

## **Features & Options:**

- User friendly relief system allows for easy connection / disconnection with residual pressure
- Drain the residual pressure before connection and disconnection, allowing the connection without pressure and without effort in order to reduce injury risk.
- Equipped with ISO 16028 interchangeable size 1/2 male & female parts flat face. Drain line in the middle is 3/8 size male.
- Direct replacement for other connect under pressure systems.
- Low cost field replacement couplers.
- Modular design allows for optional size 5/8 body male & female for high flow circuits.

### **Main Applications**

- Skid steer
- Excavators
- Mobile construction equipment
- Mini-Excavators

### **Technical Features and Options**

- Interchangeability of couplings: equipped with ISO 16028 couplings size 1/2" male and female (available also with ISO 16028 size 5/8 couplings); drain line in the middle is ISO 16028 size 3/8 male.
- Couplings type : Flat face
- Mechanical connection of couplings: Locking balls
- Connection system : Push to connect
- Disconnection system: Pulling back the sleeve of the female coupling
- Connection with residual pressure: After draining the pressure with the knob
- Disconnection with residual pressure: After draining the pressure with the knob

- Threads available: 3/4 JIC for pressure lines , 3/8 SAE for drain line.
- Threads on request: Metrics DIN, ORFS, SAE, BSP and others
- Construction material: High resistance carbon steel
- Surface treatment: CrIII zinc plated
- External springs: AISI 302
- Internal springs: C72 steel
- Locking ball material: Hard steel 100 C6
- Seals: standard in NBR (Nitrile), POM
- Anti-extrusion rings: PTFE

## Saturn Block

#### **Benefits**

- User friendly relief system allows for easy connection and disconnection with residual pressure.
- Drain the residual pressure before connection and disconnection, allowing the connection without pressure and without effort in order to reduce injury risk.
- Flat face is easy to clean, helping to reduce the inclusion of contamination to the hydraulic circuit.
- Minimal fluid loss during connection / disconnection, reducing fluid loss to the environment.
- Minimal air inclusion during connection / disconnection, enhancing correct function of the circuit.
- Patented internal coupling's valve design creates minimal pressure drop, maintaining circuit efficiency in the system
- Good resistance at impulse pressures due to male and female couplings A-HD "Heavy Duty" type.
- Low cost field replacement spare kits for couplers and valve.
- Compact slim design.
- Safe and simple to use.
- Optional bracket for electrical connector.

#### How to use

- Before to couple clean the flat mating surface of quick coupling to avoid the inclusion of dirt in the circuit.
- Drain the residual pressure pulling the knob out and up to drain the residual pressure of upper coupling, down to drain the residual pressure of lower coupling.

- To couple push the male half towards the female half or vice versa.
- To uncouple pull back the sleeve.

**Important:** in case of residual pressure, before uncoupling drain the residual pressure pulling the knob out and up to drain the residual pressure of upper coupling, down to drain the residual pressure of lower coupling.

• Optional bracket for electrical connector.

#### Warning!

- Do not relieve pressure:
  - When the attachment is not in the rest position
  - During operation of the attachment (due to danger of unexpected movement
- of the attachment) • Do not use the female coupling disconnected with high impulse pressure frequency.
- Do not couple-uncouple with flow and/or pump pressure in the circuit.
- Dis / Connection only allowed with residual pressure .
- Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).

• When the couplings are disconnected, it is suggested to use the protection caps.

It is important to limit contamination in the circuit to avoid compromising the function of the internal valves.
It is important to have a drain line for connecting the line in the middle.

Description	Size	ISO Size	Rated Flow		Max. Flow Suggested		Spillage*
	Inch	mm	l/min	GPM	l/min	GPM	ml
SATURN DN13	1/2	12.5	45	11.93	90	23.85	0.020
SATURN DN15	5/8	16	74	19.61	148	39.22	0.026

Description Max. operating pressure						
	Cou	pled	Male		Female	
	MPa	psi	MPa	psi	MPa	psi
SATURN DN13	33	4785	33	4785	33	4785
SATURN DN15	33	4785	33	4785	33	4785

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#### Performance

Description	Max. operating pressure during connection and disconnection					
	M	ale	Female			
	Мра	psi	MPa	psi		
SATURN	25	3625	25	3625		
DN13						
SATURN DN15	25	3625	25	3625		

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

• Tests:

• The Saturn Block with the couplings A-HD have been tested at impulse with max. operating pressure for 1.000.000 impulses in according with ISO 7241-2 in connected position.

• The couplings A-HD have been tested at impulse with max. operating pressure for 100.000 impulses in according with ISO 7241-2 in disconnected position.





Scheme of use Saturn Block DN 15



# Saturn Block

## Example of repair kit



