Hydraulic Couplings





TIF2500/TIF3800/TIF5000 Series

Technical Description

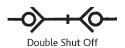
The FEM, FEC and IF series plug profiles are produced according to ISO Standard 16028 and are compatible with other series complying with the same standard. These couplings offer a leek free disconnection and minimal oil loss during uncoupling. Thanks to the valve design, the coupling has a minimum pressure drop, and thus achieves maximum cost-effectiveness. Exists in standard version (steel) and stainless steel.

Advantages

- Can be operated with use of one hand.
- Safety locking feature as standard to prevent unintentional uncoupling.
- FEC with the pressure eliminator enables effortless connection under static pressure (up to rated working pressure).
- FEMP and FECP with push pull features is suitable for multi-plates or when coupling is fixed on an application.



Working Pressure See charts.



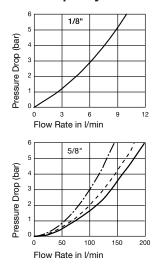
Working Temperature

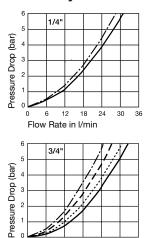
 -30° C up to $+100^{\circ}$ C (NBR), -25° C up to $+200^{\circ}$ C (FKM) depending on the medium.

Special seals are available on request.

Material Coupling	FEM-Series: Standard/Steel	FEC-Series: Push-Pull/Pressure Eliminator	IF-Series Stainless Steel
Coupling Body	Steel, zinc plated, passivated, sealed	Steel, nitrocarburizing	AISI 316
Sleeve	Steel, zinc plated, passivated, sealed	Steel, zinc plated, passivated, sealed	AISI 316
Valve	Steel, zinc plated, passivated, sealed	Steel, zinc plated, passivated, sealed	AISI 316
2nd Valve		Brass	
Springs	AISI 301	AISI 301	AISI 301
Locking Balls	AISI 420 C	AISI 420 C	AISI 420 C
Seals	NBR	NBR	FKM
Valve Holder	Steel, zinc plated, passivated	Steel, zinc plated, passivated, sealed	AISI 316
2nd Valve Holder (up to 100°C)		Zinc Casting (NBR)	
2nd Valve Holder (over 100°C)		Brass (EPDM/FKM)	AISI 316
Thread Body	Steel, zinc plated, passivated, sealed	Steel, zinc plated, passivated, sealed	
Material Plug	FEM-Series: Standard / Steel	FEC-Series: Push-Pull/Pressure Eliminator	IF-Series Stainless Steel
Plug Housing	Steel hardened, zinc plated, passiv., sealed	Steel hardened, zinc plated, passiv., sealed	AISI 316
Valve	Steel	Steel, zinc plated, passivated, sealed	AISI 316
2nd Valve		Brass	
Springs	AISI 301	AISI 301	AISI 301
Seals	NBR/PUR	NBR	FKM
Valve Holder	Brass	Brass	AISI 316
2nd Valve Holder (up to 100°C)		Zinc Casting (NBR)	
2nd Valve Holder (over 100°C)		Brass (EPDM/FKM)	AISI 316
Thread Body	Steel	Steel	AISI 316

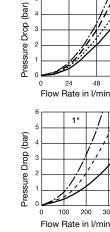
Flow Capacity with Oil with Viscosity of 32cSt at 40°C as per ISO 7241/2-2000

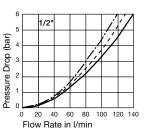




150 200

Flow Rate in I/min





Standard FEM

------ Both side pressure eliminator

Couplings side pressure eliminator
Plug side pressure eliminator

- - - One side pressure eliminator

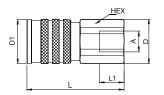
 - - - - One side pressure eliminator
(No difference in pressure drop / flow rate for the coupling and plug)

Hydraulic Couplings



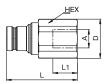


TIF2500/TIF3800/TIF5000 Series



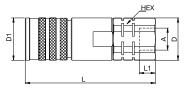
	Coupling											
Body Size	Connection A	Hex mm	L mm	L1 mm	D mm	D1 mm	Working Pressure Connection	Version	Seal	Part Number		
1/4"	G 1/4	27	64	12	29,5	29	315 bar	Standard	NBR	TE-TIF2510		

Female Thread



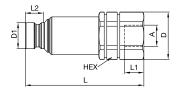
Female Thread

	Plugs												
Body Size	Connection A	Hex mm	L mm	L1 mm	D mm	D1 mm	Working Pressure Connection	Version	Seal	Part Number			
1/4"	G 1/4	22	49	12	24,5		315 bar	Standard	NBR	TE-TIF2520			
1/2"	G 1/2	36	66	14	40		250 bar	Standard	NBR	TE-TIF5020			
1/2"	G 3/4	36	70	16	40		250 bar	Standard	NBR	TE-TIF5020 75			



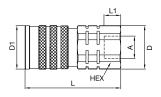
Female Thread

	Couplings											
Body Size	Connection A	Hex mm	L mm	L1 mm	L2 mm	D mm	D1 mm	Working Pressure Connection	Version	Seal	Part Number	
1/4"	G 1/4	27	91	12		29,5	29	315 bar	Press. Elimin.	NBR	TE-TIF2521	
3/8"	G 3/8	30	99	12		32	32	250 bar	Press. Elimin.	NBR	TE-TIF3811	
1/2"	G 1/2	40	112	14		43	39	250 bar	Press. Elimin.	NBR	TE-TIF5011	



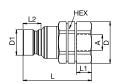
Female Thread

	Plugs											
Body Size	Connection A	Hex mm	L mm	L1 mm	L2 mm	D mm	D1 mm	Working Pressure Connection	Version	Seal	Part Number	
3/8"	G 3/8	30	87	12	16,1	32	19,7	250 bar	Press. Elimin.	NBR	TE-TIF3821	
1/2"	G 1/2	40	98	14	17	43	24,5	250 bar	Press. Elimin.	NBR	TE-TIF5021	



Female Thread

	Couplings											
Body Size	Connection A	Hex mm	L mm	L1 mm	L2 mm	D mm	D1 mm	Working Pressure Connection	Version	Seal	Part Number	
3/8"	G 3/8	30	71	12		32	32	250 bar	Stainless Steel	FKM	TE-TIF3810	
3/8"	G 1/2	30	73	14		32	32	250 bar	Stainless Steel	FKM	TE-TIF3810-50	
1/2"	G 1/2	36	76	14		40	39	250 bar	Stainless Steel	FKM	TE-TIF5010	
1/2"	G 3/4	36	80	16		40	39	250 bar	Stainless Steel	FKM	TE-TIF5010 75	



Female Thread

	Plugs											
Body Size	Connection A	Hex mm	L mm	L1 mm	L2 mm	D mm	D1 mm	Working Pressure Connection	Version	Seal	Part Number	
3/8"	G 3/8	30	58	12	16,1	32	19,7	250 bar	Stainless Steel	FKM	TE-TIF3820	
3/8"	G 1/2	30	60	12	16,1	32	19,7	250 bar	Stainless Steel	FKM	TE-TIF3820-50	

Dust Protection









Body Size	Version	L mm	D mm	Material	Colour	Part Number
3/8"	For coupling	170	28	PVC	Blue	TE-TIF3816
3/8"	For plug	170	28	PVC	Blue	TE-TIF3826
1/2"	For coupling	185	35	PVC	Blue	TE-TIF5016
1"	For coupling	240	50	PVC	Blue	TE-TIF10016
1"	For plug	240	50	PVC	Blue	TE-TIF10026