



FF90 SERIES

90 DEGREE FLAT FACE COUPLERS MADE TO THE ISO 16028 STANDARD

AKJia's FF90 Series is designed for use in applications that require a 90° elbow in the hydraulic circuit, such as digger booms. The right angle design allows for easy mounting without the need for additional fittings, reducing potential leakage paths and cost.

Series FF90 // Carbon Steel

Material	Carbon Steel
Surface Finishing	Zinc-Nickel, Zinc-Plating
Standard Seal Material(s)	NBR (Buna-N®), PTFE, ²
Working Temperature	-25° C ... +100° C / -13° F ... +212° F
Valve Design	Flat Face
Connection	Push
Disconnection	Actuate Push Sleeve
Connect Under Pressure	not allowed
Application	Hammer circuits, High pressure pulse applications, Construction plant, mobile equipment, general industrial
ISO Interchange	ISO 16028

² Alternative seal materials are available on request.

Features

- Flush, non-spill valving
- 90 degree elbow incorporated into the coupler
- Push to connect operation
- Global interchangeability with other ISO 16028 compliant couplings
- Standard sleeve lock guards against accidental disconnection
- Flat faces are easily wiped clean
- Flat face design prevents fluid loss during disconnection
- The FF90 Series is designed to connect with FF Series flat face couplers
- 1/2" body size default, other size need to customized design.

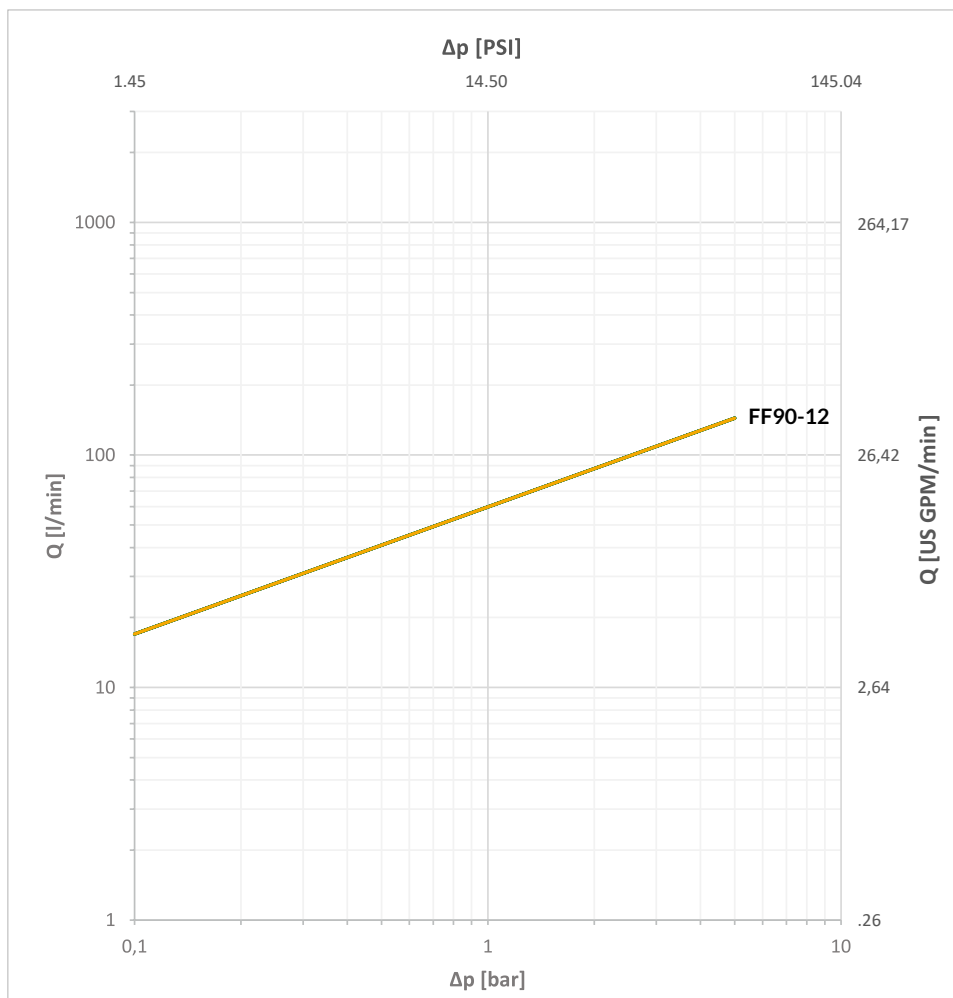
Applications

- Hammer circuits
- High pressure pulse applications
- Leak free environments
- Construction plant
- mobile equipment
- general industrial
- nuclear
- **mining**
- agricultural industries
- oil and gas industries

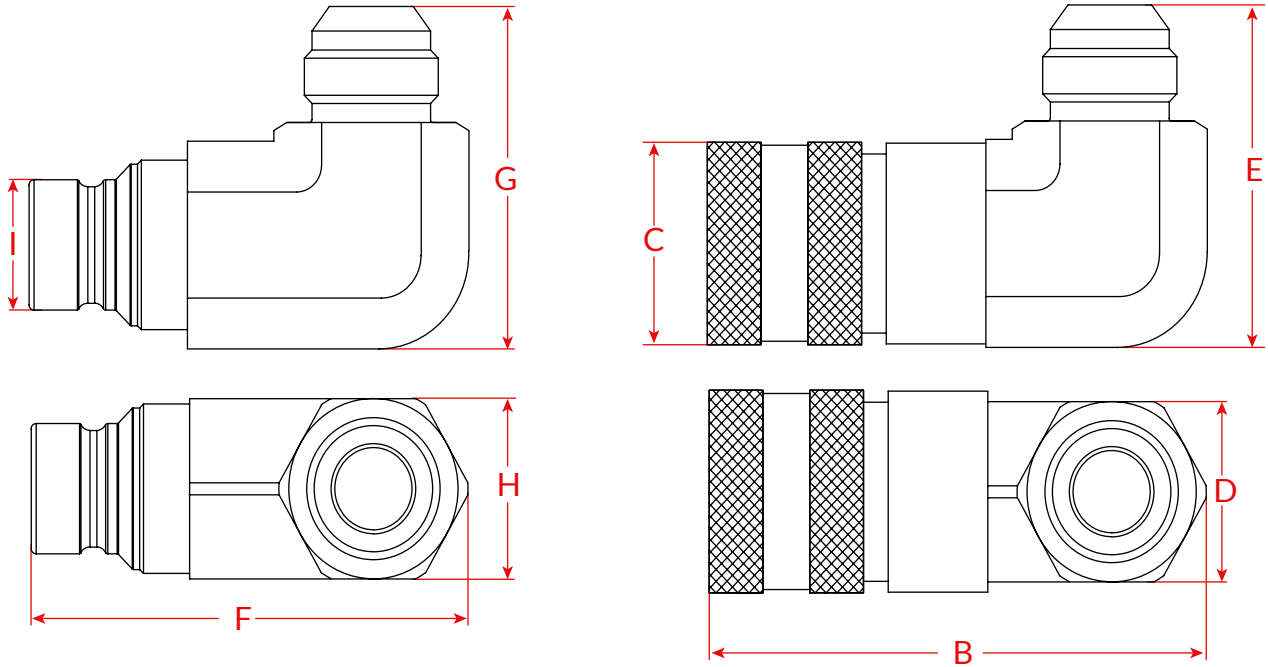
Technical Data

Series	DN Inch	DN Metric	Q _{max}		Working Pressure		bursting puresure coupled		female body		male tip		spillage ml
			l/min	US GPM	bar	psi	bar	psi	bar	psi	bar	psi	
FF90-12	1/2"	12,5	120	31.70	350	5076	1400	20300	1000	14504	1300	18550	0.02

Flow Characteristics



Dimensions



Series	Size	Thread	F Length	O.D	THK	W	M Length	W	THK	O.D	Weight (g)	
			B	C	D	E	F	G	H	I	Female	Male
FF90-12	1/2"	3/8" JIC	100.5	38	34	44	88	44	34	24.5	640	480
FF90-12	1/2"	1/2" SAE	100.5	38	34	56	88	56	34	24.5	640	480
FF90-12	1/2"	3/4" JIC	100.5	38	34	64	88	64	34	24.5	650	490

Dimensions in mm

These quick connectors are commonly used on Bobcat equipment and can be purchased by OEM number. The OEM numbers for JIC 3/4" thread are FF90-12 F JIC3/4" = 7246781, FF90-12 M JIC3/4" = 7246795, and the OEM numbers for JIC 3/8" thread are FF90-12 F JIC3/8" = 7246782, FF90-12 M JIC3/8" = 7246796

Code Rules

FF90 - **12** **F** **NPT1/2**

① ② ③ ④

- ① Series - FF90
- ② Body Size, 12 = 1/2"
- ③ Part, F = Female Coupler, M = Male Nipple, Blank = Set(Female+Male)
- ④ Thread Type and Size, JIC3/8, SAE1/2, JIC3/4...etc

Dust Caps



Size	Female Body	Male Tip
1/2"	DC-FF-12 F	DC-FF-12 M

The FF90 series also complies with the ISO 16028 standard, so the dust caps can be the same as the FF series. Because this series is only 1/2 size, it can be directly used with the corresponding DC-FF-12 F and DC-FF-12 M.