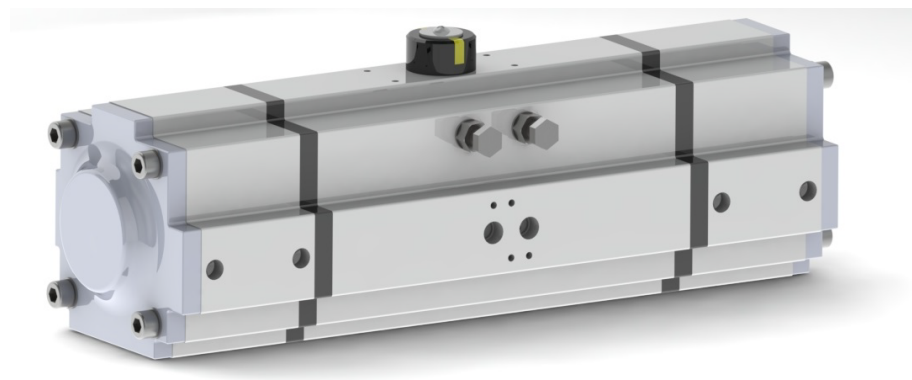




UG 3-Position Pneumatic Rack & Pinion Actuator



High performance and Reliability
Compliant with International Standards
Applicable to wide range of specifications and torque requirements
Compact Design reduces space requirements



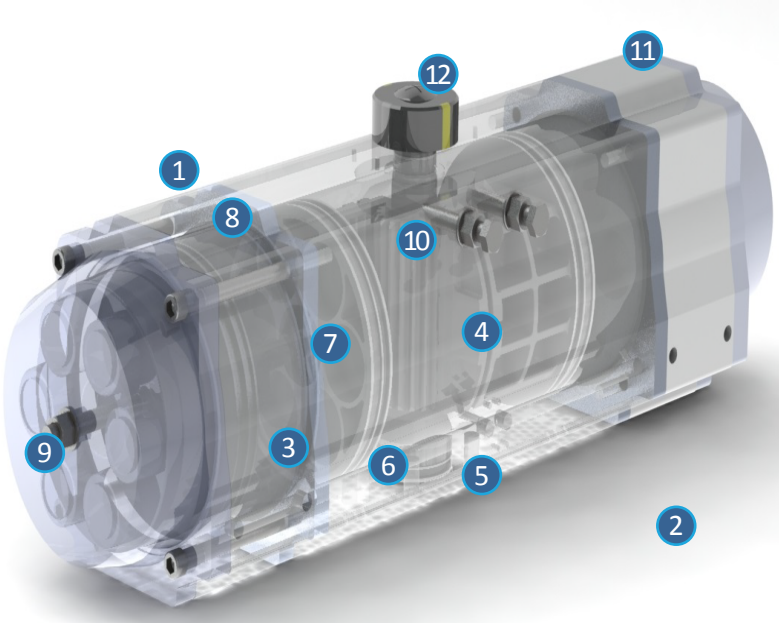
DESIGN AND CONSTRUCTION

DESIGN

UG series pneumatic actuators have introduced improvement design for rack and pinion. It is always UG's mission to offer initiative products by combining the long field experiences in products application and the latest production and materials technology available in the market today. The benefit of new design has long been verified in practice. With new technical features equipped, UG series pneumatic actuators have advantageous characteristic in:

- Reliability
- High performance
- Fully compliance with all the latest international standards
- Extensive products range allows best versatility at lower price
- Innovations and patented solutions for a universal drive shaft
- Multifunction position indicator
- Compact and light

CONSTRUCTION

1. A single compact design utilizing identical body and end caps for both double acting and spring return models. This feature reduces inventory and allows field conversion, by adding or removing modular spring cartridges.
 2. Full conformance to following latest specifications: ISO 5211, DIN 3337 and VDI/VDE 3845 for product interchangeability and easy mounting of solenoids, limit switches and other accessories.
 3. U G piston rack and pinion design for compact construction, symmetric mounting position, high-cycle life and fast operation. Reverse rotation can be accomplished in the field by simply inverting the pistons.
 4. Two independent external travel stop adjustments permit easy and precise adjustment of $\pm 5^\circ$ in both directions. This adjustment may be made in either the open or closed position and provides for accurate valve alignment.
 5. Multiple bearings and guides on pistons and racks for precise operation, low friction, high cycle life and a blowout proof pinion shaft.
 6. Electroless nickel-plated blowout resistant, bearing guided, one-piece pinion shaft for improved safety and maximum cycle life.
 7. High precision teeth on piston racks and pinion shaft for accurate positioning, low backlash, and maximum engagement resulting in overall efficient operation.
 8. Extruded aluminum body with both internal and external corrosion protections having a honed cylinder surface for longer life and a lower coefficient of friction.
 9. Modular preloaded spring cartridges designed with coated springs for simple range versatility, greater safety and corrosion resistance.
 10. Selected high quality bearings and seals that provide a wide operating temperature range, low friction, and high cycle life.
 11. Internal and external stainless steel fasteners for long term corrosion resistance.
 12. Multifunctional position indicator for visual position indication, and a direct, easy, economical way to mount popular sensors.
- 

RANGE OF OPTIONS, QUALITY MANUFACTURING, AND ACCESSORIES

RANGE OF OPTIONS

- A. Stainless steel 304 or 316 drive shafts are available on request for all sizes no matter the type of corrosion protection selected.
- B. For extremely high or low temperature applications, all models may be equipped with FPM or Silicon O rings along with an UG tested and certified suitable lubricant.
- C. Other than the standard double square bottom drive shaft connection, we can supply a keyed drive connection, a flat head connection or a special personalized drive connection.

QUALITY MANAGEMENT

- Production conforms to ISO9001.
- Each individual actuator has been factory inspected and tested and given a serial number for full traceability.
- Each individual actuator is individually packed in a special cardboard carton for protection, with a product description label for easy identification and includes installation, operation and maintenance instructions.

ACCESSORIES AVAILABLE

- Different Square reductions suitable for drive shaft
- Centering rings for all sizes
- Brackets
- Couplings
- Solenoid valves
- Switch boxes
- Proximity switches
- Gear boxes
- Positioners

Working Condition and Principle

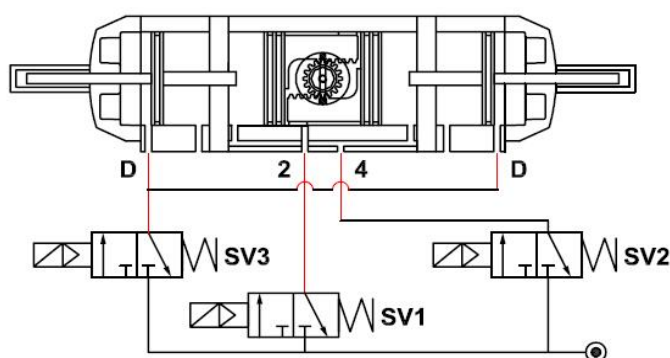
Three-Position Actuator

Three-position actuator is a special size of actuator that provide a three-position operation of 0° 、 x° and 90° . The intermediate position is achieved by an external mechanical stop with 2 auxiliary pistons, The intermediate position is adjustable, such as a 90° actuator that provide intermediate positions of 20° 、 30° 、 50° 、 70° , etc.

Principle

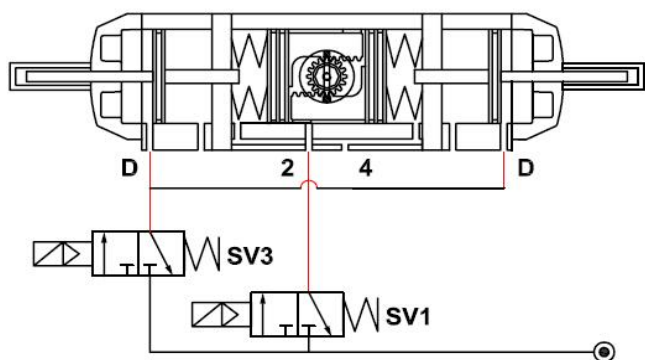
The operation of the three-position actuator requires designing a solenoid valve control loop system to complete the operation. The control principle is as follows:

➤ Double acting working principle



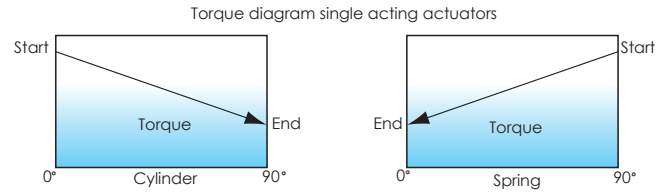
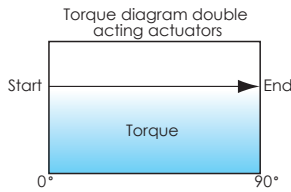
Rotation	Solenoid vale energized	Pressurized port
0° - 90°	SV1	2
90° - 0°	SV2	4
0° - X°	frist SV3 +after SV1	D、2
X° - 90°	SV1	2
90° - X°	SV3	D
X° - 0°	SV2	4

➤ Single acting working principle



Rotation	Solenoid vale energized	Pressurized Port
0° - 90°	SV1	2
90° - 0°	Spring acting, air failure at port 2	
0° - X°	frist SV3 +after SV1	D、2
X° - 90°	SV1	2
90° - X°	frist SV1 +after SV3	D、2
X° - 0°	Spring acting, air failure at port 2	

METRIC TORQUE RATINGS



DOUBLE ACTING TORQUE RATINGS IN Nm

Model	Supply Pressure (Unit: Bar)									
	2.5	3	3.5	4	4.5	5	5.5	6	7	8
UG0503P	8.6	10.4	12.3	14.2	16.0	17.9	19.8	21.6	25.4	29.1
UG0653P	17.4	21.2	25.0	28.7	32.5	36.3	40.1	43.9	51.4	59.0
UG0753P	27.0	32.9	38.8	44.7	50.5	56.4	62.3	68.2	79.9	91.7
UG0853P	39.7	48.3	56.9	65.6	74.2	82.8	91.4	100.1	117.3	134.6
UG0953P	55.7	67.9	80.0	92.1	104.2	116.4	128.5	140.6	164.8	189.1
UG1103P	72.0	89.3	105.0	120.6	136.3	152.0	167.6	183.3	214.6	245.9
UG1253P	128.7	159.5	187.5	215.4	243.4	271.4	299.4	327.4	383.3	439.3
UG1403P	196.4	237.4	278.3	319.2	360.2	401.1	442.0	482.9	564.8	646.6
UG1603P	263.5	326.6	383.9	441.2	498.5	555.8	613.1	670.4	785.0	899.7
UG1903P	428.5	518.0	607.3	696.6	785.9	875.3	964.6	1053.9	1232.5	1411.1
UG2103P	598.2	723.2	847.9	972.6	1097.3	1222.0	1346.6	1471.3	1720.7	1970.1
UG2403P	928.3	1121.7	1315.1	1508.5	1701.9	1895.3	2088.7	2282.1	2668.9	3055.7
UG2703P	1305.4	1577.4	1849.4	2121.3	2393.3	2665.2	2937.2	3209.2	3753.1	4297.0
UG3003P	1678.6	2029.4	2379.3	2729.2	3079.1	3429.0	3778.9	4128.8	4828.5	5528.3
UG3503P	2492.5	3011.8	3531.1	4050.4	4569.6	5088.9	5608.2	6127.5	7166.0	8204.6
UG4003P	3798.1	4589.4	5380.7	6172.0	6963.3	7754.5	8545.8	9337.1	10919.7	12502.2

SINGLE ACTING TORQUE RATINGS IN Nm

Model	Supply Pressure (Unit: Bar)																				Spring Retain (Nm)	
	2.5		3		3.5		4		4.5		5		5.5		6		7		8			
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
UG0503P S05	5.1	3.4	6.9	5.3	8.8	7.2	10.7	9.0	12.5	10.9	14.4	12.8									5.2	3.5
UG0503P S06	4.4	2.4	6.2	4.3	8.1	6.1	10.0	8.0	11.8	9.9	13.7	11.7	15.6	13.6							6.2	4.2
UG0503P S07			5.5	3.2	7.4	5.1	9.3	7.0	11.1	8.8	13.0	10.7	14.9	12.6	16.7	14.4					7.2	4.9
UG0503P S08					6.7	4.1	8.6	5.9	10.4	7.8	12.3	9.7	14.2	11.5	16.0	13.4	19.8	17.1			8.2	5.6
UG0503P S09							7.9	4.9	9.7	6.8	11.6	8.6	13.5	10.5	15.3	12.4	19.1	16.1	22.8	19.8	9.3	6.3
UG0503P S10									9.0	5.7	10.9	7.6	12.8	9.5	14.6	11.3	18.4	15.1	22.1	18.8	10.3	7.0
UG0503P S11											10.2	6.6	12.1	8.4	13.9	10.3	17.7	14.0	21.4	17.8	11.3	7.7
UG0503P S12													11.4	7.4	13.2	9.3	17.0	13.0	20.7	16.7	12.4	8.4
UG0653P S05	8.7	4.3	12.5	8.1	16.3	11.9	20.0	15.6	23.8	19.4	27.6	23.2									13.1	8.7
UG0653P S06	7.0	1.7	10.7	5.5	14.5	9.2	18.3	13.0	22.1	16.8	25.9	20.6	29.7	24.4							15.7	10.4
UG0653P S07			9.0	2.8	12.8	6.6	16.6	10.4	20.4	14.2	24.1	18.0	27.9	21.8	31.7	25.5					18.3	12.2
UG0653P S08					11.0	4.0	14.8	7.8	18.6	11.6	22.4	15.4	26.2	19.1	30.0	22.9	37.5	30.5			21.0	13.9
UG0653P S09							13.1	5.2	16.9	9.0	20.7	12.7	24.4	16.5	28.2	20.3	35.8	27.9	43.4	35.4	23.6	15.7
UG0653P S10									15.1	6.3	18.9	10.1	22.7	13.9	26.5	17.7	34.0	25.2	41.6	32.8	26.2	17.4
UG0653P S11											17.2	7.5	21.0	11.3	24.7	15.1	32.3	22.6	39.9	30.2	28.8	19.1
UG0653P S12													19.2	8.7	23.0	12.4	30.6	20.0	38.1	27.6	31.4	20.9
UG0753P S05	16.3	10.2	22.2	16.1	28.1	21.9	34.0	27.8	39.8	33.7	45.7	39.6									16.9	10.7
UG0753P S06	14.2	6.8	20.1	12.7	25.9	18.6	31.8	24.4	37.7	30.3	43.6	36.2	49.4	42.1							20.2	12.8
UG0753P S07			17.9	9.3	23.8	15.2	29.7	21.1	35.6	26.9	41.4	32.8	47.3	38.7	53.2	44.6					23.6	15.0
UG0753P S08					21.7	11.8	27.5	17.7	33.4	23.6	39.3	29.4	45.2	35.3	51.0	41.2	62.8	53.0			27.0	17.1
UG0753P S09							25.4	14.3	31.3	20.2	37.1	26.1	43.0	32.0	48.9	37.8	60.7	49.6	72.4	61.3	30.3	19.3
UG0753P S10									29.1	16.8	35.0	22.7	40.9	28.6	46.8	34.5	58.5	46.2	70.3	58.0	33.7	21.4
UG0753P S11											32.9	19.3	38.7	25.2	44.6	31.1	56.4	42.8	68.1	54.6	37.1	23.5
UG0753P S12													36.6	21.8	42.5	27.7	54.2	39.5	66.0	51.2	40.4	25.7
UG0853P S05	23.2	13.7	31.8	22.3	40.4	30.9	49.0	39.5	57.6	48.1	66.3	56.8									26.1	16.6
UG0853P S06	19.8	8.4	28.4	17.0	37.1	25.7	45.7	34.3	54.3	42.9	62.9	51.5	71.6	60.2							31.3	19.9
UG0853P S07			25.1	11.8	33.8	20.5	42.4	29.1	51.0	37.7	59.6	46.3	68.3	55.0	76.9	63.6					36.5	23.2
UG0853P S08					30.4	15.2	39.1	23.9	47.7	32.5	56.3	41.1	64.9	49.7	73.6	58.4	90.8	75.6			41.7	26.5
UG0853P S09							35.8	18.7	44.4	27.3	53.0	35.9	61.6	44.5	70.3	53.2	87.5	70.4	104.8	87.7	46.9	29.8
UG0853P S10									41.1	22.1	49.7	30.7	58.3	39.3	67.0	48.0	84.2	65.2	101.5	82.5	52.1	33.1
UG0853P S11											46.4	25.5	55.0	34.1	63.6	42.7	80.9	60.0	98.1	77.2	57.3	36.4
UG0853P S12													51.7	28.9	60.3	37.5	77.6	54.8	94.8	72.0	62.5	39.7
UG0953P S05	33.6	20.9	45.8	33.0	57.9	45.1	70.0	57.3	82.1	69.4	94.3	81.5									34.9	22.1
UG0953P S06	29.2	13.9	41.4	26.1	53.5	38.2	65.6	50.3	77.7	62.4	89.8	74.5	102.0	86.7							41.8	26.5
UG0953P S07			36.9	19.1	49.1	31.2	61.2	43.3	73.3	55.4	85.4	67.6	97.5	79.7	109.7	91.8					48.8	30.9
UG0953P S08					44.6	24.2	56.8	36.4	68.9	48.5	81.0	60.6	93.1	72.7	105.2	84.8	129.5	109.1			55.8	35.4
UG0953P S09							52.3	29.4	64.5	41.5	76.6	53.6	88.7	65.8	100.8	77.9	125.1	102.1	149.3	126.4	62.7	39.8
UG0953P S10									60.0	34.5	72.2	46.7	84.3	58.8	96.4	70.9	120.6	95.1	144.9	119.4	69.7	44.2
UG0953P S11											67.7	39.7	79.9	51.8	92.0	63.9	116.2	88.2	140.5	112.4	76.7	48.6
UG0953P S12													75.4	44.8	87.6	57.0	111.8	81.2	136.0	105.4	83.6	53.0
UG1103P S05	43.4	26.2	60.7	43.4	76.4	59.1	92.0	74.8	107.7	90.4	123.4	106.1									45.9	28.6
UG1103P S06	37.7	17.0	55.0	34.3	70.6	49.9	86.3	65.6	102.0	81.3	117.6	96.9	133.3	112.6							55.0	34.3
UG1103P S07			49.3	25.1	64.9	40.8	80.6	56.4	96.2	72.1	111.9	87.8	127.6	103.4	143.2	119.1					64.2	40.0
UG1103P S08					59.2	31.6	74.9	47.3	90.5	62.9	106.2	78.6	121.9	94.3	137.5	109.9	168.9	141.3			73.4	45.8
UG1103P S09							69.1	38.1	84.8	53.8	100.5	69.4	116.1	85.1	131.8	100.8	163.1	132.1	194.5	163.4	82.5	51.5
UG1103P S10									79.1	44.6	94.8	60.3	110.4	75.9	126.1	91.6	157.4	122.9	188.7	154.2	91.7	57.2
UG1103P S11											89.0	51.1	104.7	66.7	120.4	82.4	151.7	113.7	183.0	145.1	100.9	62.9
UG1103P S12													99.0	57.6	114.6	73.2	146.0	104.6	177.3	135.9	110.0	68.6

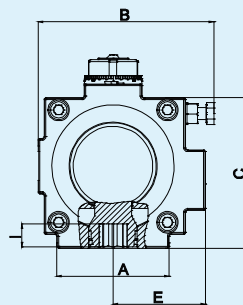
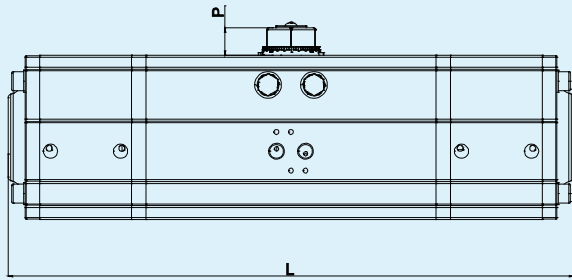
METRIC TORQUE RATINGS

SINGLE ACTING TORQUE RATINGS IN Nm

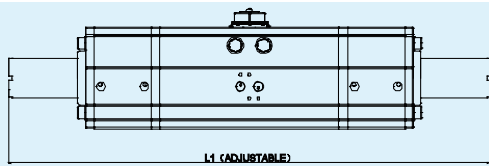
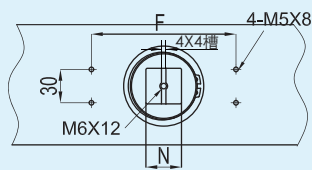
Model	Supply Pressure (Unit: Bar)																				Spring Retain (Nm)	
	2.5		3		3.5		4		4.5		5		5.5		6		7		8			
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
UG1253P S05	77.7	48.2	108.5	78.9	136.5	106.9	164.4	134.9	192.4	162.9	220.4	190.9									80.6	51.0
UG1253P S06	67.5	32.0	98.3	62.8	126.3	90.8	154.2	118.8	182.2	146.8	210.2	174.7	238.2	202.7							96.7	61.2
UG1253P S07			88.1	46.7	116.1	74.7	144.0	102.7	172.0	130.7	200.0	158.6	228.0	186.6	256.0	214.6					112.8	71.4
UG1253P S08					105.9	58.6	133.8	86.6	161.8	114.5	189.8	142.5	217.8	170.5	245.8	198.5	301.7	254.4			128.9	81.6
UG1253P S09							123.6	70.5	151.6	98.4	179.6	126.4	207.6	154.4	235.6	182.4	291.5	238.3	347.5	294.3	145.0	91.8
UG1253P S10									141.4	82.3	169.4	110.3	197.4	138.3	225.4	166.3	281.3	222.2	337.3	278.2	161.1	102.0
UG1253P S11											159.2	94.2	187.2	122.2	215.2	150.2	271.1	206.1	327.1	262.1	177.2	112.2
UG1253P S12													177.0	106.1	205.0	134.0	260.9	190.0	316.9	246.0	193.3	122.4
UG1403P S05	114.2	74.1	155.1	115.0	196.1	156.0	237.0	196.9	277.9	237.8	318.8	278.7									122.4	82.3
UG1403P S06	97.7	49.6	138.7	90.6	179.6	131.5	220.5	172.4	261.5	213.3	302.4	254.3	343.3	295.2							146.8	98.7
UG1403P S07			122.2	66.1	163.2	107.0	204.1	147.9	245.0	188.9	285.9	229.8	326.9	270.7	367.8	311.6					171.3	115.2
UG1403P S08					146.7	82.5	187.6	123.5	228.6	164.4	269.5	205.3	310.4	246.2	351.3	287.2	433.2	369.0			195.8	131.6
UG1403P S09							171.2	99.0	212.1	139.9	253.0	180.9	294.0	221.8	334.9	262.7	416.7	344.6	498.6	426.4	220.2	148.1
UG1403P S10							243.2	149.2		195.7	115.5	236.6	156.4	277.5	318.4	238.2	400.3	320.1	482.1	401.9	244.7	164.5
UG1403P S11											220.1	131.9	261.1	172.8	302.0	213.8	383.8	295.6	465.7	377.5	269.2	181.0
UG1403P S12													244.6	148.4	285.5	189.3	367.4	271.1	449.2	353.0	293.6	197.4
UG1603P S05	153.5	101.3	216.6	164.4	273.9	221.7	331.2	279.0	388.5	336.3	445.8	393.6									162.3	110.0
UG1603P S06	131.5	68.8	194.6	131.9	251.9	189.2	309.2	246.5	366.5	303.8	423.8	361.1	481.1	418.4							194.7	132.0
UG1603P S07			172.6	99.5	229.9	156.8	287.2	214.1	344.5	271.4	401.8	328.7	459.1	386.0	516.4	443.3					227.2	154.0
UG1603P S08					207.9	124.3	265.2	181.6	322.5	238.9	379.8	296.2	437.1	353.5	494.4	410.8	609.0	525.4			259.6	176.0
UG1603P S09									300.5	206.5	357.8	263.8	415.1	321.1	472.4	378.4	587.0	493.0	701.7	607.6	292.1	198.0
UG1603P S10											278.5	174.0	335.8	231.3	393.1	288.6	450.4	345.9	565.0	460.5	679.7	575.2
UG1603P S11													313.8	198.9	371.1	256.2	428.4	313.5	543.0	428.1	657.7	542.7
UG1603P S12															349.1	223.7	406.4	281.0	521.0	395.6	635.7	510.3
UG1903P S05	246.8	167.4	336.3	256.9	425.6	346.2	514.9	435.5	604.2	524.8	693.5	614.1									261.2	181.8
UG1903P S06	210.4	115.1	299.9	204.6	389.2	293.9	478.5	383.3	567.8	472.6	657.2	561.9	746.5	651.2							313.4	218.1
UG1903P S07			263.6	152.4	352.9	241.7	442.2	331.0	531.5	420.3	620.8	509.6	710.1	599.0	799.4	688.3					365.6	254.5
UG1903P S08					316.5	189.5	405.8	278.8	495.1	368.1	584.5	457.4	673.8	546.7	763.1	636.0	941.7	814.7			417.8	290.8
UG1903P S09							369.5	226.6	458.8	315.9	548.1	405.2	637.4	494.5	726.7	583.8	905.3	762.4	1084.0	941.1	470.1	327.2
UG1903P S10									422.4	263.6	511.8	353.0	601.1	442.3	690.4	531.6	869.0	710.2	1047.6	888.8	522.3	363.5
UG1903P S11											475.4	300.7	564.7	390.0	654.0	479.3	832.6	658.0	1011.3	836.6	574.5	399.9
UG1903P S12													528.4	337.8	617.7	427.1	796.3	605.7	974.9	784.4	626.8	436.2
UG2103P S05	352.8	239.1	477.8	364.1	602.5	488.8	727.2	613.5	851.9	738.2	976.6	862.9									359.1	245.4
UG2103P S06	303.7	167.3	428.7	292.3	553.4	417.0	678.1	541.7	802.8	666.4	927.5	791.0	1052.2	915.7							430.9	294.5
UG2103P S07			379.6	220.5	504.3	345.2	629.0	469.8	753.7	594.5	878.4	719.2	1003.1	843.9	1127.8	968.6					502.7	343.6
UG2103P S08					455.3	273.3	579.9	398.0	704.6	522.7	829.3	647.4	954.0	772.1	1078.7	896.8	1328.1	1146.2			574.6	392.6
UG2103P S09							530.9	326.2	655.6	450.9	780.2	575.6	904.9	700.3	1029.6	825.0	1229.0	1074.3	1528.4	1323.7	646.4	441.7
UG2103P S10									606.5	379.1	731.2	503.8	855.8	628.4	980.5	753.1	1229.9	1002.5	1479.3	1251.9	718.2	490.8
UG2103P S11											682.1	431.9	806.8	556.6	931.5	681.3	1180.8	930.7	1430.2	1180.1	790.0	539.9
UG2103P S12													757.7	484.8	882.4	609.5	1131.8	858.9	1381.1	1108.3	861.8	589.0
UG2403P S05	517.8	374.3	711.2	567.7	904.6	761.1	1098.0	954.5	1291.4	1147.9	1484.8	1341.3									554.0	410.5
UG2403P S06	435.7	263.5	629.1	456.9	822.5	650.3	1015.9	843.7	1209.3	1037.1	1402.7	1230.5	1596.1	1423.9							664.8	492.6
UG2403P S07			547.0	346.1	740.4	539.5	933.8	732.9	1127.2	926.3	1320.6	1119.7	1514.0	1313.1	1707.4	1506.5					775.6	574.7
UG2403P S08					658.3	428.7	851.7	622.1	1045.1	815.5	1238.5	1008.9	1431.9	1202.3	1625.3	1395.7	2012.1	1782.5			886.4	656.8
UG2403P S09							769.6	511.3	963.0	704.7	1156.4	898.1	1349.8	1091.5	1543.2	1284.9	1930.0	1671.7	2316.8	2058.5	997.2	738.9
UG2403P S10									880.9	593.9	1074.3	787.3	1267.7	980.7	1461.1	1174.1	1847.9	1560.9	2234.7	1947.7	1108.0	821.0
UG2403P S11											992.2	676.5	1185.6	869.9	1379.0	1063.3	1765.8	1450.1	2152.6	1836.9	1218.8	903.1
UG2403P S12													1103.5	759.1	1296.9	952.5	1683.7	1339.3	2070.5	1726.1	1329.6	985.2
UG2703P S05	745.9	519.4	1017.9	791.4	1289.9	1063.4	1561.8	1335.3	1833.8	1607.3	2105.7	1879.2									786.0	559.5
UG2703P S06	634.0	362.2	906.0	634.2	1178.0	906.2	1449.9	1178.1	1721.9	1450.1	1993.8	1722.0	2265.8	1994.0						</		

INSTALLATION

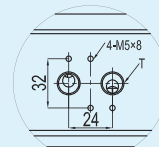
Reference Drawing



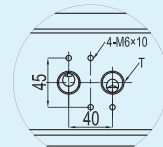
Top View



Air Connection

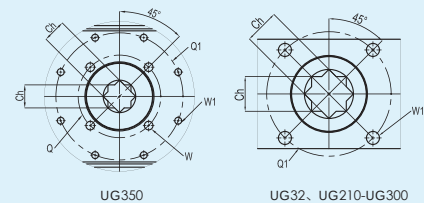


G1/4 NAMUR
UG50-UG210



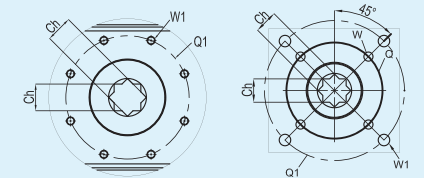
G1/2 NAMUR
UG240-UG400

Bottom View



UG350

UG32, UG210-UG300



UG400

UG50-UG190

U G 3-Position Series Pneumatic Actuator Dimension Table (Unit: mm)

MODEL	A	B	C	L1	E	F	P	N	I	ISO	Q	Q1	W	W1	Ch	T
UG050	45.0	70.5	70	242	42	80	20	10	12	F03/F05	36	50	M5*7.5	M6*9	11*11	G1/4"
UG065	62.0	89.5	89	333	52	80	20	10	16	F05/F07	50	70	M6*9	M8*12	14*14	G1/4"
UG075	68.0	102.5	100	372	59	80	20	14	16	F05/F07	50	70	M6*9	M8*12	14*14	G1/4"
UG085	68.0	112.5	113	405	64	80	20	14	19	F05/F07	50	70	M6*9	M8*12	17*17	G1/4"
UG095	92.0	126	123	442	71	80	20	14	19	F05/F07	50	70	M6*9	M8*12	17*17	G1/4"
UG110	93.0	138.5	136	468	77	80	20	14	19	F07/F10	70	102	M8*12	M10*15	17*17	G1/4"
UG125	96.0	157	161	567	85	80/130	30	22	25	F07/F10	70	102	M8*12	M10*15	22*22	G1/4"
UG140	110.0	178	178	641	97	80/130	30	22	31	F10/F12	102	102	M10*15	M12*18	27*27	G1/4"
UG160	112.0	196	200	677	106	130	30	22	31	F10/F12	102	102	M10*15	M12*18	27*27	G1/4"
UG190	136.0	216.5	232	762	112	130	30	22	41	F10/F14	102	125	M10*15	M16*24	36*36	G1/4"
UG210	140.0	235.5	255	866	120	130	30	32	40	F14	/	140	/	M16*24	36*36	G1/4"
UG240	159.0	262	292	1010	131	130	30	32	50	F16	/	165	/	M20*25	46*46	G1/2"
UG270	159.0	295	331	1092	148	130	30	32	50	F16	/	165	/	M20*25	46*46	G1/2"
UG300	180.0	335	354	1232	173	130	30	32	50	F16	/	165	/	M20*25	46*46	G1/2"
UG350	270.0	385	410	1353	195	130	30	32	50	F16/F25	165	254	M20*25	M16*24	46*46	G1/2"
UG400	290.0	520	466	1600	260	130	30	32	60	F25	/	254	/	M16*24	55*55	G1/2"

MODEL SELECTION

MODEL	TYPE	SPRING QTY	FLANGE	SQURE	OPTION	SEALING
UG050-3P	AD*:Double Acting Adjustable Type	Only For Spring Return: 5 6 7 8 9 10 11 12	F03/F05	11*11	END CAP COLOR RAL7046 RAL9004 RAL5021 RAL3020 RAL6002 RAL5015 BODY S:Grey H:Dark Grey Standard Nitrile Rubber -15℃～+80℃ HT Fluoro Rubber -15℃～+150℃ LT Silastic -40℃～+80℃	
UG065-3P			F05/F07	14*14		
UG075-3P			F05/F07	14*14		
UG085-3P			F05/F07	17*17		
UG095-3P			F05/F07	17*17		
UG110-3P	ND:Double Acting Non-adjustable Type		F07/F10	17*17		
UG125-3P			F07/F11	22*22		
UG140-3P	AS*:Spring Return Adjustable Type		F10/F12	27*27		
UG160-3P			F10/F12	27*27		
UG190-3P			F10/F14	36*36		
UG210-3P	NS:Spring Return OF Non-adjustable Type		F14	36*36		
UG240-3P			F16	46*46		
UG270-3P			F16	46*46		
UG300-3P			F16	46*46		
UG350-3P			F16/F25	46*46		
UG400-3P			F25	55*55		

*:AD and AS Please contact the sales.

Note:

- 1.The standard rotation of double acting and spring return is clockwise to close(for double acting when port 4 is pressurised).
- ISO2.The standard temperature of sealing part is -15℃to 80℃,if high temperature or low temperature required,relevant sealing parts can be used.
- 3.All technical parameters of products please refer to this catalog.Customization for special requirement is available. Please contact the sales.
- 4.Customization including but not limited to the items below:
 - 1)Color combination.
 - 2)Flange and Square custom made.
 - 3)Higher protection level.

Model Selection Example:

Example1:UG0953PND F07/10 17 P7046

Description:Actuator model UG095,double acting Non-adjustable, F07&F10,17 mm bottom square with standard indicator,P body, cap color grey(RAL7046),nitrile rubber sealing.

Example2:UG1903PNS12 F10/14 36 S5021HT

Description:Actuator model U G 190,single acting spring return, with 12 springs ,ISO flange F10&F14,36 mm bottom square ,S body, cap color green(RAL5021), fluororubber sealing.