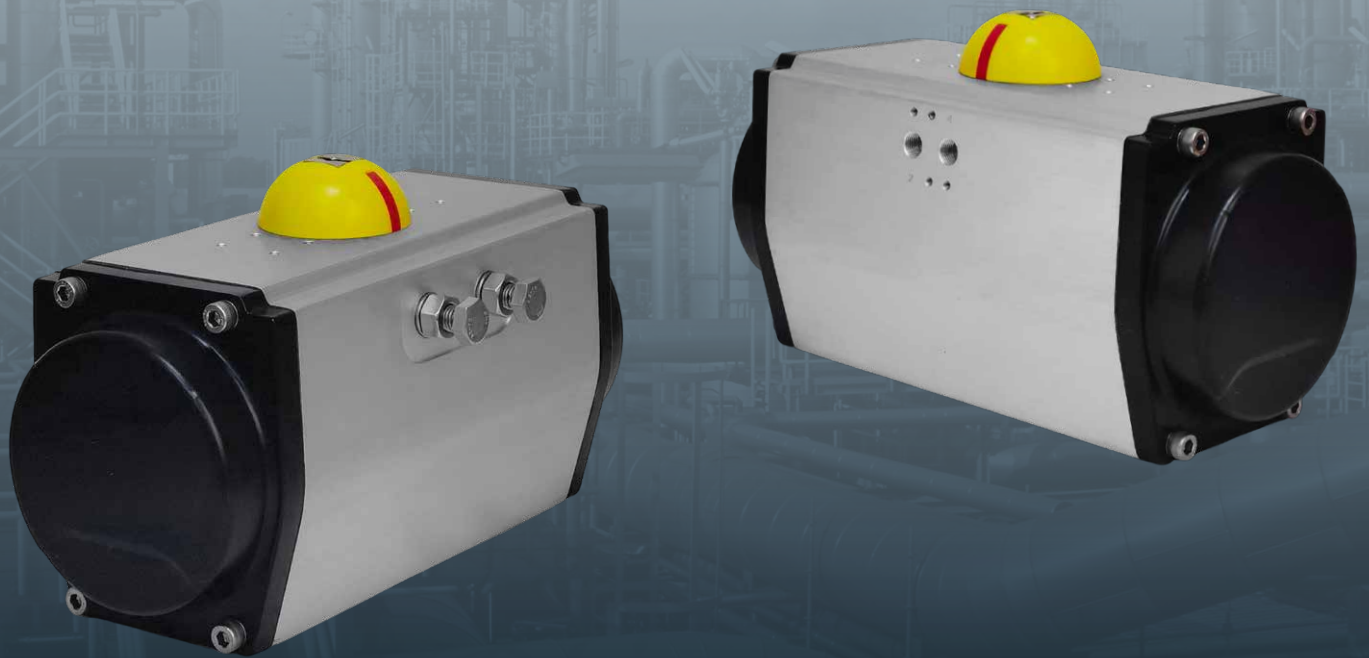


rotork®

Keeping the World Flowing
for Future Generations

GTE range



Rack and pinion actuators for part-turn valve control

GTE range rack & pinion actuators

The GTE range pneumatic rack and pinion actuators provide an optimised, cost-efficient solution for a wide range of applications.

There are a wide range of body sizes available in both double-acting and spring-return configurations. Units can be easily changed from one to the other – even in the field.

The GTE range is optimised for applications requiring 90 degree drive rotation. Optional valve mounting kits and de-clutchable manual gear overrides are also available, all designed to suit the GTE.

In addition to stand-alone actuators, Rotork can supply optimised valve automation packages based on customer requirements. For example, the GTE actuators can be equipped with NAMUR solenoid valves, limit switches and applicable precision instrumentation components. Accessory mounting conforms to NAMUR specifications and valve mounting dimensions are per ISO 5211 standards.

Rotork can provide a variety of additional services including application engineering, installation and retrofit, as well as maintenance and repair by factory-trained service personnel.

The compact design and wide selection of available options makes GTE a perfect choice for many applications requiring rack and pinion type valve actuation.

Every Rotork product is built to provide long and efficient service with a minimum of maintenance. The design, engineering and materials used in the construction ensure optimum performance even in the harshest of environments.

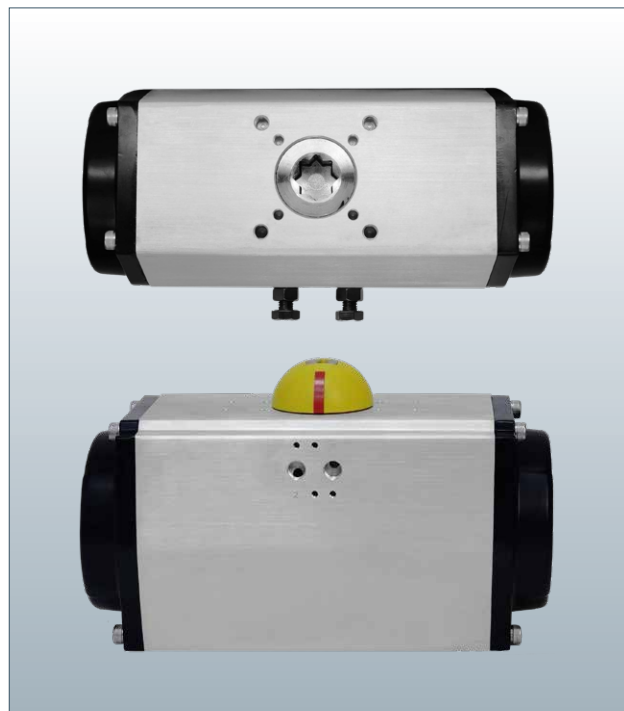
As a global leader in valve actuation technology, we provide a comprehensive range of valve actuators, controls and associated equipment. We also supply a variety of valve actuator services including commissioning, preventive maintenance and retrofit solutions.

Rotork specialises in the production and support of fluid power actuators and control systems. We are dedicated to providing the marketplace with the latest technology, consistently high quality, innovative design, excellent reliability and superior performance.

We maintain dedicated engineering groups for Applications, Product Improvement and New Product Development so that our customers can gain all the benefits that ever-advancing technologies have to offer and to ensure our efforts are in step with the continually evolving needs of our customers.

Most importantly, we have a long-standing commitment to meeting the special needs of a wide range of applications including: oil and gas exploration and transportation; municipal water and wastewater treatment; power generation; and the chemical and process industries.

With over 60 years of engineering and manufacturing expertise, we have hundreds of thousands of successful valve actuator installations throughout the world.



Fitting accessories

The right accessory solutions

Valves and actuators only perform as well as the solution is engineered. With decades of experience engineering fluid power valve automation for a multitude of applications and markets, you can depend on Rotork to provide a reliable and safe automation solution to meet your requirements.

In addition to the valve actuator itself, Rotork manufactures a wide range of precision flow control and accessory products as well as a variety of gearboxes and override options. We have designs to withstand the challenges of any valve operating environment.



Inside the GTE actuator

Every Rotork actuator is built to provide long and efficient service with minimum maintenance. The design, engineering and materials used in their construction ensure optimum performance, even in the harshest of environments.

Supply	Filtered air ISO 8573-1:2010
Optional:	Others on request
Operating pressure	2.5 to 8 bar (36 to 116 psi)
Torque output	2 to 6,300 Nm (18 to 55,760 lbf.in)
Temperature ranges	
Normal:	-18 to +80 °C (-0.4 to +176 °F) (sizes from 050 to 210) -20 to +80 °C (-4 to +176 °F) (sizes from 240 to 300) NBR/Silicone O-ring, Nylon 66 guide
Enhanced:	-40 to +80 °C (-40 to +176 °F) LNBR/Silicone O-ring, Nylon 66 guide

Mounting standards

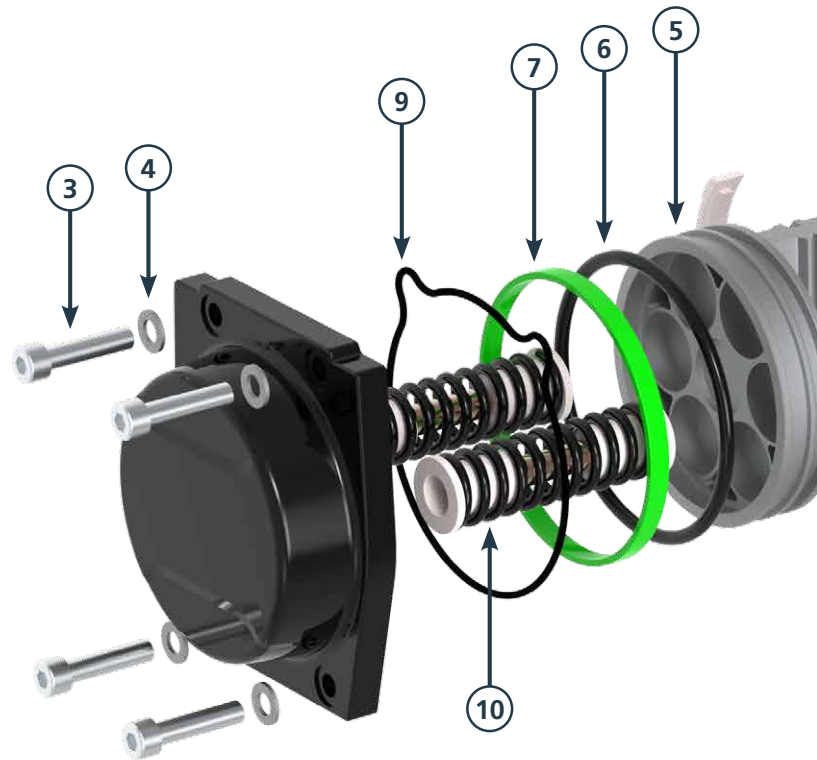
Air supply:	VDI/VDE 3845, NAMUR EN ISO 228 G 1/8" (sizes from 050 to 075) EN ISO 228 G 1/4" (sizes from 085 to 210) EN ISO 228 G 1/2" (sizes from 240 to 300)
Accessories:	VDI/VDE 3845, NAMUR
Valve interface:	ISO 5211
Valve shaft interface:	ISO 5211 double square <i>Other interface options available, see Page 8.</i>

Rotation 90°

Stroke adjustment -5° to +5° from 0° and 90° position. Dual-direction travel stops acting upon the piston(s)¹

Materials

Body:	Anodised aluminium
Pinion:	Carbon steel electroless nickel plated
Pistons:	Aluminium
End caps:	Aluminium, epoxy paint (black RAL 9005)
Spring:	Spring steel

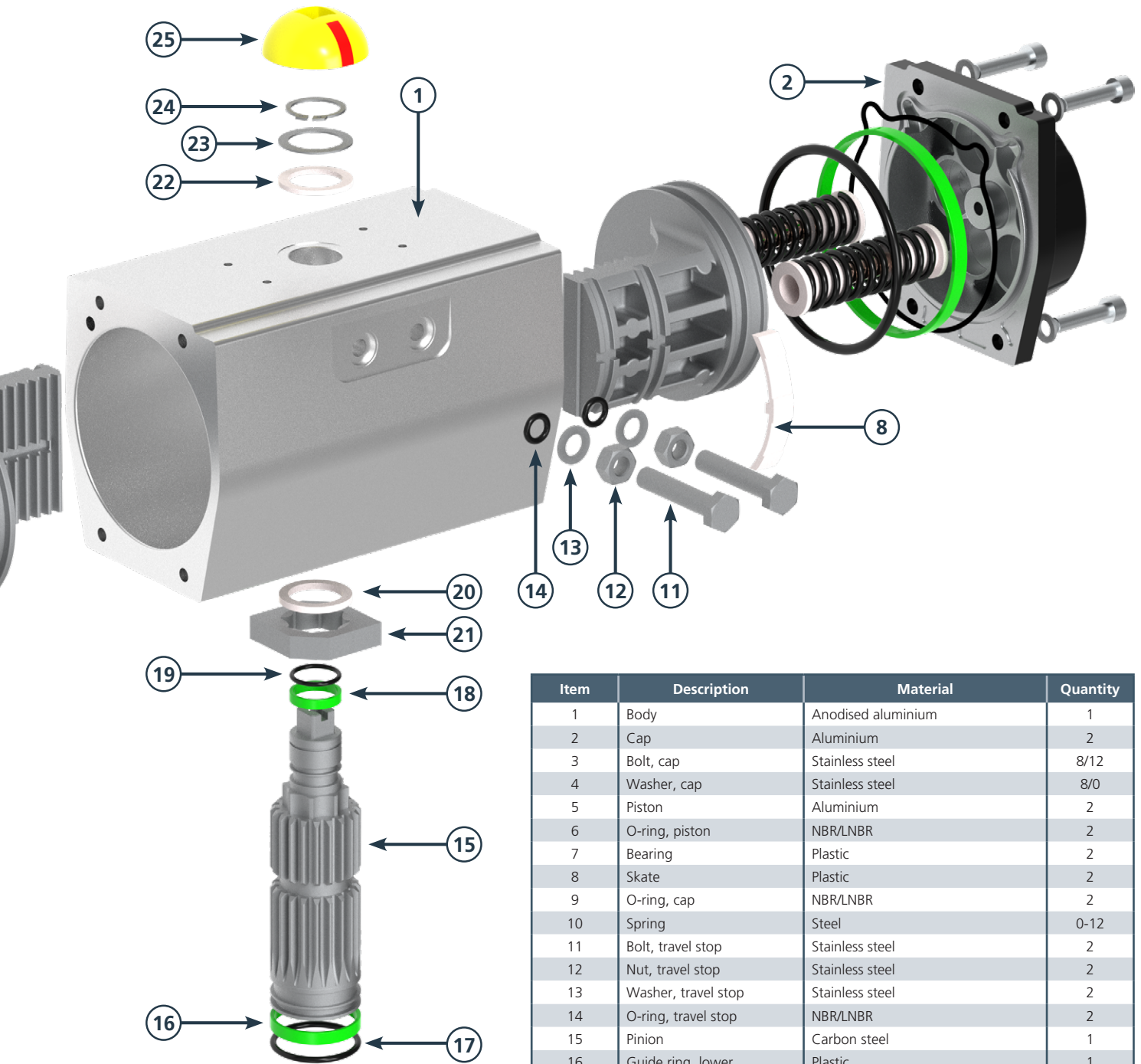


Approvals and industry standards

- Complies with IEC 60529 (1989)+(A1:1999)+(A2:2013) for IP66M/67M
- Engineered to ISO 9001:2015 requirements

¹ GTE range actuators are available with dual-direction of travel stop adjustment. Both inboard and outboard stop adjustments are +/- 5° (e.g. -5° to +5°, 85° to 95°).

Inside the GTE actuator



Item	Description	Material	Quantity
1	Body	Anodised aluminium	1
2	Cap	Aluminium	2
3	Bolt, cap	Stainless steel	8/12
4	Washer, cap	Stainless steel	8/0
5	Piston	Aluminium	2
6	O-ring, piston	NBR/LNBR	2
7	Bearing	Plastic	2
8	Skate	Plastic	2
9	O-ring, cap	NBR/LNBR	2
10	Spring	Steel	0-12
11	Bolt, travel stop	Stainless steel	2
12	Nut, travel stop	Stainless steel	2
13	Washer, travel stop	Stainless steel	2
14	O-ring, travel stop	NBR/LNBR	2
15	Pinion	Carbon steel	1
16	Guide ring, lower	Plastic	1
17	O-ring, pinion, lower	NBR/LNBR	1
18	Guide ring, upper	Plastic	1
19	O-ring, pinion, upper	NBR/LNBR	1
20	Block	Carbon steel	1
21	Spacer, inner	Plastic	1
22	Spacer, outer	Plastic	1
23	Washer	Stainless steel	1
24	Retaining ring	Stainless steel	1
25	Indicator	Plastic	1

Torque charts

Double-acting actuators (Nm) ±10%

Type	Air supply (unit: bar)									
	2.5	3	3.5	4	4.5	5	5.5	6	7	8
GTEA050DA	9.3	11.1	13.0	14.9	16.8	18.7	20.6	22.5	26.3	30.0
GTEA065DA	19.3	23.1	26.9	30.7	34.5	38.3	42.1	45.8	53.4	61.0
GTEA075DA	24.7	30.0	35.2	40.5	45.7	51.0	56.2	61.5	72.0	82.5
GTEA085DA	40.1	48.4	56.7	64.9	73.2	81.5	89.8	98.0	114.6	131.1
GETA095DA	59.3	71.6	83.9	96.3	108.6	120.9	133.2	145.6	170.2	194.9
GTEA110DA	81.1	98.0	114.9	131.7	148.6	165.5	182.4	199.3	233.1	266.9
GTEA125DA	129.4	156.3	183.1	210.0	236.8	263.7	290.5	317.4	371.1	424.8
GETA140DA	218.0	262.4	306.9	351.3	395.8	440.2	484.7	529.2	618.1	707.0
GTEA160DA	331.2	398.7	466.1	533.6	601.0	668.5	736.0	803.4	938.4	1073.3
GTEA190DA	504.3	606.1	708.0	809.8	911.7	1013.6	1115.4	1217.3	1421.0	1624.7
GTEA210DA	627.2	757.0	886.8	1016.5	1146.3	1276.1	1405.8	1535.6	1795.1	2054.7
GTEA240DA	985.8	1176.6	1367.4	1558.2	1749.0	1939.8	2130.6	2321.4	2703.0	3084.6
GTEA270DA	1460.5	1746.6	2032.6	2318.7	2604.7	2890.8	3176.8	3462.9	4035.0	4607.1
GTEA300DA	1982.8	2375.6	2768.4	3161.1	3553.9	3946.7	4339.5	4732.3	5517.8	6303.4

Single-acting actuators (Nm) ±10%

Type	Air supply (unit: bar)																				Spring torque	
	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°
GTEA050FC05	6.2	3.2	8.1	5.2	10.0	7.1	11.9	9.0	13.8	11.0	15.7	12.9	17.7	14.9	19.6	16.8	23.4	20.7	27.2	24.6	5.0	2.9
GTEA050FC06	5.5	2.1	7.4	4.1	9.3	6.0	11.2	7.9	13.1	9.8	15.0	11.7	16.9	13.7	18.8	15.6	22.7	19.4	26.5	23.2	6.1	3.7
GTEA050FC07	-	-	6.6	2.9	8.6	4.8	10.5	6.7	12.4	8.6	14.3	10.5	16.2	12.4	18.2	14.3	22.0	18.1	25.9	21.9	7.2	4.4
GTEA050FC08	-	-	-	-	7.8	3.8	9.7	5.7	11.7	7.6	13.6	9.5	15.6	11.4	17.5	13.3	21.4	17.0	25.2	20.8	8.4	5.1
GTEA050FC09	-	-	-	-	-	-	9.0	4.4	11.0	6.3	12.9	8.2	14.9	10.1	16.8	12.1	20.7	15.9	24.6	19.7	9.5	5.8
GTEA050FC10	-	-	-	-	-	-	-	-	10.2	5.0	12.2	7.0	14.1	8.9	16.1	10.9	20.0	14.8	23.9	18.7	10.7	6.5
GTEA050FC11	-	-	-	-	-	-	-	-	-	-	11.5	5.7	13.5	7.7	15.4	9.6	19.4	13.4	23.3	17.3	11.8	7.2
GTEA050FC12	-	-	-	-	-	-	-	-	-	-	-	-	12.8	6.4	14.8	8.3	18.7	12.1	22.7	15.8	12.9	7.9
GTEA065FC05	10.7	5.7	14.7	9.6	18.7	13.5	22.7	17.4	26.6	21.3	30.6	25.2	34.6	29.1	38.5	33.0	46.5	40.7	54.4	48.5	11.9	6.5
GTEA065FC06	9.4	3.2	13.4	7.1	17.3	11.0	21.3	14.9	25.2	18.9	29.2	22.8	33.1	26.7	37.1	30.6	45.0	38.4	52.9	46.2	14.4	7.9
GTEA065FC07	-	-	12.2	4.7	16.1	8.6	20.1	12.5	24.0	16.4	27.9	20.4	31.8	24.3	35.8	28.2	43.6	36.0	51.5	43.8	16.8	9.3
GTEA065FC08	-	-	-	-	14.9	5.8	18.8	9.7	22.7	13.7	26.6	17.7	30.5	21.6	34.4	25.6	42.3	33.5	50.1	41.5	19.3	10.6
GTEA065FC09	-	-	-	-	-	-	17.0	6.8	20.9	10.8	24.9	14.8	28.8	18.8	32.8	22.9	40.7	30.9	48.6	38.9	21.7	12.0
GTEA065FC10	-	-	-	-	-	-	-	-	19.1	8.0	23.1	12.0	27.1	16.1	31.1	20.1	39.1	28.2	47.1	36.3	24.2	13.4
GTEA065FC11	-	-	-	-	-	-	-	-	-	-	21.6	9.6	25.6	13.7	29.6	17.7	37.7	25.9	45.8	34.1	26.6	14.7
GTEA065FC12	-	-	-	-	-	-	-	-	-	-	-	-	24.1	11.3	28.1	15.4	36.3	23.6	44.4	31.8	29.1	16.1
GTEA075FC05	15.2	6.9	20.4	12.0	25.6	17.2	30.8	22.3	36.0	27.5	41.2	32.7	46.4	37.8	51.6	43.0	62.0	53.3	72.4	63.6	16.2	9.5
GTEA075FC06	12.5	3.3	17.8	8.4	23.0	13.5	28.2	18.7	33.4	23.8	38.6	28.9	43.9	34.0	49.1	39.2	59.5	49.4	70.0	59.7	19.8	11.5
GTEA075FC07	-	-	15.1	4.8	20.4	10.0	25.6	15.1	30.8	20.3	36.1	25.5	41.3	30.7	46.6	35.9	57.1	46.2	67.6	56.6	23.4	13.6
GTEA075FC08	-	-	-	-	18.1	6.4	23.3	11.6	28.6	16.9	33.8	22.1	39.0	27.3	44.2	32.6	54.6	43.0	65.1	53.5	27.0	15.7
GTEA075FC09	-	-	-	-	-	-	21.1	8.0	26.4	13.1	31.6	18.3	36.8	23.4	42.1	28.6	52.6	38.8	63.1	49.1	30.7	17.8
GTEA075FC10	-	-	-	-	-	-	-	-	24.2	9.4	29.4	14.5	34.7	19.5	40.0	24.6	50.5	34.7	61.0	44.8	34.3	19.9
GTEA075FC11	-	-	-	-	-	-	-	-	-	-	27.4	11.5	32.7	16.5	37.9	21.5	48.4	31.4	58.8	41.3	37.9	22.0
GTEA075FC12	-	-	-	-	-	-	-	-	-	-	-	-	30.6	13.2	35.8	18.2	46.2	28.1	56.6	38.1	41.5	24.1
GTEA085FC05	23.9	12.0	32.1	20.2	40.3	28.4	48.4	36.5	56.6	44.7	64.8	52.9	73.0	61.1	81.2	69.3	97.6	85.6	114.0	102.0	28.0	16.2
GTEA085FC06	19.7	5.5	27.9	13.8	36.2	22.0	44.4	30.3	52.7	38.5	60.9	46.8	69.2	55.1	77.4	63.3	94.0	79.8	110.5	96.3	33.7	19.6
GTEA085FC07	-	-	23.8	7.5	32.1	15.8	40.4	24.1	48.7	32.4	57.0	40.7	65.4	49.0	73.7	57.3	90.3	73.9	107.0	90.5	39.4	23.0
GTEA085FC08	-	-	-	-	28.7	10.7	36.9	18.8	45.1	26.9	53.3	35.0	61.5	43.1	69.7	51.2	86.1	67.5	102.5	83.7	45.1	26.4
GTEA085FC09	-	-	-	-	-	-	33.6	12.6	41.7	20.7	49.8	28.8	58.0	36.9	66.1	45.0	82.4	61.2	98.7	77.3	50.8	29.8
GTEA085FC10	-	-	-	-	-	-	-	-	38.3	14.5	46.4	22.6	54.5	30.7	62.6	38.7	78.8	54.9	95.0	71.0	56.5	33.2
GTEA085FC11	-	-	-	-	-	-	-	-	-	-	42.6	16.1	50.8	24.5	59.0	32.9	75.5	49.7	91.9	66.5	62.2	36.6
GTEA085FC12	-	-	-	-	-	-	-	-	-	-	-	-	47.1	18.4	55.5	27.0	72.2	44.1	88.9	61.3	67.9	40.0
GTEA095FC05	38.5	23.7	50.7	36.2	62.9	48.6	75.1	61.1	87.4	73.6	99.6	86.1	111.8	98.6	124.0	111.1	148.5	136.1	172.9	161.0	34.7	20.4
GTEA095FC06	34.1	15.9	46.4	28.4	58.7	40.9	71.0	53.3	83.3	65.8	95.6	78.3	107.9	90.7	120.2	103.2	144.8	128.1	169.4	153.1	42.2	24.8
GTEA095FC07	-	-	42.1	20.7	54.5	33.1	66.9	45.5	79.3	58.0	91.6	70.4	104.0	82.9	116.4	95.3	141.2	120.2	166.0	145.1	49.7	29.3
GTEA095FC08	-	-	-	-	49.6	25.1	61.9	37.6	74.3	50.1	86.7	62.6	99.1	75.1	111.5	87.6	136.2	112.6	161.0	137.6	57.2	33.7
GTEA095FC09	-	-	-	-	-	-	56.7	29.5	69.0	42.0	81.4	54.4	93.7	66.9	106.0	79.4	130.7	104.3	155.4	129.2	64.7	38.2
GTEA095FC10	-	-	-	-	-	-	-	-	63.7	33.9	76.0	46.3	88.3	58.7	100.6	71.1	125.2	96.0	149.8	120.8	72.2	42.6
GTEA095FC11	-	-	-	-	-	-	-	-	-	-	72.0	38.6	84.2	51.0	96.5	63.5	121.0	88.4	145.5	113.3	79.7	47.1
GTEA095FC12	-	-	-	-	-	-	-	-	-	-	-	-	80.2	43.4	92.4	55.9	116.8	80.8	141.1	105.7	87.2	51.5
GTEA110FC05	56.0	31.1	72.3	48.5	88.6	66.0	105.0	83.5	121.3	100.9	137.7	118.4	154.0	135.8	170.4	153.3	203.0	188.2	235.7	223.1	49.4	31.7
GTEA110FC06	49.2	21.0	65.5	38.3	81.8	55.6	98.1	72.9	114.4	90.2	130.7	107.6	147.0	124.9	163.3	142.2	195.9	176.8	228.5	211.4	59.8	38.0
GTEA110FC07	-	-	59.0	27.3	75.3	44.6	91.5	62.0	107.8	79.3	124.1	96.6	140.3	114.0	156.6	131.3	189.1	166.0	221.6	200.7	70.1	44.4
GTEA110FC08	-	-	-	-	68.3	34.8	84.4	51.9	100.6	68.9	116.8	85.9	132.9	103.0	149.1	120.0	181.4	154.1	213.7	188.2	80.4	50.7
GTEA110FC09	-	-	-	-	-	-	78.4	40.0	94.6	57.4	110.8	74.8	127.0	92.2	143.2	109.6	175.6	144.4	207.9	179.2	90.8	57.0
GTEA110FC10	-	-	-	-	-	-	-	-	88.1	46.3	104.3	63.8	120.5	81.2	136.7	98.7	169.2	133.6	201.7	168.6	101.1	63.3
GTEA110FC11	-	-	-	-	-	-	-	-	-	-	97.5	53.0	113.6	70.4	129.8	87.9	162.0	122.8	194.3	157.7	111.4	69.6
GTEA110FC12	-	-	-	-	-	-	-	-	-	-	-	-	107.1	59.6	123.2	77.2	155.3	112.4	187.5	147.5	121.8	76.0

Torque charts

Single-acting actuators (Nm) ±10% *continued*

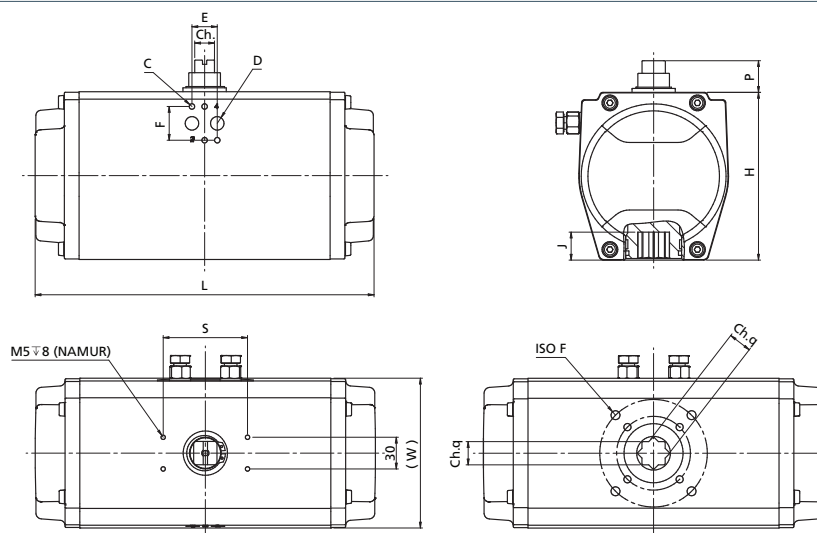
Type	Air supply (unit: bar)																				Spring torque	
	2.5		3		3.5		4		4.5		5		5.5		6		7		8			
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
GTEA125FC05	73.7	46.8	100.5	73.7	127.4	100.6	154.2	127.5	181.1	154.4	208.0	181.3	234.8	208.2	261.7	235.1	315.4	288.9	369.1	342.6	79.4	53.7
GTEA125FC06	63.2	29.6	89.9	56.1	116.6	82.7	143.3	109.2	170.0	135.7	196.7	162.3	223.4	188.8	250.1	215.4	303.5	268.4	356.9	321.5	96.0	64.8
GTEA125FC07	-	-	81.1	38.6	107.5	64.7	133.9	90.9	160.2	117.1	186.6	143.3	213.0	169.5	239.4	195.6	292.1	248.0	344.9	300.4	112.5	76.0
GTEA125FC08	-	-	-	-	-	-	122.0	75.5	148.8	101.8	175.7	128.1	202.5	154.4	229.4	180.7	283.0	233.3	336.7	285.8	129.1	87.1
GTEA125FC09	-	-	-	-	-	-	110.4	57.1	137.2	83.2	163.9	109.4	190.7	135.6	217.5	161.8	271.0	214.1	324.5	266.5	145.7	98.3
GTEA125FC10	-	-	-	-	-	-	-	-	125.5	65.1	152.2	91.8	178.9	118.5	205.6	145.1	258.9	198.4	312.3	251.7	162.3	109.4
GTEA125FC11	-	-	-	-	-	-	-	-	-	-	140.7	71.2	167.3	97.9	194.0	124.6	247.2	177.9	300.5	231.2	178.8	120.6
GTEA125FC12	-	-	-	-	-	-	-	-	-	-	-	-	155.8	82.0	182.4	108.3	235.6	161.1	288.8	213.8	195.4	131.7
GTEA140FC05	127.3	76.2	172.3	120.7	217.3	165.2	262.3	209.7	307.2	254.3	352.2	298.8	397.2	343.3	442.2	387.8	532.1	476.9	622.1	565.9	130.0	81.6
GTEA140FC06	110.0	47.0	155.1	91.7	200.2	136.5	245.3	181.3	290.4	226.0	335.5	270.8	380.6	315.5	425.7	360.3	515.9	449.8	606.1	539.4	157.5	99.4
GTEA140FC07	-	-	138.0	62.7	183.2	107.8	228.4	152.8	273.6	197.8	318.8	242.8	364.0	287.8	409.2	332.8	499.7	422.8	590.1	512.8	184.9	117.2
GTEA140FC08	-	-	-	-	166.1	81.0	211.0	126.0	255.9	171.0	300.8	216.0	345.7	261.0	390.6	306.0	480.5	396.1	570.3	486.1	212.4	135.1
GTEA140FC09	-	-	-	-	-	-	191.3	97.8	236.4	143.2	281.6	188.7	326.7	234.1	371.9	279.6	462.2	370.5	552.5	461.4	239.8	152.9
GTEA140FC10	-	-	-	-	-	-	-	-	216.9	115.4	262.3	161.3	307.7	207.2	353.1	253.1	443.8	344.9	534.6	436.7	267.3	170.7
GTEA140FC11	-	-	-	-	-	-	-	-	-	-	244.2	134.5	289.4	179.7	334.7	225.0	425.1	315.5	515.6	405.9	294.8	188.6
GTEA140FC12	-	-	-	-	-	-	-	-	-	-	-	-	271.2	152.2	316.3	196.8	406.5	286.0	496.6	375.2	322.2	206.4
GTEA160FC05	202.6	119.7	269.0	187.3	335.4	255.0	401.8	322.6	468.2	390.2	534.6	457.9	601.1	525.5	667.5	593.1	800.3	728.4	933.1	863.7	195.9	124.7
GTEA160FC06	178.7	72.2	245.0	140.1	311.3	208.0	377.6	275.9	443.8	343.9	510.1	411.8	576.4	479.7	642.7	547.6	775.3	683.4	907.8	819.2	237.7	150.0
GTEA160FC07	-	-	221.4	92.0	287.6	160.1	353.8	228.2	420.1	296.2	486.3	364.3	552.5	432.3	618.7	500.4	751.2	636.5	883.6	772.6	279.4	175.3
GTEA160FC08	-	-	-	-	264.0	112.2	330.1	180.4	396.3	248.6	462.4	316.8	528.6	385.0	594.7	453.1	727.0	589.5	859.4	725.9	321.1	200.7
GTEA160FC09	-	-	-	-	-	-	301.7	138.7	367.8	206.1	434.0	273.5	500.2	340.9	566.4	408.3	698.7	543.1	831.1	677.9	362.9	226.0
GTEA160FC10	-	-	-	-	-	-	-	-	339.4	163.7	405.6	230.3	471.8	296.9	538.0	363.5	670.4	496.7	802.8	629.9	404.6	251.3
GTEA160FC11	-	-	-	-	-	-	-	-	-	-	379.8	189.7	445.9	255.9	511.9	322.2	644.0	454.6	776.1	587.1	446.4	276.7
GTEA160FC12	-	-	-	-	-	-	-	-	-	-	-	-	419.9	215.0	485.8	280.8	617.7	412.5	749.5	544.3	488.1	302.0
GTEA190FC05	299.3	184.1	402.7	288.4	506.2	392.6	609.6	496.9	713.0	601.2	816.4	705.5	919.8	809.8	1023.3	914.1	1230.1	1122.6	1436.9	1331.2	293.4	187.0
GTEA190FC06	259.9	123.4	363.1	226.9	466.3	330.4	569.5	434.0	672.6	537.5	775.8	641.0	879.0	744.6	982.2	848.1	1188.6	1055.1	1394.9	1262.2	354.0	225.5
GTEA190FC07	-	-	324.1	167.7	427.2	270.9	530.2	374.0	633.3	477.2	736.4	580.3	839.5	683.5	942.5	786.6	1148.7	992.9	1354.8	1199.2	414.5	263.9
GTEA190FC08	-	-	-	-	388.1	211.3	491.0	314.1	594.0	416.9	696.9	519.6	799.9	622.4	902.9	725.2	1108.8	930.7	1314.7	1136.3	475.1	302.3
GTEA190FC09	-	-	-	-	-	-	447.6	245.0	550.9	349.3	654.2	453.5	757.5	557.8	860.8	662.0	1067.4	870.5	1274.1	1079.0	535.6	340.7
GTEA190FC10	-	-	-	-	-	-	-	-	507.8	281.7	611.5	387.4	715.1	493.2	818.8	598.9	1026.1	810.3	1233.5	1021.8	596.2	379.1
GTEA190FC11	-	-	-	-	-	-	-	-	-	-	570.5	325.2	673.6	430.9	776.6	536.5	982.7	747.8	1188.8	959.1	656.7	417.6
GTEA190FC12	-	-	-	-	-	-	-	-	-	-	-	-	632.1	368.6	734.5	474.1	939.3	685.3	1144.2	896.5	717.3	456.0
GTEA210FC05	390.1	263.1	520.5	394.9	650.9	526.7	781.3	658.5	911.7	790.3	1042.2	922.1	1172.6	1053.9	1303.0	1185.7	1563.9	1449.3	1824.7	1712.8	339.4	243.6
GTEA210FC06	337.4	186.2	467.1	316.9	596.7	447.5	726.3	578.1	856.0	708.7	985.6	839.4	1115.2	970.0	1244.9	1100.6	1504.1	1361.9	1763.4	1623.2	408.2	294.6
GTEA210FC07	-	-	416.0	242.3	545.3	372.4	674.5	502.4	803.8	632.5	933.0	762.5	1062.2	892.5	1191.5	1022.6	1450.0	1282.7	1708.4	1542.8	477.0	345.7
GTEA210FC08	-	-	-	-	493.8	297.2	622.7	426.7	751.5	556.2	880.4	685.6	1009.2	815.1	1138.1	944.6	1395.8	1203.5	1653.5	1462.4	545.7	396.8
GTEA210FC09	-	-	-	-	-	-	571.0	349.5	700.3	479.5	829.5	609.6	958.8	739.7	1088.1	869.8	1346.7	1130.0	1605.3	1390.2	614.5	447.8
GTEA210FC10	-	-	-	-	-	-	-	-	649.0	402.9	778.7	533.6	908.4	664.3	1038.2	795.1	1297.7	1056.5	1557.1	1317.9	683.2	498.9
GTEA210FC11	-	-	-	-	-	-	-	-	-	-	723.2	465.9	852.5	593.5	981.7	721.0	1240.1	976.2	1498.6	1231.4	752.0	549.9
GTEA210FC12	-	-	-	-	-	-	-	-	-	-	-	-	796.5	522.6	925.2	647.0	1182.6	896.0	1440.1	1145.0	820.8	601.0
GTEA240FC05	577.4	424.4	772.5	621.2	967.6	818.1	1162.8	1014.9	1357.9	1211.7	1553.0	1408.6	1748.1	1605.4	1943.2	1802.2	2333.5	2195.9	2723.7	2589.6	513.7	357.0
GTEA240FC06	485.3	298.2	682.1	496.2	878.8	694.1	1075.6	892.1	1272.3	1090.0	1469.1	1288.0	1665.8	1485.9	1862.6	1683.8	2256.1	2079.7	2649.6	2475.6	626.6	434.9
GTEA240FC07	-	-	586.7	367.8	784.3	566.3	981.8	764.8	1179.4	963.3	1377.0	1161.8	1574.5	1360.3	1772.1	1558.8	2167.3	1955.8	2562.4	2352.8	739.4	512.9
GTEA240FC08	-	-	-	-	689.7	438.5	888.1	637.6	1086.5	836.6	1284.9	1035.7	1483.3	1234.7	1681.6	1433.7	2078.4	1831.8	2475.2	2229.9	852.2	590.8
GTEA240FC09	-	-	-	-	-	-	808.2	519.5	1006.1	719.4	1204.1	919.3	1402.1	1119.2	1600.1	1319.0	1996.1	1718.8	2392.0	2118.6	965.1	668.8
GTEA240FC10	-	-	-	-	-	-	-	-	925.8	602.1	1123.4	802.9	1321.0	1003.6	1518.5	1204.3	1913.7	1605.8	2308.8	2007.3	1077.9	746.8
GTEA240FC11	-	-	-	-	-	-	-	-	-	-	1030.3	684.2	1228.7	885.5	1427.2	1086.8	1824.0	1489.4	2220.9	1892.1	1190.7	824.7
GTEA240FC12	-	-	-	-	-	-	-	-	-	-	-	-	1136.5	767.4	1335.8	969.2	1734.4	1373.0	2133.0	1776.8	1303.5	902.7
GTEA270FC05	784.5	591.0	1078.2	884.7	1371.9	1178.4	1665.7	1472.1	1959.4	1765.9	2253.1	2059.6	2546.8	2353.3	2840.5	2647.0	3428.0	3234.5	4015.4	3821.9	730.4	529.8
GTEA270FC06	666.2	433.1	959.9	726.8	1253.7	1020.5	1547.4	1314.2	1841.1	1608.0	2134.8	1901.7	2428.6	2195.4	2722.3	2489.1	3309.7	3076.6	3897.2	3664.0	888.5	635.2
GTEA270FC07	-	-	841.7	568.9	1135.4	862.6	1429.1	1156.3	1722.8	1450.1	2016.6	1743.8	2310.3	2037.5	2604.0	2331.2	3191.4	2918.7	3778.9	3506.1	1046.7	740.6
GTEA270FC08	-	-	-	-	1017.1	704.7	1310.8	998.4	1604.6	1292.2	1898.3	1585.9	2192.0	1879.6	2485.7	2173.3	3073.2	2760.8	3660.6	3348.2	1204.8	846.1
GTEA270FC09	-	-	-	-	-	-	1192.6	840.5	1486.3	1134.3	1780.0	1428.0	2073.7	1721.7	2367.5	2015.4	2954.9	2602.9	3542.3	3190.3	1363.0	951.5
GTEA270FC10	-	-	-	-	-	-	-	-	1368.0	976.4	1661.7	1270.1	1955.5	1563.8	2249.2	1857.5	2836.6	2445.0	3424.1	3032.4	1521.1	1056.9
GTEA270FC11	-	-	-	-	-	-	-	-	-	-	1543.5	1112.2	1837.2	1405.9	2130.9	1699.6	2718.4	2287.1	3305.8	2874.5	1679.3	11

Model number designation

Example model number **GTEA 050 FC 05 NR**

Range and rotation	GTEA = 90° rotation
Body size	050, 065, 075, 085, 095, 110, 125, 140, 160, 190, 210, 240, 270, 300
Effect	DA = Double-acting FC = Spring-return, fail to close (clockwise) FO = Spring-return, fail to open (counter-clockwise)
Spring set	05, 06, 07, 08, 09, 10, 11, 12 (spring-return), 00 (double-action)
Temperature range	NR = Normal -18 to +80 °C (-0.4 to +176 °F) (sizes 050 to 210) -20 to +80 °C (-4 to +176 °F) (sizes 240 to 300) EH = Enhanced -40 to +80 °C (-40 to +176 °F)

Dimension data and mounting standards



Model	Dimensions (mm)										Displacement (dm ³)		Weight (kg)					
	L	W	H	P	C	D	E	F	S	Ch	Ch.q	J	ISO	Open	Close	SR	DA	
	According to NAMUR																	
050	152	68.5	70	20	M5 x 8	G $\frac{1}{8}$ "	24	32	80	10	11	12	F03/F05	0.11	0.15	1.4	1.3	
065	169	84.5	89	20	M5 x 8	G $\frac{1}{8}$ "	24	32	80	10	14	16	F05/F07	0.22	0.27	2.2	2.1	
075	182.5	94	100	20	M5 x 8	G $\frac{1}{8}$ "	24	32	80	14	14	16	F05/F07	0.31	0.43	2.8	2.5	
085	211	113	113	20	M5 x 8	G $\frac{1}{4}$ "	24	32	80	14	17	19	F05/F07	0.45	0.62	4.4	4.0	
095	263	124.5	123	20	M5 x 8	G $\frac{1}{4}$ "	24	32	80	14	17	19	F05/F07	0.70	1.00	7.3	6.5	
110	286	118	136	20	M5 x 8	G $\frac{1}{4}$ "	24	32	80	14	17	19	F07/F10	0.98	1.28	8.1	7.0	
125	323	142	159	30	M5 x 8	G $\frac{1}{4}$ "	24	32	80/130	22.1	22	25	F07/F10	1.54	2.04	13.9	10.7	
140	404	157	178	30	M5 x 8	G $\frac{1}{4}$ "	24	32	80/130	22.1	27	31	F10/F12	2.64	3.25	17.9	15.5	
160	462	177	200	30	M5 x 8	G $\frac{1}{4}$ "	24	32	80/130	22.1	27	31	F10/F12	4.15	4.98	25.5	21.0	
190	494	210	232	30	M5 x 8	G $\frac{1}{4}$ "	24	32	130	22.1	36	41	F10/F14	5.85	7.63	38.2	31.5	
210	532	230	255	30	M5 x 8	G $\frac{1}{4}$ "	24	32	130	32.5	36	41	F14	7.46	9.99	51.0	41.5	
240	610	262	292.5	30	M6 x 10	G $\frac{1}{2}$ "	40	45	130	32	46	53.5	F16	11.07	15.03	68.2	55.2	
270	734	296	332	30	M6 x 10	G $\frac{1}{2}$ "	40	45	130	32	46	50	F16	17.43	23.08	100.0	80.0	
300	771	379	352	30	M6 x 10	G $\frac{1}{2}$ "	40	45	130	32	46	64	F16	23.13	28.15	126.5	100.1	
300-F25	771	379	384	30	M6 x 10	G $\frac{1}{2}$ "	40	45	130	32	55	64	F25	23.13	28.15	132.6	106.2	

Optional body air connections:

Size from 050 to 075 = ASME B1.20.1 $\frac{1}{8}$ " NPT
Size from 085 to 210 = ASME B1.20.1 $\frac{1}{4}$ " NPT
Size from 240 to 300 = ASME B1.20.1 $\frac{1}{2}$ " NPT
Size from 110 to 210 = UNI EN ISO 228 G $\frac{1}{2}$ "

Size from 240 to 300 = UNI EN ISO 228 G $\frac{3}{4}$ "
Size from 110 to 210 = ASME B1.20.1 $\frac{1}{2}$ " NPT
Size from 240 to 300 = ASME B1.20.1 $\frac{3}{4}$ " NPT

Rotork provides customised shaft interface

Assembly configurations

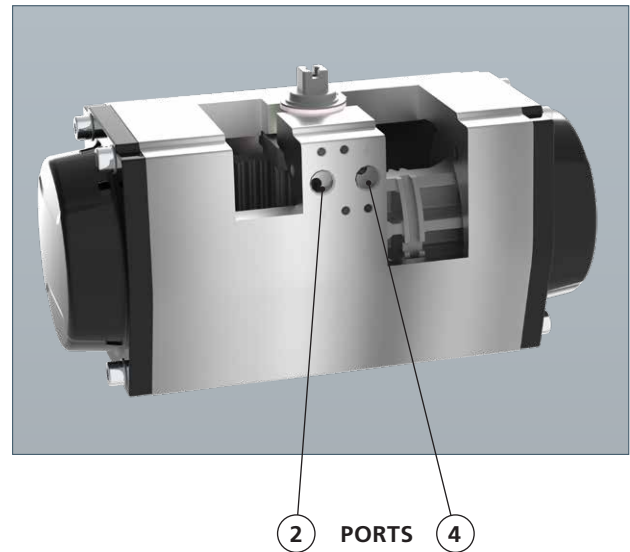
The graphics below show the relative orientation of the piston and pinion for each configuration, as viewed from the top side of the actuator. In the descriptions that follow, that perspective is assumed. Pinion rotation is indicated for each as CW (clockwise) or CCW (counter-clockwise).

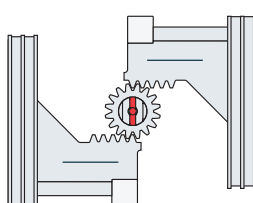
Port 2 is connected to the inboard side of the pistons. Pressurising Port 2 will force the pistons out until they reach the travel stops. The direction of pinion rotation is determined by the assembly configuration. Venting is through Port 4.

Port 4 is connected to the outboard side of the pistons. Pressurising Port 4 will force the pistons in until they reach the travel stops (if the actuator is so equipped as they're optional). The direction of pinion rotation is determined by the assembly configuration. Venting is through Port 2.

Note that on spring-return actuators, as with double-acting actuators, pressurising Port 2 will move the pistons out. When Port 2 is depressurised, spring force will move the pistons in. Venting is through Port 4. Port 4 is not to be pressurised on spring-return actuators.

Consult the GTE range Installation and Commissioning Manual or Rotork for detailed connection and operation information.



STYLE	PORT 4 (OUTBOARD) PRESSURISED <i>Shown at end of stroke</i>	PORT 2 (INBOARD) PRESSURISED <i>Shown at end of stroke</i>
A STANDARD	 	 
B OPTIONAL	 	 
C OPTIONAL	 	 
D OPTIONAL	 	 

Site services

Rotork understands the value of prompt, punctual and superior site services. Rotork Site Services have specialist expertise, insight and experience in service support for mission-critical flow control and instrumentation solutions for oil and gas, water and wastewater, power, chemical process and industrial applications. We offer global frontline support backed by dedicated in-house experts.

Our service solutions increase plant efficiency and reduce maintenance costs, while workshop services return equipment to as-new condition. Our experience and understanding of the flow control industry means we have extensive insight and ideas of what we can do to provide significant value to our customers and their operations.

Rotork Site Services is comprised of two main areas; Lifetime Management and Site Services. Lifetime Management is the suite of services within Rotork Site Services which help you manage the risk associated with aging assets and includes our Reliability Services offering. Site Services comprises essential actuator service, repair, maintenance and upgrades.

Rotork has specialist expertise, insight and experience in flow control.

We provide insight into how we can deliver value to our customers.

Our service solutions increase plant efficiency and reduce maintenance costs.



Site services

Lifetime Management

The services available within Lifetime Management offer a complete solution to managing the risks associated with the life cycle of your equipment and their obsolescence (which compromise reliable performance and valuable uptime).

The aim of Lifetime Management is to provide you with constant support and minimum- to- no disruption to your production flow. It is a customisable service, offering designed to seamlessly maintain and improve your assets. We manage the inherent risks associated with advances in technology, component obsolescence and ageing equipment for you. We are committed to helping customers maximise the continuous, fault-free operation and working life of their actuators. Supporting the continuous and reliable operation of your plant allows for improved performance and increases in valuable uptime.

Lifetime Management covers:

- Reliability Services
 - Basic - health check
 - Standard - planned maintenance
 - Premium - enhanced maintenance
- Upgrade services (retrofit)
- Planned shutdown support
- Life cycle services
- Overhauls/refurbishment
- Customised spares programme
- Intelligent Asset Management (iAM) reporting



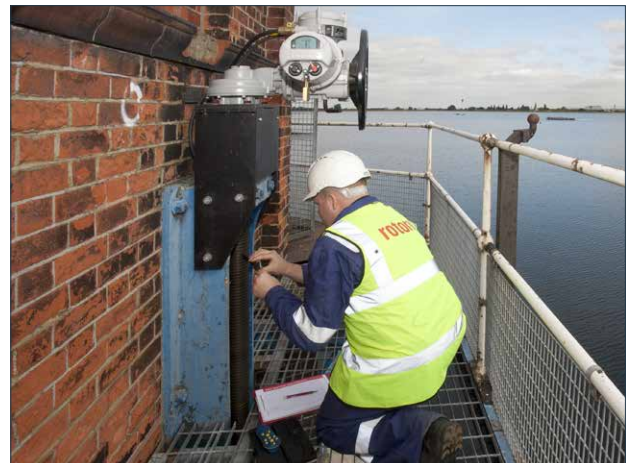
Site services

Rotork Site Services (RSS) provides the essential on-site actuator service, repair, maintenance and upgrades part of our service offering, plus the commissioning of new actuators and applications. It includes off-site work completed at a Rotork support centre including recertification, automation, testing and product selection.

Our decades of experience in the industrial actuation and flow control markets means that customers can rely on us to understand their problems and to deliver reliable, economic solutions. Rotork's talented and experienced engineers have an in-depth understanding of the problems that are faced in the field and they know how to fix them.

On sites where providing evidence of valid asset certification is a legal requirement, Rotork engineers can carry out the necessary OEM level inspections and provide the statutory paperwork to comply with regulations.

- Field support
- Planned shutdown support
- Actuator workshop overhaul
- Valve automation services
 - On-site
 - Off-site
- Global support



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