

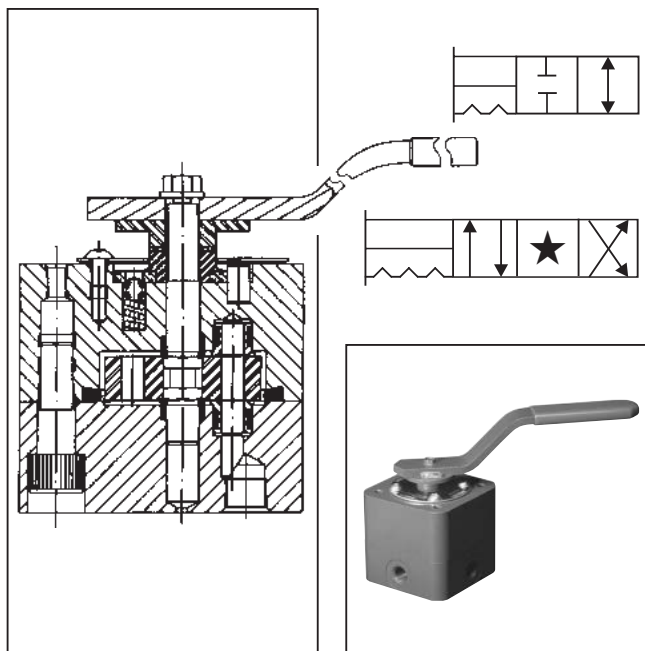
## General Description

**A**

Series 8100E valves are 2, 3 and 4-way manual selector valves with near zero leakage characteristics and are rated to 414 Bar (6000 PSI) for liquids and 276 Bar (4000 PSI) for air. The valve design requires low actuation torque and can be used in applications where loads must be held for long periods and under difficult conditions.

## Features

- Shear-type positive seal.
- Zero leakage (1 drop per min. per pressure port).
- High contamination tolerance.
- Long life due to wiping action of seals and disk.
- Low turning torque.
- Panel mounting is standard.



## Specifications

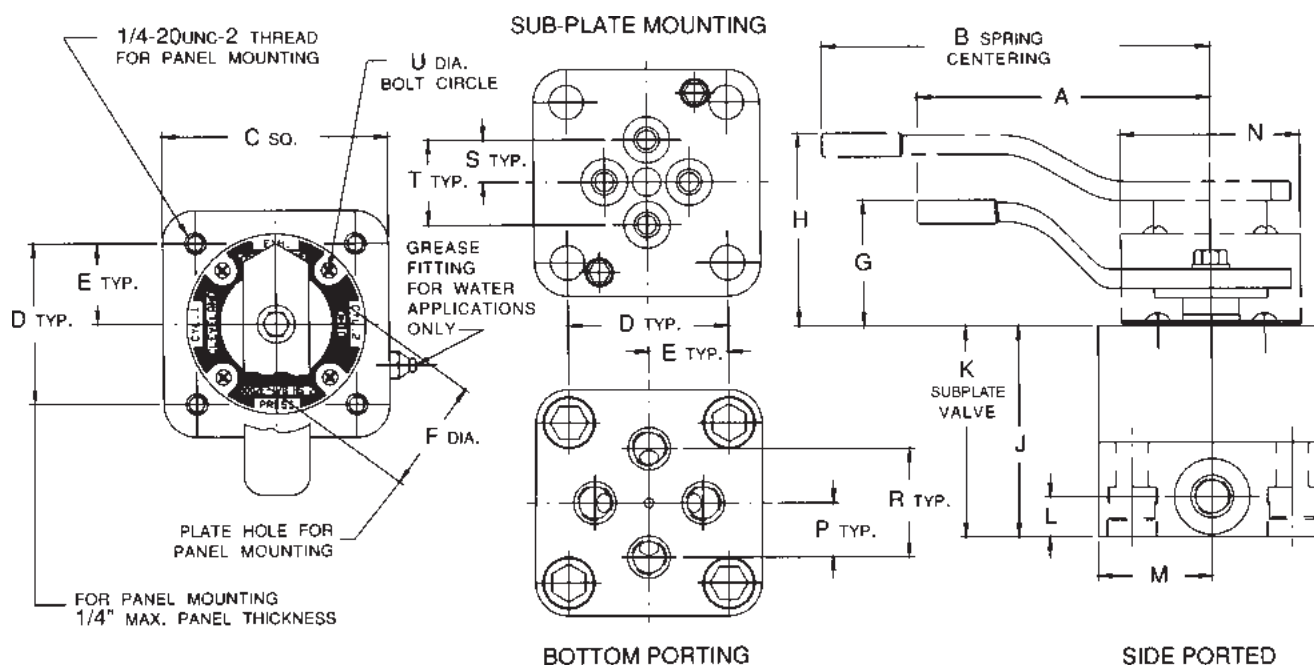
<b>Service Applications</b>	Lubricated air, hydraulic oil, and water. For case pressure or exhaust port pressure applications above 17.3 Bar (250 PSI), consult factory.	<b>Material</b>	Body & Cap: Steel Disk: Stainless steel type 440 Shaft: Stainless steel type 416 Seals: Stainless steel type 440 Spring Seals: Stainless steel O-rings: Synthetic rubber compatible with media Back-up rings: PTFE Handle: Steel Finish: Paint
<b>Maximum Operating Pressure</b>	Working: Liquids - 414 Bar (6000 PSI) Air - 276 Bar (4000 PSI) Proof: Liquids - 621 Bar (9000 PSI) Air - 621 Bar (9000 PSI) Burst: 1035 Bar (15,000 PSI)	<b>Operating Temperature</b>	-40°C to +121°C (-40°F to +250°F) Higher on special order
<b>Porting</b>	Bottom or side NPT: Pipe threads Sizes 1/4", 1/2" & 1" IST: Internal straight threads per AND10050 Sizes: 6, 10, & 16		Note: Steel bodies and caps for water or air service are electroless nickel plated. Water service valves are equipped with grease fittings and require periodic lubrication with a waterproof grease.
<b>Mounting</b>	Subplate - Sizes 6, 10 & 16		

Valve Size				Weight Lbs.	CV Factor P. to A. or P. to B.	Flow Passage Diameter	Handle Pull – Lbs.			
							8100E		R8100E	
Subplate	SAE	Tube	Pipe	Steel	8100E	8100E	Air	Oil	Air	Oil
Size 6	#6	6	1/4	5-1/2	1.0	.250 In.	18	15	17	16
Size 10	#10	10	1/2	10	1.2	.250 In.	15	13	22	19
Size 16	#16	16	1	22	3.2	.437 In.	18	15	28	26

## Ordering Information

81	5	1	E	- 1/4	H	S	2		
Prefix for Special Feature	6000 PSI Series	Flow Pattern	Type of Porting	Design Series	Size	Service Media	Materials	O-Ring Code	Suffix Options
See Option Page for Complete List	1 2-Way Shut-off		1 Side Ported		1/4 NPT	A Lubricated Air	S Steel	2 Nitrile	See Option Page for Complete List
	4 4-Way Closed Center		2 Bottom Ported		1/2 NPT	H Hydraulic Oil		28 Fluorocarbon	
	5 4-Way Tandem Center		3 Subplate Mounted		1 NPT	W Water		52 EPR	
	7 4-Way Manipulator Closed Center			6 IST			Others Available Per Request		
	8 4-Way Manipulator/Open Center			10 IST					
	9 3-Way				16 IST				
					6 Subplate				
					10 Subplate				
					16 Subplate				

## Dimensions



Valve Size				All Dimensions are in Inches																	Subplate Mounted		
Sub-Plate	SAE	Tube	Pipe	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	Mt'g. Bolt	Torq.
Size 6	#6	6	1/4	6	8	3	2 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>16</sub>	1	2 <sup>1</sup> / <sub>8</sub>	2 <sup>21</sup> / <sub>32</sub>	2 <sup>27</sup> / <sub>32</sub>	2 <sup>21</sup> / <sub>64</sub>	<sup>17</sup> / <sub>32</sub>	1 <sup>1</sup> / <sub>2</sub>	2 <sup>3</sup> / <sub>8</sub>	<sup>23</sup> / <sub>32</sub>	1 <sup>7</sup> / <sub>16</sub>	<sup>9</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>8</sub>	2	7/16 - 20NF 2 x 2 <sup>1</sup> / <sub>2</sub> Lg.	865 In. - Lbs.
Size 10	#10	10	1/2	7	10	3 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>4</sub>	1	2 <sup>3</sup> / <sub>8</sub>	3 <sup>7</sup> / <sub>64</sub>	3 <sup>37</sup> / <sub>64</sub>	2 <sup>55</sup> / <sub>64</sub>	<sup>49</sup> / <sub>64</sub>	1 <sup>3</sup> / <sub>4</sub>	2 <sup>15</sup> / <sub>16</sub>	<sup>13</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>8</sub>	<sup>9</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>2</sub>	7/16 - 20NF 2 x 3 Lg.	865 In. - Lbs.
Size 16	#16	16	1	10	12	4 <sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>16</sub>	1 <sup>19</sup> / <sub>32</sub>	1 <sup>3</sup> / <sub>8</sub>	2 <sup>15</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>8</sub>	4 <sup>23</sup> / <sub>32</sub>	3 <sup>45</sup> / <sub>64</sub>	1	2 <sup>1</sup> / <sub>4</sub>	3 <sup>11</sup> / <sub>16</sub>	1 <sup>3</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>4</sub>	<sup>13</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>16</sub>	5/8 - 18NF 2 x 3 <sup>1</sup> / <sub>2</sub> Lg.	3,250 In. - Lbs.