



Patent Applications Pending

Features

- **Connection system:** screw-on
- **Disconnection system:** screw-on
- **Shut off system:** flat valve
- **Connectability:** both male and female couplings under residual pressure
- **Disconnection under pressure:** allowed
- **Interchangeability:** worldwide market
- **Hand connection under residual pressure**
- Interchangeable with standard RF series couplings.
- Latching system by low friction threaded sleeve
- Wear reduction
- Uses standard RF series adaptors

Technical data

Size ❖	DN Nominal diameter	
	mm	inc.
1/4" 04	5	0.20
3/8" 06	7	0.28
1/2" 08	9	0.35
3/4" 12	16	0.63
1" 16	25	0.98
1-1/2" 24	35	1.38

Minimum burst pressure					
Connected		Male		Female	
MPa	PSI	MPa	PSI	MPa	PSI
100	14500	53	7685	10,5	1523
70	10150	24	3480	19	2755
55	7975	55	7975	8,3	1204
43	6325	43	6325	10,5	1523
37	5365	12	1740	7,5	1088
30	4350	16	2320	11,5	1668

Air inclusion and fluid loss	Maximum leakage rate **	Vacuum rating		Connection sleeve torque
cc max.	g/year	mmHg	incHg	Nm
0.02	1,5	2	0,08	8 ⁺² ₋₀
0,05	1,5	2	0,08	20 ⁺² ₋₀
0,1	1,5	2	0,08	20 ⁺² ₋₀
0,1	1,5	2	0,08	50 ⁺⁵ ₋₀
0,2	1,5	2	0,08	60 ⁺⁵ ₋₀
0,2	1,5	2*	0,08*	80 ⁺¹⁰ ₋₀

*Connected

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1/4" 04	5	0.20
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1/2" 08	9	0.35
3/4" 12	16	0.63
1" 16	25	0.98
1-1/2" 24	35	1.38

Maximum working pressure *					
Connected		Male		Female	
MPa	PSI	MPa	PSI	MPa	PSI
33	4785	17,5	2538	3,5	508
23,3	3379	8	1160	6	870
18,3	2654	18,3	2654	2,75	400
14,3	2074	14,3	2074	3,5	508
12,3	1784	4	580	2,5	363
10	1450	5,3	769	3,8	551

Max pressure allowing connection by hand (M+F)	
MPa	PSI
3,5	508
3	435
2,2	319
0,8	116
0,7	102
0,6	87

* Safety factor = 1:3 - For static pressure safety factor 1:2
** R22 equivalent refrigerant at operating range, both connected and disconnected.

Materials:

- Female in steel.
- Surface treatment: zinc plating with Cr III passivation.
- Springs in stainless steel.

Seals: standard in Neoprene or HNBR.
On request: EPDM, Viton or other seals.

Working temperatures:

With Neoprene seals from -40°C (-40°F) to +120°C (+248°F).
With HNBR seals from -25°C (-13°F) to +140°C (+284°F).
Temperatures refer to theoretical working conditions in laboratory.

Pressure drop chart

See at page 21

Installation and Brazing instructions

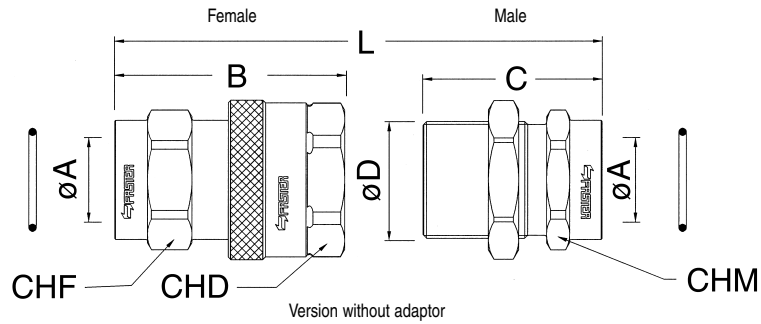
See at pages 22-23-24

Accessories - Spare part kit

See at pages 19-20

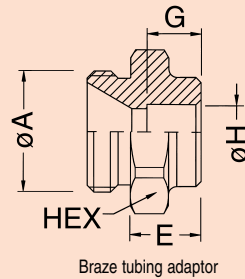
Seals compatibility

See at page 24

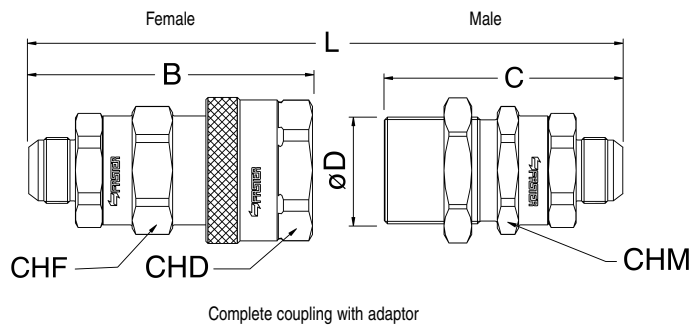


	❖	Female		Male	Seals material	B		C		Ø D	CHD		L		CHF		CHM	
		(see RF series)				mm	inc.	mm	inc.		mm	inc.	mm	inc.	mm	inc.	mm	inc.
Version without adaptor	04	RFL 04 F N	RF 04 ... N	1/2" - 20 UNF	Neoprene	29,5	1,16	-	-	5/8" - 18 UNF	19	0,75	-	-	16	0,63	19	0,75
		*RFL 04 F H	RF 04 ... H	1/2" - 20 UNF	HNBR	29,5	1,16	-	-	5/8" - 18 UNF	19	0,75	-	-	16	0,63	19	0,75
		*RFL 04 F E	RF 04 ... E	1/2" - 20 UNF	EPDM	29,5	1,16	-	-	5/8" - 18 UNF	19	0,75	-	-	16	0,63	19	0,75
		RFL 04 F V	RF 04 ... V	1/2" - 20 UNF	Viton	29,5	1,16	-	-	5/8" - 18 UNF	19	0,75	-	-	16	0,63	19	0,75
	06	*RFL 06 F N	RF 06 ... N	M18x1.5	Neoprene	35	1,38	-	-	M20x1.5	24	0,94	-	-	22	0,87	22	0,87
		*RFL 06 F H	RF 06 ... H	M18x1.5	HNBR	35	1,38	-	-	M20x1.5	24	0,94	-	-	22	0,87	22	0,87
		*RFL 06 F E	RF 06 ... E	M18x1.5	EPDM	35	1,38	-	-	M20x1.5	24	0,94	-	-	22	0,87	22	0,87
		RFL 06 F V	RF 06 ... V	M18x1.5	Viton	35	1,38	-	-	M20x1.5	24	0,94	-	-	22	0,87	22	0,87
	08	RFL 08 F N	RF 08 ... N	7/8" - 20 UNEF	Neoprene	50	1,97	-	-	1" - 20 UNEF	30	1,18	-	-	27	1,06	27	1,06
		*RFL 08 F H	RF 08 ... H	7/8" - 20 UNEF	HNBR	50	1,97	-	-	1" - 20 UNEF	30	1,18	-	-	27	1,06	27	1,06
		*RFL 08 F E	RF 08 ... E	7/8" - 20 UNEF	EPDM	50	1,97	-	-	1" - 20 UNEF	30	1,18	-	-	27	1,06	27	1,06
		RFL 08 F V	RF 08 ... V	7/8" - 20 UNEF	Viton	50	1,97	-	-	1" - 20 UNEF	30	1,18	-	-	27	1,06	27	1,06
12	RFL 12 F N	RF 12 ... N	1-1/4" - 18 UNEF	Neoprene	57,5	2,26	-	-	1-7/16" - 16 UN	41	1,61	-	-	36	1,42	41	1,61	
	*RFL 12 F H	RF 12 ... H	1-1/4" - 18 UNEF	HNBR	57,5	2,26	-	-	1-7/16" - 16 UN	41	1,61	-	-	36	1,42	41	1,61	
	*RFL 12 F E	RF 12 ... E	1-1/4" - 18 UNEF	EPDM	57,5	2,26	-	-	1-7/16" - 16 UN	41	1,61	-	-	36	1,42	41	1,61	
	*RFL 12 F V	RF 12 ... V	1-1/4" - 18 UNEF	Viton	57,5	2,26	-	-	1-7/16" - 16 UN	41	1,61	-	-	36	1,42	41	1,61	
16	*RFL 16 F N	RF 16 ... N	1-19/32" - 20 UN	Neoprene	65	2,56	-	-	1-3/4" - 16 UN	50	1,97	-	-	46	1,81	50	1,97	
	*RFL 16 F H	RF 16 ... H	1-19/32" - 20 UN	HNBR	65	2,56	-	-	1-3/4" - 16 UN	50	1,97	-	-	46	1,81	50	1,97	
	*RFL 16 F E	RF 16 ... E	1-19/32" - 20 UN	EPDM	65	2,56	-	-	1-3/4" - 16 UN	50	1,97	-	-	46	1,81	50	1,97	
	RFL 16 F V	RF 16 ... V	1-19/32" - 20 UN	Viton	65	2,56	-	-	1-3/4" - 16 UN	50	1,97	-	-	46	1,81	50	1,97	
24	RFL 24 F N	RF 24 M N	M61x1.5	Neoprene	96	3,78	70	2,76	M68x2	80	3,15	150	5,91	70	2,76	70	2,76	
	RFL 24 F H	RF 24 M H	M61x1.5	HNBR	96	3,78	70	2,76	M68x2	80	3,15	150	5,91	70	2,76	70	2,76	
	*RFL 24 F E	*RF 24 M E	M61x1.5	EPDM	96	3,78	70	2,76	M68x2	80	3,15	150	5,91	70	2,76	70	2,76	
	*RFL 24 F V	*RF 24 M V	M61x1.5	Viton	96	3,78	70	2,76	M68x2	80	3,15	150	5,91	70	2,76	70	2,76	

❖ Size *On request



► Braze tubing adaptor
See table at page 6



- All versions available with adaptors as shown in the table at page 7.
- Female coupling code from RF to RFL...
- Dimensions can be obtained from table at page 7 considering the different length of the quick-release coupling without adaptor.