

Siken Piston Accumulator

Siken Hydraulics piston has been proving customers piston accumulators in many applications. Piston accumulator consists of a pressure vessel or cylinder and a piston that divides the cylinder into two compartments.

We are providing the piston accumulator from 0.1L to 500L and operating pressures up to 30,000 PSI (2070 Bar).

As for the metal materials, we could design and produce all products in special material (Carbon steel, Stainless Steel, Titanium alloy, Aluminum alloy, Inconel, plastic materials etc...).

As for the seals, we could offer the piston accumulator with diverse seals such as NBR, HNBR, EPDM (EPR), FPM (Viton), Butyl, Low-temperature NBR etc....

Parameters:

- *Volumes: 0.1 liter ... 500 Liter*
- *max. operating pressure: up to 690 Bar (10000 PSI), 1380 bar (20000 PSI), 2070 bar (30000 PSI)*
- *Service temperature: -40°C ... +200°C*
- *Sealing materials: NBR, HNBR, EPDM (EPR), FPM (Viton), Butyl, Low-temperature NBR etc.*
- *Housing materials: Carbon steel, Stainless Steel, Titanium alloy, Aluminum alloy, Inconel, plastic materials etc...*
- *Coatings: Primer, offshore, plastic.*

Model Code

SP 210 — 40 — 100— M— S — F
1 2 3 4 5 6 7

1: SP-----Piston accumulator

2: Maximum working pressure (Bar)

3: Volume (L)

4: Outside Diameter (mm)

5: Cylinder materials:

C--- Carbon steel

S---Stainless Steel

A---Aluminum alloy

T---Titanium alloy

6: Seal materials:

N--- NBR

B---Butyl

E---EPDM

V---Viton (FPM)

7: Fluid port

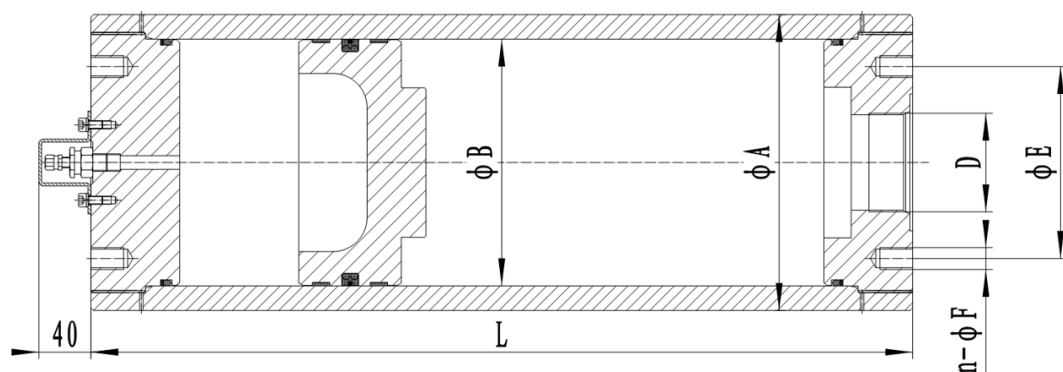
M--- Metric Thread; -----Refer to Fig 1

G---Imperial Thread-----Refer to Fig 1

S---SAE Thread; -----Refer to Fig 1

N---NPT Thread; -----Refer to Fig 1

F--- Flange connection -----Refer to Fig t 2



Piston accumulator parameters

Pressure	Voume	Flow rate	Dimension						Weight
Bar	Liter	L/min	A (mm)	B (mm)	L (mm)	D	E (mm)	n – F	kg
315	0.1	300	63	50	150	M27---M14 G12---G04 S12---S06 N12---N04 (See Chart 1 and 2)	42	2-M6	2.8
	0.16				180				3.1
	0.25				220				3.5
	0.32				260				3.8
	0.5				350				4.6
	0.75				475				5.7
	1				600				6.9
750	0.5	300	85	60	320	M27---M14 G12---G04 S12---S06 N12---N04 (See Chart 1 and 2)	52	2-M6	10
	1				500				14
	1.5				680				18
	2				860				22
	2.5				1040				26
	3				1220				30
350	1	900	121	100	266	M42---M18 G20---G06 S20---S06 N20---N06 (See Chart 1 and 2)	82	3-M12	14.5
	1.6				345				16.5
	2.5				460				19.5
	4				650				25
	6.3				945				34
350	4	1800	164	140	445	M60---M27 G32---G12 S32---S12 N32---N12 (See Chart 1 and 2)	104	3-M12	37
	6.3				595				44
	10				835				55
	16				1225				72
	20				1485				84
	25				1810				98
	32				2265				119
350	10	3000	216	180	600	M60---M27 G32---G12 S32---S12 N32---N12 (See Chart 1 and 2)	140	3-M16	89
	16				835				110
	20				990				123
	25				1190				141
	32				1465				165
	40				1775				192
	50				2170				227
350	20	3600	240	210	870	M72---M27 G32---G12 S32---S12 N32---N12 (See Chart 1 and 2)	160	3-M16	130
	25				1015				142
	32				1215				159
	40				1450				178
	50				1735				202
	63				2110				234
	80				2600				274
350	40	5400	292	250	1130	M72---M27 G40---G12 S32---S12 N40---N12 (See Chart 1 and 2)	180	4-M16	255
	50				1340				285
	63				1600				321
	80				1950				371
	100				2350				428
	125				2860				500
	150				3365				570

Fig 1 Thread port

Thread code	Thread	Thread code	Thread	Thread code	Thread	Thread code	Thread
M10	M10×1	S03	3/8-24UNF	G02	G 1/8"	N02	N 1/8"
M12	M12×1.5	S04	7/16-20UNF	G04	G 1/4"	N04	N 1/4"
M14	M14×1.5	S05	1/2-20UNF	G06	G 3/8"	N06	N 3/8"
M16	M16×1.5	S06	9/16-18UNF	G08	G 1/2"	N08	N 1/2"
M18	M18×1.5	S08	3/4-16UNF	G12	G 3/4"	N12	N 3/4"
M22	M22×1.5	S10	7/8-14UNF	G16	G 1"	N16	N 1"
M27	M27×2	S12	1 1/16-12UNF	G20	G 1 1/4"	N20	N 1 1/4"
M33	M33×2	S14	1 3/16-12UNF	G24	G 1 1/2"	N24	N 1 1/2"
M42	M42×2	S16	1 5/16-12UNF	G32	G 2"	N32	N 2"
M48	M48×2	S20	1 5/8-12UNF	G40	G 2 1/2"	N40	N 2 1/2"
M60	M60×2	S24	1 7/8-12UNF	G48	G 3"	N48	N 3"
M72	M72×2	S32	2 1/2-12UNF				
M85	M85×2	S40	3-12UNF				

Fig 2 Flange port

Flange code	Flange	Flange Size										
		A	B	C	D	E	F	G	H	J	K	L
C	3000PSI SAE split flange	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	5"
D	6000PSI SAE split flange											
F	High pressure square flange (AVIT,HAVIT) PN320	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150		DN25	

NOTE:

The special connection can be designed on request of customers.