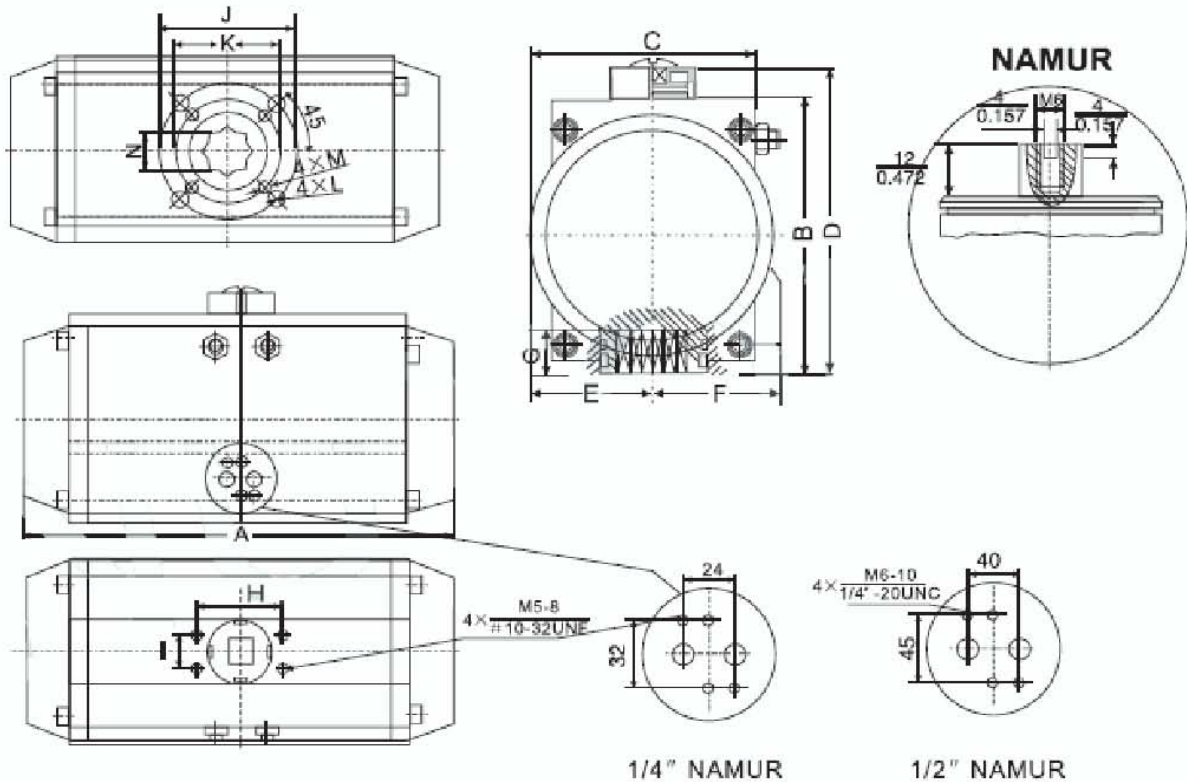




Pneumatic Actuator - Dimension Table



Dimension Table

Unit: $\frac{mm}{Inch}$

Model	A	B	C	D	E	F	G	H	I	N	A120*	A180*	J	K	L	M	Air Connection
NK-032	110 4.33	45 1.77	45 1.77	65 2.56	22.5 0.89	22.5 0.89	12 0.47	50 1.97	25 0.98	9 0.35	—	—	F03	—	M5x7.5 #10-24UNF	—	1/8"
NK-052	160 6.30	72 2.83	65 2.56	92 3.62	30 1.18	41.5 1.63	14 0.55	80 3.15	30 1.18	11 0.43	182 7.16	225 8.86	F05	F03	M6x10 1/4"-20UNC	M5x7.5 #10-32UNF	1/8" or 1/4"(std.)
NK-063	190 7.48	88 3.46	72 2.83	108 4.25	36 1.42	47 1.85	18 0.71	80 3.15	30 1.18	14 0.55	216 8.50	266 10.47	F07	F05	M8x13 5/16"-20UNC	M6x10 1/4"-20UNC	1/8" or 1/4"(std.)
NK-075	206 8.11	100 3.94	81 3.19	120 4.72	42 1.65	53 2.09	20 0.79	80 3.15	30 1.18	14 0.55	232 9.13	282 11.10	F07	F05	M8x13 5/16"-20UNC	M6x10 1/4"-20UNC	1/8" or 1/4"(std.)
NK-083	216 8.50	109 4.29	92 3.62	129 5.08	46 1.81	57 2.24	21 0.83	80 3.15	30 1.18	17 0.67	245 9.65	304 12.0	F07	F05	M8x13 5/16"-20UNC	M6x10 1/4"-20UNC	1/8" or 1/4"(std.)
NK-092	260 10.24	117 4.61	98 3.86	137 5.39	50 1.97	58.5 2.30	22 0.87	80 3.15	30 1.18	17 0.67	303 12.0	386 15.2	F07	F05	M8x13 5/16"-20UNC	M6x10 1/4"-20UNC	1/8" or 1/4"(std.)
NK-105	286 11.26	133 5.24	110 4.33	153 6.02	58 2.28	62 2.44	26 1.02	80 3.15	30 1.18	22 0.87	330 13.0	414 16.3	F10	F07	M10x16 3/8"-20UNC	M8x13 5/16"-20UNC	1/4"
NK-125	340 13.39	155 6.10	125.5 4.94	175 6.89	67.5 2.66	75 2.95	27.5 1.08	80 3.15	30 1.18	22 0.87	392 15.4	497 19.6	F10	F07	M10x16 3/8"-20UNC	M8x13 5/16"-20UNC	1/4"
NK-140	412 16.22	173 6.81	137.5 5.41	193 7.60	75 2.95	77 3.03	32 1.26	80 3.15	30 1.18	27 1.06	475 18.7	601 23.7	F12	F10	M12x20 1/2"-20UNC	M10x16 3/8"-20UNC	1/4"
NK-160	480 18.90	198 7.80	158 6.22	218 8.58	87 3.43	87 3.43	34 1.34	80 3.15	30 1.18	27 1.06	553 21.8	700 27.6	F12	F10	M12x20 1/2"-20UNC	M10x16 3/8"-20UNC	1/4"
NK-190	538 21.18	232 9.13	189 7.44	262 10.3	103 4.06	103 4.06	40 1.57	130 5.12	30 1.18	36 1.42	623 24.5	790 31.1	F14	---	M16x24 5/8"-20UNC	---	1/4"
NK-210	568 22.36	257 10.12	210 8.27	287 11.30	113 4.45	113 4.45	40 1.57	130 5.12	30 1.18	36 1.42	662 26.1	851 33.5	F14	---	M16x24 5/8"-20UNC	---	1/4"
NK-240	660 26.0	291 11.46	245 9.65	321 12.64	130 5.12	130 5.12	50 1.97	130 5.12	30 1.18	46 1.81	828 32.6	1000 39.4	F16	---	M20x26 3/4"-20UNC	---	1/4"(std.) or 3/8"
NK-270	740 29.13	330 13.0	273 10.75	360 14.17	147 5.79	147 5.79	50 1.97	130 5.12	30 1.18	46 1.81	867 34.1	1119 44.1	F16	---	M20x26 3/4"-20UNC	---	1/4"(std.) or 1/2"

* A120 & A180 are separately represented 120° and 180° operation.

* Dimensions for reference only, subject to change.



Pneumatic Actuator - Technical Data

Air Consumption - Air Volume Opening & Closing

Model	Air Volume@opening (liter/cu.in)	Air Volume@closing (liter/cu.in)	Model	Air Volume@opening (liter/cu.in)	Air Volume@closing (liter/cu.in)
NK-32	0.03	0.04	NK-125	1.20	1.60
	1.71	2.32		73.22	97.62
NK-52	0.09	0.12	NK-140	1.70	2.40
	5.49	7.32		103.72	146.43
NK-63	0.14	0.20	NK-160	2.60	3.70
	8.54	12.20		158.63	225.75
NK-75	0.21	0.30	NK-190	4.20	5.90
	12.81	18.30		256.25	359.98
NK-83	0.29	0.41	NK-210	5.70	8.20
	17.69	25.02		347.77	500.31
NK-92	0.49	0.71	NK-240	9.00	12.80
	29.90	43.32		549.12	780.97
NK-105	0.70	0.99	NK-270	12.60	17.90
	42.71	60.40		768.76	1092.13

The Table of Actuators Weight & Opening Closing Time

Model	NK-032		NK-052		NK-063		NK-075		NK-083		NK-092		NK-105	
	D	S	D	S	D	S	D	S	D	S	D	S	D	S
Screw stroke adj. for 1° adj. need	---		1/5 turn		1/5 turn		1/5 turn		1/5 turn		1/4 turn		1/4 turn	
Opening time (Sec.)	0.03	---	0.2	0.25	0.25	0.3	0.3	0.35	0.4	0.5	0.5	0.6	0.7	0.8
Closing time (Sec.)	0.03	---	0.25	0.3	0.3	0.35	0.4	0.5	0.5	0.6	0.7	0.9	0.9	1.1
Approximate weight (Kg/Lbs)	0.5/1.1	---	1.0/2.2	1.0/2.2	1.6/3.5	1.8/4.0	2.6/5.7	3.1/6.8	3.1/6.8	3.6/7.9	4.9/10.8	5.7/12.5	6.5/14.3	7.7/16.9

Model	NK-125		NK-140		NK-160		NK-190		NK-210		NK-240		NK-270	
	D	S	D	S	D	S	D	S	D	S	D	S	D	S
Screw stroke adj. for 1° adj. need	1/4 turn		1/4 turn		1/4 turn		1/3 turn		1/3 turn		1/3 turn		1/3 turn	
Opening time (Sec.)	0.9	1.1	1.3	1.5	1.6	1.8	2.2	2.4	2.9	3.4	3.8	4.3	4.5	5.0
Closing time (Sec.)	1.2	1.4	1.6	1.9	1.9	2.2	2.6	3.0	3.8	4.1	4.4	5.0	5.0	5.5
Approximate weight (Kg/Lbs)	9.9/21.8	11/24.2	13.8/30.4	16.3/35.9	19/41.8	24/52.8	28/61.6	34/74.8	37/81.4	45/99	52/114.4	64/140.8	85/187	104/228.8

Order Information

Type	Model	Spring Set	Seals	Options
NKD	032	Blank	Blank	120
Double Acting Actuator	052	(Double Acting Actuator)	(standard NBR seals)	120° operation
	063	05		180
NKS	075	06	HT= Viton seals	180° operation
Spring Return Actuator	083	07	(for high temperature)	SS
	092	08		Stainless Steel Housing
NKDN	105	09	LT= Silicone seals	
Double Acting Actuator	125	10	(for low temperature)	
(Nickel Plated Housing)	140	11		
	160	12		
NKSN	190			
Spring Return Actuator	210			
(Nickel Plated Housing)	240			
	270			

Note: The part numbers are represented as the following: Type-Model-Spring Set-Seals-Options



Pneumatic Actuator - Manual Override



Description

The de-clutchable wormgear operator offers simple and reliable manual positioning of valves, dampers and other quarter-turn devices when over-riding existing pneumatic or hydraulic rotary actuators. All units are suitable for both indoor and outdoor. The modular design is to provide the most efficient and effective solution to a full range of manual overriding requirements.

Operation

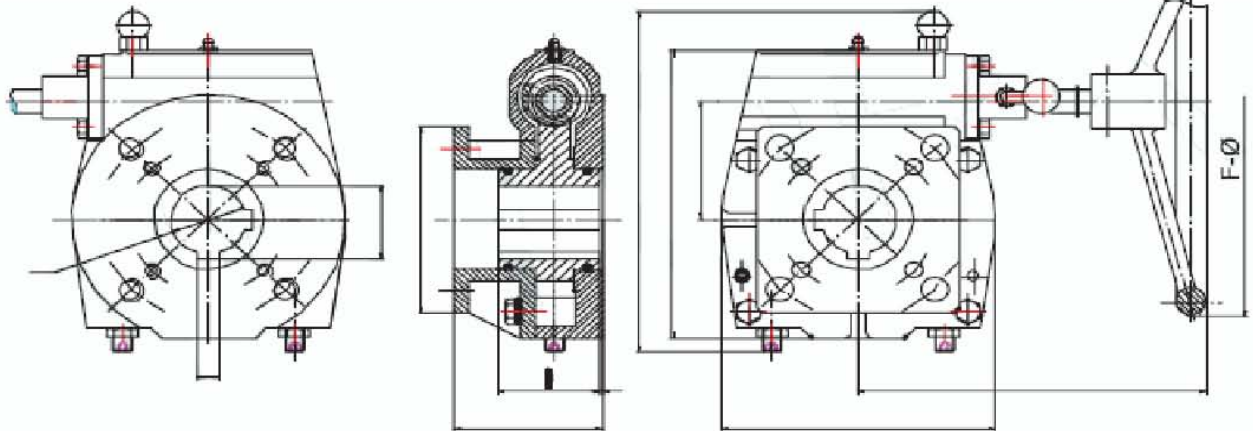
To engage manual operation, first pull out the lock handle and then rotate the clutch lever in anti-clockwise direction until engagement takes place. To return to automatic mode, first pull out the lock handle and then rotate the clutch lever in clockwise direction until engagement takes place.

Specification

- 1.Housing : Cast Iron or Aluminum Alloy
- 2.Gear Guardant : Ductile Iron
- 3.Input Shaft : ASTM A29M+Chrome Plated
- 4.Temperature Range :-20 (-4°F to +248°F)
- 5.Stroke Adjustment : ± 5° at each end
- 6.Movement: 0 ~90°
- 7.Finish Paint: Two Polyurethane Coated
- 8.Enclosure : Sealed to IP65
- 9.Torque Range: 0~300 to 3600Nm

Technical Data

Model	Gear Ratio	Input Torque (NM)	Output Torque (NM)	Hand-Wheel Dia.	Weight (Kg/Lbs)
MO26	26:1	48	300	250	72/158.4
MO38A	38:1	75	620	250	13/28.6
MO38B		77	700	350	
MO54A	54:1	100	1000	250	17/37.4
MO54B		103	1200	350	
MO78	78:1	200	3600	600	37/81.4
MO80	80:1	95	1600	350	22/48.4



Dimension Table

Unit:mm

Model	d	b	T	Valve Conn. ISO5211	A × A1	Actuator Conn. ISO5211	H	F-Ø	L	B	C	D	E
MO26	15/22	5/6	54	F05/F07	64x64	F05/F07	82	250	191	166	130	104	50.5
MO38A	32	10	55	F07/F10	100x100	F07/F10	79	250	196	191	156	125	65.5
MO38B	45	14	55	F10	130x130	F10	88	350	240				
MO54A	36	10	65	F12	110x110	F10/F12	86	250	235	234	199	175	85.5
MO54B	48	14	65	F10/F14	130x130	F14	95	350	248				
MO78	76.2	19	78	F16	156x156	F16	117	600	323	351	322	276	141.6
MO80	60	18	71	F16	156x156	F16	114	350	286	311	279	234	123

Note: All dimensions are in mm. Dimensions for reference only, subject to change.