

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

|                       |          |        |
|-----------------------|----------|--------|
| Piston Ø              |          | 125    |
| Seal kit Ordering no. | A27, A28 | SK0152 |
|                       | A25, A26 | SK0153 |

Seal kit :

|                             |          |                             |          |
|-----------------------------|----------|-----------------------------|----------|
| Series A27, A28             |          | Series A25, A26             |          |
| consists of the following : |          | consists of the following : |          |
| Nutring (4)                 | - 2 no's | Nutring (4)                 | - 2 no's |
| 'O' ring (6)                | - 1 no   | 'O' ring (6)                | - 1 no   |
| 'O' ring (12)               | - 2 no's | 'O' ring (12)               | - 2 no's |
| Cushion seal (13)           | - 2 no's | Cushion seal (13)           | - 2 no's |
| Seal (23)                   | - 1 no   | Seal (23)                   | - 2 no's |
| Nutring (24)                | - 1 no   | Nutring (24)                | - 2 no's |
| Wiper (25)                  | - 1 no   | Wiper (25)                  | - 2 no's |

Trouble shooting

| Trouble                                 | Cause                                                                                                                                              | Remedy                                                                                                              |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| 1. Cylinder does not function           | a. Low inlet pressure<br>b. Leak through the piston seal<br>c. Leak through Nutring (4)<br>d. Leak through the end covers and the cylinder barrel. | a. Increase the inlet pressure<br>b. Replace the 'O' ring (6)<br>c. Replace Nutring (4)<br>d. Replace 'O' ring (12) |
| 2. Piston Jerks during forward stroke   | a. Leak through Nutring (4)                                                                                                                        | b. Replace Nutring (4)                                                                                              |
| 3. Piston Jerks during Reverse stroke   | a. Leak through the piston seal<br>b. Leak through Nutring (4)                                                                                     | a. Replace the 'O' ring (6)<br>b. Replace Nutring (4)                                                               |
| 4. Cushion adjustment does not function | a. Defective Cushion seal (13)<br>b. Cushion piston damaged (3)                                                                                    | a. Replace Cushion seal (13)<br>b. Replace Cushion piston (3)                                                       |
| 5. Leak at piston rod end               | a. Defective Seal (23)<br>b. Defective Nutring (24)<br>c. Defective Wiper (25)                                                                     | a. Replace Seal (23)<br>b. Replace Nutring (24)<br>c. Check and replace Wiper (25)                                  |
| 6. Dust inside the front end cover      | a. Defective Wiper (25)                                                                                                                            | a. Replace Wiper (25)                                                                                               |

Dismantling and Assembling the Cylinder

1. Dismantle the Rear end cover (11) 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, Cushion seal, Bearing strip, Wiper, Nutring and Cushion piston for any damages and scratches.
5. Clean all the elements thoroughly.
6. Replace the required necessary spares.
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 Series A27 - Ø125 cylinder: Ordering number: 610010

For further information contact our regional Marketing office or Registered office

|                                                                                               |                                                                                           |
|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| <b>JANATICS INDIA PRIVATE LIMITED</b>                                                         |                                                                                           |
| Registered Office : E-25, SIDCO Industrial Estate, Kurichi, Coimbatore - 641021, INDIA        |                                                                                           |
| Works                                                                                         | : SF No. 252/1B1, Bodipalayam, Seerapalayam Village, Madukkarai Post, Coimbatore - 641105 |
| 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

|                           |      |                                                        |
|---------------------------|------|--------------------------------------------------------|
| Cylinder bore             | (mm) | Ø125                                                   |
| Cushion stroke            | (mm) | 40                                                     |
| Standard stroke           | (mm) | 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                                           |
| Materials of construction |      | Aluminium, Brass, Nitrile, Steel, Acetal, Polyurethane |

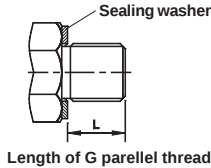
Important

Since this equipment is used in compressed air, 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 |
|-------------|----------------------|----------------------|
| G1/2        | 28 - 30              | 12 mm Max.           |



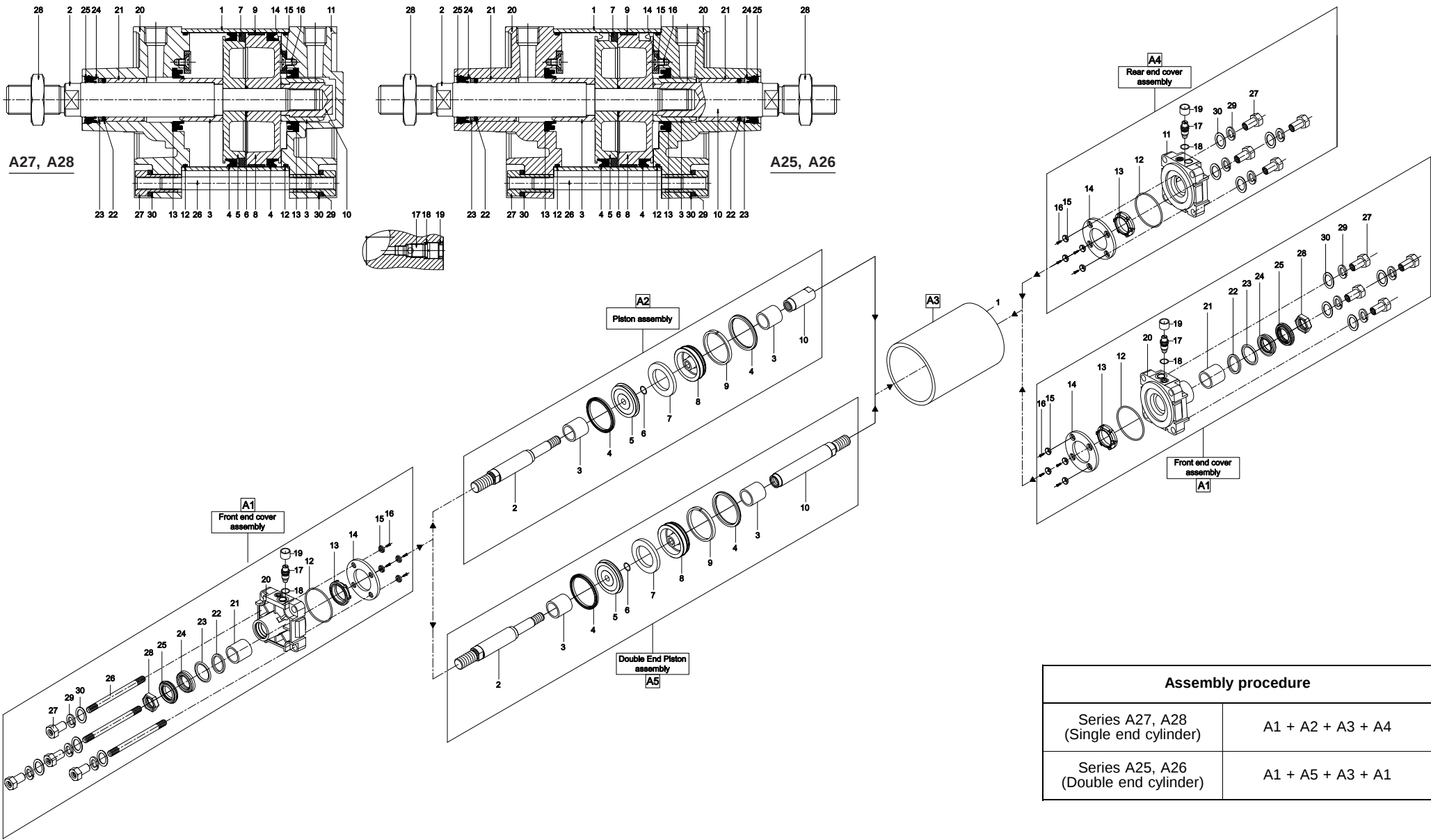
5. Tighten the pipings / nipples to the cylinder using proper tools. Do not give excess torque for tightening (See the above table for tightening torque)
6. Align the cylinder for your requirement such that no radial load is applied on the piston rod.
7. Ensure correct pressure and flow for proper functioning 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 5.

Assembly / Spare parts list

I S - A25, A26, A27, A28 - 01 - 02 - A



Assembly / Spare parts list  
Air Cylinder Series A25, A26, A27, A28

I S - A25, A26, A27, A28 - 01 - 02 - A

| Ref No | No off   |          | Part name                                   | Ordering no. for |
|--------|----------|----------|---------------------------------------------|------------------|
|        | A25, A26 | A27, A28 |                                             | Ø 125            |
| 1      | 1        |          | Cylinder barrel                             | -                |
| 2      | 1        |          | Piston rod                                  | -                |
| 3      | 2        |          | Cushion piston                              | -                |
| 4      | 2        |          | Nutring                                     | 630036           |
| 5      | 1        |          | Piston-B                                    | -                |
| 6      | 1        |          | 'O' ring                                    | 650101           |
| 7      | 1        |          | Magnet - (Series A25, A27 only)             | -                |
| 8      | 1        |          | Piston A                                    | -                |
| 9      | 1        |          | Bearing strip                               | -                |
| 10     | 1        |          | Cushion piston nut - (Series A27, A28 only) | -                |
|        |          |          | Piston rod A - (Series A25, A26 only)       | -                |
| 11     | Nil      | 1        | Rear end cover                              | -                |
| 12     | 2        |          | 'O' ring                                    | 650307           |
| 13     | 2        |          | Cushion seal                                | 610010           |
| 14     | 2        |          | Spacer                                      | -                |
| 15     | 8        |          | Insert                                      | -                |
| 16     | 8        |          | Socket counter sunk head screw              | -                |
| 17     | 2        |          | Needle                                      | -                |
| 18     | 2        |          | 'O' ring                                    | -                |
| 19     | 2        |          | Stop bush                                   | -                |
| 20     | 2        | 1        | Front end cover                             | -                |
| 21     | 2        | 1        | Bearing bush                                | -                |
| 22     | 2        | 1        | Washer                                      | -                |
| 23     | 2        | 1        | Seal                                        | 640054           |
| 24     | 2        | 1        | Nutring                                     | 630050           |
| 25     | 2        | 1        | Wiper                                       | 770058           |
| 26     | 4        |          | Tie rod                                     | -                |
| 27     | 8        |          | End cover bolt                              | -                |
| 28     | 2        | 1        | Lock nut                                    | -                |
| 29     | 8        |          | Spring washer                               | -                |
| 30     | 8        |          | 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. | A25, A26 | SK0061 | SK0062 | SK0063 | SK0064 | SK0065 | SK0066 |
|                       | A27, A28 | SK0051 | SK0052 | SK0053 | SK0054 | SK0055 | SK0056 |

| Seal kit :                  |          | Series A25, A26 |  | Series A27, A28             |          |
|-----------------------------|----------|-----------------|--|-----------------------------|----------|
| consists of the following : |          |                 |  | consists of the following : |          |
| 'O' ring ( 5 )              | - 1 no   |                 |  | 'O' ring ( 5 )              | - 1 no   |
| Main seal (Type-C) (8)      | - 1 no   |                 |  | Main seal (Type-C) (8)      | - 1 no   |
| Cushion seal (12)           | - 2 no's |                 |  | Cushion seal (12)           | - 2 no's |
| Cushion pad (13)            | - 2 no's |                 |  | Cushion pad (13)            | - 2 no's |
| 'O' ring (14)               | - 2 no's |                 |  | 'O' ring (14)               | - 2 no's |
| Nutring (20)                | - 2 no's |                 |  | Nutring (20)                | - 1 no   |
| Wiper (21)                  | - 2 no's |                 |  | Wiper (21)                  | - 1 no   |

| Trouble                                 | Cause                                                                                                                                                         | Remedy                                                                                                                         |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 1. Cylinder does not function           | a. Low inlet pressure<br>b. Leak through the piston seal<br>c. Leak through Main seal (Type-C) (8)<br>d. Leak through the end covers and the cylinder barrel. | a. Increase the inlet pressure<br>b. Replace the 'O' ring (5)<br>c. Replace Main seal (Type-C) (8)<br>d. Replace 'O' ring (14) |
| 2. Piston Jerks during forward stroke   | a. Leak through Main seal (Type-C) (8)<br>b. Leak through the piston seal                                                                                     | a. Replace Main seal (Type-C) (8)<br>b. Replace the 'O' ring (5)                                                               |
| 3. Piston Jerks during Reverse stroke   | a. Leak through the piston seal<br>b. Leak through Main seal (Type-C) (8)                                                                                     | a. Replace the 'O' ring (5)<br>b. Replace Main seal (Type-C) (8)                                                               |
| 4. Cushion adjustment does not function | a. Defective Cushion seal (12)<br>b. Cushion piston damaged (3)                                                                                               | a. Replace Cushion seal (12)<br>b. Replace Cushion piston (3)                                                                  |
| 5. Leak at piston rod end               | a. Defective Nutring (20)<br>b. Defective Wiper (21)                                                                                                          | a. Replace Nutring (20)<br>b. Check and replace Wiper (21)                                                                     |
| 6. Dust inside the front end cover      | a. Defective Wiper (21)                                                                                                                                       | a. Replace Wiper (21)                                                                                                          |

### Dismantling and Assembling the Cylinder

1. Dismantle the rear end cover (11) 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. Clean all the elements thoroughly.
5. Check the 'O' ring, Cushion seal, Cushion pad, Bearing strip, Wiper, Nutring and Cushion piston for any damages and scratches.
6. Replace the required necessary spares.
7. Apply recommended grease (Ordering No: CG001-040) 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 and mention the model number  
Example :- Cushion seal for Ø32 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 • Kolkata • Mumbai • New Delhi • Pune

### Specifications

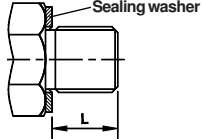
|                    |                                        |    |    |    |     |     |     |     |     |     |     |     |     |
|--------------------|----------------------------------------|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Piston dia         | (mm)                                   | 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 Instructions

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.           |



Length of G parallel thread

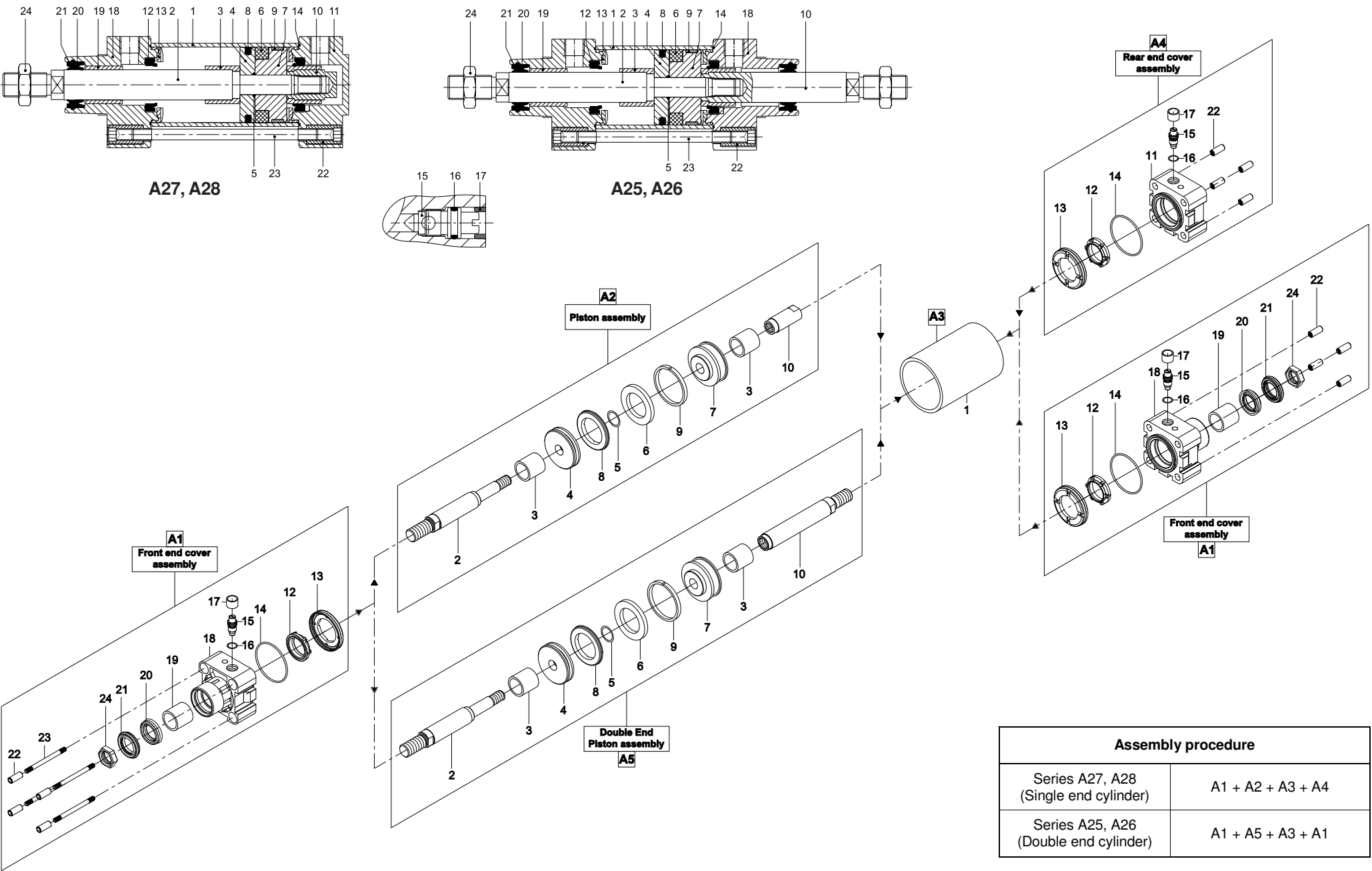
5. Tighten the pipings / nipples to the cylinder using proper tools. Do not give excess torque for tightening ( See the above table for tightening torque )
6. Align the cylinder for your requirement such that no radial load is applied on the piston rod.
7. Ensure correct pressure and flow for proper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

### Maintenance Instructions

1. Before dismantling the unit, exhaust the air in the cylinder completely.
2. Remove the cylinder assembly from the machine and clean the assembly thoroughly.
3. Test the cylinder for operation using a suitable valve.
4. Note the problems / troubles and ascertain the probable causes and its remedies from the table on page 5.

Assembly / Spare parts list

IS - A25, A26, A27, A28 - 01 - A



Assembly procedure

|                                          |                   |
|------------------------------------------|-------------------|
| Series A27, A28<br>(Single end cylinder) | A1 + A2 + A3 + A4 |
| Series A25, A26<br>(Double end cylinder) | A1 + A5 + A3 + A1 |

Spare parts list  
Air Cylinder Series A25, A26, A27, A28

IS - A25, A26, A27, A28 - 01 - A

| Ref. No. | No. off |         | Part name                                                                              | Ordering no. for |        |        |        |        |        |
|----------|---------|---------|----------------------------------------------------------------------------------------|------------------|--------|--------|--------|--------|--------|
|          | A25 A26 | A27 A28 |                                                                                        | Ø 32             | Ø 40   | Ø 50   | Ø 63   | Ø 80   | Ø 100  |
| 1        | 1       |         | Cylinder barrel                                                                        | -                | -      | -      | -      | -      | -      |
| 2        | 1       |         | Piston rod                                                                             | -                | -      | -      | -      | -      | -      |
| 3        | 2       |         | Cushion piston                                                                         | -                | -      | -      | -      | -      | -      |
| 4        | 1       |         | Piston-B                                                                               | -                | -      | -      | -      | -      | -      |
| 5        | 1       |         | 'O' ring                                                                               | 650005           | 650008 | 650010 | 650010 | 650012 | 650012 |
| 6        | 1       |         | Magnet<br>(Series A25, A27 only)                                                       | -                | -      | -      | -      | -      | -      |
| 7        | 1       |         | Piston A                                                                               | -                | -      | -      | -      | -      | -      |
| 8        | 1       |         | Main seal (Type C)                                                                     | 641505           | 641506 | 641507 | 641508 | 641509 | 641510 |
| 9        | 1       |         | Bearing strip                                                                          | -                | -      | -      | -      | -      | -      |
| 10       |         | 1       | Cushion piston nut<br>(Series A27, A28 only)<br>Piston rod A<br>(Series A25, A26 only) | -                | -      | -      | -      | -      | -      |
| 11       | Nil     | 1       | Rear end cover                                                                         | -                | -      | -      | -      | -      | -      |
| 12       | 2       |         | Cushion seal                                                                           | 641500           | 641501 | 641502 | 641502 | 641503 | 641503 |
| 13       | 2       |         | Cushion pad                                                                            | 770042           | 770038 | 770036 | 640036 | 640037 | 640038 |
| 14       | 2       |         | 'O' ring                                                                               | 651030           | 651029 | 651028 | 651031 | 651114 | 651115 |
| 15       | 2       |         | Needle                                                                                 | -                | -      | -      | -      | -      | -      |
| 16       | 2       |         | 'O' ring                                                                               | -                | -      | -      | -      | -      | -      |
| 17       | 2       |         | Bush                                                                                   | -                | -      | -      | -      | -      | -      |
| 18       | 2       | 1       | Front end cover                                                                        | -                | -      | -      | -      | -      | -      |
| 19       | 2       | 1       | Bearing bush                                                                           | -                | -      | -      | -      | -      | -      |
| 20       | 2       | 1       | Nutring                                                                                | 630034           | 630032 | 630031 | 630031 | 630035 | 630035 |
| 21       | 2       | 1       | Wiper                                                                                  | 770040           | 770039 | 770037 | 770037 | 770041 | 770041 |
| 22       | 8       |         | End cover bolt                                                                         | -                | -      | -      | -      | -      | -      |
| 23       | 4       |         | Tie rod                                                                                | -                | -      | -      | -      | -      | -      |
| 24       | 2       | 1       | Lock nut                                                                               | -                | -      | -      | -      | -      | -      |

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

Seal kit

| Piston Ø              |              | 32     | 40     | 50     | 63     | 80     | 100    |
|-----------------------|--------------|--------|--------|--------|--------|--------|--------|
| Seal kit Ordering no. | A25-H, A26-H | SK0129 | SK0130 | SK0131 | SK0132 | SK0133 | SK0134 |
|                       | A27-H, A28-H | SK0102 | SK0103 | SK0104 | SK0105 | SK0106 | SK0107 |

Seal kit :

|                             |          |                             |          |
|-----------------------------|----------|-----------------------------|----------|
| <b>Series A25-H, A26-H</b>  |          | <b>Series A27-H, A28-H</b>  |          |
| consists of the following : |          | consists of the following : |          |
| 'O' ring ( 5 )              | - 1 no   | 'O' ring ( 5 )              | - 1 no   |
| Main seal (Type-C) (8)      | - 1 no   | Main seal (Type-C) (8)      | - 1 no   |
| Cushion seal (13)           | - 2 no's | Cushion seal (13)           | - 2 no's |
| Cushion pad (14)            | - 2 no's | Cushion pad (14)            | - 2 no's |
| 'O' ring (15)               | - 2 no's | 'O' ring (15)               | - 2 no's |
| Nutring (21)                | - 2 no's | Nutring (21)                | - 1 no   |
| Metal bonded wiper (22)     | - 2 no's | Metal bonded wiper (22)     | - 1 no   |

| Trouble                                 | Cause                                                                                                                                                         | Remedy                                                                                                                         |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 1. Cylinder does not function           | a. Low inlet pressure<br>b. Leak through the piston seal<br>c. Leak through Main seal (Type-C) (8)<br>d. Leak through the end covers and the cylinder barrel. | a. Increase the inlet pressure<br>b. Replace the 'O' ring (5)<br>c. Replace Main seal (Type-C) (8)<br>d. Replace 'O' ring (15) |
| 2. Piston Jerks during forward stroke   | a. Leak through Main seal (Type-C) (8)                                                                                                                        | a. Replace Main seal (Type-C) (8)                                                                                              |
| 3. Piston Jerks during Reverse stroke   | a. Leak through the piston seal<br>b. Leak through Main seal (Type-C) (8)<br>b. Leak through Nutring (21)                                                     | a. Replace the 'O' ring (5)<br>b. Replace Main seal (Type-C) (8)<br>b. Replace the Nutring (21)                                |
| 4. Cushion adjustment does not function | a. Defective Cushion seal (13)<br>b. Cushion piston damaged (3)                                                                                               | a. Replace Cushion seal (13)<br>b. Replace Cushion piston (3)                                                                  |
| 5. Leak at piston rod end               | a. Defective Nutring (21)<br>b. Defective Metal bonded wiper (22)                                                                                             | a. Replace Nutring (21)<br>b. Check and replace Metal bonded wiper (22)                                                        |
| 6. Dust inside the front end cover      | a. Defective Metal bonded wiper (22)                                                                                                                          | a. Replace Metal bonded wiper (22)                                                                                             |

Dismantling and Assembling the Cylinder

1. Dismantle the rear end cover (11) 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. Clean all the elements thoroughly.
5. Check the 'O' ring, Cushion seal, Cushion pad, Bearing strip, Nutring, Metal bonded wiper and Cushion piston for any damages and scratches.
6. Replace the required necessary spares.
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 Ø32 cylinder : Ordering number : 642012**

For further information contact our regional Marketing office or Registered office

|                                                                                                |  |  |  |  |                                  |  |  |  |  |
|------------------------------------------------------------------------------------------------|--|--|--|--|----------------------------------|--|--|--|--|
| <b>JANATICS INDIA PRIVATE LIMITED</b>                                                          |  |  |  |  |                                  |  |  |  |  |
| 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

Specifications

|                           |                                        |    |    |     |     |     |     |     |     |     |     |     |
|---------------------------|----------------------------------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 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°C - 150°C                            |    |    |     |     |     |     |     |     |     |     |     |
| Working pressure          | 0.5 - 10 bar                           |    |    |     |     |     |     |     |     |     |     |     |
| Materials of construction | Aluminium, Brass, Viton, Steel, Teflon |    |    |     |     |     |     |     |     |     |     |     |

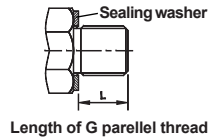
Important

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

Installation Instructions

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        | 5.5                  | 6.5 mm Max.          |
| R1/8        | 7 - 9                | -                    |
| G1/4        | 11                   | 8 mm Max.            |
| R1/4        | 12 - 14              | -                    |
| G3/8        | 20                   | 9 mm Max.            |
| R3/8        | 22 - 24              | -                    |
| G1/2, R1/2  | 28 - 30              | 10.5 mm Max.         |



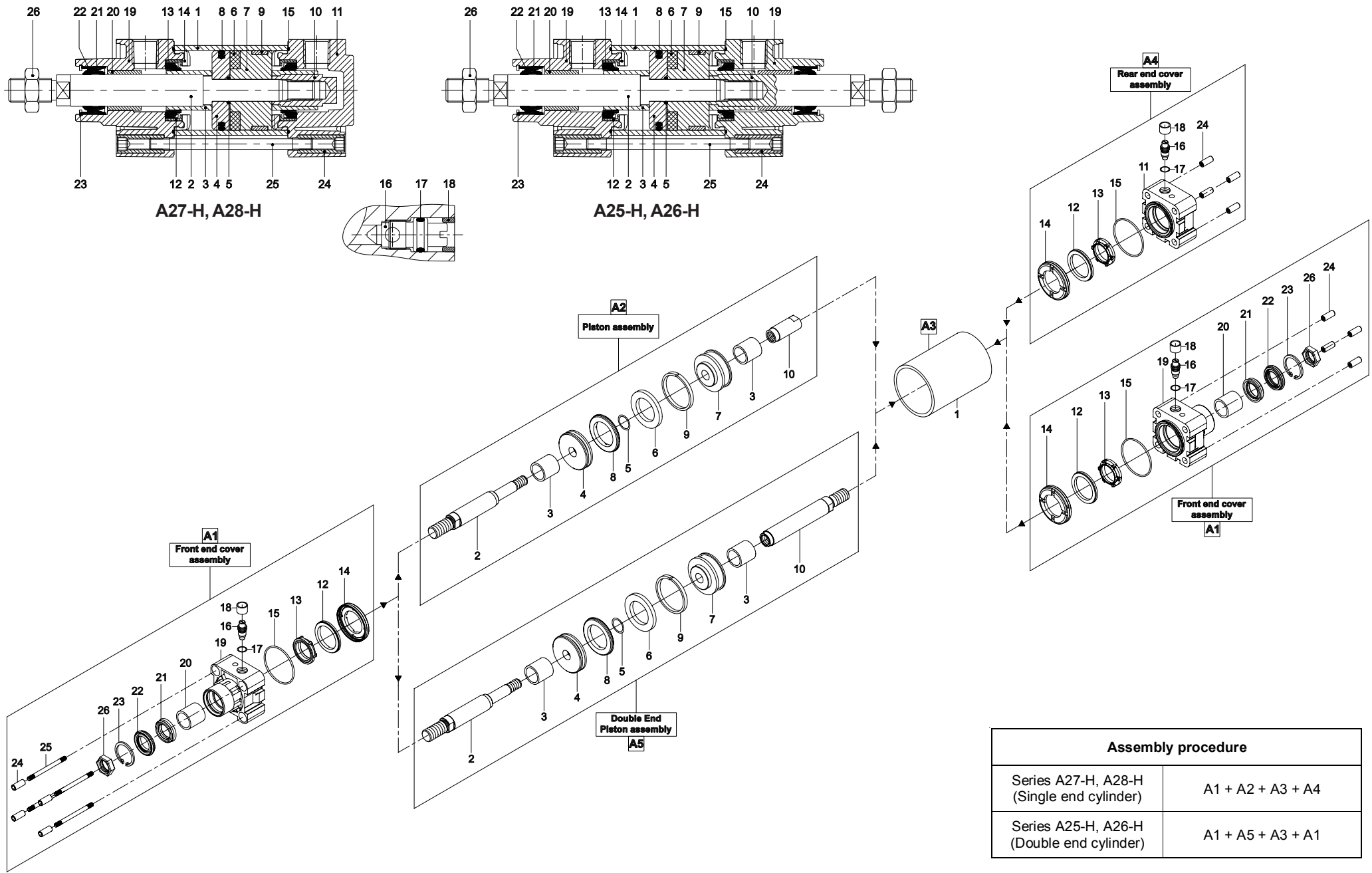
5. Tighten the pipings / nipples to the cylinder using proper tools. Do not give excess torque for tightening. (See the above table for tightening torque)
6. Align the cylinder for your requirement such that no radial load is applied on the piston rod.
7. Ensure correct pressure and flow for proper functioning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

Maintenance Instructions

1. Before dismantling the unit, exhaust the air in the cylinder completely.
2. Remove the cylinder assembly from the machine and clean the assembly thoroughly.
3. Test the cylinder for operation using a suitable valve.
4. Note the problems / troubles and ascertain the probable causes and its remedies from the table on page 5.

Assembly / Spare parts list  
Air Cylinder (High Temperature) Series A25-H, A26-H, A27-H, A28-H

IS - A25-H, A27-H - 01 - 01 - A



| Assembly procedure                           |                   |
|----------------------------------------------|-------------------|
| Series A27-H, A28-H<br>(Single end cylinder) | A1 + A2 + A3 + A4 |
| Series A25-H, A26-H<br>(Double end cylinder) | A1 + A5 + A3 + A1 |

Spare parts list  
Air Cylinder (High Temperature) Series A25-H, A26-H, A27-H, A28-H

IS - A25-H, A27-H - 01 - 01 - A

| Ref. No. | No. off        |                | Part name                            | Ordering no. for |        |        |        |        |        |
|----------|----------------|----------------|--------------------------------------|------------------|--------|--------|--------|--------|--------|
|          | A25-H<br>A26-H | A27-H<br>A28-H |                                      | Ø 32             | Ø 40   | Ø 50   | Ø 63   | Ø 80   | Ø 100  |
| 1        | 1              |                | Cylinder barrel                      | -                | -      | -      | -      | -      | -      |
| 2        | 1              |                | Piston rod                           | -                | -      | -      | -      | -      | -      |
| 3        | 2              |                | Cushion piston                       | -                | -      | -      | -      | -      | -      |
| 4        | 1              |                | Piston-B                             | -                | -      | -      | -      | -      | -      |
| 5        | 1              |                | 'O' ring                             | 652001           | 652002 | 652003 | 652003 | 652004 | 652004 |
| 6        | 1              |                | Magnet<br>(Series A25-H, A27-H only) | -                | -      | -      | -      | -      | -      |
| 7        | 1              |                | Piston A                             | -                | -      | -      | -      | -      | -      |
| 8        | 1              |                | Main seal (Type C)                   | 642000           | 642001 | 642002 | 642003 | 642004 | 642005 |
| 9        | 1              |                | Bearing strip                        | -                | -      | -      | -      | -      | -      |
| 10       | -              | 1              | Cushion piston nut                   | -                | -      | -      | -      | -      | -      |
|          | 1              | -              | Piston rod A                         | -                | -      | -      | -      | -      | -      |
| 11       | Nil            | 1              | Rear end cover                       | -                | -      | -      | -      | -      | -      |
| 12       | 2              |                | Insert (Ø32 to 50 only)              | -                | -      | -      | -      | -      | -      |
| 13       | 2              |                | Cushion seal                         | 642012           | 642013 | 642014 | 642014 | 642015 | 642015 |
| 14       | 2              |                | Cushion pad                          | 642006           | 642007 | 642008 | 642009 | 642010 | 642011 |
| 15       | 2              |                | 'O' ring                             | 652501           | 652502 | 652503 | 652504 | 652509 | 652510 |
| 16       | 2              |                | Needle                               | -                | -      | -      | -      | -      | -      |
| 17       | 2              |                | 'O' ring                             | -                | -      | -      | -      | -      | -      |
| 18       | 2              |                | Bush                                 | -                | -      | -      | -      | -      | -      |
| 19       | 2              | 1              | Front end cover                      | -                | -      | -      | -      | -      | -      |
| 20       | 2              | 1              | Bearing bush                         | -                | -      | -      | -      | -      | -      |
| 21       | 2              | 1              | Nutring                              | 632003           | 632004 | 632005 | 632005 | 632006 | 632006 |
| 22       | 2              | 1              | Metal bonded wiper                   | 621000           | 621001 | 621002 | 621002 | 621003 | 621003 |
| 23       | 2              | 1              | Circlip                              | -                | -      | -      | -      | -      | -      |
| 24       | 8              |                | End cover bolt                       | -                | -      | -      | -      | -      | -      |
| 25       | 4              |                | Tie rod                              | -                | -      | -      | -      | -      | -      |
| 26       | 2              | 1              | Lock nut                             | -                | -      | -      | -      | -      | -      |