

FEATURES

- **Connection system:** pushing the male coupling
- **Disconnection system:** pulling back the sleeve
- **Shut-off system:** flat valve (coupling with triple valve)
- **Connectability:** male part under pressure, female part free to drain
- **Disconnection under pressure:** not allowed
- **Interchangeability:** according to ISO 16028 and HTMA standards
- Male couplings with triple valve patented
- Connection up to maximum working pressure is achievable with minimal effort with standard female couplings 2FFI



Patent
Application
Pending

Technical data

(▲)

Size	ISO size	DN Nominal diameter	Rated flow		Force to connect 0 MPa		Force to connect 25 MPa (male)		Max. work. pressure		Minimum burst pressure				Fluid spillage
			mm	inc.	l/min	GPM	N	lb	N	lb	MPa	PSI	Connected	Male	cc max.
3/8"	06	10	9	0,35	50	13	270	59,5	400	88	25	3625	100	14500	0,008
1/2"	08	12,5	11	0,43	65	17,2	285	62,8	550	121	25	3625	100	14500	0,01
5/8"	10	16	14	0,55	76	20,1	280	62	500	110	25	3625	120	17400	0,02
3/4"	12	19	16	0,63	150	39,7	280	61,7	450	99	25	3625	120	17400	0,02
1"	16	25	18	0,71	170	45	315	69,4	700	154	25	3625	110	15950	0,03

*Safety factor = 1:4 - for static pressure safety factor 1:2

(▲) With 2FFI female couplings equivalent sizes (see at page 12)

Pressure drop graph: test bench to ISO 7241-2 specifications with ISO VG 32 oil at 40°C (104°F) temperature.

Materials:

- High grade carbon steel, induction hardened.
- Valves in steel.
- Surface treatment: zinc plating and Cr III passivation.
- Springs in C98 steel.

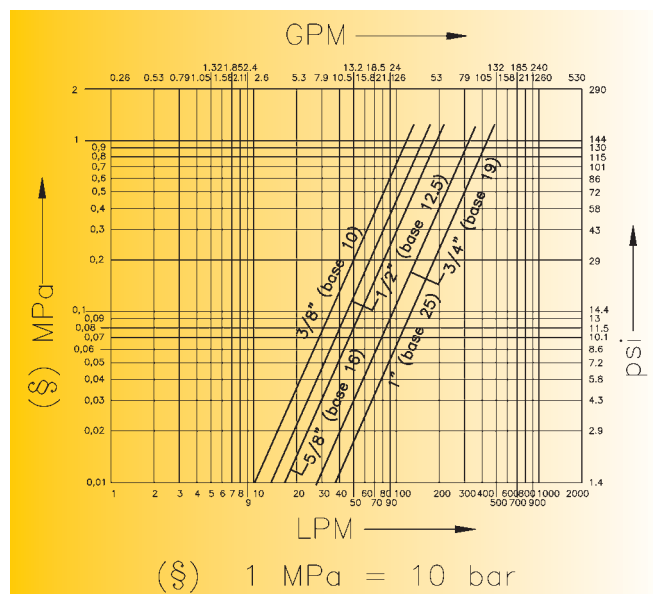
Seals:

Standard in oilproof NBR (Nitrile Rubber) and Polyurethane.

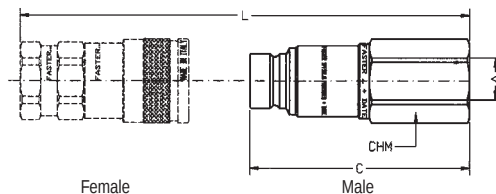
Working temperatures:

from -25°C (-13°F) to +100°C (+212°F).

For different temperature, the quick-release coupling will be supplied with the appropriate seals.



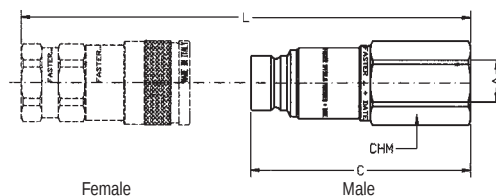
Series **3F**



LEHENGOK, S. A.

	❖	Female	Male	Thread Ø A	Standards	B mm	C inc.	Ø D mm	L mm	CHF mm	CHM mm	Ø T mm	P mm
	10	see 2FFN38 series	3FFI38 GAS M 3FFI38 NPT M 3FFI38-12GAS M 3FFI38-12NPT M	3/8" BSP 3/8" NPTF 1/2" BSP 1/2" NPTF	DIN 3852-2-X ANSI B1.20.3 DIN 3852-2-X ANSI B1.20.3		99,7 99,7 100,7 100,7	3,93 3,93 3,96 3,96	156,7 156,7 159,3 159,3	6,17 6,17 6,27 6,27	27 27 27 27	1,06 1,06 1,06 1,06	
	12,5	see 2FFI series and 2FSI series	3FFI12 GAS M *3FFI12 NPT M 3FFI12-34 GAS M *3FFI12-34 N M	1/2" BSP 1/2" NPTF 3/4" BSP 3/4" NPTF	DIN 3852-2-X ANSI B1.20.3 DIN 3852-2-X ANSI B1.20.3		117,2 117,2 122,2 122,2	4,61 4,61 4,81 4,81	182,1 182,1 191,1 191,1	7,17 7,17 7,52 7,52	34 34 34 34	1,34 1,34 1,34 1,34	
	16	see 2FFI series	*3FFI58 GAS M *3FFI58-34G M *3FFI58 NPT M *3FFI58-34N M	5/8" BSP 3/4" BSP 5/8" NPTF 3/4" NPTF	DIN 3852-2-X DIN 3852-2-X ANSI B1.20.3 ANSI B1.20.3		119,5 119,5 119,5 119,5	4,70 4,70 4,70 4,70	195,5 195,5 195,5 195,5	7,70 7,70 7,70 7,70	38 38 38 38	1,50 1,50 1,50 1,50	
	19	see 2FFI series and 2FSI series	3FFI34 GAS M 3FFI34 NPT M 3FFI34-1GAS M *3FFI34-1N M	3/4" BSP 3/4" NPTF 1" BSP 1" NPTF	DIN 3852-2-X ANSI B1.20.3 DIN 3852-2-X ANSI B1.20.3		132,6 132,6 132,6 132,6	5,22 5,22 5,22 5,22	210,9 210,9 210,9 210,9	8,30 8,30 8,30 8,30	42 42 42 42	1,65 1,65 1,65 1,65	
	25	see 2FFI series and 2FSI series	3FFI1 GAS M 3FFI1 NPT M *3FFI1-114G M *3FFI1-114N M	1" BSP 1" NPTF 1" 1/4 BSP 1" 1/4 NPTF	DIN 3852-2-X ANSI B1.20.3 DIN 3852-2-X ANSI B1.20.3		146,5 146,5 146,5 146,5	5,77 5,77 5,77 5,77	224 224 224 224	8,82 8,82 8,82 8,82	50 50 50 50	1,97 1,97 1,97 1,97	
	10	see 2FFN38 series	*3FFI38-38S M 3FFI38-12SAE M	9/16" UNF 3/4" UNF	SAE J 1926-1 SAE J 1926-1		100,7 100,7	3,96 3,96	159,3 159,3	6,27 6,27	27 27	1,06 1,06	
	12,5	see 2FFI series and 2FSI series	3FFI12-12S M 3FFI12-58SAE M 3FFI12-34SAE M	3/4" UNF 7/8" UNF 1" 1/16 UN	SAE J 1926-1 SAE J 1926-1 SAE J 1926-1		117,2 117,2 117,2	4,61 4,61 4,61	182,1 182,1 182,1	7,17 7,17 7,17	34 34 34	1,34 1,34 1,34	
	16	see 2FFI series	*3FFI58-58SAE M 3FFI58-34SAE M	7/8" UNF 1" 1/16 UN	SAE J 1926-1 SAE J 1926-1		119,5 119,5	4,70 4,70	195,5 195,5	7,70 7,70	38 38	1,50 1,50	
	19	see 2FFI series and 2FSI series	3FFI34-34SAE M *3FFI34-1S M	1" 1/16 UN 1" 5/16 UN	SAE J 1926-1 SAE J 1926-1		132,6 132,6	5,22 5,22	211,6 211,6	8,33 8,33	42 42	1,65 1,65	
	25	see 2FFI series and 2FSI series	3FFI1-1SAE M	1" 5/16 UN	SAE J 1926-1		146,5	5,77	224	8,82	50	1,97	
	10	see 2FFN38 series	*3FFI38-11/38S M *3FFI38-11/12S M	11/16" UN 13/16" UN	ISO 8434-3 ISO 8434-3		100,1 101,7	3,94 4,00	157,1 167,6	6,19 6,60	27 27	1,06 1,06	
	12,5	see 2FFI series and 2FSI series	*3FFI12-11/12S M *3FFI12-11/58S M *3FFI12-11/34S M	13/16" UN 1" UNS 1" 3/16 UN	ISO 8434-3 ISO 8434-3 ISO 8434-3		116,2 118,9 118,9	4,57 4,68 4,68	181,4 186,8 188,3	7,14 7,35 7,41	34 34 34	1,34 1,34 1,34	
	16	see 2FFI series	*3FFI58-11/58S M	1" UNS	ISO 8434-3		124,5	4,90	206,5	8,13	38	1,50	
	19	see 2FFI series and 2FSI series	*3FFI34-11/34S M *3FFI34-11/1S M	1" 3/16 UN 1" 7/16 UN	ISO 8434-3 ISO 8434-3		135 135	5,31 5,31	212 212	8,35 8,35	42 42	1,65 1,65	
	25	see 2FFI series and 2FSI series	*3FFI1-11/1S M	1" 7/16 UN	ISO 8434-3		147	5,79	238	9,37	50	1,97	

Series **3F**



	❖	Female	Male	Thread Ø A	Standards	B		C		Ø D		L		CHF		CHM		Ø T		P	
						mm	inc.	mm	inc.	mm	inc.	mm	inc.	mm	inc.	mm	inc.	mm	inc.	mm	inc.
	10	see 2FFN38 series	3FFI38-12/38S M *3FFI38-12/12S M	11/16" UN 13/16" UN	ISO 8434-3 ISO 8434-3			122 123	4,80 4,84			208,6 209,6	8,21 8,25			27 27	1,06 1,06			34 36,5	1,34 1,44
	12,5	see 2FFI series and 2FSI series	*3FFI12-12/12S M 3FFI12-12/58S M 3FFI12-12/34S M	13/16" UN 1" UNS 1" 3/16 UN	ISO 8434-3 ISO 8434-3 ISO 8434-3			141,9 141,9 141,9	5,59 5,59 5,59			232,8 232,8 233,8	9,17 9,17 9,20			34 34 34	1,34 1,34 1,34			36,5 40,5 41,5	1,44 1,59 1,63
	16	see 2FFI series	*3FFI58-12/58S M	1" UNS	ISO 8434-3			145,5	5,73			249,5	9,82			38	1,50			40,5	1,59
	19	see 2FFI series and 2FSI series	3FFI34-12/34S M 3FFI34-12/1S M	1" 3/16 UN 1" 7/16 UN	ISO 8434-3 ISO 8434-3			158,6 158,3	6,24 6,23			266,5 266,5	10,49 10,49			42 42	1,65 1,65			41,5 42	1,63 1,65
	25	see 2FFI series and 2FSI series	*3FFI1-12/1S M	1" 7/16 UN	ISO 8434-3			166	6,54			282	11,10			50	1,97			42	1,65
	10	see 2FFN38 series	*3FFI38-13/38S M 3FFI38-13/12S M	9/16" UNF 3/4" UNF	ISO 8434-2 ISO 8434-2			104 104	4,09 4,09			171,5 171,5	6,75 6,75			27 27	1,06 1,06				
	12,5	see 2FFI series and 2FSI series	*3FFI12-13/12S M *3FFI12-13/58S M *3FFI12-13/34S M	3/4" UNF 7/8" UNF 1" 1/16 UN	ISO 8434-2 ISO 8434-2 ISO 8434-2			123 123 123	4,84 4,84 4,84			192,5 192,5 192,5	7,58 7,58 7,58			34 34 34	1,34 1,34 1,34				
	16	see 2FFI series	*3FFI58-13/58S M	7/8" UNF	ISO 8434-2			126	4,96			208	8,19			38	1,50				
	19	see 2FFI series and 2FSI series	*3FFI34-13/34S M	1" 1/16 UN	ISO 8434-2			136	5,35			226	8,90			42	1,65				
	25	see 2FFI series and 2FSI series	*3FFI1-13/1S M	1" 5/16 UN	ISO 8434-2			148	5,83			243	9,57			50	1,97				
	10	see 2FFN38 series	*3FFI38-14/38S M *3FFI38-14/12S M	9/16" UNF 3/4" UNF	ISO 8434-2 ISO 8434-2			115 115	4,53 4,53			204,6 204,6	8,06 8,06			27 27	1,06 1,06			32,5 36,6	1,28 1,44
	12,5	see 2FFI series and 2FSI series	3FFI12-14/12S M 3FFI12-14/58S M 3FFI12-14/34S M	3/4" UNF 7/8" UNF 1" 1/16 UN	ISO 8434-2 ISO 8434-2 ISO 8434-2			143,4 143,4 147,9	5,65 5,65 5,82			235,8 235,8 244,7	9,28 9,28 9,63			34 34 34	1,34 1,34 1,34			36,6 40,1 44,4	1,44 1,58 1,75
	16	see 2FFI series	*3FFI58-14/58S M	7/8" UNF	ISO 8434-2			150	5,91			254	10,00			38	1,50			40,1	1,58
	19	see 2FFI series and 2FSI series	*3FFI34-14/34S M	1" 1/16 UN	ISO 8434-2			158,6	6,24			270	10,63			42	1,65			44,4	1,75
	25	see 2FFI series and 2FSI series	*3FFI1-14/1S M	1" 5/16 UN	ISO 8434-2			167	6,57			285	11,22			50	1,97			44,4	1,75

❖ ISO size GAS = BSP *On request

► **FEATURES**

- **Connection system:** pushing the male coupling
- **Disconnection system:** pulling back the sleeve
- **Shut-off system:** flat valve
- **Connectability:** female part under pressure male part free to drain
- **Disconnection under pressure:** not allowed
- **Interchangeability:** according to ISO 16028 and HTMA standard
- Quick-release couplings female part with split internal slider hydraulically balanced
- Connection up to maximum working pressure is achievable with minimal effort (standard male couplings FFI-2FFI)
- Sleeve with black zinc treatment



NEW

Patent
Application
Pending

► **Technical data**

(▲)

Size		ISO size	DN Nominal diameter		Rated flow		Force to connect 0 MPa		Force to connect 25 MPa (female)		Max. work. pressure		Minimum burst pressure				Fluid spillage
													Connected		Female		
			mm	inc.	l/min	GPM	N	lb	N	lb	MPa	PSI	MPa	PSI	MPa	PSI	
3/8"	06	10	9	0,35	60	15,9	130	28,6	170	37,4	25	3625	100	14500	100	14500	0,008
1/2"	08	12.5	11	0,43	85	22,5	200	44	240	52,8	25	3625	140	20300	100	14500	0,01
3/4"	12	19	16	0,63	145	38,4	290	63,9	330	72,6	25	3625	120	17400	100	14500	0,02

*Safety factor = 1:4 - for static pressure safety factor 1:2

(▲) With **FFI** male couplings equivalent sizes (see at page 16)

Pressure drop graph: test bench to ISO 7241-2 specifications with ISO VG 32 oil temperature at 40°C (104°F).

Materials:

- High grade carbon steel, induction hardened.
- Valves in steel.
- Surface treatment: zinc plating and Cr III passivation.
- Springs in AISI and C98 steel.
- High resistance balls 100 C6.

Seals:

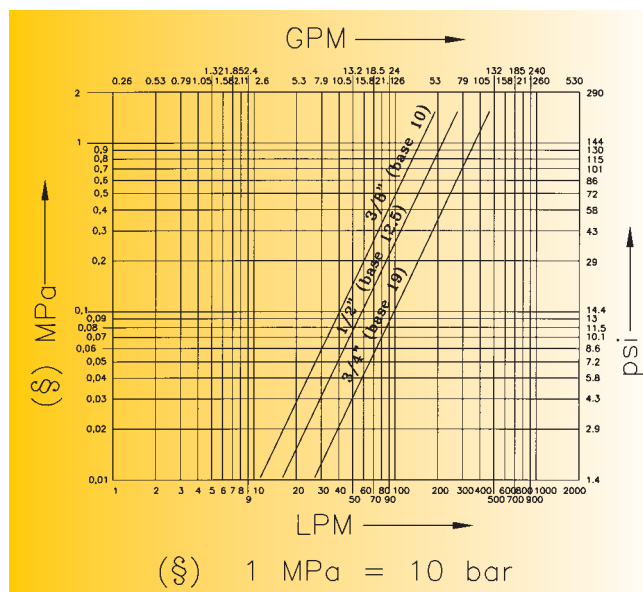
Standard in oilproof NBR (Nitrile Rubber) and Polyurethane.
On request: Viton, Neoprene, EPDM or other seals.

Antiextrusion rings:

In pure PTFE.

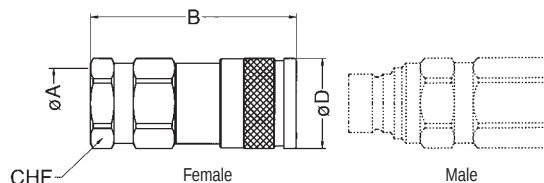
Working temperatures:

with standard seals from -25°C (-13°F) to +100°C (+212°F).
For different temperature, the quick-release coupling will be supplied with the appropriate seals.



The descriptions and illustrations in this catalogue are for information only and not binding.

Series **3FI**



	❖	Female	Male	Thread Ø A	Standards	B		C		Ø D		L		CHF		CHM		Ø T		P	
						mm	inc.	mm	inc.	mm	inc.	mm	inc.	mm	inc.	mm	inc.	mm	inc.	mm	inc.
	10	3FFI38 GAS F	see FFI-2FFI-3FFI series	3/8" BSP	DIN 3852-2-X	73	2,87			30	1,18			27	1,06						
		3FFI38-12 GAS F		1/2" BSP	DIN 3852-2-X	74,6	2,94			30	1,18			27	1,06						
		3FFI38 NPT F		3/8" NPTF	ANSI B1.20.3	73	2,87			30	1,18			27	1,06						
		3FFI38-12 NPT F		1/2" NPTF	ANSI B1.20.3	75,6	2,98			30	1,18			27	1,06						
	12,5	3FFI12 GAS F	see FFI-2FFI-3FFI series	1/2" BSP	DIN 3852-2-X	82,4	3,24			38	1,50			32	1,26						
		*3FFI12-34 GAS F		3/4" BSP	DIN 3852-2-X	86,4	3,40			38	1,50			32	1,26						
		*3FFI12 NPT F		1/2" NPTF	ANSI B1.20.3	82,4	3,24			38	1,50			32	1,26						
		*3FFI12-34 NPT F		3/4" NPTF	ANSI B1.20.3	86,4	3,40			38	1,50			32	1,26						
	19	*3FFI34 GAS F	see FFI-2FFI-3FFI series	3/4" BSP	DIN 3852-2-X	100,3	3,95			48	1,89			42	1,65						
		3FFI34-1 GAS F		1" BSP	DIN 3852-2-X	100,3	3,95			48	1,89			42	1,65						
		*3FFI34 NPT F		3/4" NPTF	ANSI B1.20.3	100,3	3,95			48	1,89			42	1,65						
		*3FFI34-1 NPT F		1" NPTF	ANSI B1.20.3	100,3	3,95			48	1,89			42	1,65						
	10	*3FFI38-12SAE F	see FFI-2FFI-3FFI series	3/4" UNF	SAE J 1926-1	74,6	2,94			30	1,18			27	1,06						
		3FFI38-58SAE F		7/8" UNF	SAE J 1926-1	74,6	2,94			30	1,18			27	1,06						
	12,5	*3FFI12-12SAE F	see FFI-2FFI-3FFI series	3/4" UNF	SAE J 1926-1	82,4	3,24			38	1,50			32	1,26						
		3FFI12-58SAE F		7/8" UNF	SAE J 1926-1	84,4	3,32			38	1,50			34	1,34						
		*3FFI12-34SAE F		1" 1/16 UN	SAE J 1926-1	86,9	3,42			38	1,50			34	1,34						
	19	3FFI34-34SAE F	see FFI-2FFI-3FFI series	1" 1/16 UN	SAE J 1926-1	100,3	3,95			48	1,89			42	1,65						
		3FFI34-1SAE F		1" 5/16 UN	SAE J 1926-1	101,5	4,00			48	1,89			42	1,65						

❖ ISO size GAS = BSP *On request