

Innovation in Irrigation™

**NELSON****800 SERIES CONTROL VALVES****GENERAL INFORMATION, PARTS LIST & DIMENSIONS**

The following table illustrates the dimensions and parts needed for the Wafer, Victaulic and Thread style sleeve valves. The first two columns (STUD LENGTHS and FLANGE TEMPLATES) refer only to the Wafer style valve. The STUD LENGTHS column gives the diameters and lengths of the Studs required. The FLANGE TEMPLATES column shows the dimensions of the flange. The VALVE LENGTHS column gives the lengths of the Wafer style as well as the available Victaulic and Thread styles.

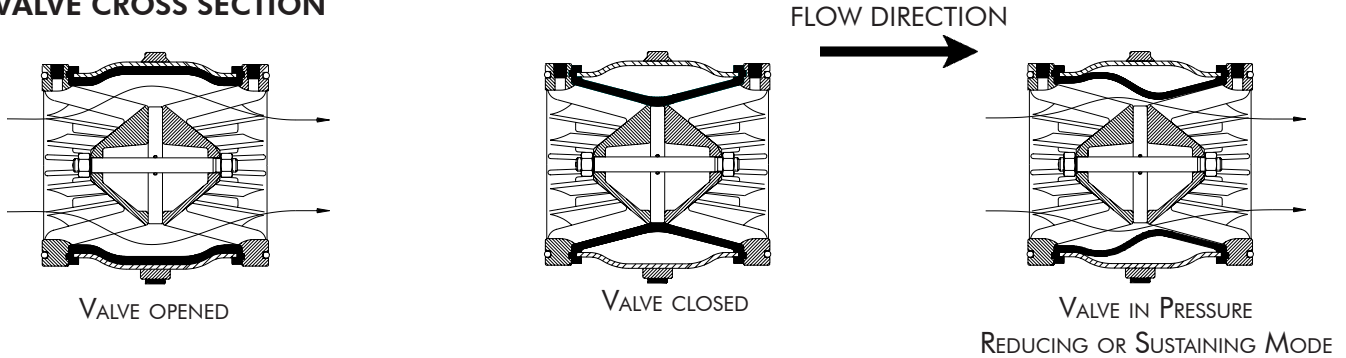
STUD LENGTHS		FLANGE TEMPLATES	VALVE LENGTHS		
		FLANGE TEMPLATE FOR USE WITH WAFER STYLE VALVES	WAFER STYLE VALVE LENGTH	VICTAULIC STYLE VALVE LENGTH	THREAD STYLE VALVE LENGTH
2 INCH VALVE	4 STUDS 5/8" DIA. X 9.5" (1.5 CM X 24 CM) 8 NUTS REQUIRED FOR ANSI GUN ADAPTER USE 4 STUDS 1/2" DIA. X 8.25" 4 FLANGE NUTS REQUIRED		6.1 INCHES 15.5 CM	8.75 INCHES 22.2 CM	9.1 INCHES 23.1 CM
3 INCH VALVE	4 STUDS 5/8" DIA. X 11" (1.5 CM X 28 CM) 8 NUTS REQUIRED FOR ANSI GUN ADAPTER USE 4 STUDS 1/2" DIA. X 9.75" 4 FLANGE NUTS REQUIRED		7.3 INCHES 18.5 CM	10 INCHES 25.4 CM	9.8 INCHES 24.9 CM
4 INCH VALVE	8 STUDS 5/8" DIA. X 11" (1.5 CM X 28 CM) 16 NUTS REQUIRED GASKETS REQUIRED FOR ANSI GUN ADAPTER USE 8 STUDS 1/2" DIA. X 9.75" 8 FLANGE NUTS REQUIRED		7 INCHES 17.8 CM	<b>INSTALLATION TIP:</b> When installing the Wafer style valve, do not overtighten the wafer stud nuts. Overtightening can damage the sleeve. Also note that the 4" valves, (and 6" valves from 1995 and earlier), have gaskets while the other sizes have an o-ring seal. Flush all dirt and debris from the line before operating the valve control. It is suggested the MANUAL ON-OFF selector valve be in the OPEN position for this flushing operation. Failure to flush the line may cause the filter or tubing to clog so that the control function does not work. See reverse side for valve manual operation and parts.  <b>WARRANTY AND DISCLAIMER</b> Nelson 800 Series Control Valves are warranted for one year from date of original sale to be free of defective materials and workmanship when used within the working specifications for which the products were designed and under normal use and service. The manufacturer assumes no responsibility for installation, removal or unauthorized repair of defective parts. The manufacturer's liability under this warranty is limited solely to replacement or repair of defective parts and the manufacturer will not be liable for any crop or other consequential damages resulting from defects or breach of warranty. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES AND OF ALL OTHER OBLIGATIONS OR LIABILITIES OF MANUFACTURER. No agent, employee or representative of the manufacturer has authority to waive, alter or add to the provisions of this warranty, nor to make any representations or warranty not contained herein.	
NEW STYLE 4 INCH VALVE	8 STUDS 5/8" DIA. X 12" (1.5 CM X 30 CM) 16 NUTS REQUIRED FOR ANSI GUN ADAPTER USE 8 STUDS 1/2" DIA. X 10.75" 8 FLANGE NUTS REQUIRED		8.1 INCHES 20.6 CM		
6 INCH VALVE	8 STUDS 3/4" DIA. X 13.5" (1.9 CM X 34 CM) 16 NUTS REQUIRED NO GASKETS REQUIRED ON '96 AND LATER		9.4 INCHES 23.9 CM		
8 INCH VALVE	8 STUDS 3/4" DIA. X 17" (1.9 CM X 43 CM) 16 NUTS REQUIRED		12 INCHES 30.5 CM		

**Manual operation:**

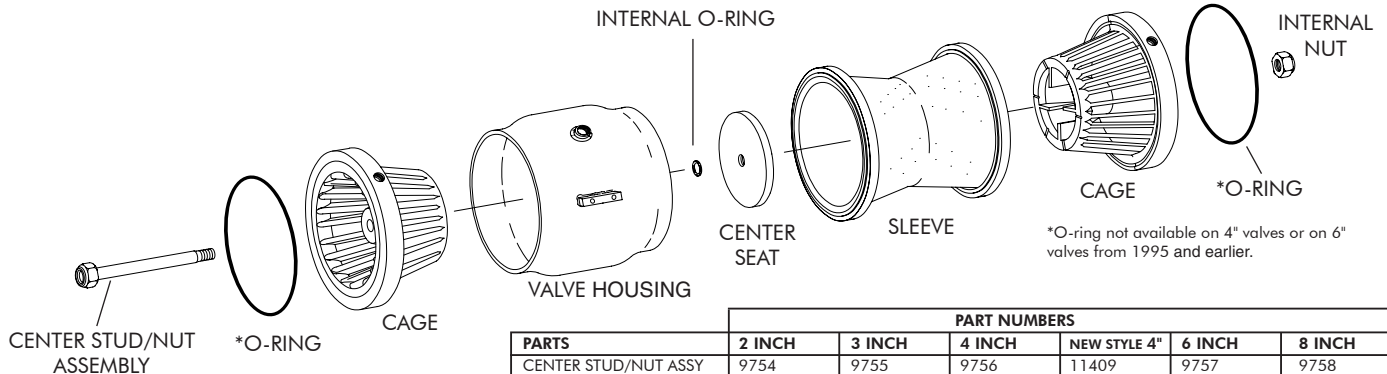
Each 800 Series Valve is equipped with a manually operated selector valve to control the on-off (OPEN-CLOSE) function. A cross section drawing of the valve operation is shown below. Pointing the selector to the "OPEN" position causes the valve to open. Pointing the selector to the "CLOSE" position pressurizes the sleeve chamber, closing the valve. The "AUTO" position has no effect on a valve that is equipped with only the manual control function. See the separate CONTROL FUNCTION AND MAINTENANCE sheet for details on the specific control function equipped on your valve.

EXAMPLE: If the selector valve handle is pointed to "OPEN", the valve sleeve opens to flow as shown.

**VALVE CROSS SECTION**

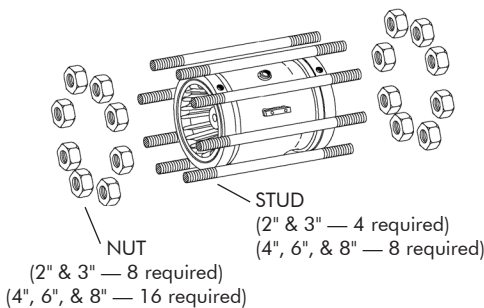


**BASIC VALVE PARTS**



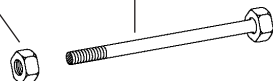
\*O-ring not available on 4" valves or on 6" valves from 1995 and earlier.

**WAFFER STUD KIT**



**FOR 2" & 3" THREADED & VICTAULIC ONLY:**

EXTERNAL NUT      EXTERNAL BOLT OR STUD



PARTS	PART NUMBERS					
	2 INCH	3 INCH	4 INCH	NEW STYLE 4"	6 INCH	8 INCH
CENTER STUD/NUT ASSY	9754	9755	9756	11409	9757	9758
CAGE						
— THREADED	9506-001	9382-001	N/A	N/A	N/A	N/A
— VICTAULIC	9505	9334	N/A	N/A	N/A	N/A
— WAFFER	9504	9380	9150	11208	9608	9391
VALVE HOUSING (1)	9500	9381	9145	11206	9646	9395
INTERNAL O-RING (1)	9483	9483	9148	9148	8973	8973
O-RINGS (2)	9522	9484	**N/A	11416	***9639	9485
CENTER SEAT (1)	9502-001	9385	9147	11209	9609	9396
SLEEVE (1)						
10-50 PSI	9501-002	9383-002	9146-002	11207-002	9697-002 <sup>v</sup>	9393-002
18-80 PSI	9501-003	9383-003	9146-003	11207-003	9697-003	9393-003
30-200 PSI	9501-001	9383-001	9146-001	11207-001	9697-001 <sup>vv</sup>	9393-001
NUT	9181	9181	9181	9181	8974	8974
STUD	9770	9180	9180	11386	8969	9521
WASHER	9183	9183	9183	9183	N/A	N/A
EXTERNAL NUT (3) <sup>vvv</sup>	9585	9585	N/A	N/A	N/A	N/A
EXTERNAL BOLT (3) <sup>vvv</sup>	9636	9584	N/A	N/A	N/A	N/A

\* Old Style 4" available as service item only. Contact Factory for details - discontinued Jan. 2011.  
 \*\* 2 gaskets required on 4" size.  
 \*\*\* Models of the 6" valve from 1995 and earlier require 2 gaskets instead of the o-rings.  
<sup>v</sup> If the sleeve was manufactured before 1/96 the replacement part number is 8961-002.  
<sup>vv</sup> If the sleeve was manufactured before 1/96 the replacement part number is 8961-001.  
<sup>vvv</sup> Only used with victaulic or threaded.