

Automation & Controls Product Group of SVF Flow Controls

The SVF Series "DMO" allows simple and reliable manual positioning of valves, dampers, and other quarter turn devices to override existing pneumatic or hydraulic rotary actuators. Recommended for all spring return actuators and on valves with an operating torque in excess of 620 in-lbs, the "DMO" Series is easily field installed on existing automated valves and can be adapted to any pneumatic quarter turn actuator.

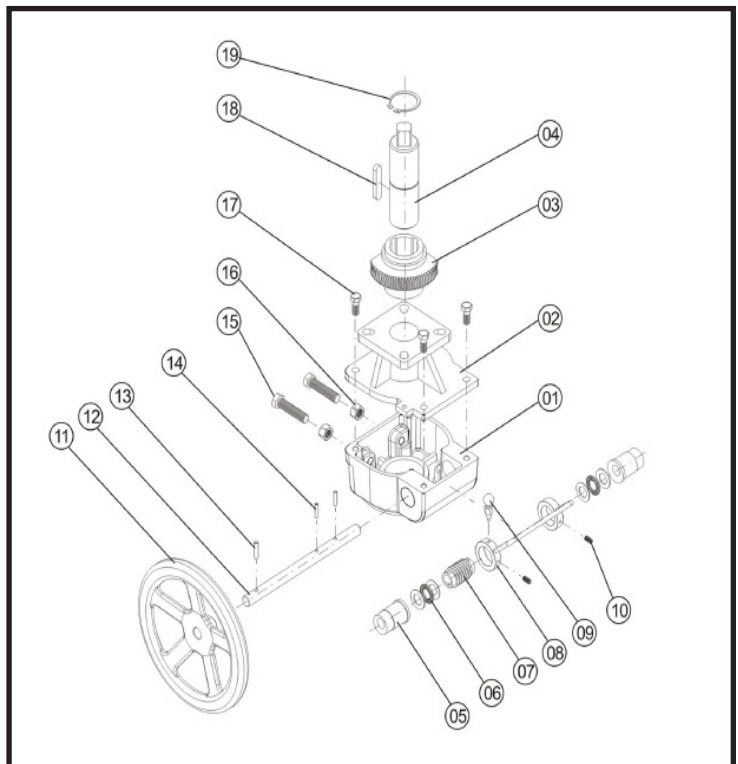
DMO DESIGN FEATURES

- ▼ Compact, Modular Design - fits between valve and actuator for a complete manual override system
- ▼ ISO 5211 Industry Standard Mounting Pad
- ▼ Three Stage Coupler (Actuator, Gear, Valve)
- ▼ Weather-proof to IP-65
- ▼ Rugged Declutch Lever and Engagement Handle
- ▼ Six Models available in a wide Torque Range
- ▼ Adjustable travel stops in both directions (Open/Close)
- ▼ Integral Drive Sleeve and Gear - permits smooth, reliable operation for extremely long life
- ▼ Optional Vent Valve to exhaust supply air from the actuator



MATERIALS OF CONSTRUCTION

ITEM #	DESCRIPTION	MATERIALS
1	BODY	ALUMINUM ALLOY/CARBON STEEL
2	BRACKET CAP	ALUMINUM ALLOY/CARBON STEEL
3	TURBINE	DUCTILE IRON
4	WORM SHAFT	CARBON STEEL
5	ECCENTRIC SETS	CARBON STEEL
6	BEARING COMPONENTS	STEEL
7	VORTEX ROD	CARBON STEEL
8	HANDLE	CARBON STEEL
9	LIMIT ASSEMBLY	CARBON STEEL
10	SET SCREWS	CARBON STEEL
11	HANDWHEEL	CARBON STEEL
12	SCROLL SHAFT	CARBON STEEL CHROME
13	CYLINDRICAL PIN HAND WHEEL	CARBON STEEL
14	CYLINDRICAL PIN HAND TURBINE	CARBON STEEL
15	ADJUSTMENT BOLTS	STAINLESS STEEL
16	NUTS	STAINLESS STEEL
17	BOLTS	STAINLESS STEEL
18	FLAT KEY	CARBON STEEL
19	RETAINING RING	STEEL



DMO DIMENSIONS & SPECIFICATIONS

"DMO" MODEL	C		D		E		F		G		H		I		J		K		L	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
DMO-1	0.59	15	4.13	105	4.72	120	0.63	16	6.44	163	3.56	90	4.33	110	5.16	131	5.91	150	7.09	180
DMO-2	0.75	19	4.25	108	5.00	127	0.75	19	7.75	197	4.92	125	5.30	135	6.18	157	6.69	170	7.87	200
DMO-3	0.87	22	5.03	128	5.90	150	0.94	24	8.77	223	5.51	140	6.31	160	7.55	192	7.87	200	11.02	280
DMO-4	1.10	28	6.58	167	7.68	195	1.14	29	11.30	287	7.34	186	7.90	201	9.25	235	10.23	260	11.81	300
DMO-5	1.53	39	6.70	170	8.23	209	1.57	40	13.50	343	9.50	241	9.80	249	10.80	274	12.20	310	15.75	400

"DMO" MODEL	D1 (Bottom)			D2 (Bottom)			D3 (Top)			D4 (Top)			T1	T2	T3 (Through)		T4 (Through)	
	in.	mm	ISO	in.	mm	ISO	in.	mm	ISO	in.	mm	ISO	Thread	Thread	in.	mm	in.	mm
DMO-1	1.97	50	F05	2.76	70	F07	1.97	50	F05	2.76	70	F07	M6	M8	0.31	8	0.39	10
DMO-2	2.76	70	F07	4.02	102	F10	2.76	70	F07	4.02	102	F10	M8	M10	0.39	10	0.47	12
DMO-3	4.02	102	F10	4.92	125	F12	4.02	102	F10	4.92	125	F12	M10	M12	0.47	12	0.55	14
DMO-4	-	-	-	5.51	140	F14	4.92	125	F12	5.51	140	F14	-	M16	0.63	16	0.71	18
DMO-5	-	-	-	6.50	165	F16	5.51	140	F14	6.50	165	F16	-	M20	0.71	18	0.87	22

"DMO" MODEL	A (BOTTOM SHAFT)		M (TOP SHAFT)	
	in.	mm	in.	mm
DMO-1	0.55	14	0.55	14
DMO-2	0.67	17	0.67	17
DMO-3	0.87	22	0.87	22
DMO-4	1.06	27	1.06	27
DMO-5	1.42	36	1.42	36

Gear Ratio	Input Torque		Output Torque	
	in-lbs	Nm	in-lbs	Nm
26:1	442	50	885	100
30:1	531	60	1903	215
38:1	796	90	3841	434
54:1	973	110	8850	1000
80:1	1239	140	17701	2000

DMO HOW TO ORDER GUIDE

MODEL CODE	Gear Ratio	Input Torque		Output Torque		ISO 5211 Mounting	Handwheel		Weight	
		in-lbs	Nm	in-lbs	Nm		in.	mm	lbs	kg
DMO-1	26:1	442	50	885	100	F05/F07	7.09	180	5.7	2.6
DMO-2	30:1	531	60	1903	215	F07/F10	7.87	200	8.8	4.0
DMO-3	38:1	796	90	3841	434	F10/F12	11.02	280	14.3	6.5
DMO-4	54:1	973	110	8850	1000	F14	11.81	300	28.6	13
DMO-5	80:1	1239	140	17701	2000	F16	15.75	400	70.5	32

Order Example: DMO-1

DMO DIMENSIONAL DRAWINGS FOR ALL MODELS

