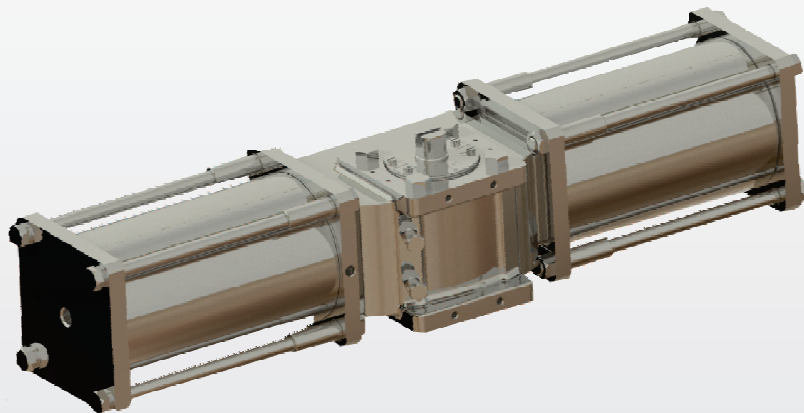
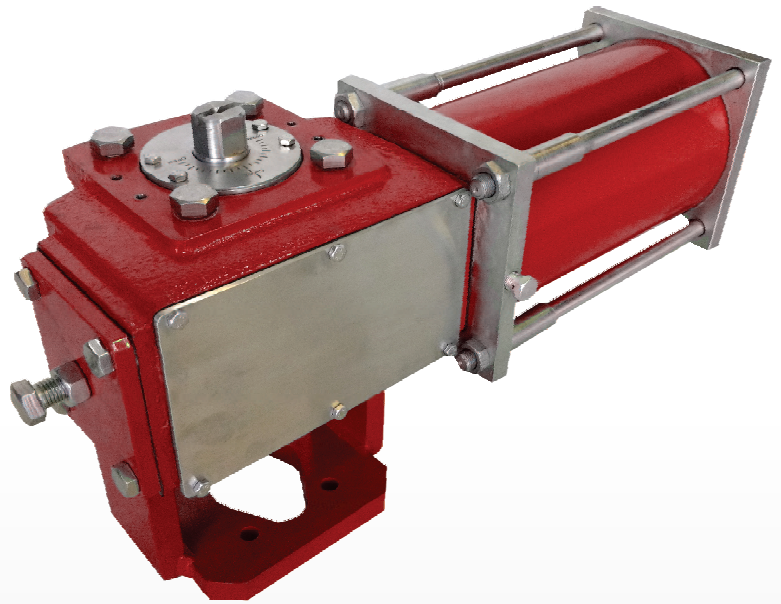
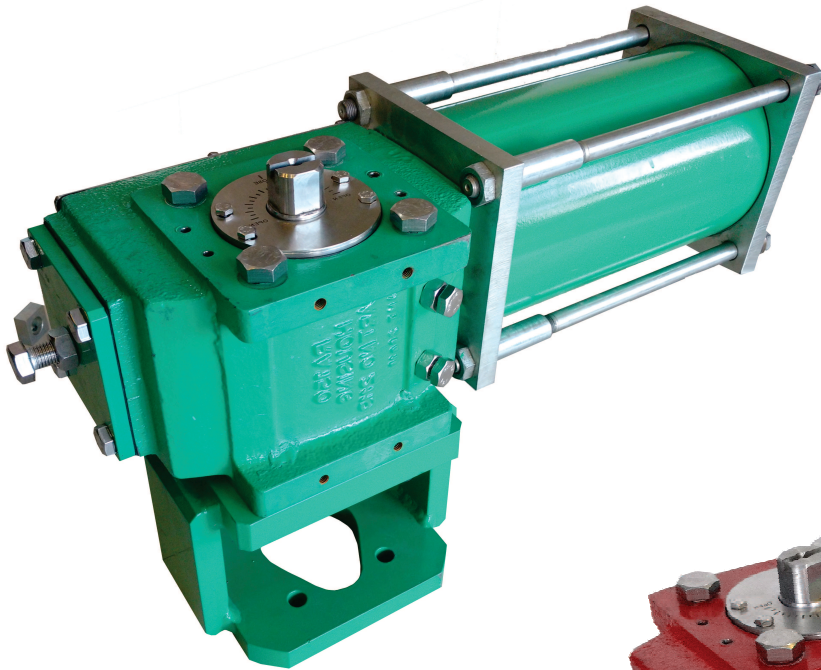




ENTECH CONTROLS

Rotary Actuators - RPA Series



PISTON ROTARY ACTUATOR 'RPA' SERIES

STANDARD FEATURES

- All models available as double acting or spring return.
- Torque outputs up to 35280Nm(384350 in-lb).
- Suitable for 60° and 90° operation.
- Open and close travel stops , provided $\pm 3^\circ$ min.
- Quick response.
- Smooth functioning constant linearity with negligible hysteresis.
- Field reversible design
- All Rotary Piston Actuators Series Certified for IS/IEC Protection Class IP66.
- Actuator mounting dimensions according to ISO 5211.
- Temperature sustaining Capacity from -40° to 100° .

STANDARD OPTIONS

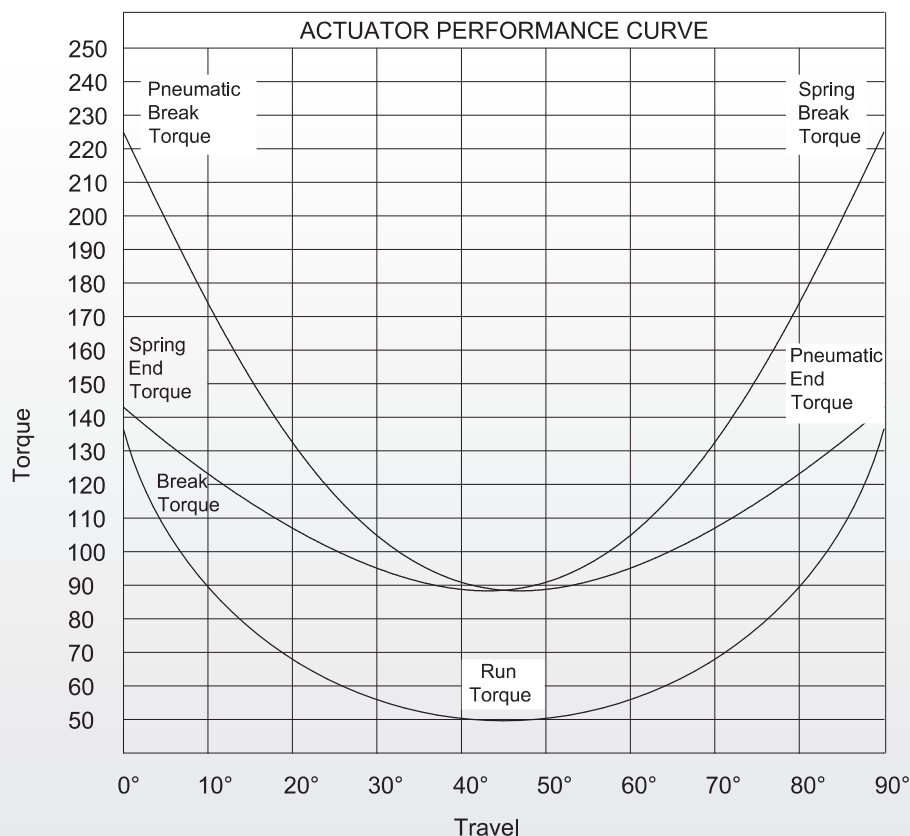
- Jackscrew manual override.
- Jackscrew with gear box manual override.
- Hydraulic hand pump override.
- Fluorosilicone seals for low temperature application upto -60°C (-76°F).
- Viton Seals for High temperature applications up to 200°C (392°F).

TYPICAL APPLICATION

- For on/off or modulating control of any quarter-turn operated valve.

CERTIFICATIONS

- ISO 9001:2008(TUV).
- CE-Machinery Directive 2006/42/EC.
- IS/IEC 60529 Part1-Protection IP66.



* Specifications are subject to change without notice

PISTON ROTARY ACTUATOR 'RPA' SERIES

TORQUE IN Nm		DOUBLE ACTING TORQUE					
MODEL	AIR PRESSURE	3 bar	4 bar	5 bar	6 bar	7 bar	8 bar
RPA80		44	58	73	87	102	116
RPA80D		79	105	131	157	183	210
RPA100		115	153	191	229	267	306
RPA100D		206	266	332	399	465	532
RPA125		179	239	299	359	418	478
RPA125D		323	431	539	647	755	862
RPA150		412	550	687	824	961	1098
RPA150D		808	1078	1347	1616	1885	2154
RPA200		733	978	1222	1467	1711	1956
RPA200D		1451	1935	2418	2902	3385	3869
RPA250		1396	1862	2327	2793	3258	3724
RPA250D		2514	3352	4189	5027	5865	6703
RPA330		3142	4189	5237	6284	7332	8379
RPA330D		5656	7541	9426	11312	13197	15082
RPA400		4766	6355	7944	9533	11122	12711
RPA400D		8581	11441	14302	17162	20023	22883
RPA500		7350	9800	12250	14700	17150	19600
RPA500D		13230	17640	22050	26460	30870	35280

TORQUE IN in-lb						
MODEL \ AIR PRESSURE	40 psig	60 psig	80 psig	100 psig	120 psig	140 psig
RPA80	364	546	728	910	1092	1274
RPA80D	624	936	1248	1560	1872	2184
RPA100	946	1418	1891	2364	2837	3310
RPA100D	1734	2600	3467	4334	5200	6068
RPA125	1497	2246	2994	3743	4492	5240
RPA125D	2679	4019	5358	6698	8038	9377
RPA150	3394	5090	6767	8484	10181	11878
RPA150D	6666	9999	13332	16665	19998	23331
RPA200	6060	9090	12120	15150	18180	21210
RPA200D	12120	18180	24240	30300	36360	42420
RPA250	11519	17279	23038	28798	34558	40317
RPA250D	20794	31192	41589	51986	62383	72780
RPA330	25978	38966	51955	64944	77933	90922
RPA330D	46838	70258	93677	117096	140515	163934
RPA400	39557	59335	79114	98892	118670	138449
RPA400D	71242	106862	142483	178104	213725	249346
RPA500	61008	91512	122016	152520	183024	213528
RPA500D	109814	164722	219629	274536	329443	384350

* Specifications are subject to change without notice

PISTON ROTARY ACTUATOR 'RPA' SERIES

TORQUE IN Nm SINGLE ACTING TORQUE

MODEL	SPRING SET NO.	SPRING		3 bar		4 bar		5 bar		6 bar	
		MIN	MAX	AIR MIN	AIR MAX	AIR MIN	AIR MAX	AIR MIN	AIR MAX	AIR MIN	AIR MAX
RPA80SR-S	1	6	14	30	38	44	52	59	67	73	81
	2	12	35	9	32	23	46	38	61	52	75
	3	20	44	-	-	14	38	29	53	43	67
	4	29	58	-	-	-	-	15	44	29	58
RPA100SR-S	1	15	38	77	100	115	138	153	176	191	214
	2	31	92	23	84	61	122	99	160	137	198
	3	53	115	-	-	38	100	76	138	114	176
	4	76	153	-	-	-	-	38	115	76	153
RPA125SR-S	1	24	60	119	155	179	215	239	275	299	335
	2	48	143	36	131	96	191	156	251	216	311
	3	84	180	-	-	59	155	119	215	179	275
	4	119	239	-	-	-	-	60	180	120	240
RPA150SR-S	1	55	137	275	357	413	495	550	632	687	769
	2	110	330	82	302	220	440	357	577	494	714
	3	192	412	-	-	138	358	275	495	412	632
	4	275	549	-	-	-	-	138	412	275	549
RPA200SR-S	1	98	244	489	635	734	880	978	1124	1223	1369
	2	195	587	146	538	391	783	635	1027	880	1272
	3	342	733	-	-	245	636	489	880	734	1125
	4	489	978	-	-	-	-	244	733	489	978
RPA250SR-S	1	186	294	1102	1210	1568	1676	2033	2141	2499	2607
	2	372	706	690	1023	1156	1490	1621	1955	2087	2421
	3	652	882	514	744	980	1210	1445	1675	1911	2141
	4	931	1176	220	465	686	931	1151	1396	1617	1862
RPA330SR-S	1	419	1047	2095	2723	3142	3770	4190	4818	5237	5865
	2	838	2514	628	2304	1675	3351	2723	4399	3770	5446
	3	1466	3142	-	-	1047	2723	2095	3771	3142	4818
	4	2095	4189	-	-	-	-	1048	3142	2095	4189
RPA400SR-S	1	635	1589	3177	4131	4766	5720	6355	7309	7944	8898
	2	1271	3813	953	3495	2542	5084	4131	6673	5720	8262
	3	2224	4766	-	-	1589	4131	3178	5720	4767	7309
	4	3178	6355	-	-	-	-	1589	4766	3178	6355
RPA500SR-S	1	980	2450	4900	6370	7350	8820	9800	11270	12250	13720
	2	1960	5880	1470	5390	3920	7840	6370	10290	8820	12740
	3	3430	7350	-	-	2450	6370	4900	8820	7350	11270
	4	4900	9800	-	-	-	-	2450	7350	4900	9800

TORQUE IN in-lb

MODEL	SPRING SET NO.	SPRING		40 psig		60 psig		80 psig		100 psig	
		MIN	MAX	AIR MIN	AIR MAX	AIR MIN	AIR MAX	AIR MIN	AIR MAX	AIR MIN	AIR MAX
RPA80SR-S	1	55	137	227	309	409	491	591	673	773	855
	2	100	319	45	264	227	446	409	628	591	810
	3	191	410	-	-	136	355	318	537	500	719
	4	273	546	-	-	-	-	182	455	364	637
RPA100SR-S	1	142	355	591	804	1063	1276	1536	1749	2009	2222
	2	260	827	119	686	591	1158	1064	1631	1537	2104
	3	496	1064	-	-	354	922	827	1395	1300	1868
	4	709	1418	-	-	-	-	473	1182	946	1655
RPA125SR-S	1	225	561	936	1272	1685	2021	2433	2769	3182	3518
	2	412	1310	187	1085	936	1834	1684	2582	2433	3331
	3	786	1684	-	-	562	1460	1310	2208	2059	2957
	4	1123	2246	-	-	-	-	748	1871	1497	2620
RPA150SR-S	1	509	1273	2121	2885	3817	4581	5514	6278	7211	7975
	2	933	2969	425	2461	2121	4157	3818	5854	5515	7551
	3	1782	3818	-	-	1272	3308	2969	5005	4666	6702
	4	2545	5090	-	-	-	-	1697	4242	3394	5939
RPA200SR-S	1	909	2273	3787	5151	6817	8181	9847	11211	12877	14241
	2	1667	5303	757	4393	3787	7423	6817	10453	9847	13483
	3	3182	6818	-	-	2272	5908	5302	8938	8332	11968
	4	4545	9090	-	-	-	-	3030	7575	6060	10605
RPA250SR-S	1	1728	2726	8793	9791	14553	15551	20312	21310	26072	27070
	2	3168	6360	5159	8351	10919	14111	16678	19870	22438	25630
	3	6048	8177	3342	5471	9102	11231	14861	16990	20621	22750
	4	8639	10903	616	2880	6071	8640	12135	14399	17895	20159
RPA330SR-S	1	3897	9742	16236	22081	29224	35069	42213	48058	55202	61047
	2	7144	22730	3248	18834	16236	31822	29225	44811	42214	57800
	3	13638	29225	-	-	9741	25328	22730	38317	35719	51306
	4	19483	38966	-	-	-	-	12989	32472	25978	45461
RPA400SR-S	1	5934	14834	24723	33623	44501	53401	64280	73180	84058	92958
	2	10878	34612	4945	28679	24723	48457	44502	68236	64280	88014
	3	20767	44501	-	-	14834	38568	34613	58347	54391	78125
	4	29668	59335	-	-	-	-	19779	49446	39557	69224
RPA500SR-S	1	9151	22878	38130	51857	68634	82361	99138	112865	129642	143369
	2	16777	53382	7626	44231	38130	74735	68634	105239	99138	135743
	3	32029	68634	-	-	22878	59483	53382	89987	83886	120491
	4	45756	91512	-	-	-	-	30504	76260	61008	106764

* Specifications are subject to change without notice

PISTON ROTARY ACTUATOR 'RPA' SERIES

TORQUE IN Nm SINGLE ACTING TORQUE

MODEL	SPRING SET NO.	SPRING		3 bar		4 bar		5 bar		6 bar	
		MIN	MAX	AIR MIN	AIR MAX	AIR MIN	AIR MAX	AIR MIN	AIR MAX	AIR MIN	AIR MAX
RPA80SR-D	1	10	26	53	69	79	95	105	121	131	147
	2	21	63	16	58	42	84	68	110	94	136
	3	37	79	-	-	26	68	52	94	78	120
	4	52	105	-	-	-	-	26	79	52	105
RPA100SR-D	1	27	69	137	179	197	239	263	305	330	372
	2	55	165	41	151	101	211	167	277	234	344
	3	96	206	-	-	60	170	126	236	193	303
	4	137	274	-	-	-	-	58	195	125	262
RPA125SR-D	1	43	108	215	280	232	388	431	496	539	604
	2	86	259	64	237	172	345	280	453	388	561
	3	151	323	-	-	108	280	216	388	324	496
	4	216	431	-	-	-	-	108	323	216	431
RPA150SR-D	1	108	269	539	700	809	970	1078	1239	1347	1508
	2	215	647	161	593	431	863	700	1132	969	1401
	3	377	808	-	-	270	701	539	970	808	1239
	4	539	1078	-	-	-	-	269	808	538	1077
RPA200SR-D	1	193	483	968	1258	1452	1742	1935	2225	2419	2709
	2	387	1161	290	1064	774	1548	1257	2031	1741	2515
	3	677	1451	-	-	484	1258	967	1741	1451	2225
	4	967	1935	-	-	-	-	438	1451	967	1935
RPA250SR-D	1	335	529	1985	2179	2823	3017	3660	3854	4498	4692
	2	670	1270	1244	1844	2082	2682	2919	3519	3757	4357
	3	1173	1588	926	1341	1764	2179	2601	3016	3439	3854
	4	1676	2117	397	838	1235	1676	2072	2513	2910	3351
RPA330SR-D	1	754	1885	3771	4902	5656	6787	7541	8672	9427	10558
	2	1508	4525	1131	4148	3016	6033	4901	7918	6787	9804
	3	2639	5656	-	-	1885	4902	3770	6787	5656	8673
	4	3770	7541	-	-	-	-	1885	5656	3771	7542
RPA400SR-D	1	1144	2860	5721	7437	8581	10297	11442	13158	14302	16018
	2	2288	6865	1716	6293	4576	9153	7437	12014	10297	17874
	3	4004	8581	-	-	2860	7437	5721	10298	8581	13158
	4	5721	11441	-	-	-	-	2861	8581	5721	11441
RPA500SR-D	1	1764	4410	8820	11466	13230	15876	17640	20286	22050	24696
	2	3528	10584	2646	9702	7056	14112	11466	18522	15876	22932
	3	6174	13230	-	-	4410	11466	8820	15876	13230	20286
	4	8820	17640	-	-	-	-	4410	13230	8820	17640

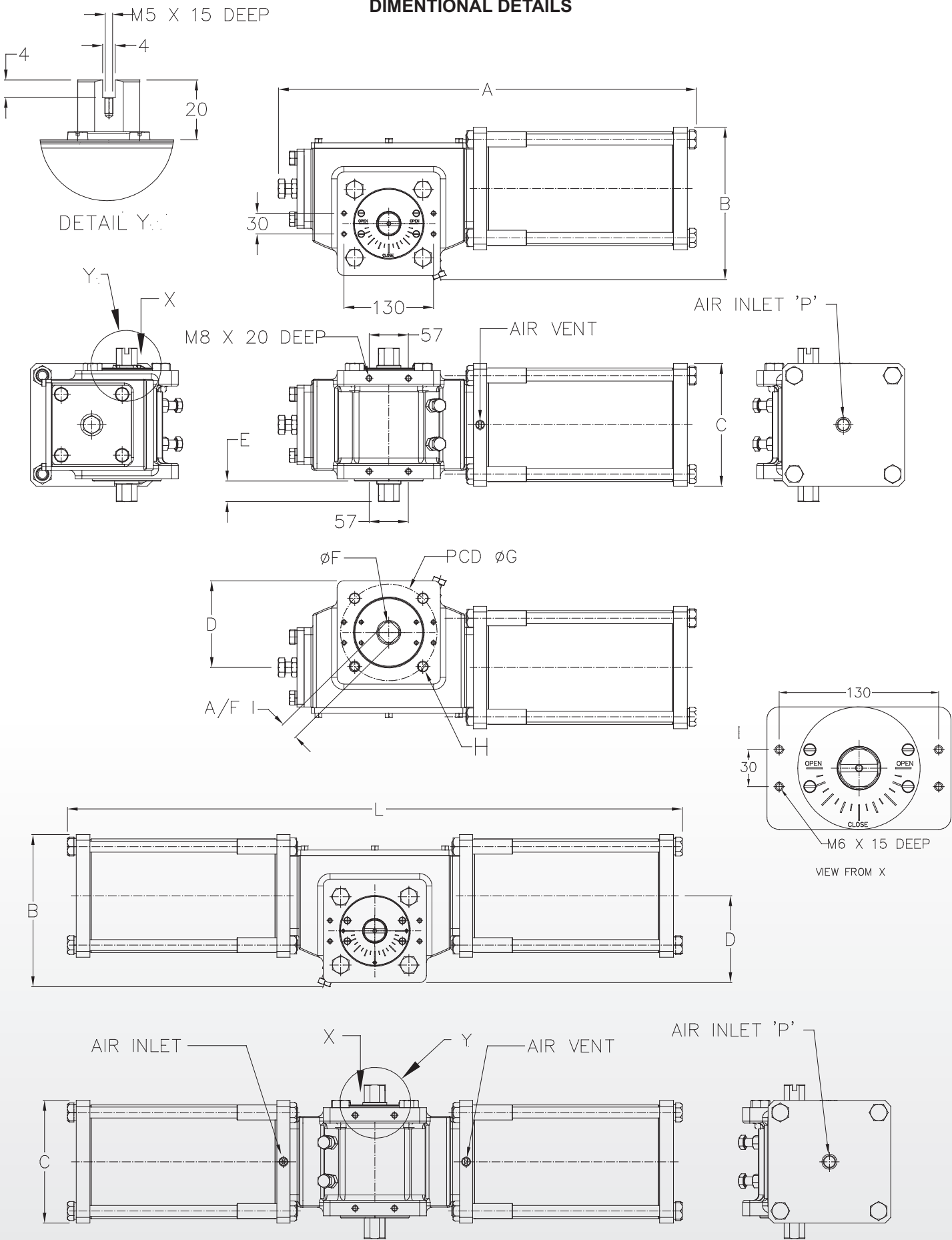
TORQUE IN in-lb

MODEL	SPRING SET NO.	SPRING		40 psig		60 psig		80 psig		100 psig	
		MIN	MAX	AIR MIN	AIR MAX	AIR MIN	AIR MAX	AIR MIN	AIR MAX	AIR MIN	AIR MAX
RPA80SR-D	1	94	234	390	530	702	842	1014	1154	1326	1466
	2	172	546	78	452	390	764	702	1076	1014	1388
	3	328	702	-	-	234	608	546	920	858	1232
	4	468	936	-	-	-	-	312	780	624	1092
RPA100SR-D	1	260	650	1084	1474	1950	2340	2817	3207	3684	4074
	2	477	1517	217	1257	1083	2123	1950	2990	2817	3857
	3	910	1950	-	-	650	1690	1517	2557	2384	3424
	4	1300	2600	-	-	-	-	867	2167	1734	3034
RPA125SR-D	1	402	1005	1674	2277	3014	3617	4353	4956	5693	6296
	2	737	2344	335	1942	1675	3282	3014	4621	4354	5961
	3	1407	3014	-	-	1005	2612	2344	3951	3684	5291
	4	2009	4019	-	-	-	-	1339	3349	2679	4689
RPA150SR-D	1	1000	2500	4166	5666	7500	9000	10832	12332	14165	15665
	2	1833	5833	833	4833	4167	8167	7500	11500	10832	14832
	3	3500	7500	-	-	2500	6500	5832	9832	9165	13165
	4	5000	10000	-	-	-	-	8332	8332	6665	11665
RPA200SR-D	1	1818	4545	7575	10302	13635	16362	19695	22422	25755	28482
	2	3333	10605	1515	8787	7575	14847	13635	20907	19695	26967
	3	6363	13635	-	-	4545	11817	10605	17877	16665	23937
	4	9090	18180	-	-	-	-	6060	15150	12120	21210
RPA250SR-D	1	3119	4921	15873	17675	26271	28073	36668	38470	47065	48867
	2	5718	11481	9313	15076	19711	25474	30108	35871	40505	46268
	3	10917	14762	6032	9877	16430	20275	26827	30672	37224	41069
	4	15596	19682	1112	5198	11510	15596	21907	25993	32304	36390
RPA330SR-D	1	7026	17564	29274	39812	52694	63232	76113	86651	99532	110070
	2	12881	40984	5854	33957	29274	57377	52693	80796	76112	104215
	3	24590	52693	-	-	17565	45668	40984	69087	64403	92506
	4	35129	70258	-	-	-	-	23419	58548	46838	81967
RPA400SR-D	1	10686	26716	44526	60556	80146	96176	115767	131797	151388	167418
	2	19591	62336	8906	51651	44526	87271	80147	122892	115768	158513
	3	37402	80147	-	-	26715	69460	62336	105081	97957	140702
	4	53431	106862	-	-	-	-	35621	89052	71242	124673
RPA500SR-D	1	16472	41180	68634	93342	123542	148250	178449	203157	233356	258064
	2	30200	96088	13726	79614	68634	134522	123541	189429	178448	244336
	3	57653	123541	-	-	41181	107069	96088	161976	150995	216883
	4	82361	164722	-	-	-	-	54907	137268	109814	192175

* Specifications are subject to change without notice

PISTON ROTARY ACTUATOR 'RPA' SERIES

DIMENTIONAL DETAILS



* Specifications are subject to change without notice

PISTON ROTARY ACTUATOR 'RPA' SERIES

ACTUATOR DIMENSION TABLE

SIZE	A	B	C	D	E	F	G	H	I	L	P
RPA80SR	310	115	100	65	15	18	70	M8 X 4	14 A/F	470	1/4 NPT
RPA100SR	375	135	110	80	15	18	70	M8 X 4	14 A/F	550	1/4 NPT
RPA125SR	490	174	145	102	20	22	102	M10 X 4	17 A/F	723	1/4 NPT
RPA150SR	608	215	178	126	20	35	140	M16 X 4	26 A/F	900	1/2 NPT
RPA200SR	608	236	220	126	20	35	140	M16 X 4	26 A/F	900	1/2 NPT
RPA250SR	727	315	282	172	40	65	165	M18 X 4	50 A/F	1460	1/2 NPT
RPA330SR	727	354	356	172	40	65	165	M18 X 4	50 A/F	1460	1/2 NPT
RPA400SR	762	452	426	260	77	98	298	M20 X 8	75 A/F	1525	1/2 NPT
RPA500SR	1100	525	520	260	77	98	298	M20 X 8	75 A/F	2100	1/2 NPT

All Dimensions Are in 'mm'.

ACTUATOR WEIGHT

MODEL	WEIGHT in kg.			
	DOUBLE	ACTING	SINGLE	ACTING
	RPA	RPA-D	RPA	RPA-D
RPA80	12	18	15	23
RPA100	17	26	22	33
RPA125	22	33	28	42
RPA150	33	50	42	63
RPA200	45	68	57	86
RPA250	80	120	100	150
RPA330	130	195	163	245
RPA400	180	270	225	169
RPA500	200	300	250	188

AIR CONSUMPTION

Actuator Model Singal act.	SWEPT Volume cu. in.	Set Pressure bar	Total Air Consumption in SCFM	Total Air Consumption in Nm3/hr	Total Air Consumption in kg/hr
RPA80SR	17.5	4	0.2	0.34	0.44
RPA80SR-D	35	4	0.4	0.68	0.88
RPA100SR	24	4	0.28	0.47	0.61
RPA100SR-D	48	4	0.56	0.94	1.22
RPA125SR	58.8	4	0.59	1	1.3
RPA125SR-D	117.6	4	1.18	2	2.6
RPA150SR	141	4	1.66	2.82	3.65
RPA150SR-D	282	4	3.32	5.64	7.3
RPA250SR	387.5	4	4.572	7.77	10.05
RPA250SR-D	775	4	9.14	15.54	20.1
RPA330SR	792	4	4.66	7.92	10.21
RPA330SR-D	1584	4	9.32	15.84	20.42
RPA400SR	1220.16	4	7.16	12	15.48
RPA400SR-D	2440.3	4	14.32	24	30.96
RPA500SR	3720	4	10.93	18.6	24
RPA500SR-D	7440	4	21.86	37.2	48

ORDERING CODE

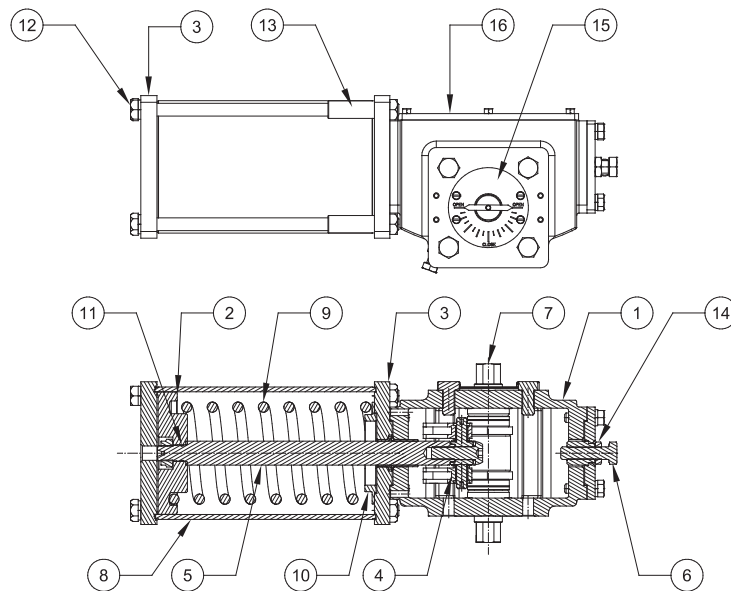
MODEL	ACTION	CODE	TYPE	CODE	ROTATION	CODE	MATERIAL	CODE	SEALS	CODE	MANUAL OVERRIDE	CODE	COATING	CODE
RPA80	DOUBLE ACTING	DOU	SINGLE CYLINDER	S	60°	CCW	CARBON STEEL	CS	NBR -N	N	JACK SCREW	J	EPOXY COATED	E
RPA100	SINGLE ACTING	SR	TWIN CYLINDER	D		CW	ALUMINIUM	AL	VITON -V	V	GEAR BOX	G	PU COATED	P
RPA125					90°	CCW	STAINLESS STEEL	S	SILICON -SI	SI	HYDRAULIC	H		
RPA150						CW								
RPA200														
RPA250														
RPA330														
RPA400														
RPA500														

RPA250	DOU	S	60CCW	CS	N	J	E
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RPA250DOUS60CCWC	SNJE
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* Specifications are subject to change without notice

CROSS SECTION DRAWING



BILL OF MATERIAL

SR. NO.	PART NAME	QTY	MATERIAL
1	HOUSING	1	S. G. IRON
2	PISTON	1	ALLOY STEEL
3	END PLATE	1	C.S.
4	LEVER ARM SUB ASSEMBLY	1	ALLOY STEEL
5	ACTUATOR SHAFT	1	ALLOY STEEL
6	HEX BOLT	1	SS304
7	LEVER ARM SHAFT	1	ALLOY STEEL
8	CYLINDER	1	C.S. + HARD CHROME
9	SPRING	1	SPRING STEEL
10	SPRING GUIDE	1	C.S.
11	O-RING	1	NBR
12	TIE ROD	4	B7
13	TIE ROD SLEEVE NUT	4	2H
14	HEX JAM NUT	1	SS304
15	ROTARY INDICATOR	1	SS304
16	HOUSING SIDE COVER	1	SS304



ENTECH CONTROLS

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