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YUGE 禹格

PRODUCT SELECTION GUIDE

上海禹格工业设备有限公司
SHANGHAI YUGE INDUSTRIAL EQUIPMENT CO.,LTD

2023

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Technical Parameters and Models of YG Multi-Turn Series

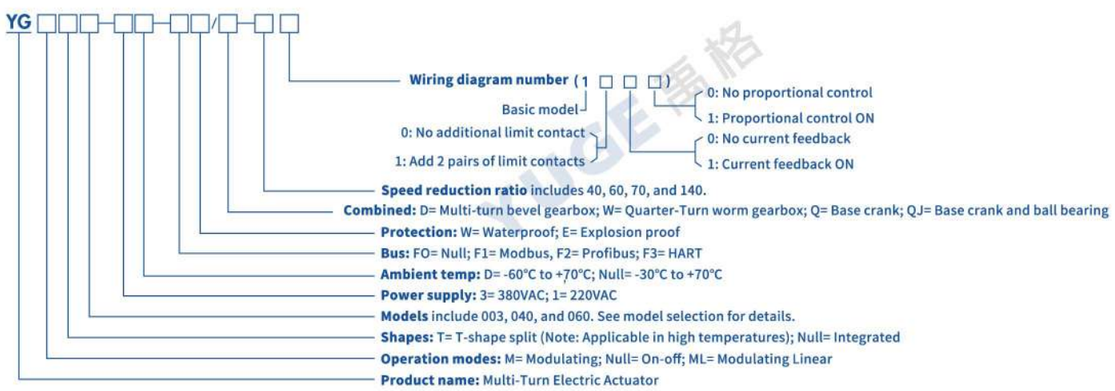
Properties of YG/YGM Multi-Turn Series

- **Applicable external power:** three-phase (380VAC; -10%/+10%; 50Hz±1%) or single-phase (220VAC; -15%/+10%; 50Hz±1%).
- **Remote control:** 24 VDC unregulated power output for passive switch input inside the electric actuator.
- **Motor mode:** Insulation Class F. On-off mode applies for short-time duty S2-15min and 60 starts/hour operation, while modulating mode for S4-50% modulating duty and 1200 starts/hour operation.
- **Service life:** 10,000 cycles at rated torque for YG/YGK on-off mode, 500,000 cycles at 50% of rated torque for YGM/YGKM modulating mode.

Technical Parameters of YG/YGM Multi-Turn Series

Items	Unit	Technical Indicator
Basic Error of Valve Position Control	%	⩽±1.0
Hysteresis Error of Valve Position Control	%	⩽1
Dead Zone	%	Adjustable within 0.1 and 9.9
Working Temp.	℃	-30 to +70 (-60 to +120 optional)
Output Range (Stroke)	°	10 to 4096 cycles, resolution of 0.35°
Basic Error of Valve Position Feedback Signal	%	⩽1
Rated Stroke Time Error	%	⩽20
Clearance	°	⩽3
Repeatability Error of Stroke Control Mechanism Condition: the set stroke time ⩾25s	%	⩽3

Smart Multi-Turn Electric Actuator



YG Multi-Turn On-Off Models (380VAC/50Hz)

Revolutions per minute (rpm)		18	24	36	48	72	96	144
YG003	Rated Torque (N.m)	34	34	34	34	34		
	Motor Power (KW)	0.15	0.15	0.15	0.25	0.25		
	Stall Current (A)	3.6	3.6	3.6	5.8	5.8		
	Rated Current (A)	2.4	2.4	2.4	2.5	2.5		
YG008	Rated Torque (N.m)	81	81	81	61	47		
	Motor Power (KW)	0.25	0.25	0.25	0.25	0.35		
	Stall Current (A)	5.8	5.8	5.8	5.8	6.5		
	Rated Current (A)	2.5	2.5	2.5	2.7	3.5		
YG014	Rated Torque (N.m)	136	136	102	80	60		
	Motor Power (KW)	0.35	0.35	0.35	0.35	0.35		
	Stall Current (A)	7	7	7	7	7		
	Rated Current (A)	3.0	3.0	3.0	3.0	3.0		
YG020	Rated Torque (N.m)	230	203	180	203	176	102	80
	Motor Power (KW)	0.65	0.65	0.65	0.75	0.75	0.75	0.75
	Stall Current (A)	12	12	12	12	12	12.6	13
	Rated Current (A)	3.7	3.7	3.7	3.7	3.7	3.9	3.9
YG030	Rated Torque (N.m)	350	300	250	200	160	130	100
	Motor Power (KW)	0.75	0.75	0.75	0.75	0.75	0.81	0.81
	Stall Current (A)	14.7	14.7	14.7	14.7	14.7	15.2	15.2
	Rated Current (A)	5	5	5	5	5	5.5	5.5
YG040	Rated Torque (N.m)	400	400	298	244	200		
	Motor Power (KW)	0.81	0.81	0.81	0.81	0.81		
	Stall Current (A)	15.2	15.2	15.2	15.2	15.2		
	Rated Current (A)	5.3	5.3	5.3	5.3	5.3		
YG060	Rated Torque (N.m)	610	610	542	474	474	366	257
	Motor Power (KW)	1.5	1.5	1.5	1.5	2.1	2.1	2.1
	Stall Current (A)	19	19	19	19	21	21	21
	Rated Current (A)	7	7	7	7	8.1	8.1	8.1
YG080	Rated Torque (N.m)	800	800	700	580	420		
	Motor Power (KW)	2.5	2.5	2.5	2.5	2.5		
	Stall Current (A)	23	23	23	23	23		
	Rated Current (A)	11	11	11	11	11		

YG Multi-Turn On-Off Models (380VAC/50Hz)

Revolutions per minute (rpm)		18	24	36	48	72	96	144
YG100	Rated Torque (N.m)	1020	1020	845	680	600	542	406
	Motor Power (KW)	3	3	3	4.5	4.5	4.5	4.5
	Stall Current (A)	27	27	27	36	36	36	36
	Rated Current (A)	16	16	16	18	18	18	18
YG150	Rated Torque (N.m)	1490	1490	1290	1020	1020	745	645
	Motor Power (KW)	4.5	4.5	4.5	4.5	5.5	5.5	5.5
	Stall Current (A)	36	36	36	36	58	58	58
	Rated Current (A)	17	17	17	17	23	23	23
YG200	Rated Torque (N.m)	2300	2030	1700	1355	1100	1020	865
	Motor Power (KW)	5.5	5.5	5.5	5.5	5.5	6	6
	Stall Current (A)	58	58	58	58	58	68	68
	Rated Current (A)	23	23	23	23	23	27	27
YG250	Rated Torque (N.m)	2650	2550	2000				
	Motor Power (KW)	6	6	6				
	Stall Current (A)	68	68	68				
	Rated Current (A)	27	27	27				
YG300	Rated Torque (N.m)	3200	3000	2600	2000	1800	1300	
	Motor Power (KW)	7.5	7.5	7.5	7.5	7.5	8	
	Stall Current (A)	100	100	100	100	100	125	
	Rated Current (A)	40	40	40	40	40	50	
YG350	Rated Torque (N.m)	3600	3500	3000				
	Motor Power (KW)	8	8	8				
	Stall Current (A)	125	125	125				
	Rated Current (A)	50	50	50				

YG Multi-Turn On-Off Models (220VAC/50Hz)

Revolutions per minute (rpm)		18	24	36	48	72	96	144
YG003	Rated Torque (N.m)	25	20	17	15	12	10	
	Motor Power (KW)	0.15	0.15	0.15	0.15	0.15	0.15	
	Stall Current (A)	2.5	2.5	2.5	2.5	2.5	2.6	
	Rated Current (A)	2	2	2	2	2	2.2	
YG008	Rated Torque (N.m)	28	24	20	17			
	Motor Power (KW)	0.2	0.2	0.2	0.2			
	Stall Current (A)	3.8	3.8	3.8	3.8			
	Rated Current (A)	2.5	2.5	2.5	2.5			
YG014	Rated Torque (N.m)	65	51	42	35	26		
	Motor Power (KW)	0.25	0.25	0.25	0.25	0.25		
	Stall Current (A)	4.5	4.5	4.5	4.5	4.5		
	Rated Current (A)	2.8	2.8	2.8	2.9	3.0		
YG020	Rated Torque (N.m)	105	95	80	78	70	45	30
	Motor Power (KW)	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	Stall Current (A)	10.5	10.5	10.5	10.5	10.5	10.5	10.5
	Rated Current (A)	5.8	5.8	5.8	5.8	5.8	5.8	6
YG040	Rated Torque (N.m)	204	180	140	102	88	55	40
	Motor Power (KW)	1.1	1.1	1.1	1.1	1.1	1.1	1.1
	Stall Current (A)	11.2	11.2	11.2	11.2	11.2	11.2	11.2
	Rated Current (A)	7	7	7	7	7	7	7
YG060	Rated Torque (N.m)	288	265	204	165	113		
	Motor Power (KW)	1.5	1.5	1.5	1.5	1.5		
	Stall Current (A)	12.3	12.3	12.3	12.3	12.3		
	Rated Current (A)	8.2	8.2	8.2	8.2	8.5		

YGM Multi-Turn Modulating Models (380VAC/50Hz)

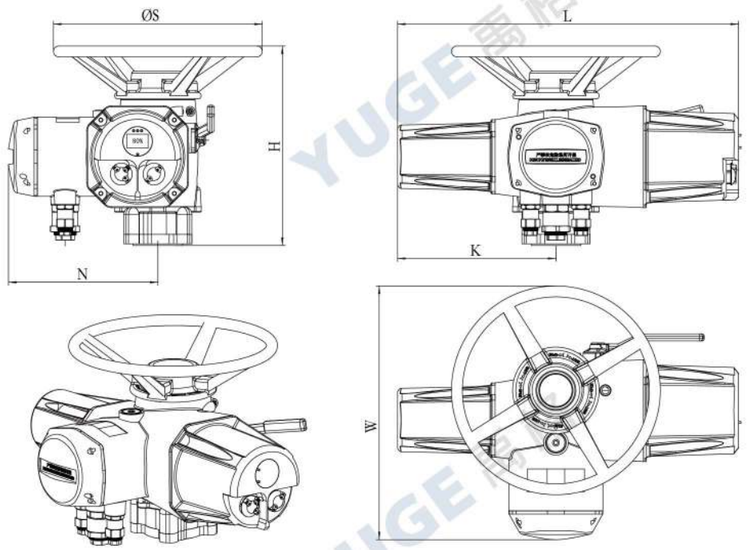
Revolutions per minute (rpm)		18	24	36	48	72	96	144
YGM003	Modulating Torque (N.m)	21	18.5	16	21	21		
	Maximum Torque (N.m)	42	37	32	42	42		
	Motor Power (KW)	0.15	0.15	0.15	0.15	0.15		
	Stall Current (A)	3.6	3.6	3.6	3.6	3.6		
	Rated Current (A)	2.4	2.4	2.4	2.4	2.4		
YGM008	Modulating Torque (N.m)	40	36	32	40	40	32	
	Maximum Torque (N.m)	81	75	65	81	81	65	
	Motor Power (KW)	0.25	0.25	0.25	0.25	0.25	0.35	
	Stall Current (A)	5.8	5.8	5.8	5.8	5.8	6.5	
	Rated Current (A)	2.5	2.5	2.5	2.5	2.5	3.5	
YGM014	Modulating Torque (N.m)	80	70	50	80	80		
	Maximum Torque (N.m)	152	136	102	152	152		
	Motor Power (KW)	0.35	0.35	0.35	0.35	0.35		
	Stall Current (A)	7	7	7	7	7		
	Rated Current (A)	3.0	3.0	3.0	3.0	3.0		
YGM020	Modulating Torque (N.m)	110	100	80	50	40	35	
	Maximum Torque (N.m)	220	200	160	102	80	70	
	Motor Power (KW)	0.65	0.65	0.65	0.65	0.65	0.65	
	Stall Current (A)	12	12	12	12	12	12.6	
	Rated Current (A)	3.7	3.7	3.7	3.7	3.7	3.9	
YGM030	Modulating Torque (N.m)	175	155	120	90	70	60	40
	Maximum Torque (N.m)	350	300	250	180	140	120	80
	Motor Power (KW)	0.75	0.75	0.75	0.75	0.75	0.75	0.75
	Stall Current (A)	14.7	14.7	14.7	14.7	14.7	15	15
	Rated Current (A)	5	5	5	5	5	5.5	5.5
YGM040	Modulating Torque (N.m)	210	200	180	150	120		
	Maximum Torque (N.m)	430	400	360	300	250		
	Motor Power (KW)	0.81	0.81	0.81	0.81	0.81		
	Stall Current (A)	15.2	15.2	15.2	15.2	15.2		
	Rated Current (A)	5.3	5.3	5.3	5.3	5.5		
YGM060	Modulating Torque (N.m)	320	300	265	200	150		
	Maximum Torque (N.m)	650	610	530	400	300		
	Motor Power (KW)	2.1	2.1	2.1	2.1	2.5		
	Stall Current (A)	19	19	19	19	21		
	Rated Current (A)	7	7	7	7	8.1		
YGM080	Modulating Torque (N.m)	420	400			150		
	Maximum Torque (N.m)	850	820			300		
	Motor Power (KW)	2.5	2.5			2.5		
	Stall Current (A)	23	23			21		
	Rated Current (A)	11	11			8.1		

YGM Multi-Turn Modulating Models (220VAC/50Hz)

Revolutions per minute (rpm)		18	24	36	48	72	96	144
YGM003	Modulating Torque (N.m)	15	12	10	10			
	Maximum Torque (N.m)	30	24	21	21			
	Motor Power (KW)	0.15	0.15	0.15	0.2			
	Stall Current (A)	2.6	2.6	2.6	2.6			
	Rated Current (A)	2.1	2.1	2.1	2.1			
YGM008	Modulating Torque (N.m)	26	20	15	13			
	Maximum Torque (N.m)	52	40	30	27			
	Motor Power (KW)	0.2	0.2	0.2	0.2			
	Stall Current (A)	3.8	3.8	3.8	3.8			
	Rated Current (A)	2.4	2.4	2.4	2.4			
YGM020	Modulating Torque (N.m)	50	40	32	26	20		
	Maximum Torque (N.m)	102	81	65	52	40		
	Motor Power (KW)	0.8	0.8	0.8	0.8	0.8		
	Stall Current (A)	10.5	10.5	10.5	10.5	10.5		
	Rated Current (A)	5.8	5.8	5.8	5.8	5.8		
YGM040	Modulating Torque (N.m)	102	90	70	48	42		
	Maximum Torque (N.m)	204	180	140	102	78		
	Motor Power (KW)	1.1	1.1	1.1	1.1	1.1		
	Stall Current (A)	11.6	11.6	11.6	11.6	11.6		
	Rated Current (A)	7	7	7	7	7		
YGM060	Modulating Torque (N.m)	180	150	130	102	72	50	
	Maximum Torque (N.m)	350	310	260	204	150	102	
	Motor Power (KW)	1.5	1.5	1.5	1.5	1.5	1.5	
	Stall Current (A)	12.5	12.5	12.5	12.5	12.5	12.5	
	Rated Current (A)	8.2	8.2	8.2	8.2	8.2	8.2	

Overall Dimensions of YG Multi-Turn Series

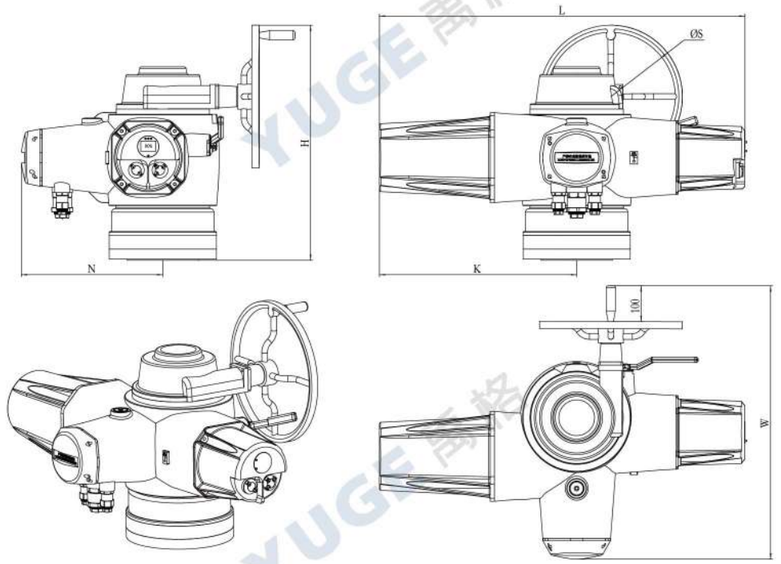
YG003 - YG100 (with 30-1000 N.m output torque)



YG003-YG100 dimension table							
Model	L	w	H	K	N	S	Net Weight (kg)
YG003	630	430	290	280	300	260	29
YG008	630	430	290	280	300	260	30
YG014	630	430	290	280	300	260	31
YG020	730	535	400	350	320	430	48
YG030	730	535	400	350	320	430	49
YG040	730	535	400	350	320	430	50
YG060	750	700	400	400	320	760	75
YG080	750	700	400	400	320	760	78
YG100	1050	820	600	580	420	800	280

Overall Dimensions of YG Multi-Turn Series

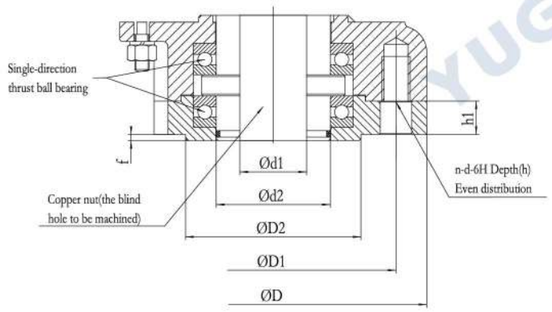
YG150 - YG350 (with 1500-3500 N.m output torque)

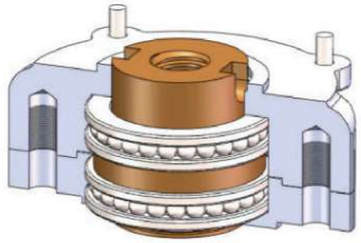


YG150-YG350 dimension table							
Model	L	w	H	K	N	S	Net Weight (kg)
YG150	1050	770	700	560	420	400	295
YG200	1050	770	700	560	420	400	310
YG250	1050	770	700	560	420	400	325
YG300	1050	770	700	560	420	400	330
YG350	1050	770	700	560	420	400	345

Connector Dimensions of YG Multi-Turn Series

A-shape copper nut connector diagram (GB/12222-2005)

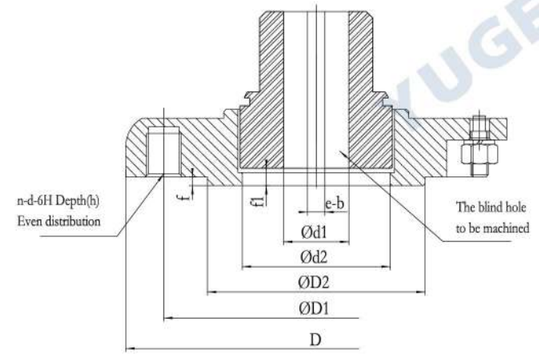


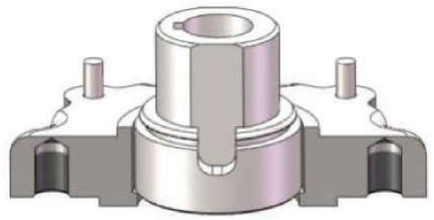


Items / Size	YG003 YG008 YG014	YG020 YG030 YG040	YG060 YG080	YG100	YG150 YG200 YG250	YG300 YG350
d1(Max)	Tr28	Tr40	Tr50	Tr60	Tr70	Tr70
d2	45	65	85	100	110	100
D2(F8)	70	100	130	200	200	230
D1	102	140	165	254	254	298
D	126	175	210	300	300	350
n-d	4-M10	4-M16	4-M20	8-M16	8-M16	8-M20
h	16	22	30	40	40	40
h1	22	19	21	66.5	103	43
f	3	3.5	4	3	5	6
Flange	F10	F14	F16	F25	F25	F30

Connector Dimensions of YG Multi-Turn Series

B-shape key connector diagram (GB/12222-20055)



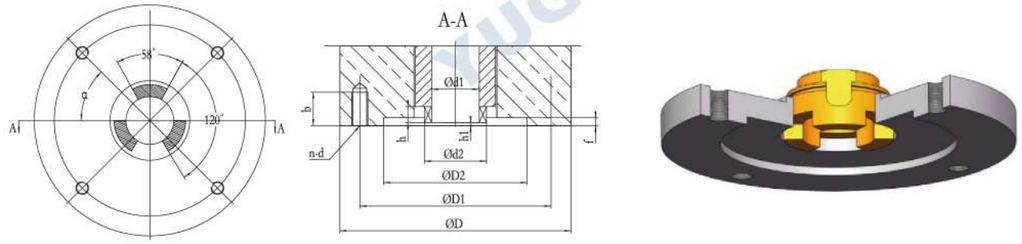


Model	YG003/008/014	YG020/030/040	YG060 YG080	YG100	YG150/200/250	YG300/350
d1 (MAX)	24	40	50	56	62	62
d1	20	30	40	50	60	60
d2	46	68	84	100	165	190
D2 (f8)	70	100	130	200	200	230
D1	102	140	165	254	254	298
D	126	175	210	300	300	350
n-d	4-M10	4-M16	4-M20	8-M16	8-M16	8-M20
h	16	20	30	68	40	40
f	3	4	4	3	4.5	5
f1	7	8	12	4.5	2	2
e-b	1-6	1-8	1-12	1-14	1-18	1-20
Flange	F10	F14	F16	F25	F25	F30

Note: The above sizes for inner holes and keys are only for reference. Valve shaft diameters are made to order.

Connector Dimensions of YG Multi-Turn Series

JB-shape connector diagram (JB2920)



Model	YG003/008/014		YG020/030/040			YG060/080			YG100		YG150/200/250			YG300/350	
Connector	JB1	JB2	JB2	JB3	JB4	JB2	JB3	JB4	JB4	JB5	JB4	JB5	JB6	JB6	JB7
d1	26	28	30	42	46	30	42	50	50	62	50	62	72	72	80
d2	39	45	45	58	70	45	58	72	72	82	72	82	95	97	118
D2	75	90	90	125	150	90	125	150	150	180	150	180	220	220	280
D1	95	120	120	160	195	120	160	195	195	235	195	235	285	285	340
D	130	145	175	185	225	210	210	225	300	300	300	300	320	350	380
n-d	4-M8	4-M10	4-M10	4-M12	4-M16	4-M10	4-M12	4-M16	4-M16	4-M20	4-M16	4-M20	4-M24	4-M24	8-M20
b	12	16	16	18	25	16	18	25	25	30	25	30	36	36	30
h	8	8	10	10	10	10	10	12	14	14	14	14	14	20	20
h1	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3
f	5	5	5	5	5	5	5	5	6	6	6	6	6	8	8
α (°)	45	45	45	45	45	45	45	45	45	45	45	45	45	45	22.5

Note: The above models are all belong to YG integrated multi-turn actuators with a maximum torque of 3500 N.m. They can be combined with D-series speed reducers to become YG/D or YGM/D smart combined multi-turn actuators with a maximum torque of 15,000 N.m.

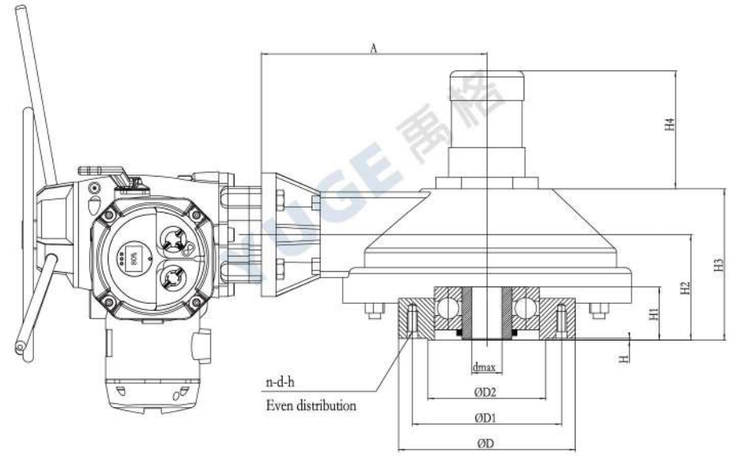
YG/D Series Models

Multi-Turn Speed Reducer Models in D/DR Series					
Model	Speed Reduction Ratio	Output Torque (N.m)	Output Torque (Ft • lbs)	Input Torque (N.m)	Magnification Ratio
D3	3	300	221	111	3
	4			83	4
	6			56	5
D4	3	600	443	222	3
	4			167	4
	6			111	5
D4R	8			88	7
	12			59	10
D6	3	1500	1107	556	3
	4			417	4
	5			333	5
	6			278	5
D6R	8			221	7
	10			176	9
	12			147	10
D8	3	2500	1845	926	3
	4			694	4
	5			556	5
	6			463	5
D8R	8			368	7
	10			294	9
	12			245	10
	16			184	14

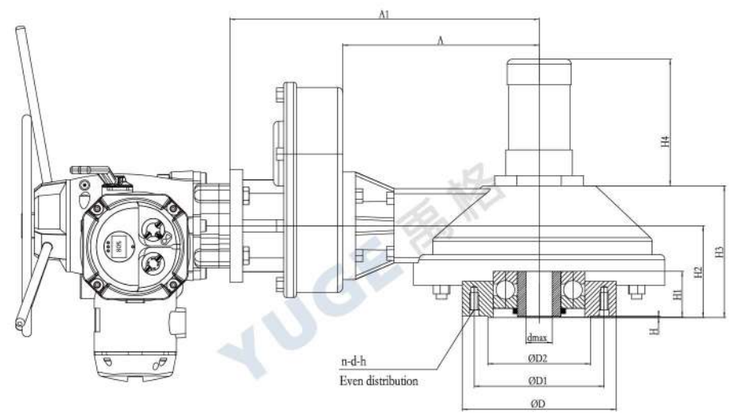
YG/D Series Models

Multi-Turn Speed Reducer Models in D/DR Series					
Model	**Speed Reduction Ratio**	**Output Torque (N.m)**	**Output Torque (Ft • lbs)**	**Input Torque (N.m)**	**Magnification Ratio**
D10	3.4	5000	3690	1634	3
	4			1389	4
	5			1111	5
	6			926	5
D10R	8			735	7
	10			588	9
	12			490	10
	16			368	14
	20			294	17
D12	6	8800	6494	1630	5
	8			1222	7
D12R	12			863	10
	18			575	15
	24			431	20
	36			288	31
D14	5	15000	11070	3333	5
D14R	10			1765	9
	15			1176	13
	20			882	17
	25			706	21
	30			588	26

Overall Dimensions of YG/D Actuator with its Connector



Overall Dimensions of YG/DR Actuator with its Connector



Dimensions Table of YG/D/DR Actuator with its Connector

Model	D3	D4	D6	D8	D10	D12	D14
Output Flange	F10	F14	F16	F25	F30	F30	F40
ΦD	125	175	210	300	350	350	475
ΦD1	102	140	165	254	298	298	406
ΦD2	70	100	130	200	230	230	300
Φd (max)	35	45	60	70	80	100	130
H	3	3	3	3	3	4	5
H1	60	64	86	104	120	167	167
H2	75	90	116	144	176	202	264
H3	110	143	168	212	254	280	384
H4	100	140	170	410	520	520	520
n-d-h	4-M10-15	4-M16-24	4-M20-30	8-M16-24	8-M20-30	8-M20-30	8-M36-54
A	153	188	233	302	383	422	423
A1		328	415	484	608	648	626

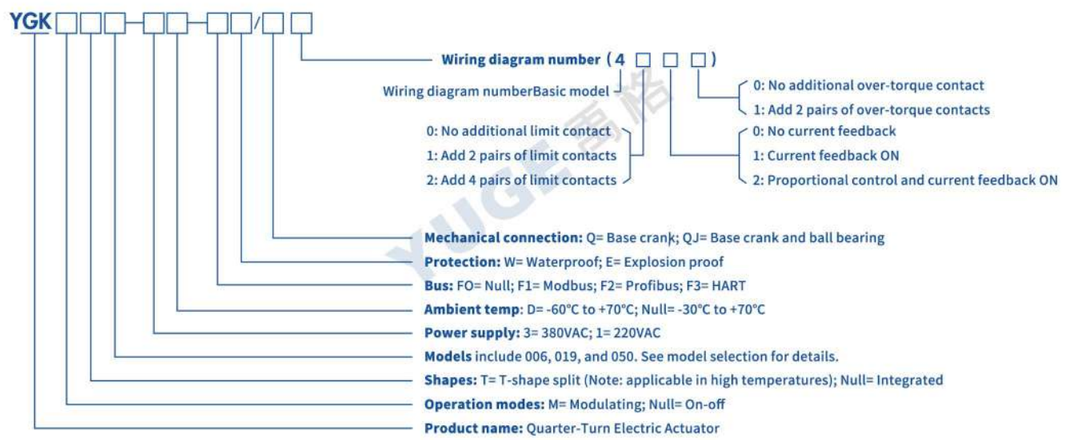
Technical Parameters and Models of YGK Quarter-Turn Series

Properties of YGK/YGKM Quarter-Turn Series

- **Applicable external power:** three-phase (380VAC; -10%/+10%; 50Hz±1%) or single-phase (220VAC; -15%/+10%; 50Hz±1%).
- **Remote control:** 24 VDC unregulated power output for passive switch input inside the electric actuator.
- **Motor mode:** Insulation Class F. On-off mode applies for short-time duty S2-15min and 60 starts/hour operation, while modulating mode for S4-50% modulating duty and 1200 starts/hour operation.
- **Service life:** 10,000 cycles at rated torque for YG/YGK on-off mode, 500,000 cycles at 50% of rated torque for YGM/YGKM modulating mode.

Properties of YGK/YGKM Quarter-Turn Series		
Items	**Unit**	**Technical Indicator**
Basic Error of Valve Position Control	%	⩽±1.0
Hysteresis Error of Valve Position Control	%	⩽1
Dead Zone	%	Adjustable within 0.1 and 9.9
Working Temp.	℃	-30 to +70 (-60 to +120 optional)
Output Range (Stroke)	°	Adjustable within 0 and 90
Basic Error of Valve Position Feedback Signal	%	⩽1
Rated Stroke Time Error	%	⩽20
Clearance	°	⩽0.5
Repeatability Error of Stroke Control Mechanism Condition: the set stroke time ⩾25s	%	⩽1

Smart Quarter-Turn Electric Actuator



YGK Quarter-Turn On-Off Models (same as split actuators)

Smart On-Off Models	Power Supply	Maximum Output Torque	Rated Torque	Stroke Time 60/50Hz	Maximum Valve Shaft Diameter	Motor Power (F Class)	Rated Current	Handwheel Cycle	Weight
		N.m	N.m	S	mm	W	A	N	Kg
YGK006	380VAC	60	50	14/17	22	15	0.25	8.5	11
	220VAC	60	50	14/17	22	15	0.53	8.5	11
YGK009	380VAC	90	75	14/17	22	25	0.28	8.5	11
	220VAC	90	75	14/17	22	25	0.6	8.5	11
YGK015	380VAC	150	125	17/20	22	40	0.39	10	12
	220VAC	150	125	17/20	22	40	0.8	10	12
YGK019	380VAC	190	160	17/20	22	45	0.42	10	13
	220VAC	190	160	17/20	22	45	1.1	10	13
YGK028	380VAC	280	235	20/25	32	50	0.45	12.5	17
	220VAC	280	235	20/25	32	50	1.2	12.5	17
YGK038	380VAC	380	320	20/25	32	60	0.51	12.5	18
	220VAC	380	320	20/25	32	60	1.4	12.5	18

YGK Quarter-Turn On-Off Models (same as split actuators)

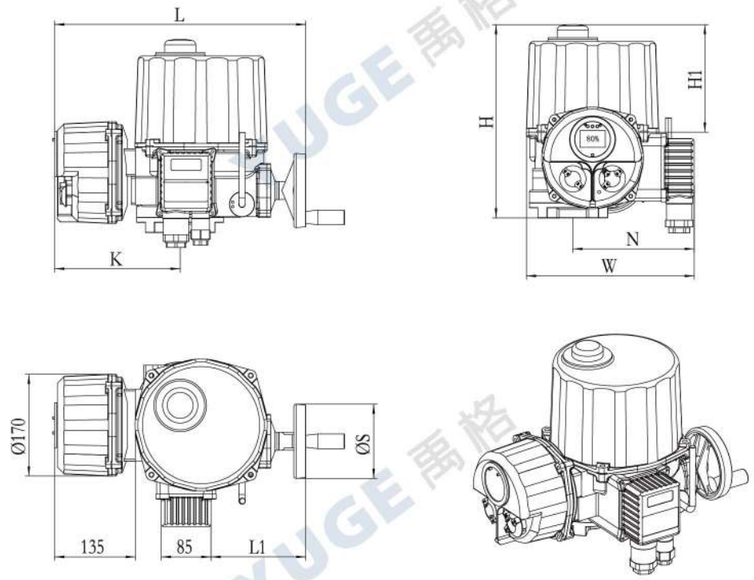
Smart On-Off Models	Power Supply	Maximum Output Torque	Rated Torque	Stroke Time 60/50Hz	Maximum Valve Shaft Diameter	Motor Power (F Class)	Rated Current	Handwheel Cycle	Weight
		N.m	N.m	S	mm	W	A	N	Kg
YGK050	380VAC	500	420	20/25	32	90	0.73	12.5	19
	220VAC	500	420	20/25	32	90	1.7	12.5	19
YGK060	380VAC	600	500	24/29	42	90	0.73	14.5	22
	220VAC	600	500	24/29	42	90	1.7	14.5	22
YGK080	380VAC	800	670	24/29	42	140	0.8	14.5	23
	220VAC	800	670	24/29	42	140	2	14.5	23
YGK100	380VAC	1000	840	24/29	42	180	0.9	14.5	25
	220VAC	1000	840	24/29	42	180	2.4	14.5	25
YGK150	380VAC	1500	1250	72/87	75	90	0.73	43.5	68
	220VAC	1500	1250	72/87	75	90	1.7	43.5	68
YGK200	380VAC	2000	1670	72/87	75	140	0.8	43.5	70
	220VAC	2000	1670	72/87	75	140	2	43.5	70
YGK250	380VAC	2500	2100	72/87	75	180	0.9	43.5	70
	220VAC	2500	2100	72/87	75	180	2.4	43.5	70

YGKM Modulating Quarter-Turn Models (same as split actuators)									
Smart Modulating Models	Power Supply	Maximum Output Torque	Rated Torque	Stroke Time 60/50Hz	Maximum Valve Shaft Diameter	Motor Power (F Class)	Rated Current	Handwheel Cycle	Weight
		N.m	N.m	S	mm	W	A	N	Kg
YGKM006	380VAC	60	50	14/17	22	15	0.25	8.5	11
	220VAC	50	25	14/17	22	15	0.53	8.5	11
YGKM009	380VAC	90	75	14/17	22	25	0.28	8.5	11
	220VAC	80	40	14/17	22	25	0.6	8.5	11
YGKM015	380VAC	150	125	17/20	22	40	0.39	10	12
	220VAC	130	70	17/20	22	40	0.8	10	12
YGKM019	380VAC	190	160	17/20	22	45	0.42	10	13
	220VAC	160	85	17/20	22	45	1.1	10	13
YGKM028	380VAC	280	235	20/25	32	50	0.45	12.5	17
	220VAC	260	130	20/25	32	50	1.2	12.5	17
YGKM038	380VAC	380	320	20/25	32	60	0.51	12.5	18
	220VAC	350	175	20/25	32	60	1.4	12.5	18
YGKM050	380VAC	500	420	20/25	32	90	0.73	12.5	19
	220VAC	420	230	20/25	32	90	1.7	12.5	19
YGKM060	380VAC	600	500	24/29	42	90	0.73	14.5	22
	220VAC	520	270	24/29	42	90	1.7	14.5	22
YGKM080	380VAC	800	670	24/29	42	140	0.8	14.5	23
	220VAC	700	360	24/29	42	140	2	14.5	23
YGKM100	380VAC	1000	840	24/29	42	180	0.9	14.5	25
	220VAC	880	450	24/29	42	180	2.4	14.5	25
YGKM150	380VAC	1500	1250	72/87	75	90	0.73	43.5	68
	220VAC	1350	720	72/87	75	90	1.7	43.5	68
YGKM200	380VAC	2000	1670	72/87	75	140	0.8	43.5	70
	220VAC	1800	950	72/87	75	140	2	43.5	70
YGKM250	380VAC	2500	2100	72/87	75	180	0.9	43.5	70
	220VAC	2300	1100	72/87	75	180	2.4	43.5	70

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Overall Dimensions of YGK Quarter-Turn Series

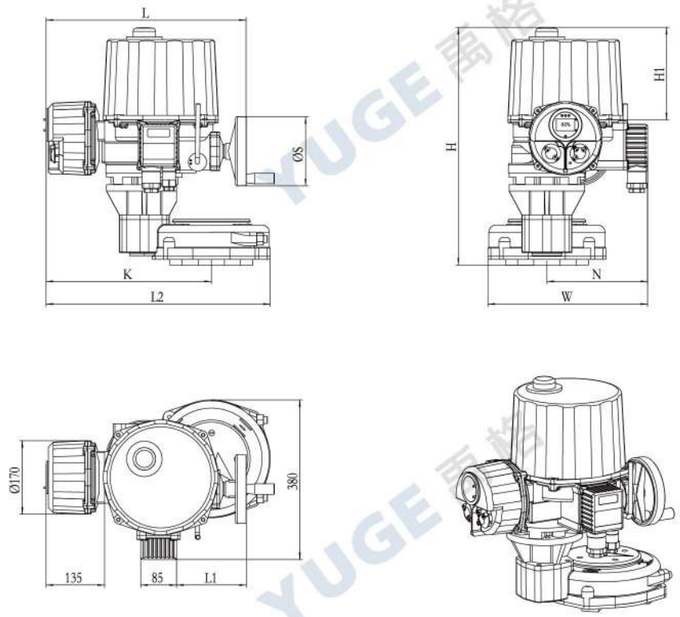
YGK006 - YGK100 (with 60-1000 N.m output torque)



Dimensions Table of YGK006 - YGK100										
Model	L	L1	L2	W	H	H1	K	N	S	Net Weight (kg)
YGK006	380	136	-	250	280	138	190	180	100	11
YGK009	380	136	-	250	280	138	190	180	100	12
YGK015	420	136	-	280	300	150	220	200	100	14
YGK019	420	136	-	280	300	150	220	200	100	15
YGK028	450	160	-	320	330	190	220	220	120	20
YGK038	450	160	-	320	330	190	220	220	120	20
YGK050	450	160	-	320	330	190	220	220	120	21
YGK060	500	165	-	380	380	220	250	250	160	30
YGK080	500	165	-	380	380	220	250	250	160	30
YGK100	500	165	-	380	380	220	250	250	160	31

Overall Dimensions of YGK Quarter-Turn Series

YGK150 - YGK250 (with 1500-2500 N.m output torque)

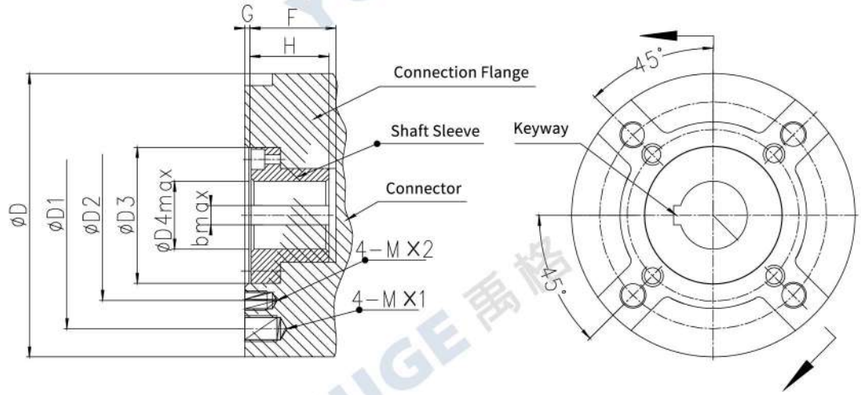


Dimensions Table of YGK150 - YGK250										
Model	**L**	**L1**	**L2**	**W**	**H**	**H1**	**K**	**N**	**S**	**Net Weight (kg)**
YGK150	500	165	600	400	560	220	430	280	160	70
YGK200	500	165	600	400	560	220	430	280	160	70
YGK250	500	165	600	400	560	220	430	280	160	70

Connector Dimensions for YGK Quarter-Turn Series

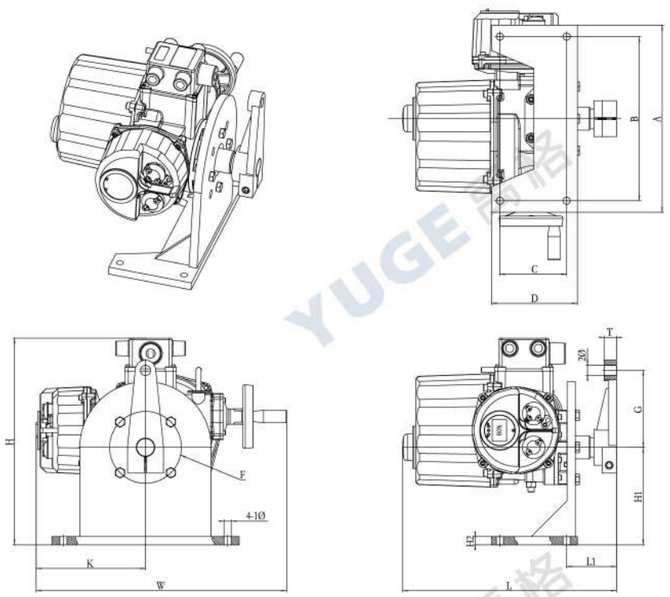
See the diagram below for the connection flange of YGK series actuator (the keyway and the screw hole position at full closure).

The maximum processing size for the shaft sleeve hole (ΦD4) is for reference only. They are usually unprocessed blind holes and made to order.

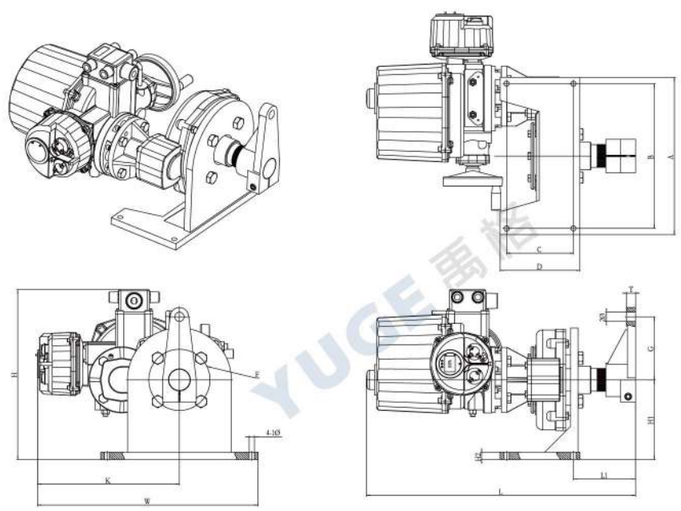


Model	**D**	**D1**	**MX1**	**D2**	**MX2**	**D3**	**D4max**	**F**	**G**	**H**	**Flange**
YGK006/009	102	70	M8	—	—	54	24	43	2	35	F07
YGK015/019	120	102	M10	70	M8	54	24	43	2	35	F10/F07
YGK028/038/050	145	125	M12	102	M10	74	34	48	2	46	F12/F10
YGK060/080/100	175	140	M16	125	M12	84	44	56	2	50	F14/F12
YGK150/200/250	235	165	M20	—	—	120	75	109	7	92	F16

Base Crank Connector Dimensions for YGK015 - YGK100 Quarter-Turn Series



Base Crank Connector Dimensions for YGK150 - YGK250 Quarter-Turn Series



Base Crank Connector Dimensions for Different YGK Quarter-Turn Models				
Model	**YGK015/019**	**YGK028/038/050**	**YGK060/080/100**	**YGK150/200/250**
A	245	365	365	430
B	220	320	320	390
C	130	130	130	180
D	160	167	167	215
G	100	150	150	170
K	220	220	250	430
L	380	430	480	740
W	470	500	550	645
H	328	410	440	495
H1	128	190	190	215
H2	16	20	20	25
L1	80	97	93	168
4-1Φ	Φ12	Φ14	Φ14	Φ14
2Φ	Φ12-Φ16	Φ16-Φ20	Φ18-Φ20	Φ18-Φ20
2Φ tapered bore 1:10	Large diameter: Φ12~Φ16	Large diameter: Φ16~Φ20	Large diameter: Φ18~Φ20	Large diameter: Φ18~Φ20
T	22	24	24	25
F	F10	F12	F14	F16

Note: The above actuators are all belong to YGK integrated Quarter-Turn series with a maximum torque of 2500 N.m. Combining with W-series speed reducers, YG multi-turn actuators can turn into YG/W or YGM/W smart combined Quarter-Turn actuators with a maximum output torque of 450,000 N.m.

YG/W Combined Quarter-Turn Models

Speed Reducer Models for W/WR Combined Quarter-Turn Series					
Model	Speed Reduction Ratio	Output Torque (N.m)	Output Torque(Ft・lbs)	Input Torque (N.m)	Magnification Ratio
W4	40	1500	1107	125	12
	70			71	21
W4R	140			36	42
	210			24	63
	280			18	83
W5	70	3000	2214	143	21
W5R	140			71	42
	210			48	63
	280			36	83
	350			29	103
W6	70	6000	4428	286	21
W6R	140			143	42
	210			95	63
	280			71	85
	350			57	105
	420			48	125
W7	70	10000	7380	446	22
W7R	140			223	45
	210			149	67
	280			112	89
	350			89	112
	420			74	135
	480			65	154
	640			48	208
W8	70	20000	14760	893	22

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YG/W Combined Quarter-Turn Models

Speed Reducer Models for W/WR Combined Quarter-Turn Series					
Model	Speed Reduction Ratio	Output Torque (N.m)	Output Torque(Ft・lbs)	Input Torque (N.m)	Magnification Ratio
W8R	140	20000	14760	446	45
	210			298	67
	280			223	90
	350			179	112
	420			149	134
	490			128	156
	560			112	179
	630			99	202
	700			89	225
	770			81	247
	840			74	270
	910			69	290
	980			64	313
W9	65	35000	25830	1683	21
W9R	130			841	42
	195			561	62
	260			421	83
	325			337	104
	390			280	125
	455			240	146
	520			210	167
	585			187	187
	650			168	208
	715			153	229
	780			140	250
	845			129	271
	910			120	292
	975			112	313
	1105			99	354
	1300			84	417
W10	64	65000	47970	3174	20

YG/W Combined Quarter-Turn Models

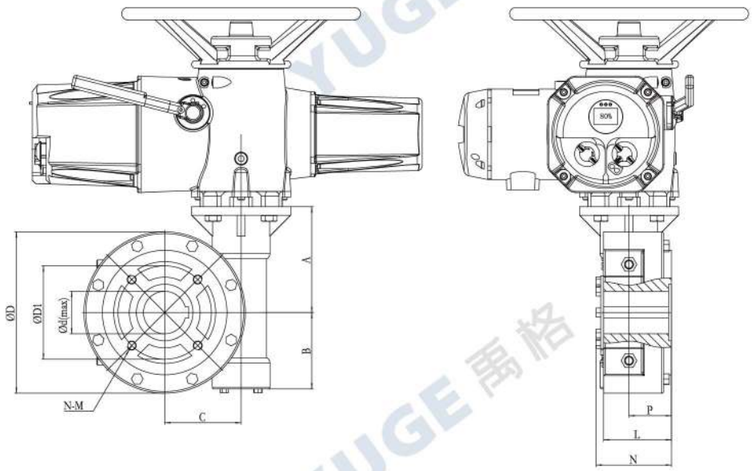
Speed Reducer Models for W/WR Combined Quarter-Turn Series					
Model	Speed Reduction Ratio	Output Torque (N.m)	Output Torque(Ft・lbs)	Input Torque (N.m)	Magnification Ratio
W10R	128	65000	47970	1587	41
	192			1058	61
	256			793	82
	320			635	102
	384			529	123
	448			453	143
	512			397	164
	576			353	184
	640			317	205
	768			264	246
	896			227	286
	960			212	307
	1024			198	328
	1152			176	360
	1280			159	409
	1408			144	451
	1536			132	492
	1920			106	613
	2240			91	714
	2564			79	823
W12	85	120000	88560	4963	24
W12R	170			2482	48
	255			1654	72
	340			1241	97
	425			993	121
	510			827	145
	595			709	190
	680			620	218
	765			551	245
	850			496	272
	1020			414	326

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YG/W Combined Quarter-Turn Models

Speed Reducer Models for W/WR Combined Quarter-Turn Series					
Model	Speed Reduction Ratio	Output Torque (N.m)	Output Torque(Ft・lbs)	Input Torque (N.m)	Magnification Ratio
W12R	1190	120000	88560	355	380
	1360			310	435
	1530			276	489
	1700			248	544
	2040			207	652
	2550			165	818
	2975			142	951
	3400			124	1089

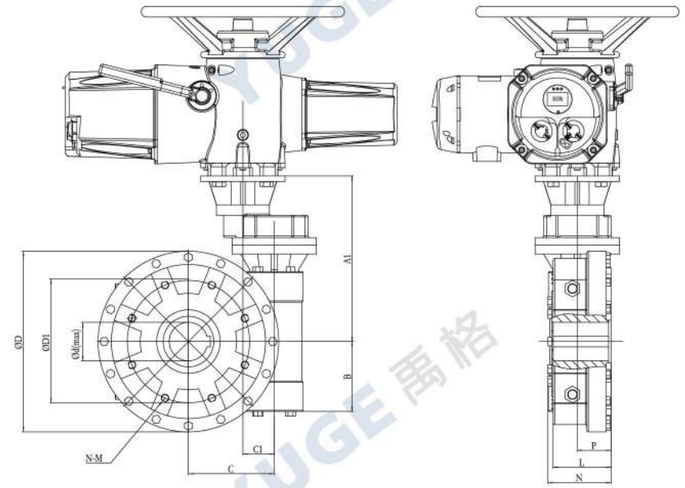
Connector Dimensions for YG/W Combined Quarter-Turn Series



Model	A	B	C	ΦD	ΦD1	d (max)	N-M	P	L	N	Flange
W3	150	97	75	170	102	Φ35	4-M10	50	75	80	F10
W4	160	106	103	218	140	Φ60	4-M16	60	95	105	F14
W5	187	135	135	285	165	Φ60	4-M20	75	115	130	F16
W6	197	145	178	375	254	Φ75	8-M16	75	120	135	F25
W7	297	195	210	450	254	Φ100	8-M16	85	120	140	F25
W8	324	230	246	520	254	Φ115	8-M16	90	140	160	F25
W9	380	265	270	590	298	Φ140	8-M20	95	160	180	F30
W10	480	305	342	735	356	Φ180	8-M30	120	170	200	F35

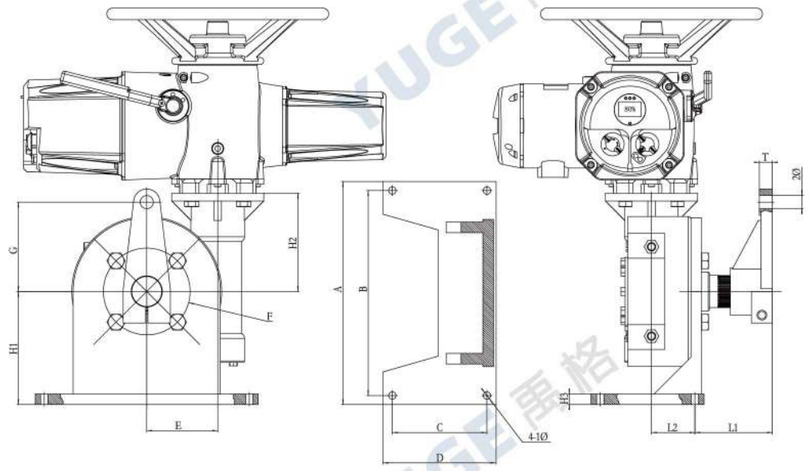
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Connector Dimensions for YG/W Combined Quarter-Turn Series



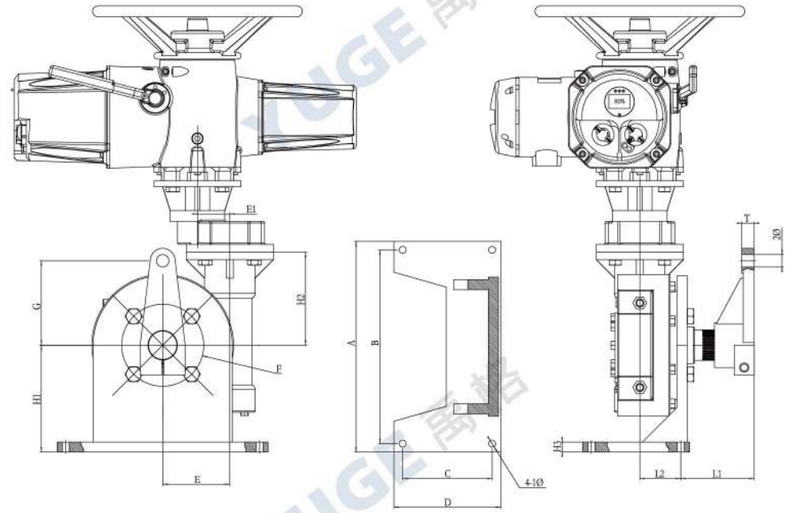
Model	A1	B	C	C1	ΦD	ΦD1	d (max)	N-M	P	L	N	Flange
W4R	300	105	102	80	220	140	Φ60	4-M16	60	95	105	F14
W5R	330	125	125	80	270	165	Φ60	4-M20	75	115	130	F16
W6R	390	140	150	80	320	254	Φ75	8-M16	75	120	135	F25
W7R	410	170	200	80	450	254	Φ100	8-M16	85	120	140	F25
W8R	480	220	240	120	520	254	Φ115	8-M16	90	140	160	F25
W9R	540	240	270	170	590	298	Φ140	8-M20	95	160	180	F30
W10R	580	280	340	200	735	356	Φ180	8-M30	120	170	200	F35
W12R	670	330	400	220	920	406	Φ180	8-M36	120	170	200	F40

Base Crank Connector Dimensions for YG/WQ Combined Quarter-Turn Series



Base Crank Connector Dimensions for YG/WQ Combined Quarter-Turn Series															
Base-Equipped Worm Gearbox Model	A	B	C	D	E	E1	G	H1	H2	H3	L1	L2	4-1Φ	2Φ	T
W3-Q	250	220	130	160	80	-	100	128	150	16	72	53	4-Φ12	Φ14	14
W4-Q	360	320	130	160	102	-	120	170	159	20	85	59	4-Φ14	Φ16	23
W5-Q	420	390	180	210	125	-	170	215	187	20	122	79	4-Φ14	Φ20	25
W6-Q	480	430	200	250	145	-	170	250	201	20	142	65	4-Φ14	Φ30	25
W7-Q	560	510	270	315	200	-	250	300	274	25	150	88.5	4-Φ22	Φ30	34
W8-Q	685	600	270	320	240	-	250	340	325	25	155	118	4-Φ22	Φ30	34
W9-Q	780	710	458	530	272	-	320	460	380	35	161	119	4-Φ26	Φ40	40
W10-Q	780	710	458	530	340	-	320	560	480	35	161	153	4-Φ33	Φ40	40

Base Crank Connector Dimensions for YG/WRQ Combined Quarter-Turn Series



Base Crank Connector Dimensions for YG/WRQ Combined Quarter-Turn Series															
Base-Equipped Worm Gearbox Model	A	B	C	D	E	E1	G	H1	H2	H3	L1	L2	4-1Φ	2Φ	T
W4R-Q	360	320	130	160	102	80	120	170	292	20	85	59	4-Φ14	Φ16	23
W5R-Q	420	390	180	210	125	80	170	215	320	20	122	79	4-Φ14	Φ20	25
W6R-Q	480	430	200	250	145	80	170	250	330	20	142	65	4-Φ14	Φ30	25
W7R-Q	560	510	270	315	200	80	250	300	418	25	150	88.5	4-Φ22	Φ30	34
W8R-Q	685	600	270	320	240	120	250	341	445	25	155	118	4-Φ22	Φ30	34
W9R-Q	780	710	458	530	272	170	320	460	550	35	161	119	4-Φ26	Φ40	40
W10R-Q	780	710	458	530	340	170	320	560	583	35	161	153	4-Φ33	Φ40	40

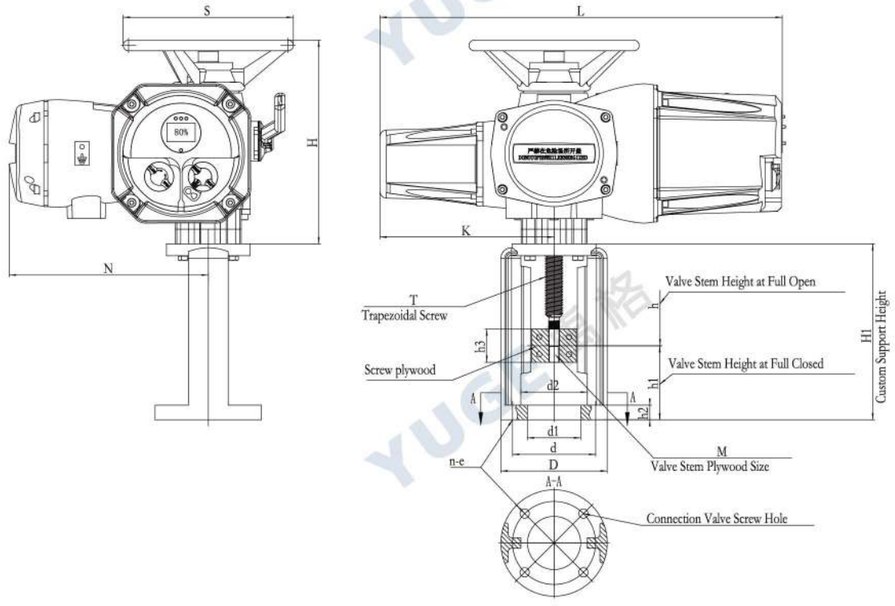
Technical Parameters and Models of YGML Linear Stroke Series

YGML Smart Linear Stroke Models

YGML Linear Stroke Models (380VAC/50Hz)						
Model	**Revolutions per minute (rpm)**	**18**	**24**	**36**	**48**	**72**
YGML03	Drive Trapezoidal Screw Diameter/lead (Mm)	25×4				
	Maximum Linear Stroke (Mm)	115				
	Flange Model (Iso 5210)	F10				
	Modulating Thrust (Kn)	9.20	9.20	8.45	7.37	
	Linear Speed (Mm/sec)	1.2	1.6	2.4	3.2	
	Rated Closing Thrust (Kn)	18.43	18.43	16.26	14.63	
YGML06	Drive Trapezoidal Screw Diameter/lead (Mm)	25×4				
	Maximum Linear Stroke (Mm)	115				
	Flange Model (Iso 5210)	F10				
	Modulating Thrust (Kn)	18.43	18.43	16.26	14.63	
	Linear Speed (Mm/sec)	1.2	1.6	2.4	3.2	
	Rated Closing Thrust (Kn)	33.06	29.27	29.27	26.02	
YGML12	Drive Trapezoidal Screw Diameter/lead (Mm)	32/6				
	Maximum Linear Stroke (Mm)	115				
	Flange Model (Iso 5210)	F14				
	Modulating Thrust (Kn)	31.15	31.15	26.12	20.74	18.06
	Linear Speed (Mm/sec)	1.8	2.4	3.6	4.8	7.2
	Rated Closing Thrust (Kn)	46.87	41.87	31.15	26.12	20.74
YGML20	Drive Trapezoidal Screw Diameter/lead (Mm)	32/6				
	Maximum Linear Stroke (Mm)	115				
	Flange Model (Iso 5210)	F14				
	Modulating Thrust (Kn)	58.39	58.39	19.56	39.18	39.18
	Linear Speed (Mm/sec)	1.8	2.4	3.6	4.8	7.2
	Rated Closing Thrust (Kn)	78.37	78.37	62.62	52.25	52.25
YGML54	Drive Trapezoidal Screw Diameter/lead (Mm)	38/8				
	Maximum Linear Stroke (Mm)	115				
	Flange Model (Iso 5210)	F16				
	Modulating Thrust (Kn)	105	105	97	78	78
	Linear Speed (Mm/sec)	2.4	3.2	4.8	6.4	9.6
	Rated Closing Thrust (Kn)	125	121	102	84	80

YGML Linear Stroke Models (220VAC/50Hz)						
Model	**Revolutions per minute (rpm)**	**18**	**24**	**36**	**48**	**72**
YGML03	Drive Trapezoidal Screw Diameter/Lead (mm)	25×4				
	Maximum Linear Stroke (mm)	115				
	Flange Model (ISO 5210)	F10				
	Modulating Thrust (kN)	6.50	6.50	5.42	5.42	
	Linear Speed (mm/sec)	1.2	1.6	2.4	3.2	
	Rated Closing Thrust (kN)	13.00	13.00	11.38	10.84	
YGML06	Drive Trapezoidal Screw Diameter/Lead (mm)	25×4				
	Maximum Linear Stroke (mm)	115				
	Flange Model (ISO 5210)	F10				
	Modulating Thrust (kN)	10.84	9.76	8.13	7.05	
	Linear Speed (mm/sec)	1.2	1.6	2.4	3.2	
	Rated Closing Thrust (kN)	22.76	20.60	17.89	14.63	
YGML12	Drive Trapezoidal Screw Diameter/Lead (mm)	32/6				
	Maximum Linear Stroke (mm)	115				
	Flange Model (ISO 5210)	F14				
	Modulating Thrust (kN)	15.37	12.29	9.99	9.60	6.91
	Linear Speed (mm/sec)	1.8	2.4	3.6	4.8	7.2
	Rated Closing Thrust (kN)	32.65	29.58	22.28	21.19	14.60
YGML20	Drive Trapezoidal Screw Diameter/Lead (mm)	32/6				
	Maximum Linear Stroke (mm)	115				
	Flange Model (ISO 5210)	F14				
	Modulating Thrust (kN)	26.89	26.89	21.13	16.13	16.13
	Linear Speed (mm/sec)	1.8	2.4	3.6	4.8	7.2
	Rated Closing Thrust (kN)	51.09	51.09	41.10	34.19	34.19
YGML54	Drive Trapezoidal Screw Diameter/Lead (mm)	38/8				
	Maximum Linear Stroke (mm)	115				
	Flange Model (ISO 5210)	F16				
	Modulating Thrust (kN)	69.29	66.26	53.53	41.2	28.68
	Linear Speed (mm/sec)	2.4	3.2	4.8	6.4	9.6
	Rated Closing Thrust (kN)	89	75	65	50	35

Overall Dimensions of YGML Linear Stroke Series

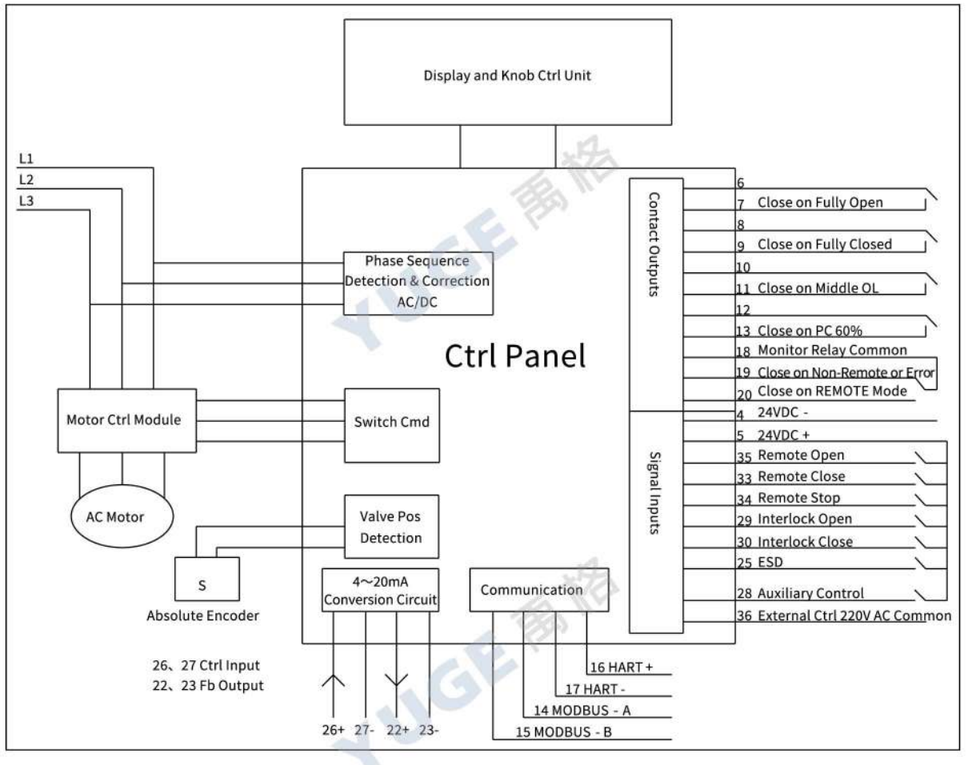


No.	Model	L	H	K	N	S	H1	D	d2	h2	h3	h1	d	d1	n-e	M
1	YGML03 YGML06	630	290	280	300	260	265	160	100	22	50					
2	YGML12 YGML20	730	400	350	320	430	280	175	100	22	50					
3	YGML54	750	400	400	320	780	380	210	130	22	60					

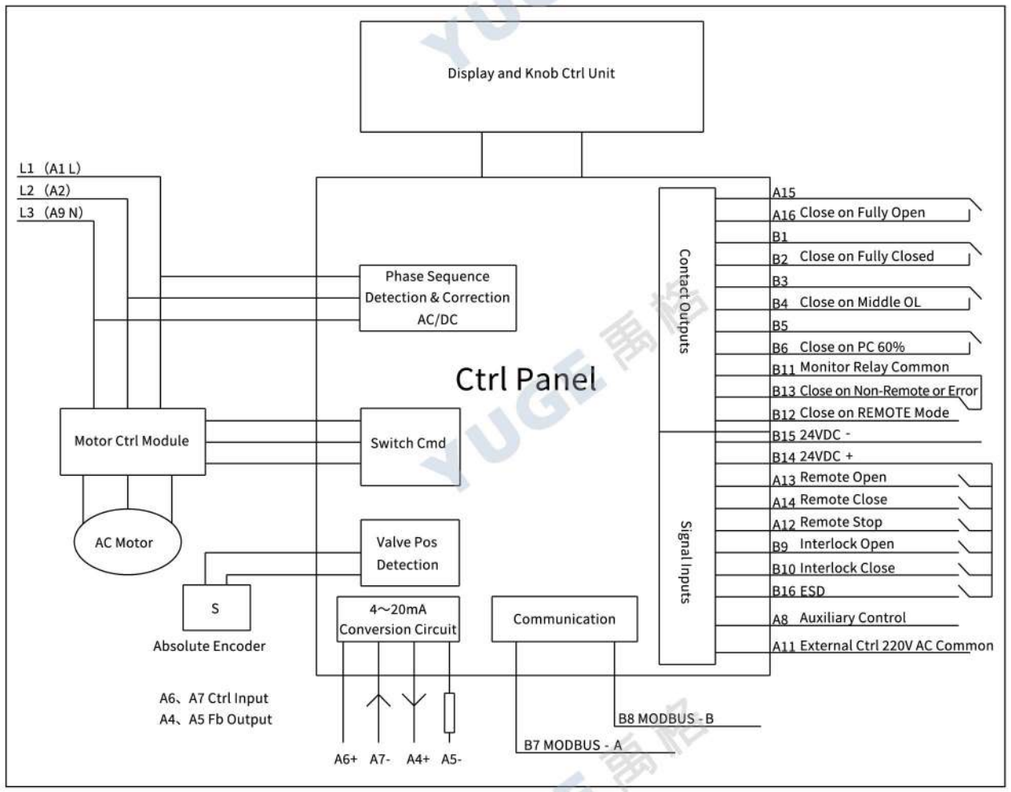
Note: The valve connection size data (such as “h, h1, d, d1, n-e and M”) are from valve manufacturers or customers.

YG/YGK Electric Actuator Control

Wiring Diagram of YG Multi-Turn Series



Wiring Diagram of YGK Quarter-Turn Series



Daily Maintenance

1. Dust proof: Wipe the actuator exteriors regularly to keep them clean.

2. Lubrication: We use maintenance-free lubricants for our products, which does not need to be replaced under normal conditions. The push rod of the linear actuator should be coated with oil or grease every 3-6 months to lubricate its copper nut and prolong its lifespan.

3. The remote control battery lasts for 1 year. Change the battery if the remote control is unresponsive.

YUGE
INDUSTRY

Complete Services

1. We provide free maintenance for products with quality-related issues within one year from the delivery date, in compliance with industry standards.

2.When receiving user consultation or fault repair calls, make complete solutions within 24 hours, send professional after-sales service personnel to deal with them when necessary, and the service is not stopped.

3. The final interpretation of this material is at the sole discretion of Shanghai YUGE Industrial Equipment Co., Ltd.

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