



# PNEUMATIC ACTUATOR

## Rotary Quarter Turn

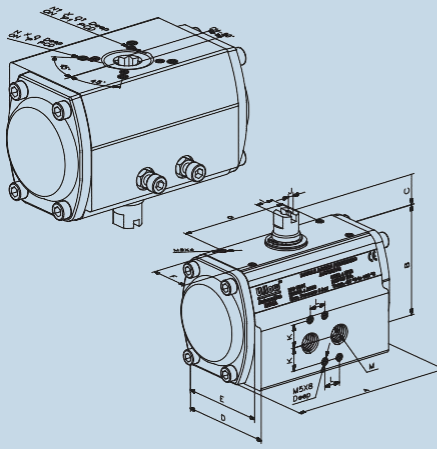


Diagram No. 4.1

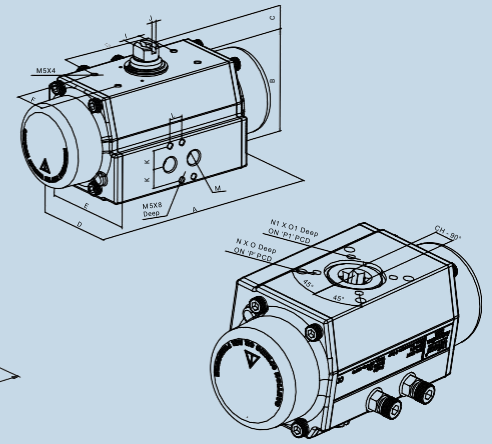


Diagram No. 4.2

## FEATURES

Uflow has successfully developed Compact, Patented Aluminium Free Rack & Pinion Pneumatic Rotary Actuator, Consuming Low Volume of Air.

- ☑ Wear proof aluminium free Rack & Pinion design.
- ☑ Low air consumption with maximum torque due to compact design.
- ☑ Providing a hard-anodized body for high corrosion resistance.
- ☑ Smooth travelling stroke for extending the life of ball valve sheet.
- ☑ Finer teeth module for smoother operation, and jerk-free sliding.
- ☑ Maintenance-free design.
- ☑ Aluminium Extruded, Hard Anodized Body.

### TEMPERATURE RANGE

NBR	-20°C to + 80°C
Viton	-20°C to + 125°C
Flourosilicone	-60°C to + 110°C

### END STROKE (0°-90°)

+5° Over travelling Possible for opening
-5° Under travelling Can be adjusted

### WORKING PRESSURE

Maximum working pressure 8 bar

## TORQUE CHART (DOUBLE ACTING)

TORQUE Nm (10Nm = 1 Kgm)

Model No.	Diagram No.	2 Bar	3 Bar	4 Bar	5 Bar	6 Bar	7 Bar	8 Bar
AD32	4.1	3	4.60	6	7.60	9	10.50	12
AD50	4.1	10.80	16	21.50	27	32.50	38	43
AD63	4.1	20	30	40	50	60	70	80
AD80	4.1	34.50	51.50	69	86.50	103	120.50	138
AD100	4.1	73	110	146	183	220	256	293
AD125	4.1	127	190	254	317.50	381	444.50	508
AD150	4.1	210	316	421	526	631	737	842

## AIR CONSUMPTION COMPARISON WITH OTHER REPUTED BRAND

Model	Piston Inward Stroke ml / bar	Piston Outward Stroke ml / bar
(Uflow) AD50	128	137
Other Brand Y	260	110
Other Brand X	200	180

DOUBLEACTING

SECTION VIEW

SINGLEACTING

## TECHNICAL DATA

Model No.	Diagram No.	Double / Single A	B	C	D	E	F	G	I	J	K	L	M	N	O	P	N1	O1	P1	CH 90	ISO FLANGE
AD32 / AS32	4.1 / 4.2	92 / 115	48	20	54	54	30	50	10	4	16	12	1/8"	M5	09	36	-	-	-	09	F03
AD50 / AS50	4.1 / 4.2	131 / 162	77	20	72	65	30	80	13	4	16	12	1/4"	M6	12	50	M5	10	36	11	F03 / F05
AD63 / AS63	4.1 / 4.2	147 / 203	87	20	86	86	30	80	15	4	16	12	1/4"	M8	12	70	M6	10	50	14	F05 / F07
AD80 / AS80	4.1 / 4.2	170 / 233	103	20	98	98	30	80	18	4	16	12	1/4"	M8	12	70	M6	10	50	17	F05 / F07
AD100 / AS100	4.1 / 4.2	217 / 302	129	20	126	126	30	80	26	4	16	12	1/4"	M10	15	102	M8	14	70	22	F07 / F10
AD125 / AS125	4.1 / 4.2	263 / 355	161	20	150	150	30	80	30	4	16	12	1/4"	M12	20	125	M10	14	102	22	F10 / F12
AD150	4.1	296	188	20	175	175	30	80	35	4	16	12	1/4"	M12	20	125	M10	14	102	27	F10 / F12

# TORQUE CHART (SINGLE ACTING)

TORQUE Nm (10Nm = 1 Kgm)

Model No.	Spring Set	Spring Torque		3 bar		4 bar		5 bar		6 bar		Piston Outward Stroke, ml/bar
		0° (Min)	90° (Max)	90° (Min)	0° (Max)	90° (Min)	0° (Max)	90° (Min)	0° (Max)	90° (Min)	0° (Max)	
AS32	21	2	3	2	3	3	4	5	6	6	7	40
	12	3	5	-	-	1	3	3	5	4	6	
	22	4	6	-	-	1	2	2	4	3	5	
AS50	02	6	13	3	10	9	16	14	21	20	27	137
	21	8	14	2	8	8	14	13	19	19	25	
	12	9	16	-	-	6	13	11	18	17	24	
	22	12	18	-	-	4	10	9	15	15	21	
AS63	02	11	22	8	19	18	29	28	39	38	49	280
	21	15	24	6	15	16	25	26	35	36	45	
	12	16	29	1	14	11	24	21	34	31	44	
	22	21	35	-	-	5	19	15	29	25	39	
AS80	201	13	23	29	39	46	56	63	73	80	90	450
	211	19	34	18	33	35	50	52	67	69	84	
	121	23	40	12	29	29	46	46	63	63	80	
	112	23	43	9	29	26	46	43	63	60	80	
	212	26	47	5	26	22	43	39	60	56	77	
	222	36	61	-	-	8	33	25	50	42	67	
AS100	201	40	59	51	70	87	106	124	143	161	180	1040
	211	51	77	33	59	69	95	106	132	143	169	
	121	53	81	29	57	65	93	102	130	139	167	
	112	61	96	14	49	50	85	87	122	124	159	
	212	71	109	-	-	37	75	74	112	111	149	
	222	83	127	-	-	19	63	56	100	93	137	

Note: For Any Other Spring Combination Contact Uflow

\* Specifications are subject to change without notice