



FF SERIES

FLAT FACE COUPLERS MADE TO THE ISO 16028 STANDARD

The FF Series flat face couplers are AKJia's flagship products, known globally for their leak free performance in high pressure pulse, hammer circuits and many other applications. The flush valves eliminate spillage and air inclusion when connecting and disconnecting. Coupler and nipple bodies have a modular design with increased flexibility for end port options.

Series FF // 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

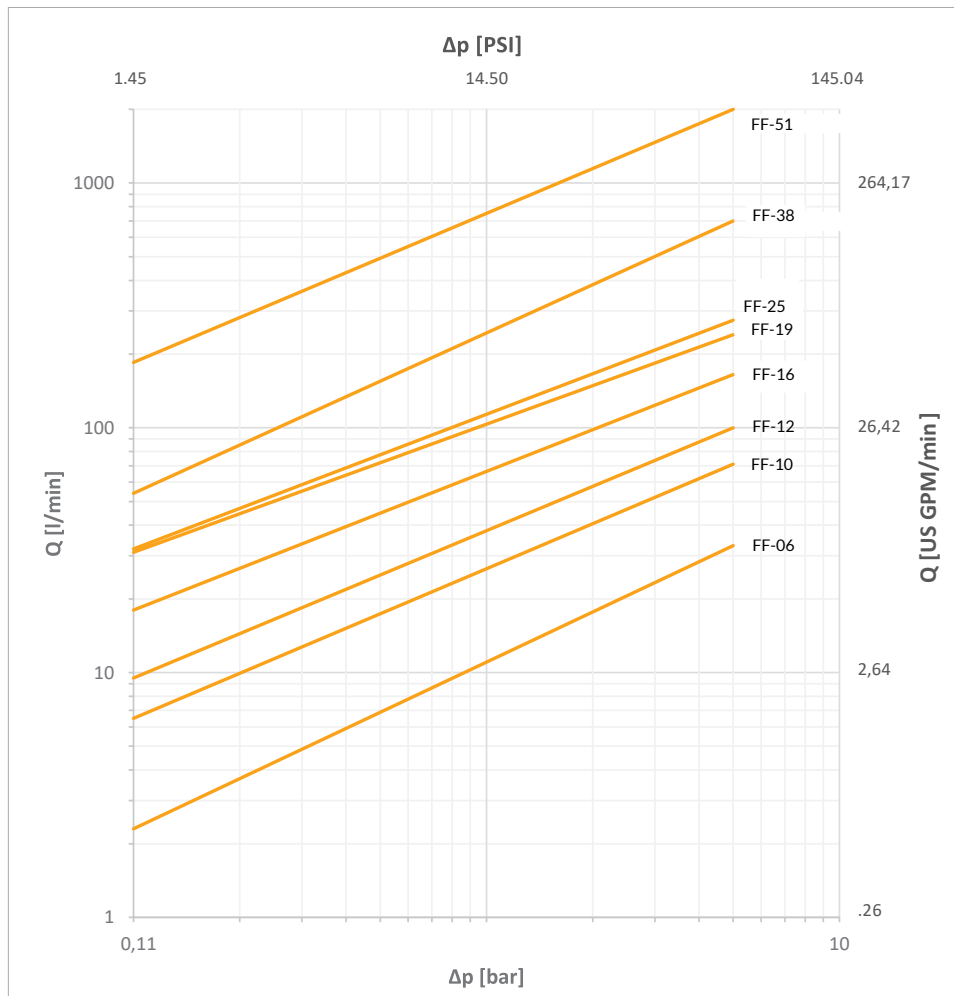
- Flush, non-spill valving
- Push to connect operation
- Global interchangeability with other ISO 16028 compliant couplings
- Standard sleeve lock guards against accidental disconnection
- Flat faces are easily wiped clean
- Flat face design prevents fluid loss during disconnection

Applications

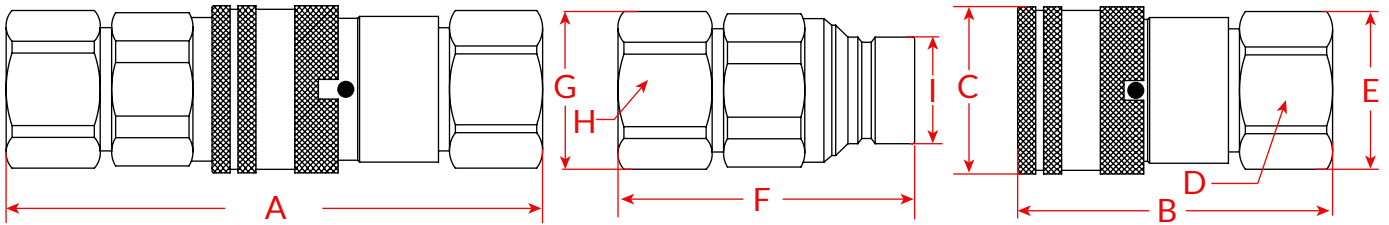
- Hammer circuits
- High pressure pulse applications
- Leak free environments
- Construction plant
- mobile equipment
- general industrial
- nuclear
- **mining**
- agricultural industries
- oil and gas industries
- Skid loader attachments
- portable car lift
- hydraulic tools

| Series | DN Inch | DN Metric | Q _{max} | | Working Pressure | | bursting pressure coupled | | female body | | male tip | | spillage ml |
|--------|------------|--------------|------------------|--------|---------------------|------|---------------------------------|-------|-------------|-------|----------|-------|----------------|
| | | | l/min | US GPM | bar | psi | bar | psi | bar | psi | bar | psi | |
| FF-06 | 1/4" | 6,3 | 40 | 10.57 | 400 | 5801 | 1700 | 24656 | 1220 | 17695 | 1500 | 21756 | 0.01 |
| FF-10 | 3/8" | 10 | 80 | 21.13 | 350 | 5076 | 1500 | 21756 | 1050 | 15229 | 1100 | 15954 | 0.015 |
| FF-12 | 1/2" | 12,5 | 120 | 31.70 | 350 | 5076 | 1200 | 17404 | 1000 | 14504 | 1050 | 15229 | 0.02 |
| FF-16 | 5/8" | 16 | 140 | 36.98 | 350 | 5076 | 1200 | 17404 | 1100 | 15954 | 1100 | 15954 | 0.02 |
| FF-19 | 3/4" | 19 | 180 | 47.55 | 350 | 5076 | 1450 | 21030 | 1050 | 15229 | 1050 | 15229 | 0.032 |
| FF-25 | 1" | 25 | 260 | 68.68 | 260 | 3771 | 800 | 11603 | 800 | 11603 | 800 | 11603 | 0.03 |
| FF-31 | 1 1/4" | 31,5 | 600 | 158.50 | 300 | 4351 | 1000 | 14504 | 1000 | 14504 | 1000 | 14504 | 0.1 |
| FF-38 | 1 1/2" | 38 | 1000 | 264.17 | 150 | 2176 | 650 | 9427 | 650 | 9427 | 700 | 10153 | 0.1 |
| FF-51 | 2" | 51 | 2350 | 620.80 | 150 | 2176 | 650 | 9427 | | | | | |

Flow Characteristics



Dimensions



| Series | Size | Thread | Overall Length | F Length | O.D | Hex | O.D | M Length | O.D | Hex | O.D | Weight (g) | |
|--------|--------|--------|----------------|----------|------|-----|-----|----------|-----|-----|------|------------|------|
| | | | | B | C | D | E | F | G | H | I | Female | Male |
| FF-06 | 1/4" | 1/4" | 95.2 | 58.2 | 28 | 22 | 24 | 48 | 24 | 22 | 16.1 | 181 | 96 |
| FF-10 | 3/8" | 3/8" | 113.9 | 68.1 | 32 | 27 | 29 | 61.5 | 26 | 24 | 19.7 | 256 | 156 |
| FF-10 | 3/8" | 1/2" | 120.9 | 73.3 | 32 | 27 | 29 | 61.5 | 29 | 27 | 19.7 | 259 | 159 |
| FF-12 | 1/2" | 1/2" | 125.3 | 75.1 | 38 | 32 | 34 | 68 | 34 | 32 | 24.5 | 408 | 305 |
| FF-12 | 1/2" | 3/4" | 136.3 | 81.1 | 38 | 36 | 38 | 73 | 38 | 36 | 24.5 | 451 | 314 |
| FF-16 | 5/8" | 3/4" | 132.9 | 79.9 | 42 | 36 | 38 | 70.5 | 38 | 36 | 27 | 460 | 320 |
| FF-19 | 3/4" | 1" | 163.1 | 99.2 | 48 | 41 | 44 | 85.5 | 44 | 41 | 30 | 850 | 478 |
| FF-25 | 1" | 1 1/4" | 178 | 111.5 | 56 | 55 | 58 | 90 | 58 | 55 | 36 | 1139 | 648 |
| FF-31 | 1 1/4" | 1 1/2" | 233.4 | 150 | 79.5 | 65 | 68 | 112 | 68 | 65 | 57 | 2370 | 1117 |
| FF-38 | 1 1/2" | 2" | 251.7 | 167 | 98.5 | 85 | 88 | 123.9 | 78 | 75 | 73 | 2700 | 1800 |

Dimensions in mm, O.D(I) can help users identify the size of the quick connector. You can compare it with the ISO16028 standard document to help users identify.

Dimensions and weights are based on NPT internal threads. For data on other threads, please contact us. Or view data on specific products on our website.

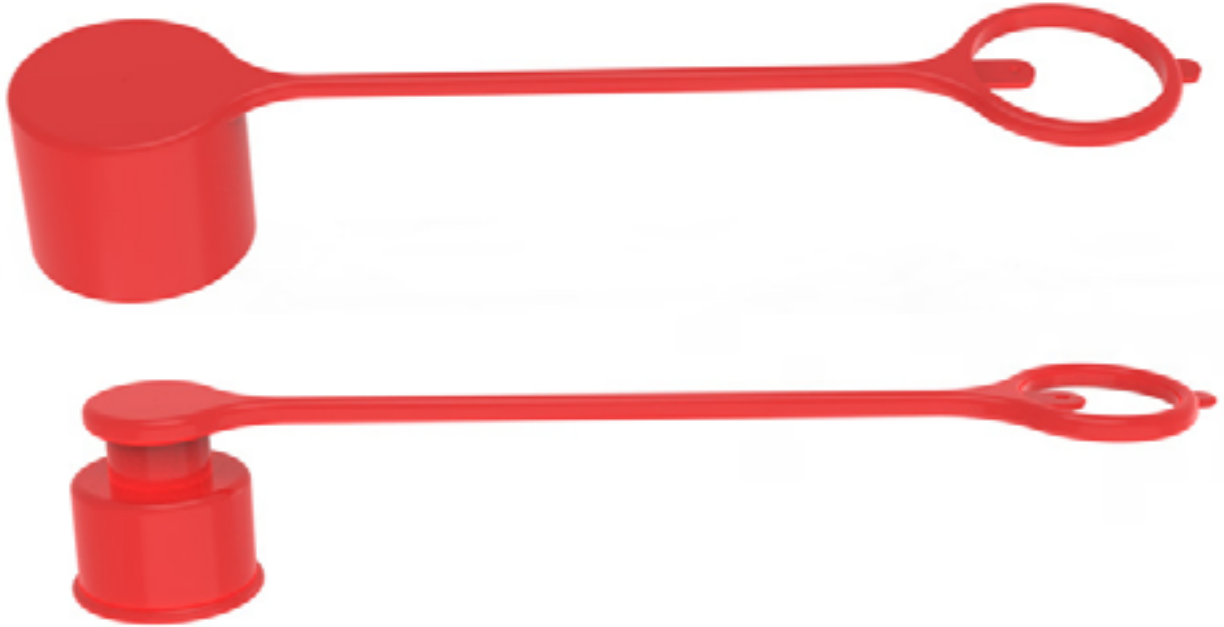
Code Rules

FF - 12 F NPT1/2

①
②
③
④

- ① Series - FF
- ② Body Size, 06 = 1/4", 10 = 3/8", 12 = 1/2", 16 = 5/8", 19 = 3/4", 25 = 1", 31 = 1 1/4", 38 = 1 1/2", 51 = 2"
- ③ Part, F = Female Coupler, M = Male Nipple, Blank = Set(Female+Male)
- ④ Thread Type and Size, NPT1/2, JIC3/8, G1/2...etc

Dust Caps



| Size | Female Body | Male Tip | Size | Female Body | Male Tip |
|------|-------------|------------|--------|-------------|------------|
| 1/4" | DC-FF-06 F | DC-FF-06 M | 1" | DC-FF-25 F | DC-FF-25 M |
| 3/8" | DC-FF-10 F | DC-FF-10 M | 1 1/4" | DC-FF-31 F | DC-FF-31 M |
| 1/2" | DC-FF-12 F | DC-FF-12 M | 1 1/2" | DC-FF-38 F | DC-FF-38 M |
| 3/4" | DC-FF-19 F | DC-FF-19 M | 2" | DC-FF-51 F | DC-FF-51 M |

The male coupler dust cap of the flat face quick coupling can be applied to any brand of quick couplings with corresponding interchangeable sizes couplings. The dimensions are 100% compatible. However, the outer diameter of the female coupler dust cap of the flat quick connector may be slightly different. It is more reasonable to purchase a matching dust cap when purchasing a quick coupling. If you purchase a dust cap separately, you need to pay attention to the outer diameter.