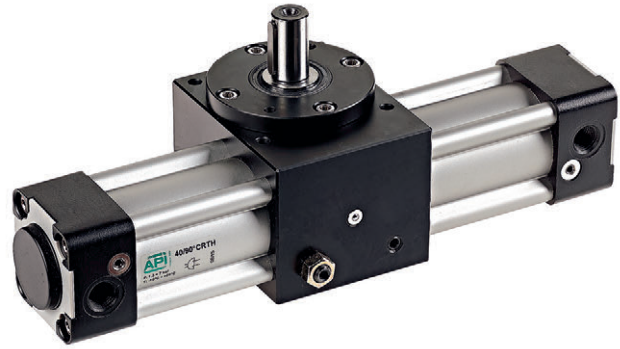


Standard executions		
Version	Symbol	Type
Male pivot gear		CRTH
Double male pivot gear		CRTHD
Female pivot gear		CRTF



Rotary cylinders with rack / pinion, magnetic as standard. The standard cylinders are provided with adjustable cushionings at both ends. One or more magnetic reed switches can be applied.

For the magnetic reed switches type ASV see from page 1.110.1.

How to order: 63 / 90° CRTH

Options	Suffix
Special versions on request	/ S

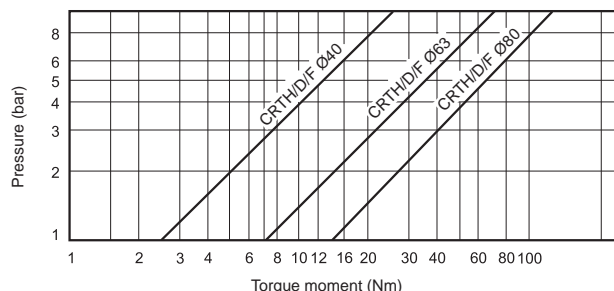
63	/	90°	CRTH	
Bores	/	Angles of rotation	Type	Option

Technical data						
Bores (mm)	40		63		80	
Fluid	Compressed filtered air with or without lubrication. Lubrication, if be used, must be continuous					
Angle of rotation	90° - 180°					
Adjustable angle	± 5°					
Rotating shaft diameter	16		24		28	
Pressure range	1.3 ÷ 7 bar					
Max allowable axial trust (max)	10		12		20	
Cushion angle	74°		75°		80°	
Temperature range	-10 °C ÷ + 60°C					
Weight (g)	CRTH	90°	3000	5400	9750	
		180°	3100	5800	10300	
	CRTHD	90°	3050	5550	9990	
		180°	3150	5950	10540	
	CRTF	90°	2840	5070	9990	
		180°	2940	5470	9740	

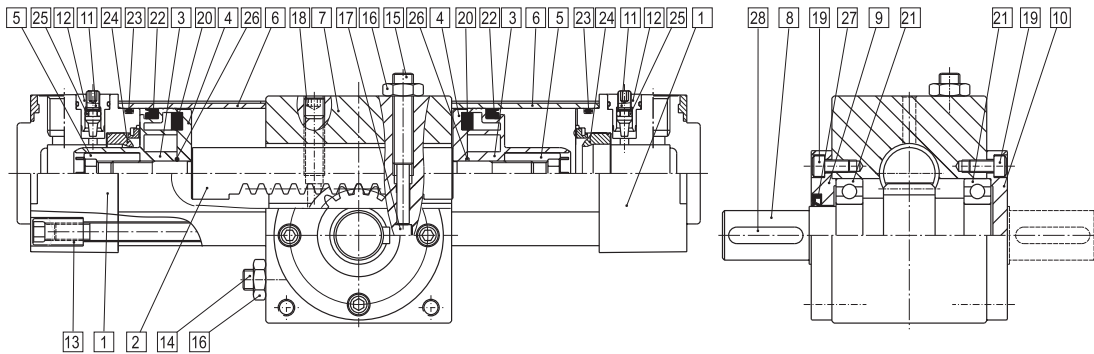
Air consumption for a complete cycle (litres/cycle)

Size	Rotation	Operating pressure (bar)									
		1	2	3	4	5	6	7	8	9	10
40	90°	0,1571	0,2352	0,3133	0,3915	0,4696	0,5477	0,6259	0,7040	0,7821	0,8603
	180°	0,3141	0,4704	0,6267	0,7829	0,9392	1,0955	1,2517	1,4080	1,5643	1,7205
63	90°	0,4383	0,6564	0,8744	1,0925	1,3105	1,5286	1,7466	1,9647	2,1828	2,4008
	180°	0,8766	1,3127	1,7488	2,1850	2,6211	3,0572	3,4933	3,9294	4,3655	4,8016
80	90°	0,8480	1,2698	1,6917	2,1135	2,5354	2,9572	3,3791	3,8009	4,2228	4,6447
	180°	1,6959	2,5396	3,3834	4,2271	5,0708	5,9145	6,7582	7,6019	8,4456	9,2893

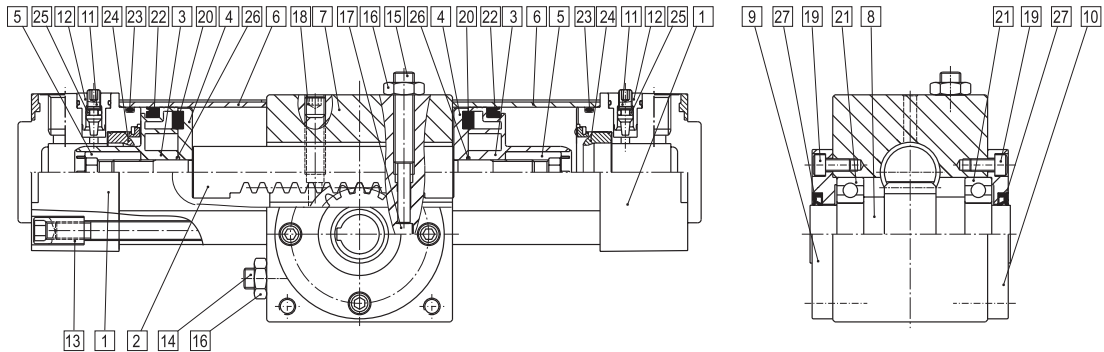
Output torque table



Type: CRTH - CRTHD

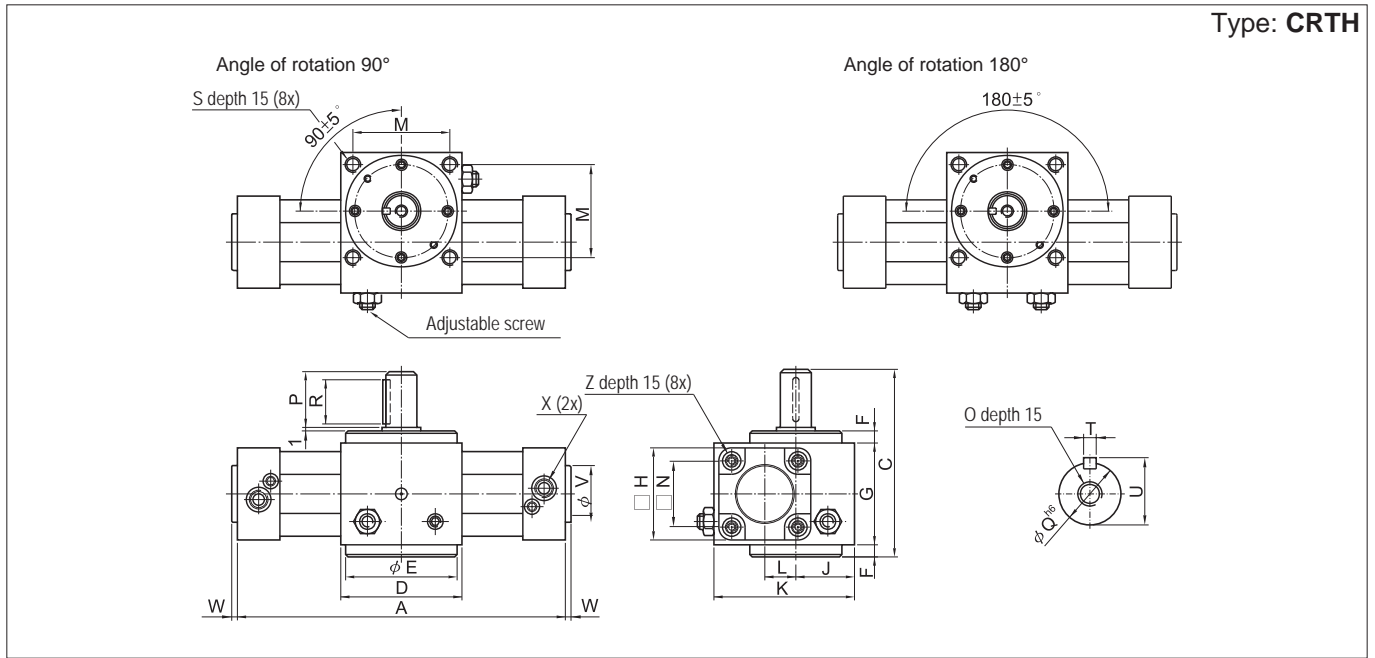


Type: CRTF

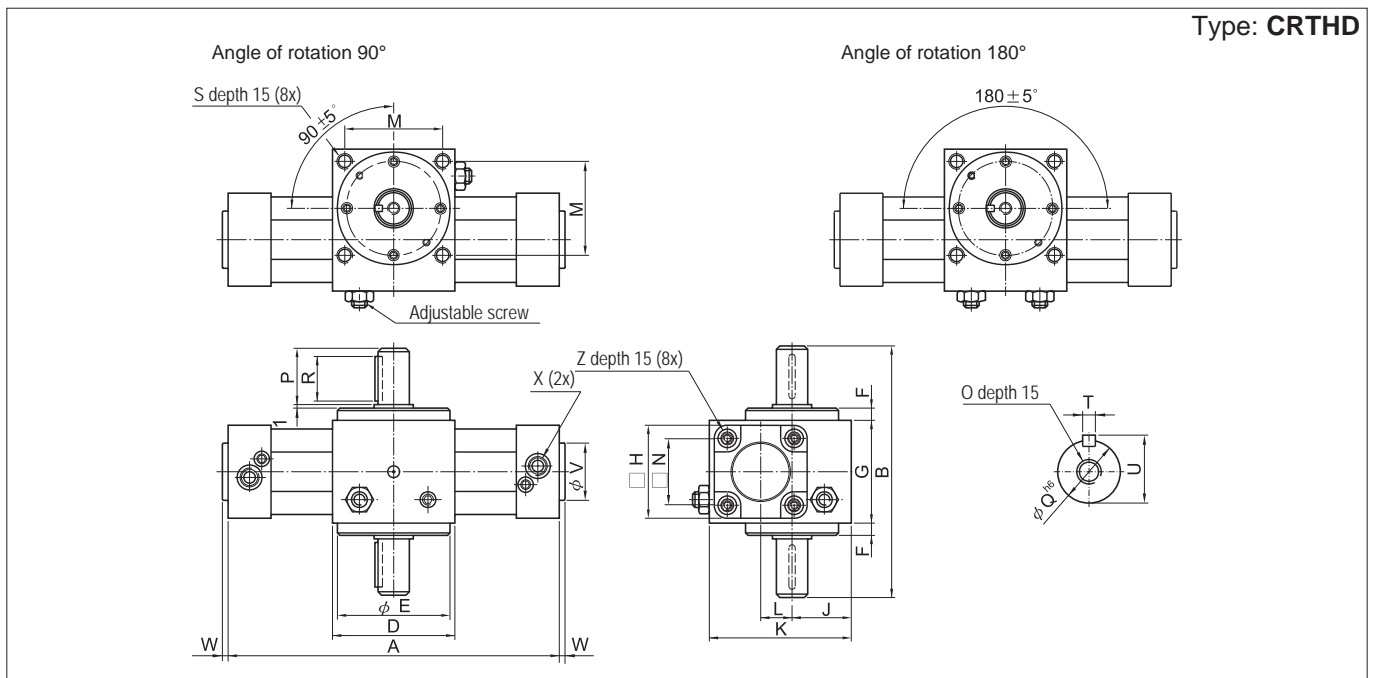


Materials (standard types)

1	End cap	Hard anodised aluminium alloy	15	Adjusting screw	Carbon steel blackening
2	Rack	Carbon steel	16	Lock nut	Carbon steel
3	Piston	POM	17	Stopper pin	Carbon steel
4	Magnet holder	Hard anodised aluminium alloy	18	Set screw	Carbon steel blackening
5	Piston nut	Carbon steel	19	Screw	Carbon steel nickel plated
6	Cylinder tube	Hard anodised aluminium alloy	20	Magnet	Magnetic material
7	Housing	Hard anodised aluminium alloy	21	Ball bearing	Carbon steel
8	Pinion shaft	Carbon steel	22	Piston packing	NBR
9	End cover	Hard anodised aluminium alloy	23	Cylinder gasket	NBR
10	End cover	Hard anodised aluminium alloy	24	Cushion packing	NBR
11	Cushion needle	Stainless steel	25	O-ring	NBR
12	Cushion plug	Brass nickel plated	26	Piston gasket	NBR
13	Tie bolt	Carbon steel galvanized	27	Rod packing	NBR
14	Adjusting screw	Carbon steel blackening	28	Key	Carbon steel

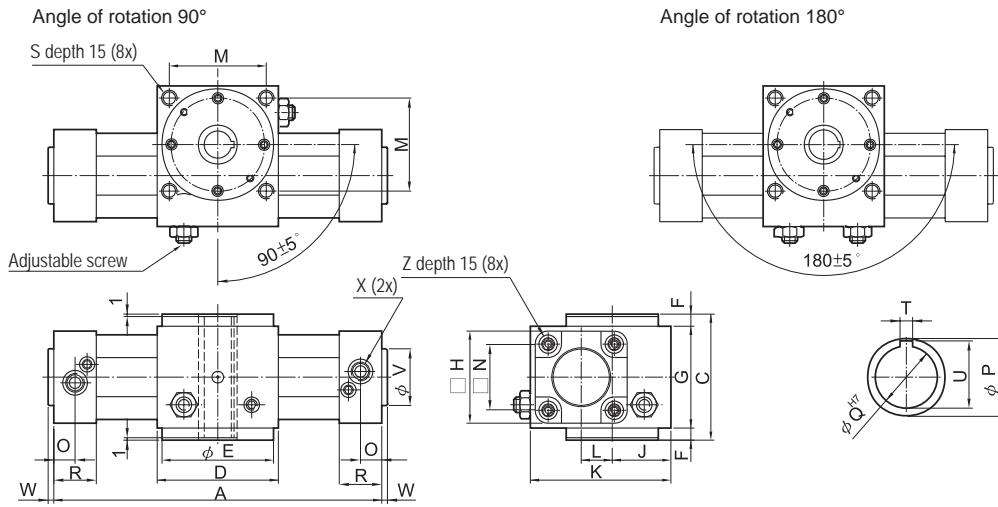


Size	A		C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Z
	90°	180°																						
40	263	326	112	75	72	8	65	53	37,5	93	27,5	60	38	M5	30	16	25	M6	5	18	35	4	1/4"	M6
63	306	377	138	90	82	10	75	75	42,5	110	30	70	56,5	M8	42	24	36	M8	8	27	45	5	3/8"	M8
80	343	428	170	105	96	12	95	95	51,5	135	36	82	72	M8	50	28	45	M10	8	31	45	6	3/8"	M10



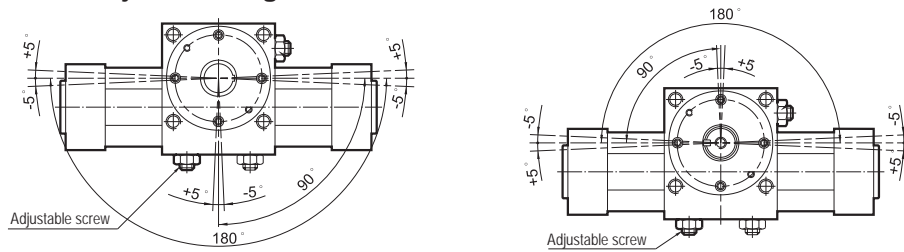
Size	A		B	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Z
	90°	180°																						
40	263	326	143	75	72	8	65	53	37,5	93	27,5	60	38	M5	30	16	25	M6	5	18	35	4	1/4"	M6
63	306	377	181	90	82	10	75	75	42,5	110	30	70	56,5	M8	42	24	36	M8	8	27	45	5	3/8"	M8
80	343	428	221	105	96	12	95	95	51,5	135	36	82	72	M8	50	28	45	M10	8	31	45	6	3/8"	M10

Type: CRTF



Size	A		C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Z
	90°	180°																						
40	263	326	81	75	72	8	65	53	37,5	93	27,5	60	38	15	25	14	30	M6	5	16,5	35	4	1/4"	M6
63	306	377	95	90	82	10	75	75	42,5	110	30	70	56,5	16	30	19	32	M8	6	22	45	5	3/8"	M8
80	343	428	119	105	96	12	95	95	51,5	135	36	82	72	19	35	24	38	M10	6	27,5	45	6	3/8"	M10

Rotating direction and adjustable angle



Hi-Rotary Cylinders

Bores: 4, 5, 6, 8, 10 mm

Double acting



Standard executions		
Version	Symbol	Type
Standard		ARTM
Flanged		ARTMF
Magnetic		ARTMC
Flanged magnetic		ARTMFC
Standard with adjustable angle		ARTML
Flanged with adjustable angle		ARTMFL
Magnetic with adjustable angle		ARTMLC
Flanged magnetic with adjustable angle		ARTMFLC

Options	Suffix
Special versions on request	/ S



Series of Hi-rotor cylinders with fixed and adjustable rotation angles and reduced overall dimensions. They are provided with elastic dampers to relieve the impacts of the vanes.

For the magnetic reed switches type ASC see from page 1.110.2.

How to order: 15 / 90° ARTML

15	/	90°	ARTML
Size	/	Rotation	Type

Technical data						
Size		10	15	20	30	40
Bores		Ø 4	Ø 5	Ø 6	Ø 8	Ø 10
Fluid	Compressed filtered air with or without lubrication. Lubrication, if be used, must be continuous					
Pressure range	1,5 ÷ 7 bar					
Temperature range	0° C ÷ + 50° C					
Rotation angle	90° - 180° - 270°					
Torque moment (Nm) at 6 bar		0,14	0,38	0,78	1,8	3,8
Ports	M5					
Weight (g)	ARTM	28	48	112	200	342
	ARTMF	41	70	138	268	438
	ARTMFC	78	116	240	390	604
	ARTMFLC	91	138	266	468	700