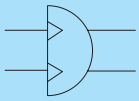
MALE PIVOT GEAR ..... AZRH

FEMALE PIVOT GEAR ..... AZRF



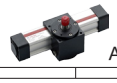
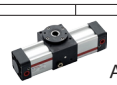
Features

- The body is manufactured in anodized aluminium alloy, and has been designed looking at the harmonious.
- Pinion and rack produced from carbon steel reduces backlash within the mechanism.
- Rotation adjustment screw.

Specification

Type	AZRH	AZRF
Bore	Φ40、63、80	
Standard rotation	90±50° ， 180±5°	
Rotating shaft dia.	Φ16、24、28	
Power fluid	Filtered air with or without lubrication	
Max.allowable axial thrust	10、12、20 kg	
The range of pressure	1.3～7 kgf/cm^2	
The range of temperature	-10～+60 ℃ (Don't freeze)	
Material of cylinder barrel	Aluminium extrusion, Anodised 20 microns	

How to order

AZRH	40	–	Y	–	A	1
Type	Bore		Rotation		Sensor switch	Quantity
 AZRH  AZRF	40：Φ40 63：Φ63 80：Φ80		90：90° 180：180°		AZRK	1：1pc 2：2pcs

Compressed air consumption for a complete cycle

Type	Rotation	Operating pressure (kgf/cm^2)									
		1	2	3	4	5	6	7	8	9	10
AZRH40、AZRF40	90°	0.1571	0.2352	0.3915	0.4696	0.4696	0.5477	0.6259	0.7040	0.7821	0.8603
	180°	0.3141	0.4704	0.7829	0.9392	0.9392	1.0955	1.2517	1.4080	1.5643	1.7205
AZRH63、AZRF63	90°	0.4383	0.6564	1.0925	1.3105	1.3105	1.5286	1.7466	1.9647	2.1828	2.4008
	180°	0.8766	1.3127	2.1850	2.6211	2.6211	3.0572	3.4933	3.9294	4.3655	4.8016
AZRH80、AZRF80	90°	0.8480	1.2698	2.1135	2.5354	2.5354	2.9572	3.3791	3.8009	4.2228	4.6447
	180°	1.6959	2.5396	4.2271	5.0708	5.0708	5.9145	6.7582	7.6019	8.4456	9.2893

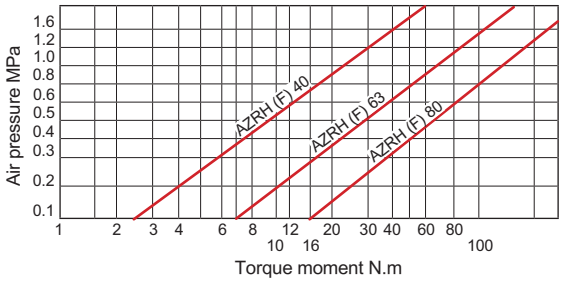
Type	AZRH、AZRF		
Bore	40	63	80
Constant K	0.3491	0.3927	0.4712

The method of calculation (compressed air consumption)

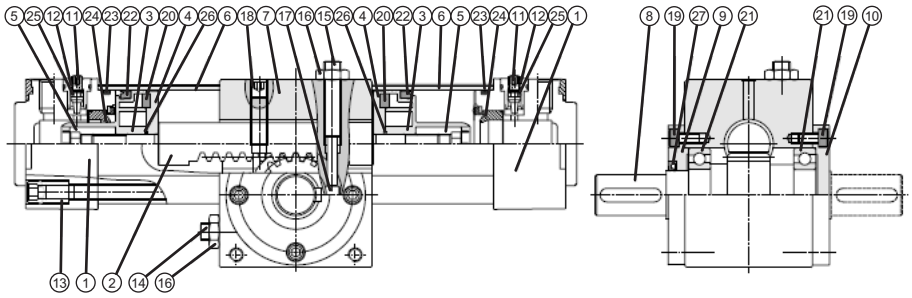
$$Q = 2 \times K \times A \times n \times Dg \times \frac{P + 0.101}{0.101} \times 10^{-6}$$

Q：Compressed air consumption　　A：Piston area (mm^2)
Dg：Rotation　　P：Air pressure (kgf/cm^2)
K：Constant　　N：Cycle of operation (cycle/min)

Output torque table



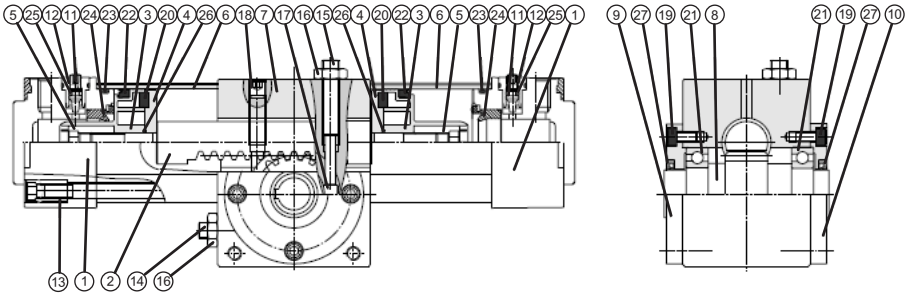
AZRH Male pivot gear (standard type) / Inside structure



Parts list

No.	Part name	Quantity	No.	Part name	Quantity	No.	Part name	Quantity
1	End cap	2	10	End cover	1	19	Hexagon socket head screw	8
2	Rack	1	11	Cushion needle	2	20	Magnet	2
3	Piston	2	12	Cushion holder	2	21	Ball bearing	2
4	Magnet holder	2	13	Tie bolt	8	22	Piston packing	2
5	Piston nut	2	14	Adjusting screw	1	23	Cylinder gasket	2
6	Cylinder tube	2	15	Adjusting screw	1	24	Cushion packing	2
7	Housing	1	16	Lock nut	2	25	Needle gasket	2
8	Pinion shaft	1	17	Stopper pin	1	26	Piston gasket	2
9	End cover	1	18	Set screw	1	27	Rod packing	1

AZRF Female pivot gear / Inside structure



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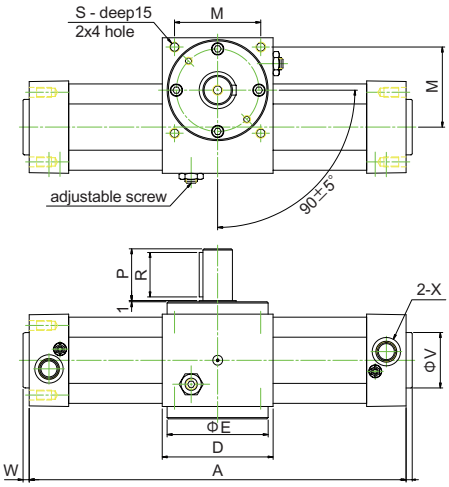
9	End cover	1	18	Set screw	1	27	Rod packing	2

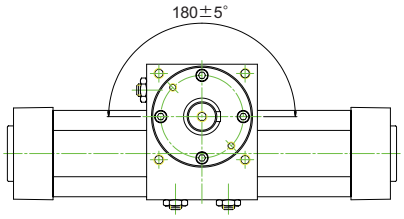
AZRH

Male pivot gear (standard type) / Dimensional features

● Angle of rotation 90°



● Angle of rotation 180°



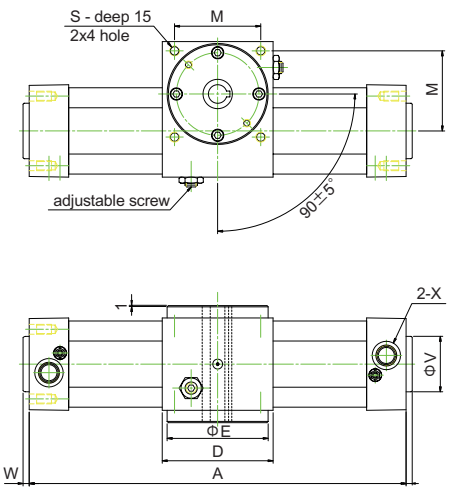
Dimensional Talbe

Mark / Bore	A 90°	A 180°	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Z
AZRH40	263	326	112	75	72	8	65	53	37.5	93	27.5	60	38	M5	30	16	25	M6	5	18	35	4	G 1/4	M6
AZRH63	306	377	138	82	82	10	75	75	42.5	110	30	70	56.5	M8	42	24	36	M8	8	27	45	5	G 3/8	M8
AZRH80	343	428	170	96	96	12	95	95	51.5	135	36	82	72	M8	50	28	45	M10	8	31	45	6	G3/8	M10

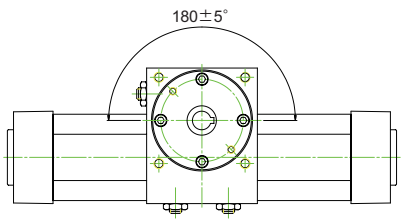
AZRF

Female pivot gear / Dimensional features

● Angle of rotation 90°



● Angle of rotation 180°



Dimensional Talbe

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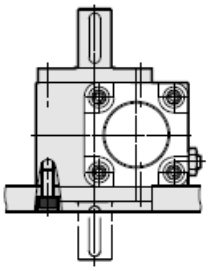
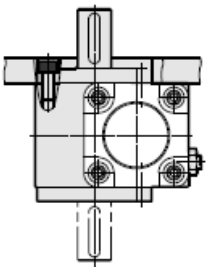
AZRF63	306	377	95	90	82	10	75	75	42.5	110	30	70	56.5	16	30	19	32	M8	6	22	45	5	G 3/8	M8
AZRF80	343	428	119	105	96	12	95	95	51.5	135	36	82	72	19	35	24	38	M10	6	27.5	45	6	G 3/8	M10

AZRH Male pivot gear (standard type) / Mounting type

Bottom mounting

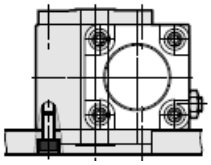


Top mounting

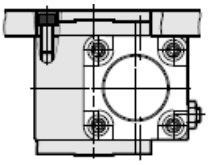


AZRF Female pivot gear / Mounting type

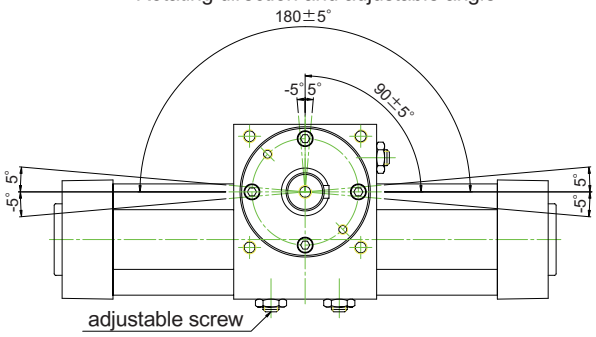
Bottom mounting



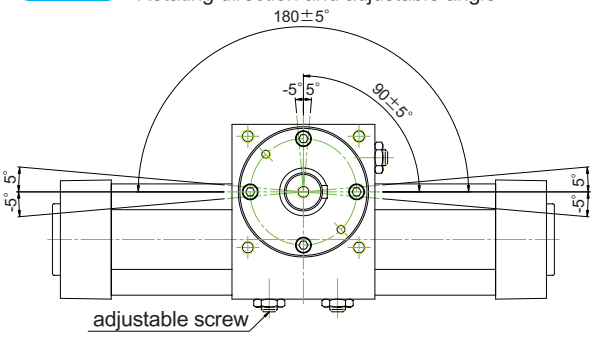
Top mounting



AZRH Male pivot gear (standard type) Rotating direction and adjustable angle



AZRF Female pivot gear Rotating direction and adjustable angle



Cylinder weight

Mark / Bore	AZRH		AZRF	
	90°	180°	90°	180°
Φ40	3.00	3.10	2.84	2.94
Φ63	5.40	5.80	5.07	5.47
Φ80	9.75	10.3	9.19	9.74