SPECIAL SERIES





# **Technical specifications and options**



Interchange ISO 16028 NFPA T3.20.15 HTMA (size 3/8")



Sealing description Nitrile NBR



Connection system Push





Material /treatment Carbon steel/Cr3



Available threads BSP - NPT - SAE



Operating pressure
Up to 420 bar



Locking mechanism
Locking ball+Safety lock
(on female coupling)



Flow rate Up to 750 l/min





Valving style Flat Face



Connection under pressure

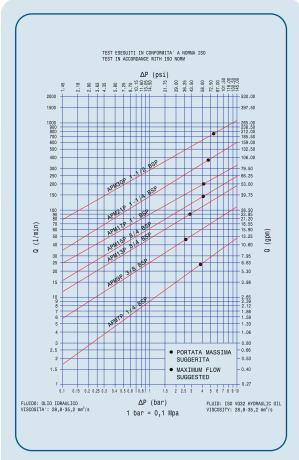
Connection: Male side only (see Benefits).
Disconnection: Not allowed.

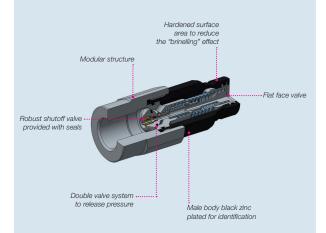
# **Benefits**

- Easy connection with male side under residual pressure (female side to drain) thanks to the internal valve.
- 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.
- Male body black zinc plated for identification
- The modular design allows flexibility with a wide range of configurations.
- Good resistance to pressure impulses.
- 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/		. flow ested	Spillage*	Ma	ax. operat	ing pressi	ıre		Burst p	ressure		
		Size	Sugg	esteu		Cou	pled	M	Male		pled	Male		
Inch	mm (ISO)		l/min	GPM	ml	Мра	psi	Мра	psi	Мра	psi	Мра	psi	
1/4	6,3	APM7P	24	6,36	0,01	42	6091	42	6091	126	18275	126	18275	
3/8	10,0	APM9P	46	12,19	0,02	35	5075	35	5075	105	15229	105	15229	
1/2	12,5	APM13P	90	23,85	0,01	35	5075	35	5075	105	15229	105	15229	
5/8	16,0	APM15P	148	39,22	0,03	35	5075	35	5075	105	15229	105	15229	
3/4	19,0	APM17P	200	53,00	0,18	35	5075	35	5075	105	15229	105	15229	
1	25,0	APM21P	378	100,17	0,18	35	5075	35	5075	105	15229	105	15229	
1-1/2	-	APM30P	750	198,75	0,40	27	3915	27	3915	81	11748	81	11748	

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

### **Different possible configurations:**

Different threads available 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 performed:

Tested with female couplings "A" series. The couplings have been tested at max. operating pressure for 100.000 impulses according to ISO norm test method.

APM-P

APM-P Series is available upon request also in Zinc Nickel version. The Zinc Nickel plating ensures high resistance to corrosion and it is ideal for hydraulic equipment applications where an improved corrosion resistance is necessary.

For specific codes, configuration or any other information, please contact Stucchi Technical Support.



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).

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

Do not use the male 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.

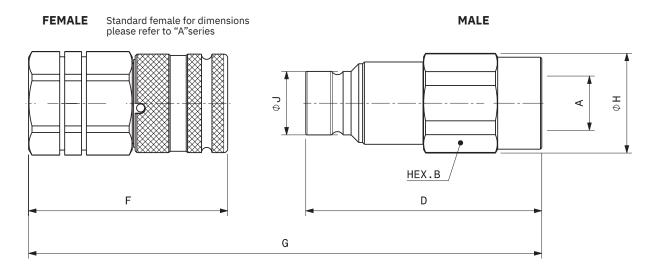
It is mandatory to carefully read and closely follow the instructions before selecting or using any Stucchi products.

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.





# **Overall dimensions**



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

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
1/4"	M APM7P 1/4 BSP	807400001	6,3	1/4"	G	(F+D)-10,8	(F+D)-0,430	D	73,2	2,88	В	24,0	0,94	Н	26,0	1,02	J	16,1	0,63	0,17	0,37
3/8"	M APM9P 3/8 BSP	807400015	10,0	3/8"	G	(F+D)-16	(F+D)-0,630	D	80,0	3,15	В	27,0	1,06	Н	29,0	1,14	J	19,7	0,78	0,22	0,49
1/2"	M APM13P 1/2 BSP	807400017	12,5	1/2"	G	(F+D)-17,3	(F+D)-0,681	D	91,0	3,74	В	36,0	1,42	Н	38,5	1,52	J	24,5	0,96	0,44	0,98
5/8"	M APM15P 3/4 BSP	807400025	16,0	3/4"	G	(F+D)-17,6	(F+D)-0,693	D	95,0	3,74	В	36,0	1,42	Н	38,5	1,52	J	27,0	1,06	0,45	0,98
3/4"	M APM17P 1 BSP	807400027	19,0	1"	G	(F+D)-22	(F+D)-0,866	D	108,5	4,27	В	46,0	1,81	Н	49,8	1,96	J	30,0	1,18	0,79	1,75
1"	M APM21P 1-1/4 BSP	807400029	25,0	1-1/4"	G	(F+D)-23	(F+D)-0,906	D	123,5	4,86	В	55,0	2,17	Н	59,8	2,35	J	36,0	1,42	1,21	2,67
1-1/2"	M APM30P 1-1/2 BSP	807400031	-	1-1/2"	G	(F+D)-28,6	(F+D)-1,126	D	146,9	5,78	В	70,0	2,76	Н	75,8	2,98	J	57,0	2,24	2,67	5,89

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

Size	Descriptive code	Item code	ISO DN	Port (A)	Overall Length			Length			Hex			Diameter			Diameter			Weight	
					mn	in in		mm	in		mm	in		mm	in		mm	in	Kg	lb	
3/8"	M APM9P 1/2 NPT	807401015	10,0	1/2"	G   (F+D)-:	L6 (F+D)-0,630	D	82,5	3,25	В	27,0	1,06	Н	29,0	1,14	J	19,7	0,78	0,22	0,49	
1/2"	M APM13P 1/2 NPT	807401017	12,5	1/2"	G (F+D)-1	17,3 (F+D)-0,681	D	91,0	3,74	В	36,0	1,42	Н	38,5	1,52	J	24,5	0,96	0,44	0,98	
3/4"	M APM17P 1 NPT	807401027	19,0	1"	G (F+D)-2	22 (F+D)-0,866	D	108,5	4,27	В	46,0	1,81	Н	49,8	1,96	J	30,0	1,18	0,75	1,66	
1"	M APM21P 1-1/4 NPT	807401029	25,0	1-1/4"	G (F+D)-2	(F+D)-0,906	D	123,5	4,86	В	55,0	2,17	Н	59,8	2,35	J	36,0	1,42	1,25	2,76	
1-1/2"	M APM30P 1-1/2 NPT	807401031	-	1-1/2"	G (F+D)-2	28,6 (F+D)-1,126	D	146,9	5,78	В	70,0	2,76	Н	75,8	2,98	J	57,0	2,24	2,69	5,93	

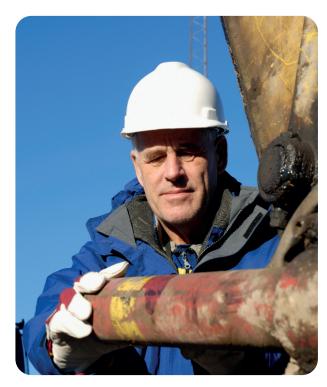
## Port description: FEMALE THREAD SAE (ISO 11926-1 & SAE J1926-1)

Size	Descriptive code	Item code	ISO DN	Port (A)		Overall Length		Length		:h	Hex		Diameter			Diameter		Weight			
						mm	in		mm	in		mm	in		mm	in		mm	in	Kg	lb
3/4"	M APM17P 1 SAE	807404027	19,0	1"	G	(F+D)-22	(F+D)-0,866	D	108,5	4,27	В	46,0	1,81	Н	49,8	1,96	J	30,0	1,18	0,75	1,66
1"	M APM21P 1-1/4 SAE	807404029	25,0	1-1/4"	G	(F+D)-23	(F+D)-0,906	D	123,5	4,86	В	55,0	2,17	Н	59,8	2,35	J	36,0	1,42	1,23	2,71
1-1/2"	M APM30P 1-1/2 SAE	807404031	-	1-1/2"	G	(F+D)-28,6	(F+D)-1,126	D	146,9	5,78	В	70,0	2,76	Н	75,8	2,98	J	57,0	2,24	2,66	5,87

To calculate G, see measure F in the A series catalogue

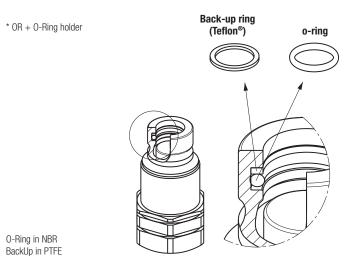
SPECIAL SERIES





# **Spare Kit Seal for Male -**

	Repair kit/OR+BK						
Body size	Description	Part number					
1/4	M APM7P	815700519					
3/8"	M APM9P	815700337					
1/2"	M APM13P	815700339					
5/8"	M APM15P	815700341					
3/4"	M APM17P	815700655					
1"	M APM21P	815700345					
1 1/2"	M APM30P	815700697*					



#### PROTECTIVE CAPS FOR APM 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 protection caps for APM couplings are manufactured in plastic with connection lanyard (standard color red, other colors available upon request).



Protective Cap											
Body size	Port size	Description	Part Number	Material/Color							
Douy 3126	1 011 3126	Description	Cap for Male	Material/Color							
1/4"	1/4"	M APM7P	815100023	Plastic/Red							
3/8"	3/8"	M APM9P	815100025	Plastic/Red							
3/8"	1/2"	M APM9P	815100027	Plastic/Red							
1/2"	1/2"	M APM13P	815100029	Plastic/Red							
1/2"	3/4"	M APM13P	815100031	Plastic/Red							
5/8"	3/4"	M APM15P	815100011	Plastic/Red							
3/4"	1"	M APM17P	815100013	Plastic/Red							
1"	1-1/4"	M APM21P	815100015	Plastic/Red							
1-1/2"	1-1/4"	M APM30P	815100017	Plastic/Red							