

»R20ESE« series

One-hand quick disconnect couplings, one side sealing, extremely compact with a large bore and only a small pressure drop.

To prevent injuries or a "whiplash" effect, we recommend that the plug-in nipple is held with one hand during uncoupling.

Areas of application: Pneumatic system, machine and plant engineering, measurement, monitoring and control systems, manufacturing industry, medical technology, chemical / pharmaceutical industry, automotive, food technology, offshore.



Operating pressure	0 to 35 bar, maximum static working pressure (non-pulsating)
Medium temperature	-20 °C to 200 °C
Ambient temperature	-20 °C to 200 °C
Flow rate	120 l/min (air)
Flow rate measurement	at 6 bar and $\Delta p = 1$ bar
Housing	Stainless steel 1.4305
Sleeve	Stainless steel 1.4305
Valve body	Stainless steel 1.4305
Spring	Stainless steel 1.4310
Retaining ring	Stainless steel 1.4310
Ball	Stainless steel 1.4034
Sealant	FPM



### Quick disconnect coupling DN 2.7, stainless steel 1.4305, male

Article No.	Type No.	Connection	a/f mm	L mm	L1 mm	D mm
156204	243.08/1-ES-E	M5 ET	9	21.7	4.3	10.0
156205	243.08/2-ES-E	G 1/8 ET	11	21.5	6.5	10.0

### Quick disconnect coupling DN 2.7, stainless steel 1.4305, female

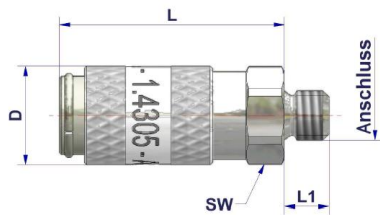
Article No.	Type No.	Connection	a/f mm	L mm	L1 mm	D mm
156206	243.08/3-ES-E	M5 IT	9	26.0	5.0	10.0
156207	243.08/4-ES-E	G 1/8 IT	12	28.0	6.5	10.0

### Quick disconnect coupling DN 2.7, stainless steel 1.4305, with hose stem

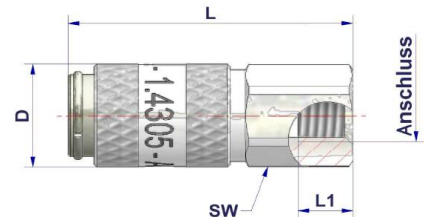
Article No.	Type No.	Connection	a/f mm	L mm	L1 mm	D mm
156208	243.08/5-ES-E	Stem, I.D. 3	8	21.0	13.0	10.0
156209	243.08/6-ES-E	Stem, I.D. 4	8	21.0	13.0	10.0

Quick disconnect coupling DN 2.7, stainless steel 1.4305, with hose connector

Article No.	Type No.	Connection	a/f mm	a/f1 mm	L mm	L1 mm	D mm
156210	243.08/7-ES-E	Hose connection 4x3	9	8	21.0	12.0	10.0
156211	243.08/8-ES-E	Hose connection 5x3	9	8	21.0	12.0	10.0
156212	243.08/9-ES-E	Hose connection 6x4	9	9	21.0	12.0	10.0



male



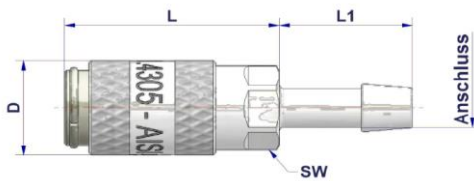
female



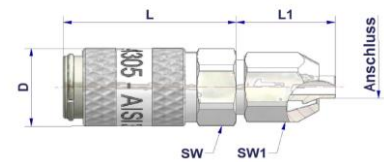
243.08/2-ES-E



243.08/4-ES-E



Hose stem



Hose connector



243.08/6-ES-E



243.08/8-ES-E

### Stem for couplings DN 2.7, stainless steel 1.4305

Article No.	Type No.	Connection	L mm	L1 mm
156255	243.09/1-ES-E	I.D. 3	11.0	13.0
156256	243.09/2-ES-E	I.D. 4	11.0	13.0

### Plug for couplings DN 2.7, stainless steel 1.4305, for hose

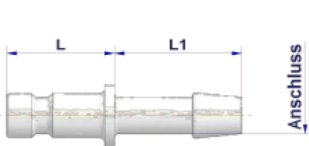
Article No.	Type No.	Connection	a/f mm	a/f1 mm	L mm	L1 mm
156257	243.09/3-ES-E	for hose 4x3	9	8	13.0	12.0
156258	243.09/4-ES-E	for hose 5x3	9	9	13.0	12.0
156259	243.09/5-ES-E	for hose 6x4	9	9	13.0	12.0

### Plug for couplings DN 2.7, stainless steel 1.4305, male

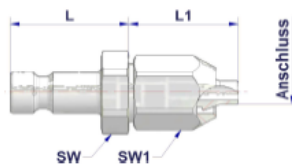
Article No.	Type No.	Connection	a/f mm	L mm	L1 mm
156260	243.09/6-ES-E	M5 ET	7	13.0	5.0
156261	243.09/7-ES-E	G 1/8 ET	11	13.0	7.0

### Plug for couplings DN 2.7, stainless steel 1.4305, female

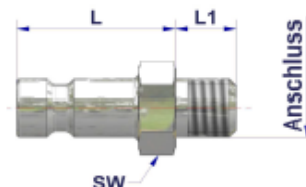
Article No.	Type No.	Connection	a/f mm	L mm	L1 mm
156262	243.09/8-ES-E	M5 IT	7	17.0	5.0
156263	243.09/9-ES-E	G 1/8 IT	12	19.0	6.5



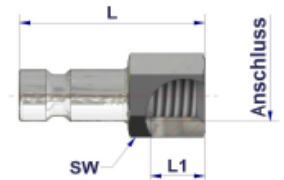
Stem



Plug for hose



male



female



243.09/2-ES-E



243.09/5-ES-E



243.09/6-ES-E



243.09/8-ES-E

**TECHNIQUE**

Single-handed coupling with automatic 3-point locking.  
Locking elements are balls that are locked by a spring-loaded release sleeve. The uncoupling process is started by pushing the release sleeve back in the direction of the connection. The valve returns to its original position and pushes the plug connector out of the coupling.

**ANWENDUNGSBEREICHE**

- medical technology
- general industrial supplies
- double shut off
- stainless steel/steel

**PRESSURE RANGE**

The coupling can be statically loaded up to 35 bar without pulsation.

**MATERIALS COUPLING**

Connection, basic body, release sleeve and valve AISI 303  
Pressure springs and retaining rings AISI 302  
Balls AISI 420

**MATERIALS GASKET**

Seals made of fluorine elastomer (FPM)  
Hardness of material 70 Shore  
Temperature range -20°C through +200°C  
Temperature range -20°C through +300°C (allowed for short periods)  
Gas permeability coefficient ( $\varnothing$ )= 3  
Resistant to mineral oils, fuels, chlorinated hydrocarbons, synthetic hydraulic fluids, hot air and many chemicals (on request)

**MATERIALS CONNECTION**

Plug connector AISI 303

## 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.

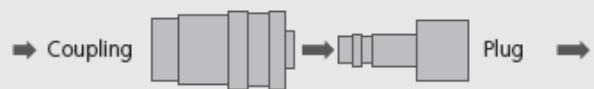
**Replacement intervals** for quick-connect couplings must, if available, be adapted to the state or technical standards. However, also operating experiential values, which result from the required operational safety and the conditions of use, such as downtimes, coupling frequency, Max. operating pressure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