

## **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 <sup>1)</sup> for								
Nitrogen < 10⁻⁴ mbar	2 800		6 800		10 800		28 000	
Working range mbar	< 10 <sup>-2</sup> to 10 <sup>-7</sup>							
Ultimate total pressure <sup>2)</sup> mbar	< 5 x 10 <sup>-7</sup>		< 5 x 10⁻7		< 5 x 10 <sup>-7</sup>		< 5 x 10 <sup>-7</sup>	
Max. permissible								
forevacuum pressure mbar	5 x 10 <sup>-1</sup>		5 x 10⁻¹		5 x 10 <sup>-1</sup>		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 <sup>3)</sup>								
at working pressure > 10 <sup>-4</sup> 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 <sup>-4</sup> 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 <sup>3)</sup>	TRIVAC D 25 B		TRIVAC D 40 B		TRIVAC D 65 B		TRIVAC D 65 B	

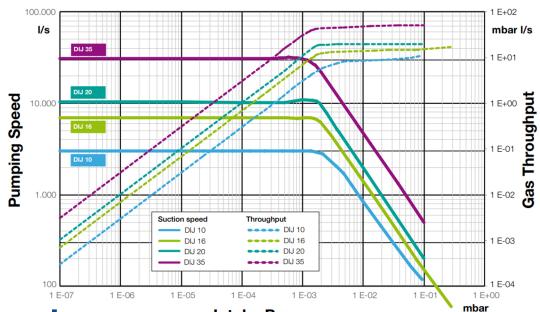
1) Measured as per DIN 28 427 using DC 704 normal as the pump fluid.

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.



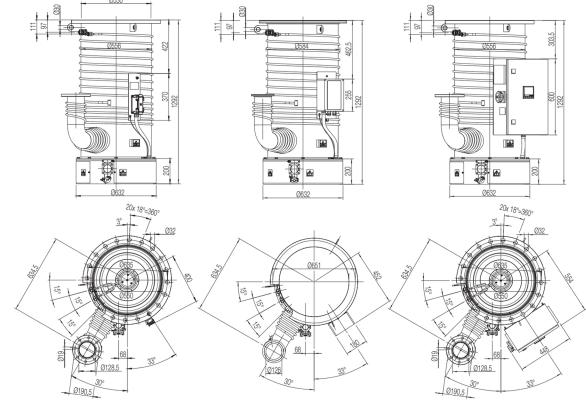
# Leybold DIJ Series Pumping Curves



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

