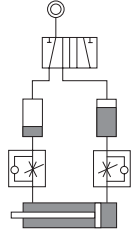


AIR-HYDRO CONVERTER ... **AZO** ...



Features

- Air/Oil systems combine the speed and low cost of air operation with the smooth, even actuator control of oil from a standard air the source. (see right fig.)



Sizing the air-hydro converter

- Determine the volume of fluid displaced by the work cylinder by multiplying stroke by piston area.

$$V = \frac{\pi D^2}{4} \times L \times 10^{-3}$$

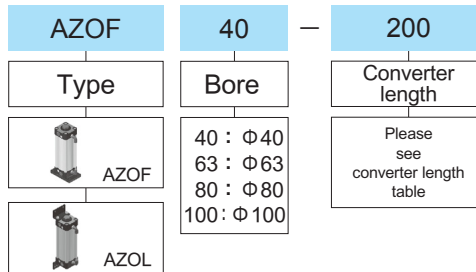
$$\pi = 3.14159$$

D : Piston area of work cylinder (mm)
 L : Stroke of work cylinder (mm)
 V : Volume of work cylinder (cm³)

Specification

Type	AZOF	AZOL
Bore	Φ40、63、80、100	
Power fluid	Filtered oil (ISO Vg32)	
Proof pressure	10.5 kgf/cm ²	
The range of temperature	-10 ~ +60 °C (Don't freeze)	
Material of converter barrel	Anodised aluminium alloy	

How to order



Converter length table

Bore	Converter length (mm)
Φ40、63、80、100	150,175,200,225,250,275,300,325,350,375,400,425,450,475,500

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Air-hydro converter

- Refer to Table 1 to find the bore and length equal to or greater than this volume. In general, longer converter of smaller bore size are most economical.
- Suggested minimum internal length is 150mm ◦
- Air-hydro converter should be sized so that the oil level does not change more than 150mm/sec ◦
- Air-hydro converter should be mounted vertically at the highest point in the system to allow self-bleeding of the converter.

Maximum useable capacities

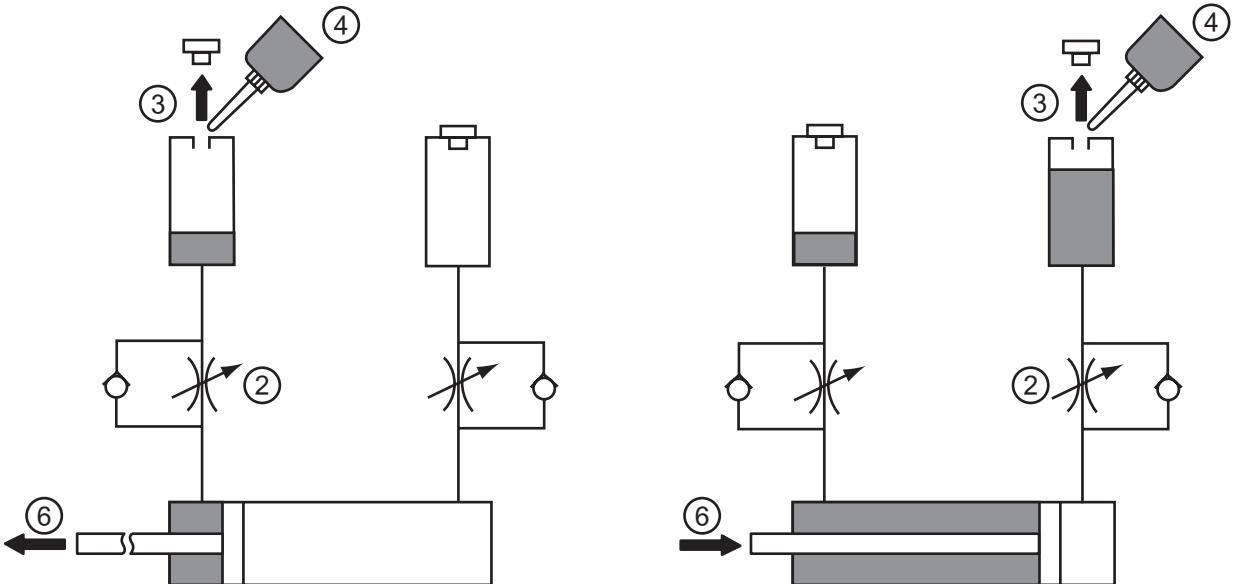
Unit : cm²

Bore (mm)	Converter length (mm)														
	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500
Φ40	94	110	125	141	157	172	188	204	220	235	251	267	282	298	314
Φ63	237	277	316	356	395	435	475	514	554	594	633	673	712	752	791
Φ80	377	440	502	565	628	691	754	816	880	942	1005	1068	1131	1194	1256
Φ100	589	687	785	883	981	1080	1178	1276	1374	1472	1570	1669	1767	1865	1963

※ On the list volume value is reserved 50% reserve volume.

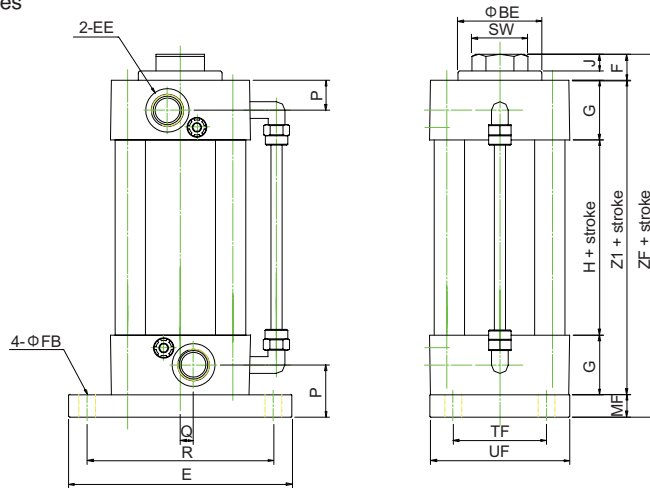
Procedures for oil

1. First pull piston to the oil end point position.
2. Throttle valve is opened fully.
3. Open the screw bolt of oil hole in the top central of air-hydro converter.
4. Down with gravity when oiling.
5. Limit oil height to maximum position and lock screw bolt. (close oil hole.)
6. Push piston to another side with about pressure 0.2 MPa after oiling.
7. The other side repeat step 2 to 5 of procedures for oil.
8. Reciprocating motion with pressure 0.2 MPa after oiling.



AZO

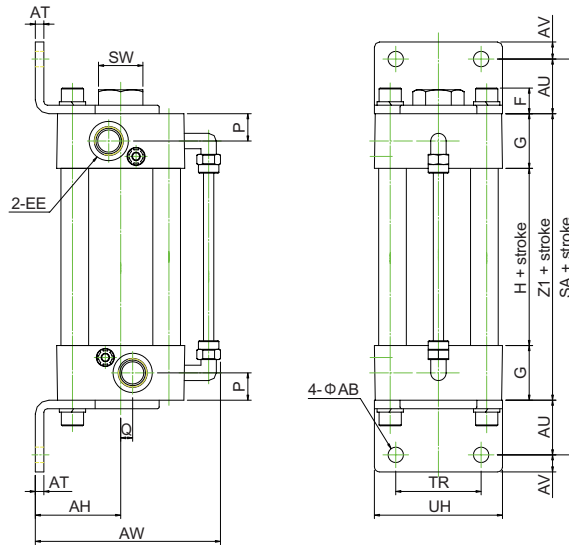
AZOF Dimensional features



Dimensional table

Mark Bore	BE	E	EE	F	FB	G	H	J	MF	P	Q	R	SW	TF	UF	Z1	ZF
Φ40	35	90	G 1/4	14	9	30	30	5	10	15	5	72	26	36	55	90	114
Φ63	45	120	G 3/8	14	9	32	30	5	12	16	8	100	26	50	75	94	120
Φ80	45	153	G 3/8	15	12	38	30	6	16	19	9	126	26	63	95	106	137
Φ100	55	178	G 1/2	15	14	40	30	6	16	20	7	150	26	75	115	110	141

AZOL Dimensional features



Dimensional table

Mark Bore	AB	AH	AT	AU	AV	AW	EE	F	G	H	P	Q	SA	SW	TR	UH	Z1
Φ40	9	36	5	28	10	84	G 1/4	14	30	30	15	5	146	26	36	53	90
Φ63	9	50	5	32	10	109	G 3/8	14	32	30	16	8	158	26	50	75	94
Φ80	12	63	6	41	13	132	G 3/8	15	38	30	19	9	188	26	63	95	106
Φ100	14	71	6	41	15	150	G 1/2	15	40	30	20	7	192	26	75	115	110