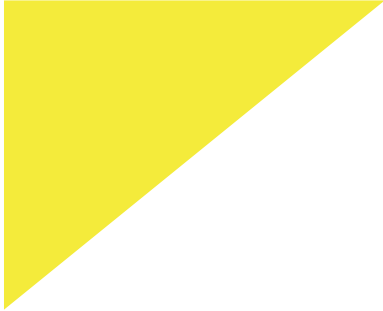


# Refrigeration



RF	pag 259
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RFLS-RFS	pag 265
Refrigeration - Accessories	pag 268



# RF

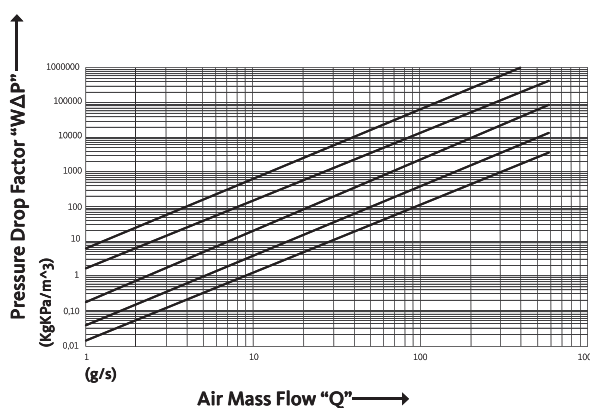
Screw to connect couplings for air conditioning & refrigeration application.

This range of couplings has been specifically designed for air conditioning and refrigeration systems. Interchangeability according to market driven standards. Available in several versions in steel, brass and with copper sweat braze adaptor.

## Applications



## Pressure Drop



## Technical Specifications

dash	Size		Working Pressure (MPa)	Flow Rate* (g/s)	Spillage (ml)	Force to Connect (N)	Burst pressure (MPa)		
	mm	inch					Male	Female	Male + Female
04	6.3	1/4"	3.5	20	0.02		53	10.5	100
06	10	3/8"	6	44	0.05		21	19	26
08	12.5	1/2"	5	107	0.1		26	15	25
12	20	3/4"	5	288	0.1		21	15	19
16	25	1"	5	477	0.2		13	15	15

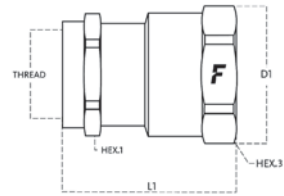
\* Flow rate calculated considering air in standard conditions (20°C, 1 bar).

Material	Brass; Steel
Seals	CR
Working temperatures	<b>- 40 °C to + 120 °C</b>
Surface treatment	MATE <b>500</b> (CrIII)
Series Interchange	MARKET

Valve Type	Flat
Connection	Screw to Connect
Disconnection	Unscrew to Disconnect
Connection Under Pressure	Allowed Residual

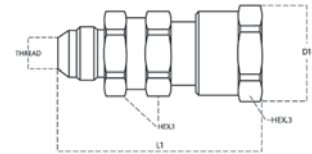


# RF



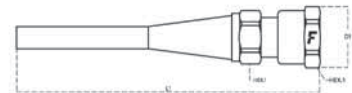
Size		Thread details			FEMALE						
mm	inch	Thread Type	Standard	Thread	Part Number	L (L1 + Thread)		D1		HEX1	
						mm	inch	mm	inch	mm	inch
6.3	1/4"	O/ SAE	ASME B1.1	1/2" -20 UNF FEMALE ORB	RF 04 F N	28	1.10	21	0.82	16	0.62
10	3/8"	O/ METRIC	ISO 6149-1	M18x1.5 FEMALE ORB	RF 06 F N	34.9	1.37	27	1.06	22	0.87
10	3/8"	O/ METRIC	ISO 6149-1	M18x1.5 FEMALE ORB	RF 06 F 5 N	34.9	1.37	27	1.06	22	0.87
12.5	1/2"	O/ SAE	ASME B1.1	7/8" -20 UNEF FEMALE ORB	RF 08 F N	46.5	1.83	34	1.34	27	1.06
20	3/4"	O/ SAE	ASME B1.1	1-1/4" -18 UNEF FEMALE ORB	RF 12 F N	55.5	2.19	45	1.77	36	1.42
20	3/4"	O/ SAE	ASME B1.1	1-1/4" -18 UNEF ORB FEMALE	RF 12 N	55.5	2.19	45	1.77	36	1.42
25	1"	O/ SAE	ASME B1.1	1-19/32" -20 UN FEMALE ORB	RF 16 F N	61.5	2.42	55	2.17	46	1.81

# RF - Threaded adaptor

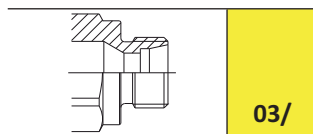
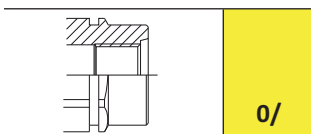


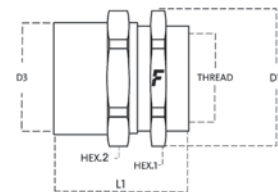
Size		Thread details			FEMALE						
mm	inch	Thread Type	Standard	Thread	Part Number	L (L1 + Thread)		D1		HEX1	
						mm	inch	mm	inch	mm	inch
12.5	1/2"	O3/ METRIC	ISO 8434-1-S	M16x1.5 MALE 8S	RF 08 1615 F N	35.8	1.41	34	1.34	27	1.06
12.5	1/2"	TD SAE	FIAT 14293	3/4"-16 UNF	RF 08 TD12 F N	70.1	2.76	34	1.34	27	1.06
12.5	1/2"	TD SAE	FIAT 14293	5/8"-18 UNF	RF 08 TD38 F N	70.1	2.76	34	1.34	27	1.06
20	3/4"	O3/ METRIC	ISO 8434-1-S	M24x1.5 MALE	RF 12 2415 F N	82.1	3.23	45	1.77	36	1.42
20	3/4"	TD SAE	FIAT 14293	7/8"-14 UNF	RF 12 TD58 F N	85.1	3.35	45	1.77	36	1.42

# RF - Copper sweat



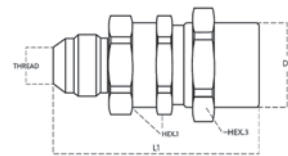
Size		Thread details			FEMALE						
mm	inch	Thread Type	Standard	Thread	Part Number	L (L1 + Thread)		D1		HEX1	
						mm	inch	mm	inch	mm	inch
10	3/8"	COPPER SWEAT	n.a.	n.a.	RF 06 CS065 F5N	76	2.99	27	1.06	22	0.87
10	3/8"	COPPER SWEAT	n.a.	n.a.	RF 06 CS095 F5N	76	2.99	27	1.06	22	0.87
12.5	1/2"	COPPER SWEAT	n.a.	n.a.	RF 08 CS160 F5N	107	4.21	34	1.34	27	1.06
12.5	1/2"	COPPER SWEAT	n.a.	n.a.	RF 08 CS125 F5N	107	4.21	34	1.34	27	1.06
12.5	1/2"	COPPER SWEAT	n.a.	n.a.	RF 08 CS095 F5N	111	4.37	34	1.34	27	1.06
20	3/4"	COPPER SWEAT	n.a.	n.a.	RF 12 CS220 F5N	131	5.16	45	1.77	36	1.42
20	3/4"	COPPER SWEAT	n.a.	n.a.	RF 12 CS190 F5N	131	5.16	45	1.77	36	1.42
20	3/4"	COPPER SWEAT	n.a.	n.a.	RF 12 CS160 F5N	131	5.16	45	1.77	36	1.42
25	1"	COPPER SWEAT	n.a.	n.a.	RF 16 CS255 F5N	146.5	5.77	55	2.17	46	1.81
25	1"	COPPER SWEAT	n.a.	n.a.	RF 16 CS220 F5N	146.5	5.77	55	2.17	46	1.81
25	1"	COPPER SWEAT	n.a.	n.a.	RF 16 CS290 F5N	146.5	5.77	55	2.17	46	1.81





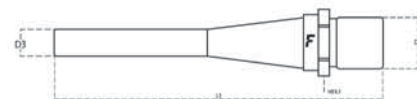
## RF

Size		Thread details			MALE									
mm	inch	Thread Type	Standard	Thread	Part Number	L (L1 + Thread)		D1		D3		HEX1		
						mm	inch	mm	inch	mm	inch	mm	inch	
6.3	1/4"	O/ SAE	ASME B1.1	5/8"-18 UNF	RF 04 M N	27.5	1.08	21	0.83	15.8	0.62	16	0.63	
10	3/8"	O/ METRIC	ISO 6149-1	M18x1.5 FEMALE ORB	RF 06 M N	27.5	1.08	27	1.06	20	0.79	22	0.87	
10	3/8"	O/ METRIC	ISO 6149-1	M18x1.5 FEMALE ORB	RF 06 M 5 N	26.5	1.04	24	0.94	20	0.79	22	0.87	
12.5	1/2"	O/ SAE	ASME B1.1	1"-20 UNEF	RF 08 M N	38.5	1.52	32	1.26	25.4	1.00	28	1.10	
12.5	1/2"	O/ SAE	ASME B1.1	1"-7/16"-16 UN	RF 12 M N	73.5	2.89	46	1.81	36.5	1.44	41	1.61	
25	1"	O/ SAE	ASME B1.1	1-19/32" -20 UN FEMALE ORB	RF 16 M N	81.5	3.21	53	2.09	44.5	1.75	48	1.89	



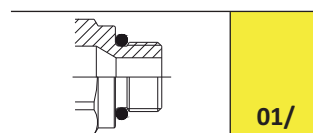
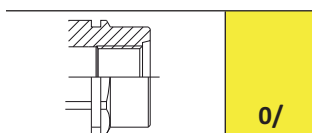
## RF - Threaded adaptor

Size		Thread details			MALE									
mm	inch	Thread Type	Standard	Thread	Part Number	L (L1 + Thread)		D1		D3		HEX1		
						mm	inch	mm	inch	mm	inch	mm	inch	
12.5	1/2"	O1/ METRIC	ISO 6149-2	M16x1.5 MALE	RF 08 1615 M N	63.5	2.50	34	1.34	25.4	1.00	27	1.06	
12.5	1/2"	TD SAE	FIAT 14293	3/4"-16 UNF	RF 08 TD12 M N	60	2.36	34	1.34	25.4	1.00	27	1.06	
12.5	1/2"	TD SAE	FIAT 14293	5/8"-18 UNF	RF 08 TD38 M N	57.5	2.26	34	1.34	25.4	1.00	27	1.06	
12.5	1/2"	O1/ METRIC	ISO 6149-2	M24x1.5 MALE	RF 12 2415 M N	69	2.72	45	1.77	36.5	1.44	36	1.42	
12.5	1/2"	TD SAE	FIAT 14293	7/8"-14 UNF	RF 12 TD58 M N	72	2.83	45	1.77	36.5	1.44	36	1.42	

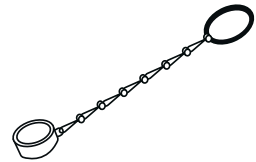
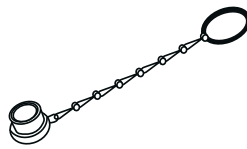


## RF - Copper sweat

Size		Thread details			MALE									
mm	inch	Thread Type	Standard	Thread	Part Number	L (L1 + Thread)		D1		D3		HEX1		
						mm	inch	mm	inch	mm	inch	mm	inch	
10	3/8"	COPPER SWEAT	n.a.	n.a.	RF 06 CS095 M5N	67.5	2.66	25	0.98	20	0.79	22	0.87	
10	3/8"	COPPER SWEAT	n.a.	n.a.	RF 06 CS065 M5N	67.5	2.66	25	0.98	20	0.79	22	0.87	
12.5	1/2"	COPPER SWEAT	n.a.	n.a.	RF 08 CS125 M5N	96	3.78	32	1.26	25.4	1	28	1.1	
12.5	1/2"	COPPER SWEAT	n.a.	n.a.	RF 08 CS095 M5N	100	3.94	32	1.26	25.4	1	28	1.1	
12.5	1/2"	COPPER SWEAT	n.a.	n.a.	RF 08 CS160 M5N	94	3.70	32	1.26	25.4	1.00	28	1.10	
20	3/4"	COPPER SWEAT	n.a.	n.a.	RF 12 CS220 M5N	118.5	4.67	46	1.81	36.5	1.44	41	1.61	
20	3/4"	COPPER SWEAT	n.a.	n.a.	RF 12 CS190 M5N	118.5	4.67	46	1.81	36.5	1.44	41	1.61	
20	3/4"	COPPER SWEAT	n.a.	n.a.	RF 12 CS160 M5N	118.5	4.67	46	1.81	36.5	1.44	41	1.61	
25	1"	COPPER SWEAT	n.a.	n.a.	RF 16 CS255 M5N	130.8	5.15	53	2.09	44.5	1.75	48	1.89	
25	1"	COPPER SWEAT	n.a.	n.a.	RF 16 CS220 M5N	130.8	5.15	53	2.09	44.5	1.75	48	1.89	
25	1"	COPPER SWEAT	n.a.	n.a.	RF 16 CS290 M5N	131	5.16	53	2.09	44.5	1.75	48	1.89	



## RF Accessories and Spares



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Aluminium dust protections

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# RFL

Screw to connect female couplings for air conditioning & refrigeration application, low friction sleeve.

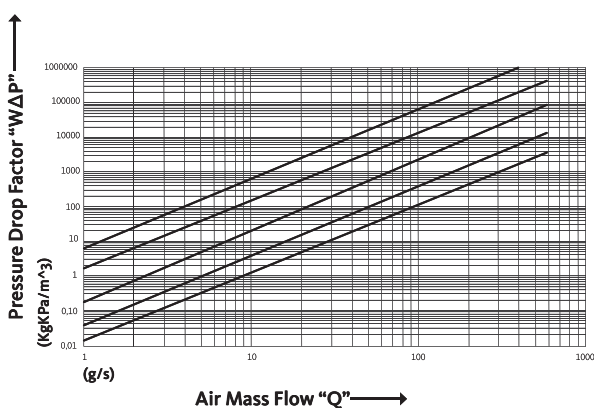
RFL screw to connect female couplings are equipped with a low friction sleeve in order to reduce connection effort and friction. Fully interchangeable with RF series same size.



## Applications



## Pressure Drop



## Technical Specifications

dash	Size		Working Pressure (MPa)	Flow Rate (g/s)	Spillage (ml)	Force to Connect (N)	Burst pressure (MPa)		
	mm	inch					Male	Female	Male + Female
04	6.3	1/4"	3.5	20	0.02			10.5	100
06	10	3/8"	6	44	0.05			19	70
08	12.5	1/2"	5	107	0.1			15	55
12	20	3/4"	5	288	0.1			15	43
16	25	1"	5	477	0.2			15	37

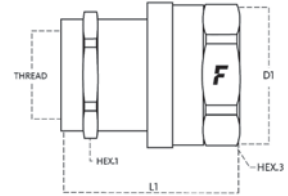
\* Flow rate calculated considering air in standard conditions (20°C, 1 bar).

Material	Steel
Seals	CR
Working temperatures	<b>- 40 °C to + 120 °C</b>
Surface treatment	MATE <b>500</b> (CrIII)
Series Interchange	MARKET

Valve Type	Flat
Connection	Screw to Connect
Disconnection	Unscrew to Disconnect
Connection Under Pressure	Allowed Residual

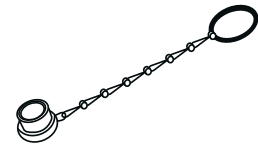


RFL



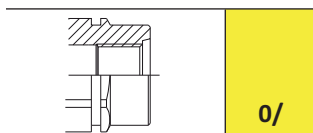
Size		Thread details			FEMALE						
mm	inc	Thread Type	Standard	Thread	Part Number	L (L1 + Thread)		D1		HEX1	
						mm	inch	mm	inch	mm	inch
6.3	1/4"	O/ SAE	ASME B1.1	1/2" -20 UNF FEMALE ORB	RFL04 F N	29.4	1.16	25	0.98	16	0.63
10	3/8"	O/ METRIC	ISO 6149-1	M18x1.5 FEMALE ORB	RFL06 F N	34.5	1.36	28	1.1	22	0.87
12.5	1/2"	O/ SAE	ASME B1.1	7/8" -20 UNEF ORB FEMALE	RFL08 F N	49.3	1.94	34	1.34	27	1.06
20	3/4"	O/ SAE	ASME B1.1	1-1/4" -18 UNEF ORB FEMALE	RFL12 F N	56.8	2.24	45	1.77	36	1.42
25	1"	O/ SAE	ASME B1.1	1-19/32" -20 UN ORB FEMALE	RFL16 F N	64	2.52	55	2.17	46	1.81

## RFL Accessories and Spares



Aluminium dust protections

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# RFLS - RFS

Couplings for air conditioning & refrigeration applications, integrated safety sleeve.

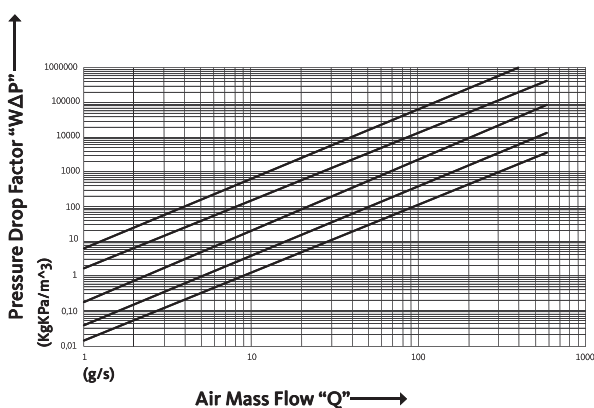
RFLS screw to connect female couplings are equipped with a low friction sleeve to reduce connection effort together with an integrated safety sleeve to prevent accidental disconnections. Corresponding male couplings RFS series are characterized by Faster profile interchangeability.



## Applications



## Pressure Drop



## Technical Specifications

dash	Size		Working Pressure (MPa)	Flow Rate (g/s)	Spillage (ml)	Force to Connect (N)	Burst pressure (MPa)		
	mm	inch					Male	Female	Male + Female
04	6.3	1/4"	3.5	20	0.02	53	10.5	100	
06	10	3/8"	6	44	0.05	24	19	70	
08	12.5	1/2"	5	107	0.1	55	15	55	
12	20	3/4"	7	288	0.2	55	21	19	

\* Flow rate calculated considering air in standard conditions (20°C, 1 bar).

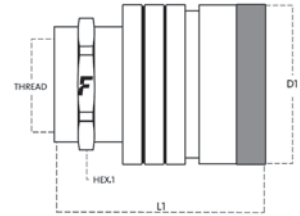
Material	Steel
Seals	CR
Working temperatures	- 40 °C to + 120 °C
Surface treatment	MATE 500 (CrIII)
Series Interchange	FASTER

Valve Type	Flat
Connection	Screw to Connect
Disconnection	Unscrew to Disconnect
Connection Under Pressure	Allowed Residual

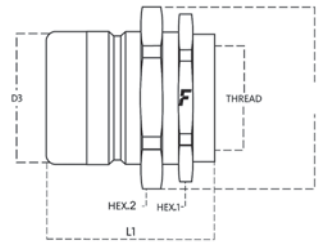




# RFLS - RFS

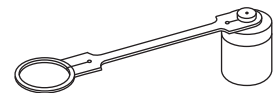
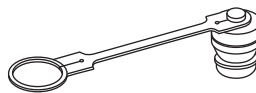


Size		Thread details			FEMALE						
mm	inch	Thread Type	Standard	Thread	Part Number	L (L1 + Thread)		D1		HEX1	
						mm	inch	mm	inch	mm	inch
6.3	1/4"	0/ SAE	ASME B1.1	1/2" -20 UNF FEMALE ORB	RFLS 04 F N	38	1.5	25	0.98	19	0.75
10	3/8"	0/ METRIC	ISO 6149-1	M18x1.5 FEMALE ORB	RFLS 06 F N	43.9	1.73	30	1.18	22	0.87
12.5	1/2"	0/ SAE	ASME B1.1	7/8" -20 UNEF ORB FEMALE	RFLS 08 F N	55.5	2.19	37	1.46	27	1.06
20	3/4"	0/ SAE	ASME B1.1	1-1/4" -18 UNEF ORB FEMALE	RFLS 12 F N	63.6	2.5	48	1.89	36	1.42



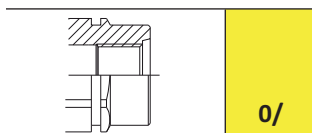
Size		Thread details			MALE								
mm	inch	Thread Type	Standard	Thread	Part Number	L (L1 + Thread)		D1		D3		HEX1	
						mm	inch	mm	inch	mm	inch	mm	inch
6.3	1/4"	0/ SAE	ASME B1.1	1/2" -20 UNF FEMALE ORB	RFS 04 M N	29	1.14	21	0.83	16	0.63	19	0.75
10	3/8"	0/ METRIC	ISO 6149-1	M18x1.5 FEMALE ORB	RFS 06 M N	31.6	1.24	25	0.98	20	0.79	22	0.87
12.5	1/2"	0/ SAE	ASME B1.1	7/8" -20 UNEF ORB FEMALE	RFS 08 M N	41.5	1.63	38	1.5	26	1.02	34	1.34
20	3/4"	0/ SAE	ASME B1.1	1-1/4" -18 UNEF ORB FEMALE	RFS 12 M N	46.6	1.83	50	1.97	36	1.42	46	1.81

## RFLS - RFS Accessories and Spares



Aluminium dust protections

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# Refrigeration - Accessories

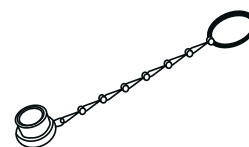


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Aluminium dust protections

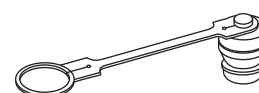
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## Aluminium dust protections



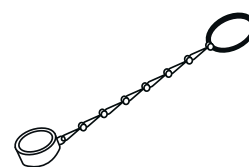
### Dust protections for female couplings

Size			Details		
dash	mm	inch	Part number	Colour	Available for Series
04	6.3	1/4"	TMRF 04 S N	○	RF - RFL
06	10	3/8"	TMRF 06 S N	○	
08	12.5	1/2"	TMRF 08 S N	○	
12	20	3/4"	TMRF 12 S N	○	
16	25	1"	TMRF 16 S N	○	



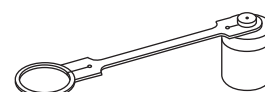
### Dust protections for female couplings

Size			Details		
dash	mm	inch	Part number	Colour	Available for Series
04	6.3	1/4"	TMRFLS04 N	○	RFLS/RFS
06	10	3/8"	TMRFLS06 N	○	
08	12.5	1/2"	TMRFLS08 N	○	



### Dust protections for male couplings

Size			Details		
dash	mm	inch	Part number	Colour	Available for Series
04	6.3	1/4"	TFRF 04 S	○	RF
06	10	3/8"	TFRF 06 S N	○	
08	12.5	1/2"	TFRF 08 S N	○	
12	20	3/4"	TFRF 12 S N	○	
16	25	1"	TFRF 16 S N	○	



### Dust protections for male couplings

Size			Details		
dash	mm	inch	Part number	Colour	Available for Series
04	6.3	1/4"	TFRFS04 N	○	RFLS/RFS
06	10	3/8"	TFRFS06 N	○	
08	12.5	1/2"	TFRFS08 N	○	