

TWISTMax

Powerful Compact Actuator



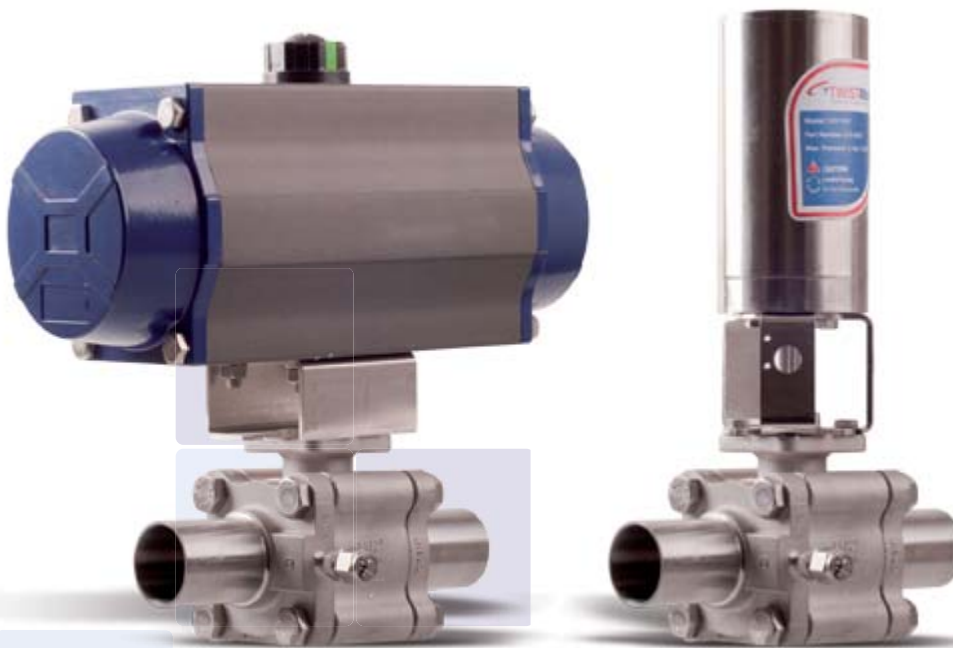
 **EGMO**

NEUMO Ehrenberg Group
www.egmo.co.il

TWISTMax Actuators

Small, Strong & Light

EGMO is proud to introduce TWISTMax, the new series of innovated actuators which offer maximum power in a compact size. The unique design saves you as much space as possible! TWISTMax actuators are pneumatically operated, and their special structure guarantees increased life cycle and reliability. TWISTMax actuators are designed to mount on all types of ball valves and butterfly valves. The TWISTMax can be supplied with either double acting or spring return versions and control accessories.



About EGMO

EGMO, a member of the NEUMO Ehrenberg Group which is a diversified multi-national organization headquartered in Germany and was founded by Senator Henry Ehrenberg in 1947, is a worldwide leader in the manufacturing of high purity, sanitary stainless steel products for the biopharmaceutical, semiconductor and food industries.

Founded in 1965, EGMO offers its customers decades of experience in innovative development and production of an extensive range of fittings, tubes, manifolds, valves, actuators, vessels and other special components.

EGMO is ASME BPE, ISO 9001:2008 & CE certified, and its products also meet the following standards: TÜV, 3A, DIN, ISO, CRN, SMS, BS (RJT).



Main Features

- Maximum torque with minimum size
- Stainless Steel structure
- Superior torque efficiency-
Smart design allows actuator's output torque which efficiently tracks valve's torque demands
- Low friction / resistant motion
- Compatible with any quarter - turn valve
- Compatible with international standards
- Long life cycle
(more than one million cycles under load)
- Maintenance free
- Light weight
- Economical air consumption compared to Rack and Pinion actuator



TWISTMax Advanced Series

TWISTMax Actuators Advanced series features an air pressure inlet from the side of the actuator, and as an option, also combines a NAMUR pad. In addition, the actuator is equipped with VDI/VDE standard. A position indicator, and proximity switch can be supplied. It is available in both double acting as well as spring return types.



TWISTMax Basic Series

The TWISTMax Actuator Basic series with its economical design combines an air pressure inlet on top of the actuator. It also can be supplied with a position indicator on the bottom of the actuator and proximity switch. It is available in both double acting as well as spring return types.

Spring Return

Pressure	Actuator Type	Units	5 BAR (72.5 PSI)			6 BAR (87 PSI)			7 BAR (101.5 PSI)			8 BAR (116 PSI)			Spring		
			Start	Middle	End	Start	Middle	End	Start	Middle	End	Start	Middle	End	Start	Middle	End
4	A	Nm	10.5	1.5	5.0	11.0	2.0	8.0	14.0	2.5	10.0	23.0	4.0	13.5	11.0	2.0	7.5
		lb in	92.9	13.3	44.3	97.4	17.7	70.8	123.9	22.1	88.5	203.6	35.4	119.5	97.4	17.7	66.4
	B	Nm	11.0	2.0	6.0	12.0	2.5	9.0	16.0	3.0	11.0	24.0	4.5	15.0	11.0	2.0	7.5
		lb in	97.4	17.7	53.1	106.2	22.1	79.7	141.6	26.6	97.4	212.4	39.8	132.8	97.4	17.7	66.4
5	A	Nm	13.0	2.5	6.0	14.5	3.5	11.0	19.0	5.0	15.0	22.0	5.8	19.0	14.0	3.0	8.0
		lb in	115.1	22.1	53.1	128.3	31.0	97.4	168.2	44.3	132.8	194.7	51.3	168.2	123.9	26.6	70.8
	B	Nm	13.5	2.7	7.0	17.5	4.2	11.5	22.0	6.0	16.0	24.0	6.5	21.0	14.0	3.0	8.0
		lb in	119.5	23.9	62.0	154.9	37.2	101.8	194.7	53.1	141.6	212.4	57.5	185.9	123.9	26.6	70.8
7	A	Nm	38.0	6.5	18.0	52.0	10.5	28.0	63.0	15.0	39.0	87.0	18.0	49.0	37.0	9.0	22.0
		lb in	336.3	57.5	159.3	460.2	92.9	247.8	557.6	132.8	345.2	770.0	159.3	433.7	327.5	79.7	194.7
	B	Nm	42.0	7.0	21.0	55.0	12.0	31.0	68.0	17.0	41.0	91.0	20.0	58.0	37.0	9.0	22.0
		lb in	371.7	62.0	185.9	486.8	106.2	274.4	601.9	150.5	362.9	805.4	177.0	513.3	327.5	79.7	194.7
9	A	Nm	55.0	18.0	40.0	75.0	27.0	60.0	95.0	34.0	82.0	120.0	45.0	105.0	66.0	22.0	50.0
		lb in	487.0	159.0	354.0	664.0	239.0	531.0	841.0	301.0	726.0	1062.0	398.3	929.3	584.0	195.0	443.0
11	A	Nm	290.0	40.0	163.0	380.0	62.0	260.0	450.0	78.0	350.0	500.0	90.0	420.0	335.0	50.0	185.0
		lb in	2566.7	354.0	1442.7	3363.3	548.7	2301.2	3982.8	690.4	3097.8	4425.0	796.5	3717.0	2965.0	442.5	1637.4

Double Acting

Pressure	Actuator Type	Units	4 BAR (58 PSI)			5 BAR (72.5 PSI)			6 BAR (87 PSI)			7 BAR (101.5 PSI)			8 BAR (116 PSI)		
			Start	Middle	End	Start	Middle	End	Start	Middle	End	Start	Middle	End	Start	Middle	End
4	A	Nm	15.5	3.0	13.0	20.0	4.0	16.0	23.5	5.0	19.5	26.0	5.5	20.0	31.0	6.7	19.0
		lb in	137.2	26.6	115.1	177.0	35.4	141.6	208.0	44.3	172.6	230.1	48.7	177.0	274.4	59.3	168.2
	B	Nm	16.0	3.5	13.5	20.5	4.5	17.0	24.0	5.5	20.5	27.0	7.0	22.0	32.0	7.0	26.0
		lb in	141.6	31.0	119.5	181.4	39.8	150.5	212.4	48.7	181.4	239.0	62.0	194.7	283.2	62.0	230.1
5	A	Nm	16.0	3.0	16.0	20.5	6.0	21.0	24.0	6.5	24.0	26.5	7.5	26.0	30.0	9.0	35.0
		lb in	141.6	26.6	141.6	181.4	53.1	185.9	212.4	57.5	212.4	234.5	66.4	230.1	265.5	79.7	309.8
	B	Nm	16.5	3.0	17.0	21.0	6.5	22.0	25.0	7.0	25.5	27.0	8.0	27.5	33.0	10.0	38.0
		lb in	146.0	26.6	150.5	185.9	57.5	194.7	221.3	62.0	225.7	239.0	70.8	243.4	292.1	88.5	336.3
7	A	Nm	48.0	11.0	39.0	61.0	15.5	48.0	77.0	17.5	57.0	87.0	20.0	69.0	110.0	25.5	87.0
		lb in	424.8	97.4	345.2	539.9	137.2	424.8	681.5	154.9	504.5	770.0	177.0	610.7	973.5	225.7	770.0
	B	Nm	52.0	13.0	42.0	65.0	17.0	50.0	80.0	21.0	61.0	92.0	24.0	73.0	125.0	29.0	98.0
		lb in	460.2	115.1	371.7	575.3	150.5	442.5	708.1	185.9	539.9	814.3	212.4	646.1	1106.3	256.7	867.3
9	A	Nm	85.0	33.0	85.0	108.0	42.0	108.0	130.0	51.0	130.0	150.0	60.0	150.0	170.0	70.0	170.0
		lb in	752.0	292.0	752.0	956.0	372.0	956.0	1151.0	451.0	1151.0	1328.0	531.0	1328.0	1504.5	619.5	1504.5
11	A	Nm	350.0	82.0	370.0	460.0	95.0	490.0	520.0	120.0	560.0	620.0	145.0	690.0	730.0	155.5	760.0
		lb in	3097.8	725.8	3274.8	4071.3	840.8	4336.9	4602.4	1062.1	4956.4	5487.5	1283.4	6107.0	6460.5	1376.2	6726.0

A - Advanced
B - Basic

Operating Pressure:
DA 4-8 Bar
SR 5-8 Bar
* At Environment Temperature

Operating Temperature:
-10°C to 60°C

* For TWISTMax actuators wider temperature range please refer to EGMO representative

TWISTMax 4 Basic



104.0 mm



Ø41 mm

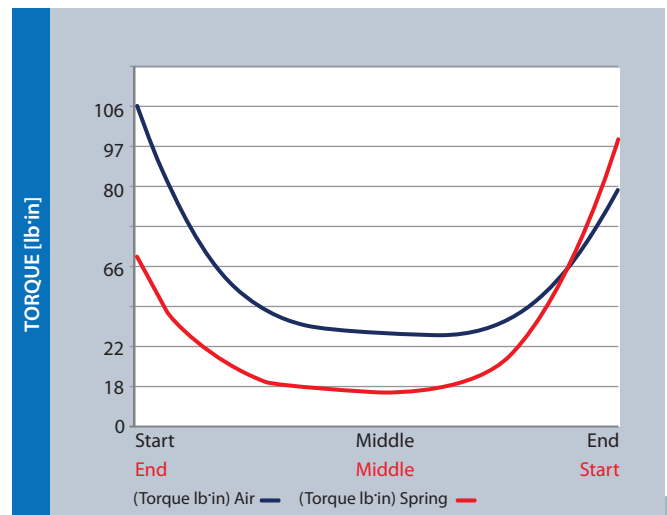
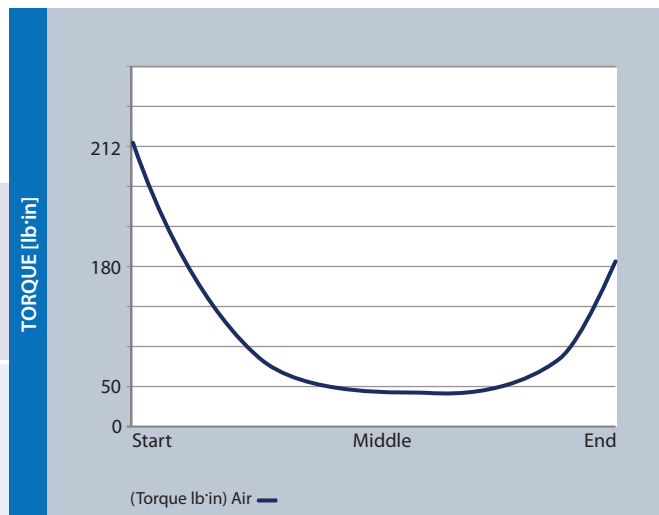
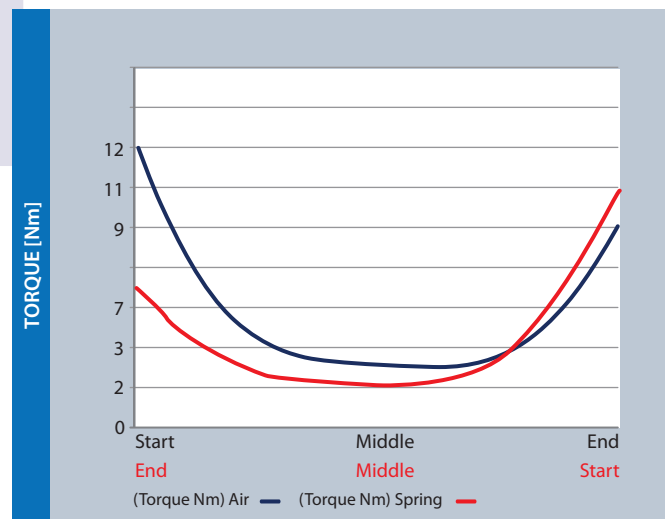
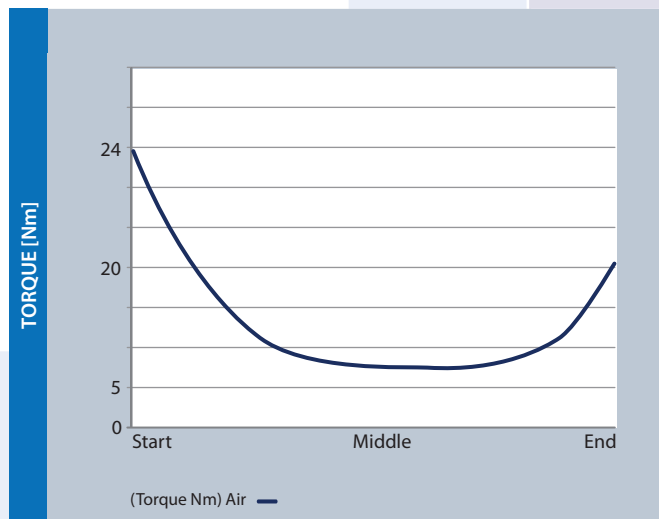
Actuator Type	SR		DA	
Unit	KG	Lb	KG	Lb
Weight	0.5	1.1	0.4	0.9

Actuator Type	SR	DA
Unit	Sec	Sec
Cycle Time	0.5	0.4

Actuator Type	SR		DA	
Unit	cc	in ³	cc	in ³
Air Consumption CCW	36.9	2.2	36.9	2.2
Air Consumption CW	-	-	61.8	3.8
Air Consumption Total	36.9	2.2	98.7	6.0

Torque Chart @ 6 Bar (Double Acting) Version

Torque Chart @ 6 Bar (Spring Return) Version



TWISTMax 4 Advanced



111.5 mm

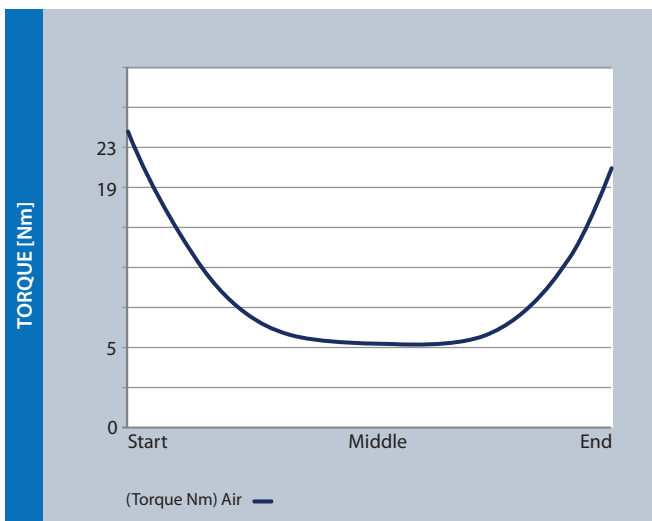
Ø41mm

Actuator Type	SR		DA	
Unit	KG	Lb	KG	Lb
Weight	0.6	1.3	0.5	1.1

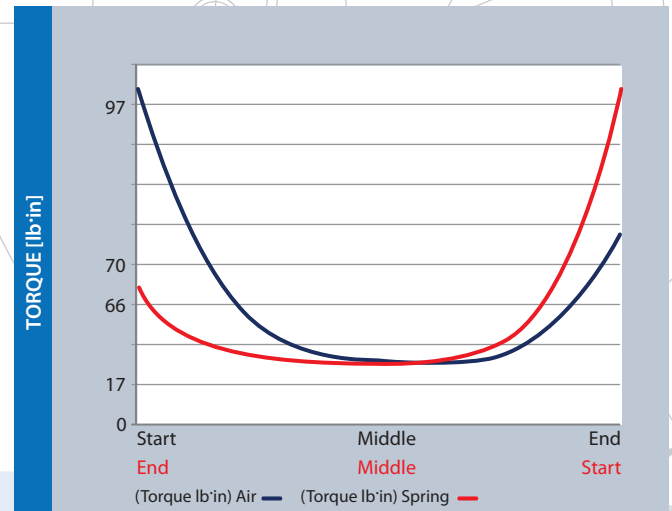
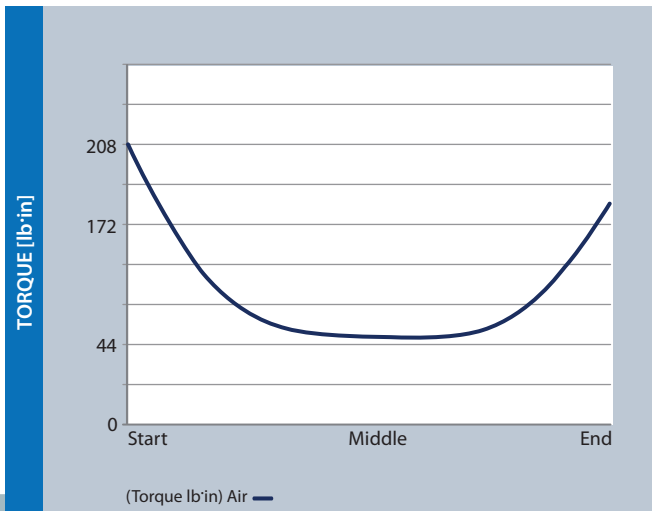
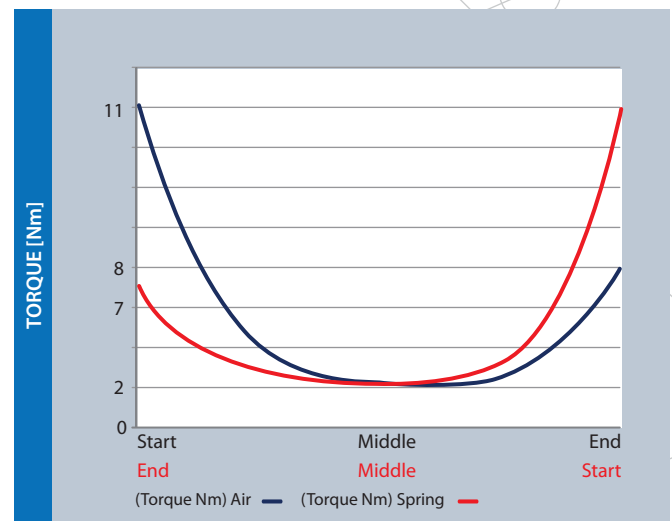
Actuator Type	SR	DA
Unit	Sec	Sec
Cycle Time	0.6	0.4

Actuator Type	SR		DA	
Unit	cc	in ³	cc	in ³
Air Consumption CCW	35.3	2.1	35.3	2.1
Air Consumption CW	-	-	60.2	3.7
Air Consumption Total	35.3	2.1	95.5	5.8

Torque Chart @ 6 Bar (Double Acting) Version



Torque Chart @ 6 Bar (Spring Return) Version



TWISTMax 5 Basic



123.5 mm

Ø52mm

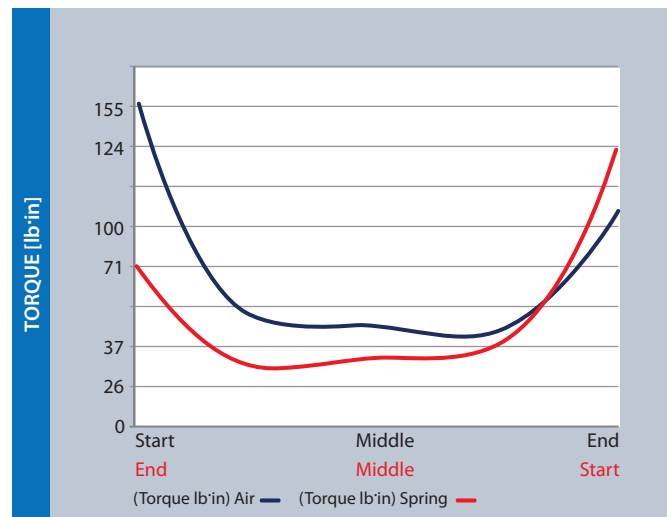
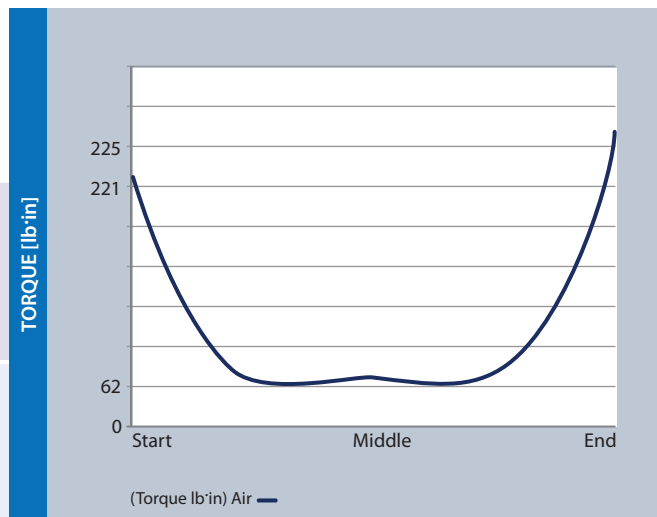
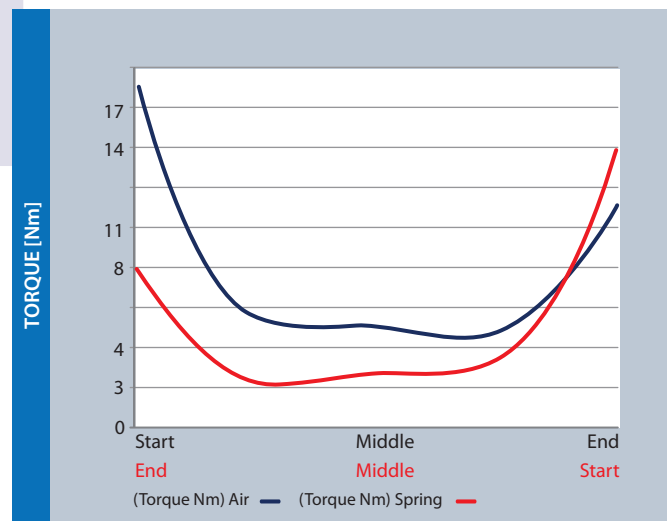
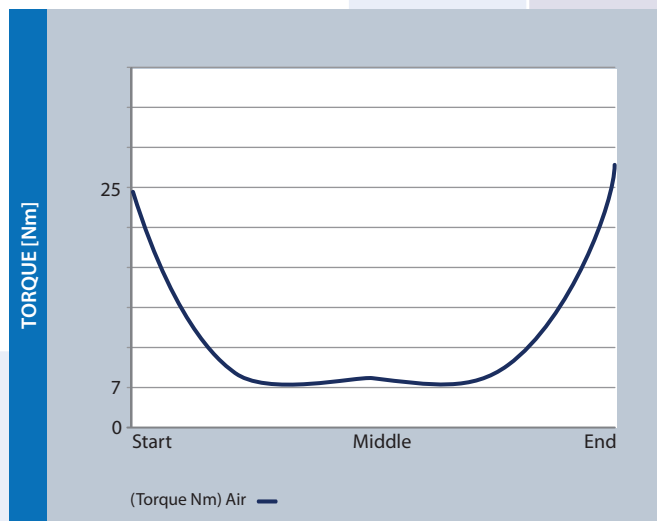
Actuator Type	SR		DA	
	KG	Lb	KG	Lb
Unit	0.9	2.0	0.8	1.8
Weight				

Actuator Type	SR	DA
	Unit	Sec
Cycle Time	0.8	0.6

Actuator Type	SR		DA	
	cc	in ³	cc	in ³
Unit	73.1	4.5	73.1	4.5
Air Consumption CCW	-	-	118.0	7.2
Air Consumption CW	73.1	4.5	191.1	11.7
Air Consumption Total				

Torque Chart @ 6 Bar (Double Acting) Version

Torque Chart @ 6 Bar (Spring Return) Version



TWISTMax 5 Advanced



140.5 mm

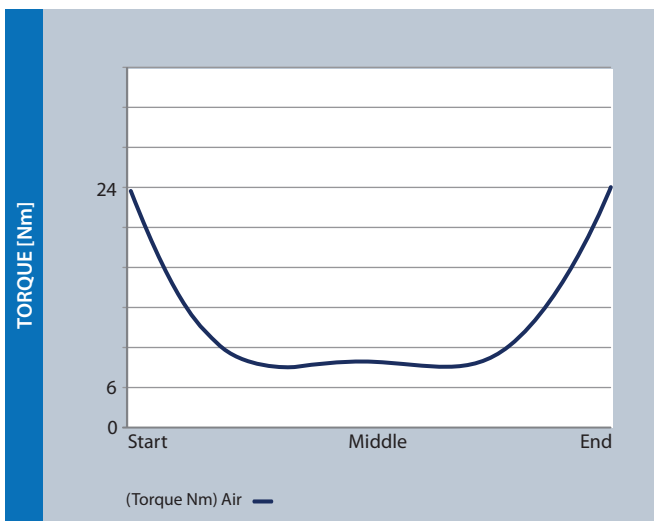
Ø52mm

Actuator Type	SR		DA	
Unit	KG	Lb	KG	Lb
Weight	1.1	2.4	1.0	2.2

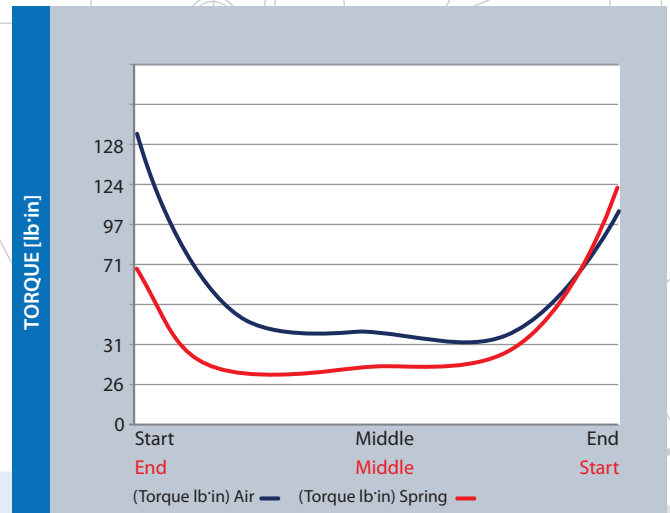
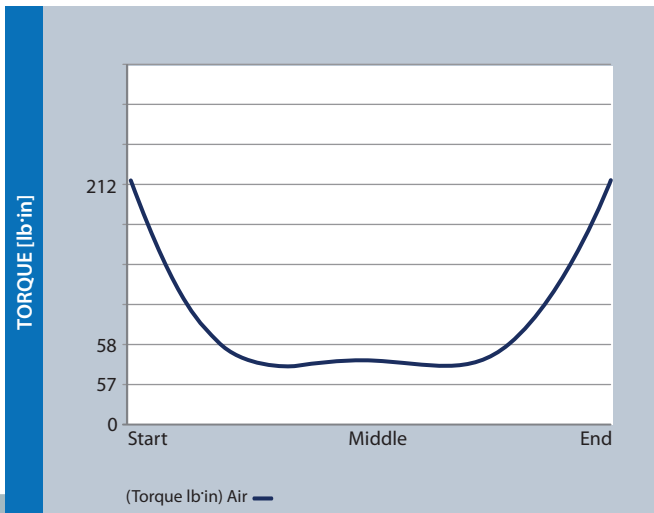
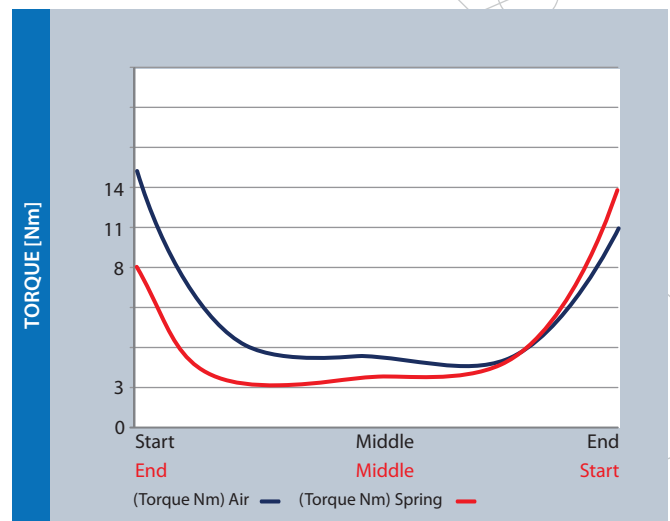
Actuator Type	SR	DA
Unit	Sec	Sec
Cycle Time	0.6	0.6

Actuator Type	SR		DA	
Unit	cc	in ³	cc	in ³
Air Consumption CCW	68.1	4.1	68.1	4.1
Air Consumption CW	-	-	112.1	6.8
Air Consumption Total	68.1	4.1	180.2	10.9

Torque Chart @ 6 Bar (Double Acting) Version



Torque Chart @ 6 Bar (Spring Return) Version



TWISTMax 7 Basic



136.0 mm

Ø70mm

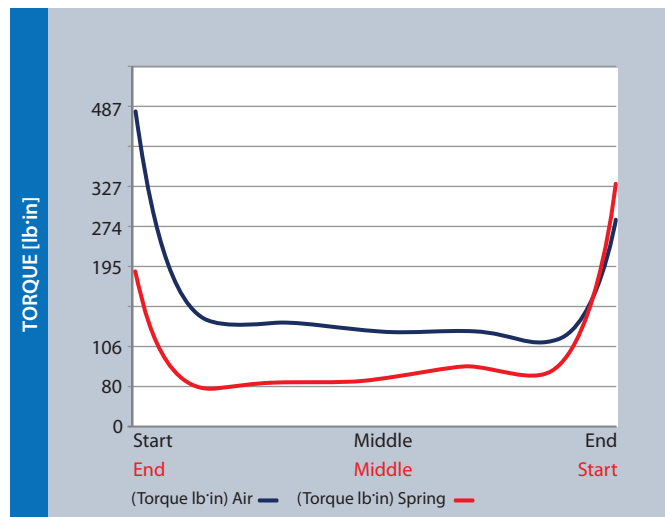
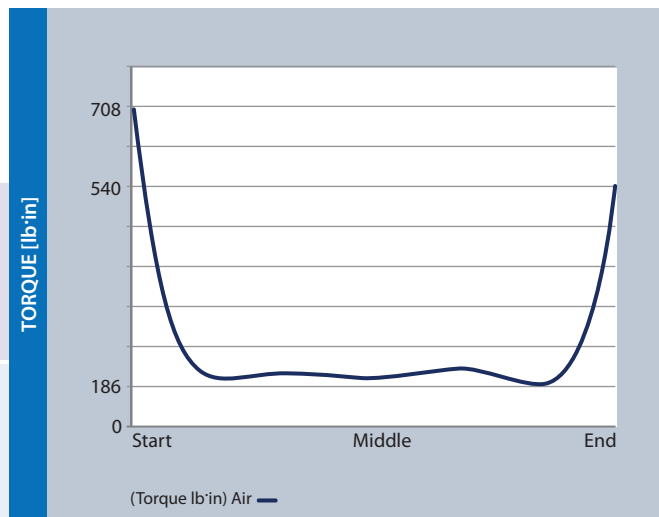
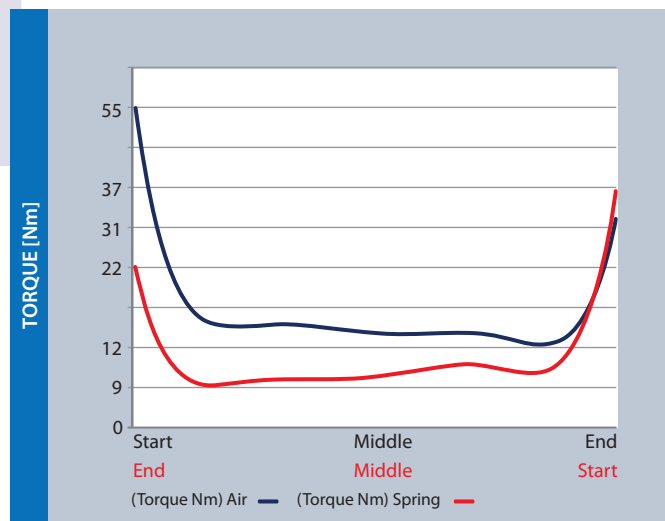
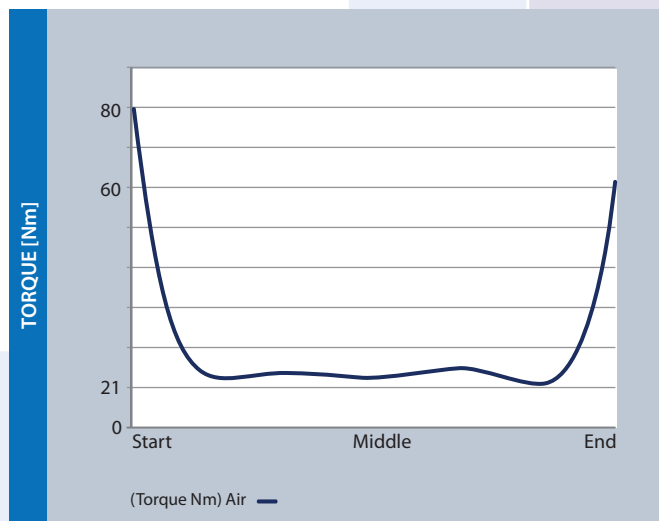
Actuator Type	SR		DA	
	KG	Lb	KG	Lb
Unit				
Weight	1.8	4.0	1.5	3.3

Actuator Type	SR	DA
	Unit	Sec
Cycle Time	0.8	0.8

Actuator Type	SR		DA	
	cc	in ³	cc	in ³
Unit				
Air Consumption CCW	143.2	8.7	143.2	8.7
Air Consumption CW	-	-	244.7	14.9
Air Consumption Total	143.2	8.7	387.9	23.6

Torque Chart @ 6 Bar (Double Acting) Version

Torque Chart @ 6 Bar (Spring Return) Version



TWISTMax 7 Advanced

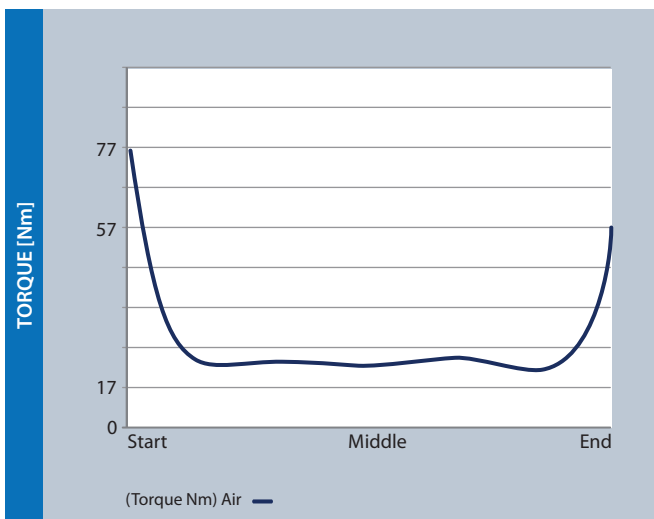


Actuator Type	SR		DA	
Unit	KG	Lb	KG	Lb
Weight	2.3	5.1	2.0	4.4

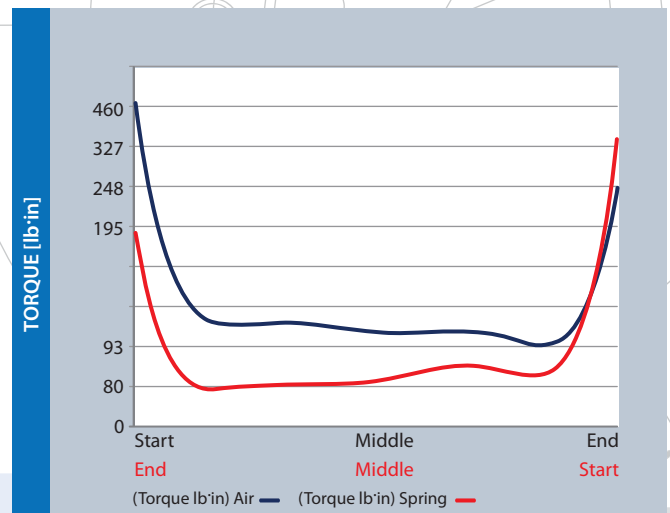
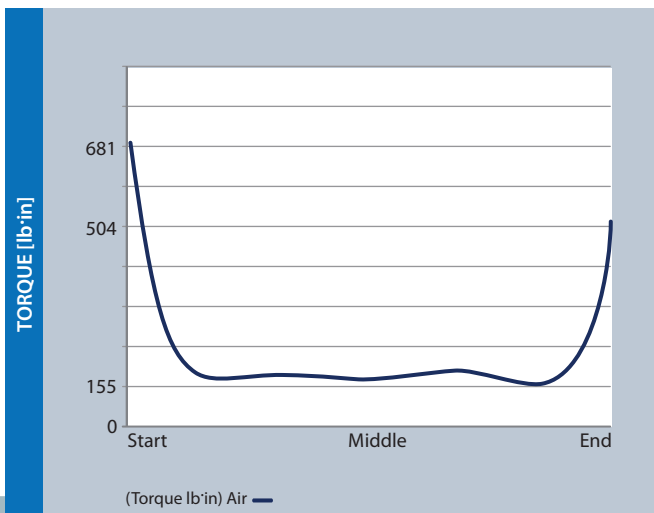
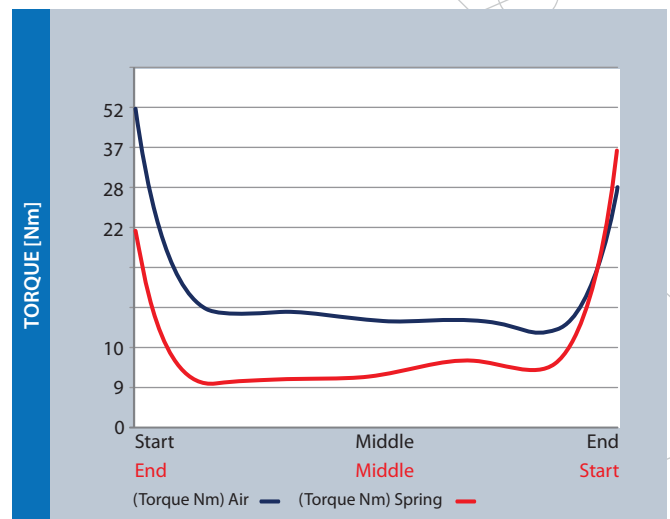
Actuator Type	SR	DA
Unit	Sec	Sec
Cycle Time	0.8	0.8

Actuator Type	SR		DA	
Unit	cc	in ³	cc	in ³
Air Consumption CCW	138.3	8.4	138.3	8.4
Air Consumption CW	-	-	239.6	14.6
Air Consumption Total	138.3	8.4	377.9	23.0

Torque Chart @ 6 Bar (Double Acting) Version



Torque Chart @ 6 Bar (Spring Return) Version



TWISTMax 9 Advanced*



190.3 mm

Ø88.9mm

Actuator Type	SR		DA	
	KG	Lb	KG	Lb
Unit				
Weight	3.6	7.9	2.8	6.2

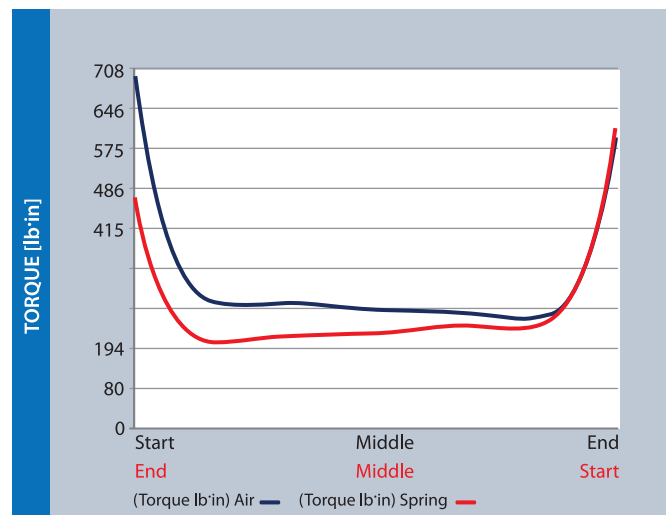
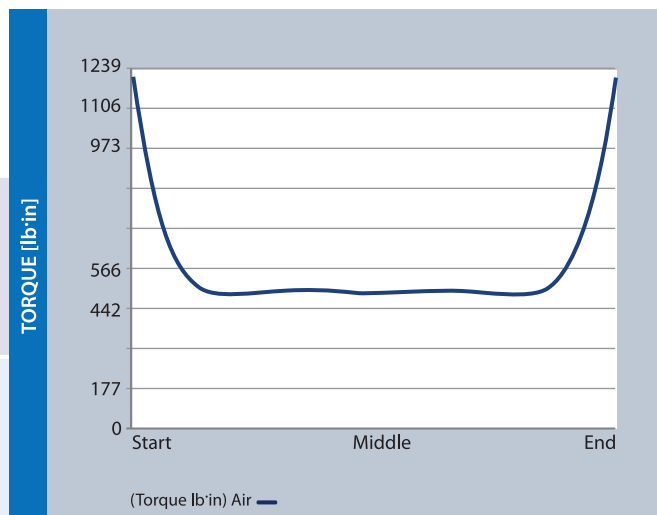
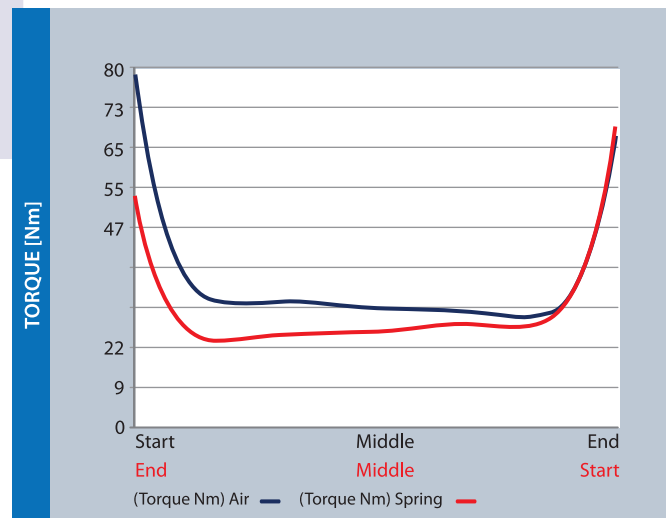
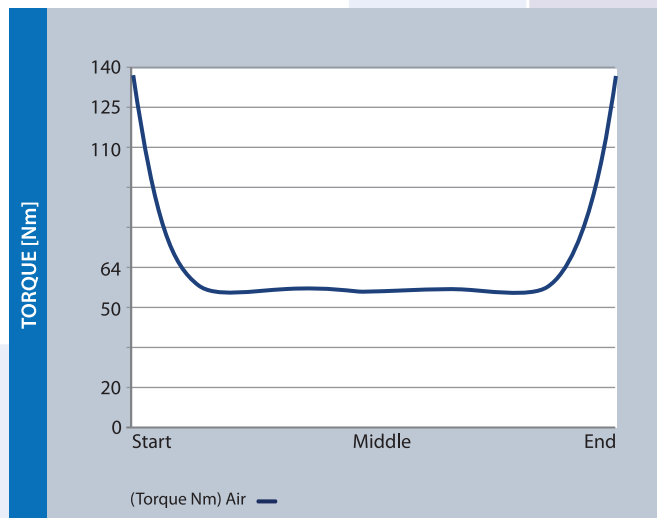
Actuator Type	SR	DA
	Unit	Sec
Cycle Time	1.0	1.0

Actuator Type	SR		DA	
	cc	in ³	cc	in ³
Unit				
Air Consumption CCW	300.1	18.32	300.1	18.32
Air Consumption CW	-	-	516.1	31.49
Air Consumption Total	300.1	18.32	816.2	49.81

*Available in advanced version only

Torque Chart @ 6 Bar (Double Acting) Version

Torque Chart @ 6 Bar (Spring Return) Version



TWISTMax 11 Advanced*



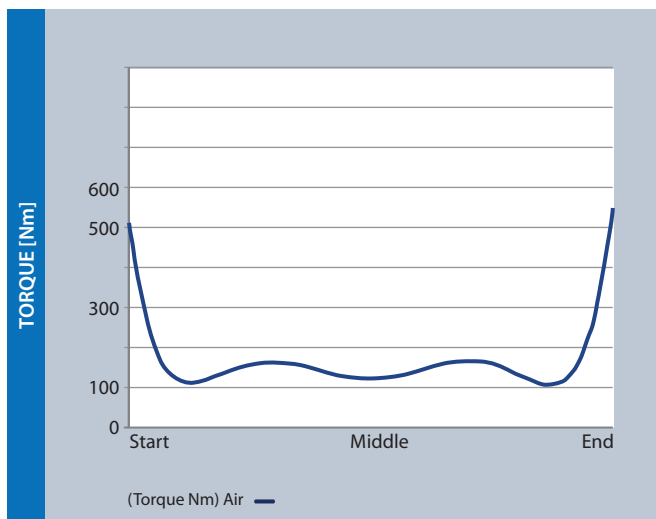
Actuator Type	SR		DA	
Unit	KG	Lb	KG	Lb
Weight	7.2	15.9	6.1	13.4

Actuator Type	SR	DA
Unit	Sec	Sec
Cycle Time	1.7	1.5

Actuator Type	SR		DA	
Unit	cc	in ³	cc	in ³
Air Consumption CCW	626.4	38.2	626.4	38.2
Air Consumption CW	-	-	1195.4	72.9
Air Consumption Total	626.4	38.2	1821.8	111.1

*Available in advanced version only

Torque Chart @ 6 Bar (Double Acting) Version



Torque Chart @ 6 Bar (Spring Return) Version

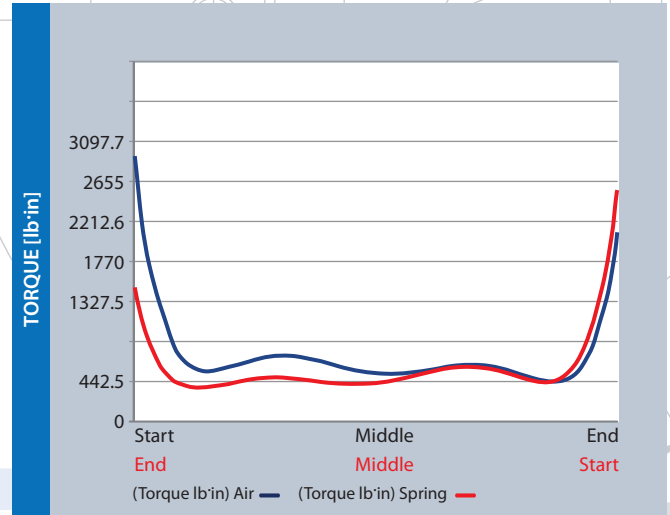
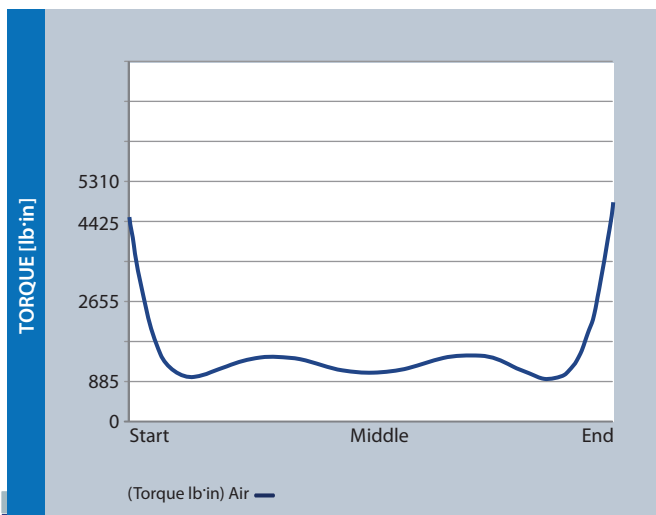
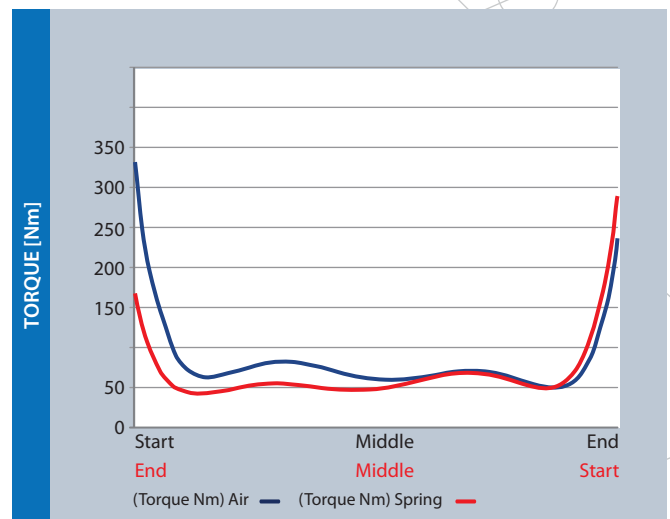
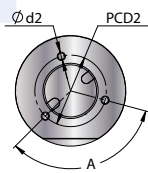


Table of Dimensions

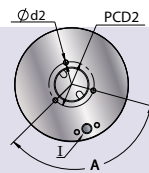
Model		L	L	L1	L1	ϕD	ϕD	∇	∇	$\phi PCD1$	$\phi PCD1$	PCD2	PCD2	$\phi d1$	$\phi d2$	A°	ISO 5211 Flange Type	Air Connection Size	
		[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[DEG]		I	O
TMX 4	A	111.5	4.40	127.5	5.02	41.0	1.615	6.4	0.25	29.0	11.5	31.0	1.22	M5	M5 x2PL	180°	N/A	M5	M5
	B	104.0	4.10	N/A	N/A													-	-
TMX 5	A	140.5	5.53	156.5	6.16	52.0	2.0	9.0	0.354	36.0	14.17	45.3	1.78	M6	M5 x3PL	120°	F03	1/8" BSPP	1/8" BSPP
	B	123.5	4.86	N/A	N/A													-	-
TMX 7	A	154.0	6.06	170	6.69	70.0	2.75	11.0	0.43	42.0	16.5	45.3	1.78	M6	M5 x3PL	120°	F04	1/8" BSPP	1/8" BSPP
	B	136.0	5.35	N/A	N/A													-	-
TMX 9	A	173.5	6.83	190.3	7.49	88.9	3.5	14.0	0.55	50.0	1.97	45.3	1.78	M6	M5x3PL	120°	F05	1/8" BSPP	1/8" BSPP
TMX 11	A	227.7	8.96	244.2	9.6	114.3	4.5	17.0	0.67	70.0	2.75	45.3	1.78	M8	M5x3PL	120°	F07	1/8" BSPP	1/8" BSPP

A - Advanced | B - Basic

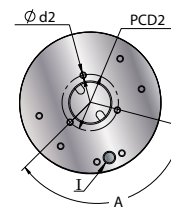
TWISTMax 4,5,7
Advanced Top View



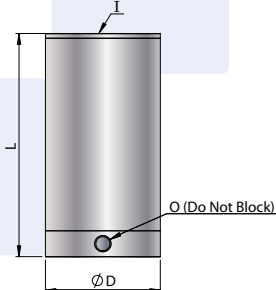
TWISTMax 9
Advanced Top View



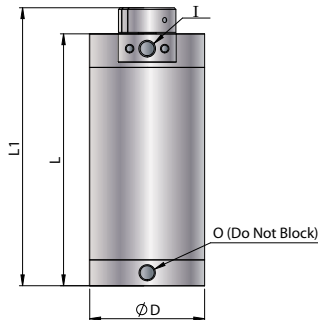
TWISTMax 11
Advanced Top View



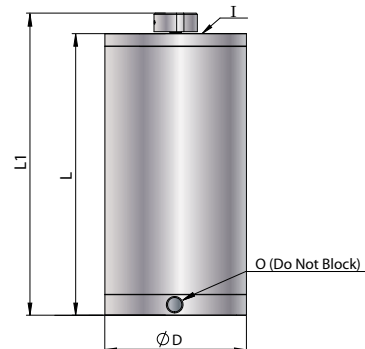
TWISTMax 4,5,7
Basic Front View



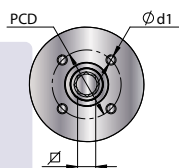
TWISTMax 4,5,7
Advanced Front View



TWISTMax 9, 11
Advanced Front View



All TWISTMax Versions Bottom View



Warning! For your safety

The system designer and user have the sole responsibility for selecting products suitable for their special application requirements, ensuring their safe and trouble-free installation, operation, and maintenance. Application details, material compatibility and product ratings should all be considered for each selected product. Improper selection, installation or use of products can cause property damage or personal injury.

Compatible Accessories

-- VDI/VDE 3845 Plate



-- Upper Visual Position Indicator



-- Coupling



-- VDI/VDE 3845 Adapter



-- Universal Bracket for Ball Valves



-- Bracket for Butterfly Valves



-- Namur Pad Adapter



-- Electro Pneumatic Positioner



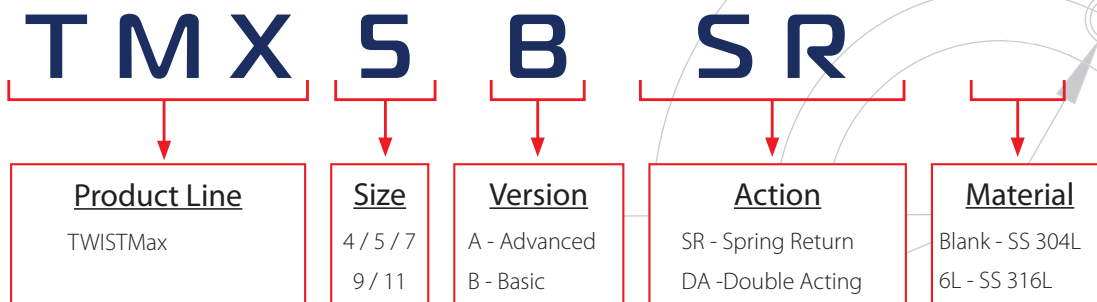
-- Proximity Switch with 5M. Cable



-- Control Head with Beacon



How to Order



Although EGMO Ltd. can provide general guidelines, it cannot provide specific data and warnings for all possible applications. The purchaser/user must therefore assume the ultimate responsibility for the proper sizing and selection, installation, operation, and maintenance of EGMO Ltd. products. The purchaser/user should read and understand the Installation Operation Maintenance (IOM) instructions included with the product, and train its employees and contractors in the safe use of EGMO Ltd. products in connection with the specific application. While the information and specifications contained in this literature are believed to be accurate, they are supplied for informative purposes only and should not be considered certified or as a guarantee of satisfactory results by reliance thereon. Nothing contained herein is to be construed as a warranty or guarantee, express or implied, regarding any matter with respect to this product. EGMO Ltd. is continually improving and upgrading its product design, Therefore the specifications, dimensions and information contained herein are subject to change without notice. Should any question arise concerning these provisions, the purchaser/user should contact EGMO Corporation at any one of its worldwide operations or offices. For more information about EGMO Ltd. Corporation, contact www.egmo.co.il

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