Medium Pressure

FF-Series

TEMA TEMA Profile

1/4" up to 1"



Technical Description

The coupling system of the FF series has double shut-off, dry break and single-handed operation. During disconnection there is no oil loss, and during coupling there is no inclusion of air into the system.

Advantages

- Dry break quick connect coupling.
- With minimum pressure drop.
- Single-handed operation.
- No oil loss during disconnection.
- A safety closing ring prevents unintentional disconnection.
- Twice as safe through double sealing.
- Also available with pressure eliminator, i.e. connection is possible under static/residual pressure up to working pressure.

Working Pressure

See charts.

Working Temperature

-30°C up to +100°C (NBR) -25°C up to +200°C (FKM) depending on the medium. Special seals are available on request (see page 6).

Available Valves



Connected length in total						
FF2510 + FF	2520 = 122 mm					
FF2510 + FF	2521 = 147 mm					
FF3810 + FF	3820 = 125 mm					
FF3810 + FF	3821 = 154 mm					
FF5010 + FF	5020 = 145 mm					
FF5010 + FF	5021 = 177 mm					
FF7510 + FF	7520 = 169 mm					
FF7510 + FF7521 = 215 mm						
FF10010 + FF10020 = 230 mm						
FF10010 + FF10021 = 269 mm						
Body Size	Bursting Pressure connected					
1/4"	> 3200 bar					
3/8"	> 2000 bar					
4 (01)	4/01					

Body Size	Bursting Pressure connected
1/4"	> 3200 bar
3/8"	> 2000 bar
1/2"	> 1500 bar
3/4"	> 1500 bar
1"	> 1100 bar

Applications Area









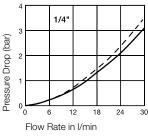


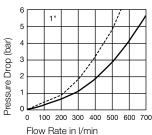


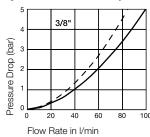


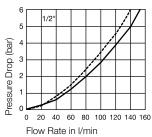
Material Coupling	Standard / Pressure Eliminator			
Coupling Body	Steel, nitrocarburizing			
Sleeve	Steel hardened, zinc plated, passivated, sealed			
Locking Ring	Brass, zinc-iron coated, black passivated, sealed			
Valve	Steel, zinc plated, passivated, sealed			
Springs	AISI 301			
Locking Balls	AISI 420 C			
Seals	NBR			
Valve Holder	Steel, yellow zinc plated, sealed			
Thread Body	Steel, zinc plated, passivated, sealed			
Plug	Standard / Pressure Eliminator			
Plug Body	Steel hardened, zinc plated, passivated, sealed			
Valve	Steel, nitrocarburizing			
Springs	AISI 301			
Seals	NBR/PUR			
Valve Holder	Brass, hard-drawn			
Thread Body	Steel, zinc plated, passivated, sealed			

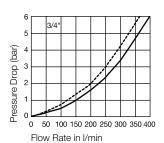
Flow Capacity with Oil with Viscosity of 32cSt at 40°C as per ISO 7241/2-2000







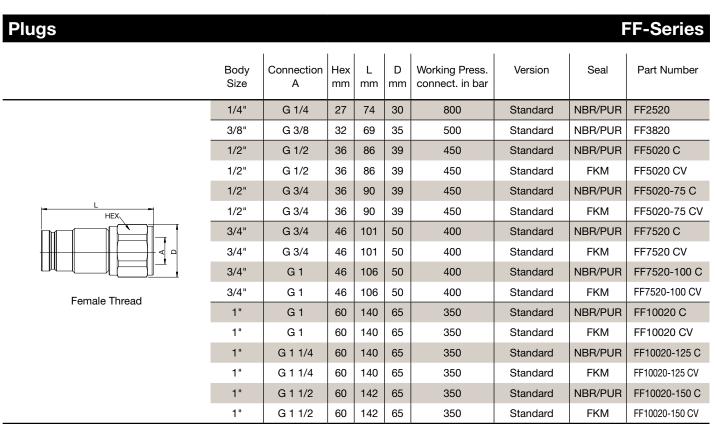




Standard FF

--- Plug side pressure eliminator

	Body Size	Connection A	Hex mm	L mm	D mm	Working Press. connect. in bar	Version	Seal	Part Number
	1/4"	G 1/4	27	65	30	800	Standard	NBR/PUR	FF2510
	3/8"	G 3/8	36	76,5	40	500	Standard	NBR/PUR	FF3810
	1/2"	G 1/2	40	82	44	450	Standard	NBR/PUR	FF5010 C
	1/2"	G 1/2	40	82	44	450	Standard	FKM	FF5010 CV
	1/2"	G 3/4	40	85	44	450	Standard	NBR/PUR	FF5010-75 C
HEX.	1/2"	G 3/4	40	85	44	450	Standard	FKM	FF5010-75 CV
	3/4"	G 3/4	50	98	55	400	Standard	NBR	FF7510 C
	3/4"	G 3/4	50	98	55	400	Standard	FKM	FF7510 CV
<u>, </u>	3/4"	G 1	50	106	55	400	Standard	NBR	FF7510-100 C
Female Thread	3/4"	G 1	50	106	55	400	Standard	FKM	FF7510-100 CV
remaie mieau	1"	G 1	65	129	70	350	Standard	NBR	FF10010 C
	1"	G 1	65	129	70	350	Standard	FKM	FF10010 CV
	1"	G 1 1/4	65	129	70	350	Standard	NBR	FF10010-125 C
	1"	G 1 1/4	65	129	70	350	Standard	FKM	FF10010-125 CV
	1"	G 1 1/2	65	129	70	350	Standard	NBR	FF10010-150 C
	1"	G 1 1/2	65	129	70	350	Standard	FKM	FF10010-150 CV



Plugs **FF-Series** Connection Hex D D1 Working Press. Version Seal Part Number Body L Size Α mm mm mm mm connect. in bar 1/4" G 1/4 27 99 800 Press. Eliminator NBR/PUR FF2521 3/8" 32 98 35 500 Press. Eliminator NBR/PUR FF3821 G 3/8 HEX G 1/2 1/2" 39 450 NBR/PUR FF5021 C 36 117 Press. Eliminator FF5021 CV 1/2" G 1/2 36 117 39 450 Press. Eliminator FKM 3/4" G 3/4 46 139 50 400 Press. Eliminator NBR/PUR FF7521 C Female Thread 1" G 1 55 175 60 350 Press. Eliminator NBR/PUR FF10021 C

Couplings										FF-Series
	Body Size	Connection A		l	D mm		Working Press. connect. in bar	Version	Seal	Part Number
5 HEX	1/2"	G 1/2	40	82	52	47	450	for Muliplate	NBR	FF5010 CE
	1/2"	G 1/2	40	82	52	47	450	for Muliplate	FKM	FF5010 CEV
	3/4"	G 3/4	50	98	66	60	400	for Muliplate	NBR	FF7510 CE
	3/4"	G 3/4	50	98	66	60	400	for Muliplate	FKM	FF7510 CEV
15										
Female Thread										

Plugs										F-Series
	Body Size	Connection A		l	D mm		Working Press. connect. in bar		Seal	Part Number
5 HEX	1/2"	G 1/2	36	117	52	47	450	Press. El. f. Multiplate	NBR/PUR	FF5021 CE
	3/4"	G 3/4	46	139	65	60	400	Press. El. f. Multiplate	NBR/PUR	FF7521 CE
[15] Female Thread										
Tomais Tillead										

Lubrication Nipples					FF-Series
	Body Size	Version	L mm	D mm	Part Number
	1/2"	for coupling	48	29	GRF5
	3/4"	for coupling	52	38	GRF7
	1"	for coupling	52	50	GRF10
<u> </u>					

Seal-Kit							
	Body Size	Version	Material	Part Number			
	1/4"	for plugs	NBR/PUR	FF2500-PSNPU			
_	3/8"	for plugs	NBR/PUR	FF3800-PSNPU			
	1/2"	for plugs	NBR/PUR	FF5000-PSNPU			
	1/2"	for plugs	FKM	FF5000-PSV			
	3/4"	for plugs	NBR/PUR	FF7500-PSNPU			
	3/4"	for plugs	FKM	FF7500-PSV			
	1"	for plugs	NBR/PUR	FF10000-PSNPU			
	1"	for plugs	FKM	FF10000-PSV			

Dust Protection							F-Series
	Body Size	Version	L mm	D mm	Material	Color	Part Number
	1/4"	for coupling	190	24	PVC	Blue	FF2516
	1/4"	for plug	190	24	PVC	Blue	FF2526
	3/8"	for coupling	190	28	PVC	Blue	FF3816
	3/8"	for plug	190	28	PVC	Blue	FF3826
L	1/2"	for coupling	220	28	PVC	Blue	FF5016
	1/2"	for plug	220	28	PVC	Blue	FF5026
D	3/4"	for coupling	250	42	PVC	Blue	FF7516
	3/4"	for plug	250	42	PVC	Blue	FF7526
	1"	for coupling	290	51	PVC	Blue	FF10016
	1"	for plug	290	51	PVC	Blue	FF10026
			Further	colors on reque	est.		

Medium Pressure

SM-Series

1/4" up to 3/4"



Technical Description

Standard design with ball locking mechanism for high pressure applications. Rugged construction.

Advantages

Body size 1/2" and above feature PTFE back up ring which prevents seal washout at high flow rates. Solid steel barstock construction: inductionhardened for a coupling with maximum resistance to damage to hydraulic and mechanical shock and brinelling.

A poppet with a crimped seal assures a maximum sealing at low flow rates and prevents seal washout at high flow rates.

Applications

- Mobile equipment
- Industrial maintenance

Working Temperature

-40°C up to +110°C (NBR) depending on the medium. Special seals are available on request (see page 6).

Working Pressure

Body Size	Max. Operating Pressure connected
1/4"	410 bar
1/2"	410 bar
3/4"	310 bar

Material Coupling	Steel
Coupling Body	Steel
Sleeve	Steel
Back-up Ring	PTFE
Valve	Steel
Springs	Steel
Locking Balls	Steel
Seals	NBR
Valve Holder	Steel
Material Plug	Steel
Plug Body	Steel
Valve	Steel
Springs	Steel
Seals	NBR
Valve Holder	Steel

Flow Capacity with Oil with Viscosity of 43cSt at 38°C as per ISO 7241/2-2000

