

## VDX90

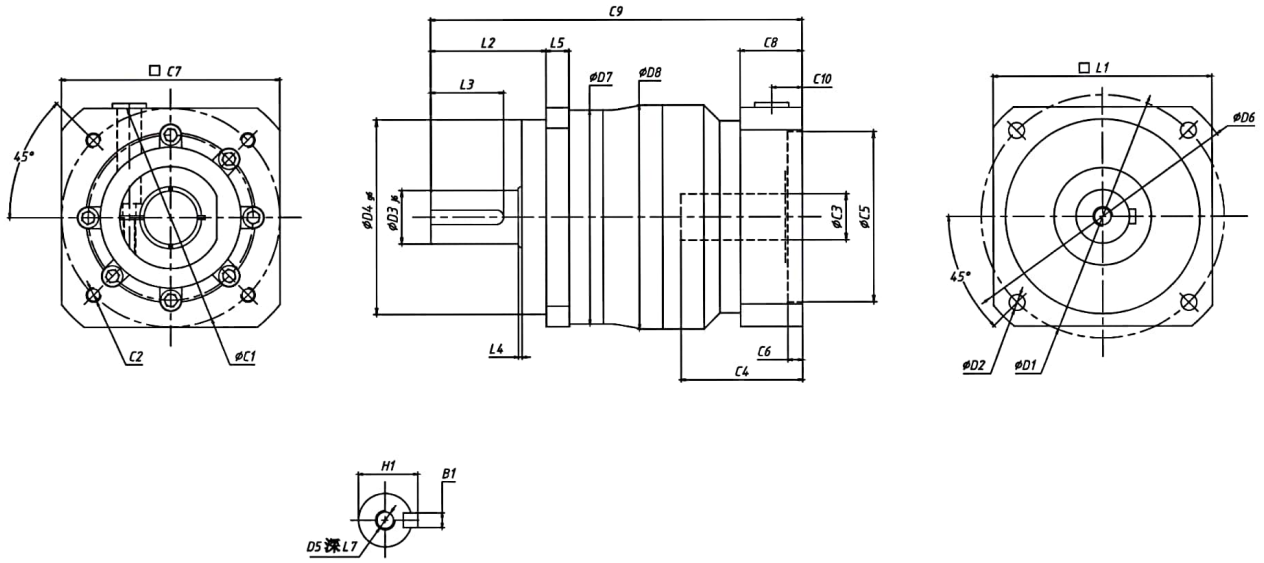
Frame size	Stage	Ratio	※1	※2	※3	※4	※5	※6	※7
			Nominal output torque [Nm]	Maximum output torque [Nm]	Emergency stop torque [Nm]	Nominal input speed [rpm]	Maximum input speed [rpm]	Permitted radial load [N]	Permitted axial load [N]
VDX90	Single	3	50	80	200	3000	6000	810	930
		4	75	125	250	3000	6000	890	1100
		5	75	125	250	3000	6000	960	1200
		7	75	125	250	3000	6000	1100	1300
		8	75	125	250	3000	6000	1100	1400
		10	50	80	200	3000	6000	1200	1600
	Double	15	50	80	200	3000	6000	1400	1900
		16	75	125	250	3000	6000	1400	1900
		20	75	125	250	3000	6000	1500	2100
		25	75	125	250	3000	6000	1600	2200
		28	75	125	250	3000	6000	1700	2200
		30	50	80	200	3000	6000	1700	2200
		35	75	125	250	3000	6000	1800	2200
		40	75	125	250	3000	6000	1900	2200
		50	75	125	250	3000	6000	2100	2200
		70	75	125	250	3000	6000	2300	2200
		80	75	125	250	3000	6000	2400	2200
		100	50	80	200	3000	6000	2400	2200

Frame size	Stage	Ratio	※8	※9	Moment of inertia ( $\leq \varnothing 8$ ) [kgcm <sup>2</sup> ]	Moment of inertia ( $\leq \varnothing 14$ ) [kgcm <sup>2</sup> ]	Moment of inertia ( $\leq \varnothing 19$ ) [kgcm <sup>2</sup> ]	Moment of inertia ( $\leq \varnothing 28$ ) [kgcm <sup>2</sup> ]
			Maximum radial load [N]	Maximum axial load [N]				
VDX90	Single	3	2400	2200	—	0.68	1.10	2.9
		4	2400	2200	—	0.48	0.87	2.6
		5	2400	2200	—	0.39	0.79	2.6
		7	2400	2200	—	0.32	0.72	2.5
		8	2400	2200	—	0.31	0.71	2.5
		10	2400	2200	—	0.29	0.69	2.4
	Double	15	2400	2200	0.20	0.36	0.75	—
		16	2400	2200	0.25	0.41	0.79	—
		20	2400	2200	0.19	0.35	0.74	—
		25	2400	2200	0.19	0.35	0.73	—
		28	2400	2200	0.24	0.40	0.78	—
		30	2400	2200	0.12	0.28	0.67	—
		35	2400	2200	0.18	0.34	0.73	—
		40	2400	2200	0.11	0.27	0.67	—
		50	2400	2200	0.11	0.27	0.67	—
		70	2400	2200	0.11	0.27	0.67	—
		80	2400	2200	0.11	0.27	0.67	—
		100	2400	2200	0.11	0.27	0.67	—

Frame size	Stage	Ratio	※10						
			Precision backlash arcmin	Standard backlash arcmin	Efficiency( $\eta$ ) %	Weight [kg]	Temperature ℃	Service life hr	Protection level
VDX90	Single	3~10	$\leq 3$	$\leq 5$	$\geq 95\%$	3.7	-10℃~+90℃	$\geq 20000$	IP65
	Double	15~100	$\leq 5$	$\leq 7$	$\geq 92\%$	4.2			

- ※1 With nominal input speed, service life is 20,000 hours.
- ※2 The maximum torque when starting and stopping.
- ※3 The maximum torque when it receives shock. (up to 1,000 times)
- ※4 The maximum average input speed.
- ※5 The maximum momentary input speed.
- ※6 With this load and nominal input speed, service life will be 20,000 hours.  
(Applied to the output shaft center, at axial load 0)
- ※7 With this load and nominal input speed, service life will be 20,000 hours.  
(Applied to the output side bearing, at radial load 0)
- ※8 The maximum radial load the gearbox can accept.
- ※9 The maximum axial load the gearbox can accept.
- ※10 The weight may vary slightly model to model.

## VDX90 DRAWING



Dimension	VDX90	
D1	100	
D2	6.5	
D3	22	
D4	80	
D5	M8 X 1.25P	
D6	116	
D7	88	
D8	92	
L1	90	
L2	47.5	
L3	30	
L4	1.5	
L5	9.5	
C1 <sup>1</sup>	98.4	90
C2 <sup>1</sup>	M6 X 1P	M6 X 1P
C3 <sup>1</sup>	≤ 12.7	≤ 24
C4 <sup>1</sup>	45	40
C5 <sup>1</sup>	73	70
C6 <sup>1</sup>	5.5	5.5
C7 <sup>1</sup>	86	90
C8 <sup>1</sup>	20.5	25.5
C9 <sup>1</sup>	148	153
C10 <sup>1</sup>	13	13
B1	6	6
H1	24.5	24.5

[unit:mm]

※1 Length will vary depending on motor.

※2 Bushing will be inserted to adapt to motor shaft.