

PAK Single Screw Extruder Specifications

		PAK200		PAK250		PAK300		PAK350		PAK450		PAK600	
		English	Metric	English	Metric	English	Metric	English	Metric	English	Metric	English	Metric
Barrel & Screw Specifications	Screw Diameter (in/mm):	2.0	50.8	2.5	63.5	3.0	76.2	3.5	88.9	4.5	114.3	6.0	152.4
	L/D:	24:1		24:1		24:1		24:1		24:1		30:1	
	Number of Heat/Cool Zones:	3		4		5		5		5		6	
	Blower Motor CFM (Barrel Cooling):	465		465		465		465		465		495	
	Number of Barrel Zones:	3		4		5		5		5		6	
	Number of Gate Zones:	1		1		1		1		1		1	
	Number of Die Zones:	1		1		1		1		1		1	
	Heat/Cool Capacity/Zone (kW):	3		4		4		4.8		10		12	
Electrical Specifications	Maximum Melt Pressure Continuous Operation (psi/bar):	10,000	680	10,000	680	10,000	680	10,000	680	10,000	680	10,000	680
	Precision Barrel Pressure Tap Standard:	1/2-20 NF		1/2-20 NF		1/2-20 NF		1/2-20 NF		1/2-20 NF		1/2-20 NF	
	Main Power Drop (1):	460/3/60		460/3/60		460/3/60		460/3/60		460/3/60		460/3/60	
	Maximum Amp Load (Amps) (2):	57.8		89.5		119.1		170.1		267.3		687	
	Main Motor Power (HP/kW):	20	15	40	30	60	45	100	75	150	112	400	300
	Nominal Speed of Main Motor (rpm):	1,750		1,750		1,750		1,750		1,750		1,750	
	Barrel Zones:	460/3/60		460/3/60		460/3/60		460/3/60		460/3/60		460/3/60	
	Gate Zone:	460/3/60		460/3/60		460/3/60		460/3/60		460/3/60		460/3/60	
Reducer Specifications	Die Zones:	230/3/60		230/3/60		230/3/60		230/3/60		230/3/60		230/3/60	
	Gear Box Rating:	40HP @ 100 rpm		120HP @ 100 rpm		120HP @ 100 rpm		280HP @ 100 rpm		480HP @ 100 rpm		800HP @ 100 rpm	
	AGMA Service Factor (3):	1.0 @ 100 rpm		1.0 @ 100 rpm		1.0 @ 100 rpm		1.0 @ 100 rpm		1.0 @ 100 rpm		1.0 @ 100 rpm	
	Thrust Bearing L-10 Life (4):	1,300,000		1,900,000		1,900,000		300,000		300,000		110,000	
	Thrust Bearing Type (High Capacity):	29418E		29424E		29424E		T611		T811		T911	
	AGMA Rating (Durability & Low Noise):	12		12		12		12		12		12	
	Gear Ratio:	17.5:1		17.5:1		17.5:1		17.5:1		17.5:1		17.5:1	
	Reduction:	Double		Double		Double		Double		Double		Double	
Installation	Screw Speed based to Based on Gear Ratio (rpm):	100		100		100		100		100		100	
	Nominal Screw Speed with Belt & Sheave (rpm):	100		100		100		100		100			
	Extruder Length (in/mm):	70	1,778	100	2,540	106	2,686	132	3,353	(5)		(5)	
	Extruder Width (in/mm):	40	1,016	40	1,016	42	1,067	48	1,219	(5)		(5)	
	Extruder Height with Hopper (in/mm):	75	1,905	75	1,905	93	2,356	92	2,337	(5)		(5)	
Extruder Weight (lbs/kg):	2,800	1,273	3,800	1,727	4,800	2,182	7,650	3,477	(5)		(5)		
Barrel Centerline from Floor (in/mm):	42	1,067	42	1,067	42	1,067	42	1,067	42	1,067	42	1,067	

Notes:

- 1) PAK600 extruder requires two drops. One drop for the control cabinet and one drop for the drive cabinet.
- 2) Maximum amp load is based on the standard AC motor & drive + the number of barrel and die zones (shown above).
Any variance from the aforementioned numbers will change the maximum amp load.
Electrical engineering will determine the amp load on the order (HP, number of die zones, number of barrel zones, air conditioning, etc.)
- 3) Rating @ SF = 1.0 @ 1750/100 rpm.
- 4) @ 5,000 psi (345 bar) @ 100 rpm.
- 5) Weights and dimensions vary based on machine content.
- 6) PAK600 comes standard as vented and plugged.