

»R320ST« series

High-quality, robust and durable, one-hand quick disconnect safety couplings, with very high flow rates and only a small pressure drop.



The coupling is released fully automatically in two steps. Air is relieved from the coupling before it is completely disconnected. The plug is only disconnected from the coupling if the residual pressure has dropped below 0.3 bar. The dreaded "whiplash effect" is thus avoided and the risk of injury virtually eliminated.

This 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, workshops, automotive, mining.

Operating pressure:	Max. 16 bar
Medium and ambient temperature:	-20 °C to 100 °C
Flow rate (air):	2250 l/min (at 6 bar and $\Delta p = 0.5$ bar)
Material:	Steel / zinc-plated brass
Springs:	Stainless steel
Sealant:	NBR



416.14-A



416.38-I



416.10-T



416.08-SL

Safety coupling DN 7.6, male

Type No.	Article No.	Connection	a/f mm	L mm	D mm
416.14-A	107589	R 1/4 male	20	63.0	23.5
416.38-A	107590	R 3/8 male	20	61.0	23.5
416.12-A	107591	R 1/2 male	22	55.5	23.5

Safety coupling DN 7.6, female

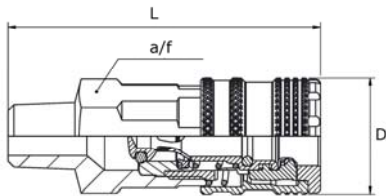
Type No.	Article No.	Connection	a/f mm	L mm	D mm
416.14-I	107592	G 1/4 female	20	57.1	23.5
416.38-I	107593	G 3/8 female	22	60.1	23.5
416.12-I	107594	G 1/2 female	25	59.5	23.5

Safety coupling DN 7.6, with hose stem

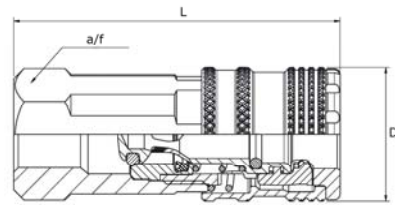
Type No.	Article No.	Connection	a/f mm	L mm	L1 mm	D mm
416.06-T	107595	Stem, I.D. 6	-	67.0	18.2	23.5
416.08-T	107596	Stem, I.D. 8	-	69.5	21.2	23.5
416.09-T	107597	Stem, I.D. 9	-	70.1	21.2	23.5
416.10-T	107598	Stem, I.D. 10	-	70.0	21.2	23.5
416.13-T	107599	Stem, I.D. 13	-	68.0	21.2	23.5

Safety coupling DN 7.6, »stream line«

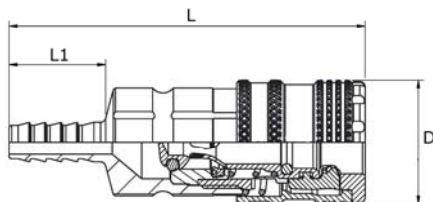
Type No.	Article No.	for hose mm	L mm	a/f 1 mm	a/f 2 mm	D mm
416.06-SL	107600	10x6.5	64.1	16	20	23.5
416.08-SL	107601	12x8	68.1	19	20	23.5
416.09-SL	107602	13.5x9.5	68.2	21	20	23.5
416.11-SL	107603	16x11	68.1	24	24	23.5



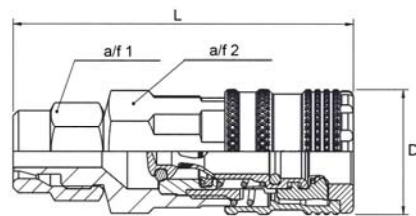
Male



Female



Hose connection



Stream line

Stem for couplings DN 7.2 - DN 7.8, hardened and galvanised steel

Type No.	Article No.	Description	L mm	a/f mm	D mm
244.907	107371	Stem, I.D. 6	42.0	-	13.0
244.908	107372	Stem, I.D. 8	45.0	-	13.0
244.908-9	107373	Stem, I.D. 9	45.0	-	13.0
244.908-10	107374	Stem, I.D. 10	45.0	-	13.0
244.909	107375	Stem, I.D. 13	45.0	-	17.0



244.908

Plug for couplings DN 7.2 - DN 7.8, hardened and galvanised steel, male, PTFE coated

Type No.	Article No.	Description	L mm	a/f mm	D mm
244.900	107376	Plug, R 1/8 male	35.0	13	-
244.901	107377	Plug, R 1/4 male	39.0	14	-
244.902	107378	Plug, R 3/8 male	41.0	17	-
244.903	107379	Plug, R 1/2 male	47.0	22	-



244.902

Plug for couplings DN 7.2 - DN 7.8, hardened and galvanised steel, female

Type No.	Article No.	Description	L mm	a/f mm	D mm
244.904-1	107380	Plug, G 1/8 female	31.0	13	-
244.904	107381	Plug, G 1/4 female	36.0	17	-
244.905	107382	Plug, G 3/8 female	38.0	20	-
244.906	107383	Plug, G 1/2 female	42.0	27	-



244.905

Plug for couplings DN 7.2 - DN 7.8, hardened and galvanised steel, »stream line«

Type No.	Article No.	Description	L mm	a/f mm	D mm
244.914	107384	Plug for hose 10x6.5	44.0	16	-
244.915	107385	Plug for hose 12x8	47.0	19	-
244.916	107386	Plug for hose 13.5x9.5	50.0	21	-
244.917	107387	Plug for hose 16x11	56.0	24	-



244.917

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.