

Part number:

**HYDROMA**

HYDRAULICKÉ SYSTÉMY

**HIDROMA**  
SYSTEMS

UKŁADY HYDRAULICZNE

**HYDROMA**

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

Series **2FF<sub>1</sub>**



Patent Application Pending

Technical data

(▲)

Size	ISO size	DN Nominal diameter		Rated flow		Force to connect		Max. work. pressure		Minimum burst pressure						Fluid spillage
		♠		l/min	GPM	N	lb	MPa	PSI	Connected		Male		Female		
		mm	inc.							MPa	PSI	MPa	PSI	MPa	PSI	
1/4"	04	6.3	7 0,27	18	4,7	125	27,5	32	4640	140	20300	150	21750	130	18850	0,006
3/8"	06	10	see 2FFN38 series page 6						see 2FFN38 series page 6							
1/2"	08	12.5	11 0,43	72	19	260	57,2	25	3625	140	20300	140	20300	100	14500	0,01
5/8"	10	16	14 0,55	140	37	240	52,9	25	3625	120	17400	see FFI - 3FFI series	100	14500	0,02	
3/4"	12	19	16 0,63	150	39,7	240	52,9	25	3625	120	17400	see FFI - 3FFI series	100	14500	0,02	
1"	16	25	18 0,71	200	52,9	240	52,9	25	3625	110	15950	see FFI - 3FFI series	100	14500	0,03	
1 1/2"	24	-	see 2FSI series page 24													
2"	32	-	see 2FSI series page 24													
3"	48	-	see 2FSI series page 24													

\*Safety factor = 1.4 - for static pressure safety factor = 1:2

(▲) With 2FF1 male couplings equivalent size

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

**Materials:**

- Female in steel with carbonitrited wear parts.
- Male in 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:**

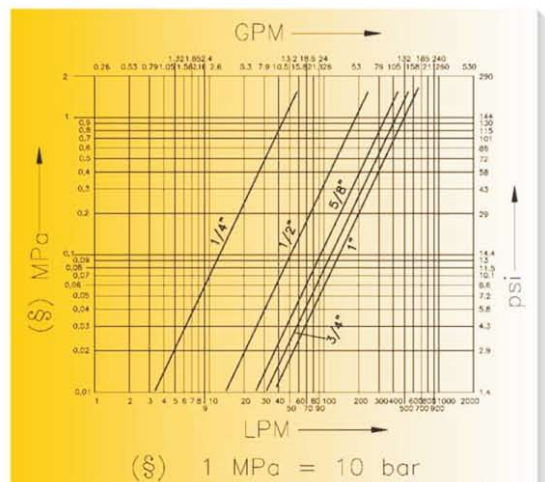
Standard in oilproof NBR (Nitrile Rubber) and Polyurethane. On request: Viton, Neoprene, EPDM or other seals.

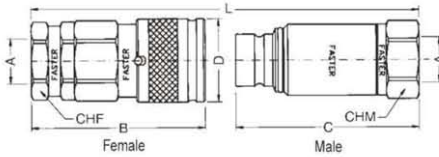
**Antiextrusion rings:**

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.





♀	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.	
6.3	2FF114 GAS F	2FF114 GAS M	1/4" BSP	DIN 3852-2-X	58,6	2,31	60,3	2,37	27	1,06	108,4	4,27	24	0,94	24	0,94					
	2FF114 NPT F	2FF114 NPT M	1/4" NPTF	ANSI B1.20.3	58,6	2,31	60,3	2,37	27	1,06	108,4	4,27	24	0,94	24	0,94					
	*2FF114 JPT F	*2FF114 JPT M	1/4" JPT	JIS B 0203	58,6	2,31	60,3	2,37	27	1,06	108,4	4,27	24	0,94	24	0,94					
10	see 2FFN38 series page 6																				
12.5	2FF112 GAS F	2FF112 GAS M	1/2" BSP	DIN 3852-2-X	82,4	3,24	87,5	3,44	38	1,50	152,4	6,00	32	1,26	32	1,26					
	2FF112-34 GAS F	2FF112-34 GAS M	3/4" BSP	DIN 3852-2-X	86,4	3,40	92,5	3,64	38	1,50	161,4	6,35	32	1,26	34	1,34					
	2FF112 NPT F	2FF112 NPT M	1/2" NPTF	ANSI B1.20.3	82,4	3,24	87,5	3,44	38	1,50	152,4	6,00	32	1,26	32	1,26					
	2FF112-34 NPT F	2FF112-34 NPT M	3/4" NPTF	ANSI B1.20.3	86,4	3,40	92,5	3,64	38	1,50	161,4	6,35	32	1,26	34	1,34					
	*2FF112 JPT F	*2FF112 JPT M	1/2" JPT	JIS B 0203	82,4	3,24	87,5	3,44	38	1,50	152,4	6,00	32	1,26	32	1,26					
16	*2FF158 GAS F	see FFI-3FFI series	5/8" BSP	DIN 3852-2-X	92	3,62			42	1,65			38	1,50							
	2FF158-34 GAS F		3/4" BSP	DIN 3852-2-X	92	3,62			42	1,65			38	1,50							
	*2FF158 NPT F		5/8" NPT	ANSI B1.20.3	92	3,62			42	1,65			38	1,50							
	*2FF158-34N F		3/4" NPTF	ANSI B1.20.3	92	3,62			42	1,65			38	1,50							
19	2FF134 GAS F	see FFI-3FFI series	3/4" BSP	DIN 3852-2-X	100,3	3,95			48	1,89			42	1,65							
	2FF134-1 GAS F		1" BSP	DIN 3852-2-X	100,3	3,95			48	1,89			42	1,65							
	2FF134 NPT F		3/4" NPTF	ANSI B1.20.3	100,3	3,95			48	1,89			42	1,65							
	*2FF134-1 NPT F		1" NPTF	ANSI B1.20.3	100,3	3,95			48	1,89			42	1,65							
	*2FF134 JPT F	3/4" JPT	JIS B 0203	100,3	3,95			48	1,89			42	1,65								
25	2FF11 GAS F	see FFI-3FFI series	1" BSP	DIN 3852-2-X	99,8	3,93			55	2,17			50	1,97							
	2FF11 NPT F		1" NPTF	ANSI B1.20.3	99,8	3,93			55	2,17			50	1,97							
	2FF11 JPT F		1" JPT	JIS B 0203	99,8	3,93			55	2,17			50	1,97							
24	see 2FSI series page 24																				
32	see 2FSI series page 24																				
48	see 2FSI series page 24																				
6.3	2FF114-38SAE F	2FF114-38SAE M	9/16" UNF	SAE J 1926-1	58,6	2,31	61,8	2,43	27	1,06	109,9	4,33	24	0,94	24	0,94					
	10	see 2FFN38 series page 6																			
	12.5	2FF112-12SAE F	2FF112-12SAE M	3/4" UNF	SAE J 1926-1	82,4	3,24	92,5	3,64	38	1,50	152,4	6,00	32	1,26	32	1,26				
2FF112-58SAE F		2FF112-58SAE M	7/8" UNF	SAE J 1926-1	84,4	3,32	92,5	3,64	38	1,50	159,4	6,27	34	1,34	34	1,34					
2FF112-34SAE F		2FF112-34SAE M	1" 1/16 UN	SAE J 1926-1	86,9	3,42	92,5	3,64	38	1,50	156,8	6,17	34	1,34	34	1,34					
16	*2FF158-58SAE F	see FFI-3FFI series	7/8" UNF	SAE J 1926-1	92	3,62			42	1,65			38	1,50							
	2FF158-34SAE F		1" 1/16 UN	SAE J 1926-1	92	3,62			42	1,65			38	1,50							
19	2FF134-34SAE F	see FFI-3FFI series	1" 1/16 UN	SAE J 1926-1	100,3	3,95			48	1,89			42	1,65							
	2FF134-1SAE F		1" 5/16 UN	SAE J 1926-1	101,5	4,00			48	1,89			42	1,65							
25	2FF11-1SAE F	see FFI-3FFI series	1" 5/16 UN	SAE J 1926-1	100,3	3,95			55	2,17			50	1,97							
6.3	*2FF114-1/14G F	2FF114-1/14G M	1/4" BSP	DIN 3852-2-B	72,9	2,87	64,6	2,54	27	1,06	126,5	4,98	24	0,94	24	0,94					
	*2FF114-1/14N F	*2FF114-1/14N M	1/4" NPTF	ANSI B1.20.3	72,9	2,87	64,6	2,54	27	1,06	126,5	4,98	24	0,94	24	0,94					
	*2FF114-1/14S F	*2FF114-1/14S M	7/16" UNF	SAE J 1926-3	72,9	2,87	64,6	2,54	27	1,06	126,5	4,98	24	0,94	24	0,94					
10	see 2FFN38 series page 6																				
12.5	*2FF112-1/12GAS F	*2FF112-1/12GAS M	1/2" BSP	DIN 3852-2-B	84	3,31	88	3,46	38	1,50	154,5	6,08	32	1,26	32	1,26					
	2FF112-1/12NPT F	2FF112-1/12NPT M	1/2" NPTF	ANSI B1.20.3	84	3,31	88	3,46	38	1,50	154,5	6,08	32	1,26	32	1,26					
	2FF112-1/12S F	*2FF112-1/12S M	3/4" UNF	SAE J 1926-3	84	3,31	88	3,46	38	1,50	154,5	6,08	32	1,26	32	1,26					
16	2FF158-1/58S F	see FFI-3FFI series	1" UNS	SAE J 1926-3	94	3,70			42	1,65			38	1,50							
19	*2FF134-1/34S F	see FFI-3FFI series	1" 1/16 UNF	SAE J 1926-3	102	4,02			48	1,89			42	1,65							
25	*2FF11-1/1S F	see FFI-3FFI series	1" 5/16 UN	SAE J 1926-3	104	4,09			55	2,17			50	1,97							
6.3	*2FF114-2/1415 F	*2FF114-2/1415 M	M 14x1,5	ISO 8434-1-L	72,9	2,87	64,6	2,54	27	1,06	126,5	4,98	24	0,94	24	0,94	8,2	0,32			
	2FF114-2/1615 F	*2FF114-2/1615 M	M 16x1,5	ISO 8434-1-L	72,9	2,87	64,6	2,54	27	1,06	126,5	4,98	24	0,94	24	0,94	10,2	0,40			
	10	see 2FFN38 series page 6																			
12.5	2FF112-2/1815 F	*2FF112-2/1815 M	M 18x1,5	ISO 8434-1-L	80,9	3,18	80,8	3,18	38	1,50	144,2	5,68	32	1,26	32	1,26	12,2	0,48			
	2FF112-2/2215 F	*2FF112-2/2215 M	M 22x1,5	ISO 8434-1-L	81,9	3,22	81,8	3,22	38	1,50	146,2	5,76	32	1,26	32	1,26	15,2	0,60			
16	*2FF158-2/2615 F	see FFI-3FFI series	M 26x1,5	ISO 8434-1-L	94	3,70			42	1,65			38	1,50			18,2	0,72			
19	*2FF134-2/2615 F	see FFI-3FFI series	M 26x1,5	ISO 8434-1-L	105,8	4,17			48	1,89			42	1,65			18,2	0,72			
	*2FF134-2/302 F		M 30x2	ISO 8434-1-L	105,8	4,17			48	1,89			42	1,65			22,2	0,87			
25	*2FF11-2/302 F	see FFI-3FFI series	M 30x2	ISO 8434-1-L	107	4,21			55	2,17			50	1,97			22,2	0,87			
6.3	*2FF114-3/1415 F	*2FF114-3/1415 M	M 14x1,5	ISO 8434-1-S	72,9	2,87	64,6	2,54	27	1,06	126,5	4,98	24	0,94	24	0,94	6,2	0,24			
	*2FF114-3/1615 F	*2FF114-3/1615 M	M 16x1,5	ISO 8434-1-S	72,9	2,87	64,6	2,54	27	1,06	126,5	4,98	24	0,94	24	0,94	8,2	0,32			
10	see 2FFN38 series page 6																				
12.5	2FF112-3/2415 F	*2FF112-3/2415 M	M 24x1,5	ISO 8434-1-S	83,9	3,30	88,2	3,47	38	1,50	154,6	6,09	32	1,26	32	1,26	16,2	0,64			
16	*2FF158-3/2415 F	see FFI-3FFI series	M 24x1,5	ISO 8434-1-S	94	3,70			42	1,65			38	1,50			16,2	0,64			
19	*2FF134-3/302 F	see FFI-3FFI series	M 30x2	ISO 8434-1-S	105,8	4,17			48	1,89			42	1,65			20,2	0,80			
	*2FF134-3/362 F		M 36x2	ISO 8434-1-S	107,8	4,24			48	1,89			42	1,65			25,2	0,99			
25	*2FF11-3/362 F	see FFI-3FFI series	M 36x2	ISO 8434-1-S	107	4,21			55	2,17			50	1,97			25,2	0,99			