»R-SC/A1« series

Swing safety coupling with free passage.
The plug-in nipple is inserted into the coupling body and rotated by an approx. 90° motion to make the connection.
As soon as the "red ring" clicks into the intended slot then a secure connection has been made.
To release the connection again, the "red ring" must be pulled out and the plug-in nipple is swivelled to the stopper into the starting position. Venting is done during uncoupling through a vent hole on the back side of the coupling.

This coupling meets ISO standard DIN EN ISO 4414, EN 983.

Areas of application: Pneumatic system, machine and plant engineering, measurement, monitoring and control systems, manufacturing industry, workshops, automotive.

| | |
|---|---|
| Operating pressure | max. 25 bar / max. 16 bar when attaching / detaching |
| Technical vacuum | 100 mbar |
| Temperature range | -20 °C to 100 °C |
| Flow rate | 820 l/min (air) |
| Flow rate measurement | at 6 bar and Δp = 0.5 bar |
| Medium | Compressed air, gases |
| Housing | Steel, QPQ treated |
| Sleeve | Die-cast zinc, nickel-plated, red rubber coated |
| Threaded piece | Galvanised steel |
| Sealant | NBR |
| Lubrication | Silicone-free |
| Corrosion resistance | 72 h salt spray test according to DIN 50021 SS |
| Necessary coupling force of the plug | 10 N (at 6 bar) |
| Plug profile | acc. ARO 210 |


**Swing safety coupling DN 5.5, acc. ARO 210, male**

| Art. No. | Type No. | Connection | Length mm | a/f mm |
|---|---|---|---|---|
| 141601 | 420.11-SCH | G 1/4 ET | 59.0 | 19 |
| 141602 | 420.12-SCH | G 3/8 ET | 59.0 | 19 |
| 141603 | 420.13-SCH | G 1/2 ET | 61.0 | 22 |
| 141604 | 420.11-SCH-NPT | NPT 1/4 ET | 63.0 | 19 |
| 141605 | 420.12-SCH-NPT | NPT 3/8 ET | 68.0 | 20 |
| 141606 | 420.13-SCH-NPT | NPT 1/2 ET | 67.0 | 22 |

**Swing safety coupling DN 5.5, acc. ARO 210, female**

| Art. No. | Type No. | Connection | Length mm | a/f mm |
|---|---|---|---|---|
| 141595 | 420.01-SCH | G 1/4 IT | 56.0 | 19 |
| 141596 | 420.02-SCH | G 3/8 IT | 58.0 | 19 |
| 141597 | 420.03-SCH | G 1/2 IT | 61.0 | 24 |
| 141598 | 420.01-SCH-NPT | NPT 1/4 IT | 56.0 | 19 |
| 141599 | 420.02-SCH-NPT | NPT 3/8 IT | 59.0 | 22 |
| 141600 | 420.03-SCH-NPT | NPT 1/2 IT | 65.0 | 24 |

# Swing safety couplings DN 5.5, acc. ARO 210

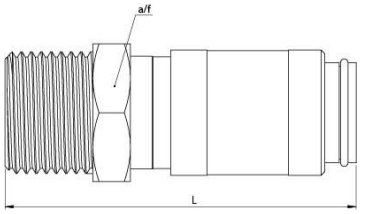
Art. No. 141601 to 141618

## Swing safety coupling DN 5.5, acc. ARO 210, with hose stem

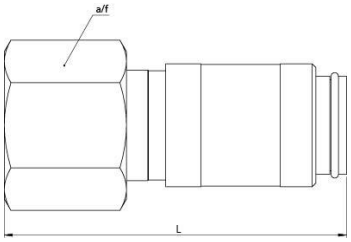
| Art. No. | Type No. | Connection | Length mm | a/f mm |
|---|---|---|---|---|
| 141607 | 420.21-SCH | Stem, I.D. 6 | 68.0 | 23 |
| 141608 | 420.22-SCH | Stem, I. D. 8 | 68.0 | 19 |
| 141609 | 420.24-SCH | Stem, I.D. 10 | 68.0 | 19 |

## Swing safety coupling DN 5.5, acc. ARO 210, with hose connector

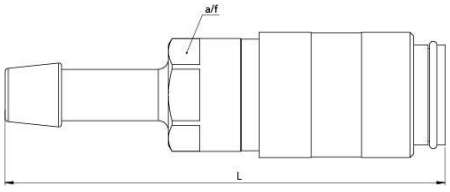
| Art. No. | Type No. | Connection | Length mm | a/f mm |
|---|---|---|---|---|
| 141610 | 420.32-SCH | Hose connection 6.5x10 | 63.0 | 20 |
| 141611 | 420.34-SCH | Hose connection 8x12 | 66.0 | 20 |



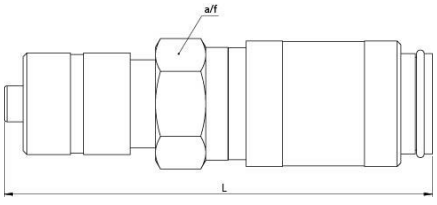

420.12-SCH




420.02-SCH




420.21-SCH




420.32-SCH

## Stem for couplings DN 5.5, ARO 210, hardened, galvanised steel

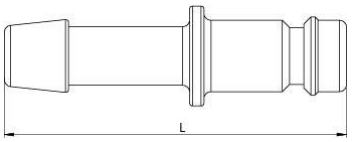
| Art. No. | Type No | Description | Length mm |
|---|---|---|---|
| 141619 | 420.71 | Stem, I.D. 6 | 51.0 |
| 141620 | 420.72 | Stem, I.D. 8 | 51.0 |
| 141621 | 420.74 | Stem, I. D. 10 | 51.0 |

## Plug for couplings DN 5.5, ARO 210, hardened, galvanised steel, male

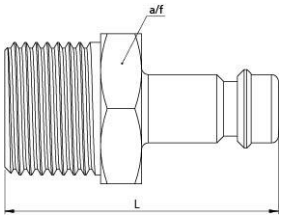
| Art. No. | Type No. | Description | Length mm | a/f mm |
|---|---|---|---|---|
| 141612 | 420.60 | Plug, G 1/8 ET | 42.0 | 14 |
| 141613 | 420.61 | Plug, G 1/4 ET | 42.0 | 14 |
| 141614 | 420.61-NPT | Plug, NPT 1/4 ET | 45.0 | 14 |
| 141615 | 420.62-NPT | Plug, NPT 3/8 ET | 47.0 | 19 |

## Plug for couplings DN 5.5, ARO 210, hardened, galvanised steel, female

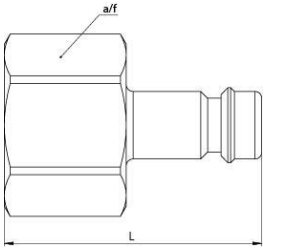
| Art. No. | Type No. | Description | Length mm | a/f mm |
|---|---|---|---|---|
| 141616 | 420.51 | Plug, G 1/4 IT | 43.0 | 17 |
| 141617 | 420.51-NPT | Plug, NPT 1/4 IT | 43.0 | 17 |
| 141618 | 420.52-NPT | Plug, NPT 3/8 IT | 45.0 | 19 |




420.71




420.61




420.51

# Swing safety couplings DN 5.5, acc. ARO 210

Art. No. 141601 to 141618

## Installation location

The installation location of the quick-connect coupling must be selected so that the health of the person operating it cannot be harmed by sources of danger in the immediate surroundings, e.g. from slipping, jamming, contaminating or burning.

## Low pressure applications

Threads for low-pressure applications are, if series-related no corresponding coatings or sealing rings are present, to be provided with suitable sealing materials, such as a PTFE belt or liquid sealing agent. Here the resistance to the flowing medium must be paid attention to.

## Service manual

Quick-connect couplings are predominantly maintenance-free, if used in standard applications and handled carefully. The selection of the quick-connect coupling must be compatible with the intended purpose of use and material. Depending on the operating conditions it is recommended to provide the following points during maintenance:

**External visual inspection** with dirt in the functioning area of coupling and plug (seal area, control elements) these must be cleaned. The following distinguishing symptoms require replacement of the corresponding parts: Torn, damaged, heavily damaged or corroded parts, leaks on coupling and / or plug parts.

**Function test** under maximum Max. operating pressure can be used to test the quick-connect coupling for possible malfunctions and leaks. During the testing and operating phase it must be ensured that the operating personnel work protected.

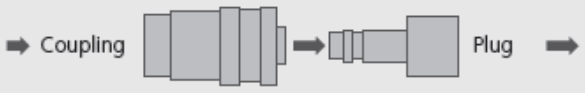
**Replacement intervals** for quick-connect couplings must, if available, be adapted to the state or technical standards. However, also operating experiential values, which result from the required operational safety and the conditions of use, such as downtimes, coupling frequency, Max. operating pressure and properties of the medium, are critical for establishing the replacement intervals.

## Pulsating tool

When using pulsating tools it is recommended to observe the standard ISO 6150, § 7.1. It recommends installing a minimum 300 mm long, flexible hose between the pulsating tool and the quick-connect coupling. The oscillating forces are taken by the hose piece and thus increase the service life of the quick-connect coupling. No warranty can be made for couplings mounted directly on pulsating tools.

## Flow direction

The recommended flow direction is from the coupling to the plug if nothing else is specified in the technical data sheet.




## Application with hoses

When using hoses the permissible Max. operating pressure and the working temperature must absolutely be observed and suitable hose connections must be seen to.