

P RANGE - METRIC AND IMPERIAL TORQUE DATA

P RANGE PNEUMATIC QUARTER TURN ACTUATORS



The diagram illustrates the internal structure of a P Range Pneumatic Quarter Turn Actuator. It features a central vertical shaft with a handle at the top. The shaft is surrounded by a housing with internal seals and a piston mechanism. A horizontal dashed line passes through the center of the actuator. Two circular symbols, each with a diagonal cross, are positioned on the left side of the actuator, representing pneumatic ports. Arrows indicate the flow of air into and out of these ports. The entire diagram is set against a blue background with white lines and text.

Publication PT/ISO20
Date of issue 02/03

P - Pneumatic

P Range Actuator

Double Acting and Spring Return

Torque Output Tables

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KEY

MOP = MAXIMUM OPERATING PRESSURE

MOP is the maximum pressure that can be applied to the actuator for regular operation and will produce the maximum center body torque at the Hydraulic Break position.

MAWP = MAXIMUM ALLOWABLE WORKING PRESSURE

MAWP is the maximum pressure that may be applied to a fully stroked actuator against the travel stop.

PNEUMATIC P DOUBLE ACTING

Model No.	MOP	MAWP	Position of stroke	40	50	60
P25005	350	350	Break	2680	3370	4030
			Run	1490	1874	2240
P25006	280	350	Break	3950	4870	5850
			Run	2198	2710	3252
P25007	210	260	Break	5270	6580	7900
			Run	2930	3660	4390
P25008	160	200	Break	6870	8580	10310
			Run	3820	4770	5730
P25010	100	130	Break	10700	13400	16100
			Run	5970	7460	8950
P25012	70	90	Break	15472	19340	23208
			Run	8595	10744	12893
P25008-2*	80	100	Break	13800	17200	30600
			Run	7640	9550	11500
P32508	350	350	Break	9820	12270	14720
			Run	5456	6820	8180
P32510	230	280	Break	15280	19090	22910
			Run	8492	10610	12730
P32512	160	200	Break	22010	27520	33010
			Run	12230	15290	18340
P32514	120	150	Break	29926	37407	44889
			Run	16626	20782	24938
P32510-2*	120	150	Break	30500	38200	45800
			Run	17000	21200	25500
P32512-2*	80	100	Break	44000	55000	66000
			Run	24400	30500	36600

IMPERIAL

Torque Output (in.lbs) at Operating Pressure (psi)

70	80	90	100	125	150	175	200	225	250
4710	5380	6070	6740	8420	10110	11790	13480	15160	16850
2620	2990	3373	3748	4680	5620	6550	7490	8430	9370
6820	7794	8760	9750	12180	14630	17060	19500	21930	24370
3794	4330	4870	5420	6770	8130	9481	10840	12195	13550
9210	10540	11860	13180	16470	19780	23060			
5120	5860	6950	7327	9150	10990	12820			
12030	13750	15460	17190	21470	25770				
6685	7640	8590	9550	13930	14320				
18800	21500	24200	26900						
10500	11900	13400	14900						
27076									
15042									
24100	27500								
13400	15300								
17170	19630	22080	24550	30690	36820	42960	49100	55230	61370
9540	10910	12270	13640	17050	20460	23870	27280	30690	34100
26740	30560	34380	38210	47750	57310	66860	76420	85973	
14860	16980	19100	21230	26530	31840	37150	42460	47768	
38520	44020	49536	55040	68790	82560				
21400	24460	27520	30580	38220	45870				
52370	59852	67333	74815						
29095	33251	37407	41564						
53400	61100	68700	76300						
29700	33900	38200	42400						
77000	88000								
42800	48900								

PNEUMATIC P DOUBLE ACTING

Model No.	MOP	MAWP	Position of stroke	3.0	3.5	4.0
P25005	24.1	24.1	Break	330	385	440
			Run	183	214	245
P25006	19.3	24.1	Break	475	555	634
			Run	264	308	352
P25007	14.5	17.9	Break	647	755	863
			Run	359	419	479
P25008	11.0	13.8	Break	845	986	1127
			Run	470	548	626
P25010	6.9	9.0	Break	1320	1541	1761
			Run	734	856	978
P25012	4.8	6.2	Break	1902	2218	2535
			Run	1056	1232	1409
P25008-2*	5.5	6.9	Break	1670	1948	2226
			Run	928	1082	1237
P32508	24.1	24.1	Break	1201	1401	1601
			Run	667	778	890
P32510	15.9	19.3	Break	1876	2189	2502
			Run	1042	1216	1390
P32512	11.0	13.8	Break	2702	3152	3603
			Run	1501	1751	2002
P32514	8.3	10.3	Break	3678	4291	4904
			Run	2043	2384	2724
P32510-2*	8.3	10.3	Break	3678	4291	4904
			Run	2043	2384	2724
P32512-2*	5.5	6.9	Break	5329	6217	7106
			Run	2961	3454	3948

METRIC

Torque Output (Nm) at Operating Pressure (bar)

5.0	6	6.0	7.0	8.5	10.5	12.0	14.0	15.1	17.0
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550	605	660	770	935	1155	1320	1541	1662	1871
306	336	367	428	520	642	734	856	923	1039

792	872	951	1109	1347	1664	1901	2218	2393	2694
440	484	528	616	748	924	1056	1232	1329	1497

1078	1186	1294	1510	1833	2265	2588			
599	659	719	839	1018	1258	1438			

1409	1549	1690	1972	2394	2958				
783	861	939	1096	1330	1643				

2201	2421	2641	3081						
1223	1345	1467	1712						

3169									
1761									

2783	3061								
1546	1701								

2002	2202	2402	2802	3403	4203	4804	5604	6045	6805
1112	1223	1334	1557	1890	2335	2669	3114	3358	3781

3127	3440	3753	4378	5317	6568	7506	8757	9445	
1737	1911	2085	2432	2954	3649	4170	4865	5247	

4504	4954	5404	6305	7656	9457				
2502	2752	3002	3503	4253	5254				

6130	6743	7356	8582						
3405	3746	4087	4768						

6130	6743	7356	8582						
3405	3746	4087	4768						

8882	9770								
4934	5428								

PNEUMATIC P SPRING RETURN

Model No.	Output Torque (in.lbs, Nm) at Operating Pressure (psi, bar)							
	40	3.0	50	3.5	60	4.0	70	5.0
P25005SR	750	85	750	85	1,610	182	1,610	182
P25006SR	1,510	171	1,510	171	2,260	255	2,260	255
P25007SR	1,920	217	1,920	217	2,960	334	2,960	334
P25008SR	2,300	260	2,300	260	3,540	400	3,540	400
P25010SR	3,810	431	3,810	431	5,800	644	5,800	644
P25012SR	5,600	633	5,600	633	7,300	825	7,300	825
P32510SR	5,540	626	5,540	626	8,480	958	8,480	958
P32512SR	7,890	892	7,890	892	12,000	1,356	12,000	1,356
P32514SR	10,900	1,231	10,900	1,231	16,400	1,853	16,400	1,853
P32517SR	15,230	1,721	15,230	1,721	23,170	2,618	23,170	2,618
P32519SR	20,300	2,294	20,300	2,294	31,100	3,514	31,100	3,514

IMPERIAL / METRIC

SR
Imp / Met

80	5.5	90	6.0	100	7.0	125	8.5	150	10.5
1,980	224	1,980	224	2,200	249	2,790	315	3,380	382
2,850	322	2,850	322	3,610	408	4,670	528	5,250	593
3,670	415	3,670	415	4,390	496	6,020	680	7,480	845
4,770	539	4,770	539	6,490	733	7,300	825	8,770	991
7,300	825	7,300	825	9,460	1,069	11,890	1,354	14,350	1,622
11,000	1,243	11,000	1,243	14,000	1,582	-	-	-	-
11,420	1,290	11,420	1,290	14,030	1,585	17,530	1,981	21,040	2,378
15,130	1,710	15,130	1,710	19,570	2,211	24,790	2,801	29,860	3,354
21,250	2,401	21,250	2,401	26,709	3,018	32,950	3,723	38,930	4,398
31,110	3,515	31,110	3,515	38,930	4,399	48,580	5,490	58,430	6,603
38,930	4,398	38,930	4,398	48,580	5,489	58,430	6,602	-	-

Rotork Fluid System Centres of Excellence

Rotork Fluid System
Fluid System s.r.l
Via di Coselli 13/15
55060 Coselli, Lucca
Italy
Tel: +39 0583 94811
Fax: +39 0583 403482
Email: fluid@fluidsystem.it

Rotork Fluid System
Rotork Controls Inc
675 Mile Crossing Blvd.
Rochester, NY 14624
USA
Tel: +1 585 328 1550
Fax: +1 585 328 5848
Email: info@rotork.com

Rotork Fluid System
428 Tigore Industrial Avenue
Singapore (Singapore) Pte Ltd
Tel: +65 457 1233
Fax: +65 457 6011
Email: mail@rotork.com

Rotork Fluid System
Regina House Ring Road
Bramley, Leeds LS13 4ET
UK
Tel: +44 113 236 3312
Fax: +44 113 236 3310
Email: sales@rotorkfluidsystem.co.uk

Rotork Fluid System
Rotork Controls (Canada) Ltd
#8 850, 28th Street NE
Calgary, Alberta T2A 6K1
Canada
Tel: +1 403 569 9455
Fax: +1 403 569 9414
Email: info@rotork.ca

Rotork Fluid System
Rotork Controls (Canada) Ltd
2850 Argentina Rd, Unit #4
Mississauga, Ontario L4W 3L8
Canada
Tel: +1 905 363 0313
Fax: +1 905 363 0320
Email: info@rotork.ca

Rotork Fluid System
Rotork Controls Inc.
9777 West Gulf Bank
Suite 15A
Houston, Texas 77040
USA
Tel: +1 713 856 5640
Fax: +1 713 856 8127
Email: info@rotork.com

Rotork Fluid System
Rotork Controls Inc
2180 South McDowell Blvd.
Petaluma, CA 94954
USA
Tel: +1 707 769 4880
Fax: +1 707 769 4888
Email: info@rotork.com

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