Handwheel Gearbox Operator

Our 20-series Aluminium valve handwheel gearbox, 90 quarter turn drive device is suitable for butterfly valve, ball valve and plug valve and so on. The aluminium alloy material body after static electricity powder coating has an excellent apperance, strong adhesion/mechanical property and anti-corrosion/wear resistance.

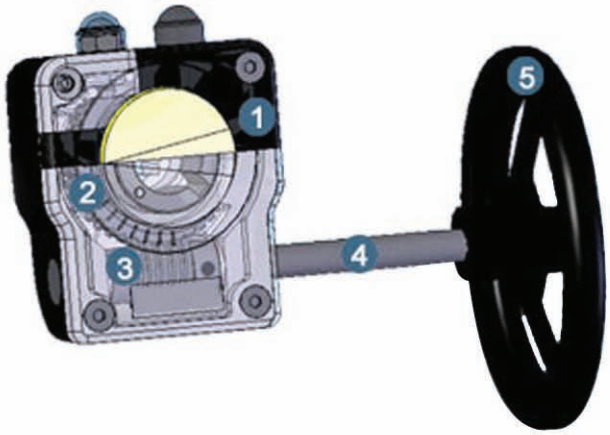
- **ISO 5211 direct mount patterns**
- **Filled with special lubricant before leaving the factory**
- **Watherproof is IP65**
- **The output torque range: 180-1310Nm**
- **5 degree angle adjusting**



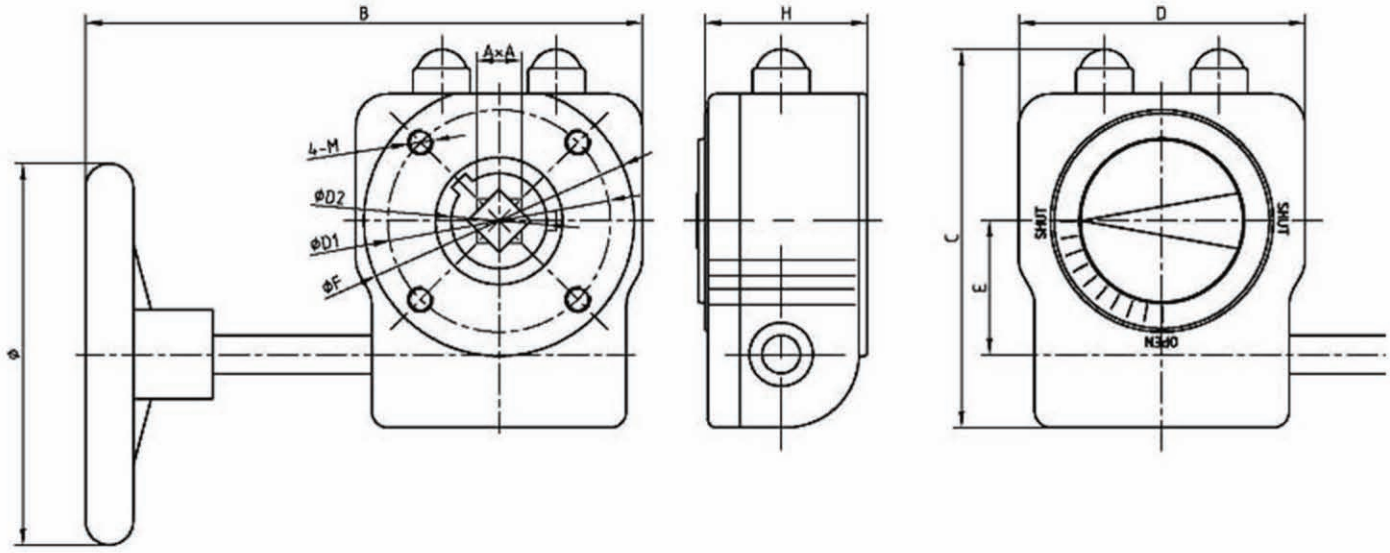
Guiding for model choosing and device operating:

1. **The device should be correctly installed. The worm gear shaft hole should be concentric with the valve shaft. And then the screws must be tighten up.**
2. **The rating torque can be output when the load applied on handwheel meets the requirement. In order not to damage the device, the user must not operate the device by changing the handwheel diameter and using resultant force that exceeds the required input value.**

No	Part Name	Standard Material	Optional Material
1	Body	Aluminium Alloy	
2	Worm Gear	Ductile Iron, QT400-15	
3	Worm	Carbon Steel	
4	Shaft	Carbon Steel	Stainless Steel
5	Hand Wheel	Carbon Steel	
	Screw	Carbon Steel	Stainless Steel



Handwheel Gearbox Operator



Dimension Table

Model	Gear Ratio	AxA	B	C	D	E	F	H	ø	øD1	4-M	øD2
20070	1:40	8x8, 9x9, 11x11, 14x14, 17x17	200	120	90	42	85	48	140	F05/07	M6/M8	30
20090	1:37	8x8, 9x9, 11x11, 14x14, 17x17	200	130	125	50	110	54	200	F07/09	M8/M8	32
20102	1:36	19x19, 22x22, 24x24	250	150	120	60	117	56	250	F07/10	M8/M10	43
20125	1:36	19x19, 22x22, 24x24	250	175	140	60	130	69	300	F10/12	M10/M12	43
20140	1:36	22x22, 27x27	400	220	190	80	175	95	400	F14	M16	52

Reference Selection

Model	Output / Input Torque Ration	Reference Output Torque (Nm)	Butterfly valve model choosing	Ball valve model choosing	WT (kg)
20070	1:9.6	180	32-150	50	1.6
20090	1:12	300	32-200	65	1.8
20102	1:12.5	540	200-300	80	3
20125	1:12.5	675	250-350	100	5
20140	1:10	1310	350-400	150	10





Gearbox Declutch Operator

The Aluminium Declutch Gearbox is specially designed for butterfly valves, ball valves, and plug valves as well as for pneumatic actuators. This device allows manual operation during installing, system testing if when air resource is not loaded. It can be mounted directly on most of the popular rack & pinion style pneumatic actuators in the market. Of course, it does not need a distance plate installed between the pneumatic actuator and the declutch gearbox.

- A simple and compact design, light-weight device
- ISO 5211 connecting standard
- Easy to switch from manual drive to pneumatic drive by using the wrench retainer
- Internal parts lubricated with special lubricant when the device is assembled.
- Weatherproof is IP65
- GD series products output torque range varies from 180 to 1310Nm
- 5 degree angle adjusting



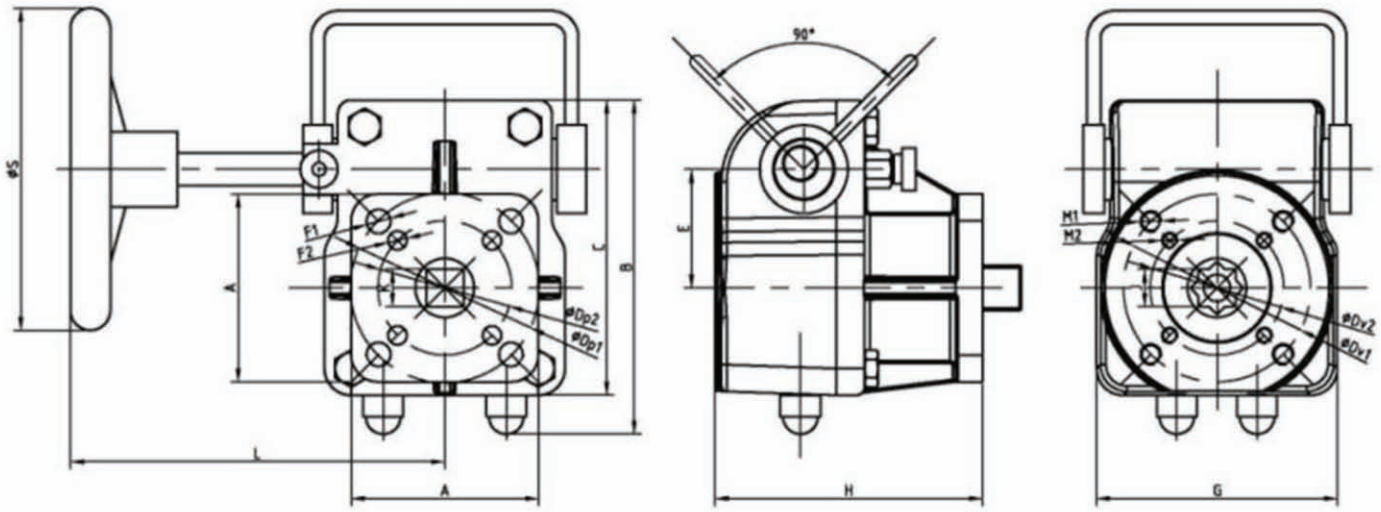
Guidings for model choosing and device operating:

1. The device should be correctly installed. The worm gear shaft hole should be concentric with the valve shaft. And then the screws must be tighten up.
2. The rating torque can be output when the load applied on handwheel meets the requirement. In order not to damage the device, the user must not operate the device by changing the handwheel diameter and using resultant force that exceeds the required input value.



No	Part Name	Standard Material	Optional Material
1	Hand Wheel	Carbon Steel	
2	Shaft	Carbon Steel	Stainless Steel
3	Elastic Limit Pin	Stainless Steel	
4	Wrench Retainer	Carbon Steel	Paint
5	Cap	Aluminium Alloy, ZL 104	
6	Worm	Carbon Steel	
7	Worm Gear	Ductile Iron, QT400-15	
8	Connecting Axie	Carbon Steel	Zinc Coating
9	Body	Aluminium Alloy	
-	Eccentric Guide	Carbon Steel	Stainless Steel
-	Screw	Carbon Steel	Stainless Steel

Gearbox Declutch Operator



Dimension Table

Model	Gear Ratio	A	B	C	Dp1	F1	Dp2	F2	Dv1	M1	Dv2	M2	K	Actuator	G	H	L	S
GD050	1:40	70	125	110	70	8.5	50	6.5	70	M8	50	M6	11	52	90	100	130	200
													14	63-75				
													17	83-92				
GD070	1:38	95	150	135	102	10.5	70	8.5	102	M10	70	M8	14	63-75	125	100	150	200
													17	83-92				
													19	105				
GD102	1:36	115	185	160	125	12.5	102	10.5	125	M12	102	M10	22	105-127	140	110	180	300
													27	140-160				
GD140	1:50	140	230	210	125	12.5			125	M12			27	140-160	190	150	300	400
					140	16.5			140	M16			36	190-210				

*** For GD140 it cannot be doubled drilled as F12/F14.**
Either F12 or F14 is available for flange connection.

Technical Parameter and Reference

Model	Output / Input Torque Ratio	Reference Output Torque	Actuator model choosing	Butterfly valve model choosing	Ball valve model choosing	WT (kg)
GD050	1:9.6	300	52-105	32-150	50	2.3
GD070	1:12.5	360	63-127	32-200	65	3.5
GD102	1:12.5	810	105-160	200-350	80	5.6
GD140	1:10	1310	140-210	350-400	150	12.5



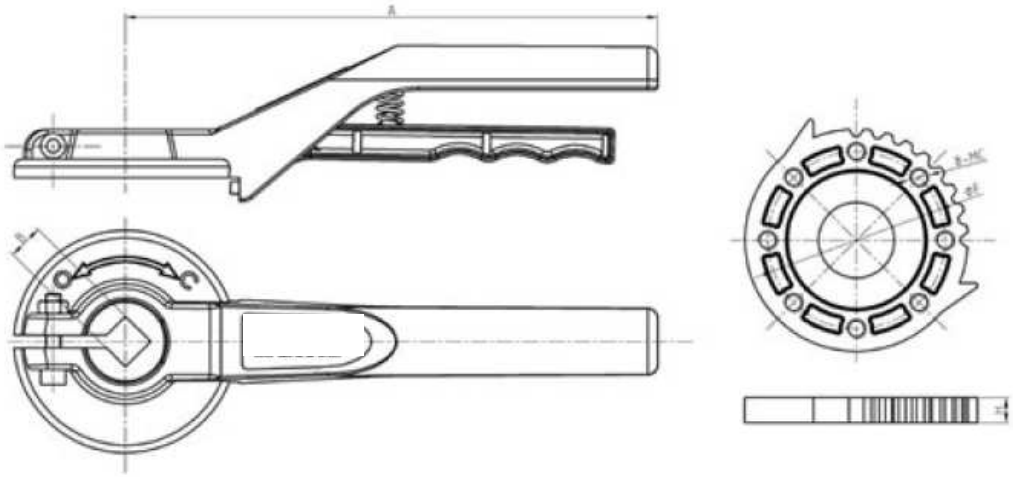
Manual Aluminium Hand Lever

30 SERIES

Our 30-series Aluminium valve hand lever, 90 quarter turn drive device is suitable for butterfly valve, ball valve and plug valve and so on. The aluminium ally material body after static electricity powder coating has an excellent appearance, strong adhesion/mechanical property and anti-corrosion/wear resistance.

- ISO 5211 direct mounting patterns.





Model	A	B	C	F	H
30150	210	11x11 , 14x14	M8	70	10
30250	340	17x17 , 22x22	M10	102	12