

# Reversing Valves

In a Dualine lubricating system, the reversing valve directs pump flow to one of the two main supply lines while the second supply line is in relief to the pump reservoir. At the completion of each half lubrication cycle, the reversing valve redirects the pump and relief flow. Thus, on each succeeding half lubrication cycle, pressure and relief flow are alternated in the two main supply lines. This action causes the measuring valves to stroke and discharge lubricant to their respective bearings. In an automatic system, the reversing valve also controls maximum system pressure and pump shut down.

## FR20

These reversing valves operate in conjunction with pressure switches. They control end-of-line systems (DC41 central stations and air powered systems).

### Technical Data

Maximum Flow Rate	12 gpm (Oil)
Maximum Allowable Pressure (Non-Shock)	5000 psi (3000 psi @ relief port)
Spool Configuration	2 position, 4 way
Solenoid	Push type epoxy covered coil
Inrush Current	5.5 amp
Holding Current	1.1 amp
Seals	Buna "N" rubber

## DR4-5

These reversing valves are activated by system pressure and are adjustable between 500 and 3500 psi. They control non-return and return systems using CS2000, DC36 and DC42 central stations. They are also used with air barrel pumps for spray and medium and large dualine systems.

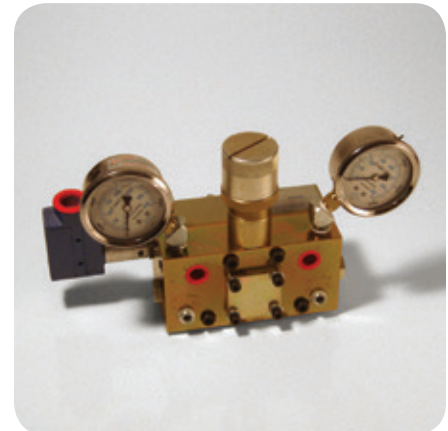
### Technical Data

Lubricant	SAE 10 oil to NLGI grade 2 grease	
Materials	Housing	Zinc with yellow chromate
	Piston	Low carbon steel
Pressure Range	500-3500 psi	
Seals	Buna "N" rubber	



FR20

See Datasheet #35585 for additional information.



DR4-5

See Datasheet #DL1200 for additional information.

## SA-V

This reversing valve is designed for use in hydraulic Dualine systems. It can be used as a 4/2 or a 3/2 valve and is driven by a direct current geared motor.

### Technical Data

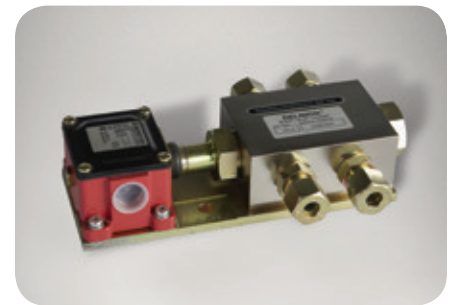
Maximum Operating Pressure	5800 psi (400 bar)
Temperature Range	-4°F to 176°F (-20°C to 80°C)
Maximum Power Consumption	42 W
IP Enclosure Rating	IP-65

### SG-A Switching Device

The switching device SG-A must be used in conjunction with the SA-V reversing valve. It is used as a differential pressure switch. When the differential pressure is 50 bar and/or 100 bar, the SA-V releases a pulse for the reversion of the directional control valve or for the monitoring of the system.



SA-V



SG-A Switching Device

### How to Order

When ordering, specify name, description and part number, e.g. DR4-5 Reversing Valve with limit switch, pressure gauges and mounting bracket, **Part #DR459**.

Name	Description	Part #
FR20 <sup>1</sup>	115 VAC (50-60 Hz), Not supplied with mounting kit.	37149115N1
	115 VAC (50-60 Hz), Supplied on DC41 w/ mounting brackets and hardware.	37149115N2
	230 VAC (50-60 Hz), Not supplied with mounting kit.	37149230N1
	24 VDC, Not supplied with mounting kit.	3714924N1
DR4-5	Basic valve.	DR45
	Valve with limit switch, pressure gauges and mounting bracket.	DR459
	Valve with limit switch, pressure gauges and line connecting hardware.	DR45K
	Valve with limit switch, pressure gauges, mounting brackets and line strainer.	DR460A <sup>3</sup>
	Valve with limit switch, pressure gauges, mounting brackets and line strainer.	DR460B <sup>4</sup>
SA-V <sup>2</sup>	110-127 VAC and 200-240 VAC	SAV11A00
	24 VDC	SAV24A00
SG-A	50 Bar	SGA05A00
	100 Bar	SGA10A00

<sup>1</sup> Refer to Datasheet #35585: FR20 Reversing Valve, for all available versions.

<sup>2</sup> SGA-A switching device is required for SA-V.

<sup>3</sup> Grease only

<sup>4</sup> Oil only