



STUCCHI  
Innesti Rapidi  
Serie multi speciali



 HYDRAULIC  
COMPONENTS  
& FLUID CONTAMINATION  
CONTROL

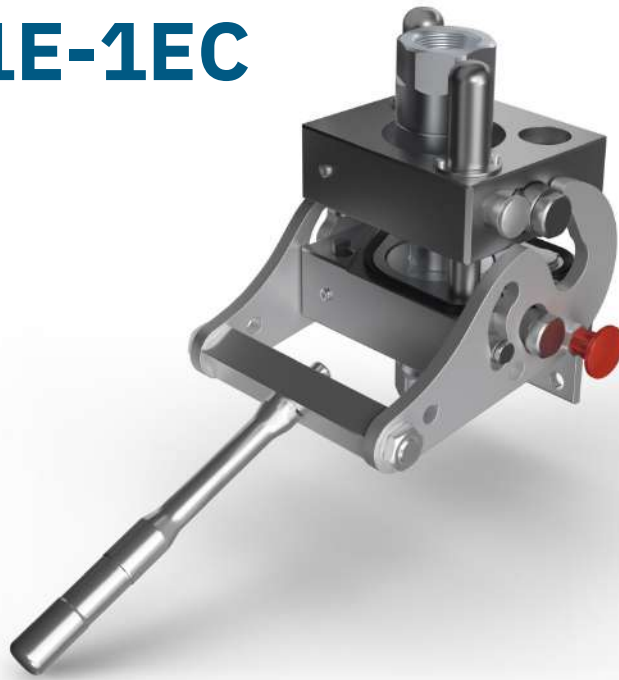


All trademarks belong to their respective owners; third party trademarks, product names, trade names, corporate names and company names mentioned may be trademarks of their respective owners or registered trademarks of other companies and are used for instructional purposes and for the benefit of the owner, without any end of Copyright infringement in force.

Tutti i marchi riportati appartengono ai legittimi proprietari; marchi di terzi, nomi di prodotti, nomi commerciali, nomi corporativi e società citati possono essere di proprietà dei rispettivi titolari o registrati da altre società e sono stati utilizzati a puro scopo esplicativo e a beneficio del possessore, senza alcun fine di violazione dei diritti di Copyright vigenti.

# BM2 1A-1E-1EC

SPECIAL SERIES



FAP9 (A)	FAP13 (B)	FAP15 (C)	FAP17 (D)	FAP21 (E)	FAP30 (G)	EC
3/8"	1/2"	5/8"	3/4"	1"	1-1/2"	instead of DN9 or DN13
1 D				1 - special		1

## Technical specifications and options



**Interchange**  
Stucchi profile



**Sealing**  
Nitrile NBR



**Available sizes**  
1"



**Material**  
Aluminium, Carbon steel



**Valving style**  
Flat face



**Connection Under Pressure**  
Allowed with Easy CUP



**Operating pressure**  
up to 420 bar



**Locking mechanism**  
Pin, Cam



**Temperature**  
-20°C / +100°C



**Connection system**  
Lever



**Available threads**  
NPT



**Flow rate**  
up to 378 l/min

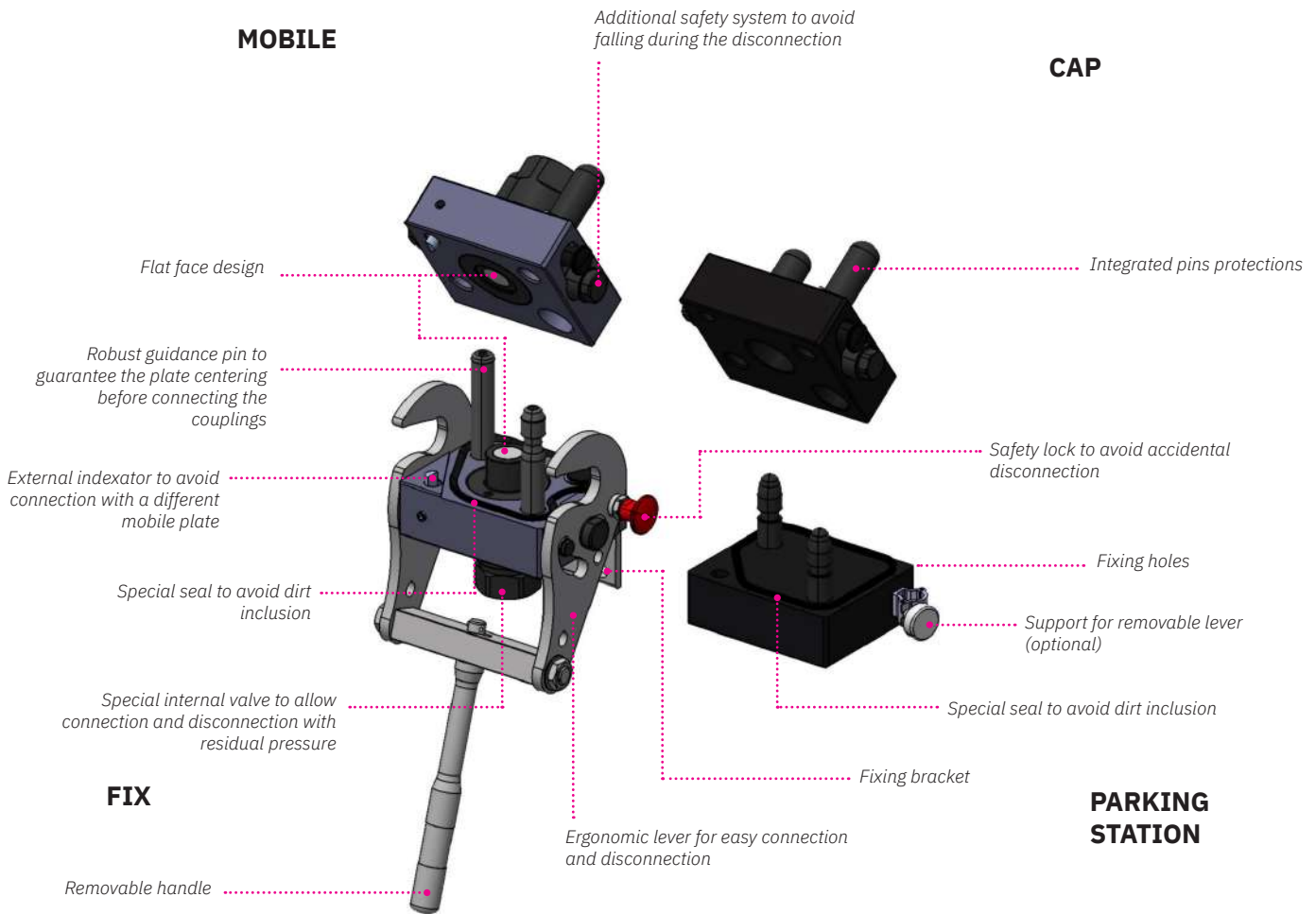
## Benefits

- Specific design for 1" hydraulic line: the lever/cam system minimizes the force required to connect the couplings, even with significant pressure trapped in the circuit and under difficult conditions (environment, access, etc.).
- The locking mechanism ensures a full connection and prevents any accidental disconnection.
- Specific indexator avoids misconnection with different mobile plate.
- Designed to be used with hydraulic oil for fluid power application.
- Safety system on the mobile plate avoids accidental falling during the disconnection.
- Special rubber seal prevents dirt inclusion.
- The additional service line can be used with optional electrical connector or one drain line FAP9D.
- Robust guidance pins guarantee the correct alignment before the connection.
- Parking station and cover plate protect the system from contamination and damage as well as providing a convenient storage solution.
- The removable handle (that can be parked in the optional support on the parking station) increases usability reducing the overall dimension.
- Flat face couplings are easy to clean, reducing the inclusion of contamination to the hydraulic circuit.
- Internal valve design creates minimal pressure drop, maintaining circuit efficiency in the system.
- Minimal fluid loss during disconnection, reducing fluid loss to the environment.
- Minimal air inclusion during connection/disconnection.
- High resistance at impulse pressures.
- Safe and simple to use.

## Main applications



## Features



## Performances (with FAP21)

Size	Series	Max. flow suggested		Spillage*	Max. operating pressure					
		l/min	GPM		Coupled		Male		Female	
Inch				ml	MPa	psi	MPa	psi	MPa	psi
1	FAP21AS	378	100,17	0,1	42	6000	42	6000	42	6000

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

FAP9 line is only for drain line (max working pressure 1 MPa).

**Temperature range:** Standard seals NBR, PUR, POM from -20 °C to +100 °C ( from -4 °F to +212 °F).

**Tests:** The couplings have been tested at max. operating pressure in accordance with ISO norm for 200.000 impulses coupled and 100.000 impulses uncoupled.

Different threads available upon request.

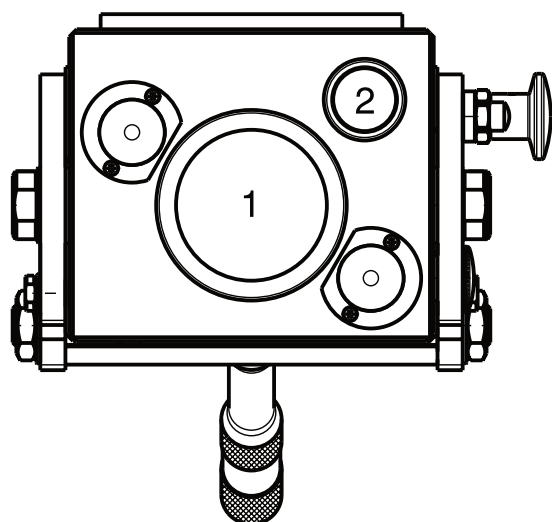
## Installation, use and maintenance

---

- Install the fixed multiconnection with the proper fixing holes, by referring to the drawing shown in the datasheet.
- Install the flexible hoses on the coupling of the fixed and mobile multiconnection, by screwing them with proper torque.
- Clean the mating surface of the parts prior to connect.
- Insert and lock the removable lever in the corresponding hole on the lever system of the fixed multiconnection.
- Put the lever of the fixed multiconnection in complete open position, by unlocking the locking button and rotate the lever until the button is again engaged in the open position.
- Connect the mobile multiconnection by engaging the guiding pins into the fixed multiconnection
- Disengage the button of the safety lock then connect the multiconnection by rotating the lever until the stroke is complete and the locking button engaged again in the closed position.
- Disconnect the lever from the fixed part in order to avoid injuries from fall or lose it. Park it in the proper (optional) support.
- To disconnect, insert the lever and disengage the locking button then rotate by doing vice versa the sequence above described.
- Then disengage the safety “anti-fall” locking system by pulling the knob on the mobile and separate the mobile multiconnection.
- After disconnection, clean the parts and apply the cap on the fixed part then connect the mobile part in the parking station to protect from dust and dirt.
- Disconnect and put the lever in the support.
- Clean frequently the multiconnection and the components.
- If needed, lubricate the connection and guiding parts.
- Check often the multiconnection by looking for leakage, damage or malfunctioning.

## Configurations

---



### Possible configurations

Position	Coupling Size	Predisposition for electrical connector
1	FAP21AS	-
2	FAP9D	YES

Electrical connectors part number:  
806422060 F EC7BM - 806422061 M EC7BM.

For FAP9D and plugs part number see the Stucchi Multicoupling Catalog.

## Plates and spare parts

### Multicouplings (couplings included)

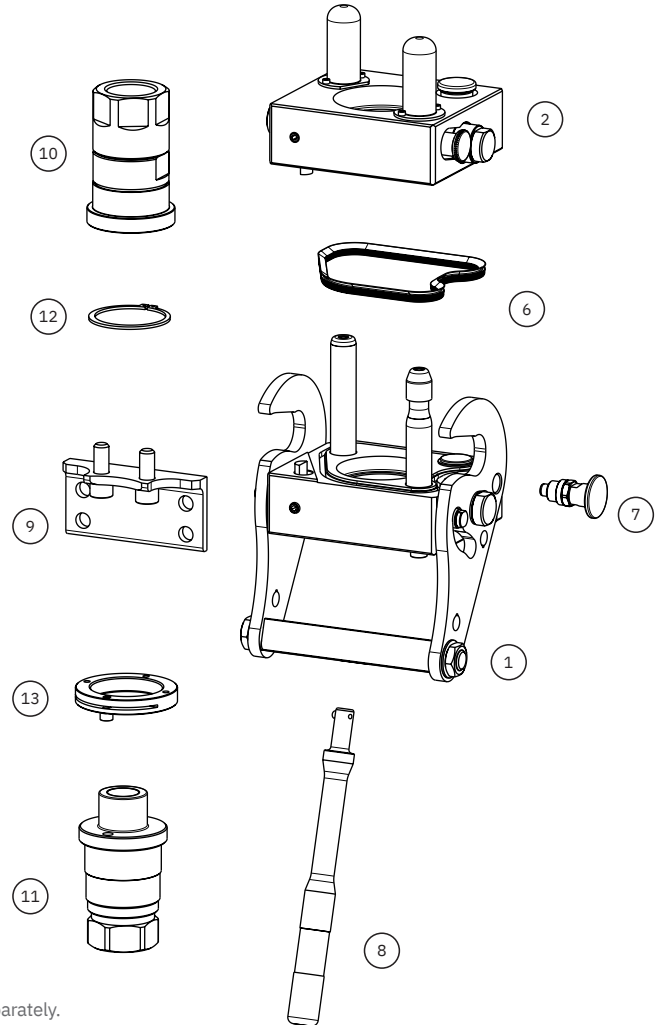
Code	Name	Description
870017113	MULTI FIX BM2 1E Provided with removable lever	1 FAP21AS 1-1/4 NPT
870017213	MULTI MOBILE BM2 1E	1 FAP21AS 1-1/4 NPT

### Multicoupling spare parts (couplings not included)

Code	Name	Key
806000428	MULTI FIX EMPTY BM2 1A-1E-1EC Removable lever and bracket not included, to be ordered separately	1
806000429	MULTI MOBILE EMPTY BM2 1A-1E-1EC	2
815606322	PARKING STATION BM 145x124	3
815606321	CAP FIX MULTI BM 145x124	4
815524016	SUPPORT FOR LEVER BM	5
815701279	SPARE KIT DUST SEAL PLATE BM2	6
815701280	SPARE KIT SAFETY BUTTON BM	7
815701281	SPARE KIT REMOVABLE HANDLE BM	8
815701302	SSPARE KIT BRACKET BM2 120x60	9

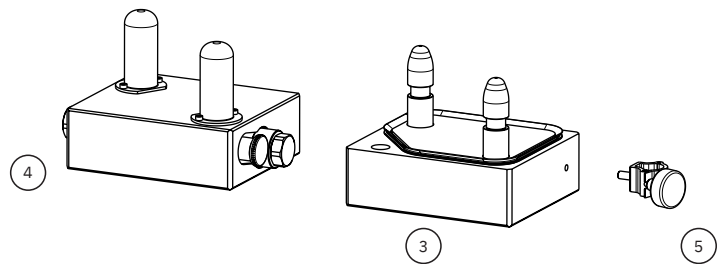
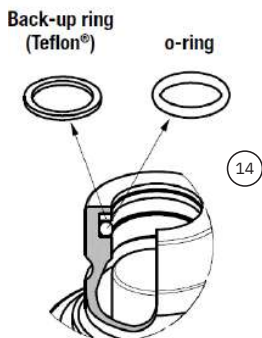
### Couplings spare parts

Code	Name	Key
807101002*	F FAP21AS1 1-1/4 NPT	10
807101003**	M FAP21AS1 1-1/4 NPT	11
815701154	SPARE KIT SEEGER F FAP21AS1	12
815701155	SPARE KIT LOCKING SLEEVE M FAP21AS1	13
815701159	SPARE KIT SEAL PUR M FAP21AS1	14



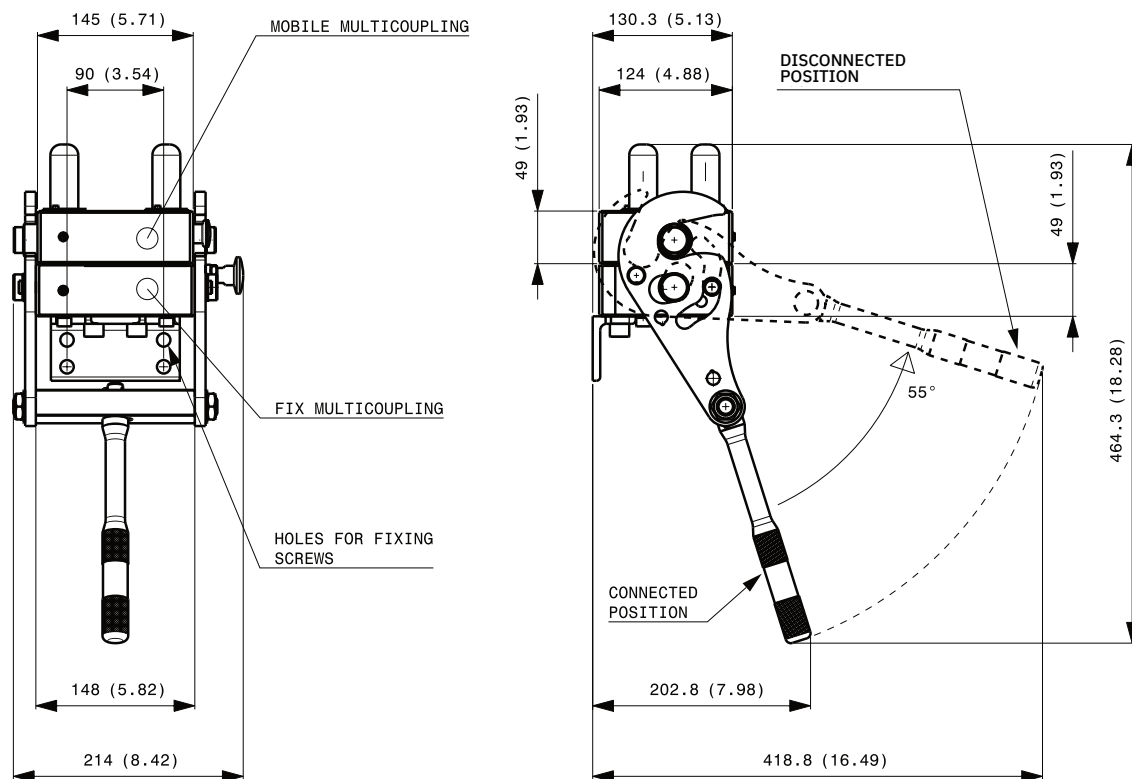
\* Seeger ring is not included in the female coupling; seeger ring to be ordered separately.

\*\* Male locking sleeve and screw are not included in the female coupling; kit to be ordered separately.

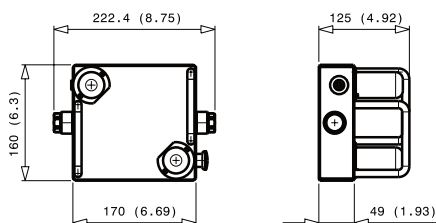


## Overall dimensions

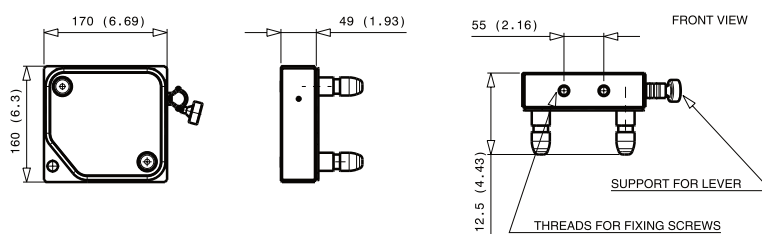
### Fixed and mobile multicoupling



### Cap for fix multicoupling



### Parking station for mobile multicoupling



## ⚠ WARNINGS

- 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).
- Do not use the female coupling disconnected with high impulse pressure.
- Do not couple-uncouple with flow 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 working 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.
- 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 tools are between them.
- Pay attention during the connection not to put finger 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.
- Do not exceed single coupling performance and total multiconnection resistance of the multiconnection (please refer to dedicated datasheet).
- Do not pressurize the "auxiliary line with FAP9-3/8" line as this line has to be used for drain line only.
- 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 to modify, disassemble or damage the multiconnection, part of it or coupling/electrical connector, the lever or safety lock system.
- Stucchi Multiconnection BM2 is intended to be used for hydraulic oil applications: do not use the products for dangerous, inflammable or explosive fluids.
- The quick coupling FAP-AS series is intended to be used only on Stucchi Multiconnections BM2. Do not use the FAP-AS coupling on a custom-made multiconnection or other device different than a Stucchi Multiconnection.
- In case of doubt please contact Stucchi Technical Support.
- It is MANDATORY to read and closely follow the instructions. Last updated version always applies at time of installation, see latest Instructions and warnings section on Stucchi website before selecting or using Stucchi products.

# BM2 1A-1G-1EC

SPECIAL SERIES



FAP9 (A)	FAP13 (B)	FAP15 (C)	FAP17 (D)	FAP21 (E)	FAP30 (G)	EC
3/8"	1/2"	5/8"	3/4"	1"	1-1/2"	instead of DN9 or DN13
1 D					1 - special	1

## Technical specifications and options



**Interchange**  
Stucchi profile



**Sealing**  
Nitrile NBR



**Available sizes**  
1-1/2



**Material**  
Aluminium, Carbon steel



**Valving style**  
Flat face



**Connection Under Pressure**  
Allowed with Easy CUP



**Operating pressure**  
up to 420 bar



**Locking mechanism**  
Pin, Cam



**Temperature**  
-20°C / +100°C



**Connection system**  
Lever



**Available threads**  
NPT, SAE



**Flow rate**  
up to 750l/min

## Benefits

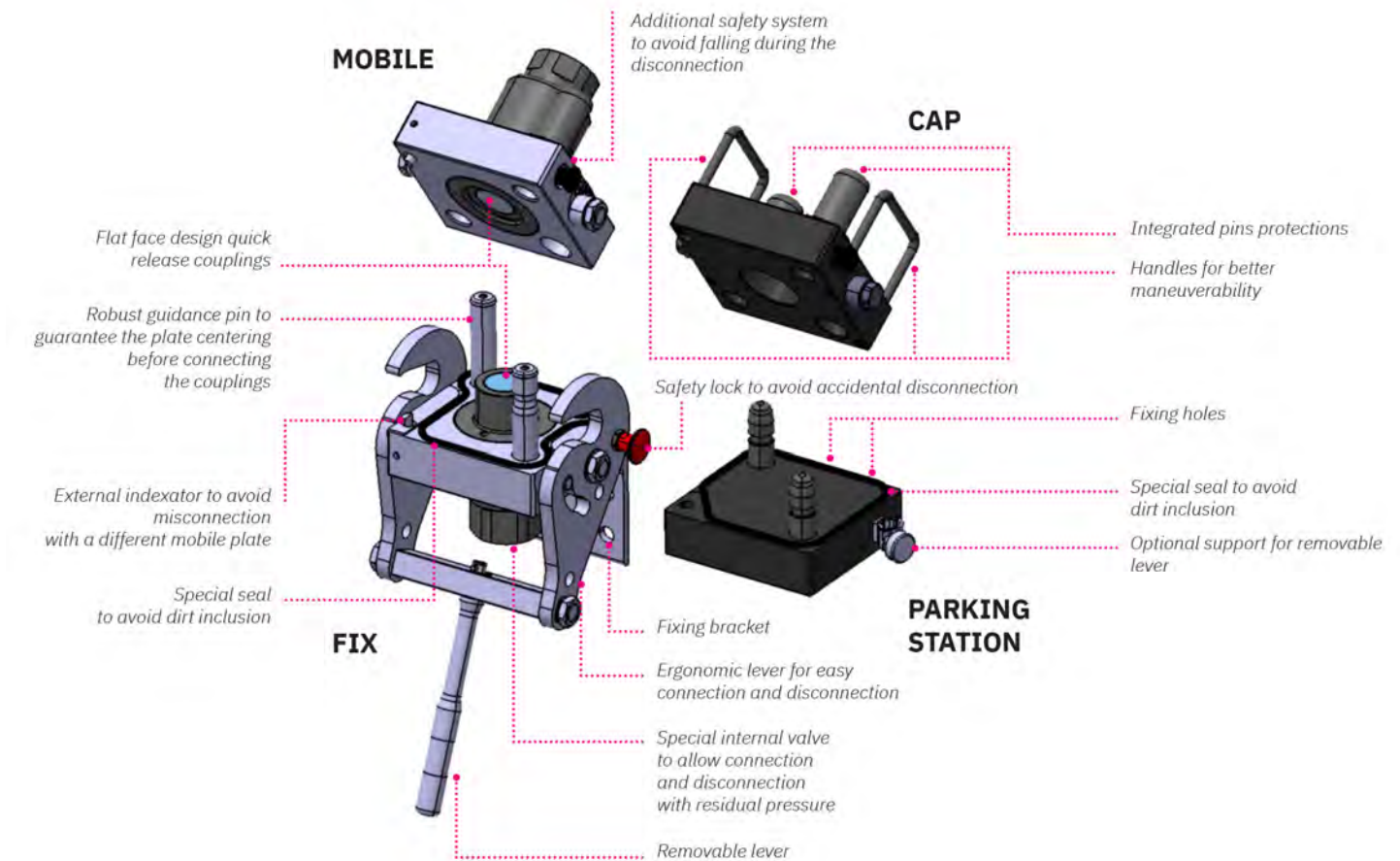
- Specific design for hydraulic lines above 1": the lever/cam system minimizes the force required to connect the couplings, even with significant pressure trapped in the circuit and under difficult conditions (environment, access, etc.).
- The locking mechanism ensures a full connection and prevents any accidental disconnection.
- Specific indexator avoids misconnection with different mobile plate.
- Designed to be used with hydraulic oil for fluid power application.
- Safety system on the mobile plate avoids accidental falling during the disconnection.
- Special rubber seal prevents dirt inclusion.
- Additional service line, can be used with optional electrical connector or one drain line FAP9 (3/8).
- Robust guidance pins guarantees the correct alignment before the connection.
- Parking station and cover plates protect the system from contamination and damage as well as to provide a convenient storage solution.
- The removable handle (that can be parked in the optional support on the parking station) increases usability reducing the overall dimension.
- Flat face couplings are easy to clean, reducing the inclusion of contamination to the hydraulic circuit
- Internal valve design creates minimal pressure drop, maintaining circuit efficiency in the system.
- Minimal fluid loss during disconnection, reducing fluid loss to the environment.
- Minimal air inclusion during connection/disconnection.
- High resistance at impulse pressures.
- Safe and simple to use.

## Main applications





## Features



## Performances (with FAP30)

Size	Series	Max. flow suggested		Spillage*	Max. operating pressure					
					Coupled		Male		Female	
Inch		l/min	GPM	ml	MPa	psi	MPa	psi	MPa	psi
1-1/2	FAP30AS2	750	198,75	0,2	42	6000	42	6000	27	3915

\* Spillage is an indicative value of the fluid loss per couple-uncouple cycle.  
FAP9 line is only for drain line (max working pressure 1 MPa).

**Temperature range:** Standard seals NBR, PUR, POM from -20 °C to +100 °C ( from -4 °F to +212 °F).

**Tests:** The couplings have been tested at max. operating pressure for 500.000 impulses in accordance with ISO norm.

Different threads available upon request.

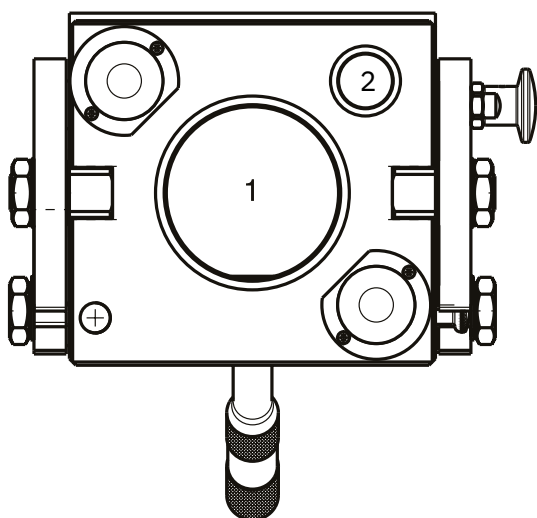
## Installation, use and maintenance

---

- Install the fixed multiconnection with the proper fixing holes, by referring to the drawing shown in the datasheet.
- Install the flexible hoses on the coupling of the fixed and mobile multiconnection, by screwing them with proper torque.
- Clean the mating surface of the parts prior to connect.
- Insert and lock the removable lever in the corresponding hole on the lever system of the fixed multiconnection.
- Put the lever of the fixed multiconnection in complete open position, by unlocking the locking button and rotate the lever until the button is again engaged in the open position.
- Connect the mobile multiconnection by engaging the guiding pins into the fixed multiconnection
- Disengage the button of the safety lock then connect the multiconnection by rotating the lever until the stroke is complete and the locking button engaged again in the closed position.
- Disconnect the lever from the fixed part in order to avoid injuries from fall or lose it. Park it in the proper (optional) support.
- To disconnect, insert the lever and disengage the locking button then rotate by doing vice versa the sequence above described.
- Then disengage the safety “anti-fall” locking system by pulling the knob on the mobile and separate the mobile multiconnection.
- After disconnection, clean the parts and apply the cap on the fixed part then connect the mobile part in the parking station to protect from dust and dirt.
- Disconnect and put the lever in the support.
- Clean frequently the multiconnection and the components.
- If needed, lubricate the connection and guiding parts.
- Check often the multiconnection by looking for leakage, damage or malfunctioning.

## Configurations

---



### Possible configurations

Position	Coupling Size	Predisposition for electrical connector
1	FAP30	-
2	FAP9	YES

## Plates and spare parts

### Multicoupling (couplings included)

Code	Name	Description
870017108	MULTI FIX BM2 1G Provided with removable lever	1 FAP30AS 1-1/2 NPT
870017208	MULTI MOBILE BM2 1G	1 FAP30AS 1-1/2 NPT
870017110	MULTI FIX BM2 1G Provided with removable lever	1 FAP30AS 1-1/2 SAE
870017210	MULTI MOBILE BM2 1G	1 FAP30AS 1-1/2 SAE

### Multicoupling spare parts (couplings not included)

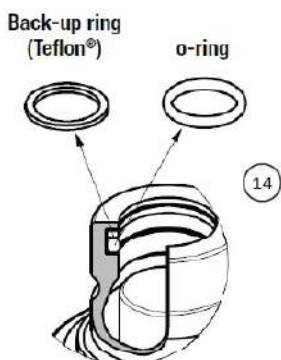
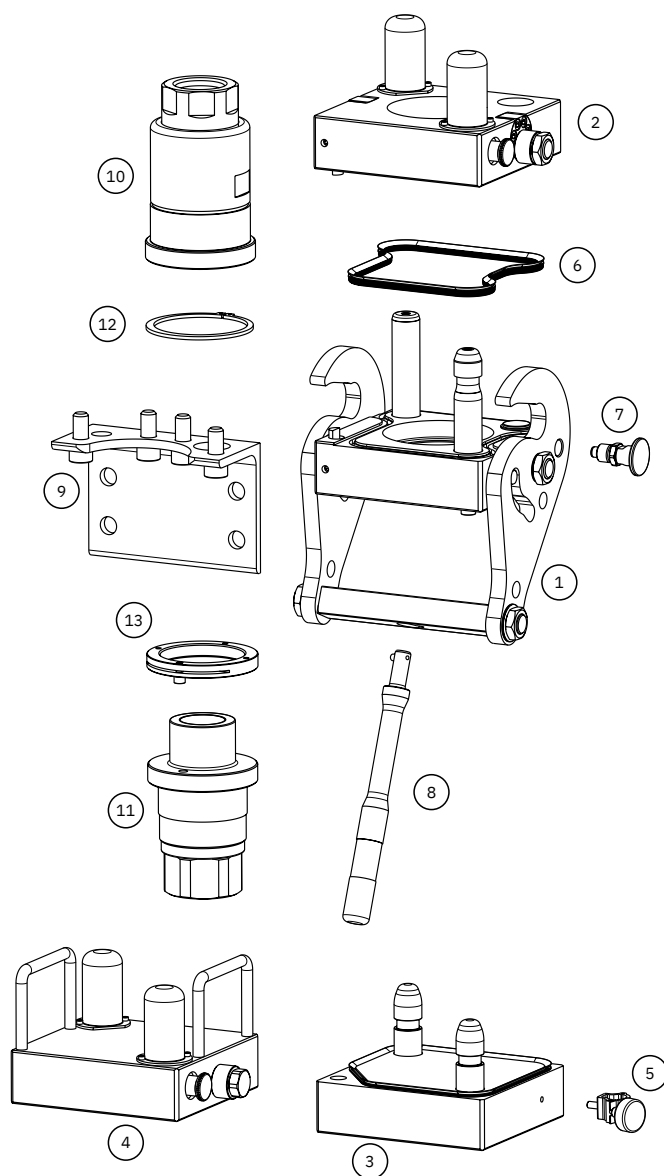
Code	Name	Key
806000422	MULTI FIX EMPTY BM2 1A-1G-1EC Removable lever not included, to be ordered separately	1
806000423	MULTI MOBILE EMPTY BM2 1A-1G-1EC	2
815606317	PARKING STATION BM 170X160	3
815606318	CAP FIX MULTI BM 170X160	4
815524016	SUPPORT FOR LEVER BM	5
815701279	SPARE KIT DUST SEAL PLATE BM2	6
815701280	SPARE KIT SAFETY BUTTON BM	7
815701281	SPARE KIT REMOVABLE HANDLE BM	8
815701282	SPARE KIT BRACKET BM2	9

### Couplings spare parts

Code	Name	Key
807101006*	F FAP30AS2 1-1/2 NPT	10
807104010*	F FAP30AS2 1-1/2 SAE	10
807101007**	M FAP30AS2 1-1/2 NPT	11
807104011**	M FAP30AS2 1-1/2 SAE	11
815701156	SPARE KIT SEEGER F FAP30AS2	12
815701157	SPARE KIT LOCKING SLEEVE M FAP30AS2	13
815701171	SPARE KIT OR NBR+BK M FAP30AS2	14

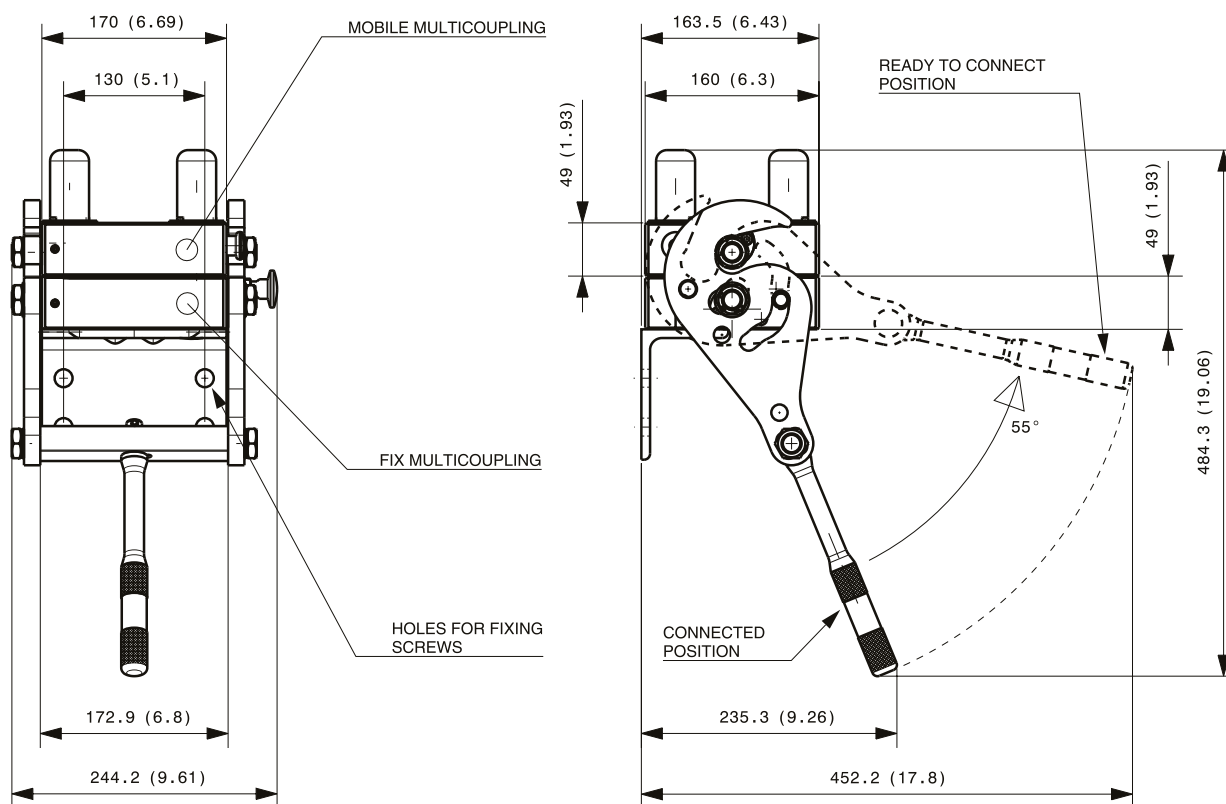
\* Seeger ring is not included in the female coupling; seeger ring to be ordered separately.

\*\* Male locking sleeve and screw are not included in the female coupling; kit to be ordered separately.

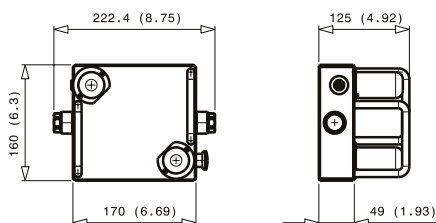


## Overall dimensions

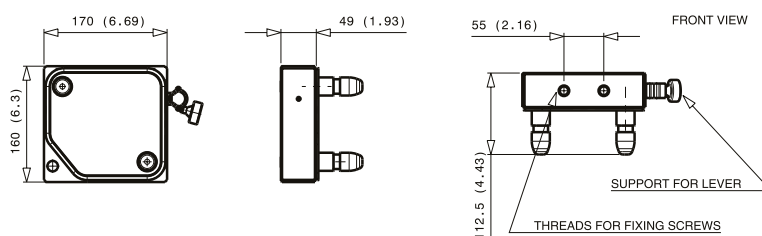
### Fixed and mobile multicoupling



### Cap for fix multicoupling



### Parking station for mobile multicoupling



## ⚠ WARNINGS

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).  
 Do not use the female coupling disconnected with high impulse pressure.  
 Do not couple-uncouple with flow 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 working 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.  
 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 tools are between them.  
 Pay attention during the connection not to put finger between the plates.  
 We advise to assemble the multicoupling with the female face down in order to allow water or moisture to be drained easily.  
 Do not exceed single coupling performance and total multicoupling resistance of the multicoupling (please refer to dedicated datasheet).  
 Do not pressurize the "auxiliary line with FAP9-3/8" line as this line has to be used for drain line only.  
 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 to modify, disassemble or damage the multicoupling, part of it or coupling/electrical connector, the lever or safety lock system.  
 Stucchi Multicoupling BM2 is intended to be used for hydraulic oil applications: do not use the products for dangerous, inflammable or explosive fluids.  
 The quick coupling FAP-AS series is intended to be used only on Stucchi Multicouplings BM2. Do not use the FAP-AS coupling on a custom-made multicoupling or other device different than a Stucchi Multicoupling.  
 In case of doubt please contact Stucchi Technical Support.  
 It is MANDATORY to read and closely follow the instructions. Last updated version always applies at time of installation, see latest Instructions and warnings section on Stucchi website before selecting or using Stucchi products.

# BM2 1A-1G-1EC V01

SPECIAL SERIES



FAP9 (A)	FAP13 (B)	FAP15 (C)	FAP17 (D)	FAP21 (E)	FAP30 (G)	EC
3/8"	1/2"	5/8"	3/4"	1"	1-1/2"	instead of DN9 or DN13
1 D					1 - special	1

## Technical specifications and options



**Interchange**  
Stucchi profile



**Sealing**  
Nitrile NBR



**Available sizes**  
1"-1/2"



**Material**  
Aluminium, Carbon steel



**Valving style**  
Flat face



**Connection Under Pressure**  
Allowed with Easy CUP



**Operating pressure**  
up to 420 bar



**Locking mechanism**  
Pin, Cam



**Temperature**  
-20°C / +100°C



**Connection system**  
Lever



**Available threads**  
BSP



**Flow rate**  
up to 750l/min

## Benefits

- Specific design developed to be assembled on excavator arm, with an ergonomic connection in order to be appreciated in the earth moving.
- Specific design for hydraulic lines above 1": the lever/cam system minimizes the force required to connect the couplings, even with significant pressure trapped in the circuit and under difficult conditions (environment, access, etc.).
- The locking mechanism ensures a full connection and prevents any accidental disconnection.
- Specific indexator avoids misconnection with different mobile plate.
- Designed to be used with hydraulic oil for fluid power application.
- Safety system on the mobile plate avoids accidental falling during the disconnection.
- Special rubber seal prevents dirt inclusion.
- The additional service line can be used with optional electrical connector or one drain line FAP9 (3/8).
- Robust guidance pins guarantee the correct alignment before the connection.
- Parking station and cover plates protects the system from contamination and damage as well as to provide a convenient storage solution.
- The removable lever (that can be parked in the optional bracket on the parking station) increases usability reducing the overall dimension.
- Flat face couplings are easy to clean, reducing the inclusion of contamination to the hydraulic circuit.
- Internal valve design creates minimal pressure drop, maintaining circuit efficiency in the system.
- Minimal fluid loss during disconnection, reducing fluid loss to the environment.
- Minimal air inclusion during connection/disconnection.
- High resistance at impulse pressures.
- Safe and simple to use.

## Main applications



Agriculture



Oil&Gas



Industry



High Pressure



Cooling



Refrigeration



Earth Moving



Vehicles



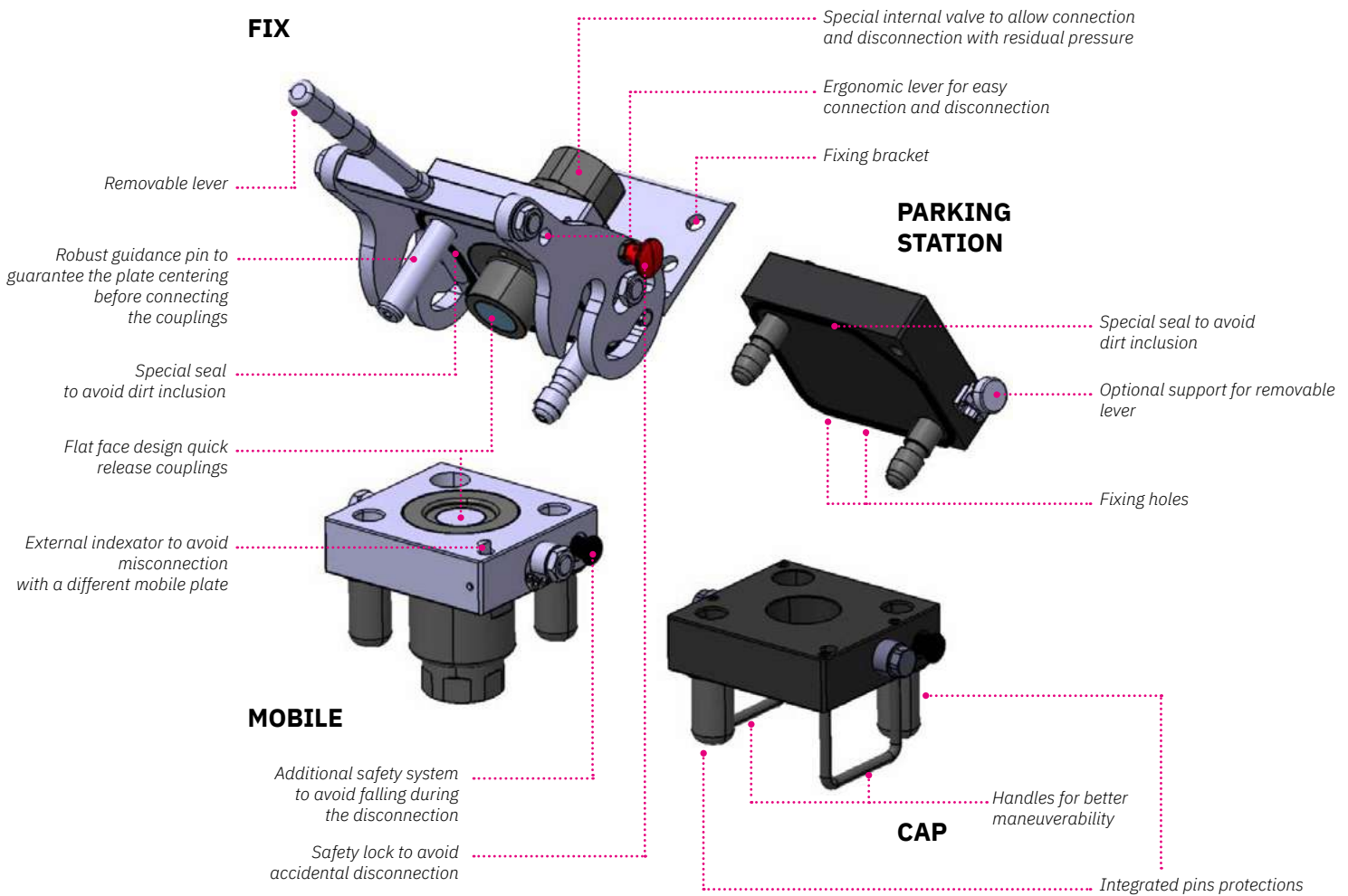
Hydraulic Equipment



Chemical & Foot Industry

## Features

V01 version with reverse connection system for an ergonomic connection on excavator application.



## Performances (with FAP30)

Size	Series	Max. flow suggested		Spillage*	Max. operating pressure					
					Coupled		Male		Female	
Inch		l/min	GPM	ml	MPa	psi	MPa	psi	MPa	psi
1-1/2	FAP30AS2	750	198,75	0,2	42	6000	42	6000	27	3915

\* Spillage is an indicative value of the fluid loss per couple-uncouple cycle.  
FAP9 line is only for drain line (max working pressure 1 MPa).

**Temperature range:** Standard seals NBR, PUR, POM from -20 °C to +100 °C ( from -4 °F to +212 °F).

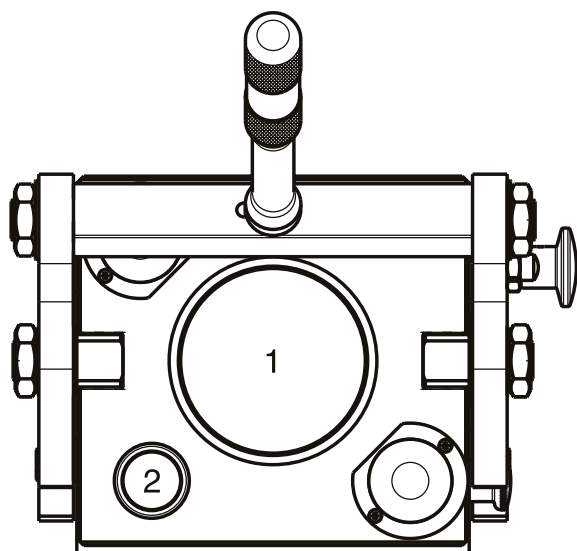
**Tests:** The couplings have been tested at max. operating pressure for 500.000 impulses in connected position in accordance with ISO norm.

Different threads available upon request.

## Installation, use and maintenance

- Install the fixed multiconnection with the proper fixing holes, by referring to the drawing shown in the datasheet.
- Install the flexible hoses on the coupling of the fixed and mobile multiconnection, by screwing them with proper torque.
- Clean the mating surface of the parts prior to connect.
- Insert and lock the removable lever in the corresponding hole on the lever system of the fixed multiconnection.
- Put the lever of the fixed multiconnection in complete open position, by disengaging the locking button and rotate the lever until the button is again engaged in the open position.
- Connect the mobile multiconnection by engaging the guiding pins into the fixed multiconnection.
- Disengage the button of the safety lock then connect the multiconnection by rotating the lever until the stroke is complete and the locking button engaged again in the closed position.
- When the mobile is connected with fixed multiconnection, the cap can be easily parked in the parking station.
- Disconnect the lever from the fixed part in order to avoid injuries from fall or lose it. Park it in the proper (optional) bracket.
- To disconnect the plate, insert the lever and disengage the locking button then rotate by doing vice versa the sequence above described.
- Then disengage the safety “anti-fall” locking system by pulling the knob on the mobile and separate the mobile multiconnection.
- After disconnection, clean the parts and apply the cap on the fixed part then connect the mobile part in the parking station to protect from dust and dirt.
- Disconnect and put the lever in the bracket.
- Clean frequently the multiconnection and the components.
- If needed, lubricate the connection and guiding parts.
- Check periodically the multiconnection by looking for leakage, damage or malfunctioning.

## Configurations



### Possible configurations

Position	Coupling Size	Predisposition for electrical connector
1	FAP30	-
2	FAP9D	YES

## Plates and spare parts

### Multicoupling (couplings included)

Code	Name	Description
870017107	MULTI FIX BM2 1G V01 Provided with removable lever	1 FAP30AS 1-1/2 BSP
870017207	MULTI MOBILE BM2 1G V01	1 FAP30AS 1-1/2 BSP

### Multicoupling spare parts (couplings not included)

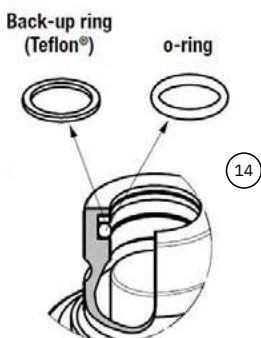
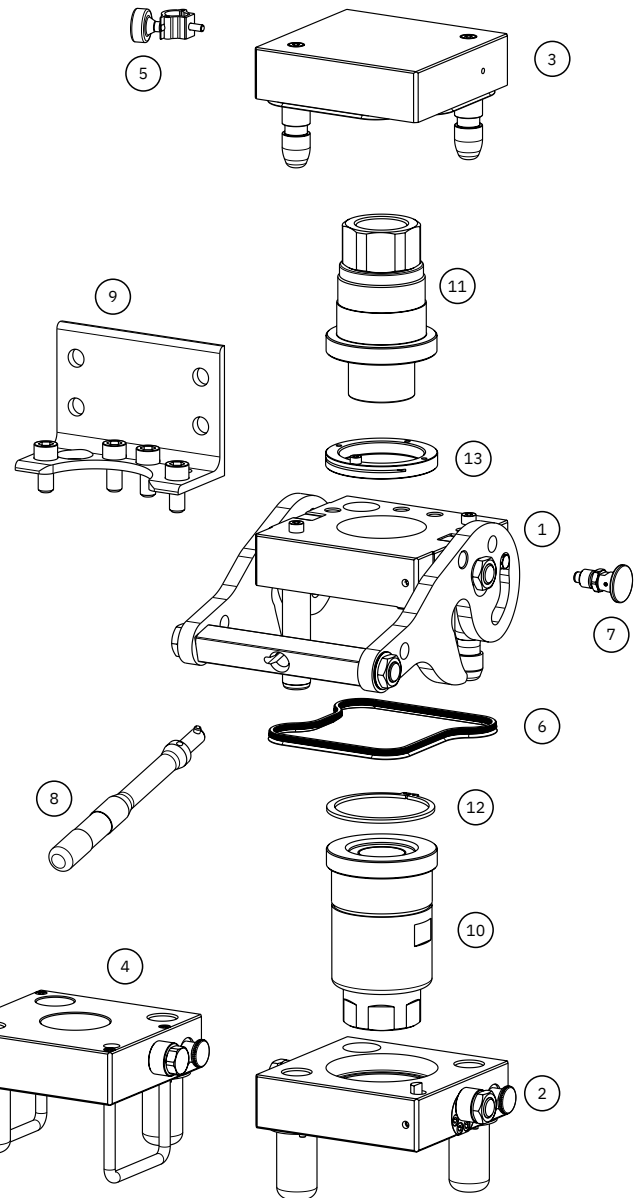
Code	Name	Key
806000418	MULTI FIX EMPTY BM2 1A-1G-1EC V01 Removable lever not included, to be ordered separately	1
806000419	MULTI MOBILE EMPTY BM2 1A-1G-1EC V01	2
815606316	CAP FIX MULTI BM 170X160 V01	3
815606317	PARKING STATION MULTI BM 170x160	4
815524016	SUPPORT FOR LEVER BM	5
815701279	SPARE KIT DUST SEAL PLATE BM2	6
815701280	SPARE KIT SAFETY BUTTON BM	7
815701281	SPARE KIT REMOVABLE HANDLE BM	8
815701282	SPARE KIT BRACKET BM2	9

### Spare parts

Code	Name	Key
807100058*	F FAP30AS2 1-1/2 BSP	10
807100059**	M FAP30AS2 1-1/2 BSP	11
815701156	SPARE KIT SEEGER F FAP30AS2	12
815701157	SPARE KIT LOCKING SLEEVE M FAP30AS2	13
815701171	SPARE KIT OR NBR+BK M FAP30AS2	14

\* Seeger ring is not included in the female coupling; to be ordered separately.

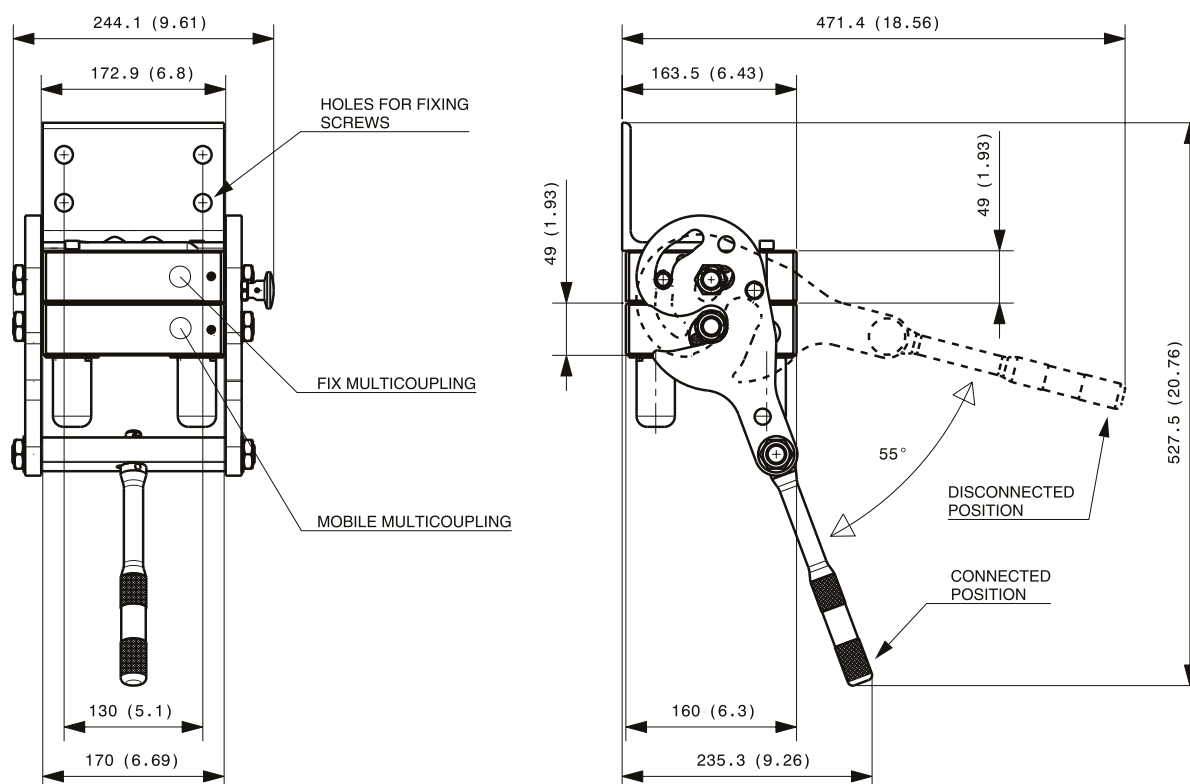
\*\* Male locking sleeve and screw are not included in the female coupling; to be ordered separately.



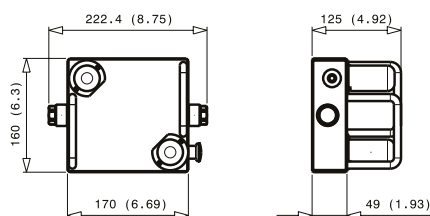


## Overall dimensions

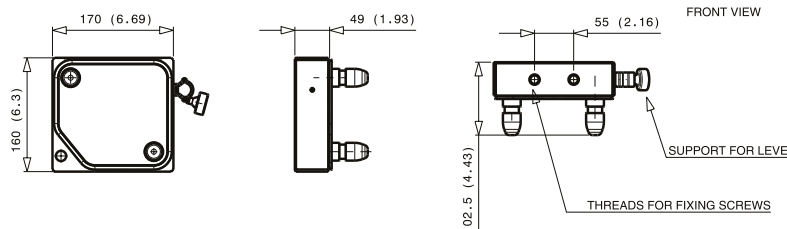
### Fixed and mobile multicoupling



### Cap for fix multicoupling



### Parking station for mobile multicoupling



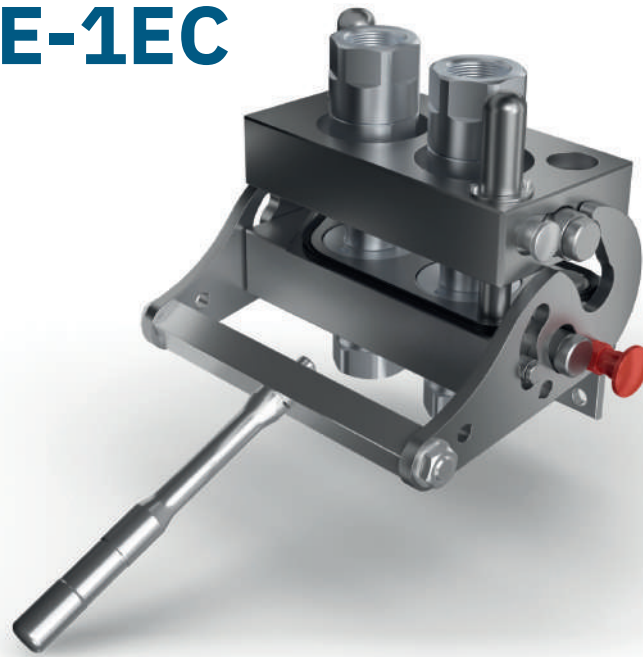
Dimensions in mm (inches)

## ⚠ WARNINGS

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).  
 Do not use the female coupling disconnected with high impulse pressure.  
 Do not couple-uncouple with flow 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 working 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.  
 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 tools are between them.  
 Pay attention during the connection not to put finger 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.  
 Do not exceed single coupling performance and total multiconnection resistance of the multiconnection (please refer to dedicated datasheet).  
 Do not to pressurize the "auxiliary line with FAP9-3/8" line as this line has to be used for drain line only.  
 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 to modify, disassemble or damage the multiconnection, part of it or coupling/electrical connector, the lever or safety lock system.  
 Stucchi Multiconnection BM2-V01 is intended to be used for hydraulic oil applications: do not use the products for dangerous, inflammable or explosive fluids.  
 The quick coupling FAP-AS series is intended to be used only on Stucchi Multiconnections BM2-V01. Do not use the FAP-AS coupling on a Custom-made multiconnection or other device different than a Stucchi Multiconnection.  
 In case of doubt please contact Stucchi Technical Support.  
**It is MANDATORY to read and closely follow the instructions. Last updated version always applies at time of installation, see latest Instructions and warnings on Stucchi website before selecting or using Stucchi products.**

# BM3 1A-2E-1EC

SPECIAL SERIES



<b>FAP9 (A)</b> 3/8"	<b>FAP13 (B)</b> 1/2"	<b>FAP15 (C)</b> 5/8"	<b>FAP17 (D)</b> 3/4"	<b>FAP21 (E)</b> 1"	<b>FAP30 (G)</b> 1-1/2"	<b>EC</b> instead of DN9 or DN13
1 D				2 - special		1

## Technical specifications and options



**Interchange**  
Stucchi profile



**Sealing**  
Nitrile NBR



**Available sizes**  
1"



**Material**  
Aluminium, Carbon steel



**Valving style**  
Flat face



**Connection Under Pressure**  
Allowed with Easy CUP



**Operating pressure**  
up to 350 bar



**Locking mechanism**  
Pin, Cam



**Temperature**  
-20°C / +100°C



**Connection system**  
Lever



**Available threads**  
NPT



**Flow rate**  
up to 378 l/min

## Benefits

- Specifically designed to connect simultaneously two 1" lines: one pressure line and one return line which work by the flow reversal.
- The lever/cam system minimizes the force required to connect the couplings, even with significant pressure trapped in the circuit and under difficult conditions (environment, access, etc.).
- The locking mechanism ensures a full connection and prevents any accidental disconnection.
- Designed to be used with hydraulic oil for fluid power application.
- Safety system on the mobile plate avoids accidental falling during the disconnection.
- Special rubber seal prevents dirt inclusion.
- The additional service line can be used with optional electrical connector or one drain line FAP9D.
- Robust guidance pins guarantee the correct alignment before the connection.
- Parking station and cover plate protect the system from contamination and damage, as well as providing a convenient storage solution.
- Flat face couplings are easy to clean, reducing the inclusion of contamination to the hydraulic circuit.
- Internal valve design creates minimal pressure drop, maintaining circuit efficiency in the system.
- Minimal fluid loss during disconnection, reducing fluid loss to the environment.
- Minimal air inclusion during connection/disconnection.
- High resistance at impulse pressures.
- Safe and simple to use.

## Main applications



## Features

### MOBILE

Flat face design

Robust guidance pins guarantee the centering before connecting the couplings

Special seal to avoid dirt inclusion

Special internal valve to allow connection and disconnection with residual pressure

Removable handle

### FIX

Additional safety system to avoid falling during the disconnection

Ergonomic lever for easy connection and disconnection

### CAP

Integrated pins protections

Fixing holes

Optional support for removable lever

Special seal to avoid dirt inclusion

Safety lock system avoids accidental disconnection

### PARKING STATION

## Performances (with FAP21)

Size	Series	Max. flow suggested		Spillage*	Max. operating pressure					
		l/min	GPM		Coupled		Male		Female	
Inch				ml	MPa	psi	MPa	psi	MPa	psi
1	FAP21AS	378	100,17	0,1	42	6000	42	6000	42	6000

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

#### IMPORTANT

Both the couplings can work at the max. operating pressure, but in an alternating way: when one coupling is in pressure the other coupling shall be with no pressure (return line).

FAP9D line is only for drain line (max. operating pressure 1 Mpa).

**Temperature range:** Standard seals NBR, PUR, POM from -20 °C to +100 °C ( from -4 °F to +212 °F).

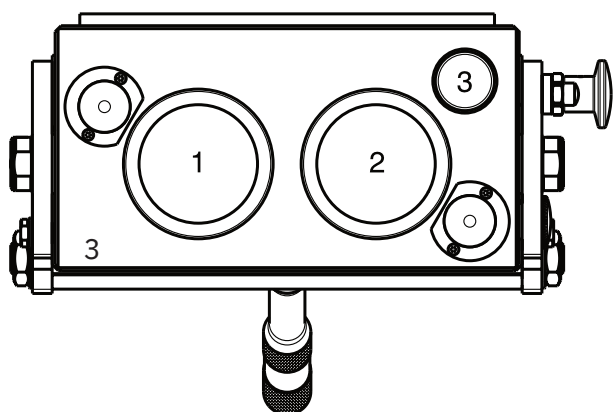
**Tests:** The couplings have been tested at max. operating pressure in accordance with ISO norm for 200.000 impulses coupled and 100.000 impulses uncoupled.

Different threads available upon request.

## Installation, use and maintenance

- Install the fixed multiconnection with the proper fixing holes, by referring to the drawing shown in the datasheet.
- Install the flexible hoses on the coupling of the fixed and mobile multiconnection, by screwing them with proper torque.
- Clean the mating surface of the parts prior to connect.
- Insert and lock the removable lever in the corresponding hole on the lever system of the fixed multiconnection.
- Put the lever of the fixed multiconnection in complete open position, by disengaging the locking button and rotate the lever until the button is again engaged in the open position.
- Connect the mobile multiconnection by engaging the guiding pins into the fixed multiconnection.
- Disengage the button of the safety lock then connect the multiconnection by rotating the lever until the stroke is complete and the locking button engaged again in the closed position.
- Disconnect the lever from the fixed part in order to avoid injuries from fall or lose it. Park it in the proper (optional) support.
- When the mobile is connected with the fixed multiconnection, the cap can be easily parked in the parking station.
- To disconnect, insert the lever and disengage the locking button then rotate by doing vice versa the sequence above described.
- Then disengage the safety “anti-fall” locking system by pulling the knob on the mobile and separate the mobile multiconnection.
- After disconnection, clean the parts and apply the cap on the fixed part then connect the mobile part in the parking station to protect from dust and dirt.
- Disconnect and put the lever in the support.
- Clean frequently the multiconnection and the components.
- If needed, lubricate the connection and guiding parts.
- Check periodically the multiconnection by looking for leakage, damage or malfunctioning.

## Configurations



### Possible configurations

Position	Coupling Size	Predisposition for electrical connector
1	FAP21AS	-
2	FAP21AS	-
3	FAP9D	YES

Electrical connectors part number:  
806422060 F EC7BM - 806422061 M EC7BM.

For FAP9D and plugs part number see the Stucchi Multicoupling Catalog.

## Plates and spare parts

### Multicoupling (couplings included)

Code	Name	Description
870017114	MULTI FIX BM3 2E Provided with removable lever	2 FAP21AS 1-1/4 NPT
870017214	MULTI MOBILE BM3 2E	2 FAP21AS 1-1/4 NPT

### Multicoupling spare parts (couplings not included)

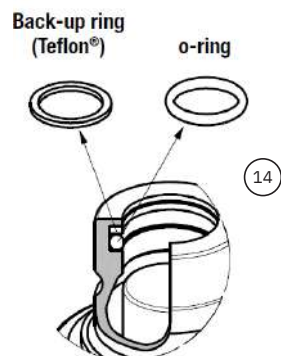
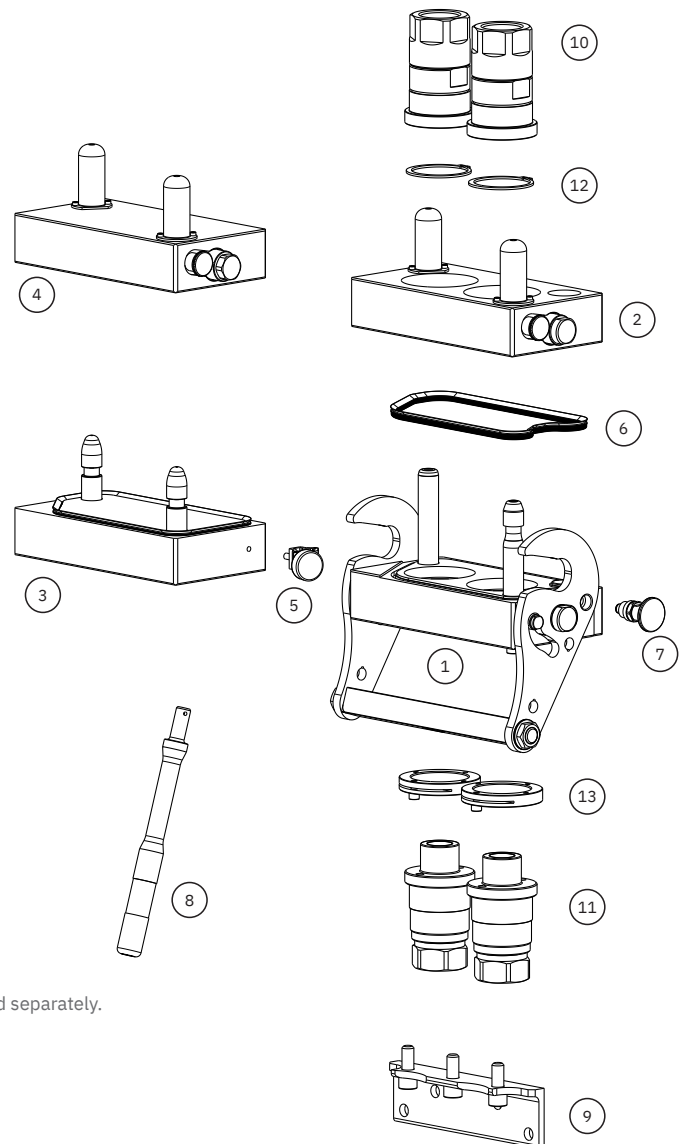
Code	Name	Key
806000430	MULTI FIX EMPTY BM3 1A-2E-1EC Removable lever and bracket not included, to be ordered separately	1
806000431	MULTI MOBILE EMPTY BM3 1A-2E-1EC	2
815606324	PARKING STATION MOBILE MULTICOUPLING BM 235x124	3
815606323	CAP FIX MULTI COUPLING BM 235X124	4
815524016	SUPPORT FOR LEVER BM	5
815701190	SPARE KIT DUST SEAL PLATE BM3	6
815701280	SPARE KIT SAFETY BUTTON BM	7
815701281	SPARE KIT REMOVABLE HANDLE BM	8
815701303	KIT BRACKET BM3 210x60	9

### Spare parts

Code	Name	Key
807101002*	F FAP21AS1 1-1/4 NPT	10
807101003**	M FAP21AS1 1-1/4 NPT	11
815701154	SPARE KIT SEEGER F FAP21AS1	12
815701155	SPARE KIT LOCKING SLEEVE M FAP21AS1	13
815701159	SPARE KIT SEAL PUR M FAP21AS1	14

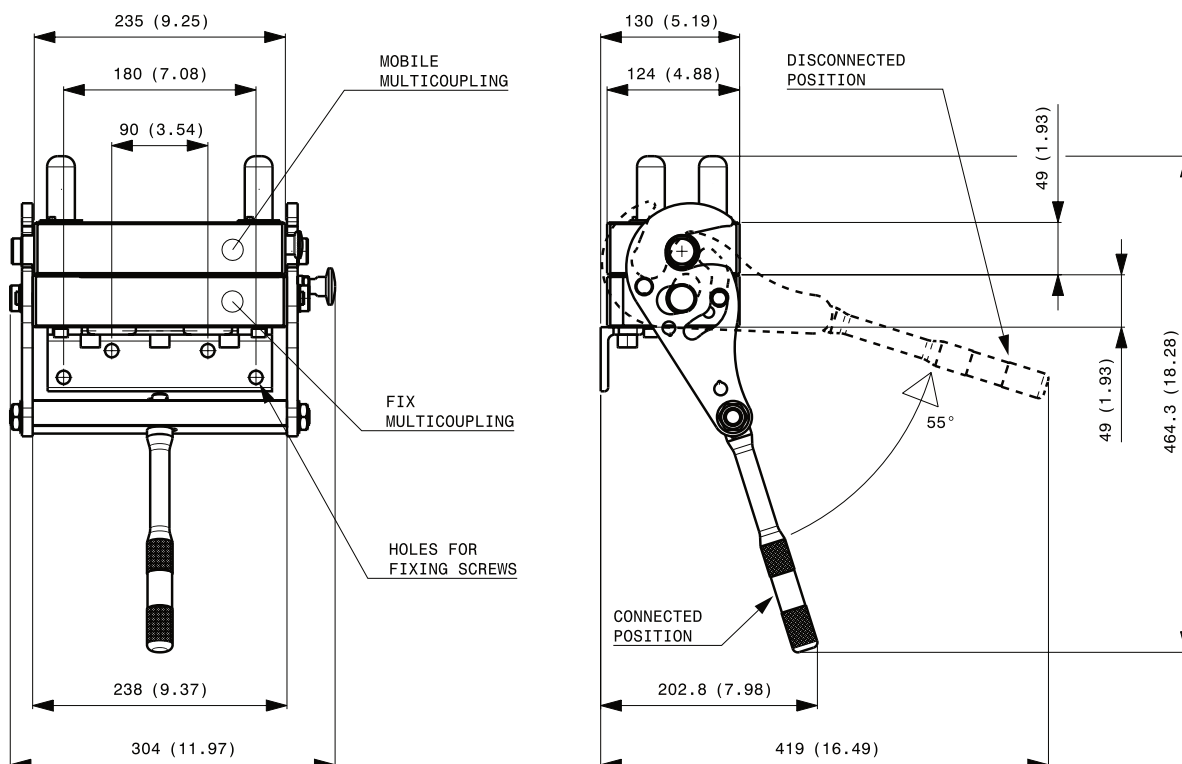
\* Seeger ring is not included in the female coupling; to be ordered separately.

\*\* Male locking sleeve and screw are not included in the female coupling; kit to be ordered separately.

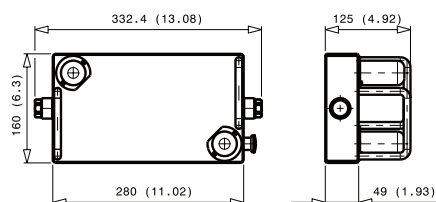


## Overall dimensions

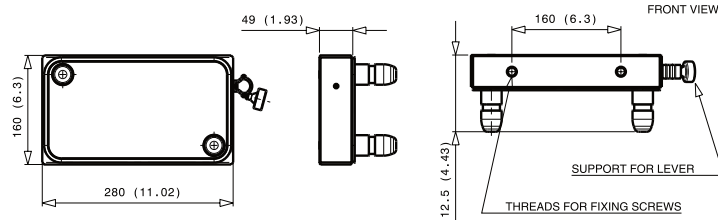
### Fixed and mobile multicoupling



### Cap for fix multicoupling



### Parking station for mobile multicoupling



## ⚠ WARNINGS

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).

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

Do not couple-uncouple with flow 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 working 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.

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 tools are between them.

Pay attention during the connection not to put finger 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.

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

Do not to pressurize the "auxiliary line with FAP9-3/8" line as this line has to be used for drain line only.

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 to modify, disassemble or damage the multiconnection, part of it or coupling/electrical connector, the lever or safety lock system.

Stucchi Multiconnection BM3 is intended to be used for hydraulic oil applications: do not use the products for dangerous, inflammable or explosive fluids.

The quick coupling FAP-AS series is intended to be used only on Stucchi Multiconnections BM. Do not use the FAP-AS coupling on a custom-made multiconnection or other device different than a Stucchi Multiconnection.

In case of doubt please contact Stucchi Technical Support.

**It is MANDATORY to read and closely follow the instructions. Last updated version always applies at time of installation, see latest Instructions and warnings on Stucchi website before selecting or using Stucchi products.**

# BM3 1A-2G-1EC

SPECIAL SERIES



FAP9 (A)	FAP13 (B)	FAP15 (C)	FAP17 (D)	FAP21 (E)	FAP30 (G)	EC
3/8"	1/2"	5/8"	3/4"	1"	1-1/2"	instead of DN9 or DN13
1 D					2 - special	1

## Technical specifications and options



**Interchange**  
Stucchi profile



**Sealing**  
Nitrile NBR



**Available sizes**  
1-1/2"



**Material**  
Aluminium, Carbon steel



**Valving style**  
Flat face



**Connection Under Pressure**  
Allowed with Easy CUP



**Operating pressure**  
up to 350 bar



**Locking mechanism**  
Pin, Cam



**Temperature**  
-20°C / +100°C



**Connection system**  
Lever



**Available threads**  
NPT, SAE



**Flow rate**  
up to 750l/min

## Benefits

- Specifically designed to connect simultaneously two 1-1/2" lines: one pressure line and one return line which work by the flow reversal.
- The lever/cam system minimizes the force required to connect the couplings, even with significant pressure trapped in the circuit and under difficult conditions (environment, access, etc.).
- The locking mechanism ensures a full connection and prevents any accidental disconnection.
- Designed to be used with hydraulic oil for fluid power application.
- Safety system on the mobile plate avoids accidental falling during the disconnection.
- Special rubber seal prevents dirt inclusion.
- The additional service line can be used with optional electrical connector or one drain line FAP9 (3/8).
- Robust guidance pins guarantee the correct alignment before the connection.
- Parking station and cover plates protect the system from contamination and damage, as well as to provide a convenient storage solution.
- Flat face couplings are easy to clean, reducing the inclusion of contamination to the hydraulic circuit.
- Internal valve design creates minimal pressure drop, maintaining circuit efficiency in the system.
- Minimal fluid loss during disconnection, reducing fluid loss to the environment.
- Minimal air inclusion during connection/disconnection.
- High resistance at impulse pressures.
- Safe and simple to use.

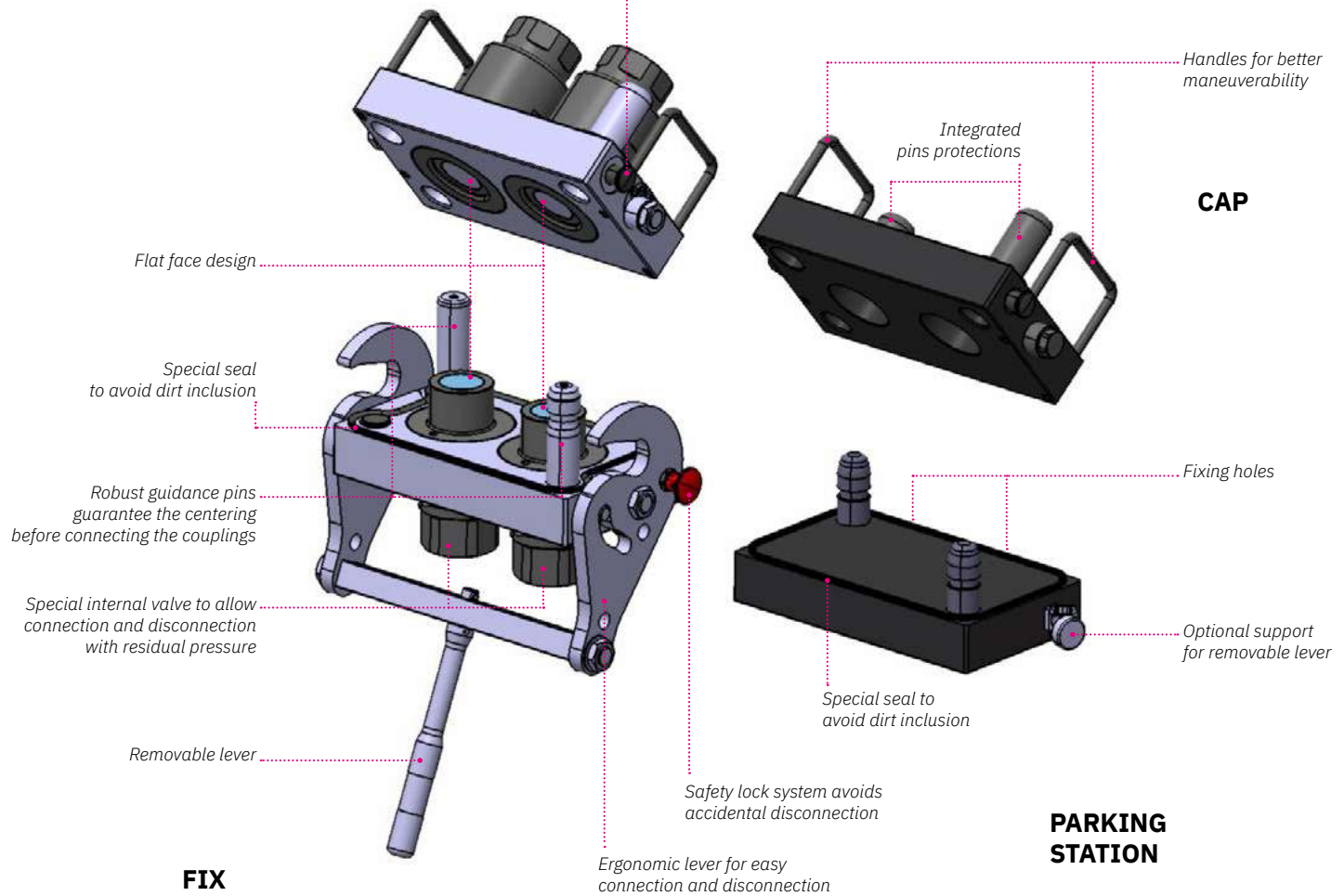
## Main applications



## Features

### MOBILE

Additional safety system to avoid falling during the disconnection



Handles for better maneuverability

### CAP

Integrated pins protections

Fixing holes

Optional support for removable lever

### PARKING STATION

### FIX

Safety lock system avoids accidental disconnection

Ergonomic lever for easy connection and disconnection

## Performances (with FAP30)

Size	Series	Max. flow suggested		Spillage*	Max. operating pressure					
		l/min	GPM		Coupled		Male		Female	
Inch				ml	MPa	psi	MPa	psi	MPa	psi
1-1/2	FAP30AS2	750	198,75	0,2	35	5075	35	5075	27	3915

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

### IMPORTANT

Both the couplings can work at the max. operating pressure, but in an alternating way: when one coupling is in pressure the other coupling shall be with no pressure (return line).

FAP9 line is only for drain line (max. operating pressure 1 Mpa).

**Temperature range:** Standard seals NBR, PUR, POM from -20 °C to +100 °C ( from -4 °F to +212 °F).

**Tests:** The couplings have been tested at max. operating pressure for 200.000 impulses in connected position in accordance with ISO norm.

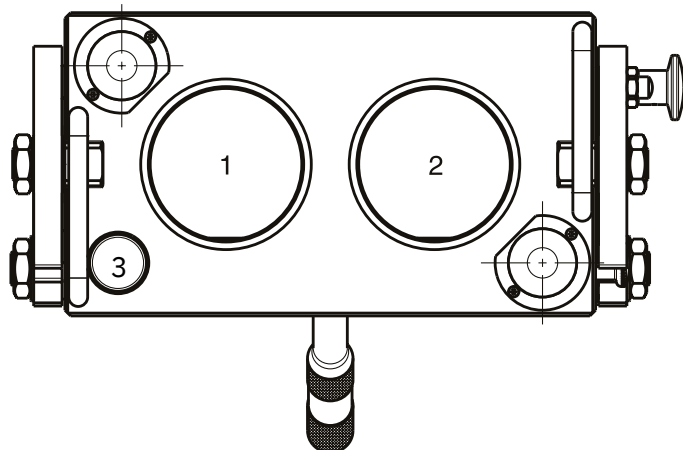
Different threads available upon request.



## Installation, use and maintenance

- Install the fixed multiconnection with the proper fixing holes, by referring to the drawing shown in the datasheet.
- Install the flexible hoses on the coupling of the fixed and mobile multiconnection, by screwing them with proper torque.
- Clean the mating surface of the parts prior to connect.
- Insert and lock the removable lever in the corresponding hole on the lever system of the fixed multiconnection.
- Put the lever of the fixed multiconnection in complete open position, by disengaging the locking button and rotate the lever until the button is again engaged in the open position.
- Connect the mobile multiconnection by engaging the guiding pins into the fixed multiconnection.
- Disengage the button of the safety lock then connect the multiconnection by rotating the lever until the stroke is complete and the locking button engaged again in the closed position.
- Disconnect the lever from the fixed part in order to avoid injuries from fall or lose it. Park it in the proper (optional) support.
- When the mobile is connected with the fixed multiconnection, the cap can be easily parked in the parking station.
- To disconnect, insert the lever and disengage the locking button then rotate by doing vice versa the sequence above described.
- Then disengage the safety “anti-fall” locking system by pulling the knob on the mobile and separate the mobile multiconnection.
- After disconnection, clean the parts and apply the cap on the fixed part then connect the mobile part in the parking station to protect from dust and dirt.
- Disconnect and put the lever in the support.
- Clean frequently the multiconnection and the components.
- If needed, lubricate the connection and guiding parts.
- Check periodically the multiconnection by looking for leakage, damage or malfunctioning.

## Configurations



### Possible configurations

Position	Coupling Size	Predisposition for electrical connector
1	FAP30	-
2	FAP30	-
3	FAP9D	YES

## Plates and spare parts

### Multicoupling (couplings included)

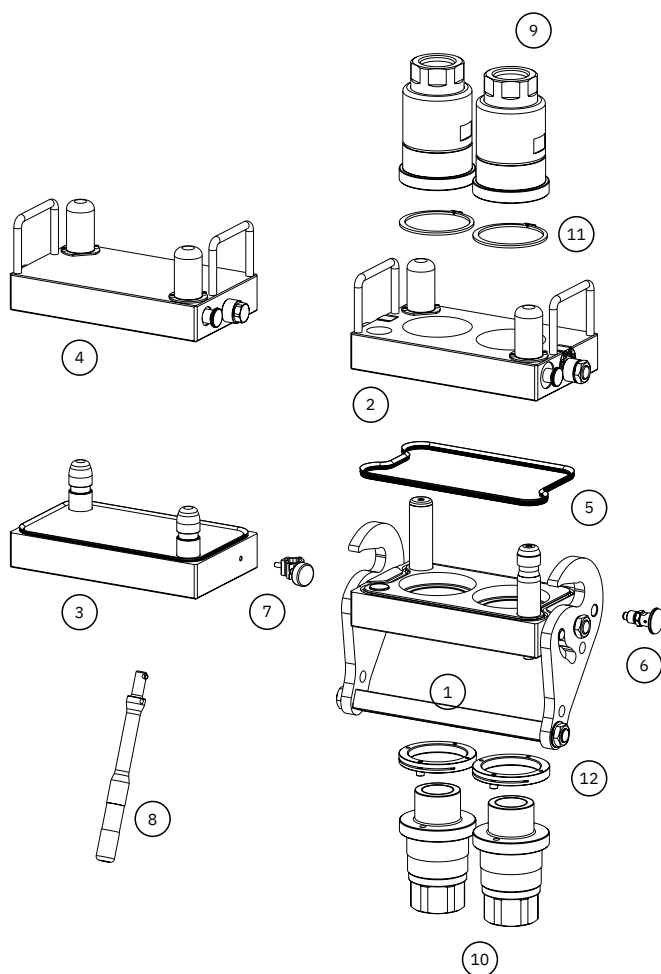
Code	Name	Description
870017109	MULTI FIX BM3 2G Provided with removable lever	2 FAP30AS 1-1/2 NPT
870017209	MULTI MOBILE BM3 2G	2 FAP30AS 1-1/2 NPT
870017111	MULTI FIX BM3 2G Provided with removable lever	2 FAP30AS 1-1/2 SAE
870017211	MULTI MOBILE BM3 2G	2 FAP30AS 1-1/2 SAE
870017112	MULTI FIX BM3 2G Provided with removable lever	2 FAP30AS 1-1/2 BSP
870017212	MULTI MOBILE BM3 2G	2 FAP30AS 1-1/2 BSP

### Multicoupling spare parts (couplings not included)

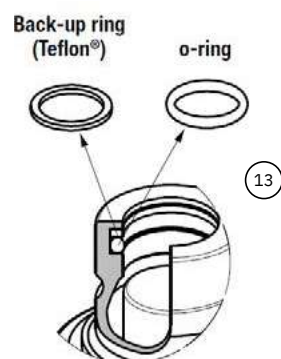
Code	Name	Key
806000424	MULTI FIX EMPTY BM3 1A-2G-1EC Removable lever not included to be ordered separately	1
806000425	MULTI MOBILE EMPTY BM3 1A-2G-1EC	2
815606319	PARKING STATION MOBILE BM 280X160	3
815606320	CAP FIX MULTI BM 280X160	4
815701190	SPARE KIT DUST SEAL PLATE BM3	5
815701280	SPARE KIT SAFETY BUTTON BM	6
815524016	SUPPORT FOR LEVER BM	7
815701281	SPARE KIT REMOVABLE HANDLE BM	8

### Spare parts

Code	Name	Key
807101006*	F FAP30AS2 1-1/2 NPT	9
807101007**	M FAP30AS2 1-1/2 NPT	10
807104010*	F FAP30AS2 1-1/2 SAE	9
807104011**	M FAP30AS2 1-1/2 SAE	10
807100058*	F FAP30AS2 1-1/2 BSP	9
807100059**	M FAP30AS2 1-1/2 BSP	10
815701156	SPARE KIT SEEGER F FAP30AS2	11
815701157	SPARE KIT LOCKING SLEEVE M FAP30AS2	12
815701171	SPARE KIT OR NBR+BK M FAP30AS2	13

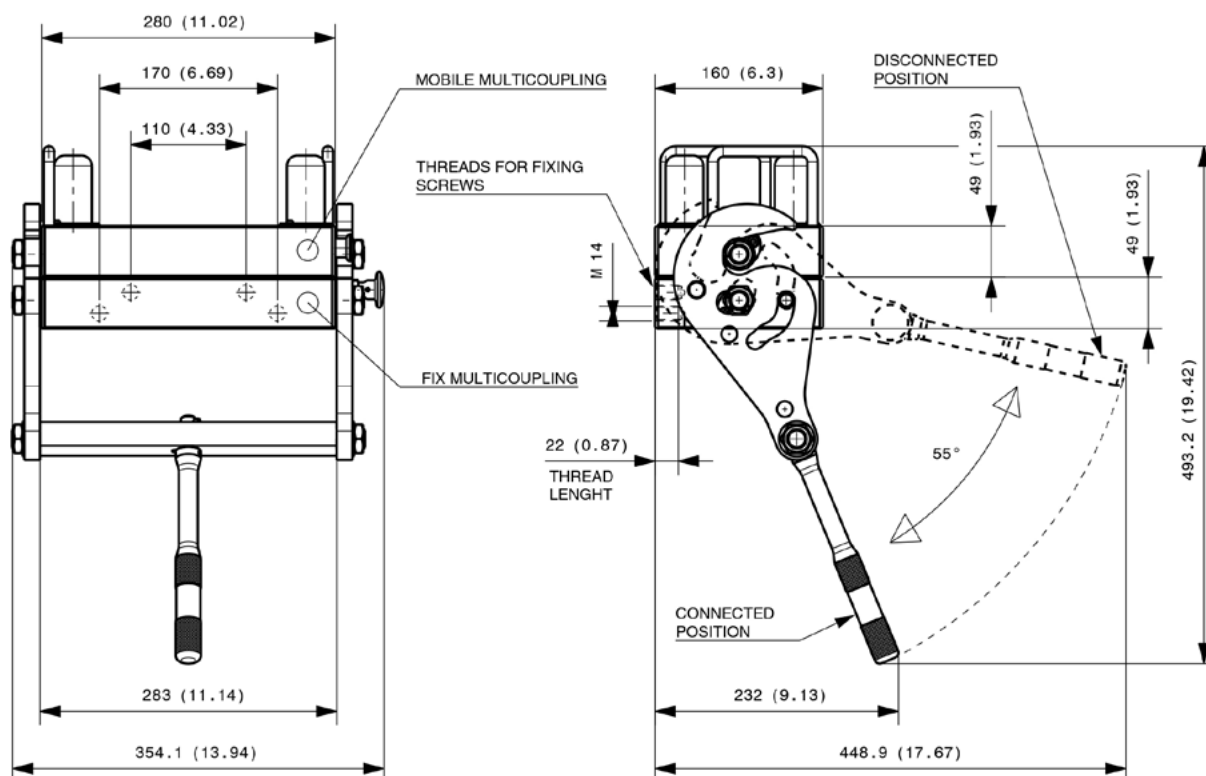


\* Seeger ring is not included in the female coupling; to be ordered separately.  
 \*\* Male locking sleeve and screw are not included in the female coupling; kit to be ordered separately.

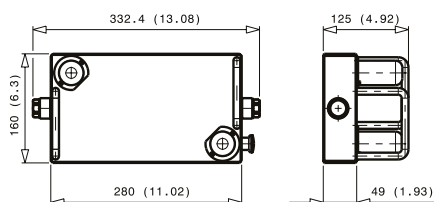


## Overall dimensions

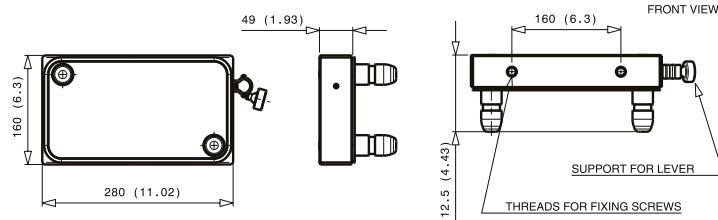
### Fixed and mobile multicoupling



### Cap for fix multicoupling



### Parking station for mobile multicoupling



## ⚠ WARNINGS

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).

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

Do not couple-uncouple with flow 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 working 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.

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 tools are between them.

Pay attention during the connection not to put finger between the plates.

We advise to assemble the multicoupling 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 multicoupling (please refer to dedicated datasheet).

Do not to pressurize the "auxiliary line with FAP9-3/8" line as this line has to be used for drain line only.

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 to modify, disassemble or damage the multicoupling, part of it or coupling/electrical connector, the lever or safety lock system.

Stucchi Multiconnection BM3 is intended to be used for hydraulic oil applications: do not use the products for dangerous, inflammable or explosive fluids.

The quick coupling FAP-AS series is intended to be used only on Stucchi Multiconnections BM. Do not use the FAP-AS coupling on a custom-made multicoupling or other device different than a Stucchi Multiconnection.

In case of doubt please contact Stucchi Technical Support.

**It is MANDATORY to read and closely follow the instructions. Last updated version always applies at time of installation, see latest Instructions and warnings on Stucchi website before selecting or using Stucchi products.**

# FAP SHUNT

SPECIAL SERIES



## Technical specifications and options



**Interchange**  
Stucchi profile



**Sealing**  
Nitrile NBR



**Available sizes**  
3/8" and 3/4"



**Material /treatment**  
Carbon steel / ZnNi



**Valving style**  
Flat face



**Connection under pressure**  
allowed



**Operating pressure**  
Up to 350 bar



**Locking mechanism**  
Pin, Cam



**Temperature**  
-20°C / +100°C



**Connection system**  
By multicoupling



**Available threads**  
not available



**Flow rate**  
Up to 200 l/min

## Benefits

- The shunt system avoids constant pressure in the fix multicoupling, when disconnected from the mobile.
- Works as hydraulic switch to connect-disconnect more lines in a quick way.
- Modular design allows to have several configurations for different multicoupling models.
- 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 environment.
- Minimal air inclusion during connection/disconnection, enhancing correct function of the circuit.
- Couplings without locking balls eliminate the "brinelling" effect.
- Zinc Nickel plating qualified for high corrosion resistance.
- Compact slim design.
- Safe and simple to use.

## How to use

- To assemble the FAP SHUNT on the multiconnection: remove the seeger ring, unscrew the threaded nut, insert the couplings in the holes 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.
- To disassemble the FAP SHUNT couplings from the multiconnection: take away the seeger ring, unscrew the threaded nut, extract the couplings from the holes of the multiconnection.
- Before connecting clean the flat mating surface of couplings 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

**Easy shunt solution to connect two hydraulic lines**

**Zinc nickel surface plating for high corrosion resistance**

**Modular design**

**Interfaceable with mobile multicoupling of existing models**

### MAIN APPLICATIONS

Agriculture	Oil/Gas	Industry	High Pressure	Cooling
Refrigeration	Earth Moving	Vehicles	Hydraulic Equipment	Chemical & Food Industry

## Performances

Size	Descriptive code	item code	Max. flow suggested		Hydrostatic pushing area coupled	Spillage*	Max. operating pressure		Burst pressure	
			l/min	GPM			MPa	psi	MI	MI
3/8	F FAP9AZN SHUNT	Female 811424002	46	12,19	1,226	0,012	35	5075	120	17400
3/4	F FAP17ZN SHUNT	Female 811424000	200	53	3,298	0,032	33	4785	120	17400

\* Spillage is an indicative value of the fluid loss during disconnection (according to ISO norm test method).

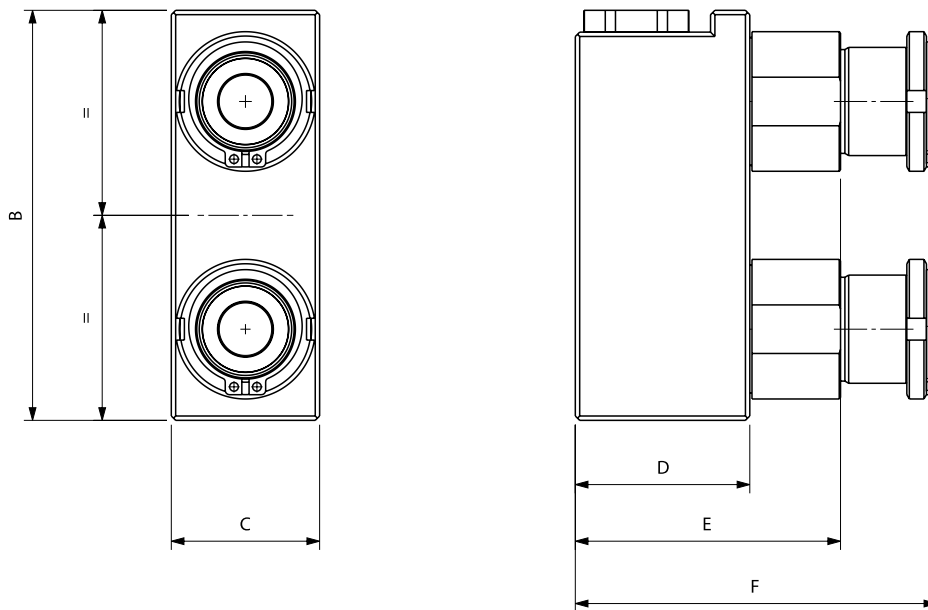
### Temperature range:

Standard seals NBR, PUR, POM from -20°C to + 100°C (from -4 F° to +212°F).

### Tests:

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

## Overall dimensions

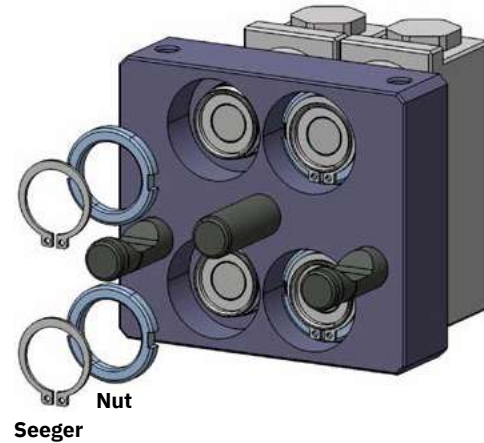


BODY	Descriptive code	Item code	Overall Length		Length		Length		Height		Width		Weight		Compatible multicouplings models
SIZE			mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	Kg	Lbs	
3/8" - 10	F FAP9AZN SHUNT	811424002	F 82,9	3,26	E 60,8	2,39	D 40	1,57	B 94	3,70	C 34	1,34	C 1,12	2,47	DP2 2A-1EC; DP4 4A-2EC; DP6 4A-2EC
3/4" - 19	F FAP17ZN SHUNT	811424000	F 107,6	4,24	E 84	3,31	D 49	1,93	B 119	4,69	C 50	1,97	C 2,97	6,54	DP2 2D

## Spare parts

### Repair kit/Nut + Seeger

Part Number	NBR Version Description
815701000	SET OF 10 SEEGER+NUT FAP9AZN
815701004	SET OF 5 SEEGER+NUT FAP17ZN



### ⚠ 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 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).  
 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.  
 FAP SHUNT is intended to be used only on Stucchi Multiconnections. Do not use the FAP SHUNT coupling on a custom-made multiconnection or other device different than a Stucchi Multiconnection.  
 Do not disassemble, misuse, modify or damage the products.  
 FAP SHUNT is intended to be used with standard hydraulic oils in fluid power application. Do not use the FAP SHUNT 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.  
 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 applies at time of installation, see latest Instructions and warnings on Stucchi website before selecting or using Stucchi products.**

# DMC4 4E

SPECIAL SERIES



FAP9 (A) 3/8"	FAP13 (B) 1/2"	FAP15 (C) 5/8"	FAP17 (D) 3/4"	FAP21 (E) 1"	FAP30 (G) 1-1/2"	EC instead of DN9 or DN13
				4 - special FAP21DM		

## Technical specifications and options



**Interchange**  
Stucchi profile



**Sealing**  
Nitrile NBR



**Available sizes**  
1"



**Material**  
Aluminium, Carbon steel



**Valving style**  
Flat face



**Connection Under Pressure**  
Allowed with Easy CUP



**Operating pressure**  
420 bar (max in 2 lines)



**Locking mechanism**  
Pin, Cam



**Temperature**  
-20°C / +100°C



**Connection system**  
Lever



**Available threads**  
BSP



**Flow rate**  
up to 378 l/min

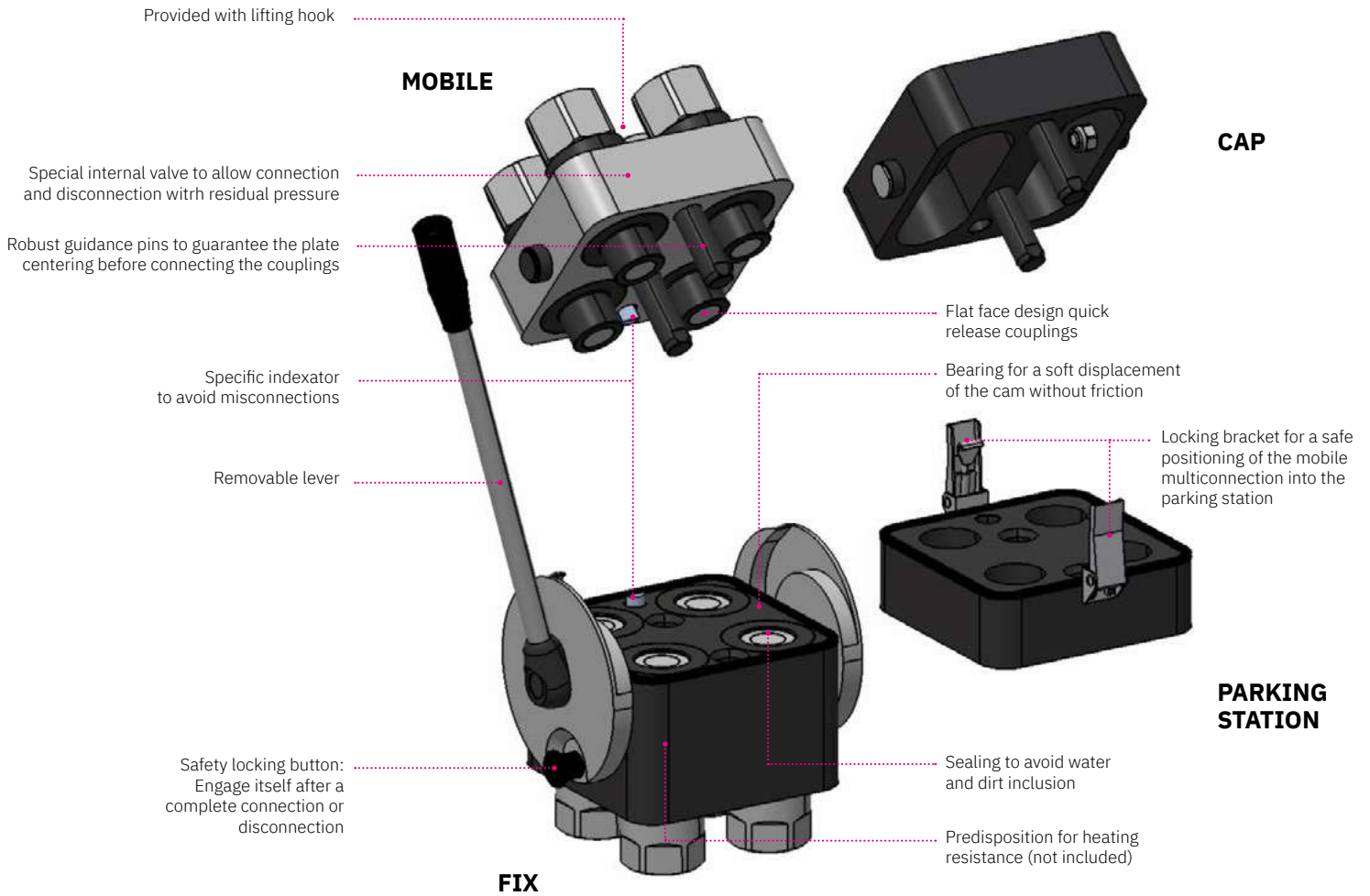
## Benefits

- Specific design for hydraulic lines with 1" (dimension 21): the lever/cam system minimizes the force required to connect the couplings, even with significant pressure trapped in the circuit or under difficult conditions (environment, access, etc.).
- The locking mechanism ensures a full connection and prevents any accidental disconnections.
- Specific indexator avoids misconnection with different mobile plate.
- Special rubber seal prevents dirt inclusion.
- Robust guidance pins guarantee the correct alignment before the connection.
- Parking station and cover plates protect the system from contamination and damage as well as to provide a convenient storage solution.
- The removable lever increases usability reducing the overall dimension.
- Flat face couplings are easy to clean, reducing the inclusion of contamination to the hydraulic circuit.
- Internal valve design creates minimal pressure drop, maintaining circuit efficiency in the system.
- Minimal fluid loss during disconnection, reducing fluid loss to the environment.
- Minimal air inclusion during connection/disconnection.
- High resistance at impulse pressures.
- Safe and simple to use.

## Main applications



## Features



## Performances (with FAP21)

Size	Series	Max. flow suggested		Spillage*	Max. operating pressure					
					Coupled		Male		Female	
Inch		l/min	GPM	ml	MPa	psi	MPa	psi	MPa	psi
1	FAP21DM	378	100,17	0,06	42**	-	42	-	30	-

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

\*\* Please notice the pressure may only be applied on maximum 2 lines only, the other 2 lines have to be connected to return/drain.

**Temperature range:** Standard seals NBR, PUR, POM from -20 °C to +100 °C ( from -4 °F to +212 °F).

**Tests:** The couplings have been tested at max. operating pressure for 200.000 impulses in connected position in accordance with ISO norm.

Other threads available upon request.



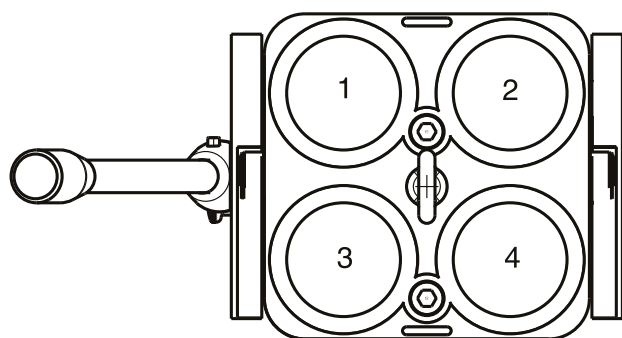
## Installation, use and maintenance

---

- Install the fixed multiconnection with the proper fixing holes, by referring to the drawing shown in the datasheet.
- Install the flexible hoses on the coupling of the fixed and mobile multiconnection, by screwing them with proper torque.
- Clean the mating surface of the parts prior to connect.
- Insert and lock the removable lever.
- Put the lever of the fixed multiconnection in complete open position, by disengaging the locking button and rotate the lever until the button is again engaged in the open position.
- Connect the mobile multiconnection by engaging the guiding pins into the fixed multiconnection.
- Disengage the locking button then connect the multiconnection by rotating the lever until the stroke is complete and the locking button engaged again in the closed position.
- When the mobile is connected with fixed multiconnection, the cap can be easily parked in the parking station.
- Disconnect the lever from the fixed part in order to avoid injuries from fall or loose it.
- To disconnect the plate, insert the lever and disengage the locking button then rotate by doing vice versa the sequence above described.
- After disconnection, clean the parts and apply the cap on the fixed part then connect the mobile part in the parking station to protect from dust and dirt.
- Disconnect the lever.
- Clean frequently the multiconnection and the components.
- If needed, lubricate the connection and guiding parts.
- Check periodically the multiconnection for leakage, damage or malfunctioning.
- Notice: do not pressurize more than 2 lines together (see “Performances” section).

## Configurations

---



### Possible configurations

Position	Coupling Size	Predisposition for electrical connector
1	FAP21 special	-
2	FAP21 special	-
3	FAP21 special	-
4	FAP21 special	-

## Plates and spare parts

### Multicoupling (couplings included)

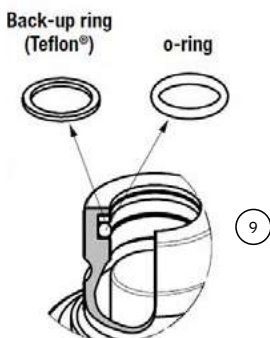
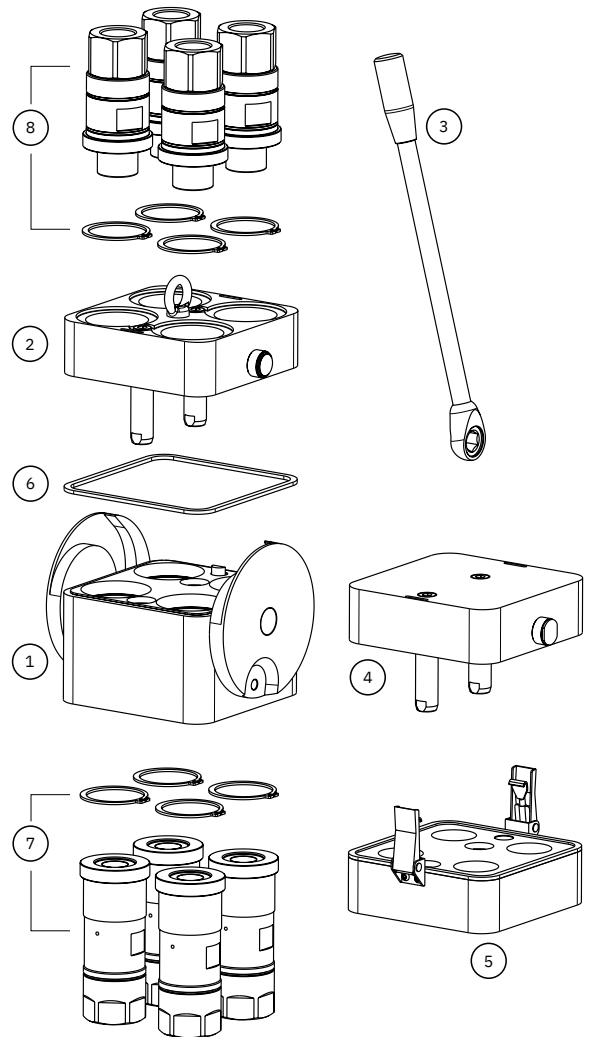
Code	Name	Description
870013115	MULTI FIX DMC4 4E Provided with removable lever (included)	4 FAP21DM 1 BSP
870013215	MULTI MOBILE DMC4 4E	4 FAP21DM 1 BSP

### Multicoupling spare parts (couplings not included)

Code	Name	Key
806000228	MULTI FIX EMPTY DMC4 4E* Removable lever not included, to be ordered separately	1
806000229	MULTI MOBILE EMPTY DMC4 4E Lifting hook not included, to be ordered separately	2
815701272	SPARE KIT LEVER GROUP DMC L300	3
815606228	CAP FIX MULTICOUPLING DMC 184X160	4
815606229	PARKING STATION MULTICOUPLING MOBILE DMC 160x160	5
815701285	SPARE KIT SEAL MULTICOUPLING FIX DMC4	6

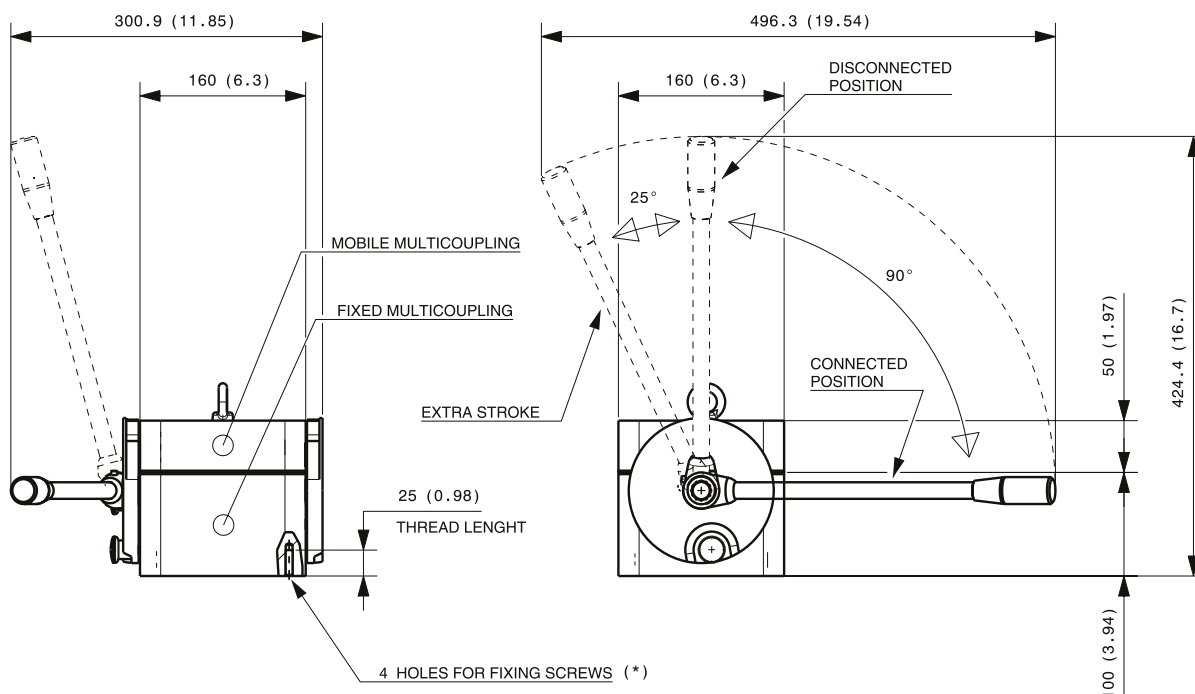
### Couplings spare parts

Code	Name	Key
815701287	SPARE KIT SEEGER+M FAP21DM 1 BSP	7
815701288	SPARE KIT SEEGER+F FAP21DM 1 BSP	8
815700345	SPARE KIT OR NBR+BK M FF 100	9

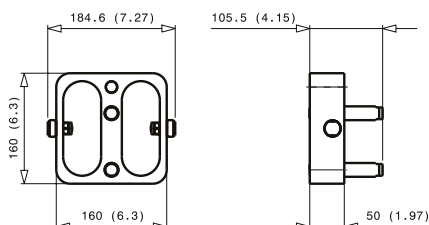


## Overall dimensions

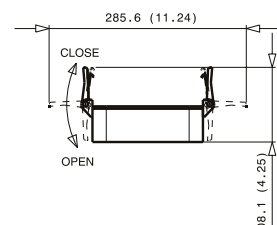
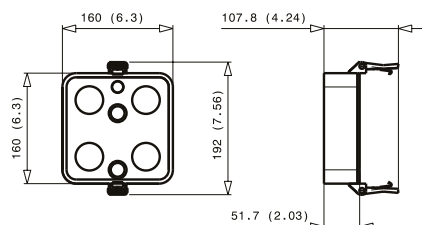
### Fixed and mobile multicoupling



### Cap for fix multicoupling



### Parking station for mobile multicoupling



Dimensions in mm (inches)

## ⚠ WARNINGS

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).  
 Do not use the female coupling disconnected with high impulse pressure.  
 Do not couple-uncouple with flow 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 working 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.  
 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 tools are between them.  
 Pay attention during the connection not to put finger between the plates.  
 Do not exceed single coupling performance and total multiconnection resistance of the multiconnection (please refer to dedicated datasheet).  
 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 to modify, disassemble or damage the multiconnection, part of it or coupling/electrical connector, the lever or safety lock system.  
 Stucchi Multiconnection DMC. are intended to be used for hydraulic fluid power application: do not use the products for dangerous, inflammable or explosive fluids  
 The quick coupling FAP-DM series is intended to be used only on Stucchi Multiconnections DMC. Do not use the FAP-DM coupling on a Custom-made multiconnection or other device different than a Stucchi Multiconnection.  
 In case of doubt please contact Stucchi Technical Support.  
 It is **MANDATORY** to read and closely follow the instructions. Last updated version always applies at time of installation, see latest Instructions and warnings on Stucchi website (English version: [www.stucchigroup.com/en](http://www.stucchigroup.com/en)) before selecting or using Stucchi products.



FAP9 (A) 3/8"	FAP13 (B) 1/2"	FAP15 (C) 5/8"	FAP17 (D) 3/4"	FAP21 (E) 1"	FAP30 (G) 1-1/2"	EC instead of DN9 or DN13
				6 - special FAP21DM		

## Technical specifications and options



**Interchange**  
Stucchi profile



**Sealing**  
Nitrile NBR



**Available sizes**  
6 x 1" (special FAP21)



**Material**  
Aluminium, Carbon steel



**Valving style**  
Flat face



**Connection Under Pressure**  
Allowed with Easy CUP



**Operating pressure**  
420 bar (max in 3 lines)



**Locking mechanism**  
Pin, Cam



**Temperature**  
-20°C / +100°C



**Connection system**  
Lever



**Available threads**  
BSP



**Flow rate**  
up to 378 l/min

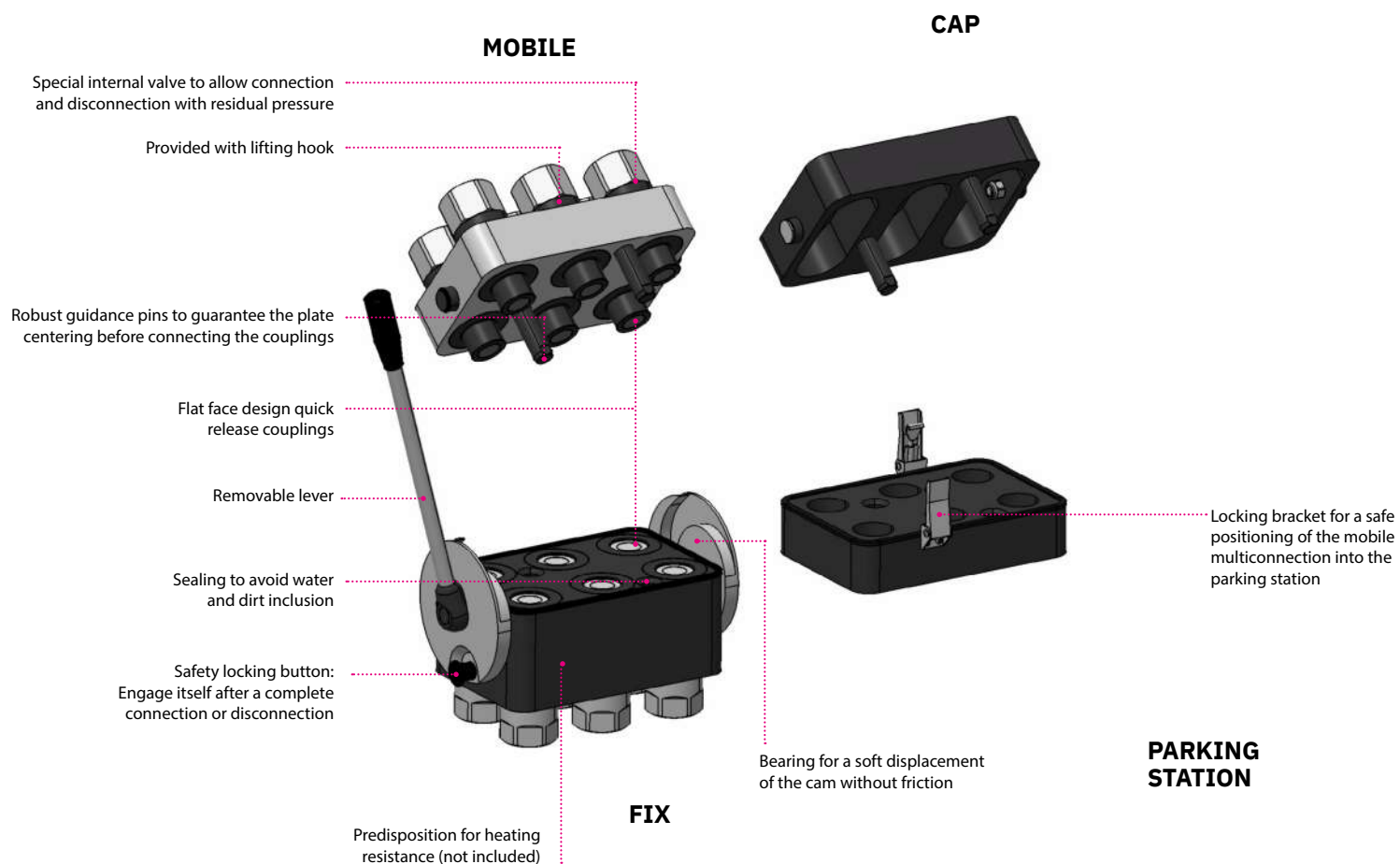
## Benefits

- Specific design for hydraulic lines with 1" (dimension 21): the lever/cam system minimizes the force required to connect the couplings, even with significant pressure trapped in the circuit or under difficult conditions (environment, access, etc.)
- The locking mechanism ensures a full connection and prevents any accidental disconnections.
- Special rubber seal prevents dirt inclusion.
- Robust guidance pins guarantee the correct alignment before the connection.
- Parking station and cover plates protects the system from contamination and damage as well as to provide a convenient storage solution.
- The removable lever increases usability reducing the overall dimension.
- Flat face couplings are easy to clean, reducing the inclusion of contamination to the hydraulic circuit.
- Internal valve design creates minimal pressure drop, maintaining circuit efficiency in the system.
- Minimal fluid loss during disconnection, reducing fluid loss to the environment.
- Minimal air inclusion during connection/disconnection.
- High resistance at impulse pressures.
- Safe and simple to use.

## Main applications



## Features



## Performances (with FAP21)

Size	Series	Max. flow suggested		Spillage*	Max. operating pressure					
		l/min	GPM		Coupled		Male		Female	
Inch				ml	MPa	psi	MPa	psi	MPa	psi
1	FAP21DM	378	100,17	0,06	42**	-	42	-	30	-

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

\*\* Please notice the pressure may be applied on maximum 3 lines, the other 3 lines have to be connected to return/drain.

**Temperature range:** Standard seals NBR, PUR, POM from -20 °C to +100 °C ( from -4 °F to +212 °F).

**Tests:** The couplings have been tested at max. operating pressure for 200.000 impulses in connected position in accordance with ISO norm.

Other threads available upon request.

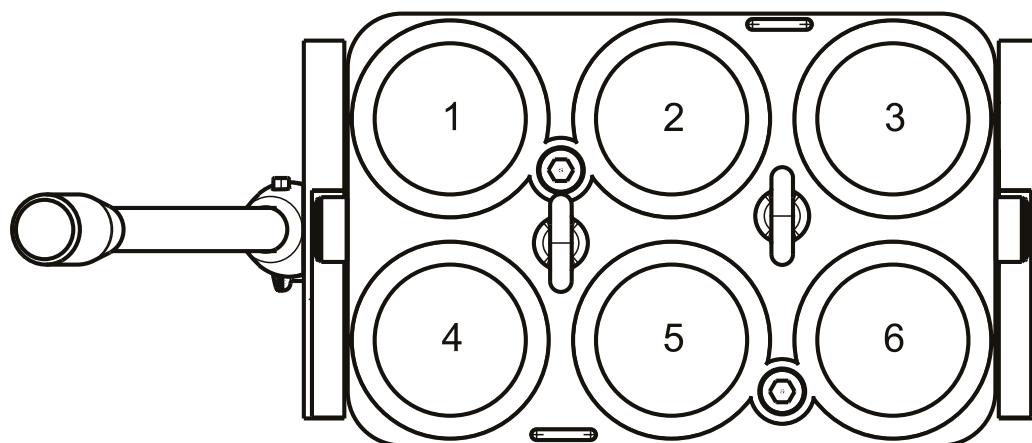
## Installation, use and maintenance

---

- Install the fixed multiconnection with the proper fixing holes, by referring to the drawing shown in the datasheet
- Install the flexible hoses on the coupling of the fixed and mobile multiconnection, by screwing them with proper torque
- Clean the mating surface of the parts prior to connect
- Insert and lock the removable lever
- Put the lever of the fixed multiconnection in complete open position, by disengaging the locking button and rotate the lever until the button is again engaged in the open position
- Connect the mobile multiconnection by engaging the guiding pins into the fixed multiconnection
- Disengage the locking button then connect the multiconnection by rotating the lever until the stroke is complete and the locking button engaged again in the closed position
- When the mobile is connected with fixed multiconnection, the cap can be easily parked in the parking station
- Disconnect the lever from the fixed part in order to avoid injuries from fall or loose it
- To disconnect the plate, insert the lever and disengage the locking button then rotate by doing vice versa the sequence above described
- After disconnection, clean the parts and apply the cap on the fixed part, then connect the mobile part in the parking station to protect from dust and dirt
- Disconnect the lever
- Clean frequently the multiconnection and the components
- If needed, lubricate the connection and guiding parts
- Check periodically the multiconnection by looking for leakage, damage or malfunctioning
- Notice: do not pressurize more than 3 lines together (see “Performances” section)

## Configurations

---



### Possible configurations

Position	Coupling Size	Predisposition for electrical connector
1	FAP21 special	-
2	FAP21 special	-
3	FAP21 special	-
4	FAP21 special	-
5	FAP21 special	-
6	FAP21 special	-

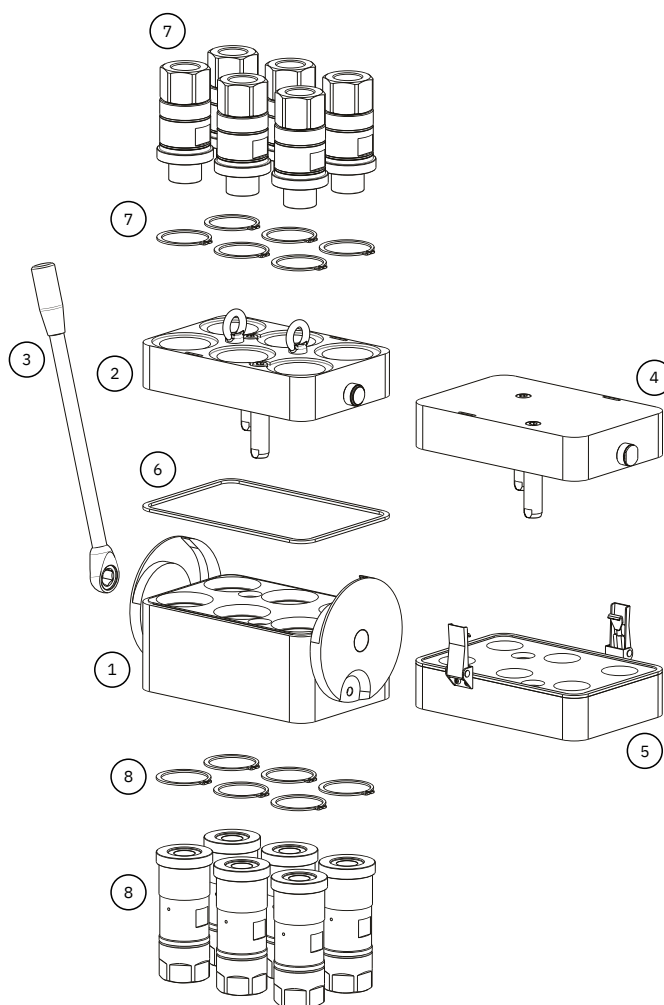
## Plates and spare parts

### Multicoupling (couplings included)

Code	Name	Description
870013114	MULTI FIX DMC6 6E V01 Provided with removable lever (included) Lever on the right	6 FAP21DM 1 BSP
870013116	MULTI FIX DMC6 6E Provided with removable lever (included) Lever on the left	6 FAP21DM 1 BSP
870013214	MULTI MOBILE DMC6 6E	6 FAP21DM 1 BSP

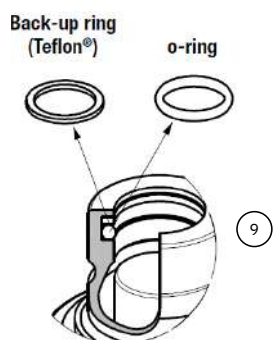
### Multicoupling spare parts (couplings not included)

Code	Name	Key
806000234	MULTI FIX EMPTY DMC6 6E V01 Removable lever not included, to be ordered separately Lever on the right Fixed part to be used in code 870013114	1
806000232	MULTI FIX EMPTY DMC6 6E Removable lever not included, to be ordered separately Lever on the left Fixed part to be used in code 870013116	1
806000235	MULTI MOBILE EMPTY DMC6 6E lifting hook not included	2
815701272	KIT COMPLETE LEVER GROUP DMC	3
815606234	CAP FIX MULTICOUPLING DMC6-21	4
815606235	PARKING STATION MULTICOUPLING MOBILE DMC 160x240	5
815701286	KIT SEAL MULTICOUPLING FIX DMC6	6



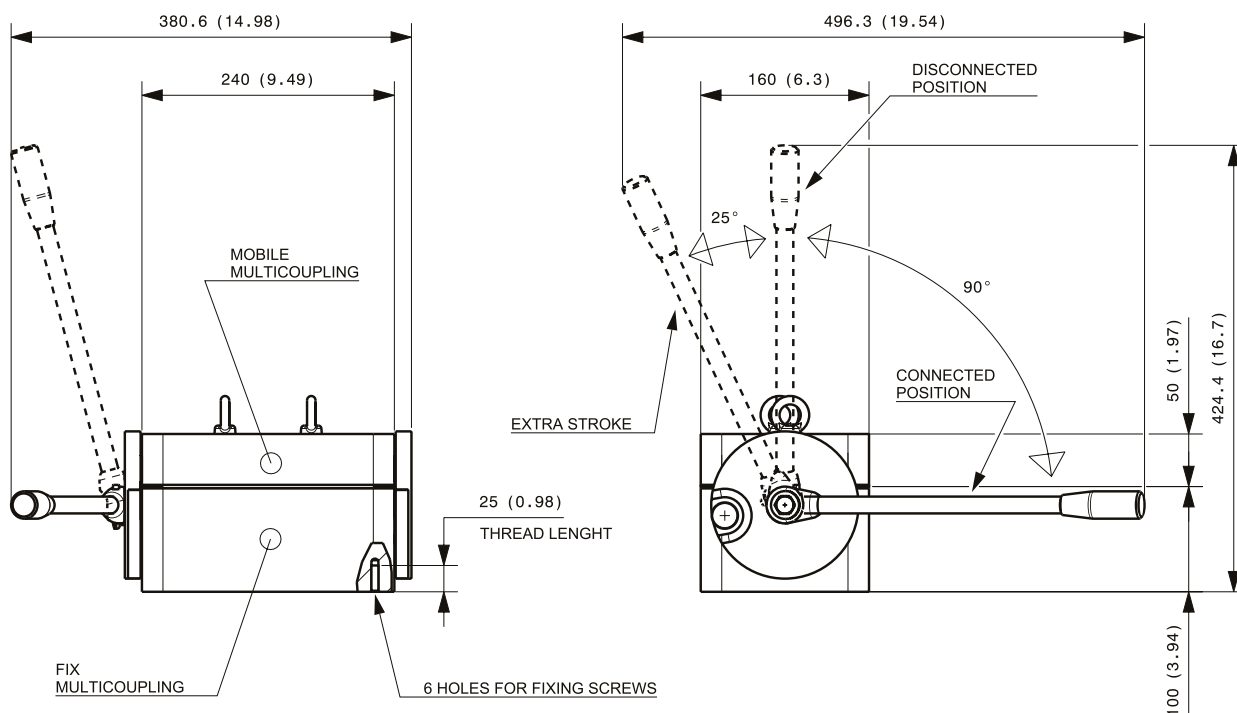
### Couplings spare parts

Code	Name	Key
815701287	SPARE KIT SEEGER+M FAP21DM 1 BSP	7
815701288	SPARE KIT SEEGER+F FAP21DM 1 BSP	8
815700345	SPARE KIT OR NBR+BK M FF 100	9

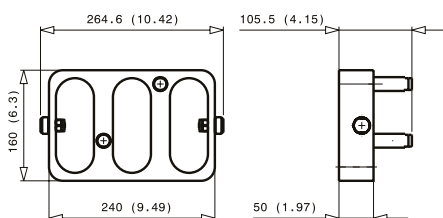


## Overall dimensions

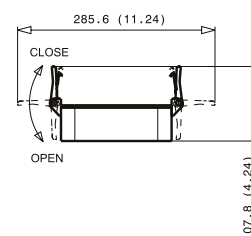
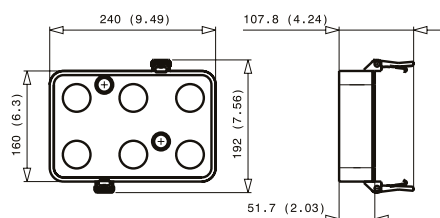
### Fixed and mobile multicoupling



### Cap for fix multicoupling



### Parking station for mobile multicoupling



Dimensions in mm (inches)

## ⚠ WARNINGS

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). Do not use the female coupling disconnected with high impulse pressure. Do not couple-uncouple with flow 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 working 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. 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 tools are between them. Pay attention during the connection not to put finger between the plates. Do not exceed single coupling performance and total multiconnection resistance of the multiconnection (please refer to dedicated datasheet). 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 to modify, disassemble or damage the multiconnection, part of it or coupling/electrical connector, the lever or safety lock system. Stucchi Multiconnection DMC. are intended to be used for hydraulic fluid power application: do not use the products for dangerous, inflammable or explosive fluids. The quick coupling FAP-DM series is intended to be used only on Stucchi Multiconnections DMC. Do not use the FAP-DM coupling on a Custom-made multiconnection or other device different than a Stucchi Multiconnection. In case of doubt please contact Stucchi Technical Support. It is **MANDATORY** to read and closely follow the instructions. Last updated version always applies at time of installation, see latest Instructions and warnings on Stucchi website (English version: [www.stucchigroup.com/en](http://www.stucchigroup.com/en)) before selecting or using Stucchi products.



# SV2 1E-1G

SPECIAL SERIES



Easy  
CUP



<b>FAP9 (A)</b> 3/8"	<b>FAP13 (B)</b> 1/2"	<b>FAP15 (C)</b> 5/8"	<b>FAP17 (D)</b> 3/4"	<b>FAP21 (E)</b> 1"	<b>FAP30 (G)</b> 1-1/2"	<b>EC</b> instead of DN9 or DN13
				1 - special	1 - special	

## Technical specifications and options

**Interchange**  
Stucchi profile

**Sealing**  
Nitrile NBR

**Available sizes**  
1" and 1-1/2"

**Material**  
Aluminium, Carbon steel

**Valving style**  
Flat face

**Connection Under Pressure**  
Allowed with Easy CUP

**Operating pressure**  
P: 350 bar, T: 20 bar

**Locking mechanism**  
Pin, Cam

**Temperature**  
-20°C / +100°C

**Connection system**  
Lever

**Available threads**  
BSP, NPT, SAE

**Flow rate**  
P: 378 l/min, T: 750 l/min

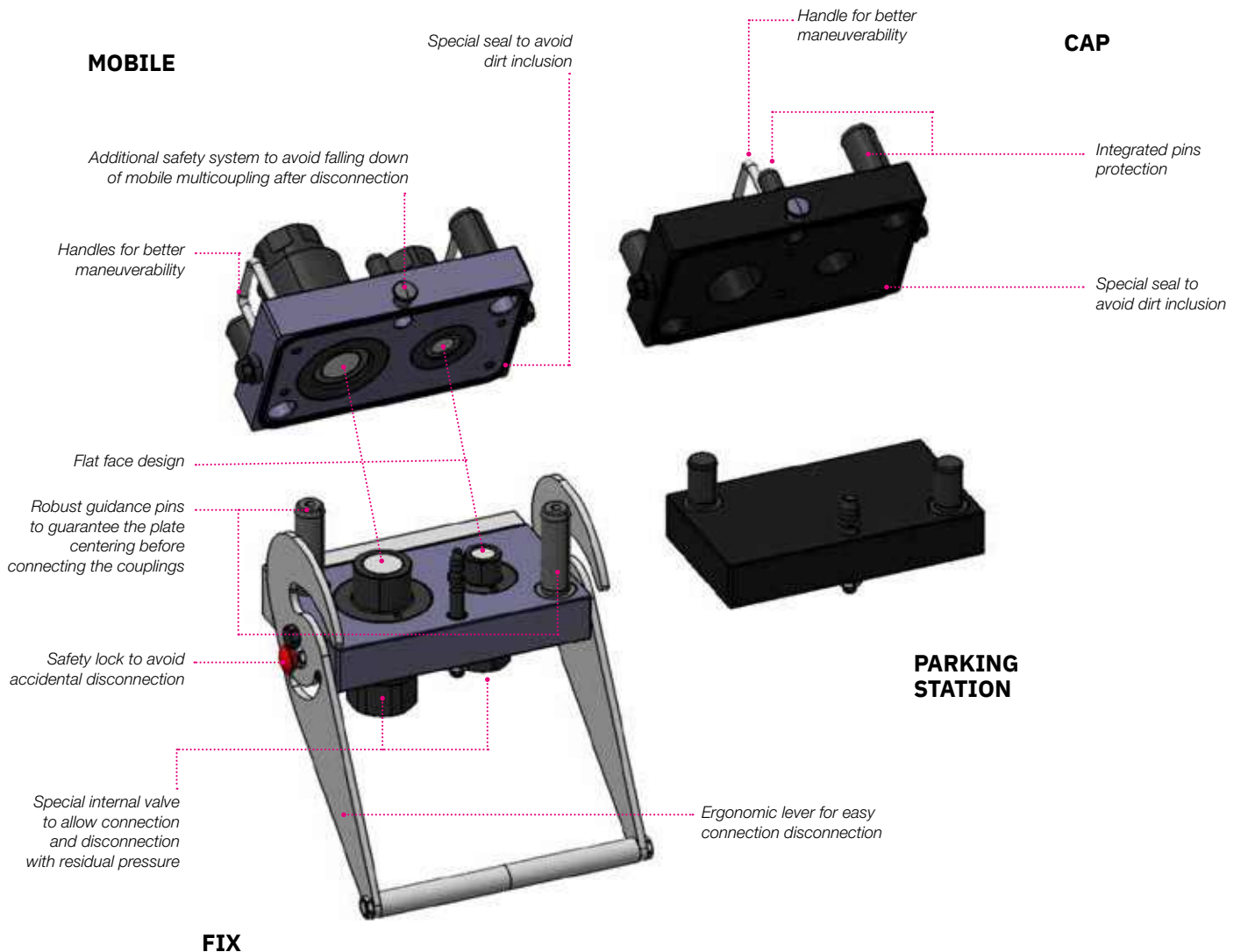
## Benefits

- Specifically designed to connect simultaneously one pressure line size 1" and one return line size 1-1/2".
- The lever/cam system minimizes the force required to connect the couplings, even with significant pressure trapped in the circuit and under difficult conditions (environment, access, etc.).
- The locking mechanism ensures a full connection and prevents any accidental disconnection.
- Designed to be used with hydraulic oil for fluid power application.
- Safety system on the mobile plate avoids accidental falling during the disconnection.
- Special rubber seal prevents dirt inclusion.
- Robust guidance pins guarantee the correct alignment before the connection.
- Parking station and cover plates protects the system from contamination and damage as well as to provide a convenient storage solution.
- Flat face couplings are easy to clean, reducing the inclusion of contamination to the hydraulic circuit.
- Internal valve design creates minimal pressure drop, maintaining circuit efficiency in the system.
- Minimal fluid loss during disconnection, reducing fluid loss to the environment.
- Minimal air inclusion during connection/disconnection.
- High resistance at impulse pressures.
- Safe and simple to use.

## Main applications



## Features



## Performances (with FAP21 and FAP30)

Size	Series	Max. flow suggested		Spillage*	Max. operating pressure					
					Coupled		Male		Female	
Inch		l/min	GPM	ml	MPa	psi	MPa	psi	MPa	psi
1	FAP21AS1	378	100,17	0,06	25	3625	25	3625	25	3625
1-1/2	FAP30AS2	750	198,75	0,2	2	290	2	290	2	290

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

### Temperature range:

Standard seals NBR, PUR, POM from -20 °C to +100 °C ( from -4 °F to +212 °F).

### Tests:

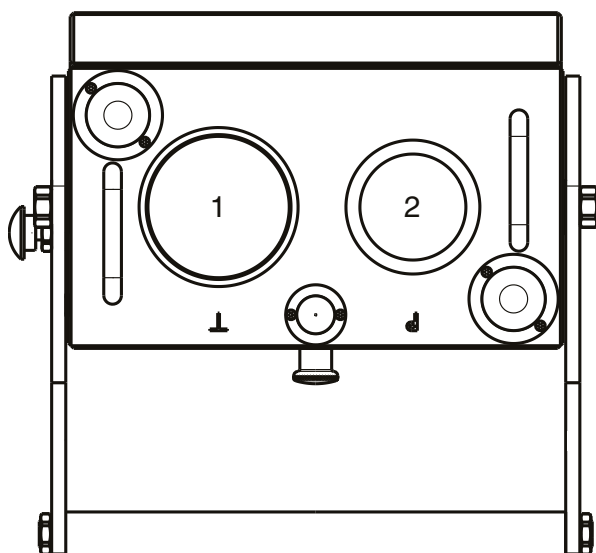
The couplings have been tested at max. operating pressure for 200.000 impulses in connected position in accordance with ISO norm.

Different threads available upon request.

## Installation, use and maintenance

- Install the fixed multiconnection with the proper fixing holes, by referring to the drawing shown in the datasheet.
- Install the flexible hoses on the coupling of the fixed and mobile multiconnection, by screwing them with proper torque.
- Notice: the multiconnection has a mark with “P” near the coupling hole of FAP21 and a “T” near the coupling FAP30.
- That means the pressure line has to be connected to “P” line (FAP21), the drain line has to be connected with “T” line (FAP30).
- Clean the mating surface of the parts prior to connect.
- Connect the mobile multiconnection by engaging the guiding pins into the fixed multiconnection.
- Disengage the button of the safety lock then connect the multiconnection by rotating the lever until the stroke is complete and the locking button engaged again in the closed position.
- When the mobile is connected with the fixed multiconnection, the cap can be easily parked in the parking station.
- To disconnect, disengage the locking button then rotate by doing vice versa the sequence above described.
- Then disengage the safety “anti-fall” locking system by pulling the knob on the mobile and separate the mobile multiconnection.
- After disconnection, clean the parts and apply the cap on the fixed part then connect the mobile part in the parking station to protect from dust and dirt.
- Clean frequently the multiconnection and the components.
- If needed, lubricate the connection and guiding parts.
- Check periodically the multiconnection by looking for leakage, damage or malfunctioning.

## Configurations



### Possible configurations

Position	Coupling Size	Predisposition for electrical connector
1	FAP30	-
2	FAP21	-

## Plates and spare parts

### Multicoupling (couplings included)

Code	Name	Description
870022106	MULTI FIX SV2 1E-1G	1 FAP21AS 1-1/4 NPT - 1 FAP30AS 1-1/2 NPT
870022107	MULTI FIX SV2 1E-1G	1 FAP21AS 1-1/4 SAE - 1 FAP30AS 1-1/2 SAE
870022108	MULTI FIX SV2 1E-1G	1 FAP21AS 1 BSP - 1 FAP30AS 1-1/2 BSP
870022206	MULTI MOBILE SV2 1E-1G	1 FAP21AS 1-1/4 NPT - 1 FAP30AS 1-1/2 NPT
870022207	MULTI MOBILE SV2 1E-1G	1 FAP21AS 1-1/4 SAE - 1 FAP30AS 1-1/2 SAE
870022208	MULTI MOBILE SV2 1E-1G	1 FAP21AS 1 BSP - 1 FAP30AS 1-1/2 BSP

### Multicoupling spare parts (couplings not included)

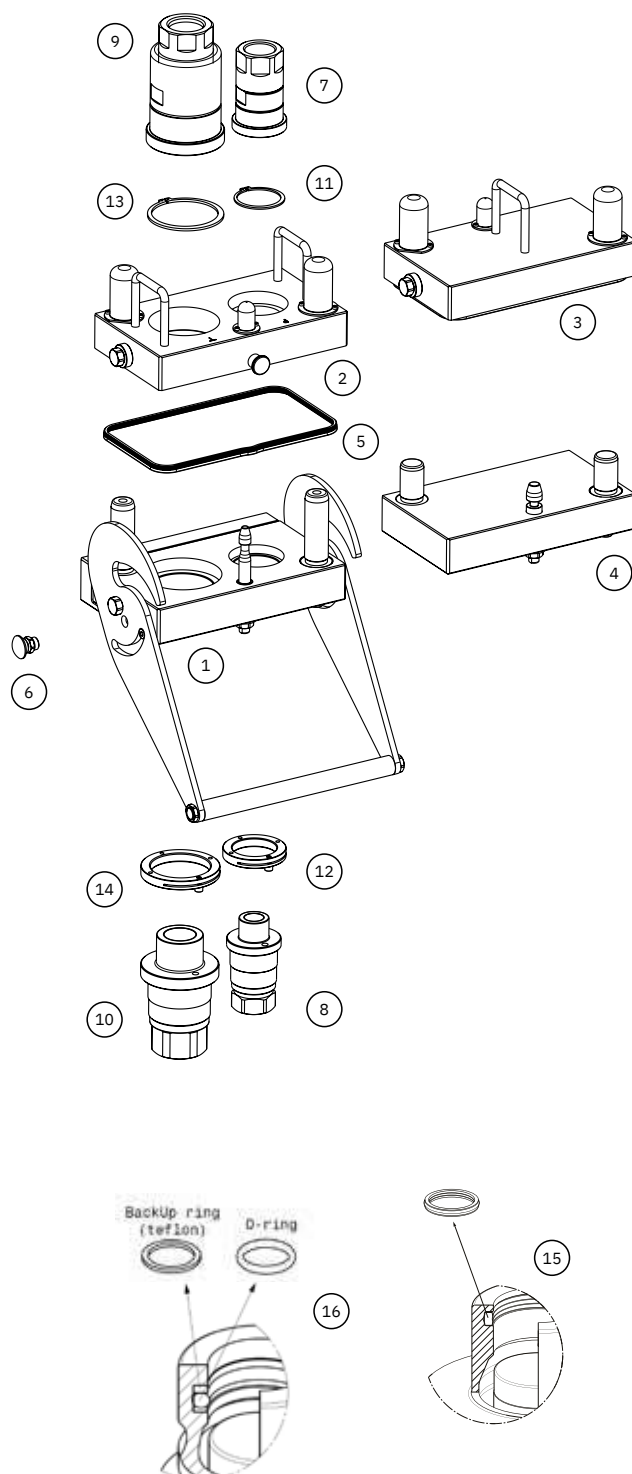
Code	Name	Key
806000378	MULTI FIX EMPTY SV2 1E-1G	1
806000379	MULTI MOBILE EMPTY SV2 1E-1G	2
815606288	CAP FIX MULTICOUPLING SV 280x160	3
815606289	PARKING STATION MOBILE MULTICOUPLING SV 280x160	4
815701168	SPARE KIT DUST SEAL PLATE SV2	5
815701296	SPARE KIT SAFETY BUTTON SV2	6

### Spare parts

Code	Name	Key
807100054 *	F FAP21AS1 1 BSP	7
807100055 **	M FAP21AS1 1 BSP	8
807100058 *	F FAP30AS2 1-1/2 BSP	9
807100059 **	M FAP30AS2 1-1/2 BSP	10
807101002 *	F FAP21AS1 1-1/4 NPT	7
807101003 **	M FAP21AS1 1-1/4 NPT	8
807101006 *	F FAP30AS2 1-1/2 NPT	9
807101007 **	M FAP30AS2 1-1/2 NPT	10
807104012 *	F FAP21AS1 1-1/4 SAE	7
807104013 **	M FAP21AS1 1-1/4 SAE	8
807104010 *	F FAP30AS2 1-1/2 SAE	9
807104011 **	M FAP30AS2 1-1/2 SAE	10
815701154	SPARE KIT SEEGER F FAP21AS1	11
815701155	SPARE KIT LOCKING SLEEVE M FAP21AS1	12
815701156	SPARE KIT SEEGER F FAP30AS2	13
815701157	SPARE KIT LOCKING SLEEVE M FAP30AS2	14
815701159	SPARE KIT SEAL PUR M FAP21AS1	15
815701171	SPARE KIT OR NBR+BK M FAP30AS2	16

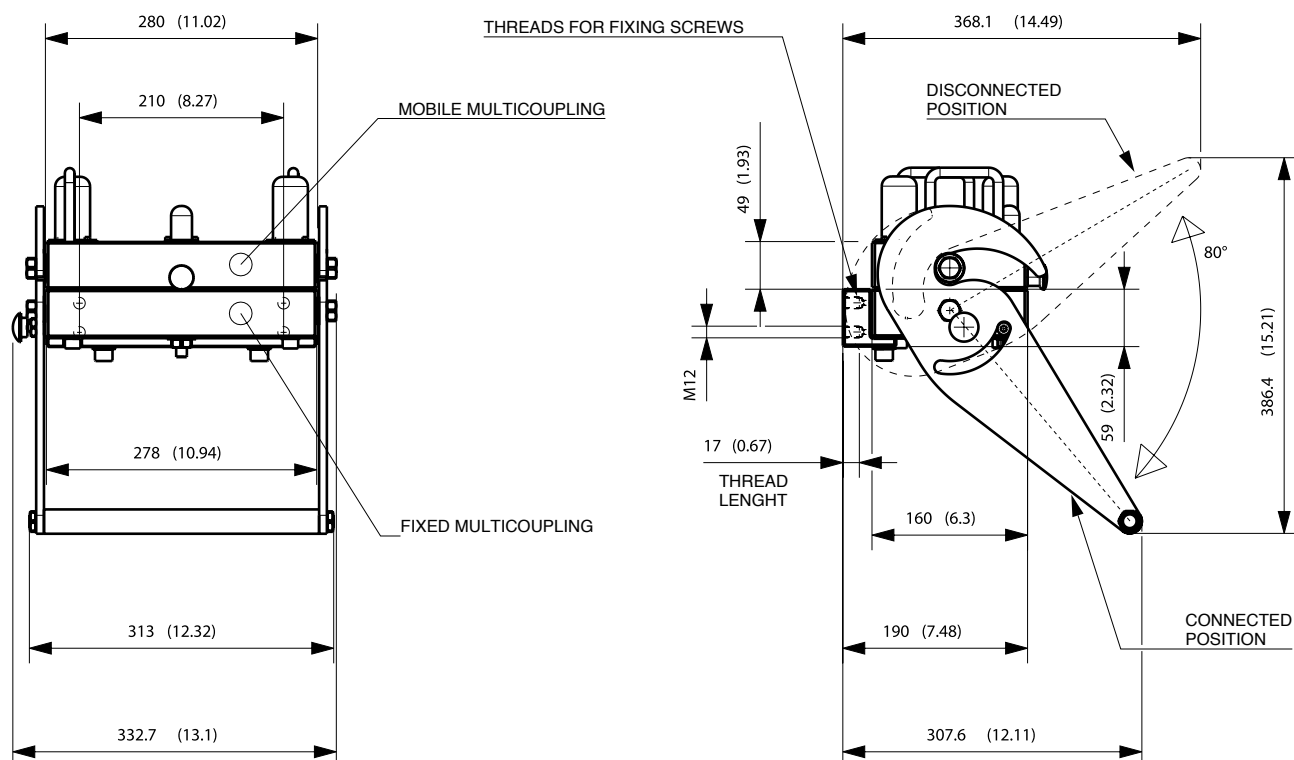
\* Seeger ring is not included in the female coupling; to be ordered separately.

\*\* Male locking sleeve and screw are not included in the female coupling; to be ordered separately.

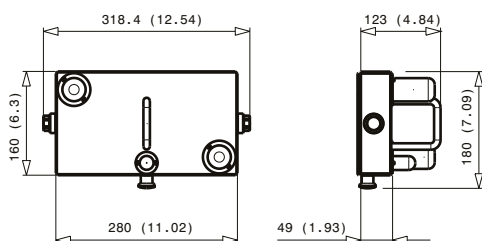


## Overall dimensions

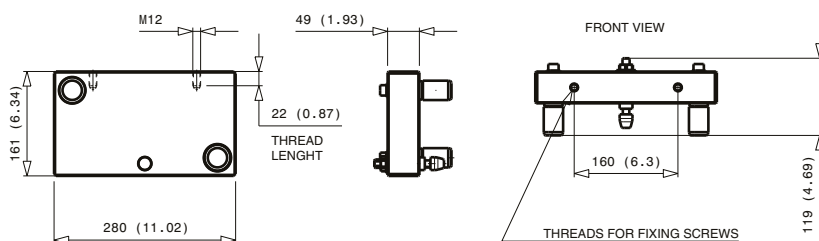
### Fixed and mobile multicoupling



### Cap for fix multicoupling



### Parking station for mobile multicoupling



## ⚠ WARNINGS

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).  
 Do not use the female coupling disconnected with high impulse pressure.  
 Do not couple-uncouple with flow 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 working 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.  
 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 tools are between them.  
 Pay attention during the connection not to put finger between the plates.  
 We advise to assemble the multicoupling with the female face down in order to allow water or moisture to be drained easily.  
 Do not exceed single coupling performance and total multicoupling resistance of the multicoupling (please refer to dedicated datasheet).  
 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 to modify, disassemble or damage the multicoupling, part of it or coupling/electrical connector, the lever or safety lock system.  
 Stucchi SV2 Multiconnections are intended to be used for hydraulic oil applications: do not use the products for dangerous, inflammable or explosive fluids.  
 The quick coupling FAP-AS series is intended to be used only on Stucchi Multiconnections. Do not use the FAP-AS coupling on a custom-made multicoupling or other device different than a Stucchi Multiconnection.  
 In case of doubt please contact Stucchi Technical Support.  
 It is **MANDATORY** to read and closely follow the instructions. Last updated version always applies at time of installation, see latest Instructions and warnings on Stucchi website (English version: [www.stucchigroup.com/en](http://www.stucchigroup.com/en)) before selecting or using Stucchi products.

# GR6 6A-2EC V01

SPECIAL SERIES



FAP9 (A) 3/8"	FAP13 (B) 1/2"	FAP15 (C) 5/8"	FAP17 (D) 3/4"	FAP21 (E) 1"	FAP30 (G) 1-1/2"	EC instead of DN9 or DN13
6 FAP9AZN ("A" TYPE)						2

## Technical specifications and options

<b>Interchange</b> Stucchi profile	<b>Sealing</b> Nitrile NBR	<b>Available sizes</b> 6 x 3/8"	<b>Material</b> Brass, Carbon steel
<b>Valving style</b> Flat face	<b>Connection Under Pressure</b> Allowed with Easy CUP	<b>Operating pressure</b> up to 350 bar	<b>Locking mechanism</b> Pin, Cam
<b>Temperature</b> -20°C / +100°C	<b>Connection system</b> Lever	<b>Available threads</b> DIN L15	<b>Flow rate</b> up to 46 l/min

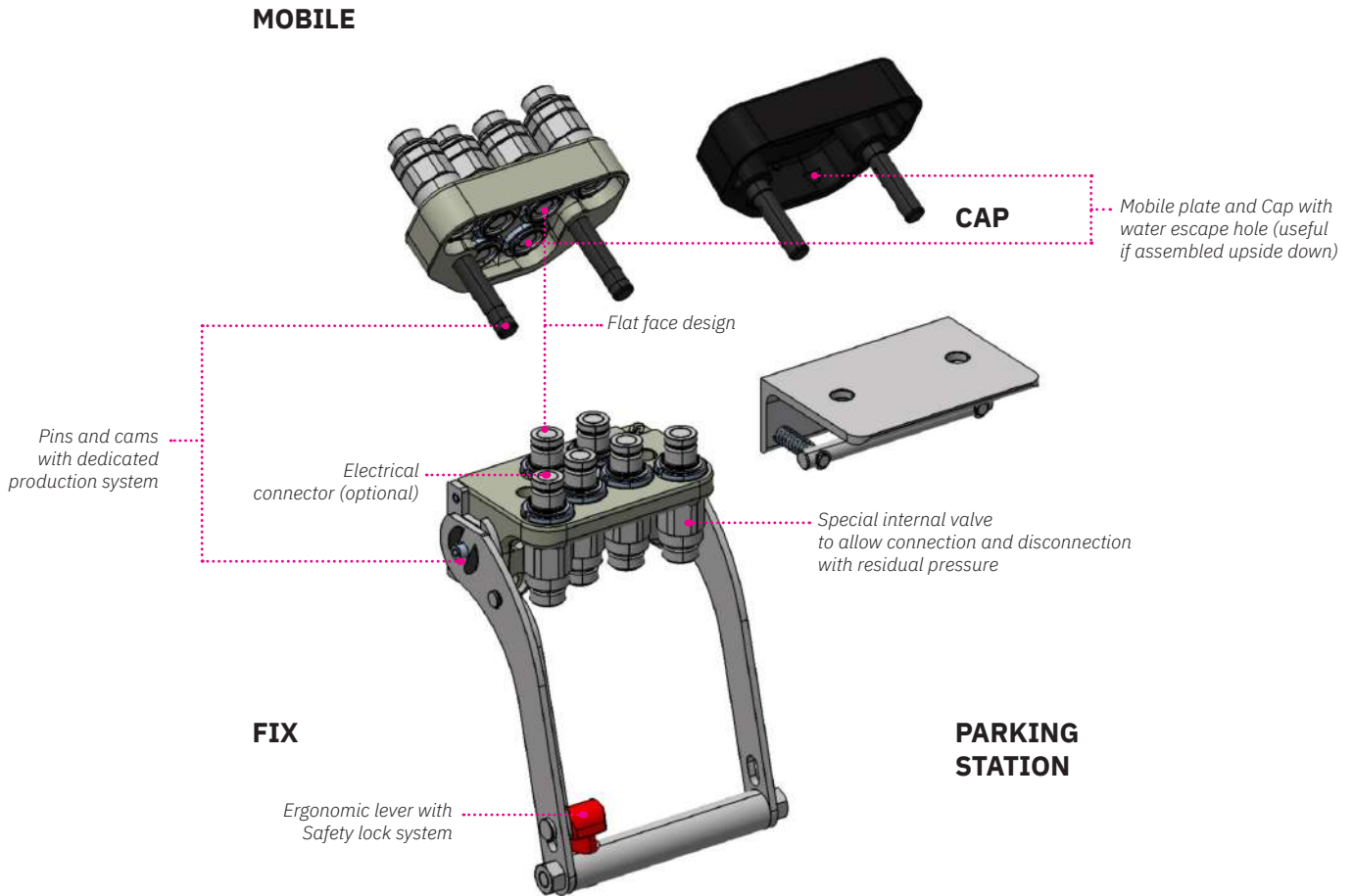
## Benefits

- GR6 6A-2EC V01 is specifically developed and designed from GR6 6A-2EC model for truck trailer application
- To be used on truck trailer application where the OEM has to provide a previous design risk analysis (FMEA or similar process) to allow a hydraulic multiconnection to be used for connecting hydraulic lines like steering, suspension and pilot lines
- Pin and connection cam provided with dedicated materials, production and quality process to achieve peculiar safety level need to be used on truck trailer hydraulic fluid power lines
- Parking station and cover plates protects the system from contamination and damage as well as to provide a convenient storage solution
- Mobile plate and cover plate provided with holes for water condensation escape, if assembled upside-down
- The locking mechanism ensures a full connection and prevents accidental disconnection
- Flat face couplings are easy to clean, reducing the inclusion of contamination to the hydraulic circuit
- Internal valve design creates minimal pressure drop, maintaining circuit efficiency in the system
- Minimal fluid loss during disconnection, reducing fluid loss to the environment
- Minimal air inclusion during connection/disconnection
- High resistance at impulse pressures
- Safe and simple to use

## Main applications



## Features



## Performances (with FAP9AZN)

Size	Series	Max. flow suggested		Hydroplastic pushing area coupled	Spillage*	Max. operating pressure					
		l/min	GPM			Coupled		Male		Female	
Inch				Cm <sup>2</sup>	ml	MPa	psi	MPa	psi	MPa	psi
3/8	FAP9AZN	46	12,19	1,226	0,012	35	5075	35	5075	35	5075

\* For additional performances information please refer to FAP9ZN performance chart in Stucchi Multicoupling catalogue.

**Temperature range:** Standard seals NBR, PUR, POM from -20 °C to +100 °C ( from -4 °F to +212 °F).

**Tests:** The product have been tested in accordance with ISO norms.

Different threads available upon request.

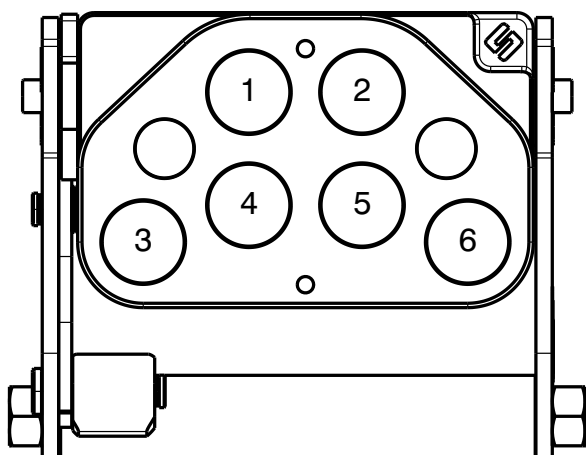
## Installation, use and maintenance

---

- Before choosing the product, please verify the resistance by consulting the following paragraph in the Stucchi Multicoupling catalogue: “DP - GR: resistance”.
- For installation, use and maintenance follow the indication of Stucchi Multiconnection catalogue, reference to the following paragraphs: “DP - GR: installation”, “GR: how to use”.
- Clean frequently the multiconnection and the components.
- Lubricate the connection and guiding parts.
- Check often the multiconnection by looking for leakage, damage or malfunctioning.

## Configurations

---



### Possible configurations

Position	Coupling Size	Predisposition for electrical connector
1	FAP9AZN	-
2	FAP9AZN	-
3	FAP9AZN	YES*
4	FAP9AZN	-
5	FAP9AZN	-
6	FAP9AZN	YES*

\* Electrical connector to be used:  
806422000 F EC6 -806422001 M EC6



## Plates and spare parts

### Multicoupling (couplings included)

Code	Name	Description
870015051	MULTI COMPLETE GR6 6A V01	6 FAP9A L15 - CAP
870015151	MULTI FIX GR6 6A V01	6 FAP9A L15
870015251	MULTI MOBILE GR6 6A V01	6 FAP9A L15

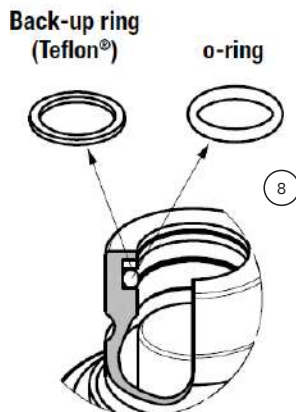
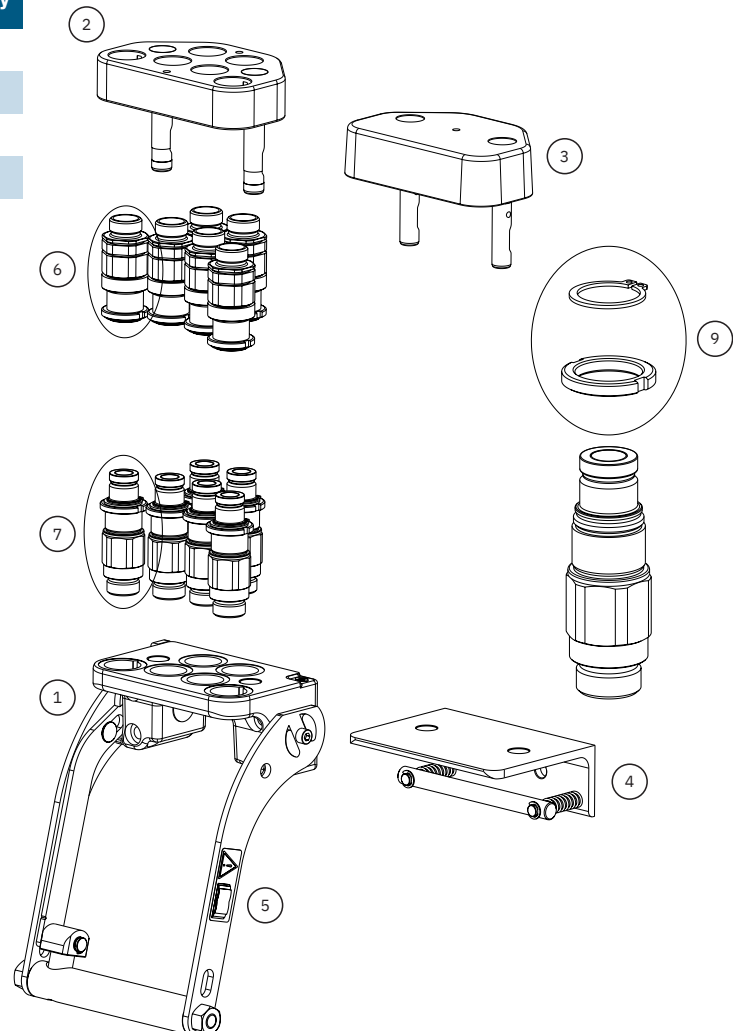
### Multicoupling spare parts (couplings not included)

Code	Name	Key
806000290	MULTI FIX EMPTY GR6 6A-2EC V01	1
806000291	MULTI MOBILE EMPTY GR6 6A-2EC V01	2
815606252	CAP FIX MULTICOUPLING GR 139X90 V04	3
815606249	PARKING STATION MOBILE MULTICOUPLING GR 140x100	4
815701052	SPARE KIT LEVER GROUP GR 200x176	5

### Spare parts

Code	Name	Key
811408012*	F FAP9AZN L15	6
811408013*	M FAP9AZN L15	7
815701096	SPARE KIT OR NBR+BK M FF CUP 38	8
815701000	SET OF 10 SEEGER+NUT FAP9AZN	9

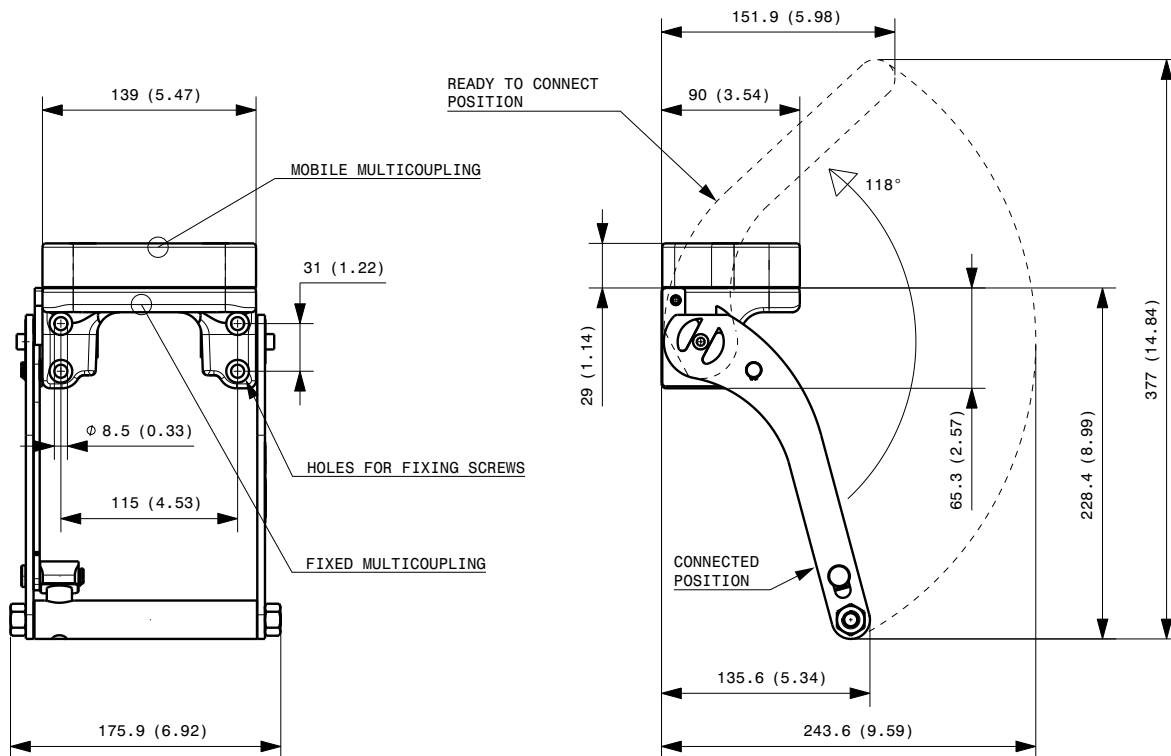
\*Seeger Ring and Nut are included with the coupling



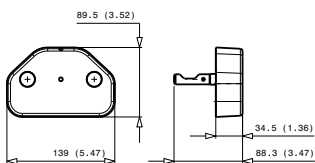
## Overall dimensions

Max. resistance 18000 N

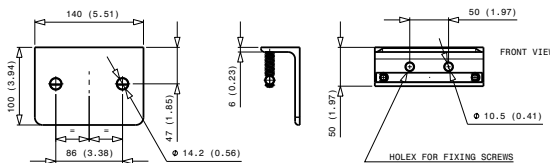
### Fixed and mobile multicoupling



### Cap for fix multicoupling



### Parking station for mobile multicoupling



Dimensions in mm (inches)

## ⚠ IMPORTANT WARNINGS

The malfunction of the steering lines can cause the vehicle to become out of control, with consequent potential accidents which can be serious. It is important that the Manufacturer, prior to select the product, has performed the risk analysis (for example FMEA method) which includes study of the failure mode, detection and effect of the failure. Consequently, the Manufacturer must implement what is necessary to make the fault evident and mitigate its most dangerous effects.

Do not use the GR6 6A-2EC V01 multiconnection for brake lines application.

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 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.

Do not force the lever without pushing the unlock 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 material 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.

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

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 the coupling, the lever or safety lock system.

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

Stucchi Multiconnection are intended to be used for hydraulic fluid power oil applications with limitations given by NBR seal compatibility and temperature range.













Do not use GR6 6A-2EC V01 series multiconnection for very high temperature applications.

The quick coupling FAPZN series is intended to be used only on Stucchi Multiconnection. Do not use the FAPZN coupling on a Custom-made multiconnection or another device different than a Stucchi Multiconnection.

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



## Technical specifications and options

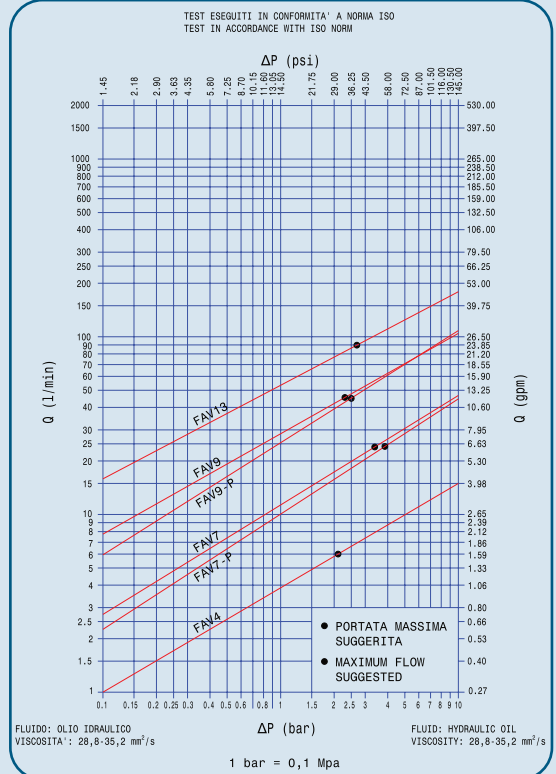
 <b>Interchange</b> Stucchi profile	 <b>Sealing description</b> FKM (VITON®)	 <b>Connection system</b> By customer manifold
 <b>Available sizes</b> From 1/8" to 1/2"	 <b>Material /treatment</b> Carbon Steel with QPQ and Stainless steel AISI303	 <b>Available threads</b> METRIC
 <b>Operating pressure</b> Up to 300 bar	 <b>Locking mechanism</b> Cartridge for manifold	 <b>Flow rate</b> Up to 90 l/min
 <b>Temperature</b> -15°C / +180°C	 <b>Valving style</b> Flat face	 <b>Connection under pressure</b> Not allowed for standard version (Allowed only for P version)

## Benefits

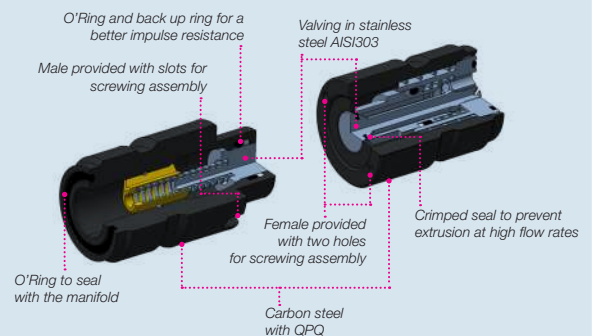
- Designed to be used in custom manifold for automatic connection.
- Designed to be used in hydraulic fluid power application and fluid lines.
- Suitable to be used with hydraulic oil, water or water&glycol lines.
- Available also in "P" version to be connected under residual pressure (male and female valving with steel to steel sealing system).
- Flat face is easy to clean, reducing the inclusion of contamination inside the hydraulic circuit.
- Minimal fluid loss during disconnection eliminating environment pollution.
- Minimal air inclusion during connection.
- Compact slim design.
- Safe and simple to use.

## How to use

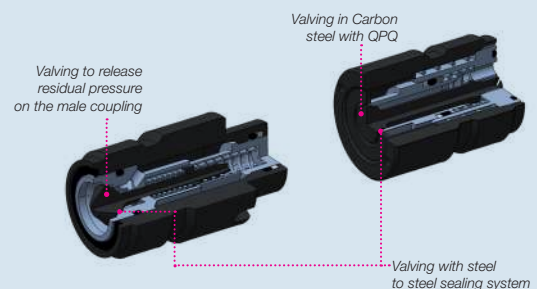
- Screw the parts in the correspondent manifold cavity (threaded hole) until the contact with the surface bottom.
- Apply the correct torque to tight the coupling in the manifold.
- The coupling are provided with slot & holes on the frontal face to allow the screwing operation (see drawing) to screw the parts can be used the special tightening tool (on request).
- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- Connect male and female by moving the two manifold parts one against the other in a smooth way.
- The connection and disconnection speed must not exceed the 5 mm/sec.
- After connection the faces of the manifold must be in contact.



### FAV features:



### FAV-P features: same as FAV, in addition:



## MAIN APPLICATIONS



## Performances

Size	Series	Max. flow suggested		Connect force		Manual tightening torque		Spillage*	Max. operating pressure						Hydrostatic pushing area coupled	
		l/min	GPM	N	lbf	Nm	lbf ft		Coupled		Male		Female		cm <sup>2</sup>	in <sup>2</sup>
1/8	FAV4	6	1,56	98	22	25	18,44	0,01	30	4350	30	4350	30	4350	0,45	0,07
1/4	FAV7	24	6,34	153	34	50	36,88	0,01	30	4350	30	4350	12	1740	0,72	0,11
3/8	FAV9	46	12,15	147	33	70	51,63	0,01	30	4350	30	4350	15	2175	1,23	0,19
1/2	FAV13	90	23,78	201	45	90	66,38	0,02	25	3625	25	3625	12	1740	1,89	0,29

## FAV-P version suitable to be connected under residual pressure

Size	Series	Max. flow suggested		Connect force		Manual tightening torque		Spillage*	Max. operating pressure						Max. residual pressure in one side**	Hydrostatic pushing area coupled		
		l/min	GPM	N	lbf	Nm	lbf ft		Coupled		Male		Female			MPa	psi	cm <sup>2</sup>
1/4	FAV7P	24	6,34	168	38	50	67,79	0,01	30	4350	30	4350	12	1740	25	3625	0,72	0,11
3/8	FAV9P	46	12,15	145	33	70	94,91	0,01	30	4350	30	4350	15	2175	25	3625	1,23	0,19

\* Spillage is an indicative value of the fluid loss per couple-uncouple cycle (according to ISO norm test method).

\*\* It is suggested to release pressure in one side before to connect.

The force to keep the part together is equal to the Connect Force + Hydrostatic Pushing Area x Pressure in Connected condition.

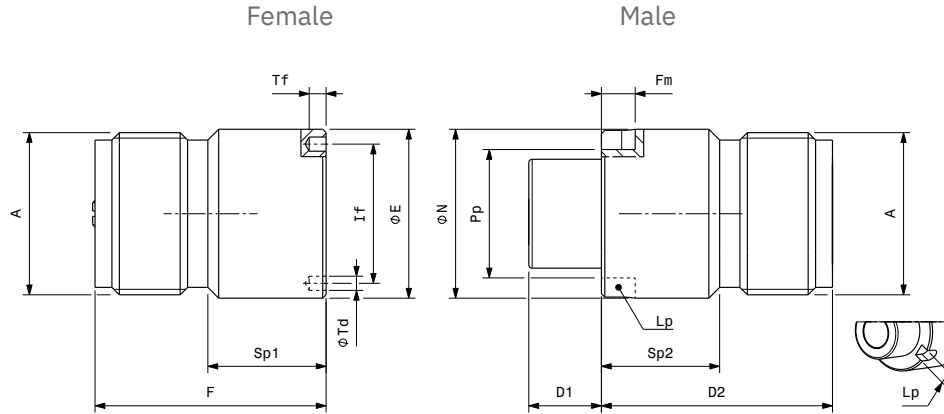
### Temperature range:

Seals in FKM (Viton): from -15 °C to +180 °C (from -4 °F to +212 °F).

Please read carefully Instructions and warnings for proper selection of the products.



## Overall dimensions

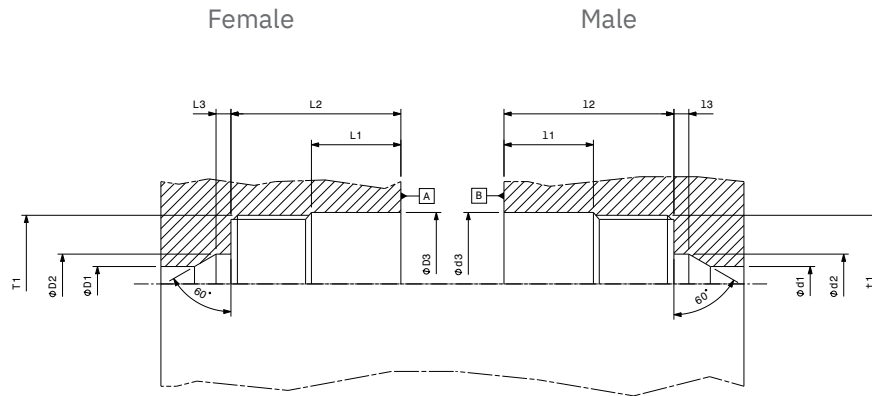


## FAV quick couplings dimensions

Size	Descriptive code	Item code	Length		Length		Diameter		Diameter		Diameter		Length		Diameter		Weight							
			mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	Kg	lb						
1/8"	F FAV4	804024100	F	27,4	1,08	Sp1	12,0	0,47	E	21,0	0,83													
1/8"	M FAV4	804024101	D1+D2	7,9 + 27,4	-	Sp2	12,0	0,47	N	21,0	0,83	A	M20X1,5	If	16,0	0,63	Tf	2,0	0,08	Td	2,1	0,08	0,06	0,12
1/4"	F FAV7	804024108	F	34,2	1,35	Sp1	17,5	0,69	E	25,0	0,98													
1/4"	M FAV7	804024109	D1+D2	10,7 + 34,2	-	Sp2	17,5	0,69	N	25,0	0,98	A	M24X1,5	If	20,6	0,81	Tf	2,5	0,10	Td	2,1	0,08	0,09	0,20
1/4"	F FAV7P	804024102	F	34,2	1,35	Sp1	17,5	0,69	E	25,0	0,98													
1/4"	M FAV7P	804024103	D1+D2	10,8+34,2	-	Sp2	17,5	0,69	N	25,0	0,98	A	M24X1,5	If	20,6	0,81	Tf	2,5	0,10	Td	2,1	0,08	0,09	0,20
3/8"	F FAV9	804024112	F	46	1,81	Sp1	22,0	0,87	E	27,0	1,06													
3/8"	M FAV9	804024113	D1+D2	15,8+46	-	Sp2	22,0	0,87	N	27,0	1,06	A	M26X1,5	If	23,5	0,93	Tf	2,5	0,10	Td	2,1	0,08	0,13	0,28
3/8"	F FAV9P	804024104	F	46	1,81	Sp1	22,0	0,87	E	27,0	1,06													
3/8"	M FAV9P	804024105	D1+D2	15,9+46	-	Sp2	22,0	0,87	N	27,0	1,06	A	M26X1,5	If	23,5	0,93	Tf	2,5	0,10	Td	2,1	0,08	0,13	0,29
1/2"	F FAV13	804024106	F	50,7	2,00	Sp1	19,0	0,75	E	33,0	1,30													
1/2"	M FAV13	804024107	D1+D2	17,2+43,7	-	Sp2	19,0	0,75	N	33,0	1,30	A	M32X1,5	If	29,0	1,14	Tf	2,5	0,10	Td	2,1	0,08	0,20	0,43

Max. allowed tolerance of the diameters E and N is h7.

## Overall dimensions



## Housing dimensions

Size	Descriptive code	Item code	Length		Length		Length		Diameter		Diameter		Diameter		Diameter							
			mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in						
1/8"	F FAV4	804024100	L1	12,5	0,49	L2	27,4	1,08	L3	3	0,12	D1	4	0,16	D2	8,0	0,31	D3	21,0	0,83	T1	20X1,5
1/8"	M FAV4	804024101	l1	12,5	0,49	l2	27,4	1,08	l3	3	0,12	d1	4	0,16	d2	8,0	0,31	d3	21,0	0,83	t1	20X1,5
1/4"	F FAV7	804024108	L1	18,0	0,71	L2	34,2	1,35	L3	3	0,12	D1	7	0,28	D2	12,0	0,47	D3	25,0	0,98	T1	24X1,5
1/4"	M FAV7	804024109	l1	18,0	0,71	l2	34,2	1,35	l3	3	0,12	d1	7	0,28	d2	12,0	0,47	d3	25,0	0,98	t1	24X1,6
1/4"	F FAV7P	804024102	L1	18,0	0,71	L2	34,2	1,35	L3	3	0,12	D1	7	0,28	D2	12,0	0,47	D3	25,0	0,98	T1	24X1,7
1/4"	M FAV7P	804024103	l1	18,0	0,71	l2	34,2	1,35	l3	3	0,12	d1	7	0,28	d2	12,0	0,47	d3	25,0	0,98	t1	24X1,8
3/8"	F FAV9	804024112	L1	22,5	0,89	L2	46,0	1,81	L3	6	0,24	D1	9	0,35	D2	15,5	0,61	D3	27,0	1,06	T1	26X1,5
3/8"	M FAV9	804024113	l1	22,5	0,89	l2	46,0	1,81	l3	6	0,24	d1	9	0,35	d2	15,5	0,61	d3	27,0	1,06	t1	26X1,5
3/8"	F FAV9P	804024104	L1	22,5	0,89	L2	46,0	1,81	L3	6	0,24	D1	9	0,35	D2	15,5	0,61	D3	27,0	1,06	T1	26X1,5
3/8"	M FAV9P	804024105	l1	22,5	0,89	l2	46,0	1,81	l3	6	0,24	d1	9	0,35	d2	15,5	0,61	d3	27,0	1,06	t1	26X1,5
1/2"	F FAV13	804024106	L1	20,0	0,79	L2	50,7	1,99	L3	8	0,31	D1	13	0,51	D2	21,0	0,83	D3	33,0	1,30	T1	32X1,5
1/2"	M FAV13	804024107	l1	20,0	0,79	l2	50,7	1,99	l3	8	0,31	d1	13	0,51	d2	21,0	0,83	d3	33,0	1,30	t1	32X1,5

Max allowed tolerance of holes D3 and d3 is H7.

Max allowed tolerance of holes length L2 and l2 is +0.1 mm.

Max allowed tolerances between male and female interaxis (misalignment): +/- 0.04 mm.

Max perpendicularity error between the hole D3-T1/d3-t1 and the plan A/B= 0,02 mm.

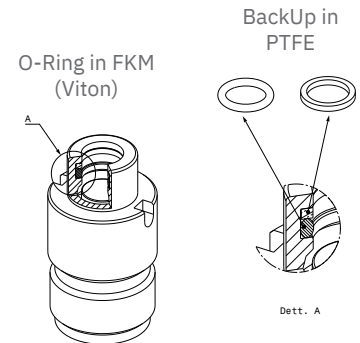
Max concentricity error between diameter T1&D3 and between t1&d3 = 0,02 mm.

After connection the plan A and B must be in contact.

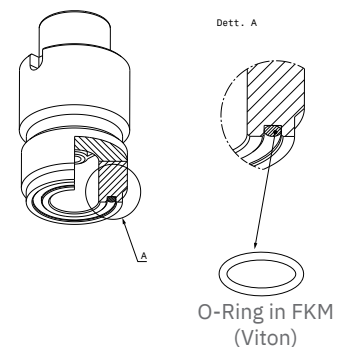
The system has to be provided with guiding devices to allow the correct alignment&function of the parts.

## Spare parts

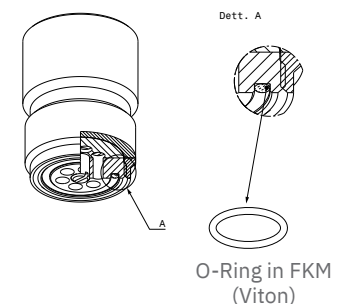
Repair kit / OR+BK FOR MALE		
Body size	Description	Part number
1/8	SPARE KIT OR VITON+BK M FAV4	815701325
1/4	SPARE KIT OR VITON+BK M FAV7	815700523
3/8	SPARE KIT OR VITON+BK M FAV9	815700247
1/2	SPARE KIT OR VITON+BK M FAV13	815700249



Repair kit / OR FOR MALE - BACK SIDE		
Body size	Description	Part number
1/8	SPARE KIT OR VITON BACK SEAL M FAV4	815701327
1/4	SPARE KIT OR VITON BACK SEAL M FAV7-FAV7P	815701329
3/8	SPARE KIT OR VITON BACK SEAL M FAV9-9P	815701331
1/2	SPARE KIT OR VITON BACK SEAL M FAV13	815701333



Repair kit / OR FOR FEMALE - BACK SIDE		
Body size	Description	Part number
1/8	SPARE KIT OR VITON BACK SEAL F FAV4	815701326
1/4	SPARE KIT OR VITON BACK SEAL F FAV7-FAV7P	815701328
3/8	SPARE KIT OR VITON BACK SEAL F FAV9-9P	815701330
1/2	SPARE KIT OR VITON BACK SEAL F FAV13	815701332



### ⚠ WARNING

Stucchi FAV couplings are intended to be used for connecting hydraulic fluid power circuit of industrial equipments.  
 Do not use Stucchi FAV couplings with dangerous, flammable or explosive fluids.  
 A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.  
 Connect under pressure FAV-P products are suitable to be connected under residual (static) pressure.  
 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 in the circuit.  
 Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).  
 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.  
**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.**





## LubeTeam Hydraulic S.r.l.

*Administration and Headquarter:*

Via Tufara Scautieri, 6

83018 - San Martino Valle Caudina (AV)

*Office and Warehouse:*

S.S. 7 Appia, Km. 237,00

82011 - Airola BN

ITALY

Tel. +39 0823 950 994

Fax +39 0823 412 546

[www.lubeteam.it](http://www.lubeteam.it) [info@lubeteam.it](mailto:info@lubeteam.it)

Italian VAT / C.F. e P.IVA: 01251720627

Follow us



This document is the property of LubeTeam Hydraulic S.r.l. All data reported here are for the exclusive use of the Receiver. Reproduction is not authorized without writing permission, in all or in part of the content of this document, in accordance to Law 633 art. 171, dated April 22, 1941.

Il presente documento è di proprietà della LubeTeam Hydraulic S.r.l. I dati riportati sono per esclusivo del destinatario. La riproduzione, di tutto o in parte, non è autorizzata senza permesso scritto secondo l'art. 171 della L. 633 del 22 Aprile 1941.