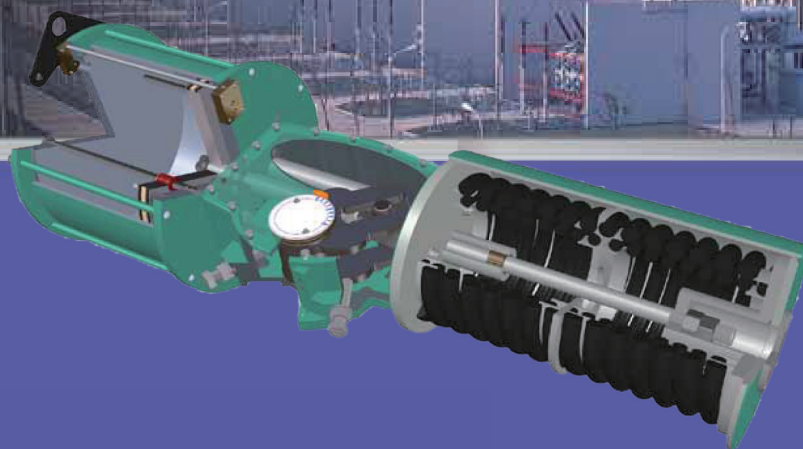




JDV
CONTROL
VALVES

JES / JEC Series

Pneumatic Actuator





**JDV
CONTROL
VALVES**

JES / JEC Series

Pneumatic Actuator

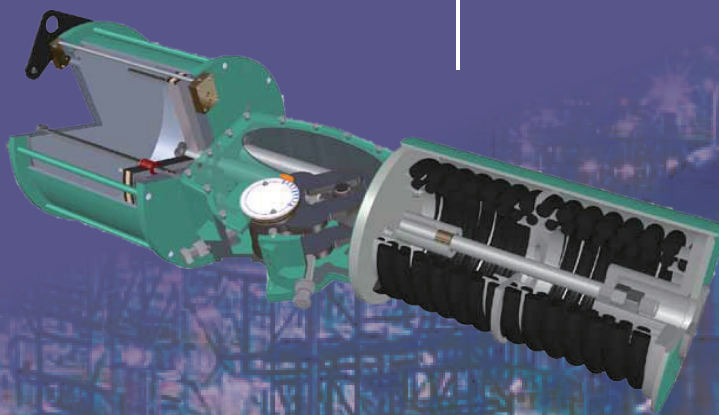
The JES/JEC Series heavy duty scotch yoke actuators are consisted Of symmetrical and canted type and offer complete modular systems. By applying to double acting and Single Acting configuration, our compact JES/JEC Series can be suited for torque outputs of any valve such as ball,butterfly,plug valves and other quarter turn mechanism.

JES/JEC Series are also designed to use with Hydraulic override, Limit Switches,Solenoid Valve and Positioner by built-in air tubing at the factory.

In order to guarantee reliable operation,we use high-technical materials,You will receive an operational, safety application from us.

Application

Power plant, Chemical processing line,Steel industry,Gas station,Water works,Oil industry,Marine,sewage industry,etc.



PRODUCT FEATURES

产品特色

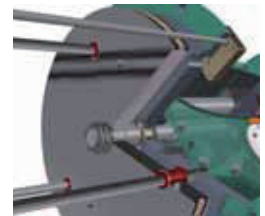
- **Type:**
 - JES-DA Type = Double Acting (For Ball/Plug Valve)
 - JES-SR Type = Single Acting (Spring Return)(For Ball/Plug Valve)
 - JEC-DA Type = Double Acting (For Butterfly/Damper Valve)
 - JEC-SR Type = Single Acting (Spring Return)(For Butterfly/Damper Valve)
- **Torque Outputs:**
 - From: 495 N.m (4386 In.lb)
 - Up to: 750000 N.m (6645000 In.lb)
- **Temperature:**
 - Standard:-20°C To +80°C
 - Low: -35°C To +80°C
 - High: -20°C To +150°C
- **Working Pressure:**
 - 2.8 Bar to 7 Bar (40 to 100 Psig)
 - Max: 10 Bar
- **ISO or MSS Valve Mounting:**
 - JES/JEC Series meet the dimensional requirements according to ISO 5211.
 - (Option:MSS-SP 101)
- **Features**
 - Compact Design
 - Water Ingress Protected
 - Symmetric or Canted Yoke
 - Safety
 - Standardized
 - Versatile
 - MSS or ISO Valve Mounting
 - Modular Design
 - Corrosion Resistant

Safe Piston Guide Bar

JES/JEC Series actuators are designed to minimize friction under low air pressure.

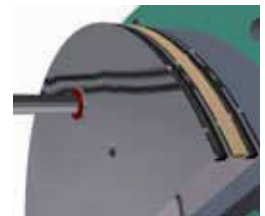
Piston guide bars inside cylinder are also designed to maintain smoother operation.

JES/JEC Series has invented to prevent any transformation of spring retainer and piston by using anti-abrasive engineering plastic bushing.



Piston guide ring

High quality Back-up-ring prevent any leakage from worn-out and guarantee higher performance for a long life.



Easy setting indicator

When the two parts of travel stops set travel range -5° -95° to the valve, Indicator can meet the position easily and conveniently.



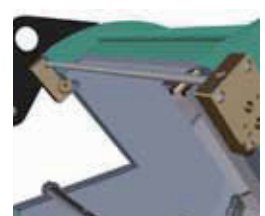
Alignment of modules

The Engineering plastic front cover bushing ensure accurate alignment between housing and cylinder case.



Namur standard

The JES/JEC Series allow the standardization of NAMUR type. It is assembled to a variety of accessories easily.



Symmetric or canted type



Hydraulic jacket

Optional Hydraulic Jacket can be incorporated in accordance with customer' s requirements.

Replaceable bearing

The heat-treated surface of yoke and bearing provide low friction and permanent lubrication.

Spring rod guide

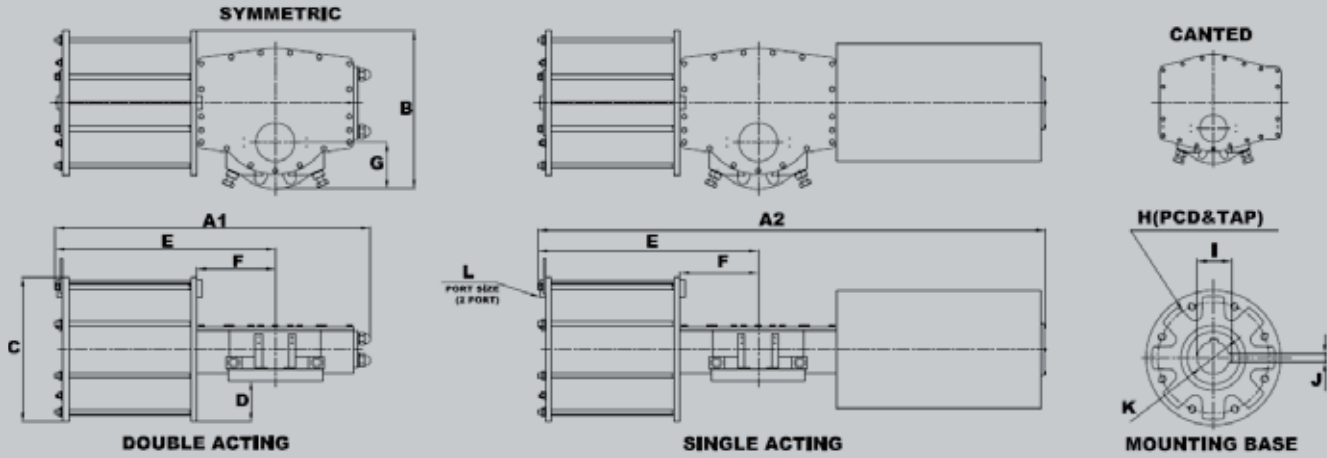
A spring rod guide holder & bushing inside a spring case not only prevent any change of spring case but also maintain safe operation of spring rod.

Compact air tubing type

Built-in air pipe and In/Out air block in both end of a cylinder cover give users much convenient for the easy installation of accessories like solenoid valve, air set, etc.(Option)



TECHNICAL SPECIFICATION 技术资料



JES Series (For Ball/Plug Valve)

(M.M.)

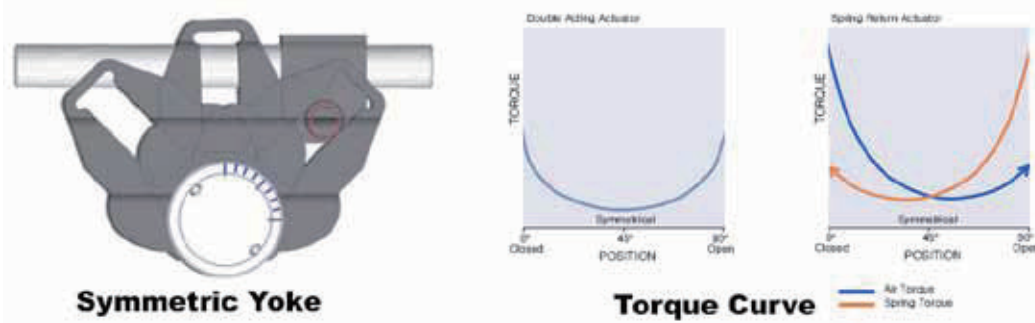
TYPE	A1	A2		B	C	D	E	F	G	H		I	J	K		L
		4.2	5.6							PCD	TAP/DP			Bore size	DP	
JES-08DA(SR)-200	747	1262	1262	334	271	61	573	174	113	165	M20/25	54	14	50	121	1/2" NPT
JES-08DA(SR)-250	747	1262	1262	359	322	86	573	174	113	165	M20/25	54	14	50	121	1/2" NPT
JES-08DA(SR)-300	747	1262	1262	385	373	112	573	174	113	165	M20/25	54	14	50	121	1/2" NPT
JES-08DA(SR)-335	747	1265	1265	413	410	130	573	174	113	165	M20/25	54	14	50	121	1/2" NPT
JES-10DA(SR)-335	888	1465	1465	455	410	105	673	215	150	254	M16/24	80	20	75	171	1/2" NPT
JES-10DA(SR)-385	888	1465	1468	481	461	131	673	215	150	254	M16/24	80	20	75	171	1/2" NPT
JES-10DA(SR)-435	888	1468	1468	506	512	156	673	215	150	254	M16/24	80	20	75	171	1/2" NPT
JES-13DA(SR)-435	1098	1807	1810	566	512	144	826	272	180	298	M20/29	95	22	90	191	3/4" NPT
JES-13DA(SR)-485	1098	1807	1813	591	562	169	826	272	180	298	M20/29	95	22	90	191	3/4" NPT
JES-13DA(SR)-535	1098	1810	1816	622	624	200	826	272	180	298	M20/29	95	22	90	191	3/4" NPT
JES-16DA(SR)-535	1301	2174	2177	682	624	172	980	321	210	356	M30/43	117	32	110	235	3/4" NPT
JES-16DA(SR)-585	1301	2177	2179	708	675	198	980	321	210	356	M30/43	117	32	110	235	3/4" NPT
JES-16DA(SR)-635	1301	2177	2181	734	728	224	980	321	210	356	M30/43	117	32	110	235	3/4" NPT
JES-20DA(SR)-635	1582	2576	2583	810	739	211	1182	400	240	406	M36/50	137	32	130	265	3/4" NPT
JES-20DA(SR)-685	1582	2578	2586	835	789	236	1182	400	240	406	M36/50	137	32	130	265	3/4" NPT
JES-20DA(SR)-735	1582	2583	2586	863	845	263	1182	400	240	406	M36/50	137	32	130	265	3/4" NPT

JEC Series (For Butterfly/Damper Valve)

(M.M.)

TYPE	A1	A2		B	C	D	E	F	G	H		I	J	K		L
		4.2	5.6							PCD	TAP/DP			Bore size	DP	
JEC-08DA(SR)-200	822	1337	1337	334	271	61	596	181	113	165	M20/25	54	14	50	121	1/2" NPT
JEC-08DA(SR)-250	822	1337	1337	359	322	86	596	181	113	165	M20/25	54	14	50	121	1/2" NPT
JEC-08DA(SR)-300	822	1337	1337	385	373	112	596	181	113	165	M20/25	54	14	50	121	1/2" NPT
JEC-08DA(SR)-335	822	1340	1340	413	410	130	596	181	113	165	M20/25	54	14	50	121	1/2" NPT
JEC-10DA(SR)-335	966	1543	1543	455	410	105	693	219	150	254	M16/24	80	20	75	171	1/2" NPT
JEC-10DA(SR)-385	966	1543	1546	481	461	131	693	219	150	254	M16/24	80	20	75	171	1/2" NPT
JEC-10DA(SR)-435	966	1546	1546	506	512	156	693	219	150	254	M16/24	80	20	75	171	1/2" NPT
JEC-13DA(SR)-435	1192	1901	1904	566	512	144	849	269	180	298	M20/29	95.4	22	90	191	3/4" NPT
JEC-13DA(SR)-485	1192	1901	1907	591	562	169	849	269	180	298	M20/29	95.4	22	90	191	3/4" NPT
JEC-13DA(SR)-535	1192	1904	1910	622	624	200	849	269	180	298	M20/29	95.4	22	90	191	3/4" NPT
JEC-16DA(SR)-535	1414	2287	2290	682	624	172	1006	320	210	356	M30/43	117	32	110	235	3/4" NPT
JEC-16DA(SR)-585	1414	2290	2292	708	675	198	1006	320	210	356	M30/43	117	32	110	235	3/4" NPT
JEC-16DA(SR)-635	1414	2290	2294	734	728	224	1006	320	210	356	M30/43	117	32	110	235	3/4" NPT
JEC-20DA(SR)-635	1699	2693	2760	810	739	211	1214	395	240	406	M36/50	137	32	130	265	3/4" NPT
JEC-20DA(SR)-685	1699	2695	2763	835	789	236	1214	395	240	406	M36/50	137	32	130	265	3/4" NPT
JEC-20DA(SR)-735	1699	2700	2763	863	845	263	1214	395	240	406	M36/50	137	32	130	265	3/4" NPT

Yoke design & Torque curve



DOUBLE ACTING TORQUE SHEET-JES-DA SERIES (For Ball/Plug Valve) 双动扭力表

(N.m.)

MODEL	2.8 BAR			4.2 BAR			5.6 BAR			7 BAR		
	0°	R°	90°	0°	R°	90°	0°	R°	90°	0°	R°	90°
JES-08DA-200	1024	635	1003	1536	952	1505	2049	1269	2006	2561	1587	2508
-250	1601	992	1568	2401	1488	2352	3201	1984	3135	4002	2480	3922
-300	2305	1428	2257	3458	2142	3386	4601	2856	4515	5763	3571	5644
-335	2874	1781	2815	4312	2672	4222	5749	3562	5630	7185	4453	7037
JES-10DA-335	3381	2096	3312	5072	3143	4967	6763	4191	6623	8453	5238	8280
-385	4466	2768	4374	6700	4151	6561	8933	5535	8749	11166	6919	10935
-435	5702	3533	5584	8552	5299	8376	11403	7066	11168	14253	8832	13960
JES-13DA-435	7412	4593	7260	11118	6889	10889	14824	9185	14519	18530	11482	18148
-485	9214	5710	9024	13821	8564	13536	18428	11419	18047	23034	14273	22559
-535	11211	6947	10980	16817	10421	16470	22422	13894	21960	28029	17367	27451
JES-16DA-535	13798	8550	13514	20698	12825	20271	27597	17100	27028	34497	21375	33786
-585	16499	10223	16159	24748	15334	24238	32997	20446	32317	41246	25558	40395
-635	19439	12045	19039	29158	18068	28558	38878	24090	38077	48598	30112	47596
JES-20DA-635	24298	15057	23798	36448	22585	35696	48597	30113	47595	60747	37641	59495
-685	28277	17521	27693	42415	26282	41540	56553	35042	55386	70690	43803	69233
-735	32555	20172	31884	48832	30258	47826	65109	40344	63767	81387	50430	79709

SPRING ACTING TORQUE SHEET-JES-SR SERIES (For Ball/Plug Valve) 单动扭力表

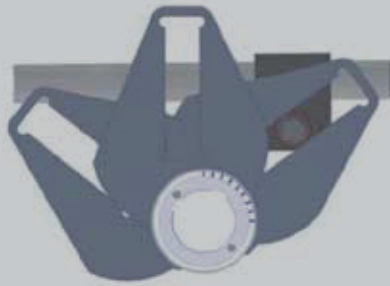
(N.m.)

MODEL		SPRING TORQUE (Nm)			AIR TORQUE: AIR SUPPLY PRESSURE											
		START	R	END	2.8BAR			4.2BAR			5.6BAR			7BAR		
					START	R	END	START	R	END	START	R	END	START	R	END
JES-08SR-200	4.2BAR	975	495	602	422	140	28	934	457	530	1447	774	1031	1771	937	1228
	5.6BAR	1280	650	790				746	302	225	1259	620	727			
JES-08SR-250	4.2BAR	1479	751	913	688	241	89	1488	737	873	2288	1233	1656	2763	1461	1915
	5.6BAR	2007	1019	1239				1162	469	344	1962	965	1128			
JES-08SR-300	4.2BAR	2126	1079	1313	992	349	131	2154	1063	1260	3297	1777	2389	3976	2102	2750
	5.6BAR	2894	1469	1787				1671	673	492	2824	1388	1621			
JES-08SR-335	4.2BAR	2667	1354	1647	1227	427	148	2665	1318	1555	4102	2208	2963	5007	2662	3509
	5.6BAR	3528	1791	2178				2133	881	695	3570	1771	2102			
JES-10SR-335	4.2BAR	3087	1563	1891	1490	533	225	3181	1580	1880	4872	2628	3536	5887	3118	4091
	5.6BAR	4189	2120	2566				2506	1023	779	4197	2070	2435			
JES-10SR-385	4.2BAR	4048	2049	2480	1986	719	326	4220	2102	2513	6453	3486	4701	7863	4190	5544
	5.6BAR	5391	2729	3303				3397	1422	1170	5630	2806	3357			
JES-10SR-435	4.2BAR	4977	2519	3049	2653	1014	607	5503	2780	3399	8354	4547	6191	10156	5278	6737
	5.6BAR	7223	3554	4097				4455	1745	1153	7306	3511	3945			
JES-13SR-435	4.2BAR	7202	3569	4167	3245	1024	58	6951	3320	3687	10657	5616	7317	13094	6826	8753
	5.6BAR	9395	4656	5436				5682	2233	1494	9388	4529	5124			
JES-13SR-485	4.2BAR	8857	4390	5125	4089	1320	167	8696	4174	4679	13303	7029	9190	16628	8691	11187
	5.6BAR	11372	5582	6406				7414	2982	2164	12021	5836	6675			
JES-13SR-535	4.2BAR	10740	5323	6214	4997	1624	240	10603	5098	5730	16208	8571	11220	19793	10313	13217
	5.6BAR	14234	7054	8236				8581	3366	2236	14187	6840	7726			
JES-16SR-535	4.2BAR	13070	6505	7651	6147	2045	444	13047	6320	7201	19946	10595	13958	24293	12700	16355
	5.6BAR	17431	8675	10204				10494	4150	2841	17393	8425	9598			
JES-16SR-585	4.2BAR	15538	7733	9096	7403	2490	621	15652	7601	8700	23901	12713	16779	29122	15250	19685
	5.6BAR	20710	10308	12124				12624	5027	3527	20873	10138	11606			
JES-16SR-635	4.2BAR	18742	9328	10971	8468	2717	297	18187	8740	9816	27907	14762	19335	34471	18102	23464
	5.6BAR	24132	12010	14127				15032	6057	4426	24752	12080	13945			
JES-20SR-635	4.2BAR	23515	11608	13456	10842	3449	283	22992	10977	12181	35141	18505	24080	43655	22897	29626
	5.6BAR	29869	14744	17092				19356	7841	5828	31506	15369	17727			
JES-20SR-685	4.2BAR	26637	13149	15243	13034	4372	1056	27172	13133	14903	41310	21893	28749	50216	26141	33454
	5.6BAR	35779	17662	20474				21940	8620	5761	36078	17380	19607			
JES-20SR-735	4.2BAR	31134	15368	17816	14739	4804	750	31016	14890	16692	47293	24976	32633	58228	30452	39238
	5.6BAR	40471	19978	23159				25673	10280	7354	41950	20366	23296			

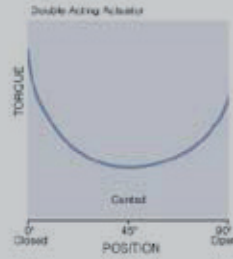


**JDV
CONTROL
VALVES**

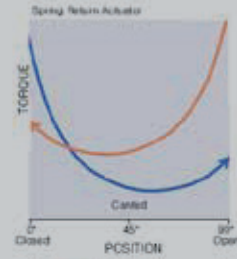
Yoke design & Torque curve



Canted Yoke



Torque Curve

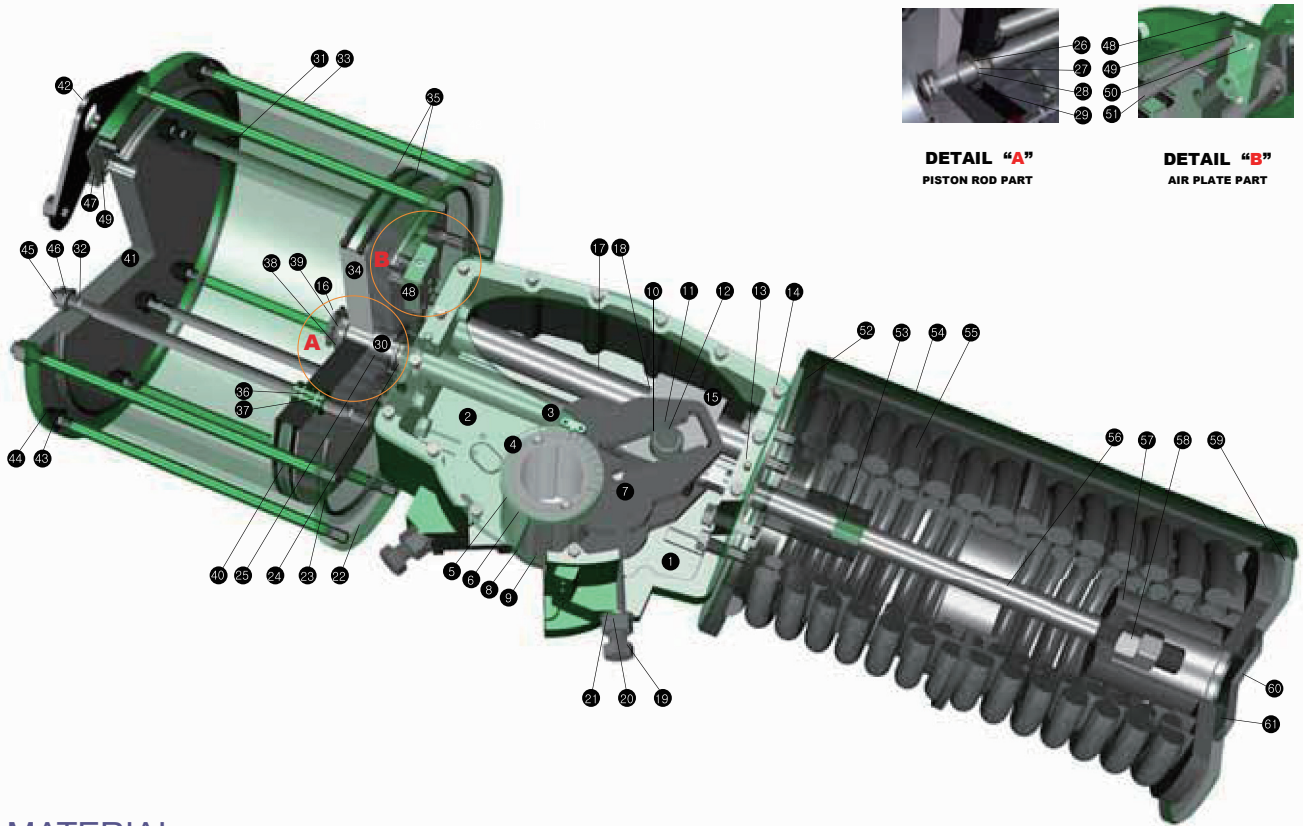


DOUBLE ACTING TORQUE SHEET-JEC-DA SERIES (For Butterfly/Damper Valve) 双动扭力表 (N.m)

MODEL	2.8 BAR			4.2 BAR			5.6 BAR			7 BAR		
	0	R	900	0	R	900	0	R	900	0	R	900
JEC-08DA-200	1,284	634	895	1,926	952	1,342	2,568	1,269	1,789	3,210	1,587	2,237
-250	2,006	992	1,399	3,009	1,487	2,098	4,012	1,983	2,797	5,016	2,480	3,496
-300	2,889	1,428	2,013	4,333	2,142	3,020	5,778	2,856	4,027	7,223	3,571	5,034
-335	3,603	1,781	2,511	5,404	2,672	3,766	7,205	3,562	5,022	9,007	4,452	6,277
JEC-10DA-335	4,238	2,095	2,954	6,358	3,142	4,431	8,477	4,190	5,908	10,596	5,238	7,384
-385	5,598	2,768	3,901	8,396	4,151	5,852	11,195	5,535	7,803	13,994	6,918	9,754
-435	7,146	3,533	4,980	10,719	5,299	7,471	14,292	7,066	9,961	17,865	8,832	12,452
JEC-13DA-435	9,290	4,593	6,475	13,935	6,889	9,713	18,579	9,185	12,950	23,225	11,482	16,188
-485	11,549	5,709	8,049	17,323	8,564	12,073	23,097	11,418	16,098	28,871	14,273	20,122
-535	14,052	6,947	9,794	21,078	10,420	14,691	28,104	13,894	19,588	35,130	17,368	24,485
JEC-16DA-535	17,295	8,550	12,054	25,942	12,825	18,081	34,590	17,100	24,109	43,237	21,375	30,136
-585	20,679	10,222	14,412	31,018	15,334	21,619	41,357	20,445	28,825	51,697	25,557	36,032
-635	24,365	12,046	16,982	36,547	18,068	25,473	48,729	24,091	33,964	60,911	30,113	42,454
JEC-20DA-365	30,456	15,056	21,227	45,684	22,585	31,841	60,911	30,113	42,454	76,140	37,641	53,067
-685	35,441	17,521	24,701	53,161	26,281	37,052	70,882	35,042	49,403	88,601	43,802	61,754
-735	40,804	20,172	28,439	61,206	30,258	42,659	81,607	40,344	56,878	102,008	50,430	71,098

SPRING ACTING TORQUE SHEET-JEC-SR SERIES (For Butterfly/Damper Valve) 单动扭力表 (N.m)

MODEL		SPRING TORQUE (Nm)			AIR TORQUE: AIR SUPPLY PRESSURE											
		START	R	END	2.8BAR			4.2BAR			5.6BAR			7BAR		
					START	R	END	START	R	END	START	R	END	START	R	END
JEC-08SR-200	4.2BAR	808	452	670	614	182	87	1256	500	534	1898	817	981			
	5.6BAR	1056	591	876				1050	361	286	1692	678	733	2334	996	1181
-250	4.2BAR	1282	717	1063	943	275	117	1946	770	816	2949	1266	1515			
	5.6BAR	1683	942	1396				1614	546	415	2617	1042	1114	3620	1538	1813
-300	4.2BAR	1824	1021	1513	1376	407	189	2820	1121	1196	4265	1835	2203			
	5.6BAR	2462	1378	2042				2292	765	559	3736	1479	1566	5181	2193	2572
-335	4.2BAR	2301	1288	1909	1694	493	210	3495	1384	1465	5296	2274	2721			
	5.6BAR	3100	1735	2572				2832	936	666	4633	1827	1921	6435	2717	3177
JEC-10SR-335	4.2BAR	2711	1512	2230	2008	583	243	4128	1630	1720	6247	2678	3197			
	5.6BAR	3759	2098	3093				3265	1045	671	5384	2093	2148	7503	3140	3625
-385	4.2BAR	3467	1935	2852	2746	833	434	5544	2216	2385	8343	3600	4336			
	5.6BAR	4757	2654	3913				4484	1497	1095	7282	2880	3046	10081	4264	4997
-435	4.2BAR	4421	2467	3637	3509	1066	559	7082	2832	3050	10655	4599	5540			
	5.6BAR	6099	3403	5017				5702	1896	1372	9275	3663	3863	12848	5429	6353
JEC-13SR-435	4.2BAR	6118	3340	4735	4555	1253	357	9200	3549	3595	13844	5845	6832			
	5.6BAR	7878	4301	6098				7837	2588	1835	12482	4884	5072	17127	7181	8310
-485	4.2BAR	7605	4152	5887	5662	1557	444	11436	4412	4468	17210	7266	8493			
	5.6BAR	10017	5469	7754				9569	3095	2056	15343	5949	6081	21117	8804	10105
-535	4.2BAR	9088	4962	7035	7017	1985	706	14043	5458	5603	21069	8932	10500			
	5.6BAR	11908	6502	9217				11861	3919	2783	18887	7392	7680	25913	10866	12577
JEC-16SR-535	4.2BAR	11286	6189	8845	8450	2361	768	17097	6636	6795	25745	10911	12823			
	5.6BAR	15018	8235	11770				14173	4590	3064	22820	8865	9091	31467	13140	15118
-585	4.2BAR	13008	7133	10195	10484	3089	1404	20823	8201	8611	31162	13312	15817			
	5.6BAR	18316	10044	14355				16663	5290	3303	27003	10402	10510	37342	15513	17716
-635	4.2BAR	15684	8601	12292	12073	3445	1298	24255	9467	9789	36437	15490	18280			
	5.6BAR	20617	11306	16158				20389	6762	4856	32571	12784	13347	44753	18807	21837
JEC-20SR-635	4.2BAR	18928	10292	14480	15976	4764	2299	31204	12293	12913	46431	19821	23526			
	5.6BAR	26335	14028	18967				26717	8556	5505	41945	16085	16119	57173	23613	26732
-685	4.2BAR	23156	12591	17715	17726	4930	1545	35446	13690	13896	53167	22451	26247			
	5.6BAR	30708	16357	22115				31046	9924	6345	48766	18685	18695	66486	27445	31046
-735	4.2BAR	26132	14209	19992	20812	5963	2307	41214	16049	16527	61615	26135	30746			
	5.6BAR	34753	18512	25029				36176	11746	7905	56578	21832	22125	76979	31918	36345



MATERIAL

NO	PART NAME	MATERIAL
1	HOUSING	DUCTILE IRON
2	HOUSING COVER	DU DRY BUSHING
3	POSITION NEEDLE	DU DRY BUSHING
4	POSITION INDICATOR	SUS
5	UPPER BUSHING O-RING	NBR
6	UPPER BUSHING	BSC
7	YOKE	ALLOY STEEL
8	LOW BUSHING O-RING	NBR
9	LOW BUSHING	BSC
10	SNAP-RING	ALLOY STEEL
11	SLIDE BEARING	ALLOY STEEL
12	SLIDE PIN	ALLOY STEEL
13	COVER FIXED PIN	ALLOY STEEL
14	COVER BOLT	ALLOY STEEL
15	SLIDE BLOCK	ALLOY STEEL
16	PISTON ROD LOCK BOLT	ALLOY STEEL
17	GUIDE BAR	ALLOY STEEL
18	GUIDE BUSHING	ALLOY STEEL
19	TRAVEL STOPPER BOLT	ALLOY STEEL
20	TRAVEL STOPPER NUT	ALLOY STEEL
21	TRAVEL STOPPER WASHER	ALLOY STEEL
22	CYLINDER	ALLOY STEEL
23	CYLINDER FRONT COVER	ALLOY STEEL
24	COVER O-RING	NBR
25	FRONT COVER BUSHING	ENGINEERING PLASTIC
26	ROD SEALS	PTFE
27	ROD SEALS O-RING	NBR
28	PISTON ROD O-RING RETAINER	ALLOY STEEL
29	SEALS RETAINER BOLT	ALLOY STEEL
30	PISTON ROD	ALLOY STEEL
31	PISTON GUIDE BAR	ALLOY STEEL

NO	PART NAME	MATERIAL
32	PISTON GUIDE BAR O-RING	NBR
33	TIE BOLT	ALLOY STEEL
34	PISTON	ALLOY STEEL
35	PISTON O-RING	NBR
36	PISTON GUIDE BUSHING	ENGINEERING PLASTIC
37	PISTON GUIDE BAR BUSHING O-RING	NBR
38	ROD WASHER	ALLOY STEEL
39	ROD LOCK NUT	ALLOY STEEL
40	BACK-UP-RING	PTFE
41	CYLINDER END COVER	ALLOY STEEL
42	LIFE PLATE	ALLOY STEEL
43	TIE BOLT WASHER	ALLOY STEEL
44	TIE BOLT NUT	ALLOY STEEL
45	PISTON GUIDE BAR NUT	ALLOY STEEL
46	PISTON GUIDE BAR BOLT	ALLOY STEEL
47	END AIR PLATE	ALM
48	FRONT AIR PLATE	ALM
49	AIR PLATE O-RING	NBR
50	AIR PLATE BOLT	ALLOY STEEL
51	AIR PIPE	SUS
52	SPRING CASE FRONT COVER	ALLOY STEEL
53	SPRING ROD GUIDE BUSHING	ENGINEERING PLASTIC
54	SPRING CASE	ALLOY STEEL
55	SPRING	ALLOY STEEL
56	SPRING ROD	ALLOY STEEL
57	SPRING RETAINER	ALLOY STEEL
58	ROD ADJUST NUT	ALLOY STEEL
59	SPRING CASE END COVER	ALLOY STEEL
60	CAP	ALLOY STEEL
61	CAP BOLT	ALLOY STEEL



台湾进典工业股份有限公司

台湾桃园县新屋乡新荣路292巷2-2号

Tel:886-3-4203366 Fax:886-3-4202266 E-mail:webmaster@jdv.com.tw

<http://www.jdv.com.tw>

上海进典控制阀有限公司

上海闵行区浦江高科技园三鲁公路3585号第4幢

Tel:86-21-64296118 Fax:86-21-64297088 E-mail:webmaster@jdv.com.cn

JDV-北京办事处

北京朝阳区建国路93号万达广场4号楼2608室

Tel:86-10-58208918 Fax:86-10-58208918*12 E-mail:eric.wu@jdv.com.cn

JDV-成都办事处

成都市锦江区成都万达广场5单元2202室

Tel:86-28-84191701 Fax:86-28-84191701*602 E-mail:mojianjun@jdv.com.cn

Copyright 2009/12. All rights are reserved by JDV. Technical data and content may be changed by JDV as necessary

