

BI-TORQ PN SERIES DOUBLE ACTING ACTUATOR TORQUE

AVAILABLE AIR SUPPLY PRESSURE (PSI)

MODEL	40PSI	50PSI	60PSI	70PSI	80PSI	90PSI	100PSI	115PSI
PN-32DA	34	43	55	64	71	82	87	101
PN-52DA	86	110	133	156	179	203	226	261
PN-63DA	154	196	238	280	321	363	405	468
PN-75DA	284	360	435	511	586	661	737	850
PN-85DA	405	486	607	767	848	928	1089	1250
PN-100DA	646	818	991	1163	1336	1508	1681	1939
PN-115DA	1070	1355	1640	1925	2210	2495	2780	3208
PN-125DA	1409	1783	2157	2532	2906	3280	3654	4216
PN-140DA	1920	2310	3080	3850	4230	4620	5390	6160
PN-161DA	2513	3009	4018	5018	5523	6027	7027	8036
PN-181DA	3390	4262	5425	6780	7452	8134	9488	10842
PN-201DA	4708	5846	7532	9417	10356	11294	13179	15064
PN-241DA	10267	12325	16436	20543	22596	24650	28757	32863
PN-271DA	13719	16462	21950	27438	30182	32926	38422	43910

ACTUATOR TORQUE OUTPUT (IN. LBS.)

FOR TORQUE VALUES OR AIR SUPPLY PRESSURES NOT LISTED, PLEASE CONSULT FACTORY

BI-TORQ PN SERIES TECHNICAL DATA

ACTUATOR WEIGHTS (LBS.)

MODEL	32	52	63	75	85	100	115	125	140	161	181	201	241	271
DOUBLE ACTING	1.08	2.25	3.26	5.51	9.24	11.02	17.75	22.09	33.86	46.91	59.00	80.80	132.30	189.61
SPRING RETURN	---	2.62	3.97	6.94	10.34	14.40	23.92	26.76	45.28	65.04	70.50	94.30	154.30	227.10

ACTUATOR CYCLE TIME (SECONDS)

MODEL	32	52	63	75	85	100	115	125	140	161	181	201	241	271
CCW (DA)	0.03	0.03	0.06	0.12	0.20	0.30	0.53	0.83	0.98	1.15	1.45	1.74	3.34	4.50
CW (DA)	0.03	0.04	0.08	0.12	0.19	0.27	0.47	0.66	0.93	1.10	1.38	1.70	3.30	4.50
CCW (SR)	---	0.09	0.14	0.22	0.31	0.44	0.83	1.08	1.23	1.75	2.10	2.38	3.82	4.50
CW (SR)	---	0.09	0.14	0.22	0.33	0.46	0.78	0.90	0.97	1.34	1.79	2.19	4.50	6.20

NOTE: ALL CYCLE TIMES ARE DERIVED INDEPENDENTLY OF VALVES AND ACTUATOR ACCESSORIES THAT MIGHT AFFECT OVERALL TIME PERFORMANCE.
CYCLE TIMES ARE BASED ON 80 PSI AIR SUPPLY.

ACTUATOR AIR CONSUMPTION (CUBIC INCHES)

MODEL	32	52	63	75	85	100	115	125	140	161	181	201	241	271
Double acting (both ways)	4.03	15.93	29.35	36.73	81.77	112.1	164.76	255.32	390.55	510.65	742.81	947.82	1479.66	2001.59
Spring Return	---	7.69	14.22	17.15	36.00	54.37	85.43	122.05	165.98	215.11	348.84	462.56	747.22	945.87

BI-TORQ PN SERIES SPRING RETURN ACTUATOR TORQUE

ACTUATOR TORQUE OUTPUT (IN. LBS.)

MODEL	SPRING SET	SPRING TORQUE START-END	40PSI AIR TORQUE START-END	50PSI AIR TORQUE START-END	60PSI AIR TORQUE START-END	70PSI AIR TORQUE START-END	80PSI AIR TORQUE START-END	90PSI AIR TORQUE START-END	100PSI AIR TORQUE START-END	115PSI AIR TORQUE START-END
PN-52-SR	01	44-32	48-23	72-47	95-70					
	02	59-42		61-31	85-54	108-77				
	03	66-46			80-47	104-70	127-94	150-117		
	04	82-57			70-31	93-55	116-78	140-101	163-125	
	05	105-72				78-32	101-55	125-78	148-102	183-137
PN-63-SR	01	85-44	92-38	134-80	176-122					
	02	109-58		120-56	162-98	204-140				
	03	128-71			149-79	191-121	233-162	275-204		
	04	152-82			136-54	177-96	219-138	261-180	303-222	
	05	196-111				151-53	193-95	235-136	276-178	339-241
PN-75-SR	01	172-89	168-63	244-138	319-214					
	02	226-118		215-85	291-160	366-235				
	03	249-133			275-137	351-212	426-288	502-363		
	04	303-162			247-83	322-158	398-234	473-309	549-385	
	05	380-205				279-81	354-157	430-232	505-308	618-421
PN-85-SR	01	242-142	196-67	277-147	438-308					
	02	298-176		244-91	404-251	566-412				
	03	361-215			366-189	526-350	606-430	687-510		
	04	416-248			332-133	493-293	573-373	653-454	814-614	
	05	536-321				420-173	501-254	581-335	742-495	902-656
PN-100-SR	01	395-218	384-154	556-326	728-499					
	02	521-288		485-199	658-372	830-544				
	03	564-318			628-329	801-502	973-674	1146-847		
	04	691-389			558-203	730-375	903-548	1075-720		
	05	860-486				630-206	802-378	975-551	1147-723	1406-982
PN-115-SR	01	658-363	650-270	935-555	1220-840					
	02	835-449		848-378	1133-663	1419-949				
	03	957-538			1044-541	1329-827	1615-1112	1900-1397		
	04	1133-625			958-365	1243-650	1528-934	1813-1220	2098-1505	
	05	1432-800				1067-352	1352-637	1638-922	1923-1207	2350-1635
PN-125-SR	01	877-470	850-328	1224-703	1599-1077					
	02	1040-560		1135-539	1509-914	1883-1288				
	03	1313-718			1351-640	1725-1015	2099-1389	2474-1763		
	04	1477-808			1261-477	1636-851	2010-1226	2384-1600	2758-1974	
	05	1913-1055				1388-415	1762-789	2136-1164	2511-1538	3072-2099

BI-TORQ PN SERIES SPRING RETURN ACTUATOR TORQUE

ACTUATOR TORQUE OUTPUT (IN. LBS.)

MODEL	SPRING SET	SPRING TORQUE START-END	40PSI AIR TORQUE START-END	50PSI AIR TORQUE START-END	60PSI AIR TORQUE START-END	70PSI AIR TORQUE START-END	80PSI AIR TORQUE START-END	90PSI AIR TORQUE START-END	100PSI AIR TORQUE START-END	115PSI AIR TORQUE START-END
PN-140-SR	01	1345-725	1053-319	1461-681	2142-1407					
	02	1522-814		1319-496	2044-1221	2770-1947				
	03	361-248			1814-761	2540-1487	2903-1850	3266-2213		
	04	2124-1132			1708-566	2434-1292	2797-1655	3168-2027	3894-2752	
	05	2725-1451				2106-637	2469-1009	2832-1372	3558-2097	4283-2823
PN-161-SR	03	1761-1195	1823-1247	2823-2257	3832-3257	4238-3761				
	04	2354-1593		2425-1663	3434-2080	3928-3168	4434-3673	5443-4673		
	05	2938-1983			3035-2080	3540-2584	4036-3089	5045-4089	6045-5089	
	06	3531-2380				3142-1991	3637-2496	4646-3505	5647-4505	
PN-181-SR	03	2514-1681	2390-1549	3744-2912	5098-4266	5779-4939				
	04	3354-2293		3186-2071	4540-3425	5213-4107	5895-4779	7249-6133		5475-3865
	05	4195-2796			3982-2584	4655-3266	5337-3939	6691-5302	8045-6656	
	06	5027-3355				4098-2425	4779-3107	6133-4461	7488-5815	
PN-201-SR	03	3345-2257	3390-2301	5275-4186	7152-6072	8099-7010				
	04	4461-3009		4523-3071	6399-4956	7346-5895	8284-6833	10170-8718		
	05	5576-3762			5646-3841	6593-4779	7532-5717	9417-7603	11130-9480	
	06	6691-4514				5841-3664	6780-4602	8665-6487	10550-8373	10562-8137
PN-241-SR	03	7452-4983	7346-4868	11453-8975	15560-13082	17613-15135				
	04	9939-6638		9798-6488	13905-10603	15958-12657	18012-14710	22193-18817		
	05	12427-8293		8143-4010	12250-8116	14303-10169	16357-12213	20463-16330	24570-20437	
	06	14914-9949			14896-7922	17791-10807	20676-13701	26456-19472	32226-25252	
PN-271-SR	03	10479-6992	10338-6850	16117-12630	21888-18401	24783-21295				
	04	13976-9329		13781-9134	19560-14905	22446-17799	25340-20685	31111-26464		
	05	17472-11657		11453-5638	17233-11418	20118-14303	23004-17188	28783-22968	34563-28748	
	06	20968-13984			14896-7922	17790-10807	20676-13701	26455-19472	32226-25252	27115-20965