

## ELETTRORAVA TURBOMOLECULAR PUMPS TECHNICAL DATA

MODEL		ETP 80	ETP 200	ETP 300	ETP 450	ETP 1000	ETP 1800	ETP 3500	ETP 6000	ETP 10000
Pumping Speed N <sub>2</sub>	(l/s)	80	190	330	460	1000	1500	3000	5500	10000
Pumping Speed He	(l/s)	60	170	340	520	1150	1800	3400	6000	11300
Pumping Speed H <sub>2</sub>	(l/s)	40	150	300	480	1100	1700	3100	5000	10300
Compress. Ratio N <sub>2</sub>		6x10 <sup>5</sup>	1x10 <sup>8</sup>	1x10 <sup>9</sup>	> 1x10 <sup>9</sup>	> 1x10 <sup>10</sup>	> 1x10 <sup>10</sup>	> 1x10 <sup>10</sup>	> 1x10 <sup>10</sup>	> 1x10 <sup>10</sup>
Compress. Ratio He		350	2x10 <sup>3</sup>	2x10 <sup>4</sup>	3.5x10 <sup>4</sup>	2x10 <sup>5</sup>	2x10 <sup>5</sup>	6x10 <sup>4</sup>	2.3x10 <sup>5</sup>	2x10 <sup>5</sup>
Compress. Ratio H <sub>2</sub>		60	200	1x10 <sup>3</sup>	1.5x10 <sup>3</sup>	5x10 <sup>3</sup>	5x10 <sup>3</sup>	2.6x10 <sup>3</sup>	8x10 <sup>3</sup>	5x10 <sup>3</sup>
Ultimate Pressure *	(mbar)	5x10 <sup>-9</sup>	1x10 <sup>-9</sup>	5x10 <sup>-10</sup>	5x10 <sup>-10</sup>	5x10 <sup>-10</sup>	5x10 <sup>-10</sup>	5x10 <sup>-10</sup>	5x10 <sup>-10</sup>	5x10 <sup>-10</sup>
Rotational Speed	(rpm)	60000	51000	42000	36000	36000	27000	15000	14000	12000
Starting Time	(min)	0.5	1	2	2.5	5	7	10	18	25
Inlet Flange	CF	DN63CF	DN100CF	DN150CF	DN150CF	DN200CF	DN250CF	Wheeler 16"	Wheeler 20"	Wheeler 25"
	ISO	DN63ISO	DN100ISO	DN160ISO	DN160ISO	DN200ISO	DN250ISO	DN400ISO	DN500ISO	DN630ISO
Outlet Flange	KF	DN16KF	DN25KF	DN25KF	DN40KF	DN40KF	DN63ISO	DN100ISO	DN100ISO	DN100ISO
Min. recommended Backing-pump	(m <sup>3</sup> /h)	4	8	12	15	22	35	60	80	120
Lubrication		Oil/Grease	Oil/Grease	Oil/Grease	Oil/Grease	Oil/Grease	Oil/Grease	Oil	Oil	Oil
Noise level at 1 m dist.	(dBA)	< 45	< 45	< 46	< 47	< 48	< 49	< 52	< 55	< 60

\* According to the DIN28428 standard, the ultimate pressure is the pressure measured in the standard test-done after a maximum bake-out period of 48 hours at maximum temperature of 300°C and after a maximum cooling-down period of 48 hours.

The backing pump is a two stage rotary vane pump. The inlet flange seal is of metal.