

SATURN3SERIES

INTERCHANGE > ISO 16028 (for the couplings)



Easy
CUP



TECHNICAL FEATURES AND OPTIONS

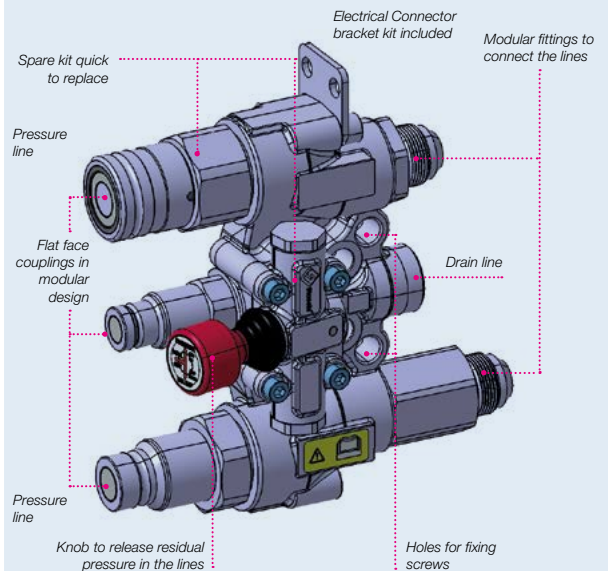
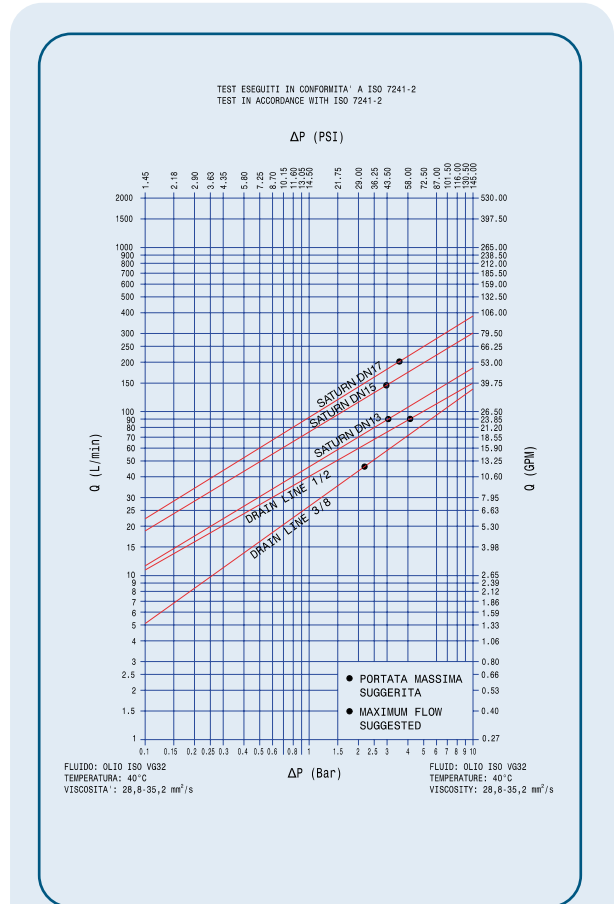
Interchange ISO 16028 (for the couplings)	Sealing description Nitrile NBR	Connection system Push
Available sizes from 1/2" to 3/4"	Material/treatment Carbon steel /Cr3	Available threads SAE - JIC
Operating pressure Up to 350 bar	Locking mechanism Locking ball + Safety Lock	Flow rate Up to 200 l/min
Temperature (°C) -20°C / +100°C	Valving style Flat face	Connection under pressure Connection: One side - Both sides 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



CASTING

PERFORMANCES

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

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

Saturn 3 can be configured with VEP, VP, VEP-HD cartridges upon request.

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.

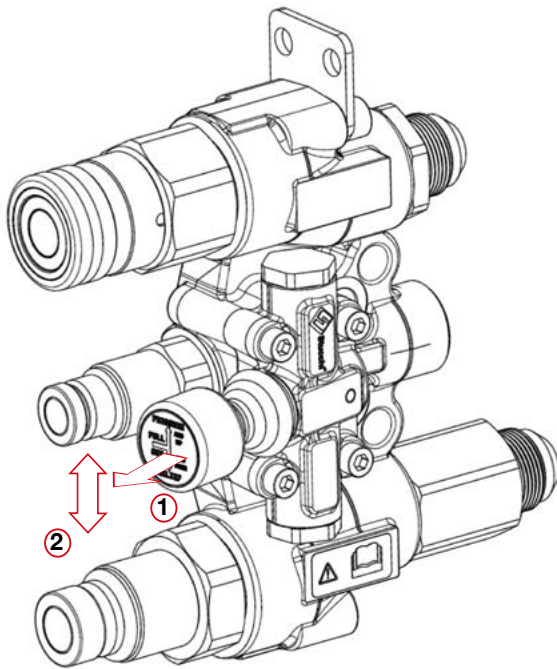
The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.

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 website for the latest release.

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

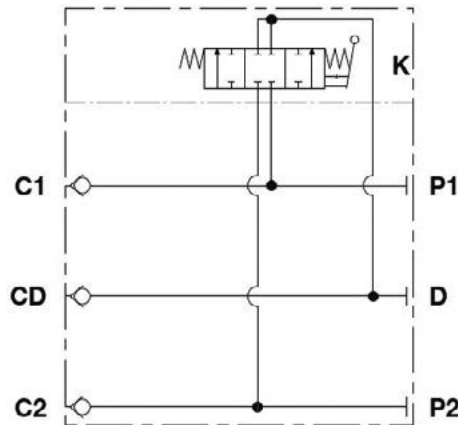
HOW IT WORKS



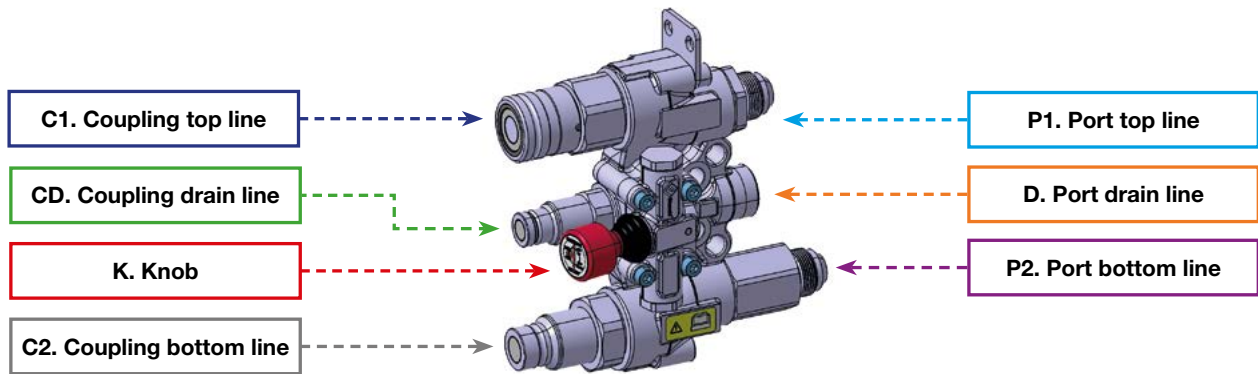
To release the pressure:

- 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

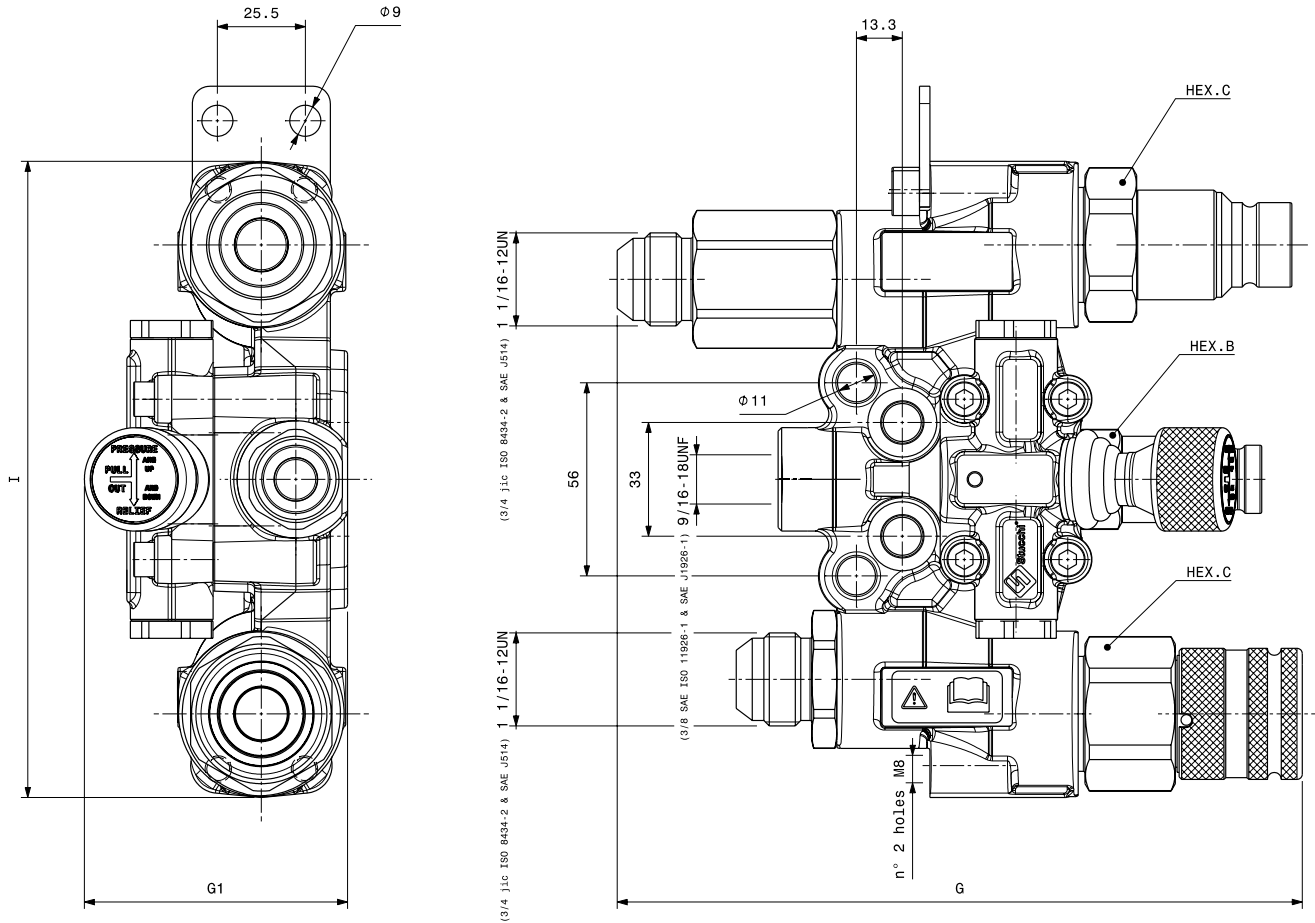


HOW TO ORDER, PRODUCT DEFINITION



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 3 MF 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 3 MF 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 3 MF 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 3 MF 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 3 LEFT MF A17-M A9-NO ADAPTERS	808800106	RIGHT	MALE DN17 3/4"	MALE DN9 3/8"	FEMALE DN17 3/4"	3/4" SAE	3/4" SAE
SATURN 3 MF A13-PLUG-NO ADAPTERS	808800107	RIGHT	MALE DN13 1/2"	PLUGGED	FEMALE DN13 1/2"	3/4" SAE	3/4" SAE
SATURN 3 LEFT MF A13-M A9-SHORT ADAPTERS	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 3 LEFT MF A13-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)

OVERALL DIMENSIONS



Descriptive Code	Length		Length		Length		Hex		Hex		Weight						
	mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb					
SATURN 3 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 3 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 3 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

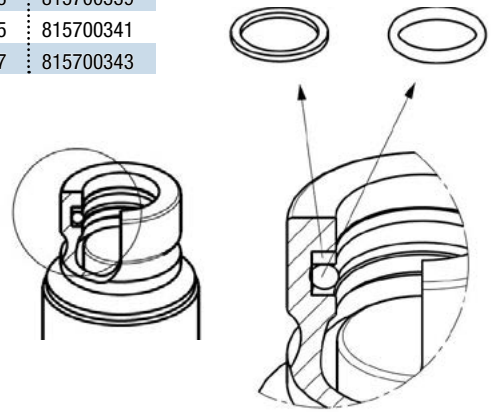


SPARE KIT SEAL FOR MALE

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

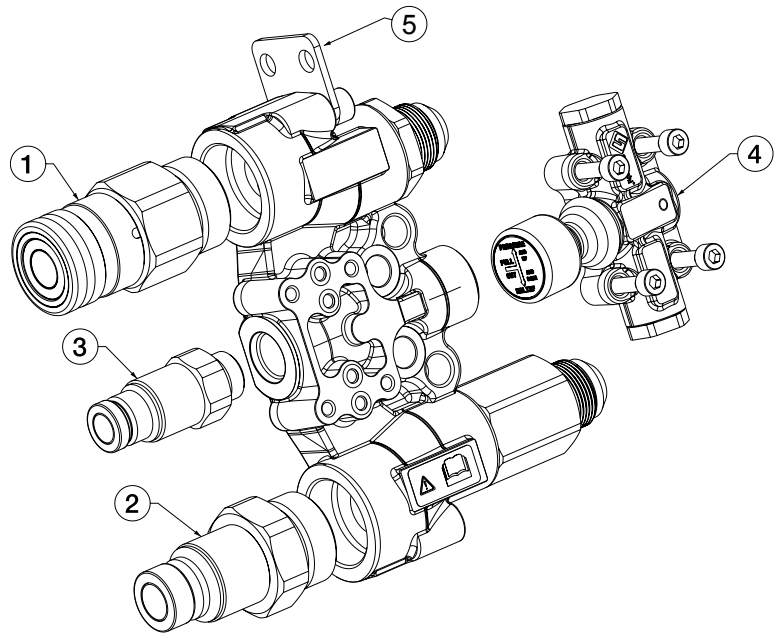
Backup ring
(Teflon®)

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 EXT	801304049	3
-	CARTRIDGE REPAIR KIT VALVE GROUP	815700866	4
-	SPARE KIT BRACKET AND SCREWS FOR SATURN 3	815700865	5

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