

a constant flow of solutions

Multicouplings Catalog

stucchigroup.com

PRODUCTS CATALOG

a constant flow of solutions













Since 1960, Stucchi is one of the leading manufacturers of quick disconnect couplings for all varieties of sizes and port configurations, ranging from 1/8" to 2" in dimensions to accommodate a wide range of application requirements.

Pressure capabilities extend to 720 bar operating pressure; port configurations include BSP, NPT, SAE and metric standard in stock; materials range from brass to 316 stainless steel; and there is also an assortment of seal options.

Its solutions-based approach meets the demanding requirements for applications across multiple markets.

Product quality assurance is documented throughout the company's supply chain, beginning with raw materials certifications, ongoing improvements in production materials, automation of production, fatigue testing, pressure-testing parts prior to shipping, and an ISO quality-management system.



Stucchi[®]

Index



Technical Support



Custom solutions?

Ask Stucchi!

Since 1960 Stucchi has proposed customized and innovative solutions to the market. A continuous search for solutions that have generated a strong competence about the product and its many applications.

> For more information please contact Stucchi Technical Support.



Quick Couplings Stucchi Interchange

Select the Brand, the Series, the Part number and Stucchi Interchange will give you the equivalent Stucchi product.

Fill in the form on interchange.stucchi.it and discover the power of this tool.

Technical question? We are here to help you!

Every application is different and it may be challenging to choose the solution that will bring the most value and benefit to your equipment. That's why STUCCHI has a team of product engineers ready to help you to facilitate your work in every step of the process. From the choice of the most suitable product to the pressure drop calculation or material compatibility check, they are here to assist you in all your design challenges.

For more information please contact Stucchi Technical Support.



A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.

Connect under pressure products are suitable to be connected under residual (static) pressure.

Never connect or disconnect with dynamic pressure (e.g. pump on).

Make sure that the medium used is compatible with seal and material as indicated for each series. In case of doubt please contact Stucchi Technical Support.

The interchangeability of quick couplings is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension. It is mandatory to carefully read and closely follow the instructions before selecting or using any Stucchi products.

Always refer to the version uploaded in the Instructions and warning section of stucchigroup.com website for the latest release.

For specific, product-related, instructions, please contact Stucchi technical service.

Certifications

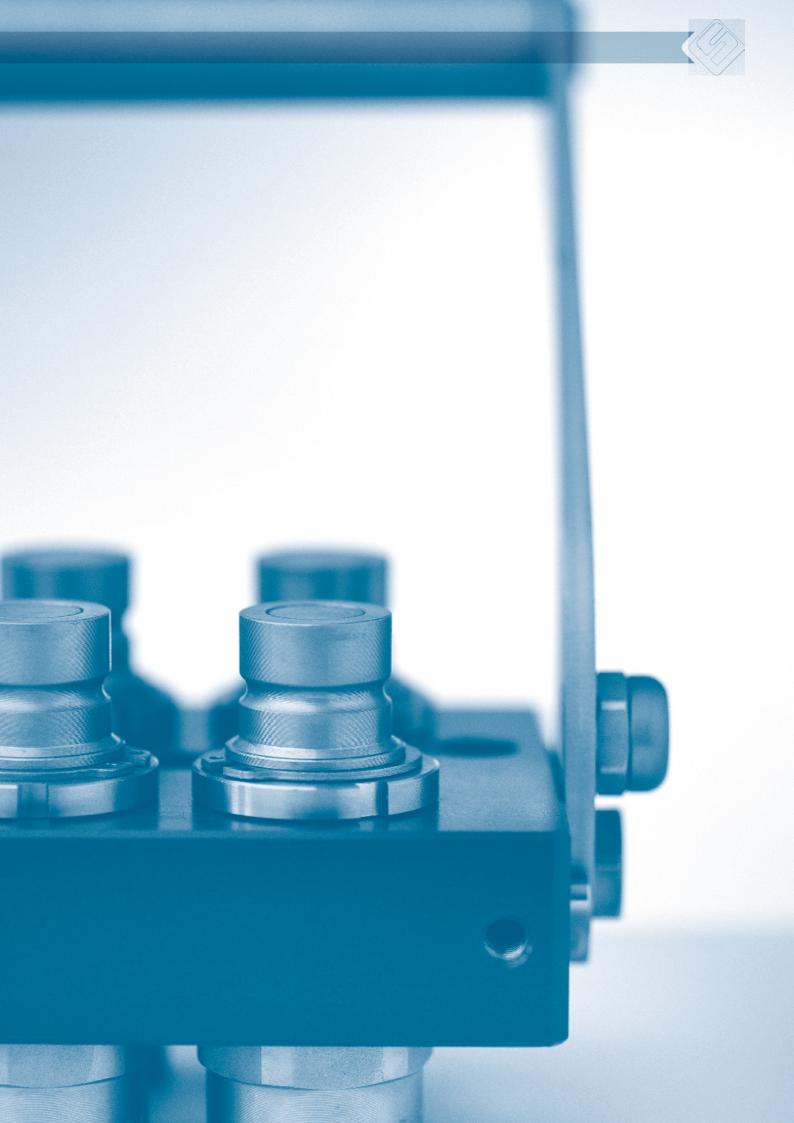




After certification of occupational health and safety management system (**ISO 45001**), Stucchi reached another major objective of the company policies through a careful performance of the service for the full compliance with national and international environmental management systems, certifying its model of business organization according to the **UNI EN ISO 14001:2004**.



Certifications available on request



Applications



The strength that distinguishes Stucchi in the market is a "constant flow of solutions" in the development, manufacturing and distribution of products for fluid connections.

The vision that drives us towards the future is to be recognized by our customers as the supplier of choice for fluid power products and solutions that are easy to use, safe, durable, environmentally friendly and that help in saving energy. Following these principles Stucchi offers solutions that cover a wide range of applications constantly ensuring the quality of products.











Earth Moving

Stucchi couplings are suitable for machines and systems related with controlling mobile equipment used in off-highway applications.



In exploration, extraction, field services (upstream), storage and conveyance (downstream) of crude oil and natural gas Stucchi products are the best solutions.

Vehicles

Vehicle manufacturers appreciate Stucchi couplings for their high performances in hydraulic applications systems to connect different tools or trailers.

Agriculture

From conventional 'poppet design' profile to flat face and multicouplings, Stucchi products are present on agricultural machines and attachments.

Industry

Stucchi couplings are present on machineries and systems used for industrial manufacturing.











Hydraulic Tools

Machineries and systems related to various hydraulic equipment (machine and automation tools, powered hand tools) require high performance couplings and Stucchi can provide them.

High Pressure

Stucchi couplings are present on systems associated with high pressure applications; not only on jacks, ram or clamping devices but also on rescue equipment.

Refrigeration

Stucchi quick couplings are equipped on systems associated with vehicles refrigeration (A/C recharge) and isothermal bodies through low temperature eutectic plates.

Cooling

Machineries for cooling of systems with water or water glycol can be equipped with Stucchi quick couplings.

Chemical & Food Industry

Stucchi couplings are used in chemical applications where flow performances associated with non-spill design allows to increase system specifications and to protect the environment.

Why Multicouplings?





Manual multicouplings are tools that allow the connection and disconnection of several hydraulic power lines, electrical and pneumatic or cooling lines simultaneously.

The connection and disconnection operation requires a simple and quick movement allowing the operator to save time and operate safely.

The multicouplings are equipped with flat face couplings that are designed to reduce contamination entering into a circuit, eliminate spillage, and reduce air inclusion during connection and disconnection of the couplings.

Stucchi offers a wide range of multicouplings to satisfy the diverse applications requirements.

All the lines can have the same nominal diameter or each line can be different from the others according to the application.

BENEFITS

- Flexibility, large range of configuration to fulfill different Customer request
- Flat face couplings to reduce contamination of circuits
- Connects with residual pressure
- Mechanical connection eliminates brinneling effect
- Safety lock prevents unwanted disconnection
- Simple to use with a single movement applied by one arm only
- Ease of maintenance or replacement of quick couplings
- Cap and parking station available
- Possible to integrate hydraulic lines along with pneumatic, water cooling or electrical connector in the same multiconnection
- Minimize time to change different attachments
- Eliminate the risk to mismatch the hydraulic connections
- Reduce the assembly space necessary for hydraulic connections
- Easily mounted on new equipment or retrofit on pre-existing system
- Possibility to integrate heater, sensor, indexator key or other devices

Which Multicoupling?



Hydraulic oil power line

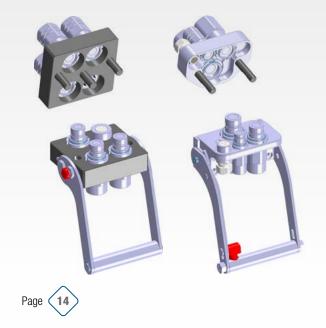
Operating pressure up to 350 bar - 5000 PSI

Connection / Disconnection under residual pressure

DP/GR

Features

- UP to 10 lines
- Plates in brass or aluminum
- Couplings in carbon steel
- FAQ series: coupling for water/glycol
- Optional: electrical connector, sensors...



Water/Glycol - Air/Oil

Operating pressure up to 10 bar - 145 PSI

Connection/Disconnection without residual pressure

GRE

Features

- UP to 18 lines
- Plates in anodized aluminum
- Couplings in brass
- Designed to be used for hydraulic oil-water/cooling-pneumatic application



Page (150)

Where Multicoupling?





















DP - GR: glossary





Flat face

Flat face is easy to clean, helping to reduce the inclusion of contamination in the hydraulic circuit

+ Male & female couplings

Equipped with a patented special valve to connect & disconnect the hydraulic lines. Special couplings available for water cooling or pneumatic lines. The main purpose of the couplings is to convey """ fluid, hydraulic signals or energy thru the lines and automatically shut off without spillage during disconnection.



Electrical connector

Electrical connector option
Possible to integrate an electrical connector
with hydraulic couplings in the same
multiconnection. It is a good complement
to Stucchi multiconnection adding the
possibility to conduct low voltage signal for
solenoid valve, sensor or other electronic
Customer devices.

Fixed plate

It is called "fixed" because is normally installed on the machine, thanks to the bolting holes to assemble the body on the frame of the Customer equipment. Fixed multiconnection is normally supplied with male couplings installed

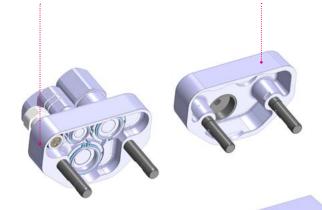
Mobile plate

It is called "mobile" because is normally installed on the attachment (it is the part with the locking pins).

The couplings of the mobile parts are connected to the flexible hose bundle of the attachment, so the mobile part of the Customer equipment.

Cover for fixed multiconnection

Reinforced design made in Aluminum in order to resist to weather conditions. It helps to prevent dirt, pollutants & contamination entering the couplings of fixed multiconnection in disconnected position.





Male residual pressure eliminator

Patented internal pressure release valve system allows an easy connection with high internal residual pressure



To protect the mobile half when disconnected. It helps to prevent dirt, pollutants & contamination entering the couplings of mobile multiconnection in disconnected position. In addition to that, it helps to fix the mobile half with his hose bundle when not in use, thanks to the fixing holes making possible to

assemble the parking station on the attachment frame

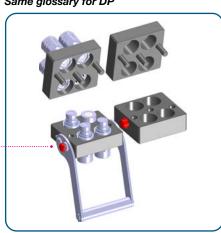
Levers & Locking

Ergonomic lever for easy connection/ disconnection with Safety lock system avoids accidental disconnection



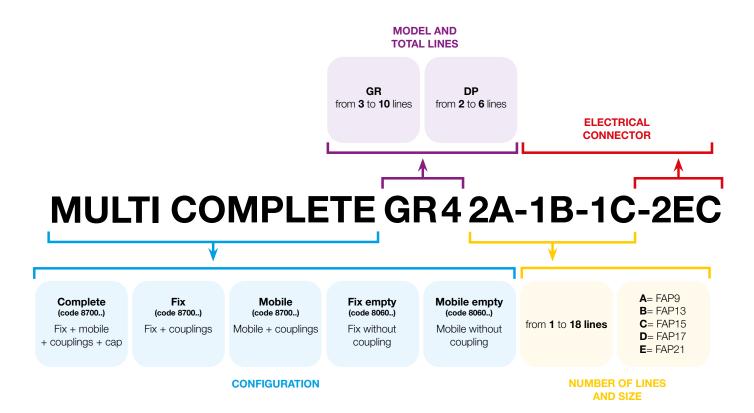


Same glossary for DP



DP - GR: multi description Stucchi

The stucchi multicoupling description can help you to easily know the characteristics of a multicoupling: configuration and model, number of lines and size, presence of electrical connectors. See the example below...



DP - GR: multi map



New name	Family	Total Lines		1 P9 A)	FAP13 (B)	FAP15 (C)	FAP17 (D)	FAP21 (E)	FAP30 (G)	EC	C*	Previous description	Page
Body size			3/	/8"	1/2"	5/8"	3/4"	1"	1-1/2"	3/8"	1/2"		
Max flow suggested	(l/min)		4	6	90	148	200	378	750				
Mostly used adap				8"	1/2"	3/4"	1"	1-1/4"	1-1/2"				
(main alternative th	read)		(1/	2")	(3/4")		(3/4")	(1")					
DP2 2A-1EC	DP	2	2	Α						1		DP2-9ZN	30
DP2 2A-2EC V04	DP	2	2	Α				:		2		DP2-9L	32
DP2 2B-1EC	DP	2			2						1	DP2-13ZN	34
DP2 2B-2EC V04	DP	2			2						2	DP2-13L	36
DP2 2C	DP	2				2						DP2-15	38
DP2 2D	DP	2					2	:				DP2-17ZN	40
DP2 1A-1B	DP	2	1	D	1							DPT2ZN	42
DP3 1A-1B-1EC	DP	3	1	D	1					1**		DPT3ZN	44
DP3 1A-2C-1EC V04	DP	3	1	D		2				1			46
DP3 1C-2E	DP	3				1		2				DP3GE	48
DP3 2A-1EC	DP	3	2	Α						1**		DPJ3ZN	50
DP4 4A V02	DP	4	4	Α								DP4-9FAZN	50
DP4 4A-2EC	DP	4	4	Α						2		DP4-9ZN	52
DP4 4B-2EC	DP	4			4						2	DP4-13ZN	54
DP6 4A-2EC	DP	6	4	Α						2**		DP6-9ZN	56
DP6 2A-4D-2EC	DP	6	2	D			4	:		2		DP6AD	58
GR3 3A-1EC	GR	3	3	Α						1		GR3-9ZN	60
GR3 3B-1EC	GR	3			3					•	1	GR3-13ZN	62
GR3 1A-2E-1EC	GR	3	1	D				2		1		GRK3ZN	64
GR3 2B-1C-2EC	GR	3			2	1					2	GRI3	66
GR4 2A-1B-1C-2EC	GR	4	2	D	1	1				2		GRI4SBZN	68
GR4 2A-2B-2EC	GR	4	2	D	2					2		GRB4ZN	70
GR4 2A-1B-1D-2EC	GR	4	2	D	1		1			2		GR4MRZN	72
GR4 2A-1C-1D-2EC	GR	4	2	D		1	1			2		GRI4ZN	74
GR4 2A-2C-2EC	GR	4	2	D		2				2		GRI4TBZN	76
GR5 2B-3D-2EC	GR	5			2		3			•	2	GR5AAZN	78
GR5 3A-1D-1E-2EC	GR	5	3	D			1	1		2		GRD5ZN	80
GR5 2B-2C-1E-2EC	GR	5			2	2		1			2	GRZ5ZN	82
GR5 5C	GR	5				5						GR5-15ZN	84
GR6 6A-2EC	GR	6	6	Α						2		GR6-9ZN	86
GR6 4A-2B-2EC	GR	6	4	D	2					2		GRT6ZN	88
GR6 4B-2D-4EC	GR	6			4		2				4	GR6ABZN	90
GR6 2A-2B-2C-2EC	GR	6	2	D	2	2				2		GRM6MCZN	92
GR6 6B-2EC	GR	6			6						2	GR6-13ZN	94
GR6 3A-1B-1C-1D-2EC	GR	6	3	D	1	1	1			2		GRC6ZN	96
GR6 1A-1B-1C-2D-1EC	GR	6	1	D	1	1	2			1		GRP6ZN	98
GR6 2A-2C-2D-2EC	GR	6	2	D		2	2		<u> </u>	2		GRM6ZN	100
GR6 2A-2B-1D-1E-2EC	GR	6	2	D	2		1	1	:	2		GRU6ZN	102
GR6 2B-4D-2EC	GR	6			2		4				2	GR6LLZN	104
GR6 2A-4C-2EC	GR	6	2	D		4				2		GRM6ALZN	106
GR6 2A-1B-2D-1E-3EC	GR	6	2	D	1		2	1		2	1	GR6AF	108
GR7 4A-3B-4EC	GR	7	4	D	3		:		:	4		GR7ABZN	110
GR7 4A-3B-4EC V01	GR	7	4	D	3					4		GR7ABZNLC	110
GRHP7 7A-4EC	GR	7	4 3	D "HP"						4		GR7ACZN	112
GR7 4A-1B-2D-4EC	GR	7	4	D	1		2			4		GR7AAZN	114
GR8 6A-2B-6EC	GR	8	6	D	2					6		GR8ABZN	116
GR8 7A-1D-7EC	GR	8	7	D	-		1			7		GR8AAZN	118
GR10 10A-2EC	GR	10	10	D						'		GR10-9LCZN	120
GR10 10A-2EC V01	GR	10	10	D								GR10-9ZNSD	120
GR10 10A-2EC V03	GR	10	10	D			:			2		GR10-9ZN3D	120
GR10 10B-2EC	GR	10	10	U	10					_	2	GR10-13ZN	122

^{*} Electrical Connector instead of hydraulic line

FAP9 "A" and "D": the version is depending on the type of multicoupling in use.

^{**} this line is only dedicated for EC

DP - GR: how to choose



Step A

Define the type of multicoupling you need

Step B

Choose configuration of the multicoupling

Step C

Set up each line

A. DEFINE THE TYPE OF MULTICOUPLING YOU NEED



DP

Features

- Hydraulic oil power line
- Operating pressure up to 350 bar
- Dis/connection under pressure
- Up to 6 lines
- Body in aluminium with special treatment
- Locking on the side



GR

Features

- Hydraulic oil power line
- Operating pressure up to 350 bar
- Dis/connection under pressure
- Up to 10 lines
- Body in brass with nickel plating
- Locking on the lever

DP - GR: how to choose



B. CHOOSE CONFIGURATION OF THE MULTICOUPLING



1 Dimension your couplings and EC

Coupling size choice is based on:

- Flow/Pressure drop
- Operating pressure (check on the FAP-ZN, FAP-HP or FAQ serie datasheet)
- Hose/Port size



3 Choose the multicoupling for your configuration

Use the overview table 'Multi Description' to choose the multicoupling for your listing/configuration

Advice:

- 1. You can increase the size of some couplings to have a better match with an existing configuration.
- 2. In case of too many lines, you may need to divide your configuration in different plates.



2 Define your configuration = List your couplings & EC

Eg: 2 x size 3/8" + 1 x size 1/2" + 1 EC



4 Verify the resistance of your multicoupling

Use 'Max. Multicoupling Resistance' provided on the single datasheet to be sure that the multicoupling will be able to handle the pressure once connected.

See page 27 for details.

DP - GR: how to choose



C. SETUP EACH LINE

Hydraulic oil

Connectable under pressure

Medium pressure

Hydraulic oil

Connectable under pressure

High pressure

Water-Glycol

Not connectable under pressure

Low pressure

FAP-ZN*

FAP-HP

FAQ



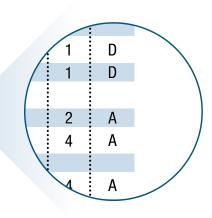




Choose your port type (BSP/SAE-ORB/NPT...) and port size

* if size 3/8" check the multicoupling to know if you need a type A or D (See Multi Map pag. 16)

New name	Family	Total Lines	FA (#	
Body size			3/	8"
Max flow suggested	l (l/min)		4	6
Mostly used ada (main alternative t			3/ (1/	-
DP2 2A-1EC	DP	2	2	Α
DP2 2B-1EC	DP	2		
DP2 2B-2EC V04	DP	2		
DP2 2C	DP	2		
DP2 2D	DP	2		
DP2 1A-1B	DP	2	1	D
DP3 1A-1B-1EC	DP	3	1	D
DP3 1C-2E	DP	3		
DP3 2A-1EC	DP	3	2	Α
DP4 4A-2EC	DP	4	4	Α
DP4 4B-2EC	DP	4		
DP4 4A V02	DP	4	4	Α
DP6 4A-2EC	DP	6	4	Α
DP6 2A-4D-2EC	DP	6	2	D



DP - GR: features



Technical features and options



Interchange Stucchi internal specification



Available threads BSP NPT SAE



Mechanical connection Internal cams and locking pins



Valving style Flat Face



Connection/disconnection system Rotating the lever after disengage the locking system



Operating pressure Up to 350 bar/5000 psi



Construction material and surface treatment

Body plates in aluminum alloy with hard oxidation surface treatment for DP; Body plates in brass with nichel plating for GR; lever in carbon steel with zinc nickel plating.



Flow rate Up to 378 I/min - 100 GPM



Nominal diameter available

FAP9=3/8", FAP13=1/2", FAP15=5/8", FAP17=3/4", FAP21=1"



Temperature from -20 °C to +100 °C (from -4 °F to +212 °F).



Connection under pressure

Connectable with residual pressure in both sides with FAP-ZN couplings

Application



















Benefits

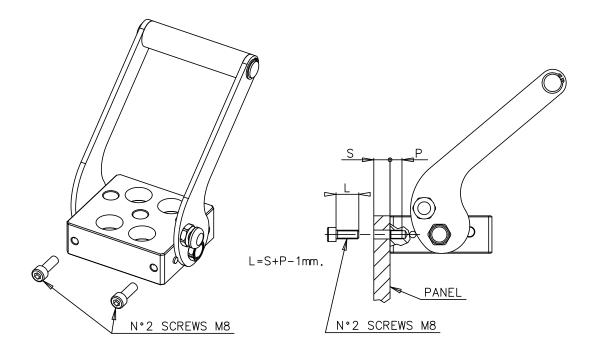
- Optimal solution for hydraulic fluid power applications with a operating pressure up to 350 bar.
- Quick connection and disconnection of up to ten hydraulic, electrical and pneumatic lines without any risk to incorrect connection of the lines.
- Ergonomic lever for easy connect/disconnect with residual pressure.
- Patented coupling design to connect/disconnect multiple couplings with high residual pressure.
- Flat face couplers eliminate environmental issue of leakage.
- No risk of misalignment or misconnection with guide pin design.
- Couplers mounted with snap rings for ease of installation or replacement.
- Fixed half male couplers interchangeable with FIRG or A series flat face coupling for temporary diagnostic purpose.
- Electrical connector option for electronic control systems.
- Easily mounted on new equipment or retrofit on pre-existing system.



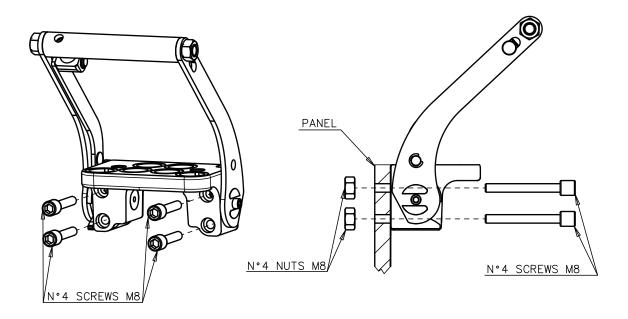
Installation

- Ensure the space to assemble the multiconnection is enough to allow the correct connection & disconnection in an ergonomic way. Check the drawing of the multiconnection referring to the corresponding datasheet.
- For GR version: If the fixed multiconnection has the couplings assembled in the holes: disassemble the couplings close to the fixing holes prior to proceed with the installation.
- Attach the fixed multicoupling on the machine using fixing screws as indicated in the drawing below.
- After having assembled the couplings on the hoses, place the couplings in the holes of the multicoupling and lock them using proper threaded sleeve and/or seeger/snap rings. Please refer to corresponding FAP-ZN or FAQ coupling series datasheet for further information.
- Use flexible hoses to connect the couplings; avoid to using rigid pipes as they could transmit excessive side load & vibration to the multiconnection.

DP



GR





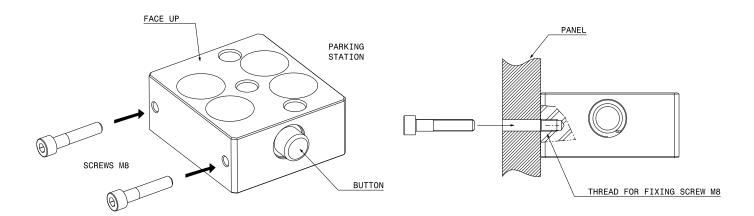
To install the parking station

Ensure the space to assemble the parking station is enough to allow the correct connection & disconnection in an ergonomic way. Check the drawing of the parking station.

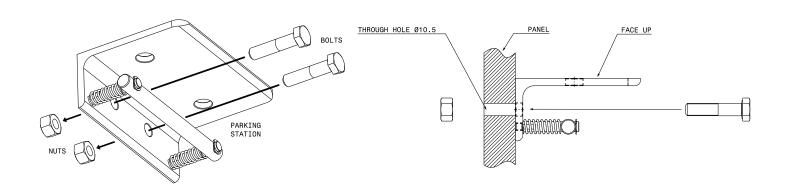
Fix the parking station body on the machine or the frame of the attachment using fixing screws as indicated in the drawing of the corresponding parking station.

Please verify the parking station is placed "face up".

DP



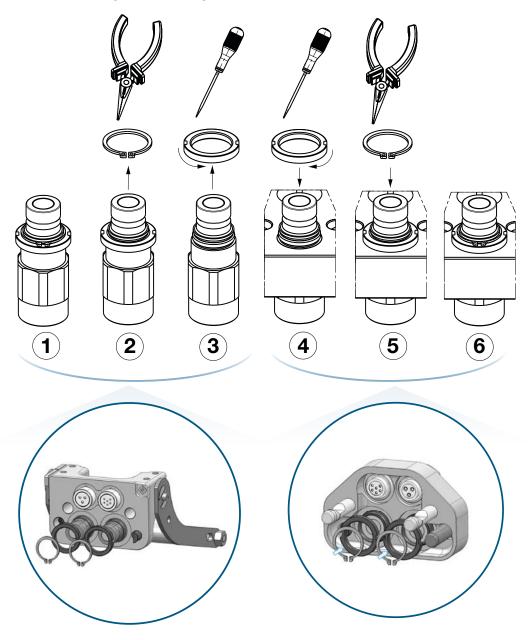
GR





FAP-ZN: How to install

- FAP-ZN couplings are normally supplied already assembled on the Stucchi multiconnection or may be supplied as a spare part to be replaced on a Stucchi multiconnection.
- To assemble the FAP-ZN couplings on the multiconnection: take away the seeger ring, unscrew the threaded nut, mount the flexible hose on the threaded port (screwing with the proper torque), insert the coupling in the hole of the multiconnection; screw the threaded nut with a manual torque (an overtorque is not necessary!) then assemble the seeger ring to lock the threaded nut (fig. below 1...6).
- To disassemble the FAP-ZN couplings from the multiconnection: take away the seeger ring, unscrew the threaded nut, extract the coupling from the hole of the multiconnection (fig. below viceversa 6 to 4) then proceed to disassemble the flexible hose from the threaded port.
- Before connecting clean the flat mating surface of coupling to avoid inclusion of contamination in the circuit.
- Connect and disconnect in according to the instruction of use for multicoupling.
- Test the correct functioning of the couplings





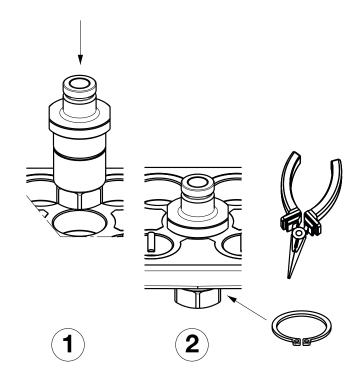
During the assembly/dismantling of the quick couplings, be careful to not deform the seeger rings. if deformed, replace them.





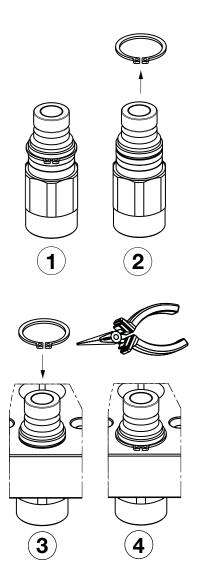
FAP-HP: How to install

- FAP-HP couplings are normally supplied already assembled in the Stucchi multiconnection or may be supplied as a spare part to be replaced on a Stucchi multiconnection.
- To assemble the FAP-HP couplings in the multiconnection: take away the seeger ring on the back side of the male & female, insert the coupling in the hole of the multiconnection then assemble the seeger ring on the back of side to lock the couplings in the plates, mount the flexible hose on the threaded port (screwing with the proper torque), (fig. below 1...2).
- To disassemble the FAP-HP couplings from the multiconnection: take away the seeger ring from the back side of male & female then proceed to disassemble the flexible hose from the threaded port., extract the coupling from the hole of the multiconnection (fig. below reverse process)
- Before connecting clean the flat mating surface of coupling to avoid inclusion of contamination in the circuit.
- Connect and disconnect in according to the instruction of use for multicoupling.
- Test the correct functioning of the couplings



FAQ: How to install

- FAQ couplings may be fitted in the same holes of FAP-ZN couplings; read the table on the specific multiconnection as described below:
- FAP9A: in the hole may be assembled the FAQ9A coupling
- FAP9D: in the hole may be assembled the FAQ9D coupling
- FAP13 or FAP15 or FAP17 or FAP21: in the hole may be assembled respectively FAQ13,15,17,21 coupling.
- FAQ couplings are normally supplied already assembled on the Stucchi multiconnection or may be supplied as a spare part to be replaced on a Stucchi multiconnection.
- To assemble/disassemble the FAQ couplings on the multiconnection: take away the seeger ring from the groove, assemble the flexible hose on the threaded port, insert the coupling in the proper hole of the multiconnection; then assemble the seeger ring to lock the FAQ in the multiconnection. Follow the sequence shown in the drawing below from 1 to 4 for assembly operation; to disassemble follow the same sequence but viceversa from 4 to 1.
- Be careful during the assembly of the seeger ring: if damaged replace it with a new one.
- Before to couple clean the flat mating surface of quick coupling to avoid the inclusion of dirty in the circuit.
- Connect and disconnect in according to the instruction of use for multicoupling.



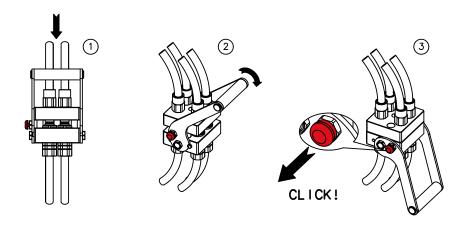
DP: how to use



To connect

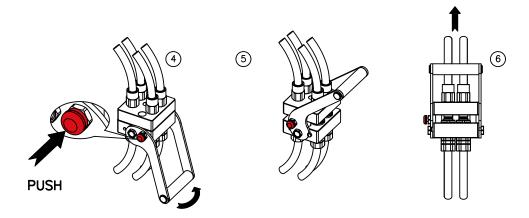
- Before coupling, clean the flat mating surface of the couplings to avoid inclusion of dirt in the circuit.

 Insert the guidance pins of the mobile multicoupling into the holes of the fixed multicoupling and move the mobile half till the contact of the couplings faces (fig. 1).
- Acting on the handle turn the lever in the direction of the fixed multicoupling (fig. 2).
- Continue to rotate till the safety lock automatically engage itself (fig. 3).
- Now the multicoupling is coupled and ready to work.
- In case of connection with residual pressure in the circuit, the maximum force is required only for the last third of the connection.



To disconnect

- Push the red safety button, at the same time acting on the handle turn the lever in the direction of the mobile multicoupling (fig. 4).
- Continue to rotate till the mechanical stop of the levers (fig. 5)
- Now the multicoupling is uncoupled and it is possible to pull out the mobile half (fig. 6).
- In case of disconnection with residual pressure in the circuit, the maximum force is required only for the first third of the disconnection.

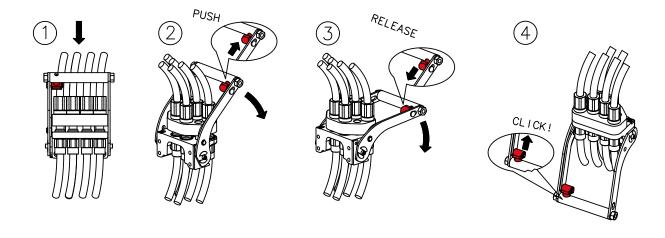


GR: how to use



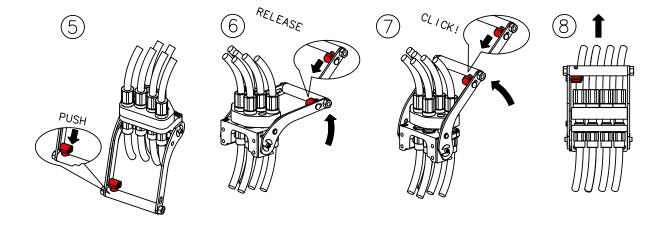
To connect

- Before coupling, clean the flat mating surface of the couplings to avoid the inclusion of dirty in the circuit.
- Insert the guidance pins of the mobile multicoupling into the holes of the fixed multicoupling and move the mobile half till the contact of the couplings faces (fig. 1).
- Push the red safety button to unlock the rotation of the lever, and in the same time acting on the handle turn the lever in the direction of the fixed multicoupling (fig. 2).
- After a short rotation release the red button (fig.3).
- Continue to rotate till the safety lock automatically engage itself (fig. 4).
- Now the multicoupling is coupled and ready to work.
- In case of connection with residual pressure in the circuit, the maximum force is required only for the last third of the connection.



To disconnect

- Push the red safety button, at the same time acting on the handle turn the lever in the direction of the mobile multicoupling (fig. 5).
- After a short rotation release the red button (fig. 6).
- Continue to rotate till the mechanical stop of the levers (fig. 7)
- Now the multicoupling is uncoupled and it is possible to pull out the mobile half (fig. 8).
- In case of disconnection with residual pressure in the circuit, the maximum force is required only for the first third of the disconnection.



DP - GR: resistance



Resistance

All Stucchi multicouplings have been tested at their maximum resistance by impulse pressure test (for 200.000 cycles in according with ISO norm; 100.000 cycles for model GRHP7 7A-4EC.

The maximum resistance (N) for each multicoupling model is indicated in the data sheets.

The force applied to multicoupling coupled depends on the number of couplings under pressure at the same time, on their operating pressure and on their size. For a correct use of the multicoupling it is necessary to verify that the force is not higher than the maximum resistance of the multicoupling.

 $F = [(P3/8x S3/8) + (P1/2x S1/2) + (P5/8x S5/8) + (P3/4x S3/4) + (P1x S1)] \times 10$

F = Force applied to multicoupling (N)

P = Total amount of operating pressure coupled in the couplings with same size (bar)

S = Hydrostatic pushing area coupled (cm2)

The operating pressure for a single coupling must not be higher than the maximum operating pressure coupled indicated in table.

Coupling size	Hydrostatic pushing area coupled	Maximum operating pressure coupled for FAP-ZN couplings
FAP-ZN9 - 3/8	S3/8= 1,226 cm2	35 Mpa (350 bar)
FAP-ZN13 - 1/2	S1/2= 1,893 cm2	33 Mpa (330 bar)
FAP-ZN15 - 5/8	S5/8= 2,404 cm2	33 Mpa (330 bar)
FAP-ZN17 - 3/4	S3/4= 3,298 cm2	33 Mpa (330 bar)
FAP-ZN21 - 1	S1 = 4,335 cm2	30 Mpa (300 bar)

Example

Max. resistance of 870015092 MULTI COMPLETE GR6 2A-2C-2D is 23000 N.

To verify if 870015092 MULTI COMPLETE GR6 2A-2C-2D multicoupling resists to operating condition of following application:

One line size 3/8 with max. operating pressure coupled of 30 Mpa (300 bar)

One line size 3/8 with max. operating pressure coupled of 15 Mpa (150 bar)

One line size 5/8 with max. operating pressure coupled of 25 Mpa (250 bar)

One line size 5/8 with max. operating pressure coupled of 10 Mpa (100 bar)

One line size 3/4 with max. operating pressure coupled of 20 Mpa (200 bar)

One line size 3/4 with max. operating pressure coupled of 5 Mpa (50 bar)

It is necessary to verify that F (force applied to multicoupling) is not greater than max. multicoupling resistance:

P3/8 = 300 bar + 150 bar = 450 bar

P5/8 = 250 bar + 100 bar = 350 bar

P3/4 = 200 bar + 50 bar = 250 bar

 $F = [(P3/8x S3/8) + (P5/8x S5/8) + (P3/4x S3/4)] \times 10 =$

 $F = [(450x1,226) + (350x2,404) + (250x3,298)] \times 10 =$

 $F = [551.7 + 841.4 + 824.5] \times 10 = 22.176N$

Being F (21732 N) lower than max. multicoupling resistance (23000 N), the 870015092 MULTI COMPLETE GR6 2A-2C-2D multicoupling is suitable for this application.

WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects. Never connect or disconnect with dynamic pressure (e.g. pump on).

Do not use the female coupling disconnected with high impulse pressure.

Do not couple-uncouple with flow and/or pressure in the circuit.

Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F). Check the maximum allowable operating pressure of the port in use.

Make sure that the medium used is compatible with seal and material as indicated for each series. In case of doubt please contact Stucchi Technical Support.

It is MANDATORY to read and closely follow the instructions. Last updated version always apply at time of installation, see latest written Instructions on Stucchi website (stucchigroup.com) before selecting or using Stucchi products.

Do not force the lever without pushing the red safety button.
Do not use extensions or other tools to ease the rotating of the lever.
Do not connect the fixed half with the mobile half if dirt or other material (tool, finger) is between them

Pay attention during the connection not to put finger or other body parts between the plates
We advise to assemble the multiconnection with the female face down in order to allow water or moisture to be drained easily.

We advise to assemble the multiconnection with the female face down in order to allow water or moisture to be drained easily.

Do not exceed single coupling performance and total multiconnection resistance of the multiconnection (please refer to dedicated datasheet)

Read&follow also the corresponding catalogue of the coupling and/or electrical connector in use in the multiconnection.

When the multicoupling is disconnected, it is suggested to use the protection cover for the fixed half and the parking station for the mobile half.

Do not modify, disassemble or damage the multiconnection, part of it or coupling/electrical connector, the lever or safety lock system.

Stucchi Multiconnection GR&DP are intended to be used for hydraulic oil applications: do not use the products for dangerous, inflammable or explosive fluids (Example: heat transfer oil at very high temperature, steam ...).

Stucchi Multiconnection GR&DP are intended to be used for hydraulic oil applications with limitations given by NBR seal compatibility&temperature range.

Do not use GR&DP series multiconnection for very high temperature applications.



Medium/High pressure



MULTICOUPLINGS



DP p. 30

Valving style: Flat face Interchange: Stucchi profile Sealing description: Nitrile NBR Available sizes: From 3/8" to 1" Flow rate: Up to 378 l/min Material: Carbon steel, Aluminium / Cr3

Connection under pressure: Allowed



GR p. 60

Valving style: Flat face Interchange: Stucchi profile Sealing description: Nitrile NBR Available sizes: From 3/8" to 1" Flow rate: Up to 378 l/min Material: Carbon steel, Brass / Cr3 Connection under pressure: Allowed

COUPLINGS



FAP-ZN p. 125

Valving style: Flat face Interchange: Stucchi interface Available sizes: From 3/8" to 1" Operating pressure: Up to 350 bar Flow rate: Up to 378 l/min Material: High strength carbon steel Connection system: By multicoupling Connection under pressure: Both sides, easy connection



FAP-HP

Valving style: Flat face Interchange: Stucchi interface Available sizes: 3/8" Operating pressure: Up to 720 bar Flow rate: Up to 46 l/min Material: High strength carbon steel Connection system: By multicoupling Connection under pressure: Both sides, easy connection



FAO

p. 133

p. 139

Valving style: Flat face
Interchange: Stucchi interface
Available sizes: From 3/8" to 3/4"
Operating pressure: Up to 20 bar
Flow rate: Up to 200 l/min
Material: High strength carbon steel
Connection system: By multicoupling
Connection under pressure:
Not allowed

ELECTRICAL CONNECTOR



FC.

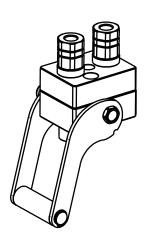
wire: To crimp IP protection: Not listed p. 147

Interchange: Stucchi interface
Max number of contacts: 7
Seals: NBR (Nitrile)
Material: Body brass nickel plated;
cable retainer in plastic
Contact diameter: 2 mm
Ampere: 12 service to 15 max (each contact)
Voltage: 24V max
Connection contact and eletrical

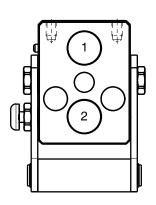


DRAWING





CONFIGURATIONS



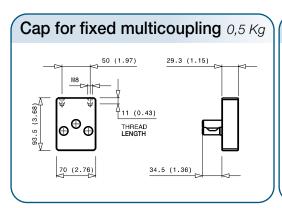
	Possible configurations					
Pos	Coupling size	Predisposition for electrical connector				
1	FAP9AZN	YES				
2	FAP9AZN	<u>-</u>				

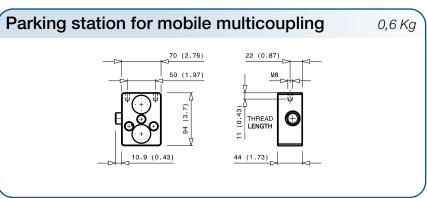
	MultiCoupling (couplings included)					
Code	Name	Description				
870007015	MULTI COMPLETE DP2 2A	2 FAP9A 1/2 BSP - CAP				
870007016	MULTI COMPLETE DP2 2A	2 FAP9A 3/8 BSP - CAP				
870007017	MULTI COMPLETE DP2 2A	2 FAP9A L15 - CAP				
870007115	MULTI FIX DP2 2A	2 FAP9A 1/2 BSP				
870007116	MULTI FIX DP2 2A	2 FAP9A 3/8 BSP				
870007215	MULTI MOBILE DP2 2A	2 FAP9A 1/2 BSP				
870007216	MULTI MOBILE DP2 2A	2 FAP9A 3/8 BSP				

	MultiCoupling spare parts (couplings not included)					
Code	me					
806000344	MULTI FIX EMPTY DP2 2A-1EC					
806000345	MULTI MOBILE EMPTY DP2 2A-1EC					
815606266	CAP FIX MULTICOUPLING DP 94x70					
815606267	PARKING STATION MOBILE MULTICOUPLING DP 94x70					
815701083	SPARE KIT LEVER GROUP DP 130x87					



Fixed and mobile multicoupling 1,3 Kg and 0,6 Kg 131.9 (5.19) 102.2 (4.02) READY TO CONNECT POSITION 70 (2.76) THREADS FOR FIXING SCREWS MOBILE MULTICOUPLING ∑115° .4 (10.02) ₩ 29.3 (1.15) (5.71)(1.36)FIXED MULTICOUPLING 34.5 (145 11 (0.43) THREAD LENGTH 94 (3.7) CONNECTED 50 (1.97) POSITION 86.6 (3.41) 130.3 (5.13) 194 (7.64)





Dimensions in millimeters (inch)

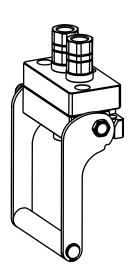
STUCCHI MultiCouplings Catalog - January 2021- All right reserved.

Texts, data and illustrations mentioned in this catalogue may be changed by Stucchi at any time, without notice; always refer to the version uploaded on the English version of stucchigroup.com/en website for the latest release. In case of doubt, please contact Stucchi technical service.

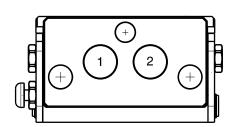


DRAWING





CONFIGURATIONS



Possible configurations						
Pos	Coupling size	Predisposition for electrical connector				
1	FAP9AZN	YES				
2	FAP9AZN	YES				

	MultiCoupling (couplings included)					
Code		Name		Description		
870008022	•	MULTI COMPLETE DP2 2A V04*		2 FAP9A 1/2 BSP - CAP		
870008122		MULTI FIX DP2 2A V04*		2 FAP9A 1/2 BSP		
870008222	i	MULTI MOBILE DP2 2A V04*		2 FAP9A 1/2 BSP		

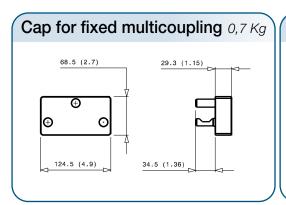
^{*} **V04** = it differs from DP2 2A standard because it is longitudinal and has a different angle lever

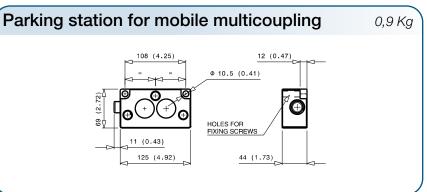
	MultiCoupling spare parts (couplings not included)					
Code	Name					
806000410	MULTI FIX EMPTY DP2 2A-2EC V04*					
806000411	MULTI MOBILE EMPTY DP2 2A-2EC V04*					
815606310	CAP FIX MULTICOUPLING DP 125x69					
815606311	PARKING STATION MOBILE MULTICOUPLING DP 125X69					
815701215	SPARE KIT LEVER GROUP DP 150x142					

 $^{^{\}star}$ **V04** = it differs from DP2 2A standard because it is longitudinal and has a different angle lever



Fixed and mobile multicoupling 1,7 Kg and 0,7 Kg 157.2 (6.19) 165.2 (6.5) READY TO CONNECT POSITION 125 (4.92) 69 (2.72) HOLES FOR FIXING SCREWS MOBILE MULTICOUPLING lacktriangleQ 271 (10.67) 29.3 (1.15) FIXED MULTICOUPLING .5 (1.36) 179.8 (7.08) Φ 10.5 (0.41) CONNECTED POSITION 80.5 (3.17) 108 (4.25) 198.8 (7.83) 141.6 (5.57) Dimensions in millimeters (inch)





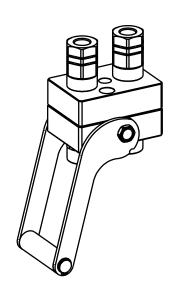
STUCCHI MultiCouplings Catalog - January 2021- All right reserved.

Texts, data and illustrations mentioned in this catalogue may be changed by Stucchi at any time, without notice; always refer to the version uploaded on the English version of stucchigroup.com/en website for the latest release. In case of doubt, please contact Stucchi technical service.

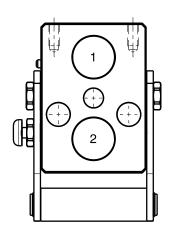


DRAWING





CONFIGURATIONS



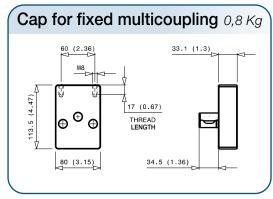
	Possible configurations					
Pos	Coupling size	Predisposition for electrical connector				
1	FAP13ZN	YES				
2	FAP13ZN	<u>-</u>				

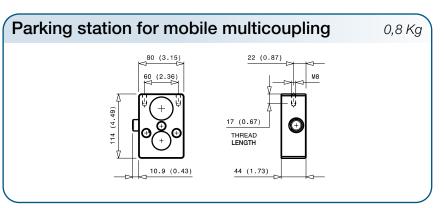
	MultiCoupling (couplings included)				
Code		Name		Description	
870008016		MULTI COMPLETE DP2 2B		2 FAP13 3/4 BSP - CAP	
870008019		MULTI COMPLETE DP2 2B		2 FAP13 1/2 BSP - CAP	
870008119		MULTI FIX DP2 2B		2 FAP13 1/2 BSP	
870008219		MULTI MOBILE DP2 2B		2 FAP13 1/2 BSP	
870008216		MULTI MOBILE DP2 2B		2 FAP13 3/4 BSP	

MultiCoupling spare parts (couplings not included)					
Code		Name			
806000346		MULTI FIX EMPTY DP2 2B-1EC			
806000347		MULTI MOBILE EMPTY DP2 2B-1EC			
815606270		CAP FIX MULTICOUPLING DP 114x80			
815606271		PARKING STATION MOBILE MULTICOUPLING DP 114x80			
815701082		SPARE KIT LEVER GROUP DP 170x97			



Fixed and mobile multicoupling 1,6 Kg and 0,8 Kg 112.2 (4.42) 172.5 (6.79) READY TO CONNECT POSITION MOBILE MULTICOUPLING THREADS FOR FIXING SCREWS Ф .8 (12.55) 0 33.1 (1.3) 183.6 (7.23) FIXED MULTICOUPLING 17 (0.67) THREAD LENGTH 114 (4.49) CONNECTED POSITION 150.6 (5.93) 60 (2.36) 96.6 (3.8) 242.6 (9.55)





Dimensions in millimeters (inch)

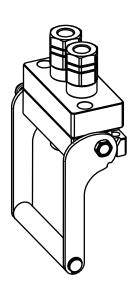
STUCCHI MultiCouplings Catalog - January 2021- All right reserved.

Texts, data and illustrations mentioned in this catalogue may be changed by Stucchi at any time, without notice; always refer to the version uploaded on the English version of stucchigroup.com/en website for the latest release. In case of doubt, please contact Stucchi technical service.

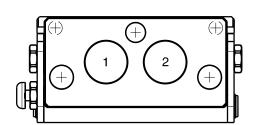


DRAWING





CONFIGURATIONS



Possible configurations							
Pos	Coupling size	Predisposition for electrical connector					
1	FAP13ZN	YES					
2	FAP13ZN	YES					

MultiCoupling (couplings included)					
Code		Name	Description		
870008012	i	MULTI COMPLETE DP2 2B V04*	2 FAP13 1/2 BSP - CAP		
870008112		MULTI FIX DP2 2B V04*	2 FAP13 1/2 BSP		
870008121		MULTI FIX DP2 2B V05**	2 FAP13 3/4 BSP		
870008212		MULTI MOBILE DP2 2B V04*	2 FAP13 1/2 BSP		
870008221		MULTI MOBILE DP2 2B V04*	2 FAP13 3/4 BSP		

^{*} V04 = it differs from DP2 2B standard because is longitudinal and has a different angle lever (compact version)

^{**} **V05** = it differs from DP2 2B standard because is longitudinal

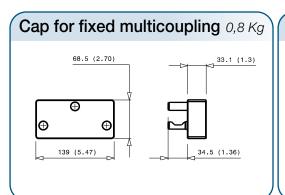
MultiCoupling spare parts (couplings not included)					
Code	Name				
806000368	MULTI FIX EMPTY DP2 2B-2EC V04*				
806000402	MULTI FIX EMPTY DP2 2B-2EC V05**				
806000369	MULTI MOBILE EMPTY DP2 2B-2EC V04*				
815606240	CAP FIX MULTICOUPLING DP 139x69				
815606309	PARKING STATION MOBILE MULTICOUPLING DP 139x69				
815701088	SPARE KIT LEVER GROUP DP 150x156				

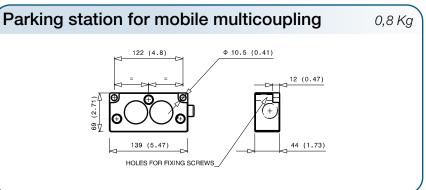
^{*} **V04** = it differs from DP2 2B standard because is longitudinal and has a different angle lever (compact version)

^{**} V05 = it differs from DP2 2B standard because is longitudinal



Fixed and mobile multicoupling 1,8 Kg and 0,8 Kg 163.5 (6.44) 171.2 (6.74) READY TO CONNECT POSITION 69 (2.72) 139 (5.47) HOLES FOR FIXING SCREWS MOBILE MULTICOUPLING Œ () 273.1 (10.75) 33.1 (1.3) FIXED MULTICOUPLING Φ 10.5 (0.41) CONNECTED 80.5 (3.17) POSITION 155.6 (6.13) 198.8 (7.83)

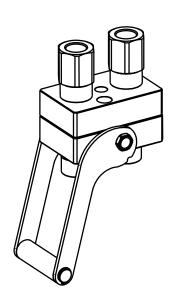


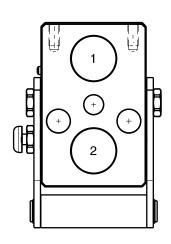


Dimensions in millimeters (inch)









Possible configurations			
Pos	Coupling size	Predisposition for electrical connector	
1	FAP15ZN	-	
2	FAP15ZN	-	

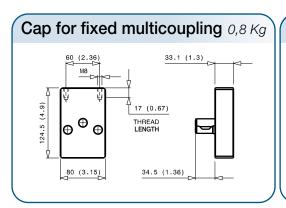
MultiCoupling (couplings included)				
Code		Name	De	scription
870008018	i	MULTI COMPLETE DP2 2C	2 F	AP15 3/4 BSP - CAP
870008118		MULTI FIX DP2 2C	2 F	AP15 3/4 BSP
870008218		MULTI MOBILE DP2 2C	2 F	AP15 3/4 BSP

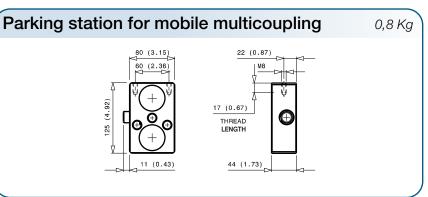
	MultiCoupling spare parts (couplings not included)			
Code		Name		
806000308		MULTI FIX EMPTY DP2 2C		
806000309		MULTI MOBILE EMPTY DP2 2C		
815606238		CAP FIX MULTICOUPLING DP 125x80		
815606239		PARKING STATION MOBILE MULTICOUPLING DP 125x80		
815701082		SPARE KIT LEVER GROUP DP 170x97		



Fixed and mobile multicoupling 1,6 Kg and 0,8 Kg 178 (7.01) 112 (4.41) READY TO CONNECT **POSITION** 125 (4.92) THREADS FOR FIXING SCREWS MOBILE MULTICOUPLING 115° 318.8 (12.55) 183.6 (7.23) 34.5 (1.36) FIXED MULTICOUPLING 17 (0.67) THREAD LENGTH CONNECTED **POSITION** 156.1 (6.15) 60 (2.36) 96.6 (3.8) 248.1 (9.77)

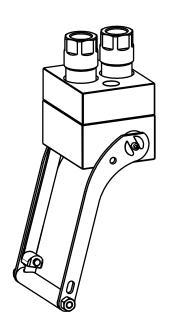
Dimensions in millimeters (inch)

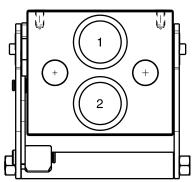












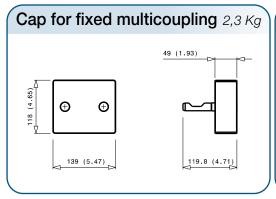
Possible configurations			
Pos	Coupling size	Predisposition for electrical connector	
1	FAP17ZN	=	
2	FAP17ZN	-	

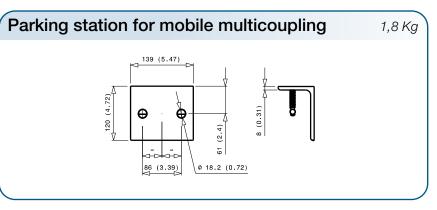
	MultiCoupling (couplings included)			
Code	Name	Description		
870008029	MULTI COMPLETE DP2 2D	2 FAP17 3/4 BSP - CAP		
870008017	MULTI COMPLETE DP2 2D	2 FAP17 1 BSP - CAP		
870008113	MULTI FIX DP2 2D	2 FAP17 1 NPT		
870008117	MULTI FIX DP2 2D	2 FAP17 1 BSP		
870008124	MULTI FIX DP2 2D	1 FAP17 3/4 SAE - 1 FAP17 1 SAE		
870008126	MULTI FIX DP2 2D	2 FAP17 3/4 SAE		
870008129	MULTI FIX DP2 2D	2 FAP17 3/4 BSP		
870008213	MULTI MOBILE DP2 2D	2 FAP17 1 NPT		
870008217	MULTI MOBILE DP2 2D	2 FAP17 1 BSP		
870008224	MULTI MOBILE DP2 2D	1 FAP17 3/4 SAE - 1 FAP17 1 SAE		
870008226	MULTI MOBILE DP2 2D	2 FAP17 3/4 SAE		
870008229	MULTI MOBILE DP2 2D	2 FAP17 3/4 BSP		

	MultiCoupling spare parts (couplings not included)			
Code	ا	Name		
806000348		MULTI FIX EMPTY DP2 2D		
806000349		MULTI MOBILE EMPTY DP2 2D		
815606272		CAP FIX MULTICOUPLING DP 139x118		
815606273		PARKING STATION MOBILE MULTICOUPLING DP 139x120		
815701084		SPARE KIT LEVER GROUP DP 250x176		



Fixed and mobile multicoupling 3,9 Kg and 2,1 Kg 139 (5.47) 199.9 (7.87) READY TO CONNECT 119 (4.69) MOBILE MULTICOUPLING **POSITION** THREADS FOR FIXING SCREWS 118° 44 (1.73) 459.4 (18.09) ₩ 283.2 (11.15) 14 (0.55) 115 (4.53) FIXED MULTICOUPLING THREAD LENGTH CONNECTED POSITION **(** 160.1 (6.3) 176 (6.93) 304 (11.97)

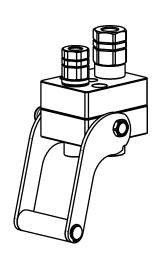


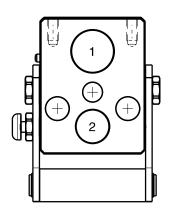


Dimensions in millimeters (inch)









Possible configurations			
Pos	Coupling size	Predisposition for electrical connector	
1	FAP13ZN	-	
2	FAP9DZN	-	

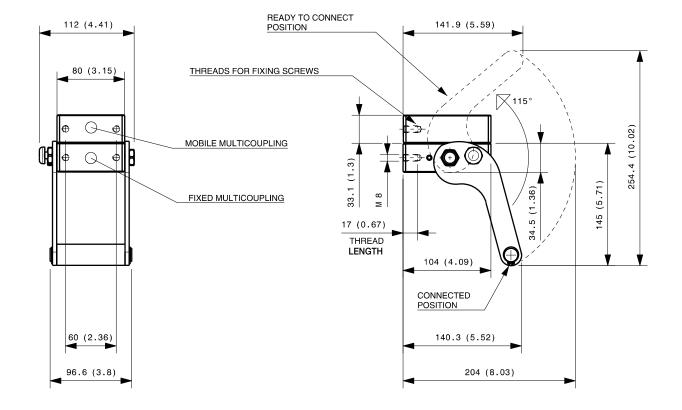
MultiCoupling (couplings included)			
Code		Name	Description
870009014	i	MULTI COMPLETE DP2 1A-1B	1 FAP9D 3/8 BSP - 1 FAP13 1/2 BSP - CAP
870009114		MULTI FIX DP2 1A-1B	1 FAP9D 3/8 BSP - 1 FAP13 1/2 BSP
870009214		MULTI MOBILE DP2 1A-1B	1 FAP9D 3/8 BSP - 1 FAP13 1/2 BSP

	MultiCoupling spare parts (couplings not included)			
Code	Name			
806000354	MULTI FIX EMPTY DP2 1A-1B			
806000355	MULTI MOBILE EMPTY DP2 1A-1B			
815606268	CAP FIX MULTICOUPLING DP 104x80			
815606269	PARKING STATION MOBILE MULTICOUPLING DP 104x80			
815701086	SPARE KIT LEVER GROUP DP 130x97			

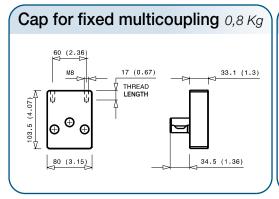


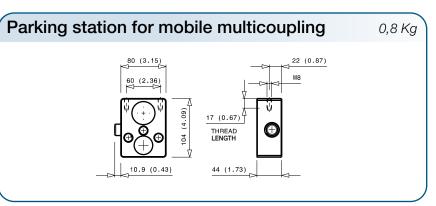
Fixed and mobile multicoupling

1,5 Kg and 0,8 Kg



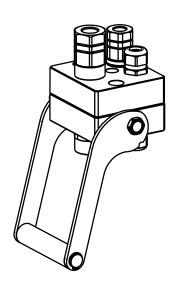
Dimensions in millimeters (inch)

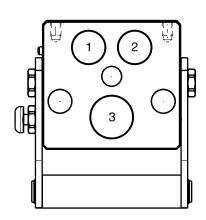












Possible configurations			
Pos	Coupling size	Predisposition for electrical connector	
1	FAP9DZN	-	
2	-	YES	
3	FAP13ZN	-	

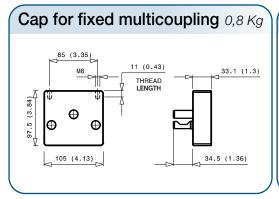
MultiCoupling (couplings included)		
Code	Name	Description
870009015	MULTI COMPLETE DP3 1A-1B-1EC	1 FAP9D 3/8 BSP - 1 FAP13ZN 1/2 BSP - 1EC4 - CAP
870009115	MULTI FIX DP3 1A-1B-1EC	1 FAP9D 3/8 BSP - 1 FAP13ZN 1/2 BSP - 1EC4
870009215	MULTI MOBILE DP3 1A-1B-1EC	1 FAP9D 3/8 BSP - 1 FAP13ZN 1/2 BSP - 1EC4

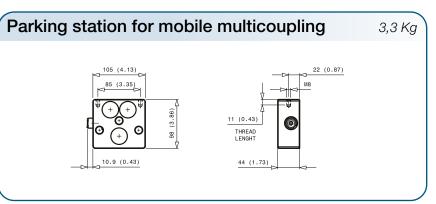
MultiCoupling spare parts (couplings not included)			
Code	Name		
806000356	MULTI FIX EMPTY DP3 1A-1B-1EC		
806000357	MULTI MOBILE EMPTY DP3 1A-1B-1EC		
815606276	CAP FIX MULTICOUPLING DP 105x98		
815606277	PARKING STATION MOBILE MULTICOUPLING DP 105x98		
815701081	SPARE KIT LEVER GROUP DP 170x121		



Fixed and mobile multicoupling 1,5 Kg and 0,8 Kg 164.5 (6.48) READY TO CONNECT 137.2 (5.40) 98 (3.86) POSITION THREADS FOR FIXING SCREWS 105 (4.13) 115° 55) MOBILE MULTICOUPLING \odot Q 318.8 (12. 183.6 (7.23) FIXED MULTICOUPLING 11 (0.43) THREAD LENGTH CONNECTED POSITION 142.6 (5.61) 234.6 (9.24) 121.6 (4.79)

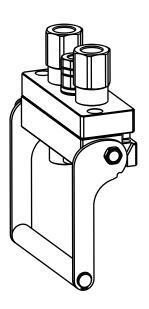
Dimensions in millimeters (inch)

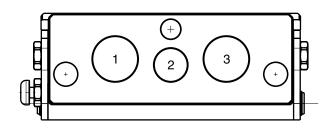












Possible configurations		
Pos	Coupling size	Predisposition for electrical connector
1	FAP15	-
2	FAP9-D	YES
3	FAP15	-

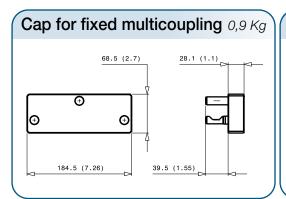
MultiCoupling (couplings included)		
Code	Name	Description
870008027	MULTI COMPLETE DP3 1A-2C V04	1 FAP9D 3/8 BSP - 2 FAP15 3/4 BSP - CAP
870008127	MULTI FIX DP3 1A-2C V04	1 FAP9D 3/8 BSP - 2 FAP15 3/4 BSP
870008130	MULTI FIX DP3 1A-2C V04	1 FAP9D 1/2 BSP - 2 FAP15 3/4 BSP
870008227	MULTI MOBILE DP3 1A-2C V04	1 FAP9D 3/8 BSP - 2 FAP15 3/4 BSP
870008230	MULTI MOBILE DP3 1A-2C V04	1 FAP9D 1/2 BSP - 2 FAP15 3/4 BSP

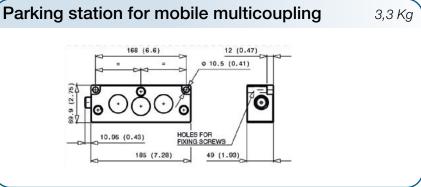
MultiCoupling spare parts (couplings not included)		
Code	Name	
806000416	MULTI FIX EMPTY DP3 1A-2C-1EC V04	
806000417	MULTI MOBILE EMPTY DP3 1A-2C-1EC V04	
815606314	CAP FIX MULTICOUPLING DP 185x69	
815606315	PARKING STATION MOBILE MULTICOUPLING DP 185x69	



Fixed and mobile multicoupling 2,3 Kg and 0,9 Kg 217 (8.54) 165.7 (6.52) READY TO CONNECT POSITION_ 185 (7.28) 69 (2.72) HOLES FOR FIXING SCREWS MOBILE MULTICOUPLING 270.8 (10.66) FIXED MULTICOUPLING Φ 10.5 (0.41) LENGTH CONNECTED POSITION 80.5 (3.17) 168 (6.61) 201.6 (7.94) 198.8 (7.83)

Dimensions in millimeters (inch)

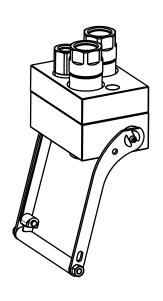


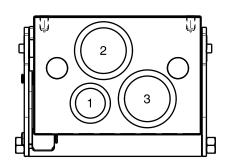












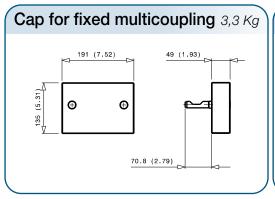
Possible configurations			
Pos	Coupling size	Predisposition for electrical connector	
1	FAP15ZN	-	
2	FAP21ZN	-	
3	FAP21ZN	-	

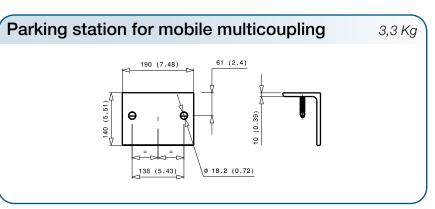
MultiCoupling (couplings included)			
Code		Name	Description
870015056		MULTI COMPLETE DP3 1C-2E	1 FAP15 3/4 BSP - 2 FAP21 1 BSP - CAP
870015088		MULTI COMPLETE DP3 1C-2E	1 FAP15 3/4 SAE - 2 FAP21 1-1/4 SAE - CAP
870015188		MULTI FIX DP3 1C-2E	1 FAP15 3/4 SAE - 2 FAP21 1-1/4 SAE
870015288		MULTI MOBILE DP3 1C-2E	1 FAP15 3/4 SAE - 2 FAP21 1-1/4 SAE

MultiCoupling spare parts (couplings not included)			
Code	ا	Name	
806000392	:	MULTI FIX EMPTY DP3 1C-2E	
806000393		MULTI MOBILE EMPTY DP3 1C-2E	
815606300		CAP FIX MULTICOUPLING DP 191x135	
815606301		PARKING STATION MOBILE MULTICOUPLING DP 190x140	
815701089		SPARE KIT LEVER GROUP DP 250x228	

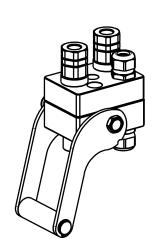


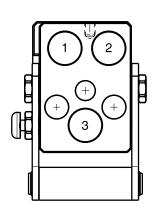
Fixed and mobile multicoupling 5,3 Kg and 2,8 Kg 191 (7.52) 199.9 (7.87) READY TO CONNECT POSITION 135 (5.31) MOBILE MULTICOUPLING THREADS FOR FIXING SCREWS X118° 49 (1.93) 459.4 (18.09) 49 (1.93) M10 (2.72)283.2 (11.15) 167 (6.57) FIXED MULTICOUPLING 14 (0.55) THREAD LENGTH CONNECTED POSITION 160.1 (6.31) 227.9 (8.97) 304 (11.97) Dimensions in millimeters (inch)











Possible configurations		
Pos	Coupling size	Predisposition for electrical connector
1	FAP9AZN	-
2	-	YES
3	FAP9AZN	-

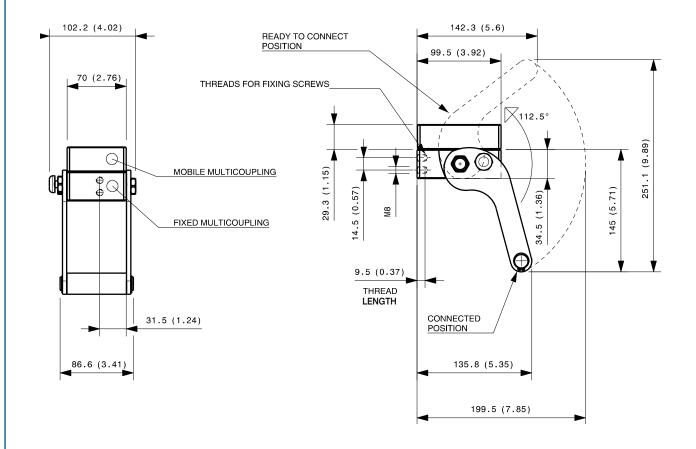
	MultiCoupling (couplings included)		
Code		Name	Description
870009016	i	MULTI COMPLETE DP3 2A-1EC	2 FAP9A 3/8 BSP - 1EC6 - CAP
870009116		MULTI FIX DP3 2A-1EC	2 FAP9A 3/8 BSP - 1EC6
870009216		MULTI MOBILE DP3 2A-1EC	2 FAP9A 3/8 BSP - 1EC6

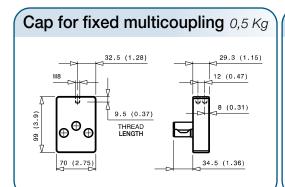
MultiCoupling spare parts (couplings not included)			
Code	ame		
806000358	MULTI FIX EMPTY DP3 2A-1EC		
806000359	MULTI MOBILE EMPTY DP3 2A-1EC		
815606274	CAP FIX MULTICOUPLING DP 99x70		
815606275	PARKING STATION MOBILE MULTICOUPLING DP 100x70		
815701083	SPARE KIT LEVER GROUP DP 130x87		

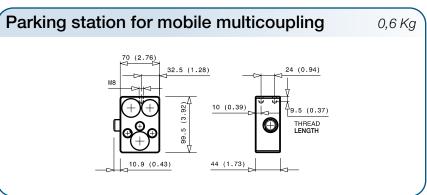


Fixed and mobile multicoupling

1,3 Kg and 0,6 Kg





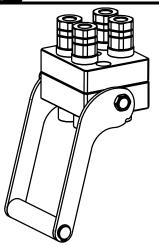


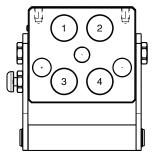
Dimensions in millimeters (inch)











Possible configurations			
Pos	Coupling size	Predisposition for electrical connector	
1	FAP9AZN	-	
2	FAP9AZN	YES	
3	FAP9AZN	YES	
4	FAP9AZN	-	

	MultiCoupling (couplings included)		
Code	Name	Description	
870011017	MULTI COMPLETE DP4 4A	4 FAP9A 3/8 BSP - CAP	
870011020	MULTI COMPLETE DP4 4A	4 FAP9A 1/2 BSP - CAP	
870011022	MULTI COMPLETE DP4 4A	4 FAP9A 1/4 BSP - CAP	
870011027	MULTI COMPLETE DP4 4A	4 FAQ9A 3/8 BSP - CAP	
870011028	MULTI COMPLETE DP4 4A	4 FAP9A 3/8 SAE - CAP	
870011029	MULTI COMPLETE DP4 4A	4 FAP9A 1/2 NPT - CAP	
870011124	MULTI FIX DP4 4A V02*	2 FAP9A 3/8 BSP - 2 FAP9A 1/2 BSP	
870011117	MULTI FIX DP4 4A	4 FAP9A 3/8 BSP	
870011120	MULTI FIX DP4 4A	4 FAP9A 1/2 BSP	
870011122	MULTI FIX DP4 4A	4 FAP9A 1/4 BSP	
870011123	MULTI FIX DP4 4A	2 FAP9A 3/8 BSP - 2 FAP9A 1/2 BSP	
870011125	MULTI FIX DP4 2A	2 FAP9A 3/8 BSP	
870011126	MULTI FIX DP4 4A	4 FAP9A 1/2 SAE	
870011217	MULTI MOBILE DP4 4A	4 FAP9A 3/8 BSP	
870011220	MULTI MOBILE DP4 4A	4 FAP9A 1/2 BSP	
870011222	MULTI MOBILE DP4 4A	4 FAP9A 1/4 BSP	
870011223	MULTI MOBILE DP4 4A	2 FAP9A 3/8 BSP - 2 FAP9A 1/2 BSP	

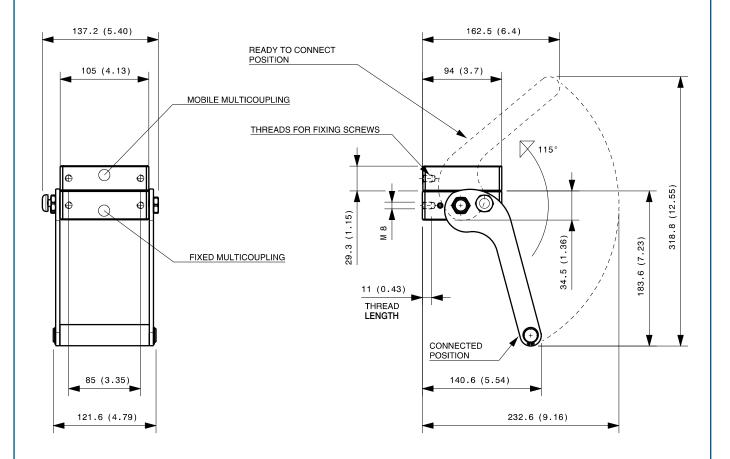
^{*} $\mathbf{V02} = \mathbf{side} \ \mathbf{button}$

MultiCoupling spare parts (couplings not included)		
Code	Name	
806000264	MULTI FIX EMPTY DP4 4A-2EC	
806000370	MULTI FIX EMPTY DP4 4A VO2*	
806000265	MULTI MOBILE EMPTY DP4 4A-2EC	
815606280	CAP FIX MULTICOUPLING DP 105x94	
815606281	PARKING STATION MOBILE MULTICOUPLING DP 105x94	
815701081	SPARE KIT LEVER GROUP DP 170x121	
UPON REQUEST	SPECIFIC KIT FOR VO2 MODEL	



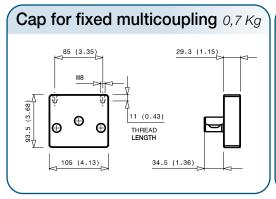
Fixed and mobile multicoupling

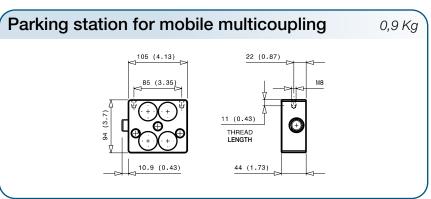
1,7 Kg and 0,7 Kg



Available also model with button in other side, in case of need ask the drawing to info@stucchi.it

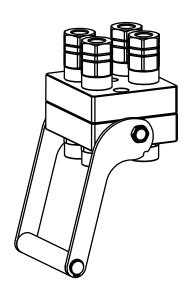
Dimensions in millimeters (inch)

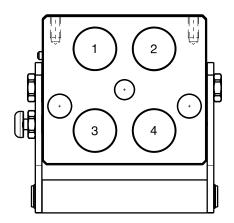












Possible configurations			
Pos	Coupling size Predisposition for electrical connector		
1	FAP13ZN	-	
2	FAP13ZN	YES	
3	FAP13ZN	YES	
4	FAP13ZN	-	

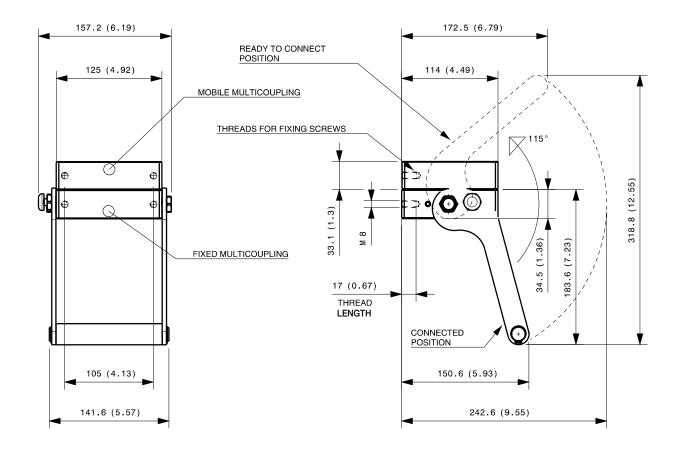
	MultiCoupling (couplings included)				
Code	Name	Description			
870012007	MULTI COMPLETE DP4 4B	4 FAP13 3/4 BSP - CAP			
870012008	MULTI COMPLETE DP4 4B	4 FAP13 1/2 BSP - CAP			
870012009	MULTI COMPLETE DP4 4B	4 FAP13 1/2 NPT - CAP			
870012107	MULTI FIX DP4 4B	4 FAP13 3/4 BSP			
870012108	MULTI FIX DP4 4B	4 FAP13 1/2 BSP			
870012109	MULTI FIX DP4 4B	4 FAP13 1/2 NPT			
870012110	MULTI FIX DP4 2B 1EC	2 FAP13 1/2 BSP 1EC6			
870012111	MULTI FIX DP4 2B	2 FAP13 1/2 BSP			
870012207	MULTI MOBILE DP4 4B	4 FAP13 3/4 BSP			
870012208	MULTI MOBILE DP4 4B	4 FAP13 1/2 BSP			
870012209	MULTI MOBILE DP4 4B	4 FAP13 1/2 NPT			
870012210	MULTI MOBILE DP4 2B 1EC	2 FAP13 1/2 BSP 1EC6			

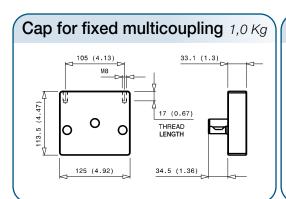
	MultiCoupling spare parts (couplings not included)			
Code		Name		
806000350		MULTI FIX EMPTY DP4 4B-2EC		
806000351		MULTI MOBILE EMPTY DP4 4B-2EC		
815606282		CAP FIX MULTICOUPLING DP 125x114		
815606283		PARKING STATION MOBILE MULTICOUPLING DP 125x114		
815701085		SPARE KIT LEVER GROUP DP 170x142		

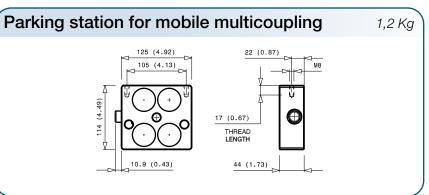


Fixed and mobile multicoupling

2,0 Kg and 1,0 Kg



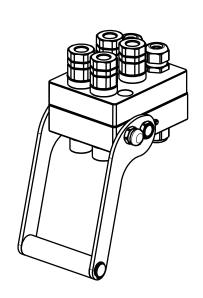




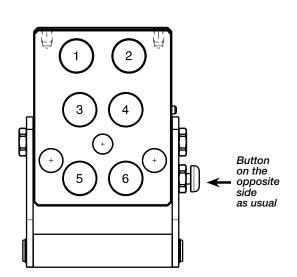
Dimensions in millimeters (inch)







CONFIGURATIONS



Possible configurations			
Pos	Coupling size	Predisposition for electrical connector	
1	-	YES	
2	-	YES	
3	FAP9AZN	-	
4	FAP9AZN	-	
5	FAP9AZN	-	
6	FAP9AZN	-	

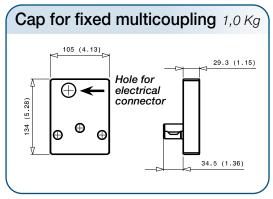
MultiCoupling (couplings included)			
Code		Name	Description
870011021		MULTI COMPLETE DP6 4A	2 FAP9A 3/8 BSP - 2 FAP9A 1/2 BSP - CAP
870011121		MULTI FIX DP6 4A	2 FAP9A 3/8 BSP - 2 FAP9A 1/2 BSP
870011221		MULTI MOBILE DP6 4A	2 FAP9A 3/8 BSP - 2 FAP9A 1/2 BSP

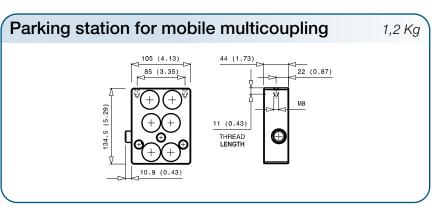
MultiCoupling spare parts (couplings not included)				
Code		ame		
806000352	i	MULTI FIX EMPTY DP6 4A-2EC		
806000353		MULTI MOBILE EMPTY DP6 4A-2EC		
815606292		CAP FIX MULTICOUPLING DP 134x105		
815606285		PARKING STATION MOBILE MULTICOUPLING DP 135x105		
815701081		SPARE KIT LEVER GROUP DP 170x121		
815701301		KIT BRACKET DP6 4A-2EC		

NOTE: This multicoupling model must be completed by adding the electrical connectors (pos 1, pos 2, cap), see page 'Electrical connectors' to get specific codes.



Fixed and mobile multicoupling 1,7 Kg and 1,0 Kg 137.2 (5.40) 204.2 (8.04) READY TO CONNECT POSITION 105 (4.13) 135.7 (5.34) THREADS FOR FIXING SCREWS MOBILE MULTICOUPLING 115° Button 318.8 (12.55) on the opposite 0 \oplus side 29.3 (1.15) as usual 8 34.5 (1.36) 183.6 (7.23) FIXED MULTICOUPLING 11 (0.43) THREAD LENGTH CONNECTED **POSITION** 182.3 (7.18) 85 (3.35) 274.3 (10.8) 121.6 (4.79)

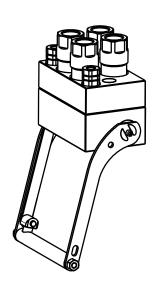




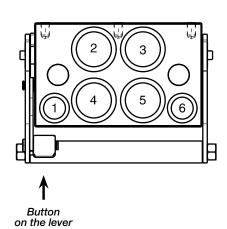
Dimensions in millimeters (inch)







CONFIGURATIONS



Possible configurations				
Pos	Coupling size	Predisposition for electrical connector		
1	FAP9DZN	YES *		
2	FAP17ZN	-		
3	FAP17ZN	-		
4	FAP17ZN	-		
5	FAP17ZN	=		
6	FAP9DZN	YES *		

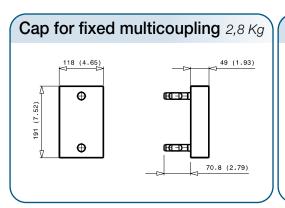
* - Maximum hose diameter for FAP9: Ø16 (1.33), in case of bigger hose use a longer adaptor.

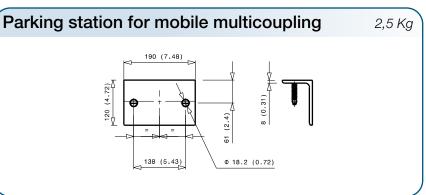
MultiCoupling (couplings included)			
Code		Name	Description
870008023	•	MULTI COMPLETE DP6 2A-4D	2 FAP9D 3/8 BSP - 4 FAP17 1 BSP - CAP
870008028		MULTI COMPLETE DP6 4D	4 FAP17 1 BSP - CAP
870008123		MULTI FIX DP6 2A-4D	2 FAP9D 3/8 BSP - 4 FAP17 1 BSP
870008223		MULTI MOBILE DP6 2A-4D	2 FAP9D 3/8 BSP - 4 FAP17 1 BSP

MultiCoupling spare parts (couplings not included)			
Code	N	lame	
806000382		MULTI FIX EMPTY DP6 2A-4D-2EC	
806000383		MULTI MOBILE EMPTY DP6 2A-4D-2EC	
815606290		CAP FIX MULTICOUPLING DP 191x118	
815606291		PARKING STATION MOBILE MULTICOUPLING DP 190x120	
815701089		SPARE KIT LEVER GROUP DP 250x228	



Fixed and mobile multicoupling 4,5 Kg and 2,2 Kg 199.9 (7.87) READY TO CONNECT POSITION 191 (7.52) 119 (4.69) MOBILE MULTICOUPLING THREADS FOR FIXING SCREWS . 118° 49 (1.93) Ø 49 (1.93) 283.2 (11.15) (2.72)FIXED MULTICOUPLING 69 14 (0.55) Button THREAD LENGTH on the lever CONNECTED POSITION 160.1 (6.3) 167 (6.57) 227.9 (8.97) 304 (11.97)

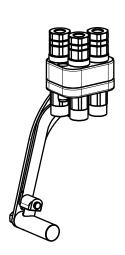


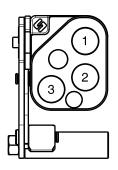


Dimensions in millimeters (inch)









Possible configurations				
Pos	Coupling size	Predisposition for electrical connector		
1	FAP9AZN	-		
2	FAP9AZN	-		
3	FAP9A7N	YES		

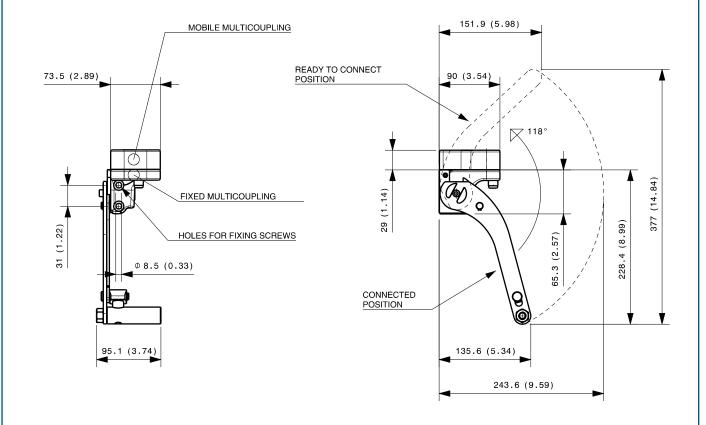
MultiCoupling (couplings included)			
Code	Name	Description	
870001040	MULTI COMPLETE GR3 3A	2 FAP9A 3/8 BSP - 1 FAP9A 1/2 BSP - CAP	
870001043	MULTI COMPLETE GR3 3A	3 FAP9A 3/8 BSP - CAP	
870001044	MULTI COMPLETE GR3 3A	3 FAP9A 1/2 BSP - CAP	
870001140	MULTI FIX GR3 3A	2 FAP9A 3/8 BSP - 1 FAP9A 1/2 BSP	
870001143	MULTI FIX GR3 3A	3 FAP9A 3/8 BSP	
870001144	MULTI FIX GR3 3A	3 FAP9A 1/2 BSP	
870001240	MULTI MOBILE GR3 3A	2 FAP9A 3/8 BSP - 1 FAP9A 1/2 BSP	
870001243	MULTI MOBILE GR3 3A	3 FAP9A 3/8 BSP	
870001244	MULTI MOBILE GR3 3A	3 FAP9A 1/2 BSP	

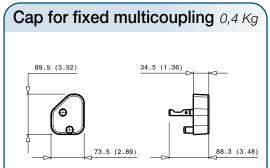
MultiCoupling spare parts (couplings not included)			
Code		Name	
806000270		MULTI FIX EMPTY GR3 3A-1EC	
806000271		MULTI MOBILE EMPTY GR3 3A-1EC	
815606242		CAP FIX MULTICOUPLING GR 90x74	
815606243		PARKING STATION MOBILE MULTICOUPLING GR 100x75	
815701053		SPARE KIT LEVER GROUP GR 200x95	

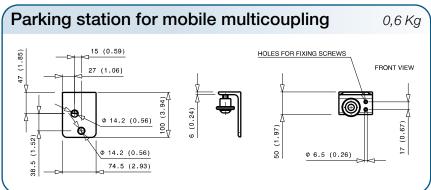


Fixed and mobile multicoupling

2,0 Kg and 0,9 Kg



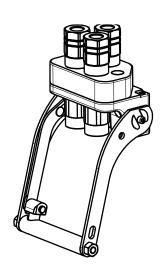


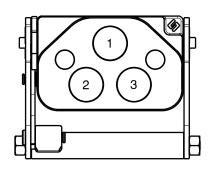


Dimensions in millimeters (inch)









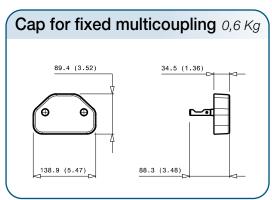
Possible configurations			
Pos	Coupling size	Predisposition for electrical connector	
1	FAP13ZN	-	
2	FAP13ZN	YES	
3	FAP13ZN	_	

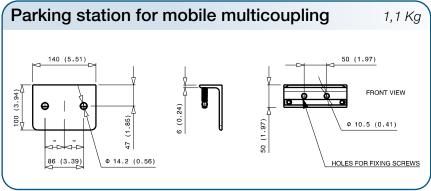
MultiCoupling (couplings included)		
Code	Name	Description
870003017	MULTI COMPLETE GR3 3B	1 FAP13 1/2 BSP - 2 FAP13 3/4 BSP - CAP
870003020	MULTI COMPLETE GR3 3B	3 FAP13 1/2 BSP - CAP
870003021	MULTI COMPLETE GR3 3B	3 FAP13 3/4 BSP - CAP
870003117	MULTI FIX GR3 3B	1 FAP13 1/2 BSP - 2 FAP13 3/4 BSP
870003120	MULTI FIX GR3 3B	3 FAP13 1/2 BSP
870003122	MULTI FIX GR3 2B	2 FAP13 3/4 BSP
870003123	MULTI FIX GR3 2B-1EC	2 FAP13 1/2 BSP - 1 EC6
870003217	MULTI MOBILE GR3 3B	1 FAP13 1/2 BSP - 2 FAP13 3/4 BSP
870003220	MULTI MOBILE GR3 3B	3 FAP13 1/2 BSP
870003223	MULTI MOBILE GR3 2B-1EC	2 FAP13 1/2 BSP - 1 EC6

	MultiCoupling spare parts (couplings not included)			
Code		Name		
806000272	:	MULTI FIX EMPTY GR3 3B-1EC		
806000273		MULTI MOBILE EMPTY GR3 3B-1EC		
815606248		CAP FIX MULTICOUPLING GR 139x90		
815606249		PARKING STATION MOBILE MULTICOUPLING GR 140x100		
815701052		SPARE KIT LEVER GROUP GR 200x176		



Fixed and mobile multicoupling 3,8 Kg and 1,8 Kg 151.9 (5.98) MOBILE MULTICOUPLING READY TO CONNECT POSITION 139 (5.47) 90 (3.54) FIXED MULTICOUPLING 31 (1.22) (14.84)(1) 32.8 (1.29) 377 228.4 (8.99) ϕ 8.5 (0.33) HOLES FOR FIXING SCREWS 115 (4.53) CONNECTED POSITION 135.6 (5.34) 176 (6.93) 243.6 (9.59)

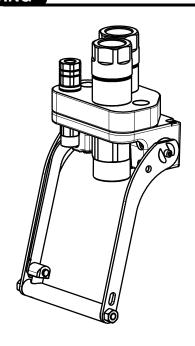


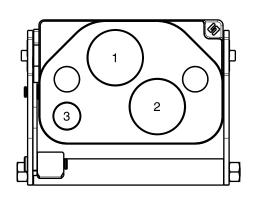


Dimensions in millimeters (inch)









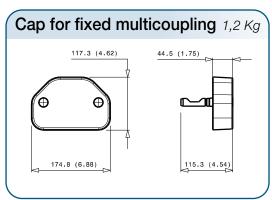
Possible configurations		
Pos	Coupling size	Predisposition for electrical connector
1	FAP21ZN	-
2	FAP21ZN	-
3	FAP9DZN	YES

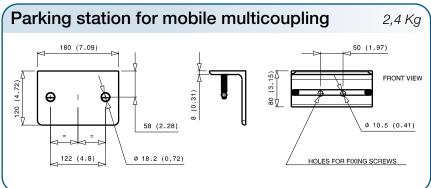
MultiCoupling (couplings included)		
Code	Name	Description
870015075	MULTI COMPLETE GR3 1A-2E	1 FAP9D 3/8 BSP - 2 FAP21 1 BSP - CAP
870015083	MULTI COMPLETE GR3 1A-2E	1 FAP9D 3/8 BSP - 2 FAP21 1-1/4 BSP - CAP
870016052	MULTI COMPLETE GR3 1A-2E	1 FAP9D 1/2 BSP - 2 FAP21 1 BSP - CAP
870016001	MULTI COMPLETE GR3 2E	2 FAP21 1-1/4 BSP - CAP
870015175	MULTI FIX GR3 1A-2E	1 FAP9D 3/8 BSP - 2 FAP21 1 BSP
870016101	MULTI FIX GR3 2E	2 FAP21 1-1/4 BSP
870015275	MULTI MOBILE GR3 1A-2E	1 FAP9D 3/8 BSP - 2 FAP21 1 BSP
870016201	MULTI MOBILE GR3 2E	2 FAP21 1-1/4 BSP

MultiCoupling spare parts (couplings not included)			
Code		Name	
806000310	•	MULTI FIX EMPTY GR3 1A-2E-1EC	
806000311		MULTI MOBILE EMPTY GR3 1A-2E-1EC	
815606260		CAP FIX MULTICOUPLING GR 175x117 V02	
815606261		PARKING STATION MOBILE MULTICOUPLING GR 180x120 V02	
815701055		SPARE KIT LEVER GROUP GR 250x212	



Fixed and mobile multicoupling 5,7 Kg and 2,8 Kg 175 (6.89) 196.9 (7.75) MOBILE MULTICOUPLING 118 (4.65) READY TO CONNECT POSITION ∑118° HOLES FOR FIXING SCREWS 459.4 (18.09) 32.8 (1.29) 283.2 (11.15) 31 (1.22) 70.8 (2.79) Φ 8.5 (0.33) 151 (5.94) FIXED MULTICOUPLING CONNECTED POSITION 157.1 (6.19) 211.9 (8.34) 301 (11.85)

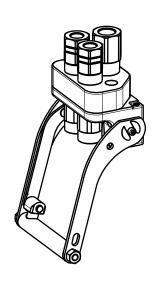


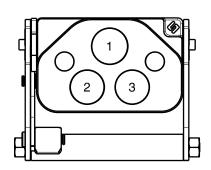


Dimensions in millimeters (inch)









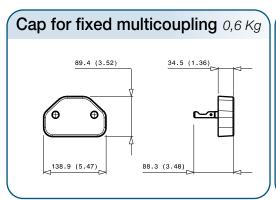
Possible configurations				
Pos Coupling size Predisposition for electrical connector				
1	FAP15ZN	-		
2	FAP13ZN	YES		
3	FAP13ZN	YES		

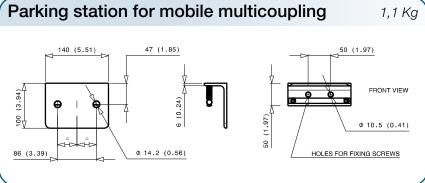
MultiCoupling (couplings included)			
Code		Name	Description
870015065	i	MULTI COMPLETE GR3 2B-1C	2 FAP13 1/2 BSP - 1 FAP15 3/4 BSP - CAP
870015165		MULTI FIX GR3 2B-1C	2 FAP13 1/2 BSP - 1 FAP15 3/4 BSP
870015265		MULTI MOBILE GR3 2B-1C	2 FAP13 1/2 BSP - 1 FAP15 3/4 BSP

MultiCoupling spare parts (couplings not included)			
Code	Name		
806000376	MULTI FIX EMPTY GR3 2B-1C-2EC		
806000377	MULTI MOBILE EMPTY GR3 2B-1C-2EC		
815606248	CAP FIX MULTICOUPLING GR 139x90		
815606249	PARKING STATION MOBILE MULTICOUPLING GR 140x100		
815701052	SPARE KIT LEVER GROUP GR 200x176		



Fixed and mobile multicoupling 3,7 Kg and 1,7 Kg 139 (5.47) 151.9 (5.98) READY TO CONNECT **POSITION** 90 (3.54) MOBILE MULTICOUPLING HOLES FOR FIXING SCREWS X 118° (14.84)32.8 (1.29) 228.4 (8.99) 31 (1.22) Φ 8.5 (0.33) 22) (2 65.3 115 (4.53) FIXED MULTICOUPLING CONNECTED POSITION 135.6 (5.34) 175.9 (6.93) 243.6 (9.59) Dimensions in millimeters (inch)

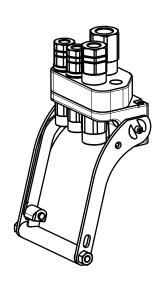


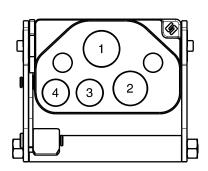












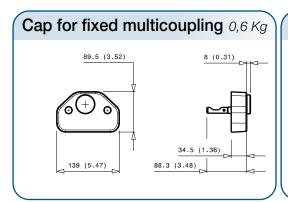
Possible configurations		
Pos	Coupling size	Predisposition for electrical connector
1	FAP15ZN	-
2	FAP13ZN	-
3	FAP9DZN	YES
4	FAP9DZN	YES

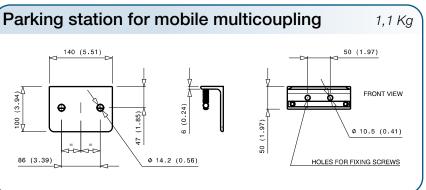
MultiCoupling (couplings included)			
Code		Name	Description
870015091	i	MULTI COMPLETE GR4 1B-1C	1 FAP13 1/2 BSP - 1 FAP15 3/4 BSP - CAP
870015191		MULTI FIX GR4 1B-1C	1 FAP13 1/2 BSP - 1 FAP15 3/4 BSP
870015291	•	MULTI MOBILE GR4 1B-1C	1 FAP13 1/2 BSP - 1 FAP15 3/4 BSP

MultiCoupling spare parts (couplings not included)			
Code	Name		
806000276	MULTI FIX EMPTY GR4 2A-1B-1C-2EC		
806000277	MULTI MOBILE EMPTY GR4 2A-1B-1C-2EC		
815606246	CAP FIX MULTICOUPLING GR 139x90 V02		
815606249	PARKING STATION MOBILE MULTICOUPLING GR 140x100		
815701052	SPARE KIT LEVER GROUP GR 200x176		



Fixed and mobile multicoupling 3,7 Kg and 1,7 Kg 139 (5.47) 151.9 (5.98) MOBILE MULTICOUPLING READY TO CONNECT POSITION 90 (3.54) HOLES FOR FIXING SCREWS X 118° 32.8 (1.29) 228.4 (8.99) 31 (1.22) Φ 8.5 (0.33) (2.57)65.3 (115 (4.53) FIXED MULTICOUPLING CONNECTED POSITION 135.6 (5.34) 243.6 (9.59) 175.9 (6.93)

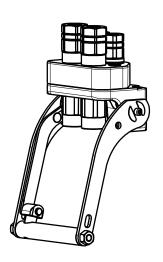


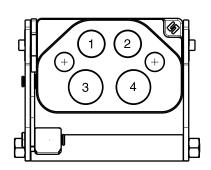


Dimensions in millimeters (inch)









Possible configurations			
Pos	Coupling size	Predisposition for electrical connector	
1	FAP9DZN	YES	
2	FAP9DZN	YES	
3	FAP13ZN	=	
4	FAP13ZN	-	

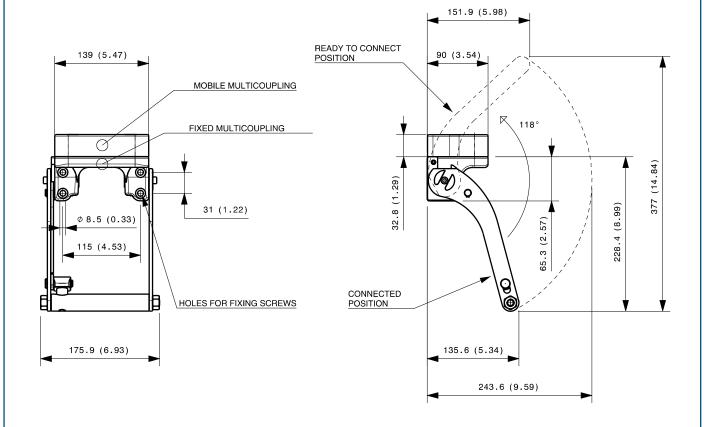
MultiCoupling (couplings included)			
Code		Name	Description
870016014	i	MULTI COMPLETE GR4 2A-2B	2 FAP9D 3/8 BSP - 2 FAP13 1/2 BSP - CAP
870016114	i	MULTI FIX GR4 2A-2B	2 FAP9D 3/8 BSP - 2 FAP13 1/2 BSP
870016214		MULTI MOBILE GR4 2A-2B	2 FAP9D 3/8 BSP - 2 FAP13 1/2 BSP

MultiCoupling spare parts (couplings not included)			
Code	Name		
806000274	MULTI FIX EMPTY GR4 2A-2B-2EC		
806000275	MULTI MOBILE EMPTY GR4 2A-2B-2EC		
815606248	CAP FIX MULTICOUPLING GR 139x90		
815606249	PARKING STATION MOBILE MULTICOUPLING GR 140x100		
815701052	SPARE KIT LEVER GROUP GR 200x176		

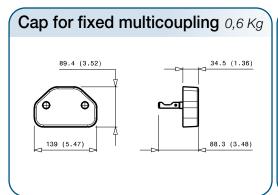


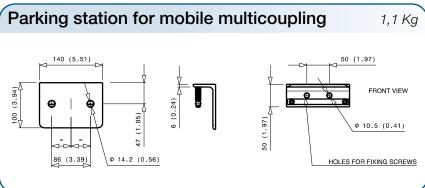
Fixed and mobile multicoupling

3,7 Kg and 1,8 Kg



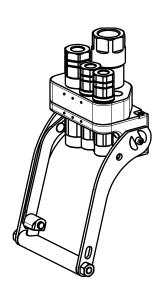
Dimensions in millimeters (inch)

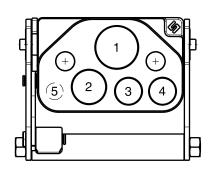












Possible configurations			
Pos	Coupling size	Predisposition for electrical connector	
1	FAP17ZN	-	
2	FAP13ZN	-	
3	FAP9DZN	YES	
4	FAP9DZN	YES	
5		*	

 $^{^{\}star}$ - Holes Ø16 (0.63) for optional sensor.

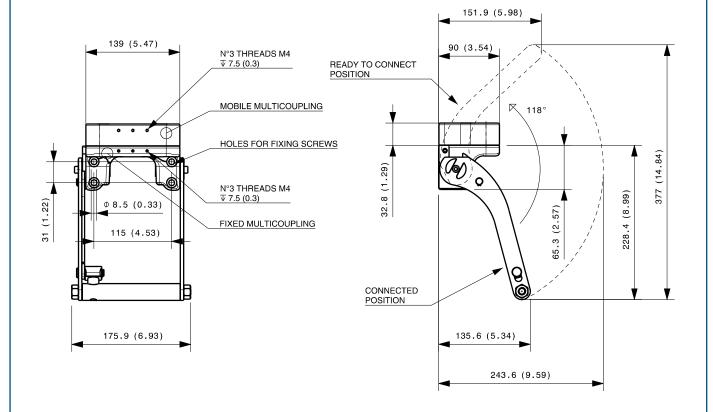
MultiCoupling (couplings included)		
Code	Name	Description
870016015	MULTI COMPLETE GR4 2A-1B-1D	2 FAP9D 3/8 BSP - 1 FAP13 1/2 BSP - 1 FAP17 1 BSP - CAP
870016115	MULTI FIX GR4 2A-1B-1D	2 FAP9D 3/8 BSP - 1 FAP13 1/2 BSP - 1 FAP17 1 BSP
870016215	MULTI MOBILE GR4 2A-1B-1D	2 FAP9D 3/8 BSP - 1 FAP13 1/2 BSP - 1 FAP17 1 BSP

MultiCoupling spare parts (couplings not included)			
Code	Name		
806000280	MULTI FIX EMPTY GR4 2A-1B-1D-2EC		
806000281	MULTI MOBILE EMPTY GR4 2A-1B-1D-2EC		
815606244	CAP FIX MULTICOUPLING GR 139x90 V01		
815606249	PARKING STATION MOBILE MULTICOUPLING GR 140x100		
815701052	SPARE KIT LEVER GROUP GR 200x176		
815701300	KIT PLUG FOR HOLE D16 MULTI FIX GR4 2A-1B-1D-2EC		

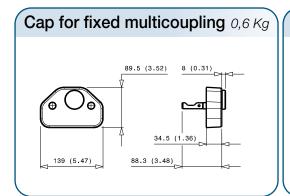


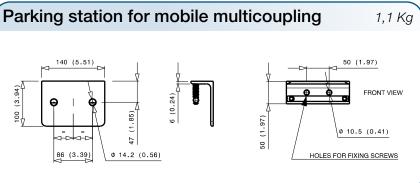
Fixed and mobile multicoupling

3,6 Kg and 1,7 Kg



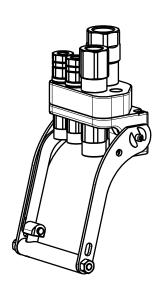
Dimensions in millimeters (inch)

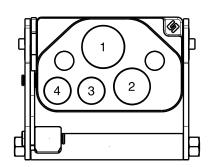












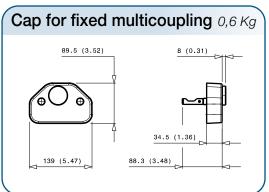
Possible configurations		
Pos	Coupling size	Predisposition for electrical connector
1	FAP17ZN	-
2	FAP15ZN	-
3	FAP9DZN	YES
4	FAP9DZN	YES

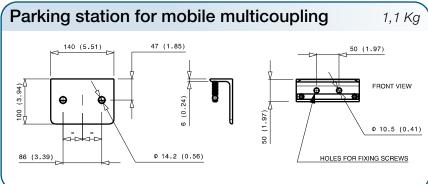
	MultiCoupling (couplings included)		
Code	Name	Description	
870015058	MULTI COMPLETE GR4 2A-1C-1D	2 FAP9D 3/8 BSP - 1 FAP15 3/4 BSP - 1 FAP17 1 BSP - CAP	
870015060	MULTI COMPLETE GR4 1A-1C-1D	1 FAP9D 3/8 BSP - 1 FAP15 3/4 BSP - 1 FAP17 1 BSP - CAP	
870015074	MULTI COMPLETE GR4 1C-1D	1 FAP15 3/4 BSP - 1 FAP17 1 BSP - CAP	
870015086	MULTI COMPLETE GR4 1C-1D-2EC	1 FAP15 3/4 BSP - 1 FAP17 1 BSP - 2EC6 - CAP	
870016025	MULTI COMPLETE GR4 1D-1EC	1 FAP17 3/4 BSP - 1EC6 - CAP	
870016026	MULTI COMPLETE GR4 2A-1D	2 FAP9D 1/2 BSP - 1 FAP17 1 BSP - CAP	
870015095	MULTI COMPLETE GR4 2A-1C	2 FAP9D 3/8 BSP - 1 FAP15 3/4 BSP - CAP	
870015158	MULTI FIX GR4 2A-1C-1D	2 FAP9D 3/8 BSP - 1 FAP15 3/4 BSP - 1 FAP17 1 BSP	
870015160	MULTI FIX GR4 1A-1C-1D	1 FAP9D 3/8 BSP - 1 FAP15 3/4 BSP - 1 FAP17 1 BSP	
870016127	MULTI FIX GR4 1A-1C-1D	1 FAP9D 3/8 BSP - 1 FAP15 3/4 BSP - 1 FAP17 3/4 BSP	
870015258	MULTI MOBILE GR4 2A-1C-1D	2 FAP9D 3/8 BSP - 1 FAP15 3/4 BSP - 1 FAP17 1 BSP	
870015260	MULTI MOBILE GR4 1A-1C-1D	1 FAP9D 3/8 BSP - 1 FAP15 3/4 BSP - 1 FAP17 1 BSP	
870016225	MULTI MOBILE GR4 1D-1EC	1 FAP17 3/4 BSP - 1EC6	
870016227	MULTI MOBILE GR4 1A-1C-1D	1 FAP9D 3/8 BSP - 1 FAP15 3/4 BSP - 1 FAP17 3/4 BSP	

	MultiCoupling spare parts (couplings not included)		
Code	Name		
806000282	MULTI FIX EMPTY GR4 2A-1C-1D-2EC		
806000283	MULTI MOBILE EMPTY GR4 2A-1C-1D-2EC		
815606246	CAP FIX MULTICOUPLING GR 139x90 V02		
815606249	PARKING STATION MOBILE MULTICOUPLING GR 140x100		
815701052	SPARE KIT LEVER GROUP GR 200x176		



Fixed and mobile multicoupling 3,6 Kg and 1,7 Kg 139 (5.47) 151.9 (5.98) MOBILE MULTICOUPLING 90 (3.54) READY TO CONNECT POSITION HOLES FOR FIXING SCREWS X 118° 228.4 (8.99) ϕ 8.5 (0.33) 31 (1.22) 115 (4.53) FIXED MULTICOUPLING CONNECTED POSITION 135.6 (5.34) 175.9 (6.93) 243.6 (9.59) Dimensions in millimeters (inch)

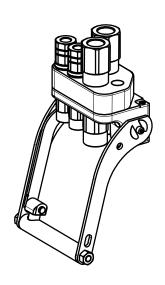


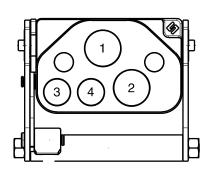












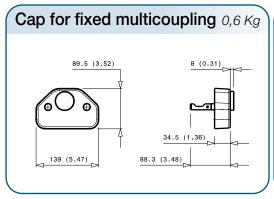
Possible configurations		
Pos	Coupling size	Predisposition for electrical connector
1	FAP15ZN	-
2	FAP15ZN	-
3	FAP9DZN	YES
4	FAP9DZN	YES

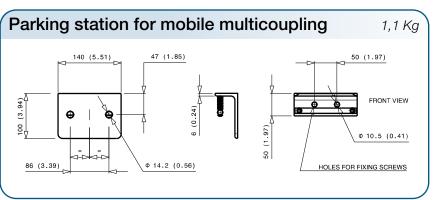
MultiCoupling (couplings included)		
Code	Name	Description
870016008	MULTI COMPLETE GR4 1A-2C-1EC	1 FAP9D 1/2 BSP - 2 FAP15 3/4 BSP - 1EC7 - CAP
870016041	MULTI COMPLETE GR4 1A-2C	1 FAP9D 3/8 NPT - 2 FAP15 3/4 NPT - CAP
870016060	MULTI COMPLETE GR4 1A-2C	1 FAP9D 3/8 SAE - 2 FAP15 3/4 SAE - CAP
870016107	MULTI FIX GR4 2A-2C	2 FAP9D 3/8 BSP - 2 FAP15 3/4 BSP EXT
870016108	MULTI FIX GR4 1A-2C-1EC	1 FAP9D 1/2 BSP - 2 FAP15 3/4 BSP - 1EC7
870016111	MULTI FIX GR4 1A-2C	1 FAP9D 3/8 BSP - 2 FAP15 3/4 BSP
870016129	MULTI FIX GR4 1A-2C-1EC	1 FAP9D 3/8 BSP - 2 FAP15 3/4 BSP - 1EC7
870016207	MULTI MOBILE GR4 2A-2C	2 FAP9D 3/8 BSP - 2 FAP15 3/4 BSP EXT
870016208	MULTI MOBILE GR4 1A-2C-1EC	1 FAP9D 1/2 BSP - 2 FAP15 3/4 BSP - 1EC7
870016211	MULTI MOBILE GR4 1A-2C	1 FAP9D 3/8 BSP - 2 FAP15 3/4 BSP
870016229	MULTI MOBILE GR4 1A-2C-1EC	1 FAP9D 3/8 BSP - 2 FAP15 3/4 BSP - 1EC7
870016241	MULTI MOBILE GR4 1A-2C	1 FAP9D 3/8 NPT - 2 FAP15 3/4 NPT
870016260	MULTI MOBILE GR4 1A-2C	1 FAP9D 3/8 SAE - 2 FAP15 3/4 SAE

MultiCoupling spare parts (couplings not included)		
Code		Name
806000278		MULTI FIX EMPTY GR4 2A-2C-2EC
806000279		MULTI MOBILE EMPTY GR4 2A-2C-2EC
815606246		CAP FIX MULTICOUPLING GR 139x90 V02
815606249		PARKING STATION MOBILE MULTICOUPLING GR 140x100
815701052	:	SPARE KIT LEVER GROUP GR 200x176



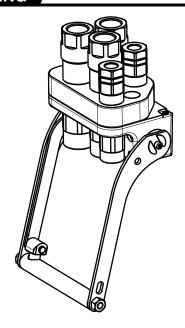
Fixed and mobile multicoupling 3,7 Kg and 1,7 Kg 139 (5.47) 151.9 (5.98) MOBILE MULTICOUPLING 90 (3.54) READY TO CONNECT POSITION HOLES FOR FIXING SCREWS X 118° 377 (14.84) 32.8 (1.29) 228.4 (8.99) 31 (1.22) Φ 8.5 (0.33) (2.57)65.3 115 (4.53) FIXED MULTICOUPLING (**(** CONNECTED POSITION 135.6 (5.34) 243.6 (9.59) 175.9 (6.93) Dimensions in millimeters (inch)

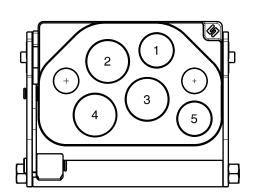












Possible configurations		
Pos	Coupling size	Predisposition for electrical connector
1	FAP13ZN	YES
2	FAP17ZN	-
3	FAP17ZN	-
4	FAP17ZN	-
5	FAP13ZN	YES

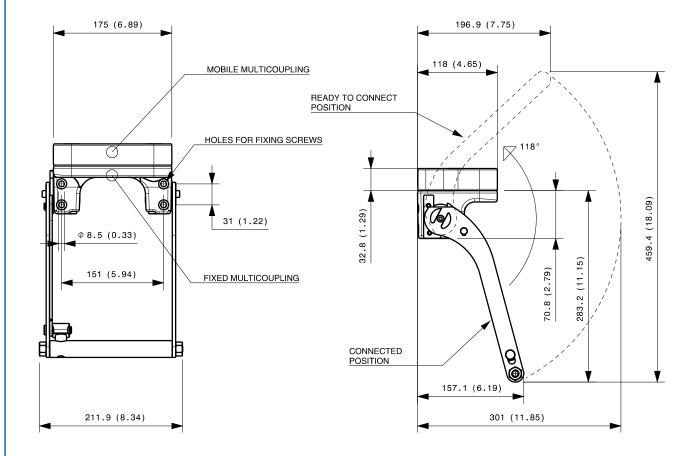
MultiCoupling (couplings included)		
Code	Name	Description
870015080	MULTI COMPLETE GR5 2B-3D	2 FAP13 1/2 BSP - 3 FAP17 3/4 BSP - CAP
870016033	MULTI COMPLETE GR5 2B-1D	2 FAP13 3/4 BSP - 1 FAP17 1 BSP - CAP
870016046	MULTI COMPLETE GR5 1B-3D	1 FAP13 3/4 BSP - 3 FAP17 1 BSP - CAP
870015180	MULTI FIX GR5 2B-3D	2 FAP13 1/2 BSP - 3 FAP17 3/4 BSP
870016122	MULTI FIX GR5 3D-2EC	3 FAP17 1 BSP - 2 EC6
870016147	MULTI FIX GR5 3D	3 FAP17 3/4 BSP
870016154	MULTI FIX GR5 1B-3D	1 FAP13 1/2 BSP - 3 FAP17 3/4 BSP
870016153	MULTI FIX GR5 3D	3 FAP17 1 BSP
870015280	MULTI MOBILE GR5 2B-3D	2 FAP13 1/2 BSP - 3 FAP17 3/4 BSP
870016222	MULTI MOBILE GR5 3D-2EC	3 FAP17 1 BSP - 2 EC6
870016247	MULTI MOBILE GR5 3D	3 FAP17 3/4 BSP
870016254	MULTI MOBILE GR5 1B-3D	1 FAP13 1/2 BSP - 3 FAP17 3/4 BSP
870016253	MULTI MOBILE GR5 3D	3 FAP17 1 BSP

MultiCoupling spare parts (couplings not included)		
Code	Name	
806000312	MULTI FIX EMPTY GR5 2B-3D-2EC	
806000313	MULTI MOBILE EMPTY GR5 2B-3D-2EC	
815606260	CAP FIX MULTICOUPLING GR 175x117 V02	
815606261	PARKING STATION MOBILE MULTICOUPLING GR 180x120 V02	
815701055	SPARE KIT LEVER GROUP GR 250x212	

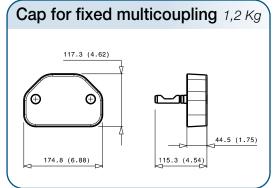


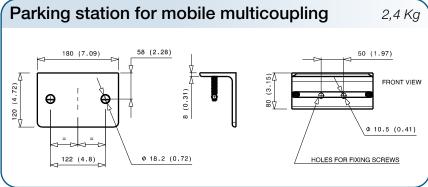
Fixed and mobile multicoupling

5,5 Kg and 2,7 Kg



Dimensions in millimeters (inch)





 GR53A-1D-1E-2EC

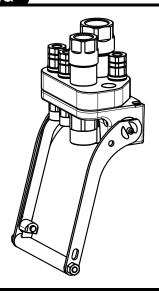
 Previous description
 Max. Resistance Body size
 FAP9 (A) 3/8"
 FAP13 (B) FAP15 (C) 5/8"
 FAP17 (D) FAP21 (E) FAP30 (G) 1-1/2"
 FAP30 (G) 1-1/2"

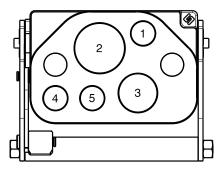


DRAWING









	Possible configurations		
Pos	Coupling size	Predisposition for electrical connector	
1	FAP9DZN	-	
2	FAP21ZN	-	
3	FAP17ZN	-	
4	FAP9DZN	YES	
5	FAP9DZN	YES	

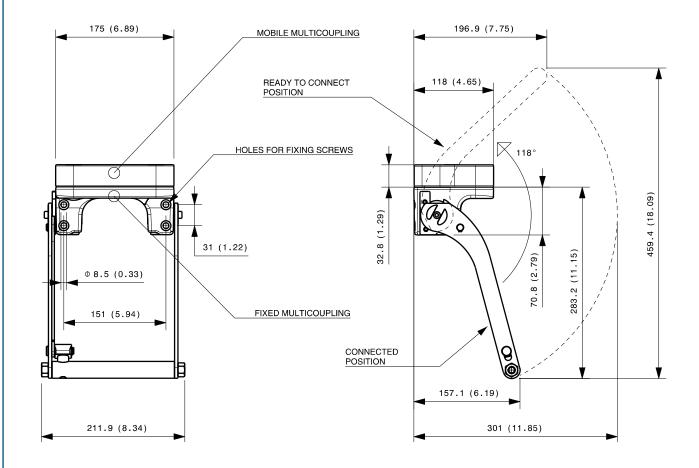
MultiCoupling (couplings included)			
Code		Name	Description
870015066	i	MULTI COMPLETE GR5 2A-1D-1E	2 FAP9D 3/8 BSP - 1 FAP17 1 BSP - 1 FAP21 1-1/4 BSP - CAP
870015079		MULTI COMPLETE GR5 1A-1D-1E-1EC	1 FAP9D 3/8 BSP - 1 FAP17 3/4 BSP - 1 FAP21 1 BSP - 1EC6 - CAP
870015084		MULTI COMPLETE GR5 1D-1E-2EC	1 FAP17 3/4 BSP - 1 FAP21 1 BSP - 2EC6 - CAP
870015099		MULTI COMPLETE GR5 2A-1D-1E	2 FAP9D 3/8 BSP - 1 FAP17 3/4 BSP - 1 FAP21 1 BSP - CAP
870016000		MULTI COMPLETE GR5 3A-1D-1E	3 FAP9D 1/2 BSP - 1 FAP17 1 BSP - 1 FAP21 1-1/4 BSP - CAP
870016030	i	MULTI COMPLETE GR5 2A-1D-1E-1EC6	1 FAP9D 3/8 BSP - 1 FAP9D 1/2 BSP - 1 FAP17 1 BSP - 1 FAP21 1-1/4 BSP - 1EC6 - CAP
870016042		MULTI COMPLETE GR5 1A-1D-1E	1 FAP9D 3/8 BSP - 1 FAP17 1 BSP - 1 FAP21 1-1/4 BSP - CAP
870016043		MULTI COMPLETE GR5 2A-1E	2 FAP9D 3/8 BSP - 1 FAP21 1-1/4 BSP - CAP
870015161		MULTI FIX GR5 2A-1D-1E	2 FAP9D 1/2 BSP - 1 FAP17 1 BSP - 1 FAP21 1-1/4 BSP
870015184		MULTI FIX GR5 1D-1E-2EC	1 FAP17 3/4 BSP - 1 FAP21 1 BSP - 2EC6
870015166		MULTI FIX GR5 2A-1D-1E	2 FAP9D 3/8 BSP - 1 FAP17 1 BSP - 1 FAP21 1-1/4 BSP
870015199		MULTI FIX GR5 2A-1D-1E	2 FAP9D 3/8 BSP - 1 FAP17 3/4 BSP - 1 FAP21 1 BSP
870016130		MULTI FIX GR5 2A-1D-1E-1EC	1 FAP9D 3/8 BSP - 1 FAP9D 1/2 BSP - 1 FAP17 1 BSP - 1 FAP21 1-1/4 BSP - 1EC6
870015261		MULTI MOBILE GR5 2A-1D-1E	2 FAP9D 1/2 BSP - 1 FAP17 1 BSP - 1 FAP21 1-1/4 BSP
870015266		MULTI MOBILE GR5 2A-1D-1E	2 FAP9D 3/8 BSP - 1 FAP17 1 BSP - 1 FAP21 1-1/4 BSP
870015284		MULTI MOBILE GR5 1D-1E-2EC	1 FAP17 3/4 BSP - 1 FAP21 1 BSP - 2EC6
870015299		MULTI MOBILE GR5 2A-1D-1E	2 FAP9D 3/8 BSP - 1 FAP17 3/4 BSP - 1 FAP21 1 BSP
870016230		MULTI MOBILE GR5 2A-1D-1E-1EC	1 FAP9D 3/8 BSP - 1 FAP9D 1/2 BSP - 1 FAP17 1 BSP - 1 FAP21 1-1/4 BSP - 1EC6

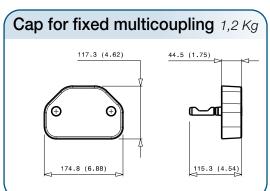
	MultiCoupling spare parts (couplings not included)		
Code	Name		
806000316	MULTI FIX EMPTY GR5 3A-1D-1E-2EC		
806000317	MULTI MOBILE EMPTY GR5 3A-1D-1E-2EC		
815606260	CAP FIX MULTICOUPLING GR 175x117 V02		
815606261	PARKING STATION MOBILE MULTICOUPLING GR 180x120 V02		
815701055	SPARE KIT LEVER GROUP GR 250x212		

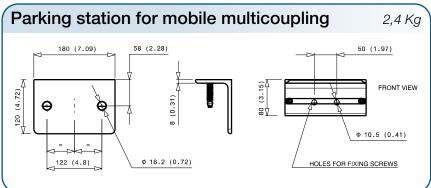


Fixed and mobile multicoupling

5,6 Kg and 2,8 Kg







Dimensions in millimeters (inch)

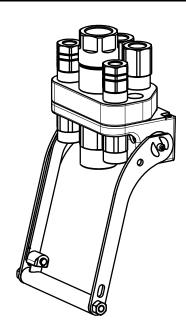
 GR52B-2C-1E-2EC

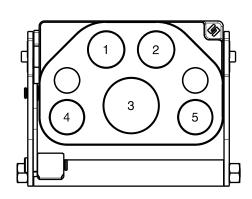
 Previous description
 Max. Resistance Body size
 FAP9 (A) 3/8"
 FAP13 (B) 5/8"
 FAP17 (D) FAP21 (E) FAP30 (G) 1-1/2"
 FAP30 (G) 1-1/2"



DRAWING







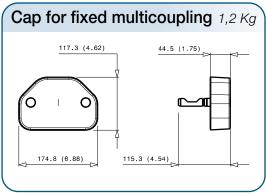
Possible configurations		
Pos	Coupling size	Predisposition for electrical connector
1	FAP15ZN	-
2	FAP15ZN	-
3	FAP21ZN	-
4	FAP13ZN	YES
5	FAP13ZN	YES

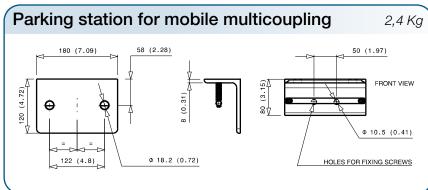
MultiCoupling (couplings included)		
Code	Name	Description
870016051	MULTI COMPLETE GR5 2B-1C-1E	2 FAP13 1/2 BSP - 1 FAP15 3/4 BSP - 1FAP21 1 BSP - CAP
870015063	MULTI COMPLETE GR5 2B-2C-1E	2 FAP13 1/2 BSP - 2 FAP15 3/4 BSP - 1 FAP21 1-1/4 BSP - CAP
870015097	MULTI COMPLETE GR5 2C-1E	2 FAP15 3/4 BSP - 1 FAP21 1 BSP - CAP
870016003	MULTI COMPLETE GR5 2C-1E	2 FAP15 3/4 BSP - 1 FAP21 1-1/4 BSP - CAP
870016012	MULTI COMPLETE GR5 2B-2C	2 FAP13 1/2 BSP - 2 FAP15 3/4 BSP - CAP
870015157	MULTI FIX GR5 1B-2C-1E	1 FAP13 1/2 BSP - 2 FAP15 3/4 BSP - 1 FAP21 1 BSP
870015257	MULTI MOBILE GR5 1B-2C-1E	1 FAP13 1/2 BSP - 2 FAP15 3/4 BSP - 1 FAP21 1 BSP
870016258	MULTI MOBILE GR5 1B-1C-1E	1 FAP13 1/2 BSP - 1 FAP15 3/4 BSP - 1 FAP21 1 BSP
870016257	MULTI MOBILE GR5 1C-1E	1 FAP15 3/4 BSP - 1 FAP21 1 BSP

MultiCoupling spare parts (couplings not included)			
Code	Nam	e	
806000314	Ml	ULTI FIX EMPTY GR5 2B-2C-1E	
806000315	MU	ULTI MOBILE EMPTY GR5 2B-2C-1E	
815606260	CA	AP FIX MULTICOUPLING GR 175x117 V02	
815606261	PA	RKING STATION MOBILE MULTICOUPLING GR 180x120 V02	
815701055	SP	PARE KIT LEVER GROUP GR 250x212	



Fixed and mobile multicoupling 5,5 Kg and 2,6 Kg 196.9 (7.75) 175 (6.89) MOBILE MULTICOUPLING 118 (4.65) READY TO CONNECT POSITION 118° HOLES FOR FIXING SCREWS Ø 459.4 (18.09) 32.75 (1.29) 31 (1.22) 70.8 (2.79) Φ 8.5 (0.33) 151 (5.94) FIXED MULTICOUPLING CONNECTED POSITION 157.1 (6.19) 211.9 (8.34) 301 (11.85)

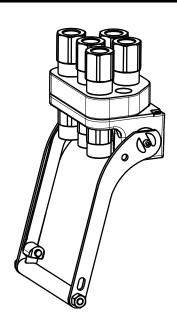




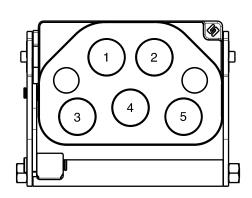
Dimensions in millimeters (inch)







CONFIGURATIONS



Possible configurations		
Pos	Coupling size	Predisposition for electrical connector
1	FAP15ZN	-
2	FAP15ZN	-
3	FAP15ZN	*
4	FAP15ZN	-
5	FAP15ZN	*

* upon request

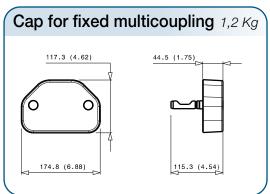
MultiCoupling (couplings included)		
Code	Name	Description
870016010	MULTI COMPLETE GR5 5C	5 FAP15 3/4 BSP - CAP
870016110	MULTI FIX GR5 5C	5 FAP15 3/4 BSP
870016210	MULTI MOBILE GR5 5C	5 FAP15 3/4 BSP

MultiCoupling spare parts (couplings not included)			
Code		Name	
806000326		MULTI FIX EMPTY GR5 5C	
806000327		MULTI MOBILE EMPTY GR5 5C	
815606260		CAP FIX MULTICOUPLING GR 175x117 V02	
815606261		PARKING STATION MOBILE MULTICOUPLING GR 180x120 V02	
815701055		SPARE KIT LEVER GROUP GR 250x212	

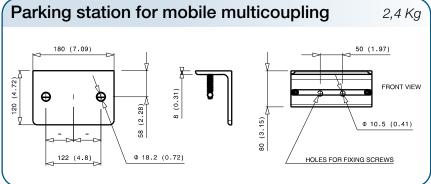


Fixed and mobile multicoupling 5,6 Kg and 2,8 Kg READY TO CONNECT POSITION 175 (6.89) 196.9 (7.75) 118 (4.65) MOBILE MULTICOUPLING HOLES FOR FIXING SCREWS ∑ 118° 60 31 (1.22) 70.8 (2.79) 283.2 (11.15) Φ 8.5 (0.33) 151 (5.94) FIXED MULTICOUPLING CONNECTED POSITION 157.1 (6.19)

Dimensions in millimeters (inch)



211.9 (8.34)

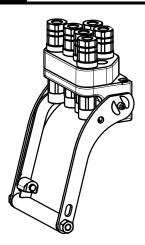


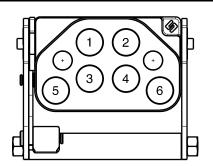
301 (11.85)











Possible configurations		
Pos	Coupling size	Predisposition for electrical connector
1	FAP9AZN	-
2	FAP9AZN	-
3	FAP9AZN	-
4	FAP9AZN	-
5	FAP9AZN	YES
6	FAP9AZN	YES

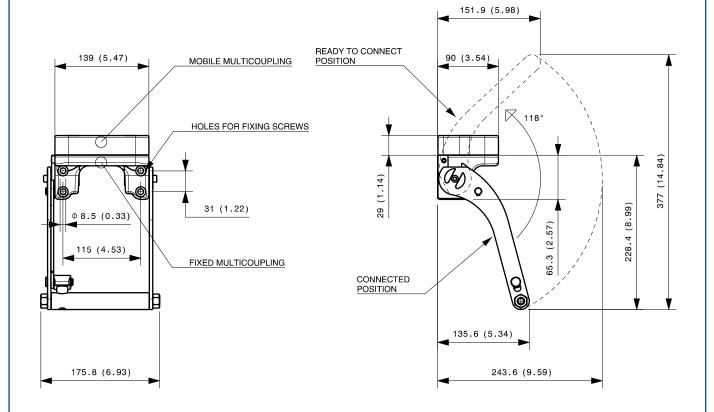
MultiCoupling (couplings included)		
Code	Name	Description
870000074	MULTI COMPLETE GR6 5A	5 FAP9A 3/8 BSP - CAP
870000075	MULTI COMPLETE GR6 6A	6 FAP9A 1/2 BSP - CAP
870000079	MULTI COMPLETE GR6 6A	6 FAP9A 3/8 BSP - CAP
870000080	MULTI COMPLETE GR6 4A	4 FAP9A 1/2 BSP - CAP
870000081	MULTI COMPLETE GR6 4A-2EC	4 FAP9A L15 - 2EC7 - CAP
870000086	MULTI COMPLETE GR6 4A-1EC	4 FAP9A 1/2 NPT - 1EC7 - CAP
870015096	MULTI COMPLETE GR6 5A	5 FAP9A 1/4 BSP - CAP
870000172	MULTI FIX GR6 2A	2 FAP9A 3/8 BSP
870000174	Multi fix GR6 5A	5 FAP9A 3/8 BSP
870000179	Multi fix GR6 6A	6 FAP9A 3/8 BSP
870000180	MULTI FIX GR6 4A	4 FAP9A 1/2 BSP
870000185	MULTI FIX GR6 4A	3 FAP9A 1/4 SAE - 1 FAP9A 3/8 SAE
870000187	MULTI FIX GR6 6A	6 FAP9A 1/2 NPT
870016144	MULTI FIX GR6 4A	4 FAP9A 3/8 BSP
870000273	MULTI MOBILE GR6 5A	5 FAP9A 3/8 BSP
870000275	MULTI MOBILE GR6 6A	6 FAP9A 1/2 BSP
870000279	MULTI MOBILE GR6 6A	6 FAP9A 3/8 BSP
870000280	MULTI MOBILE GR6 4A	4 FAP9A 1/2 BSP
870000285	MULTI MOBILE GR6 4A	3 FAP9A 1/4 SAE - 1 FAP9A 3/8 SAE
870000287	MULTI MOBILE GR6 6A	6 FAP9A 1/2 NPT

MultiCoupling spare parts (couplings not included)			
Code	Name		
806000262	MULTI F	FIX EMPTY GR6 6A-2EC	
806000263	MULTI N	MOBILE EMPTY GR6 6A-2EC	
815606248	CAP FIX	MULTICOUPLING GR 139x90	
815606249	PARKIN	G STATION MOBILE MULTICOUPLING GR 140x100	
815701052	SPARE I	KIT LEVER GROUP GR 200x176	

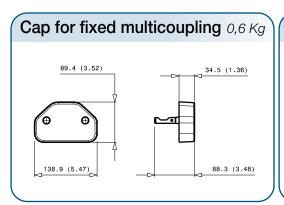


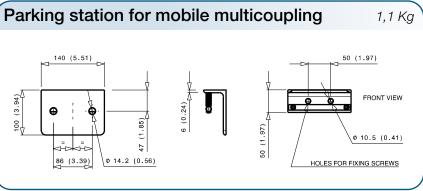
Fixed and mobile multicoupling

3,7 Kg and 1,5 Kg



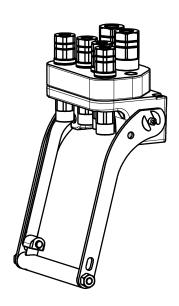
Dimensions in millimeters (inch)

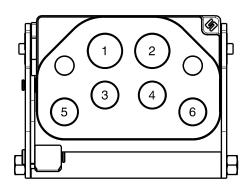












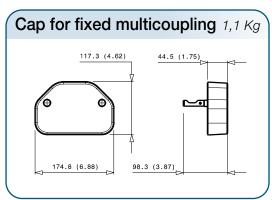
Possible configurations			
Pos	Coupling size	Predisposition for electrical connector	
1	FAP13ZN	-	
2	FAP13ZN	-	
3	FAP9DZN	-	
4	FAP9DZN	-	
5	FAP9DZN	YES	
6	FAP9DZN	YES	

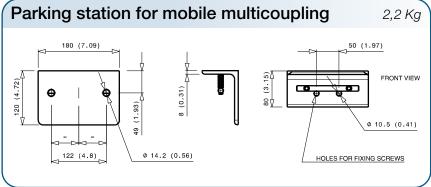
MultiCoupling (couplings included)			
Code	Name	Description	
870015064	MULTI COMPLETE GR6 4A-2B	4 FAP9D 1/2 BSP - 2 FAP13 3/4 BSP - CAP	
870016002	MULTI COMPLETE GR6 4A-2B	4 FAP9D 3/8 BSP - 2 FAP13 3/4 BSP - CAP	
870016032	MULTI COMPLETE GR6 2A 2B	2 FAP9D 3/8 BSP - 2 FAP13 1/2 BSP - CAP	
870016034	MULTI COMPLETE GR6 2A-2B-2EC	2 FAP9D 3/8 BSP - 2 FAP13 1/2 BSP - 2 EC6 - CAP	
870016013	MULTI COMPLETE GR6 4A-1B	4 FAP9DZ 1/4 BSP - 1 FAP13ZN 1/2 BSP	
870015190	Multi fix GR6 4A-2B	4 FAP9D 3/8 BSP - 1 FAP13 1/2 BSP - 1 FAP13 3/4 BSP	
870016132	MULTI FIX GR6 2A 2B	2 FAP9D 3/8 BSP - 2 FAP13 1/2 BSP	
870016134	MULTI FIX GR6 2A-2B-2EC	2 FAP9D 3/8 BSP - 2 FAP13 1/2 BSP - 2 EC6	
870015290	MULTI MOBILE GR6 4A-2B	4 FAP9D 3/8 BSP - 1 FAP13 1/2 BSP - 1 FAP13 3/4 BSP	
870016232	MULTI MOBILE GR6 2A 2B	2 FAP9D 3/8 BSP - 2 FAP13 1/2 BSP	
870016234	MULTI MOBILE GR6 2A-2B-2EC	2 FAP9D 3/8 BSP - 2 FAP13 1/2 BSP - 2 EC6	

MultiCoupling spare parts (couplings not included)		
Code	Name	
806000294	MULTI FIX EMPTY GR6 4A-2B-2EC	
806000295	MULTI MOBILE EMPTY GR6 4A-2B-2EC	
815606256	CAP FIX MULTICOUPLING GR 175x117	
815606257	PARKING STATION MOBILE MULTICOUPLING GR 180x120	
815700999	SPARE KIT LEVER GROUP GR 250x212	



Fixed and mobile multicoupling 5,9 Kg and 2,8 Kg 175 (6.89) 194.4 (7.65) MOBILE MULTICOUPLING 118 (4.65) READY TO CONNECT POSITION 118° HOLES FOR FIXING SCREWS 459.4 (18.09) 32.8 (1.29) • 31 (1.22) 276.7 (10.89) Φ 8.5 (0.33) 70.8 (2.79) 151 (5.94) FIXED MULTICOUPLING CONNECTED POSITION 154.6 (6.09) 211.9 (8.34) 298.5 (11.75)

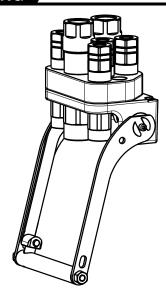


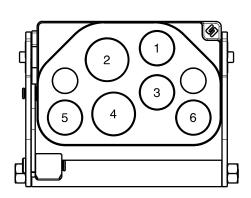


Dimensions in millimeters (inch)









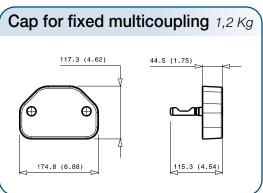
Possible configurations				
Pos	Coupling size	Predisposition for electrical connector		
1	FAP13ZN	YES		
2	FAP17ZN	-		
3	FAP13ZN	YES		
4	FAP17ZN	-		
5	FAP13ZN	YES		
6	FAP13ZN	YES		

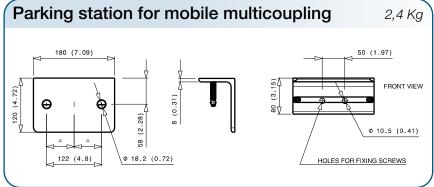
MultiCoupling (couplings included)			
Code	Name	Description	
870015073	MULTI COMPLETE GR6 4B-2D	4 FAP13 1/2 BSP - 2 FAP17 3/4 BSP - CAP	
870016031	MULTI COMPLETE GR6 2B 2D 2EC	2 FAP13 1/2 BSP - 2 FAP17 1 BSP - 2EC7 - CAP	
870016036	MULTI COMPLETE GR6 4B-2D	2 FAP13 1/2 BSP - 2 FAP13 3/4 BSP - 1 FAP17 3/4 BSP - 1 FAP17 1 BSP - CAP	
870015173	MULTI FIX GR6 4B-2D	4 FAP13 1/2 BSP - 2 FAP17 3/4 BSP	
870016131	MULTI FIX GR6 2B 2D 2EC	2 FAP13 1/2 BSP - 2 FAP17 1 BSP - 2EC7	
870016149	MULTI FIX GR6 4B-2D	2 FAP13 1/2 BSP - 2 FAP13 3/4 BSP - 2 FAP17 1 BSP	
870015273	MULTI MOBILE GR6 4B-2D	4 FAP13 1/2 BSP - 2 FAP17 3/4 BSP	
870016231	MULTI MOBILE GR6 2B 2D 2EC	2 FAP13 1/2 BSP - 2 FAP17 1 BSP - 2EC7	
870016249	MULTI MOBILE GR6 4B-2D	2 FAP13 1/2 BSP - 2 FAP13 3/4 BSP - 2 FAP17 1 BSP	

MultiCoupling spare parts (couplings not included)			
Code		Name	
806000322		MULTI FIX EMPTY GR6 4B-2D-4EC	
806000323		MULTI MOBILE EMPTY GR6 4B-2D-4EC	
815606260		CAP FIX MULTICOUPLING GR 175x117 V02	
815606261		PARKING STATION MOBILE MULTICOUPLING GR 180x120 VO2	
815701055		SPARE KIT LEVER GROUP GR 250x212	



Fixed and mobile multicoupling 5,4 Kg and 2,6 Kg 196.9 (7.75) 175 (6.89) 118 (4.65) MOBILE MULTICOUPLING READY TO CONNECT POSITION HOLES FOR FIXING SCREWS 459.4 (18.09) 32.8 (1.29) 31 (1.22) 283.2 (11.15) Φ 8.5 (0.33) 70.8 (2.79) 151 (5.94) FIXED MULTICOUPLING CONNECTED POSITION 157.1 (6.19) 211.9 (8.34) 301 (11.85)





Dimensions in millimeters (inch)

 GR6 2A - 2B - 2C - 2EC

 Previous description
 Max. Resistance Body size
 FAP9 (A) 3/8"
 FAP13 (B) 5/8"
 FAP15 (C) 5/8"
 FAP17 (D) FAP21 (E) FAP30 (G) 1-1/2"
 FAP30 (G) 1-1/2"

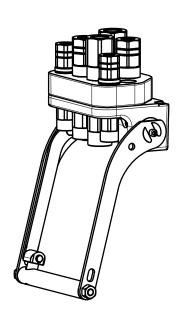
 GRM6MCZN

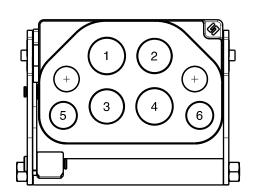


DRAWING









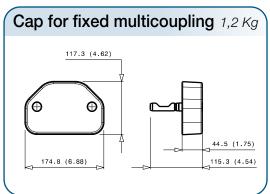
Possible configurations				
Pos	Coupling size	Predisposition for electrical connector		
1	FAP15ZN	-		
2	FAP13ZN	-		
3	FAP13ZN	-		
4	FAP15ZN	-		
5	FAP9DZN	YES		
6	FAP9DZN	YES		

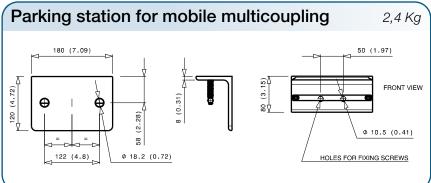
MultiCoupling (couplings included)			
Code	Name	Description	
870016016	MULTI COMPLETE GR6 2A-2B-2C	2 FAP9D 3/8 BSP - 2 FAP13 1/2 BSP - 2 FAP15 3/4 BSP - CAP	
870016028	MULTI COMPLETE GR6 1A-2B-2C	1 FAP9D 3/8 BSP - 2 FAP13 1/2 BSP - 2 FAP15 3/4 BSP - CAP	
870016116	MULTI FIX GR6 2A-2B-2C	2 FAP9D 3/8 BSP - 2 FAP13 1/2 BSP - 2 FAP15 3/4 BSP	
870016128	MULTI FIX GR6 1A-2B-2C	1 FAP9D 3/8 BSP - 2 FAP13 1/2 BSP - 2 FAP15 3/4 BSP	
870016135	MULTI FIX GR6 1A-2B-2C	1 FAP9D 1/2 BSP - 2 FAP13 1/2 BSP - 2 FAP15 3/4 BSP	
870016216	MULTI MOBILE GR6 2A-2B-2C	2 FAP9D 3/8 BSP - 2 FAP13 1/2 BSP - 2 FAP15 3/4 BSP	
870016228	MULTI MOBILE GR6 1A-2B-2C	1 FAP9D 3/8 BSP - 2 FAP13 1/2 BSP - 2 FAP15 3/4 BSP	
870016235	MULTI MOBILE GR6 1A-2B-2C	1 FAP9D 1/2 BSP - 2 FAP13 1/2 BSP - 2 FAP15 3/4 BSP	

MultiCoupling spare parts (couplings not included)			
Code	ا	Name	
806000318		MULTI FIX EMPTY GR6 2A-2B-2C-2EC	
806000319		MULTI MOBILE EMPTY GR6 2A-2B-2C-2EC	
815606260		CAP FIX MULTICOUPLING GR 175x117 V02	
815606261		PARKING STATION MOBILE MULTICOUPLING GR 180x120 V02	
815701055	i	SPARE KIT LEVER GROUP GR 250x212	



Fixed and mobile multicoupling 5,7 Kg and 2,9 Kg 196.9 (7.75) FIXED MULTICOUPLING READY TO CONNECT POSITION 175 (6.89) 118 (4.65) MOBILE MULTICOUPLING X 118° 31 (1.22) 60 459.4 (18. 32.8 (1.29) 283.2 (11.15) Φ 8.5 (0.33) 151 (5.94) HOLES FOR FIXING SCREWS CONNECTED **POSITION** 211.9 (8.34) 157.1 (6.19) 301 (11.85)

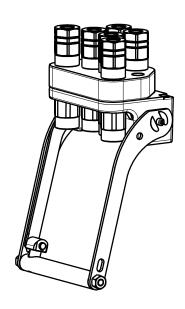


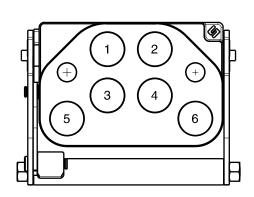


Dimensions in millimeters (inch)









Possible configurations				
Pos	Coupling size	Predisposition for electrical connector		
1	FAP13ZN	=		
2	FAP13ZN	-		
3	FAP13ZN	-		
4	FAP13ZN	-		
5	FAP13ZN	YES		
6	FAP13ZN	YES		

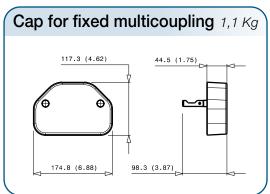
	MultiCoupling (couplings included)			
Code		Name	Description	
870002030	į	MULTI COMPLETE GR6 6B	6 FAP13 3/4 BSP - CAP	
870002031		MULTI COMPLETE GR6 6B	6 FAP13 1/2 BSP - CAP	
870002130		MULTI FIX GR6 6B	6 FAP13 3/4 BSP	
870002131		MULTI FIX GR6 6B	6 FAP13 1/2 BSP	
870002209		MULTI MOBILE GR6 2B	2 FAP13 3/4 BSP	
870002230		MULTI MOBILE GR6 6B	6 FAP13 3/4 BSP	
870002231		MULTI MOBILE GR6 6B	6 FAP13 1/2 BSP	

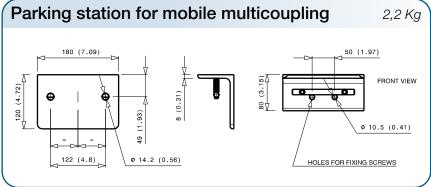
MultiCoupling spare parts (couplings not included)			
Code		Name	
806000292	i	MULTI FIX EMPTY GR6 6B-2EC	
806000293		MULTI MOBILE EMPTY GR6 6B-2EC	
815606256	i	CAP FIX MULTICOUPLING GR 175x117	
815606257	i	PARKING STATION MOBILE MULTICOUPLING GR 180x120	
815700999	i	SPARE KIT LEVER GROUP GR 250x212	



Fixed and mobile multicoupling 5,8 Kg and 2,7 Kg 194.4 (7.65) 118 (4.65) 175 (6.89) MOBILE MULTICOUPLING READY TO CONNECT POSITION HOLES FOR FIXING SCREWS 118° 459.4 (18.09) 32.8 (1.29) 31 (1.22) 276.7 (10.89) Φ 8.5 (0.33) 151 (5.94) FIXED MULTICOUPLING CONNECTED POSITION 154.6 (6.09) 211.9 (8.34) 298.5 (11.75)

Dimensions in millimeters (inch)





 GR6 3A-1B-1C-1D-2EC

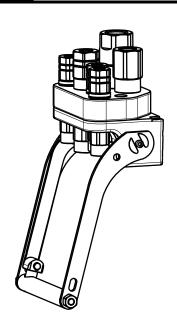
 Previous description
 Max. Resistance Body size
 FAP9 (A) 3/8"
 FAP13 (B) 1/2"
 FAP15 (C) FAP17 (D) FAP21 (E) FAP30 (G) 1-1/2"
 FAP30 (G) 1-1/2"

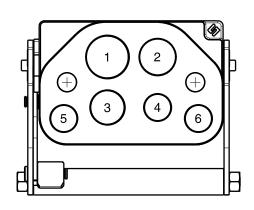


DRAWING









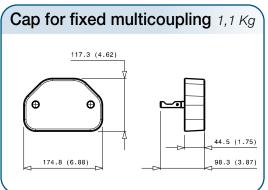
Possible configurations			
Pos	Coupling size	Predisposition for electrical connector	
1	FAP17ZN	-	
2	FAP15ZN	-	
3	FAP13ZN	-	
4	FAP9DZN	-	
5	FAP9DZN	YES	
6	FAP9DZN	YES	

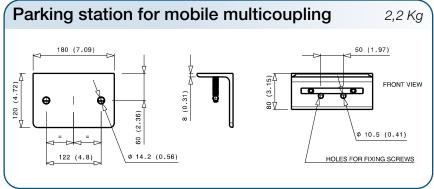
MultiCoupling (couplings included)				
Code		Name		Description
870016017		MULTI COMPLETE GR6 3A-1B-1C-1D		3 FAP9D 3/8 BSP - 1 FAP13 1/2 BSP - 1 FAP15 3/4 BSP - 1 FAP17 1 BSP - CAP
870016117		MULTI FIX GR6 3A-1B-1C-1D		3 FAP9D 3/8 BSP - 1 FAP13 1/2 BSP - 1 FAP15 3/4 BSP - 1 FAP17 1 BSP
870016123		MULTI FIX GR6 3A-1B-1C-1D		3 FAP9D 3/8 SAE - 1 FAP13 1/2 SAE - 1 FAP15 3/4 SAE - 1 FAP17 1 SAE
870016217		MULTI MOBILE GR6 3A-1B-1C-1D		3 FAP9D 3/8 BSP - 1 FAP13 1/2 BSP - 1 FAP15 3/4 BSP - 1 FAP17 1 BSP
870016223		MULTI MOBILE GR6 3A-1B-1C-1D		3 FAP9D 3/8 SAE - 1 FAP13 1/2 SAE - 1 FAP15 3/4 SAE - 1 FAP17 1 SAE

	MultiCoupling spare parts (couplings not included)			
Code	lame			
806000296	MULTI FIX EMPTY GR6 3A-1B-1C-1D-2EC			
806000297	MULTI MOBILE EMPTY GR6 3A-1B-1C-1D-2EC			
815606258	CAP FIX MULTICOUPLING GR 175x117 V01			
815606259	PARKING STATION MOBILE MULTICOUPLING GR 180x120 V01			
815700999	SPARE KIT LEVER GROUP GR 250x212			



Fixed and mobile multicoupling 5,8 Kg and 2,8 Kg 205.4 (8.09) FIXED MULTICOUPLING READY TO CONNECT 175 (6.89) 118 (4.65) POSITION MOBILE MULTICOUPLING 118° 31 (1.22) 32.8 (1.29) Φ 8.5 (0.33) 151 (5.94) HOLES FOR FIXING SCREWS CONNECTED POSITION ١ 165.6 (6.52) 211.9 (8.34) 309.5 (12.18)





Dimensions in millimeters (inch)

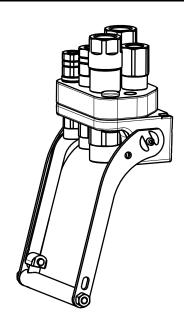
 GR6 1A-1B-1C-2D-1EC

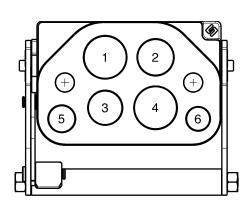
 Previous description Body size
 Max. Resistance FAP9 (A) 3/8" FAP13 (B) 5/8" FAP15 (C) FAP17 (D) FAP21 (E) FAP30 (G) 1-1/2"



DRAWING







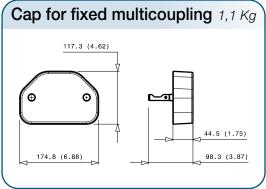
Possible configurations		
Pos	Coupling size Predisposition for electrical connector	
1	FAP17ZN	-
2	FAP15ZN	-
3	FAP13ZN	-
4	FAP17ZN	-
5	FAP9DZN	YES
6	PLUG	-

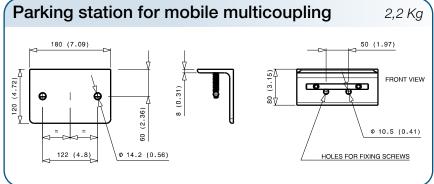
MultiCoupling (couplings included)			
Code		Name	Description
870016018	i	MULTI COMPLETE GR6 1A-1B-1C-2D	1 FAP9D 3/8 BSP - 1 FAP13 1/2 BSP - 1 FAP15 3/4 BSP - 2 FAP17 1 BSP - CAP
870016118		MULTI FIX GR6 1A-1B-1C-2D	1 FAP9D 3/8 BSP - 1 FAP13 1/2 BSP - 1 FAP15 3/4 BSP - 2 FAP17 1 BSP
870016218		MULTI MOBILE GR6 1A-1B-1C-2D	1 FAP9D 3/8 BSP - 1 FAP13 1/2 BSP - 1 FAP15 3/4 BSP - 2 FAP17 1 BSP

MultiCoupling spare parts (couplings not included)			
Code	Name		
806000298	MULTI FIX EMPTY GR6 1A-1B-1C-2D-1EC		
806000299	MULTI MOBILE EMPTY GR6 1A-1B-1C-2D-1EC		
815606258	CAP FIX MULTICOUPLING GR 175x117 V01		
815606259	PARKING STATION MOBILE MULTICOUPLING GR 180x120 V01		
815700999	SPARE KIT LEVER GROUP GR 250x212		



Fixed and mobile multicoupling 5,7 Kg and 2,6 Kg 205.4 (8.09) FIXED MULTICOUPLING READY TO CONNECT 175 (6.89) 118 (4.65) **POSITION** MOBILE MULTICOUPLING 31 (1.22) 459.4 (18.09) 32.8 (1.29) 276.7 (10.89) Φ 8.5 (0.33) 151 (5.94) HOLES FOR FIXING SCREWS CONNECTED POSITION 165.6 (6.52) 211.9 (8.34) 309.5 (12.18) Dimensions in millimeters (inch)





 GR62A-2C-2D-2EC

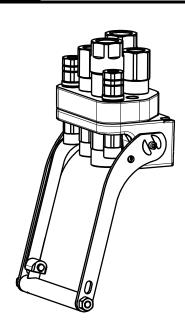
 Previous description
 Max. Resistance Body size
 FAP9 (A) 3/8"
 FAP13 (B) 1/2"
 FAP15 (C) 5/8"
 FAP17 (D) 5/8"
 FAP21 (E) 1-1/2"
 FAP30 (G) 1-1/2"

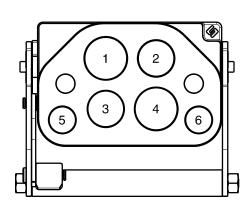


DRAWING









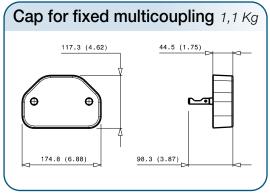
Possible configurations		
Pos	Coupling size Predisposition for electrical connector	
1	FAP17ZN	-
2	FAP15ZN	-
3	FAP15ZN	-
4	FAP17ZN	-
5	FAP9DZN	YES
6	FAP9DZN	YES

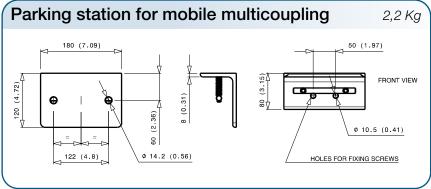
MultiCoupling (couplings included)		
Code	Name	Description
870015062	MULTI COMPLETE GR6 1A-2C-2D	1 FAP9D 3/8 BSP - 2 FAP15 3/4 BSP - 2 FAP17 1 BSP - CAP
870015092	MULTI COMPLETE GR6 2A-2C-2D	2 FAP9D 3/8 BSP - 2 FAP15 3/4 BSP - 2 FAP17 1 BSP - CAP
870015094	MULTI COMPLETE GR6 2A-2C-1D	2 FAP9D 3/8 BSP - 2 FAP15 3/4 BSP - 1 FAP17 1 BSP - CAP
870015098	MULTI COMPLETE GR6 2A-2D	2 FAP9D 3/8 BSP - 2 FAP17 1 BSP - CAP
870015155	MULTI FIX GR6 2D-2EC	2 FAP17 1 BSP - 2 EC6
870015198	MULTI FIX GR6 2A-2D	2 FAP9D 3/8 BSP - 2 FAP17 1 BSP
870015255	MULTI MOBILE GR6 2D-2EC	2 FAP17 1 BSP - 2 EC6
870015298	MULTI MOBILE GR6 2A-2D	2 FAP9D 3/8 BSP - 2 FAP17 1 BSP

	MultiCoupling spare parts (couplings not included)		
Code	ا	Name	
806000300		MULTI FIX EMPTY GR6 2A-2C-2D-2EC	
806000301		MULTI MOBILE EMPTY GR6 2A-2C-2D-2EC	
815606258		CAP FIX MULTICOUPLING GR 175x117 V01	
815606259		PARKING STATION MOBILE MULTICOUPLING GR 180x120 V01	
815700999		SPARE KIT LEVER GROUP GR 250x212	



Fixed and mobile multicoupling 5,7 Kg and 2,6 Kg 175 (6.89) 205.4 (8.09) MOBILE MULTICOUPLING 118 (4.65) READY TO CONNECT POSITION HOLES FOR FIXING SCREWS 459.4 (18.09) 8 (1.29) • 31 (1.22) 276.7 (10.89) Φ 8.5 (0.33) 151 (4.53) FIXED MULTICOUPLING CONNECTED 165.6 (6.52) **POSITION** 211.9 (8.34) 309.5 (12.18)





Dimensions in millimeters (inch)

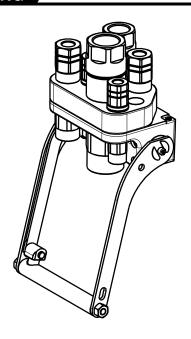
 GR6 2A - 2B - 1D - 1E - 2E C

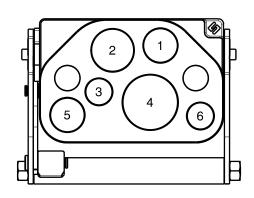
 Previous description
 Max. Resistance Body size
 FAP9 (A) 3/8"
 FAP13 (B) 1/2"
 FAP15 (C) 5/8"
 FAP17 (D) 5/8"
 FAP21 (E) 1-1/2"
 FAP30 (G) 1-1/2"



DRAWING







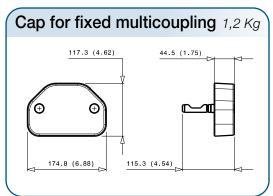
Possible configurations		
Pos	Coupling size Predisposition for electrical connector	
1	FAP13ZN	-
2	FAP17ZN	-
3	FAP9DZN	YES
4	FAP21ZN	-
5	FAP13ZN	-
6	FAP9DZN	YES

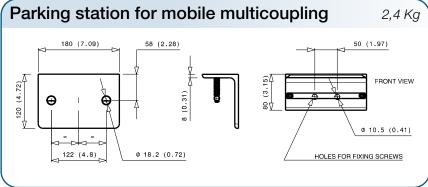
	MultiCoupling (couplings included)		
Code		Name	Description
870015059	:	MULTI COMPLETE GR6 1A-2B-1D-1E	1 FAP9D 3/8 BSP - 2 FAP13 1/2 BSP - 1 FAP17 1 BSP - 1 FAP21 1-1/4 BSP - CAP
870015070		MULTI COMPLETE GR6 1A-2B-1D-1E	1 FAP9D 3/8 BSP - 2 FAQ13 1/2 BSP - 1 FAP17 1 BSP - 1 FAP21 1-1/4 BSP - CAP
870015093		MULTI COMPLETE GR6 1A-2B-1D	1 FAP9D 3/8 BSP - 2 FAP13 1/2 BSP - 1 FAP17 3/4 BSP - CAP
870015170		MULTI FIX GR6 1A-2B-1D-1E	1 FAP9D 3/8 BSP - 2 FAQ13 1/2 BSP - 1 FAP17 1 BSP - 1 FAP21 1-1/4 BSP
870015270		MULTI MOBILE GR6 1A-2B-1D-1E	1 FAP9D 3/8 BSP - 2 FAQ13 1/2 BSP - 1 FAP17 1 BSP - 1 FAP21 1-1/4 BSP
870016037		MULTI COMPLETE GR6 2A-2B-1D-1E	2 FAP9D 1/2 BSP - 2 FAP13 3/4 BSP - 1 FAP17 1 BSP - 1 FAP21 1-1/4 BSP - CAP

MultiCoupling spare parts (couplings not included)			
Code	Name		
806000306	MULTI FIX EMPTY GR6 2A-2B-1D-1E-2EC		
806000307	MULTI MOBILE EMPTY GR6 2A-2B-1D-1E-2EC		
815606260	CAP FIX MULTICOUPLING GR 175x117 V02		
815606261	PARKING STATION MOBILE MULTICOUPLING GR 180x120 VO2		
815701055	SPARE KIT LEVER GROUP GR 250x212		



Fixed and mobile multicoupling 5,4 Kg and 2,6 Kg 175 (6.89) 196.9 (7.75) MOBILE MULTICOUPLING 118 (4.65) READY TO CONNECT HOLES FOR FIXING SCREWS X118° 32.8 (1.29) 31 (1.22) 283.2 (11.15) (2.79)Φ 8.5 (0.33) 151 (5.94) FIXED MULTICOUPLING CONNECTED 157.1 (6.19) POSITION 211.9 (8.34) 301 (11.85)



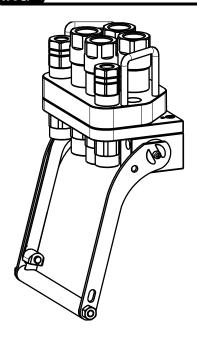


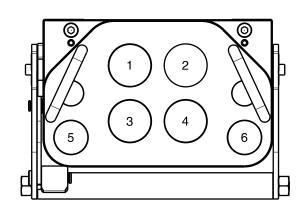
Dimensions in millimeters (inch)











Possible configurations		
Pos	Coupling size Predisposition for electrical connector	
1	FAP17ZN	-
2	FAP17ZN	-
3	FAP17ZN	-
4	FAP17ZN	-
5	FAP13ZN	YES
6	FAP13ZN	YES

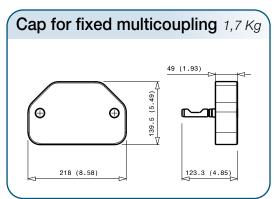
	MultiCoupling (couplings included)			
Code	Name	Description		
870015067	MULTI COMPLETE GR6 1B-4D	1 FAQ13 1/2 BSP - 4 FAP17 1 BSP - CAP		
870016004	MULTI COMPLETE GR6 1B-4D	1 FAP13 1/2 BSP - 4 FAP17 1 BSP - CAP		
870016038	MULTI COMPLETE GR6 2B-4D	2 FAP13 3/4 BSP - 4 FAP17 1 BSP - CAP		
870016105	MULTI FIX GR6 2D	2 FAP17 1 BSP		
870016124	MULTI FIX GR6 2B-4D	2 FAP13 1/2 SAE - 4 FAP17 1 SAE		
870016205	MULTI MOBILE GR6 2D	2 FAP17 1 BSP		
870016224	MULTI MOBILE GR6 2B-4D	2 FAP13 1/2 SAE - 4 FAP17 1 SAE		

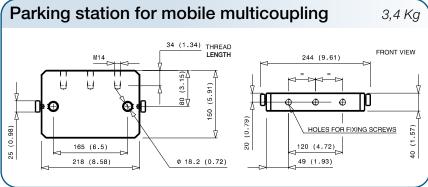
MultiCoupling spare parts (couplings not included)		
Code		Name
806000338	•	MULTI FIX EMPTY GR6 2B-4D-2EC
806000339		MULTI MOBILE EMPTY GR6 2B-4D-2EC
815606262		CAP FIX MULTICOUPLING GR 218x140
815606263		PARKING STATION MOBILE MULTICOUPLING GR 218x150
815701056	i	SPARE KIT LEVER GROUP GR 250x256



Fixed and mobile multicoupling 7,7 Kg and 5,0 Kg 218 (8.58) 210.6 (8.29) MOBILE MULTICOUPLING READY TO CONNECT 140.2 (5.52) POSITION (2.99) ∕118° HOLES FOR FIXING SCREWS 60 459.4 (18. 32.8 (1.29) • 31 (1.22) Φ 8.5 (0.33) FIXED MULTICOUPLING 194 (7.64) CONNECTED **POSITION** 170.8 (6.72) 254.8 (10.04) 314.7 (12.39)

Dimensions in millimeters (inch)

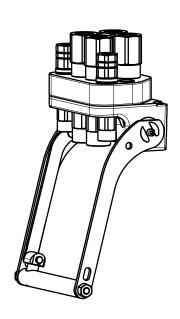


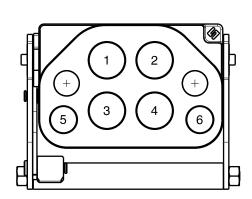












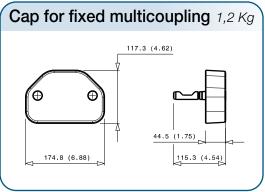
Possible configurations		
Pos	Coupling size	Predisposition for electrical connector
1	FAP15ZN	-
2	FAP15ZN	-
3	FAP15ZN	-
4	FAP15ZN	-
5	FAP9DZN	YES
6	FAP9DZN	YES

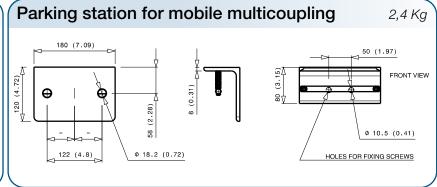
MultiCoupling (couplings included)			
Code		Name	Description
870016019	:	MULTI COMPLETE GR6 2A-4C	2 FAP9D 3/8 BSP - 4 FAP15 3/4 BSP - CAP
870016119		MULTI FIX GR6 2A-4C	2 FAP9D 3/8 BSP - 4 FAP15 3/4 BSP
870016219		MULTI MOBILE GR6 2A-4C	2 FAP9D 3/8 BSP - 4 FAP15 3/4 BSP

MultiCoupling spare parts (couplings not included)		
Code	lame	
806000320	MULTI FIX EMPTY GR6 2A-4C-2EC	
806000321	MULTI MOBILE EMPTY GR6 2A-4C-2EC	
815606260	CAP FIX MULTICOUPLING GR 175x117 V02	
815606261	PARKING STATION MOBILE MULTICOUPLING GR 180x120 V02	
815701055	SPARE KIT LEVER GROUP GR 250x212	



Fixed and mobile multicoupling 5,6 Kg and 2,9 Kg 196.9 (7.75) READY TO CONNECT 175 (6.89) 118 (4.65) POSITION MOBILE MULTICOUPLING 31 (1.22) 159.4 (18.09) 32.8 (1.29) 283.2 (11.15) 70.8 (2.79) Φ 8.5 (0.33) HOLES FOR FIXING SCREWS FIXED MULTICOUPLING 151 (5.94) CONNECTED POSITION (**(** 157.1 (6.19) 211.9 (8.34) 301 (11.85) Dimensions in millimeters (inch)





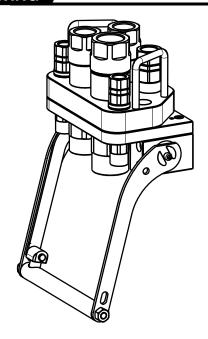
 GR6 2A-1B-2 D-1E-3EC

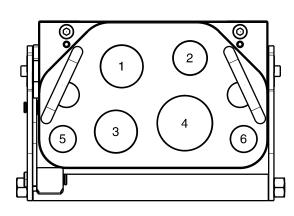
 Previous description
 Max. Resistance Body size
 FAP9 (A) 3/8"
 FAP13 (B) 1/2"
 FAP15 (C) FAP17 (D) FAP21 (E) FAP30 (G) 1-1/2"
 FAP30 (G) 1-1/2"



DRAWING







Possible configurations		
Pos	Coupling size	Predisposition for electrical connector
1	FAP17ZN	-
2	FAP13ZN	YES
3	FAP17ZN	-
4	FAP21ZN	-
5	FAP9DZN	YES
6	FAP9DZN	YES

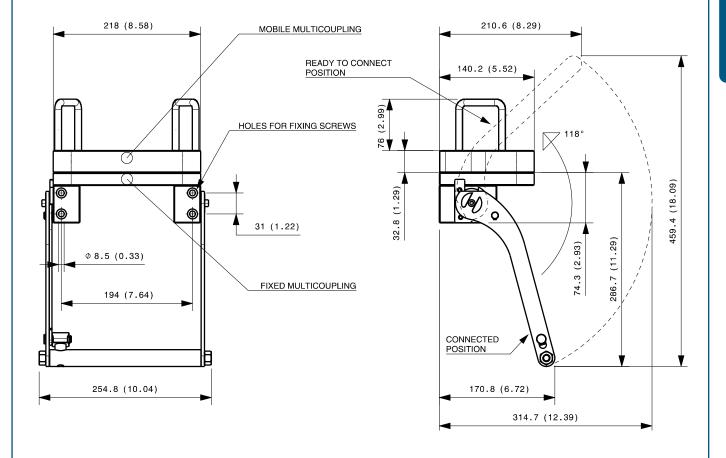
MultiCoupling (couplings included)		
Code	Name	Description
870015076	MULTI COMPLETE GR6 1A-2D-1E	1 FAP9D 1/2 BSP - 2 FAP17 1 BSP - 1 FAP21 1-1/4 BSP - CAP
870015152	MULTI FIX GR6 2A-2D-1E	2 FAP9D 1/2 BSP - 2 FAP17 3/4 BSP - 1 FAP21 1-1/4 BSP
870015176	MULTI FIX GR6 1A-2D-1E	1 FAP9D 1/2 BSP - 2 FAP17 1 BSP - 1 FAP21 1-1/4 BSP
870016156	MULTI FIX GR6 1B-2D-1E	1 FAP13 1/2 BSP - 2 FAP17 3/4 BSP - 1 FAP21 1 BSP
870015276	MULTI MOBILE GR6 1A-2D-1E	1 FAP9D 1/2 BSP - 2 FAP17 1 BSP - 1 FAP21 1-1/4 BSP
870015252	MULTI MOBILE GR6 2A-2D-1E	2 FAP9D 1/2 BSP - 2 FAP17 3/4 BSP - 1 FAP21 1-1/4 BSP
870016255	MULTI MOBILE GR6 1D-1E	1 FAP17 3/4 BSP - 1 FAP21 1 BSP
870016256	MULTI MOBILE GR6 1B-2D-1E	1 FAP13 1/2 BSP - 2 FAP17 3/4 BSP - 1 FAP21 1 BSP

MultiCoupling spare parts (couplings not included)			
Code		Name	
806000388		MULTI FIX EMPTY GR6 2A-1B-2D-1E-3EC	
806000389		MULTI MOBILE EMPTY GR6 2A-1B-2D-1E -3EC	
815606262		CAP FIX MULTICOUPLING GR 218x140	
815606263		PARKING STATION MOBILE MULTICOUPLING GR 218x150	
815701056		SPARE KIT LEVER GROUP GR 250x256	

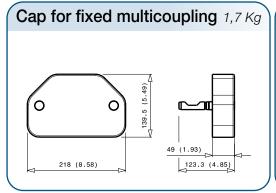


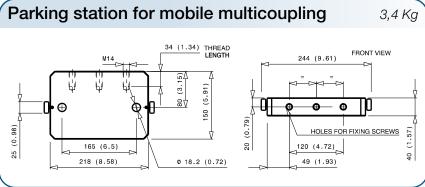
Fixed and mobile multicoupling

7,5 Kg and 4,3 Kg



Dimensions in millimeters (inch)



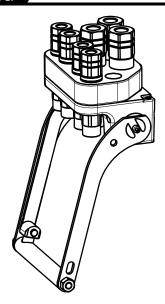


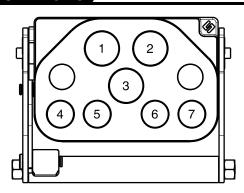


DRAWING









Possible configurations		
Pos	Coupling size	Predisposition for electrical connector
1	FAP13ZN	-
2	FAP13ZN	-
3	FAP13ZN	-
4	FAP9DZN	YES
5	FAP9DZN	YES
6	FAP9DZN	YES
7	FAP9D7N	YFS

MultiCoupling (couplings included)		
Code	Name	Description
870015085	MULTI COMPLETE GR7 2B-3EC	2 FAP13 1/2 BSP - 3EC6 - CAP
870016148	MULTI FIX GR7 2A-3B-2EC	2 FAP9D 1/2 BSP - 3 FAP13 1/2 BSP - 2EC6
870015153	MULTI FIX GR7 1A-2B-3EC	1 FAP9D 3/8 BSP - 2 FAP13 3/4 BSP - 3EC6
870015154	MULTI FIX GR7 3B-3EC	3 FAP13 1/2 BSP - 3EC6
870015185	MULTI FIX GR7 2B-3EC	2 FAP13 1/2 BSP - 3EC6
870015171	MULTI FIX GR7 3A-3B V01*	1 FAQ9D 3/8 BSP - 2 FAP9D 3/8 BSP - 3 FAP13 1/2 BSP
870016248	MULTI MOBILE GR7 2A-3B-2EC	2 FAP9D 1/2 BSP - 3 FAP13 1/2 BSP - 2EC6
870015253	MULTI MOBILE GR7 1A-2B-3EC	1 FAP9D 3/8 BSP - 2 FAP13 3/4 BSP - 3EC6
870015254	MULTI MOBILE GR7 3B-3EC	3 FAP13 1/2 BSP - 3EC6
870015285	MULTI MOBILE GR7 2B-3EC	2 FAP13 1/2 BSP - 3EC6
870015271	MULTI MOBILE GR7 3A-3B V01*	1 FAQ9D 3/8 BSP - 2 FAP9D 3/8 BSP - 3 FAP13 1/2 BSP

^{*} **V01** = lever lenght

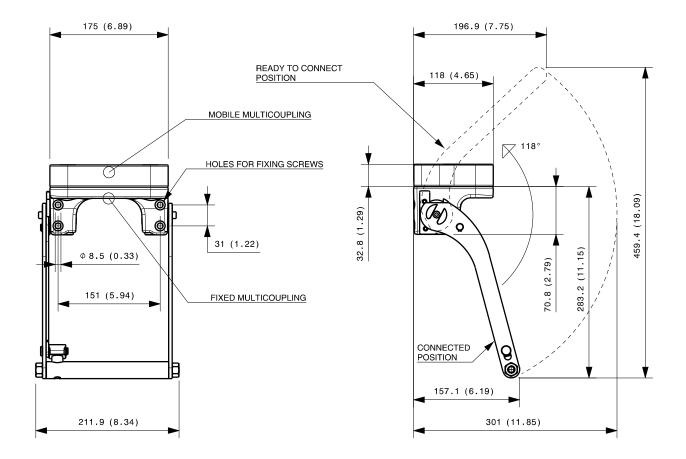
MultiCoupling spare parts (couplings not included)		
Code	Name	
806000328	MULTI FIX EMPTY GR7 4A-3B-4EC	
806000380	MULTI FIX EMPTY GR7 4A-3B-4EC V01*	
806000329	MULTI MOBILE EMPTY GR7 4A-3B-4EC	
815606260	CAP FIX MULTICOUPLING GR 175x117 V02	
815606261	PARKING STATION MOBILE MULTICOUPLING GR 180x120 VO2	
815701055	SPARE KIT LEVER GROUP GR 250x212	
UPON REQUEST	SPECIFIC KIT FOR V01 MODEL	

^{*} V01 = lever lenght



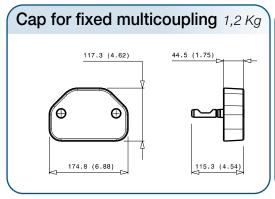
Fixed and mobile multicoupling

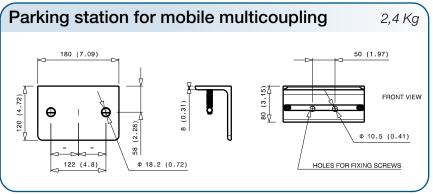
5,7 Kg and 2,9 Kg



Available also model with shorter lever, in case of need ask the drawing to info@stucchi.it

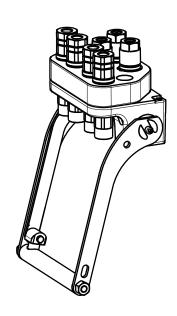
Dimensions in millimeters (inch)

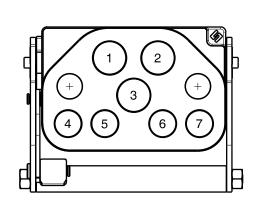




DRAWING







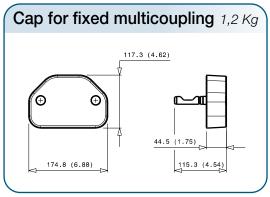
Possible configurations			
Pos	Coupling size	Predisposition for electrical connector	Pression type
1	FAP9-HP	-	High
2	FAP9-HP	-	High
3	FAP9-HP	-	High
4	FAP9DZN	YES	Medium
5	FAP9DZN	YES	Medium
6	FAP9DZN	YES	Medium
7	FAP9DZN	YES	Medium

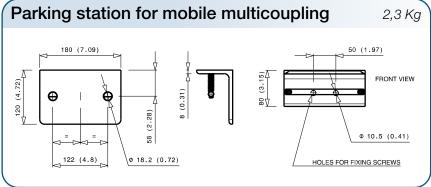
MultiCoupling (couplings included)			
Code		Name	Description
870016020	į	MULTI COMPLETE GRHP7 7A	4 FAP9D 3/8 BSP - 3 FAP9HP 3/8 NPT - CAP
870016120		MULTI FIX GRHP7 7A	4 FAP9D 3/8 BSP - 3 FAP9HP 3/8 NPT
870016220		MULTI MOBILE GRHP7 7A	4 FAP9D 3/8 BSP - 3 FAP9HP 3/8 NPT

	MultiCoupling spare parts (couplings not included)			
Code		Name		
806000330		MULTI FIX EMPTY GRHP7 7A-4EC		
806000331		MULTI MOBILE EMPTY GRHP7 7A-4EC		
815606260		CAP FIX MULTICOUPLING GR 175x117 V02		
815606261		PARKING STATION MOBILE MULTICOUPLING GR 180x120 V02		
815701055		SPARE KIT LEVER GROUP GR 250x212		



Fixed and mobile multicoupling 5,6 Kg and 2,9 Kg 196.9 (7.75) FIXED MULTICOUPLING READY TO CONNECT POSITION 118 (4.65) 175 (6.89) MOBILE MULTICOUPLING 31 (1.22) 459.4 (18.09) 32.8 (1.29) 283.2 (11.15) 70.8 (2.79) Φ 8.5 (0.33) HOLES FOR FIXING SCREWS 151 (5.94) CONNECTED POSITION 157.1 (6.19) 212 (8.34) 301 (11.85)



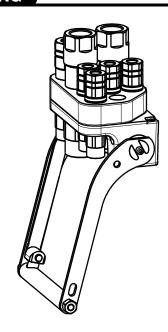


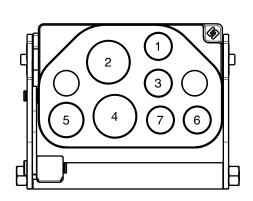
Dimensions in millimeters (inch)



DRAWING







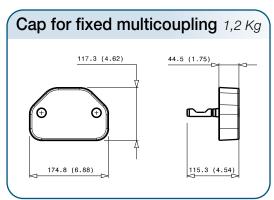
Possible configurations		
Pos	Coupling size	Predisposition for electrical connector
1	FAP9DZN	YES
2	FAP17ZN	-
3	FAP9DZN	YES
4	FAP17ZN	-
5	FAP13ZN	-
6	FAP9DZN	YES
7	FAP9DZN	YES

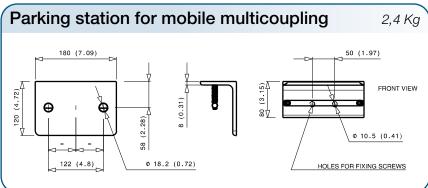
MultiCoupling (couplings included)		
Code	Name	Description
870016006	MULTI COMPLETE GR7 3A-1B-2D-1EC	1 FAP9D 1/4 BSP - 2 FAP9D 3/8 BSP -1 FAP13 1/2 BSP - 2 FAP17 1 BSP - 1EC7 - CAP
870016106	MULTI FIX GR7 3A-1B-2D-1EC	1 FAP9D 1/4 BSP - 2 FAP9D 3/8 BSP - 1 FAP13 1/2 BSP - 2 FAP17 1 BSP - 1EC7
870016139	MULTI FIX GR7 1B-2D-4EC	1 FAP13 1/2 BSP - 2 FAP17 1 BSP - 4 EC6
870016206	MULTI MOBILE GR7 3A-1B-2D-1EC	1 FAP9D 1/4 BSP - 2 FAP9D 3/8 BSP - 1FAP13 1/2 BSP - 2 FAP17 1 BSP - 1EC7
870016239	MULTI MOBILE GR7 1B-2D-4EC	1 FAP13 1/2 BSP - 2 FAP17 1 BSP - 4 EC6

MultiCoupling spare parts (couplings not included)		
Code	Name	
806000324	MULTI FIX EMPTY GR7 4A-1B-2D-4EC	
806000325	MULTI MOBILE EMPTY GR7 4A-1B-2D-4EC	
815606260	CAP FIX MULTICOUPLING GR 175x117 V02	
815606261	PARKING STATION MOBILE MULTICOUPLING GR 180x120 VO2	
815701055	SPARE KIT LEVER GROUP GR 250x212	



Fixed and mobile multicoupling 5,4 Kg and 2,6 Kg 175 (6.89) 196.9 (7.75) READY TO CONNECT POSITION 118 (4.65) MOBILE MULTICOUPLING 118° HOLES FOR FIXING SCREWS 459.4 (18.09) 32.8 (1.29) 31 (1.22) Φ 8.5 (0.33) 151 (5.94) FIXED MULTICOUPLING CONNECTED POSITION 157.1 (6.19) 211.9 (8.34) 301 (11.85)





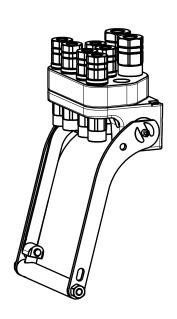
Dimensions in millimeters (inch)

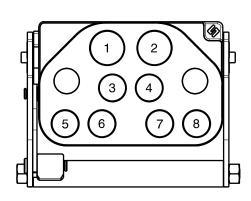


DRAWING









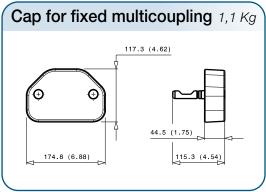
Possible configurations		
Pos	Coupling size	Predisposition for electrical connector
1	FAP13ZN	-
2	FAP13ZN	-
3	FAP9DZN	YES
4	FAP9DZN	YES
5	FAP9DZN	YES
6	FAP9DZN	YES
7	FAP9DZN	YES
8	FAP9DZN	YES
_	•	•

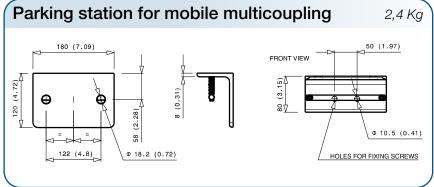
MultiCoupling (couplings included)		
Code	Name	Description
870015087	MULTI COMPLETE GR8 6A-2B	6 FAP9D 3/8 BSP - 1 FAP13 1/2 BSP - 1 FAP13 3/4 BSP - CAP
870016059	MULTI COMPLETE GR8 6A-2B	6 FAP9D 3/8 BSP - 2 FAP13 1/2 BSP - CAP
870015187	MULTI FIX GR8 6A-2B	6 FAP9D 3/8 BSP - 1 FAP13 1/2 BSP - 1 FAP13 3/4 BSP
870016150	MULTI FIX GR8 6A-2B	6 FAP9D 1/2 BSP - 2 FAP13 1/2 BSP
870015287	MULTI MOBILE GR8 6A-2B	6 FAP9D 3/8 BSP - 1 FAP13 1/2 BSP - 1 FAP13 3/4 BSP
870016250	MULTI MOBILE GR8 6A-2B	6 FAP9D 1/2 BSP - 2 FAP13 1/2 BSP

MultiCoupling spare parts (couplings not included)		
Code		Name
806000334		MULTI FIX EMPTY GR8 6A-2B-6EC
806000335		MULTI MOBILE EMPTY GR8 6A-2B-6EC
815606260		CAP FIX MULTICOUPLING GR 175x117 V02
815606261		PARKING STATION MOBILE MULTICOUPLING GR 180x120 VO2
815701055	:	SPARE KIT LEVER GROUP GR 250x212



Fixed and mobile multicoupling 5,7 Kg and 2,8 Kg 175 (6.89) 196.9 (7.75) READY TO CONNECT POSITION 118 (4.65) MOBILE MULTICOUPLING X 118° HOLES FOR FIXING SCREWS 459.4 (18.09) 32.8 (1.29) 70.8 (2.79) 283.2 (11.15) 31 (1.22) Φ 8.5 (0.33) 151 (5.94) FIXED MULTICOUPLING CONNECTED POSITION 157.1 (6.19) 211.9 (8.34) 301 (11.85)



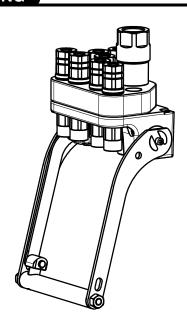


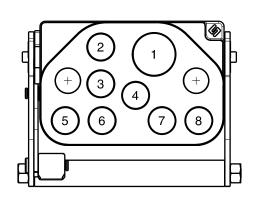
Dimensions in millimeters (inch)



DRAWING







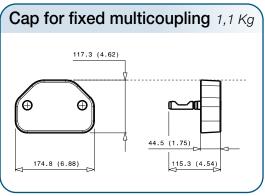
	Possible configurations									
Pos	Coupling size	Predisposition for electrical connector								
1	FAP17ZN	-								
2	FAP9DZN	YES								
3	FAP9DZN	YES								
4	FAP9DZN	YES								
5	FAP9DZN	YES								
6	FAP9DZN	YES								
7	FAP9DZN	YES								
8	FAP9DZN	YES								

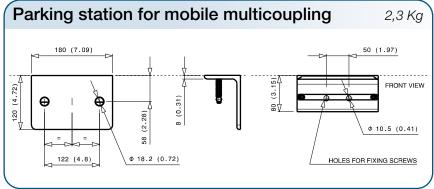
MultiCoupling (couplings included)										
Code	Code Name Description									
870016021		MULTI COMPLETE GR8 7A-1D	7 FAP9D 3/8 BSP - 1 FAP17 1 BSP - CAP							
870016121		MULTI FIX GR8 7A-1D	7 FAP9D 3/8 BSP - 1 FAP17 1 BSP							
870016221		MULTI MOBILE GR8 7A-1D	7 FAP9D 3/8 BSP - 1 FAP17 1 BSP							

	MultiCoupling spare parts (couplings not included)								
Code	Name								
806000332	MULTI FIX EMPTY GR8 7A-1D-7EC								
806000333	MULTI MOBILE EMPTY GR8 7A-1D-7EC								
815606260	CAP FIX MULTICOUPLING GR 175x117 V02								
815606261	PARKING STATION MOBILE MULTICOUPLING GR 180x120 V02								
815701055	SPARE KIT LEVER GROUP GR 250x212								



Fixed and mobile multicoupling 5,7 Kg and 2,8 Kg 196.9 (7.75) FIXED MULTICOUPLING READY TO CONNECT POSITION 175 (6.89) 118 (4.65) MOBILE MULTICOUPLING X 118° 31 (1.22) .4 (18.09) 32.8 (1.29) 283.2 (11.15) Φ 8.5 (0.33) 151 (5.94) HOLES FOR FIXING SCREWS CONNECTED POSITION 157.1 (6.19) 211.9 (8.34) 301 (11.85) Dimensions in millimeters (inch)





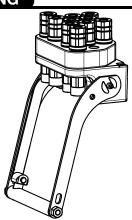
GR10 10A-2EC

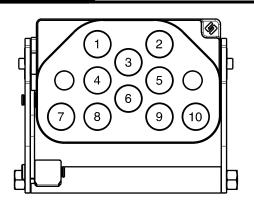
Previous description Max. Resistance FAP9 (A) FAP13 (B) FAP15 (C) FAP17 (D) FAP21 (E) FAP30 (G) 1/2" 5/8" 3/4" 1" 1-1/2"











	Possible configurations										
Pos	Coupling size	Predisposition for electrical connector									
1	FAP9DZN	-									
2	FAP9DZN	-									
3	FAP9DZN	-									
4	FAP9DZN	-									
5	FAP9DZN	-									
6	FAP9DZN	-									
7	FAP9DZN	YES									
8	FAP9DZN	-									
9	FAP9DZN	-									
10	FAP9DZN	YES									

	MultiCoupling (couplings included)									
Code		Name	Description							
870004022		MULTI COMPLETE GR10 8A	8 FAP9D 3/8 BSP - CAP							
870004023		MULTI COMPLETE GR10 10A	10 FAP9D 1/2 BSP - CAP							
870004024		MULTI COMPLETE GR10 10A	10 FAP9D 3/8 BSP - CAP							
870004026		MULTI COMPLETE GR10 10A	10 FAP9D 1/4 BSP - CAP							
870004028		MULTI COMPLETE GR10 8A	8 FAP9D 1/2 BSP - CAP							
870004029		MULTI COMPLETE GR10 10A	8 FAP9D 3/8 BSP -2 FAP9D 1/2 BSP - CAP							
870004032		MULTI COMPLETE GR10 9A	9 FAP9D 1/2 BSP - CAP							
870004033		MULTI COMPLETE GR10 9A	9 FAP9D 3/8 BSP - CAP							
870004034		MULTI COMPLETE GR10 10A	10 FAP9D 3/8 SAE - CAP							
870004025		MULTI COMPLETE GR10 8A V03**	8 FAP9DSD 1/2 BSP - CAP							
870004036		MULTI COMPLETE GR10 10A V03**	10 FAP9DSD 1/2 BSP - CAP							
870004123		MULTI FIX GR10 10A	10 FAP9D 1/2 BSP							
870004125		MULTI FIX GR10 8A V03**	8 FAP9DSD 1/2 BSP							
870004135		MULTI FIX GR10 10A	10 FAP9D 3/8 NPT							
870004136		MULTI FIX GR10 10A V03**	10 FAP9DSD 1/2 BSP							
870004223		MULTI MOBILE GR10 10A	10 FAP9D 1/2 BSP							
870004224		MULTI MOBILE GR10 10A	10 FAP9D 3/8 BSP							
870004225		MULTI MOBILE GR10 8A V03**	8 FAP9DSD 1/2 BSP							
870004235		MULTI MOBILE GR10 10A	10 FAP9D 3/8 NPT							
870004236		MULTI MOBILE GR10 10A V03**	10 FAP9DSD 1/2 BSP							

^{**} **V03** = seal on plate

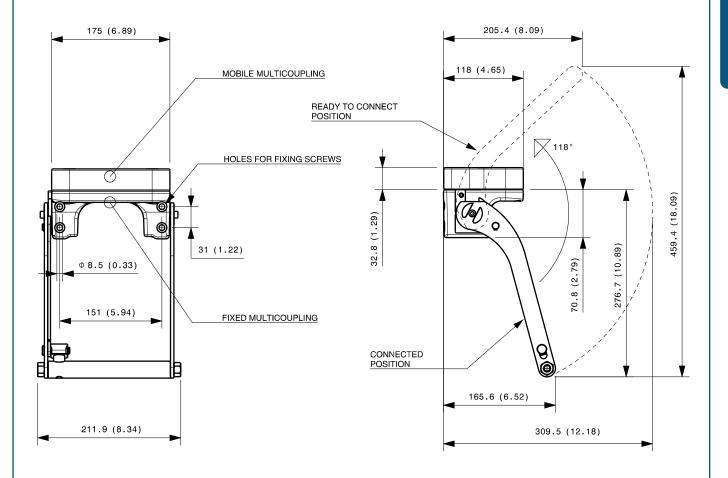
MultiCoupling spare parts (couplings not included)						
Code	Name					
806000302	MULTI FIX EMPTY GR10 10A-2EC					
806000303 MULTI MOBILE EMPTY GR10 10A-2EC						
806000304	MULTI FIX EMPTY GR10 10A-2EC V01*					
806000372	MULTI FIX EMPTY GR10 10A-2EC V03**					
806000373 MULTI MOBILE EMPTY GR10 10A-2EC V03**						
* V01 = lever length ** V03 = seal on plate						

MultiCoupling spare parts (couplings not included)							
Code	Name						
815606258	CAP FIX MULTICOUPLING GR 175X117 V01*						
815606286	CAP FIX MULTICOUPLING GR 175X117 V03**						
815606259	PARKING STATION MOBILE MULTICOUPLING GR 180x120 V01*						
815700999	SPARE KIT LEVER GROUP GR 250x212						
UPON REQUEST	SPECIFIC KIT FOR V01* MODEL						
815700998	SPECIFIC KIT FOR V03** MODEL						



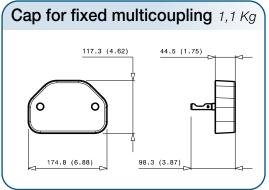
Fixed and mobile multicoupling

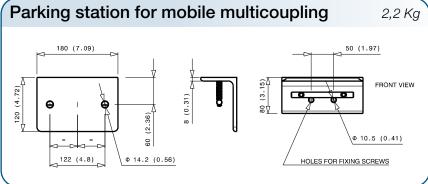
5,7 Kg and 2,7 Kg



Available also model with shorter lever or seal on fix multicoupling, in case of need ask the drawing to info@stucchi.it

Dimensions in millimeters (inch)



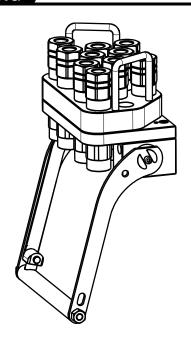


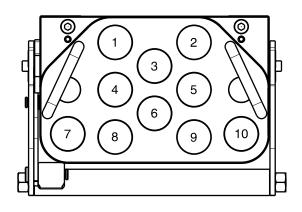
GR1010B-2EC
Previous description Max. Resistance Body size FAP9 (A) FAP13
3/8" FAP13 FAP9 (A) FAP13 (B) FAP15 (C) FAP17 (D) FAP21 (E) FAP30 (G) 3/8" 1/2" 5/8" 3/4" 1" 1-1/2" GR10-13ZN



DRAWING







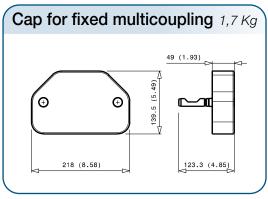
	Possible configurations										
Pos	Coupling size	Predisposition for electrical connector									
1	FAP13ZN	-									
2	FAP13ZN	-									
3	FAP13ZN	-									
4	FAP13ZN	-									
5	FAP13ZN	-									
6	FAP13ZN	-									
7	FAP13ZN	YES									
8	FAP13ZN	-									
9	FAP13ZN	-									
10	FAP13ZN	YES									

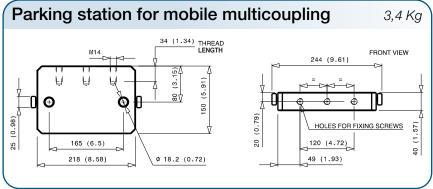
	MultiCoupling (couplings included)									
Code	Name	1 3/ 1 5 /								
870010008	MULTI COMPLETE GR10 10B	10 FAP13 3/4 BSP - CAP								
870010009	MULTI COMPLETE GR10 10B	10 FAP13 1/2 BSP - CAP								
870010010	MULTI COMPLETE GR10 10B	10 FAP13 1/2 NPT - CAP								
870010109	MULTI FIX GR10 10B	10 FAP13 1/2 BSP								
870010111	MULTI FIX GR10 8B	4 FAP13 1/2 SAE - 4 FAP13 3/4 SAE								
870010112	MULTI FIX GR10 8B	8 FAP13 3/4 SAE								
870010209	MULTI MOBILE GR10 10B	10 FAP13 1/2 BSP								
870010211	MULTI MOBILE GR10 8B	4 FAP13 1/2 SAE - 4 FAP13 3/4 SAE								

	MultiCoupling spare parts (couplings not included)								
Code		Name							
806000336	:	MULTI FIX EMPTY GR10 10B-2EC							
806000337		MULTI MOBILE EMPTY GR10 10B-2EC							
815606262		CAP FIX MULTICOUPLING GR 218x140							
815606263		PARKING STATION MOBILE MULTICOUPLING GR 218x150							
815701056		SPARE KIT LEVER GROUP GR 250x256							



Fixed and mobile multicoupling 7,5 Kg and 4,3 Kg 218 (8.58) 210.6 (8.29) MOBILE MULTICOUPLING 140.2 (5.52) READY TO CONNECT POSITION HOLES FOR FIXING SCREWS (2.99) 92 • .4 (18.09) 32.8 (1.29) 31 (1.22) Φ 8.5 (0.33) 74.3 (2.93) 194 (7.64) FIXED MULTICOUPLING CONNECTED POSITION 170.8 (6.72) 255 (10.04) 314.7 (12.39)





Dimensions in millimeters (inch)



INTERCHANGE > Stucchi profile (only for Stucchi multicouplings)





TECHNICAL FEATURES AND OPTIONS



Interchange Stucchi profile



Sealing description Nitrile NBR



Connection system

By multicoupling



Available from 3/8'



Material Carbon steel /7i-Ni















Flow rate Up to 378 I/min









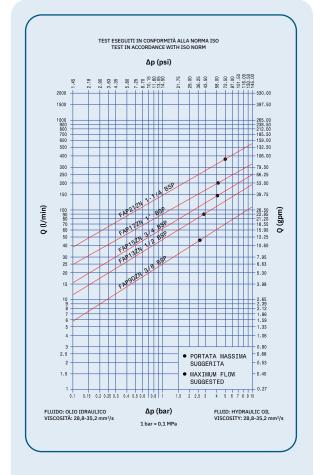


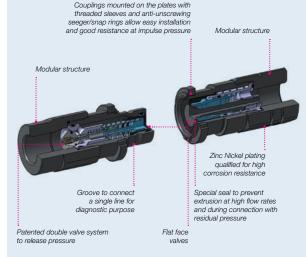
BENEFITS

- Flat face is easy to clean, helping to reduce the inclusion of contamination in the hydraulic circuit.
- Minimal fluid loss during connection/disconnection, reducing fluid loss to the
- Minimal air inclusion during connection/disconnection, enhancing correct function of the circuit.
- Internal flow of valve design creates minimal pressure drop, maintaining circuit efficiency in the system.
- Patented internal pressure release valve system allows an easy connection with high internal residual pressure.
- The modular design allows for broad range of port configurations.
- Couplings without locking balls eliminate the "brinelling" effect.
- Zinc Nickel plating qualified for high corrosion resistance.
- For diagnostic purpose of a single line (example: pressure or flow check for a limited period of time), male FAP-ZN may be connected with a Stucchi "A series" flat face female coupling.
- Compact slim design.
- Safe and simple to use

HOW TO USE

• See instructions at page 22





MAIN APPLICATIONS





PERFORMANCE

Size		Series/Size	Max. flow	suggested	Hydrostatic pushing area coupled	Spillage*
Inch	mm (ISO)		l/min	GPM	Cm ²	ml
3/8	-	FAP9ZN (A/D)	46	12,19	1,226	0,012
1/2	-	FAP13ZN	90	23,85	1,893	0,020
5/8	-	FAP15ZN	148	39,22	2,404	0,110
3/4	-	FAP17ZN	200	53,00	3,298	0,032
1	-	FAP21ZN	378	100,17	4,335	0,035

Size	Series/Size		Ma	x. operat	ing pressu	re			Burst pressure				
		Coupled		Male		Female		Coupled		Male		Female	
Inch		MPa psi		MPa	psi	MPa	psi	MPa psi		MPa	psi	MPa	psi
3/8	Fap9zn (a/d)	35	5075	35	5075	35	5075	120	17400	120	17400	100	14500
1/2	FAP13ZN	33	4785	33	4785	33	4785	120	17400	120	17400	100	14500
5/8	FAP15ZN	33	4785	33	4785	33	4785	120	17400	120	17400	100	14500
3/4	FAP17ZN	33	4785	33	4785	33	4785	120	17400	120	17400	100	14500
1	FAP21ZN	30	4350	30	4350	30	4350	100	14500	100	14500	80	11600

Size	Series/Size		ale to drain		essure during conr e Male to drain	and Female	Max. residual pressure during disconnection		
Inch		MPa	psi	MPa	a psi	MPa	psi	MPa	psi
3/8	Fap9zn (a/d)	25	3625	25	3625	25	3625	25	3625
1/2	FAP13ZN	25	3625	25	3625	20	2900	20	2900
5/8	FAP15ZN	25	3625	25	3625	20	2900	20	2900
3/4	FAP17ZN	25	3625	25	3625	15	2175	15	2175
1	FAP21ZN	25	3625	25	3625	15	2175	15	2175

^{*}Spillage is an indicative value of the fluid loss per couple-uncouple cycle without residual pressure.

Different possible configurations:

Other ports available upon request.

Connection and disconnection with residual pressure in both couplings is recommended for occasional operations only.

For ordinary operations it is suggested to release pressure in one side before to connect and disconnect in way that operator effort and wearing of the couplings are reduced.

Temperature range:

Standard seals NBR, PUR, POM from -20 °C to +100 °C (from -4 °F to +212 °F). Please read carefully "instruction and warning" for proper selection of the products.

The couplings coupled have been tested at max. operating pressure for 200.000 impulses, replacing the seeger ring every 50.000 impulses, in according with ISO norm. The male uncoupled have been tested for 200.000 impulses. The female uncoupled have been tested for 100.000 impulses.

WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.

A detect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects Never connect or disconnect with dynamic pressure (e.g. pump on).

Do not use the female coupling disconnected with high impulse pressure.

Do not couple-uncouple with flow and/or pressure in the circuit.

Do not couple-uncouple when the temperature inside of the circuit is higher than 80° C (176° F). Check the maximum allowable operating pressure of the port in use.

It is important to limit contamination in the circuit to avoid compromising the function of the internal valves. Make sure that the medium used is compatible with seal and material as indicated for each series.

In case of doubt please contact Stucchi Technical Support.

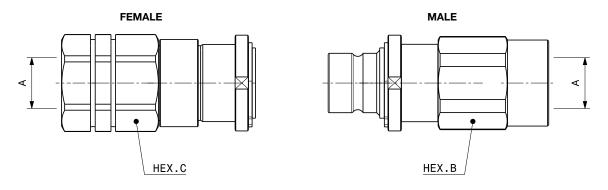
In case of doubt please contact Stucchi Technical Support. FAP-ZN series is intended to be used only on Stucchi Multiconnections. Do not use the FAP-ZN coupling on a Custom-made multiconnection or other device different than a Stucchi Multiconnection.

Do not disassemble, misuse, modify or damage the products. FAP-ZN series is intended to be used with standard hydraulic oils in fluid power application. Do not use the FAP-ZN coupling with different fluids (for example with inflammable, corrosive or dangerous fluids, gases ecc). Replace the seeger ring every 50.000 impulse cycles. For dimension "FAP9ZN 3/8": there are two versions of FAP9ZN: "A" and "D". The version is depending on the type of multiconnection in use. Please verify if the multiconnection you are using requires FAP9ZN "A" or "D" type consulting the single datasheet in case of need of spare parts. Contact Stucchi Service for support. Do not use the male FAP-ZN groove to connect the A-series female for a continuous service with pressure impulse (this feature is intended to be used only for diagnostic purpose so that for a short&limited time). When the couplings are disconnected, it is suggested to use the protection cap and parking station.

It is MANDATORY to read and closely follow the instructions. Last updated version always apply at time of installation, see latest written Instructions on Stucchi website (stucchigroup.com) before selecting or using Stucchi products.



SPECIFICATIONS



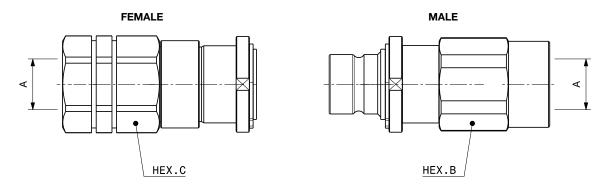
Port description: FEMALE THREAD BSPP (ISO 1179-1)

Body size	Descriptive Code	<u>Ite</u> i	m Code	Port (A)	A or D type		Hex		Wei	ght
							mm	inch	Kg	Lbs
3/8"	F FAP9DZN 1/4 BSP	Female	811400024	1/4"	D	С	30,0	1,18	0,31	0,69
3/0	M FAP9DZN 1/4 BSP	Male	811400025	1/4	ט	В	27,0	1,06	0,26	0,57
3/8"	F FAP9AZN 1/4 BSP	Female	811400026	1/4"	Α	С	30,0	1,18	0,32	0,70
3/0	M FAP9AZN 1/4 BSP	Male	811400027	1/4	A	В	27,0	1,06	0,22	0,49
3/8"	F FAP9AZN 3/8 BSP	Female	811400002	3/8"	А	С	30,0	1,18	0,26	0,56
3/0	M FAP9AZN 3/8 BSP	Male	811400003	3/0	A	В	27,0	1,06	0,22	0,49
3/8"	F FAP9DZN 3/8 BSP	Female	811400004	3/8"	D	С	30,0	1,18	0,27	0,59
3/0	M FAP9DZN 3/8 BSP	Male	811400005	3/0	U	В	27,0	1,06	0,23	0,51
3/8"	F FAP9AZN 1/2 BSP	Female	811400006	1/2"	А	С	30,0	1,18	0,28	0,61
3/0	M FAP9AZN 1/2 BSP	Male	811400007	1/2	^	В	27,0	1,06	0,22	0,49
3/8"	F FAP9DZN 1/2 BSP	Female	811400008	1/2"	D	С	30,0	1,18	0,26	0,57
3/0	M FAP9DZN 1/2 BSP	Male	811400009	1/2	D	В	27,0	1,06	0,21	0,46
3/8"	-	-	-	1/2"		-	-	-	-	-
3/0	M FAP9DZNSD 1/2 BSP	Male	811400031*	1/2		В	29,0	1,14	0,22	0,49
1/2"	F FAP13ZN 1/2 BSP	Female	811400010	1/2"		С	36,0	1,42	0,44	0,98
1/2	M FAP13ZN 1/2 BSP	Male	811400011	1/2		В	36,0	1,42	0,44	0,96
1/2"	F FAP13ZN 3/4 BSP	Female	811400012	3/4"		С	36,0	1,42	0,47	1,03
1/2	M FAP13ZN 3/4 BSP	Male	811400013	5/4		В	36,0	1,42	0,44	0,97
5/8"	F FAP15ZN 3/4 BSP	Female	811400014	3/4"		С	41,0	1,61	0,59	1,30
3/0	M FAP15ZN 3/4 BSP	Male	811400015	5/4		В	36,0	1,42	0,46	1,00
3/4"	F FAP17ZN 3/4 BSP	Female	811400020	3/4"		С	46,0	1,81	1,00	2,20
5/4	M FAP17ZN 3/4 BSP	Male	811400021	5/4		В	46,0	1,81	0,84	1,85
3/4"	F FAP17ZN 1 BSP	Female	811400016	1"		С	46,0	1,81	0,93	2,05
- U/T	M FAP17ZN 1 BSP	Male	811400017	'		В	46,0	1,81	0,76	1,66
1"	F FAP21ZN 1 BSP	Female	811400022	1"		С	55,0	2,17	1,69	3,72
'	M FAP21ZN 1 BSP	Male	811400023	'		В	55,0	2,17	1,39	3,06
1"	F FAP21ZN 1-1/4 BSP	Female	811400018	1-1/4"		С	55,0	2,17	1,53	3,38
,	M FAP21ZN 1-1/4 BSP	Male	811400019	1-1/4		В	55,0	2,17	1,22	2,69

^{*} to be used with Multi GR10 10A-2EC V03



SPECIFICATIONS

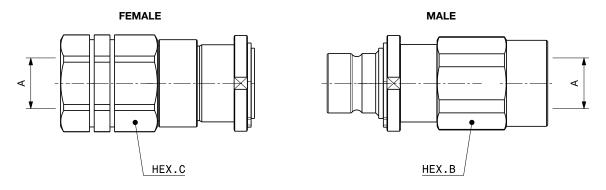


Port description: FEMALE THREAD NPT (ANSI B1.20.1)

Body size	Descriptive Code	Iter	n Code	Port (A)	A or D type		Hex		We	ight
	<u>.</u>						mm	inch	Kg	Lbs
3/8"	F FAP9AZN 3/8 NPT	Female	811401002	3/8"	А	С	30,0	1,18	0,27	0,59
3/0	M FAP9AZN 3/8 NPT	Male	811401003	5/0	7	В	27,0	1,06	0,23	0,50
3/8"	F FAP9DZN 3/8 NPT	Female	811401004	3/8"	D	С	30,0	1,18	0,27	0,59
3/0	M FAP9DZN 3/8 NPT	Male	811401005	3/0	, ,	В	27,0	1,06	0,23	0,50
3/8"	F FAP9AZN 1/2 NPT	Female	811401006	1/2"	Α	С	30,0	1,18	0,28	0,62
3/0	M FAP9AZN 1/2 NPT	Male	811401007	1/2	^	В	27,0	1,06	0,23	0,50
3/8"	F FAP9DZN 1/2 NPT	Female	811401008	1/2"	D	С	30,0	1,18	0,27	0,58
3/0	M FAP9DZN 1/2 NPT	Male	811401009	1/2	D	В	27,0	1,06	0,23	0,50
1/2"	F FAP13ZN 1/2 NPT	Female	811401010	1/2"		С	36,0	1,42	0,47	1,04
1/2	M FAP13ZN 1/2 NPT	Male	811401011	1/2		В	36,0	1,42	0,44	0,97
1/2"	F FAP13ZN 3/4 NPT	Female	811401012	3/4"		С	36,0	1,42	0,49	1,08
1/2	M FAP13ZN 3/4 NPT	Male	811401013	5/4		В	36,0	1,42	0,45	0,99
5/8"	F FAP15ZN 3/4 NPT	Female	811401014	3/4"		С	41,0	1,61	0,62	1,36
3/0	M FAP15ZN 3/4 NPT	Male	811401015	3/4		В	36,0	1,42	0,46	1,02
3/4"	F FAP17ZN 3/4 NPT	Female	811401020	3/4"		С	46,0	1,81	0,99	2,18
3/4	M FAP17ZN 3/4 NPT	Male	811401021	3/4		В	46,0	1,81	0,75	1,66
3/4"	F FAP17ZN 1 NPT	Female	811401016	1"		С	46,0	1,81	0,98	2,16
3/4	M FAP17ZN 1 NPT	Male	811401017	'		В	46,0	1,81	0,77	1,69
1"	F FAP21ZN 1 NPT	Female	811401022	1"		С	55,0	2,17	1,70	3,75
1	M FAP21ZN 1 NPT	Male	811401023	1		В	55,0	2,17	1,40	3,09
1"	F FAP21ZN 1-1/4 NPT	Female	811401018	1-1/4"		С	55,0	2,17	1,63	3,59
ı	M FAP21ZN 1-1/4 NPT	Male	811401019	1-1/4		В	55,0	2,17	1,26	2,78



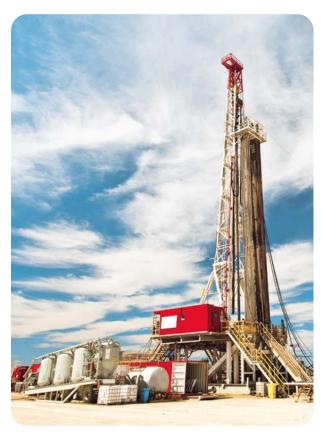
SPECIFICATIONS



Port description: FEMALE THREAD SAE (ISO 11926-1 & SAEJ1926-1)

Body size	Descriptive Code	Ite	n Code	Port (A)	A or D type		Hex			ight
							mm	inch	Kg	Lbs
3/8"	F FAP9AZN 1/4 SAE	Female	811404020	7/16-UNF	Α	С	27,0	1,06	0,32	0,70
3/0	M FAP9AZN 1/4 SAE	Male	811404021	7710 0141	^	В	30,0	1,18	0,26	0,57
3/8"	F FAP9DZN 1/4 SAE	Female	811404022	7/16-UNF	D	С	27,0	1,06	0,32	0,70
3/0	M FAP9DZN 1/4 SAE	Male	811404023	7710 0141	Ď	В	30,0	1,18	0,26	0,58
3/8"	F FAP9AZN 3/8 SAE	Female	811404024	9/16-18UNF	Α	С	27,0	1,06	0,26	0,57
3/0	M FAP9AZN 3/8 SAE	Male	811404025	3/10 10014	^	В	30,0	1,18	0,23	0,51
3/8"	F FAP9DZN 3/8 SAE	Female	811404026	9/16-18UNF	D	С	27,0	1,06	0,27	0,60
3/0	M FAP9DZN 3/8 SAE	Male	811404027	3/10-100IVI	D	В	30,0	1,18	0,24	0,53
3/8"	F FAP9AZN 1/2 SAE	Female	811404002	3/4-16UNF	Α	С	27,0	1,06	0,28	0,62
3/0	M FAP9AZN 1/2 SAE	Male	811404003	3/4-100IVI	^	В	30,0	1,18	0,23	0,50
3/8"	F FAP9DZN 1/2 SAE	Female	811404004	3/4-16UNF	D	С	27,0	1,06	0,28	0,62
3/0	M FAP9DZN 1/2 SAE	Male	811404005	3/4-100IVI	Ь	В	30,0	1,18	0,23	0,50
3/8"	F FAP9AZN 5/8 SAE	Female	811404006	7/8-14UNF	Α	С	27,0	1,06	0,27	0,60
3/0	M FAP9AZN 5/8 SAE	Male	811404007	7/0-140IVI	A	В	30,0	1,18	0,26	0,58
3/8"	F FAP9DZN 5/8 SAE	Female	811404008	7/8-14UNF	D	С	27,0	1,06	0,27	0,60
3/0	M FAP9DZN 5/8 SAE	Male	811404009	7/0-140IVI	D	В	30,0	1,18	0,23	0,50
1/2"	F FAP13ZN 1/2 SAE	Female	811404028	3/4-16UNF		С	36,0	1,42	0,45	1,00
1/2	M FAP13ZN 1/2 SAE	Male	811404029	3/4-100IVI		В	36,0	1,42	0,44	0,96
1/2"	F FAP13ZN 5/8 SAE	Female	811404010	7/8-14UNF		С	36,0	1,42	0,47	1,04
1/2	M FAP13ZN 5/8 SAE	Male	811404011	7/0-140IVI		В	36,0	1,42	0,45	0,99
1/2"	F FAP13ZN 3/4 SAE	Female	811404012	1-1/16-12UN		С	36,0	1,42	0,47	1,03
1/2	M FAP13ZN 3/4 SAE	Male	811404013	1-1/10-120N		В	36,0	1,42	0,43	0,95
5/8"	F FAP15ZN 3/4 SAE	Female	811404014	1-1/16-12UN		С	41,0	1,61	0,60	1,32
3/6	M FAP15ZN 3/4 SAE	Male	811404015	1-1/10-120N		В	36,0	1,42	0,43	0,95
3/4"	F FAP17 3/4 SAE	Female	811404030	1-1/16-12UN		С	46,0	1,81	1,01	2,23
3/4	M FAP17ZN 3/4 SAE	Male	811404031	1-1/10-120N		В	46,0	1,81	0,84	1,84
3/4"	F FAP17ZN 1 SAE	Female	811404016	1-5/16-12UN		С	46,0	1,81	0,96	2,11
3/4	M FAP17ZN 1 SAE	Male	811404017	1-5/10-12UN		В	46,0	1,81	0,75	1,66
1"	F FAP21ZN 1 SAE	Female	811404032	1-5/16-12UN		С	55,0	2,17	1,67	3,69
ı	M FAP21ZN 1 SAE	Male	811404033	1-0/10-12UN		В	55,0	2,17	1,38	3,05
1"	F FAP21ZN 1-1/4 SAE	Female	811404018	1-5/8-12UN		С	55,0	2,17	1,58	3,47
	M FAP21ZN 1-1/4 SAE	Male	811404019	1-3/6-12UN		В	55,0	2,17	1,27	2,80

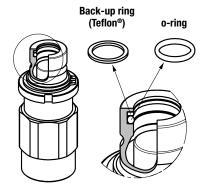




SPARE KIT SEAL FOR MALE

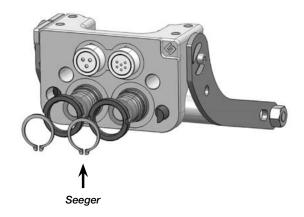
	Repair kit / OR+BK	
Body Size	Description	Part Number
3/8"	M FAP9ZN	815701096
1/2"	M FAP13ZN	815700339
5/8"	M FAP15ZN	815700341
3/4"	M FAP17ZN	815700655
1"	M FAP21ZN	815700345

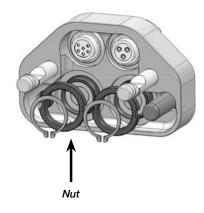
O-Ring in Nitrile BackUp in Teflon®



REPAIR KIT/NUT + SEEGER

	Repair kit / Nut + Seeger						
Part Number	Description						
815701000	SET OF 10 SEEGER+NUT FAP9AZN						
815701001	SET OF 10 SEEGER+NUT FAP9DZN						
815701002	SET OF 10 SEEGER+NUT FAP13AZN						
815701003	SET OF 5 SEEGER+NUT FAP15AZN						
815701004	SET OF 5 SEEGER+NUT FAP17AZN						
815701005	SET OF 5 SEEGER+NUT FAP21AZN						







INTERCHANGE > Stucchi profile (only for Stucchi multicouplings)





TECHNICAL FEATURES AND OPTIONS



Interchange Stucchi profile (only for Stucchi



Sealing description



Connection system















Available NPT











Up to 46 I/min



Temperature (°C)

Operating

Up to 720 bar

pressure





Valving style Flat face



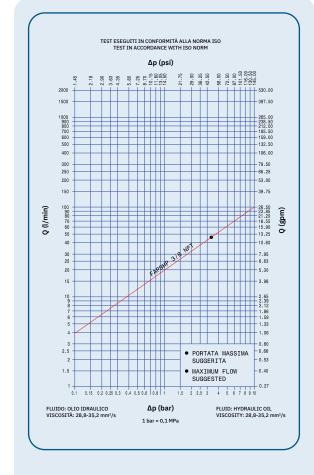
under pressure Connection: Both sides. Disconnection: allowed

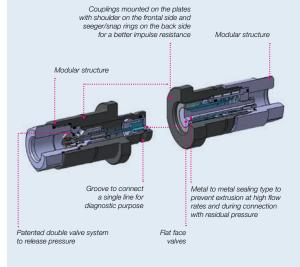
BENEFITS

- Flat face is easy to clean, helping to reduce the inclusion of contamination in the hydraulic circuit.
- Minimal fluid loss during connection / disconnection, reducing fluid loss to
- Minimal air inclusion during connection / disconnection, enhancing correct function of the circuit.
- Internal flow of valve design creates minimal pressure drop, maintaining circuit efficiency in the system.
- Patented internal pressure release valve system allows an easy connection with high internal residual pressure.
- The modular design allows for broad range of port configurations.
- Couplings without locking balls eliminate the "brinelling" effect.
- For diagnostic purpose of a single line (example: pressure or flow check for a limited period of time), male FAP9HP may be connected with a Stucchi "A9HP serie" flat face female coupling.
- · Compact slim design.
- Safe and simple to use.

HOW TO USE

See instructions at page 23





MAIN APPLICATIONS







PERFORMANCE

S	Size	Series/Size	Max. flow	suggested	Hydrostatic pushing area coupled	Spillage*
Inch	mm (ISO)		I/min	GPM	Cm ²	ml
3/8	-	FAP9HP	46	12,19	1,168	0,012

Size	Size Series/Size Max. operating pressure					Burst pressure							
		Cou	ıpled		<i>l</i> lale		male	Coı	ıpled	M	ale	Fer	nale
Inch		MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
3/8	FAP9HP	72	10440	72	10440	42	6090	180	26100	200	29000	125	18125

Size	Series/Size		Max. residual pressure during connection						lual pressure
		Male Fem	ale to drain	Female N	Male to drain	Male a	and Female	during dis	sconnection
Inch		MPa	psi	MPa	psi	MPa	psi	MPa	psi
3/8	FAP9HP	25	3625	25	3625	25	3625	25	3625

^{*} Spillage is an indicative value of the fluid loss per couple-uncouple cycle without residual pressure.

Connection and disconnection with residual pressure in both couplings is recommended for occasional operations only.

For ordinary operations it is suggested to release pressure in one side before to connect and disconnect in way that operator effort and wearing of the couplings are reduced.

Temperature range:

Seals in NBR (Nitrile): from -20 °C to +100 °C (from -4 °F to +212 °F).

Tests:

The couplings have been tested at max. operating pressure for 10.000 impulses in according with ISO norm.



A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.

Never connect or disconnect with dynamic pressure (e.g. pump on).

Do not use the female coupling disconnected with high impulse pressure.

Do not couple-uncouple with flow and/or pressure in the circuit.

Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).

Check the maximum allowable operating pressure of the port in use.

Make sure that the medium used is compatible with seal and material as indicated for each series.

In case of doubt please contact Stucchi Technical Support.

It is MANDATORY to read and closely follow the instructions. Last updated version always apply at time of installation, see latest written Instructions on Stucchi website (stucchigroup.com) before selecting or using Stucchi products.

When the couplings are disconnected, it is suggested to use the protection cap and parking station.
It is important to limit contamination in the circuit to avoid compromising the function of the internal valve
FAP-HP series intended to be used only on Stucchi Multiconnections. Do not use the FAP-HP coupling on a Custom-made multiconnection or other device different than a Stucchi Multiconnection

FAP-HP series is intended to be used with standard hydraulic oils in fluid power application. Do not use the FAP-HP coupling with different fluids (for example with

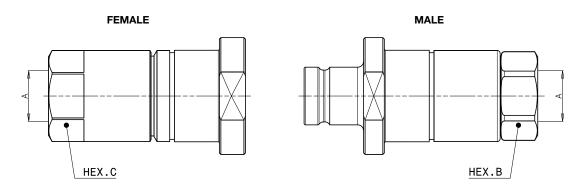
inflammable, corrosive or dangerous fluids, gases ecc).

Please verify if the multiconnection you are using requires FA9HP type consulting the single multicoupling datasheet

Do not use the male FAP-ZN groove to connect the A-HP series female for a continuous service with pressure impulse (this feature is intended to be used only for diagnostic purpose for a short&limited time).



SPECIFICATIONS



Port description: FEMALE THREAD NPT (ANSI B1.20.1)

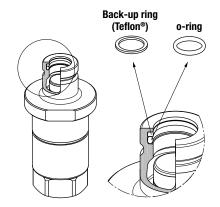
Body size	Descriptive Code	Item Code	Port (A)	A or D type	Hex		We	ight
				·	mm	inch	Kg	Lbs
3/8"	F FAP9HP 3/8 NPT	Female 807101000	3/8"	_	C 27,0	1,06	0,31	0,68
3/0	M FAP9HP 3/8 NPT	Male 807101001	5/0		B 27,0	1,06	0,31	0,67





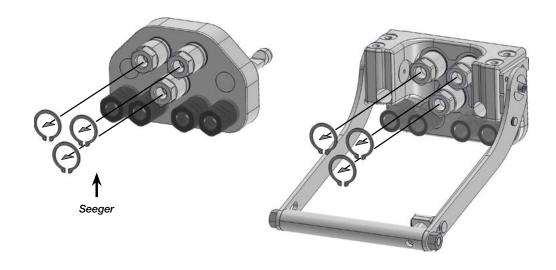
SPARE KIT SEAL FOR MALE

	Repair kit / OR+BI	<		
Body Size	Description		Part Number	
3/8"	FAP9HP		815701119	
O-Ring in Nitrile BackUp in Teflon®				



REPAIR KIT/SEEGER

	Repair kit/Seeger
Part Number	Description
815701038	SET OF 5 SEEGER FOR PLUG FAP9HP





INTERCHANGE > Stucchi profile (only for Stucchi multicouplings)





TECHNICAL FEATURES AND OPTIONS



Interchange Stucchi profile (only for Stucchi



Sealing description Nitrile NBR



Connection system

By multicoupling



Available from 3/8'



Material Carbon steel-Stainless steel/QPQ



Available

BSP - NPT



Operating Up to 20 bar



Locking mechanism PIN/CAM



Flow rate Up to 200 I/min



Temperature (°C) oil -20°/+100°



Valving style Flat face



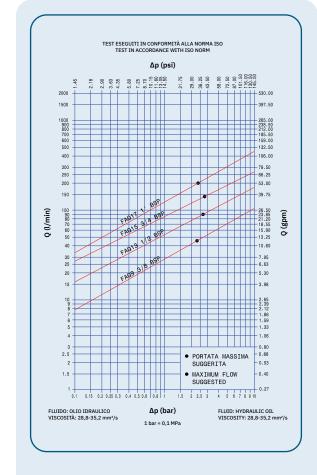
Connection under pressure Connection: not allowed. Disconnection: not allowed

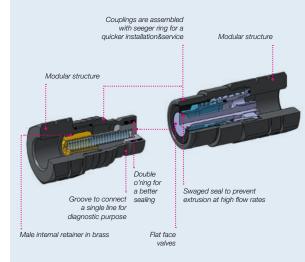
BENEFITS

- Designed to be used with fluids like air, water or water & glycol lines.
- Flat face is easy to clean, helping to reduce the inclusion of contamination to the hydraulic circuit.
- Minimal fluid loss during connection/disconnection, reducing fluid loss to the
- Minimal air inclusion during connection/disconnection, enhancing correct function of the circuit.
- Linear flow reduces internal turbulence and pressure drop, maintaining circuit efficiency in the entire system.
- Superior corrosion resistance compared to zinc plating in specific corrosive environments (example:water, water&glycol, cooling fluids).
- The modular design allows flexibility with the range of port configurations.
- Allows to conduct in the same multiconnection different fluids.
- Double oring in the male valving to improve sealing action when connected.
- For diagnostic purpose of a single line (example: pressure or flow check for a short&limited time), male FAQ may be connected with a Stucchi FIRG-Q series flat face female.
- Couplings are assembled with a seeger ring for a quicker mounting or service on the multiconnection.

HOW TO USE

• See instructions at page 24





MAIN APPLICATIONS





PERFORMANCE

Size		Size Series/Size Max. flow sugg		suggested	Hydrostatic pushing area coupled	Spillage*	
Inch	mm (ISO)		I/min	GPM	Cm²	ml	
3/8	-	FAQ9	46	12,19	1,226	0,012	
1/2	-	FAQ13	90	23,85	1,893	0,020	
5/8	-	FAQ15	148	39,22	2,404	0,026	
3/4	-	FAQ17	200	53,00	3,298	0,032	

Size	Series/Size		Ma	x. operat	ing pressur	e e	
		Col	upled	· N	lale	Fe	male
Inch		MPa	psi	MPa	psi	MPa	psi
3/8	FAQ9	2	290	2	290	2	290
1/2	FAQ13	2	290	2	290	2	290
5/8	FAQ15	2	290	2	290	2	290
3/4	FAQ17	2	290	2	290	2	290

^{*} Spillage is an indicative value of the fluid loss per couple-uncouple cycle without residual pressure.

Different possible configurations:

Different threads available upon request.

Temperature range:

Seals in NBR (Nitrile):

- for oil, from -20 $^{\circ}$ C to +100 $^{\circ}$ C (from -4 $^{\circ}$ F to +212 $^{\circ}$ F).
- for water, from $+5^{\circ}$ C $+60^{\circ}$ C (from $+41^{\circ}$ F to $+140^{\circ}$ F).

Upon request seals in VITON®: from -15°C to +180°C (from +5 °F to +356 °F). Upon request EPDM (Ethylene Propylene) seals: from -40°C to +150°C (from -40 °F to +302 °F). Please read carefully "instruction and warning" for proper selection of the products.

WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects. Never connect or disconnect with dynamic pressure (e.g. pump on).

Do not use the female coupling disconnected with high impulse pressure.

Do not couple-uncouple with flow and/or pressure in the circuit.

Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F). Check the maximum allowable operating pressure of the port in use.

Make sure that the medium used is compatible with seal and material as indicated for each series.

In case of doubt please contact Stucchi Technical Support.

It is MANDATORY to read and closely follow the instructions. Last updated version always apply at time of installation, see latest written Instructions on Stucchi website (stucchigroup.com) before selecting or using Stucchi products.

Connection and disconnection has to be done without pressure only

When the multicoupling is disconnected, it is suggested to use the protection caps&parking station.

Do not disassemble, misuse, modify or damage the products.

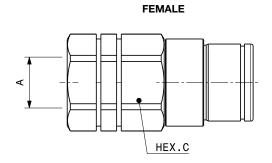
FAQ series is intended to be used only on Stucchi Multiconnections. Do not use the FAQ coupling on a Custom-made multiconnection or other device different than a

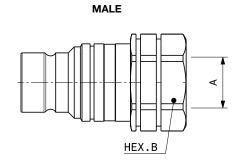
FAQ series is intended to be used only on Stucchi Multiconnections. Do not use the FAQ coupling on a Custom-made multiconnection or other device different than a Stucchi Multiconnection.

FAQ series has been tested&approved for use with water. FAQ series is intended to be used only with not dangerous fluids (water, water&glycol, hydraulic oil). Do not use FAQ couplings with dangerous, flammable or explosive fluids (steam, acids, very hot/flammable oils, gases, dangerous gases etc.). Contact Stucchi Service for support. Do not use FAQ couplings with very hot fluids (limits given by NBR seal compatibility&temperature range – see "performance" of FAQ serie). Do not use FAQ couplings with fluids below the freezing point to avoid damages due to ice expansion and consequential extrusion of the valving For dimension "FAQ9 - size 3/8": there are two versions of FAQ9: "A" and "D". The version is depending the type of multiconnection are in use. Please verify if the multiconnection you are using requires FAQ9 "A" or "D" type consulting the single datasheet in case of need of spare parts. See specific instruction. Contact Stucchi Service for support.



SPECIFICATIONS





Port description: FEMALE THREAD BSPP (ISO 1179-1)

Body size	Descriptive Code	Item Code		Port (A)	A or D type	Hex			Weight	
							mm	inch	Kg	Lbs
3/8"	F FAQ9A 3/8 BSP	Female	806900018	3/8"	А	С	30,0	1,18	0,24	0,54
3/0	M FAQ9A 3/8 BSP	Male	806900019	3/0		В	27,0	1,06	0,16	0,35
3/8"	F FAQ9D 3/8 BSP	Female	806900022	3/8"	D	С	30,0	1,18	0,24	0,54
3/0	M FAQ9D 3/8 BSP	Male	806900023			В	27,0	1,06	0,18	0,39
1/2"	F FAQ13 1/2 BSP	Female	806900006	1/2"	_	С	36,0	1,42	0,42	0,93
1/2	M FAQ13 1/2 BSP	Male	806900007	1/2		В	36,0	1,42	0,28	0,63
5/8"	F FAQ15 3/4 BSP	Female	806900010	3/4"		С	41,0	1,61	0,58	1,29
3/0	M FAQ15 3/4 BSP	Male	806900011	5/4		В	36,0	1,42	0,30	0,65

Port description: FEMALE THREAD NPT (ANSI B1.20.1)

Body size	Descriptive Code	Item Code	Port (A)	A or D type	Hex		Weight		
						mm	inch	Kg	Lbs
3/8"	F FAQ9D 3/8 NPT	Female 806901022	3/8"	D	С	30,0	1,18	0,24	0,53
3/0	M FAQ9D 3/8 NPT	Male 806901023			В	27,0	1,06	0,18	0,39
5/8"	F FAQ15 3/4 NPT	Female 806901010	3/4"	_	С	44,8	1,77	0,59	1,30
0/0	M FAQ15 3/4 NPT	Male 806901011	5, 4		В	38,5	1,52	0,52	1,15

Size 3/4 (FAQ17) available upon request.



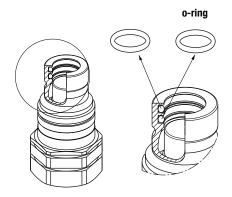


SPARE KIT SEAL FOR MALE

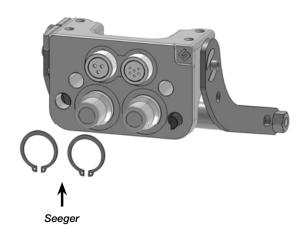
	Repair kit / OR+BK	
Body Size	Description	Part Number
3/8"	SET OF 10 OR NBR M FAQ9	815701065
1/2"	SET OF 10 OR NBR M FAQ13	815701067
5/8"	SET OF 10 OR NBR M FAQ15	815701069

O-Ring in Nitrile

(kit composed of 10 O-Ring for male coupling; 1 male = 2 O-Ring)



-		D : 13/0				
	Repair kit/Seeger					
	Part Number	Description				
	815701033	SET OF 10 SEEGER FOR PLUG FAP-FAQ9				
	815701034	SET OF 10 SEEGER FOR PLUG FAP-FAQ13				
	815701035	SET OF 5 SEEGER FOR PLUG FAP-FAQ15				
	815701036	SET OF 5 SEEGER FOR PLUG FAP-FAQ17				







Plugs & Seeger

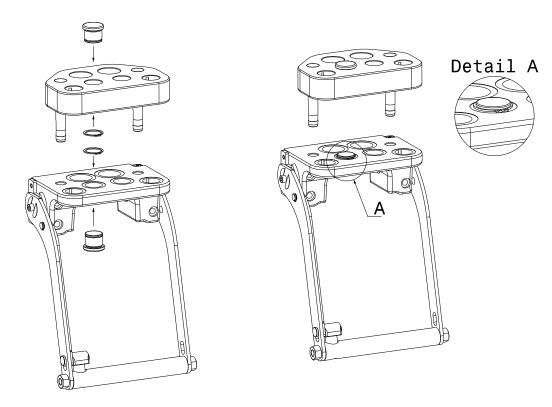




When the multicoupling chosen has one or more holes where no couplings or electrical connectors are fitted, it is important to cover the holes with the proper plugs in order to avoid dirt entering the multicoupling. The plugs for multicouplings holes are made in black anodized aluminum.

Installation

- Put the plug in the corresponding hole of mobile or fixed multiconnection.
- Assemble the seeger ring with proper plyers.
- Check the correct positioning of the seeger ring after assembly.
- To disassemble: same as above but reverse process.



Plugs & Seeger



PLUGS

	Plugs
Body Size	Description
815701030	SET OF 5 PLUGS FOR HOLE MULTI FIX FAP9HP
815701031	SET OF 5 PLUGS FOR HOLE MULTI MOBILE FAP9HP
815701018	SET OF 10 PLUGS FOR HOLE MULTI FIX FAP-FAQ9
815701020	SET OF 10 PLUGS FOR HOLE MULTI MOBILE FAP-FAQ9
815701022	SET OF 10 PLUGS FOR HOLE MULTI FIX FAP-FAQ13
815701023	SET OF 10 PLUGS FOR HOLE MULTI MOBILE FAP-FAQ13
815701024	SET OF 5 PLUGS FOR HOLE MULTI FIX FAP-FAQ15
815701025	SET OF 5 PLUGS FOR HOLE MULTI MOBILE FAP-FAQ15
815701026	SET OF 5 PLUGS FOR HOLE MULTI FIX FAP-FAQ17
815701027	SET OF 5 PLUGS FOR HOLE MULTI MOBILE FAP-FAQ17
815701028	SET OF 5 PLUGS FOR HOLE MULTI FIX FAP-FAQ21
815701029	SET OF 5 PLUGS FOR HOLE MULTI MOBILE FAP-FAQ21

Kit composed of only plugs, to fix in the plate you need also seeger ring (see table here below)

SEEGER RING

	Seeger ring				
Body Size	Description				
815701033	SET OF 10 SEEGER FOR PLUG FAP-FAQ9				
815701034	SET OF 10 SEEGER FOR PLUG FAP-FAQ13				
815701035	SET OF 5 SEEGER FOR PLUG FAP-FAQ15				
815701036	SET OF 5 SEEGER FOR PLUG FAP-FAQ17				
815701037	SET OF 5 SEEGER FOR PLUG FAP-FAQ21				
815701038	SET OF 5 SEEGER FOR PLUG FAP9HP				



Pay attention not to damage the seeger ring during the assembly Do not leave any open hole (without plug) in the multiconnection in order to avoid dirt to enter in the parts. Do not disassemble, misuse, modify or damage the products.



Electrical connectors





In addition to the couplings for fluid energy transmission, it is possible to fit in the multicouplings the electrical connectors for the electric energy transmission. They are suitable for all very low tension electronic (max 24 V) devices such as instrumentation, signals, solenoid valves, etc.

Technical features and options



Interchange Stucchi profile



Ampere12 service to 15 max (each contact)



Max. number of contacts



Voltage 24 V max.



Seals NBR (Nitrile)



Connection contact and electrical wireTo crimp



Construction materialBody brass nickel plated; cable retainer in plastic



IP protection Not listed



Contact diameter 2 mm

Electrical connectors



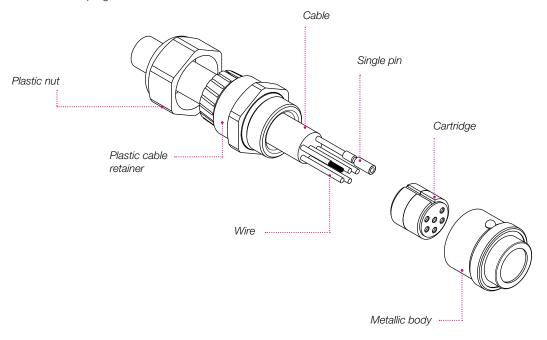
New name	Previous description							
		3/8" 1/2"						
			6 POLES (EC6) electrical connetor female - male	7 POLES (EC7) electrical connetor female - male	6 POLES (EC6) electrical connetor female - male	7 POLES (EC7) electrical connetor female - male		
DP2 2A-1EC	DP2-9ZN	DP	806422000-039	-	-	-	30	
DP2 2A-2EC V04	DP2-9L	DP	806422000-039	-	-	-	32	
DP2 2B-1EC	DP2-13ZN	DP	-	-	806422010-035	806422024-043	34	
DP2 2B-2EC V04	DP2-13L	DP	-	-	806422010-035	806422024-043	36	
DP2 2C	DP2-15	DP	=	=	-	=	38	
DP2 2D	DP2-17ZN	DP	-	-	-	-	40	
DP2 1A-1B	DPT2ZN	DP	-	=	-	=	42	
DP3 1A-1B-1EC	DPT3ZN	DP	-	806422012-027	-	-	44	
DP3 1A-2C-1EC V04		DP	806422000-063	=	-	-	46	
DP3 1C-2E	DP3GE	DP	-	-	-	-	48	
DP3 2A-1EC	DPJ3ZN	DP	806422000-021	806422012-033	-	-	50	
DP4 4A VO2	DP4-9FAZN	DP	806422000-039	-	-	-	50	
OP4 4A-2EC	DP4-9ZN	DP	806422000-039	-	-	=	52	
DP4 4B-2EC	DP4-13ZN	DP	-	-	806422010-035	806422024-043	54	
DP6 4A-2EC	DP6-9ZN	DP	806422000-041	-	-	-	56	
DP6 2A-4D-2EC	DP6AD	DP	on request	on request	-	-	58	
GR3 3A-1EC	GR3-9ZN	GR	806422000-001	806422012-013	-	-	60	
GR3 3B-1EC	GR3-13ZN	GR	-	-	806422010-011	806422024-025	62	
GR3 1A-2E-1EC	GRK3ZN	GR	806422000-007	806422012-019	-	-	64	
GR3 2B-1C-2EC	GRI3	GR	-	-	806422010-011	806422024-025	66	
GR4 2A-1B-1C-2EC	GRI4SBZN	GR	806422000-007	806422012-019	_	_	68	
GR4 2A-2B-2EC	GRB4ZN	GR	806422000-007	806422012-019	_	_	70	
GR4 2A-1B-1D-2EC	GR4MRZN	GR	806422000-007	806422012-019	_	-	72	
GR4 2A-1C-1D-2EC	GRI4ZN	GR	806422000-007	806422012-019	-	_	74	
GR4 2A-2C-2EC	GRI4TBZN	GR	806422000-007	806422012-019	_	_	76	
GR5 2B-3D-2EC	GR5AAZN	GR	-	-	806422010-011	806422024-025	78	
GR5 3A-1D-1E-2EC	GRD5ZN	GR	806422000-007	806422012-019	-	-	80	
GR5 2B-2C-1E-2EC	GRZ5ZN	GR	-	-	806422010-011	806422024-025	82	
GR5 5C	GR5-15ZN	GR	_		-	-	84	
R6 6A-2EC	GR6-9ZN	GR	806422000-001	806422012-013	_	_	86	
GR6 4A-2B-2EC	GRT6ZN	GR	806422000-007	806422012-019	_		88	
GR4 4B-2D-4EC	GR6ABZN	GR	-	-	806422010-011	806422024-025	90	
GR6 2A-2B-2C-2EC	GRM6MCZN	GR	806422000-007	806422012-019	-	- 000422024 020	92	
GR6 6B-2EC	GR6-13ZN	GR	-	-	806422010-011	806422024-025	94	
GR6 3A-1B-1C-1D-2EC	GRC6ZN	GR	806422000-007	806422012-019	-	-	96	
GR6 1A-1B-1C-2D-1EC	GRP6ZN	GR	806422000-007	806422012-019	_	-	98	
GR6 2A-2C-2D-2EC	GRM6ZN	GR	806422000-007	806422012-019	-		100	
GR6 2A-2B-1D-1E-2EC	GRU6ZN	GR	806422000-007	806422012-019	_	-	102	
GR6 2B-4D-2EC	GR6LLZN	GR	-	-	806422010-011	806422024-025	102	
GR6 2A-4C-2EC	GRM6ALZN	GR	806422000-007	806422012-019	-	- 000422024-023	106	
GR6 2A-1B-2D-1E-3EC	GR6AF	GR	806422000-007	806422012-019	806422010-011	806422024-025	108	
GR7 4A-3B-4EC				;		-		
GR7 4A-3B-4EC GR7 4A-3B-4EC V01	GR7ABZN GR7ABZNLC	GR GR	806422000-007 806422000-007	806422012-019 806422012-019	-		110	
GRHP7 7A-4EC	GR7ACZN	GR	806422000-007	806422012-019	-	-	112	
GR7 4A-1B-2D-4EC	GR7AAZN	GR	806422000-007	806422012-019	-		114	
		GR		:		_		
GR8 6A-2B-6EC	GR8ABZN	:	806422000-007	806422012-019	-	-	116	
GR8 7A-1D-7EC	GR8AAZN	GR CB	806422000-007	806422012-019	-		118	
GR10 10A-2EC	GR10-9ZN	GR CB	806422000-007	806422012-019	-	-	120	
GR10 10A-2EC V01	GR10-9LCZN	GR CD	806422000-007	806422012-019	-	-	120	
GR10 10A-2EC V03	GR10-9ZNSD	GR	-	-	-	<u> </u>	120	

Upon request different number of contacts.



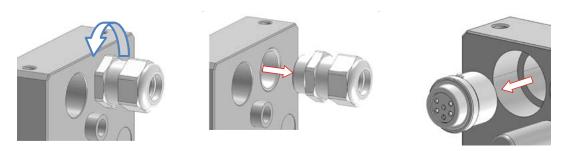
Installation

Stucchi electrical connectors are normally supplied already assembled on the Stucchi multicouplings or could be supplied as a spare part to be replaced on a Stucchi multicoupling.

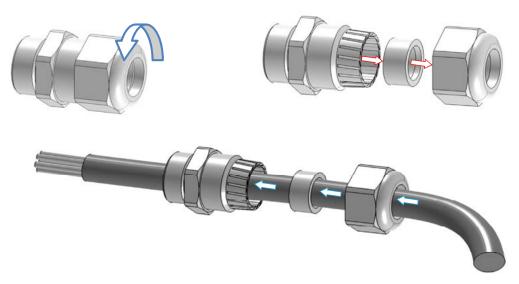


A. If the electrical connector is assembled on a Stucchi multi coupling proceed as following instruction:

Unscrew the cable retainer from the back of the multi coupling & extract the electrical connector from the multi coupling, separating the plastic cable retainer from the metallic body of the electrical connector.



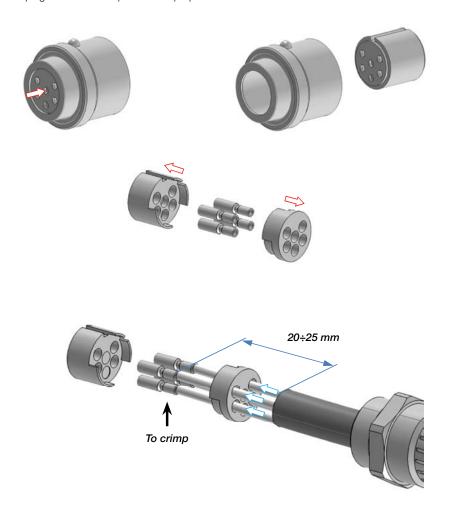
Unscrew the plastic nut from the cable retainer, then insert the cable in the plastic cable retainer, so strip the cable for a length of 30 mm and the single wires for 10 mm.



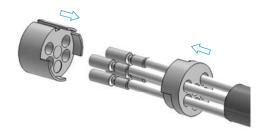
Electrical connectors



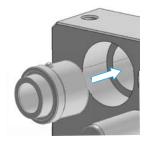
Open the electrical connector cartridge to extract the single pins. Install the single cable wire crimping the end on the pin with the proper tool.



Assemble the cartridge with all the pins & wiring crimped.

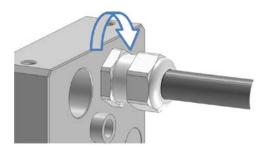


Insert the metal body of the electrical connector at the back of the multicoupling. Insert the cable with all the group assembled on. Allow the alignment of the groove on the cartridge with the pin in the hole of the multiconnection.





Screwing the plastic nut with the metallic body (a manual torque is enough, do not overtorque). Push the cable in direction of the connector, while screw the (cable retainer) plastic nut to lock the cable and verify if there is no space for accidental incoming of water or dirt between cable and cable retainer sealing (a manual torque is enough, do not overtorque). The cable has to adhere to the cable retainer not allowing water, dirt or moisture to enter in. The male electrical connector is provided with a plastic protection: ensure this protection is sliding correctly on the pins after assembly.



Before connecting clean the flat mating surface to avoid inclusion of contamination. Connect and disconnect in according to the instruction of use for multicoupling. Test the correct functioning of the electrical connector.

B. If the electrical connector is supplied as a spare part to be replaced on a Stucchi multi coupling

Same as above but start by opening the electrical connector separating the plastic cable retainer from the upper metal body.



A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects. It is MANDATORY to read and closely follow the instructions. Last updated version always apply at time of installation, see latest written Instructions on Stucchi website (stucchigroup.com) before selecting or using Stucchi products.

Do not pull the cable assembly during the use in order to avoid damages of the electrical connector.

Do not weld the electrical connector pins, they are intended to be assembled by crimping with proper tool.

Do not use the electrical connector with high voltage or high amperage.

Do not connect or disconnect with power in the lines! Always shut off the power prior to connect&disconnect.

Do not touch with hand, finger or tools the pins. Do not shortcircuit, misuse or modify the parts.

Avoid liquids, dirts, particles or other objects touching the pins: shortcircuits may happen!

The products are intended to be used in Stucchi multiconnection only. Do not use the electrical connectors on a Custom-made multiconnection or other device different than a Stucchi Multiconnection.

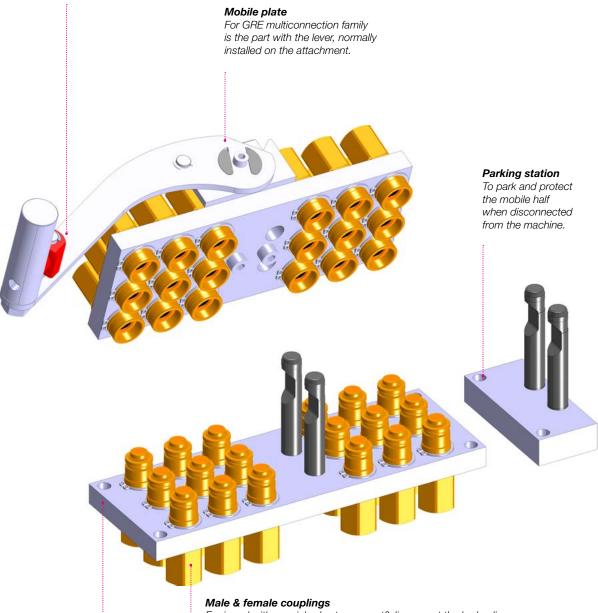
Every multiconnection has to be fitted with the corresponding electrical connector. For spare parts consult the list of EC at following page and the single datasheet of the multiconnection in use. Contact Stucchi Service for support.

GRE: glossary



Levers & Locking

Ergonomic lever for easy connection/ disconnection with Safety lock system avoids accidental disconnection



Equipped with special valve to connect&disconnect the hydraulic, water or pneumatic lines. Made in brass with stainless steel springs.

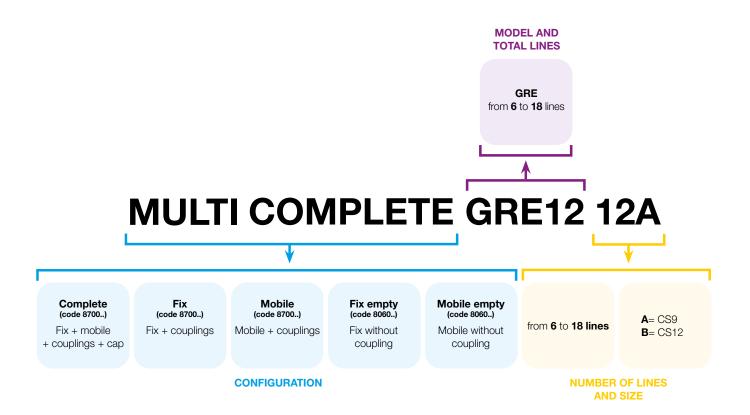
Fixed plate

For GRE multiconnection family is the part with the pins but without the lever, normally installed on the machine.

GRE: multi description



The stucchi multicoupling description can help you to easily know the characteristics of a multicoupling: configuration and model, number of lines and size, presence of electrical connectors. See the example below...



GRE: multi map



New name	Family	Total Lines	CS9 (A)	CS12 (B)	Previous description	Page
Body size	<u> </u>		3/8"	1/2"		
Max flow suggest	ed (I/min)		46	90		
Mostly used a	laptor		3/8"	1/2"		
(main alternative	GRE	6	(1/2") 6		GRE6-9	162
RE6 6B	GRE	6		6	GRE6-12	164
GRE12 12A	GRE	•	12		GRE12-9	166
GRE12 12B	GRE	12		12	GRE12-12	168
GRE18 18A	GRE	18	18		GRE18-9	170
GRE18 18B	GRE	18		18	GRE18-12	172
		*			4	
						4
			U.			
	-	9		CST.	12-5-13	
	1					

GRE: how to choose



Water/Glycol - Air/Oil

Operating pressure up to 10 bar - 145 PSI

Connection/Disconnection without residual pressure

GRE

Features

- UP to 18 lines
- Plates in anodized aluminum



GRE: how to choose



CHOOSE CONFIGURATION OF THE MULTICOUPLING



1 Dimension your CS couplings



2 Define your configuration = List your couplings (CS9 or CS12, total number of CS)

Eg: 6 x size 3/8"

Coupling size choice is based on:

- Flow/Pressure drop
- Operating pressure max 10 bar (check on the CS serie datasheet)
- Hose/Port size



3 Choose the multicoupling for your configuration

Use the overview table "Multi description" to choose the multicoupling for your listing/configuration

Eg: 6 x size 3/8" = choose GRE6-9 (6 lines with 6 CS9=3/8 couplings)

Advices:

- 1. you can increase the size of couplings to have a better match with an existing configuration.
- 2. In case of too many lines, you may need to divide your configuration in different plates.

GRE: features



Technical features and options



Interchange Stucchi internal specification



Available threads BSP NPT hose barb or other port available on request



Mechanical connection Internal cams and locking pins



Valving style Non Spill type



Connection/disconnection system Rotating the lever & lock the safety button



Operating pressure Up to 10 bar/145 psi



Construction material and surface treatment

Body plates in aluminum alloy - anodizing surface treatment; lever in carbon steel with CRIII zinc plating. Cams and pins in high resistance carbon steel with nitriding (QPQ) treatment.



Flow rate Up to 90 I/min - 24 gpm



Nominal diameter available 3/8" (CS9) - 1/2" (CS12)



Temperature - for oil, from -20° C to +100° C (from -4° F to +212° F)- for water, from +5° C + 60° C (from +41° F to +140° F)



Connection under pressure not allowed

Application



















Benefits

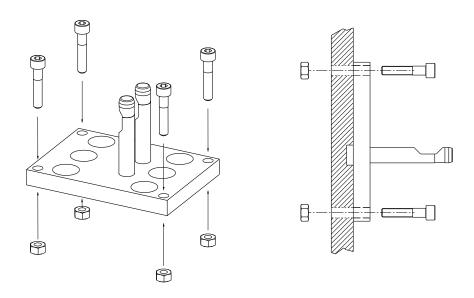
- Optimal solution for industrial application with a operating pressure up to 10 bar.
- Designed to be used for hydraulic oil-water/cooling-pneumatic application.
- Quick connection and disconnection of up to eighteen (18) hydraulic, water-cooling and pneumatic lines without any risk to incorrect connection of the lines.
- Ergonomic lever for easy connect/disconnect.
- Non spill valve design couplers reduces environmental issue of leakage.
- No risk of misalignment with guide pin design.
- Couplers mounted with snap rings for ease of installation or replacement.
- Easily mounted on new equipment or retrofit on pre-existing system.

GRE: installation



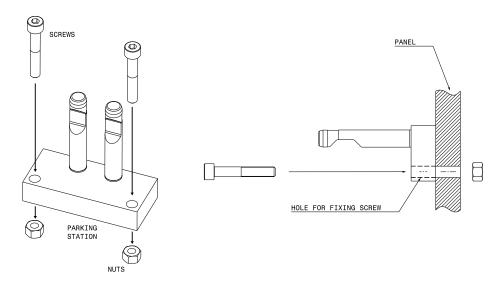
Installation

Fix the fixed multicoupling on the machine using fixing screws as indicated in the drawing here below. The multiconnection may be installed with the coupling in vertical or horizontal position. After having assembled the couplings on the hoses, place the couplings in the holes of the multicouplings and lock them with the seeger rings. Please refer to correspondant CS coupling series datasheet for further information.



To install the parking station

To install the parking station ensure the space to assemble the parking station is enough to allow the correct connection & disconnection in an ergonomic way. Check the drawing of the parking station. Fix the parking station body on the machine or the frame of the attachment using fixing screws as indicated in the drawing of the corresponding parking station.

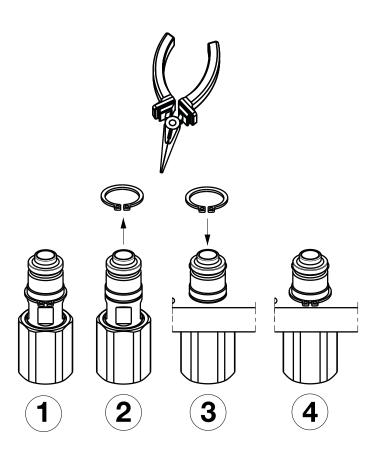


GRE: how to use



CS: How to install

- CS couplings are normally supplied already assembled on the Stucchi multiconnection or may be supplied as a spare part to be replaced on a Stucchi multiconnection.
- Use flexible hoses to connect the couplings; avoid to use rigid pipes as they could transmit excessive side load&vibration to the multiconnection.
- To assemble/disassemble the CS couplings on the multiconnection: take away the seeger ring from the groove, assemble the flexible hose on the end port, insert the coupling in the proper hole of the multiconnection; then assemble the seeger ring to lock the CS coupling in the multiconnection. See the sequence below 1... 4 and viceversa to disassemble.
- Be careful during the assembly of the seeger ring: if damaged replace it with a new one.
- Before to couple clean the flat mating surface of quick coupling to avoid the inclusion of dirt in the circuit.

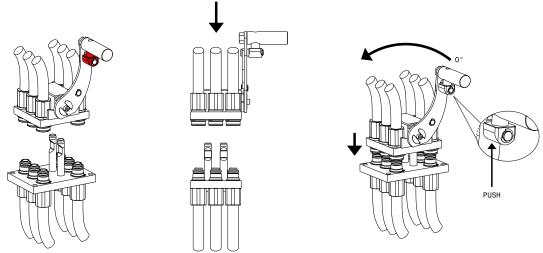


GRE: how to use

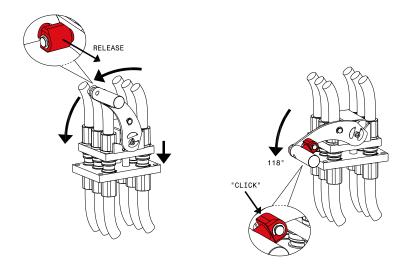


To connect

Release the pressure in the system. Before merging the two halves of the Stucchi multicoupling, ensure that the flat mating surfaces of the couplings are clean to avoid inclusion of dirt in the circuit. Handle needs to be in the 12 o'clock starting position. Align and insert guide pins on fixed half into the mating port on the mobile half until pins are fully inserted. Engage red locking mechanism on the handle (by pushing the red button) and move handle in a downward direction.

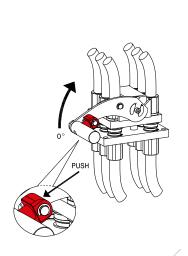


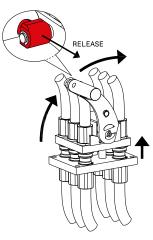
After a short rotation release the red button; Continue to rotate till the safety lock automatically engages itself in the final position. Now the multicoupling is coupled and ready to work.



To disconnect

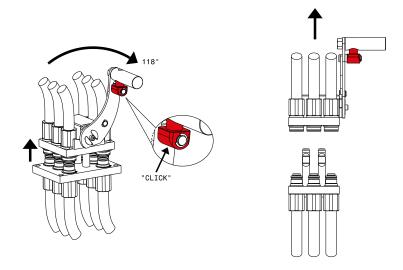
Release the pressure in the system. To disconnect reverse process: engage the locking mechanism (by pushing red button) and raise handle in upward direction. After short rotation release the red button.



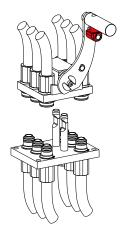




Continue to rotate till the safety lock automatically engage itself in the 12 o 'clock position. Pull out mobile half from fixed half pins. (Pay attention during the pulling phase not to make the mobile half fall down causing injure).



Now the multicoupling is uncoupled.



WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.

Never connect or disconnect with dynamic pressure (e.g. pump on).

Do not use the female coupling disconnected with high impulse pressure.

Do not couple-uncouple with flow and/or pressure in the circuit.

Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).

Check the maximum allowable operating pressure of the port in use.

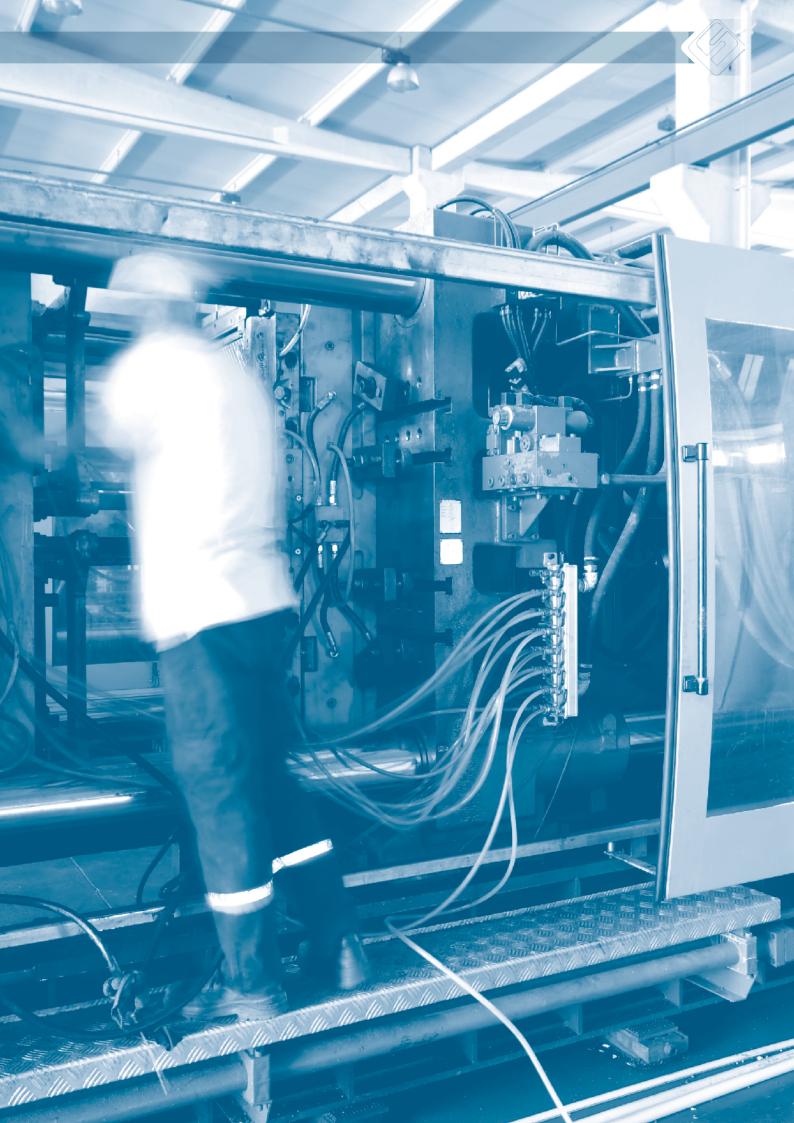
Make sure that the medium used is compatible with seal and material as indicated for each series.

In case of doubt please contact Stucchi Technical Support.

It is MANDATORY to read and closely follow the instructions. Last updated version always apply at time of installation, see latest written Instructions on Stucchi website (stucchigroup.com) before selecting or using Stucchi products.

Do not force the lever without pushing the red safety button.
Do not use extensions or other tools to ease the rotating of the lever.
Do not connect the fixed half with the mobile half if dirt or other material (tool, finger) is between them.

Do not modify, disassemble or damage the product, the lever or safety lock system Do not use GRE multiconnection for high pressure and high temperature application. Please refer to CS coupling datasheet & single GRE multiconnection datasheet.



Low pressure

Stucchi[®]

MULTICOUPLINGS



GRE

p. 164

Valving style: Flat face Interchange: Stucchi profile Sealing description: Nitrile NBR Available sizes: From 3/8" to 1/2" Operating pressure: Up to 10 bar Flow rate: Up to 90 l/min Material: Aluminium

COUPLINGS



CS

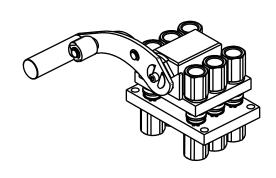
p. 177

Valving style: Flat face
Interchange: Stucchi interface
Available sizes: From 3/8" to 1/2"
Operating pressure: Up to 10 bar
Flow rate: Up to 90 l/min
Connection system:
By multicoupling
Connection under pressure:
Not allowed

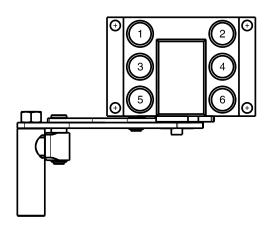


DRAWING





CONFIGURATIONS



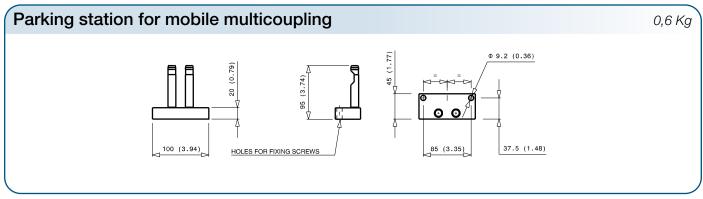
Possible configurations				
Pos	Coupling size			
ALL	CS9			

MultiCoupling (couplings included)					
Code	Name	Description			
870020117	MULTI FIX GRE6 6A	6 CS9 3/8 BSP			
870020217	MULTI MOBILE GRE6 6A	6 CS9 3/8 BSP			

	MultiCoupling spare parts (couplings not included)						
Code	Name						
806000024	MULTI FIX EMPTY GRE6 6A						
806000025	MULTI MOBILE EMPTY GRE6 6A						
815606033	PARKING STATION MOBILE MULTICOUPLING GRE 100x45						
815701059	SPARE KIT LEVER GROUP GRE 125x95						



Fixed and mobile multicoupling 0,6 Kg and 1,5 Kg READY TO CONNECT POSITION MOBILE MULTICOUPLING Φ 9.2 (0.36) FIXED MULTICOUPLING 118° 70 (2.76) CONNECTED POSITION 220.2 (8.67) (0.59)104.7 (4.12) 44.5 (1.75) 18 (0.71) 45 (1.77) 105 (4.13) 90.9 (3.58) 75 (2.95) 120 (4.72) HOLES FOR FIXING SCREWS 135 (5.31) 180.9 (7.12) 217.7 (8.57) Dimensions in millimeters (inch)



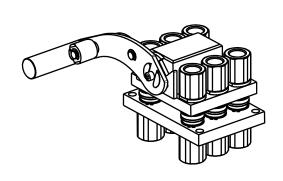
STUCCHI MultiCouplings Catalog - January 2021- All right reserved.

Texts, data and illustrations mentioned in this catalogue may be changed by Stucchi at any time, without notice; always refer to the version uploaded on the English version of stucchigroup.com/en website for the latest release. In case of doubt, please contact Stucchi technical service.

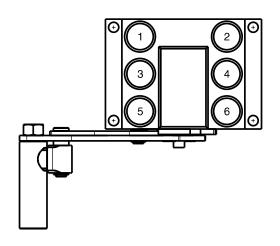


DRAWING





CONFIGURATIONS



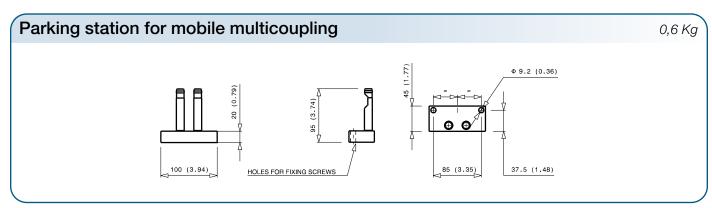
Possible configurations				
Pos	Coupling size			
ALL	CS12			

	MultiCoupling (couplings included)						
Code	Name	Description					
870020005	MULTI COMPLETE GRE6 6B	6 CS12 1/4 BSP					
870020105	MULTI FIX GRE6 6B	6 CS12 1/4 BSP					
870020111	MULTI FIX GRE6 4B	4 CS12 1/2 BSP					
870020118	MULTI FIX GRE6 6B	6 CS12 1/2 BSP					
870020205	MULTI MOBILE GRE6 6B	6 CS12 1/4 BSP					
870020211	MULTI MOBILE GRE6 4B	4 CS12 1/2 BSP					

	MultiCoupling spare parts (couplings not included)					
Code	Code Name					
806000090	MULTI FIX EMPTY GRE6 6B					
806000091	MULTI MOBILE EMPTY GRE6 6B					
815606033	PARKING STATION MOBILE MULTICOUPLING GRE 100x45					
815701059	SPARE KIT LEVER GROUP GRE 125x95					



Fixed and mobile multicoupling 0,7 Kg and 1,6 Kg READY TO CONNECT POSITION MOBILE MULTICOUPLING Φ 9.2 (0.36) FIXED MULTICOUPLING CONNECTED POSITION 75 (2.95) 220.2 (8.67) (0.59)15 (0.59) 104.7 (4.12) 44.5 (1.75) 45 (1.77) (0.71) 18 90.9 (3.58) 85 (3.35) 127 (5) HOLES FOR FIXING SCREWS 142 (5.59) 190.9 (7.52) 221.2 (8.71) Dimensions in millimeters (inch)



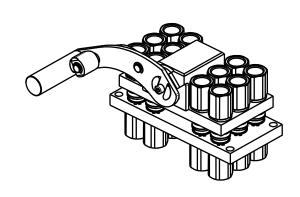
STUCCHI MultiCouplings Catalog - January 2021- All right reserved.

Texts, data and illustrations mentioned in this catalogue may be changed by Stucchi at any time, without notice; always refer to the version uploaded on the English version of stucchigroup.com/en website for the latest release. In case of doubt, please contact Stucchi technical service.

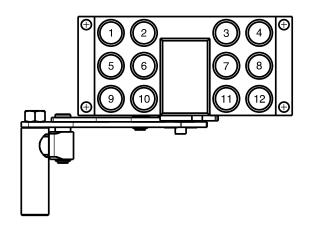


DRAWING





CONFIGURATIONS

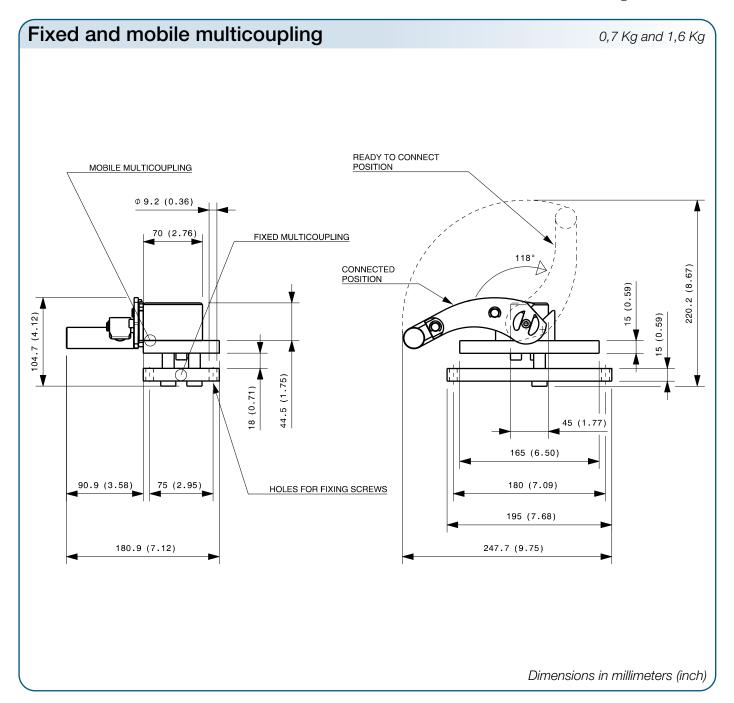


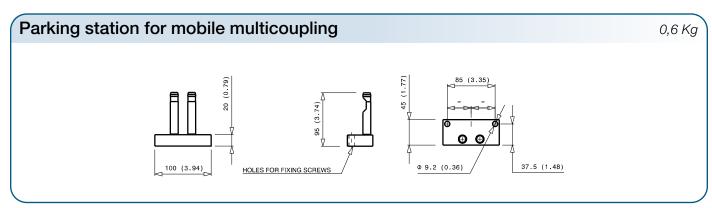
Possible configurations				
Pos	Coupling size			
ALL	CS9			

	MultiCoupling (couplings included)					
Code		Name	Description			
870020010		MULTI COMPLETE GRE12 12A	12 CS9 3/8 NPT			
870020112		MULTI FIX GRE12 8A	8 CS9 1/2 BSP			
870020208		MULTI MOBILE GRE12 12A	12 CS9 3/8 NPT			
870020212		MULTI MOBILE GRE12 8A	8 CS9 1/2 BSP			

	MultiCoupling spare parts (couplings not included)								
Code	Code Name								
806000020	MULTI FIX EMPTY GRE12 12A								
806000021	MULTI MOBILE EMPTY GRE12 12A								
815606033	PARKING STATION MOBILE MULTICOUPLING GRE 100x45								
815701059	SPARE KIT LEVER GROUP GRE 125x95								







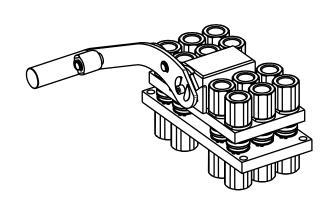
STUCCHI MultiCouplings Catalog - January 2021- All right reserved.

Texts, data and illustrations mentioned in this catalogue may be changed by Stucchi at any time, without notice; always refer to the version uploaded on the English version of stucchigroup.com/en website for the latest release. In case of doubt, please contact Stucchi technical service.

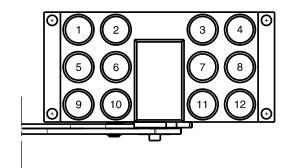


DRAWING





CONFIGURATIONS

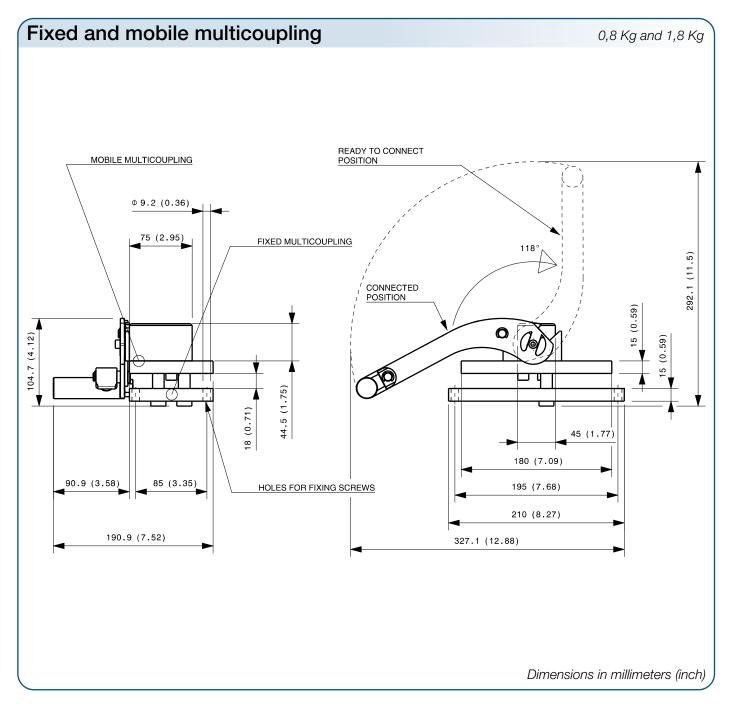


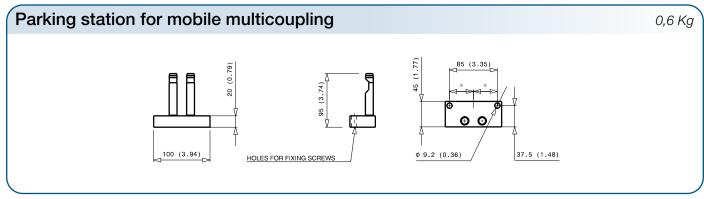
	Possible configurations									
Pos	Coupling size									
ALL	CS12									

	MultiCoupling (couplings included)										
Code	Code Name Description										
870020109	MULTI FIX GRE12 12B	12 CS12 1/2 BSP									
870020209	MULTI MOBILE GRE12 12B	12 CS12 1/2 BSP									

	MultiCoupling spare parts (couplings not included)								
Code	Code Name								
806000026	MULTI FIX EMPTY GRE12 12B								
806000027	MULTI MOBILE EMPTY GRE12 12B								
815606033	PARKING STATION MOBILE MULTICOUPLING GRE 100x45								
815701078	SPARE KIT LEVER GROUP GRE 200x95								



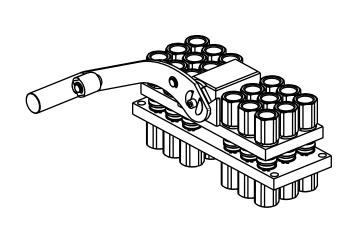




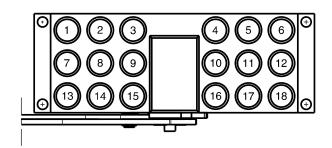


DRAWING





CONFIGURATIONS



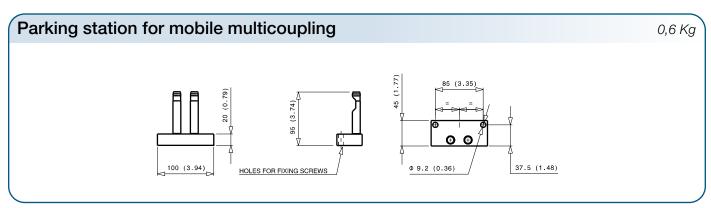
Po	Possible configurations									
Pos	Coupling size									
ALL	CS9									

	MultiCoupling (couplings included)										
Code	Code Name Description										
870020120	:	MULTI FIX GRE18 18A	18 CS9 3/8 NPT								
870020220		MULTI MOBILE GRE18 18A	18 CS9 3/8 NPT								

	MultiCoupling spare parts (couplings not included)								
Code	Code Name								
806000022	MULTI FIX EMPTY GRE18 18A								
806000023	MULTI MOBILE EMPTY GRE18 18A								
815606033	PARKING STATION MOBILE MULTICOUPLING GRE 100x45								
815701078	SPARE KIT LEVER GROUP GRE 200x95								



Fixed and mobile multicoupling 0,9 Kg and 1,8 Kg READY TO CONNECT POSITION MOBILE MULTICOUPLING Φ 9.2 (0.36) 70 (2.76) FIXED MULTICOUPLING 118° CONNECTED **POSITION** (0.59)104.7 (4.12) 18 (0.71) 45 (1.77) 225 (8.86) 90.9 (3.58) 75 (2.95) 240 (9.45) HOLES FOR FIXING SCREWS 255 (10.04) 349.6 (13.76) 180.9 (7.12) Dimensions in millimeters (inch)



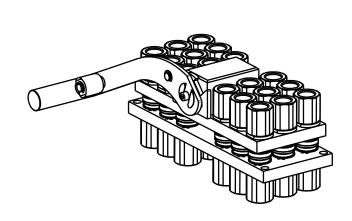
STUCCHI MultiCouplings Catalog - January 2021- All right reserved.

Texts, data and illustrations mentioned in this catalogue may be changed by Stucchi at any time, without notice; always refer to the version uploaded on the English version of stucchigroup.com/en website for the latest release. In case of doubt, please contact Stucchi technical service.



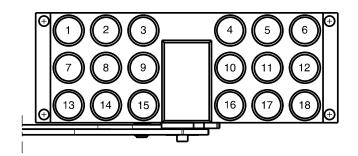
DRAWING





CONFIGURATIONS

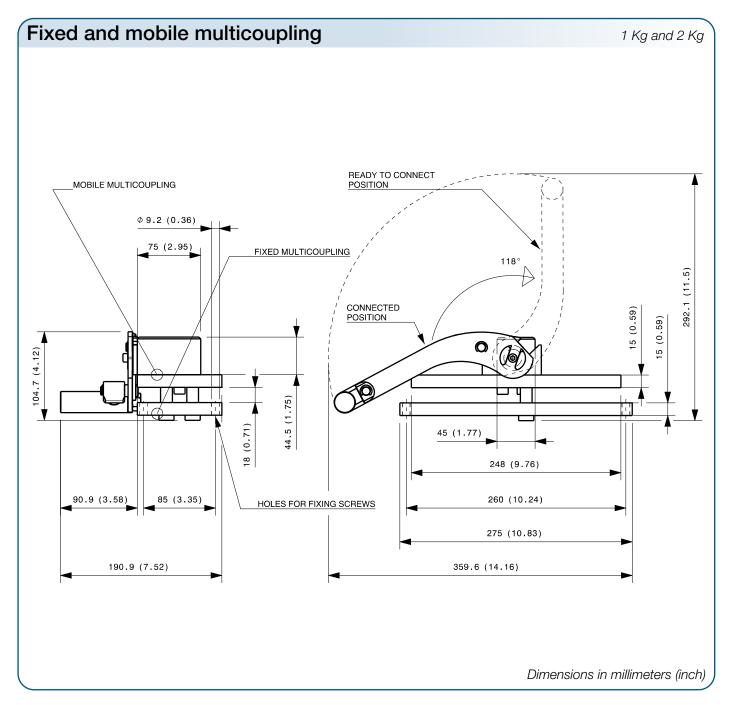
Possible configurations								
Pos	Coupling size							
ALL	CS12							

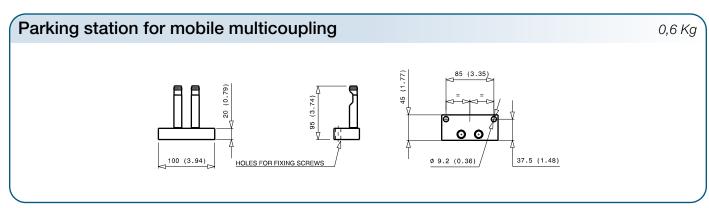


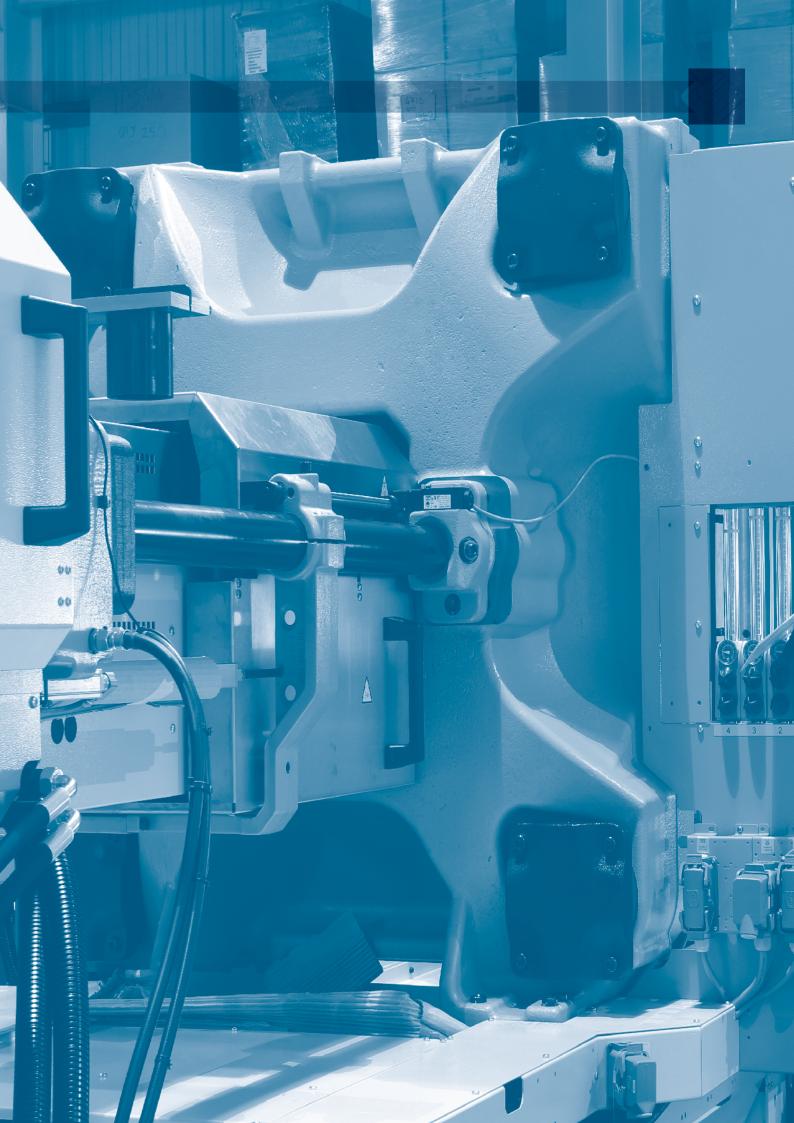
	MultiCoupling (couplings included)										
Code	Code Name Description										
870020121	MULTI FIX GRE18 18B	18 CS12 1/2 BSP									
870020221	870020221 MULTI MOBILE GRE18 18B 18 CS12 1/2 BSP										

	MultiCoupling spare parts (couplings not included)								
Code	Code Name								
806000028	MULTI FIX EMPTY GRE18 18B								
806000029	MULTI MOBILE EMPTY GRE18 18B								
815606033	PARKING STATION MOBILE MULTICOUPLING GRE 100x45								
815701078	SPARE KIT LEVER GROUP GRE 200x95								









INTERCHANGE > Stucchi profile (only for Stucchi multicouplings)





TECHNICAL FEATURES AND OPTIONS



Interchange





Sealing description Nitrile NBR



Connection system





from 3/8'



Material Brass



Available





Operating Up to 10 bar



Locking mechanism PIN/CAM



Flow rate Up to 90 I/min



Temperature (°C)



Valving style Flat face



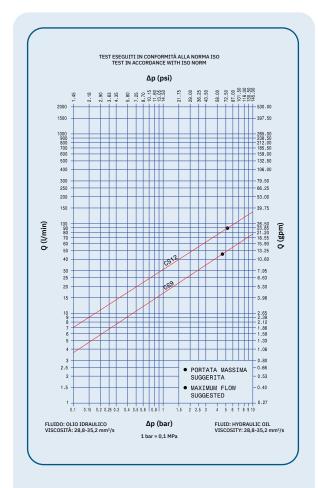
Connection under pressure Connection: not allowed Disconnection: not allowed

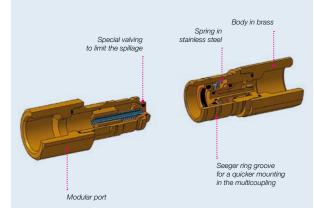
BENEFITS

- The solution to conduct low pressure hydraulic oil,pneumatic or water lines.
- Valving design helps to reduce the inclusion of contamination to the circuit.
- Minimal fluid loss during connection / disconnection, reducing fluid loss to the environment.
- Minimal air inclusion during connection / disconnection, enhancing correct function of the circuit.
- Linear flow reduces internal turbulence and pressure drop, maintaining circuit efficiency in the entire system.
- Good corrosion resistance thanks to brass components construction
- The modular design allows flexibility with the range of port configurations (hose barb available on request).
- Allows to conduct in the same multiconnection different fluids:hydraulic oil, water, air.
- Couplings are assembled with a seeger ring for a quicker mounting or service on the multiconnection.
- Compact slim design.
- Safe and simple to use.

HOW TO USE

See instructions at page 156





MAIN APPLICATIONS







PERFORMANCE

S	ize	Series/Size	Max. flow	suggested	Spillage*
Inch	mm (ISO)		I/min	GPM	ml
3/8	-	CS9	46	12.2	0.03
1/2	-	CS12	90	23.8	0.04

Size	Series/Size	s/Size Max. operating pressure						Burst pressure					
				lale	Female Couple		pled	Male		Female			
Inch		MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
3/8	CS9	1	145	1	145	1	145	4	580	4	580	4	580
1/2	CS12	1	145	1	145	1	145	4	580	4	580	4	580

^{*} Spillage is an indicative value of the fluid loss per couple-uncouple cycle.

Different possible configurations:

Other ports available upon request. Different threads available upon request.

PL version, free flow (without valve) on both sides.

Temperature range:

Seals in NBR (Nitrile):

- for oil, from -20° C to +100° C (from -4° F to +212° F)
- for water, from $+5^{\circ}$ C $+60^{\circ}$ C (from $+41^{\circ}$ F to $+140^{\circ}$ F)

Upon request seals in VITON®: from -15°C to +180°C (from +5 °F to +356 °F).

Tests:

The couplings have been tested in according with ISO norm.



A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.

Never connect or disconnect with dynamic pressure (e.g. pump on).

Do not use the female coupling disconnected with high impulse pressure.

Do not couple-uncouple with flow and/or pressure in the circuit.

Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).

Check the maximum allowable operating pressure of the port in use.

Make sure that the medium used is compatible with seal and material as indicated for each series.

In case of doubt please contact Stucchi Technical Support.

It is MANDATORY to read and closely follow the instructions. Last updated version always apply at time of installation, see latest written Instructions on Stucchi website (stucchigroup.com) before selecting or using Stucchi products.

Please read carefully General instructions for selection and use of the products in our master catalogues.

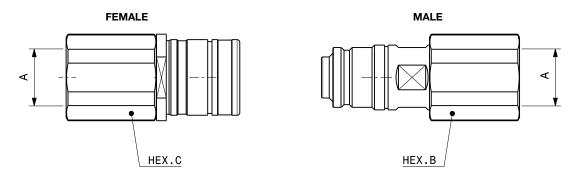
Do not couple-uncouple with flow and/or dynamic pressure in the circuit.
CS series is intended to be used only on Stucchi Multiconnections. Do not use the CS coupling on a Custom-made multiconnection or other device different than a Stucchi

Do not disassemble, misuse, modify or damage the products.

CS series has been tested&approved with hydraulic oil. CS serie is intended to be used only with not dangerous fluids (water, hydraulic oil, air at low temperature/low pressure). Do not use CS couplings with dangerous, inflammable or explosive fluids (steam, acids, very hot/flammable oils etc.). Do not use CS couplings with very hot fluids (limits given by NBR seal compatibility&temperature range). Do not use CS couplings with fluids below the freezing point to avoid damages due to ice expansion and consequential extrusion of the valving



SPECIFICATIONS



Port description: FEMALE THREAD BSPP (ISO 1179-1)

Body size	Descriptive Code	Item Code			Port (A)		Hex		Weight	
							mm	inch	Kg	Lbs
3/8"	F CSF9BN 3/8 BSP	Female	802100002		3/8"	С	27,0	1,06	0,19	0,41
3/0	M CSM9BN 3/8 BSP	Male	802100003	i	3/0	В	27,0	1,06	0,16	0,36
3/8"	F CSF9BN 1/2 BSP	Female	802100006		1/2"	С	27,0	1,06	0,18	0,39
0/0	M CSM9BN 1/2 BSP	Male	802100007		1/2	В	27,0	1,06	0,16	0,34
1/2"	F CSF12BN 1/4 BSP	Female	802100000	•	1/4"	С	30,0	1,18	0,23	0,51
1/2	M CSM12BN 1/4 BSP	Male	802100001		1/ 4	В	30,0	1,18	0,20	0,45
1/2"	F CSF12BN 1/2 BSP	Female	802100008		1/2"	С	30,0	1,18	0,24	0,52
1/2	M CSM12BN 1/2 BSP	Male	802100009	i	1/2	В	30,0	1,18	0,22	0,48

Port description: FEMALE THREAD NPT (ANSI B1.20.1)

Body size	Descriptive Code	Item Code		Port (A)	Hex			Weight	
					·	mm	inch	Kg	Lbs
3/8"	F CSF9BN 3/8 NPT	Female	802101000	3/8"	С	24,0	0,94	0,15	0,32
3/0	M CSM9BN 3/8 NPT	Male	802101003	3/0	В	24,0	0,94	0,13	0,28
1/2"	F CSF12BN 1/2 NPT	Female	802101004	1/2"	С	30,0	1,18	0,24	0,52
1/2	M CSM12BN 1/2 NPT	Male	802101005	1/2	В	30,0	1,18	0,21	0,45



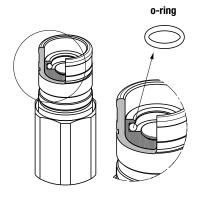


SPARE KIT SEAL FOR FEMALE

	Repair kit	
Body Size	Description	Part Number
3/8"	SET OF 10 EXTERNAL OR CSF9	815701060
1/2"	SET OF 10 EXTERNAL OR CSF12	815701062

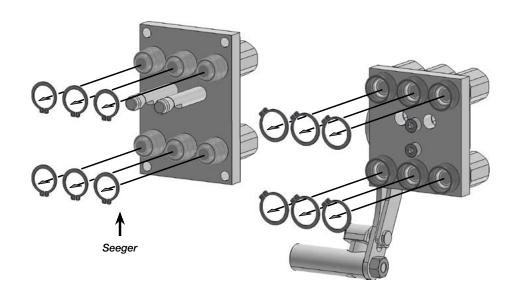
O-Ring in Nitrile

(kit composed of 10 O-Ring for female coupling; 1 female = 1 O-Ring)



REPAIR SEEGER

	Repair kit seeger
Part Number	Description
815701103	SET 0F 10 SEEGER CSF9-CSM12
815701104	SET OF 10 SEEGER CSM9
815701105	SET OF 10 SEEGER CSF12

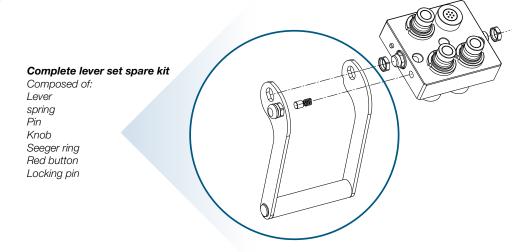




Spare Kit Lever



DP Series



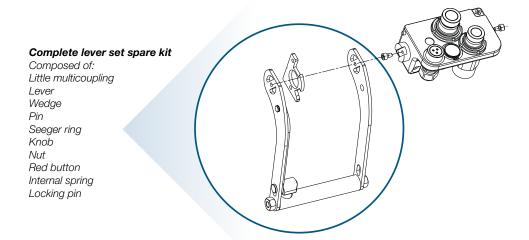
How to replace it

Unscrew & disassemble the lever group from the fixed multiconnection, then disassemble the seeger ring to extract the knob. Reassemble the new kit with the same sequence vice-versa. Threads of the lever set have to be reassembled with Loctite (2701 Type) and screw the tread with proper torque.

Energized spring could come out from the button, be careful.

Pay attention to the button internal pin - it is pushed by a spring! Be careful.

GR Series



How to replace it

Unscrew the lever group from the fixed multiconnection, then take away the little multicoupling. Reassemble the new kit with the same sequence vice-versa. Threads of the lever set have to be reassembled with Loctite (2701 Type) and screw the thread with proper torque.

Energized spring could come out from the button, be careful.

Pay attention to the button internal pin - it is pushed by a spring! Be careful.

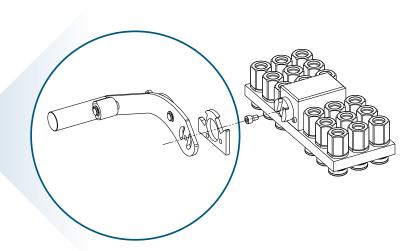
Spare Kit Lever



GRE Series

Complete lever set spare kit

Composed of: Lever spring Pin Knob Seeger ring Red button Locking pin



How to replace it

Unscrew the lever group from the mobile multiconnection, then take away the little multicoupling. Reassemble the new kit with the same sequence vice-versa. Threads of the lever set have to be reassembled with Loctite (2701 Type) and screw the thread with proper torque.

Energized spring could come out from the button, be careful.

Pay attention to the button internal pin - it is pushed by a spring! Be careful.



Energized spring could come out from the button, be careful!

Here above instruction has to be considered as general indication how to replace spare kit on multicoupling, not a complete instruction of use. Please ask the specific instruction by contacting Stucchi Customer Service for support at info@stucchi.it

Notice: all the nut&threads of the lever set have to be reassembled with Loctite (2701 Type) before screwing. All the threads have to be screwed with proper torque value. The code of the lever spare kit is on the multicoupling datasheet

Other products

FLAT FACE



FIRG

Valving style: Flat face Interchange: ISO 16028 Sealing description: Nitrile NBR Available sizes: From 1/4" to 2" Operating pressure: Up to 330 bar Flow rate: Up to 1000 l/min Material / Treatment: Carbon steel / Cr3



Α

Valving style: Flat face
Interchange: ISO 16028
Sealing description: Nitrile NBR
Available sizes: From 1/8" to 1-1/2"
Operating pressure: Up to 420 bar
Flow rate: Up to 750 I/min
Material / Treatment:
Carbon steel / Cr3



APM

Valving style: Flat face
Interchange: ISO 16028
Sealing description: Nitrile NBR
Available sizes: From 3/8" to 1-1/2"
Operating pressure: Up to 350 bar
Flow rate: Up to 750 l/min
Material / Treatment:
Carbon steel / Cr3
Connection under pressure: One side only



Stucchi[®]

A-HD

Valving style: Flat face Interchange: ISO 16028 Sealing description: Nitrile NBR Available sizes: From 3/8" to 1/2" Operating pressure: Up to 350 bar Flow rate: Up to 90 l/min Material / Treatment: Carbon steel / Cr3 Connection under pressure: One side only



AX

Valving style: Flat face Interchange: ISO 16028 Sealing description: FKM (Viton®) Available sizes: From 1/4" to 1" Operating pressure: Up to 350 bar Flow rate: Up to 378 l/min Material / Treatment: Stainless steel (AISI 316L)



FIRG-Q

(AISI 316L) / QPQ

Valving style: Flat face
Interchange: ISO 16028
Sealing description:
Nitrile NBR-FKM(Viton®)-EPDM-Kalrez®
Available sizes: From 1/4" to 2"
Operating pressure: Up to 300 bar
Flow rate: Up to 1000 l/min
Material / Treatment:
Carbon steel+Stainless steel



FL

Valving style: Flat face Interchange: ISO 16028 Sealing description: FKM (Viton®) Available sizes: From 1/8" to 2" Operating pressure: Up to 350 bar Flow rate: Up to 1000 l/min Material / Treatment: Stainless steel (AISI 316L)

FLAT FACE SCREW



VEP-P

Valving style: Flat face Interchange: Stucchi profile Sealing description: Nitrile NBR Available sizes: From 1/4" to 2" Operating pressure: Up to 600 bar Flow rate: Up to 1000 l/min Material / Treatment: Carbon steel / Cr3+QPQ Connection under pressure: Allowed



VEP-HD

Valving style: Flat face Interchange: Stucchi profile Sealing description: Nitrile NBR Available sizes: From 5/8" to 1-1/2" Operating pressure: Up to 550 bar Flow rate: Up to 750 l/min Material / Treatment: Carbon steel / QPQ Connection under pressure: Allowed



VP-P

Valving style: Flat face
Interchange: Stucchi profile
Sealing description: Nitrile NBR
Available sizes: From 1/4" to 1-1/2"
Operating pressure: Up to 600 bar
Flow rate: Up to 750 l/min
Material / Treatment:
Carbon steel / Cr3+QPQ
Connection under pressure: Allowed

CASTING



SATURN

Valving style: Flat face Interchange: ISO 16028 Sealing description: Nitrile NBR Available sizes: From 1/2" to 3/4" Operating pressure: Up to 350 bar Flow rate: Up to 200 l/min Material / Treatment: Carbon steel / Cr3 Connection under pressure:



SATURN HF

Valving style: Flat face
Interchange: ISO 16028
Sealing description: Nitrile NBR
Available sizes: From 1/2" to 3/4"
Operating pressure: Up to 350 bar
Flow rate: Up to 200 l/min
Material / Treatment:
Carbon steel / Cr3
Connection under pressure:
One side only



POPPET SCREW



VD

Valving style: Poppet
Interchange: ISO 14541
Sealing description: Nitrile NBR
Available sizes: From 1/4" to 1-1/4"
Operating pressure: Up to 450 bar
Flow rate: Up to 378 l/min
Material / Treatment:
Carbon steel / Cr3
Connection under pressure:
One side only



VLS

Valving style: Poppet
Interchange: With similar couplings
Sealing description: Nitrile NBR
Available sizes: From 1/2" to 1"
Operating pressure: Up to 465 bar
Flow rate: Up to 200 l/min
Material / Treatment:
Carbon steel / Cr3
Connection under pressure:
One side only



VOF

Valving style: Poppet
Interchange: With similar couplings
Sealing description: Nitrile NBR
Available sizes: From 3/4" to 2"
Operating pressure: Up to 345 bar
Flow rate: Up to 1100 l/min
Material / Treatment:
Carbon steel / Cr3
Connection under pressure:
One side only



VOFX

Valving style: Poppet
Interchange: With similar couplings
Sealing description: Nitrile NBR
Available sizes: From 3/4" to 2"
Operating pressure: Up to 207 bar
Flow rate: Up to 1100 l/min
Material / Treatment:
Stainless steel (AISI 316L)
Connection under pressure:
One side only



VR

Valving style: Flat face non-spill Interchange: With Rohrleitung couplings Sealing description: Nitrile NBR Available sizes: From 3/8" to 1-1/4" Operating pressure: Up to 420 bar Flow rate: Up to 576 l/min Material / Treatment: Carbon steel / Cr3 Connection under pressure: One side only



POPPET

BIR

Valving style: Poppet
Interchange: ISO 7241 'A'
Sealing description: Nitrile NBR
Available sizes: From 1/4" to 2"
Operating pressure: Up to 350 bar
Flow rate: Up to 1000 l/min
Material / Treatment:
Carbon steel / Cr3
Connection under pressure:
Allowed (only PC version)



I/IP

Valving style: Poppet Interchange: ISO 7241 'A' Sealing description: Nitrile NBR Available sizes: From 1/4" to 1" Operating pressure: Up to 350 bar Flow rate: Up to 200 l/min Material / Treatment: Carbon steel / Cr3



IR

Valving style: Ball Interchange: With similar couplings Sealing description: Nitrile NBR Available sizes: From 1/4" to 1" Operating pressure: Up to 300 bar Flow rate: Up to 150 I/min Material / Treatment: Carbon steel / Cr3



IR-V

Valving style: Poppet Interchange: With similar couplings Sealing description: Nitrile NBR Available sizes: From 1/4" to 1" Operating pressure: Up to 300 bar Flow rate: Up to 200 l/min Material / Treatment: Carbon steel / Cr3



IRB

Valving style: Poppet Interchange: ISO 7241 'B' Sealing description: Nitrile NBR Available sizes: From 1/8" to 1" Operating pressure: Up to 350 bar Flow rate: Up to 200 l/min Material / Treatment: Carbon steel / Cr3



IRBO

Valving style: Poppet Interchange: ISO 7241 'B' Sealing description: FKM (Viton®) Available sizes: From 1/8" to 1" Operating pressure: Up to 200 bar Flow rate: Up to 200 l/min Material / Treatment: Brass



IRBX

Valving style: Poppet Interchange: ISO 7241 'B' Sealing description: FKM (Viton®) Available sizes: From 1/8" to 1" Operating pressure: Up to 250 bar Flow rate: Up to 200 l/min Material / Treatment: Stainless steel & brass



Valving style: Poppet
Interchange: Nordic interface
Sealing description: Nitrile NBR
Available sizes: From 1/4" to 1"
Operating pressure: Up to 450 bar
Flow rate: Up to 378 l/min
Material / Treatment:
Carbon steel / Cr3
Connection under pressure:
Allowed (only PC version)



IRCX

Valving style: Poppet Interchange: Nordic interface Sealing description: FKM (Viton®) Available sizes: From 1/4" to 1" Operating pressure: Up to 300 bar Flow rate: Up to 378 l/min Material / Treatment: Stainless steel (AISI 316L)



IFR

Valving style: Flat face non-spill Interchange: ISO 5676 Sealing description: Nitrile NBR Available sizes: 3/8" Operating pressure: Up to 150 bar Flow rate: Up to 46 l/min Material / Treatment: Carbon steel / Cr3



HIGH PRESSURE



A-HF

Valving style: Flat Face Interchange: Stucchi profile Sealing description: Nitrile NBR Available sizes: From 1/8" to 3/8" Operating pressure: Up to 720 bar Flow rate: Up to 46 l/min Material / Treatment: Carbon steel / Cr3



IV-HP

Valving style: Ball
Interchange: With similar couplings (high
pressure)
Sealing description: Nitrile NBR
Available sizes: From 1/4" to 3/8"
Operating pressure: Up to 700 bar
Flow rate: Up to 23 l/min
Material / Treatment:
Carbon steel / Cr3

CHECK VALVE



VUZ

Available sizes: From 1/8" to 2" Operating pressure: Up to 400 bar Flow rate: Up to 1000 l/min Material / Treatment: Carbon steel / Cr3

VEHICLE A/C



ACR-ACB

Valving style: Poppet Interchange: SAE J639 Sealing description: HNBR Available sizes: 1/4" Operating pressure: Up to 41 bar Material / Treatment: Brass



Easy Connection Under Pressure is the Stucchi solution for manual connection with residual pressure in the circuit. The male couplings have a triple valve system that allows the easy connection of couplings with internal residual pressure, in safe condition and without fluid loss.



Blow Out Prevention

Specific dimensions are fire tested and Lloyd certified in accordance with API 16D and the EUB Directive #36. For complete technical information please contact Stucchi technical support.

Instructions and warning



The incorrect use of products can cause malfunctioning and safety risks.

Therefore, before using Stucchi products, we strongly recommend reading and following the "general instructions for selection and use of the products" and the "instructions of use" of the specified product intending to use.



A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects. Connection under pressure ae under residual pressure.

Never connect or disconnect with dynamic pressure (e.g. pump on).

Make sure that the medium used is compatible with seal and material as indicated for each series.

The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.

It is mandatory to carefully read and closely follow the instructions before selecting or using any Stucchi products.

Always refer to the version uploaded in the Instructions and warnings section of stucchigroup.com website for the latest release. In case of doubt or for specific product-related instructions, please contact Stucchi technical service.

1.0 GENERAL INSTRUCTIONS

1.1 Context

These safety instructions form a supplement and shall be used as one document together with the technical documentation related to the specified product to be installed

It is recommended that all systems and equipment be protected so that safety of people, animals and objects will be guaranteed in case of defect of the product.

1.3 Distribution of the instruction

A copy of these instructions has to be supplied to every person responsible for the selection and/or usage of the products.

1.4 Responsibility of the user

Due to the most various range of operating use and conditions of the products, Stucchi does not guarantee that every product can be used for every application. These safety instructions don't analyse all technical parameters that have to be considered by selecting the products.

The end user, through their own analyses and tests, is responsible for the following:

- Final selection of the product Ascertainment that the requirements of the end user are satisfied and that the
- predicted use does not present a safety risk. Supply of all warnings regarding the safety of the equipment on which Stucchi products will be used. Correct disposal of the product at the end of its life, see paragraph 'disposal

2.0 INSTRUCTIONS FOR SELECTION OF THE PRODUCT

2.1 Application fieldsCheck that the product is suitable for the specific application.

In case of doubt, contact the Stucchi Technical Support.

2.2 Type of product

Select the type of product most suitable for the working environment.

Flat face couplings: suitable for working environments where it is necessary to reduce to minimum the fluid loss during disconnection and to avoid dirt inclusion during connection. Screw couplings: they are suitable for high operating pressure and frequent impulses; they are connectable with high residual pressure.

Poppet valve couplings: widely used in the agricultural field.

2.3 Materials and treatments

Make sure that the materials and treatments of the product conform to the exposed working environment.

Choose the product with dimensions and flow suited to the circuit in order to avoid over stress damaging the product.

For application with flow inversion during operation, use only products designed for that

Flow inversion during operation generates turbulences inside the product that can cause damage on the components.

Choose the product with thread suitable for the application. For high pressure conditions, over 50 MPa, products with taper thread NPT are recommended.

2.7 Type of medium

Verify that the seals of the product are compatible with the medium used in case of doubts please contact Stucchi Technical Support.

Make sure that other not compatible fluids do not come in contact with the seals in case

of maintenance. Do not use the products with inflammable, explosive or dangerous fluids $% \left(1\right) =\left(1\right) \left(1\right)$

Verify that the working temperature is within the functional limits of the coupling and its seals. The couplings must not be connected and disconnected with a temperature higher than 80 degrees Celsius. In case of connection-disconnection with temperature higher than 30 Celsius degrees, the operator must be protected using gloves and/or other devices to prevent any leakage or splashing causing injury to himself, persons, animals and objects.

2.9 Environment temperature

With extreme temperature conditions, the mechanical resistance of the products changes. The use and handling of couplings in case of ice can be difficult due to ice inclusion in the blocking mechanisms

Use protective gloves in applications with hot and cold operating temperature.

2.10 Pressure

Verify always if the maximum operating pressure of the product is the same or higher than the pressure peaks of the application.

Do not make confusion between the burst pressure and the maximum operating pressure. so do not use the value of the burstpressure for your selection.

Check that the number of impulse cycles which the product has been tested is compatible with the impulse number of the application.

2.11 Residual pressure

For connection and disconnection with residual pressure use only couplings that are developed for this scope.

The term 'internal residual pressure' means: the static pressure retained in the system, which has not be generated by a working pump or other accessories in moveme

The structure of the machine or plant in which these products are placed, must be suitable to limit accidental splashing and fluid losses caused by wrong usage or malfunctioning of the product, in order to avoid direct and indirect damage on persons, animals or objects. The temperature of the fluid must not exceed the limits mentioned in point 2.8

2.12 Connection frequency
It is important to know the connection frequency with which the coupling is used, while this has significant influence on the life of both springs and seals.

An under-estimated value can cause unexpected fluid loss

2.13 Safety device

If used in environments or machines in strict closeness at persons, animals or objects (1 meter), within easy accidental disconnection conditions, it is highly recommended to use ball locked couplings with security system or screw couplings and to make sure that the preventive disconnection mechanism is correctly screwed together.

2.14 Mechanical loads

Side loads, mechanical stresses in general and vibrations reduce significantly the life of the product and are often the cause of sudden damages

It is recommended to assemble quick release couplings without risks of mechanical damage and over-loading caused by stress generated in flexible or rigid hoses and to assemble quick release couplings on hoses with proper dimensions referred to the nominal passage of the quick release coupling.

In case of applications with rotation use only products developed for this scope In case of rotation between male and female part it is necessary to inform in advance Stucchi Technical Support or to provide the connection with swivel joints suitable for this

2.16 Special applications

You should be advised to take particular attention to special applications (such as vacuum use, high temperature, etc...).

Please consult Stucchi Technical Support who is able to give instructions concerning the use of Stucchi products.

Do not use Stucchi products in nuclear, aircraft or military field: do not use Stucchi products in explosive environment or with inflammable, explosive or dangerous fluid. In this cases contact Stucchi Technical Support for assistance.

3.0 INSTRUCTIONS FOR STOCK PRESERVATION

For a correct preservation of the product and in order to avoid damage before even starting to use the product read carefully the following instructions.





3.1 Packaging

The products have to be kept in closed packaging to protect the components, mainly the seals, from dust and ultraviolet rays.

3.2 Environments

The products shall be kept in environments with low percentage of humidity, no condensation, no salt, protected from atmospheric factors, far away from heating

devices and magnetic fields.

Eliminate equipment that can produce ozone, as this element is extremely destructive for

3.3 Protection cap

The protection cap assembled on the thread has to be removed at the moment of the product installation only.

3.4 Special packagingIn case of requests for special packaging contact the customer service.

4.0 INSTALLATION INSTRUCTIONS

4.1 Pre Installation inspections

Before installation of the product it is necessary to inspect it visually and to verify if the part number and description of the product refers to the one requested.

The optimal is to use the hoses having the same sizes as the coupling body, can be used the hoses having one size more (step up) than the coupling but not bigger otherwise they can overstress the coupling with risk of failure.

4.3 Hose assembling

In case of single coupling one part (female or male) can be assembled directly on the rigid tube, but the other part shall be assembled on the flexible hose in order to allow an easy connection and absorb better the vibration and mechanical stress.

In case of the multicoupling both parts (fixed and mobile) shall be assembled on the flexible hoses to avoid the misalignment of the couplings.

Once connected the flexible hose should create a right radius according to the hose manufacturer specifications, in this way the connection/disconnection of the couplings takes place in easy way and aligned position.

4.4 Side load

Don't apply radial/axial loads that create misalignment of the couplings during connection/ disconnection and can cause damage on the connection and sealing parts.

4.5 Fitting assembling

Use fittings and sealing systems conform to the thread of the product only.

To install and remove the couplings use proper tools and act only on flat spanner surfaces of the coupling. Do not use improper tools (spanner for hoses, bench vice, pincer etc.) while these can cause damage on the coupling with malfunction as result. Use the tightening torque stabilized by the norm to screw the fittings.

4.6 Positioning of the coupling

It is suggested to install the couplings in such way that they can easy be connected and disconnected, reducing to the minimum the forces and risks for the operator. It's suggested to install the coupling not exposed in order to protect if from collision with

It is suggested to protect the couplings using shelters and protections (see sector norms) to guarantee the security and to prevent damage.

5.0 INSTRUCTIONS OF USE

5.1 Modality of use

The modality of use changes in accordance to the type of product used.

For every type of product, the modality of use described in the catalogue or the specific usage instructions supplied by Stucchi have to be carefully followed .The system has to be immediately stopped and the product should be replaced whenever one of the following

- Visible damage, damaged parts of the product, cracks and corrosion. Difficulties in connection and disconnection generated by too high force compared to the data mentioned in the catalogue.
- Presence of leakage
- Malfunctioning of the valve.

In the above mentioned cases please contact Stucchi Technical Support for information

5.2 Connection / Disconnection

Before connecting, the parts of the couplings involved in the connection have to be cleaned. Connection with dirty parts may cause damage such as unexpected and dangerous leakage on the coupling.

Another consequence of dirt is contamination of the system.

Do connect and disconnect the coupling only as indicated in the modality of use: do not use other unsuitable tools. A loss of fluid contained in the circuit may occur during the disconnection of the coupling. The approximate spillage values are shown in the catalog. It is recommended to pay maximum attention during the disconnection phase and to activate the necessary precautions to avoid the dispersion of fluids in the environment.

5.3 Mechanical damage

The product shall not be exposed to mechanical damages while they can cause damage

and malfunctioning.

Do not use tools to open the valves to release residual pressure trapped in the circuit.

5.4 Circuits cleaningUse the products in clean circuits.
Dirt can damage components of the product and cause malfunctioning.

5.5 Protection caps

Use anti-dust caps when coupling is disconnected to avoid dirt and contamination and to protect the surface from accidental damage caused by collisions.

5.6 Use of semi-couplings of other manufacturers.

Do not connect Stucchi half-couplings with other not compatible half-couplings. In case of connection of a Stucchi half-coupling with a half-coupling from another manufacturer, do not exceed the lowest nominal pressure of the two products.

6.0 MAINTENANCE INSTRUCTIONSThe good functional of product is often compromised by a lack of maintenance. To avoid unexpected damage that can cause times of arrest and safety risks it is necessary to apply maintenance periodically.

The period dedicated to the maintenance of the product has to be defined by the user and depends on the type of application and on the working conditions the product is exposed to.

6.1 Ordinary - Preventive maintenanceFirst, the product should be well cleaned and the area where it is installed as well, then you should check and verify the following steps:

- Absence of breakage or various damage on the products. Absence of leakage in general.
- Correctness of tightening torque of the adapters. Check the level of circuit contamination.
- The connected parts or the parts in movement should be greased with grease compatible with the seals assembled in the products.
- The replacement of the coupling should be planned in accordance with the requested endurance for the specific application.

In case of reparation of the products it is recommended to follow Stucchi's specific instructions and use spare parts, tools and documentation supplied by Stucchi only. Please contact Stucchi Technical Support for the above specific information.

7.0 Disposal instructions

Do not litter the product after use.

The product must be disposed according to the local law and the requirements of the relevant local authorities.

Details about product composition are reported in the catalogs on stucchigroup.com. The user is responsible for the waste characterization and its disposal.

IT IS THE RESPONSIBILITY OF THE USER TO SELECT, INSTALL AND USE THE QUICK RELEASE COUPLING IN THE CORRECT WAY.

The texts, data and illustrations indicated in this catalogue, may be changed by Stucchi S.p.A at any time without notice.

For more information please contact the Stucchi Technical Support, in any case we remind for last updated version always applied at time of installation, see latest written Instruction on stucchigroup.com before selecting or using Stucchi products.

Conversion table

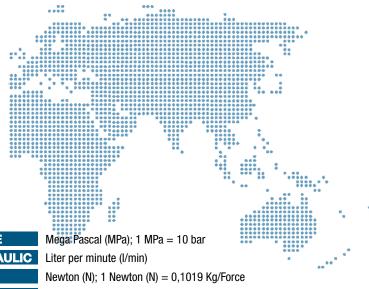


Unit of measure

Anglo Saxon Imperial System



International Metric System (SI)



Pound/Square Inch (psi) Gallon per minute (US-GPM) Pound force (lbf) Pound force per Foot (lbf ft) Fahrenheit degree (°F) Inch (Inch) Foot (ft) Pound (lb)

PRESSURE
FLOW IN HYDRAULIC
FORCE
TORQUE
TEMPERATURE
LENGHT
WEIGHT

Newton meter (Nm)

Millimeter (mm) Meter (m) Kilogram (kg)

Celsius degree (°C)

USA > SI

1 psi = 0.0069 Mpa 1 GPM = 3.78 I/min1 lbf = 4,444 N1 lbf ft = 1,357 Nm $^{\circ}F = (^{\circ}C*1,8)+32$ 1 lnch = 25,4 mm 1 ft = 0,3048 m

1 lb = 0,4536 kg

SI > USA

1 Mpa = 145 psi1 l/min = 0.265 CPM1 N = 0,225 lbf1 Nm = 0.737 lbf ft $^{\circ}C = (^{\circ}F-32)/1,8$

1 mm = 0.03937 lnch 1 m = 3.28084 ft

1 kg = 2,2046 kg

Temperature Celsius degrees °C

Oil -20 > +100

Water

Seal coumpound

NBR

Temperature Fahrenheit degrees °

> Oil -4 > +212

Water +41 > +140

SEAL Temperature range

It is a generic indication of the seal temperature range given by Stucchi seal suppliers after laboratory tests made in standard conditions. It is given for Customer information only (is intended as a guide but not as a warranty). It does not means all the Stucchi products are homologated for such seal temperature range. Fluid in use, external condition (radiant heating, temperature changes...), internal condition (duration of exposure, state changes of the fluid, thermal expansion...) should be taken into account.

Every application has to be analyzed by the Customer prior to do the final choice. Please contact us for further information.

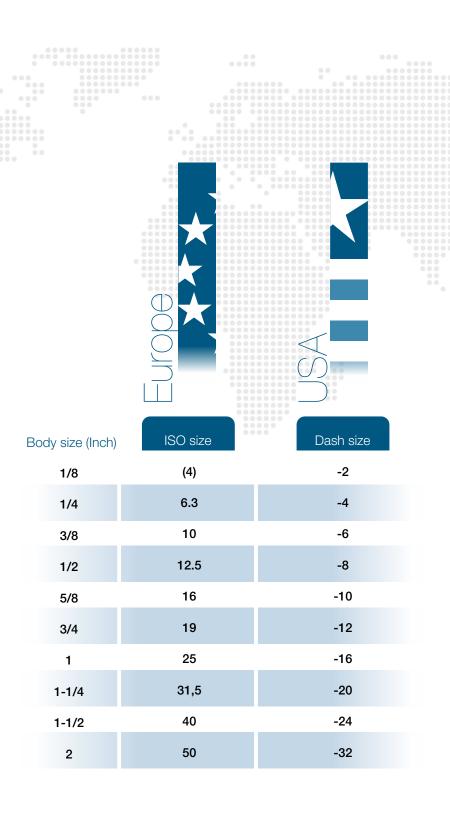
SEAL compatibility

Verify that the seals of the product are compatible with the medium used. Make sure that no other not compatible fluids do not come in contact with the seals in case of maintenance or due to external environment condition. Do not use Stucchi product with flammable, explosive or dangerous fluids. We always recommend to do a customer verification & validation test to approve the products in the specific application prior to do the final choice.

Please contact us for further information.

Size, different references





Quick Coupling Glossary



Brinelling

Markings of the locking balls on the metallic parts where they are in contact with high impulse applications.

Male coupling half connected with the female coupling half.

Coupled

ISO Norm

The norms used as reference for the test method are two: ISO 7241-2 issued in 1986 then canceled and replaced in 2017 by the new ISO 18869.

Max. residual pressure during connection

Max. allowed residual pressure (pressure trapped in the circuit) to connect the coupler.

Rated flow

Typical rated flow relative to the size, in accordance with ISO norm standard.

Tightening torque

Recommended torque to apply during connection on screw to connect couplings to prevent accidental disconnection.

Burst pressure

Value of pressure at which a coupling loses its ability to retain pressure.

.....

Disconnect torque

.....

Value of torque required to disconnect the couplings without residual pressure in the system.

Mechanical connection

Method or type of connection that creates retention between the male coupling half and female coupling half.

Max. residual pressure during disconnection

Max. allowed residual pressure (pressure trapped in the circuit) to disconnect the coupler.

Size

Nominal size of coupling body.

Valve system

Type of valve used to shut-off medium flow in the male or female coupling half once disconnected.

Dis/Connect force

Value of force required to dis/connect the couplings without residual pressure in the system.

.....

Interchangeability

Possibility of male coupling half or female coupling half to connect with the other brands of couplings.

Max. flow suggested

Max. flow suggested by Stucchi

Pressure drop

Pressure lost between the inlet and the outlet of the coupling.

Spillage

Indicative value of the fluid loss per couple - uncouple cycle without residual pressure. Checked on sample in accordance with ISO norm test method.

Connect torque

Value of torque required to connect the couplings without residual pressure in the system.

ISO Size

Size indicated by ISO standard (the International Organization for Standardization) related to interchangeability of the couplings.

Max. operating pressure

The maximum peak of pressure at which can be used the product.

Quick coupling

A quick, easy, sure product to repeatedly connect and disconnect almost any fluid line in a system and to turn off the flow immediately upon disconnect.

Temperature range

See page 190.



Note:



)

Note:



Via della Lira Italiana, 397 24040 Pagazzano (BG) Italy

stucchigroup.com



Stucchi USA inc.

1105 Windham Parkway, Romeoville IL 60446 USA stucchiusa.com

Stucchi (Shanghai)

Fluid Power Technology Co., Ltd No. 5, Lane 3500, Xiupu Road Kangqiao Industrial Park Pudong New District 201315 Pudong Shanghai, China stucchichina.com

Stucchi FCP Pty Ltd.

8/7-11 Rodeo Drive Dandenong South VIC 3175 Australia

Unit3, 22 Strathwyn Street Brendale, QLD 4500 Australia stucchigroup.com/en-au

Stucchi Engates Hidraulicos Ltda.

Rua Henrique Manasses, 105, Salas 03, 04, BOX 84 18086-610 - Bairro Eden - Sorocaba SP - Brasil stucchigroup.com/br-pt



