



Flat Face Plus ISO 16028 QD Series



Leak-Free Performance for High-Pressure Hydraulic Applications



- Offered in Zinc Nickel Plated Steel & 316 Stainless Steel
- Manufactured to ISO 16028 Standard
- Bi-directional Flow
- Multiple Thread Types: NPT and ORB
- Connect Under Pressure Series

- Tested to 1,200 Hours of Protection from White & Red Rust
- Minimizes Air Inclusion Upon Connection
- Sleeve-lock to Prevent Accidental Disconnection
- Multiple Body Sizes: Steel $\frac{1}{4}$ " - $1\frac{1}{2}$ "; 316SS $\frac{1}{4}$ " - 1"



Call ZSi-Foster at (866) 918-3003
or order now at ZSi-Foster.com

ZSi-Foster

Canton, MI | La Mirada, CA | Ocala, FL | Springfield, MO



FF Plus Series

(Flat Face, Meets ISO 16028 Standard)



Zinc Nickel Plated Steel

Mobile Hydraulic Equipment | Agricultural Machinery
Mining Equipment | Nuclear | General Industrial
Construction Equipment | Hammer Circuits
High Pressure Pulse Applications | Mobile Equipment



316 Stainless Steel

All Steel Applications Plus: Chemical Processing
Oil & Gas | Pharmaceutical Processing Equipment
Corrosive Fluid Environments | Marine

Construction

(Sizes 06 to 25) - Carbon steel with zinc nickel plating fitted with Nitrile seals (Viton seals available)
1200 hours with no white or red rust in salt spray tests
AISI 316 stainless steel fitted with Viton seals (Other seals available on request)

Features

Safety locking sleeve to prevent accidental disconnection
Flat faces are easily wiped clean
Minimal inclusion of air and contaminants during connection
Flat face design prevents fluid loss during disconnection
Bidirectional flow

Accessories

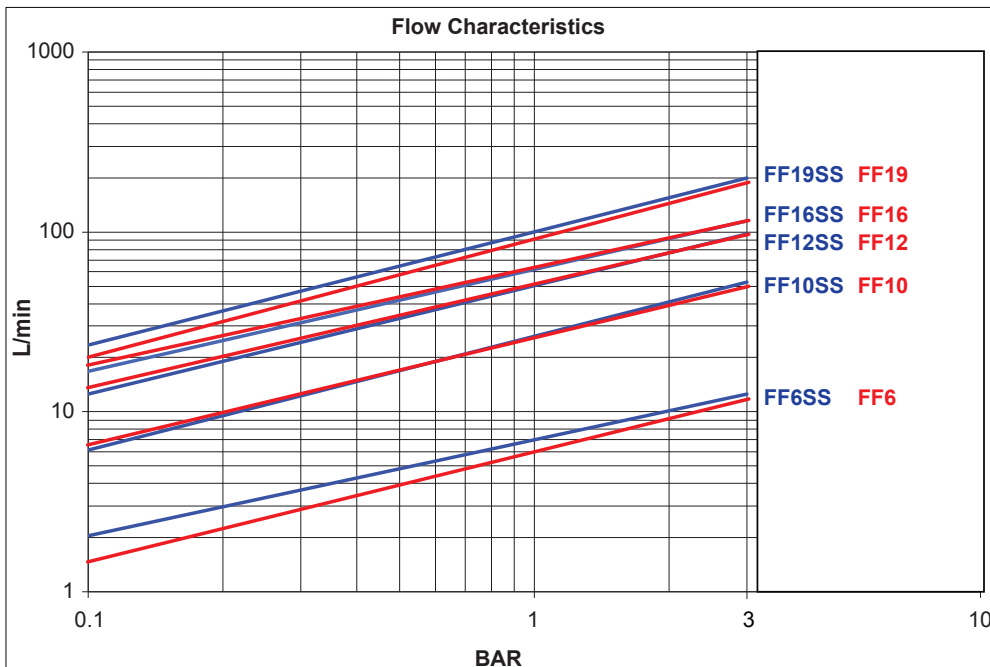
Dust Caps and Plugs are available

Specifications

Couplers have been tested to the ISO 7241-2 Standard
Operating temperatures - Zinc Nickel Plated Steel:
(With Nitrile seals): -40°C (-40°F) to 106°C (223°F),
(With Viton seals): -20°C (-4°F) to 200°C (392°F)
Operating temperatures - Stainless Steel:
(With Viton seals): -20°C (-4°F) to 200°C (392°F)

Flow Characteristics

Contact ZSi-Foster for detailed information



FF Plus Series

(Flat Face, Meets ISO 16028 Standard)



Part No.	ISO 16028 Size	Type	Finish	Body Size	Thread	Max. Working Pressure Psi	Burst Pressure (Coupled) Psi	Burst Pressure (each) Psi	Weight (lbs)		
FF6P-04	06	Plug	Zinc Nickel Plated Steel	1/4"	1/4" Female NPT	5,800	24,650	17,690	0.2		
FF6S-04		Socket						21,750	0.4		
FF6P-04SS		Plug	Stainless Steel - 316			5,075	18,850	37,700	0.2		
FF6S-04SS		Socket				23,200	0.4				
FF10P-06	10	Plug	Zinc Nickel Plated Steel	3/8"	3/8" Female NPT	5,075	21,750	15,225	0.3		
FF10S-06		Socket						15,950	0.6		
FF10P-06SS		Plug	Stainless Steel - 316			5,075	27,550	20,300	0.3		
FF10S-06SS		Socket						14,500	0.5		
FF10P-08		Plug	Zinc Nickel Plated Steel		1/2" Female NPT	5,075	21,750	15,225	0.3		
FF10S-08		Socket						15,950	0.6		
FF10P-08SS		Plug	Stainless Steel - 316			5,075	27,550	18,850	0.3		
FF10S-08SS		Socket						14,500	0.6		
FF10P-75ORB		Plug	Zinc Nickel Plated Steel		3/4" -16 Female ORB	5,075	21,750	14,500	0.4		
FF10S-75ORB		Socket				5,075	27,550	15,225	0.7		
FF12P-08		12	Plug		Zinc Nickel Plated Steel	1/2"	1/2" Female NPT	5,075	17,400	14,500	0.7
FF12S-08			Socket							15,225	1.0
FF12P-08SS	Plug		Stainless Steel - 316	5,075	23,200			15,950	0.6		
FF12S-08SS	Socket							14,500	1.0		
FF12P-12	Plug		Zinc Nickel Plated Steel	3/4" Female NPT	5,075		17,400	14,500	0.7		
FF12S-12	Socket							15,225	1.0		
FF12P-12SS	Plug		Stainless Steel - 316		5,075		23,200	15,950	0.7		
FF12S-12SS	Socket							14,500	1.0		
FF12P-75ORB	Plug		Zinc Nickel Plated Steel	3/4" - 16 Female ORB	5,075		17,400	15,225	0.9		
FF12S-75ORB	Socket							23,200	15,950	1.1	
FF12P-87ORB	Plug		Zinc Nickel Plated Steel	7/8" - 14 Female ORB	5,075		17,400	15,225	0.9		
FF12S-87ORB	Socket							23,200	15,950	1.1	
FF12P-106ORB	Plug		Zinc Nickel Plated Steel	1-1/16" - 12 Female ORB	5,075		17,400	15,225	0.9		
FF12S-106ORB	Socket							23,200	15,950	1.1	
FF16P-12	16		Plug	Zinc Nickel Plated Steel	5/8"		3/4" Female NPT	5,075	17400	15,950	0.7
FF16S-12			Socket							14,500	1.1
FF16P-12SS		Plug	Stainless Steel - 316	5,075		20,300		15,950	0.7		
FF16S-12SS		Socket						14,500	1.1		
FF19P-12	19	Plug	Zinc Nickel Plated Steel	3/4"	3/4" Female NPT	5,075	21,025	15,950	1.0		
FF19S-12		Socket						15,950	1.7		
FF19P-12SS		Plug	Stainless Steel - 316			5,075	20,300	15,950	0.7		
FF19S-12SS		Socket						14,500	1.7		
FF19P-16		Plug	Zinc Nickel Plated Steel		1" Female NPT	5,075	21,025	15,225	1.0		
FF19S-16		Socket						15,950	1.7		
FF19P-16SS		Plug	Stainless Steel - 316			5,075	20,300	15,950	1.0		
FF19S-16SS		Socket						14,500	1.7		
FF19P-131ORB		Plug	Zinc Nickel Plated Steel		1-5/16" - 12 Female ORB	5,075	21,025	15,950	1.1		
FF19S-131ORB		Socket						15,950	1.8		
FF25P-16	25	Plug	Zinc Nickel Plated Steel	1"	1" Female NPT	5,075	11,600	15,225	2.8		
FF25S-16		Socket						14,500	2.4		
FF25P-16SS		Plug	Stainless Steel - 316			5,075	14,500	15,950	2.8		
FF25S-16SS		Socket						14,500	3.1		
FF25P-20		Plug	Zinc Nickel Plated Steel		1-1/4" Female NPT	3,770	11,600	11,600	1.5		
FF25S-20		Socket						11,600	2.9		
FF25P-20SS		Plug	Stainless Steel - 316			5,075	14,500	14,500	1.7		
FF25S-20SS		Socket						14,500	3.1		
FF25P-162ORB		Plug	Zinc Nickel Plated Steel		1-5/8" - 12 Female ORB	5,075	11,600	15,225	1.7		
FF25S-162ORB		Socket						15,225	2.8		
FF32P-24	32	Plug	Zinc Nickel Plated Steel	1-1/4"	1-1/2" Female NPT	3,625	15,950	17,400	1.9		
FF32S-24		Socket						17,400	3.0		
FF40P-32	40	Plug	Zinc Nickel Plated Steel	1-1/2"	2" Female NPT	3,625	14,500	14,500	2.1		
FF40S-32		Socket						14,500	3.2		



FF Plus Series - Connect Under Pressure

(Flat Face, Meets ISO 16028 Standard)



FF10CUP



FF12CUP



FF19CUP

Connects under pressure by hand, with up to 350 bar locked in the plug. The ideal choice for applications where the ability to connect under pressure is essential.

Mobile Hydraulic Equipment | Agricultural Machinery | Mining Equipment
Nuclear | General Industrial | Construction Equipment | Leak free Environments
High Pressure Pulse Applications | Mobile Equipment | Hammer Circuits
Hot Environments Where Thermal Expansion of Trapped Oil May Take Place

Features

- Designed to connect with the flat face sockets
- Flat faces are easily wiped clean
- Allows for minimal inclusion of air and contaminants during connection
- Flat face design prevents fluid loss during disconnection
- Bidirectional flow
- Connect under pressure with up to 350 bar locked in the plugs
- Sockets must have zero pressure when connecting plugs under pressure

Construction

- (Sizes 10 to 19) - Carbon steel with zinc nickel plating fitted with Nitrile seals
- (1200 hours with no white or red rust in salt spray tests)

Accessories

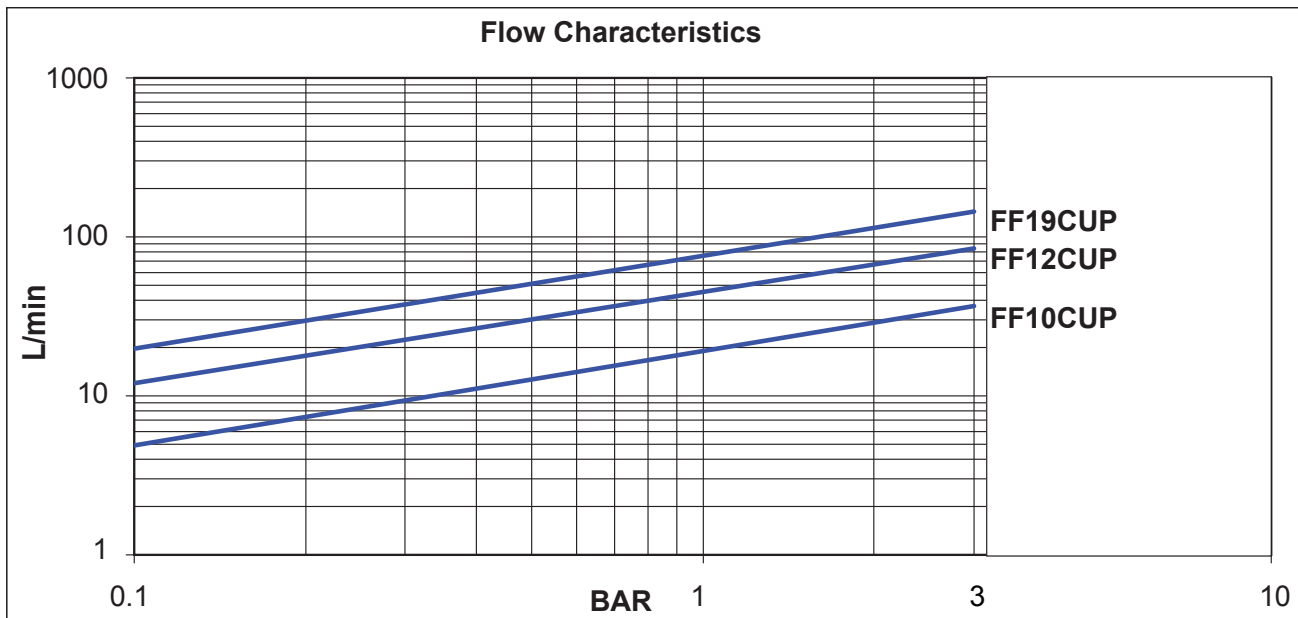
- Dust Caps are available for connect under pressure series

Specifications

- Operating temperatures:
(With Nitrile seals): -40°F to 223°F (-40°C to 106°C)

Flow Characteristics

- Contact ZSi-Foster for detailed information



FF Plus Connect Under Pressure Plugs & FF Plus Series Dust Caps




Connect Under Pressure Plugs


Part No.	ISO 16028 Size	Type	Finish	Body Size	Thread	Max. Working Pressure Psi	Burst Pressure (Coupled) Psi	Burst Pressure (Plug) Psi	Weight (lbs)
FF10CUPP-06	10	Plug	Zinc Nickel Plated Steel	3/8"	3/8" Female NPT	5,075	21,750	21,750	0.5
FF10CUPP-08					1/2" Female NPT				0.5
FF12CUPP-08	12			1/2" Female NPT	5,075	17,400	21,750	1.0	
FF12CUPP-12				3/4" Female NPT	5,075	21,750	1.0		
FF19CUPP-16	19			3/4"	1" Female NPT	5,075	21,025	23,200	1.1

Flat Face Dust Caps

FF Plus Series Socket - Dust Caps

Socket - Dust Caps		Part No.	Size	Description
		6FFSDC	1/4"	Dust Cap - PVC
		10FFSDC	3/8"	
		12FFSDC	1/2"	
		16FFSDC	5/8"	
		19FFSDC	3/4"	
		25FFSDC	1"	

FF Plus Series Plug - Dust Caps

Plug - Dust Caps		Part No.	Size	Description
		6FFPDC	1/4"	Dust Cap - PVC
		10FFPDC	3/8"	
		12FFPDC	1/2"	
		16FFPDC	5/8"	
		19FFPDC	3/4"	
		25FFPDC	1"	

Call ZSi-Foster at (866) 918-3003
or order now at ZSi-Foster.com



Foster Flat Face Plus Series Frequently Asked Questions

1. When did Foster first offer FF product?

- Foster designed and launched this product type in 1999. It was a limited offering.
- The current offering was kicked-off in November 2016 and released in 1Q 2018.
- It maintains the same part numbers as those created in 1999.

2. What are the advantages of zinc nickel plated steel over trivalent chrome plated steel?

- Trivalent chrome, still available from our Breco line, offers approximately 96 hours of protection against rust.
- The carbon steel QC is zinc nickel plated and offers protection of at least 1,200 hours against white and red rust.

3. Where is the product stocked?

- In our plant located in Springfield, MO.
- Please contact your Regional Manager for questions about other stocking locations.

4. Does the ZSi-Foster product interchange with competitors' offerings?

- Yes, as long as the competitor's product is manufactured to the ISO 16028 interchange standard.

5. What is the breadth of ZSi-Foster's flat-face offering?

- The product is available in zinc nickel plated steel, 316SS, and accessories.
- Connect-under-pressure (CUP) plugs are available in three different body sizes. (ISO 10, 12, 19)
- Many thread jump sizes are available within each body size.

6. Can custom product be developed?

- Yes – please contact your Regional Sales Manager.

7. Are additional body sizes / jump sizes available?

- Yes – please contact your Regional Sales Manager.

8. Are other seals available?

- Yes – for Viton add the suffix -V to the item number.
- For other seal options please contact your Regional Sales Manager.



1,200 Hour Salt Spray Test Results

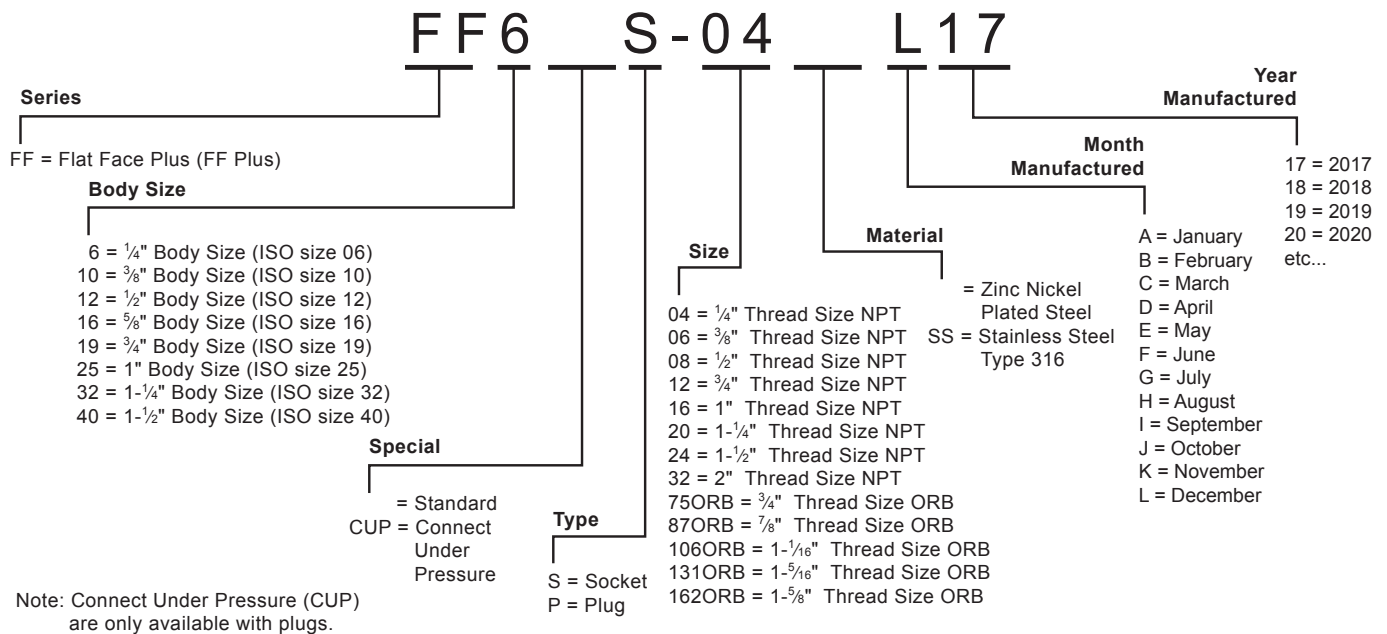
Finish	Original Parts - 000	24 Hours	96 Hours	288 Hours	480 Hours	957 Hours	1,200 Hours
Zinc Nickel Plating							
Trivalent Chrome							

Foster Flat Face Plus Series Frequently Asked Questions



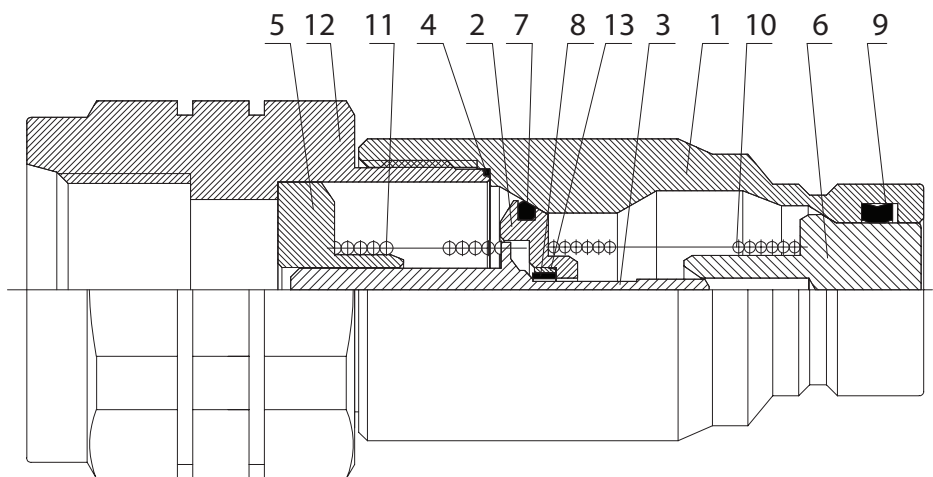
9. What do all the letters and numbers mean on the product? As an example, FOSTER FF6S-04 L17?

- FOSTER indicates the brand name of the product offering.
- FF6S-04 indicates the part number, with the nomenclature indicating the following:
 - FF = Flat Face Plus product series
 - 6 = body size in mm; above example indicates ~ 1/4" body size
 - S = socket (P = plug)
 - 04 = thread size in inches using the 1/16 scale; above example indicates 1/4" NPT
- L17 indicates is a date code for month and year of manufacture; the letter indicates month, numbers indicates year
- See Part Number Chart below



Flat Face Plug Cutaway Diagram

Item	Desc.
1	Body
2	Secondary Valve
3	Poppet Valve Guide Pin
4	Connector Seal
5	Spring Support
6	Poppet Valve
7	Secondary Valve Seal
8	Decompression Valve Seal
9	Poppet Valve Seal
10	Poppet Valve Spring
11	Secondary Valve Spring
12	Connector
13	Bush



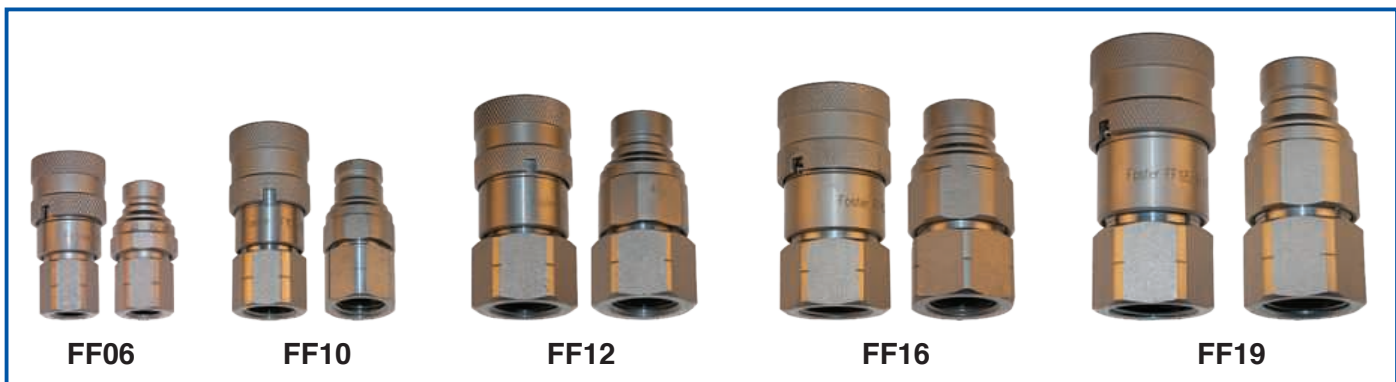


Flat Face Plus ISO 16028 QD Series



Typical Applications Include:

- ◆ Public Utilities
- ◆ Construction Equipment
- ◆ Agricultural Equipment
- ◆ Mining Equipment and Railway Maintenance
- ◆ Specialized Applications in Chemical, Pharmaceutical and Food Processing



- Recommended for All Applications Where There is a Risk of Contamination of Hydraulic Circuits and to Meet Safety, Environmental Protection and Cleanliness of the Work Area
- Two-Way Shut Off; Easily Wiped Clean
- Designed for Applications Where Hydraulic Spillage is a Concern



Call ZSi-Foster at (866) 918-3003
or order now at ZSi-Foster.com

ZSi-Foster - Canton, MI | La Mirada, CA | Ocala, FL | Springfield, MO