

Leybold DIJ Series Technical Specifications

	DIJ 10	DIJ 320	DIJ 16	DIJ 500	DIJ 20	DIJ 630	DIJ 35	DIJ 1000
High vacuum connection DN	10" ANSI	320 ISO-K	16"ANSI	500 ISO-K	20" ANSI	630 ISO-K	35" ANSI	1000 ISO-F
Forevacuum connection DN	2" ANSI	63 ISO-K	3"ANSI	100 ISO-K	4" ANSI	160 ISO-K	6" ANSI	200 ISO-K
Pumping speed ¹⁾ for								
Nitrogen < 10⁻⁴ mbar	2 800		6 800		10 800		28 000	
Working range mbar	< 10 ⁻² to 10 ⁻⁷							
Ultimate total pressure ²⁾ mbar	< 5 x 10 ⁻⁷		< 5 x 10⁻7		< 5 x 10 ⁻⁷		< 5 x 10 ⁻⁷	
Max. permissible								
forevacuum pressure mbar	5 x 10 ⁻¹		5 x 10⁻¹		5 x 10 ⁻¹		5 x 10⁻¹	
Pump fluid fill, min. / max.	1.0 / 1.4		1.7 / 3.4		5.0 / 7.0		12.0 / 18.0	
Mains voltage V	1 ~ 230 /N/PE		3 ~ 400 /N/PE		3 ~ 400 /N/PE		3 ~ 400 /N/PE	
depending on variant, 50 / 60 Hz $$ V	1 ~ 230 /N/PE		3 ~ 460 /N/PE		3 ~ 460 /N/PE		3 ~ 460 /N/PE	
Heating power kW	2.4		3.6		10.8		21.6	
Number of heating cartridges	2		3		9		18	
Warm up period min	< 25		< 25		< 25		< 30	
Coolant (minimum) 2)								
for the pump I/h	160		290		600		1 200	
for the cold cap baffle I/h	20		50		80		150	
Number of cooling circuits								
(including cold cap baffle)	2		2		2		2	
Coolant connection								
for the pump G	3/8"		1/2"		1/2"		1/2"	
for the cold cap baffle G	1/4"		3/8"		3/8"		3/8"	
Weight, approx. kg	45		110		208		720	
Recom. forevacuum pumps ³⁾								
at working pressure > 10 ⁻⁴ mbar								
oil-sealed	SV 100 B & W 501		SV 200 & W 501		SV 300 B & W 1001		SV 630 B & W 2001	
dry-compressing	-		DV 450 & W 501		DV 450 & W 1001		DV 650 & W 2001	
at working pressure < 10 ⁻⁴ mbar								
oil-sealed	D 25 B		D 65 B & W 251		SV 100 B & W 501		SV 300 B & W 1001	
dry-compressing	ECODRY plus 60		ECODRY plus 60 & W 251		-		DV 450 & W 1001	
Recom. supporting pump ³⁾	TRIVAC D 25 B		TRIVAC D 40 B		TRIVAC D 65 B		TRIVAC D 65 B	

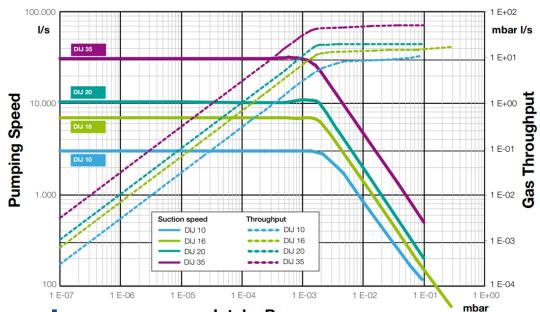
1) Measured as per DIN 28 427 using DC 704 normal as the pump fluid.

2) The coolant water volume is referenced to $\Delta T = 10$ K. The discharge temperature should not exceed 30 °C.

3) Single- and two-stage rotary vane pumps (TRIVAC; SOGEVAC), or dry-compressing pumps (ECODRY plus ;DRYVAC) from our line of forevacuum pumps in conjunction with roots pumps (RUVAC) in pumping systems.



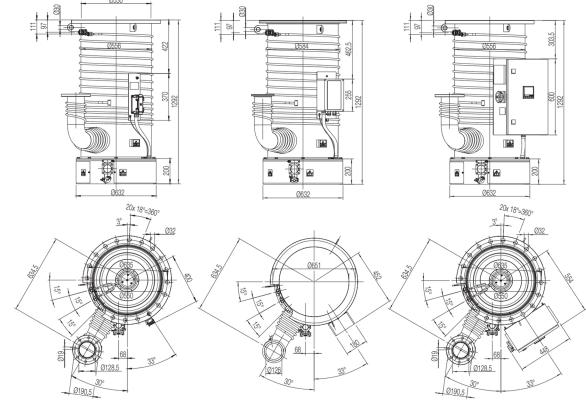
Leybold DIJ Series Pumping Curves



Dimensions

Intake Pressure

Dimensional drawings for DIJ 20 with plug, (left), DIJ 20 with ESU (middle) and DIJ 630 with junction box (EER) (right)



PROVAC SALES, INC. 3131 SOQUEL DRIVE, SOQUEL CA 95073



Leybold DIJ Series Features & Benefits

- most innovative heating concept
- effective temperature monitoring protects against overheating
- minimum stress & longest lifetime for heaters & oil
- insulated heater area ensures minimum energy losses
- unique baffle design minimizes oil backstreaming
- five stage system design provides excellent performance data
- prolonged maintenance intervals
- high forevacuum tolerance & pumping speed
- simple to operate, maintenance friendly design
- safe & economical

Applications

- vacuum coating metallurgy vacuum furnaces vacuum drying
- research & development space simulation industrial applications
- mechanical engineering

