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HITORK®
A HANKUN Brand

PNEUMATIC ACTUATORS

Hankun Quality Driving The Future

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A HANKUN Brand

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Due to the continuous development and improvement of the product, design and parameter changes will not be notified separately. Please call us for the latest product and technical information.

Super Reliable
High Precision

Choose Hankun, Choose Reliable, Easy and Satisfied.

Hankun was founded in 2007 with a vision to become a "respected international expert in fluid control." Hankun independently R&D and manufacture IoT intelligent electric actuators, pneumatic actuators, valves, as well as IoT intelligent hose pumps and unmanned dosing devices. Certified with 3C, TS, and relevant production qualifications. Hankun is a world-leading provider of fluid control solutions and integrated equipment systems.

Hankun is headquartered in Beijing with the factory in Shanghai and branch offices in Guangzhou, Xi'an, Chengdu, Jinan, Moscow and other cities. Furthermore, Hankun has authorized distributors in Canada, Singapore, Indonesia, Thailand,, Uzbekistan, Pakistan, India and other countries and regions, ensuring a robust and efficient sales network and service system.

With the mission of "Making fluid control more reliable and simpler under harsh working conditions of special medium", Hankun has long been dedicated to providing professional fluid control solutions for industries such as power plant, petrochemicals, water treatment and other process industries. Through the necessary technical exchanges, Hankun recommends safe, cost-effective, environmentally friendly solution and design based on the actual site conditions, effectively addressing issues such as leaks and blockages.

Reputation is paramount for Hankun. Hankun strictly adhere to contractual obligations by providing timely delivery, installation guidance, and commissioning to ensure compliance and smooth handover for customer use. Throughout the entire life cycle, Hankun provide whole process and considerate service.

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Upright

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Products

HITORK pneumatic actuators are designed with a consistent focus on achieving greater strength, compact size, more stable operation and refined appearance. Through continuous iteration and updates, we provide users with increasingly superior products.

HITORK pneumatic actuators offer significant advantages, including a wide range of thrust/torque outputs, strong environmental adaptability, reliable performance, and a long service life.

HITORK pneumatic actuator product line is comprehensive and supports rich functional configurations. In addition to standard double-acting and single-acting options, various handwheel options are available, such as lead screw-type, worm gear, and bevel gear mechanisms.

Design Features

To meet the application requirements of different workstations, HITORK pneumatic actuators can provide functions such as adjustable stroke time, quick open/quick close, and quick open/slow close. They also offer redundant solenoid valve control solutions specifically designed for the chemical industry, such as 1oo2, 2oo2, and 2oo3 redundancy schemes, fulfilling on-site demands for safety and reliability.

To address the need for periodic functional testing of ESD valves at specific intervals, HITORK pneumatic actuators provide control solutions with PST functionality. These solutions offer both manual and automatic control modes, allowing users to select according to the actual requirements.

HITORK pneumatic actuators support color customization. For environmental corrosion protection requirements in offshore oil platforms or coastal plants, a C5-M grade coating can be customized as per ISO 12944 standard.

Based on years of experience in the valve pneumatic actuator industry and incorporating user feedback, HITORK has developed the HiPos series of intelligent valve positioners. This series utilizes the latest microprocessors and new-generation piezoelectric valves, featuring compact size, light weight, and high intelligence. It also offers optional functions such as HART communication and CT4 explosion-proof ratings, making it increasingly adopted across various industries.

Advantages

Supply Pressure: 2 ~ 8bar, Customizable for special pressure requirements
Torque Range: 3 ~ 210,000 Nm
Thrust Range: 1,000 ~ 300,000 N
Ambient Temperature: -60℃ ~ +120℃
Materials: Aluminum alloy, Carbon steel, Stainless steel, etc.

Model Designation

Part-Turn

	1	2	3	4	5	6
Information	Series	Model	Action Type	Handwheel	Spring	Ambient Temperature
Code	HPR	Refer to Table	DA-FL	Handwheel-SM	Refer to Table	HT-High Temperature（-20 ~ +120℃）
	HPY	Refer to Table	SRC-FC	Hydraulic Handwheel-HM		Standard temperature（-20 ~ +80℃）
			SRO-FO			LT-Low Temperature（-40 ~ +80℃）
						ULT-Ultra Low Temperature（-60 ~ +40℃）

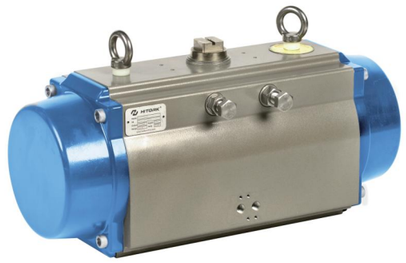
Linear

	1	2	3	4	5	6
Information	Series	Model	Travel	Action Type	Handwheel	Ambient Temperature
Code	HPD	Refer to Table	10	SRC-FC	Side-Mounted-SM	HT-High Temperature（0 ~ +120℃）
	HPL	Refer to Table	……	SRO-FO	Top-Mounted-TM	Standard temperature（-20 ~ +80℃）
			100	DA-FL	Hydraulic-HM	LT-Low Temperature（-40 ~ +80℃）
						ULT-Ultra Low Temperature（-60 ~ +40℃）

Rack and Pinion

HPR Series

The HPR series pneumatic actuator is a widely used rack and pinion type part-turn pneumatic actuator. Its cylinder body is formed by extruded aluminum, with the inner surface finely ground and hard anodized, ensuring long service life, low friction coefficient, and rapid movement. It is suitable for valves requiring 0~90 degree rotation, such as ball valves, butterfly valves, and plug valves.



Design Features

Corrosion Resistance: The cylinder body is extruded from ASTM 6005 aluminum alloy (stainless steel cylinders are available based on customer application requirements, subject to final selection). The inner surface undergoes fine grinding and anodic oxidation to enhance corrosion resistance and extend service life.

Adjustable Torque: The modular pre-load spring cartridge allows for safe and convenient disassembly of the single-acting actuator. The torque output range can be adjusted by changing the number of springs.

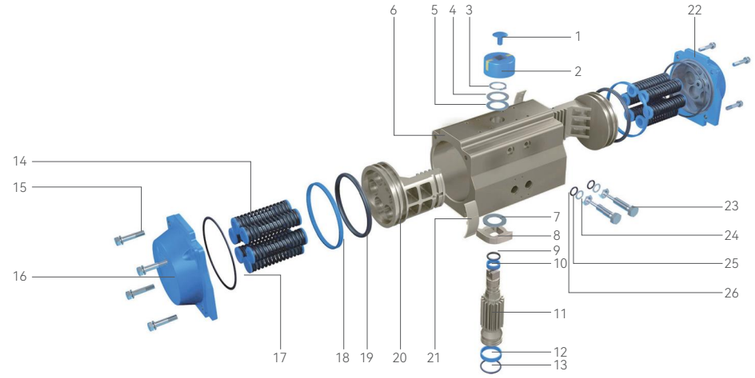
Adjustable Opening: External independent stroke adjustment screws allow for convenient and precise ±4° adjustment in both directions, ensuring precise alignment between the actuator's fully open and fully closed positions with the corresponding valve positions.

Reliable Structure: The integrated gear-and-bearing design enhances operational safety. With nickel-plating treatment, the assembly offers improved fracture resistance and extended service life.

Fast Response Speed: The rack and pinion mechanism achieves transmission efficiency of over 90%, minimizing energy loss. The direct engagement of pneumatic drive with the gear mechanism enables rapid start-stop performance, making it ideal for high-speed cycling applications.

Universal Connection Standard: The multi-functional position indicator with NAMUR groove enables easy connection with a wide range of standard sensor components.

Exploded View Diagram



Item	Designation	Material	Item	Designation	Material
1	Cap Screw	Engineering Plastic	14	Spring	Alloy Spring Steel
2	Indicator	Engineering Plastic	15	End Cover Screw	Stainless Steel
3	Circlip	Alloy Spring Steel	16	Left End Cover	Aluminum Alloy
4	Washer	Stainless Steel	17	End Cover O-Ring	NBR
5	External Shim	Engineering Plastic	18	Piston Bearing	Engineering Plastic
6	Cylinder	Aluminum Alloy	19	Piston O-Ring	NBR
7	Internal Shim	Engineering Plastic	20	Piston	Aluminum Alloy
8	Adjustable Stop	Aluminum Alloy	21	Piston Cover Plate	Nylon 6
9	Upper O-Ring	NBR	22	Right End Cover	Aluminum Alloy
10	Upper Bearing	Engineering Plastic	23	Adjusting Screw	Stainless Steel
11	Output Shaft	Alloy Steel	24	Nut	Stainless Steel
12	Lower Bearing	Engineering Plastic	25	Adjusting Screw Washer	Stainless Steel
13	Lower O-Ring	NBR	26	Adjusting Screw O-Ring	NBR

Advantages

Angle of Rotation: 0 ~ 90°

Output Torque: Double-acting: 3 ~ 13,000 Nm, Single-acting: 5 ~ 5,000 Nm

Operating Pressure: 2 ~ 8 bar

Ambient Temperature: High-temperature range: -20 ~ +100°C, Standard temperature range: -20 ~ +80°C
Low-temperature range: -40 ~ +80°C, Ultra Low-temperature range: -60 ~ +40°C

Model Designation

	1	2	3	4	5	6
Information	Series	Model	Action Type	Handwheel	Spring	Ambient Temperature
Code	HPR	007	DA-FL	Handwheel-SM	K8	HT-High Temperature (-20 ~ +100°C)
		.....	SRC-FC		.....	Standard Temperature (-20 ~ +80°C)
		8000	SRO-FO		K12	LT-Low Temperature (-40 ~ +80°C)
						ULT-Ultra Low Temperature (-60 ~ +40°C)
Example	HPR075-DA-SM-LT					

Double-Acting Torque Table

Torque: Nm

Model	Air Supply (bar)									
	2	2.5	3	4	4.5	5	5.5	6	7	8
HPR007DA	3	4	5	6	7	8	8	9	11	12
HPR012DA	5	6	7	10	11	12	13	14	17	19
HPR020DA	8	10	12	16	18	20	22	24	28	32
HPR035DA	15	18	22	29	33	36	40	44	51	58
HPR050DA	20	25	30	40	45	50	55	60	70	80
HPR075DA	31	39	47	63	70	78	86	94	110	125
HPR110DA	45	56	68	90	102	113	124	135	158	181
HPR160DA	66	83	99	132	149	165	182	198	231	264
HPR255DA	100	125	150	200	226	251	276	301	351	401
HPR435DA	171	214	256	342	385	427	470	513	598	684
HPR665DA	266	332	399	532	598	665	731	798	931	1064
HPR1000DA	426	532	638	851	958	1064	1170	1277	1490	1702
HPR1200DA	532	665	798	1064	1197	1330	1463	1596	1862	2128
HPR1800DA	769	962	1154	1539	1731	1924	2116	2308	2693	3078
HPR2700DA	1170	1462	1754	2339	2632	2924	3216	3509	4094	4679
HPR3800DA	1526	1908	2289	3052	3434	3815	4197	4578	5341	6104
HPR5700DA	2285	2856	3427	4570	5141	5712	6283	6854	7997	9139
HPR8000DA	3256	4070	4884	6512	7326	8140	8954	9768	11396	13024

Single-Acting Torque Table

Torque: Nm

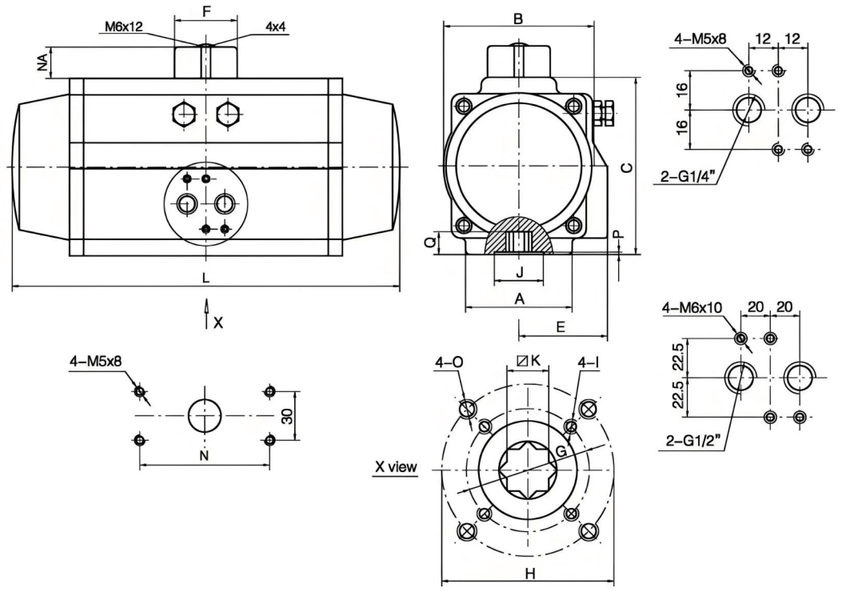
Air Supply		2.5bar		3bar		4bar		5bar		6bar		7bar		8bar		Spring	
Model	Spring	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
		Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	End	Start
HPR020SR	K5	5.7	3.8	7.6	5.7											6.2	4.3
	K6	4.9	2.5	6.9	4.5	10.9	8.5									7.4	5
	K7	4	1.3	6	3.3	9.8	7.3	14	10.4							8.6	5.9
	K8			5.2	2	9.2	6	13.2	9.1	17.2	14.1					9.9	6.7
	K9			4.3	0.8	8.3	4.8	12.3	7.9	16.3	12.8	20.3	16.8			11.1	7.6
	K10					7.4	3.6	11.5	6.7	15.5	11.6	19.5	15.6			12.4	8.5
	K11					6.6	2.3	10.6	5.4	14.6	10.4	18.6	14.3	22.6	18.3	13.6	9.3
	K12							9.7	4.2	13.8	9.1	17.8	12.2	21.8	17.1	14.8	10.2
HPR035SR	K5	11.4	7.7	15	11.4	22.3	14.9									10.4	6.8
	K6	10.1	5.7	13.6	9.3	20.9	16.6	28.3	23.9							12.5	8.2
	K7	8.6	3.6	12.5	7.2	19.5	14.5	26.8	21.9							14.6	9.6
	K8			10.9	5.1	18.2	12.4	25.5	19.8	32.8	27	40.1	34.3			16.7	10.9
	K9					16.8	10.4	24.1	17.7	31.4	24.9	38.7	32.2			18.8	12.3

Air Supply		2.5bar		3bar		4bar		5bar		6bar		7bar		8bar		Spring	
Model	Spring	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
		Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	End	Start
HPR035SR	K10					11.4	8.2	22.8	15.6	30	22.8	37.3	30.1	44.7	37.4	20.9	13.7
	K11							21.5	13.5	28.7	20.7	36	28	43.3	35.3	22.9	15
	K12							20	11.4	27.3	18.6	34.6	25.9	41.9	33.3	25	16.4
HPR050SR	K5	14.5	10.6	19.4	15.5	29.5	25.7									14.5	10.5
	K6	12.4	7.6	17.3	12.6	27.4	22.7	37.5	32.8							17.4	12.7
	K7	10.4	4.8	15.2	9.7	25.3	19.9	35.4	29.9							20.3	14.8
	K8			13.1	6.8	23.1	16.9	33.3	27	43.2	37	53.3	47			23.2	16.9
	K9					21	14.1	31.2	24.1	41.1	34.1	51.2	44.2			26.1	19
	K10					19	11.1	28.8	21.2	39	31.2	49.1	41.2	59.1	51.2	29	21.1
	K11							27	18.3	37	28.3	47	38.4	57	48.4	31.9	23.2
	K12							24.9	15.4	34.9	25.4	44.9	35.4	54.9	45.4	34.7	25.3
HPR075SR	K5	23.3	16.1	31.1	24	46.8	39.7									23	15.8
	K6	20.1	11.5	28	19.3	43.7	35.1	59.4	50.7							27.6	19
	K7	17	6.9	24.8	14.8	40.5	30.5	56.2	46.2							32.2	22.1
	K8			21.7	10.1	37.4	25.8	53.1	41.5	68.8	57.2	84.5	72.9			36.8	25.3
	K9					34.2	21.3	49.9	37	65.6	52.6	81.2	68.3			41.4	28.5
	K10					31	16.6	46.7	32.3	62.4	48	78.1	63.7	93.8	79.3	46	31.6
	K11							43.6	27.7	59.3	43.4	75	59.1	90.6	74.8	50.6	34.8
	K12							40.4	23.2	56.1	38.9	71.7	54.5	87.4	70.2	55.2	38
HPR110SR	K5	33.1	22	44.2	33.2	66.8	55.9									34.4	23.3
	K6	28.4	15.2	39.6	26.4	62.2	49	84.8	71.6							41.2	28
	K7	23.8	8.2	34.9	19.4	57.5	42.1	80.2	64.7							48.1	32.7
	K8			31.3	12.6	52.9	35.2	75.5	57.9	98.1	80.5	120.7	103			55	37.3
	K9					48.2	28.4	70.9	51	93.5	73.6	116	96.1			61.9	42
	K10					43.6	21.5	66.2	44.1	88.8	66.7	111.3	89.2	134	111.8	68.7	46.7
	K11							61.5	37.2	84.1	59.9	106.6	82.4	129.2	105	75.6	51.4
	K12							56.8	30.4	79.4	53	101.9	75.5	124.5	98.1	82.5	56
HPR160SR	K5	51	33.4	67.5	49.9	100.6	83									49.2	31.6
	K6	44.7	23.5	61.1	40	94.2	73.2	127.3	106.2							59.1	38
	K7	38.4	13.7	54.9	30.3	87.9	63.4	121	96.4							68.9	44.3
	K8			48.5	20.4	81.6	53.5	114.7	86.5	147.7	119.6	180.8	152.7			78.7	50.6
	K9					75.3	43.7	108.4	76.8	141.5	109.8	174.5	142.9			88.6	56.9
	K10					68.9	33.4	102	66.5	135.1	99.6	168.2	132.6	201.2	165.7	98.4	63.3
	K11							95.7	57	128.7	90.1	161.8	123.1	194.8	156.2	108.3	69.6
	K12							89.4	47.5	122.5	80.6	155.5	113.6	188.6	146.7	118.1	75.9
HPR255SR	K5	73	47	98	72	148	122									79	52
	K6	63	31	88	56	138	107	188	157							94	63
	K7	52	15	77	40	127	90	178	141							110	73
	K8			67	25	117	75	167	125	217	176	268	226			125	84

Air Supply		2.5bar		3bar		4bar		5bar		6bar		7bar		8bar		Spring	
Model	Spring	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
		Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	End	Start
HPR255SR	K9					107	59	157	109	207	159	257	210			141	94
	K10					96	44	146	94	196	144	247	194	297	245	157	105
	K11							136	78	186	128	236	178	286	228	173	115
	K12							125	63	176	113	226	163	276	213	188	125
HPR435SR	K5	128	85	171	127	256	213									129	86
	K6	111	59	154	102	239	187	325	273							155	103
	K7	94	33	137	76	222	162	308	247							181	120
	K8			120	50	205	136	291	221	376	307	462	392			206	137
	K9					187	110	273	196	358	281	444	367			232	155
	K10					170	84	256	169	341	255	427	340	512	426	258	172
	K11							238	143	324	229	409	314	495	400	284	189
	K12							221	118	307	203	392	289	478	374	310	206
HPR665SR	K5	193	124	259	191	392	324									208	140
	K6	165	83	232	149	365	282	498	415							250	168
	K7	137	41	203	107	336	240	469	373							292	196
	K8			176	66	309	199	442	237	575	465	708	598			333	223
	K9					280	157	413	290	546	423	679	556			375	251
	K10					253	115	386	248	519	381	652	514	785	647	417	279
	K11							358	207	491	340	624	473	757	606	458	307
	K12							330	165	463	298	596	431	729	564	500	335
HPR1000SR	K5	332	222	438	329	651	542									309	200
	K6	292	161	398	267	611	480	824	693							371	240
	K7	252	99	358	205	571	418	784	631							433	280
	K8			318	143	531	356	744	569	957	782	1169	995			495	320
	K9					491	295	704	507	917	720	1130	933			557	360
	K10					451	233	664	446	877	658	1090	871	1302	1084	618	400
	K11							624	384	837	597	1050	809	1263	1022	680	440
	K12							584	322	797	535	1010	748	1223	960	742	480
HPR1200SR	K5	390	285	523	418	789	684									380	275
	K6	335	209	468	342	734	608	1000	874							456	330
	K7	280	133	413	266	679	532	945	798							532	385
	K8			358	190	624	456	890	722	1156	988	1422	1254			608	440
	K9					569	380	835	646	1101	912	1367	1178			684	495
	K10					514	304	780	570	1046	836	1312	1102	1578	1368	760	550
	K11							725	494	991	760	1257	1026	1523	1292	836	605
	K12							670	418	936	684	1202	950	1468	1216	912	660
HPR1800SR	K5	552	409	744	600	1129	985									554	410
	K6	470	297	662	489	1047	874	1432	1259							665	492
	K7	388	187	580	379	964	764	1349	1149							775	575

Air Supply		2.5bar		3bar		4bar		5bar		6bar		7bar		8bar		Spring	
Model	Spring	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
		Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	End	Start
HPR1800SR	K8			498	268	883	653	1267	1037	1652	1422	2037	1807			886	656
	K9					800	542	1185	926	1569	1311	1954	1696			998	739
	K10					718	431	1103	816	1488	1201	1872	1586	2257	1970	1108	821
	K11							1021	705	1406	1090	1791	1474	2176	1859	1219	903
	K12							939	594	1323	979	1708	1363	2093	1748	1330	985
HPR2700SR	K5	903	675	1195	968	1779	1552									787	560
	K6	790	519	1083	811	1667	1396	2252	1981							943	672
	K7	679	361	972	654	1556	1238	2141	1823							1101	783
	K8			860	497	1444	1081	2029	1666	2614	2252	3199	2836			1258	895
	K9					1332	923	1917	1509	2502	2094	3087	2678			1416	1007
	K10					1220	767	1805	1352	2390	1937	2974	2521	3560	3107	1572	1119
	K11							1693	1194	2278	1779	2862	2364	3448	2949	1730	1231
	K12							1582	1037	2167	1623	2751	2207	3336	2792	1887	1342
HPR3800SR	K5	1097	729													1061	730
	K6	935	494	1316	875											1273	876
	K7	772	258	1153	639	1916	1402									1485	1022
	K8			991	403	1754	1166	2517	1929							1697	1168
	K9					1592	930	2355	1693	3118	2456					1909	1314
	K10					1430	695	2193	1458	2956	2221	3719	2984	4482	3747	2122	1460
	K11							2030	1222	2793	1985	3556	2748	4319	3511	2334	1606
	K12							1868	986	2631	1749	3394	2512	4157	3275	2546	1752
HPR5700SR	K5	1553	964													1702	1173
	K6	1292	586	1863	1157											2043	1408
	K7	1031	208	1602	779	2745	1922									2383	1642
	K8			1341	401	2484	1544	3626	2686							2724	1877
	K9					2224	1165	3336	2307	4508	3449					3064	2112
	K10					1963	787	3105	1929	4247	3071	5390	4214	6532	5356	3405	2346
	K11							2844	1551	3986	2693	5129	3836	6271	4978	3745	2581
	K12							2584	1172	3726	2314	4869	3457	6011	4599	4086	2816
HPR8000SR	K7	2028	869													2880	1837
	K8	1736	411	2550	1225											3292	2100
	K9			2259	768	3887	2396									3703	2362
	K10			1967	311	3595	1939	5223	3567							4115	2624
	K11					3303	1482	4931	3110	6559	4738					4526	2887
	K12					3012	1025	4640	2653	6268	4281	7895	5908	9523	7536	4938	3149
	K13							4348	2195	5976	3823	7603	5450	9231	7078	5349	3412
	K14							4057	1738	5685	3366	7312	4993	8940	6621	5761	3674
	K15							3765	1281	5393	2909	7020	4536	8648	6164	6172	3937
	K16									5101	2452	6728	4079	8356	5707	6584	4199

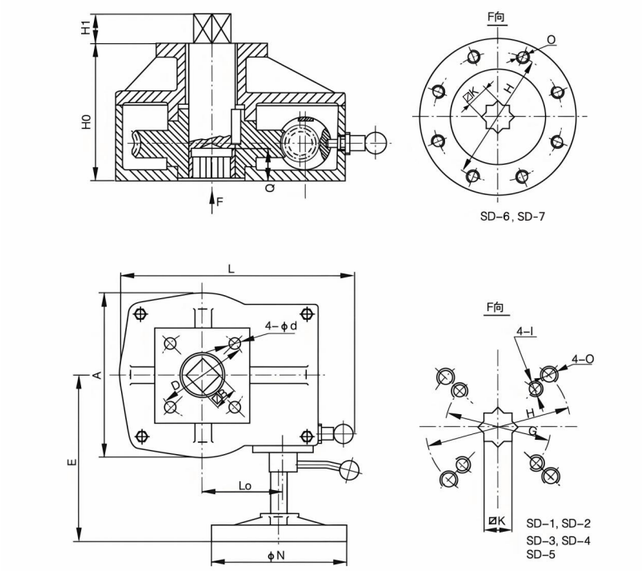
Dimensions

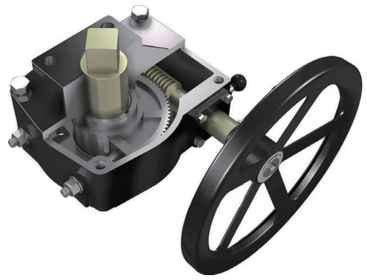


Model	A	B	C	E	NA	ΦF	ΦG	ΦH	I	J	⍁K	L	N	O	P	Q	Air Supply Connection
HPR020	52	58	70	41	20	40	/	ISO F05 Φ50	/	25	11	160	80	M6X10	1	12	G1/4"
HPR035	68	74	89	50			ISO F05 Φ50	ISO F07 Φ70	M6X10	28	14	192		MBX13		16	
HPR050	68	85	100	52			ISO F05 Φ50	ISO F07 Φ70		32	14	218					
HPR075	68	96	113	56			ISO F05 Φ50	ISO F07 Φ70		36	17	238				19	
HPR110	95	107	123	65			ISO F07 Φ70	ISO F10 Φ102	M8X13	40	17	272		M10X16			
HPR160	96	120	136	70		58	ISO F07 Φ70	ISO F10 Φ102		40	17	274					
HPR255	96	135	157	74	30		ISO F07 Φ70	ISO F10 Φ102		53	22	335			1.5	24	
HPR435	114	152	178	81			ISO F10 Φ102	ISO F12 Φ125	M10X16	53	27	352	130	M12X30		29	
HPR665	118	174	200	92			ISO F10 Φ102	ISO F12 Φ125		66	27	422					
HPR1000	134	206	232	109			ISO F10 Φ102	ISO F12 Φ125		78	36	488		M16X25		38	
HPR1200	140	228	255	115		80	/	ISO F14 Φ140	/	88	36	550				50	G1/2"
HPR1800	160	260	292	130				ISO F16 Φ165		100	46	600		M20X28			
HPR2700	160	295	330	148				ISO F16 Φ165		117	46	720			2		
HPR3800	180	310	354	170				ISO F16 Φ165		125	46	784					
HPR5700	270	285	410	195			ISO F16 Φ165	ISO F25 Φ254	M20X28	134	46	846		8 - M16X30			

Handwheel

Pneumatic butterfly valves and pneumatic ball valves equipped with a single-stage worm gear manual actuator can be switched to manual operation with a simple action. The manual mechanism is installed between the pneumatic actuator and the valve, ensuring extremely convenient operation.





Size	H0	H1	⍁B	⍁K	Q	A	L	N	L0	D	d	H	Ox Depth	G	Ix Depth	E	Scope of Application		Gear Ratio	Torque(Nm)
SD-1	93	15	14	14	16	98	147	140	42	50	7	70	M8x10	50	M6x8	130	DA SR	020 035 050	38:1	150
SD-2	108	19	17	17	19	106	170	180	53	70	9	70	4-M8x10	70	M6x8	145	DA SR	075 110 160	51:1	300
SD-3	128	25	22	22	25	136	210	250	74	102	12	125	4-M12x16	102	M10x14	180	DA SR	255	42:1	800
			27	27													DA SR	435 665		
SD-4	164	38	36	36	40	200	254	340	97	140	18	140	4-M16x22	/	/	220	DA SR	1000 1200	51:1	3500
SD-5	181	48	46	46	50	256	348	500	126	165	22	165	4-M20x28			292	DA SR	1800 2700 DA3800	50:1	5000
SD-6	228	50	46	46	50	372	430	500	186	165	22	165	4-M20x28			400	DA SR	5700 SR3800	79:1	10000
			55	55	60					254	8-18	254	8-M16x22				DA	8000		
SD-7	324	55	55	55	60	505	610	650	250	254	8-18	254	8-M16x22			495	SR	8000	87:1	15000

Scotch Yoke

HPY Series

The HPY series scotch yoke type pneumatic actuator is an industrial part-turn valve drive mechanism developed with a modular structure design. Utilizing compressed air as the power source, it allows flexible replacement of pneumatic modules or spring return modules on both sides of the housing, enabling both double-acting and single-acting functions. The actuator can be equipped with optional accessories such as hydraulic manual override, solenoid valves, and limit switches, and is widely suitable for 0~90° rotating valves including ball valves, butterfly valves, and plug valves.

Design Features

Modular Design: The HPY series scotch yoke type pneumatic actuator employs a modular architecture that systematically integrates functional components including transmission, cylinder, spring, and manual override modules. This design provides exceptional configuration flexibility, supporting both double-acting and single-acting operation modes to address diverse application scenarios.

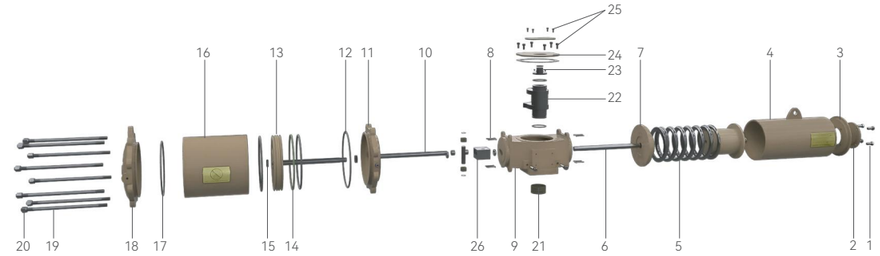
Corrosion and Wear Resistance: The HPY series scotch yoke type pneumatic actuator features specially treated piston rods, guide rods, and self-lubricating bearings with advanced surface treatments that significantly enhance wear and corrosion resistance. The housing is coated with a high-performance protective layer, while the inner bore is treated with a PTFE coating, collectively ensuring superior overall corrosion resistance.

Excellent Protection Performance: The HPY series scotch yoke type pneumatic actuator meets IP67 protection standard, with all connection points equipped with high-performance O-rings and sealing gaskets. This design effectively prevents external moisture and contaminating dust from entering the actuator interior, ensuring stable and reliable performance with extended service life.

Universal Connection Standard: The actuator's output accessories comply with NAMUR standards, and its mounting dimensions for valve connection meet ISO 5211 requirements, giving the HPY series actuators excellent interchangeability.

Versatile Control Options: Hankun possesses extensive experience in pneumatic control, enabling customized design of pneumatic system tailored to specific customer process requirements.

Exploded View Diagram



Item	Designation	Material	Item	Designation	Material
1	Bolt	Carbon Steel	14	Guide Ring	Ductile Iron
2	End Cover	Carbon Steel	15	Screw	Carbon Steel
3	Cylinder Head	Ductile Iron	16	Cylinder	Carbon Steel (internally E-coated)
4	Spring Cylinder	Carbon Steel	17	O-Ring	NBR
5	Spring	Spring Steel	18	Cylinder Head	Ductile Iron
6	Spring Cylinder Tension Rod	Carbon Steel	19	Bolt	Carbon Steel
7	Spring End Cap	Carbon Steel	20	Nut	Carbon Steel
8	Bolt	Carbon Steel	21	Bearing	Steel-Based Alloy
9	Housing	Carbon Steel	22	Yoke	Cast Steel
10	Spring Tension Rod	Carbon Steel	23	Indicator	Carbon Steel
11	Cylinder Guide Cover	Ductile Iron	24	Housing Cover	Ductile Iron
12	O-Ring	NBR	25	Bolt	Carbon Steel
13	Piston	Ductile Iron	26	Guide Slider	Special Aviation Aluminum

Advantages

Angle of Rotation: 0 ~ 90°

Output Torque: Double-acting: 500 ~ 210,000 Nm, Single-acting: 300 ~ 170,000 Nm

Operating Pressure: 3 ~ 7 bar

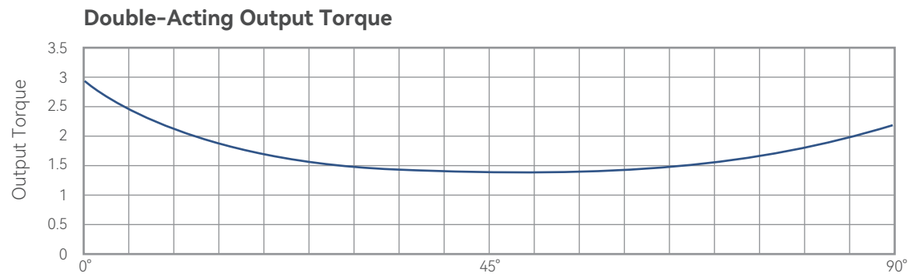
Ambient Temperature: High-temperature range: -20 ~ +120°C, Standard temperature range: -20 ~ +80°C
Low-temperature range: -40 ~ +80°C, Ultra low-temperature range: -60 ~ +40°C

Model Designation

	1	2	3	4	5	6
Information	Series	Housing	Cylinder Bore Diameter	Action Type	Manual Mode	Ambient Temperature
Code	HPY	C0	200	DA-FL	Lead Screw-SM	HT-High Temperature (-20 ~ +120°C)
		C1	250	SRC-FC	Bevel Gear Stem-GM	Standard Temperature (-20 ~ +80°C)
		.....	.....	SRO-FO	Hydrauli-HM	LT-Low Temperature (-40 ~ +80°C)
		C8	1100			ULT-Ultra Low Temperature (-60 ~ +40°C)
Example	HPY-C1-250-SRC-GM-LT					

Double-Acting Torque Table

Torque: Nm

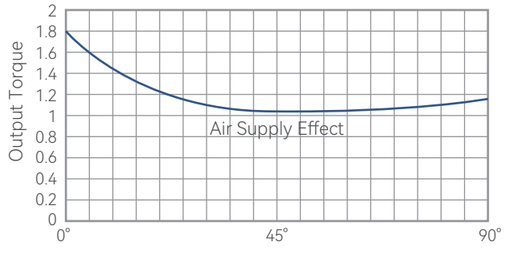


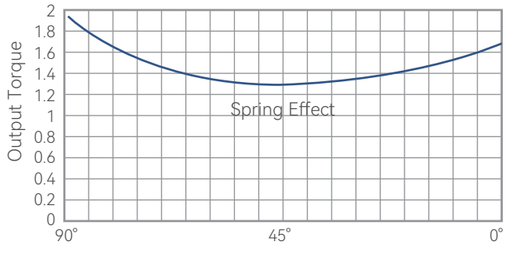
Model	Stroke Position	Air Supply (bar)							
		3	3.5	4	4.5	5	5.5	6	7
HPY-C0-180-DA	0°/90°	595	694	794	893	992	1091	1190	1389
	45°	330	386	440	496	551	606	661	771
HPY-C0-200-DA	0°/90°	735	857	980	1102	1225	1347	1470	1714
	45°	408	476	544	612	680	748	816	952
HPY-C0-250-DA	0°/90°	1148	1339	1531	1722	1913	2104	2296	2679
	45°	638	744	850	957	1063	1169	1276	1488
HPY-C1-200-DA	0°/90°	867	1011	1156	1299	1443	1589	1733	2022
	45°	481	562	612	650	802	883	963	1123
HPY-C1-250-DA	0°/90°	1354	1580	1806	2031	2257	2483	2708	3160
	45°	752	878	1003	1128	1254	1379	1504	1755
HPY-C1-300-DA	0°/90°	1950	2275	2600	2925	3250	3575	3900	4550
	45°	1083	1264	1444	1625	1806	1986	2167	2528
HPY-C2-300-DA	0°/90°	2247	2621	2996	3370	3744	4119	4493	5242
	45°	1248	1456	1664	1872	2080	2288	2496	2912
HPY-C2-350-DA	0°/90°	3058	3568	4077	4587	5097	5606	6116	7135
	45°	1699	1982	2265	2548	2831	3114	3398	3964
HPY-C3-350-DA	0°/90°	3672	4285	4897	5509	6121	6733	7345	8569
	45°	2040	2380	2720	3060	3400	3740	4080	4761
HPY-C3-400-DA	0°/90°	4797	5596	6396	7195	7994	8794	9593	11192
	45°	2665	3109	3553	3997	4441	4885	5330	6218
HPY-C3-450-DA	0°/90°	6071	7083	8094	9106	10118	11130	12142	14165
	45°	3373	3934	4497	5059	5621	6183	6745	7870
HPY-C4-400-DA	0°/90°	6127	7148	8169	9190	10211	11232	12254	14296
	45°	3404	3971	4538	5106	5673	6240	6809	7942
HPY-C4-450-DA	0°/90°	7754	9047	10339	11631	12924	14216	15508	18093
	45°	4308	5026	5744	6462	7180	7898	8616	10051

Model	Stroke Position	Air Supply (bar)							
		3	3.5	4	4.5	5	5.5	6	7
HPY-C4-500-DA	0°/90°	9573	11169	12764	14360	15955	17551	19146	22337
	45°	5318	6205	7091	7978	8864	9750	10637	12410
HPY-C5-500-DA	0°/90°	12122	14143	16163	18184	20204	22224	24245	28286
	45°	6735	7057	8980	10102	11224	12347	13469	15714
HPY-C5-550-DA	0°/90°	14668	17113	19557	22002	24447	26891	29336	34225
	45°	8149	9507	10865	12223	13582	14940	16298	19014
HPY-C5-600-DA	0°/90°	17456	20366	23275	26184	29094	32003	34912	40731
	45°	9698	11314	12930	14547	16163	17779	19396	22628
HPY-C6-600-DA	0°	21365	24925	28486	32047	35608	39168	42729	49851
	45°	11869	13847	15826	17804	19782	21760	23738	27695
HPY-C6-650-DA	0°/90°	25074	29253	33432	37611	41789	45968	50147	58505
	45°	13930	16251	18573	20895	23216	25538	27860	32503
HPY-C7-650-DA	0°/90°	30646	35753	40861	45968	51076	56184	61291	71506
	45°	17025	19863	22700	25538	28376	31213	34051	39726
HPY-C7-700-DA	0°/90°	35542	41465	47389	53312	59236	65160	71083	82931
	45°	19745	23036	26327	29618	32909	36200	39491	46073
HPY-C7-800-DA	0°/90°	46422	54159	61896	69633	77370	85107	92844	108317
	45°	25790	30088	41234	38685	42983	47281	51580	60176
HPY-C8-800-DA	0°/90°	59082	68929	78776	88623	98470	108317	118164	137859
	45°	32823	38294	43765	49235	54706	60176	65647	76588
HPY-C8-900-DA	0°	74776	87239	99701	112163	124627	137089	149552	174477
	45°	41542	48466	55390	62313	69237	76161	83084	96932
HPY-C8-1000-DA	0°	92316	107702	123088	138474	153860	169246	184632	215404
	45°	51287	59834	68382	76930	85478	94026	102573	119669

Single-Acting Torque Table

扭矩：Nm

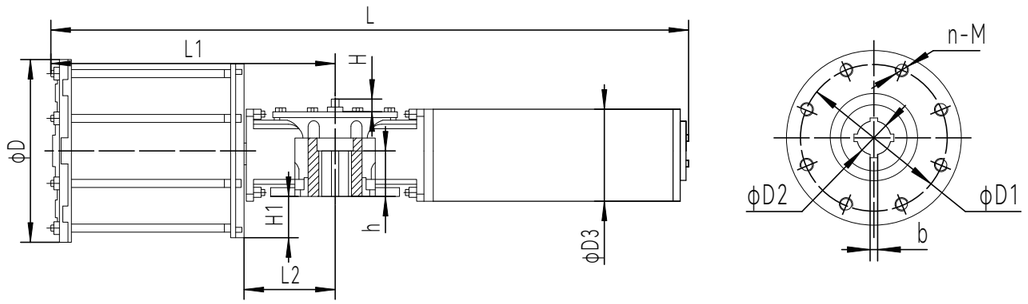




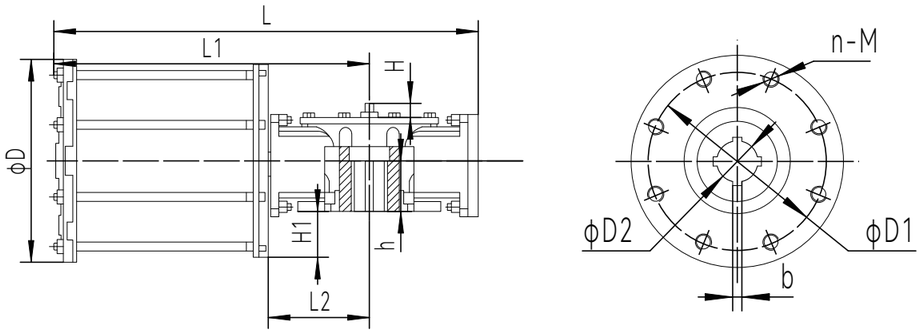
Model	Stroke Position	Spring Torque	Air Supply (bar)					
			4	4.5	5	5.5	6	7
HPY-C0-200-SR	0°	319	734	856	978	1100	1222	1466
	45°	246	298	389	480	571	662	844
	90°	541	439	561	683	805	927	1171
HPY-C0-250-SR	0°	602	980	1171	1362	1553	1744	2126
	45°	551	445	532	619	691	763	907
	90°	1213	612	804	996	1188	1379	1763
HPY-C1-250-SR	0°	710	1255	1480	1705	1930	2155	2605
	45°	551	593	673	753	833	913	1073
	90°	1213	784	1009	1230	1455	1710	2160
HPY-C1-300-SR	0°	1257	1800	2125	2450	2775	3100	3750
	45°	800	818	967	1161	1310	1459	1757
	90°	1759	1343	1668	1993	2318	2643	3293
HPY-C2-300-SR	0°	1610	2254	2628	3002	3376	3750	4498
	45°	1175	922	1092	1262	1432	1602	1772
	90°	2585	1364	1738	2112	2486	2860	3608
HPY-C2-350-SR	0°	2084	3305	3815	4325	4835	5345	6365
	45°	1373	1502	1734	1966	2198	2410	2834
	90°	3021	2360	2870	3380	3890	4400	5420
HPY-C3-350-SR	0°	2242	3809	4421	5033	5645	6257	7481
	45°	1427	1731	2010	2289	2568	2847	3405
	90°	3140	2503	3115	3727	4339	4951	6175
HPY-C3-400-SR	0°	2557	4348	5147	5946	6745	7544	9142
	45°	1730	1976	2340	2704	3068	3432	4160
	90°	3637	3045	3857	4669	5481	6293	7917
HPY-C3-450-SR	0°	3219	6046	7058	8070	9082	10094	12118
	45°	2048	2748	3208	3668	4128	4588	5508
	90°	4507	3587	4599	5611	6623	7635	9659
HPY-C4-450-SR	0°	4404	6759	8051	9343	10635	11927	14511
	45°	2802	3072	3659	4246	4833	5420	6594
	90°	6166	5327	6619	7911	9203	10495	13079
HPY-C4-500-SR	0°	5996	7761	9357	10953	12549	14145	17337
	45°	5003	3528	4253	4978	5703	6428	7878
	90°	11007	6768	8364	9960	11556	13152	16344

Model	Stroke Position	Spring Torque	Air Supply (bar)					
			4	4.5	5	5.5	6	7
HPY-C4-600-SR	0°	7902	11207	13505	15803	18101	20399	24595
	45°	7173	5094	6139	7184	8229	9274	11364
	90°	15781	7131	9429	11727	14025	16323	20919
HPY-C5-500-SR	0°	9150	11171	13192	15213	17234	19255	23297
	45°	6535	4376	5996	7616	9236	10496	13736
	90°	14379	9628	11649	13670	15691	17712	21754
HPY-C5-600-SR	0°	10654	15665	18574	21483	34392	27301	33119
	45°	7610	7120	8442	9764	11086	12408	15052
	90°	18568	9790	12699	15608	18517	21426	27244
HPY-C5-700-SR	0°	14852	21377	25337	29297	33257	37217	45137
	45°	10303	9716	11516	13316	15116	16916	20516
	90°	22669	13602	17562	21522	25482	29442	37362
HPY-C6-600-SR	0°	16232	18157	21718	25279	28840	32401	39523
	45°	10329	8253	9872	11491	13110	14729	17967
	90°	22725	12969	16530	20091	23652	27213	34335
HPY-C6-650-SR	0°	20469	20407	24586	28765	32944	37123	45481
	45°	13025	9275	11175	13075	14975	16875	20675
	90°	28656	14576	18755	22934	27113	31292	39650
HPY-C7-700-SR	0°	23100	31289	37212	43135	49058	54981	66827
	45°	16100	14222	16915	19608	22301	24994	27687
	90°	35420	22349	28272	34195	40118	46041	57887
HPY-C7-750-SR	0°	38500	31893	38722	45552	52382	59213	72872
	45°	24500	14660	17601	20707	23812	26918	31782
	90°	53900	22649	29610	31010	43270	51571	63760
HPY-C7-800-SR	0°	46200	32496	40233	47970	55707	63444	78918
	45°	29400	14770	18288	21806	25324	28842	35878
	90°	64680	23211	30948	38685	46422	54159	69633
HPY-C8-950-SR	0°	70560	58527	75540	88003	100466	112929	137855
	45°	52563	28671	34336	40001	45666	51331	62661
	90°	115640	45055	57518	69981	82444	94907	119833
HPY-C8-1100-SR	0°	90160	70536	84423	98310	112197	126084	153858
	45°	78400	31980	38374	44768	51162	57556	70344
	90°	172480	50383	72663	78157	92044	105931	133705

Dimensions



Model	L	L1	L2	H1	H	D	D1	n-M	b	D2	h	D3
HPY-C0-200-SR	1104	465	141	76	30	270	140	4-M16	10	30	40	170
HPY-C0-250-SR	1115	480	145	79	30	320	140	4-M16	10	30	40	170
HPY-C1-250-SR	1403	558	170	98	30	320	165	4-M20	12	40	50	220
HPY-C1-300-SR	1420	570	175	102	30	380	165	4-M20	12	40	50	220
HPY-C2-300-SR	1420	565	182	120	30	380	200	8-M16	14	50	50	275
HPY-C2-350-SR	1435	580	186	124	30	430	200	8-M16	14	50	50	275
HPY-C3-350-SR	1615	672	216	153	30	430	254	8-M20	18	60	60	300
HPY-C3-400-SR	1630	681	221	157	30	480	254	8-M20	18	60	60	300
HPY-C3-450-SR	1645	690	227	160	30	530	254	8-M20	18	60	60	300
HPY-C4-450-SR	1940	785	268	159	30	530	298	8-M20	28	80	70	390
HPY-C4-500-SR	1950	795	274	163	30	565	298	8-M20	28	80	70	390
HPY-C4-600-SR	1965	933	332	168	30	690	298	8-M20	28	80	70	390
HPY-C5-500-SR	2585	942	338	175	30	590	356	8-M30	32	100	100	380
HPY-C5-600-SR	2600	950	345	180	30	690	356	8-M30	32	100	100	380
HPY-C5-700-SR	2620	1175	460	185	30	790	356	8-M30	32	100	100	380
HPY-C6-600-SR	3160	1187	469	146	30	690	406	8-M36	32	150	130	580
HPY-C6-650-SR	3180	1200	480	150	30	740	406	8-M36	32	150	130	580
HPY-C7-700-SR	3470	1232	460	196	30	790	483	12-M36	32	160	130	580
HPY-C7-750-SR	3485	1240	469	200	30	840	483	12-M36	32	160	130	580
HPY-C7-800-SR	3500	1250	480	205	30	900	483	12-M36	32	160	130	580



Model	L	L1	L2	H1	D	D1	n-M	H	b	D2	h
HPY-C0-180-DA	645	465	140	70	250	140	4 - M16	30	10	30	40
HPY-C0-200-DA	650	470	143	75	270	140	4 - M16	30	10	30	40
HPY-C0-250-DA	660	480	145	79	320	140	4 - M16	30	10	30	40
HPY-C1-200-DA	760	560	171	68	270	165	4 - M20	30	12	40	50
HPY-C1-250-DA	770	570	175	72	320	165	4 - M20	30	12	40	50
HPY-C1-300-DA	785	585	778	75	380	165	4 - M20	30	12	40	50
HPY-C2-300-DA	810	580	186	100	380	165	4 - M20	30	14	50	50
HPY-C2-350-DA	825	595	190	110	430	165	4 - M20	30	14	50	50
HPY-C3-350-DA	952	660	210	125	430	254	8 - M20	30	18	60	60
HPY-C3-400-DA	965	670	227	136	480	254	8 - M20	30	18	60	60
HPY-C3-450-DA	977	685	235	145	530	254	8 - M20	30	18	60	60
HPY-C4-400-DA	1078	760	252	173	480	298	8 - M20	30	28	80	70
HPY-C4-450-DA	1095	770	263	178	530	298	8 - M20	30	28	80	70
HPY-C4-500-DA	1110	785	274	183	585	298	8 - M20	30	28	80	70
HPY-C5-500-DA	1280	923	315	170	585	356	8 - M30	30	32	100	100
HPY-C5-550-DA	1295	935	330	175	640	356	8 - M30	30	32	100	100
HPY-C5-600-DA	1310	950	345	180	690	356	8 - M30	30	32	100	100
HPY-C6-600-DA	1730	1230	465	148	690	406	8 - M36	30	32	155	130
HPY-C6-650-DA	1750	1250	480	155	740	406	8 - M36	30	32	155	130
HPY-C7-650-DA	1715	1210	450	192	740	406	8 - M36	30	32	180	130
HPY-C7-700-DA	1730	1230	465	198	800	406	8 - M36	30	32	180	130
HPY-C7-800-DA	1750	1250	480	205	900	406	8 - M36	30	32	180	130

Diaphragm

HPD Series

The HPD series pneumatic actuator is a lightweight, compact diaphragm type linear actuator delivering high output force. It operates by applying air pressure to a diaphragm plate, which simultaneously compresses the spring mechanism. The thrust generated on the effective area of the plate drives the push rod in linear motion. It is widely applied in control valves and other precision linear control systems requiring high accuracy.

Design Features

High Reliability & Long Service Life: The surface treatment employs epoxy electrostatic powder coating, providing exceptional adhesion and corrosion resistance. The diaphragm utilizes a specialized molding process with burst strength exceeding 22 kg/cm², significantly enhancing overall operational lifespan.

Excellent Linearity: The molded diaphragm moves within the diaphragm chamber with minimal change in effective area during travel, ensuring superior linear performance.

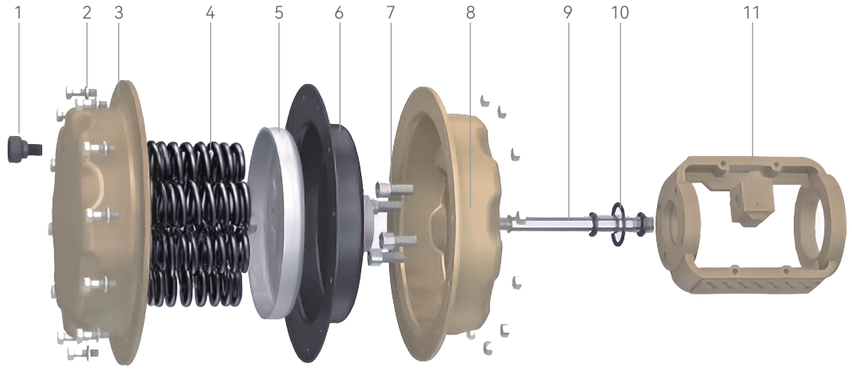
Responsive Operation & Fast Response: The actuator utilizes direct air pressure on the diaphragm for immediate linear movement without lag. With minimal diaphragm inertia, it rapidly responds to pressure signal variations, making it ideal for applications requiring frequent cycling.

High Output Force: The molded diaphragm and cold-stamped diaphragm housing withstand elevated pressures, enabling maximum thrust generation.

Rigid Connection: The clamp-style stem connection reliably transmits motion while facilitating installation. By eliminating linkage mechanisms, it prevents positioning inaccuracies caused by connection backlash.

Wide Applicability: Five sizes of direct-acting and reverse-acting actuators enable diverse applications. With customizable spring ranges, adjustable travel stops, and optional handwheel assemblies, they accommodate virtually any control valve requirement.

Exploded View Diagram



Item	Designation	Material	Item	Designation	Material
1	Breather Vent	Engineering Plastic	7	Hex Socket Head Cap Screw	Carbon Steel
2	Hex Bolt	Carbon Steel	8	Lower Diaphragm Housing	Carbon Steel
3	Upper Diaphragm Housing	Carbon Steel	9	Thrust Rod	A276-303
4	Spring	Alloy Spring Steel	10	O-Ring	NBR
5	Diaphragm Plate	Carbon Steel	11	Bracket	Ductile Iron
6	Diaphragm	EPDM			

Model Designation

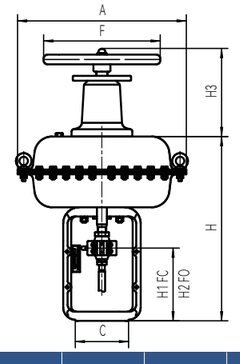
	1	2	3	4	5	6
Information	Series	Model	Travel	Action Type	Handwheel	Ambient Temperature
Code	HPD	22	10	SRC-FC	Side-Mounted-SM	HT-High Temperature (0 ~ +100℃)
		.....	.....	SRO-FO	Top-Mounted-TM	Standard Temperature (-20 ~ +80℃)
		56	100			LT-Low Temperature (-40 ~ +80℃)
Example	HPD23-16-SRC-TM-LT					

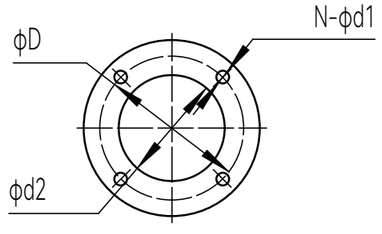
Thrust Parameters

Model	Diaphragm Effective Area cm²	Air Supply (bar)	Spring Range (bar)	Output Thrust N	Travel mm
22	200	4	1.2-3	2100	10/16
23	350	4	1.2-3	3600	16/25
34	560	4	1.2-2.8	6500	40
45	960	4	1.2-2.8	11180	40/60
56	1600	4	1.2-2.8	18000	100

Note: For selection under other air supply, please consult us.

Dimensions



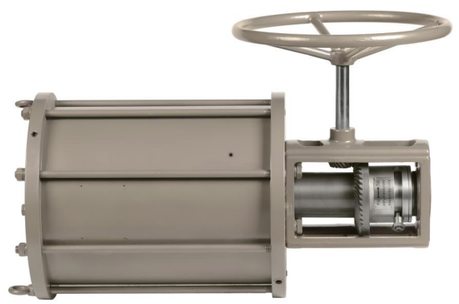


Model	A	H	H1	H2	H3	C	D	N-d1	d2	F	Weight kg
HPD22	285	300	90	106	179	95	80	2-ϕ10	60	200	12
HPD23	288	323	90	115	179	100	80	2-ϕ10	60	200	16
HPD34	365	417	130	170	230	130	105	4-ϕ12	80	240	22
HPD45	475	520	135	195	315	150	118	4-ϕ14	95	350	52
HPD56	585	720	170	270	400	180	130	4-ϕ18	100	449	125

Piston

HPL Series

The HPL series piston type pneumatic actuator is a linear actuator that delivers high output force and long stroke. Recognized by the market for its reliable performance, simple operation, and easy maintenance, it is widely used with linear movement valves such as gate valves and globe valves.



Design Features

High Thrust Output: The HPL series pneumatic actuator employs a dual-piston structure design to deliver greater thrust, ensuring smooth valve operation without jamming.

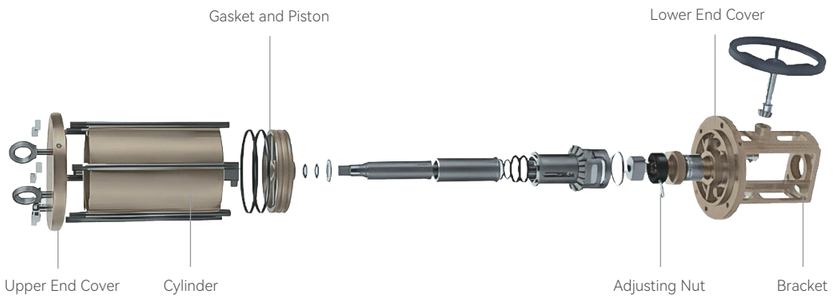
Wear and Corrosion Resistance: The cylinder is constructed from cold-drawn hydraulic tubing, honed and hard chrome-plated to significantly enhance the actuator's wear resistance and corrosion protection.

Excellent Protection Performance: The HPL series pneumatic actuator meets IP67 protection standard, with cylinder seals using imported NBR O-rings to prevent ingress of external moisture and contaminating dust, ensuring stable and reliable performance with extended service life.

Universal Connection Standard: The mounting dimensions for valve connections comply with ISO 5211 requirements, giving the HPL series actuators excellent interchangeability.

Versatile Control Solutions: Hankun possesses extensive experience in pneumatic control and can custom-design pneumatic systems according to customers' process control requirements.

Exploded View Diagram



Advantages

Travel Range: Single-acting: 0 ~ 200mm, Double-acting: 0 ~ 2000mm

Thrust Range: Single-acting: 1 ~330 kN, Double-acting: 3 ~ 800kN

Operation Pressure: 3 ~ 7 bar

Ambient Temperature: High-temperature range: -20 ~ +120°C, Standard temperature range: -20 ~ +80°C
Low-temperature range: -40 ~ +80°C, Ultra low-temperature range: -60 ~ +40°C

Model Designation

	1	2	3	4	5	6
Information	Series	Model	Travel	Action Type	Handwheel	Ambient Temperature
Code	HPL	80	10	DA-FL	Lead Screw-SM	HT-High Temperature (-20 ~ +120°C)
		.....	.....	SRC-FC	Bevel Gear Stem-GM	Standard Temperature (-20 ~ +80°C)
		900	100	SRO-FO	Hydraulic-HM	LT-Low Temperature (-40 ~ +80°C)
						ULT-Ultra Low Temperature (-60 ~ +40°C)
Example	HPL200-50-SRC-SM-ULT					

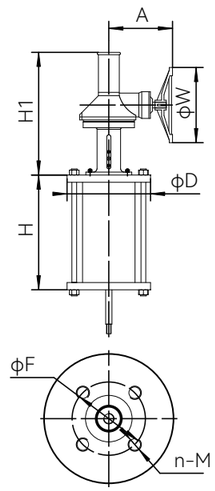
Double-Acting Thrust Table

Diameter(mm)	3bar	4bar	5bar	6bar	7bar
125	2250	3000	3750	4500	5250
140	3000	4000	5000	6000	7000
160	3750	5000	6250	7500	8750
180	6750	9000	11250	13500	15750
200	9000	12000	15000	18000	21000
220	11250	15000	18750	22500	26250
250	13500	18000	22500	27000	31500
280	15000	20000	25000	30000	35000
300	18750	25000	31250	37500	43750
320	22500	30000	37500	45000	52500
350	28500	38000	47500	57000	66500
400	37500	50000	62500	75000	87500
450	47250	63000	78750	94500	110250
500	58500	78000	97500	117000	136500
550	70500	94000	117500	141000	164500
600	82500	110000	137500	165000	192500
650	97500	130000	162500	195000	227500
700	112500	150000	187500	225000	262500

Note: The HPL Series single-acting models are customized products.

Dimensions

Model	D	H	H1	F	n-M	A	W
HPL160DA	225	120+S	180+S	102	4-M10	180	300
HPL180DA	245	120+S	180+S	102	4-M10	190	300
HPL200DA	265	120+S	180+S	102	4-M10	200	300
HPL220DA	300	140+S	180+S	125	4-M12	225	300
HPL250DA	325	145+S	180+S	125	4-M12	225	300
HPL280DA	355	145+S	180+S	125	4-M12	250	300
HPL300DA	375	145+S	180+S	125	4-M12	250	300
HPL320DA	400	155+S	200+S	140	4-M16	275	450
HPL350DA	430	155+S	200+S	140	4-M16	275	450
HPL400DA	485	170+S	200+S	165	4-M20	300	450
HPL450DA	535	170+S	250+S	165	4-M20	325	450
HPL500DA	605	180+S	250+S	254	8-M16	350	600
HPL550DA	655	180+S	250+S	254	8-M16	375	600
HPL600DA	705	190+S	250+S	298	8-M20	400	700
HPL650DA	760	190+S	250+S	298	8-M20	425	700
HPL700DA	810	190+S	250+S	298	8-M20	450	700



Accessories

Partial Stroke Testing

Features

Partial Stroke Testing (PST) Compared to Full Stroke Testing (FST), PST can reduce the PFD (Probability of Failure on Demand) value and improve the SIL (Safety Integrity Level), thereby enhancing the reliability of ESD valves.

Partial stroke testing extends the intervals between full stroke tests, complements full stroke testing, and reduces testing costs.

Provide Basis for Maintenance.

By implementing PST, the bypass valve for ESD valves can be eliminated, reducing process costs.

Automated partial stroke testing enhances testing safety and minimizes the probability of human error associated with manual testing.

Solenoid Valves

Overview

Solenoid valves are the core control components in automated valve control systems. They use electromagnetic force to switch pneumatic pathways, thereby executing valve opening and closing operations. High-quality solenoid valves provide reliable safety assurance for on-off valves.

Parameters

Voltage: 24VDC, 110VAC/DC, 220VAC/DC

Action Type: 3/2-way, 5/2-way

Control Type: Single solenoid, Double solenoid

Mounting Style: Line-mounted, Sub-base mounted

Material: Aluminum alloy, Stainless steel

Ambient Temperature: -20℃ ~ +80℃, -40℃ ~ +170℃, -60℃ ~ +130℃

Filter Regulators

Overview

Filter Regulators are integrated pneumatic control components that combine filtration and pressure regulation functions. They are primarily used for compressed air purification and pressure stabilization, providing vital protection for all pneumatic components within the circuit, making them indispensable for pneumatic actuator systems.

Parameters

Nominal Diameter: 1/4'', 3/8'', 1/2'', 3/4'', 1''

Thread Specification: NPT, G thread, PT

Filter: 5μm, 25μm, 40μm

Drain Type: Manual, Automatic, Differential pressure

Housing Material: Aluminum alloy, Stainless steel

Ambient Temperature: -20℃ ~ +80℃, -40℃ ~ +80℃, -60℃ ~ +80℃

Limit Switch

Overview

Limit switches are field instruments in automation systems that detect valve status. They output the open or closed position of a valve as a discrete signal (contact) to remote controllers or for computer sampling. After confirmation, the next program sequence is executed. These switches also provide critical interlock protection and remote alarm indication for key valves within the automation system.

Parameters

Switch Type: Mechanical, Proximity action

Electrical Connection: NPT1/2, M20*1.5

Protection Rating: Up to IP68

Housing Material: Aluminum alloy, Stainless steel

Ambient Temperature: -20℃ ~ +80℃, -40℃ ~ +80℃, -60℃ ~ +80℃

Valve Positoner

Overview

The HiPos series is an intelligent valve positioner designed for precise valve modulation and control. It operates by receiving a 4–20 mA DC current signal from the control system to determine the target valve position, while simultaneously reading the actual valve position from a position sensor. The integrated control software processes both signals to regulate the pneumatic actuator's air supply and exhaust, accurately driving the valve to the desired setpoint.

- Set signal correction
- Characteristic curve selection and setting
- Tight closing function
- Stroke direction setting
- Dead zone setting
- Signal direction setting
- Stroke limit
- Restore factory settings

Parameters

Housing Material: Aluminum alloy

Signal Input: 4~20mA

Communication Protocol: HART

Valve Travel Range: Linear: 10~100mm, Part-turn: 30~100°, Split-type: 5~50mm

Ambient Temperature: Standard temperature: -20℃ ~ +70℃, Low temperature: -40℃ ~ +70℃

Hysteresis: ≤1%

Basic Error: ≤1%

Air supply: 1.4~7 bar

Protection Rating: IP66

Steady-State Air Consumption: ≤0.4 L/min

Explosion-Proof Rating: ExiaIICT6Ga/ExdbIICT6Gb

Hankun maintains cooperative relationships with leading pneumatic accessory manufacturers including Siemens, ABB, ASCO, SMC, Norgren, YTC, Tissin, Rotex, and Honeywell. We are capable of providing customized solutions for specialized functions such as quick-opening, quick-closing, and emergency actuation.