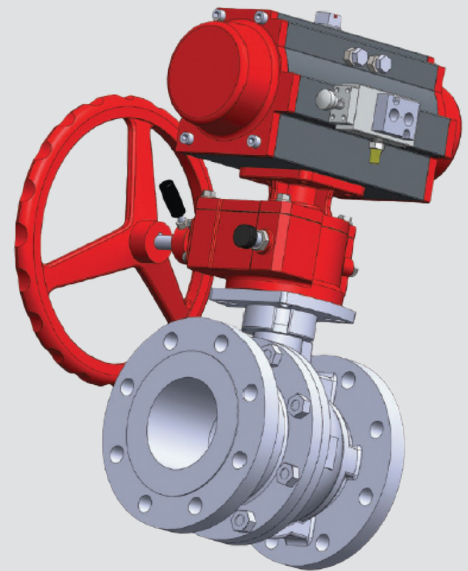
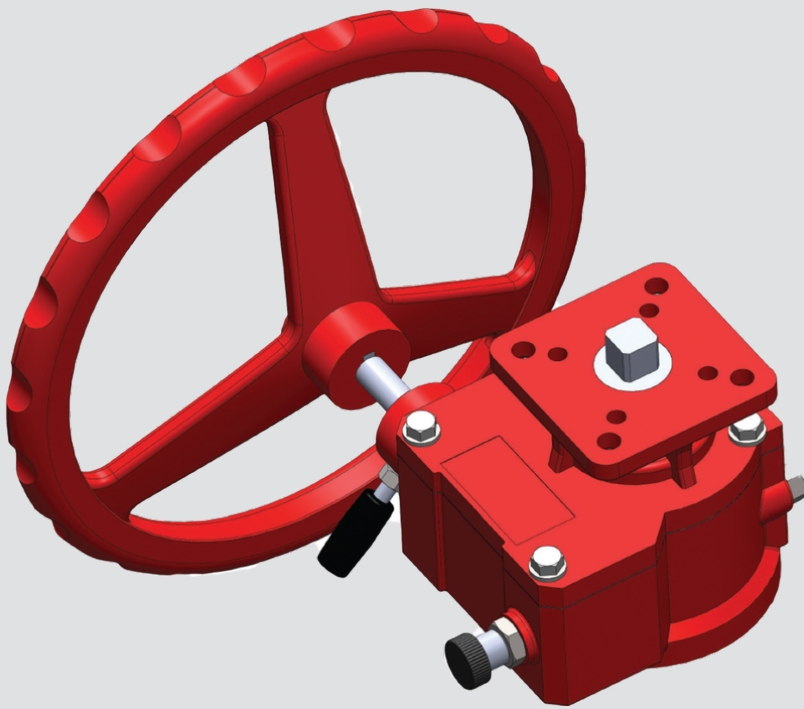
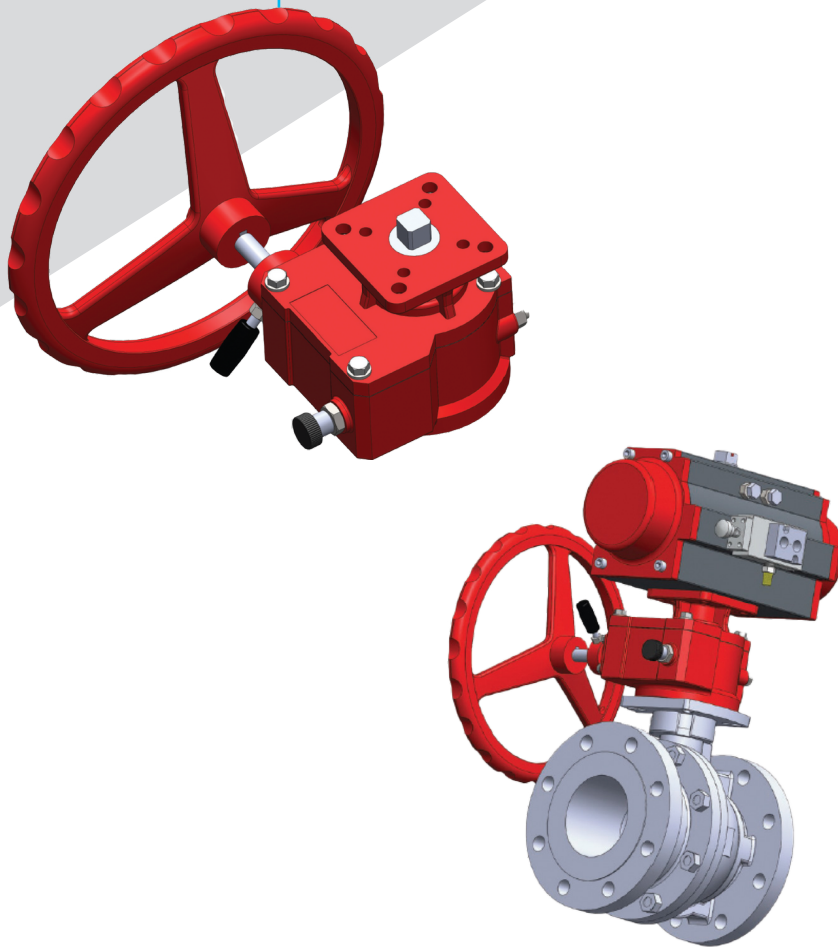


Series DGO

Declutchable Gear Override Datasheet



Decutchable Gear Override Series DGO



Features

- 2 industry standard Mounting Patterns - ISO-(3RDGO) and ABZ-(3KDGO)
- 3 Stage Coupler (Actuator, Gear, Valve)
- Rugged Declutch Lever and Engagement Handle
- BBV - Block and Bleed Valve to exhaust supply air from actuator

There are two series available:

3RDGO: Matches ISO5211 mounting dimensions

3KDGO: Matches the 3.25 and 5.00 bolt patterns.

Torque rating is based on output shaft design. Rim pull for the rated torque does not exceed 80lbs.

Note: Standard temperature rating is -5°F to 175°F.

The Declutchable Gear Override “Sandwich Mounts” between a pneumatic quarter-turn actuator and a ball, butterfly, plug valve or damper. This rugged device allows for manual operation during installation and system testing or in the event of an air supply failure.

The **3K/3RDGO Series** mounts directly to the **Series 227** and **Series 228** pneumatic actuators. The units come complete with a three-stage coupler that connects to the pneumatic actuator, through the gear override, and to the valve or coupler.

Output torques cover a broad range of pneumatic actuator and Quarter-Turn Valve-Damper applications that require a declutchable manual gear override.



3RDGO

3KDGO

Delcutchable Gear Override Series DGO



Series DGO with ISO Mounting

Series 227 / Series 228 Actuator Size	Series DGO Model	Torque Rating (In-Lbs)	Gear Ratio	Actuator Side Mounting					Valve Side Mounting				
				L	M	J	BCD	Hole Dia.	L	M	K	BCD	Tap Size
227-210 228-3R-1750	3RDGO-36	15,000	64 : 1	1.417	1.97	1.46	4.92 (F12) 5.51 (F14)	0.55 0.67	1.417	1.97	1.65	5.51 (F14)	5/8 - 11
227-240 228-3R-2400	3RDGO-46A	36,000	96 : 1	1.811	2.56	1.81	6.50 (F16)	0.78	1.81 1	2.56	2.13	6.50 (F16)	3/4 - 10
227-270 228-3R-2700 228-3R-3300	3RDGO-46B	47,000	471 : 1	1.811	2.56	1.81	6.50 (F16)	0.78	1.81 1	2.56	2.13	6.50 (F16)	3/4 - 10

Series DGO with Double D Flats

Series 227 / Series 228 Actuator Size	Series DGO Model	Torque Rating (In-Lbs)	Gear Ratio	Actuator Side Mounting					Valve Side Mounting				
				N	P	J	BCD	Hole Dia.	N	P	K	BCD	Tap Size
227-50 227-63 228-3K-40	3KDGO-38	500	36 : 1	0.56	0.375	1.25	3.25	0.41	0.56	0.38	1.38	3.25	3/8 - 16
227-75 227-100 228-3K-80 228-3K-130 228-3K-200	3KDGO-50	2,150	36 : 1	0.75	0.5	1.25	3.25	0.41	0.75	0.5	1.38	3.25	3/8 - 16

Series DGO with 1.125" Dia. Bore and 1/4" Square Key

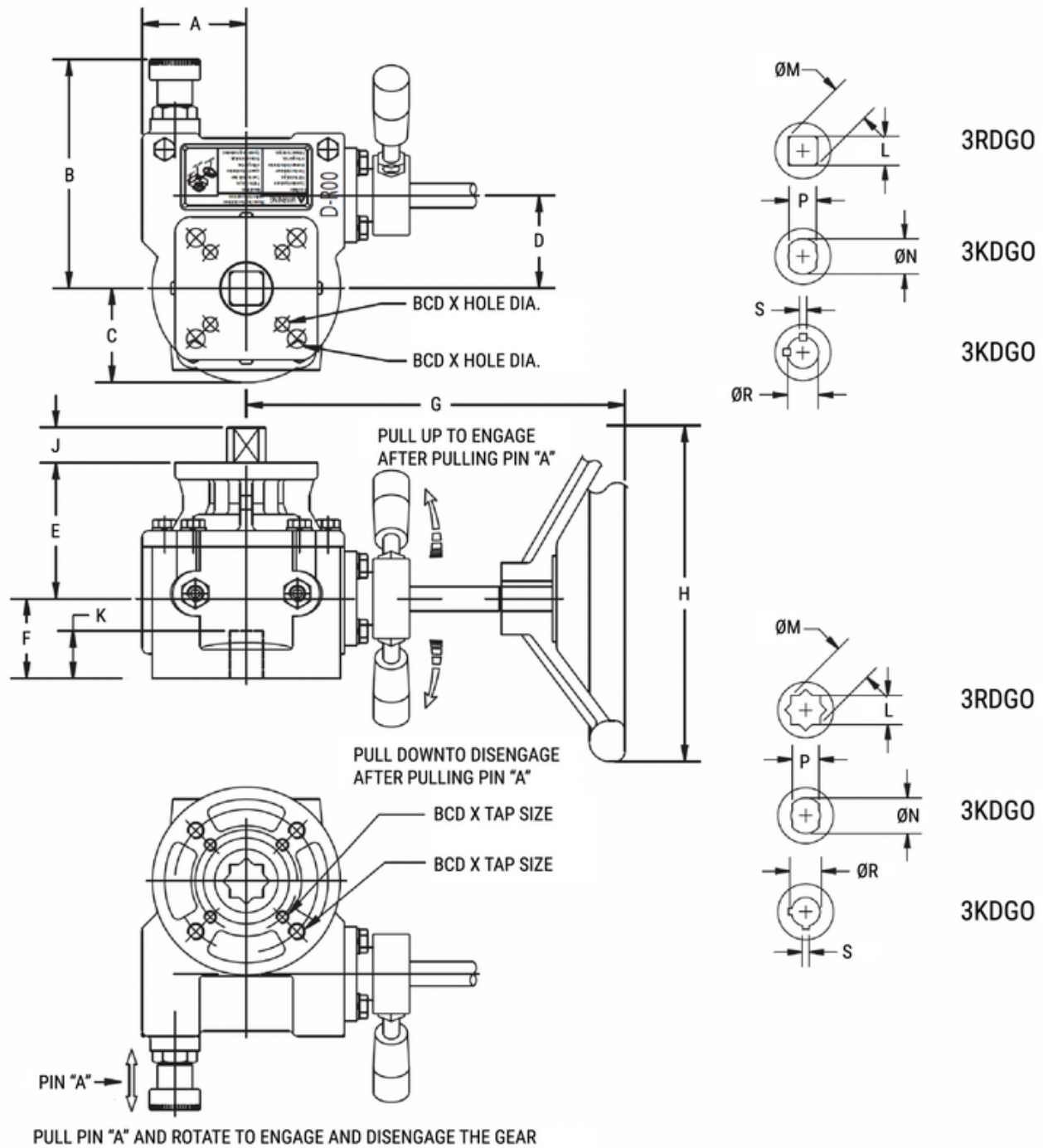
Series 227 / Series 228 Actuator Size	Series DGO Model	Torque Rating (In-Lbs)	Gear Ratio	Actuator Side Mounting					Valve Side Mounting				
				N	P	J	BCD	Hole Dia.	N	P	K	BCD	Tap Size
227-115 227-125 228-3K-300	3KDGO-300	3,650	36 : 1	1.125	0.25	2.00	3.25	0.41	1.125	0.25	2.00	3.25	3/8 - 16
227-145 227-160 228-3K-500 228-3K-700 228-3K-850	3KDGO-500	9,000	48 : 1	1.125	0.25	2.00	3.25 5.00	0.41 0.55	1.125	0.25	2.00	3.25 5.00	3/8 - 16 1/2 - 13
227-180 228-3K-1200	3KDGO-1200	15,000	64 : 1	1.125	0.25	2.00	5.00	0.55	1.125	0.25	2.00	5.00	1/2 - 13

Note:

Torque rating is based on output shaft design.
Rim pull for the rated torque does not exceed 80lbs.
Dimensions – inches



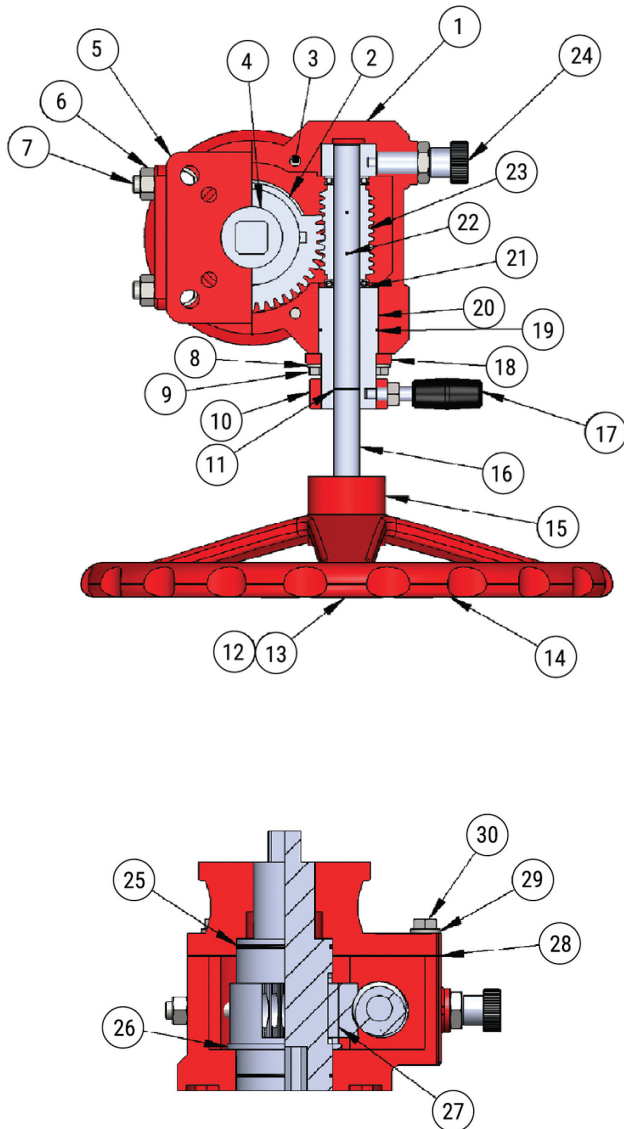
Delcutchable Gear Override Series DGO



Gear Ratio	A	B	C	D	E	F	G	H	Weight
32 : 1	2.00	4.41	1.81	1.81	2.64	1.50	7.48	7.87	18.00
36 : 1	2.68	4.92	1.97	2.24	3.39	1.85	8.86	12.20	40.00
48 : 1	3.19	6.46	3.03	3.07	4.09	2.09	10.24	15.75	66.00
64 : 1	4.25	7.87	3.35	4.33	4.84	2.80	11.97	19.69	110.00
96 : 1	6.65	11.34	5.75	6.97	6.42	3.54	17.40	31.50	265.00

Note: Dimensions - inches

Decuttable Gear Override Series DGO



Parts & Materials

Part No.	Description	Qty.	Material
1	Housing	1	Ductile Iron
2	Worm Wheel	1	Ductile Iron
3	Housing Pin	2	Carbon Steel
4	Drive Coupler	1	Carbon Steel
5	Cover	1	Ductile Iron
6	Stop Bolt Nut	2	Carbon Steel
7	Stop Bolt	2	Carbon Steel
8	Side Cover Washer	4	Carbon Steel
9	Side Cover Bolt	4	Carbon Steel
10	Position Adapter	1	Carbon Steel
11	Worm Shaft O-Ring	1	NBR Nitrile Rubber
12	Hand Wheel Bolt	1	Carbon Steel
13	Hand Wheel Washer	1	Carbon Steel
14	Hand Wheel	1	Carbon Steel / Ductile Iron
15	Worm Shaft Key	1	Carbon Steel
16	Worm Shaft	1	Carbon Steel
17	Position Lever Assembly	1	Carbon Steel / Plastic
18	Side Cover	1	Carbon Steel / Plastic
19	Declutch Cam Bushing O-Ring	1	NBR Nitrile Rubber
20	Declutch Cam Bushing	1	Ductile Iron
21	Thrust Ball Bearing	1	Bearing Steel
22	Worm Pin	1	Carbon Steel
23	Worm	1	Carbon Steel
24	Position Lock Pin Assembly	1 Set	Carbon Steel / Plastic
25	Worm Wheel O-Ring	2	NBR Nitrile Rubber
26	Thrust Bearing	1	Aluminum Bronze
27	Coupling Key	1	Carbon Steel
28	Gasket	1	Oil Paper
29	Cover Washer	4	Carbon Steel
30	Cover Bolt	4	Carbon Steel

Delcutchable Gear Override Series DGO

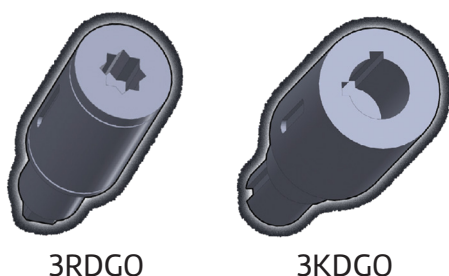
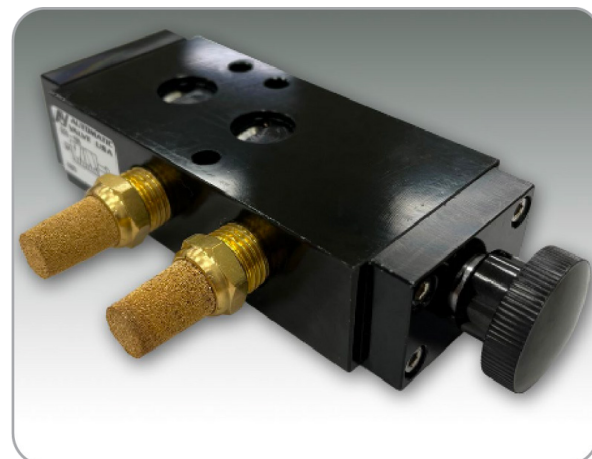
BBV – Block and Bleed Valves

- The NAMUR mounted BBV for DGO Series actuators is used as a bypass valve with a manual override to shut off supply air and vent actuator ports. It may also be used as a lockout valve which, when properly implemented, will satisfy OSHA Standard 1910.147 The Control of Hazardous Energy.

BBV – Block and Bleed Valves

The BBV – Block and Bleed Valve shuts off the supply air and vents the pneumatic actuator, allowing for manual operation.

- Manual operation purges air from one side of the pistons to the other, preventing corrosive atmospheres from being drawn into the actuator.
- Directly mounts to the NAMUR air porting of the pneumatic actuator, eliminating tubing and fittings.
- Can be combined with other NAMUR accessories such as NAMUR-NPT solenoid valves.

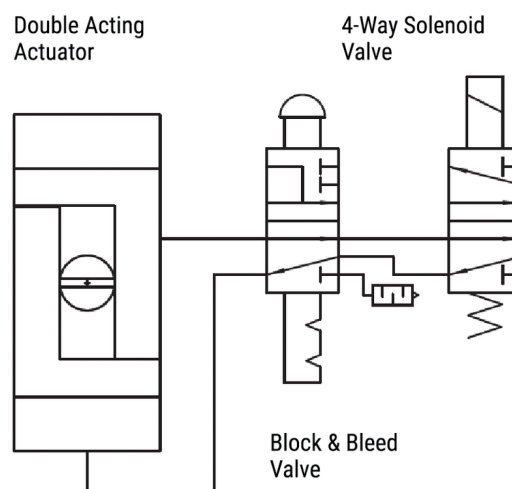


Part Number Matrix

Specifications	
Temperature Range:	-20°F to +180°F
Pressure Range:	20 psig to 120 psig
Media:	Dry or lubricated (non-corrosive gas compatible with nitrile seals)
Flow Coefficient:	$C_v = 1.75$

Bill of Material for the NAMUR-BBV.

Item	Material
Body	Aluminum, Anodized
Spool	Aluminum, Anodized
End Cap	Aluminum, Anodized
Seals	Nitrile, Buna
Knob	Plastic



Delcutchable Gear Override Series DGO



Model Number	Size
3RDGO	36
	46A
	46B
3KDGO	38
	50
	300
	500
	1200

Designation	Option
L	Low Temperature Silicone Seals (-40°C to 82°C) (-40°F to 180°F)
V	High Temperature FKM Seals (-18°C to 177°C) (0°F to 350°F)
M	Marine Powder Coating

Note: Standard temperature rating is -5°F to 175°F.

Example: 3RDGO-36-V
(Declutchable Gear Override with 19.69” (500mm) Dia Handwheel.
64:1 Gear Ratio.Mounts directly to Series 228 3R1000, 3R1200, &
3R1750 with FKM Seals)

About ASC Engineered Solutions

ASC Engineered Solutions is defined by quality—in its products, services and support. With more than 1,400 employees, the company's portfolio of precision-engineered piping support, valves and connections provides products to more than 4,000 customers across industries, such as mechanical, industrial, fire protection, oil and gas, and commercial and residential construction. Its portfolio of leading brands includes ABZ Valve®, AFCON®, Anvil®, Anvil EPS, Anvil Services, Basic-PSA, Beck®, Catawissa, Cooplet®, FlexHead®, FPPI®, Gruvlok®, J.B. Smith, Merit®, North Alabama Pipe, Quadrant®, SCI®, Sharpe®, SlideLOK®, SPF® and SprinkFLEX®. With headquarters in Commerce, CA, and Exeter, NH, ASC also has ISO 9001:2015 certified production facilities in PA, TN, IL, TX, AL, LA, KS, and RI.



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