Technical data

Note: All technical data are based on a working pressure of 6 bar and with oil. Speed tolerance accuracy in between clock and anti-clockwise directions is ±10%.

Air motor size & type	P1V-A160	P1V-A260	P1V-A360
Nominal power (watts)	1600	2600	3600
Working pressure (bar)	3 to 7, 6 in explosive atmosphere		
Working temperature (°C)	-20 to +110		
Ambient temperature (°C)	-20 to +110		
Air flow required (Nl/min)	1900	3600	5800
Min pipe ID, inlet (mm)	15	19	25
Min pipe ID, outlet (mm)	15	19	25
Choice of treatment unit: recommended min air flow (l/min) at p1 7.5 bar and 0.8 bar pressure drop			
	2100	3900	6200
Choice of valve: recommended min nominal air flow (l/min) at p1 6 bar and 1 bar pressure drop			
	2300	4200	6600
Medium	40µm filtered, oil mist lubricated compressed air		
Oil operation	1-2 drop per cube meter, ISO8573-1 purity class 3.-.5		
Recommended oil	Foodstuffs industry Klüber oil 4 UH1- 32 N		
Sound level free outlet (dB(A))	120	131	131
With outlet silencer (dB(A))	97.5	99	101

Note: sound levels are measured at free speed with the measuring instrument positioned 1 meter away from the air motor at an height of 1 meter.

Material specification

Air motor size & type	P1V-A160	P1V-A260	P1V-A360
	Without gear box		
Motor housing	Cast iron, synthetic paint, silver grey color		
Shaft	High grade steel		
Key	Hardened steel		
External seal	Nitrile rubber, NBR		
Internal steel parts	High grade steel		
Vanes	Patented, no data		
Screws	Zinc coated steel		
	With gear boxes, common data		
Housing	Alloy steel, synthetic paint, silver grey color		
Shaft	Hardened steel		
Key	Hardened steel		
Shaft seal	Nitrile rubber, NBR		
Screws	Zinc coated steel		
	With planetary gear box		
Housing	Cast iron, synthetic paint, silver grey color		
	With helical gear box		
Housing	Aluminium or cast iron, synthetic paint, silver grey color		
	With worm gear box		
Housing	Aluminium or cast iron, synthetic paint, silver grey color		
Pinion	Chili cast phosphor bronze		
Worm	Alloyed, hardened steel		

P1V-A Air Motor - Without gear box

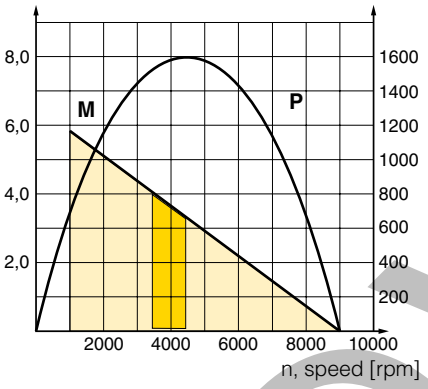
NOTE! All technical data are based on a working pressure of 6 bar and with oil.
Speed tolerance accuracy is -+10%.

A: Basic reversible motor without gear box, IEC Flange

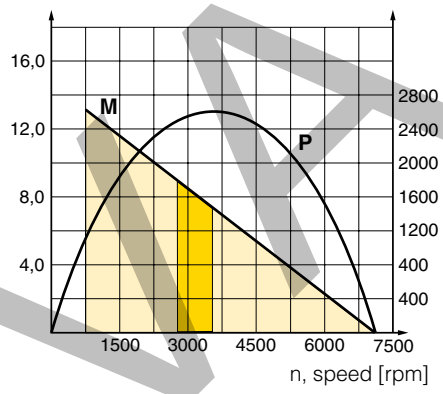
Max power	Free speed*	Nominal speed	Nominal torque	Min start torque	Air consumption at max power	Connection	Min pipe ID inlet/ outlet	Weight	Order code
kW	rpm	rpm	Nm	Nm	l/s		mm	Kg	
1,600	9000	4500	3,3	5,0	32	G1/2	15	4,2	**P1V-A160A0900**
2,600	7000	3500	7,1	11,0	60	G3/4	19	7,9	**P1V-A260A0700**
3,600	6000	3000	11,5	17,0	97	G1	25	16,5	**P1V-A360A0600**

* maximum admissible speed (idling)

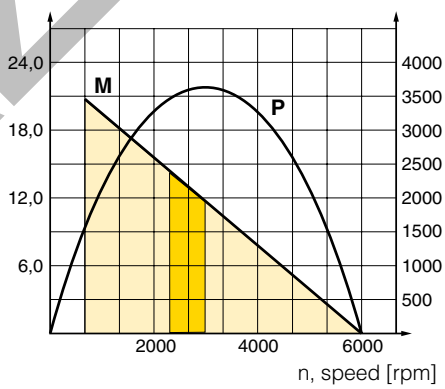
P1V-A160A0900



P1V-A260A0700



P1V-A360A0600



Possible working range of motor.

Optimum working range of motor.
Higher speeds = more vane wear
Lower speeds with high torque = more gearbox wear

Permitted shaft loadings

Max permitted load on output shaft for basic motors (based on 10,000,000 revolutions of the output shaft, with 90% probable service life for ball bearings.

	F_{ax} N	F_{rad} N	a mm
P1V-A160A0900	600	1000	15
P1V-A260A0700	700	1400	20
P1V-A360A0600	900	1900	25

F_{rad} = Radial loading (N)
F_{ax} = Axial loading (N)

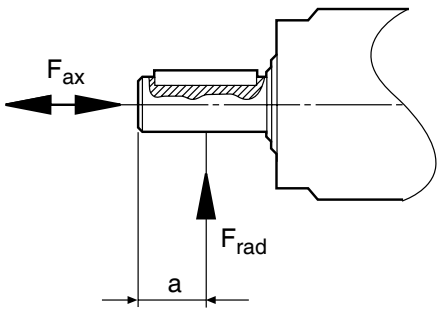
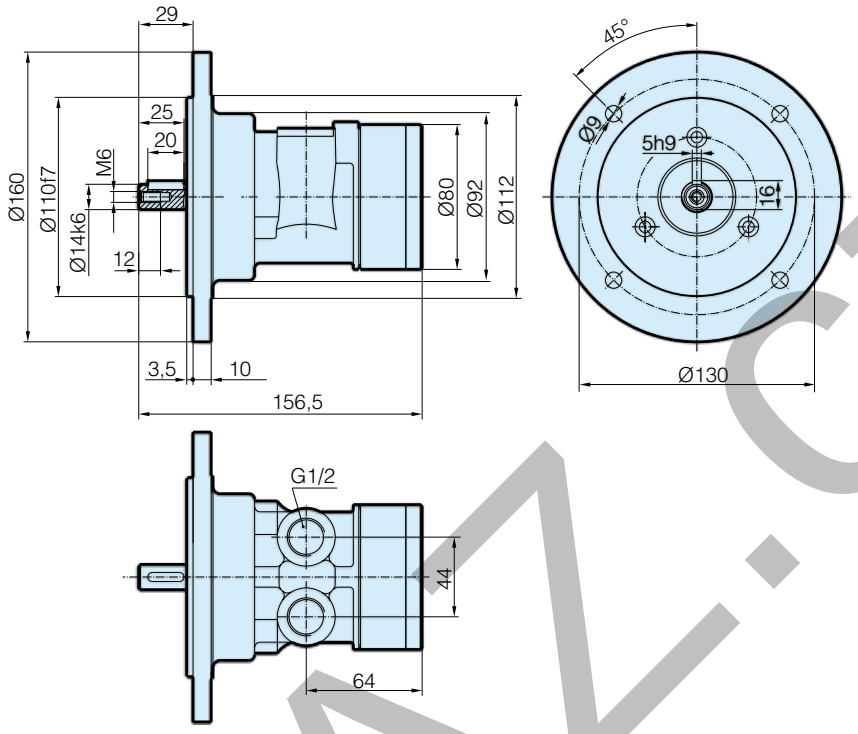


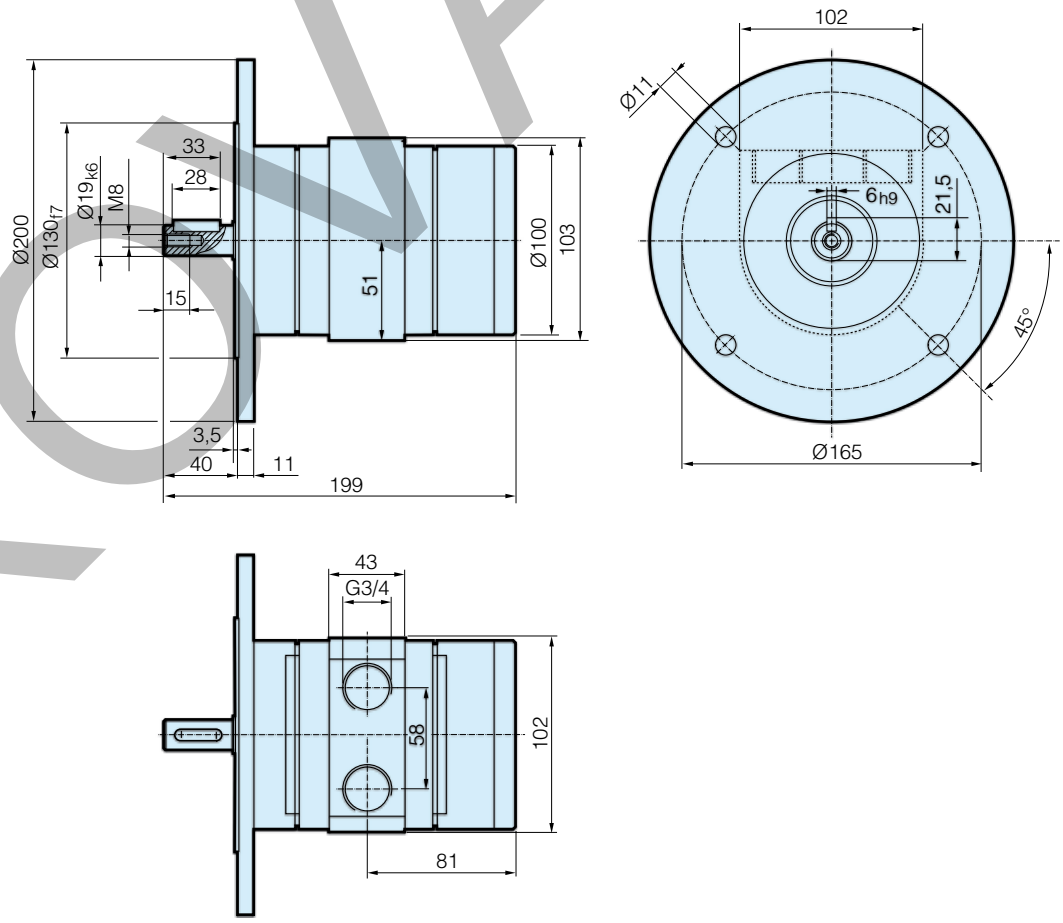
Fig. 1: Loading on output shaft.

Dimensions (mm)

Flange motor IEC71AB5 (P1V-A160)



Flange motor IEC80AB5 (P1V-A260)



Dimensions (mm)

Flange motor IEC90AB5 (P1V-A360)