

Technical specifications of pump:

Sl. No.	Item description	specification
a)	Type of the pump	Gear pump
b)	Type of drive (motor)	Brushless DC magnetically driven
c)	Working fluid	Acetone
d)	Working condition	Liquid state
e)	Material of the construction	SS 316 L or equivalent
f)	All wetted parts	SS 316 L or equivalent
g)	Volume flow range (litre/min)	0 to 3
h)	Max. rated system level pressure (bar)	~ 10
i)	Max. differential pressure (bar)	~ 8
j)	Max. head (m)	~ 10
k)	Operating temperature range of the fluid (°C)	-25 to +80
l)	End connection	¼" (NPT female) or equivalent
m)	Seals, inner materials	SS 316 L or similar metallic
n)	Speed (rpm)	Up to 5000
o)	DC Input voltage (V)	24
p)	Mass (kg)	< 2
q)	Leak rate (mbar.l/s)	1×10^{-8}
r)	Variable speed control through input voltage as follows	
	i. Voltage (0V)	0 rpm
	ii. Voltage (1V)	1000 rpm
	iii. Voltage (2V)	2000 rpm
	iv. Voltage (3V)	3000 rpm
	v. Voltage (4V)	4000 rpm
	vi. Voltage (5V)	5000 rpm
s)	Restricted materials	Following materials shall not be used in the pump: Plastic, rubber, neoprene and polymer based materials

t)	Pump shall be vacuum compatible for a vacuum level of 10^{-6} torr
u)	Pump materials must meet the requirement of total mass loss (TML) < 1% and collected volatile condensable materials (CVCM) < 0.1%

General requirements:

- **Acceptance of the system at vendor site:**
 - ✓ Pre delivery inspection of the item will be carried out at vendor premises by ISRO engineer.
 - ✓ The vendor shall demonstrate functionality test at vendor site which includes the pump operation like switch on/off, flow control etc.
- **One-to One Compliance:** The supplier shall provide printed catalogue of the system providing detailed specification and one-to-one compliance table as per the technical specifications. The offer should be complete with compliance statement for each of the specifications, offering technical features, safety features and optional items. Indicating merely 'YES', 'NO' or 'OKAY' in the compliance statement will not be considered
- **Delivery period:** 8 to 10 Weeks from the date of placement of purchase order
- **Instruction manual** (hard and soft copy) including installation procedure and service manual with details regarding operation and maintenance of the system shall be provided.
- **Warranty:** The equipment shall have minimum warranty for 12 months from the date of acceptance.

Technical compliance statement

ISRO Specifications			Vendor compliance
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