

rotork®

Fluid Systems

Rotork's GTS actuators are ideally suited for use in the harsh and corrosive environments often found in industries such as petrochemical, marine, and offshore. They are an equally well-suited choice for sanitary requirements typically found in pharmaceutical and food & beverage applications.

The robust range conforms to valve industry standard fitment specifications and includes seven body sizes to meet a wide range of torque requirements. A variety of complementary stainless steel control components and accessories are also available.

Design

- Rack and pinion pneumatic actuators in both single- and double-acting executions with travel stops in both directions ($90^\circ \pm 5^\circ$)

Torque Output

- 39 to 1,150 Nm (345 to 10,170 lbf.in)

Supply

- Filtered air PNEUROP/ISO Class 4 (contact Rotork regarding other fluids)

Supply Pressure

- 2 to 10 bar (30 to 145 psi)

Temperature Ranges

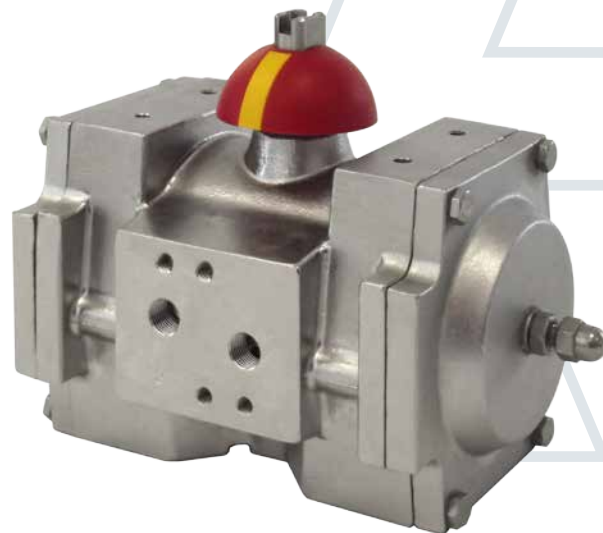
- **Standard** -50 to +70 °C (-58 to +158 °F)
- **High** -15 to +160 °C (5 to 320 °F)

Materials

- **Body & End Caps**
Electro-polished stainless steel AISI 316L
- **Pistons**
Aluminium UNI 1706 (AISI 316L optional)
- **Pinion**
Stainless steel AISI 316L
- **Piston Bearing**
Delrin® (POM)
IXEF® (PARA) for high-temperature builds
- **Seals**
Nitrile rubber (NBR)
Viton™ for high-temperature builds
- **Screws**
Stainless steel AISI 316 A4

Mechanical Interfaces

- ISO 5211, NAMUR VDI/DE 3845, BSI EN 15714-3-4



GTS Range

Stainless Steel Pneumatic Rack & Pinion Actuators



Keeping the World Flowing

Torque Output Data

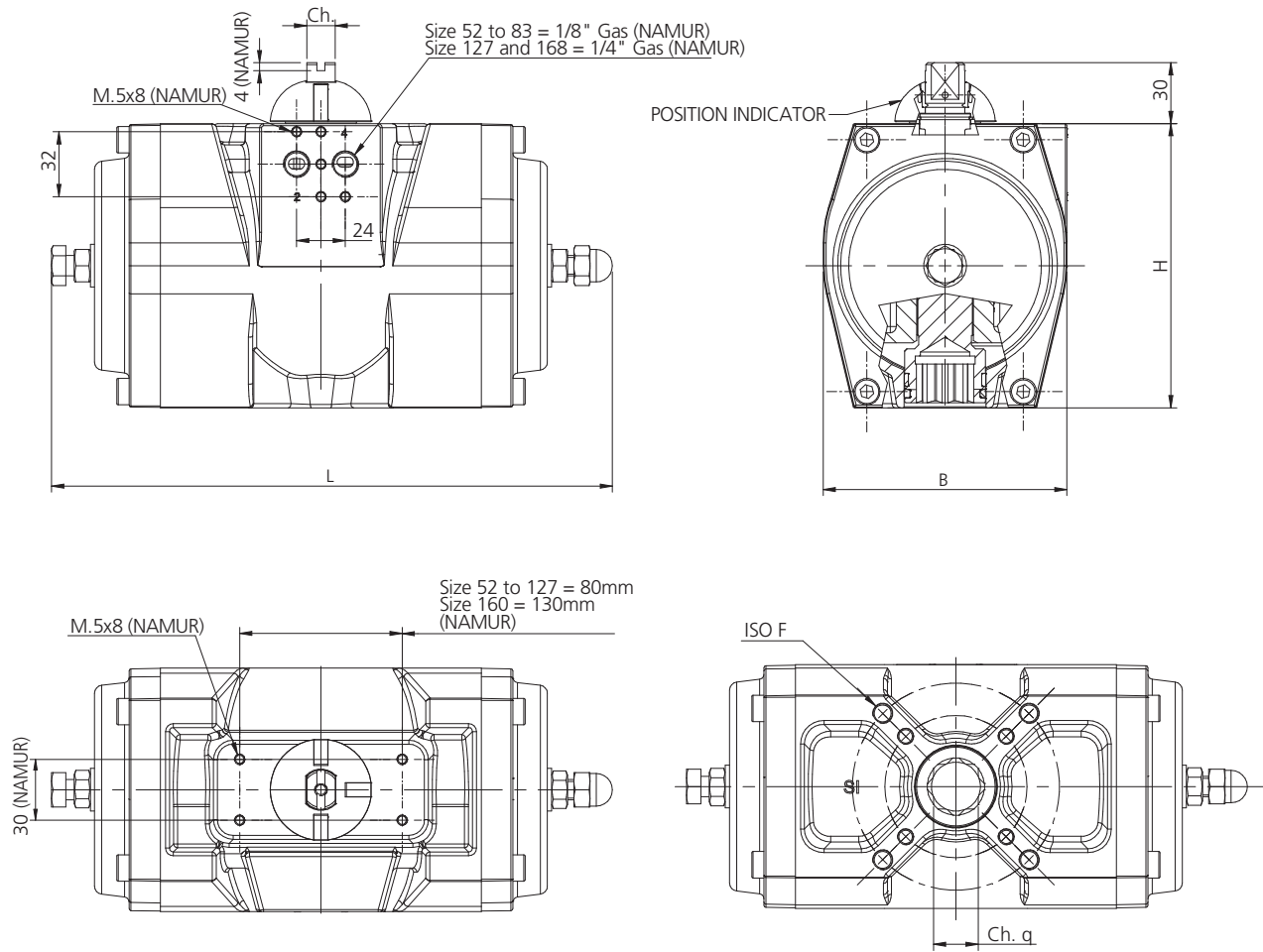
Double-Acting Actuators

Model	Pneumatic Torque (Nm)													
	2 bar	2.5 bar	3 bar	3.5 bar	4 bar	4.5 bar	5 bar	5.5 bar	6 bar	6.5 bar	7 bar	8 bar	9 bar	10 bar
52	7.8	9.7	11.7	13.6	15.6	17.5	19.5	21.4	23.4	25.3	27.3	31.2	35.1	39.0
63	11.6	14.5	17.4	20.3	23.2	26.1	29.0	31.9	34.8	37.7	40.6	46.4	52.2	58.0
75	20.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0	80.0	90.0	100
83	29.0	36.2	43.5	50.7	58.0	65.2	72.5	79.7	87.0	94.2	101	116	130	145
110	58.0	72.5	87.0	102	116	131	145	160	174	189	203	232	261	290
127	116	145	174	203	232	261	290	319	348	377	406	464	522	580
160	230	288	345	403	460	518	575	633	690	748	805	920	1035	1150

Spring-Return Actuators

Model	Springs	Spring Torque (Nm)	Pneumatic Torque (Nm)																		
			3 bar		4 bar		5 bar		5.5 bar		6 bar		7 bar		8 bar		9 bar		10 bar		
			0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	
52	6	5.7	9.6	5.8	1.9	9.7	5.8	13.6	9.7	16.0	12.0	17.5	13.6	21.4	17.5	25.3	21.4	29.2	25.3	33.1	29.2
	8	7.6	12.7	-	-	7.8	2.6	11.7	6.5	14.0	8.8	15.6	10.4	19.5	14.3	23.4	18.2	27.3	22.1	31.2	26.0
	10	9.5	15.9	-	-	-	-	9.7	3.2	12.1	5.6	13.6	7.1	17.5	11.0	21.4	14.9	25.3	18.8	29.2	22.7
	12	11.5	19.1	-	-	-	-	-	-	10.1	2.3	11.7	3.9	15.6	7.8	19.5	11.7	23.4	15.	27.2	19.5
63	6	9.0	13.3	8.2	3.9	14.0	9.7	19.8	15.5	22.7	18.4	25.6	21.3	31.4	27.1	37.2	32.9	43.0	38.7	48.8	44.5
	8	12.0	17.7			10.9	5.2	16.7	11.0	19.6	13.9	22.5	16.8	28.3	22.6	34.1	28.4	39.9	34.2	45.7	40.0
	10	15.0	22.1					13.7	6.5	16.6	9.4	19.5	12.3	25.3	18.1	31.1	23.9	36.9	29.7	42.7	35.5
	12	18.0	26.5							13.5	4.8	16.4	7.7	22.2	13.5	28.0	19.4	33.8	25.2	39.6	31.0
75	6	15.7	23.9	14.0	5.6	24.0	15.6	34.0	25.6	39.0	30.6	44.0	35.6	54.0	45.6	64.0	55.6	74.0	65.6	84.0	75.6
	8	21.0	31.9			18.6	7.5	28.6	17.5	33.6	22.5	38.6	27.5	48.6	37.5	58.6	47.5	68.6	57.5	78.6	67.5
	10	26.2	39.8					23.3	9.4	28.3	14.4	33.3	19.4	43.3	29.4	53.3	39.4	63.3	49.4	73.3	59.4
	12	31.4	47.8					17.9	1.3	22.9	6.3	27.9	11.3	37.9	21.3	47.9	31.3	57.9	41.3	67.9	51.2
83	6	21.7	33.6	21.4	9.2	35.9	23.7	50.4	38.2	57.6	45.5	64.9	52.7	79.4	67.2	93.9	81.7	108	96.2	123	111
	8	28.9	44.8			28.5	12.3	43.0	26.8	50.2	34.1	57.5	41.3	72.0	55.8	86.5	70.3	101	84.8	115	99.3
	10	36.1	56.0					35.6	15.4	42.9	22.6	50.1	29.9	64.6	44.4	79.1	58.9	93.6	73.4	108	87.9
	12	43.4	67.2					28.2	4.0	35.5	11.2	42.7	18.5	57.2	33.0	71.7	47.5	86.2	62.0	101	76.5
110	6	47.4	71.1	38.6	14.5	67.6	43.5	96.6	72.5	111.2	87.0	125.7	101.5	155	130	184	159	213	188	242	217
	8	63.2	94.8			51.5	19.3	80.5	48.3	95.0	62.8	109.5	77.3	139	106	168	135	197	164	226	193
	10	79.0	119					64.4	24.1	78.9	38.6	93.4	53.1	122	82.1	151	111	180	140	209	169
	12	94.8	142							62.8	14.4	77.3	28.9	106	57.9	135	86.9	164	116	193	145
127	6	89.8	146	82.4	24.7	140	82.7	198	141	227	170	256	199	314	257	372	315	430	373	488	431
	8	120	195			110	33.0	168	91.0	197	120	226	149	284	207	342	265	400	323	458	381
	10	150	244					137	41.2	166	70	195	99.2	253	157	311	215	369	273	427	331
	12	180	293							136	20.4	165	49.4	223	107	281	165	339	223	397	281
160	6	168	249	172	88.6	287	204	402	319	460	376	517	434	632	549	747	664	862	779	977	894
	8	224	332			230	118	345	233	402	291	460	348	575	463	690	578	805	693	920	808
	10	279	415			172	32.6	287	148	345	205	402	263	517	378	632	493	747	608	862	723
	12	335	498					230	62.1	287	120	345	177	460	292	575	407	690	522	805	637

Dimension Data



Model	Dimensions (mm)					Displacement (dm ³)			Weight (Kg)	
	L	H	B	Ch	Chq	ISO	SR	DA	SR	DA
52	172.0	74.0	68.5	10.0	14.0	F03/F05	0.13	0.25	2.7	2.6
63	175.0	88.0	79.5	10.0	14.0	F05/F07	0.21	0.40	3.7	3.5
75	206.0	100.0	92.5	10.0	17.0	F05/F07	0.32	0.60	5.1	4.8
83	226.0	108.0	99.5	10.0	17.0	F05/F07	0.45	0.88	6.0	5.6
110	276.0	140.0	120.0	14.0	22.0	F07/F10	0.98	1.90	12.0	11.0
127	366.0	160.0	137.0	20.0	22.0	F07/F10	2.00	3.65	19.8	18.0
160	449.0	198.0	172.0	28.0	27.0	F10/F12	3.80	7.00	36.0	32.0

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Rack & Pinion Actuators

A full listing of the Rotork sales
and service network is available
on our website.

www.rotork.com

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PUB110-005-00
Issue 08/17

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