

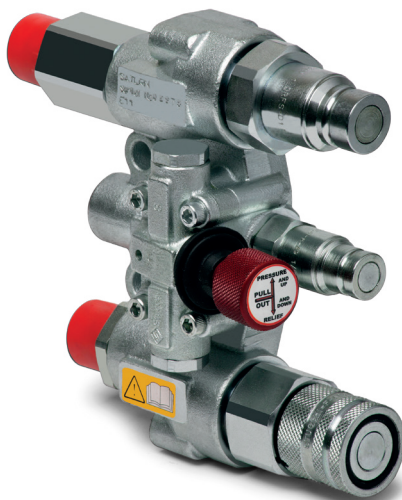
# SATURN SERIES

INTERCHANGE > ISO 16028 (for the couplings)



Stucchi®

Easy  
CUP



## TECHNICAL FEATURES AND OPTIONS



### Interchange

ISO 16028  
(for the couplings)



### Sealing description

Nitrile NBR



### Connection system

Push



### Available sizes

from 1/2"  
to 3/4"



### Material /treatment

Carbon steel  
/Cr3



### Available threads

SAE - JIC



### Operating pressure

Up to 350 bar



### Locking mechanism

Locking ball +  
Safety Lock



### Flow rate

Up to 200 l/min



### Temperature (°C)

-20° / +100°



### Valving style

Flat face



### Connection under pressure

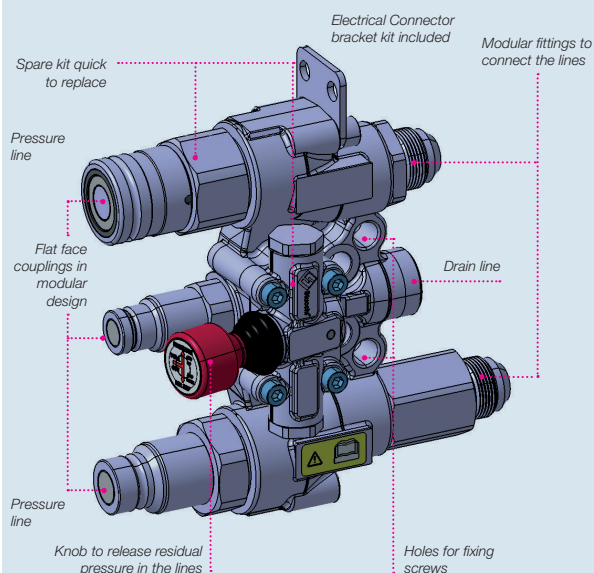
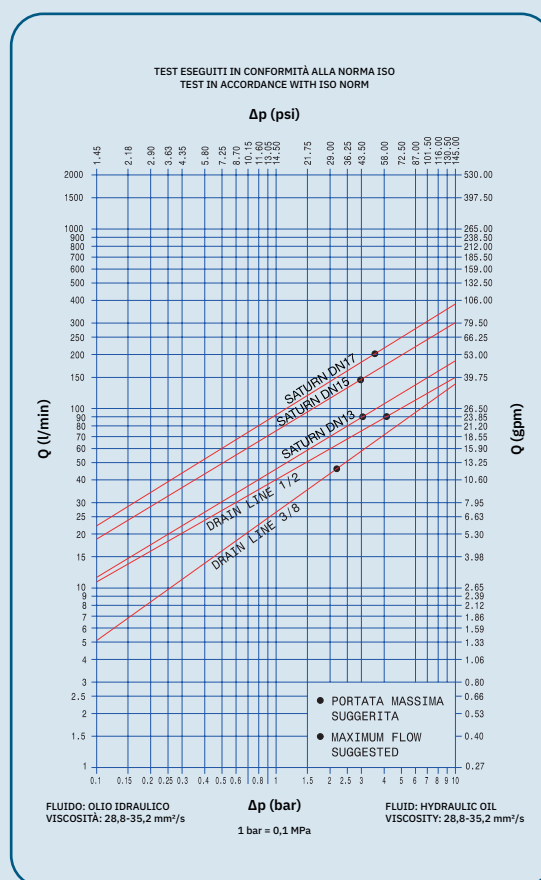
Connection: One side -  
Both side if use with APM/  
AHD (see Benefits).  
Disconnection: Allowed  
(see Benefits).

## BENEFITS

- Stucchi design pressure relief system completely independent of the connections prevents accidental release of pressure during the operation.
- User friendly pressure relief system (knob) allows for easy connection and disconnection with residual pressure.
- Please use in conjunction with APM series or AHD series to be able to connect with the matching side (attachment) under residual pressure.
- Low cost field replacement spare kits for couplers and valve.
- Flat face is easy to clean, reducing the inclusion of contamination to 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
- Good resistance to pressure impulses.
- Compact slim and flexible design (possible to use different sizes of couplings).
- Safe and simple to use.
- Bracket for electrical connector (kit plate + screw included in the box).

## HOW TO USE

- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion 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 connect push the male half towards the female half or viceversa.
- After connection turn the external sleeve to engage safety lock function, to prevent accidental disconnection.
- To disconnect pull back the sleeve of the female
- 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.



## MAIN APPLICATIONS



Agriculture



Oil/Gas



Industry



High Pressure



Mining



Refrigeration



Earth Moving



Vehicles



Hydraulic Equipment



Chemical & Food Industry

## PERFORMANCES

Size		Series/Size	Max. flow suggested		Spillage*
Inch	mm (ISO)		l/min	gpm	ml
1/2	12,5	SATURN DN13	90	23,85	0,02
5/8	16	SATURN DN15	148	39,22	0,03
3/4	19	SATURN DN17	200	53	0,03

Size	Series/Size	Max. operating pressure						Max. residual pressure			
		Coupled		Male		Female		Male		Female	
Inch		MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
1/2	SATURN DN13	35	5075	33	4785	33	4785	25	3625	25	3625
5/8	SATURN DN15	35	5075	33	4785	33	4785	25	3625	25	3625
3/4	SATURN DN17	35	5075	33	4785	33	4785	25	3625	25	3625

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

### Different possible configurations:

See specific table.

### Temperature range:

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

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

### Tests:

The Saturn Block have been tested at impulse with max. operating pressure for 1.000.000 impulses according to ISO norm in connected position.



## WARNING

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 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)

Connection with residual pressure (pressure trapped in the circuit) allowed with one side to drain.

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.

In case of doubt please contact Stucchi Technical Support.

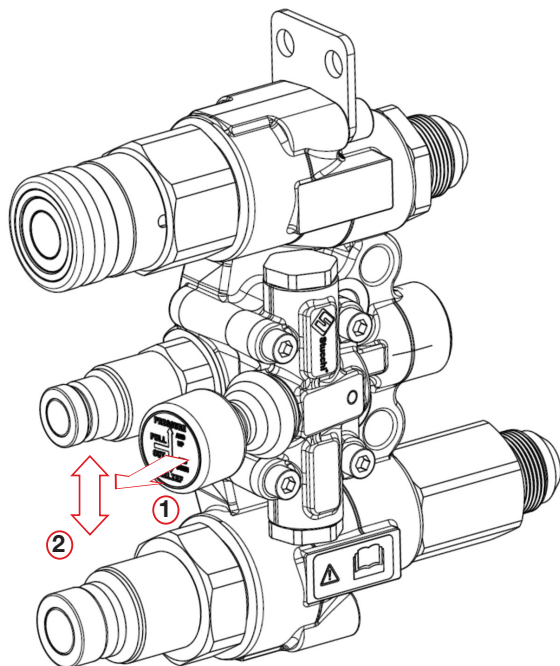
The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.

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

**Always refer to the version uploaded in the Instructions and warning section of [stucchigroup.com](http://stucchigroup.com) website for the latest release.**

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

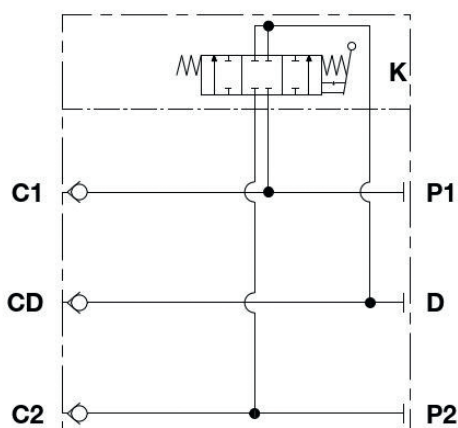
## HOW IT WORKS



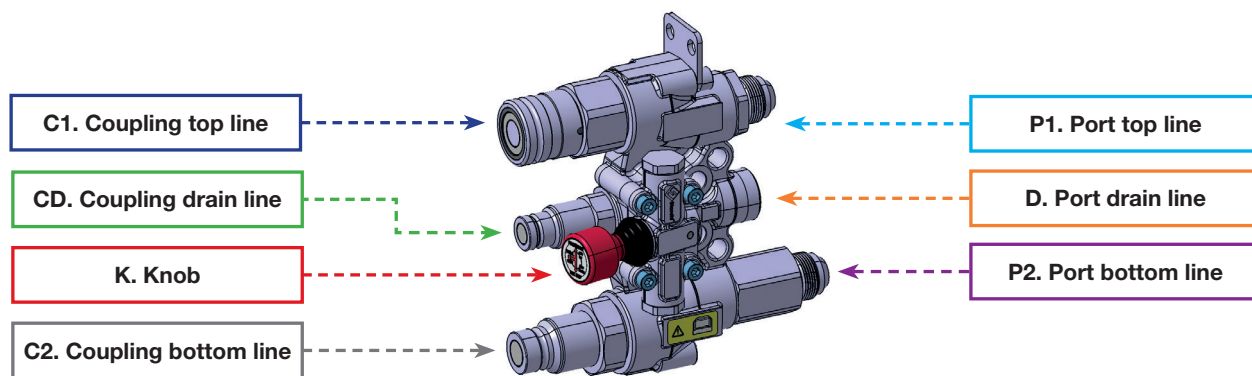
**To release the pressure:**

- ① Pull the lever
- +
- ② Push up to release the pressure on the upper line  
Push down to release the pressure on the lower line

## HYDRAULIC CIRCUIT



## HOW TO ORDER, PRODUCT DEFINITION



Descriptive Code	Item Code	Lever Side	C1. Coupling top line	CD. Coupling drain line	C2. Coupling bottom line	P1. Port top line	P2. Port bottom line
SATURN WITH M+F A13 + M A9	808800102	LEFT	MALE DN13 1/2"	MALE DN9 3/8"	FEMALE DN13 1/2"	3/4" JIC (long adaptor)	3/4" JIC (short adaptor)
SATURN WITH M+F A15 + M A9	808800103	LEFT	MALE DN15 5/8"	MALE DN9 3/8"	FEMALE DN15 5/8"	3/4" JIC (long adaptor)	3/4" JIC (short adaptor)
SATURN WITH M+F A17 + M A13	808800104	LEFT	FEMALE DN17 3/4"	MALE DN13 1/2"	MALE DN17 3/4"	3/4" JIC (long adaptor)	3/4" JIC (short adaptor)
SATURN WITH M+F A17 + M A9	808800105	LEFT	FEMALE DN17 3/4"	MALE DN9 3/8"	MALE DN17 3/4"	3/4" JIC (long adaptor)	3/4" JIC (short adaptor)
SATURN LEFT WITH M+F A17 + M A9	808800106	RIGHT	MALE DN17 3/4"	MALE DN9 3/8"	FEMALE DN17 3/4"	3/4" SAE	3/4" SAE
SATURN LEFT WITH M+F A13 + CAP A13	808800107	RIGHT	MALE DN13 1/2"	PLUGGED	FEMALE DN13 1/2"	3/4" SAE	3/4" SAE
SATURN LEFT WITH M+F A13 + M A9	808800108	RIGHT	MALE DN13 1/2"	MALE DN9 3/8"	FEMALE DN13 1/2"	3/4" JIC (short adaptor)	3/4" JIC (short adaptor)
SATURN LEFT WITH M+F13 + M A9	808800121	LEFT	MALE DN13 1/2"	MALE DN9 3/8"	FEMALE DN13 1/2"	3/4" JIC (long adaptor)	3/4" JIC (short adaptor)

[illegible]

Descriptive Code	Length			Length			Length			Hex		Hex		Weight			
		mm	inch		mm	inch		mm	inch		mm	inch		mm	inch	Kg	Lbs
SATURN DN13	G	196,8	7,75	G1	76,0	2,99	I	184,0	7,24	C	41,0	1,61	B	27,0	1,06	4,31	9,51
SATURN DN15	G	203,7	7,75	G1	76,0	2,99	I	184,0	7,24	C	41,0	1,61	B	27,0	1,06	4,44	9,78
SATURN DN17	G	224,0	7,75	G1	76,0	2,99	I	184,0	7,24	C	46,0	1,81	B	32,0	1,26	5,05	11,14

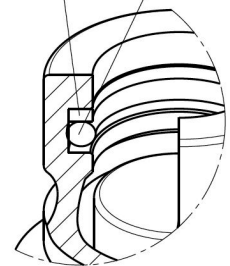
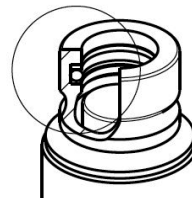


## SPARE KIT SEAL FOR MALE

Repair kit / OR+BK		
Body Size	Description	Part Number
3/8"	M A9 (drain line)	815700337
1/2"	MALE DIN13	815700339
5/8"	MALE DIN15	815700341
3/4"	MALE DIN17	815700343

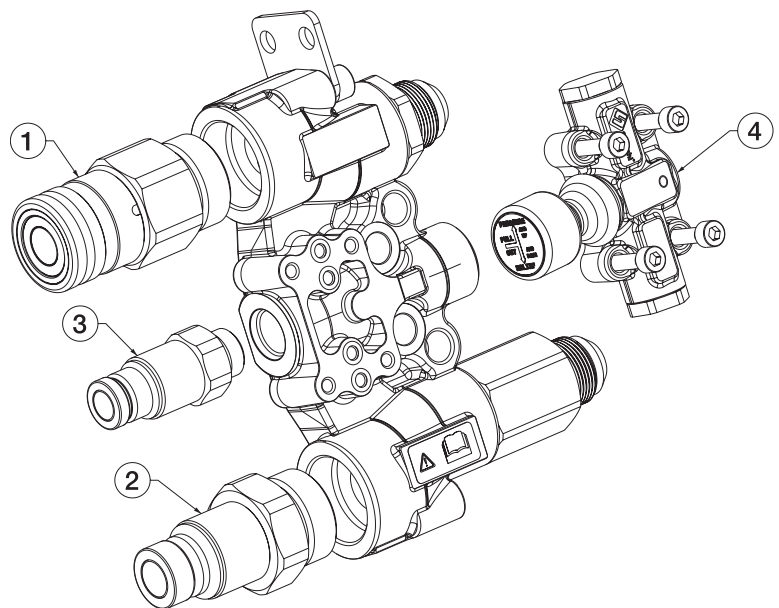
Backup ring  
(Teflon®)

O-ring



O-Ring in NBR  
Backup in Teflon®

## REPAIR KIT FOR SATURN SERIES



Repair kit			
Body Size	Descriptive Code	Part Number	Legend
1/2"	CARTRIDGE F A13HDSP 1 ORFS (DIN13)	808313038	1
1/2"	CARTRIDGE M A13HD 1 ORFS (DIN13)	808313001	2
5/8"	CARTRIDGE F A15HDS 1 ORFS (DIN15)	808313032	1
5/8"	CARTRIDGE M A15HD 1 ORFS (DIN15)	808313003	2
3/4"	CARTRIDGE F A17 1 ORFS (DIN17)	801313010	1
3/4"	CARTRIDGE M A17 1 ORFS (DIN17)	801313011	2
3/8"	CARTRIDGE M A9 1/2 SAE EXT	801304033	3
1/2"	CARTRIDGE M A13RN 1/2 SAE EST	801304049	3
-	CARTRIDGE REPAIR KIT VALVE GROUP	815700866	4

Male or Female coupling can be mounted indifferently either on the top or bottom port