

CHELIC®

Ver. 1-2

CAT-2405

AUTOMATION

氣立可 自動化元件

氣動執行器

PNEUMATIC ACTUATOR



The Keystone of Industrial 4.0

氣動執行器

CTY SERIES / PNEUMATIC ACTUATOR

CHELIC®

產品特色

FEATURE



壓鑄鋁質 (CTY) 缸體，產品輕巧、外觀優美，內表面細磨精加工，內部和外部均採用高級防腐技術，氣缸摩擦係數小，使用壽命長，抗腐蝕性能強。

雙活塞齒輪齒條式設計，結構緊湊、安裝位置對稱、改變輸出軸轉向方便，使用壽命長、動作迅速。活塞齒條背面裝有複合軸承及導向環，動作精確、摩擦係數小、使用壽命延長。

組合式預負荷鍍層彈簧，工作壽命長。

高精度齒輪和齒條，嚙合間隙小、精度高，輸出功率大。不銹鋼緊固件，安全美觀，抗腐蝕性強。

Die casting aluminum ATY body with both internal and external corrosion protection having honed cylinder surface for longer life and low coefficient of friction.

Dual piston rack and pinion design for compact construction, symmetric mounting position, high-cycle life and fast operation, reverse rotation can be accomplished in the field by simply inverting the pistons.

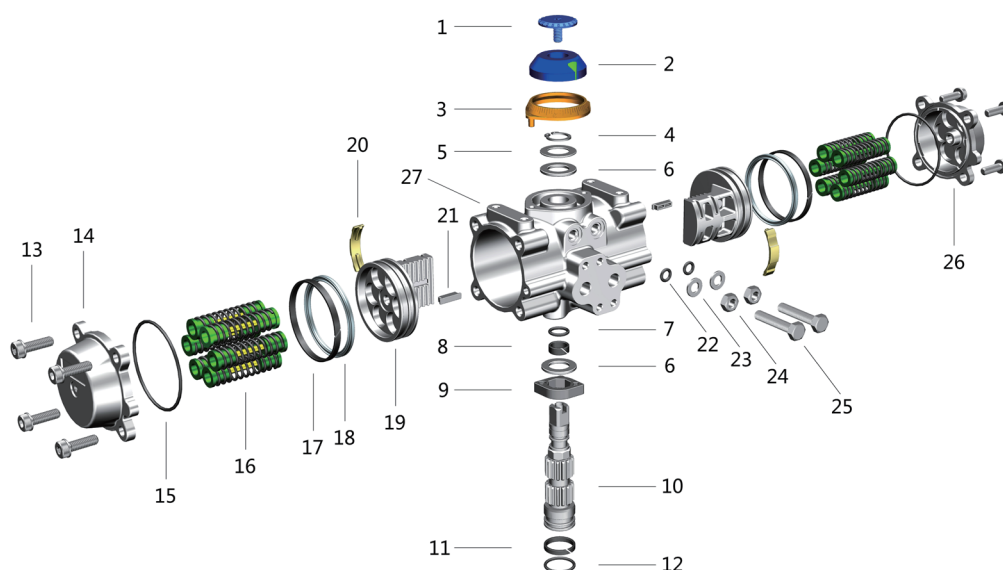
Multiple bearings and guides on racks and pistons, low friction, high cycle life and prevent shaft blowout.

Modular preloaded spring cartridge design, with coated spring for simple versatile range, greater safety and corrosion resistance, longer cycle life.

Fully machined teeth on piston and pinion for accurate low backlash rack and pinion engagement, maximum efficiency, stainless steel fasteners for long term corrosion resistance.

零件材質

MATERIAL



NO.	Part Name	零件名稱	Quantity 數量	Material 材質
1	Indicator Nut	指示螺帽	1	ABS
2	Indicator	指示器	1	ABS
3	Indicator	指示表	1	ABS
4	Elastic Ring	彈性擋圈	1	SS301
5	Shim	墊片	1	POM
6	Wear Pad	耐磨墊片	2	POM
7	Shaft Type O Ring	軸上 O 型圈	1	NBR
8	Wear Resistant Ring	耐磨環	1	POM
9	Adjusting Cam	調節凸輪	1	WCB
10	Output Shaft	輸出軸	1	C45
11	Wear Resistant Ring	耐磨環	1	POM
12	Shaft Under the O Ring	軸下 O 型圈	1	NBR
13	End Cap Bolt	端蓋螺栓	8	SS301
14	Left End Cover	左端蓋	1	Die casting Alu
15	End Cover Type O Ring	端蓋 O 型圈	2	NBR
16	Spring Set	彈簧組	12	55CrSi
17	Wear Resistant Ring	耐磨環	2	POM
18	Piston Seal Ring	活塞密封圈	2	NBR
19	Piston	活塞	2	Die casting Alu
20	Piston Guide Shoe	活塞導向瓦	2	POM
21	Guide Block	導向塊	2	PA66
22	Bolt with O Ring	調節螺栓 O 型圈	2	NBR
23	Shim	墊片	2	SS301
24	Nut	螺帽	2	SS301
25	Adjusting Bolt	調節螺栓	2	SS301
26	Right End Cover	右端蓋	1	Die casting Alu
27	Cylinder Body	缸體	1	Die casting Alu

產品特色

FEATURE



鋁擠型（CT）缸體，內表面細磨精加工，內部和外部均採用高級防腐技術，氣缸摩擦係數小，使用壽命長，抗腐蝕性能強。

雙活塞齒輪齒條式設計，結構緊湊、安裝位置對稱、改變輸出軸轉向方便，使用壽命長、動作迅速。活塞齒條背面裝有複合軸承及導向環，動作精確、摩擦係數小、使用壽命延長。

組合式預負荷鍍層彈簧，工作壽命長。

高精度齒輪和齒條，嚙合間隙小、精度高，輸出功率大。不銹鋼緊固件，安全美觀，抗腐蝕性強。

Extruded aluminum AT body with both internal and external corrosion protection having honed cylinder surface for longer life and low coefficient of friction.

Dual piston rack and pinion design for compact construction, symmetric mounting position, high-cycle life and fast operation, reverse rotation can be accomplished in the field by simply inverting the pistons.

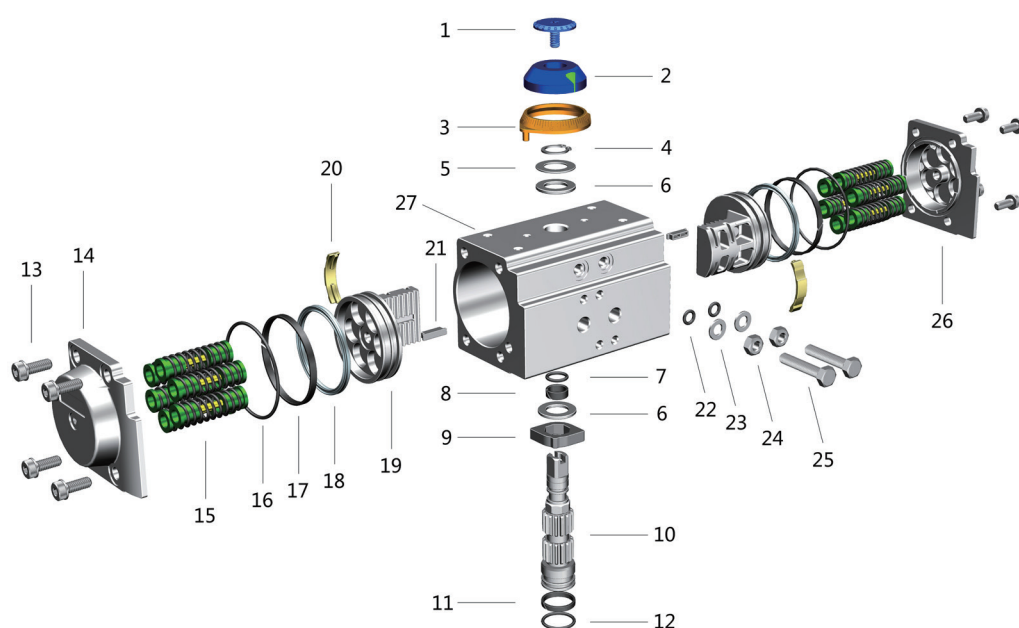
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Modular preloaded spring cartridge design, with coated spring for simple versatile range, greater safety and corrosion resistance, longer cycle life.

Fully machined teeth on piston and pinion for accurate low backlash rack and pinion engagement, maximum efficiency, stainless steel fasteners for long term corrosion resistance.

零件材質

MATERIAL



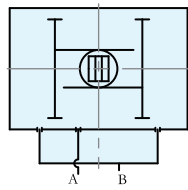
NO.	Part Name 零件名稱		Quantity 數量	Material 材質
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2	Indicator	指示器	1	ABS
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4	Elastic Ring	彈性擋圈	1	SS301
5	Shim	墊片	1	POM
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25	Adjusting Bolt	調節螺栓	2	SS301
26	Right End Cover	右端蓋	1	Die casting Alu
27	Cylinder Body	缸體	1	6005-T5

双作用執行器

DOUBLE ACTING ACTUATORS

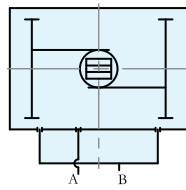
工作原理
OPERATION PRINCIPLE

CHELIC®



0°

CCW



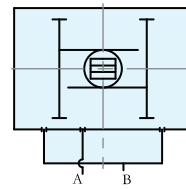
90°

A 口進氣，壓縮空氣推動活塞向外運動，使致動器輸出軸逆時針旋轉（0° -90°），B 口排氣

B 口進氣，壓縮空氣推動活塞向內移動，使致動器輸出軸順時針旋轉（90° -0°），A 口排氣

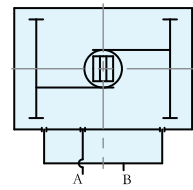
Air to port A forces the pistons outwards, causing the pinion to turn counterclockwise while the air is being exhausted from port B

Air to port B forces the pistons inwards, causing the pinion to turn clockwise while the air is being exhausted from port A



0°

CW



90°

A 口進氣，壓縮空氣推動活塞向外運動，使致動器輸出軸順時針旋轉（0° -90°），B 口排氣

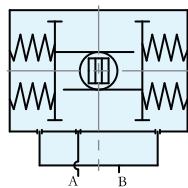
B 口進氣，壓縮空氣推動活塞向內移動，使致動器輸出軸逆時針旋轉（90° -0°），A 口排氣

Air to port A forces the pistons outwards, causing the pinion to turn clockwise while the air is being exhausted from port B

Air to port B forces the pistons inwards, causing the pinion to turn counterclockwise while the air is being exhausted from port A

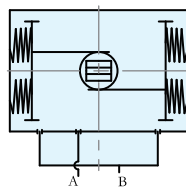
單作用執行器

SPRING RETURN ACTUATORS



0°

CCW



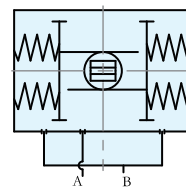
90°

A 口進氣，壓縮空氣克服彈簧力，推動活塞向外運動，執行器輸出軸逆時針轉動（0° -90°），B 口排氣

執行器失氣，活塞在彈簧力的作用下向內運動，執行器輸出軸順時針轉動（90° -0°），A 口排氣

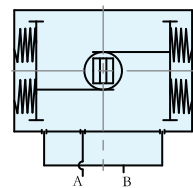
Air to port A forces the pistons outwards, causing the spring to compress, the pinion turns counter clockwise while air is being exhausted from port B

Loss of air pressure on port A, the stored energy in the springs forces the pistons inwards. The pinion turns clockwise while air is being exhausted from port A



0°

CW



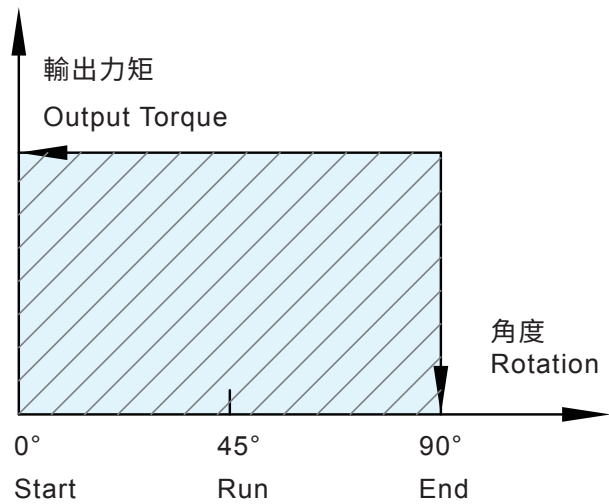
90°

A 口進氣，壓縮空氣克服彈簧力，推動活塞向外運動，執行器輸出軸順時針轉動（0° -90°），B 口排氣

執行器失氣，活塞在彈簧力的作用下向內運動，執行器輸出軸逆時針轉動（90° -0°），A 口排氣

Air to port A forces the pistons outwards, causing the spring to compress, the pinion turns clockwise while air is being exhausted from port B

Loss of air pressure on port A, the stored energy in the springs forces the pistons inwards. The pinion turns counterclockwise while air is being exhausted from port A



氣源壓力

AIR SUPPLY PRESSURE (UNIT: BAR)

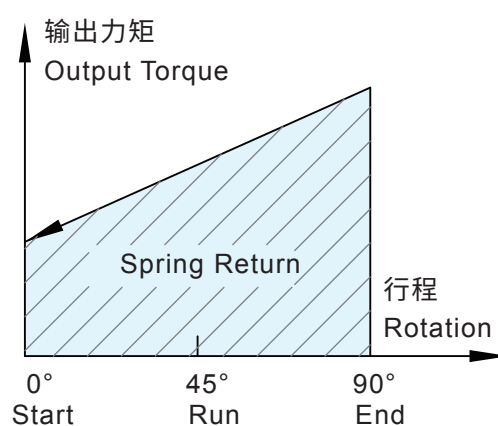
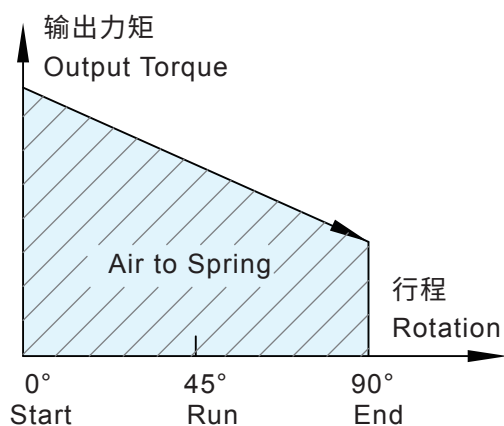
氣壓輸出扭矩 OUTPUT TORQUE OF AIR TO SPRING (BAR)							
Model	2.5	3	4	5	6	7	8
CT-52DA CTY-52DA	9.2	11	14.7	18.4	22.1	25.8	29.5
CT-63DA CTY-63DA	15.1	18.1	24.1	30.1	36.1	42.1	48.2
CT-75DA	25.2	30.2	40.3	50.3	60.4	70.5	80.5
CT-83DA	38.5	46.2	61.6	77.1	92.5	107.9	123.3
CT-92DA	56.8	68.2	90.9	113.6	136.3	159.1	181.8
CT-105DA	82.2	98.7	131.6	164.4	197.3	230.2	263.1
CT-125DA	128	154	205	256	308	359	410
CT-140DA	219	263	351	439	526	614	702
CT-160DA	334	401	535	668	802	935	1069
CT-190DA	538	646	861	1077	1292	1508	1723
CT-210DA	658	789	1052	1316	1579	1842	2105
CT-240DA	894	1073	1432	1788	2145	2505	2860
CT-280DA	1315	1578	2104	2631	3157	3683	4209
CT-300DA	1845	2214	2953	3691	4429	5168	5906
CT-350DA	2740	3288	4385	5481	6577	7673	8770
CT-400DA	4289	5147	6863	8579	10294	12009	13725

單作用輸出力矩

OUTPUT TORQUE OF SPRING RETURN ACTUATORS

工作原理
OPERATION PRINCIPLE

CHELIC®



氣源壓力

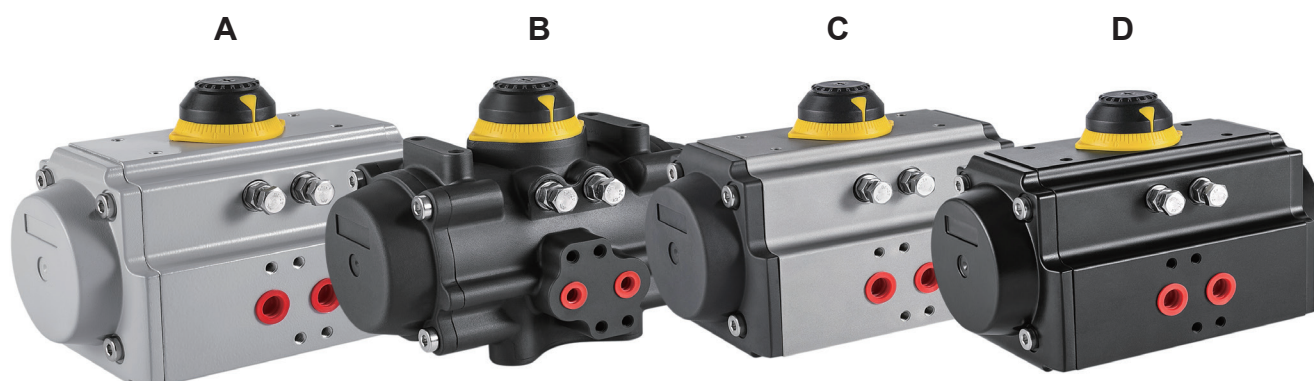
AIR SUPPLY PRESSURE (UNIT: BAR)

氣壓輸出扭矩 OUTPUT TORQUE OF AIR TO SPRING(BAR)																彈簧輸出扭矩 SPRINGS' OUTPUT	
氣壓 AIR PRESSURE		2.5		3		4		5		6		7		8			
MODEL	SPRING(QTY)	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
CT-52SR CTY-52SR	S5	5.4	3.7	7.2	5.5											5.5	3.8
	S6	4.7	2.5	6.5	4.3	10.2	8									6.7	4.5
	S7	3.9	1.4	5.7	3.2	9.4	6.9	13.1	10.6							7.8	5.3
	S8			5	2.1	8.7	5.8	12.4	9.5	16.1	13.2					8.9	6
	S9					7.9	4.7	11.6	8.4	15.3	12.1	19	15.8			10	6.8
	S10					7.2	3.6	10.9	7.3	14.6	11	18.3	14.7	22	18.4	11.1	7.5
	S11							10.1	6.2	13.8	9.9	17.5	13.6	21.2	17.3	12.2	8.3
	S12							9.4	5.1	13.1	8.8	16.8	12.5	20.5	16.2	13.3	9
CT-63SR CTY-63SR	S5	9.3	6.6	12.3	9.6											8.5	5.8
	S6	8.2	4.9	11.2	7.9	17.2	13.9									10.2	6.9
	S7	7	3.2	10	6.2	16	12.2	22	18.2							11.9	8.1
	S8			8.9	4.5	14.9	10.5	20.9	16.5	26.9	22.5					13.6	9.2
	S9					13.7	8.7	19.7	14.7	25.7	20.7	31.7	26.7			15.4	10.4
	S10					12.6	7	18.6	13	24.6	19	30.6	25	36.7	31.1	17.1	11.5
	S11							17.4	11.3	23.4	17.3	29.4	23.3	35.5	29.4	18.8	12.7
	S12							16.3	9.6	22.3	15.6	28.3	21.6	34.4	27.7	20.5	13.8
CT-75SR	S5	14.1	10.0	19.7	15.7											14.5	10.5
	S6	11.9	6.9	16.9	11.9	27.6	22.9									17.4	12.7
	S7	9.7	3.9	14.7	8.9	24.8	19.0	35.5	30.0							20.3	14.8
	S8			12.4	5.8	22.5	15.9	32.5	25.9	43.5	37.2					23.2	16.9
	S9					20.3	12.9	30.3	22.9	40.4	33.0	51.5	44.4			26.1	19.0
	S10					18.1	9.8	28.1	19.8	38.2	29.9	48.3	40.0	58.3	50.0	29.0	21.1
	S11							25.9	16.8	36.0	26.9	46.1	37.0	56.1	47.0	31.9	23.2
	S12							23.7	13.7	33.8	23.8	43.9	33.9	53.9	43.9	34.7	25.3

氣壓輸出扭矩 OUTPUT TORQUE OF AIR TO SPRING(BAR)																彈簧輸出扭矩 SPRINGS' OUTPUT	
氣壓 AIR PRESSURE		2.5		3		4		5		6		7		8			
MODEL	SPRING(QTY)	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
CT-83SR	S5	21.9	14.3	30.4	23.2											23.0	15.8
	S6	18.5	9.4	26.2	17.1	42.6	34.0									27.6	19.0
	S7	15.2	4.6	22.9	12.3	38.3	27.7	55.0	44.9							32.2	22.1
	S8			19.6	7.4	35.0	22.8	50.5	38.3	67.2	55.7					36.8	25.3
	S9					31.6	18.0	47.1	33.5	62.5	48.9	79.4	66.5			41.4	28.5
	S10					28.3	13.2	43.8	28.7	59.2	44.1	74.6	59.5	90.0	74.9	46.0	31.6
	S11							40.5	23.8	55.9	39.2	71.3	54.6	86.7	70.0	50.6	34.8
	S12							37.1	19.0	52.5	34.4	67.9	49.8	83.3	65.2	55.2	38.0
CT-92SR	S5	32.2	20.6	44.9	33.8											34.4	23.3
	S6	27.3	13.4	38.7	24.8	62.9	49.7									41.2	28.0
	S7	22.4	6.1	33.8	17.5	56.5	40.2	80.9	65.5							48.1	32.7
	S8			28.9	10.3	51.6	33.0	74.3	55.7	99.0	81.3					55.0	37.3
	S9					46.7	25.8	69.4	48.5	92.1	71.2	117.1	97.2			61.9	42.0
	S10					41.8	18.5	64.5	41.2	87.2	63.9	110.0	86.7	132.7	109.4	68.7	46.7
	S11							59.5	34.0	82.2	56.7	105.0	79.5	127.7	102.2	75.6	51.4
	S12							54.6	26.8	77.3	49.5	100.1	72.3	122.8	95.0	82.5	56.0
CT-105SR	S5	48.9	30.4	67.1	49.5											49.2	31.6
	S6	42.2	20.0	58.7	36.5	93.6	72.5									59.1	38.0
	S7	35.6	9.7	52.1	26.2	85.0	59.1	120.1	95.5							68.9	44.3
	S8			45.4	15.8	78.3	48.7	111.1	81.5	146.7	118.6					78.7	50.6
	S9					71.7	38.4	104.5	71.2	137.4	104.1	173.3	141.6			88.6	56.9
	S10					65.0	28.0	97.8	60.8	130.7	93.7	163.6	126.6	196.5	159.5	98.4	63.3
	S11							91.1	50.4	124.0	83.3	156.9	116.2	189.8	149.1	108.3	69.6
	S12							84.5	40.1	117.4	73.0	150.3	105.9	183.2	138.8	118.1	75.9
CT-125SR	S5	72.9	45.5	101.6	75.6											78.4	52.4
	S6	61.9	29.0	87.9	55.0	142.2	110.9									94.1	62.8
	S7	50.8	12.5	76.8	38.5	127.8	89.5	182.7	146.3							109.7	73.3
	S8			65.8	22.0	116.8	73.0	167.8	124.0	224.2	182.6					125.4	83.8
	S9					105.8	56.5	156.8	107.5	208.8	159.5	264.8	217.9			141.1	94.2
	S10					94.8	40.0	145.8	91.0	197.8	143.0	248.8	194.0	299.8	245.0	156.8	104.7
	S11							134.8	74.5	186.8	126.5	237.8	177.5	288.8	228.5	172.4	115.2
	S12							123.7	58.0	175.7	110.0	226.7	161.0	277.7	212.0	188.1	125.7
CT-140SR	S5	128.7	83.3	177.2	134.0											129.0	85.8
	S6	110.6	56.1	154.6	100.1	338.1	196.2									154.8	102.9
	S7	92.6	29.0	136.6	73.0	224.6	161.0	318.9	258.5							180.5	120.1
	S8			118.5	45.8	206.5	133.8	294.5	221.8	388.7	319.7					206.3	137.3
	S9					188.5	106.7	276.5	194.7	363.5	281.7	459.6	381.9			232.1	154.4
	S10					170.4	79.5	258.4	167.5	345.4	254.5	433.4	342.5	521.4	430.5	257.9	171.6
	S11							240.3	140.4	327.3	227.4	415.3	315.4	503.3	403.4	283.7	188.7
	S12							222.3	113.2	309.3	200.2	397.3	288.2	485.3	376.2	309.5	205.9

氣壓輸出扭矩 OUTPUT TORQUE OF AIR TO SPRING(BAR)																彈簧輸出扭矩 SPRINGS' OUTPUT	
氣壓 AIR PRESSURE		2.5		3		4		5		6		7		8			
MODEL	SPRING(QTY)	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
CT-160SR	S5	187.0	114.7	261.3	192.7											208.3	139.7
	S6	157.6	70.9	224.6	137.9	367.0	285.0									250	168
	S7	128.2	27.0	195.2	94.0	329.2	228.0	472.0	376.0							292	196
	S8			165.8	50.2	299.8	184.2	432.8	317.2	579.0	469.0					333	223
	S9					270.4	140.3	403.4	273.3	537.4	407.3	684.0	560.0			375	251
	S10					241.0	96.4	374.0	229.5	508.0	363.5	641.0	496.5	775.0	630.5	417	279
	S11							344.6	185.6	478.6	319.6	611.6	452.6	745.6	586.6	458	307
	S12							315.2	141.7	449.2	275.7	582.2	408.7	716.2	542.7	500	335
CT-190SR	S5	327	212	456	353											293	190
	S6	285	147	393	255	634	509									352	227
	S7	243	82	351	190	566	405	812	667							410	265
	S8			309	125	524	340	740	556	989	823					469	303
	S9					482	275	698	491	913	706	1167	981			527	341
	S10					440	210	656	426	871	641	1087	857	1302	1072	586	379
	S11							614	361	829	576	1045	792	1260	1007	645	417
	S12							572	296	787	511	1003	727	1218	942	703	455
CT-210SR	S5	369	258	529	429											360	260
	S6	311	178	442	309	739	620									432	313
	S7	253	99	384	230	647	493	951	813							503	365
	S8			326	150	589	413	853	677	1159	1004					575	417
	S9					531	333	795	597	1058	860	1373	1195			647	469
	S10					473	253	737	517	1000	780	1263	1043	1526	1306	719	521
	S11							679	437	942	700	1205	963	1468	1226	791	573
	S12							621	357	884	620	1147	883	1410	1146	863	625
CT-240SR	S5	533	372	712	550	1068	908									520	360
	S6	461	268	640	446	996	804	1354	1162							625	432
	S7	389	164	568	342	925	700	1282	1056	1640	1415					730	504
	S8			496	238	852	596	1210	953	1568	1310	1925	1668			834	576
	S9					780	490	1138	848	1495	1206	1852	1563	2210	1920	938	648
	S10					708	386	1066	745	1422	1102	1780	1458	2137	1816	1042	720
	S11							994	641	1350	998	1708	1355	2065	1712	1145	792
	S12									1278	894	1636	1250	1994	1608	1250	864
CT-280SR	S5	903	668	1193	961	1775	1547									1113	653.4
	S6	788	505	1080	792	1664	1372	2248	1952							1335	783.6
	S7	671	335	965	628	1553	1218	2141	1808	2729	2398					1558	914.2
	S8			843	463	1435	1052	2021	1640	2607	2228	3193	2816			1780	1044
	S9					1302	885	1895	1474	2488	2070	3081	2666	3674	3262	2003	1175
	S10					1201	724	1783	1311	2377	1895	2960	2485	3546	3070	2226	1306
	S11							1670	1145	2255	1735	2842	2320	3429	2908	2448	1436
	S12									2143	1565	2728	2154	3312	2745	2671	1567

氣壓輸出扭矩 OUTPUT TORQUE OF AIR TO SPRING(BAR)																彈簧輸出扭矩 SPRINGS' OUTPUT	
氣壓 AIR PRESSURE		2.5		3		4		5		6		7		8			
MODEL	SPRING(QTY)	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
CT-300SR	S5	1125	730	1504	1112	2262	1876									1237	730
	S6	962	495	1345	877	2111	1641	2877	2405							1484	876
	S7	805	260	1182	640	1948	1405	2714	2169	3480	2933					1731	1022
	S8			1022	405	1782	1168	2545	1930	3308	2692	4071	3454			1979	1168
	S9					1625	932	2385	1695	3149	2458	3913	3221	4677	3984	2226	1314
	S10					1462	701	2225	1460	2988	2222	3750	2987	4515	3748	2474	1460
	S11							2065	1225	2824	1987	3585	2750	4348	3512	2721	1601
	S12									2662	1750	3428	2514	4188	3277	2968	1752
CT-350SR	S5	1602	968	2172	1538	3312	2678									1930	1180
	S6	1340	592	1915	1162	3065	2302	4205	3442							2316	1416
	S7	1085	213	1655	783	2796	1926	3936	3066	5076	4206					2702	1652
	S8			1392	408	2532	1550	3675	2692	4815	3832	5955	4972			3088	1888
	S9					2275	1170	3401	2312	4556	3455	5696	4595	6836	5735	3474	2124
	S10					1995	791	3154	1935	4296	3075	5442	4220	6582	5362	3860	2360
	S11							2895	1556	4029	2697	5178	3840	6322	4984	4246	2596
	S12									3775	2318	4915	3465	6062	4605	4632	2832
CT-400SR	S5	2792	1758	3715	2681	5560	4526									2853	1819
	S6	2428	1187	3351	2110	5196	3955	7041	5800							3424	2182
	S7	2064	616	2987	1539	4832	3384	6677	5229	8522	7074					3995	2546
	S8			2623	968	4468	2813	6313	4658	8158	6503	10003	8348			4565	2910
	S9					4104	2242	5949	4087	7794	5932	9639	7777	11484	9622	5136	3274
	S10					3741	1671	5585	3516	7430	5361	9275	7206	11120	9051	5707	3638
	S11							5221	2945	7066	4790	8911	6635	10756	8480	6278	4001
	S12									6702	4219	8547	6064	10392	7909	6848	4365



Different colors powder polyester painted
and surface treatment body and ends available

不同的噴塑顏色
不同的缸體及端蓋表面處理



The featured color
hard black anodizing color for tube

主推顏色
缸體黑色硬質氧化

選型規格：雙作用

SELECTION MODEL: DOUBLE ACTING

CTY	+	BORE	+	DA	+	C
SERIES 系列	BORE 缸徑	TYPE 類型 (DA)	C 顏色			
CTY	52-63	DOUBLE ACTING 雙作用	A-B-C-D			

CT	+	BORE	+	DA	+	C
SERIES 系列	BORE 缸徑	TYPE 類型 (DA)	C 顏色			
CT	52-400	DOUBLE ACTING 雙作用	A-B-C-D			



壓鑄鋁 CTY - DIE CASTING ALUMINUM

Sizing: Double Acting Actuator

The suggested safety factor for double acting actuators under normal working conditions is 20%-30%

Example:

- The torque needed by valve=100Nm
- The torque considered safety factor (1+30%)=130Nm
- Air supply=5Bar

According to the above table, we can choose the minimum model is ATY-105DA



型材鋁 CT - EXTRUDED ALUMINUM

雙作用執行器的選用：

在正常操作條件下，雙作用執行器考慮的安全係數為 20%-30%

範例：

- 閥門力矩 =100Nm
 - 安全力 a 對照雙作用力矩表，選配雙作用致動器
- 最小規格為 ATY-105DA

選型規格：單作用

SELECTION MODEL: SPRING RETURN

CTY	+	BORE	+	SR	+	X	+	C
SERIES 系列	BORE 缸徑	TYPE 類型 (DA)	X 彈簧數量	C 顏色				
CTY	52-63	SPRING RETURN 單作用	5-12	A-B-C-D				

CT	+	BORE	+	SR	+	X	+	C
SERIES 系列	BORE 缸徑	TYPE 類型 (DA)	X 彈簧數量	C 顏色				
CT	52-400	SPRING RETURN 單作用	5-12	A-B-C-D				



壓鑄鋁 CTY - DIE CASTING ALUMINUM

Sizing: Spring Return Actuators

The suggested safety factor for spring return actuator under normal working conditions is 30%-50%

Example:

- The torque needed by valve=80N.m
- The torque consider safety factor (1+30%)=104N.m
- Air supply=5Bar

According to the table of spring return actuator's output, we find output torque of SR140 S7 is:

- Air stroke 0° =308N.m
- Air stroke 90° =247N.m
- Spring stroke 90° =181N.m
- Spring stroke 0° =120N.m

All the output torque is larger than we needed.



型材鋁 CT - EXTRUDED ALUMINUM

單作用執行器的選用：

在正常操作條件下，單作用執行器考慮的安全係數為 30%-50%

範例：

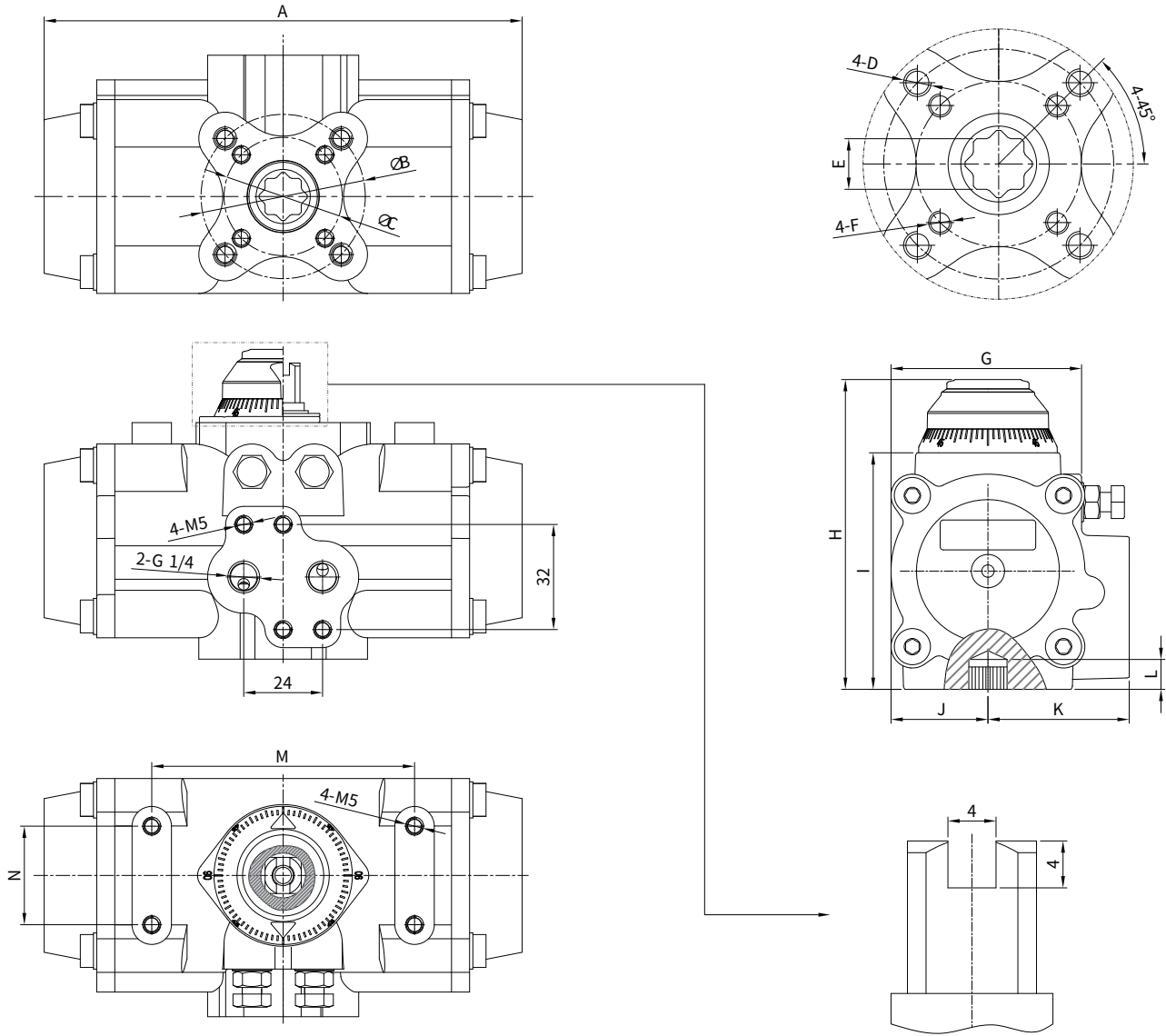
- 閥門力矩 =80Nm
- 安全力矩 =80 x (1+30%) =104Nm
- 氣源壓力 =5Bar

對照單作用致動器輸出力矩表，可查到 SR140 S7 輸出力矩為

- 空氣行程 0° =308N.m
- 空氣行程 90° =247N.m
- 彈簧行程 90° =181N.m
- 彈簧行程 0° =120N.m

所有輸出力矩均大於我們需求

安裝尺寸
DIMENSIONS



Ø[MM]	A	Ø B	Ø C	D	E	F	G	H	I	J	K	L	M	N
ATY-52	145.5	50	36	M6	11	M5	58	94	72	29.5	43	13	80	30
ATY-63	153.5	70	50	M8	14	M6	66.5	110	88	35	48.5	16	80	30

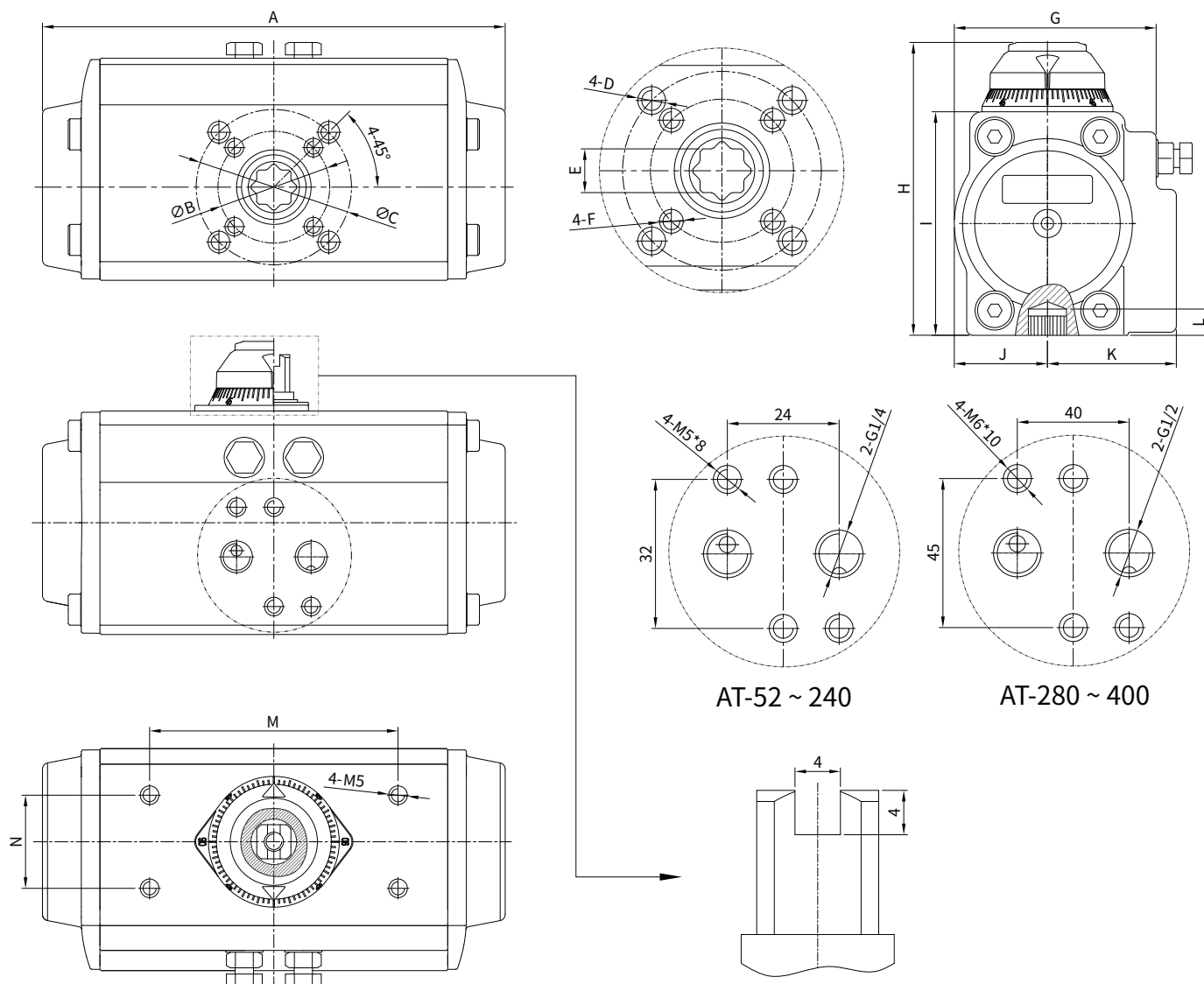
型號 CT

TYPE CT

CHELIC®

安裝尺寸

DIMENSIONS

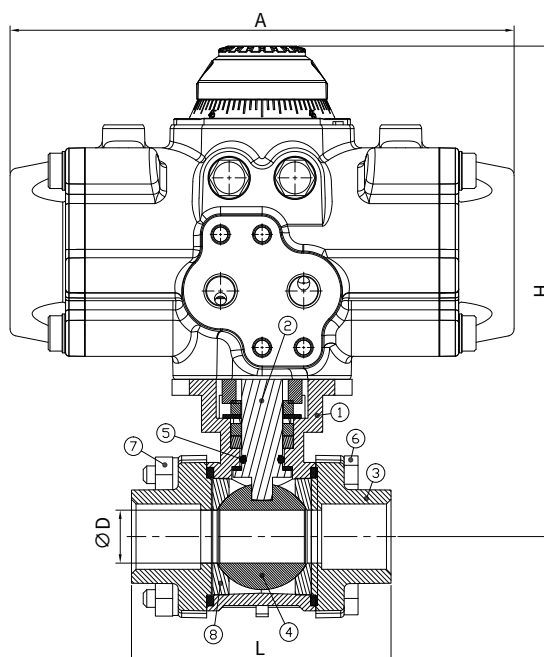


Ø [MM]	A	ØB	ØC	D	E	F	G	H	I	J	K	L	M	N
AT-52	149	36	50	M6*10	11	M5*8	65	94.5	72	30	41.5	13	80	30
AT-63	162	50	70	M8*13	14	M6*10	72	110	87.5	36	47	18	80	30
AT-75	184	50	70	M8*13	14	M6*10	81	119.5	99.5	42	53	18	80	30
AT-83	204	50	70	M8*13	17	M6*10	88	128.8	108.8	46	57	21	80	30
AT-92	262	50	70	M8*13	17	M6*10	98	136.5	116.5	50	61	21	80	30
AT-105	268	70	102	M10*16	22	M8*13	109.5	153	133	57.5	64	26	80	30
AT-125	301	70	102	M10*16	22	M8*13	127.5	175	155	67.5	74.5	26	80	30
AT-140	390	102	125	M12*20	27	M10*16	137.5	192	172	75	77	31	130	30
AT-160	458	102	125	M12*20	27	M10*16	158	217	197	87	87	31	130	30
AT-190	525	140	140	M16*22	36	M16*22	189	260	230	103	103	36	130	30
AT-210	532	140	140	M16*22	36	M16*22	211	285	255	114	114	36	130	30
AT-240	610	165			46	M20*25	242	342	305	129	133	50	130	30
AT-270	670	165			46	M20*25	273	364	327	142	156	50	130	30
AT-300	752	165			55	M20*25	312	380	345	162	173	60	130	30
AT-350	880	165	254	M16*25	50	M20*25	362	440	410	190	195	60	130	30
AT-400	950	165	254	M16*25	55	M20*28	450	506	466	260	260		130	30

氣動執行器 & 球閥

Ball Valve

CHELIC

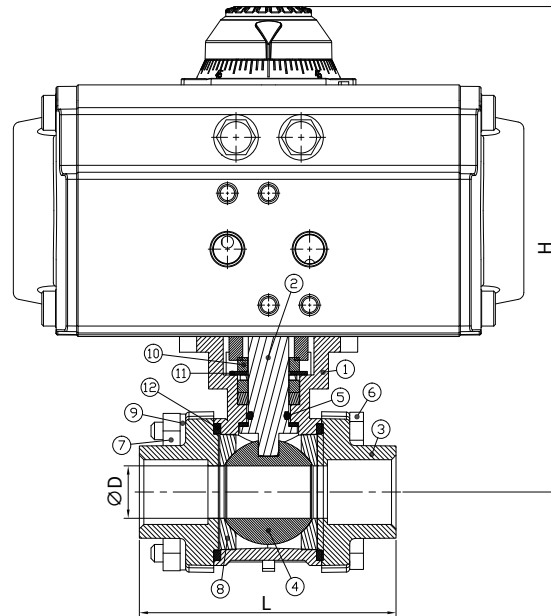


應用規格：Application Norm
公稱壓力：1.6-6.4MPa
適用溫度範圍：-25 °C ~ +200°C
適用介質：
水、油、氣體及某些腐蝕性液體 (W.O.G)
螺紋類型：
G, NPT, BSP, DIN259/299

Working Pressure: 1000PSI
Temperature Range: -25°C ~ +200°C
Suitable medium:
Water, Oil, air and some corrosive liquid
Thread type:
G, NPT, BSP, DIN259/299

NO.	Part Name 零件名稱	Material 材質	
1	Body 閥體	CF8M 不銹鋼	WCB 碳鋼
2	Stem 閥桿	SS316 不銹鋼	SS304 不銹鋼
3	Cap 閥蓋	CF8M 不銹鋼	WCB 碳鋼
4	Ball 球體	SS316 不銹鋼	SS304 不銹鋼
5	O Ring O型圈	VITON 橡膠	VITON 橡膠
6	Bolt 螺栓	SS304 不銹鋼	B8
7	Nut 螺帽	SS304 不銹鋼	FCD45
8	Ball Seat 球座	R-PTFE (15%)	R-PTFE (15%)
9	Washer 墊圈	SS304 不銹鋼	FCD45
10	Stem packing 填料	PTFE 聚四氟乙烯	PTFE 聚四氟乙烯
11	Thrust washer 止推墊圈	PTFE 聚四氟乙烯	PTFE 聚四氟乙烯
12	Stem packing 填料	PTFE 聚四氟乙烯	PTFE 聚四氟乙烯

SIZE	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"
MODEL	ATY52	ATY52	ATY52	ATY52	ATY52	ATY63	ATY63
D	11.6	12.7	15	20	25	32	40
L	68	68	75	80	90	108	120
A	145.5	145.5	145.5	145.5	145.5	153.5	153.5
H	139	139	139	140	151	157	165



應用規格：Application Norm
公稱壓力：1.6-6.4MPa
適用溫度範圍：-25 °C ~ +200°C
適用介質：
水、油、氣體及某些腐蝕性液體 (W.O.G)
螺紋類型：
G, NPT, BSP, DIN259/299

Working Pressure: 1000PSI
Temperature Range: -25°C ~ +200°C
Suitable medium:
Water, Oil, air and some corrosive liquid
Thread type:
G, NPT, BSP, DIN259/299

NO.	Part Name 零件名稱	Material 材質	
1	Body 閥體	CF8M 不銹鋼	WCB 碳鋼
2	Stem 閥桿	SS316 不銹鋼	SS304 不銹鋼
3	Cap 閥蓋	CF8M 不銹鋼	WCB 碳鋼
4	Ball 球體	SS316 不銹鋼	SS304 不銹鋼
5	O Ring O型圈	VITON 橡膠	VITON 橡膠
6	Bolt 螺栓	SS304 不銹鋼	B8
7	Nut 螺帽	SS304 不銹鋼	FCD45
8	Ball Seat 球座	R-PTFE (15%)	R-PTFE (15%)
9	Washer 墊圈	SS304 不銹鋼	FCD45
10	Stem packing 填料	PTFE 聚四氟乙烯	PTFE 聚四氟乙烯
11	Thrust washer 止推墊圈	PTFE 聚四氟乙烯	PTFE 聚四氟乙烯
12	Stem packing 填料	PTFE 聚四氟乙烯	PTFE 聚四氟乙烯

SIZE	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
MODEL	AT52	AT52	AT52	AT52	AT52	AT63	AT63	AT75	AT83	AT105	AT125
D	11.6	12.7	15	20	25	32	40	50	65	80	100
L	68	68	75	80	90	108	120	141	165	188	256
A	149	149	149	149	149	162	162	184	204	268	301
H	139	139	139	140	151	173	181	202	229	264	309

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