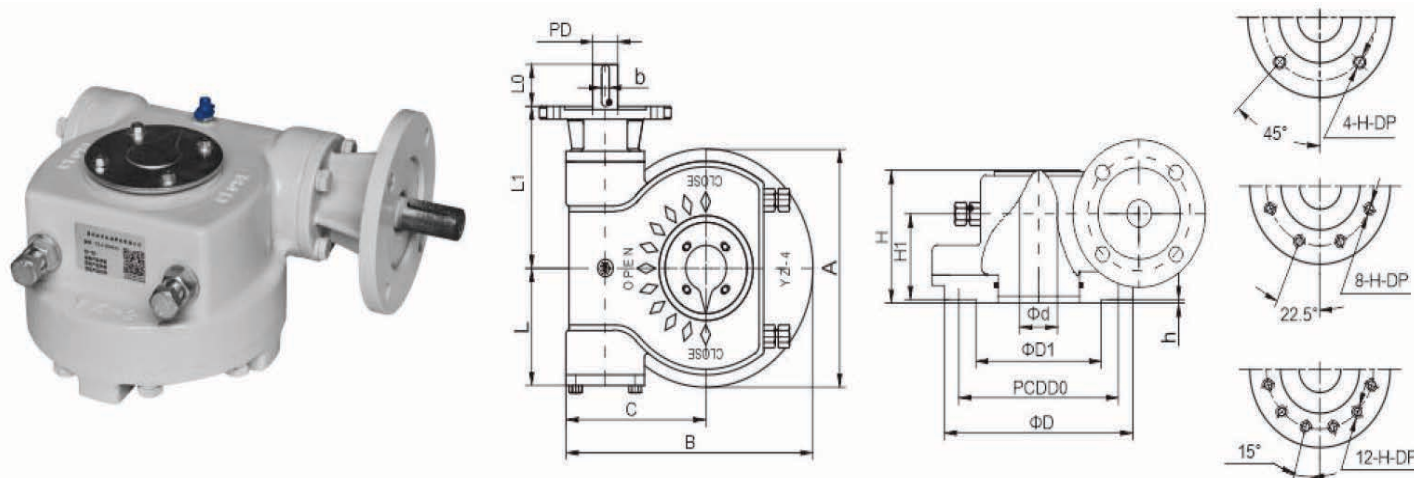


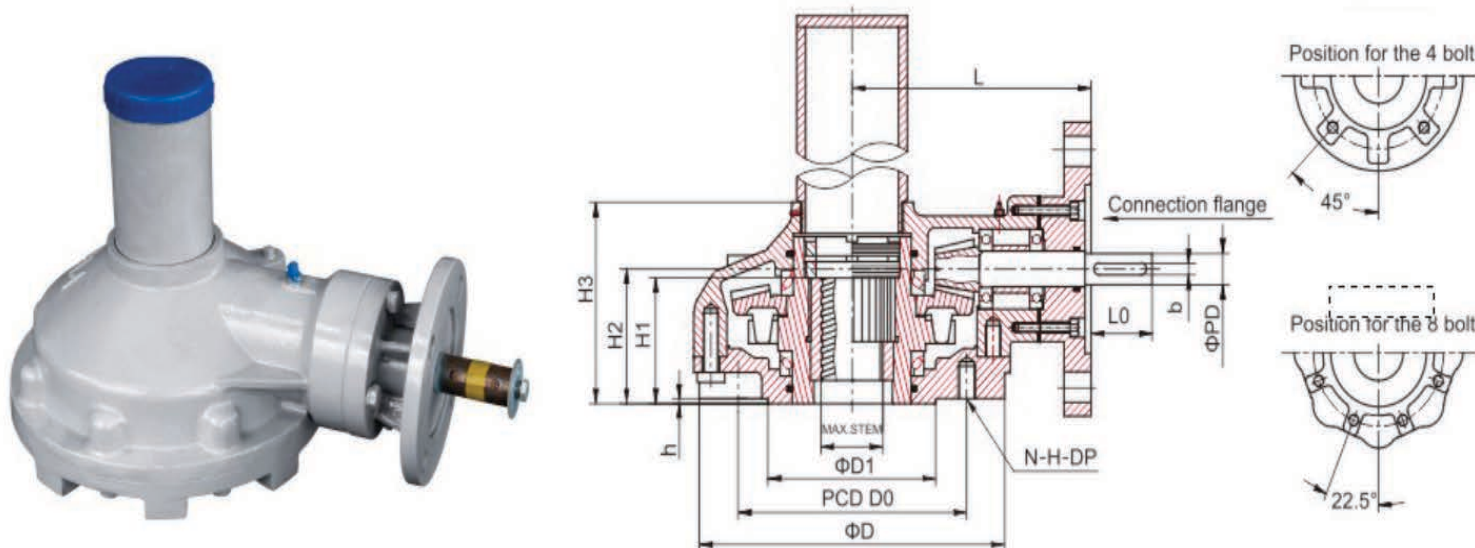
# NUTORK® YZ-D Series Quarter-Turn Worm Gearbox

This series of products is quarter turn electric gear actuator. Suit to be used in ball valves, butterfly valves, plug valves, rotary ball valves etc. The housing made by precise casting, new design, nice appearance. It transmitted by worm gear and worm. The worm gear with selflocking. With tapered roller bearing, so the gearboxes can be operated more flexibly and have higher efficiency. Worm gear material choose ductile iron, aluminum bronze or D2, according to open times and electric actuator speed. Two connection types for choose stem and key connection and removable nut type. Can produce based type gearboxes used in damper valves. The output mounting flange adapts to ISO 5211. So the gearboxes installed on the valve are very convenient. Input flange adapts to ISO 5211JB2920-81 etc. General products protection grade is IP65. For special environment can be done IP68 and immersion.



Model		YZ-0-D	YZ-1-D	YZ-2-D	YZ-2J-D	YZ-30-D	YZ-3-D	YZ-60-D	YZ-3J-D	YZ-4-D	YZ-100-D	YZ-4J-D	YZ-5-D	YZ-230-D	YZ-5J-D	YZ-6-D	YZ-6J-D	YZ-7-D	YZ-7X-D	YZ-7J-D	YZ-8-D	YZ-8J-D	YZ-9-D
TECHNICAL-PARAMETERS																							
Ratio		34:1	44:1	44:1	50:1	70:1	50:1	70:1	50:1	55:1	70:1	57:1	62:1	70:1	67:1	65:1	75:1	82:1	70:1	75:1	75:1	60:1	82:1
Max-torque Nm	N-m	500	1200	1600	3500	3000	4500	6000	7500	12000	10000	16500	22000	23000	28000	38000	48000	63000	80000	100000	140000	190000	250000
	kgf-M	51	122	204	357	408	510	612	765	1225	1326	1683	2245	2251	2857	3878	2133	6428	8163	10204	14285	19388	25510
M.A.±10%		0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
CONNECTION-SIZE																							
Flange		F10	F12	F14	F16	F16	F16	F25	F20	F25	F30	F30	F30	F35	F35	F35	F40	F40	F48	F48	F48	F60	F60
Flange Diameter (D)		F10	150	175	210	210	210	300	250	300	350	350	350	415	415	415	475	475	560	560	560	686	686
PCD	D0	102	125	140	165	165	165	254	205	254	298	298	298	356	356	356	406	406	483	483	483	603	603
	N-H-DP	4-M10 -15	4-M12 -18	4-M16 -20	4-M20 -30	4-M20 -30	4-M20 -30	8-M16 -24	8-M16 -24	8-M16 -24	8-M20 -30	8-M20 -30	8-M20 -30	8-M30 -45	8-M30 -45	8-M30 -40	8-M36 -5	8-M36 -54	12-M36 -54	12-M36 -54	12-M36 -54	12-M36 -54	12-M36 -54
Convex(D1x h)		70x3	85x3	100x4	130x5	130x5	130x5	200x5	140x5	200x5	230x5	230x5	230x5	260x5	260x5	260x5	300x8	300x8	370x8	370x8	370x8	470x8	470x8
Max-Stem-Diameter (mm (Φd))		30	42	50	60	75	60	90	75	90	110	105	110	120	120	120	145	160	180	180	200	220	220
		12x8	12x8	14x9	18x11	18x11	18x11	25x14	22x14	25x14	28x16	28x16	28x16	32x18	32x18	32x18	40x22	40x22	45x25	45x25	45x25	50x28	50x28
Electrical equipment connect	PDxb(key)	20x6	20x6	20x6	30x8	30x8	30x8	40x12	40x12	40x12	50x14	50x14	50x14	50x14	50x14	50x14	70x20	70x20	70x20	70x20	70x20	80x22	80x22
	LO	45	45	45	55	55	55	60	60	60	80	80	80	80	80	80	110	110	110	110	110	120	120
APPEARANCE-SIZE																							
A		125	150	175	210	270	225	360	300	340	400	350	390	460	430	470	560	590	620	660	730	770	800
B		156	185	207	245	315	265	403	331	393	458	418	427	509	488	532	637	670	705	735	817	910	995
C		90	110	120	140	180	125	223	186	222	258	243	232	279	275	298	357	375	395	405	452	525	535
L		80	85	95	115	137.5	122	177.5	148	167	196	185	187	223	225	232	280	295	315	340	365	395	420
L1		135	140	155	180	188.5	180	228.5	228	22	260	265	252	282	305	302	360	370	410	420	440	490	580
H		100	105	114	132	146	154	160	155	185	182	185	190	198.5	195	200	243	244	270	292	305	380	400
H1		66	68	78	93	98	106	110.5	105	127	114.5	122	120	131	132	127	145	153	167	193	208	215	250
COMBINATION OF WORM GEAR BOX AND ELECTRICAL EQUIPMENT PARAMETERS																							
Electrical Parameters	Torque Nm	50	100	150	250	176	300	244	450	600	542	845	1200	1020	1350	1800	1800	2500	2500	3500	5000	8000	8000
	Speed /min	24	24	24	24	24	24	48	24	24	36	36	24	24	24	24	24	24	24	24	24	24	24
	Flange	F10	F10	F10	F14	F14	F14	F14	F14	F16	F16	F16	F16	F25	F25	F25	F25	F25	P30	F30	F30	F35	F40
Gearbox Parameters	Output Nm	500	1200	2000	3500	4000	4650	6000	6750	10200	13000	16500	22000	25000	27100	35000	40500	61500	73500	78750	112500	144000	196000
	Open time S	22	27.5	27.5	31.2	43.8	32.2	21.8	32.2	34.3	29.1	28	39	43.8	42	40.6	47	51.3	44	47	47	37.5	51.3

This bevel gearbox can be installed directly on the gate valves, butterfly valves, plug valves, globe valves and other valves. By using spiral bevel gears and thrust ball bearing, this series actuator can run smoothly, and has high output torque, low noise and high efficiency. It can avoid from water in and grease out. Protection grade is IP65. For special environment can be done IP68 and immersion. For different valves and requirement, there are single stage gearboxes with input flange, two stage gearboxes with input flange, two stage manual gearboxes and so on.



Model	MY-VS10-D	MY-VS20-D	MY-V0-D	MY-V1-D	MY-V2-D	MY-V3-D	MY-V35-D	MY-V4-D	MY-V5-D	MY-V6-D	MY-V7-D	MY-V8-D	MY-V9-D	MY-V10-D
<b>TECHNICAL-PARAMETERS</b>														
Ratio	2.3:1	2.35:1	3.1:1	3.6:1	4:1	4:1:1	4:1	5:1	5:1	5:1	6.5:1	7:1	5:1	5.5:1
	3:1	3:1	4:1	4:1			4.5:1	5.6:1	6.3:1	6:1				
Transmission efficiency M.A.±10%	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Max-torque N-m	216	363	480	600	900	1600	4000	6000	8000	10000	18500	28000	65000	100000
Max stem dia.mm	20	25	35	40	52	60	70	90	100	120	130	150	180	200
Weight Kg	10	12	21.5	28	35	50	95.5	160	190	288	390	565	980	1300
<b>CONNECTION-SIZE</b>														
Flange No. connection with valve JB2920-81	Flange No.1	Flange No.1	Flange No.2	Flange No.3	Flange No.4	Flange No.5	Flange No.7	Flange No.8	Flange No.8	Flange No.9	Flange No.10			
FLANGE	F10	F12	F14	F16	(F20)	F25	F30	F35	F35	F40	F48	F60	F60	F80
Flange Diameter(D)	125	150	175	210	250	300	350	415	415	475	560	686	686	900
PCD	D0	102	125	140	165	205	254	298	356	356	406	483	603	813
	N-H-DP	4-M10 -15	4-M12 -18	4-M16 -24	4-M20 -30	8-M16 -24	8-M16 -24	8-M20 -30	8-M30 -45	8-M30 -45	8-M36 -54	12-M36 -54	20-M36 -54	20-M36 -54
Convex(D1xh)	70x3	85x3	100x4	130x4	140x5	200x5	230x5	260x5	260x5	300x8	370x8	470x8	470x8	670x10
Input Shaft	PDx b(key)	20x6	20x6	30x8	30x8	30x8	40x12	40x12	45x14	45x14	50x14	50x14	60x18	70x20
	LO	45	45	50	50	50	60	65	65	65	70	80	80	100
Input flange size JB2920-81	Flange No.1	Flange No.1	Flange No.2	Flange No.3	Flange No.4	Flange No.4	Flange No.5	Flange No.7	Flange No.7	Flange No.8	Flange No.8	Flange No.9	Flange No.10	Flange No.10
<b>APPEARANCE-SIZE</b>														
H1	38	46	55	62	75	85	105	120	145	165	195	200	285	355
H2	65	70	70	75	90	100	140	160	155	210	220	250	245	330
H3	110	125	128	145	160	170	225	280	280	335	360	380	410	540
L	160	175	200	220	248	265	320	325	395	405	430	480	680	720
<b>BEVEL GEAR COMBINATION OF PARAMETERS AND ELECTRICAL EQUIPMENT</b>														
Electrical Parameters	Torque Nm	108	142	176	203	298	474	950	1020	1490	1700	3500	5000	10000
	Speed r/min	36	36	36	36	24/48	24/36/48	24/36/48	24/36/48	24/36/48	24/36	24	24	24
	JB2920-81	Z10	Z15	Z20	Z20	Z30	Z45	Z90	Z120	Z180	Z180	Z350	Z500	Z1000
	Connection flange	F10	F10	F10/F14	F10/F14	F14/F16	F14/F16	F16/F25	F16/F25	F25/F30	F25/F30	F25/F30	F30/F35	F35/F40
Parameters of bevel gear	Output Torque Nm	185	375	480	600	900	1600	3700	6000	8000	10000	18200	28000	42500