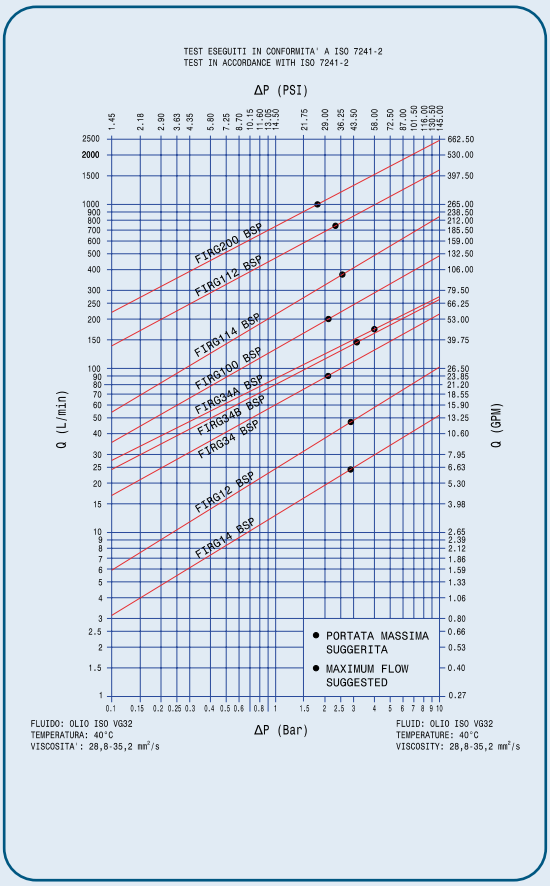
FIRG SERIES

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

Stucchi®





TECHNICAL FEATURES AND OPTIONS

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

Sealing description
Nitrile NBR

Connection system
Push

Available sizes
from 1/4"
to 2"

Material /treatment
Carbon steel /Cr3

Available threads
BSP - NPT - BSPT - SAE

Operating pressure
Up to 330 bar

Locking mechanism
Locking ball + Safety Lock

Flow rate
Up to 1000 l/min

Temperature (°C)
-20°C / +100°C

Valving style
Flat face

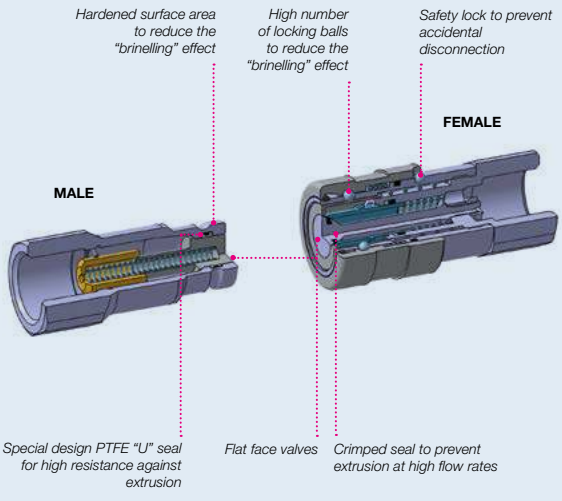
Connection under pressure
Connection: not allowed
Disconnection: not allowed

BENEFITS

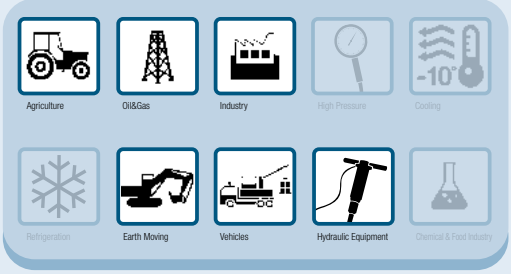
- Flat face is easy to clean, reducing the inclusion of contamination inside the hydraulic circuit.
- Minimal fluid spillage during disconnection, reducing fluid spillage to the environment.
- Minimal air inclusion during connection, enhancing correct function of the circuit.
- Linear flow reduces internal turbulence and pressure drop maintaining circuit efficiency.
- Good resistance to pressure impulses when the couplings are connected.
- 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)	OLD	NEW	l/min	gpm	N	lbf	N	lbf	ml
1/4	6,3	FIRG14	FIRG7	24	6,36	140	31,50	40	9,00	0,01
3/8	10,0	FIRG38-12	FIRG9	46	12,19	150	33,75	40	9,00	0,01
1/2	12,5	FIRG12A-34	FIRG13	90	23,85	160	36,00	60	13,50	0,02
5/8	16,0	FIRG34B	FIRG15	148	39,22	180	40,50	55	12,38	0,02
3/4	19,0	FIRG34A	FIRG17 3/4	170	45,05	270	60,75	90	20,25	0,03
3/4	19,0	FIRG100	FIRG17 1	200	53,00	240	54,00	65	14,63	0,03
1	25,0	FIRG114	FIRG21	378	100,17	310	69,75	100	22,50	0,03
1-1/2		FIRG112	FIRG30	750	198,75	390	87,75	90	20,25	0,05
2		FIRG200	FIRG45	1000	265,00	470	105,75	100	22,50	0,1

Size	Series/Size		Max. operating pressure						Burst pressure					
			Coupled		Male		Female		Coupled		Male		Female	
in	OLD	NEW	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
1/4	FIRG14	FIRG7	30	4350	42	6090	12	1740	120	17400	126	18270	48	6960
3/8	FIRG38-12	FIRG9	30	4350	30	4350	12	1740	120	17400	120	17400	48	6960
1/2	FIRG12A-34	FIRG13	25	3625	25	3625	10	1450	100	14500	100	14500	40	5800
5/8	FIRG34B	FIRG15	25	3625	22	3190	10	1450	100	14500	88	12760	40	5800
3/4	FIRG34A	FIRG17 3/4	33	4785	33	4785	33	4785	100	14500	100	14500	100	14500
3/4	FIRG100	FIRG17 1	25	3625	20	2900	10	1450	100	14500	80	11600	40	5800
1	FIRG114	FIRG21	25	3625	20	2900	10	1450	100	14500	80	11600	40	5800
1-1/2	FIRG112	FIRG30	20	2900	27	3915	8	1160	80	11600	80	11600	32	4640
2	FIRG200	FIRG45	20	2900	16	2320	8	1160	80	11600	64	9280	32	4640

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

Different possible configurations:
BSPT thread available upon request.

Temperature range:
Standard seals NBR (Nitrile): from -20 °C to +100 °C (from -4 °F to +212 °F).
Upon request seals in FKM (VITON®): form -15°C to +180°C (from +5 °F to +356 °F).
Please read carefully Instructions and warnings for proper selection of the products.

Tests:
The couplings have been tested at max. operating pressure for 100.000 impulses according to ISO norm.

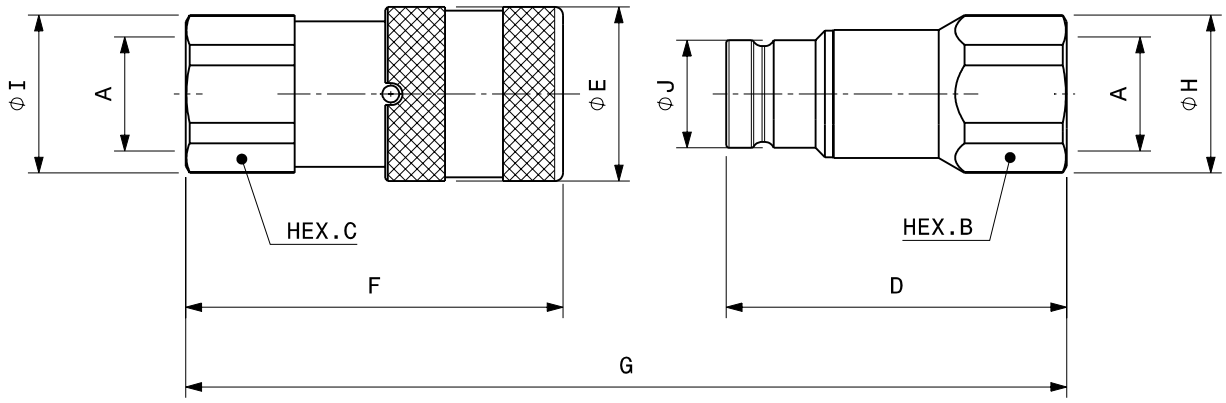
WARNING

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 website for the latest release.
For specific, product-related, instructions, please contact Stucchi technical service.

OVERALL DIMENSIONS

FEMALE

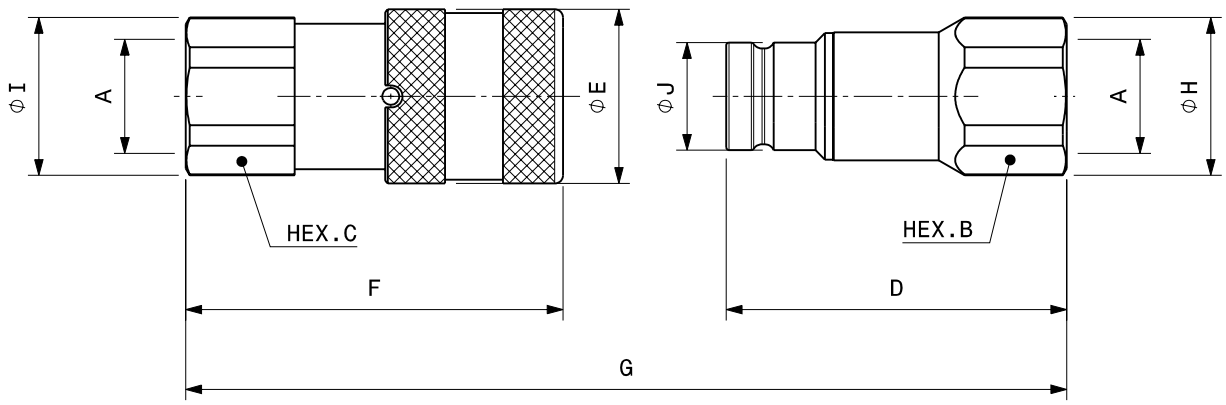
MALE



Port description: FEMALE THREAD BSPP (ISO1179-1)

BODY SIZE	Descriptive Code OLD	Descriptive Code NEW	Item Code	ISO DN	PORT (A)	Overall Length			Length			Hex			Diameter			Diameter			PORT (A)	
							mm	in		mm	in		mm	in		mm	in		mm	in	kg	lb
1/4"	F FIRG 14 BSP	F FIRG7 1/4 BSP	Female 800800000	6,3	1/4"	G	85,2	3,35	F	48,1	1,89	C	22,0	0,87	I	23,8	0,94	E	28,0	1,10	0,14	0,31
	M FIRG 14 BSP	M FIRG7 1/4 BSP	Male 800800001						D	47,9	1,89	B	22,0	0,87	H	23,8	0,94	J	16,1	0,63	0,09	0,19
3/8"	F FIRG 38 BSP	F FIRG9 3/8 BSP	Female 800800004	10	3/8"	G	108,7	4,28	F	64,2	2,53	C	27,0	1,06	I	29,0	1,14	E	32,0	1,26	0,24	0,52
	M FIRG 38 BSP	M FIRG9 3/8 BSP	Male 800800005						D	60,0	2,36	B	24,0	0,94	H	26,0	1,02	J	19,7	0,78	0,12	0,27
3/8"	F FIRG 12 BSP	F FIRG9 1/2 BSP	Female 800800002	10	1/2"	G	116,2	4,57	F	69,2	2,72	C	27,0	1,06	I	29,0	1,14	E	32,0	1,26	0,24	0,52
	M FIRG 12 BSP	M FIRG9 1/2 BSP	Male 800800003						D	62,5	2,46	B	27,0	1,06	H	29,0	1,14	J	19,7	0,78	0,13	0,28
1/2"	F FIRG 12A BSP	F FIRG13 1/2 BSP	Female 800800006	12,5	1/2"	G	124,5	4,90	F	73,8	2,91	C	32,0	1,26	I	33,8	1,33	E	38,0	1,50	0,38	0,83
	M FIRG 12A BSP	M FIRG13 1/2 BSP	Male 800800007						D	68,0	2,68	B	32,0	1,26	H	33,8	1,33	J	24,5	0,96	0,23	0,51
1/2"	F FIRG 34 BSP	F FIRG13 3/4 BSP	Female 800800008	12,5	3/4"	G	134,0	5,28	F	80,8	3,18	C	36,0	1,42	I	38,5	1,52	E	38,0	1,50	0,41	0,91
	M FIRG 34 BSP	M FIRG13 3/4 BSP	Male 800800009						D	70,5	2,78	B	36,0	1,42	H	38,5	1,52	J	24,5	0,96	0,23	0,50
5/8"	F FIRG 34B BSP	F FIRG15 3/4 BSP	Female 800800010	16	3/4"	G	131,4	5,17	F	78,5	3,09	C	36,0	1,42	I	38,5	1,52	E	42,0	1,65	0,48	1,06
	M FIRG 34B BSP	M FIRG15 3/4 BSP	Male 800800011						D	70,5	2,78	B	36,0	1,42	H	38,5	1,52	J	27,0	1,06	0,27	0,59
3/4"	F FIRG 34A BSP	F FIRG17 3/4 BSP	Female 800800020	19	3/4"	G	149,0	5,87	F	88,7	3,49	C	41,0	1,61	I	44,8	1,76	E	48,0	1,89	0,75	1,65
	M FIRG 34A BSP	M FIRG17 3/4 BSP	Male 800800021						D	82,3	3,24	B	41,0	1,61	H	44,8	1,76	J	30,0	1,18	0,45	0,98
3/4"	F FIRG 100 BSP	F FIRG17 1 BSP	Female 800800012	19	1"	G	153,5	6,04	F	93,2	3,67	C	45,0	1,77	I	47,8	1,88	E	48,0	1,89	0,77	1,69
	M FIRG 100 BSP	M FIRG17 1 BSP	Male 800800013						D	82,3	3,24	B	45,0	1,77	H	47,8	1,88	J	30,0	1,18	0,39	0,87
1"	F FIRG 114 BSP	F FIRG21 1-1/4 BSP	Female 800800014	25	1-1/4"	G	172,8	6,80	F	106,0	4,17	C	55,0	2,17	I	59,8	2,35	E	55,0	2,17	1,22	2,68
	M FIRG 114 BSP	M FIRG21 1-1/4 BSP	Male 800800015						D	89,8	3,54	B	55,0	2,17	H	59,8	2,35	J	36,0	1,42	0,64	1,41
1-1/2"	F FIRG 112 BSP	F FIRG30 1-1/2 BSP	Female 800800016	-	1-1/2"	G	214,9	8,46	F	132,4	5,21	C	65,0	2,56	I	72,0	2,83	E	80,0	3,15	2,82	6,22
	M FIRG 112 BSP	M FIRG30 1-1/2 BSP	Male 800800017						D	111,1	4,37	B	65,0	2,56	H	69,8	2,75	J	57,0	2,24	1,67	3,67
2"	F FIRG 200 BSP	F FIRG45 2 BSP	Female 800800018	-	2"	G	241,5	9,51	F	156,6	6,17	C	80,0	3,15	I	88,5	3,48	E	100,0	3,94	5,10	11,24
	M FIRG 200 BSP	M FIRG45 2 BSP	Male 800800019						D	123,8	4,87	B	75,0	2,95	H	83,5	3,29	J	73,0	2,87	2,26	4,98

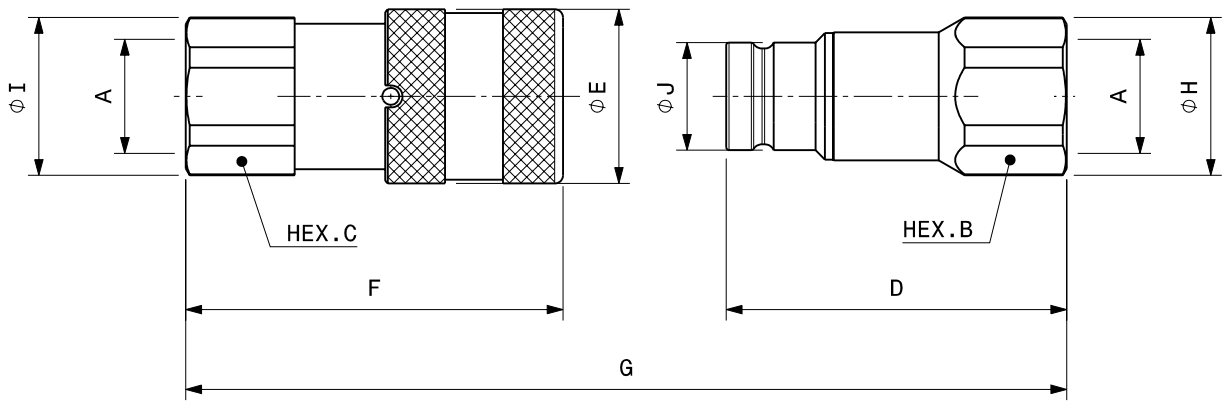
FEMALE **MALE**



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

BODY SIZE	Descriptive Code OLD	Descriptive Code NEW	Item Code	ISO DN	PORT (A)	Overall Length mm	Overall Length in	Length mm	Length in	Hex mm	Hex in	Diameter mm	Diameter in	Diameter mm	Diameter in	PORT (A) kg	PORT (A) lb
1/4"	F FIRG 14 NPT	F FIRG7 1/4 NPT	Female 800801000	6,3	1/4"	G 85,2	3,35	F 48,1	1,89	C 22,0	0,87	I 23,8	0,94	E 28,0	1,10	0,14	0,31
	M FIRG 14 NPT	M FIRG7 1/4 NPT	Male 800801001					D 47,9	1,89	B 22,0	0,87	H 23,8	0,94	J 16,1	0,63	0,09	0,19
3/8"	F FIRG 38 NPT	F FIRG9 3/8 NPT	Female 800801004	10	3/8"	G 108,7	4,28	F 64,2	2,53	C 27,0	1,06	I 29,0	1,14	E 32,0	1,26	0,24	0,52
	M FIRG 38 NPT	M FIRG9 3/8 NPT	Male 800801005					D 60,0	2,36	B 24,0	0,94	H 26,0	1,02	J 19,7	0,78	0,12	0,27
3/8"	F FIRG 12 NPT	F FIRG9 1/2 NPT	Female 800801002	10	1/2"	G 116,2	4,57	F 69,2	2,72	C 27,0	1,06	I 29,0	1,14	E 32,0	1,26	0,24	0,53
	M FIRG 12 NPT	M FIRG9 1/2 NPT	Male 800801003					D 62,5	2,46	B 27,0	1,06	H 29,0	1,14	J 19,7	0,78	0,13	0,29
1/2"	F FIRG 12A NPT	F FIRG13 1/2 NPT	Female 800801006	12,5	1/2"	G 124,5	4,90	F 73,8	2,91	C 32,0	1,26	I 33,8	1,33	E 38,0	1,50	0,38	0,83
	M FIRG 12A NPT	M FIRG13 1/2 NPT	Male 800801007					D 68,0	2,68	B 32,0	1,26	H 33,8	1,33	J 24,5	0,96	0,24	0,52
1/2"	F FIRG 34 NPT	F FIRG13 3/4 NPT	Female 800801008	12,5	3/4"	G 134,0	5,28	F 80,8	3,18	C 36,0	1,42	I 38,5	1,52	E 38,0	1,50	0,42	0,93
	M FIRG 34 NPT	M FIRG13 3/4 NPT	Male 800801009					D 70,5	2,78	B 36,0	1,42	H 38,5	1,52	J 24,5	0,96	0,23	0,52
5/8"	F FIRG 34B NPT	F FIRG15 3/4 NPT	Female 800801010	16	3/4"	G 131,4	5,17	F 78,5	3,09	C 36,0	1,42	I 38,5	1,52	E 42,0	1,65	0,49	1,08
	M FIRG 34B NPT	M FIRG15 3/4 NPT	Male 800801011					D 70,5	2,78	B 36,0	1,42	H 38,5	1,52	J 27,0	1,06	0,27	0,60
3/4"	F FIRG 34A NPT	F FIRG17 3/4 NPT	Female 800801020	19	3/4"	G 149,0	5,87	F 88,7	3,49	C 41,0	1,61	I 44,8	1,76	E 48,0	1,89	0,76	1,66
	M FIRG 34A NPT	M FIRG17 3/4 NPT	Male 800801021					D 82,3	3,24	B 41,0	1,61	H 44,8	1,76	J 30,0	1,18	0,45	0,99
3/4"	F FIRG 100 NPT	F FIRG17 1 NPT	Female 800801012	19	1"	G 153,5	6,04	F 93,2	3,67	C 45,0	1,77	I 47,8	1,88	E 48,0	1,89	0,78	1,72
	M FIRG 100 NPT	M FIRG17 1 NPT	Male 800801013					D 82,3	3,24	B 45,0	1,77	H 47,8	1,88	J 30,0	1,18	0,41	0,89
1"	F FIRG 114 NPT	F FIRG21 1-1/4 NPT	Female 800801014	25	1 1/4"	G 172,8	6,80	F 106,0	4,17	C 55,0	2,17	I 59,8	2,35	E 55,0	2,17	1,22	2,68
	M FIRG 114 NPT	M FIRG21 1-1/4 NPT	Male 800801015					D 89,8	3,54	B 55,0	2,17	H 59,8	2,35	J 36,0	1,42	0,66	1,46
1-1/2"	F FIRG 112 NPT	F FIRG30 1-1/2 NPT	Female 800801016	-	1 1/2"	G 214,9	8,46	F 132,4	5,21	C 65,0	2,56	I 72,0	2,83	E 80,0	3,15	2,85	6,28
	M FIRG 112 NPT	M FIRG30 1-1/2 NPT	Male 800801017					D 111,1	4,37	B 65,0	2,56	H 69,8	2,75	J 57,0	2,24	1,67	3,68
2"	F FIRG 200 NPT	F FIRG45 2 NPT	Female 800801018	-	2"	G 241,5	9,51	F 156,6	6,17	C 80,0	3,15	I 88,5	3,48	E 100,0	3,94	5,10	11,24
	M FIRG 200 NPT	M FIRG45 2 NPT	Male 800801019					D 123,8	4,87	B 75,0	2,95	H 83,5	3,29	J 73,0	2,87	2,26	4,98

FEMALE **MALE**



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

BODY SIZE	Descriptive Code OLD	Descriptive Code NEW	Item Code	ISO DN	PORT (A)	Overall Length mm	Overall Length in	Length mm	Length in	Hex mm	Hex in	Diameter mm	Diameter in	Diameter mm	Diameter in	PORT (A) kg	PORT (A) lb
1/4"	F FIRG 14 3/8 SAE	F FIRG7 3/8 SAE	Female 800804000	6,3	9/16-18UNF	G 93,2	3,67	F 53,1	2,09	C 22,0	0,87	I 23,8	0,94	E 28,0	1,10	0,15	0,33
	M FIRG 14 3/8 SAE	M FIRG7 3/8 SAE	Male 800804001					D 50,9	2,00	B 22,0	0,87	H 23,8	0,94	J 16,1	0,63	0,09	0,20
3/8"	F FIRG 38 1/2 SAE	F FIRG9 1/2 SAE	Female 800804002	10	3/4-16UNF	G 116,2	4,57	F 69,2	2,72	C 27,0	1,06	I 29,0	1,14	E 32,0	1,26	0,24	0,54
	M FIRG 38 1/2 SAE	M FIRG9 1/2 SAE	Male 800804003					D 62,5	2,46	B 27,0	1,06	H 29,0	1,14	J 19,7	0,78	0,14	0,31
3/8"	F FIRG 12 5/8 SAE	F FIRG9 5/8 SAE	Female 800804004	10	7/8-14UNF	G 119,7	4,71	F 71,2	2,80	C 30,0	1,18	I 32,0	1,26	E 32,0	1,26	0,26	0,57
	M FIRG 12 5/8 SAE	M FIRG9 5/8 SAE	Male 800804005					D 64,0	2,52	B 30,0	1,18	H 32,0	1,26	J 19,7	0,78	0,15	0,32
1/2"	F FIRG 12A 5/8 SAE	F FIRG13 5/8 SAE	Female 800804006	12,5	7/8-14UNF	G 129,0	5,08	F 76,3	3,00	C 32,0	1,26	I 33,8	1,33	E 38,0	1,50	0,38	0,83
	M FIRG 12A 5/8 SAE	M FIRG13 5/8 SAE	Male 800804007					D 70,0	2,76	B 32,0	1,26	H 33,8	1,33	J 24,5	0,96	0,23	0,51
1/2"	F FIRG 34 SAE	F FIRG13 3/4 SAE	Female 800804008	12,5	1-1/16-12UN	G 138,0	5,43	F 83,3	3,28	C 36,0	1,42	I 38,5	1,52	E 38,0	1,50	0,42	0,93
	M FIRG 34 SAE	M FIRG13 3/4 SAE	Male 800804009					D 72,0	2,83	B 36,0	1,42	H 38,5	1,52	J 24,5	0,96	0,23	0,51
5/8"	F FIRG 34B SAE	F FIRG15 3/4 SAE	Female 800804010	16	1-1/16-12UN	G 137,9	5,43	F 83,5	3,29	C 36,0	1,42	I 38,5	1,52	E 42,0	1,65	0,50	1,10
	M FIRG 34B SAE	M FIRG15 3/4 SAE	Male 800804011					D 72,0	2,83	B 36,0	1,42	H 38,5	1,52	J 27,0	1,06	0,27	0,59
3/4"	F FIRG 34A SAE	F FIRG17 3/4 SAE	Female 800804020	19	1-1/16-12UN	G 149,0	5,87	F 88,7	3,49	C 41,0	1,61	I 44,8	1,76	E 48,0	1,89	0,75	1,64
	M FIRG 34A SAE	M FIRG17 3/4 SAE	Male 800804021					D 82,3	3,24	B 41,0	1,61	H 44,8	1,76	J 30,0	1,18	0,44	0,97
3/4"	F FIRG 100 SAE	F FIRG17 1 SAE	Female 800804012	19	1-5/16-12UN	G 153,5	6,04	F 93,2	3,67	C 45,0	1,77	I 47,8	1,88	E 48,0	1,89	0,77	1,69
	M FIRG 100 SAE	M FIRG17 1 SAE	Male 800804013					D 82,3	3,24	B 45,0	1,77	H 47,8	1,88	J 30,0	1,18	0,39	0,87
1"	F FIRG 114 SAE	F FIRG21 1-1/4 SAE	Female 800804014	25	1-5/8-12UN	G 172,8	6,80	F 106,0	4,17	C 55,0	2,17	I 59,8	2,35	E 55,0	2,17	1,22	2,68
	M FIRG 114 SAE	M FIRG21 1-1/4 SAE	Male 800804015					D 89,8	3,54	B 55,0	2,17	H 59,8	2,35	J 36,0	1,42	0,64	1,41
1-1/2"	F FIRG 112 SAE	F FIRG30 1-1/2 SAE	Female 800804016	-	1-7/8-12UN	G 214,9	8,46	F 132,4	5,21	C 65,0	2,56	I 72,0	2,83	E 80,0	3,15	2,82	6,22
	M FIRG 112 SAE	M FIRG30 1-1/2 SAE	Male 800804017					D 111,1	4,37	B 65,0	2,56	H 69,8	2,75	J 57,0	2,24	1,66	3,65
2"	F FIRG 200 SAE	F FIRG45 2 SAE	Female 800804018	-	2-1/2-12UN	G 241,5	9,51	F 156,6	6,17	C 80,0	3,15	I 88,5	3,48	E 100,0	3,94	5,10	11,24
	M FIRG 200 SAE	M FIRG45 2 SAE	Male 800804019					D 123,8	4,87	B 75,0	2,95	H 83,5	3,29	J 73,0	2,87	2,26	4,98

Panel mounting

FIRG Series is available upon request also as panel mounting version:

BC: Snap Ring Solution
Grooves on the male body and on the female sleeve.

BT: Lock Ring Solution
Thread on the male body and female body.

Using the BC and BT versions mounted on the panel, you obtain the breakaway function, avoiding damages of the hydraulic connections in case of strong axial force during unintended disconnection.

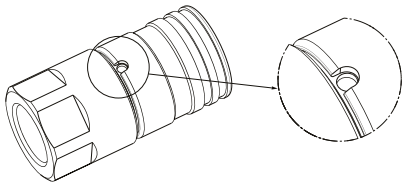


BC **BT**

SS version

For specific cases, FIRG Series is available upon request without the safety lock ball.

For additional information, please contact Stucchi Technical Support.

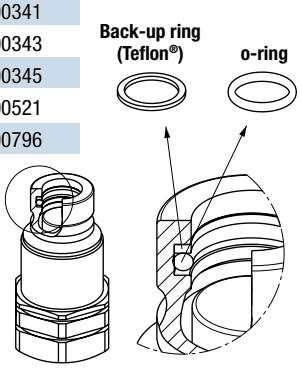




SPARE KIT SEAL FOR MALE

Repair kit / OR+BK			
Body Size	Description		Part Number
	OLD	NEW	
1/4”	M FIRG14	M FIRG7	815700519
3/8”	M FIRG38-12	M FIRG9	815700337
1/2”	M FIRG12A-34	M FIRG13	815700339
5/8”	M FIRG34B	M FIRG15	815700341
3/4”	M FIRG100-34A	M FIRG17	815700343
1”	M FIRG114	8M FIRG21	815700345
1-1/2”	M FIRG112	M FIRG30	815700521
2”	M FIRG200	M FIRG45	815700796

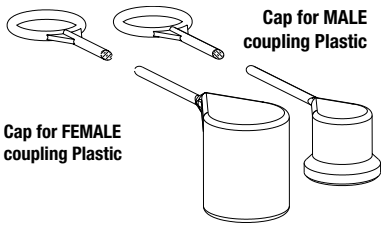
O-Ring in Nitrile
BackUp in Teflon®



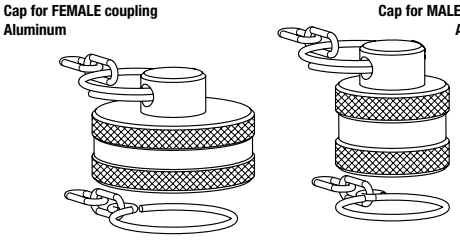
PROTECTIVE CAPS FOR FIRG SERIES

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.
For the FIRG series are available three kind of materials:

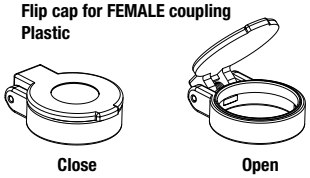
- plastic caps with lanyard (standard color: red, other colors available upon request)
- aluminum caps with lanyard (standard colors: natural aluminum, other colors available upon request)
- plastic caps, clip system (standard color: red, other colors available upon request)



Protective Cap						
Body Size	Port Size	Description		Part number		Material/Color
		OLD	NEW	Cap for Female	Cap for Male	
1/4”	1/4”	FIRG14	FIRG7	815100000	815100023	Plastic/Red
3/8”	3/8”	FIRG38	FIRG9	815100002	815100025	Plastic/Red
3/8”	1/2”	FIRG12	FIRG9	815100002	815100027	Plastic/Red
1/2”	1/2”	FIRG12A	FIRG13	815100004	815100029	Plastic/Red
1/2”	3/4”	FIRG34	FIRG13	815100006	815100031	Plastic/Red
5/8”	3/4”	FIRG34B	FIRG15	815100008	815100011	Plastic/Red
3/4”	3/4”	FIRG34A	FIRG17	815100010	815100013	Plastic/Red
3/4”	1"	FIRG100	FIRG17	815100010	815100013	Plastic/Red
1”	1-1/4"	FIRG114	FIRG114	815100012	815100015	Plastic/Red



Protective Cap					
Body Size	Description		Part Number		Material/Color
	OLD	NEW	Cap for Female	Cap for Male	
1/4”	FIRG14	FIRG7	816005002	816005003	Aluminum/Natural
3/8”	FIRG38-12	FIRG9	816005004	816005005	Aluminum/Natural
1/2”	FIRG12A-34	FIRG13	816005006	816005007	Aluminum/Natural
3/4”	FIRG100-34A	FIRG17	816005010	816005011	Aluminum/Natural
1”	FIRG114	FIRG21	816005012	816005013	Aluminum/Natural
1-1/2”	FIRG112	FIRG30	815105014	815105017	Aluminum/Natural
2"	FIRG200	FIRG45	815105016	815105019	Aluminum/Natural



Protective Cap				
Body Size	Description		Part Number	Material/Color
	OLD	NEW	Cap for Female	
3/8”	FIRG38-12	FIRG9	816005002	Aluminum/Natural
1/2”	FIRG12A-34	FIRG13	816005004	Aluminum/Natural
5/8”	FIRG34B	FIRG15	816005006	Aluminum/Natural
3/4”	FIRG100-34A	FIRG17	816005010	Aluminum/Natural

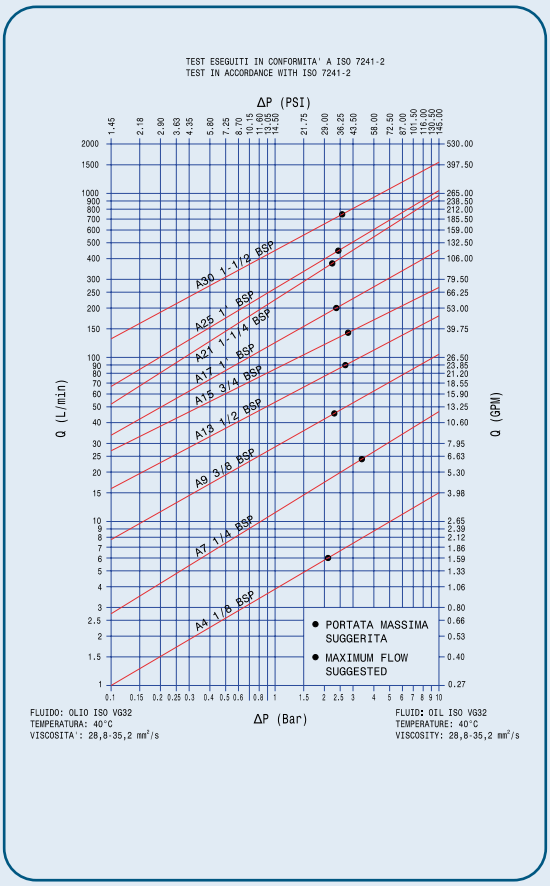
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ASERIES

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

Stucchi®





TECHNICAL FEATURES AND OPTIONS

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

Sealing description
Nitrile NBR

Connection system
Push

Available sizes
from 1/8"
to 1-1/2"

Material /treatment
Carbon steel/
Cr3 (Zn-Ni version available)

Available threads
BSP - NPT - SAE
ORFS - METRIC - JIC

Operating pressure
Up to 420 bar

Locking mechanism
Locking ball + Safety Lock

Flow rate
Up to 750 l/min

Temperature (°C)
-20°C / +100°C

Valving style
Flat face

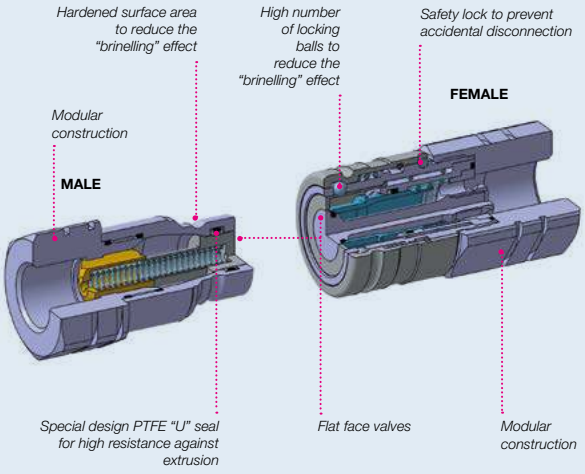
Connection under pressure
Connection: not allowed
Disconnection: not allowed

BENEFITS

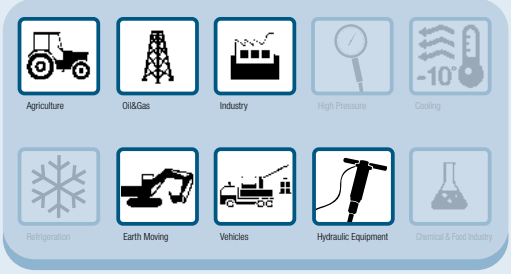
- Flat face is easy to clean, reducing the inclusion of contamination inside the hydraulic circuit.
- Minimal fluid spillage during disconnection, reducing fluid spillage to the environment.
- Minimal air inclusion during connection.
- Internal valve design creates minimal pressure drop, maintaining circuit efficiency in the system
- The modular design allows flexibility with a wide range of configurations.
- 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/Size	Max. flow suggested		Connect force		Disconnect force		Spillage*
in	mm (ISO)		l/min	gpm	N	lbf	N	lbf	ml
1/8	-	A4	6	1,59	120	27,00	25	5,63	-
1/4	6,3	A7	24	6,36	150	33,75	45	10,13	0,01
3/8	10,0	A9	46	12,19	170	38,25	40	9,00	0,01
1/2	12,5	A13	90	23,85	190	42,75	50	11,25	0,02
5/8	16,0	A15	148	39,22	190	42,75	55	12,38	0,02
3/4	19,0	A17	200	53,00	220	49,50	70	15,75	0,03
1	25,0	A21	378	100,17	250	56,25	75	16,88	0,03
1-1/4	-	A25	450	119,25	350	78,75	90	20,25	0,17
1-1/2	-	A30	750	198,75	390	87,75	70	15,75	0,05

Size	Series/Size	Max. operating pressure						Burst pressure					
		Coupled		Male		Female		Coupled		Male		Female	
in		MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
1/8	A4	42	6090	42	6090	42	6090	126	18270	126	18270	126	18270
1/4	A7	42	6090	42	6090	42	6090	126	18270	126	18270	126	18270
3/8	A9	35	5075	35	5075	35	5075	100	14500	100	14500	100	14500
1/2	A13	33	4785	33	4785	33	4785	100	14500	100	14500	100	14500
5/8	A15	33	4785	33	4785	33	4785	100	14500	100	14500	100	14500
3/4	A17	33	4785	33	4785	33	4785	100	14500	100	14500	100	14500
1	A21	30	4350	30	4350	30	4350	80	11600	80	11600	80	11600
1-1/4	A25	30	4350	30	4350	30	4350	80	11600	80	11600	80	11600
1-1/2	A30	27	3915	27	3915	27	3915	80	11600	80	11600	70	10150

* 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.

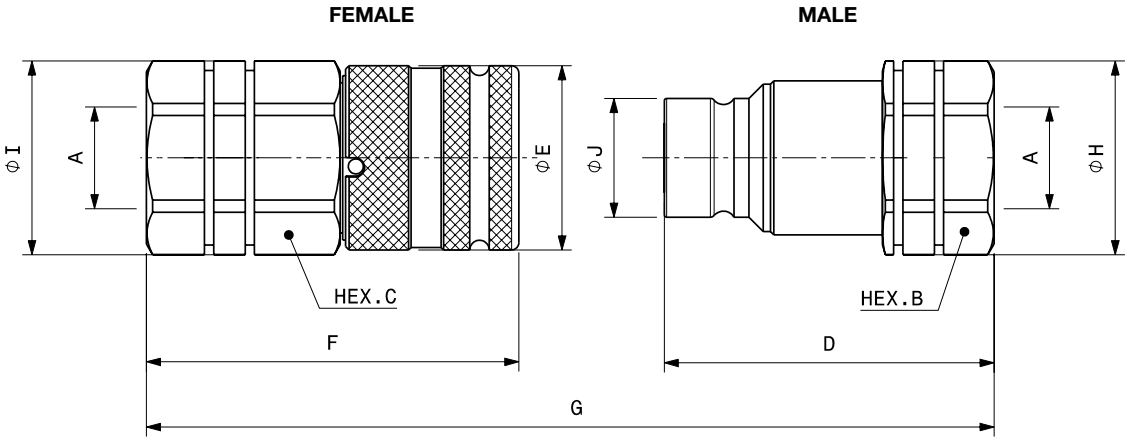
Temperature range:
Standard seals NBR (Nitrile): from -20 °C to +100 °C (from -4 °F to +212 °F).
Upon request seals in FKM (VITON®): from -15°C to +180°C (from +5 °F to +356 °F).
Please read carefully Instructions and warnings for proper selection of the products.

Tests:
The couplings have been tested at max. operating pressure for 100.000 impulses according to ISO norm.

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 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)

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
1/8"	F A4 1/8 BSP	Female	801300002	-	1/8"	G	68,4	2,69	F	40,0	1,57	C	19,0	0,75	I	20,5	0,81	E	20,0	0,79	0,07	0,16
	M A4 1/8 BSP	Male	801300003						D	36,3	1,43	B	17,0	0,67	H	18,5	0,73	J	11,6	0,46	0,04	0,08
1/4"	F A7 1/4 BSP	Female	801300004	6,3	1/4"	G	90,2	3,55	F	53,1	2,09	C	27,0	1,06	I	29,0	1,14	E	28,0	1,10	0,19	0,41
	M A7 1/4 BSP	Male	801300031						D	47,9	1,89	B	22,0	0,87	H	23,8	0,94	J	16,1	0,63	0,09	0,19
3/8"	F A9 3/8 BSP	Female	801300006	10	3/8"	G	108,8	4,28	F	64,8	2,55	C	30,0	1,18	I	32,0	1,26	E	32,0	1,26	0,27	0,60
	M A9 3/8 BSP	Male	801300005						D	60,0	2,36	B	27,0	1,06	H	29,0	1,14	J	19,7	0,78	0,15	0,32
3/8"	F A9 1/2 BSP	Female	801300008	10	1/2"	G	116,3	4,58	F	69,8	2,75	C	30,0	1,18	I	32,0	1,26	E	32,0	1,26	0,28	0,61
	M A9 1/2 BSP	Male	801300007						D	62,5	2,46	B	27,0	1,06	H	29,0	1,14	J	19,7	0,78	0,14	0,30
1/2"	F A13 1/2 BSP	Female	801300014	12,5	1/2"	G	127,5	5,02	F	76,8	3,02	C	36,0	1,42	I	40,0	1,57	E	38,0	1,50	0,45	1,00
	M A13 1/2 BSP	Male	801300013						D	68,0	2,68	B	36,0	1,42	H	40,0	1,57	J	24,5	0,96	0,24	0,52
1/2"	F A13 3/4 BSP	Female	801300016	12,5	3/4"	G	137,0	5,39	F	83,8	3,30	C	36,0	1,42	I	40,0	1,57	E	38,0	1,50	0,46	1,02
	M A13 3/4 BSP	Male	801300015						D	70,5	2,78	B	36,0	1,42	H	40,0	1,57	J	24,5	0,96	0,27	0,60
5/8"	F A15 3/4 BSP	Female	801300022	16	3/4"	G	139,4	5,49	F	84,0	3,31	C	41,0	1,61	I	44,8	1,76	E	42,0	1,65	0,63	1,38
	M A15 3/4 BSP	Male	801300021						D	73,0	2,87	B	36,0	1,42	H	38,5	1,52	J	27,0	1,06	0,30	0,66
5/8"	F A15 1 BSP	Female	801300034	16	1"	G	145,4	5,72	F	87,0	3,43	C	41,0	1,61	I	44,8	1,76	E	42,0	1,65	0,60	1,32
	M A15 1 BSP	Male	801300035						D	76,0	2,99	B	41,0	1,61	H	44,8	1,76	J	27,0	1,06	0,33	0,73
3/4"	F A17 3/4 BSP	Female	801300040	19	3/4"	G	158,5	6,24	F	96,8	3,81	C	46,0	1,81	I	49,8	1,96	E	48,0	1,89	0,97	2,14
	M A17 3/4 BSP	Male	801300041						D	83,7	3,30	B	46,0	1,81	H	49,8	1,96	J	30,0	1,18	0,53	1,16
3/4"	F A17 1 BSP	Female	801300000	19	1"	G	160,5	6,32	F	98,8	3,89	C	46,0	1,81	I	49,8	1,96	E	48,0	1,89	0,94	2,07
	M A17 1 BSP	Male	801300001						D	83,7	3,30	B	46,0	1,81	H	49,8	1,96	J	30,0	1,18	0,48	1,05
1"	F A21 3/4 BSP	Female	801300048	25	3/4"	G	178,0	7,01	F	102,8	4,05	C	55,0	2,17	I	59,8	2,35	E	55,0	2,17	1,44	3,16
	M A21 3/4 BSP	Male	801300049						D	98,2	3,87	B	55,0	2,17	H	59,8	2,35	J	36,0	1,42	0,97	2,14
1"	F A21 1 BSP	Female	801300050	25	1"	G	178,6	7,03	F	104,8	4,13	C	55,0	2,17	I	59,8	2,35	E	55,0	2,17	1,42	3,12
	M A21 1 BSP	Male	801300051						D	96,8	3,81	B	55,0	2,17	H	59,8	2,35	J	36,0	1,42	0,89	1,96
1"	F A21 1-1/4 BSP	Female	801300024	25	1 1/4"	G	172,8	6,80	F	105,8	4,17	C	55,0	2,17	I	59,8	2,35	E	55,0	2,17	1,31	2,89
	M A21 1-1/4 BSP	Male	801300023						D	90,0	3,54	B	55,0	2,17	H	59,8	2,35	J	36,0	1,42	0,71	1,56
1"	F A21 1-1/2 BSP	Female	801300028	25	1 1/2"	G	182,8	7,20	F	110,8	4,36	C	60,0	2,36	I	64,8	2,55	E	55,0	2,17	1,40	3,08
	M A21 1-1/2 BSP	Male	801300027						D	95,0	3,74	B	60,0	2,36	H	64,8	2,55	J	36,0	1,42	0,80	1,76
1-1/4"	F A25 1 BSP	Female	801300046	-	1"	G	196,8	7,75	F	120,1	4,73	C	55,0	2,17	I	65,0	2,56	E	65,0	2,56	2,09	4,61
	M A25 1 BSP	Male	801300047						D	100,0	3,94	B	55,0	2,17	H	59,8	2,35	J	44,0	1,73	1,13	2,49
1-1/4"	F A25 1-1/4 BSP	Female	801300052	-	1 1/4"	G	206,8	8,14	F	125,1	4,93	C	55,0	2,17	I	65,0	2,56	E	65,0	2,56	2,07	4,56
	M A25 1-1/4 BSP	Male	801300053						D	105,0	4,13	B	55,0	2,17	H	59,8	2,35	J	44,0	1,73	1,09	2,39
1-1/2"	F A30 1-1/4 BSP	Female	801300036 *	-	1-1/4"	G	214,9	8,46	F	132,4	5,21	C	65,0	2,56	I	69,8	2,75	E	80,0	3,15	3,25	7,16
	M A30 1-1/4 BSP	Male	801300037 *						D	111,1	4,37	B	65,0	2,56	H	82,0	3,23	J	57,0	2,24	1,75	3,85
1-1/2"	F A30 1-1/2 BSP	Female	801300026	-	1 1/2"	G	214,9	8,46	F	132,4	5,21	C	65,0	2,56	I	82,0	3,23	E	80,0	3,15	3,14	6,92
	M A30 1-1/2 BSP	Male	801300025						D	111,1	4,37	B	65,0	2,56	H	69,8	2,75	J	57,0	2,24	1,67	3,67
1-1/2"	F A30 2 BSP	Female	801300038	-	2"	G	228,4	8,99	F	138,0	5,43	C	75,0	2,95	I	82,0	3,23	E	80,0	3,15	3,33	7,33
	M A30 2 BSP	Male	801300039						D	119,0	4,69	B	75,0	2,95	H	82,0	3,23	J	57,0	2,24	1,93	4,25

* Available upon request.