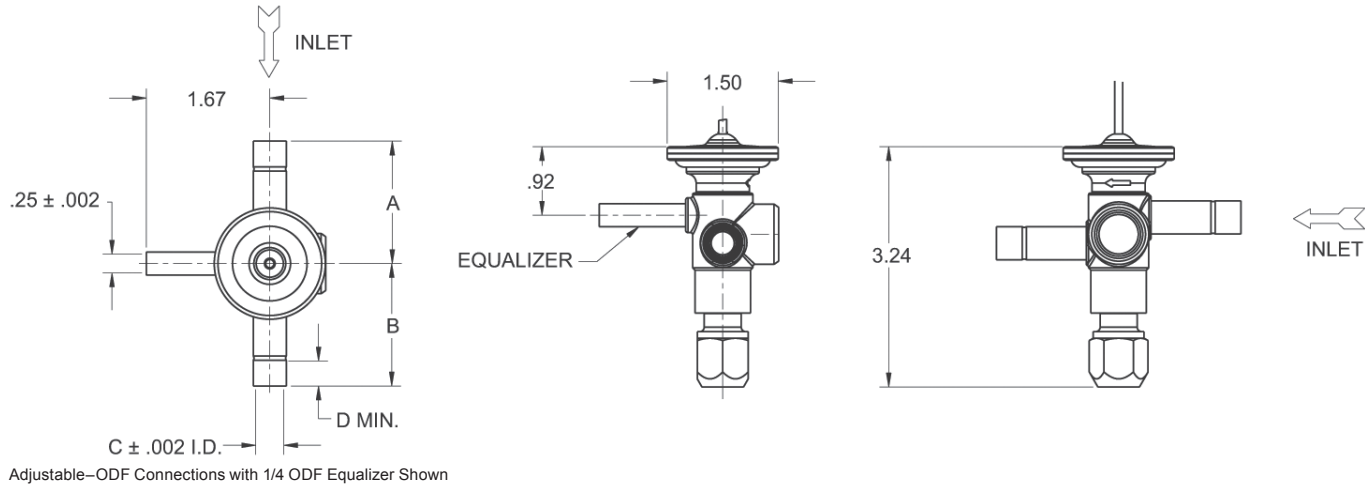
**ORDERING INFORMATION (CONTINUED)  
ADJUSTABLE SUPERHEAT, STRAIGHT-THROUGH BODY STYLE, INDIVIDUALLY PACKAGED**

REFRIGERANT	CAPACITY (TONS)	CHECK VALVE	BLEED	INLET X OUTLET	BULB CAP TUBE LENGTH	EXTERNAL EQUALIZER	PCN
R-410A	3	√	-	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091018
		√	15%	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091019
		√	-	Chatleff X Chatleff	5 ft	*5 ft With 1/4" SAE Flare Nut	091020
		√	-	3/8 ODF X 1/2 ODF	5 ft	5 ft With Angle Cut	091021
			-	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091022
			15%	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091023
	4	√	-	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091024
		√	15%	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091025
		√	-	Chatleff X Chatleff	5 ft	*5 ft With 1/4" SAE Flare Nut	091026
		√	-	3/8 ODF X 1/2 ODF	5 ft	5 ft With Angle Cut	091027
			-	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091028
			15%	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091029
	5	√	-	3/8 ODF X 1/2 ODF	5 ft	1/4" ODF	091063
		√	-	1/2 ODF X 5/8 ODF	5 ft	1/4" ODF	091030
		√	15%	1/2 ODF X 5/8 ODF	5 ft	1/4" ODF	091031
		√	-	Chatleff X Chatleff	5 ft	*5 ft With 1/4" SAE Flare Nut	091032
		√	-	1/2 ODF X 5/8 ODF	5 ft	5 ft With Angle Cut	091033
			-	1/2 ODF X 5/8 ODF	5 ft	1/4" ODF	091034
	6		15%	1/2 ODF X 5/8 ODF	5 ft	1/4" ODF	091035
		√	-	1/2 ODF X 5/8 ODF	5 ft	1/4" ODF	091036
		√	15%	1/2 ODF X 5/8 ODF	5 ft	1/4" ODF	091037
		√	-	Chatleff X Chatleff	5 ft	*5 ft With 1/4" SAE Flare Nut	091038
		√	-	1/2 ODF X 5/8 ODF	5 ft	5 ft With Angle Cut	091039
			-	1/2 ODF X 5/8 ODF	5 ft	1/4" ODF	091040
	7		15%	1/2 ODF X 5/8 ODF	5 ft	1/4" ODF	091041
		√	-	5/8 ODF X 7/8 ODF	5 ft	1/4" ODF	091042
		√	15%	5/8 ODF X 7/8 ODF	5 ft	1/4" ODF	091043
		√	-	Chatleff X Chatleff	5 ft	*5 ft With 1/4" SAE Flare Nut	091044
		√	-	5/8 ODF X 7/8 ODF	5 ft	5 ft With Angle Cut	091045
			-	5/8 ODF X 7/8 ODF	5 ft	1/4" ODF	091046
	8		15%	5/8 ODF X 7/8 ODF	5 ft	1/4" ODF	091047
			-	1/2 ODF X 5/8 ODF	5 ft	1/4" ODF	091091
			-	5/8 ODF X 7/8 ODF	5 ft	1/4" ODF	091048
	10		15%	5/8 ODF X 7/8 ODF	5 ft	1/4" ODF	091049
			-	1/2 ODF X 5/8 ODF	5 ft	1/4" ODF	091092
			-	5/8 ODF X 7/8 ODF	5 ft	1/4" ODF	091050
	12		15%	5/8 ODF X 7/8 ODF	5 ft	1/4" ODF	091051
			-	1/2 ODF X 5/8 ODF	5 ft	1/4" ODF	091060
			-	5/8 ODF X 7/8 ODF	5 ft	1/4" ODF	091052
			15%	5/8 ODF X 7/8 ODF	5 ft	1/4" ODF	091053
			-	5/8 ODF X 1-1/8 ODF	5 ft	1/4" ODF	091054
	15		-	7/8 ODF X 1-1/8 ODF	5 ft	1/4" ODF	091055
		-	5/8 ODF X 7/8 ODF	5 ft	1/4" ODF	091056	
		15%	5/8 ODF X 7/8 ODF	5 ft	1/4" ODF	091057	
		-	5/8 ODF X 1-1/8 ODF	5 ft	1/4" ODF	091058	
	-	7/8 ODF X 1-1/8 ODF	5 ft	1/4" ODF	091059		

\* External equalizer has a stainless steel tube and copper flare with 1/4" SAE flare nut

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**NXT SERIES DIMENSIONAL DATA (in.)**



CONNECTIONS	DIMENSION			
	A	B	C	D
3/8 ODF	1.65	1.65	0.379	0.34
1/2 ODF	1.65	1.65	0.504	0.48
5/8 ODF	2.15	2.15	0.629	0.75
7/8 ODF	2.15	2.15	0.879	0.75
1-1/8 ODF	2.40	2.40	1.129	0.91
Chatteff	1.80	1.36	-	-