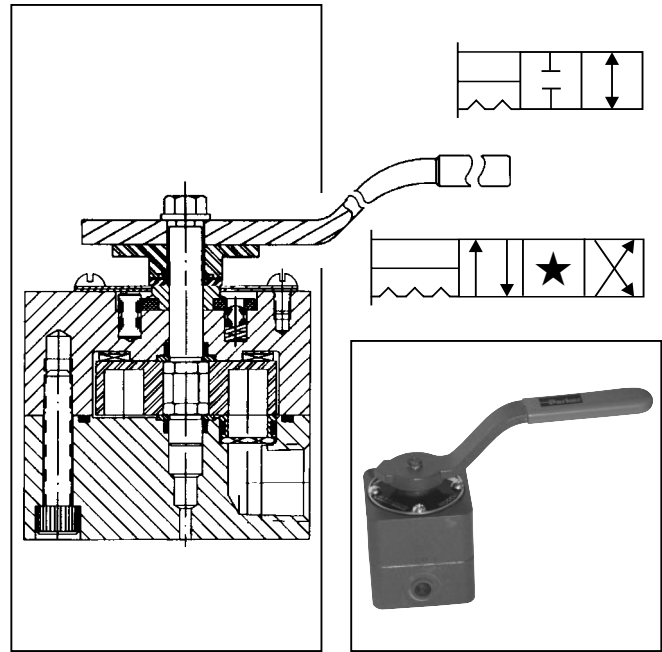


General Description

Series 8500 valves are 2, 3 and 4-way manual selector valves with near zero leakage characteristics and are rated to 207 Bar (3000 PSI). The valve design requires low actuation torque and can be used in air, oil and water applications.

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

Service Applications	Lubricated air, hydraulic oil, and water. For case pressure or exhaust port pressure applications above 17.3 Bar (250 PSI), consult factory.	Mounting	Subplate - Sizes 10 & 16
Maximum Operating Pressure	Working: 207 Bar (3000 PSI) Proof: 310.5 Bar (4500 PSI) Burst: 517.5 Bar (7500 PSI)	Material	Body & Cap: Aluminum alloy anodized Disk: Stainless steel type 440 Shaft: Stainless steel type 416 Seals: Stainless steel type 440 O-rings: Synthetic rubber compatible with media Spring seals: Stainless steel Back-up rings: PTFE Handle: Steel, aluminum & plastic Finish: Paint
Porting	Bottom or side NPT: Pipe threads Sizes 1/8", 1/4", 3/8", 1/2", 3/4" & 1" IST: Internal straight threads per AND10050 Sizes 4, 6, 8 10, 12 & 16 SAE: Straight threads Sizes #4, #6, #8, #10, #12 & #16	Operating Temperature	-40°C to +121°C (-40°F to +250°F) Higher on special order

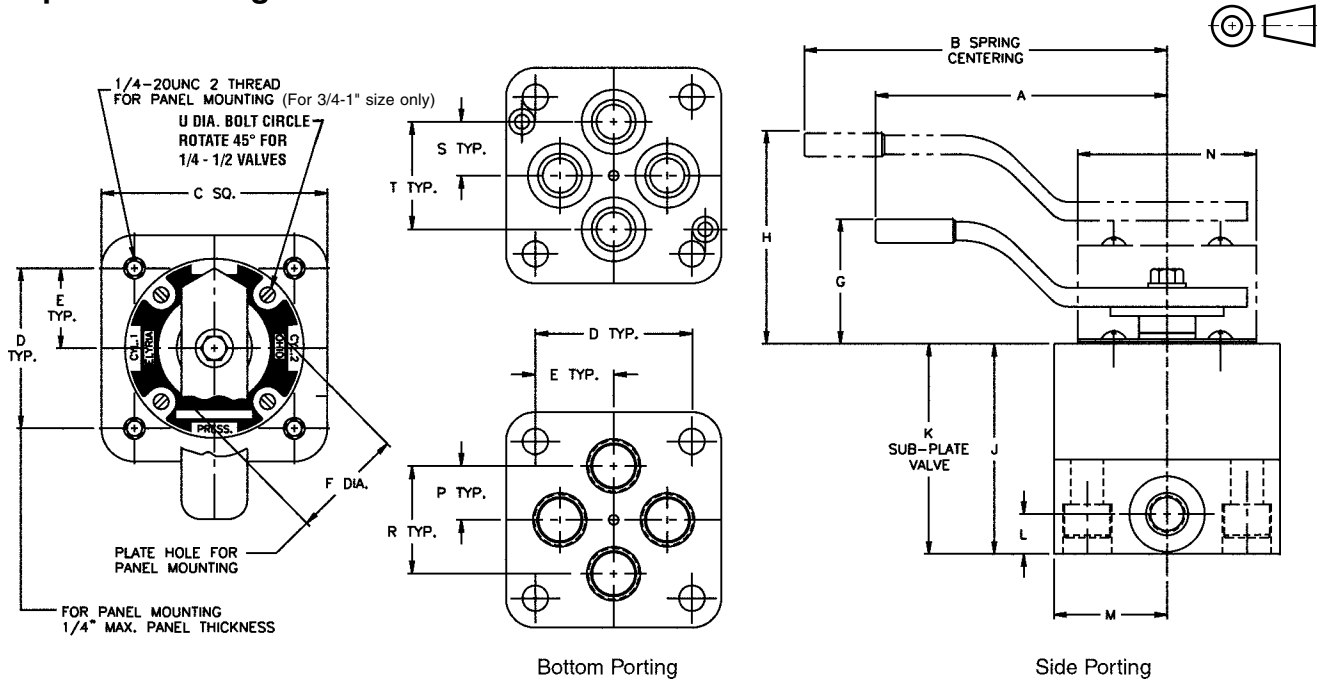
Valve Size				Weight Lbs.	CV Factor P. to A. or P. to B.	Flow Passage Diameter	Handle Pull – Lbs.			
							8500E		R8500E	
Subplate	IST	Tube	Pipe	Steel	8500E	8500E	Air	Oil	Air	Oil
—	#6	6	1/4	2.5	1.7	.437 In.	13	15	11	17
Size 10	#10	10	1/2	2.5	2.4	.437 In.	13	15	11	17
Size 16	#16	16	1	13	8.5	.750 In.	15	18	26	30

Ordering Information

Prefix for Special Feature	85	5	1	F	- 1/4	H	D	2	Suffix Options
See Option Page for Complete List	3000 PSI Series	Flow Pattern	Type of Porting	Design Series	Size	Service Media	Materials	O-Ring Code	See Option Page for Complete List
	1 2-Way Shut-off 4 4-Way Closed Center 5 4-Way Tandem Center 7 4-Way Manipulator Closed Center 8 4-Way Manipulator/Open Center		1 Side Ported 2 Bottom Ported 3 Subplate Mounted		1/4 NPT 1/2 NPT 1 NPT 6 IST 10 IST 16 IST 10 Subplate 16 Subplate	A Lubricated Air H Hydraulic Oil W Water	D Aluminum	2 Nitrile 28 Fluorocarbon	



**Dimensions
 Subplate Mounting**



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	M'tg. Bolt	Torq.
—	#6	6	1/4	6	6	2 3/4	2	1	1 21/32	1 31/32	2 25/32	2 13/16	2 1/32	5/8	1 3/8	2 3/8	23/32	1 7/16	11/16	1 3/8	2 1/8	5/16 - 24NF x 2	250 In. - Lbs.
Size 10	#10	10	1/2	6	6	2 3/4	2	1	1 21/32	1 31/32	2 25/32	2 13/16	2 1/32	5/8	1 3/8	2 3/8	23/32	1 7/16	11/16	1 3/8	2 1/8	5/16 - 24NF x 2	250 In. - Lbs.
Size 16	#16	16	1	10	12	4 1/2	3 3/16	1 19/32	1 3/8	2 15/16	3 3/8	4 23/32	3 45/64	1	2 1/4	3 11/16	1 3/8	2 3/4	1 11/64	2 11/32	3 3/16	1/2 - 20 x 4 Lg.	1,370 In. - Lbs.

Special Feature Letter		Location	8000 - 8100			8400	8500	
			$\frac{1}{8}-\frac{1}{2}$	$\frac{3}{4}-1$	$\frac{1}{4}-\frac{1}{2}$	$\frac{1}{8}-\frac{1}{4}$	$\frac{1}{8}-\frac{1}{2}$	$\frac{3}{4}-1$
F	-Fourth Seal	P	A	A	A	N/A	A	A
FR	-Fourth Seal & Spring Return	P	A	A	A	N/A	A	A
R	-Spring Return	P	A	A	A	A	A	A
CR	-Normally Closed Spring Return	P	A	A	A	N/A	A	A
H	-Less Handle	S	A	A	A	A	A	A
P	-Locking Kit	S	A	A	N/A	N/A	N/A	A
L	-No Left Handle Position	S	A	A	A	N/A	A	A
R	-No Right Handle Position	S	A	A	A	N/A	A	A
M	-No Center Detent	S	A	A	A	A	A	A

P=Prefix S=Suffix A=Available N/A=Not Available

Combined Options Not Available

1. Options M, L & R available individually only.
2. Options FR limits maximum pressure on valve to 1500 PSI.



Contents

Manifold Mounted Exectrol Directional Control Valves

Series 21100 Solenoid Operated, 4-Way E2 - E3

Series 21200 Solenoid Operated, 4-Way E4 - E5

Series 25100, 25200 Solenoid Controlled, Pilot Operated, 4-Way E6 - E8

Series 21353, 21356 Solenoid Operated, 2-Way E9

Series 23100, 23200, 23300 Pilot Operated, 4-Way E10 - E11

Series 21400 Direct-Acting, Solenoid Operated E12 - E13

Series 961, 962, 963, 965 Dump or Shut-off E14 - E16

E