

»R125MSV« series, Bi-Tec type

Safety air relief couplings for gaseous media.  
Combination of a sliding valve and a quick disconnect coupling.



Connection is pressureless. Only a low spring force has to be overcome. Pressure only builds up when the green sleeve is pushed forward. It is impossible to disconnect the hose either intentionally or inadvertently in this position. When the sliding sleeve is moved back into its home position, the air is relieved from the hose and the coupling can be disconnected.

These safety couplings are not suitable for direct attachment to pulsating tools.  
We recommend using our vibration dampers, according to ISO 6150 § 7.1.

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

Max. operating pressure:	20 bar
Medium temperature:	-20 °C to 100 °C
Ambient temperature:	-20 °C to 100 °C
Flow rate:	2050 l/min (air)
Flow rate measurement:	at 6 bar and $\Delta p = 0.5$ bar
Housing:	Nickel-plated brass
Valve body:	Nickel-plated brass
Unlocking sleeve:	Hardened, nickel-plated steel
Sleeve:	Anodised aluminium
Spring:	Stainless steel
Ball:	Stainless steel
Sealant:	NBR



249.04-S



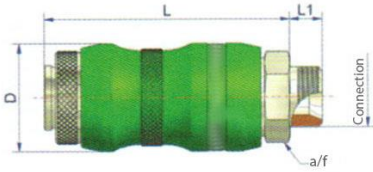
249.14-S



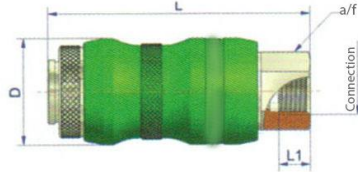
249.26-S

### Coupling process:

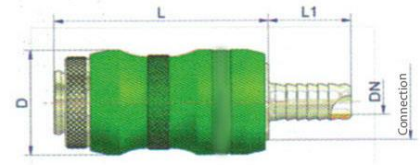
- 1 After coupling, the hose is pressurized when the green sliding sleeve is pushed forward. In this position, the safety sleeve prevents accidental uncoupling of the pressurized line.
- 2 Sliding the green safety sleeve back depressurizes the hose, and exposes the release sleeve.
- 3 The depressurized line can then be uncoupled by pulling the release sleeve in the direction of the connection.



Male



Female



Hose connection

**Safety coupling DN 7.8, male**

Art. No.	Type No.	Connection	a/f mm	L mm	D mm	L1 mm
134074	249.04-S	R 1/4 ET	19	68.0	30.0	12.0
134075	249.05-S	R 3/8 ET	19	68.0	30.0	13.0
134076	249.07-S	R 1/2 ET	22	70.0	30.0	17.0

**Safety coupling DN 7.8, female**

Art. No.	Type No.	Connection	a/f mm	L mm	D mm	L1 mm
134077	249.14-S	G 1/4 IT	19	75.0	30.0	9.0
134078	249.15-S	G 3/8 IT	19	75.0	30.0	9.0
134079	249.16-S	G 1/2 IT	24	80.0	30.0	12.0

**Safety coupling DN 7.8, with hose stem**

Art. No.	Type No.	Connection	a/f mm	L mm	D mm	L1 mm
134080	249.24-S	Stem, I.D. 6	-	61.0	30.0	23.5
134081	249.25-S	Stem, I.D. 8	-	61.0	30.0	23.5
134082	249.26-S	Stem, I.D. 9	-	61.0	30.0	23.5
134083	249.27-S	Stem, I.D. 10	-	61.0	30.0	23.5
134084	249.28-S	Stem, I.D. 13	-	61.0	30.0	23.5



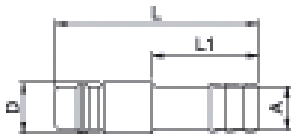
243.351-N



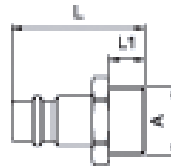
243.50-N



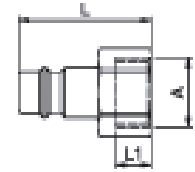
243.55-N



Stem



Plug male



Plug female

### Stem for couplings DN 7.2 - DN 7.8, nickel-plated brass

Art. No.	Type No.	Description	a/f mm	L mm	D mm	L1 mm
107300	243.06-N	Stem, I.D. 6	-	44.0	12.0	24.0
107301	243.351-N	Stem, I.D. 8	-	48.0	12.0	25.0
107302	243.07-N	Stem, I.D. 9	-	44.0	12.0	24.0
107303	243.352-N	Stem, I.D. 10	-	48.0	12.0	25.0
107304	243.10-N	Stem, I.D. 13	-	46.0	11.9	24.0

### Plug for couplings DN 7.2 - DN 7.8, nickel-plated brass, male

Art. No.	Type No.	Description	a/f mm	L mm	D mm	L1 mm
107305	243.48-N	Plug, G 1/8 ET	14	31.0	-	7.0
107306	243.50-N	Plug, G 1/4 ET	17	32.0	-	8.0
107307	243.51-N	Plug, G 3/8 ET	19	33.0	-	8.5
107308	243.52-N	Plug, G 1/2 ET	24	35.0	-	10.0

### Plug for couplings DN 7.2 - DN 7.8, nickel-plated brass, female

Art. No.	Type No.	Description	a/f mm	L mm	D mm	L1 mm
107309	243.54-N	Plug, G 1/8 IT	14	31.0	-	9.0
107310	243.55-N	Plug, G 1/4 IT	17	32.0	-	10.0
107311	243.56-N	Plug, G 3/8 IT	19	32.0	-	10.0
107312	243.57-N	Plug, G 1/2 IT	24	34.0	-	12.0



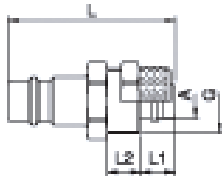
243.216-N



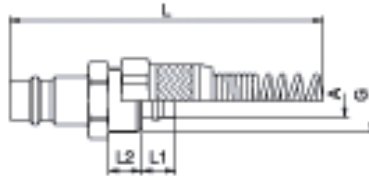
243.357-N



243.761



Plug for hose



Plug for hose with swivel nut and kink protector spring

**Plug for couplings DN 7.2 - DN 7.8, nickel-plated brass, for hose**

Art. No.	Type No.	Description	a/f mm	L mm	D mm	L1 mm	L2 mm
107313	243.216-N	Plug for hose 6x4	12	34.0	12.0	6.0	6.0
107314	243.217-N	Plug for hose 8x6	14	34.0	12.0	6.0	5.0
107315	243.218-N	Plug for hose 10x8	17	42.0	12.0	8.0	6.0

**Plug for couplings DN 7.2 - DN 7.8, nickel-plated brass, for hose with swivel nut and kink protector spring**

Art. No.	Type No.	Description	a/f mm	L mm	D mm	L1 mm	L2 mm
107316	243.355-N	for hose 6x4 with swivel nut and kink protector spring	-	111.0	12.0	7.0	6.0
107317	243.356-N	for hose 8x6 with swivel nut and kink protector spring	-	117.0	12.0	7.0	6.0
107318	243.357-N	for hose 10x8 with swivel nut and kink protector spring	17	132.0	-	9.0	8.0
107319	243.358-N	for hose 12x9 with swivel nut and kink protector spring	17	139.0	-	9.0	8.0

**Push-in elbow for couplings DN 7.2 - DN 7.8, nickel-plated brass**

Art. No.	Type No.	Description	Width mm	Height mm
107254	243.761	Push-in elbow for hose 8x6	48.0	27.0

## 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.