

FF Series (Steel) ISO 16028 Interchange



Hansen's FF Series flat face is specifically designed for those applications where quick and easy connections and no-spill performance are essential. The FF Series is ideal for use when global interchangeability with other manufacturers is important and is available in sizes from 1/4" through 2" to best meet your specific size requirements.

Product Features

- Meets or exceeds the ISO 16028 standard
- Push-to-connect
- Standard sleeve lock prevents accidental disconnection
- Colour identification rings available to help prevent crossing of lines
- Standard Material: High-resistant carbon steel with Guardian Seal™ plating, a whole new level of corrosion resistance with minimum 720 hours RR protection
- Guardian Seal™ plating:
 - Nickel-free
 - Solvent-free
 - Meets Global RoHS, ELV and REACH requirements
- Standard Seal Material: NBR+AU
- Available seal options: NBR+AU, FKM, EPDM, HNBR (upon request)

Physical Characteristics

| ISO Size* (mm) | Coupling Size (in) | Maximum Operating Pressure Connected*** | | | | Minimum Burst Pressure Connected | | | | Rated Flow** (lpm) | Fluid Loss ml-cc. | Air Inclusion ml-cc. | Force to Connect | | | | | | |
|-------------------|-----------------------|---|-------|-------|-------|----------------------------------|-------|-------|--------|-----------------------|----------------------|-------------------------|------------------|-----|-------|-------|-------|-----|------|
| | | (bar) | (psi) | (bar) | (psi) | (bar) | (psi) | (bar) | (psi) | | | | N | Lbs | | | | | |
| 6.3 | 1/4 | 400 | 5,800 | 400 | 5,800 | 400 | 5,800 | 1,400 | 20,300 | 1,400 | 20,300 | 1,400 | 20,300 | 18 | 4.8 | 0.004 | 0.007 | 80 | 18.0 |
| 10.0 | 3/8 | 400 | 5,800 | 400 | 5,800 | 400 | 5,800 | 1,400 | 20,300 | 1,400 | 20,300 | 1,400 | 20,300 | 40 | 10.6 | 0.006 | 0.010 | 140 | 31.5 |
| 12.5 | 1/2 | 400 | 5,800 | 400 | 5,800 | 400 | 5,800 | 1,400 | 20,300 | 1,400 | 20,300 | 1,400 | 20,300 | 77 | 20.3 | 0.012 | 0.013 | 195 | 43.8 |
| 16.0 | 5/8 | 400 | 5,800 | 400 | 5,800 | 400 | 5,800 | 1,400 | 20,300 | 1,400 | 20,300 | 1,400 | 20,300 | 82 | 21.7 | 0.016 | 0.030 | 205 | 46.1 |
| 19.0 | 3/4 | 400 | 5,800 | 400 | 5,800 | 400 | 5,800 | 1,300 | 18,850 | 1,300 | 18,850 | 1,400 | 20,300 | 114 | 30.1 | 0.034 | 0.015 | 215 | 48.3 |
| 25.0 | 1 | 400 | 5,800 | 400 | 5,800 | 400 | 5,800 | 1,260 | 18,270 | 1,260 | 18,270 | 1,260 | 18,270 | 184 | 48.6 | 0.032 | 0.033 | 260 | 58.5 |
| - | 1 1/4 | 300 | 4,350 | 300 | 4,350 | 300 | 4,350 | 900 | 13,050 | 900 | 13,050 | 900 | 13,050 | 260 | 68.7 | 0.170 | 0.053 | 200 | 45.0 |
| - | 1 1/2 | 300 | 4,350 | 300 | 4,350 | 270 | 3,915 | 900 | 13,050 | 900 | 13,050 | 810 | 11,745 | 450 | 118.9 | 0.265 | 0.445 | 385 | 86.6 |
| - | 2 | 300 | 4,350 | 300 | 4,350 | 225 | 3,260 | 900 | 13,050 | 900 | 13,050 | 675 | 9,790 | 700 | 184.9 | 0.390 | 0.260 | 375 | 84.3 |

* The ISO size corresponds to the internal diameter of the hose or the external diameter of the rigid tube (as defined in ISO 4397 Standard)

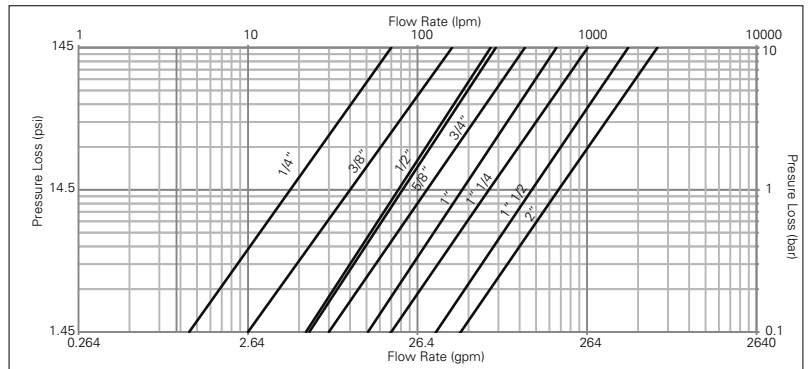
** Indicated values refer to a 1 bar/14.5 psi pressure drop

*** 400 bar for static, steady or non-pulsed applications, 350 bar for ISO pressure rating for dynamic applications with moderate hydraulic shock

Applications & Markets

- Hydraulic and Fluid Transfer
- Construction Equipment
- Agricultural Equipment
- Utility Vehicles
- On-Highway Vehicles
- Stationary In-plant Hydraulics and Fluid Transfer
- Interchangeable with HTMA couplings in the 3/8" size

Flow Data



Seal Elastomer Data*

| Seal Elastomer | P/N Code | ISO Size (6FF, 10FF, 12FF, 16FF, 19FF and 25FF) Maximum Operation Temperature Range | Non-ISO Size (32FF, 50FF and 50FF) Maximum Operation Temperature Range |
|-----------------------------------|----------|---|--|
| NBR (Nitrile) + AU (Polyurethane) | - | -25°C +100°C/-13°F +212°F | -20°C +100°C/-4°F +212°F |
| FKM | -143 | -20°C +200°C/-4°F +392°F | -15°C +180°C/+5°F +356°F |
| EPDM (Ethylene-Propylene) | -192 | -40°C +150°C/-40°F +302°F | on request |
| HNBR | -507 | -32°C +150°C/-25°F +302°F | on request |
| Kalrez® 6375 | -242 | -20°C +275°C/-4°F +527°F | on request |
| Generic FFKM (Perfluorocarbon) | -503 | -15°C +275°C/+5°F +527°F | on request |

* For reference only, based on Guyson recommended temperatures.

Contact Guyson technical sales department for further information on fluid compatibility

Maximum Operating Pressure

| Coupling Size (in) | Nominal Flow Diameter | Non hazardous liquids Group 2 | | Non hazardous gases Group 2 | | Hazardous liquids Group 1 | | | | | | | |
|-----------------------|-----------------------|-------------------------------|--------|-----------------------------|--------|---------------------------|--------|-----|------|----|-----|----|-----|
| | | Plug & Connected | Socket | Plug & Connected | Socket | Plug & Connected | Socket | | | | | | |
| | | bar | (psi) | bar | (psi) | bar | (psi) | | | | | | |
| 1 1/2 | 30.1 | 300 | 4350 | 270 | 3915 | 300 | 4350 | 270 | 3915 | 66 | 955 | 66 | 955 |
| 2 | 39.2 | 300 | 4350 | 225 | 3260 | 25 | 360 | 25 | 360 | 50 | 725 | 50 | 725 |

* Nominal diameters over 25mm should not be used to convey gases in group 1 (PED 2014/68/EU)

European Pressure Equipment Directive

All couplings are designed and manufactured under Article 4.3 of the European Pressure Equipment Directive PED 2014/68/EU. Couplings with nominal diameters greater than 25 mm should not be used to convey gases in Group 1 (hazardous).



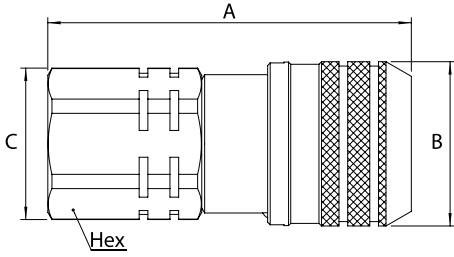
GUYSON INTERNATIONAL LIMITED HOSE & COUPLINGS DIVISION

Southview Business Park, Guiseley, Leeds LS20 9PR

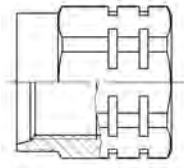
Tel: 01943 870044 e-mail: leeds@guyson.co.uk web: www.guyson.co.uk



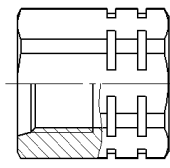
FF Series (Steel) ISO 16028 Interchange



ISO 6149-1
15° + metric thread



SAE J 1926-1
15° + UN/UNF thread



EATON S013A
15° + BSPP thread

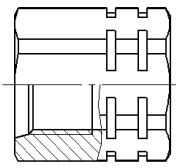


Figure 1

Sockets (Female)

| Part Number | Body Size (in) | ISO Size (mm) | Nominal Flow Diameter (mm) | Thread Size* (Female) | | | | Fig. | Dimensions | | | | | | Weight | | | |
|-------------|----------------|---------------|----------------------------|-----------------------|------|------------|--------------|------|-------------|--------|--------|--------|----------|--------|--------|--------|----------|------|
| | | | | NPT | BSPP | ISO 6149-1 | SAE J 1926-1 | | Eaton S013A | A (in) | B (in) | C (in) | Hex (in) | A (mm) | B (mm) | C (mm) | Hex (mm) | lbs |
| 6FFS25 | ¼ | 6.3 | 6 | ¼ 18f | | | | 1 | 2.13 | 1.06 | 0.94 | 0.87 | 54 | 27 | 24 | 22 | - | - |
| 6FFS25BS | ¼ | 6.3 | 6 | ¼-19 | | | | 1 | 2.13 | 1.06 | 0.94 | 0.87 | 54 | 27 | 24 | 22 | - | - |
| 6FFS25FG | ¼ | 6.3 | 6 | | | | G ¼ | 1 | 2.13 | 1.06 | 0.94 | 0.87 | 54 | 27 | 24 | 22 | 0.32 | 143 |
| 6FFS56UN | ¼ | 6.3 | 6 | | | | ¾ 18f UNF | 1 | 2.17 | 1.06 | 0.94 | 0.87 | 55 | 27 | 24 | 22 | - | - |
| 10FFS16FMET | ¾ | 10 | 8.6 | | | M16x1.5 | | 1 | 2.67 | 1.26 | 1.16 | 1.06 | 67.8 | 32 | 29.5 | 27 | - | - |
| 10FFS37 | ¾ | 10 | 8.6 | ¾ 18f | | | | 1 | 2.67 | 1.26 | 1.16 | 1.06 | 67.8 | 32 | 29.5 | 27 | - | - |
| 10FFS37BS | ¾ | 10 | 8.6 | ¾-19 | | | | 1 | 2.67 | 1.26 | 1.16 | 1.06 | 67.8 | 32 | 29.5 | 27 | - | - |
| 10FFS37FG | ¾ | 10 | 8.6 | | | | G ¾ | 1 | 2.67 | 1.26 | 1.16 | 1.06 | 67.8 | 32 | 29.5 | 27 | 0.56 | 255 |
| 10FFS50 | ¾ | 10 | 8.6 | ½ 14f | | | | 1 | 2.79 | 1.26 | 1.16 | 1.06 | 70.8 | 32 | 29.5 | 27 | - | - |
| 10FFS50BS | ¾ | 10 | 8.6 | ½-14 | | | | 1 | 2.79 | 1.26 | 1.16 | 1.06 | 70.8 | 32 | 29.5 | 27 | - | - |
| 10FFS50FG | ¾ | 10 | 8.6 | | | | G ½ | 1 | 2.79 | 1.26 | 1.16 | 1.06 | 70.8 | 32 | 29.5 | 27 | 0.55 | 251 |
| 10FFS56UN | ¾ | 10 | 8.6 | | | | ¾ 18f UNF | 1 | 2.79 | 1.26 | 1.16 | 1.06 | 70.8 | 32 | 29.5 | 27 | - | - |
| 10FFS75UN | ¾ | 10 | 8.6 | | | | ¾ 16f UNF | 1 | 2.79 | 1.26 | 1.16 | 1.06 | 70.8 | 32 | 29.5 | 27 | - | - |
| 10FFS87UN | ¾ | 10 | 8.6 | | | | ¾ 14f UNF | 1 | 2.91 | 1.26 | 1.30 | 1.18 | 73.8 | 32 | 33 | 30 | - | - |
| 12FFS106UN | ½ | 12.5 | 11 | | | | 1 ¼ 12f UN | 1 | 3.50 | 1.50 | 1.56 | 1.42 | 89 | 38.2 | 39.5 | 36 | - | - |
| 12FFS50 | ½ | 12.5 | 11 | ½ 14f | | | | 1 | 3.27 | 1.50 | 1.56 | 1.42 | 83 | 38.2 | 39.5 | 36 | - | - |
| 12FFS50BS | ½ | 12.5 | 11 | ½-14 | | | | 1 | 3.27 | 1.50 | 1.56 | 1.42 | 83 | 38.2 | 39.5 | 36 | - | - |
| 12FFS50FG | ½ | 12.5 | 11 | | | | G ½ | 1 | 3.27 | 1.50 | 1.56 | 1.42 | 83 | 38.2 | 39.5 | 36 | 1.1 | 498 |
| 12FFS75 | ½ | 12.5 | 11 | ¾ 14f | | | | 1 | 3.39 | 1.50 | 1.56 | 1.42 | 86 | 38.2 | 39.5 | 36 | - | - |
| 12FFS75BS | ½ | 12.5 | 11 | ¾-14 | | | | 1 | 3.39 | 1.50 | 1.56 | 1.42 | 86 | 38.2 | 39.5 | 36 | - | - |
| 12FFS75FG | ½ | 12.5 | 11 | | | | G ¾ | 1 | 3.39 | 1.50 | 1.56 | 1.42 | 86 | 38.2 | 39.5 | 36 | 1.08 | 488 |
| 12FFS75UN | ½ | 12.5 | 11 | | | | ¾ 16f UNF | 1 | 3.27 | 1.50 | 1.56 | 1.42 | 83 | 38.2 | 39.5 | 36 | - | - |
| 12FFS87UN | ½ | 12.5 | 11 | | | | ¾ 14f UNF | 1 | 3.39 | 1.50 | 1.56 | 1.42 | 86 | 38.2 | 39.5 | 36 | - | - |
| 16FFS106UN | ¾ | 16 | 13 | | | | 1 ½ 12f UN | 1 | 3.50 | 1.66 | 1.56 | 1.42 | 89 | 42.2 | 39.5 | 36 | - | - |
| 16FFS50 | ¾ | 16 | 13 | ½ 14f | | | | 1 | 3.27 | 1.66 | 1.56 | 1.42 | 83 | 42.2 | 39.5 | 36 | - | - |
| 16FFS50BS | ¾ | 16 | 13 | ½-14 | | | | 1 | 3.27 | 1.66 | 1.56 | 1.42 | 83 | 42.2 | 39.5 | 36 | - | - |
| 16FFS75 | ¾ | 16 | 13 | ¾ 14f | | | | 1 | 3.39 | 1.66 | 1.56 | 1.42 | 86 | 42.2 | 39.5 | 36 | - | - |
| 16FFS75BS | ¾ | 16 | 13 | ¾-14 | | | | 1 | 3.39 | 1.66 | 1.56 | 1.42 | 86 | 42.2 | 39.5 | 36 | - | - |
| 16FFS75FG | ¾ | 16 | 13 | | | | G ¾ | 1 | 3.39 | 1.66 | 1.56 | 1.42 | 86 | 42.2 | 39.5 | 36 | 1.20 | 548 |
| 16FFS75UN | ¾ | 16 | 13 | | | | ¾ 16f UNF | 1 | 3.27 | 1.66 | 1.56 | 1.42 | 83 | 42.2 | 39.5 | 36 | - | - |
| 16FFS87UN | ¾ | 16 | 13 | | | | ¾ 14f UNF | 1 | 3.39 | 1.66 | 1.56 | 1.42 | 86 | 42.2 | 39.5 | 36 | - | - |
| 19FFS100 | ¾ | 19 | 15 | 1 11,5f | | | | 1 | 3.80 | 1.82 | 1.81 | 1.65 | 96.6 | 46.2 | 46 | 42 | - | - |
| 19FFS100BS | ¾ | 19 | 15 | 1-11 | | | | 1 | 3.80 | 1.82 | 1.81 | 1.65 | 96.6 | 46.2 | 46 | 42 | - | - |
| 19FFS100FG | ¾ | 19 | 15 | | | | G 1 | 1 | 3.80 | 1.82 | 1.81 | 1.65 | 96.6 | 46.2 | 46 | 42 | 1.62 | 737 |
| 19FFS106UN | ¾ | 19 | 15 | | | | 1 ½ 12f UN | 1 | 3.80 | 1.82 | 1.81 | 1.65 | 96.6 | 46.2 | 46 | 42 | - | - |
| 19FFS131UN | ¾ | 19 | 15 | | | | 1 ¾ 12f UN | 1 | 3.80 | 1.82 | 1.81 | 1.65 | 96.6 | 46.2 | 46 | 42 | - | - |
| 19FFS75 | ¾ | 19 | 15 | ¾ 14f | | | | 1 | 3.80 | 1.82 | 1.81 | 1.65 | 96.6 | 46.2 | 46 | 42 | - | - |
| 19FFS75BS | ¾ | 19 | 15 | ¾-14 | | | | 1 | 3.80 | 1.82 | 1.81 | 1.65 | 96.6 | 46.2 | 46 | 42 | - | - |
| 25FFS100 | 1 | 25 | 18 | 1 11,5f | | | | 1 | 4.07 | 2.17 | 2.36 | 2.17 | 103.5 | 55.2 | 60 | 55 | - | - |
| 25FFS100BS | 1 | 25 | 18 | 1-11 | | | | 1 | 4.07 | 2.17 | 2.36 | 2.17 | 103.5 | 55.2 | 60 | 55 | - | - |
| 25FFS125 | 1 | 25 | 18 | 1 ¼ 11,5f | | | | 1 | 4.07 | 2.17 | 2.36 | 2.17 | 103.5 | 55.2 | 60 | 55 | - | - |
| 25FFS125BS | 1 | 25 | 18 | 1 ¼-11 | | | | 1 | 4.07 | 2.17 | 2.36 | 2.17 | 103.5 | 55.2 | 60 | 55 | - | - |
| 25FFS125FG | 1 | 25 | 18 | | | | G 1 ¼ | 1 | 4.07 | 2.17 | 2.36 | 2.17 | 103.5 | 55.2 | 60 | 55 | 2.74 | 1246 |
| 25FFS131UN | 1 | 25 | 18 | | | | 1 ¾ 12f UN | 1 | 4.07 | 2.17 | 2.36 | 2.17 | 103.5 | 55.2 | 60 | 55 | 2.77 | 126 |
| 25FFS162UN | 1 | 25 | 18 | | | | 1 ¾ 12f UN | 1 | 4.07 | 2.17 | 2.36 | 2.17 | 103.5 | 55.2 | 60 | 55 | - | - |
| 32FFS125 | 1 ¼ | - | 22.1 | 1 ¼-11,5 | | | | 1 | 4.93 | 2.55 | 2.36 | 2.17 | 125.2 | 64.8 | 60 | 55 | 4.22 | 1915 |
| 32FFS125BS | 1 ¼ | - | 22.1 | 1 ¼-11 | | | | 1 | 4.93 | 2.55 | 2.36 | 2.17 | 125.2 | 64.8 | 60 | 55 | 4.18 | 1897 |
| 32FFS162UN | 1 ¼ | - | 22.1 | | | | 1 ¾ 12 UN | 1 | 4.93 | 2.55 | 2.36 | 2.17 | 125.2 | 64.8 | 60 | 55 | 4.16 | 1894 |
| 40FFS150 | 1 ½ | - | 30.1 | 1 ½-11,5 | | | | 1 | 5.01 | 3.13 | 2.76 | 2.56 | 127.4 | 79.5 | 70 | 65 | 6.16 | 2796 |
| 40FFS150BS | 1 ½ | - | 30.1 | 1 ½-11 | | | | 1 | 5.01 | 3.13 | 2.76 | 2.56 | 127.4 | 79.5 | 70 | 65 | 6.13 | 2781 |
| 40FFS150FG | 1 ½ | - | 30.1 | | | | G 1 ½ | 1 | 5.01 | 3.13 | 2.76 | 2.56 | 127.4 | 79.5 | 70 | 65 | 6.12 | 2775 |
| 40FFS187UN | 1 ½ | - | 30.1 | | | | 1 ¾ 12 UN | 1 | 5.01 | 3.13 | 2.76 | 2.56 | 127.4 | 79.5 | 70 | 65 | 6.10 | 2767 |
| 50FFS200 | 2 | - | 39.2 | 2-11,5 | | | | 1 | 6.17 | 3.84 | 3.46 | 3.15 | 156.8 | 97.5 | 87.8 | 80 | 10.87 | 4931 |
| 50FFS200BS | 2 | - | 39.2 | 2-11 | | | | 1 | 6.17 | 3.84 | 3.46 | 3.15 | 156.8 | 97.5 | 87.8 | 80 | 10.82 | 4908 |
| 50FFS250UN | 2 | - | 39.2 | | | | 2 ½ 12 UN | 1 | 6.17 | 3.84 | 3.46 | 3.15 | 156.8 | 97.5 | 87.8 | 80 | 10.64 | 4825 |

*Alternative end connections available upon request.

To obtain connected length of coupling, add dimensions A (Fig. 1 or Fig. 2) and G (Fig. 3 or 4) together.

FF Series (Steel) ISO 16028 Interchange

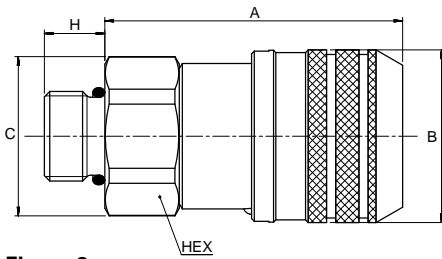
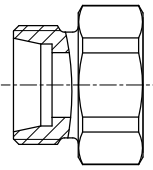
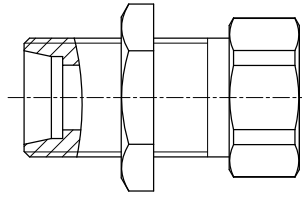


Figure 2

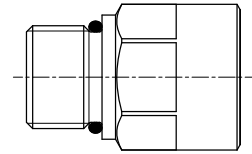
ISO 8434-1
Metric thread



ISO 8434-1 + Bulkhead
Metric thread



SAE J 1926-2
UN/UNF thread



Sockets (Female)

| Part Number | Body Size | ISO Size | Nominal Flow Diameter | Thread Size*(Male) | | Fig. | Dimensions | | | | | | | | | | Weight | |
|-------------|-----------|----------|-----------------------|--------------------------|--------------|------|------------|--------|--------|---------|----------|--------|--------|--------|--------|----------|--------|-------|
| | | | | ISO 8434-1 | SAE J 1926-2 | | A (in) | B (in) | C (in) | H (in.) | Hex (in) | A (mm) | B (mm) | C (mm) | H (mm) | Hex (mm) | lbs | grams |
| 6FFS10LBH | ¼ | 6.3 | 6 | 10L - M16x1,5 + bulkhead | | 2 | 1.65 | 1.06 | 0.94 | 1.38 | 0.87 | 42 | 27 | 24 | 35 | 22 | - | - |
| 10FFS8L | ¾ | 10 | 6 | 8L - M14x1,5 | | 2 | 2.33 | 1.26 | 1.16 | 0.39 | 1.06 | 59.3 | 32 | 29.5 | 10 | 27 | 0.52 | 236 |
| 10FFS10L | ¾ | 10 | 8 | 10L - M16x1,5 | | 2 | 2.33 | 1.26 | 1.16 | 0.43 | 1.06 | 59.3 | 32 | 29.5 | 11 | 27 | 0.52 | 234 |
| 10FFS12L | ¾ | 10 | 10 | 12L - M18x1,5 | | 2 | 2.28 | 1.26 | 1.16 | 0.43 | 1.06 | 57.8 | 32 | 29.5 | 11 | 27 | 0.52 | 235 |
| 10FFS15L | ¾ | 10 | 8,6 | 15L - M22x1,5 | | 2 | 2.24 | 1.26 | 1.16 | 0.47 | 1.06 | 56.8 | 32 | 29.5 | 12 | 27 | 0.52 | 238 |
| 10FFS15LBH | ¾ | 10 | 8,6 | 15L - M22x1,5 | | 2 | 3.24 | 1.26 | 1.16 | 1.50 | 1.06 | 82.3 | 32 | 29.5 | 38 | 27 | 0.62 | 282 |
| 10FFS16S | ¾ | 10 | 8,6 | 16S - M24x1,5 + bulkhead | | 2 | 2.26 | 1.26 | 1.16 | 0.55 | 1.06 | 57.3 | 32 | 29.5 | 14 | 27 | 0.46 | 211 |
| 10FFS56ORM | ¾ | 10 | 8,6 | | ¾ 18F UNF | 2 | 2.61 | 1.26 | 1.06 | 0.47 | 0.94 | 66.4 | 32 | 27 | 12 | 23.8 | - | - |
| 10FFS75ORM | ¾ | 10 | 8,6 | | ¾ 16F UNF | 2 | 2.61 | 1.26 | 1.06 | 0.55 | 0.94 | 66.4 | 32 | 27 | 14 | 23.8 | - | - |
| 12FFS15LBH | ½ | 12 | 11 | 15L - M22x1,5 + bulkhead | | 2 | 3.66 | 1.50 | 1.56 | 1.50 | 1.42 | 93 | 38.2 | 39.5 | 38 | 36 | 1.05 | 478 |
| 12FFS16S | ½ | 12 | 11 | 16S - M24x1,5 | | 2 | 2.75 | 1.50 | 1.56 | 0.55 | 1.42 | 70 | 38.2 | 39.5 | 14 | 36 | 1.01 | 460 |
| 12FFS18LBH | ½ | 12 | 11 | 18L - M26x1,5 + bulkhead | | 2 | 3.74 | 1.50 | 1.56 | 1.57 | 1.42 | 95 | 38.2 | 39.5 | 40. | 36 | 1.17 | 534 |
| 16FFS15LBH | ¾ | 16 | 12 | 15L - M22x1,5 + bulkhead | | 2 | 2.68 | 1.66 | 1.56 | 1.50 | 1.42 | 68 | 42.2 | 39.5 | 38 | 36 | - | - |
| 16FFS16S | ¾ | 16 | 12 | 16S - M24x1,5 | | 2 | 2.75 | 1.66 | 1.56 | 0.55 | 1.42 | 70 | 42.2 | 39.5 | 14 | 36 | 1.11 | 505 |
| 16FFS18LBH | ¾ | 16 | 13 | 18L - M26x1,5 + bulkhead | | 2 | 2.68 | 1.66 | 1.56 | 1.57 | 1.42 | 68 | 42.2 | 39.5 | 40 | 36 | - | - |

* Alternative end connections available upon request.

To obtain connected length of coupling, add dimensions A (Fig. 1 or Fig. 2) and G (Fig. 3 or 4) together.

Note that ISO 8434-1 will restrict usage of coupling to 250 bar for end connection 8L, 10L, 12L and 15L, and to 160 bar for end connection 18L.

FF Series (Steel) ISO 16028 Interchange

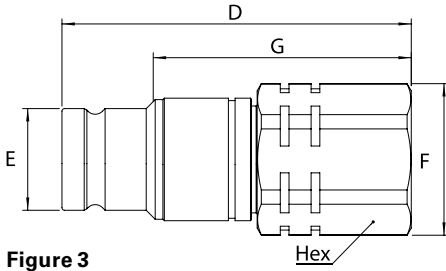
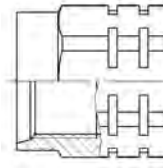
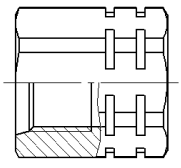


Figure 3

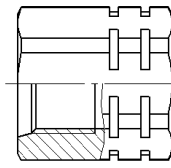
ISO 6149-1
15° + Metric thread



SAE J 1926-1
15° + UN/UNF thread



EATON S013A
15° + BSPP Thread



Plugs (Male)

| Part Number | Body Size | ISO Size | Nominal Flow Diameter | Thread Size*(Female) | | | Dimensions | | | | | | | | | | | | | Weight | |
|-------------|-----------|----------|-----------------------|----------------------|-------|------------|--------------|-------------|------|--------|--------|--------|--------|----------|--------|--------|--------|--------|----------|--------|-------|
| | | | | NPT | BSPP | ISO 6149-1 | SAE J 1926-1 | Eaton S013A | Fig. | D (in) | E (in) | F (in) | G (in) | Hex (in) | D (mm) | E (mm) | F (mm) | G (mm) | Hex (mm) | lbs | grams |
| 6FFP25 | ¼ | 6.3 | 6 | ¼ 18f | | | | | 3 | 2.01 | 0.64 | 0.94 | 1.58 | 0.87 | 51 | 16.2 | 24 | 40.1 | 22 | - | - |
| 6FFP25BS | ¼ | 6.3 | 6 | | ¼-19 | | | | 3 | 2.01 | 0.64 | 0.94 | 1.58 | 0.87 | 51 | 16.2 | 24 | 40.1 | 22 | - | - |
| 6FFP25FG | ¼ | 6.3 | 6 | | | | | G ¼ | 3 | 2.01 | 0.64 | 0.94 | 1.58 | 0.87 | 51 | 16.2 | 24 | 40.1 | 22 | 0.20 | 90 |
| 6FFP56UN | ¼ | 6.3 | 6 | | | | ¾ 18f UNF | | 3 | 2.05 | 0.64 | 0.94 | 1.62 | 0.87 | 52 | 16.2 | 24 | 41.1 | 22 | - | - |
| 10FFP16FMET | ¾ | 10 | 8.6 | | | M16x1,5 | | | 3 | 2.56 | 0.78 | 1.16 | 1.96 | 1.06 | 65 | 19.7 | 29.5 | 49.7 | 27 | - | - |
| 10FFP37 | ¾ | 10 | 8.6 | ¾ 18f | | | | | 3 | 2.56 | 0.78 | 1.16 | 1.96 | 1.06 | 65 | 19.7 | 29.5 | 49.7 | 27 | - | - |
| 10FFP37BS | ¾ | 10 | 8.6 | | ¾-19 | | | | 3 | 2.56 | 0.78 | 1.16 | 1.96 | 1.06 | 65 | 19.7 | 29.5 | 49.7 | 27 | - | - |
| 10FFP37FG | ¾ | 10 | 8.6 | | | | | G ¾ | 3 | 2.56 | 0.78 | 1.16 | 1.96 | 1.06 | 65 | 19.7 | 29.5 | 49.7 | 27 | 0.35 | 157 |
| 10FFP50 | ¾ | 10 | 8.6 | ½ 14f | | | | | 3 | 2.68 | 0.78 | 1.16 | 2.08 | 1.06 | 68 | 19.7 | 29.5 | 52.7 | 27 | - | - |
| 10FFP50BS | ¾ | 10 | 8.6 | | ½-14 | | | | 3 | 2.68 | 0.78 | 1.16 | 2.08 | 1.06 | 68 | 19.7 | 29.5 | 52.7 | 27 | - | - |
| 10FFP50FG | ¾ | 10 | 8.6 | | | | | G ½ | 3 | 2.68 | 0.78 | 1.16 | 2.08 | 1.06 | 68 | 19.7 | 29.5 | 52.7 | 27 | 0.33 | 150 |
| 10FFP56UN | ¾ | 10 | 8.6 | | | | ¾ 18f UNF | | 3 | 2.68 | 0.78 | 1.16 | 2.08 | 1.06 | 68 | 19.7 | 29.5 | 52.7 | 27 | - | - |
| 10FFP75UN | ¾ | 10 | 8.6 | | | | ¾ 16f UNF | | 3 | 2.68 | 0.78 | 1.16 | 2.08 | 1.06 | 68 | 19.7 | 29.5 | 52.7 | 27 | - | - |
| 10FFP87UN | ¾ | 10 | 8.6 | | | | ¾ 14f UNF | | 3 | 2.80 | 0.78 | 1.30 | 2.19 | 1.18 | 71 | 19.7 | 33 | 55.7 | 30 | - | - |
| 12FFP106UN | ½ | 12.5 | 11 | | | | 1 ½ 12f UN | | 3 | 2.95 | 0.96 | 1.56 | 2.28 | 1.42 | 75 | 24.5 | 39.5 | 58 | 36 | - | - |
| 12FFP50 | ½ | 12.5 | 11 | ½ 14f | | | | | 3 | 2.71 | 0.96 | 1.56 | 2.05 | 1.42 | 69 | 24.5 | 39.5 | 52 | 36 | - | - |
| 12FFP50BS | ½ | 12.5 | 11 | | ½-14 | | | | 3 | 2.71 | 0.96 | 1.56 | 2.05 | 1.42 | 69 | 24.5 | 39.5 | 52 | 36 | - | - |
| 12FFP50FG | ½ | 12.5 | 11 | | | | | G ½ | 3 | 2.71 | 0.96 | 1.56 | 2.05 | 1.42 | 69 | 24.5 | 39.5 | 52 | 36 | 0.67 | 305 |
| 12FFP75 | ½ | 12.5 | 11 | ¾ 14f | | | | | 3 | 2.83 | 0.96 | 1.56 | 2.16 | 1.42 | 72 | 24.5 | 39.5 | 55 | 36 | - | - |
| 12FFP75BS | ½ | 12.5 | 11 | | ¾-14 | | | | 3 | 2.83 | 0.96 | 1.56 | 2.16 | 1.42 | 72 | 24.5 | 39.5 | 55 | 36 | - | - |
| 12FFP75FG | ½ | 12.5 | 11 | | | | | G ¾ | 3 | 2.83 | 0.96 | 1.56 | 2.16 | 1.42 | 72 | 24.5 | 39.5 | 55 | 36 | 0.65 | 295 |
| 12FFP75UN | ½ | 12.5 | 11 | | | | ¾ 16f UNF | | 3 | 2.71 | 0.96 | 1.56 | 2.05 | 1.42 | 69 | 24.5 | 39.5 | 52 | 36 | - | - |
| 12FFP87UN | ½ | 12.5 | 11 | | | | ¾ 14f UNF | | 3 | 2.83 | 0.96 | 1.56 | 2.16 | 1.42 | 72 | 24.5 | 39.5 | 55 | 36 | - | - |
| 16FFP106UN | ¾ | 16 | 13 | | | | 1 ½ 12f UN | | 3 | 2.95 | 1.06 | 1.56 | 2.28 | 1.42 | 75 | 27 | 39.5 | 58 | 36 | - | - |
| 16FFP50 | ¾ | 16 | 13 | ½ 14f | | | | | 3 | 2.71 | 1.06 | 1.56 | 2.05 | 1.42 | 69 | 27 | 39.5 | 52 | 36 | - | - |
| 16FFP50BS | ¾ | 16 | 13 | | ½-14 | | | | 3 | 2.71 | 1.06 | 1.56 | 2.05 | 1.42 | 69 | 27 | 39.5 | 52 | 36 | - | - |
| 16FFP75 | ¾ | 16 | 13 | ¾ 14f | | | | | 3 | 2.83 | 1.06 | 1.56 | 2.16 | 1.42 | 72 | 27 | 39.5 | 55 | 36 | - | - |
| 16FFP75BS | ¾ | 16 | 13 | | ¾-14 | | | | 3 | 2.83 | 1.06 | 1.56 | 2.16 | 1.42 | 72 | 27 | 39.5 | 55 | 36 | - | - |
| 16FFP75FG | ¾ | 16 | 13 | | | | | G ¾ | 3 | 2.83 | 1.06 | 1.56 | 2.16 | 1.42 | 72 | 27 | 39.5 | 55 | 36 | 0.7 | 317 |
| 16FFP75UN | ¾ | 16 | 13 | | | | ¾ 16f UNF | | 3 | 2.71 | 1.06 | 1.56 | 2.05 | 1.42 | 69 | 27 | 39.5 | 52 | 36 | - | - |
| 16FFP87UN | ¾ | 16 | 13 | | | | ¾ 14f UNF | | 3 | 2.83 | 1.06 | 1.56 | 2.16 | 1.42 | 72 | 27 | 39.5 | 55 | 36 | - | - |
| 19FFP100 | ¾ | 19 | 15 | 1 11,5f | | | | | 3 | 3.69 | 1.18 | 1.81 | 2.84 | 1.65 | 93.8 | 29.9 | 46 | 72 | 42 | - | - |
| 19FFP100BS | ¾ | 19 | 15 | | 1-11 | | | | 3 | 3.69 | 1.18 | 1.81 | 2.84 | 1.65 | 93.8 | 29.9 | 46 | 72 | 42 | - | - |
| 19FFP100FG | ¾ | 19 | 15 | | | | | G 1 | 3 | 3.69 | 1.18 | 1.81 | 2.84 | 1.65 | 93.8 | 29.9 | 46 | 72 | 42 | 1.14 | 518 |
| 19FFP106UN | ¾ | 19 | 15 | | | | 1 ½ 12f UN | | 3 | 3.69 | 1.18 | 1.81 | 2.84 | 1.65 | 93.8 | 29.9 | 46 | 72 | 42 | - | - |
| 19FFP131UN | ¾ | 19 | 15 | | | | 1 ½ 12f UN | | 3 | 3.69 | 1.18 | 1.81 | 2.84 | 1.65 | 93.8 | 29.9 | 46 | 72 | 42 | - | - |
| 19FFP75 | ¾ | 19 | 15 | ¾ 14f | | | | | 3 | 3.69 | 1.18 | 1.81 | 2.84 | 1.65 | 93.8 | 29.9 | 46 | 72 | 42 | - | - |
| 19FFP75BS | ¾ | 19 | 15 | | ¾-14 | | | | 3 | 3.69 | 1.18 | 1.81 | 2.84 | 1.65 | 93.8 | 29.9 | 46 | 72 | 42 | - | - |
| 25FFP100 | 1 | 25 | 18 | 1 11,5f | | | | | 3 | 4.12 | 1.42 | 2.36 | 3.22 | 2.17 | 104.6 | 36 | 60 | 81.7 | 55 | - | - |
| 25FFP100BS | 1 | 25 | 18 | | 1-11 | | | | 3 | 4.12 | 1.42 | 2.36 | 3.22 | 2.17 | 104.6 | 36 | 60 | 81.7 | 55 | - | - |
| 25FFP125 | 1 | 25 | 18 | 1 ¼ 11,5f | | | | | 3 | 4.12 | 1.42 | 2.36 | 3.22 | 2.17 | 104.6 | 36 | 60 | 81.7 | 55 | - | - |
| 25FFP125BS | 1 | 25 | 18 | | 1¼-11 | | | | 3 | 4.12 | 1.42 | 2.36 | 3.22 | 2.17 | 104.6 | 36 | 60 | 81.7 | 55 | - | - |
| 25FFP125FG | 1 | 25 | 18 | | | | | G 1¼ | 3 | 4.12 | 1.42 | 2.36 | 3.22 | 2.17 | 104.6 | 36 | 60 | 81.7 | 55 | 2.08 | 948 |
| 25FFP131UN | 1 | 25 | 18 | | | | 1 ½ 12f UN | | 3 | 4.12 | 1.42 | 2.36 | 3.22 | 2.17 | 104.6 | 36 | 60 | 81.7 | 55 | 2.09 | 952 |
| 25FFP162UN | 1 | 25 | 18 | | | | 1 ½ 12f UN | | 3 | 4.12 | 1.42 | 2.36 | 3.22 | 2.17 | 104.6 | 36 | 60 | 81.7 | 55 | - | - |
| 32FFP125 | 1 ¼ | - | 22.1 | 1 ¼-11,5 | | | | | 3 | 4.15 | 1.73 | 2.36 | 3.24 | 2.17 | 105.5 | 44 | 60 | 82.3 | 55 | 2.63 | 1193 |
| 32FFP125BS | 1 ¼ | - | 22.1 | | 1¼-11 | | | | 3 | 4.15 | 1.73 | 2.36 | 3.24 | 2.17 | 105.5 | 44 | 60 | 82.3 | 55 | 2.60 | 1177 |
| 32FFP162UN | 1 ¼ | - | 22.1 | | | | 1 5/8 12 UN | | 3 | 4.15 | 1.73 | 2.36 | 3.24 | 2.17 | 105.5 | 44 | 60 | 82.3 | 55 | 2.59 | 1174 |
| 40FFP150 | 1 ½ | - | 30.1 | 1 ½ 11,5 | | | | | 3 | 4.13 | 2.24 | 2.61 | 3.01 | 2.36 | 105 | 57 | 66.3 | 76.5 | 60 | 3.15 | 1430 |
| 40FFP150BS | 1 ½ | - | 30.1 | | 1½-11 | | | | 3 | 4.13 | 2.24 | 2.61 | 3.01 | 2.36 | 105 | 57 | 66.3 | 76.5 | 60 | 3.12 | 1417 |
| 40FFP150FG | 1 ½ | - | 30.1 | | | | | 1 ½ | 3 | 4.13 | 2.24 | 2.61 | 3.01 | 2.36 | 105 | 57 | 66.3 | 76.5 | 60 | 3.11 | 1412 |
| 40FFP187UN | 1 ½ | - | 30.1 | | | | 1 ½ 12 UN | | 3 | 4.13 | 2.24 | 2.61 | 3.01 | 2.36 | 105 | 57 | 66.3 | 76.5 | 60 | 3.10 | 1406 |
| 50FFP200 | 2 | - | 39.2 | 2 11,5 | | | | | 3 | 5.31 | 2.87 | 3.29 | 3.80 | 2.95 | 135 | 73 | 83.5 | 96.6 | 75 | 6.01 | 2725 |
| 50FFP200BS | 2 | - | 39.2 | | 2-11 | | | | 3 | 5.31 | 2.87 | 3.29 | 3.80 | 2.95 | 135 | 73 | 83.5 | 96.6 | 75 | 5.97 | 2706 |
| 50FFP250UN | 2 | - | 39.2 | | | | 2 ½ 12 UN | | 3 | 5.31 | 2.87 | 3.29 | 3.80 | 2.95 | 135 | 73 | 83.5 | 96.6 | 75 | 5.78 | 2623 |

* Alternative end connections available upon request.

To obtain connected length of coupling, add dimensions A (Fig. 1 or Fig. 2) and G (Fig. 3 or 4) together.

FF Series (Steel) ISO 16028 Interchange

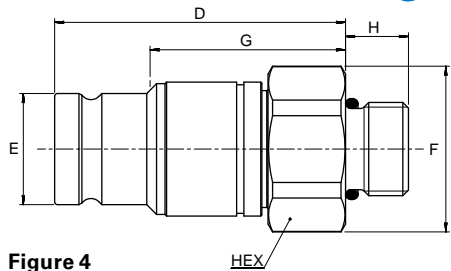
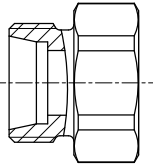
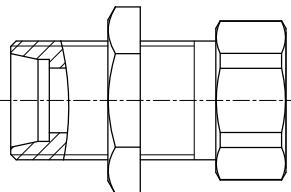


Figure 4

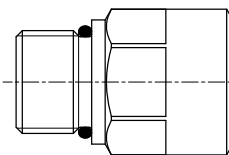
ISO 8434-1
Metric thread



ISO 8434-1 + Bulkhead
Metric thread



SAE J 1926-2
UN/UNF thread



Plugs (Male)

| Part Number | Body Size (in) | ISO Size (mm) | Nominal Flow Diameter (mm) | Thread Size*(Male) | | Fig. | Dimensions | | | | | | | | | | Weight | | | |
|-------------|----------------|---------------|----------------------------|---------------------------|--------------|------|------------|--------|--------|---------|--------|----------|--------|--------|--------|--------|--------|----------|------|-------|
| | | | | ISO 8434-1 | SAE J 1926-2 | | D (in) | E (in) | F (in) | G (in.) | H (in) | Hex (in) | D (mm) | E (mm) | F (mm) | G (mm) | H (mm) | Hex (mm) | lbs | grams |
| 6FFP10LBH | ¼ | 6.3 | 6 | M10L - M16x1,5 + bulkhead | SAE J 1926-2 | 4 | 1.54 | 0.64 | 0.94 | 1.11 | 1.38 | 0.87 | 39 | 16.2 | 24 | 28.1 | 35 | 22 | 0.27 | 123 |
| 10FFP8L | ¾ | 10 | 6 | 8L - M14x1,5 | | 4 | 2.20 | 0.78 | 1.16 | 1.84 | 0.39 | 1.06 | 56 | 19.7 | 29.5 | 46.7 | 10 | 27 | 0.3 | 137 |
| 10FFP10L | ¾ | 10 | 8 | 10L - M16x1,5 | | 4 | 2.17 | 0.78 | 1.16 | 1.84 | 0.43 | 1.06 | 55 | 19.7 | 29.5 | 46.7 | 11 | 27 | 0.3 | 135 |
| 10FFP12L | ¾ | 10 | 10 | 12L - M18x1,5 | | 4 | 2.17 | 0.78 | 1.16 | 1.41 | 0.43 | 1.06 | 55 | 19.7 | 29.5 | 35.7 | 11 | 27 | 0.3 | 136 |
| 10FFP15L | ¾ | 10 | 8,6 | 5L - M22x1,5 | | 4 | 2.13 | 0.78 | 1.16 | 1.84 | 0.47 | 1.06 | 54 | 19.7 | 29.5 | 46.7 | 12 | 27 | 0.31 | 139 |
| 10FFP15LBH | ¾ | 10 | 8,6 | 15L - M22x1,5 + bulkhead | | 4 | 2.01 | 0.78 | 1.16 | 2.9 | 1.50 | 1.06 | 51 | 19.7 | 29.5 | 73.7 | 38 | 27 | 0.4 | 183 |
| 10FFP16S | ¾ | 10 | 8,6 | 16S - M24x1,5 | | 4 | 2.52 | 0.78 | 1.16 | 1.92 | 0.55 | 1.06 | 64 | 19.7 | 29.5 | 48.7 | 14 | 27 | 0.27 | 123 |
| 10FFP56ORM | ¾ | 10 | 8,6 | | ¼ 18f UNF | 4 | 2.5 | 0.78 | 1.06 | 1.9 | 0.47 | 0.94 | 63.6 | 19.7 | 27 | 48.3 | 12 | 23.8 | 0.33 | 150 |
| 10FFP75ORM | ¾ | 10 | 8,6 | | ¼ 16f UNF | 4 | 2. | 0.78 | 1.06 | 1. | 0.55 | 0.94 | 63.6 | 19.7 | 27 | 48.3 | 14 | 23.8 | 0.34 | 156 |
| 12FFP15LBH | ½ | 12 | 11 | 15L - M22x1,5 + bulkhead | | 4 | 2.12 | 0.96 | 1.56 | 2.95 | 1 | 1.42 | 54 | 24.5 | 39.5 | 75 | 38 | 36 | 0.65 | 297 |
| 12FFP16S | ½ | 12 | 11 | 16S - M24x1,5 | | 4 | 2.71 | 0.96 | 1.56 | 2.05 | 0.55 | 1.42 | 69 | 24.5 | 39.5 | 52 | 14 | 36 | 0.61 | 279 |
| 12FFP18LBH | ½ | 12 | 11 | 18L - M26x1,5 + bulkhead | | 4 | 2.12 | 0.96 | 1.56 | 3.03 | 1.57 | 1.42 | 54 | 24.5 | 39.5 | 77 | 40 | 36 | 0.78 | 353 |
| 16FFP15LBH | ¾ | 16 | 12 | 15L - M22x1,5 + bulkhead | | 4 | 2.12 | 1.06 | 1.56 | 1.45 | 1.5 | 1.42 | 54 | 27 | 39.5 | 37 | 38 | 36 | 0.65 | 298 |
| 16FFP16S | ¾ | 16 | 12 | 16S - M24x1,5 | | 4 | 2.71 | 1.06 | 1.56 | 2.05 | 0.55 | 1.42 | 69 | 27 | 39.5 | 52 | 14 | 36 | 0.62 | 280 |
| 16FFP18LBH | ¾ | 16 | 13 | 18L - M26x1,5 + bulkhead | | 4 | 2.12 | 1.06 | 1.56 | 1.45 | 1.57 | 1.42 | 54 | 27 | 39.5 | 37 | 40 | 36 | 0.78 | 353 |

*Alternative end connections available upon request.

To obtain connected length of coupling, add dimensions A (Fig. 1 or Fig. 2) and G (Fig. 3 or 4) together.

Note that ISO 8434-1 will restrict usage of coupling to 250 bar for end connection 8L, 10L, 12L and 15L, and to 160 bar for end connection 18L.

Socket (Female) Dust Plug

| Body Size (in) | Body Size (in) with color ring | Part Number | Coupling Type | Dust Plug Material |
|----------------|--------------------------------|-------------|---------------|--------------------|
| ¼ | - | SDC6FF | Socket/Female | PVC |
| ¾* | - | SDC10FF | Socket/Female | PVC |
| ½ | ¾ | SDC12FF | Socket/Female | PVC |
| ¾ | - | SDC16FF | Socket/Female | PVC |
| ¾ | ½ | SDC19FF | Socket/Female | PVC |
| 1 | ¾ | SDC25FF | Socket/Female | PVC |

*Dust caps and dust plugs are offered in black.

Plug (Male) Dust Cap

| Body Size (in) | Part Number | Coupling Type | Dust Plug Material |
|----------------|-------------|---------------|--------------------|
| ¼ | PDC6FF | Plug/Male | PVC |
| ¾* | PDC10FF | Plug/Male | PVC |
| ½ | PDC12FF | Plug/Male | PVC |
| ¾ | PDC16FF | Plug/Male | PVC |
| ¾ | PDC19FF | Plug/Male | PVC |
| 1 | PDC25FF | Plug/Male | PVC |



Colour Coding Ring Option*

| Body Size (in) | ISO Size (mm) | Size | Socket/Female Ring Part Number** | | | | Plug/Male Ring Part Number** | | | | Tool Part Number | Tool & Rings Kit Part Number*** |
|----------------|---------------|------|----------------------------------|-----------|-----------|-----------|------------------------------|-----------|-----------|-----------|------------------|---------------------------------|
| | | | Blue | Red | Yellow | Green | Blue | Red | Yellow | Green | | |
| ¼ | 6 | 6FF | CR6FFSLB | CR6FFSRD | CR6FFSYL | CR6FFSDG | CR6FFPLB | CR6FFPRD | CR6FFPYL | CR6FFPDG | CR6FFSP93 | CRKIT6FF |
| ¾ | 10 | 10FF | CR10FFSLB | CR10FFSRD | CR10FFSYL | CR10FFSDG | CR10FFPLB | CR10FFPRD | CR10FFPYL | CR10FFPDG | CR10FFSP93 | CRKIT10FF |
| ½ | 12.5 | 12FF | CR12FFSLB | CR12FFSRD | CR12FFSYL | CR12FFSDG | CR12FFPLB | CR12FFPRD | CR12FFPYL | CR12FFPDG | CR12FFSP93 | CRKIT12FF |
| ¾ | 16 | 16FF | CR16FFSLB | CR16FFSRD | CR16FFSYL | CR16FFSDG | CR16FFPLB | CR16FFPRD | CR16FFPYL | CR16FFPDG | CR16FFSP93 | CRKIT16FF |
| ¾ | 19 | 19FF | CR19FFSLB | CR19FFSRD | CR19FFSYL | CR19FFSDG | CR19FFPLB | CR19FFPRD | CR19FFPYL | CR19FFPDG | CR19FFSP93 | CRKIT19FF |

For colour coded rings TPE material is used that offers excellent flexibility which allows a very good shock resistance in demanding applications.

Good thermal, chemical and weather resistance provides a great fit on the coupling and a extended life time in toughest conditions.

The colour coded rings are easy to install by using the referenced tools.

* For requests on alternative colours or installation instructions, please contact your Guyson technical sales department.

** Orders must be in multiples of 10 pcs.

*** The kit consists of a tool plus 10 socket rings and 10 plug rings of each colour.

