

Trouble shooting

Trouble	Cause	Remedy
1. Cylinder does not function	a. Low inlet pressure b. Leak through the piston seal c. Leak through Nutring (8) d. Leak through the end covers and the cylinder barrel	a. Increase the inlet pressure b. Replace the 'O'ring (9) c. Replace nutring (8) d. Replace 'O'ring (4)
2. Piston Jerks during forward stroke	a. Leak through nutring (8)	a. Replace nutring (8)
3. Piston Jerks during Reverse Stroke	a. Leak through the piston seal b. Leak through nutring (8)	a. Replace the 'O'ring (9) b. Replace nutring (8)
4. Cushion adjustment does not function	a. Defective 'O'ring (20) b. Defective cushion seal (13) c. Cushion piston damaged (6)	a. Replace 'O'ring (20) b. Replace c. Replace
5. Leak at piston rod end	a. Defective Nutring (15) b. Defective Wiper (16)	a. Replace Nutring (15) b. Check and replace Wiper (16)
6. Dust inside the front end cover	a. Defective Wiper (16)	a. Replace Wiper (16)

Dismantling and Assembling the Cylinder

1. Dismantle the rear end cover (2) using appropriate tools
2. Remove the cylinder barrel (1) and check for damages in the bore.
3. Remove the piston assembly along with the piston rod and check for dirt and damage.
4. Check the O ring, Piston seal, Bearing strip, Wiper, Nutring and Cushion piston for any damages and scratches.
5. Replace the required necessary spares.
6. Clean all the elements thoroughly.
7. Apply general purpose grease on all the rubber seals, cylinder bore, bearing bush and piston rod.
8. Reassemble the complete cylinder.
9. Check the performance of the cylinder using a suitable valve.

How to order for spare parts

Mention the spare parts numbers as given in the tables.

Example :- **Cushion seal for 32ø cylinder: Ordering number: 641500**

For further information contact our regional Marketing office or Registered office

JANATICS INDIA PRIVATE LIMITED

Regd. Office & Works : E - 25, SIDCO Industrial Estate, Kurichi, Coimbatore - 641 021, INDIA

Tel : + 91 422 2672800 Email : janatics@md2.vsnl.net.in

Fax : + 91 422 2672304 Web : www.janatics.com

Marketing Offices : Ahmedabad Bangalore Chennai Hyderabad Indore Kolkata Mumbai New Delhi Pune

Subject to change

Specification

Piston dia (mm)	32	40	50	63	80	100						
Cushion stroke (mm)	21	23	23	23	28	28						
Standard stroke (mm)	25	50	80	100	125	160	200	250	300	320	400	500
Medium	Compressed air - filtered - lubricated											
Medium temperature	5° - 60° C											
Working pressure	0.5 - 10 bar											

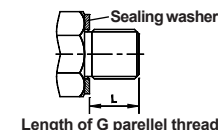
Important

Since this equipment is used in compressed air line, proper precautions are to be taken for safety.

Installation Instruction

1. Install in clean / acid free atmosphere.
2. Before installation of the cylinder check whether the unit is as per the specifications.
3. Check for proper fittings to be used on to the cylinder. Use only (R) taper thread nipples with teflon tape.
4. When using (G) parallel thread nipples, use sealing washer and check the length of the thread as below.

Thread Size	Tightening torque Nm	Length (L) of thread
G1/8	7 - 9	6 mm Max.
G1/4	12 - 14	8 mm Max.
G3/8	22 - 24	9 mm Max.
G1/2	28 - 30	12 mm Max.



5. Tighten the pipings / nipples to the cylinder using proper tools. Do not give excess torque for tightening.
6. Align the cylinder for your requirement such that no radial load is applied on the piston rod.
7. Ensure correct pressure and flow for proper functioning of the cylinder. Use correct size of tubings as required.
8. Adjust the cushioning needle as per requirement.

Maintenance Instructions

- a. Before dismantling the unit, exhaust the air in the cylinder completely.
- b. Remove the cylinder assembly from the machine and clean the assembly thoroughly.
- c. Test the cylinder for operation using a suitable valve.
- d. Note the problems / troubles and ascertain the probable causes and its remedies from the table on page 4.

Assembly / Spare parts list
Air Cylinder (Series A12)

JANATICS
Pneumatic

IS - A12 - 01 - B

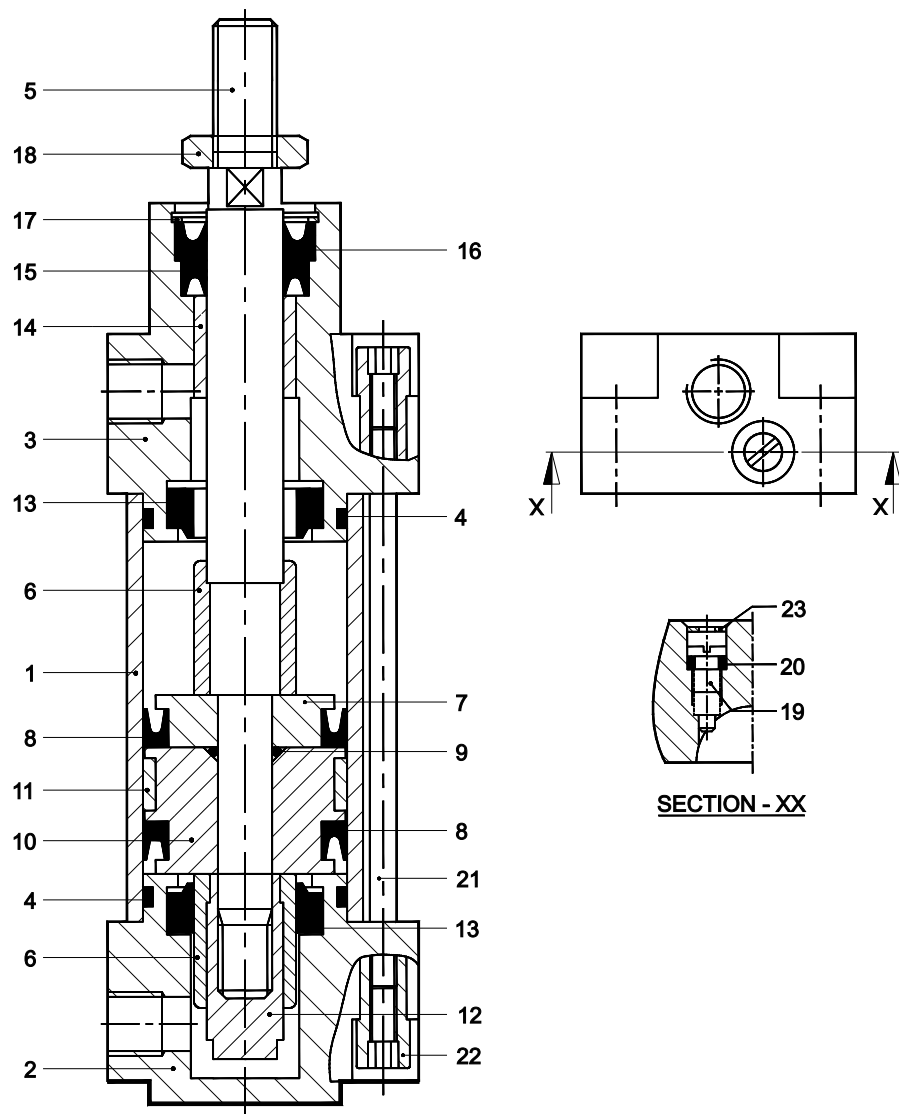


fig. 2

Spare parts list
Air Cylinder (Series A12)

JANATICS
Pneumatic

IS - A12 - 01 - B

Ref No.	No. off	Part name	Ordering no. for					
			32 Ø	40 Ø	50 Ø	63 Ø	80 Ø	100 Ø
1	1	Cylinder barrel	-	-	-	-	-	-
2	1	Rear end cover	-	-	-	-	-	-
3	1	Front end cover	-	-	-	-	-	-
4	2	'O' ring	650016	650017	650109	650111	650300	650301
5	1	Piston rod	-	-	-	-	-	-
6	2	Cushion Piston	-	-	-	-	-	-
7	1	Piston - B	-	-	-	-	-	-
8	2	Nutring	630001	630003	630005	630007	630008	630010
9	1	'O' ring	650005	650008	650010	650010	650012	650012
10	1	Piston - A	-	-	-	-	-	-
11	1	Bearing Strip	710001	710002	710003	710004	710005	710006
12	1	Cushion piston nut	-	-	-	-	-	-
13	2	Cushion seal	641500	641501	641523	641523	641503	641503
14	1	Bearing bush	-	-	-	-	-	-
15	1	Nutring	630002	630004	630006	630006	630009	630009
16	1	Wiper	620001	620002	620003	620003	620004	620004
17	1	Internal circlip	-	-	-	-	-	-
18	1	Locknut	-	-	-	-	-	-
19	2	Needle	-	-	-	-	-	-
20	2	'O' ring	650001	650002	650004	650006	-	-
21	4	Tierod	-	-	-	-	-	-
22	8	End cover bolt	-	-	-	-	-	-
23	2	Lock washer	-	-	-	-	-	-

* Though the ordering numbers have been given for individual seals, it is recommended to order as a **Seal kit** during major maintenance

Piston Ø	32	40	50	63	80	100
Seal Kit ordering No.	SK0001	SK0002	SK0003	SK0004	SK0005	SK0006

Seal kit :

consists of the following :

'O' ring	(4)	- 2 no's.
Nutring	(8)	- 2 no.
'O' ring	(9)	- 1 no.
Cushion seal	(13)	- 2 no's.
Nutring	(15)	- 1 no.
Wiper	(16)	- 1 no.
'O' ring	(20)	- 2 no's. (For Ø32 to Ø63)

Assembly / Spare parts list

IS-A12, A13, A14-01-01

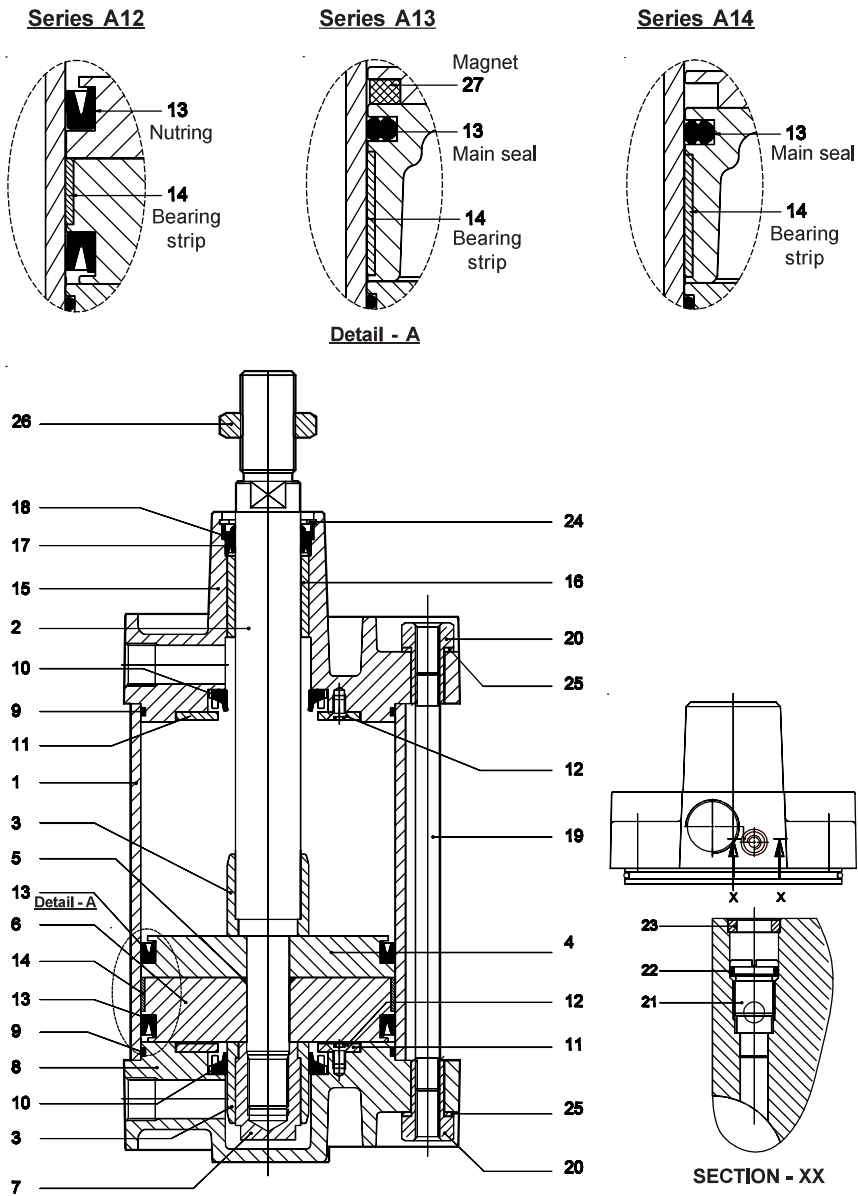


fig. 2

Spare parts list
Air Cylinder Series A12, A13, A14

IS-A12, A13, A14-01-01

Ref No.	No. off	Part Name	Ordering no. for		
			125 Ø	160 Ø	200 Ø
1	1	Cylinder barrel	-	-	-
2	1	Piston rod	-	-	-
3	2	Cushion piston	-	-	-
4	1	Piston – B	-	-	-
5	1	'O' ring	650101	650117	650117
6	1	Piston – A	-	-	-
7	1	Cushion piston nut	-	-	-
8	1	Rear end cover	-	-	-
9	2	'O' ring	650307	650308	650310
10	2	Cushion seal	610010	610011	610011
11	2	Spacer	-	-	-
12	8	Socket counter sunk head screw	-	-	-
13	2	Nutring – (Series A12)	630000	630021	-
	1	Main seal Type C – (Series A13, A14)	640030	640031	640032
14	1	Bearing strip (Series A12)	710017	710018	-
		(Series A13, A14)	710010	710011	710012
15	1	Front end cover	-	-	-
16	1	Bearing bush	-	-	-
17	1	Nutring	630020	630022	630022
18	1	Metal bonded wiper	620000	620005	620005
19	4	Tie rod	-	-	-
20	8	End cover bolt	-	-	-
21	2	Needle	-	-	-
22	2	'O' ring	-	-	-
23	2	Stop bush	-	-	-
24	1	Circlip-light B (Int)	-	-	-
25	8	Spring washer	-	-	-
26	1	Lock nut	-	-	-
27	1	Magnet	-	-	-

Ordering no's in the shaded block refers to **Series A13, A14**

Though the ordering numbers have been given for individual seals, it is recommended to order as a **Seal kit** during major maintenance

Series	A12		A13, A14		
Piston Ø	125	160	125	160	200
Seal kit Ordering no.	SK0007	SK0008	SK0017	SK0018	SK0019

Seal kit :

consists of the following :

'O'ring (5)	- 1 no.	Nutring / (Main seal - 1 no)	(13) - 2 nos.
'O'ring (9)	- 2 nos.	Nutring	(17) - 1 no.
Cushion seal (10)	- 2 nos.	Wiper	(18) - 1 no.