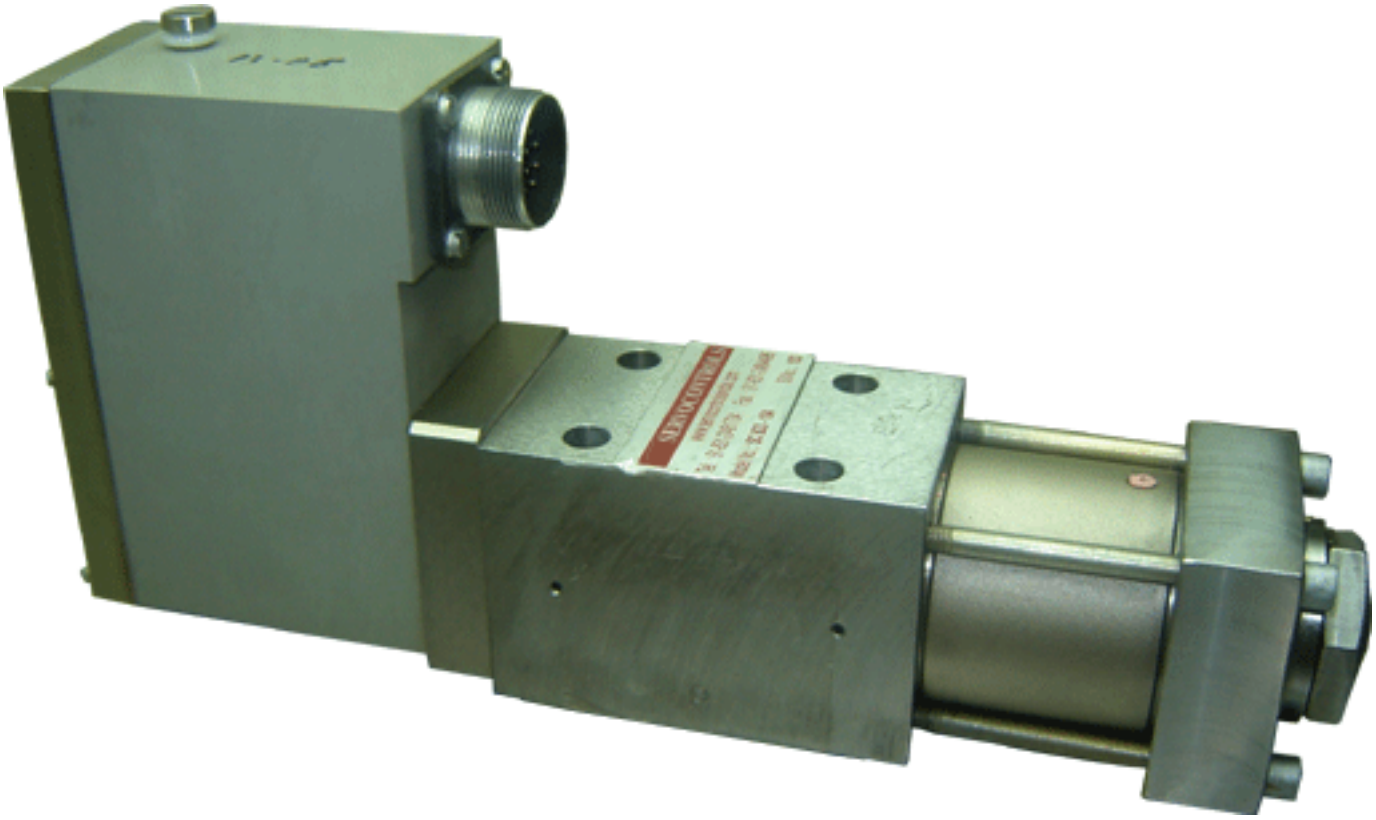
DIRECT DRIVE VALVE (DDV)

SC633/SC634



SERVOCONTROLS
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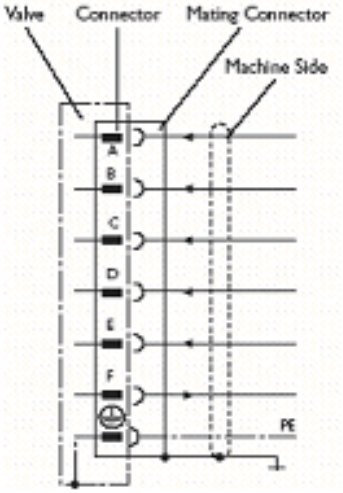
1. Performance	SC633	SC634
1.1 Rated Flow at △ p = 7MPa, 1/ m in	5;10;20;40	60;100
1.2 Threshold of feeling, %from U_{rated}	0, 5	0, 5
1.3 Null bias, % from U_{rated}	2, 0	2, 0
1.4 Hysteresis, % from U_{rated}	0, 5	0, 5
1.5 Non-Linearity, % from rated flow	10	10
1.6 Lekage, % from rated flow	3	
1.7 Dynamic Characteristic at control signal Amplitude= 0.1 U_{rate} -Phase Shift= 90^0 at frequency f, Hz -Rising of amplitude-phase-frequency characteristics at frequency range 0…200Hz, decibel	 150 1	 100 1
1.8 Mass,kg,	2	7
2. Electronic Block Characteristics		
2.1 Supply Voltage, V	22…28	22…28
3. Operation Requirements		
3.1 Supply Pressure , MPa	14….21	2…..28
3.1 Supply Pressure , MPa	0, 5	0…5
3.3 Operation Fluid	Mineral Oil	
3.4 Rated Control Signal	10	±10
3.5 Acceptable Viscosity	5…….400	5…….400

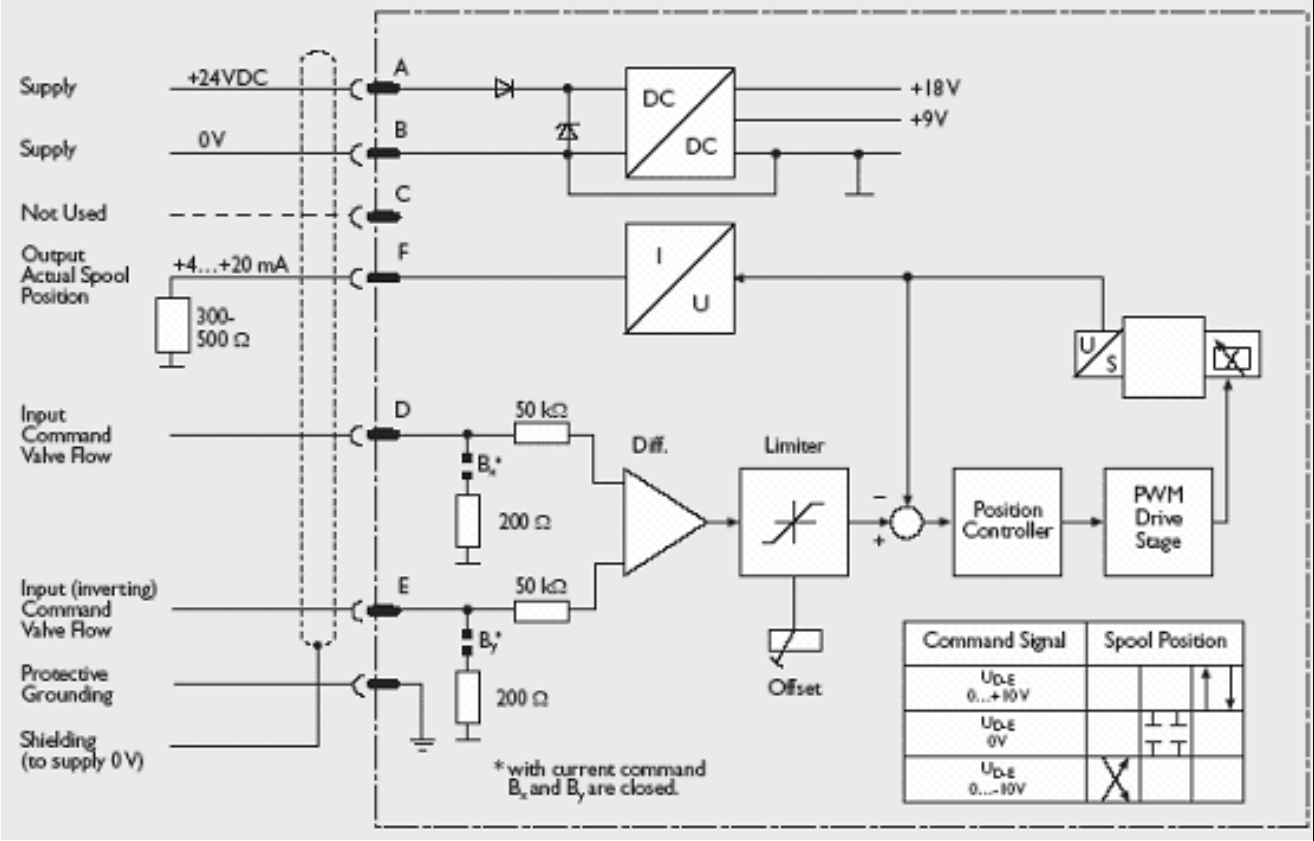
Connector Wiring

Valve with 6+PE pole connector to DIN 43563 and mating connector (metal shell) with advancing protective grounding connection ( ).
Thread 7/8-20 UNF 2A.



Function	Voltage Command 0..... ± 10VDC	Current Command 0..... ± 10mA
Supply	+24VDC(22 to 28VDC)	+24VDC(22 to 28VDC)
Supply/Signal Ground	⊥ (0V)	
Not Used		
Input Command Valve Flow	0..... ± 10VDC Input resistance 50kΩ	0..... ± 10mA Load resistance 200kΩ
Input Inverted Command Valve Flow	0..... ± 10VDC Input resistance 50kΩ	0..... ± 10mA Load resistance 200kΩ
Output Actual Spool Position	+4.....+20mA load resistance 300Ω to 500Ω, with respect to ⊥(0V)	
Protective Grounding		

Block Diagram



Notes

1. Supply voltage U_A = +24 VDC (22 to 28 VDC).
Current consumption I_{Amax} = 1.2 A for D633 and
I_{Amax} = 2.2 A for D634.
External fuse per valve D633 1.6 A (slow)
D634 2.5 A (slow)

2. Input signal (command signal)

2.1 Voltage command 0…±10 V
The spool stroke of the valve is proportional to (U_D-U_E).
100% valve opening P ç A and B ç T with (U_D-U_E) = +10 VDC.
With single ended signals either pin D or E, depending on the desired flow phasing, is connected to reference voltage level. (usually ground ^).

2.2 Current command 0…±10 mA
The spool stroke of the valve is proportional to (I_D - I_E).
100% valve opening P ç A and B ç T with (I_D - I_E) = +10 mA.
Either pin D or E is used according to the desired flow phasing.The unused pin is left open.

3. Measuring output (actual spool position)
For the actual spool position signal IF is available (+4 ... +20 mA).
100% valve opening P ç A and B ç T with +20 mA.
100% valve opening P ç B and A ç T with +4 mA.

4. All signal lines (also those of external transducers) should be twisted pairs and shielded. Shielding connected radially to ^ (0 V), power supply side, and connected to the mating connector housing (EMC).

5. **EMC**: Meets the requirements of EN 55011/3.91 class B,EN 50081-1/01.92, and EN 50082-2/03.95, performance criterion class A.

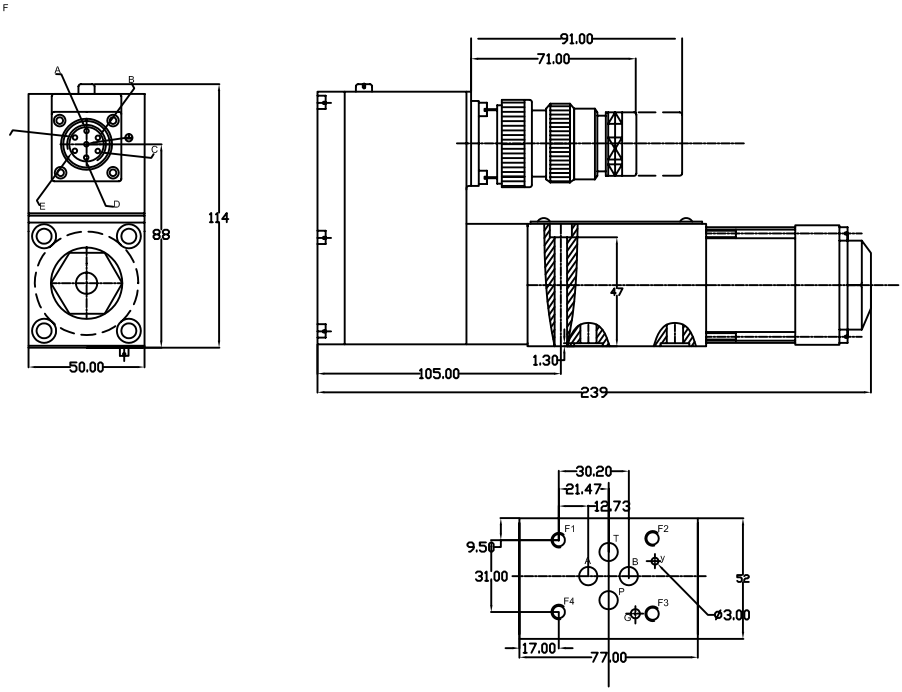
6. Protective grounding lead Å 0.001 in^2

7. When making electrical connections to the valve (shield, protective grounding), appropriate measures must be taken to ensure that locally different earth potentials do not result in excessive ground currents. See Moog Application
Note AM 353E.

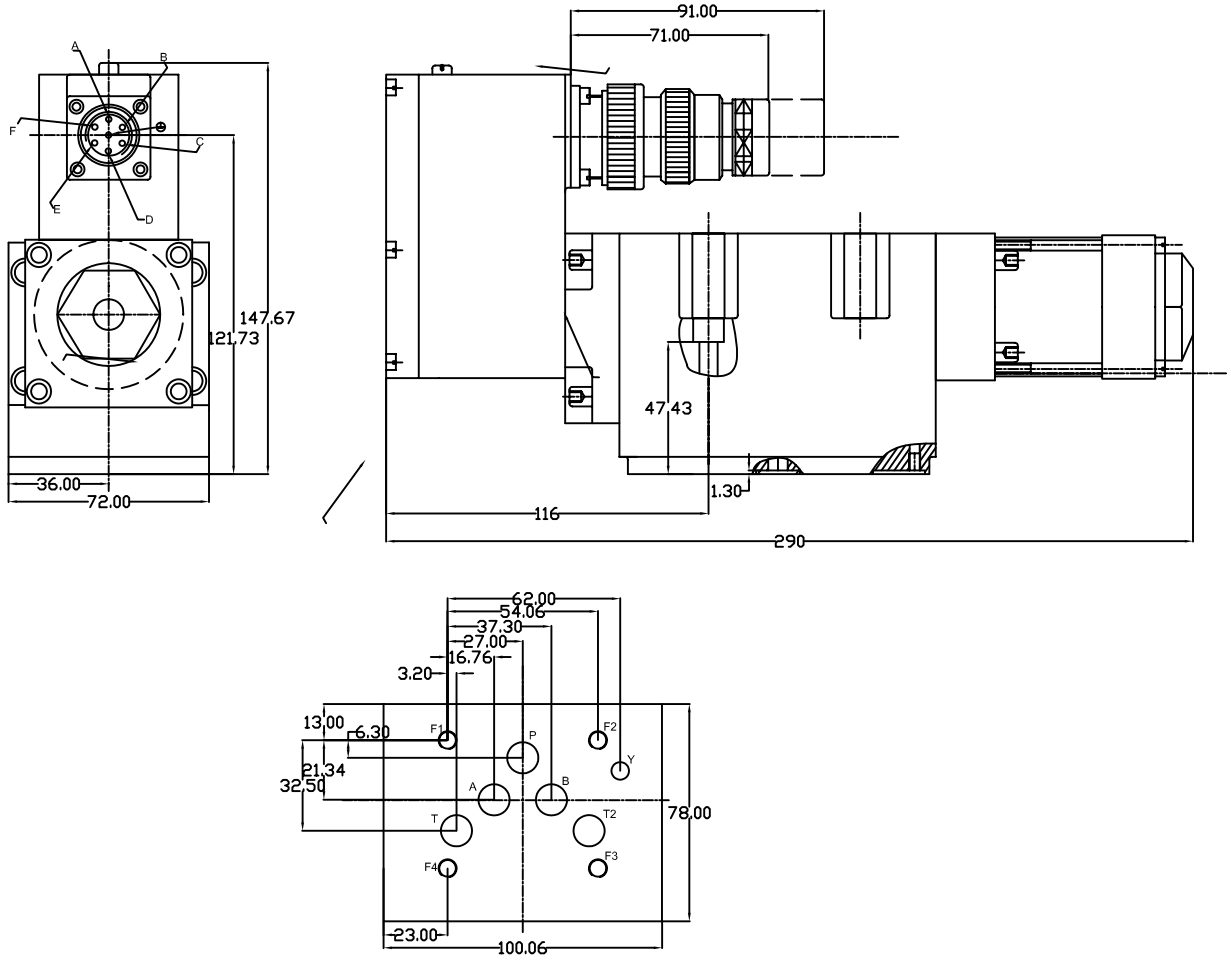
8. Valves available with explosion protection to EN 50018, class EEx d IIB+H2 T4 and EEx d I.
Installation dimensions and connector changed.
Special data sheet on request.

INSTALLATION DETAILS

SC633



SC634



SC633-XXX (Std. valves)

±10V Input , lpm at 35 bar each land.

Model	Flow
SC633-101	5
SC633-102	10
SC633-103	20
SC633-104	40

±10mA Input , lpm at 35 bar each land.

Model	Flow
SC633-201	5
SC633-202	10
SC633-203	20
SC633-204	40

SC634 (Std. valves)

±10V Input , lpm at 35 bar each land.

Model	Flow
SC634-101	60
SC634-102	100

±10mA Input , lpm at 35 bar each land.

Model	Flow
SC634-201	60
SC634-202	100

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