

## Compu-Spread

### Systems for Class 4/5/6 Snow & Ice Control Vehicles

### Perfectly Matched to the Application

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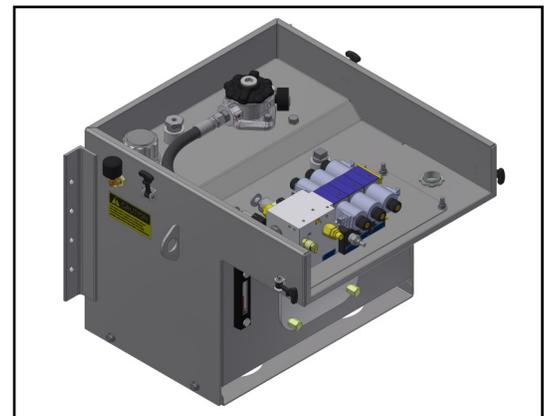
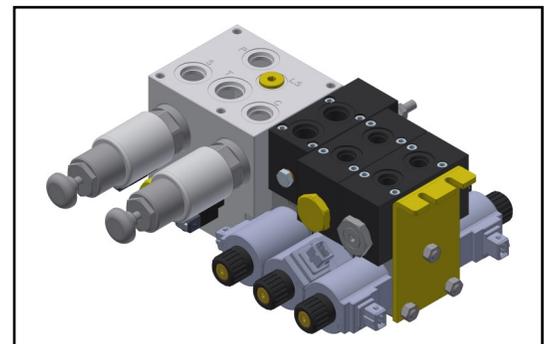
Rexroth has long been established in the Snow & Ice Control market with our Compu-Spread products, particularly in the large truck sector. We now have devices focused on the requirements unique to the mid-sized truck market: compact, low weight, still full-function, fewer possible actuator functions and of course cost effective system solutions. The elements which make up this system concept were engineered together, matched to ensure optimum vehicle performance.

The CS-530 spreader controller family is ideally suited for this sector. It is smaller than the CS-550 but retains many of its features. It connects easily to the CS-106 joystick console, designed for smooth control of proportional or on/off functions such as hoist, tilt and plow. Cab installation of these controls is facilitated by the robust armrest console.

The SCDX hydraulic control features a base spinner/conveyor manifold, to which stackable directional control valves, proportional or on/off, are added according to system requirements. Load sensing hydraulics are a Compu-Spread standard.

The hydraulic controls can be installed in the VTM-076 valve/tank module, intended for side frame mounting where space is limited. The stainless steel tank and enclosure lid ensure that all hydraulic components are protected from the weather.

The Rexroth A1VO variable displacement piston pump is the most compact unit available for its flow rate, designed for PTO installation in this vehicle class. It features a compact pressure and load sense control, ensuring that these systems are as energy efficient—and quiet—as possible.



**System component overview**

(excerpts only—see the respective data sheets for more detail)

**CS-530 Controller Family**

CS-520	2 axis controller (spinner, conveyor): spinner control—manual; conveyor control—manual, ground-speed triggered manual, open or closed loop regulation; Pause and Blast (remote possible); 4 material types; AVL	
CS-524	2 axis controller (spinner, conveyor): spinner control—manual; conveyor control—manual, open or closed loop regulation; Pause and Blast (remote possible); 4 material types; AVL; integrated 2 axis on/off joystick with 2 modes, 5 switches for auxiliary functions (2 A maximum each)	
CS-530	3 axis controller (spinner, conveyor, liquid): spinner control—manual; conveyor & liquid control—manual, ground-speed triggered manual, open or closed loop regulation; Pause and Blast (remote possible); 4 material types; 4 liquids; AVL	
Operating temperature	-22 to 150° F	-30 to 85° C
Power supply	8-32 VDC	
Solenoid voltage	12 VDC, 2 A maximum, PWM proportional outputs, fixed current regulation	

**CS-106 joystick console**

Paddle version	3, 5 or 7 single axis proportional paddle sticks, with equivalent number of rocker switches	
Joystick version	2 joystick (with 3 rocker switches) or 3 joystick (5 rocker switches); joysticks available: single axis, dual axis "X" gate or 360°, 3 axis 360° with "Z" twist	
Power supply	8-32 VDC, console fitted with 10 A input fuse	
Solenoid voltage	Depending on execution, up to 14 (7 x double acting) proportional outputs 3.5 A Max, PWM, with current regulation, full coil suppression on joystick outputs	
Rocker switches	5 A; 2 or 3 position contoured rocker, latched or spring return	

**General Hydraulic System Considerations**

Fluid	Mineral oil to DIN 51524 or ATF; refer to Rexroth data sheet RE 90220 for more details	
Fluid operating temperature range	-22° to 212° F	-30° to 100° C
Fluid cleanliness recommendation	per ISO 4406 (c): 19/17/14	
Fluid viscosity	42 to 2000 SUS (60 to 500 preferred)	5 to 400 cSt (10 to 100 preferred)

**SCDX Hydraulic Controls**

Maximum operating pressure	3000 psi	210 bar
Maximum inlet flow rate	15 USGPM	56 L/min
Directional Valve flow rate (up to 6 slices possible)	1 section (hoist) 8 USGPM, others 4 USGPM	1 section (hoist) 30 l/min, others 15 l/min

**VTM-076 Valve/Tank Module**

Hydraulic fluid volume	20 US gallons	76 litres
VTM overall (W x H x D)	25.4 x 25 x 29.8 inches	644 x 634 x 756 mm
VTM Weight (with manifold, without fluid)	161 pounds (maximum with M4 assembly)	73 kg (maximum with M4 assembly)

**A1VO Piston Pump—sizes 28 and 35**

Displacement	1.7 or 2.1 cu. in./rev.	28 or 35 ccm/rev.
Nominal pressure	3600 psi	250 bar
Maximum speed	3200 rpm (size 28); 3000 rpm (size 35)	
Maximum flow at maximum speed	23 (size 28) or 27.7 (size 35) USGPM	89 (size 28) or 105 (size 35) l/min

N.B. All dimensions are approximate, intended for illustrative purposes only. Request a certified drawing before beginning construction or installation.

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