

产品选型手册



气动执行器



电动执行器



韩国科仁加中国代表处

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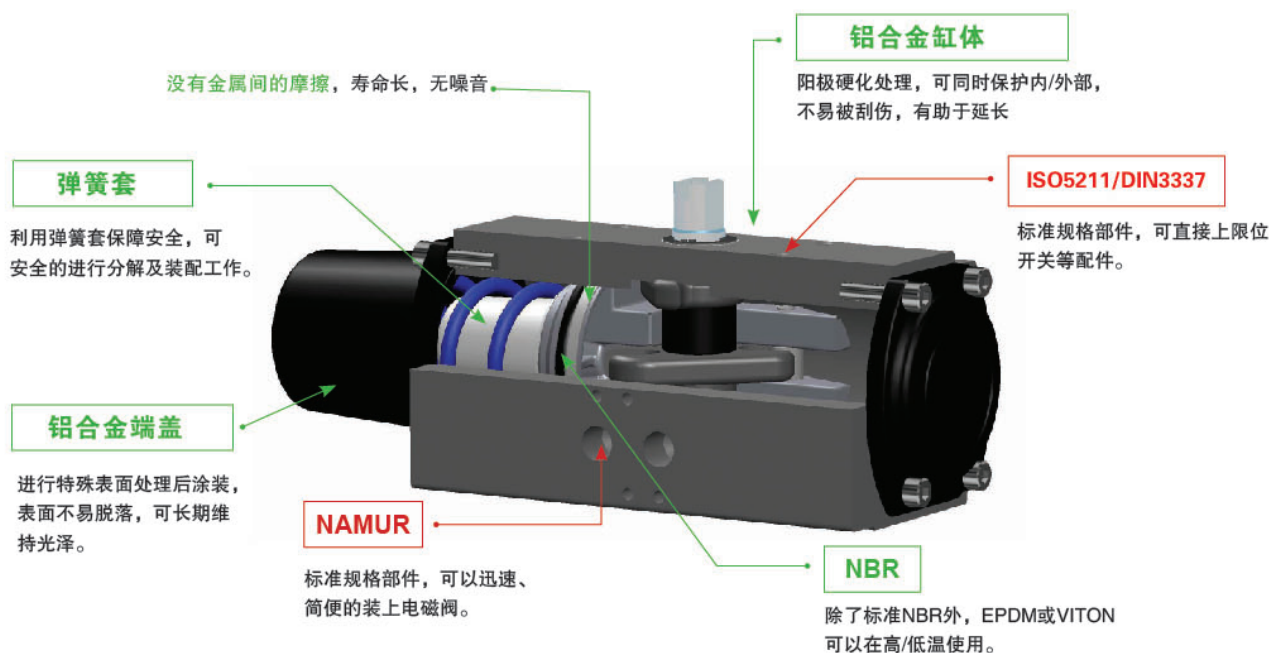
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气动执行器 (A/R 系列)



- 该产品用于90° 旋转的阀门，例如：球阀、蝶阀等。
- 根据ISO国际标准设计连接，可直接安装阀门和附件。
- 设计紧凑，寿命长，质量好，方便实用。



► 产品类型



A D 65

① ② ③

① A系列-拨叉式
R系列-齿轮齿条式

② D-双作用
S-单作用

③ 内部直径

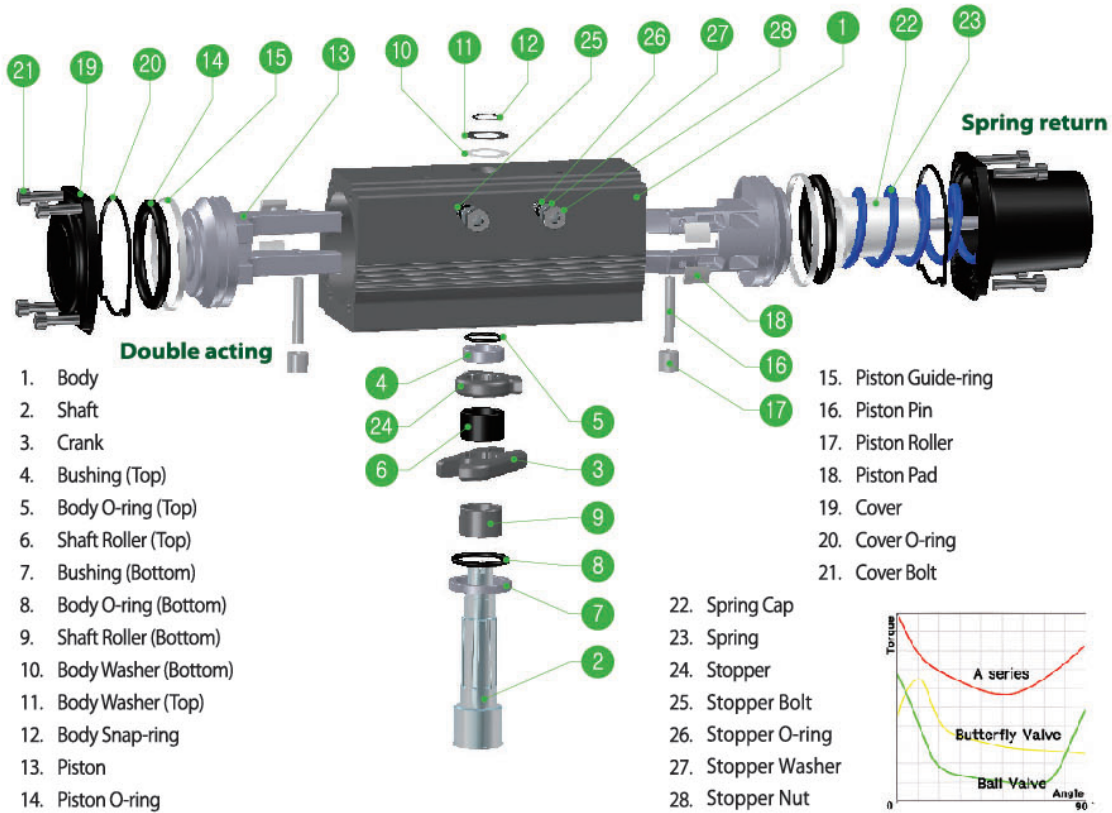
AD 50/65/80/100/125/140/160/185/210/250/300

AS 50/65/80/100/125/140/160/185/210/250/300

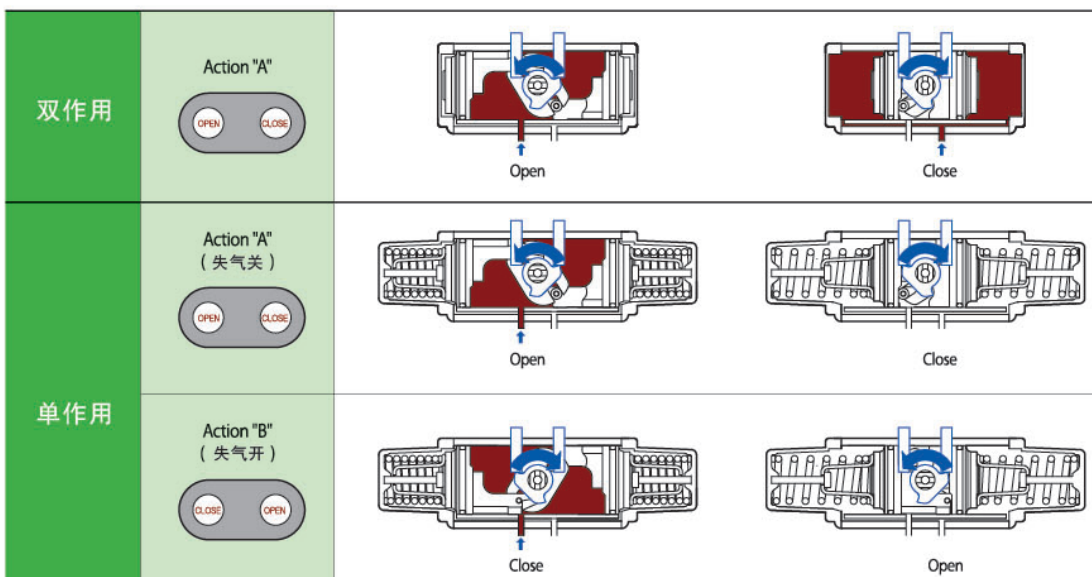
RD 32/40/50/65/80/90/100/115/125/140/160/185/210

RS 40/50/65/80/90/100/115/125/140/160/185/210

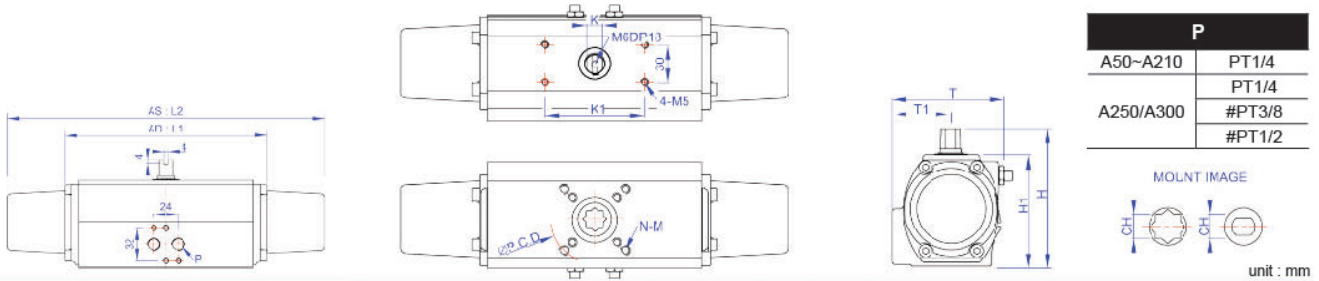
► 部件表



► 工作原理



► 尺寸图



型号	K1	ISO	P.C.D(φ)	N-G	K	L1	L2	T	T1	H	H1	CH	DTH	AD Wt(Kg)	AS Wt(Kg)
A50	80	F03/F05/ F07	36/50/70	4-M5/M6/M8	9	162	257	75	40	90	70	11*11	13	1.4	1.6
												#14*14	14		
												#9.7*φ15	14		
A65	80	F05/F07	50/70	4-M6/M8	13	202	314	89	46	107	87	14*14	17	2.3	3.0
												#11.7*φ17	17		
												#9.7*φ15	14		
A80	80	F07	70	4-M8	13	262	430	101	49.5	126	106	17*17	19	3.9	5.3
												#14.7*φ19	20		
A100	80	F07/F10	70/102	4-M8/M10	19	311	500	129	61.5	148	128	22*22	26	6.7	9.5
												#17.7*φ22	26		
A125	80	F07/F10	70/102	4-M8/M10	19	390	606	151	71.5	174	154	22*22	26	11.3	17.6
A140	80	F10/F12	102/125	4-M10/M12	24	431	682	164	77	192	172	27*27	30	16.4	23.9
												#22*22			
A160	80	F14	140	4-M16	24	506	781	188	89	216	196	36*36	30	23.7	36.6
		#F10/F12	#102/125	#4-M10/M12								#27*27			
*A185	80/130	F14	140	4-M16	30	581	894	217	103	254	224	36*36	30	38.1	62.6
A210	130	F16	165	4-M20	36	605	982	231	115	284	254	46*46	60	45.5	77.2
		#F14										#36*36	50		
A250	130	F16	165	4-M20	36	755	1108	301	152	335	305	46*46	60	65.8	119.6
*A300	130	F16/F25	165/254	4-M20/8-M16	36	900	1344	360	170	408	378	55*55	60	78.0	145.0

-带 '#' 是可选项。 -带 '*' 是正在研发，数据可能有变化。

► 选型参数

阀门尺寸		双作用		单作用	
		球阀	蝶阀	球阀	蝶阀
1/2"	15A	AD50		AS50	
3/4"	20A				
1"	25A				
1-1/4"	32A	AD65		AS65	
1-1/2"	40A				
2"	50A				
2-1/2"	65A	AD80		AS80	AS50
3"	80A				
4"	100A				
5"	125A	AD100	AD65	AS100	AS65
6"	150A	AD125		AS125	
8"	200A	AD140		AS140	
10"	250A	AD160	AD80	AS160	AS80
12"	300A	AD185		AS185	
14"	350A	AD210		AS210	
16"	400A	AD250	AD100	AS250	AS100
18"	450A	AD300		AS300	
20"~22"	500A~550A			AD125	
24"~32"	600A~800A		AD140	AS160	
34"~40"	850A~1000A		AD160	AS185	
			AD185	AS210	
			AD210	AS250	
			AD250	AS300	
			AD300		

• 此数据仅供参考，数据会因为阀门的材料，压力，使用环境的变化而变化。
• 科仁加公司保留数据的最终解释权，如有变更，恕不另行通知。

A 系列 (AD/AS)

拨叉式



► 双作用扭矩表

单位: Nm

型号	角度	Supply Air											
		3Bar		4Bar		5Bar		6Bar		7Bar		8Bar	
		关	开	关	开	关	开	关	开	关	开	关	开
AD50	0°	29.0	21.0	37.0	28.0	38.0	37.0	42.0	41.0	46.5	45.4	50.4	49.2
	45°	15.0	16.0	20.0	21.0	25.0	26.0	30.0	31.0	33.2	34.4	36.0	37.2
	90°	25.0	25.0	33.0	38.0	39.0	40.0	50.0	52.0	55.4	57.6	60.0	62.4
AD65	0°	63.0	59.0	85.0	78.0	105.0	95.0	131.0	116.0	145.2	128.6	157.2	139.2
	45°	33.0	38.0	45.0	49.0	57.0	63.0	68.0	73.0	75.4	80.9	81.6	87.6
	90°	54.0	52.0	72.0	71.0	88.0	93.0	107.0	107.0	118.6	118.6	128.4	128.4
AD80	0°	121.0	105.0	162.0	143.0	209.0	183.0	261.0	210.0	289.3	232.7	313.2	252.0
	45°	65.0	69.0	84.0	92.0	112.0	121.0	130.0	144.0	144.1	159.6	156.0	172.8
	90°	97.0	101.0	130.0	133.0	171.0	156.0	198.0	209.0	219.4	231.6	237.6	250.8
AD100	0°	194.0	186.0	265.0	247.0	332.0	292.0	393.0	368.0	435.5	407.8	471.6	441.6
	45°	110.0	127.0	147.0	165.0	185.0	196.0	237.0	250.0	262.7	277.1	284.4	300.0
	90°	173.0	179.0	231.0	237.0	297.0	301.0	348.0	363.0	385.7	402.3	417.6	435.6
AD125	0°	428.0	432.0	576.0	551.0	725.0	678.0	886.9	793.9	983.0	880.0	1,064.3	952.7
	45°	255.0	273.0	339.0	360.0	425.0	443.0	513.0	531.0	568.5	588.5	615.6	637.2
	90°	385.0	375.0	510.0	491.0	635.0	613.0	750.0	732.0	831.2	811.2	899.9	878.3
AD140	0°	623.0	576.0	829.9	753.9	1,104.9	922.9	1,310.9	1,096.9	1,452.9	1,215.8	1,573.1	1,316.3
	45°	333.0	331.0	450.0	455.0	579.0	582.0	691.0	668.0	765.8	740.3	829.1	801.5
	90°	520.0	523.0	689.0	720.0	862.9	879.9	1,054.9	969.9	1,169.2	1,075.0	1,265.9	1,163.9
AD160	0°	952.9	812.9	1,146.9	1,061.9	1,484.9	1,311.9	1,799.9	1,599.9	1,994.9	1,773.2	2,159.9	1,919.9
	45°	540.0	569.0	730.0	757.9	919.9	948.9	1,109.9	1,132.9	1,230.2	1,255.7	1,331.9	1,359.5
	90°	879.9	978.9	1,169.9	1,319.9	1,447.9	1,634.9	1,749.9	2,026.9	1,939.5	2,246.4	2,099.9	2,432.2
AD185	0°	1,528.8	1,304.2	1,840.0	1,703.6	2,382.2	2,104.7	2,887.5	2,566.7	3,200.4	2,844.8	3,465.1	3,080.0
	45°	830.2	874.8	1,122.3	1,165.3	1,414.4	1,458.9	1,706.5	1,741.8	1,891.3	1,930.5	2,047.7	2,090.2
	90°	1,294.0	1,439.6	1,720.5	1,941.1	2,129.3	2,404.3	2,573.4	2,980.7	2,852.2	3,303.6	3,088.1	3,576.9
AD210	0°	1,979.9	1,909.9	2,799.8	2,599.8	3,299.8	3,199.8	3,919.7	3,819.7	4,344.4	4,233.6	4,703.7	4,583.7
	45°	1,099.9	1,149.9	1,459.9	1,499.9	1,919.9	1,949.9	2,299.8	2,399.8	2,549.0	2,659.8	2,759.8	2,879.8
	90°	1,669.9	1,719.9	2,149.9	2,299.8	2,799.8	2,899.8	3,349.8	3,449.8	3,712.7	3,823.5	4,019.7	4,139.7
AD250	0°	4,100.0	3,000.0	5,500.0	3,950.0	7,100.0	4,850.0	8,480.0	5,750.0	9,398.7	6,372.9	10,176.0	6,900.0
	45°	1,880.0	1,850.0	2,550.0	2,500.0	3,200.0	3,150.0	3,800.0	3,760.0	4,211.7	4,167.3	4,560.0	4,512.0
	90°	3,100.0	3,400.0	4,180.0	4,580.0	5,240.0	5,850.0	6,180.0	7,050.0	6,849.5	7,813.8	7,416.0	8,460.0
AD300	0°	7,211.0	5,049.0	9,615.0	6,732.0	12,019.0	8,416.0	14,422.0	10,099.0	15,984.4	11,193.1	17,306.4	12,118.8
	45°	2,970.0	2,970.0	3,960.0	3,960.0	4,950.0	4,950.0	5,940.0	5,940.0	6,583.5	6,583.5	7,128.0	7,128.0
	90°	5,049.0	7,211.0	6,732.0	9,415.0	8,416.0	12,019.0	10,099.0	14,422.0	11,193.1	15,984.4	12,118.8	17,306.4

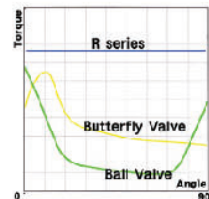
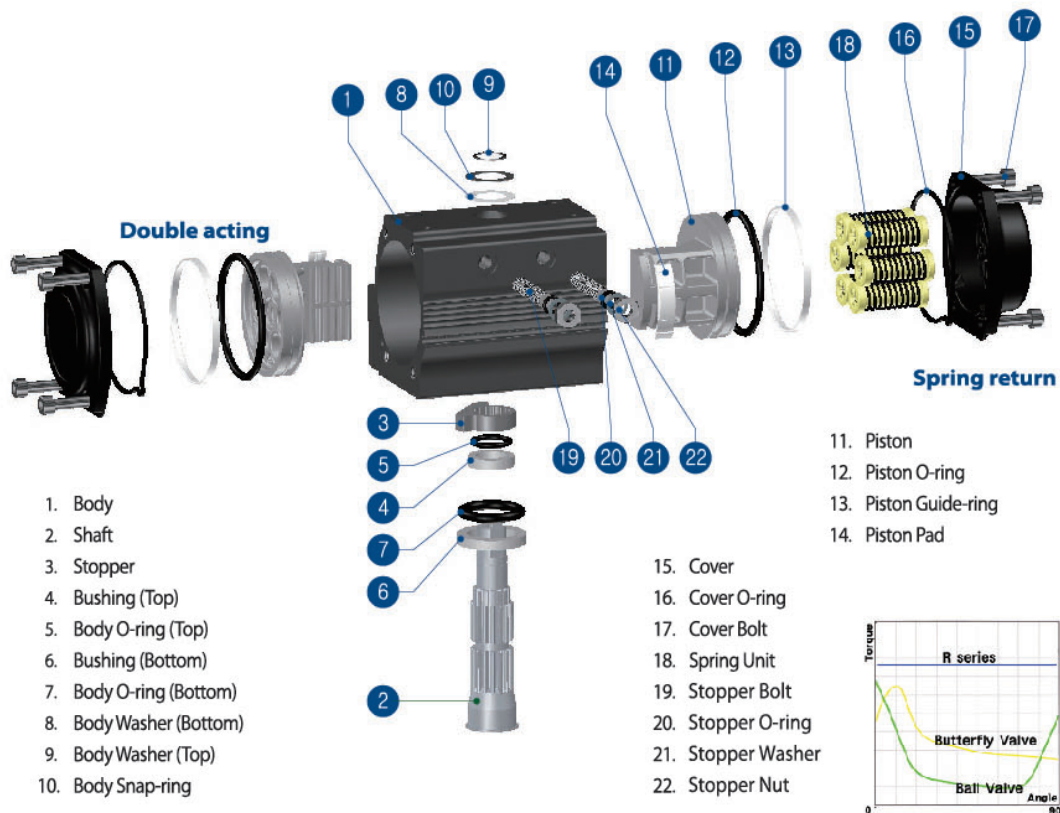
► 单作用扭矩表

单位: Nm

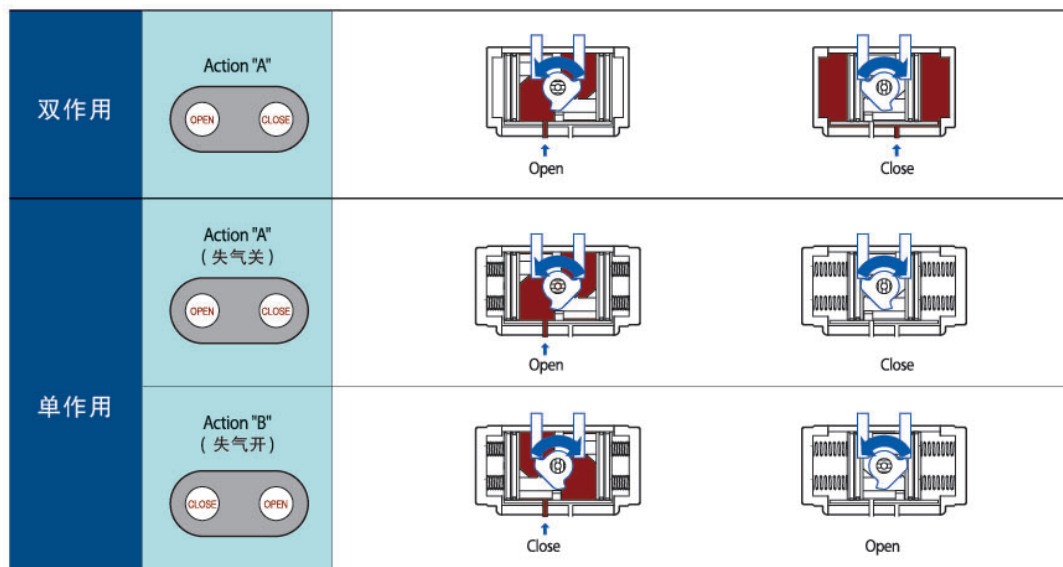
型号	角度	弹簧扭矩: 较弱		弹簧扭矩: 中等		弹簧扭矩: 较强	
		Spring to Close	Air to Open:3Bar	Spring to Close	Air to Open:4.5Bar	Spring to Close	Air to Open:6Bar
AS50	0°	10.0	20.0	14.0	26.0	17.0	34.0
	45°	9.0	9.0	12.0	12.0	15.0	15.0
	90°	20.0	10.0	26.0	14.0	34.0	17.0
AS65	0°	22.0	39.0	35.0	54.0	48.0	70.0
	45°	18.0	18.0	23.0	28.0	37.0	32.0
	90°	39.0	22.0	54.0	35.0	70.0	48.0
AS80	0°	40.0	70.0	60.0	100.0	80.0	130.0
	45°	30.0	30.0	50.0	50.0	70.0	70.0
	90°	70.0	40.0	100.0	60.0	130.0	80.0
AS100	0°	70.0	140.0	100.0	190.0	130.0	240.0
	45°	50.0	50.0	80.0	80.0	110.0	110.0
	90°	140.0	70.0	190.0	100.0	240.0	130.0
AS125	0°	175.0	251.0	243.0	403.0	358.0	520.0
	45°	105.0	125.0	177.0	182.0	215.0	254.0
	90°	215.0	168.0	395.0	210.0	441.0	341.0
AS140	0°	200.0	370.0	371.0	576.0	480.0	726.0
	45°	170.0	170.0	236.0	265.0	330.0	360.0
	90°	370.0	200.0	447.0	366.0	680.0	430.0
AS160	0°	400.0	540.0	550.0	750.0	769.9	1,149.9
	45°	290.0	290.0	420.0	420.0	560.0	560.0
	90°	540.0	400.0	750.0	550.0	1,149.9	769.9
AS185	0°	641.7	866.3	882.3	1,203.1	1,235.2	1,844.8
	45°	445.8	445.8	645.7	645.7	860.9	860.9
	90°	794.1	588.2	1,102.9	808.8	1,691.1	1,132.3
AS210	0°	840.0	910.0	1,250.0	1,510.0	1,750.0	2,160.0
	45°	500.0	430.0	740.0	780.0	1,040.0	1,130.0
	90°	1,000.0	500.0	1,500.0	920.0	2,140.0	1,370.0
AS250	0°	1,540.0	1,900.0	2,120.0	2,760.0	3,060.0	3,660.0
	45°	920.0	950.0	1,320.0	1,370.0	1,830.0	1,900.0
	90°	1,800.0	1,400.0	2,470.0	2,200.0	3,550.0	2,760.0
AS300	0°	2,870.0	4,283.0	4,308.0	6,421.0	5,740.0	8,566.0
	45°	1,447.0	1,523.0	2,172.0	2,283.0	2,894.0	3,046.0
	90°	2,928.0	2,180.0	4,396.0	3,266.0	5,857.0	4,359.0

• 弹簧分为 强/中/弱 三种供您选择, 如订单上没有特别标注, 以标准 (蓝色框) 出货。

► 部件表



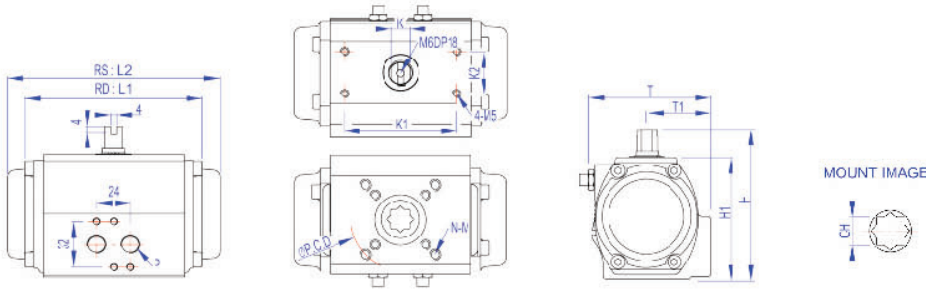
► 工作原理



R 系列 (RD/RS) 齿轮齿条式



► 尺寸图



P		
R32,R40	PT1/8	
R50~R210	PT1/4	
	K1	K2
R32	25.5	25.5
R40	50	25
R50~R160	80	30
R210	130	30

单位: Nm

型号	ISO	P.C.D(Ø)	N-G	K	L1	L2	T	T1	H	H1	CH	DTH	RD 重量 (Kg)	RS 重量 (Kg)
@RD32	F03	36	4-M5	7	66	-	45	25	55	45	9*9	9	0.3	-
@R40	F03/F05	36/50	4-M5/M6	9	97	97	63	32	75	55	9*9	9	0.5	0.6
	#F04	#42	#4-M5											
R50	F03/F05/F07	36/50/70	4-M5/M6/M8	9	119	133	75	40	90	70	11*11	13	1.0	1.1
	#F04	#42	#4-M5											
R65	F05/F07	50/70	4-M6/M8	13	131	154	89	46	106.5	86.5	14*14	16	1.4	1.5
R80	F07	70	4-M8	19	189	220	101	49.5	126	106	17*17	19	2.9	3.3
R90	F07	70	4-M8	19	188	223	104	54.5	136	116	17*17	19	3.4	3.8
R100	F07/F10	70/102	4-M8/M10	19	229	256	132	61.5	148	128	22*22	26	4.7	5.4
											#17*17	19		
*R115	F07/F10	70/102	4-M8/M10	19	264	302	137	67.5	163	143	22*22	26	7.3	8.4
R125	F07/F10	70/102	4-M8/M10	19	299	330	151	71.5	174	154	22*22	26	8.6	9.9
R140	F10/F12	102/125	4-M10/M12	24	332	389	164	77	192	172	27*27	30	12.4	14.5
											#22*22	26		
R160	F10/F12	102/125	4-M10/M12	24	364	416	188	89	216	196	27*27	30	16.9	19.5
*R185	F14	140	4-M16	30	434	465	217	103	254	224	27*27	30	27.1	31.6
R210	F14	140	4-M16	36	444	527	231	115	284	254	36*36	30	32.3	37.9

•带 '@' 的是紧凑型产品, 不带有限位。 •带 '#' 是可选项。 •带 '*' 的是正在研发, 数据可能有变化。

► 双作用扭矩表

单位: Nm

型号	SUPPLY AIR						
	3Bar	4Bar	4.5Bar	5Bar	6Bar	7Bar	8Bar
RD32	3.2	4.5	5.3	6.0	7.3	8.5	9.7
RD40	5.0	7.0	8.0	9.0	11.0	12.8	14.7
RD50	10.3	13.7	15.5	17.1	20.6	24.0	27.4
RD65	19.1	25.4	28.6	31.8	38.2	44.6	50.0
RD80	39.3	52.2	58.8	65.3	78.4	91.5	104.7
RD90	57.8	77.1	86.8	96.4	115.7	134.9	153.8
RD100	84.4	112.5	126.5	140.6	168.7	196.8	220.4
RD115	133.9	178.5	200.7	223.1	267.7	312.4	349.8
RD125	171.2	228.4	256.9	285.4	342.5	399.5	456.6
RD140	243.3	324.4	365.0	405.5	486.6	567.7	648.8
RD160	350.7	467.6	526.0	584.4	701.3	818.2	935.2
RD185	556.6	742.1	834.8	927.5	1,113.0	1,298.5	1,484.2
RD210	725.4	967.2	1,088.1	1,209.0	1,450.8	1,692.6	1,934.4

► 选择参数

阀门尺寸	双作用		单作用		
	球阀		蝶阀	球阀	蝶阀
1/2"	15A	RD32 (1piece)	RD50	RS40	
3/4"	20A	RD40 (1piece)		RS50	
1"	25A		RD65	RS65	
1-1/4"	32A			RS80	
1-1/2"	40A		RD80	RD50	RS90
2"	50A			RD65	RS100
2-1/2"	65A		RD90		RS115
3"	80A	RD100/RD115	RD80	RS125	RS90
4"	100A	RD115/RD125		RS140	RS100
5"	125A	RD140	RD90	RS160	RS115
6"	150A	RD160	RD100	RS185	RS125
8"	200A	RD185	RD125	RS210	RS140
10"	250A	RD210	RD140		RS160
12"	300A		RD160		RS185
14"	350A		RD185		RS210
16"	400A		RD210		

•此数据仅供参考, 数据会因为阀门的材料, 压力, 使用环境的变化而变化。

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▶ 单作用扭矩表

单位 : Nm

型号	Spring unit	Supply Air													
		3Bar		4Bar		4.5Bar		5Bar		6Bar		7Bar		SPRING	
		0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°
RS40	1	2.8	1.8	4.9	3.8	5.8	4.7	6.7	5.6	8.6	7.5	10.4	9.3	2.8	1.8
	2	-	-	-	-	3.6	1.4	4.5	2.3	6.4	4.2	8.2	6.0	6.4	4.2
	op3	2.5	1.1	4.3	3.0	5.3	3.9	6.2	4.8	8.0	6.6	9.8	8.5	3.9	2.5
	op4	-	-	3.8	2.1	4.6	3.0	5.6	4.0	7.5	5.8	9.3	7.6	4.6	3.0
	op5	-	-	-	-	4.2	2.2	5.1	3.2	6.9	5.0	8.7	5.0	5.5	3.6
RS50	8	4.7	2.3	8.1	5.7	9.9	7.4	11.5	9.1	15.0	12.6	18.4	16.0	8.0	5.6
	9	-	-	7.4	4.6	9.2	6.4	10.8	8.0	14.3	11.5	17.7	14.9	9.1	6.3
	10	-	-	6.8	3.7	8.5	5.5	10.2	7.1	13.7	10.6	17.1	14.0	10.0	6.9
	11	-	-	-	-	7.8	4.4	9.5	6.1	13.0	9.6	16.4	13.0	11.0	7.6
	12	-	-	-	-	-	-	-	-	12.3	8.5	15.7	11.9	12.1	8.3
RS65	8	9.6	4.7	16.0	11.1	19.2	14.3	22.4	17.5	28.7	23.8	35.1	30.2	14.4	9.5
	9	-	-	14.8	9.3	18.0	12.5	21.2	15.6	27.6	22.0	34.0	28.4	16.2	10.6
	10	-	-	13.6	7.5	16.8	10.6	20.0	13.8	26.4	20.2	32.8	26.6	18.0	11.8
	11	-	-	-	-	15.6	8.8	18.8	12.0	25.2	18.4	31.6	24.8	19.8	13.0
	12	-	-	-	-	-	-	-	-	24.1	16.7	30.4	23.1	21.5	14.2
RS80	8	19.1	7.7	32.1	20.7	38.7	27.3	45.2	33.8	58.3	46.9	71.3	60.0	30.7	20.1
	9	-	-	29.6	16.7	36.2	23.3	42.7	29.8	55.7	42.9	68.8	56.0	35.5	22.6
	10	-	-	27.1	12.9	33.7	19.5	40.4	25.9	53.2	39.0	66.3	52.1	39.4	25.1
	11	-	-	-	-	31.2	15.5	37.7	22.0	50.7	35.0	63.8	48.1	43.3	27.6
	12	-	-	-	-	-	-	-	-	48.2	31.2	61.3	44.3	47.2	30.1
RS90	8	27.2	9.5	46.4	28.8	56.2	38.5	65.8	48.1	85.0	67.4	104.3	86.6	48.3	30.6
	9	-	-	42.6	22.7	52.3	32.4	61.9	42.0	81.2	61.3	100.4	80.5	54.4	34.5
	10	-	-	38.7	16.6	48.4	26.4	58.0	36.0	77.3	55.2	96.5	74.5	60.5	38.4
	11	-	-	-	-	44.7	20.4	54.3	30.0	73.5	49.3	92.8	68.5	66.4	42.1
	12	-	-	-	-	-	-	-	-	69.7	43.2	88.9	62.4	72.5	46.0
RS100	8	42.6	19.5	70.8	47.6	84.8	61.6	98.9	75.7	127.0	103.8	155.1	131.9	64.9	41.7
	9	-	-	65.5	39.4	79.5	53.5	93.6	67.6	121.7	95.7	149.9	123.8	73.0	47.0
	10	-	-	60.3	31.3	74.3	45.3	88.4	59.4	116.5	87.6	144.6	115.7	81.2	52.2
	11	-	-	-	-	69.1	37.2	83.2	51.3	111.3	79.4	139.5	107.5	89.3	57.4
	12	-	-	-	-	-	-	-	-	106.1	71.4	134.2	99.5	97.3	62.6
RS115	8	56.4	25.7	93.6	62.9	112.1	81.5	130.8	100.1	168.0	137.3	205.1	174.5	85.8	55.2
	9	-	-	86.6	52.2	105.2	70.7	123.8	89.4	161.0	126.5	198.2	163.7	96.6	62.1
	10	-	-	79.7	41.4	98.2	59.9	116.9	78.6	154.1	115.8	191.2	153.0	107.3	69.1
	11	-	-	-	-	91.4	49.2	110.1	67.8	147.3	105.0	184.4	142.2	118.1	75.9
	12	-	-	-	-	-	-	-	-	140.3	94.4	177.5	131.6	128.7	82.8
RS125	8	84.7	35.2	141.8	92.4	170.4	120.9	198.9	149.5	256.0	206.5	313.0	263.6	136.0	86.5
	9	-	-	131.0	75.9	159.5	104.4	188.1	133.0	245.1	190.0	302.2	247.1	152.4	97.3
	10	-	-	120.2	58.4	148.7	86.9	177.3	115.5	234.3	172.5	291.4	229.6	170.0	108.2
	11	-	-	-	-	137.4	70.5	165.9	99.0	223.0	156.0	280.1	213.1	186.4	119.5
	12	-	-	-	-	-	-	-	-	212.7	138.5	269.8	195.6	203.9	129.8
RS140	8	79.7	10.7	201.4	132.4	241.9	172.9	282.5	213.5	363.6	294.6	444.7	375.7	192.0	123.1
	9	-	-	186.4	108.1	227.0	148.7	267.5	189.2	348.6	270.3	429.7	351.4	216.3	138.0
	10	-	-	170.6	83.9	211.1	124.4	251.7	165.0	332.8	246.1	413.9	327.2	240.5	153.8
	11	-	-	-	-	196.2	101.1	236.8	141.7	317.9	222.8	399.0	303.9	263.8	168.7
	12	-	-	-	-	-	-	-	-	302.0	198.6	383.1	279.7	288.0	184.6
RS160	8	165.3	76.7	282.2	193.6	340.6	252.0	399.0	310.4	515.9	427.3	632.8	544.3	274.0	185.4
	9	-	-	259.6	159.7	318.0	218.1	376.4	276.5	493.3	393.4	610.2	510.3	308.0	208.1
	10	-	-	236.9	125.7	295.3	184.1	353.7	242.5	470.6	359.4	587.5	476.3	342.0	230.7
	11	-	-	-	-	271.6	150.1	330.0	208.5	446.9	325.4	563.8	442.3	376.0	254.4
	12	-	-	-	-	-	-	-	-	424.3	290.4	541.2	407.3	411.0	277.1
RS185	8	221.0	102.6	377.3	258.9	455.4	337.0	533.5	415.0	689.8	571.3	846.0	727.6	366.3	247.9
	9	-	-	347.0	213.4	425.1	291.5	503.2	369.6	659.5	525.9	815.7	682.2	411.7	278.2
	10	-	-	316.7	168.0	394.8	246.1	472.9	324.2	629.2	480.4	785.5	636.7	457.2	308.5
	11	-	-	-	-	363.1	200.6	441.2	278.7	597.5	435.0	753.8	591.3	502.6	340.1
	12	-	-	-	-	-	-	-	-	567.2	388.2	723.5	544.5	549.4	370.4
RS210	8	-	-	644.0	402.2	764.9	523.1	885.8	644.1	1,127.9	885.8	1,369.9	1,127.9	565.0	323.2
	9	-	-	603.6	331.6	724.5	452.5	845.4	573.4	1,087.7	815.1	1,328.7	1,056.8	635.6	363.6
	10	-	-	563.2	260.9	684.1	381.8	805.0	502.7	1,046.5	744.5	1,288.5	986.3	706.3	404.0
	11	-	-	-	-	643.8	311.3	764.7	432.2	1,006.4	673.9	1,248.4	915.8	776.8	444.3
	12	-	-	-	-	603.3	240.6	724.2	361.5	965.9	603.3	1,208.2	845.1	847.5	484.8