

INDUSTRIAL AUTOMATION

*VALVE **ACTUATORS***



Pneumatic Rotary Actuator

Specification

Pneumatic Scotch-Yoke Actuators

Extruded Aluminum Alloy Body

Anodized Surface

Double Coated Interior

Powder Coated Finish End Caps

Cast Aluminum Piston

Plated Steel Drive Shaft

Buna N Seals/Stainless Steel Fastener

Optional Low Temperature/High Temperature Seals

Compressed Air Operating Medium

ISO5211 NAMUR Mounting Dimensions

Standard Operating Pressures 4 ~ 7kg/cm²

Operating Temperature -10 ~ 60°C

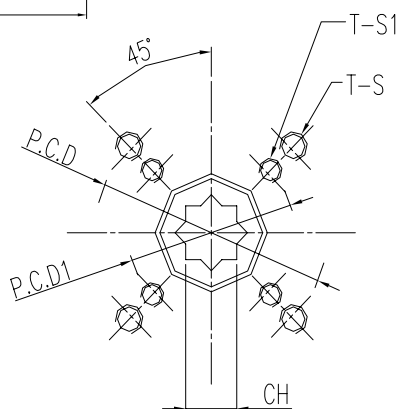
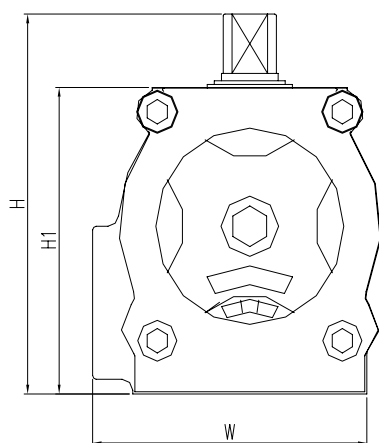
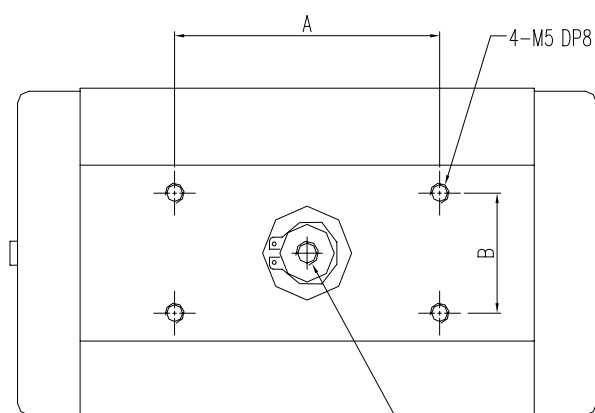
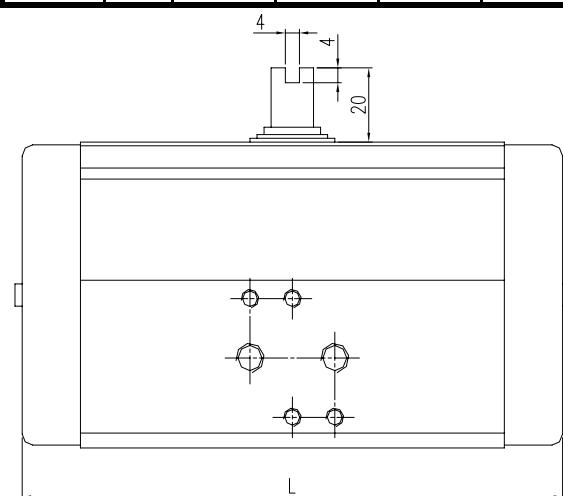
Automates 90° Rotating Mechanisms

Dimensions

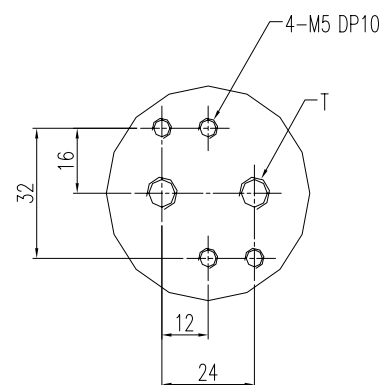
Double Acting Actuator

(Unit : mm)

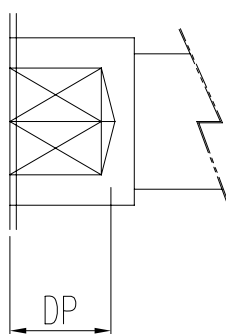
Model	L	H	H1	W	T	A	B	PCD	TS	PCD1	TS1	CH	DP	ISO
RD 40	102	75	55	60	PT 1/8	50	25	50	M6	36	M5	9X9	12	F03/F05
RD 50	162	86	66	72.5	PT 1/4	80	30	50	M6	36	M5	11X11	14	F03/F05
RD 65	204	105	85	83	PT 1/4	80	30	70	M8	50	M6	14X14	17	F05/F07
RD 80	246	121	101	99	PT 1/4	80	30	70	M8	—	—	17X17	21	F07
RD 100	296	142.5	122.5	118	PT 1/4	80	30	102	M10	70	M8	22X22	27	F07/F10



Bottom View ISO 5211



Air Connection

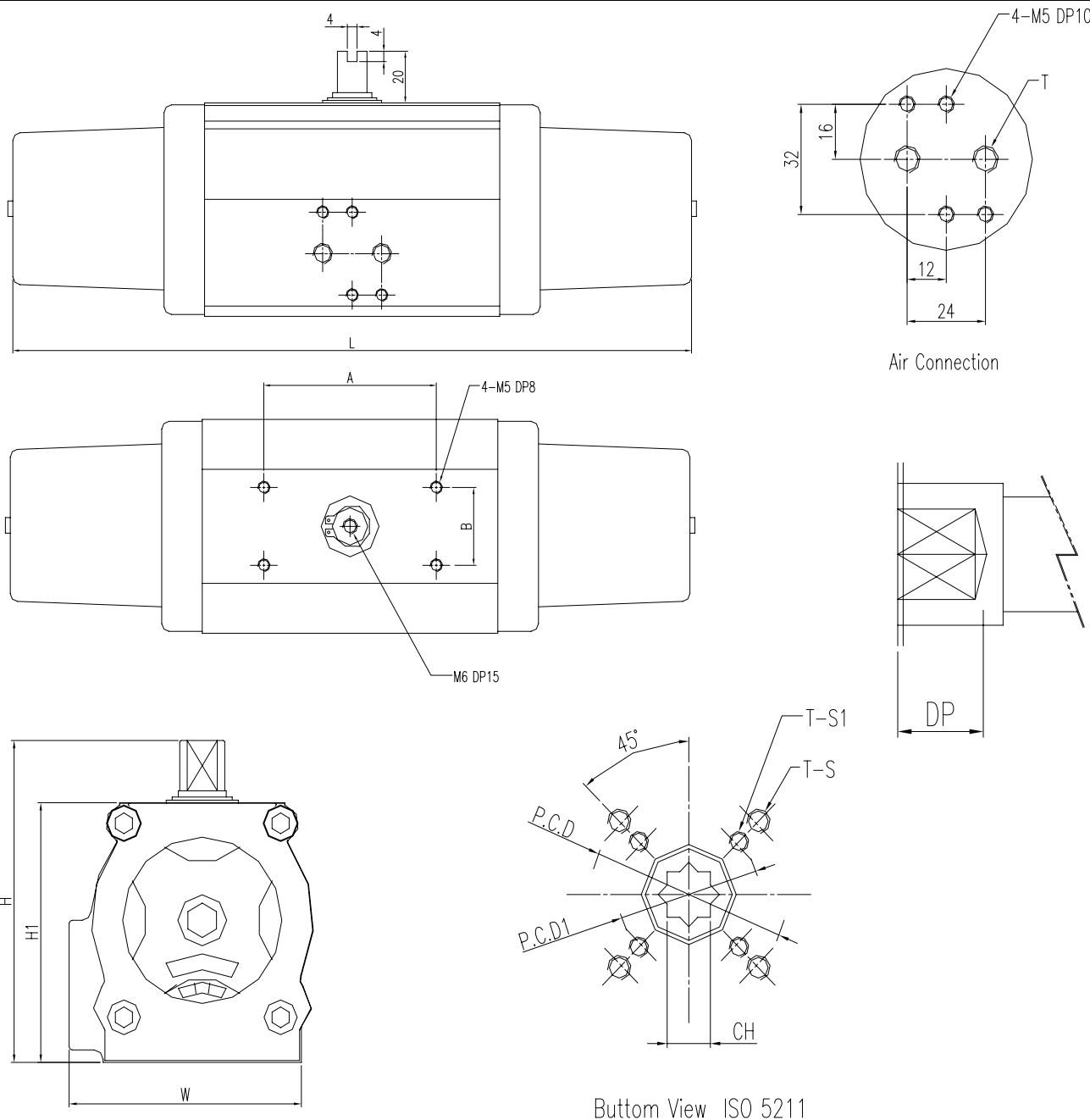


Dimensions

Spring Return Actuator

(Unit : mm)

Model	L	H	H1	W	T	A	B	PCD	TS	PCD1	TS1	CH	DP	ISO
RS 40	102	75	55	60	PT 1/8	50	25	50	M6	36	M5	9X9	12	F03/F05
RS 50	268	86	66	72.5	PT 1/4	80	30	50	M6	36	M5	11X11	14	F03/F05
RS 65	329	105	85	83	PT 1/4	80	30	70	M8	50	M6	14X14	17	F05/F07
RS 80	386	121	101	99	PT 1/4	80	30	70	M8	-	-	17X17	21	F07
RS 100	480	142.5	122.5	118	PT 1/4	80	30	102	M10	70	M8	22X22	27	F07/F10



Bottom View ISO 5211

Output Torques

Double Acting Actuator

(Unit : Kg.f-m/Nm/inch pounds)

Model	Angle	4kg/cm ²	4bar	55psi	5kg/cm ²	5bar	70psi	6kg/cm ²	6bar	85psi	7kg/cm ²	7bar	100psi
		Kg.f-m	Nm	inch pounds	Kg.f-m	Nm	inch pounds	Kg.f-m	Nm	inch pounds	Kg.f-m	Nm	inch pounds
RD 40	0°	0.72	7.2	60	0.92	9.2	79	1.13	11.3	98	1.33	13.3	116
	45°	0.72	7.2	60	0.92	9.2	79	1.13	11.3	98	1.33	13.3	116
	90°	0.72	7.2	60	0.92	9.2	79	1.13	11.3	98	1.33	13.3	116
RD 50	0°	3.68	36.8	309	4.79	47.9	409	5.99	59.9	518	7.18	71.8	626
	45°	2.04	20.4	171	2.57	25.7	220	3.15	31.5	272	3.73	37.3	325
	90°	3.06	30.6	257	3.95	39.5	337	4.79	47.9	414	5.59	55.9	487
RD 65	0°	8.3	83	696	10.8	108	923	13.5	135	1167	16.2	162	1412
	45°	4.6	46	386	5.8	58	496	7.1	71	614	8.4	84	732
	90°	6.9	69	579	8.9	89	760	10.8	108	934	12.7	127	1107
RD 80	0°	15.7	157	1317	20.4	204	1743	25.5	255	2204	30.7	307	2676
	45°	8.7	87	730	11	110	940	13.4	134	1158	16.1	161	1404
	90°	13	130	1091	16.8	168	1435	20.4	204	1764	23.7	237	2066
RD 100	0°	30	300	2517	39.6	396	3383	49.5	495	4279	59.4	594	5178
	45°	16.9	169	1418	21.2	212	1811	26	260	2248	29.6	296	2580
	90°	25.3	253	2123	32.6	326	2785	39.6	396	3423	46.3	463	4036

Output Torques

Spring Return Actuator

(Unit : Kg·f·m/Nm/inch pounds)

Model	Angle	Spring range 2 ~ 3kgf/cm²									
		Spring to	Spring to	Spring to	Air to 4.5kg/cm²	Air to 4.5bar	Air to 65psi	Air to 5kg/cm²	Air to 5bar	Air to 70psi	
		Kg.f-m	Nm	inch pounds	Kg.f-m	Nm	inch pounds	Kg.f-m	Nm	inch pounds	
RS 40	0°	0.4	3.9	35	0.5	5	44	0.6	6	51	
	45°	0.5	4.9	43	0.4	4	35	0.5	5	43	
	90°	0.6	5.9	52	0.3	3	26	0.4	4	34	
RS 50	0°	1.7	16.7	148	1.9	19	167	2.3	23	196	
	45°	1.2	11.8	104	1.1	11	97	1.3	13	111	
	90°	2.2	21.6	191	1.3	13	115	1.7	17	145	
RS 65	0°	3.9	38.2	339	4.3	43	379	5	50	427	
	45°	2.9	28.4	252	2.4	24	212	3	30	256	
	90°	5	49	434	2.9	29	256	3.9	39	333	
RS 80	0°	7.4	72.6	642	8.1	81	714	9.5	95	812	
	45°	5.1	50	443	4.5	45	397	5.7	57	487	
	90°	9.5	93.2	825	5.5	55	485	7.2	72	615	
RS 100	0°	14.4	141.2	1250	15.8	158	1393	18.2	182	1555	
	45°	10.5	103	911	8.8	88	776	11	110	940	
	90°	18.2	178.5	1580	10.6	106	934	14.2	142	1213	

Output Torques

Spring Return Actuator

(Unit : Kg.f-m/Nm/inch pounds)

Model	Angle	Spring range 3 ~ 4kgf/cm ²											
		Spring to	Spring to	Spring to	Air to 6kg/cm ²	Air to 6bar	Air to 80psi	Air to 6.5kg/cm ²	Air to 6.5bar	Air to 90psi	Air to 7kg/cm ²	Air to 7bar	Air to 100psi
		Kg.f-m	Nm	inch pounds	Kg.f-m	Nm	inch pounds	Kg.f-m	Nm	inch pounds	Kg.f-m	Nm	inch pounds
RS 40	0°	0.6	5.9	52	0.6	6	49	0.7	7	59	0.8	8	70
	45°	0.7	6.9	61	0.5	5	41	0.6	6	51	0.7	7	61
	90°	0.8	7.8	69	0.4	4	33	0.5	5	42	0.6	6	52
RS 50	0°	2.6	25.5	226	2.3	23	187	2.6	26	220	3	30	262
	45°	1.8	17.7	156	1.3	13	106	1.6	16	135	1.9	19	166
	90°	2.9	28.4	252	1.7	17	138	2	20	169	2.6	26	227
RS 65	0°	5.9	57.9	512	5.1	51	415	5.8	58	490	6.7	67	584
	45°	4	39.2	347	3	30	244	3.6	36	304	4.2	42	366
	90°	6.6	64.7	573	3.8	38	309	4.6	46	389	5.8	58	506
RS 80	0°	11.2	109.8	972	9.7	97	789	11	110	929	12.7	127	1107
	45°	7.6	74.5	660	5.7	57	464	6.8	68	575	8	80	697
	90°	12.5	122.6	1085	7.2	72	586	8.7	87	735	11	110	959
RS 100	0°	21.6	211.8	1875	18.8	188	1530	21.4	214	1808	24.6	246	2145
	45°	14.7	144.2	1276	11	110	895	13.1	131	1107	15.4	154	1343
	90°	24.2	237.3	2100	13.9	139	1131	17	170	1436	21.2	212	1848

Screw Ball Valve

■ 1 Piece Screwed Ball Valve – Double Acting

Model		RD 40	RD 50
mm	inch		
10A	3/8"	⊙	
15A	1/2"	⊙	
20A	3/4"	⊙	
25A	1"	⊙	
32A	1-1/4"	⊙	
40A	1-1/2"		⊙
50A	2"		⊙

■ 1 Piece Screwed Ball Valve – Single Acting

Model		RS 40	RS 50	RS 65
mm	inch			
10A	3/8"	⊙		
15A	1/2"	⊙		
20A	3/4"	⊙		
25A	1"	⊙		
32A	1-1/4"		⊙	
40A	1-1/2"		⊙	
50A	2"			⊙

■ 3 Piece Screwed Ball Valve – Double Acting

Model		RD 40	RD 50	RD 65
mm	inch			
8A	1/4"	⊙		
10A	3/8"	⊙		
15A	1/2"	⊙		
20A	3/4"	⊙		
25A	1"		⊙	
32A	1-1/4"		⊙	
40A	1-1/2"			⊙
50A	2"			⊙

■ 3 Piece Screwed Ball Valve – Single Acting

Model		RS 40	RS 50	RS 65
mm	inch			
8A	1/4"	⊙		
10A	3/8"	⊙		
15A	1/2"		⊙	
20A	3/4"		⊙	
25A	1"		⊙	
32A	1-1/4"			⊙
40A	1-1/2"			⊙
50A	2"			⊙

Flanged Ball Valve

■ Flanged Ball Valve – Double Acting

Model		RD 40	RD 50	RD 65	RD 80	RD 100
mm	inch					
15A	1/2"		◎			
20A	3/4"		◎			
25A	1"		◎			
32A	1-1/4"			◎		
40A	1-1/2"			◎		
50A	2"			◎		
65A	2-1/2"				◎	
80A	3"				◎	
100A	4"					◎

■ Flanged Ball Valve – Single Acting

Model		RS 40	RS 50	RS 65	RS 80	RS 100
mm	inch					
15A	1/2"		◎			
20A	3/4"		◎			
25A	1"			◎		
32A	1-1/4"			◎		
40A	1-1/2"			◎		
50A	2"				◎	
65A	2-1/2"				◎	
80A	3"					◎
100A	4"					

Butterfly Valve

■ Butterfly Valve – Double Acting

Model		RD 40	RD 50	RD 65	RD 80	RD 100
mm	inch					
40A	1-1/2"		⊙			
50A	2"		⊙			
65A	2-1/2"		⊙			
80A	3"			⊙		
100A	4"			⊙		
125A	5"				⊙	
150A	6"				⊙	
200A	8"					⊙
250A	10"					⊙

■ Butterfly Valve – Single Acting

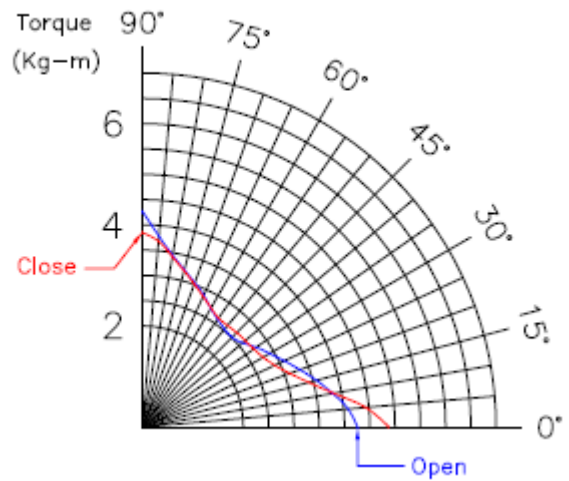
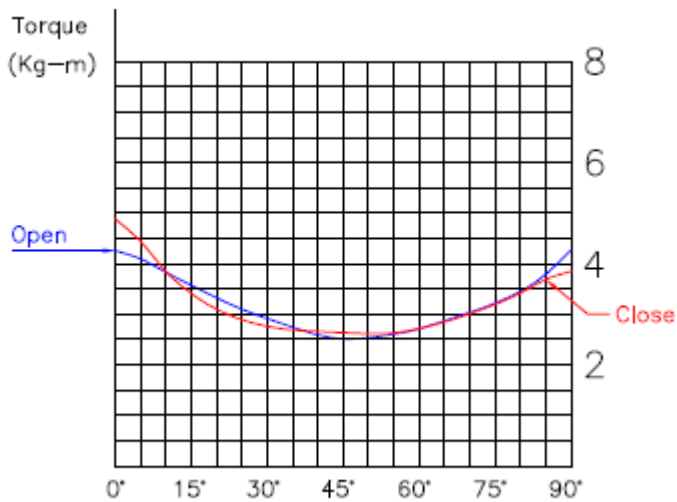
Model		RS 40	RS 50	RS 65	RS 80	RS 100
mm	inch					
40A	1-1/2"		⊙			
50A	2"		⊙			
65A	2-1/2"			⊙		
80A	3"			⊙		
100A	4"				⊙	
125A	5"				⊙	
150A	6"					⊙
200A	8"					⊙
250A	10"					

Output Torque Curve

RD 50

Operating Pressure = 5kg/cm²

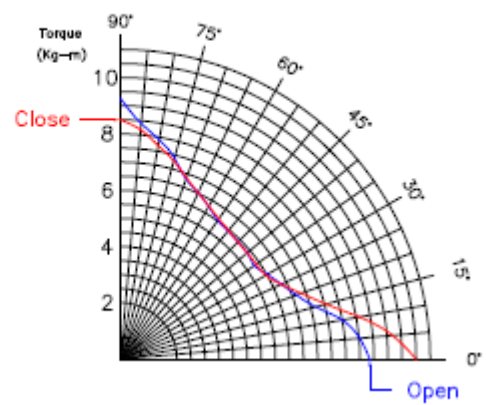
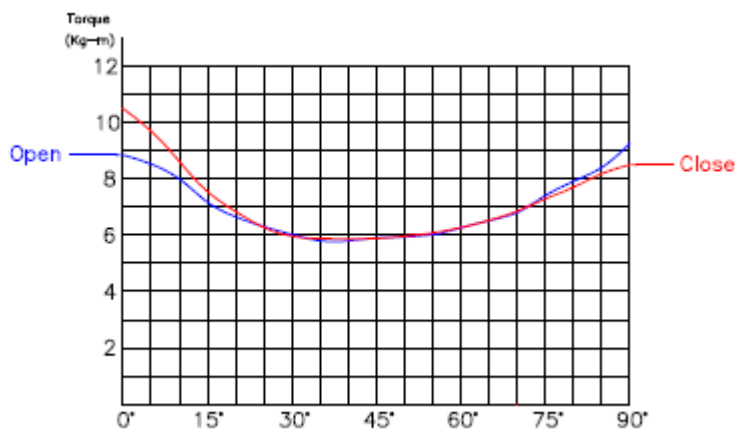
kg-m x 9.8 = Nm



RD 65

Operating Pressure = 5kg/cm²

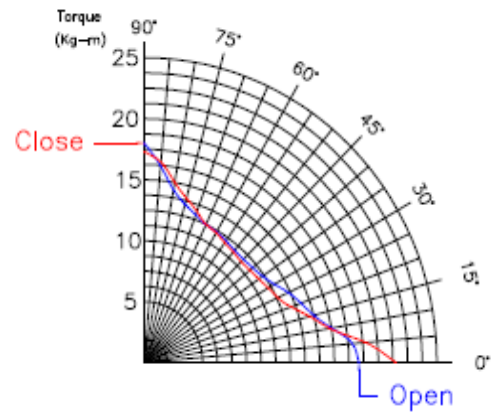
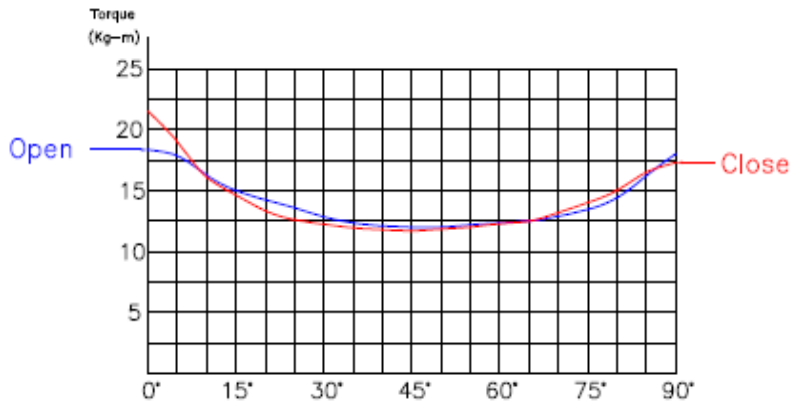
kg-m x 9.8 = Nm



Output Torque Curve

RD 80

Operating Pressure = 5kg/cm²
kg-m x 9.8 = Nm

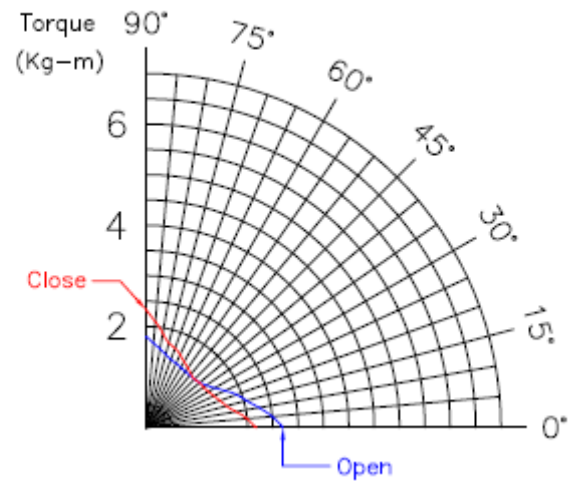
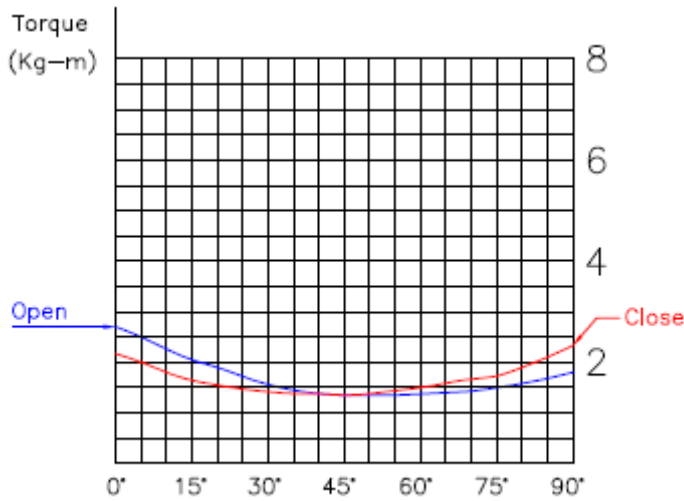


Output Torque Curve

RS 50

Operating Pressure = 5kg/cm²

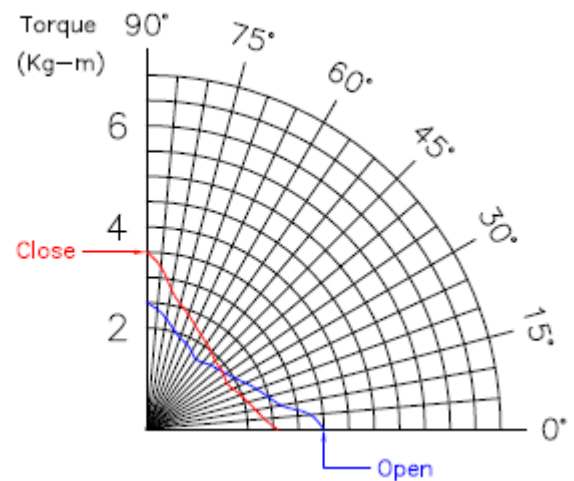
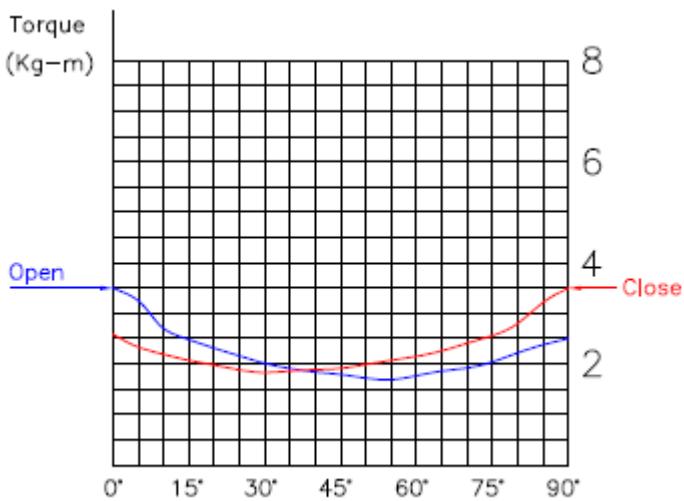
kg-m x 9.8 = Nm



RS 50

Operating Pressure = 7kg/cm²

kg-m x 9.8 = Nm

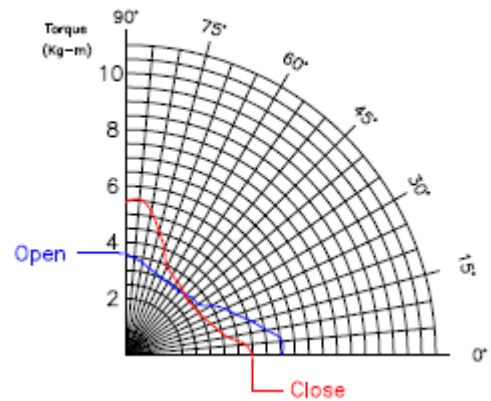
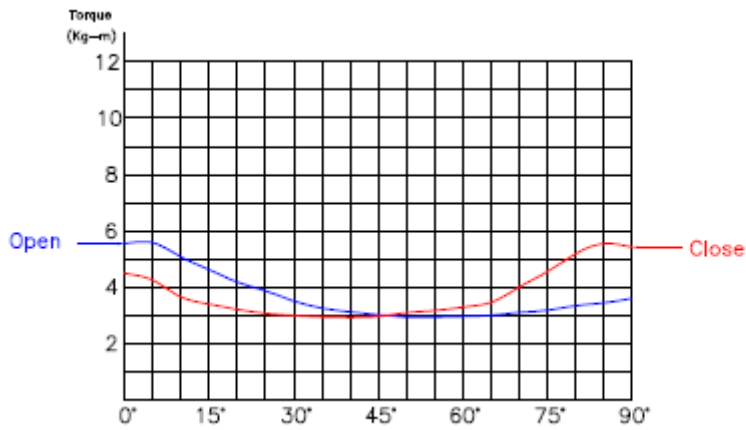


Output Torque Curve

RS 65

Operating Pressure = 5kg/cm²

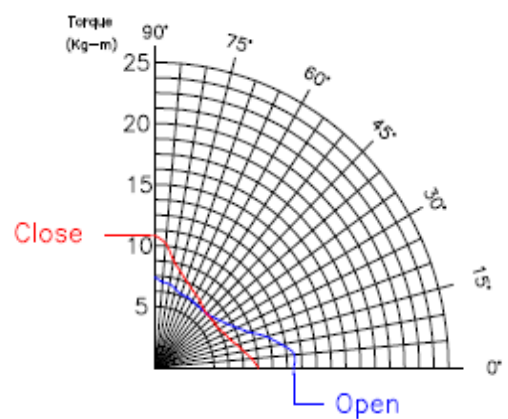
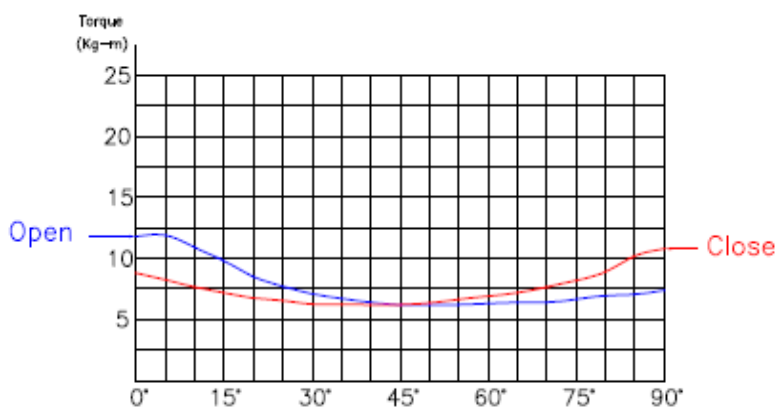
kg-m x 9.8 = Nm



RS 80

Operating Pressure = 7kg/cm²

kg-m x 9.8 = Nm



Products Weight

Double Acting Actuator

Model	Weight(kg)
RD 40	0.61
RD 50	1.25
RD 65	2.30
RD 80	3.65
RD 100	7.00

Spring Return Actuator

Model	Weight(kg)
RS 40	0.67
RS 50	1.80
RS 65	3.04
RS 80	5.25
RS 100	10.00

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