

# A-HP SERIES

INTERCHANGE > Stucchi profile



## TECHNICAL FEATURES AND OPTIONS

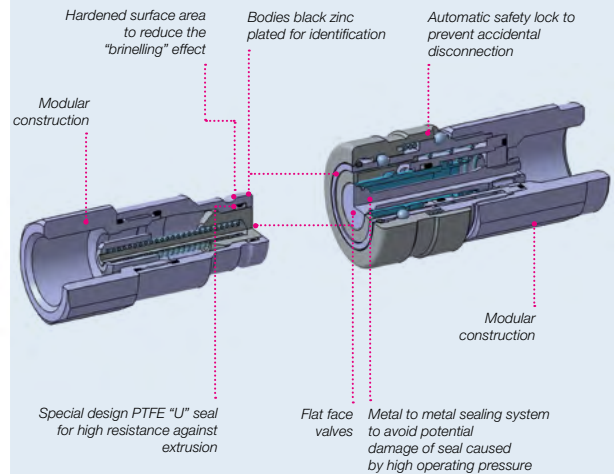
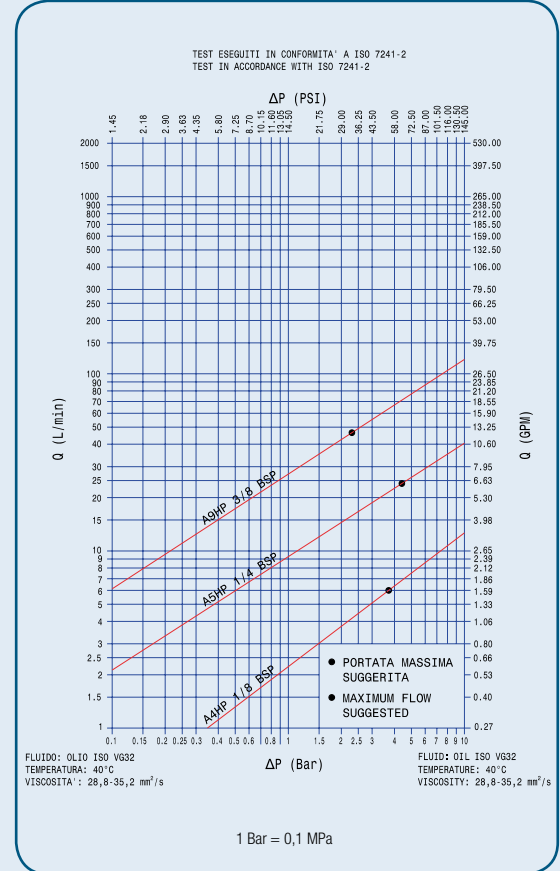
<b>Interchange</b> Stucchi profile	<b>Sealing description</b> Nitrile NBR	<b>Connection system</b> Push
<b>Available sizes</b> from 1/8" to 3/8"	<b>Material/treatment</b> Carbon steel /Cr3	<b>Available threads</b> BSP - NPT
<b>Operating pressure</b> Up to 720 bar	<b>Locking mechanism</b> Locking Ball + Safety sleeve	<b>Flow rate</b> Up to 46 L/Min
<b>Temperature (°C)</b> -20° / +100°	<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 design reduces pressure drop, increasing circuit efficiency.
- Automatic safety lock to prevent accidental disconnection. This safety feature is very important mainly for the rescue equipment.
- The modular structure allows broad range of port configurations.
- 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 until the coupler sleeve clicks.
- Upon connection the safety sleeve automatically rotates engaging the safety lock mechanism. In this safety lock position the coupling cannot be disconnected until the operator aligns the sleeve in the proper position (safety locking ball aligned with the notch in the coupler sleeve).
- To disconnect turn the external sleeve until the until the stop and push back the sleeve.



## MAIN APPLICATIONS



HIGH PRESSURE

## PERFORMANCES

Size	Series/Size	Max. flow suggested		Connect force		Disconnect force		Spillage*
		l/min	GPM	N	lbf	N	lbf	
1/8	A4HP	6	1,59	95	21,38	40	9,00	0,04
1/4	A5HP	24	6,36	125	28,13	45	10,13	0,02
3/8	A9HP	46	12,19	205	46,13	50	11,25	0,02

Size	Series/Size	Max. operating pressure						Burst pressure					
		Coupled		Male		Female		Coupled		Male		Female	
Inch		MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
1/8	A4HP	72	10440	72	10440	72	10440	160	23200	160	23200	160	23200
1/4	A5HP	72	10440	72	10440	50	7250	200	29000	200	29000	150	21750
3/8	A9HP	72	10440	72	10440	42	6090	180	26100	200	29000	125	18125

\*Spillage is an indicative value of the fluid loss during disconnection (according to ISO 7241-2 test method)

### Different thread options:

Male NPT thread available upon request

### Temperature range:

Standard seals NBR (Nitrile): from -20 °C to +100 °C ( from -4 °F to +212 °F). Please read carefully "instruction and warning" for proper selection of the products.

### Tests:

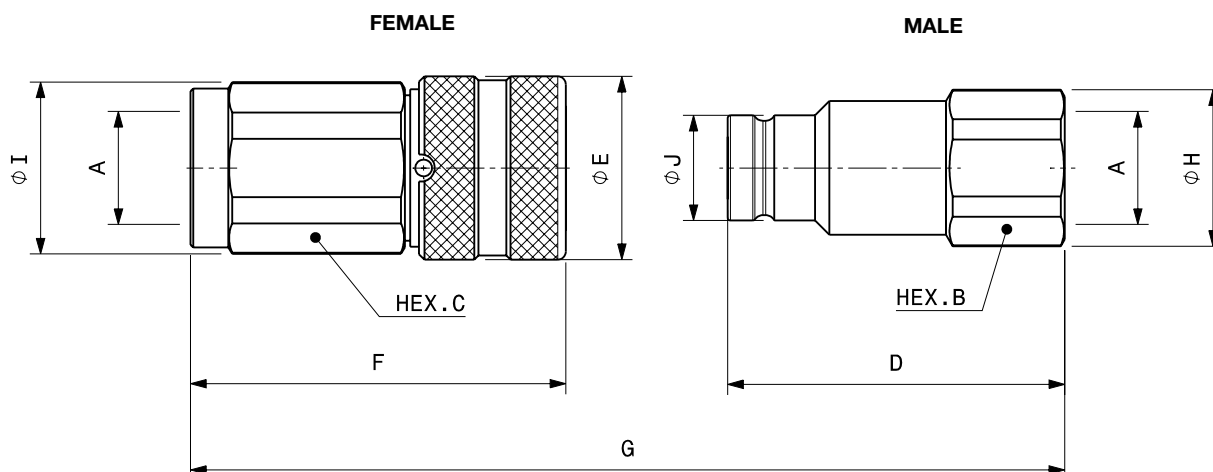
The couplings have been tested at impulse with max. operating pressure for pressure for 100.000 impulses according to ISO 7241-2 test method. A4HP has been tested for 10.000 impulses.

## 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 read and closely follow the instructions. Last updated version always apply at time of installation, see latest written Instructions on Stucchi website ([www.stucchi.it](http://www.stucchi.it)) before selecting or using Stucchi products.**

## OVERALL DIMENSIONS



### Port description: FEMALE THREAD NPT (ANSI B.1.20.1)

BODY SIZE	Descriptive Code	Item Code	PORT (A)	Overall Length		Length		Hex		Diameter		Diameter		Weight						
				mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	Kg	Lbs					
1/8"	F A4HP 1/8 NPT	Female 80160104	1/8"	G	72,3	2,85	F	44,0	1,73	C	17,0	0,67	I	21,8	0,86	E	22,0	0,87	0,09	0,20
	M A4HP 1/8 NPT	Male 80160105					D	36,2	1,43	B	17,0	0,67	H	18,5	0,73	J	12,0	0,47	0,04	0,09
1/4"	F A5HP 1/4 NPT	Female 801601004	1/4"	G	94,9	3,74	F	58,0	2,28	C	22,0	0,87	I	29,0	1,14	E	29,0	1,14	0,21	0,45
	M A5HP 1/4 NPT	Male 801601005					D	47,9	1,89	B	22,0	0,87	H	23,8	0,94	J	16,5	0,65	0,09	0,20
1/4"	F A5HP 3/8 NPT	Female 801601008	3/8"	G	103,9	4,09	F	60,0	2,36	C	24,0	0,94	I	29,0	1,14	E	29,0	1,14	0,21	0,46
	M A5HP 3/8 NPT	Male 801601009					D	54,9	2,16	B	24,0	0,94	H	26,0	1,02	J	16,5	0,65	0,11	0,24
3/8"	F A9HP 3/8 NPT	Female 801601010	3/8"	G	108,8	4,28	F	64,6	2,54	C	30,0	1,18	I	32,0	1,26	E	34,0	1,34	0,32	0,71
	M A9HP 3/8 NPT	Male 801601011					D	60,0	2,36	B	27,0	1,06	H	29,0	1,14	J	19,5	0,77	0,15	0,34
3/8"	F A9HP 1/2 NPT	Female 801601012	1/2"	G	116,3	4,58	F	69,6	2,74	C	30,0	1,18	I	32,0	1,26	E	34,0	1,34	0,31	0,68
	M A9HP 1/2 NPT	Male 801601013					D	62,5	2,46	B	27,0	1,06	H	29,0	1,14	J	19,5	0,77	0,14	0,32

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

BODY SIZE	Descriptive Code	Item Code	PORT (A)	Overall Length		Length		Hex		Diameter		Diameter		Weight						
				mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	Kg	Lbs					
1/8"	F A4HP 1/8 BSP	Female 801600010	1/8"	G	72,3	2,85	F	44,0	1,73	C	17,0	0,67	I	21,8	0,86	E	22,0	0,87	0,09	0,21
	M A4HP 1/8 BSP	Male 801600011					D	36,2	1,43	B	17,0	0,67	H	18,5	0,73	J	12,0	0,47	0,04	0,09
1/4"	F A5HP 1/4 BSP	Female 801600000	1/4"	G	94,9	3,74	F	58,0	2,28	C	22,0	0,87	I	29,0	1,14	E	29,0	1,14	0,20	0,45
	M A5HP 1/4 BSP	Male 801600001					D	47,9	1,89	B	22,0	0,87	H	23,8	0,94	J	16,5	0,65	0,09	0,19
1/4"	F A5HP 3/8 BSP	Female 801600002	3/8"	G	103,9	4,09	F	60,0	2,36	C	24,0	0,94	I	29,0	1,14	E	29,0	1,14	0,20	0,45
	M A5HP 3/8 BSP	Male 801600003					D	54,9	2,16	B	24,0	0,94	H	26,0	1,02	J	16,5	0,65	0,09	0,19
3/8"	F A9HP 3/8 BSP	Female 801600006	3/8"	G	108,8	4,28	F	64,6	2,54	C	30,0	1,18	I	32,0	1,26	E	34,0	1,34	0,30	0,66
	M A9HP 3/8 BSP	Male 801600007					D	60,0	2,36	B	27,0	1,06	H	29,0	1,14	J	19,5	0,77	0,15	0,33
3/8"	F A9HP 1/2 BSP	Female 801600008	1/2"	G	116,3	4,58	F	69,6	2,74	C	30,0	1,18	I	32,0	1,26	E	34,0	1,34	0,30	0,67
	M A9HP 1/2 BSP	Male 801600009					D	62,5	2,46	B	27,0	1,06	H	29,0	1,14	J	19,5	0,77	0,15	0,34