



# 1000 SERIES CONTROL VALVES

PRODUCT UPDATES  
FEBRUARY 2018

## NEW SELECTION GUIDE

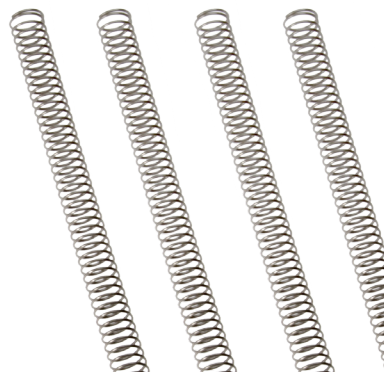
### 1. SIZE

CODE	SIZE
1000V2	2"
1000V3	3"
<b>1000V4</b>	4"

## NEW 4" VALVE



## NEW TUBING PROTECTION



## NEW CONNECTIONS FOR END OF PIVOT VALVES



# 1000 SERIES

## CONTROL VALVE SELECTION GUIDE

TO ORDER: Select one option from each of the 7 sections to build the valve description code.

**NEW** New Options!

1. SIZE	
CODE	SIZE
1000V2	2"
1000V3	3"
<b>1000V4</b>	4"

2. STYLE	
CODE	STYLE
INL	Inline
BGV	Big Gun Valve
TEE*	Tee
ELB*	Elbow

\*Tee and Elbow in 2" only

3. PRESSURE	
CODE	OPERATING PRESSURE
LO	Low (10-40 psi)
MED	Medium (18-80 psi)
HI	High (30-150 psi)

4. CONNECTIONS	
CODE	CONNECTIONS
CONNECTIONS FOR 2" VALVES	
B01	None (wafer only, no stud kit)
B02	2" FNPT (metal)
B03	2" PVC Socket
B04	Wafer 3x2x3 (no stud kit)
B05	2" Victaulic
B06	3" Victaulic (3x2x3)
B08	2" FNPT (plastic)
B09	3" OD Spline (Certa-Set)
B11	1.5" FNPT
B14	2" FBSP
B16	3" PVC Socket (3x2x3)
B17	Wafer w/stud kit for 2" flanges
B19	Wafer w/stud kit for 75/100 Big Gun
B21	Wafer 3x2x3 w/stud kit
CONNECTIONS FOR 3" VALVES	
B01	None (wafer only, no stud kit)
B15	3" PVC Socket
B18	Wafer w/stud kit for 3" flanges
B20	Wafer w/stud kit for 150 Big Gun
<b>B22</b>	Wafer 4x3x4 w/stud kit
<b>B23</b>	Wafer 4x3x4 (no stud kit)
<b>B24</b>	3" Victaulic
<b>B25</b>	4" PVC Socket (4x3x4)
CONNECTIONS FOR 4" VALVES	
B01	None (wafer only, no stud kit)
<b>B26</b>	4" PVC Socket
<b>B27</b>	Wafer w/stud kit for 4" flanges
<b>B29</b>	Wafer 6x4x6 w/stud kit
<b>B30</b>	Wafer 6x4x6 (no stud kit)
B31	6" PVC Socket (6x4x6)
B32	4" Victaulic

## EXAMPLE:

SECTION	1. SIZE	2. STYLE	3. PRESSURE	4. CONNECTIONS	5. ON/OFF CONTROL	6. PRESSURE CONTROL	7. FILTER
CODE	1000V2	INL	MED	B03	E01	R60	H3
DESCRIPTION	1000 Series 2" Valve	Inline	Medium (18-80 psi)	2" PVC Socket	Manual Selector Only	Pressure Reducing 5-60 psi	Internal Filter

5. ON/OFF CONTROLS*			
CODE	ON/OFF CONTROL	CODE	SINGLE/DUAL CONTROL
E00	None	Tee Valves Only:	
E01	Manual Selector Only	-1	Single Control
<b>E11<sup>†</sup></b>	Manual Sel. w/E11 Solenoid - 12VDC, NC	-2	Dual Control
E23	Manual Sel. w/E23 Solenoid - DC Lat.		
E29	Manual Sel. w/E29 Solenoid - DC Lat.		
E31	Manual Sel. w/E31 Window+ Controller		
E34	Manual Sel. w/E34 Solenoid - 24VDC		
E40	Manual Sel. w/E40 Solenoid - 24VAC		
E43	Manual Sel. w/E43 Solenoid - 24VAC		
E46	Manual Sel. w/E46 Solenoid - 24VAC		
E50	Manual Sel. w/E50 Solenoid - 120VAC		
E53	Manual Sel. w/E53 Solenoid - 110VAC		

6. PRESSURE CONTROL	
CODE	ADJ. RANGE
PRESSURE REDUCING	
R0	None
R30	5-30 psi
R60	5-60 psi
R120	10-120 psi
PRESSURE SUSTAINING	
S0	None
S60	5-60 psi
S120	10-120 psi

7. FILTER	
CODE	FILTER
H0	None
H2	External Filter
H3	Internal Filter
<b>FILTER WITH TUBING PROTECTION</b>	
<b>H4</b>	External Filter
<b>H5</b>	Internal Filter

\*Contact Factory for full solenoid specifications.

<sup>†</sup>New, normally closed solenoid for pressure sustaining, normally open valve ("PSNO") for applications at filter stations

Nelson Control Valves come standard normally closed. Use the following codes to specify non-standard, normally open, or special solenoid plumbing logic.

OPTIONAL SOLENOID LOGIC								
SOLENOID ONLY			SUSTAINING W/ SOLENOID			REDUCING W/ SOLENOID		
CODE	SOLENOID STATUS	VALVE STATUS	CODE	SOLENOID STATUS	VALVE STATUS	CODE	SOLENOID STATUS	VALVE STATUS
L02	Energized	Closed	L03	Energized	Sustaining	L08	Energized	Closed
	De-energized	Open		De-energized	Closed		De-energized	Reducing
			L04 <sup>†</sup>	Energized	Sustaining			
				De-energized	Open			
			L05	Energized	Closed			
				De-energized	Sustaining			
			L06	Energized	Open			
				De-energized	Sustaining			

<sup>†</sup>Pressure Sustaining normally-open valve ("PSNO") for applications at filter stations

# THE WAIT IS OVER.

The most efficient and versatile  
**4 INCH VALVE** in the industry  
has arrived.



4" PVC Socket Connections.  
Shown with NEW optional  
tubing protection (see pg. 6)

Growers and irrigation designers alike have long awaited an economical valve option that is ideally suited to flows in the 400-700 gpm (90-160 m<sup>3</sup>/hr) range, where most 4" valves have too much pressure loss but a 6" valve is too expensive. The all-new Nelson 4" 1000 Series valve meets this challenge and is capable of accurately regulating pressure across an even wider range of flows.

The new 4" 1000 Series valve can be configured with either removable 4" PVC Sockets or a simple and cost effective 6x4x6 wafer that installs between 6" flanges. Additional connection types coming soon.

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6x4x6 Wafer Style Valve -  
ready to install between 6"  
ANSI Flanges.

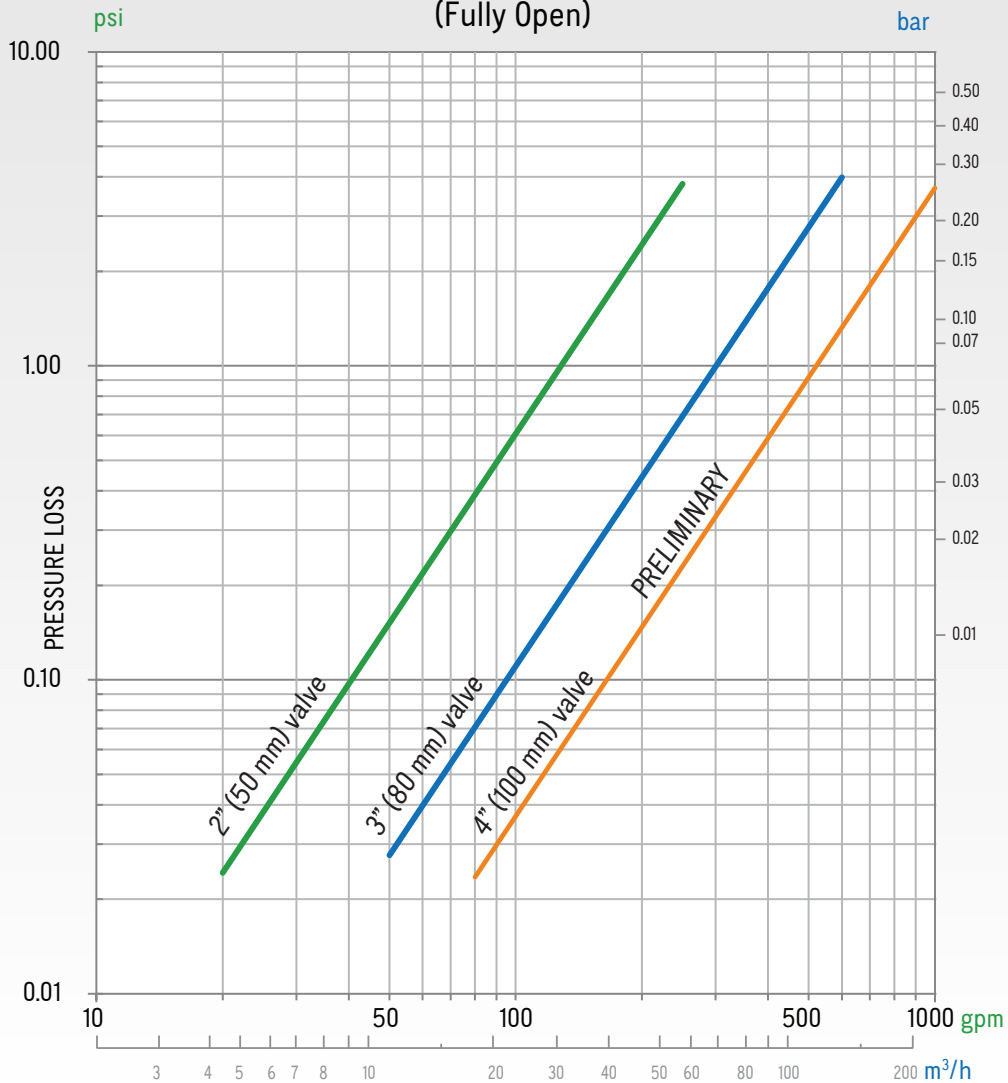


New jacket mounting design with improved  
clip is more secure yet easier to use.

# 1000 SERIES

The lowest friction loss and the highest capacity of any valve on the market.

Pressure Loss Data  
1000 Series Inline Valves  
(Fully Open)



	Cv (gpm @ 1 psi loss)	Kv (m³/hr @ 1 bar loss)
2" (50 mm)	128	111
3x2x3	135	117
3" (80 mm)	300	259
4x3x4	308	266
4" (100 mm)	520*	450*
6x4x6	TBA	TBA

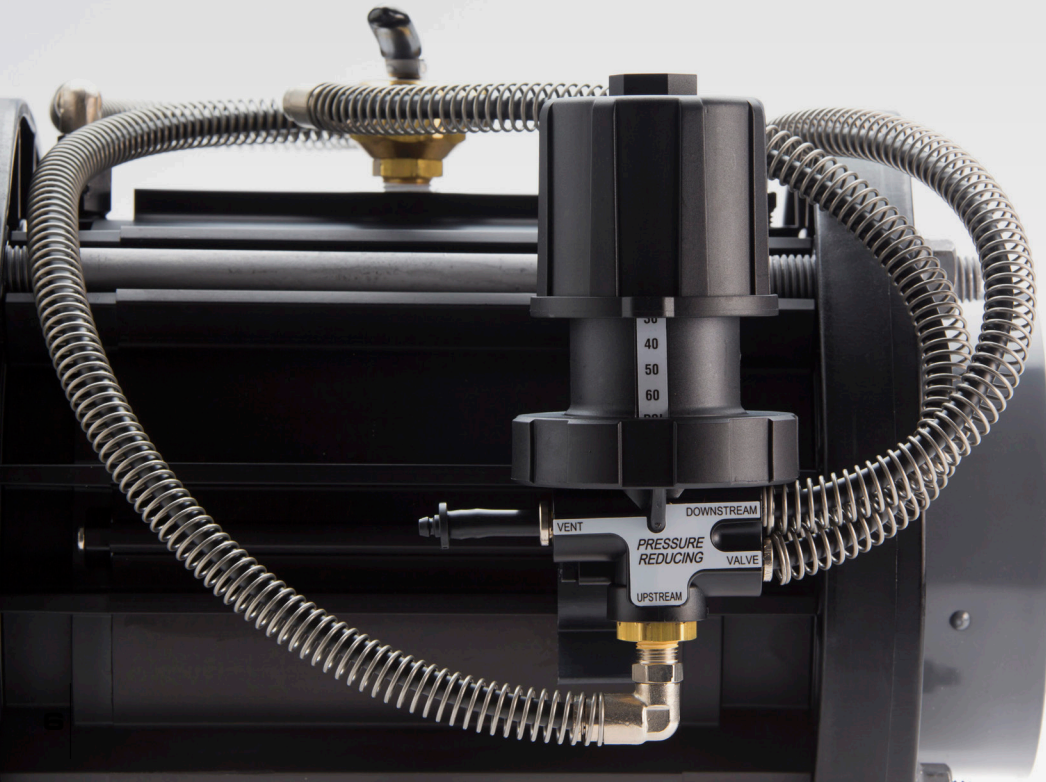
\*PRELIMINARY

$$\text{Pressure Loss (psi)} = \frac{\text{Flow (gpm)}^2}{Cv^2}$$

$$\text{Pressure Loss (bar)} = \frac{\text{Flow (m}^3\text{/h)}^2}{Kv^2}$$

# 1000 SERIES

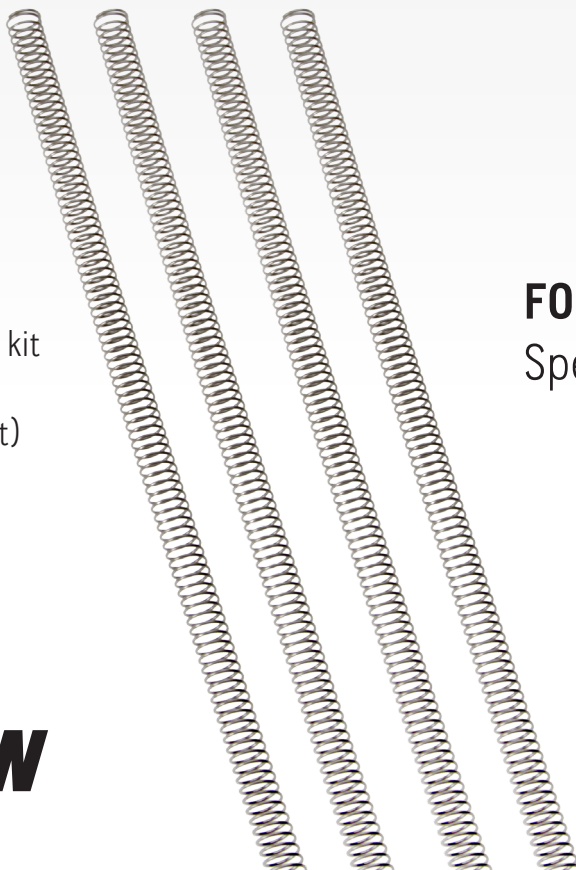
## NEW TUBING PROTECTION



Protect control tubing from damage caused by coyotes and other animals.

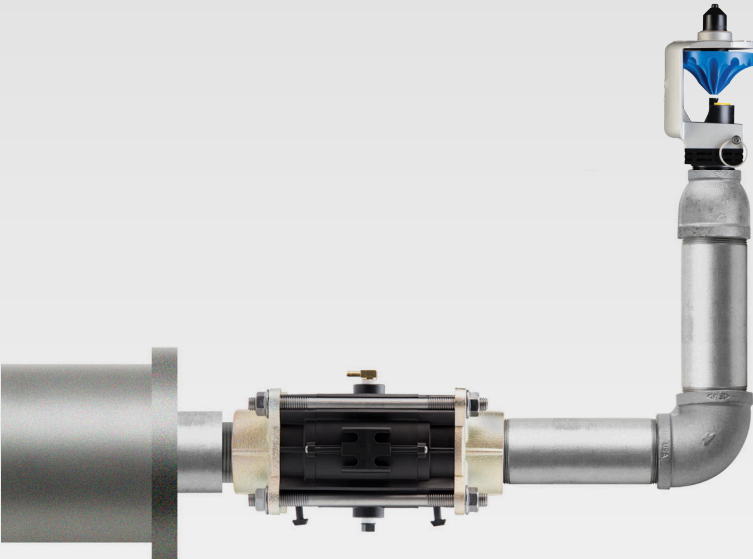
New Tubing Protection is the result of rigorous field testing in which valves were plumbed with protected and unprotected tubes and placed in areas with high coyote activity. The wire coil eradicates tube damage more effectively than a ranch rifle!

#13038  
Tubing protection kit  
Includes 4 x 16"  
lengths (trim to fit)



**FOR FACTORY INSTALLATION**  
Specify Option H4 or H5

# 2" (50 mm) End of Pivot Valves for R55 & R75 (NEW metal connections)



## 1000P

PRESSURE REGULATING  
AND/OR ELECTRIC ON/OFF  
Choose from metal threaded  
2" or 1.25" FNPT inlet/outlet.

Plastic connections still available - contact factory.

Model	Valve Function	Internal Filter	Rubber Drains QTY 2	On/off	Press. Reg. Adjust. Range (psi)	Metal Connections (FNPT)	Part Number
<b>1000P-R</b>	Pressure regulating only. No on/off control.	✓	✓	-	5-60	2" x 2"	12254-0036
						2" x 1.25"	12254-0042
						1.25" x 1.25"	12254-0039
<b>1000P-X*</b>	Electric on/off by solenoid located at pivot tower box*	-	✓	solenoid at tower*	-	2" x 2"	12254-0037
						2" x 1.25"	12254-0043
						1.25" x 1.25"	12254-0040
<b>1000P-RX*</b>	Pressure regulating with electric on/off by solenoid located at pivot tower box*	✓	✓	solenoid at tower*	5-60	2" x 2"	12254-0038
						2" x 1.25"	12254-0044
						1.25" x 1.25"	12254-0041

\*1000P-X and 1000P-RX models have electric on/off capability, but do not include a solenoid. The solenoid is provided by others and typically is located at the last tower on the pivot.



**1000P-R**



**1000P-X**



**1000P-RX**



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