



Flat face solutions for modern agriculture machines

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The Stucchi proposition

Being the expert of quick couplings, with **more than 60 years of experience**, makes Stucchi the right partner **for hydraulic quick connection solutions**, also in the agriculture sector.

Thanks to its partnership with world leaders in the agriculture machines manufacturing, Stucchi has developed **specific innovations** and solutions for this demanding industry.

The main focus of Stucchi engineers is to **reduce the environmental impact**, thanks to **flat face designs** and technologies that minimize fluid spillage to the soil.

A series
A-FS series

Neptune
APB series
A series



Multicouplings

A series
APM-P series
Flat Face/ISO-A adaptor

The advantages of flat face couplings



POPPET



- No spillage
- No air inclusion
- No dirt inclusion
- Easy to clean
- Higher performance
- No damage for hydraulic system



FLAT FACE



When hydraulic lines are connected or disconnected, there should be **no contamination** from inside the circuit to the outside environment or vice versa, from the outside environment to inside the circuit.

Flat face coupling technology is among the best performing in most application areas, providing significant benefits that translate into greater operational efficiency, less wasted time and fewer risks, both in terms of the environment and personnel. The **special design of the flat face valve** gives rise to a reduction in fluid spillage to the outside, protecting both workers and the environment. The same system limits entry of external substances into the circuit, preventing malfunctions and reducing wear.

Flat face valves are also easier to clean, reducing the time required for maintenance and providing **greater efficiency** in the area of application.



Neptune

INTERCHANGE: ISO16028 & ISO7241 "A"



Scan here
to see the Neptune video

The first modular solution that introduces flat face couplings on the rear of the tractor, thanks to a system of easy to replace.

Features and benefits

- The cartridge system allows to easily switch from ISO-A to Flat Face couplings for greater flexibility in the use of tools.
- Possibility of exploiting the advantages of Flat Face couplings in terms of efficiency, cleanliness and respect for the environment.
- The special patented front seal on the flat face valve allows to avoid the use of caps to protect the circuit from external contamination.
- The patented system allows the connection of the male coupling even in presence of residual pressure in the tool circuit.
- The ergonomic lever with dual function releases the pressure inside the Neptune system and effortless disconnect the male coupling.
- Breakaway function in both types of cartridges, to prevent damage to the circuit in the event of accidental disconnection of the tool.
- Possibility of installing more blocks on the rear of the tractor, depending on the number of lines needed.
- Cartridges available in three sizes: ISO-A 1/2", ISO-A 3/4", Flat Face 5/8".
- Dedicated APM Neptune male coupling for the attachment side circuit.

Neptune block with
2 FF 5/8" cartridges



APB for Power Beyond

INTERCHANGE: ISO16028



Scan here for more technical information

Special Flat Face female couplings designed for tractors with Power Beyond (separate system powered by a variable flow pump working with a Load Sensing system).

Features and benefits

- Developed according to Power Beyond regulations: ISO17567:2020 (Flow class 2).
- Patented front seal prevents dirt particles from entering the circuit, eliminating the need for protective caps.
- Flat face is easy to clean, reducing the inclusion of contamination inside the hydraulic circuit.
- Breakaway function to avoid damages of the hydraulic connections in case of strong axial force during unintended disconnection.
- P Line provided with pressure release valve system allows an easy connection with internal residual pressure (lower than 6 bar).
- P line provided with an internal locking pin that prevents the connection in case of a pressure higher than 6 bar inside the circuit (prevents the operator from connecting if the tractor motor is running).
- Minimal fluid spillage during disconnection, reducing fluid spillage to the environment.
- Minimal air inclusion during connection.
- Zn-Ni plating ensures high resistance to corrosion.

Drain | APB9

(3/8" - 10mm ISO 16028)

Load Sensing | APB7

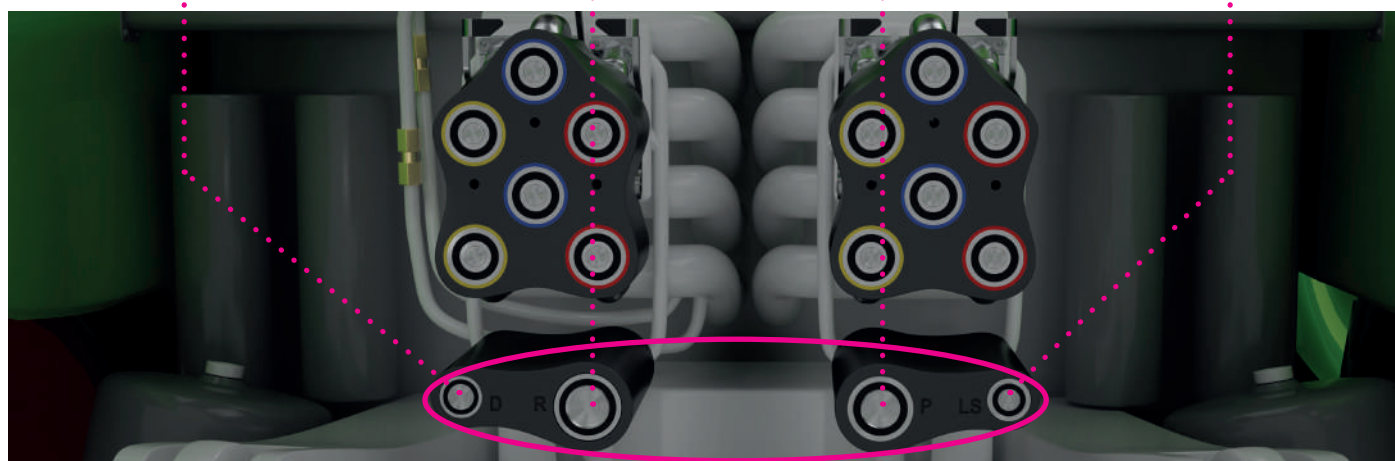
(1/4" - 6,3mm ISO 16028)

Return | APB17R

(3/4" - 19mm ISO 16028)

Pressure | APB15P

(5/8" - 16mm ISO 16028)



APM-P Series













INTERCHANGE: ISO16028



Scan here for more technical information

Evolution of the Stucchi APM male coupling, specifically developed to connect with Stucchi APB female couplings for Power Beyond solution on the back of the tractor.

Technical specifications and opinions

 Interchange ISO 16028 NFPA T3.20.15 HTMA (size 3/8")	 Sealing description Nitrile NBR	 Connection system Push	 Available sizes From 1/4" to 1-1/2"
 Material/treatment Carbon steel/Cr3	 Available threads BSP - NPT - SAE	 Operating pressure Up to 420 bar	 Locking mechanism Locking ball+Safety lock (on female coupling)
 Flow rate Up to 750 l/min	 Temperature -20°C / +100°C	 Valving style Flat Face	 Connection under pressure Connection: Disconnection: Male side only Not allowed. (see Benefits).

Features and benefits

- Easy connection with male side under residual pressure (female side to drain) thanks to the internal valve.
- Flat face is easy to clean, reducing the inclusion of contamination inside the hydraulic circuit.
- Minimal fluid spillage during disconnection, reducing fluid spillage to the environment.
- Minimal air inclusion during connection.
- Internal valve design creates minimal pressure drop, maintaining circuit efficiency in the system.
- Male body black zinc plated for easier identification.
- The modular design allows flexibility with a wide range of configurations.
- Good resistance to pressure impulses.

Also available APM-Neptune male coupling, to install on the attachment circuit, to be connected with Neptune casting block at the rear of the tractor. Main differences:

1. allow connection with residual pressure in the male coupling;
2. close the circuit in case of accidental releasing of the pressure in the female side.

A Series













INTERCHANGE: ISO16028



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The modular structure of this flat face series allows the flexibility to offer several types of threads or special ports in order to satisfy diverse applications while maintaining a compact dimension.

Technical specifications and opinions

	Interchange ISO 16028 NFPA T3.20.15 HTMA (size 3/8")		Sealing description Nitrile NBR		Connection system Push		Available sizes From 1/8" to 1-1/2"
	Material/treatment Carbon steel (Zn-Ni version available)		Available threads BSP - NPT - SAE ORFS - METRIC - JIC		Operating pressure Up to 420 bar		Locking mechanism Locking ball + Safety Lock
	Flow rate Up to 750 l/min		Temperature -20°C / +100°C		Valving style Flat Face		Connection under pressure Connection: not allowed Disconnection: not allowed

Features and benefits

- Flat face is easy to clean, reducing the inclusion of contamination inside the hydraulic circuit.
- Minimal fluid spillage during disconnection, reducing fluid spillage to the environment.
- Minimal air inclusion during connection.
- 3/8" size is used for brake system in the rear part of the tractor, according to the (EU) 2015/68 regulation.
- Internal valve design creates minimal pressure drop, maintaining circuit efficiency in the system.
- The modular design allows flexibility with a wide range of configurations.
- Good resistance to pressure impulses.

A-FS series

INTERCHANGE: ISO16028



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The A-FS series is an evolution of Stucchi A series, with a special front seal that prevents dirt particles from entering the circuit, eliminating the need for protective caps.

Technical specifications and opinions



Interchange
ISO16028



Sealing description
Nitrile NBR



Connection system
Push



Available sizes
1/2" 5/8"



Material/treatment
Carbon steel (Zn-Ni)



Available threads
METRIC



Operating pressure
Up to 350 bar



Locking mechanism
Locking ball



Flow rate
Up to 148 l/min



Temperature
-20°C / +100°C



Valving style
Flat Face



Connection under pressure
Connection: not allowed
Disconnection: Not allowed

Features and benefits

- Patented front seal prevents dirt particles from entering the circuit, eliminating the need for protective caps.
- Flat face is easy to clean, reducing the inclusion of contamination inside the hydraulic circuit.
- Minimal fluid spillage during disconnection, reducing fluid spillage to the environment.
- Minimal air inclusion during connection.
- Internal valve design creates minimal pressure drop, maintaining circuit efficiency in the system.
- The modular design allows flexibility with a wide range of configurations.
- Zn-Ni plating ensures high resistance to corrosion.

Multicouplings for agriculture machines

INTERCHANGE: Stucchi profile

Agriculture is a very specialized industry: there are attachments and machines dedicated to each to specific steps of the farming process; therefore, the needs are much diversified when it comes to hydraulic connections.

Stucchi multicouplings are the **ideal solution** when there are multiple hydraulic lines to be connected and disconnected in a circuit, allowing to connect the two parts with **great ease and without the aid of tools**. The two plates, one mobile and one fixed, welcome one all the males and the other all the females; thanks to different mechanical systems (lever or cam), the operator can connect or disconnect with a single movement **up to 10 hydraulic lines simultaneously**.



The main advantages of using Stucchi Multicouplings:

- configuration flexibility
- widest range in the market
- maximum speed of execution
- minimum effort required of the operator
- no risk of wrong connections
- strong and secure connection thanks to the locking mechanisms
- connection and disconnection even in presence of residual pressure
- easy connection even in presence of large lines
- cleaning and safety of the flat face quick couplings
- minimized fluid spillage to the environment
- less wear on the couplings
- possibility to insert electrical connectors

Multicouplings for agriculture applications

Some examples of applications and attachments where Stucchi Multicouplings can offer an **optimal solution** for an easier and safer working experience.



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Telehandler

DP2 2A-2EC V04
DP2 2B-2EC V04
DP2 2B-2EC V05



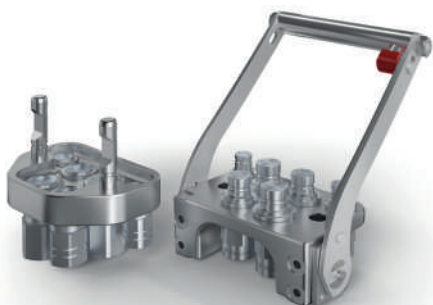
Frontloader

DP4 4A-2EC
DP4 4B-2EC
GR6 6A-2EC
GR6 6B-2EC



Olive shaker

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















Flat Face/ISO-A adaptors



Scan here for more technical information

It provides correct interface connection between ISO-A coupling (poppet) with ISO 16028 coupling (flat face), allowing connection of the tractor with implements with different valving type.

Technical specifications and opinions

	Interchange ISO 16028 ISO 7241-1- "A"		Sealing description Nitrile NBR		Connection system Push/Single active sleeve		Available sizes 1/2" - 5/8"
	Material/treatment Carbon steel/Cr3		Available threads NA		Operating pressure Up to 250 bar		Locking mechanism Locking ball
	Flow rate Up to 90 l/min		Temperature -20°C / +100°C		Valving style Flat Face/Poppet		Connection under pressure Allowed with Easy CUP for APM version. Disconnection not allowed.

Avoids spillage at every connection when used on the flat face side for connection and disconnection.

For the poppet side:

- The poppet valve with elastomer seal to provide maximum sealing of the couplings when disconnected.

For the flat face side:

- 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
- Good resistance to pressure impulses and high flow rates.

For the APM-flat face type:

- Easy connection with male side under residual pressure (female side to drain) thanks to the internal valve.

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