

Air usage and compressor sizing for AVL products

Air Compressor Requirements for AVL Products

DEVICE	USAGE	UNITS	PER	COMPRESSOR RATING *	UNITS	NOTES
PDL (16H) Dobby A-Lift	0.96	CFM @ 100 PSI	Loom	3	CFM	Rated @ 60 PPM
TDL (24H) Dobby A-Lift	1.06	CFM @ 100 PSI	Loom	3	CFM	Rated @ 60 PPM
FDL (16H) Dobby A-Lift	0.96	CFM @ 100 PSI	Loom	3	CFM	Rated @ 60 PPM
SDL (16H) Dobby A-Lift	0.96	CFM @ 100 PSI	Loom	3	CFM	Rated @ 60 PPM
SDL (24H) Dobby A-Lift	1.06	CFM @ 100 PSI	Loom	3	CFM	Rated @ 60 PPM
A' Loom Dobby (all models) A-Lift	1.25	CFM @ 100 PSI	Loom	4	CFM	Rated @ 60 PPM
RL 48 in., 72 in., 96 in., 120 in.	0.73	CFM @ 100 PSI	Loom	2	CFM	Rated @ 30 PPM
RL 144 in., 180 in.	1.45	CFM @ 100 PSI	Loom	4	CFM	Rated @ 30 PPM
Air-Assisted Shuttle Boxes	0.47	CFM @ 100 PSI	Loom	2	CFM	Rated @ 60 PPM
IDL (all functions)	25.00	CFM @ 115 PSI	Loom	25	CFM	Rated @ 60 PPM
Air-Jacquard (336 Hook Head)	2.50	CFM @ 100 PSI	Head	8	CFM	Rated @ 60 PPM
Electro-Mechanical Jacquard (7/07) A-Lift (120 Hook Head)	1.50	CFM @ 100 PSI	10 Heads	5	CFM	Rated @ 60 PPM

COMPRESSOR RATING COMMENTS:

I suggest sizing a compressor for worst case scenerios like say, 50% duty cycle. When using a 50% duty cycle, doubling the usage rate is the fist step, then adding another 50% will insure the compressor is not working at it's maximum capacity, making it last longer and delivering reliable compressed air to AVL products.

EXAMPLE: PDL doobby uses .963 CFM. Round up to 1 CFM, X 2 = 2 CFM, + (50%) 1 CFM =3 CFM recommended compressor size for this application.

Exceptions to the above sizing methods are products that may use compressors other than the reciprocating type. Screw type compressors are often used in higher volume applications such as IDL's, or a Jacquard with several heads.

PPM = Picks Per Minute
 CFM = Cubic Feet Per Minute
 PSI = Pounds Per Square Inch