



127 Village Lane
Easley, SC 29642
Tel: (864) 605-0150
Fax: (864) 605-0830
www.tru-flo.com

INSTALLATION & MAINTENANCE MANUAL

DGO DECLUTCHABLE WORM GEAR OVERRIDE

Introduction

The Triac rotary manual override sandwich mounts between the actuator and the valve/damper. The self-locking declutchable worm gear design provides a secure, easily engaged, long lasting override for the Triac pneumatic actuator.



Installation

- 1 Note the valve position (open or closed) and ensure that the DGO operator and the actuator are in a corresponding position.
- 2 The DGO operator direct mounts to the actuator specified. Place the actuator on the DGO, aligning the coupler and actuator pinion.
- 3 Insert actuator mounting bolts with lockwashers and tighten until snug. Cycle actuator several times, then tighten fully.
- 4 Install the DGO to the valve with proper mounting kit.
- 5 Tighten the nuts and bolts until snug, stroke the actuator several times to properly align coupler, then tighten fully.

BBV - Block & Bleed Valve

The BBV, block and bleed valve, shuts off the air supply and vents the actuator allowing manual operation. (Please see IOM4007 for detailed information)

- Manual operation purges the air from one side of the pistons to the other, preventing corrosive atmosphere from being drawn into the actuator.
- Direct mounts to the NAMUR air porting of the Triac pneumatic actuator eliminating the need for tubing and fittings.
- Can be combined with other Triac NAMUR accessories such as the flow controls, & TVC solenoids

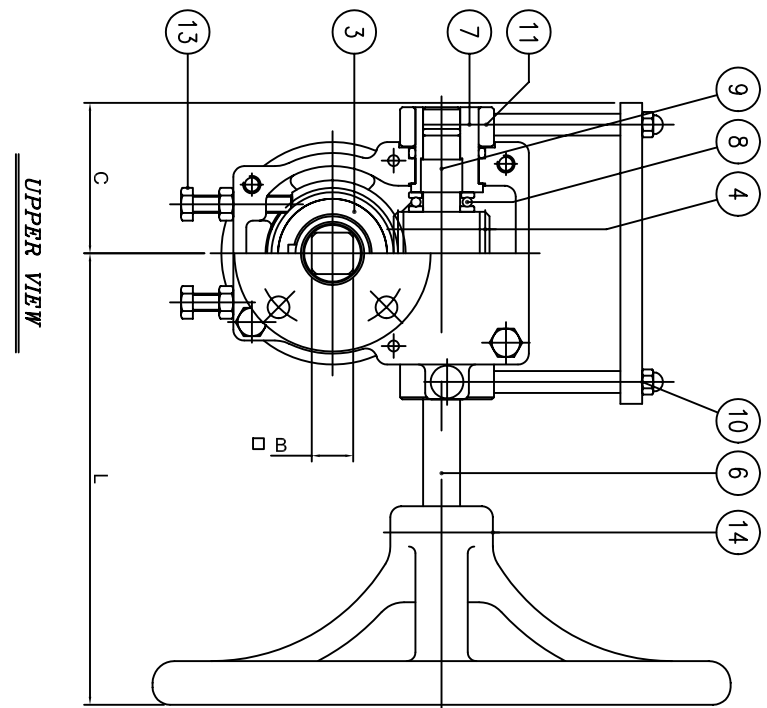
Operation

- 1 Actuator will operate normally with DGO override declutched.
- 2 Manual operation requires that the supply air is shut off and the actuator vented. Pull the knob on the BBV vent valve to accomplish this.
- 3 Momentarily lift the lock pin and rotate the declutch bar clockwise 180 deg (toward the actuator), until the lock pin drops into place. The worm gear is now engaged, rotate handwheel until desired position is reached.
- 4 To return to automatic operation, rotate handwheel to desired valve position (or full failed position for spring return actuator). Momentarily lift the lock pin and rotate the declutch bar ccw 180 deg, until the lock pin engages, locking the declutch bar into place. Push in the knob on the BBV to re-connect the air supply lines.

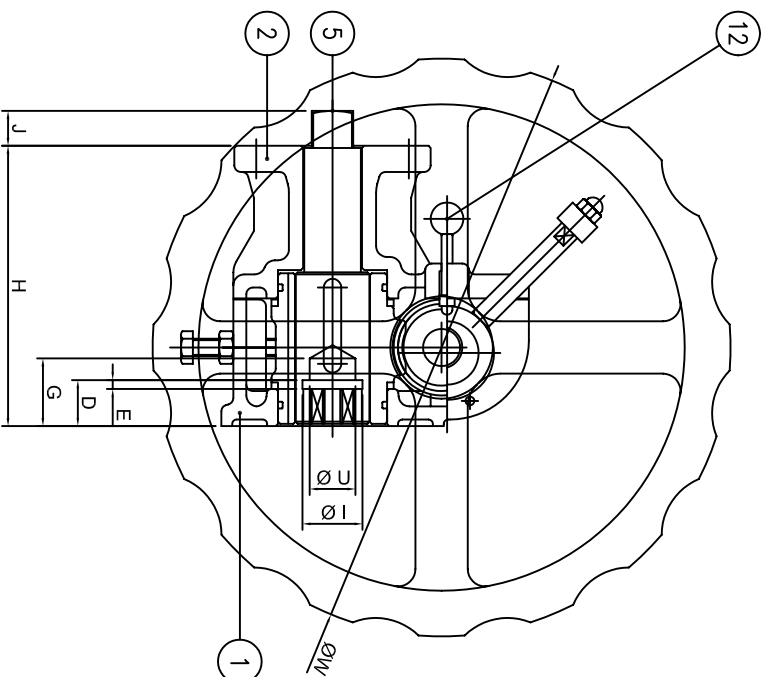


How to Specify

The manual override shall be an Triac DGO declutchable worm gear override capable of being sandwich mounted between the Triac actuator and the valve. Body shall be casting iron with enamel coating for corrosion resistance. Gearing to be plated steel to ensure reliable and long life. The vent valve shall be an Triac BBV direct NAMUR mounted to the actuator to provide internal air purging of the cylinder bore during manual operation.



UPPER VIEW



BOTTOM VIEW

MODEL #	INPUT LBS	OUTPUT In-Lbs	INPUT LBS	OUTPUT In-Lbs
DGO-1	45	1996	85	3732
DGO-2	45	3298	85	5989
DGO-3	45	5034	85	9114

TORQUE


MODEL #	BOLT CIRCLE	TOP - BOLT HOLE	BOTTOM - TAPPED HOLE	ISO
DGO-1	2.76	0.39	5-/16-18UNC	F07
DGO-2	4.02	0.47	3/8-16UNC	F10
DGO-3	4.92	0.55	1/2-13UNC	F12

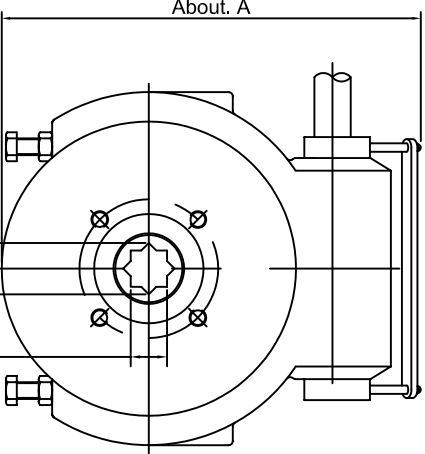
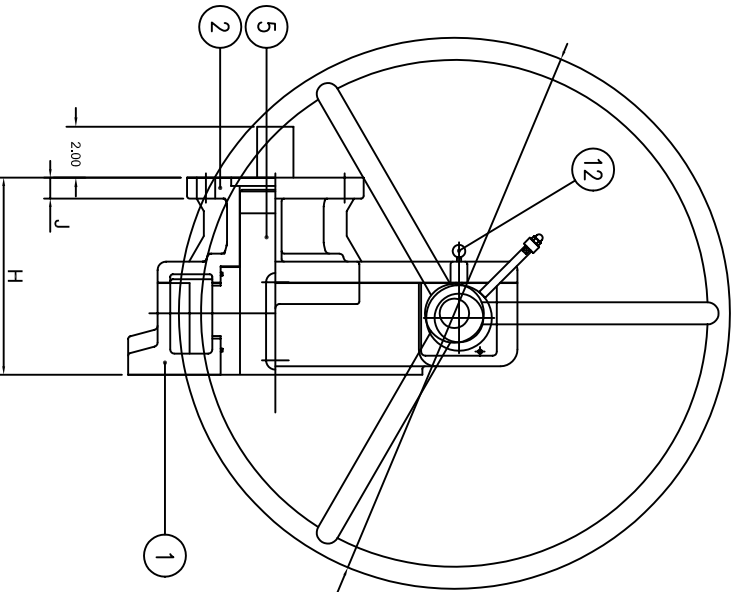
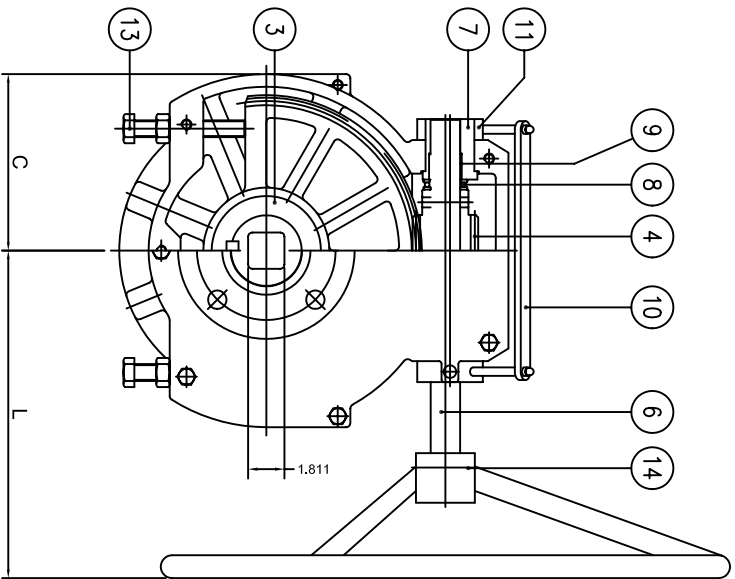
MOUNTING DIMENSIONS

MODEL #	C	L	W	H	A	B	J	S	D	E	I	U	G
DGO-1	2.72	8.15	10.43	5.06	7.97	0.748	0.63	0.748	0.83	0.16	1.08	0.83	1.22
DGO-2	3.33	8.82	15.24	6.20	10.55	0.866	0.83	0.866	1.06	0.24	1.30	0.96	1.46
DGO-3	3.84	10.24	18.23	6.85	12.03	1.063	1.02	1.063	1.50	0.39	1.85	1.46	1.89

DIMENSIONS

NO.	DESCRIPTION	ASTM	JIS	QTY	REMARK
14	HANDLE	A126 CL.B	GC 200	1	
13	BOLT&NUT	A 36	SS 41	2	
12	STOPPER	A276 - 410	STS 410	1	
11	LEVER RETAINER	A 36	SS 41	2	
10	LEVER	A 36	SS 41	1	
9	DU BUSH		PURCHASE	2	
8	BEARING		PURCHASE	2	
7	SHAFT RETAINER	ANSI-1045	SM 45C	2	
6	SHAFT	ANSI-1045	SM 45C	1	
5	COUPLING	ANSI-1045	SM 45C	1	
4	WORM GEAR	ANSI-1045	SM 45C	1	
3	WORM WHEEL	AS36	GCD 450	1	
2	COVER	A126 CL.B	GC 200	1	
1	BODY	A126 CL.B	GC 200	1	

ECN#		DATE		BY		<div><div>127 Village Lane Easley, SC 29642 Tel: (864) 605-0150 Fax: (864) 605-0830 www.tru-flo.com</div></div>									
DRAWN						SAH		APPROVED		REVISION		TO5676			
DATE				10/17/02		DATE									
TITLE				TRIAC DGO-1, 2, 3 DECLUTCHABLE GEAR OVERRIDE											



BOTTOM VIEW

UPPER VIEW

TORQUE

MODEL	INPUT LBS	OUTPUT In-Lbs	INPUT LBS	OUTPUT In-Lbs
DGO-5	45	27810	85	50602

Input = Rim pull

DIMENSIONS

MODEL #	C	L	W	H	A	B	J	S	I
DGO-5	8.27	15.34	33.46	9.23	20.69	1.12	1.10	1.57	2.68


MOUNTING DIMENSIONS

MODEL #	BOLT CIRCLE	TOP - BOLT HOLE	BOTTOM - TAPPED HOLE	ISO
DGO-5	6.50	0.86	3/4"-10UNC	F16

NO.	DESCRIPTION	ASTM	JIS	QTY
14	HANDLE	A126 CL B	GC 200	1
13	BOLT&NUT	A 36	SS 41	2
12	STOPPER	A276-410	STS 410	1
11	LEVER RETAINER	A 36	SS 41	2
10	LEVER	A 36	SS 41	1
9	DU BUSH	PURCHASE		2
8	BEARING	PURCHASE		2
7	SHAFT RETAINER	ANSH-1045	SM 45C	2
6	SHAFT	ANSH-1045	SM 45C	1
5	COUPLING	ANSH-1045	SM 45C	1
4	WORM GEAR	ANSH-1045	SM 45C	1
3	WORM WHEEL	A536	GCD 450	1
2	COVER	A126 CL B	GC 200	1
1	BODY	A126 CL B	GC 200	1



ECN178	05/18/04	SAH
ECN#	DATE	BY



127 Village Lane
Easley, SC 29642
Tel: (864) 605-0150
Fax: (864) 605-0830
www.ttu-fla.com

DATE	DATE	DATE	TO5678
DATE	DATE	DATE	
10/18/02			
TRIAC DGO-5 DECLUTCHABLE GEAR OVERRIDE			