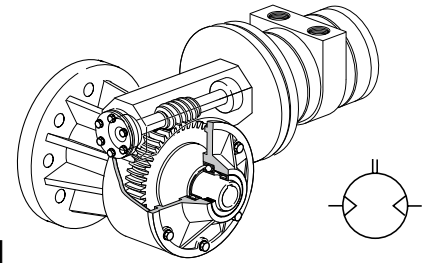


P1V-A Air Motor - Worm Gear

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



F: Reversible motor with worm gear, flange mounting left-hand

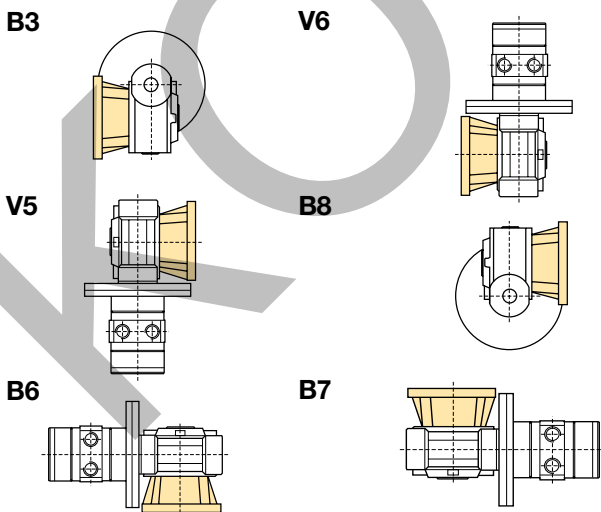
Max power	Max speed*	Nominal speed	Nominal torque	Min start torque	Max permanent torque**	Types of self-locking	Air consumption at max power	Connection	Min pipe ID inlet/outlet	Weight	Order code
kW	rpm	rpm	Nm	Nm	Nm		l/s		mm	Kg	
Series P1V-A160											
1,600	430	320	38	40	44	1	32	G1/2	15	7,2	P1V-A160F0043••
1,600	200	150	77	65	125	2	32	G1/2	15	10,5	P1V-A160F0020••
1,600	95	70	154	117	250	3	32	G1/2	15	17,8	P1V-A160F0010••
1,600	75	55	180	130	225	3	32	G1/2	15	17,8	P1V-A160F0008••
Series P1V-A260											
2,600	500	350	62	71	125	1	60	G3/4	19	14,5	P1V-A260F0050••
2,600	220	150	133	133	285	1	60	G3/4	19	21,0	P1V-A260F0022••
2,600	125	85	224	191	430	2	60	G3/4	19	21,0	P1V-A260F0013••
2,600	62	44	415	308	660	3	60	G3/4	19	57,0	P1V-A260F0008••
Series P1V-A360											
3,600	500	300	98	113	125	1	97	G1	25	22,9	P1V-A360F0050••
3,600	220	130	224	230	285	1	97	G1	25	31,0	P1V-A360F0022••
3,600	125	75	368	317	595	2	97	G1	25	55,0	P1V-A360F0013••
3,600	62	37	670	480	660	3	97	G1	25	65,5	P1V-A360F0006••

* maximum admissible speed (idling)

** Max gear box torque for a permanent load

Note!
•• specify installation position in the order code as in the illustrations below.
Example: P1V-A160F0043B3

F: Installation positions, worm gear, flange mounting left-hand



Note: Oil-bath gearboxes mean that the installation position must be decided in advance. The installation position determines the volume of oil in the gearbox and location of oil filling and drain plugs.

Self-locking

Dynamic self-locking means that the force acting on the output shaft of the gear can not turn the gear further when the air motor is stopped. Dynamic self-locking is only possible when the gear ratio is high, and at low speeds. None of our worm drive gears are completely self-locking in dynamic conditions.

Static self-locking means that the force acting on the output shaft of the gear can not begin to turn the shaft.

When loads with considerable momentum are driven, it is necessary to have a braking time sufficient to stop the gearbox from being overloaded. It is extremely important that the maximum permitted torque is not exceeded.

Tip: Braking of the air motor can be arranged by either slowly restricting the air supply to the motor until it is completely shut off, or by slowly reducing the supply pressure to zero.

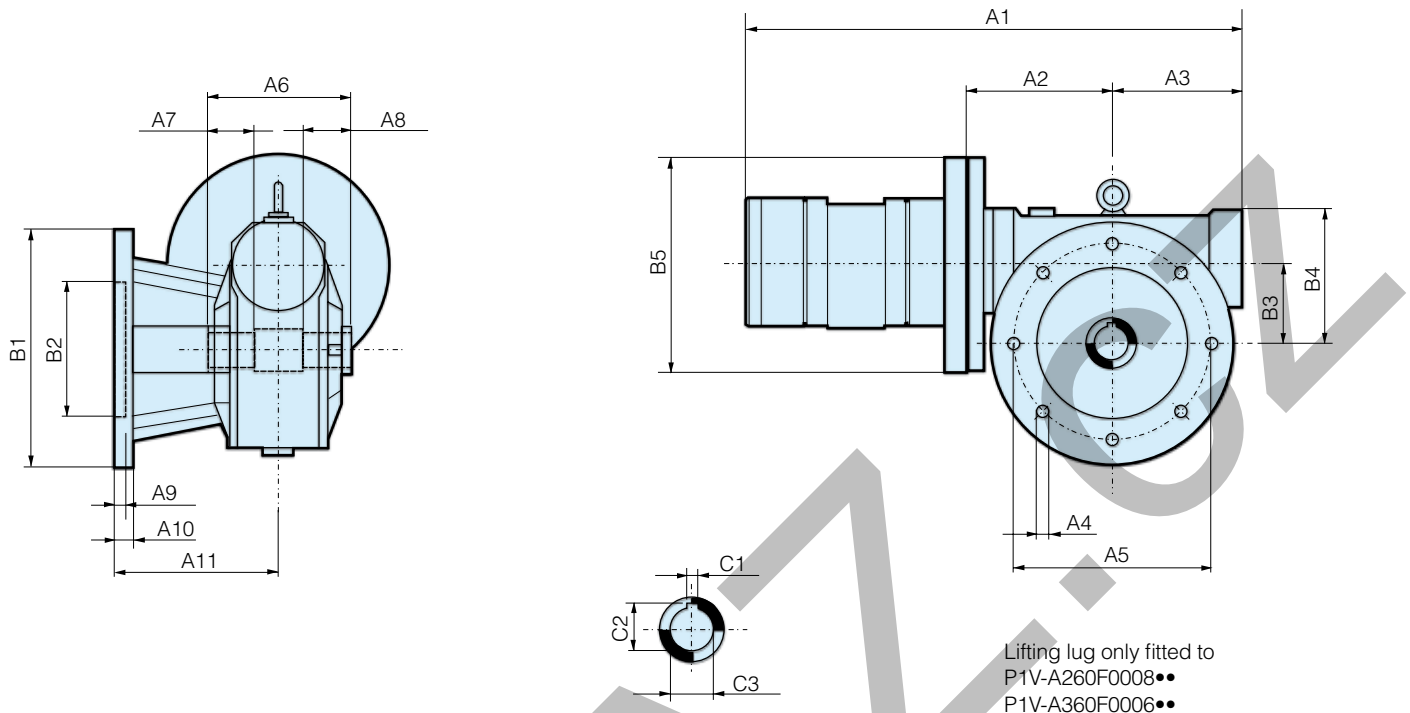
Types of Self-locking

1. Static, not self-locking
2. Static, self-locking - quicker return under vibration - not dynamically self-locking
3. Static, self-locking - return only possible under vibration - good dynamic self-locking

Important!
Since it is practically impossible to guarantee total self-locking, an external brake must be used to guarantee that vibration can not cause an output shaft to move.

Dimensions (mm)

F: Motor with worm gear, flange mounting



Lifting lug only fitted to
 P1V-A260F0008••
 P1V-A360F0006••

As standard, the motor has a hollow shaft with key slot. Please refer to page 44 for a dimension sketch of the single ended and double ended shafts and for additional flange on the opposite side.

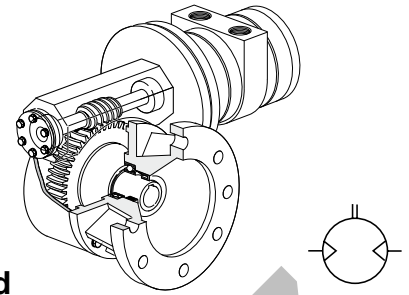
Order code	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	B1	B2	B3
P1V-A160F0043••	259,5	70	63	10,5	90	82	22,5	22,5	10	12	85,0	125	70 H8	49,50
P1V-A160F0020••	301,5	95	80	10,5	130	120	40,0	40,0	8	11	116,0	180	115 H8	62,17
P1V-A160F0010••	362,5	126	110	12,5	176	140	45,0	45,0	15	15	151,0	210	152 H8	86,90
P1V-A160F0008••	362,5	126	110	12,5	176	140	45,0	45,0	15	15	151,0	210	152 H8	86,90
P1V-A260F0050••	292,0	70	63	10,5	90	82	22,5	22,5	10	12	85,0	125	70 H8	49,50
P1V-A260F0022••	395,0	126	110	12,5	176	140	45,0	45,0	15	15	151,0	210	152 H8	86,90
P1V-A260F0013••	395,0	126	110	12,5	176	140	45,0	45,0	15	15	151,0	210	152 H8	86,90
P1V-A260F0008••	498,0	185	154	16,0	255	165	52,5	52,5	18	20	197,5	320	180 H8	130,00
P1V-A360F0050••	340,0	95	80	10,5	130	120	40,0	40,0	8	11	116,0	180	115 H8	62,17
P1V-A360F0022••	401,0	126	110	12,5	176	140	45,0	45,0	15	15	151,0	210	152 H8	86,90
P1V-A360F0013••	456,0	153	138	13,5	230	155	45,0	45,0	18	20	179,5	280	170 H8	110,10
P1V-A360F0006••	504,0	185	154	16,0	255	165	52,5	52,5	18	20	197,5	320	180 H8	130,00

Order code	B4	B5	C1	C2	C3
P1V-A160F0043••	80,0	160	8 H8	28,3	25 H7
P1V-A160F0020••	98,5	160	8 H8	28,3	25 H7
P1V-A160F0010••	138,0	160	10 H8	38,3	35 H7
P1V-A160F0008••	138,0	160	10 H8	38,3	35 H7
P1V-A260F0050••	80,0	200	8 H8	28,3	25 H7
P1V-A260F0022••	138,0	200	10 H8	38,3	35 H7
P1V-A260F0013••	138,0	200	10 H8	38,3	35 H7
P1V-A260F0008••	195,0	200	14 H8	48,8	45 H7
P1V-A360F0050••	98,5	200	8 H8	28,3	25 H7
P1V-A360F0022••	138,0	200	10 H8	38,3	35 H7
P1V-A360F0013••	169,0	200	12 H8	45,3	42 H7
P1V-A360F0006••	195,0	200	14 H8	48,8	45 H7

••: see previous page for installation positions

P1V-A Air Motor - Worm Gear

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



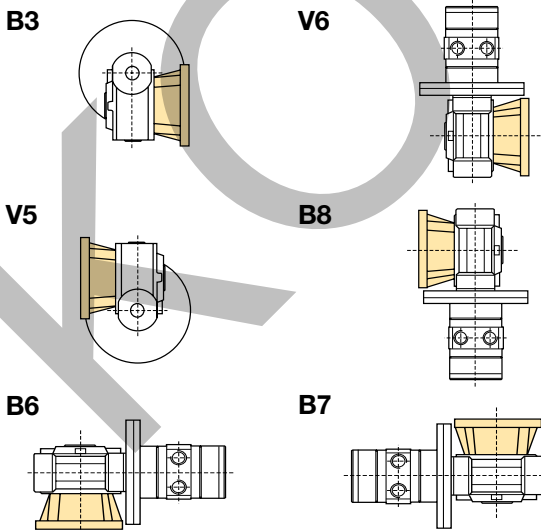
G: Reversible motor with worm gear, flange mounting right-hand

Max power	Max speed*	Nominal speed	Nominal torque	Min start torque	Max permanent torque**	Types of self-locking	Air consumption at max power	Connection	Min pipe ID inlet/outlet	Weight	Order code
kW	rpm	rpm	Nm	Nm	Nm		l/s		mm	Kg	
Series P1V-A160											
1,600	430	320	38	40	44	1	32	G1/2	15	7,2	P1V-A160G0043••
1,600	200	150	77	65	125	2	32	G1/2	15	10,5	P1V-A160G0020••
1,600	95	70	154	117	250	3	32	G1/2	15	17,8	P1V-A160G0010••
1,600	75	55	180	130	225	3	32	G1/2	15	17,8	P1V-A160G0008••
Series P1V-A260											
2,600	500	350	62	71	125	1	60	G3/4	19	14,5	P1V-A260G0050••
2,600	220	150	133	133	285	1	60	G3/4	19	21,0	P1V-A260G0022••
2,600	125	85	224	191	430	2	60	G3/4	19	21,0	P1V-A260G0013••
2,600	62	44	415	308	660	3	60	G3/4	19	57,0	P1V-A260G0008••
Series P1V-A360											
3,600	500	300	98	113	125	1	97	G1	25	22,9	P1V-A360G0050••
3,600	220	130	224	230	285	1	97	G1	25	31,0	P1V-A360G0022••
3,600	125	75	368	317	595	2	97	G1	25	55,0	P1V-A360G0013••
3,600	62	37	670	480	660	3	97	G1	25	65,5	P1V-A360G0006••

* maximum admissible speed (idling)
** Max gear box torque for a permanent load

Note!
•• specify installation position in the order code as in the illustrations below.
Example: P1V-A160G0043B3

G: Installation positions, worm gear gear, flange mounting right-hand



Note: Oil-bath gearboxes mean that the installation position must be decided in advance. The installation position determines the volume of oil in the gearbox and location of oil filling and drain plugs.

Self-locking shafts and for additional flange on the opposite side.

Dynamic self-locking means that the force acting on the output shaft of the gear can not turn the gear further when the air motor is stopped. Dynamic self-locking is only possible when the gear ratio is high, and at low speeds. None of our worm drive gears are completely self-locking in dynamic conditions.

Static self-locking means that the force acting on the output shaft of the gear can not begin to turn the shaft.

When loads with considerable momentum are driven, it is necessary to have a braking time sufficient to stop the gearbox from being overloaded. It is extremely important that the maximum permitted torque is not exceeded.

Tip: Braking of the air motor can be arranged by either slowly restricting the air supply to the motor until it is completely shut off, or by slowly reducing the supply pressure to zero.

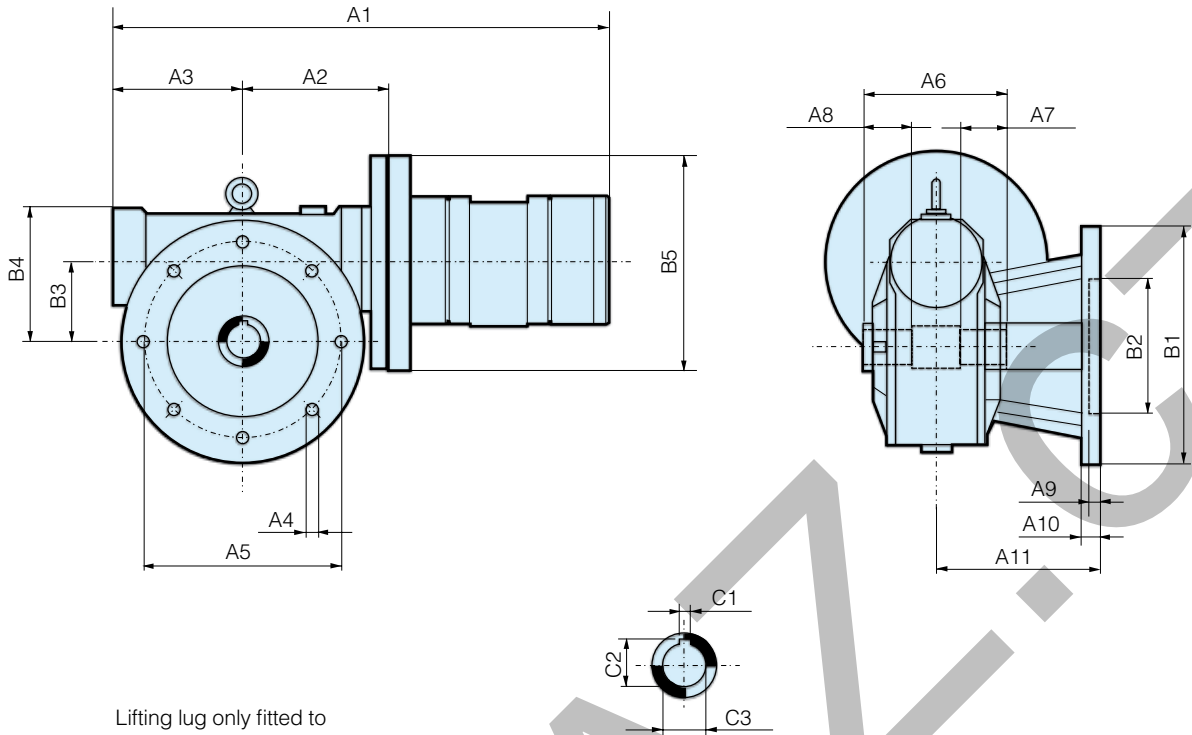
Types of Self-locking

1. Static, not self-locking
2. Static, self-locking - quicker return under vibration - not dynamically self-locking
3. Static, self-locking - return only possible under vibration - good dynamic self-locking

Important!
Since it is practically impossible to guarantee total self-locking, an external brake must be used to guarantee that vibration can not cause an output shaft to move.

Dimensions (mm)

G: Motor with worm gear, flange mounting



Lifting lug only fitted to
P1V-A260G0008••
P1V-A360G0006••

As standard, the motor has a hollow shaft with key slot. Please refer to page 44 for a dimension sketch of the single ended and double ended shafts and for additional flange on the opposite side.

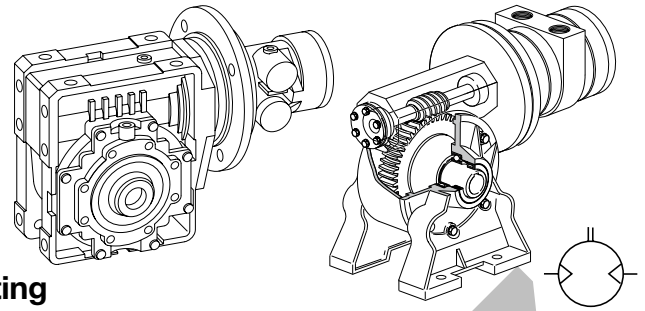
Order code	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	B1	B2	B3
P1V-A160G0043••	259,5	70	63	10,5	90	82	22,5	22,5	10	12	85,0	125	70 H8	49,50
P1V-A160G0020••	301,5	95	80	10,5	130	120	40,0	40,0	8	11	116,0	180	115 H8	62,17
P1V-A160G0010••	362,5	126	110	12,5	176	140	45,0	45,0	15	15	151,0	210	152 H8	86,90
P1V-A160G0008••	362,5	126	110	12,5	176	140	45,0	45,0	15	15	151,0	210	152 H8	86,90
P1V-A260G0050••	292,0	70	63	10,5	90	82	22,5	22,5	10	12	85,0	125	70 H8	49,50
P1V-A260G0022••	395,0	126	110	12,5	176	140	45,0	45,0	15	15	151,0	210	152 H8	86,90
P1V-A260G0013••	395,0	126	110	12,5	176	140	45,0	45,0	15	15	151,0	210	152 H8	86,90
P1V-A260G0008••	498,0	185	154	16,0	255	165	52,5	52,5	18	20	197,5	320	180 H8	130,00
P1V-A360G0050••	340,0	95	80	10,5	130	120	40,0	40,0	8	11	116,0	180	115 H8	62,17
P1V-A360G0022••	401,0	126	110	12,5	176	140	45,0	45,0	15	15	151,0	210	152 H8	86,90
P1V-A360G0013••	456,0	153	138	13,5	230	155	45,0	45,0	18	20	179,5	280	170 H8	110,10
P1V-A360G0006••	504,0	185	154	16,0	255	165	52,5	52,5	18	20	197,5	320	180 H8	130,00

Order code	B4	B5	C1	C2	C3
P1V-A160G0043••	80,0	160	8 H8	28,3	25 H7
P1V-A160G0020••	98,5	160	8 H8	28,3	25 H7
P1V-A160G0010••	138,0	160	10 H8	38,3	35 H7
P1V-A160G0008••	138,0	160	10 H8	38,3	35 H7
P1V-A260G0050••	80,0	200	8 H8	28,3	25 H7
P1V-A260G0022••	138,0	200	10 H8	38,3	35 H7
P1V-A260G0013••	138,0	200	10 H8	38,3	35 H7
P1V-A260G0008••	195,0	200	14 H8	48,8	45 H7
P1V-A360G0050••	98,5	200	8 H8	28,3	25 H7
P1V-A360G0022••	138,0	200	10 H8	38,3	35 H7
P1V-A360G0013••	169,0	200	12 H8	45,3	42 H7
P1V-A360G0006••	195,0	200	14 H8	48,8	45 H7

••: see previous page for installation positions

P1V-A Air Motor - Worm Gear

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



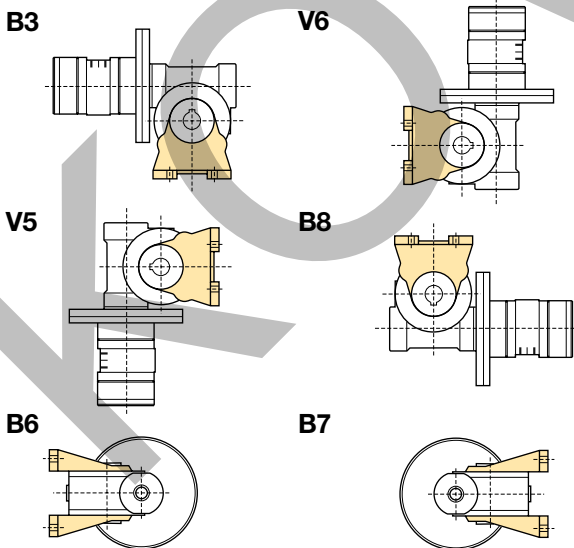
H: Reversible motor with worm gear, foot mounting

Max power	Max speed*	Nominal speed	Nominal torque	Min start torque	Max permanent torque**	Types of self-locking	Air consumption at max power	Connection	Min pipe ID inlet/outlet	Weight	Order code
kW	rpm	rpm	Nm	Nm	Nm		l/s		mm	Kg	
Series P1V-A160											
1,600	430	320	38	40	44	1	32	G1/2	15	7,2	P1V-A160H0043••
1,600	200	150	77	65	125	2	32	G1/2	15	10,2	P1V-A160H0020••
1,600	95	70	154	177	250	3	32	G1/2	15	20,5	P1V-A160H0010••
1,600	75	55	180	130	225	3	32	G1/2	15	20,5	P1V-A160H0008••
Series P1V-A260											
2,600	500	350	62	90	125	1	60	G3/4	19	11,0	P1V-A260H0050••
2,600	220	150	133	206	285	1	60	G3/4	19	21,0	P1V-A260H0022••
2,600	125	85	224	330	430	2	60	G3/4	19	21,0	P1V-A260H0013••
2,600	62	44	415	308	660	3	60	G3/4	19	57,0	P1V-A260H0008••
Series P1V-A360											
3,600	500	300	98	113	125	1	97	G1	25	22,5	P1V-A360H0050••
3,600	220	130	224	230	285	1	97	G1	25	33,0	P1V-A360H0022••
3,600	125	75	368	317	595	2	97	G1	25	49,0	P1V-A360H0013••
3,600	62	37	670	480	660	3	97	G1	25	65,5	P1V-A360H0006••

* maximum admissible speed (idling)
 ** Max gear box torque for a permanent load

Note!
 •• specify installation position in the order code as in the illustrations below.
Example: P1V-A160H0043B3

H: Installation positions, worm gear, foot mounting



Note: Oil-bath gearboxes mean that the installation position must be decided in advance. The installation position determines the volume of oil in the gearbox and location of oil filling and drain plugs.

Self-locking

Dynamic self-locking means that the force acting on the output shaft of the gear can not turn the gear further when the air motor is stopped.

Dynamic self-locking is only possible when the gear ratio is high, and at low speeds. None of our worm drive gears are completely self-locking in dynamic conditions.

Static self-locking means that the force acting on the output shaft of the gear can not begin to turn the shaft.

When loads with considerable momentum are driven, it is necessary to have a braking time sufficient to stop the gearbox from being overloaded. It is extremely important that the maximum permitted torque is not exceeded.

Tip: Braking of the air motor can be arranged by either slowly restricting the air supply to the motor until it is completely shut off, or by slowly reducing the supply pressure to zero.

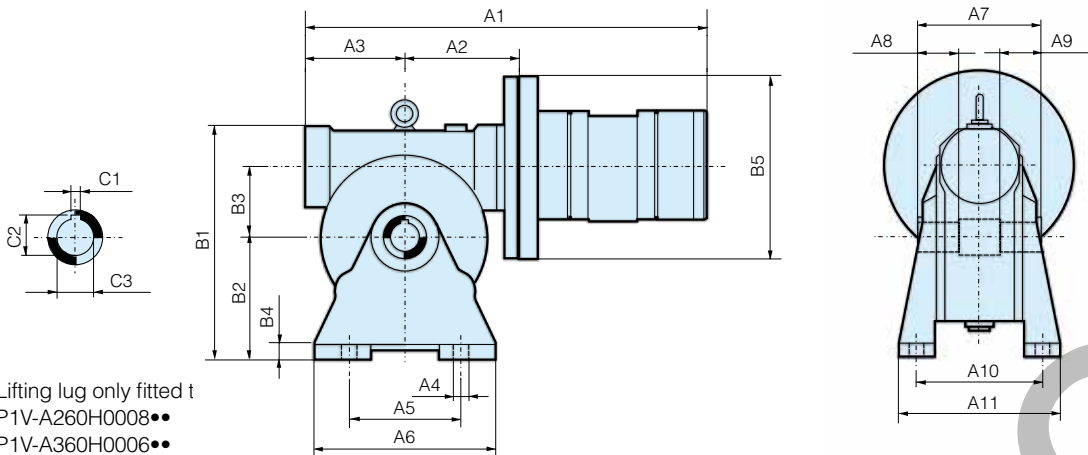
Types of Self-locking

1. Static, not self-locking
2. Static, self-locking - quicker return under vibration - not dynamically self-locking
3. Static, self-locking - return only possible under vibration - good dynamic self-locking

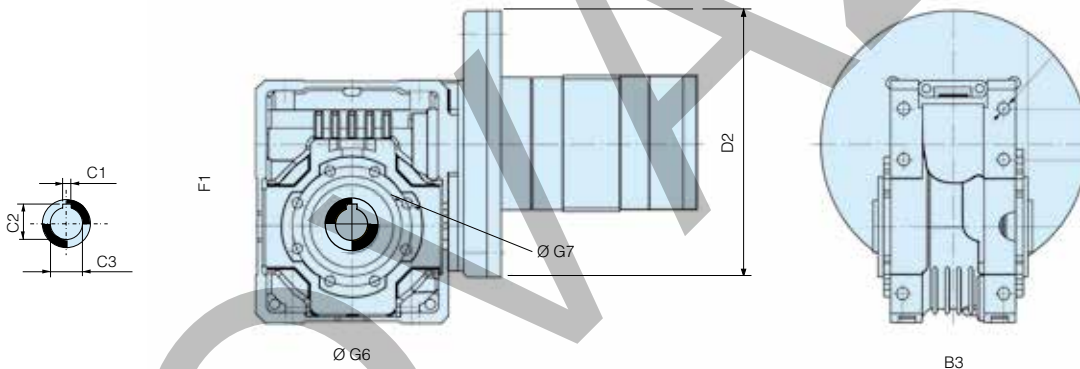
Important!
 Since it is practically impossible to guarantee total self-locking, an external brake must be used to guarantee that vibration can not cause an output shaft to move.

Dimensions (mm)

H: Motor with worm gear, foot mounting



Order code	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	B1	B2	B3
P1V-A160H0043	259,5	70	63	8,5	63	110	82	22,5	22,5	98,5	124	162	82	49,50
P1V-A260H0008	498,0	185	154	16,0	220	310	165	52,5	52,5	191,0	245	398	195	130,00
P1V-A360H0006	504,0	185	154	16,0	220	310	165	52,5	52,5	191,0	245	398	195	130,00
	B4	B5	C1	C2	C3									
P1V-A160H0043	12	160	8 H8	28,3	25 H7									
P1V-A260H0008	18	200	14 H8	48,8	45 H7									
P1V-A360H0006	18	200	14 H8	48,8	45 H7									



Order code	A1	A2	A3	A5	A6	B3	D2	F1	F2	F3	F4	F5	F6	Ø F7
P1V-A160H0020	294,5	95	127	72,5	102	120	160	62,2	110,0	182,5	72,5	102	37,5	9,0
P1V-A160H0010	355,0	128	127	100,0	144	140	160	86,9	145,5	245,5	100,0	144	45,5	11,5
P1V-A160H0008	355,0	128	127	100,0	144	140	160	86,9	145,5	245,5	100,0	144	45,5	11,5
P1V-A260H0050	333,5	102	159	72,5	102	120	200	62,2	110,0	182,5	72,5	102	37,5	9,0
P1V-A260H0022	387,0	128	159	100,0	144	140	200	86,9	145,5	245,5	100,0	144	45,5	11,5
P1V-A260H0013	387,0	128	159	100,0	144	140	200	86,9	145,5	245,5	100,0	144	45,5	11,5
P1V-A360H0050	334,5	102	165	72,5	102	120	200	62,2	110,0	182,5	72,5	102	37,5	9,0
P1V-A360H0022	393,0	128	165	100,0	144	140	200	86,9	145,5	245,5	100,0	144	45,5	11,5
P1V-A360H0013	433,0	143	165	125,0	174	155	200	110,1	183,0	308,0	125,0	184	58,0	14,0

Order code	F8	G1	Ø G6	Ø G7	C1 (H8)	C2	C3 (H7)
P1V-A160H0020	76	56,0	90	M8 depth 14	8	28,3	25
P1V-A160H0010	101	68,0	130	M10 depth 18	10	38,3	35
P1V-A160H0008	101	68,0	130	M10 depth 18	10	38,3	35
P1V-A260H0050	76	53,0	90	M8 depth 14	8	28,3	25
P1V-A260H0022	101	68,0	130	M10 depth 18	10	38,3	35
P1V-A260H0013	101	68,0	130	M10 depth 18	10	38,3	35
P1V-A360H0050	76	56,0	90	M8 depth 14	8	28,3	25
P1V-A360H0022	101	68,0	130	M10 depth 18	10	38,3	35
P1V-A360H0013	115	76,5	135	M12 depth 19	12	45,3	42

••: see previous page for installation positions