

# AXSERIES

INTERCHANGE > ISO 16028 - NFPA T3.20.15 - HTMA (size 3/8")















Stucchi®

FLAT FACE



## TECHNICAL FEATURES AND OPTIONS

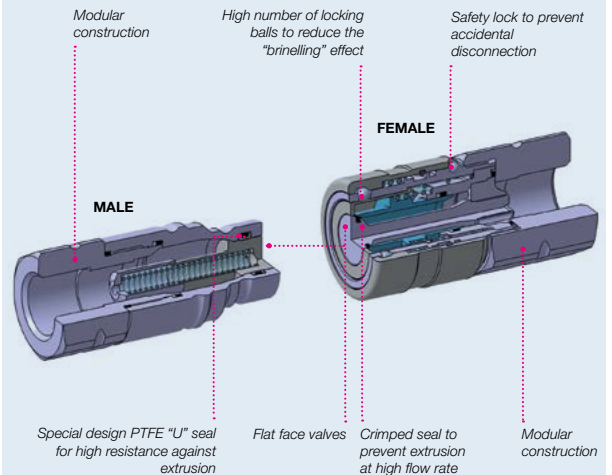
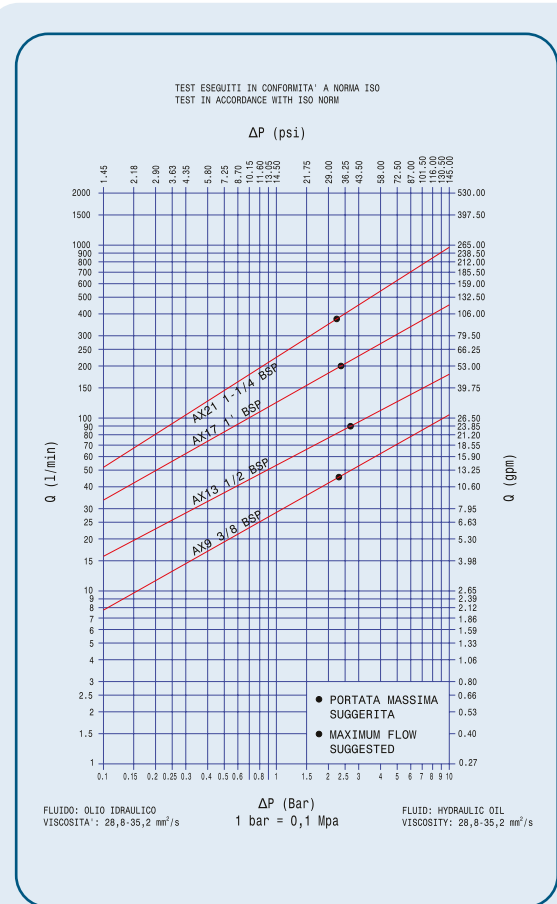
 <b>Interchange</b> ISO 16028 NFPA T3.20.15 HTMA (size 3/8")	 <b>Sealing description</b> FKM (VITON®)	 <b>Connection system</b> Push
 <b>Available sizes</b> from 3/8" to 1"	 <b>Material</b> Stainless steel (AISI 316L)	 <b>Available threads</b> BSP - METRIC
 <b>Operating pressure</b> Up to 350 bar	 <b>Locking mechanism</b> Locking ball + Safety Lock	 <b>Flow rate</b> Up to 378 l/min
 <b>Temperature (°C)</b> -15°C / +180°C	 <b>Valving style</b> Flat face	 <b>Connection under pressure</b> Connection: not allowed Disconnection: not allowed

## 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.
- Internal valve design creates minimal pressure drop, maintaining circuit efficiency in the system.
- The modular design allows flexibility with a wide range of configurations.
- Optimal corrosion resistance.
- Compact slim design.
- Safe and simple to use.

## HOW TO USE

- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect push the male half towards the female half or vice versa.
- After connection turn the external sleeve to engage safety lock function, to prevent accidental disconnection.
- To disconnect turn the external sleeve until the sleeve lock notch match the safety lock ball and push back the sleeve.



## MAIN APPLICATIONS



## PERFORMANCES

Size		Series/Size	Max. flow suggested		Connect force		Disconnect force		Spillage*
in	mm (ISO)		l/min	gpm	N	lbf	N	lbf	ml
3/8	10	AX9	46	12,19	200	45	45	10,12	0,01
1/2	12,5	AX13	90	23,85	165	37,12	58	13,05	0,02
3/4	19	AX17	200	53	255	57,37	80	18	0,03
1	25	AX21	378	100,17	285	64,12	110	24,75	0,03

Size	Series/Size	Max. operating pressure					
		Coupled		Male		Female	
in		MPa	psi	MPa	psi	MPa	psi
3/8	AX9	35	5075	35	5075	35	5075
1/2	AX13	33	4785	33	4785	33	4785
3/4	AX17	33	4785	33	4785	33	4785
1	AX21	30	4350	30	4350	30	4350

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

### Material:

- Construction: Stainless steel AISI 316L
- Springs: AISI 302
- Locking ball: AISI 316

### Different possible configurations:

Size AX7 and AX15 upon request.  
Different threads available upon request.

### Temperature range:

Seals in FKM (VITON®): from -15°C to +180°C (from +5 °F to +356 °F).  
Seals in NBR (Nitrile) with water: from +5°C to +60°C (from +41 °F to +140°F).  
Different seals available upon request.



## 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 use the female coupling disconnected with high impulse pressure.

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).

Check the maximum allowable working 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.

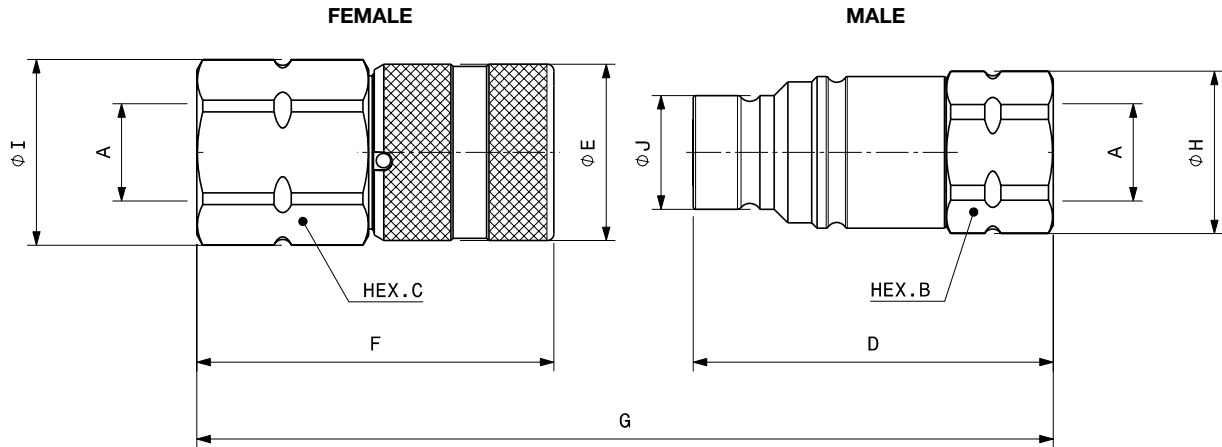
The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.

**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.**

## OVERALL DIMENSIONS



### Port description: FEMALE THREAD SAE (SAE J1926-1 or ISO 11926-1)

BODY SIZE	Descriptive Code	Item Code	ISO DN	PORT (A)	Overall Length		Length		Hex		Diameter		Diameter		Weight						
					mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb					
3/8"	F AX9 3/8 SAE	Female 808504104 *	10	9/16-18UNF	G	118,8	4,68	F	69,4	2,73	C	30,0	1,18	I	32,0	1,26	E	32,0	1,26	0,30	0,66
	M AX9 3/8 SAE	Male 808504105 *						D	65,4	2,57	B	27,0	1,06	H	29,0	1,14	J	19,7	0,78	0,16	0,34
3/8"	F AX9 1/2 SAE	Female 808504106	10	3/4-16UNF	G	125,8	4,95	F	74,4	2,93	C	30,0	1,18	I	32,0	1,26	E	32,0	1,26	0,33	0,72
	M AX9 1/2 SAE	Male 808504107						D	67,4	2,65	B	27,0	1,06	H	29,0	1,14	J	19,7	0,78	0,16	0,35
3/4"	F AX17 3/4 SAE	Female 808504114	18	1-1/16-12UN	G	167,3	6,59	F	103,8	4,09	C	46,0	1,81	I	49,8	1,96	E	48,0	1,89	1,08	2,37
	M AX17 3/4 SAE	Male 808504115						D	85,7	3,37	B	46,0	1,81	H	49,5	1,95	J	30,0	1,18	0,54	1,18
3/4"	F AX17 1" SAE	Female 808504120 *	19	1-5/16-12UN	G	170,3	6,70	F	103,8	4,09	C	46,0	1,81	I	49,8	1,96	E	48,0	1,89	-	-
	M AX17 1" SAE	Male 808504121 *						D	88,7	3,49	B	46,0	1,81	H	49,5	1,95	J	30,0	1,18	-	-
1"	F AX21 114 SAE	Female 808504122 *	25	1-5/8-12UN	G	185,8	7,31	F	108,3	4,26	C	55,0	2,17	I	59,8	2,35	E	55,0	2,17	1,42	3,13
	M AX21 114 SAE	Male 808504123 *						D	100,2	3,94	B	55,0	2,17	H	59,8	2,35	J	36,0	1,42	0,82	1,80

\* Available upon request.

### Port description: FEMALE THREAD BSPP (ISO 1179-1)

BODY SIZE	Descriptive Code	Item Code	ISO DN	PORT (A)	Overall Length		Length		Hex		Diameter		Diameter		Weight						
					mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb					
3/8"	F AX9 3/8 BSP	Female 808500104	10	3/8"	G	118,8	4,67	F	69,4	2,73	C	30,0	1,18	I	32,0	1,26	E	32,0	1,26	0,30	0,66
	M AX9 3/8 BSP	Male 808500105						D	65,4	2,57	B	27,0	1,06	H	29,0	1,14	J	19,7	0,78	0,16	0,34
1/2"	F AX13 1/2 BSP	Female 808500108	12,5	1/2"	G	137,1	5,40	F	76,9	3,03	C	36,0	1,42	I	40,0	1,57	E	38,0	1,50	0,48	1,05
	M AX13 1/2 BSP	Male 808500109						D	77,5	3,05	B	32,0	1,26	H	35,0	1,38	J	24,5	0,96	0,30	0,66
3/4"	F AX17 3/4 BSP	Female 808500114	19	3/4"	G	167,5	6,59	F	103,8	4,09	C	46,0	1,81	I	49,8	1,96	E	48,0	1,89	1,06	2,33
	M AX17 3/4 BSP	Male 808500115						D	85,7	3,37	B	46,0	1,81	H	49,5	1,95	J	30,0	1,18	0,53	1,16

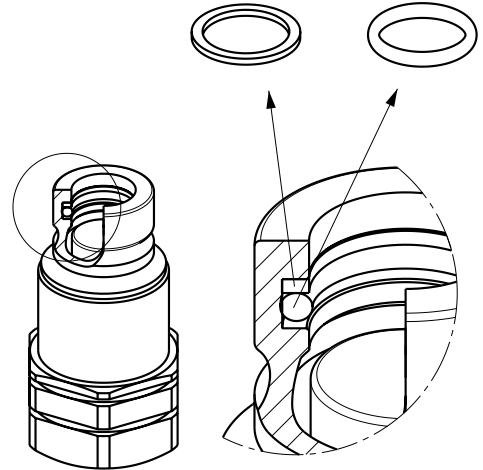


## SPARE KIT SEAL FOR MALE

Repair kit / OR+BK		
Body Size	Description	Part Number
3/8"	M AX9	815700247
1/2"	M AX13	815700249
3/4"	M AX17	815700253
1"	M AX21	815700255

Back-up ring  
(Teflon®)

o-ring



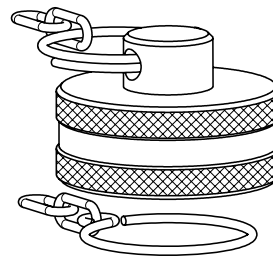
O-Ring in FKM (VITON®)  
BackUp in Teflon®

## PROTECTIVE CAPS FOR AX SERIES

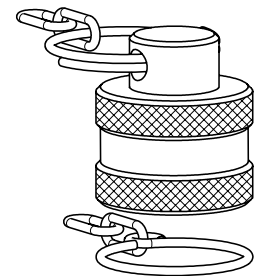
Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. This is particularly important in mobile applications where exposure to weather and aggregate materials are common.

The protective caps for AX couplings are manufactured in aluminum with lanyard (colors: natural aluminum).

Cap for FEMALE coupling  
Aluminum



Cap for MALE coupling  
Aluminum



Body Size/Description	Protective Cap		Material/Color
	Cap for Female	Cap for Male	
3/8" AX9	816005004	816005005	Aluminum/Natural
1/2" AX13	816005006	816005007	Aluminum/Natural
3/4" AX17	816005010	816005011	Aluminum/Natural
1" AX21	816005012	816005013	Aluminum/Natural

The protective caps for AX couplings are also available in plastic (see A series caps at page 39).