

»R244ES« series, swivel type

High-quality, robust and durable, one-hand quick disconnect safety couplings. When it is pressed for the first time, air is relieved from the coupling but the plug in the coupling remains locked. The plug is only disconnected when the pushbutton is pressed for the second time. The dreaded "whiplash effect" is avoided and the risk of injury to the operator virtually eliminated.

The safety version conforms to ISO-Standard DIN EN ISO 4414.

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, medical technology, chemical / pharmaceutical industry, workshops, automotive.

Operating pressure Medium temperature Ambient temperature Flow rate Flow rate measurement Housing Pushbutton Valve Internal parts Threaded piece Sealant: Max. 12 bar -20 °C to 150 °C -20 °C to 150 °C 1.600 l/min (air) at 6 bar and  $\Delta_p = 1$  bar Stainless steel 1.4404 Stainless steel 1.4404



P 5-82 e



244.11-DES



244.21-DES



244.32-DES

Pushbutton safety coupling DN 7.4, stainless steel 1.4404, male, swivel type								
Type No.	Art. No.	Connection	a/f	L1	L2	D2	Weight	
		Connection	mm	mm	mm	mm	g	
244.11-DES	107580	G 1/4 male	21	6.5	70.0	26.0	176.0	
244.12-DES	107581	G 3/8 male	21	7.0	70.0	26.0	176.0	
244.13-DES	107582	G 1/2 male	25	8.5	72.5	26.0	196.0	

P 5-82 e



Pushbutton safety coupling DN 7.4, stainless steel 1.4404, female, swivel type								
Type No.	Art. No.	Connection	a/f	L1	L2	D2	Weight	
			mm	mm	mm	mm	g	
244.21-DES	107583	G 1/4 female	21	9.0	73.5	26.0	189.0	
244.22-DES	107584	G 3/8 female	21	10.0	75.5	26.0	190.0	
244.23-DES	107585	G 1/2 female	24	11.0	77.5	26.0	200.0	

Pushbutton safety coupling DN 7.4, stainless steel 1.4404, with hose stem, swivel type								
Type No.	Art. No.	Connection	a/f	L1	L2	D2	Weight	
		connection	mm	mm	mm	mm	g	
244.31-DES	107586	Stem, I.D. 6	21	25.0	88.5	26.0	178.0	
244.32-DES	107587	Stem, I.D. 9	21	25.0	88.5	26.0	181.0	
244.33-DES	107588	Stem, I.D. 13	21	25.0	88.5	26.0	187.0	



Male



Female



Hose connection



Connection Insert the plug into the coupler

#### To release

Step 1: Press the button once to vent the downstream air from the circuit. At this time the plug is still captive in the coupling. Step 2: Press the button one more time to release the plug.



Stem for couplings DN 7.2 - DN 7.8, stainless steel 1.4305								
Type No.	Art. No.	Description	L	D	L1			
Type No.	AIL NO.	Art. No. Description	mm	mm	mm			
243.80 A	107428	Stem, I.D. 6	48.0	12.0	25.0			
243.80 B	107429	Stem, I.D. 8	48.0	12.0	25.0			
243.80 C	107430	Stem, I.D. 9	48.0	12.0	25.0			
243.80 D	107431	Stem, I.D. 10	48.0	12.0	25.0			
243.80 E	107432	Stem, I.D. 13	48.0	15.0	25.0			

Plug for couplings DN 7.2 - DN 7.8, stainless steel 1.4305, male								
Type No.	Art. No.	Description	a/f	L	L1			
		Description	mm	mm	mm			
243.85 A	107433	Plug, G 1/8 male	14	31.0	7.0			
243.85 B	107434	Plug, G 1/4 male	17	33.0	9.0			
243.85 C	107435	Plug, G 3/8 male	19	33.0	9.0			
243.85 D	107436	Plug, G 1/2 male	24	38.0	11.0			

Plug for couplings DN 7.2 - DN 7.8, stainless steel 1.4305, female							
Type No. Art. No.	Art No	Description	a/f	L	L1		
	AIL NO.	Description	mm	mm	mm		
243.95 A	107437	Plug, G 1/8 female	14	30.0	7.0		
243.95 B	107438	Plug, G 1/4 female	17	33.0	10.0		
243.95 C	107439	Plug, G 3/8 female	19	33.0	10.0		
243.95 D	107440	Plug, G 1/2 female	24	35.0	12.0		



243.80 C



243.85 C



243.95 C







P 5-82 e

Pushbutton safety couplings DN 7.4

Art. No. 107580 to 107440



#### 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.

#### Threads for low-pressure applications are, if series-

Low pressure applications

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.