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



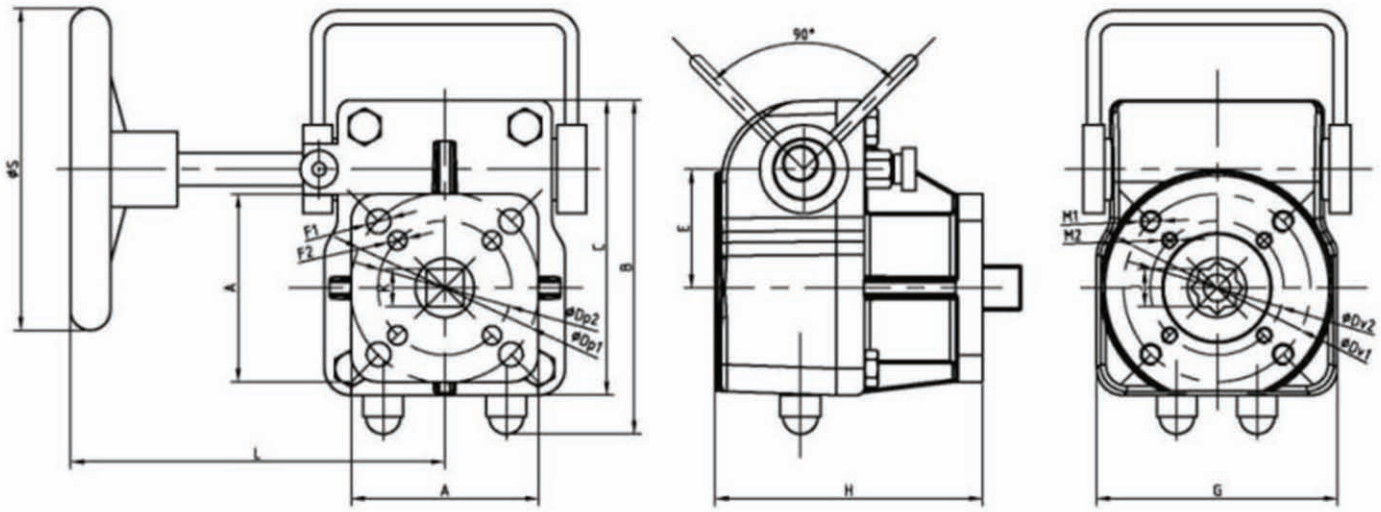
Guidings for model choosing and device operating:

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

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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

