Model PDS

Wide-belt type, stepless, variable speed drive

Used together with Models AK and PE. Employs a wide variable speed belt. Non-lubrication type stepless variable speed drive capable of changing drive speed without varying the distance between shafts. (Can be used for various models of motor ranging 0.2 kW to 37 kW. A large speed change ratio of 1:4 can be obtained.)

Variable speed pulley Model AK is a manually adjustable provided with a handwheel. Model PE, the driven pulley is spring loaded. Speed change can be made easily. Drive speed can be increased by turning the handwheel counterclockwise and decreased by reversing it.

Mount Model AK on motor shaft and Model PE on driven side as illustrated in arrangement diagram. Align the belt both parallel and angularly. When a 4P motor is used on input side, the RPM and torque at the output shaft are the same as those of the PDC type. The input RPM should be within the range of 900 to 1,800 rpm.

Lubrication is not required. The pulley will not seizure and is maintenance free since it employs self-lubricating oilless material for the sliding surfaces.

Its handwheel has a scale with a pointer and a rotary sub-scale, both easy to read.

It mounts on shafts by tightening a setscrew recurely. When fitting it on a machine, attach a cover on its rotary part.
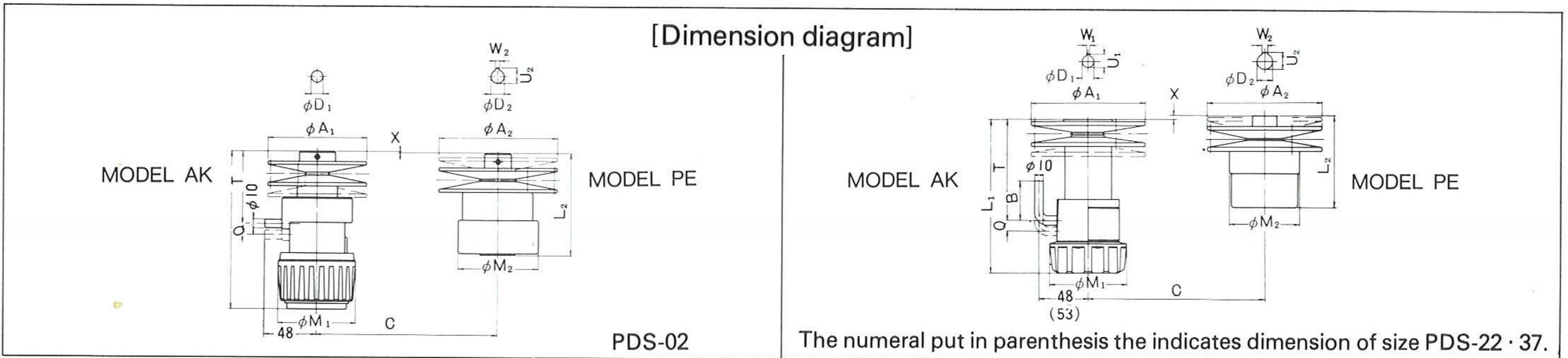
Caution:
Avoid the disassembling (particularly Model PE) if possible since it has a built-in powerful spring.

■ Specifications

Size	Motor	Pulley	Belt	Ratio	Weight kg
PDS—02	200W 4P	AK— 90 / PE—106	1022V	1 : 4	1.3 / 1.6
PDS—04	400W 4P	AK—124 / PE—124	1422V	1 : 3.5	2.4 / 2.2
PDS—07	0.75kW 4P	AK—140 / PE—155	1422V	1 : 4	2.8 / 4.0
PDS—15	1.5kW 4P	AK—155 / PE—185	1922V	1 : 4	3.7 / 6.0

Size	Motor	Pulley	Belt	Ratio	Weight kg
PDS—22	2.2kW 4P	AK—185 / PE—216	2322V	1 : 4.5	5.4 / 10.0
PDS—37	3.7kW 4P	AK—216 / PE—216	2322V	1 : 3	6.9 / 10.0
PDS—55 ~ PDS—370	5.5·7.5kW ~ 30·37kW	Will be made upon order			

[Dimension diagram]

MODEL AK — MODEL PE — PDS-02

MODEL AK — MODEL PE

The numeral put in parenthesis the indicates dimension of size PDS-22 · 37.

■ Dimensions

(mm)

Size	Model AK														Model PE										X
	A_1	M_1	L_1	B	Q	T	D_1	U_1	W_1	Max. bore	Bore depth	max P.D	min P.D	Handle revolutions	A_2	M_2	L_2	D_2	U_2	W_2	Max. bore	Bore depth	max P.D	min P.D	
PDS—02	90	70	144	—	10	65	11	—	—	※14	25	85	34.5	5	106	73	91	12	13.5	4	15	30	101	54.5	—1
PDS—04	124	86	164	53	11	107	14	16	5	19	30	114	58	5.5	124	79	122	15	17	5	19	40	118	63	12
PDS—07	140	86	172	53	15	112	19	21	5	24	40	135	58	7.5	155	94	151	18	20	5	22	45	150	77	14
PDS—15	155	86	205	53	17	142	24	27	7	24	50	148	60	8.5	185	104	172	22	25	5	25	55	178	100	16.5
PDS—22	185	86	231	62	21	165	24	27	7	28	60	178	70	10.5	216	126	205	25	28	7	35	50	208	112	17.5
PDS—37	216	86	240	74	17.5	175	28	31	7	32	60	200	110	8.5	216	126	205	30	33	7	35	65	208	120	17.5

The numerals to which ※ is attached indicate the maximum bores of the models having no key ways.

Size	Belt No. (C) Center distance			Size	Belt No. (C) Center distance		
PDS—02	1022V 220 / 163	1022V 247 / 200		PDS—15	1922V 298 / 182	1922V 321 / 211	1922V 338 / 235
PDS—04	1422V 270 / 200	1422V 300 / 242	1422V 330 / 278	PDS—22	2322V 364 / 230	2322V 396 / 275	2322V 421 / 306
PDS—07	1422V 270 / 172	1422V 300 / 214	1422V 330 / 252	PDS—37	2322V 396 / 247	2322V 421 / 279	2322V 441 / 304