



General

- If swivel movements of the hose could be possible, please use special swivel fittings to avoid leakages.
- Avoid vibrations as well as torsional and tensile forces on the push-in fittings.
- Never use push-in fittings on systems to safeguard or preserve human life.
- After assembly, we recommend carrying out a leakage test, especially when using liquids, in order to rule out assembly errors or similar.

1. Intended use

Push-in fittings are intended for the quick assembly of hoses and pipes in fluid power plants and systems.

2. Safety regulations

The safety and health protection signs listed below are labels which (in relation to a specific object) allow a specific activity or a specific situation - in each case by means of a safety sign - to make a safety and health protection statement.

Commandment sign	A command sign is a safety sign that prescribes a certain behaviour.	 Follow instructions
Warning sign	A warning sign is a safety sign that warns of a risk or danger.	 Warning of obstacles on the ground

The safety instructions are intended to protect against dangerous situations and/or property damage and contains important information to protect users and third parties from injury and/or to prevent damage to the system.



- To ensure correct use of the product, read this instruction manual.
- Read the instructions for associated equipment before use.
- Keep these instruction manual in a safe place for future reference.
- To ensure the safety of personnel and equipment, the safety instructions in this instruction manual and other relevant safety practices must be followed.

3. Storage

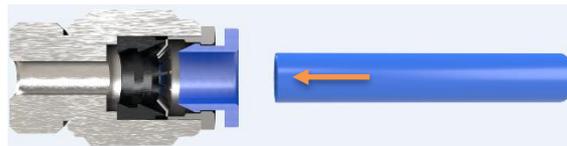
Push-in fittings must be left in their original packaging until assembly to protect them from mechanical damage, moisture and dust.

4. Assembly of the hose

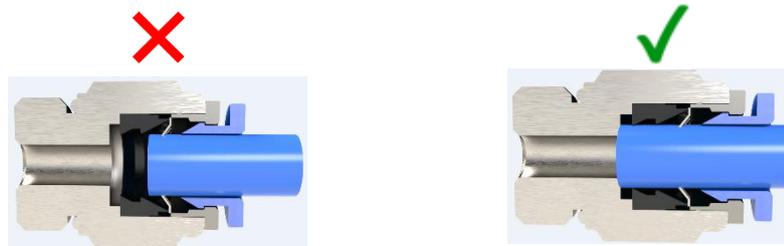
- Cut the hose straight off without damaging the outer surface. For this purpose, use a sharp hose cutter, e. g. RIEGLER hose cutter item no. 179288.



- In order to ensure an optimum sealing effect and secure retention of the connections, the end of the hose must not be oval.
- Clean the end of the hose and remove burrs.
- Make sure that the hose is within the allowable tolerances. Please consider that soft hoses can only withstand lower pressures. For reference, please have a look at the tables under point 8 "allowable hose tolerances for push-in fittings" and point 7 „suggested push-in fittings-hose-combination“ below.



- Insert the end of the hose completely through the lock claws and seals into the push-in fitting as far as possible. Incomplete installation can lead to leakage of compressed air or loosening of the hose.



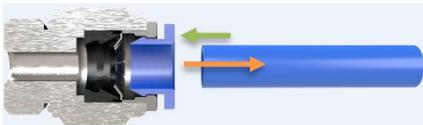
- To prevent accidental loosening of the hose, no object may touch the sleeve of the push-in fitting. Unwanted lateral forces must also be prevented.
- Finally, please check the tightness of the connection by pulling briefly.



- Lay the compressed air hoses in such a way that they do not pose a tripping hazard.

5. Disassembly of the hose

- Before disassembling the hose, please make sure that the hose line is pressureless.
- Press the sleeve down equally hard on both sides and deep enough to open the lock claws evenly, while pulling the hose out of the fitting with a slight twisting motion. For this purpose, we recommend RIEGLER's release tool for push-in fittings item no. 108853 (for hose outer \varnothing mm 3 - 10). If the sleeve is not pressed sufficiently, the hose cannot be removed or may be damaged by scratches, which leads to scrapings remaining inside the fitting which can lead to leaks later on.



RIEGLER-release tool item no. 108853



- Before reassembly, cut the end of the hose straight, in order to ensure smooth plugging and unplugging.

6. Which fittings fit into which threads?

Metric threads

- metric threads are mounted in metric cylindrical threads.
- replaceable o-ring
- frontal sealing
- reusable several times due to replaceable gasket



G-thread acc. to ISO 228-1

- shorter thread
- constant mounting depth
- replaceable o-ring
- frontal sealing
- reusable several times due to replaceable o-ring



R-thread acc. to EN 10226-1 and ISO 7/1

- self-locking thread
- sealing on the thread
- no additional sealing surface required
- smaller installation dimensions
- reusable up to five times



7. Suggested push-in fitting-hose-combination

For an improved fit of push-in fittings with **PA**-hoses, RIEGLER recommends the following **push-in fitting-hose-combination**:



Outer- \emptyset for hose	Suggested hose- \emptyset	Suggested hose RIEGLER type-no.
3	3 x 1,5	259.08 X
4	4 x 2	259.09 X
5	5 x 3	259.10 X
6	6 x 4*	259.11 X
8	8 x 6*	259.12 X
10	10 x 7	259.61 X
12	12 x 9*	259.14 X
14	14 x 11*	259.62 X
16	16 x 12	259.25 X

**recommended and based on acc. to ISO 14743*

For an improved fit of push-in fittings with **PU**-hoses, RIEGLER recommends the following **push-in fitting-hose-combination**:



Outer- \emptyset for hose	Suggested hose- \emptyset	Suggested hose RIEGLER type-no.
3	3 x 1,5	259.50 X
4	4 x 2	259.04 X
5	5 x 3	259.15 X
6	6 x 4*	259.16 X
8	8 x 5	259.63 X
10	10 x 7*	259.64 X
12	12 x 8*	259.65 X
14	14 x 10	259.51 X
16	16 x 12	259.52 X

**recommended and based on acc. to ISO 14743*

8. Allowable hose tolerances for push-in fittings

Blue Series

Hose outer- \emptyset	PU-hose	PA-hose
3	$\pm 0,10$	$\pm 0,08$
4	$\pm 0,10$	$\pm 0,08$
6	$\pm 0,12$	$\pm 0,10$
8	$\pm 0,12$	$\pm 0,10$
10	$\pm 0,15$	$\pm 0,12$
12	$\pm 0,15$	$\pm 0,12$
14	$\pm 0,15$	$\pm 0,12$
16	$\pm 0,15$	$\pm 0,15$

Click Clock

Hose outer-Ø	PU-hose	PA-hose
3	± 0,10	± 0,08
4	± 0,10	± 0,08
6	± 0,10	± 0,08
8	± 0,10	± 0,08
10	± 0,10	± 0,08
12	± 0,10	± 0,10
14	± 0,10	± 0,10

Universal short

Hose outer-Ø	PU-hose	PA-hose
4	± 0,10	± 0,10
6	± 0,10	± 0,10
8	± 0,10	± 0,10
10	± 0,12	± 0,12
12	± 0,15	± 0,15
14	± 0,15	± 0,15

Metallica

Hose outer-Ø	PU-hose	PA-hose
4	± 0,10	± 0,08
6	± 0,10	± 0,08
8	± 0,10	± 0,08
10	± 0,15	± 0,08
12	± 0,15	± 0,10
14	± 0,15	± 0,10
16	± 0,15	± 0,10

Stainless steel

Hose outer-Ø	PU-hose	PA-hose
4	± 0,10	± 0,10
6	± 0,10	± 0,10
8	± 0,10	± 0,10
10	± 0,10	± 0,10
12	± 0,10	± 0,10
14	± 0,10	± 0,10
16	± 0,10	± 0,10

Value line

Hose outer-Ø	PU-hose	PA-hose
4	± 0,10	± 0,08
6	± 0,10	± 0,08
8	± 0,10	± 0,08
10	± 0,15	± 0,08
12	± 0,15	± 0,10

9. Recycling and disposal

When disposing of push-in fittings and their transport, packaging and protective materials, the respective disposal regulations / environmental protection regulations must be observed and carried out via appropriate waste containers. Push-in fittings that are no longer usable can be dismantled and fed into the recycling circuit in appropriate containers. In this case, attention must be paid to any residual toxic or corrosive media.