

USAGE

- The Manual Override gear operator is designed for use on butterfly valves, ball valves, and plug valves that utilize high pressure pneumatic actuators for operation.
- The Manual Override gear box is a de-clutchable operator for manually overriding the actuator.

FEATURES

- Compact design and effortless operation
- There are a range of sizes so the output torque matches the size of the pneumatic actuator and valve.
- There are two keyways 90° apart in the inner hole of the worm gear to allow for easy orientation of the valve.
- Enclosure: Sealed to IP67
- Upper and lower mounting flanges conform to ISO5211



ASSEMBLY

The bottom of the gear operator should be connected with the valve and the bracket surface connected with the actuator. The valve stem coupling passes through the inner hole of the worm gear and the square end of the stem, which matches the square hole of the actuator.

OPERATION

AUTOMATIC OPERATION: During normal operation, the actuator drives the valve open and closed with the worm shaft rotating with the valve. In manual operation, the worm shaft engages the worm gear allowing for the valve and actuator to be rotated by the handwheel.

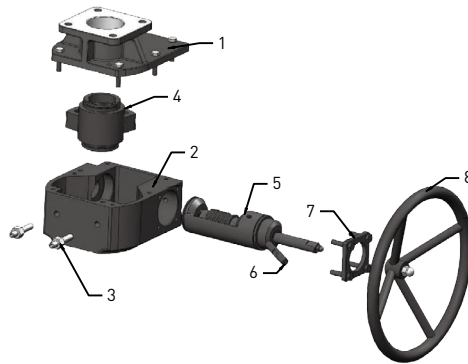
MANUAL OPERATION: For manual operation of the valve, there must be no air pressure present in the valve actuator. First, pull the handle retaining bolt (black knob), then rotate the Switch Handle counter-clockwise to the 12 O'clock position. This engages the worm rear. The valve may now be operated using the handwheel. After manual operation, place the gear operator back into its normal state by pulling the retaining bolt and rotating the Switch Handle clockwise to the 6 O'clock position.

NOTE: Air pressure must be released from the actuator in order to use the manual override.

TECHNICAL DATA

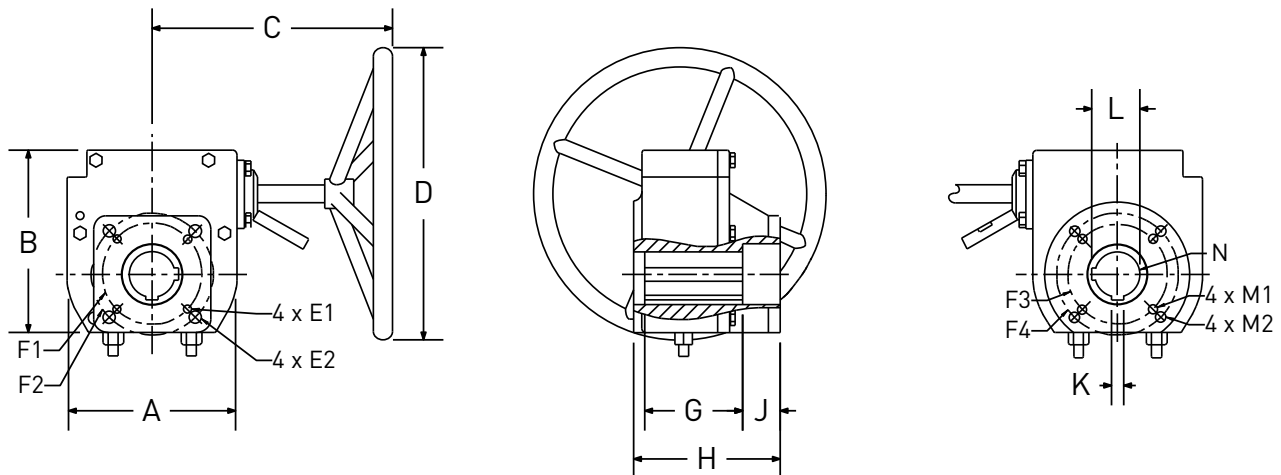
Model	Gear Ratio	Input Torque (NM)	Output Torque (NM)	Handwheel Diameter	Weight (kg)
DGD025	26:1		250	Ø145	
DGD050	38:1		500	Ø350	
DGD100	54:1		1000	Ø400	
DGD200	80:1		2000	Ø500	
DGD201	78:1		2000	Ø500	
DGD400	98:1		4000	Ø600	
DGD800	100:1		8000	Ø500	

MAIN PARTS LISTING



No.	Description	Qty	Material	Remarks
1	Cap	1	Aluminum Alloy	DGD025-DGD100: Aluminum Alloy
			Ductile Iron	DGD200-DGD400: Ductile Iron
2	Body	1	Aluminum Alloy	DGD025-DGD100: Aluminum Alloy
			Ductile Iron	DGD200-DGD400: Ductile Iron
3	Adjust Screws	1	Carbon Steel	
4	Worm Gear	1	Ductile Iron	
5	Worm	1	Carbon Steel/Ductile Iron	
6	Switch Handle	1	Carbon Steel	
7	Gland	1	Carbon Steel	
8	Handle Wheel	1	Carbon Steel	Optional: Iron

DIMENSIONS



Model	A	B	C	ØD	ØE1	ØE2	F1	F2	G	H	J	K	L	M1	M2	F3	F4	ØN
DGD025	4.01	5.71	6.57	5.71	0.275	0.354	1.97	2.76	2.48	4.72	1.73	0.24	1.21			1.97	2.76	1.10
	102	145	167	145	7	9	50	70	63	120	44	6	30.8	M6	M8	50	70	28
DGD050	4.92	6.53	9.06	13.78	----	0.433	----	4.02	3.22	5.63	1.77	0.39	1.63			2.76	4.02	1.50
	125	166	230	350	----	11	----	102	82	143	45	10	41.3	M8	M10	70	102	38
DGD100	6.85	8.15	44.18	15.75	----	0.512	----	4.92	3.27	5.91	2.05	0.55	1.96			4.02	4.92	1.81
	174	207	284	400	----	13	----	125	83	150	52	14	49.8	M10	M12	102	125	46
DGD200	9.21	8.15	14.13	19.69	0.709	0.866	5.51	6.50	3.98	6.81	1.89	0.71	2.54		----	5.51	----	2.36
	234	207	359	500	18	22	140	165	101	173	48	18	64.4	M16	----	140	----	60
DGD201	9.21	10.51	14.13	19.69	0.709	0.866	5.51	6.50	3.98	6.81	1.89	0.71	2.54		----	----	6.50	2.36
	234	267	359	500	18	22	140	165	101	173	48	18	64.4	----	M20	----	165	60
DGD400	11.49	12.80	16.73	23.62	8 x 0.709	0.866	----	6.50	4.92	7.32	1.50	0.87	3.04		----	----	6.50	2.83
	292	325	425	600	8 x 18	22	----	165	125	186	38	22	77.4	8 x M16	M20	----	165	72