

A Complete Line of Thermoplastic Hydraulic / Specialty Hoses & Fittings









HAFLE - Hose and Fittings

Hose

100R3 (meets or exceeds): NEW PF415CP Series......4 100R7: PF267/PF267NC Series.......9 PF354/PF354NC Series 5 PF367/PF367NC Series 8 PFAN388NC Series 10 PFP354NC Series......7 PFLT364 Series......11 100R8: PF628/PF628NC Series12 100R18: PF427/PF427NC Series......13 Specialty: NEW PF344LMT Series17 Custom Twin Line15

Ferrules

| NEW | H1200TX2/AFX Non Skive | 18 |
|-----|----------------------------------|----|
| | PFR/PFR7 | 18 |
| NEW | PFR3 | 18 |
| | | |
| | Standard Inserts | |
| | JIC Female 37° Seat | 21 |
| | JIC Female 37° Seat - Double Hex | 22 |
| | JIC Solid Male 37°Seat | 21 |
| | JIS Female Swivel 30° Seat | 22 |
| | NPTF Solid Male 60° Seat | 19 |
| | NPTF Male Swivel 60° Seat | 19 |
| | NPTF Solid Female Rigid | 20 |
| | NPSM Female Swivel 60° Seat | 20 |
| | SAE Solid Male O-Ring Boss | 20 |
| | | |
| | Additional Inserts | |
| | Assorted Fitting Connections | 24 |
| | | |
| | | |
| | Stainless Steel | |
| | One-Piece Fittings | |
| | OHE-LIEFE LITHING | |

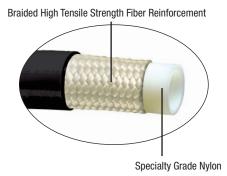
Assembly Equipment and Accessories

| Hose Cutters | 27 |
|-----------------|----|
| P400 Hose Press | 25 |
| P402 Tooling | 26 |



PF151R3 Series





Applications:

Piranha Hose Products PF151R3 Series hose is used in general purpose low pressure hydraulic applications. This hose is intended for use in common industrial hydraulic, construction, material handling and agricultural equipment applications.

Construction:

Piranhaflex™ PF151R3 Series hose consists of three individual components bonded to ensure maximum performance.

Tube - Specialty grade nylon.

Reinforcement - Braided high tensile strength fiber reinforcement.

Cover - PF151R3 Series hose has a black abrasion resistant polyurethane pin pricked cover.

Features:

- PF151R3 Series meets or exceeds SAE 100R3 performance and requirements
- The cover is a specially formulated; smooth, seamless, perforated, polyurethane compound

Packaging:

- Hoses supplied in 250 ft. reels. All reels will have no more than 2 pieces, with no piece less than 50' in length.
- · All non-standard lengths are treated as a madeto-order item and will require a minimum of 5,000 ft. to manufacture.

Working pressure for this hose series is a constant 1,500 psi in every size Temperature Range: -40°F (-40°C) to +200° F (+93°C) for petroleum based hydraulic fluids.

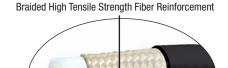
Nominal Specifications

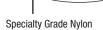
| 2 | | Nominal ID | | Nomir | nal OD | Max. | Min. I Rac | | Approx. | Coupling Recommendations |
|------------------|-----------|------------|------|-------|--------|----------------------------------|---------------|------|----------------------|-----------------------------|
| Series Number | Size Code | | | - | | Working [†] Pressure | | | Weight (lbs./ft.) | Two-Piece Couplings |
| | | (in.) | (mm) | (in.) | (mm) | (psl) | (in.) | (mm) | | Ferrule Non-Skive |
| PF151R3 | 04 | 1/4 | 6.4 | 0.410 | 10.4 | 1,500 | 1.50 | 38.1 | 0.05 | PFR3-04 |
| PF151R3 | 05 | 5/16 | 8.1 | 0.520 | 13.2 | 1,500 | 1.75 | 44.5 | 0.07 | PFR3-05 |
| PF151R3 | 06 | 3/8 | 9.7 | 0.610 | 15.5 | 1,250 | 2.50 | 63.5 | 0.10 | PFR3-06 |
| PF151R3 | 08 | 1/2 | 13.1 | 0.750 | 19.05 | 1,000 | 3.00 | 76.2 | 0.12 | PFR3-08 |

Freight: Hydraulic Hose can be combined with other KOA products for qualifying prepaid freight orders.



PF415CP Series









Applications:

Piranha Hose Products **PF415CP** Series hose is used in general purpose low pressure hydraulic applications. This hose is intended for use in common industrial hydraulic, construction, material handling and agricultural equipment applications.

Construction:

Piranhaflex™ **PF415CP** Series hose consists of three individual components bonded to ensure maximum performance.

Tube - Specialty grade nylon.

Reinforcement – Braided high tensile strength fiber reinforcement.

Cover – PF415CP Series hose has a black abrasion resistant polyurethane pin pricked cover.

Features:

- PF415CP Series is a constant 1,500 PSI working pressure in all sizes
- The cover is a specially formulated; smooth, seamless, perforated, polyether polyurethane compound

Packaging:

- Hoses supplied in 250 ft. reels. All reels will have no more than 2 pieces, with no piece less than 50' in length.
- All non-standard lengths are treated as a madeto-order item and will require a minimum of 5,000 ft. to manufacture.

Working pressure for this hose series is a constant 1,500 psi in every size Temperature Range: -40°F (-40°C) to +200° F (+93°C) for petroleum based hydraulic fluids.

Nominal Specifications

| Caritan | | Nomina | | al ID Nomin | | Max. | Min. Bend. Radius | | Approx. | Coupling Recommendations |
|------------------|-----------|--------|------|-------------|-------|----------------------------------|----------------------|------|----------------------|-----------------------------|
| Series Number | Size Code | | | | | Working [†] Pressure | | | Weight (lbs./ft.) | Two-Piece Couplings |
| | | (in.) | (mm) | (in.) | (mm) | (psl) | (in.) | (mm) | | Ferrule Non-Skive |
| PF415CP | 04 | 1/4 | 6.4 | 0.410 | 10.4 | 1,500 | 1.50 | 38.1 | 0.05 | PFR3-04 |
| PF415CP | 05 | 5/16 | 8.1 | 0.520 | 13.2 | 1,500 | 1.75 | 44.5 | 0.07 | PFR3-05 |
| PF415CP | 06 | 3/8 | 9.7 | 0.610 | 15.5 | 1,500 | 2.50 | 63.5 | 0.10 | PFR3-06 |
| PF415CP | 08 | 1/2 | 13.1 | 0.750 | 19.05 | 1,500 | 3.00 | 76.2 | 0.12 | PFR3-08 |

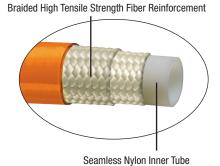
Freight: Hydraulic Hose can be combined with other KOA products for qualifying prepaid freight orders.



PF354/PF354NC Series

Abrasion Resistant Polyurethane Cover





Applications:

Piranhaflex™ PF354 and PF354NC Series hoses (for non-conductive applications) are ideal for medium pressure hydraulic hose applications for hydraulic oil and lubrication lines.

Construction:

Piranhaflex™ PF354 & PF354NC Series hoses consist of three individual components bonded to ensure maximum performance.

Tube — Seamless nylon inner tube.

Reinforcement — Braided high tensile strength fiber reinforcement.

Cover - PF354 Series hose has a black abrasion resistant polyurethane pin picked cover; PF354NC Series hose has an Orange non-conductive (REACH Compliant), non-pin pricked abrasion resistant polyurethane cover.

Features:

- Meets or exceeds SAE J517 Standards
- Tested at ½ bend radius under SAE Standards
- Exceeds 100R7 impulse requirements
- Light weight and flexible
- Ideal for general hydraulic services

Packaging:

- Hoses supplied in 250 ft. reels & 50 ft. box lengths. All reels will have no more than 2 pieces, with no piece less than 50' in length.
- All 50' boxes contain only 1 piece of hose.
- -16 MTO is available upon request.
- All non-standard lengths are treated as a made-toorder item and will require a minimum of 5,000 ft. to manufacture.
- For Twin Line please refer to page 14 for available stock sizes.

Temperature Range: -40°F (-40°C) to +200°F (+93°C) for petroleum based hydraulic fluids.

Nominal Specifications

| Series Number | Size Code | Nominal ID | | Nomir | nal OD | Max. | Min. Bend. Radius | | Approx. | Coupling Recommendations |
|-----------------------|-----------|------------|------|-------|--------|-------------------------------|----------------------|------|----------------------|-----------------------------|
| | | | | | (mm) | Working† Pressure (psl) | | | Weight (lbs./ft.) | Two-Piece Couplings |
| | | (in.) | (mm) | (in.) | | | (in.) | (mm) | (| Ferrule Non-Skive |
| PF354/ PF354NC | 02 | 1/8 | 3.6 | 0.322 | 8.2 | 3,000 | 0.75 | 19 | 0.03 | * F02NPT2 |
| PF354/ PF354NC | 03 | 3/16 | 4.8 | 0.415 | 10.5 | 3,000 | 0.75 | 19 | 0.05 | PFR-03 |
| PF354/ PF354NC | 04 | 1/4 | 6.4 | 0.496 | 12.6 | 2,750 | 1.50 | 38 | 0.06 | PFR-04 |
| PF354/ PF354NC | 05 | 5/16 | 8.1 | 0.580 | 14.7 | 2,500 | 1.75 | 44 | 0.08 | PFR7-05 |
| PF354/ PF354NC | 06 | 3/8 | 9.7 | 0.650 | 16.5 | 2,250 | 2.00 | 51 | 0.11 | PFR-06 |
| PF354/ PF354NC | 08 | 1/2 | 13.1 | 0.834 | 21.2 | 2,000 | 3.00 | 76 | 0.16 | PFR-08 |
| PF354/ PF354NC | 12 | 3/4 | 19.1 | 1.050 | 26.7 | 1,250 | 6.00 | 152 | 0.22 | PFR-12 |

^{*} Note: One-Piece fitting.

Freight: Hydraulic Hose can be combined with other KOA products for qualifying prepaid freight orders.

[†] Minimum burst pressure 4-to-1 safety factor.

PFP354 Series

Braided High Tensile Strength Fiber Reinforcement

Abrasion Resistant / Special Low Friction Polyurethane Cover







Applications:

Piranhaflex™ **PLUS** PFP354 Series hose is the ideal hose for medium pressure hydraulic lines commonly used on Fork Trucks. The "PLUS" refers to the specially engineered low friction cover compound which helps in eliminating hose routing problems between hose sheaves and pulleys. Use of Piranhaflex™ **PLUS** helps in extending hose service life with less frequent replacement and allows for increased flexibility and easier routing when hoses are bundled.

Construction:

Piranhaflex™ PLUS PFP354 Series hose consists of three individual components bonded to ensure maximum performance.

Tube - Seamless nylon inner tube.

Reinforcement - Braided high tensile strength fiber reinforcement.

Cover - PFP354 Series hose has a black abrasion resistant special low friction polyurethane pin pricked cover.

Features:

- Meets or exceeds SAE J517 Standards
- Tested at 1/2 bend radius under SAE Standards
- Exceeds 100R7 impulse requirements
- Light weight and flexible
- · Special low friction cover eliminates hose routing problems between hose sheaves and pulleys with Fork Truck applications.

Packaging:

- · Hoses supplied in 250 ft. reels. All reels will have no more than 2 pieces, with no piece less than 50' in length.
- -12 and -16 MTO are available upon request.
- All non-standard lengths are treated as a made-toorder item and will require a minimum of 5,000 ft. to manufacture.

Temperature Range: -40°F (-40°C) to +200°F (+93°C) for petroleum based hydraulic fluids.

Nominal Specifications

| 2 | | Nomin | al ID | Nomir | nal OD | Max. | | Bend. dius | Approx. | Coupling Recommendations | | | | | | | | |
|------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------------|-----------|-----------------------------|--|---|--|----------------------------------|--|--|----------------------|---------------------|
| Series Number | Size Code | Size Code | | | - | | Working [†] Pressure | | | Weight (lbs./ft.) | Two-Piece Couplings |
| | | (in.) | (mm) | (in.) | (mm) | (psl) | (in.) | (mm) | (| Ferrule Non-Skive | | | | | | | | |
| PFP354 | 04 | 1/4 | 6.4 | 0.496 | 12.6 | 2,750 | 1.50 | 38 | 0.06 | PFR-04 | | | | | | | | |
| PFP354 | 06 | 3/8 | 9.7 | 0.650 | 16.5 | 2,250 | 2.00 | 51 | 0.11 | PFR-06 | | | | | | | | |
| PFP354 | 08 | 1/2 | 13.1 | 0.834 | 21.2 | 2,000 | 3.00 | 76 | 0.16 | PFR-08 | | | | | | | | |

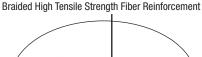
[†] Minimum burst pressure 4-to-1 safety factor.

Freight: Hydraulic Hose can be combined with other KOA products for qualifying prepaid freight orders.

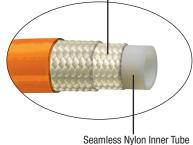


PFP354NC Series

Abrasion Resistant / Special Low Friction Polyurethane Cover













Piranhaflex™ **PLUS** "Non-Conductive" PFP354NC Series hose is the ideal hose for medium pressure hydraulic lines commonly used on utility equipment. The "PLUS" refers to the specially engineered low friction cover compound which helps in eliminating hose routing problems when used with utility equipment. Use of Piranhaflex™ **PLUS** helps in extending hose service life with less frequent replacement and allows for increased flexibility and easier routing when hoses are bundled.

Construction:

Piranhaflex™ **PLUS** PFP354NC Series hose consists of three individual components bonded to ensure maximum performance.

Tube - Seamless nylon inner tube.

Reinforcement - Braided high tensile strength fiber reinforcement.

Cover - PFP354NC Series hose has an Orange nonconductive (REACH Compliant), non-pin pricked abrasion resistant low friction polyurethane cover.

Features:

- Meets or exceeds SAE J517 Standards
- Tested at ½ bend radius under SAE Standards
- Exceeds 100R7 impulse requirements
- Light weight and flexible
- · Special low friction cover eliminates hose routing problems with utility equipment applications.

Packaging:

- Hoses supplied in 250 ft. reels. All reels will have no more than 2 pieces, with no piece less than 50' in length.
- All non-standard lengths are treated as a made-toorder item and will require a minimum of 5,000 ft. to manufacture.

Temperature Range: -40°F (-40°C) to +200°F (+93°C) for petroleum based hydraulic fluids.

Nominal Specifications

| 0.1. | | Nomi | nal ID | Nomir | nal OD | Max. | | Bend. lius | Approx. | Coupling Recommendations | | | |
|------------------|-----------|------|--------|-------|--------|----------------------------------|----------|---------------|----------------------|-----------------------------|------|--|----------------------|
| Series Number | Size Code | | | | | Working [†] Pressure | | | Weight (lbs./ft.) | Two-Piece Couplings | | | |
| | | | | | (in.) | (mm) | m) (in.) | (mm) | (psl) | (in.) | (mm) | | Ferrule Non-Skive |
| PFP354NC | 04 | 1/4 | 6.4 | 0.496 | 12.6 | 2,750 | 1.50 | 38 | 0.06 | PFR-04 | | | |
| PFP354NC | 06 | 3/8 | 9.7 | 0.650 | 16.5 | 2,250 | 2.00 | 51 | 0.11 | PFR-06 | | | |
| PFP354NC | 80 | 1/2 | 13.1 | 0.834 | 21.2 | 2,000 | 3.00 | 76 | 0.16 | PFR-08 | | | |

[†] Minimum burst pressure 4-to-1 safety factor.

Freight: Hydraulic Hose can be combined with other KOA products for qualifying prepaid freight orders.



PF367/PF367NC Series



Applications:

Piranhaflex[™] **PF367** and **PF367NC** Series hoses (for nonconductive applications) are ideal for medium pressure hydraulic hose applications for hydraulic oil and lubrication lines.

Construction:

Piranhaflex[™] PF367 & PF367NC Series hose consist of three individual components bonded to ensure maximum performance.

Tube - Seamless polyester inner tube.

Reinforcement — Braided high tensile strength fiber reinforcement.

Cover — PF367 Series hose has a black abrasion resistant polyurethane pin picked cover; PF367NC Series hose has an Orange non-conductive (REACH Compliant), non-pin pricked abrasion resistant polyurethane cover.

Features:

- Meets or exceeds SAE J517 Standards
- Tested at ½ bend radius under SAE Standards
- Exceeds 100R7 impulse requirements
- · Light weight and flexible
- Ideal for general hydraulic services

Packaging:

- Hoses supplied in 250 ft. reels & 50 ft. box lengths. All reels will have no more than 2 pieces, with no piece less than 50' in length.
- All 50' boxes contain only 1 piece of hose.
- -02 and -16 MTO are available upon request.
- All non-standard lengths are treated as a made-toorder item and will require a minimum of 5,000 ft. to manufacture.
- Twin/Multi Line MTO are available upon request.

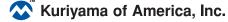
Temperature Range: $-40^{\circ}F$ ($-40^{\circ}C$) to $+200^{\circ}F$ ($+93^{\circ}C$) for petroleum based hydraulic fluids. $-40^{\circ}F$ ($-40^{\circ}C$) to $+140^{\circ}F$ ($+60^{\circ}C$) for water-based and phosphate-ester based hydraulic fluids.

Nominal Specifications

| Series Number | | Nominal ID | | Nomir | nal OD | Max. | Min. Bend. Radius | | Approx. | Coupling Recommendations |
|-----------------------|-----------|------------|------|-------|--------|-------------------------------|----------------------|------|----------------------|-----------------------------|
| | Size Code | (in.) | | | (mm) | Working† Pressure (psl) | | | Weight (lbs./ft.) | Two-Piece Couplings |
| | | | (mm) | (in.) | | | (in.) | (mm) | (1501/111) | Ferrule Non-Skive |
| PF367/ PF367NC | 03 | 3/16 | 4.8 | 0.415 | 10.5 | 3,000 | 0.75 | 19 | 0.05 | PFR-03 |
| PF367/ PF367NC | 04 | 1/4 | 6.4 | 0.496 | 12.6 | 2,750 | 1.50 | 38 | 0.06 | PFR-04 |
| PF367/ PF367NC | 05 | 5/16 | 8.1 | 0.580 | 14.7 | 2,500 | 1.75 | 44 | 0.08 | PFR7-05 |
| PF367/ PF367NC | 06 | 3/8 | 9.7 | 0.650 | 16.5 | 2,250 | 2.00 | 51 | 0.11 | PFR-06 |
| PF367/ PF367NC | 80 | 1/2 | 13.1 | 0.834 | 21.2 | 2,000 | 3.00 | 76 | 0.16 | PFR-08 |
| PF367/ PF367NC | 12 | 3/4 | 19.1 | 1.050 | 26.7 | 1,250 | 6.00 | 152 | 0.22 | PFR-12 |

[†] Minimum burst pressure 4-to-1 safety factor.

Freight: Hydraulic Hose can be combined with other KOA products for qualifying prepaid freight orders.





PF267/PF267NC Series

Abrasion Resistant Polyurethane Cover



Applications:

Piranhaflex[™] PF267 and PF267NC Series hoses (for nonconductive applications) are ideal for medium pressure hydraulic hose applications for hydraulic oil and lubrication lines.

Construction:

Piranhaflex™ PF267 & PF267NC Series hoses consist of three individual components bonded to ensure maximum performance.

Tube - Seamless polyester inner tube.

Reinforcement - Braided high tensile strength fiber reinforcement.

Cover - PF267 Series hose has a black abrasion resistant polyurethane pin picked cover; PF267NC Series hose has an Orange non-conductive (REACH Compliant), non-pin pricked abrasion resistant polyurethane cover.

Features:

- Meets or exceeds SAE J517 Standards
- Improved flexural rigidity, up to 16% less force to bend vs competitive 100R7 type hoses
- Light weight and flexible
- Improved kink resistance, up to 53% more force required to reach kink initiation vs competitive 100R7 type hose styles
- This new hose construction facilitates installation in very tight areas

Packaging:

- Hoses supplied in 250 ft. reel lengths. All reels will have no more than 2 pieces, with no piece less than 50' in length.
- All 50' boxes contain only 1 piece of hose.
- -02 and -16 MTO are available upon request.
- All non-standard lengths are treated as a made-toorder item and will require a minimum of 5,000 ft. to
- For Twin Line please refer to page 14 for available stock sizes.

Temperature Range: -40°F (-40°C) to +200°F (+93°C) for petroleum based hydraulic fluids. -40°F (-40°C) to +140°F (+60°C) for water-based and phosphate-ester based hydraulic fluids.

Nominal Specifications

| Series | | Nominal ID | | Nominal OD | | Max. | Min. Bend. Radius | | Approx. | Coupling Recommendations |
|-----------------------|-----------|------------|------|------------|------|----------------------------------|----------------------|------|----------------------|-----------------------------|
| Series Number | Size Code | | | | | Working [†] Pressure | | | Weight (lbs./ft.) | Two-Piece Couplings |
| | | (in.) | (mm) | (in.) | (mm) | (psl) | (in.) | (mm) | (| Ferrule Non-Skive |
| PF267/ PF267NC | 03 | 3/16 | 4.8 | 0.415 | 10.5 | 3,000 | 0.75 | 19 | 0.05 | PFR-03 |
| PF267/ PF267NC | 04 | 1/4 | 6.4 | 0.496 | 12.6 | 2,750 | 1.50 | 38 | 0.07 | PFR-04 |
| PF267/ PF267NC | 05 | 5/16 | 8.1 | 0.580 | 14.7 | 2,500 | 1.75 | 44 | 0.09 | PFR7-05 |
| PF267/ PF267NC | 06 | 3/8 | 9.7 | 0.651 | 16.5 | 2,250 | 2.00 | 51 | 0.12 | PFR-06 |
| PF267/ PF267NC | 80 | 1/2 | 13.1 | 0.834 | 21.2 | 2,000 | 3.00 | 76 | 0.17 | PFR-08 |
| PF267/ PF267NC | 12 | 3/4 | 19.1 | 1.050 | 26.7 | 1,250 | 6.00 | 152 | 0.24 | PFR-12 |

[†] Minimum burst pressure 4-to-1 safety factor.

Freight: Hydraulic Hose can be combined with other KOA products for qualifying prepaid freight orders.





100R7 - ANSI 92.2 Compliant

PFAN388NC Series



Applications:

Piranhaflex™ PFAN388NC Series hose is ideal for medium pressure hydraulic lines commonly used on vehicle mounted aerial devices such as Boom Trucks and Cherry Pickers. Piranhaflex™ PFAN388NC Series hose is ideal for non-conductive medium pressure hydraulic hose applications.

Construction:

Piranhaflex[™] PFAN388NC Series hose consists of three individual components bonded to ensure maximum performance.

Tube - Seamless nylon inner tube.

Reinforcement – Braided high tensile strength fiber reinforcement.

Cover – PFAN388NC Series hose has an Orange non-conductive (REACH Compliant), non-pin pricked abrasion resistant polyurethane cover.

Features:

- · Meets or exceeds SAE J517 100R7 Standards
- Tested at 1/2 bend radius under SAE Standards
- Less than 50 microamperes leakage when subjected to 75,000 volts/ft. for 5 minutes
- Complies with the ANSI 92.2 for Vehicle Mounted Aerial Devices
- Light weight and flexible

Packaging:

- Hoses supplied in 250 ft. reels. All reels will have no more than 2 pieces, with no piece less than 50' in length.
- All non-standard lengths are treated as a made-toorder item and will require a minimum of 5,000 ft. to manufacture.

Temperature Range: -40°F (-40°C) to +200°F (+93°C) for petroleum based hydraulic fluids.

Nominal Specifications

| | Series Number Size Code | | Nomi | nal ID | Nomir | nal OD | Max. | Min. Bend. Radius | | Approx. | Coupling Recommendations |
|--|----------------------------|----|-------|--------|-------|----------------------------------|-------|----------------------|----------------------|---------------------|-----------------------------|
| | | | | (in) | | Working [†] Pressure | , , | | Weight (lbs./ft.) | Two-Piece Couplings | |
| | | | (in.) | (mm) | (in.) | (mm) | (psl) | (in.) | (mm) | (, | Ferrule Non-Skive |
| | PFAN388NC | 04 | 1/4 | 6.4 | 0.496 | 12.6 | 3,000 | 1.50 | 38 | 0.06 | PFR-04 |
| | PFAN388NC | 06 | 3/8 | 9.7 | 0.650 | 16.5 | 3,000 | 2.00 | 51 | 0.11 | PFR-06 |
| | PFAN388NC | 08 | 1/2 | 13.1 | 0.834 | 21.2 | 3,000 | 3.00 | 76 | 0.16 | PFR-08 |

[†] Minimum burst pressure 3-to-1 safety factor.

Freight: Hydraulic Hose can be combined with other KOA products for qualifying prepaid freight orders.

100R7 - Low Temp PIRA

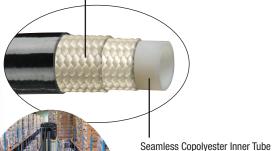


PFLT364 Series

















Piranhaflex™ PFLT364 Series hose is the ideal hose for medium pressure hydraulic lines commonly used on Fork Trucks to extend hose service life in cold storage applications.

Construction:

Piranhaflex™ PFLT364 Series hose consists of three individual components bonded to ensure maximum performance.

Tube - Seamless copolyester inner tube.

Reinforcement - Braided high tensile strength fiber reinforcement.

Cover - PFLT364 Series hose has a black copolyester pin pricked abrasion resistant cover.

Features:

- Meets or exceeds SAE J517 & J343 Standards
- Tested at ½ bend radius under SAE J517 100R7 Standards
- Exceeds SAE100R7 impulse requirements
- · Light weight and flexible
- Improved cold temperature flexibility
- A special copolyester inner tube and cover provides superior low temperature flexibility

Packaging:

- Hoses supplied in 250 ft. reels. All reels will have no more than 2 pieces, with no piece less than 50' in length.
- · All non-standard lengths are treated as a madeto-order item and will require a minimum of 5,000 ft. to manufacture.
- Twin/Multi Line MTO are available upon request.

Temperature Range: -65°F (-54°C) to +200°F (+93°C) for petroleum based hydraulic fluids. -65°F (-54°C) to 140°F (+60°C) for water-based and phosphate-ester based hydraulic fluids.

Nominal Specifications

| | | Nominal ID | | Nomir | nal OD | Max. | | Min. Bend. Radius | | Coupling Recommendations | | |
|------------------|-----------|------------|------|------------|--------|-------|----------------------------------|----------------------|-------|-----------------------------|---------------------|----------------------|
| Series Number | Size Code | | | <i>a</i> > | | (mm) | Working [†] Pressure | <i>a</i> > | | Approx. Weight (lbs./ft.) | Two-Piece Couplings | |
| | | | | (in.) | (mm) | (in.) | (mm) | mm) (psl) | (in.) | (mm) | , í | Ferrule Non-Skive |
| PFLT364 | 04 | 1/4 | 6.4 | 0.496 | 12.6 | 2,750 | 1.50 | 38 | 0.06 | PFR-04 | | |
| PFLT364 | 06 | 3/8 | 9.7 | 0.650 | 16.5 | 2,250 | 2.00 | 51 | 0.11 | PFR-06 | | |
| PFLT364 | 08 | 1/2 | 13.1 | 0.834 | 21.2 | 2,000 | 3.00 | 76 | 0.16 | PFR-08 | | |

[†] Minimum burst pressure 4-to-1 safety factor.

Freight: Hydraulic Hose can be combined with other KOA products for qualifying prepaid freight orders.



PF628/PF628NC Series

ATTENTION! Sale of PF628/PF628NC Series has been suspended. Please see this notice: https://koa.link/PF628-notice for more information.



Applications:

Piranhaflex™ PF628 Series hose is ideal for general purpose high pressure hydraulic applications with working pressures of 2,250 to 5,000 psi (depending on size). This hose is commonly used in industrial hydraulic construction, material handling, and agricultural equipment. Piranhaflex™ PF628NC Series hose has an orange, non pin-pricked cover ideal for use in applications where a non-conductive high pressure hydraulic hose is required. Typical applications include: hydraulic tools, lubrication lines and man lifts.

Construction:

Piranhaflex™ PF628 & PF628NC Series hoses consist of three individual components chemically bonded to ensure maximum performance.

Tube — Extruded seamless polyester inner tube.

Reinforcement - Aramid fiber reinforcement.

Cover — PF628 Series hose has a black highly abrasion resistant polyurethane pin picked cover; Series PF628NC hose has an Orange non-conductive (REACH Compliant), non-pin pricked abrasion resistant polyurethane cover.

Features:

- Extremely durable
- Good kink resistance
- Lightweight-less than about half that of comparable rubber/wire hose.
- Meets or exceeds SAE 100R8 impulse requirements at half of SAE recommended bend radius standards
- Will not swell or degrade in contact with most hydraulic fluids or oils
- · Highly abrasion resistant
- Inner tube will not chip or peel in service, eliminating the possibility of system contamination.
- Linear change +/-3% under typical operating pressure.

Packaging:

- Hoses supplied in 250 ft. reels & 50 ft. box lengths. All reels will have no more than 2 pieces, with no piece less than 50' in length.
- All 50' boxes contain only 1 piece of hose.
- All non-standard lengths are treated as a made-toorder item and will require a minimum of 5,000 ft. to manufacture.
- For Twin Line please refer to page 14 for available stock sizes.

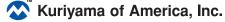
Temperature Range: -40° F (-40° C) to $+200^{\circ}$ F ($+93^{\circ}$ C) for petroleum based hydraulic fluids. -40° F (-40° C) to $+140^{\circ}$ F ($+60^{\circ}$ C) for water-based and phosphate-ester based hydraulic fluids.

Nominal Specifications

| Sorios | Size Code | Nomi | nal ID | Nomir | nal OD | Max. | Min. Bend. Radius | | Approx. | Coupling Recommendations | | | | | | | | | | | | |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|----------------------|-----------|-----------|-----------------------------|-----------|-----------|-----------|--|--|--|--|----------------------------------|--|--|----------------------|---------------------|
| Series Number | | Size Code | Size Code | Size Code | Size Code | Size Code | Size Code | Size Code | | | | | Working [†] Pressure | | | Weight (lbs./ft.) | Two-Piece Couplings |
| | | (in.) | (mm) | (in.) | (mm) | (psl) | (in.) | (mm) | | Ferrule Non-Skive | | | | | | | | | | | | |
| PF628/ PF628NC | 04 | 1/4 | 6.5 | 0.485 | 12.3 | 5,000 | 2.00 | 50 | 0.07 | PFR-04 | | | | | | | | | | | | |
| PF628/ PF628NC | 06 | 3/8 | 9.7 | 0.630 | 16.0 | 4,000 | 2.50 | 64 | 0.10 | PFR-06 | | | | | | | | | | | | |
| PF628/ PF628NC | 08 | 1/2 | 12.9 | 0.820 | 20.8 | 3,500 | 3.50 | 89 | 0.17 | PFR-08 | | | | | | | | | | | | |
| PF628/ PF628NC | 12 | 3/4 | 19.1 | 1.050 | 26.7 | 2,250 | 4.50 | 114 | 0.20 | PFR-12 | | | | | | | | | | | | |

[†] Minimum burst pressure 4-to-1 safety factor.

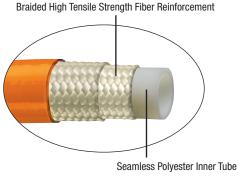
Freight: Hydraulic Hose can be combined with other KOA products for qualifying prepaid freight orders.





PF427/PF427NC Series





Applications:

Piranhaflex™ PF427 Series hose is ideal for general purpose high pressure hydraulic applications with a constant working pressure of 3,000 psi for each diameter. This hose is commonly used in industrial hydraulic construction, material handling and agricultural equipment. Piranhaflex™ PF427NC Series hose has an orange, nonpin pricked cover, ideal for use in applications where a non conductive, high pressure hydraulic hose is required. Typical applications include: hydraulic tools, lubrication lines and man lifts.

Construction:

Piranhaflex™ Hydraulic PF427 & PF427NC Series hoses consist of three individual components bonded to ensure maximum performance.

Tube - Seamless polyester inner tube.

Reinforcement - Braided high tensile strength fiber reinforcement.

Cover - PF427 Series hose has a black abrasion resistant polyurethane pin pricked cover; PF427NC Series hose has an Orange non-conductive (REACH Compliant), non-pin

pricked abrasion resistant polyurethane cover.

Features:

- Meets or exceeds SAE J517 Standards
- Tested at ½ bend radius under SAE Standards
- Exceeds 100R18 impulse requirements
- · Light weight and flexible
- · Ideal for general hydraulic services

Packaging:

- Hoses supplied in 250 ft. reels. All reels will have no more than 2 pieces, with no piece less than 50' in length.
- · All non-standard lengths are treated as a made-toorder item and will require a minimum of 5,000 ft. to manufacture.
- Twin/Multi Line MTO and available upon request.

Temperature Range: -40°F (-40°C) to +200°F (+93°C) for petroleum based hydraulic fluids. -40°F (-40°C) to +140°F (+60°C) for water-based and phosphate-ester based hydraulic fluids.

Nominal Specifications

| | Carian | | Nomi | nal ID | Nomir | nal OD | Max. | | Bend. lius | Approx. | Coupling Recommendations | |
|---|-----------------------|-----------|-------|--------|-------|--------|----------------------------------|------------|---------------|---------|-----------------------------|---------------------|
| | Series Number | Size Code | | | | | Working [†] Pressure | (in.) (mm) | (mm) | | Weight (lbs./ft.) | Two-Piece Couplings |
| | | | (in.) | (mm) | (in.) | (mm) | (psl) | | | | Ferrule Non-Skive | |
| Ī | PF427/ PF427NC | 04 | 1/4 | 6.4 | 0.496 | 12.7 | 3,000 | 1.50 | 38 | 0.06 | PFR-04 | |
| | PF427/ PF427NC | 06 | 3/8 | 9.7 | 0.650 | 16.5 | 3,000 | 2.00 | 51 | 0.11 | PFR-06 | |
| | PF427/ PF427NC | 80 | 1/2 | 13.1 | 0.834 | 21.1 | 3,000 | 3.00 | 76 | 0.16 | PFR-08 | |

[†] Minimum burst pressure 4-to-1 safety factor.

Freight: Hydraulic Hose can be combined with other KOA products for qualifying prepaid freight orders.



Thermoplastic Hydraulic Twin Line Versions





PF354TL & PF354NCTL Series Twin Line Versions:

PIRANHAFLEX™ PF354TL Series Nylon Tube/ Black Cover 100R7 Twin Line Hoses

| Part Number | Packaging | Approx. Wt. lbs./ft. |
|-----------------|-----------|-------------------------|
| PF354TL-04-250R | 250' Reel | 0.10 |
| PF354TL-06-250R | 250' Reel | 0.20 |
| PF354TL-08-250R | 250' Reel | 0.32 |

PIRANHAFLEX™ PF354NCTL Series Nylon Tube/ **Orange Cover Non-Conductive 100R7 Twin Line Hoses**

| Part Number | Packaging | Approx. Wt. lbs./ft. |
|-------------------|-----------|-------------------------|
| PF354NCTL-04-250R | 250' Reel | 0.10 |
| PF354NCTL-06-250R | 250' Reel | 0.20 |
| PF354NCTL-08-250R | 250' Reel | 0.32 |

PF267TL & PF267NCTL Series Twin Line Versions:

PIRANHAFLEX™ PF267TL Series Nylon Tube/ Black Cover 100R7 Twin Line Hoses

| Part Number | Packaging | Approx. Wt. lbs./ft. |
|-----------------|-----------|-------------------------|
| PF267TL-04-50BX | 50 Box | 0.14 |
| PF267TL-06-50BX | 50 Box | 0.24 |
| PF267TL-08-50BX | 50 Box | 0.34 |
| PF267TL-04-250R | 250' Reel | 0.14 |
| PF267TL-06-250R | 250' Reel | 0.24 |
| PF267TL-08-250R | 250' Reel | 0.34 |

PIRANHAFLEX™ PF267NCTL Series Nylon Tube/Orange Cover 100R7 Twin Line Hoses

| Part Number | Packaging | Approx. Wt. lbs./ft. |
|-------------------|-----------|-------------------------|
| PF267NCTL-04-50BX | 50 Box | 0.14 |
| PF267NCTL-06-50BX | 50 Box | 0.24 |
| PF267NCTL-08-50BX | 50 Box | 0.34 |
| PF267NCTL-04-250R | 250' Reel | 0.14 |
| PF267NCTL-06-250R | 250' Reel | 0.24 |
| PF267NCTL-08-250R | 250' Reel | 0.34 |

Series PF528TL & PF528NCTL Twin Line Versions:

PIRANHAFLEX™ PF528TL Series Nylon **Tube/Black Cover 100R8 Twin Line Hoses**

| Part Number | Packaging | Approx. Wt. lbs./ft. |
|------------------|-----------|-------------------------|
| PF528TL-04-250R | 250' Reel | 0.22 |
| PF528TL-06-250R | 250' Reel | 0.31 |
| PF528TI -08-250R | 250' Reel | 0.47 |



| PIRANHAFLEX™ PF5 | 28NCTL Series Nylon Tube/ | | | | | | | | |
|------------------------------------|---------------------------|--|--|--|--|--|--|--|--|
| Orange Cover 100R8 Twin Line Hoses | | | | | | | | | |
| | Annroy Wt | | | | | | | | |

| Part Number | Packaging | Approx. Wt. lbs./ft. |
|-------------------|-----------|-------------------------|
| PF528NCTL-04-250R | 250' Reel | 0.22 |
| PF528NCTL-06-250R | 250' Reel | 0.31 |
| PF528NCTL-08-250R | 250' Reel | 0.47 |

ATTENTION! Sale of PF628/PF628NC Series has been suspended. Please see this notice: https://koa.link/PF628-notice for more information.

Series PF628TL & PF628NCTL Twin Line Versions:

PIRANHAFLEX™ PF628TL Series Polyester Tube/Black Cover 100R8 Twin Line Hoses

| Part Number | Packaging | Approx. Wt. lbs./ft. |
|-----------------|-----------|-------------------------|
| PF628TL-04-250R | 250' Reel | 0.14 |
| PF628TL-06-250R | 250' Reel | 0.20 |
| PF628TL-08-250R | 250' Reel | 0.34 |

PIRANHAFLEX™ PF628NCTL Series Polyester Tube/ **Orange Cover Non-Conductive 100R8 Twin Line Hoses**

| Part Number | Packaging | Approx. Wt. Ibs./ft. |
|-------------------|-----------|-------------------------|
| PF628NCTL-04-250R | 250' Reel | 0.14 |
| PF628NCTL-06-250R | 250' Reel | 0.20 |
| PF628NCTL-08-250R | 250' Reel | 0.34 |

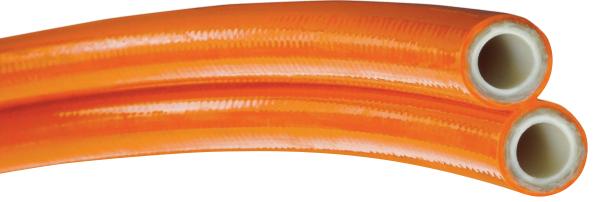
Freight: Hydraulic Hose can be combined with other KOA products for qualifying prepaid freight orders.



Custom Twin Line



Piranha Bonding Capabilities





- Bonding of hose sizes from 1/4" through 2" ID from available stocked hoses.
- For non-stock hose items, a minimum order of 2,500 ft. is required.
- Split-Back ends are provided; typically as lengths of 12", 18" or 24" for ease of coupling and assembly.
- Intermittent bonding can also be provided in lengths to meet your applications needs.
- Special packaging is available as required to meet your application needs.



 Color coding of multi-line hose packs is available for identification and easy hook-ups.





• Combinations of same or different ID's can be provided in a ribbon type configuration.

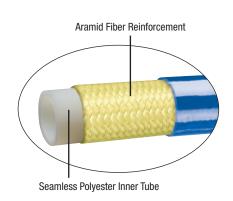
Custom Twin and Multi Line hoses are available upon request and are made to order. For more information contact Piranha Hose Products, Inc.

Phone: (231) 779-4390 • Toll-free: (800) 250-5132 • International FAX: (231) 779-4399 Web Site: www.piranhahose.com • E-Mail: sales@piranhahose.com

"Specialty"

PF321TC Series

Tank Charge – Compressor to tank fill hose





Abrasion Resistant Polyurethane Cover





Applications:

Piranhaflex™ PF321TC Series hose for use with compressed breathing air.

NOTE:

- This hose is intended for stationary applications as a fill hose for breathing air tanks.
- "NOT" for use with explosive gasses such as pure oxygen and hydrogen.
- "NOT" for use between regulator and breathing mask.

Construction:

Piranhaflex™ PF321TC Series hoses consist of three individual components bonded to ensure maximum performance.

Tube – Seamless co-polyester inner tube.

Reinforcement – Aramid fiber reinforcement.

Cover – Blue abrasion resistant (Reach Compliant) polyurethane cover.

Features:

- Specially compounded tube minimizes extraction of particulates while in service.
- Pin-pricked jacket
- Hose complies with CGA Grade E Breathing Air Standards. Overall air quality depends on all system components
- Blue colored cover for ease of identification. Other colors available as an MTO (made-to-order)

Packaging:

- Hoses supplied in 250 ft. reels. All reels will have no more than 2 pieces, with no piece less than 50' in length.
- All non-standard lengths are treated as a made-toorder item and will require a minimum of 5,000 ft. to manufacture.

Temperature Range: -40°F (-40°C) to +150° F (+65.5°C).

Nominal Specifications

| Ocation | | Nomii | nal ID | Nomir | nal OD | Max. | | Bend. lius | Approx. | Coupling Recommendations | |
|------------------|-----------|-------|--------|-------|--------|----------------------------------|------------|---------------|----------------------|-----------------------------|----------------------|
| Series Number | Size Code | | | | | Working [†] Pressure | | | Weight (lbs./ft.) | Two-Piece Couplings | |
| | | (in.) | (mm) | (in.) | (mm) | (psl) | (in.) (mm) | SI) (in.) (mı | (in.) (mm) | | Ferrule Non-Skive |
| PF321TC | 03 | 3/16 | 4.8 | 0.400 | 10.2 | 6,000 | 1.50 | 38.1 | 0.06 | PFR-03 | |
| PF321TC | 04 | 1/4 | 6.4 | 0.485 | 12.3 | 6,000 | 2.00 | 50.8 | 0.07 | PFR-04 | |

Freight: Hydraulic Hose can be combined with other KOA products for qualifying prepaid freight orders.

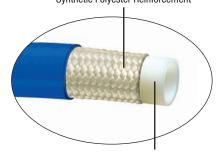
"Specialty"





Abrasion Resistant Polyurethane Cover





Seamless Polyolefin Inner Tube

Applications:

Piranhaflex™ PF344LMT Series hose used in low moisture transmission applications. This hose is intended for use in common industrial applications such as conveying urethane foam components, deionized water transfer, distilled water transfer and pure water transfer.

Construction:

Piranhaflex™ PF344LMT Series hoses consist of three individual components bonded to ensure maximum performance.

Tube - Seamless specialty grade polyolefin. Reinforcement - Synthetic polyester. Cover - Blue abrasion resistant (Reach Compliant) polyurethane cover.

Features:

- Specially compounded tube to minimize the extraction of particulates and minimize moisture transmission.
- The cover is of specialty formulated smooth, seamless, perforated, polyurethane compound.

Packaging:

- Hoses supplied in 250 ft. reels. All reels will have no more than 2 pieces, with no piece less than 50' in length.
- · All non-standard lengths are treated as a made-toorder item and will require a minimum of 5,000 ft. to manufacture.

Temperature Range: -40°F (-40°C) to +160° F (+71.1°C).

Nominal Specifications

| 2 | | Nomi | nal ID | Nomir | nal OD | Max. | Min. I Rac | | Approx. | Coupling Recommendations |
|------------------|-----------|-------|--------|-------|--------|----------------------------------|---------------|-------|----------------------|-----------------------------|
| Series Number | Size Code | | | | | Working [†] Pressure | | | Weight (lhs./ft.) | Two-Piece Couplings |
| | | (in.) | (mm) | (in.) | (mm) | (psl) | (in.) | (mm) | (, | Ferrule Non-Skive |
| PF344LMT | 04 | 1/4 | 6.4 | .500 | 12.7 | 2,750 | 2.5 | 63.5 | 0.06 | PFR-04 |
| PF344LMT | 06 | 3/8 | 9.7 | .650 | 16.5 | 2,250 | 3.0 | 76.2 | 0.11 | PFR-06 |
| PF344LMT | 80 | 1/2 | 13.1 | .830 | 21.1 | 2,000 | 4.0 | 101.6 | 0.16 | PFR-08 |
| PF344LMT | 12 | 3/4 | 19.1 | 1.18 | 30.0 | 1,500 | 5.0 | 127.0 | 0.28 | AFX-12 |
| PF344LMT | 16 | 1 | 25.4 | 1.46 | 37.1 | 1,500 | 6.0 | 152.4 | 0.40 | AFX-16 |

[†] Minimum burst pressure 4-to-1 safety factor.

Freight: Hydraulic Hose can be combined with other KOA products for qualifying prepaid freight orders.

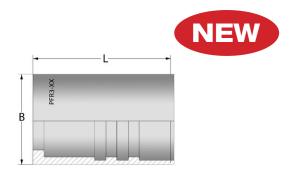




Ferrules

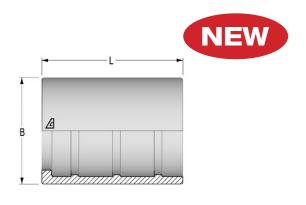
PFR₃

| Part | Dash | Hose | ID Size | B OD | L Length | Weight Each | |
|---------|------|------|---------|---------|-------------|----------------|--|
| Number | | | (mm) | (mm) | (mm) | (lbs.) | |
| PFR3-04 | -04 | 1/4 | 6.4 | 14.75 | 28.9 | 0.03 | |
| PFR3-05 | 05 | 5/16 | 7.9 | 17.4 | 28.8 | 0.04 | |
| PFR3-06 | -06 | 3/8 | 9.5 | 19 | 28.8 | 0.04 | |
| PFR3-08 | -08 | 1/2 | 12.7 | 23.7 | 36.3 | 0.06 | |



AFX

| Part | Dash | Hose | ID Size | B OD | L Length | Weight Each | |
|--------|------|-------|---------|---------|-------------|----------------|--|
| Number | Size | (in.) | (mm) | (mm) | (mm) | (lbs.) | |
| AFX-03 | 03 | 3/16 | 4.8 | 21 | 21.5 | 0.05 | |
| AFX-04 | 04 | 1/4 | 6.4 | 23 | 24.7 | 0.07 | |
| AFX-05 | 05 | 5/16 | 7.9 | 25 | 24.7 | 0.08 | |
| AFX-06 | 06 | 3/8 | 9.5 | 27 | 29.7 | 0.10 | |
| AFX-08 | 08 | 1/2 | 12.7 | 30 | 30.5 | 0.11 | |
| AFX-10 | 10 | 5/8 | 15.9 | 34 | 35.5 | 0.15 | |
| AFX-12 | 12 | 3/4 | 19.0 | 38 | 36.0 | 0.17 | |
| AFX-16 | 16 | 1 | 25.4 | 48 | 42.5 | 0.28 | |

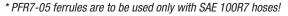


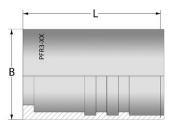
Universal Ferrules

For SAE 100R7, 100R8, 100R18 & ANSI 92.2 Hoses (Steel)

PFR/PFR7

| Part | Dash | Hose | ID Size | B OD | L Length | Weight Each | |
|----------|------|-------|---------|---------|-------------|----------------|--|
| Number | Size | (in.) | (mm) | (mm) | (mm) | (lbs.) | |
| PFR-03 | 03 | 3/16 | 4.7 | 14.9 | 24.0 | 0.03 | |
| PFR-04 | 04 | 1/4 | 6.4 | 17.0 | 29.0 | 0.04 | |
| PFR7-05* | 05 | 5/16 | 7.9 | 19.0 | 29.0 | 0.04 | |
| PFR-06 | 06 | 3/8 | 9.5 | 21.0 | 31.0 | 0.05 | |
| PFR-08 | 80 | 1/2 | 12.7 | 25.4 | 36.0 | 0.06 | |
| PFR-12 | 12 | 3/4 | 19.05 | 31.8 | 45.2 | 0.11 | |



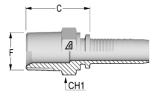


Kuriyama stocks a variety of fittings designed for use with all of our Piranhaflex[™] SAE 100R7, 100R8, 100R18 and ANSI 92.2 hoses. For more information contact your nearest Kuriyama warehouse location. Please refer to our latest Kuriyama Hydraulic Connections Catalog for a complete list of available two-piece fittings.

Two-Piece Fittings PIRAN

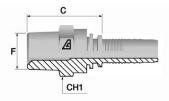


Inserts for two-piece fittings – US End Configurations



NPTF Solid Male 60° Seat

| Dout Number | r Dash | | D Size | FT | hread | C Cut-Off | Hex Dia. | Weight |
|-------------|----------|-------|--------|--------------|-------------------|----------------|-------------|----------------|
| Part Number | Size | (in.) | (mm) | Dash Size | Size (in. TPI) | Factor (mm) | CH1 (mm) | Each (lbs.) |
| A-0302-MNPT | 03 | 3/16 | 4.8 | 02 | 1/8-27 | 19.8 | 12 | 0.03 |
| A-0402-MNPT | 04 | 1/4 | 6.4 | 02 | 1/8-27 | 21.3 | 14 | 0.04 |
| A-0404-MNPT | 04 | 1/4 | 6.4 | 04 | 1/4-18 | 26.8 | 17 | 0.06 |
| A-0406-MNPT | 04 | 1/4 | 6.4 | 06 | 3/8-18 | 27.8 | 19 | 0.08 |
| A-0504-MNPT | 05 | 5/16 | 7.9 | 04 | 1/4-18 | 26.8 | 17 | 0.07 |
| A-0506-MNPT | 05 | 5/16 | 7.9 | 06 | 3/8-18 | 27.8 | 19 | 0.11 |
| A-0604-MNPT | 06 | 3/8 | 9.5 | 04 | 1/4-18 | 26.8 | 17 | 0.07 |
| A-0606-MNPT | 06 | 3/8 | 9.5 | 06 | 3/8-18 | 27.8 | 19 | 0.09 |
| A-0608-MNPT | 06 | 3/8 | 9.5 | 08 | 1/2-14 | 31.3 | 22 | 0.15 |
| A-0806-MNPT | 80 | 1/2 | 12.7 | 06 | 3/8-18 | 28.6 | 19 | 0.12 |
| A-0808-MNPT | 80 | 1/2 | 12.7 | 80 | 1/2-14 | 32.1 | 22 | 0.17 |
| A-0812-MNPT | 80 | 1/2 | 12.7 | 12 | 3/4-14 | 34.1 | 27 | 0.22 |
| A-1012-MNPT | 10 | 5/8 | 15.9 | 12 | 3/4-14 | 34.1 | 27 | 0.24 |
| A-1212-MNPT | 12 | 3/4 | 19.0 | 12 | 1-11 1/2 | 34.6 | 27 | 0.26 |



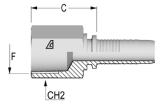
NPTF Male Swivel 60° Seat

| David Nameda ar | Dash | sh Hose ID Size | | FT | hread | C Cut-Off | Hex Dia. | Weight |
|-----------------|------|-----------------|------|--------------|-------------------|----------------|-------------|----------------|
| Part Number | Size | (in.) | (mm) | Dash Size | Size (in. TPI) | Factor (mm) | CH1 (mm) | Each (lbs.) |
| A-0404-MNPS | 04 | 1/4 | 6.4 | 04 | 1/4-18 | 37.6 | 17 | 0.09 |
| A-0604-MNPS | 06 | 3/8 | 9.5 | 04 | 1/4-18 | 39.6 | 17 | 0.12 |
| A-0606-MNPS | 06 | 3/8 | 9.5 | 06 | 3/8-18 | 37.5 | 22 | 0.15 |
| A-0806-MNPS | 08 | 1/2 | 12.7 | 06 | 3/8-18 | 38.3 | 22 | 0.17 |
| A-0808-MNPS | 80 | 1/2 | 12.7 | 08 | 1/2-14 | 42.3 | 25 | 0.25 |
| A-1212-MNPS | 12 | 3/4 | 19.0 | 12 | 3/4-14 | 50.1 | 32 | 0.31 |



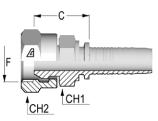
HAFLE Two-Piece Fittings

Inserts for two-piece fittings – US End Configurations



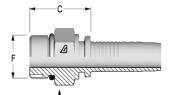
NPTF Solid Female Rigid

| David Normbay | Dash | Hose ID Size | | FT | hread | C Cut-Off | Hex Dia. | Weight | | |
|---------------|------|--------------|------|--------------|-------------------|----------------|-------------|----------------|--|--|
| Part Number | Size | (in.) | (mm) | Dash Size | Size (in. TPI) | Factor (mm) | CH2 (mm) | Each (lbs.) | | |
| A-0404-FNPR | 04 | 1/4 | 6.4 | 04 | 1/4-18 | 27.8 | 19 | 0.10 | | |
| A-0606-FNPR | 06 | 3/8 | 9.5 | 06 | 3/8-18 | 28.8 | 22 | 0.17 | | |
| A-0808-FNPR | 08 | 1/2 | 12.7 | 08 | 1/2-14 | 35.6 | 25 | 0.20 | | |
| A-1212-FNPR | 12 | 3/4 | 19.0 | 12 | 3/4-14 | 38.1 | 32 | 0.35 | | |



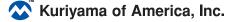
NPSM Female Swivel 60° Seat

| Dout No | Part Number | Dash | Hose ID Size | | F Thread | | C Cut-Off | Hex Dia. | Hex Dia. | Weight Each | |
|---------|----------------|------|--------------|------|-----------------------------|--------|----------------|-------------|-------------|----------------|--|
| Part Nu | Part Number Si | | (in.) | (mm) | Dash Size Size (in. TPI) | | Factor (mm) | CH1 (mm) | CH2 (mm) | (lbs.) | |
| A-0404 | -FPMS | 04 | 1/4 | 6.4 | 04 | 1/4-18 | 24.3 | 17 | 19 | 0.09 | |
| A-0606- | -FPMS | 06 | 3/8 | 9.5 | 06 | 3/8-18 | 24.8 | 19 | 22 | 0.14 | |
| A-0808- | -FPMS | 08 | 1/2 | 12.7 | 80 | 1/2-14 | 26.6 | 22 | 27 | 0.22 | |



SAE Solid Male O-Ring Boss

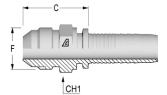
| Part Number | Dash Hos | | Hose ID Size | | Thread | C Cut-Off | Hex Dia. | Weight |
|-------------|----------|-------|--------------|--------------|-------------------|----------------|-------------|----------------|
| Part Number | Size | (in.) | (mm) | Dash Size | Size (in. TPI) | Factor (mm) | CH1 (mm) | Each (lbs.) |
| A-0404-MORB | 04 | 1/4 | 6.4 | 04 | 7/16-20 | 20.3 | 14 | 0.04 |
| A-0405-MORB | 04 | 1/4 | 6.4 | 05 | 1/2-20 | 21.3 | 16 | 0.05 |
| A-0406-MORB | 04 | 1/4 | 6.4 | 06 | 9/16-18 | 22.3 | 17 | 0.06 |
| A-0606-MORB | 06 | 3/8 | 9.5 | 06 | 9/16-18 | 23.3 | 19 | 0.08 |
| A-0608-MORB | 06 | 3/8 | 9.5 | 80 | 3/4-16 | 24.3 | 22 | 0.12 |
| A-0610-MORB | 06 | 3/8 | 9.5 | 10 | 7/8-14 | 26.8 | 27 | 0.16 |
| A-0808-MORB | 80 | 1/2 | 12.7 | 80 | 3/4-16 | 25.1 | 22 | 0.14 |
| A-0810-MORB | 08 | 1/2 | 12.7 | 10 | 7/8-14 | 27.6 | 27 | 0.19 |
| A-0812-MORB | 80 | 1/2 | 12.7 | 12 | 1 1/16-12 | 32.1 | 32 | 0.28 |
| A-1210-MORB | 12 | 3/4 | 19.0 | 10 | 7/8-14 | 28.1 | 27 | 0.24 |
| A-1212-MORB | 12 | 3/4 | 19.0 | 12 | 1 1/16-12 | 32.6 | 32 | 0.31 |
| A-1216-MORB | 12 | 3/4 | 19.0 | 16 | 1 5/16-12 | 35.7 | 38 | 0.44 |



Two-Piece Fittings

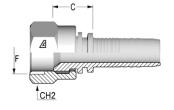


Inserts for two-piece fittings – US End Configurations



JIC Solid Male 37° Seat

| Dort Number | Dash | Hose ID Size | | FI | hread | C Cut-Off | Hex Dia. | Weight |
|-------------|------|--------------|------|--------------|-------------------|----------------|-------------|----------------|
| Part Number | Size | (in.) | (mm) | Dash Size | Size (in. TPI) | Factor (mm) | CH1 (mm) | Each (lbs.) |
| A-0404-MJIC | 04 | 1/4 | 6.4 | 04 | 7/16-20 | 25.3 | 12 | 0.04 |
| A-0405-MJIC | 04 | 1/4 | 6.4 | 05 | 1/2-20 | 25.3 | 14 | 0.05 |
| A-0406-MJIC | 04 | 1/4 | 6.4 | 06 | 9/16-18 | 26.3 | 17 | 0.06 |
| A-0505-MJIC | 05 | 5/16 | 7.9 | 05 | 1/2-20 | 25.3 | 14 | 0.05 |
| A-0506-MJIC | 05 | 5/16 | 7.9 | 06 | 9/16-18 | 26.3 | 17 | 0.07 |
| A-0606-MJIC | 06 | 3/8 | 9.5 | 06 | 9/16-18 | 26.3 | 17 | 0.07 |
| A-0608-MJIC | 06 | 3/8 | 9.5 | 80 | 3/4-16 | 29.8 | 19 | 0.11 |
| A-0808-MJIC | 80 | 1/2 | 12.7 | 08 | 3/4-16 | 29.8 | 19 | 0.12 |
| A-0810-MJIC | 80 | 1/2 | 12.7 | 10 | 7/8-14 | 34.6 | 24 | 0.19 |
| A-0812-MJIC | 08 | 1/2 | 12.7 | 12 | 1 1/16-12 | 37.1 | 27 | 0.23 |
| A-1212-MJIC | 12 | 3/4 | 19.0 | 12 | 1 1/16-12 | 37.6 | 27 | 0.27 |
| A-1214-MJIC | 12 | 3/4 | 19.0 | 14 | 1 3/16-12 | 40.1 | 32 | 0.36 |
| A-1216-MJIC | 12 | 3/4 | 19.0 | 16 | 1 5/16-12 | 42.6 | 36 | 0.54 |



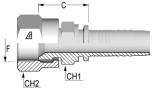
JIC Female 37° Seat

| Part Number | Dash | Hose | ID Size | F1 | Thread | C Cut-Off | Hex Dia. | Weight Each |
|-----------------|------|-------|---------|--------------|-------------------|----------------|-------------|----------------|
| r ai i Nulliyei | Size | (in.) | (mm) | Dash Size | Size (in. TPI) | Factor (mm) | CH2 (mm) | (lbs.) |
| A-0304-FJSH | 03 | 3/16 | 4.8 | 04 | 7/16-20 | 14.3 | 16 | 0.04 |
| A-0404-FJSH | 04 | 1/4 | 6.4 | 04 | 7/16-20 | 14.6 | 16 | 0.04 |
| A-0405-FJSH | 04 | 1/4 | 6.4 | 05 | 1/2-20 | 15.3 | 17 | 0.06 |
| A-0406-FJSH | 04 | 1/4 | 6.4 | 06 | 9/16-18 | 15.3 | 19 | 0.07 |
| A-0505-FJSH | 05 | 5/16 | 7.9 | 05 | 1/2-20 | 15.3 | 17 | 0.07 |
| A-0506-FJSH | 05 | 5/16 | 7.9 | 06 | 9/16-18 | 15.3 | 19 | 0.08 |
| A-0606-FJSH | 06 | 3/8 | 9.5 | 06 | 9/16-18 | 15.3 | 19 | 0.08 |
| A-0608-FJSH | 06 | 3/8 | 9.5 | 08 | 3/4-16 | 17.8 | 25 | 0.14 |
| A-0808-FJSH | 08 | 1/2 | 12.7 | 08 | 3/4-16 | 18.6 | 25 | 0.16 |
| A-0810-FJSH | 08 | 1/2 | 12.7 | 10 | 7/8-14 | 19.6 | 27 | 0.19 |
| A-0812-FJSH | 08 | 1/2 | 12.7 | 12 | 1 1/16-12 | 22.1 | 32 | 0.25 |
| A-1210-FJSH | 12 | 3/4 | 19.0 | 10 | 7/8-14 | 20.0 | 27 | 0.28 |
| A-1212-FJSH | 12 | 3/4 | 19.0 | 12 | 1 1/16-12 | 20.0 | 32 | 0.28 |
| A-1214-FJSH | 12 | 3/4 | 19.0 | 14 | 1 3/16-12 | 20.0 | 36 | 0.33 |
| A-1216-FJSH | 12 | 3/4 | 19.0 | 16 | 1 5/16-12 | 22.1 | 38 | 0.38 |





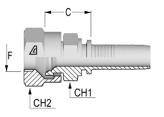
Inserts for two-piece fittings – US End Configurations



JIC Female 37° Seat - Double Hex

| Part Number | Dash | Hose I | D Size | F1 | Thread | C Cut-Off | Hex Dia. CH1 | Hex Dia. CH2 | Weight |
|-------------|------|--------|--------|--------------|-------------------|----------------|-----------------|-----------------|----------------|
| Part Number | Size | (in.) | (mm) | Dash Size | Size (in. TPI) | Factor (mm) | (mm) | (mm) | Each (lbs.) |
| A-0404-FJDH | 04 | 1/4 | 6.4 | 04 | 7/16-20 | 19.6 | 14 | 16 | 0.06 |
| A-0405-FJDH | 04 | 1/4 | 6.4 | 05 | 1/2-20 | 20.3 | 14 | 17 | 0.07 |
| A-0406-FJDH | 04 | 1/4 | 6.4 | 06 | 9/16-18 | 20.3 | 14 | 19 | 0.09 |
| A-0506-FJDH | 05 | 5/16 | 7.9 | 06 | 9/16-18 | 20.3 | 14 | 19 | 80.0 |
| A-0606-FJDH | 06 | 3/8 | 9.5 | 06 | 9/16-18 | 21.3 | 17 | 19 | 0.10 |
| A-0608-FJDH | 06 | 3/8 | 9.5 | 08 | 3/4-16 | 24.8 | 19 | 25 | 0.17 |
| A-0610-FJDH | 06 | 3/8 | 9.5 | 10 | 7/8-14 | 25.8 | 22 | 22 | 0.20 |
| A-0806-FJDH | 08 | 1/2 | 12.7 | 06 | 9/16-18 | 23.1 | 19 | 19 | 0.15 |
| A-0808-FJDH | 08 | 1/2 | 12.7 | 08 | 3/4-16 | 25.6 | 19 | 25 | 0.20 |
| A-0810-FJDH | 08 | 1/2 | 12.7 | 10 | 7/8-14 | 26.6 | 22 | 27 | 0.22 |
| A-0812-FJDH | 08 | 1/2 | 12.7 | 12 | 1 1/16-12 | 28.1 | 25 | 32 | 0.30 |
| A-1210-FJDH | 12 | 3/4 | 19.0 | 10 | 7/8-14 | 28.1 | 27 | 32 | 0.31 |
| A-1212-FJDH | 12 | 3/4 | 19.0 | 12 | 1 1/16-12 | 28.6 | 27 | 32 | 0.35 |
| A-1214-FJDH | 12 | 3/4 | 19.0 | 14 | 1 3/16-12 | 29.9 | 32 | 36 | 0.44 |
| A-1216-FJDH | 12 | 3/4 | 19.0 | 16 | 1 5/16-12 | 32.1 | 32 | 38 | 0.49 |

JIS Female Swivel 30° Seat -**B** 8363 Type **F**

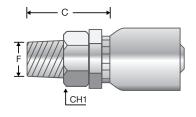


| Part Number Dash Size | | | | F Thread | | C Cut-Off | Hex Dia. CH1 | Hex Dia. CH2 | Weight Each |
|--------------------------|------|-------|------|--------------|-------------------|----------------|-----------------|-----------------|----------------|
| | Size | (in.) | (mm) | Dash Size | Size (in. TPI) | Factor (mm) | (mm) | (mm) | (lbs.) |
| A-0404-FJIS | 04 | 1/4 | 6.4 | 04 | 1/4-19 | 20.8 | 17 | 19 | 0.09 |
| A-0606-FJIS | 06 | 3/8 | 9.5 | 06 | 3/8-19 | 21.8 | 19 | 22 | 0.13 |
| A-0808-FJIS | 08 | 1/2 | 12.7 | 08 | 1/2-14 | 23.6 | 22 | 27 | 0.20 |
| A-1212-FJIS | 12 | 3/4 | 19.0 | 12 | 3/4-14 | 27.1 | 30 | 36 | 0.41 |



For use with PF321TC Series hose only



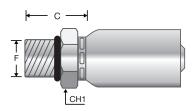


NPTF Solid Male 60° Seat

| Part Number | Dash | Hose I | D Size | F Th | read | C Cut-Off | Hex Dia. CH1 (mm) | Weight Each (lbs) |
|----------------|------|--------|--------|--------------|--------------------|----------------|-------------------------|-------------------------|
| rai i Nullibei | Size | (in) | (mm) | Dash Size | Size (in) - TPI | Factor (mm) | | |
| P-0302-MNPT-SS | 03 | 3/16 | 4.8 | 02 | 1/8-27 | 26.6 | 17 | 0.100 |
| P-0304-MNPT-SS | 03 | 3/16 | 4.8 | 04 | 1/4-18 | 28.6 | 19 | 0.107 |
| P-0404-MNPT-SS | 04 | 1/4 | 6.4 | 04 | 1/4-18 | 28.6 | 22 | 0.117 |

For use with PF321TC Series hose only



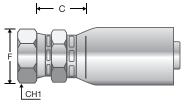


SAE Solid Male O-Ring Boss

| Part Number | Dash | Hose | ID Size | FTI | ıread | C Cut-Off | Hex Dia. CH1 (mm) | Weight Each (lbs) |
|----------------|------|------|---------|--------------|--------------------|----------------|-------------------------|-------------------------|
| Size | Size | (in) | (mm) | Dash Size | Size (in) - TPI | Factor (mm) | | |
| P-0304-MORB-SS | 03 | 3/16 | 4.8 | 04 | 7/16-20 | 22.2 | 17 | 0.105 |
| P-0404-MORB-SS | 04 | 1/4 | 6.4 | 04 | 7/16-20 | 22.2 | 19 | 0.115 |

For use with PF321TC Series hose only





JIC Female 37° Seat

| Part Number | Dash | Hose I | D Size | F Th | iread | C Cut-Off | Hex Dia. CH1 (mm) | Weight Each (lbs) |
|----------------|------|--------|--------|--------------|--------------------|----------------|-------------------------|-------------------------|
| rait Nullibei | Size | (in) | (mm) | Dash Size | Size (in) - TPI | Factor (mm) | | |
| P-0304-FJDH-SS | 03 | 3/16 | 4.8 | 04 | 7/16-20 | 19.1 | 17 | 0.113 |
| P-0404-FJDH-SS | 04 | 1/4 | 6.4 | 04 | 7/16-20 | 19.1 | 19 | 0.123 |



Additional Fittings



SAE Female 45° Seat - Double Hex



Other Configurations Available A-XXXX-FJ9 (S,M,L)

45° & 90° JIC Female Swivel 37° Seat Solid Bent Tube



ORFS Solid Male



Other Configurations Available

A-XXXX-F045, A-XXXX-F09 (S,M,L)

Straight, 45° & 90° **ORFS** Female



A-XXXX-C61S

Other Configurations Available A-XXXX-C612, A-XXXX-C613, A-XXXX-C614, A-XXXX-C616, A-XXXX-C619

Straight, 22°, 30°, 45°, 60° & 90° 0-Ring Flange SAE J518 Code 61,62



Other Configurations Available

A-XXXX-C624, A-XXXX-C629 Straight, 45° & 90° O-Ring Flange SAE J518 Code 62 Solid



C61SF-XX, C62SF-XX

Split Flange Clamps SAE J518 Code 61 & 62



A-XXXX-FGRT



A-XXXX-BTTF

Hose Mender, Grease Fitting & Bite Type Tube Fitting



A-XXXX-MBPP



A-XXXX-MBFS



BSP/JIS Solid Male



A-XXXX-BBAN

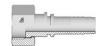


BSP Banjo, BSPP Bolt



Other Configurations Available

A-XXXX-FB04, A-XXXX-FB09 Straight, 45° & 90° BSP O-Ring Female Swivel 60°Cone



A-XXXX-FBFS

BSP Female Swivel Flat Seat





Metric Solid Male 24° Seat - DIN 3853 Light & Heavy



MBOLT-XX

Metric Banjo, Metric Bolt



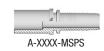
Other Configurations Available A-XXXX-FM4L, A-XXXX-FM9L

Straight, 45° and 90° Metric O-Ring Female Swivel 24° Seat - DIN 3865 Light



Other Configurations Available A-XXXX-FM4H, A-XXXX-FM9H

Straight, 45° and 90° Metric O-Ring Female Swivel 24° Seat - DIN 3865 Heavy



Other Configurations Available A-XXXX-MSP4, A-XXXX-MSP9

Straight, 45° & 90° Metric Standpipe



MTN-XXLXXXX, MTN-XXHXXXX

Nut DIN 24° Light and Heavy



MBS-XXL, MBS-XXH

Double Cutting Ring DIN 24° Light & Heavy

A-XXXX-FMFS



Metric Female French Type



Other Configurations Available

A-XXXX-KFST, A-XXXX-KF45, A-XXXX-KF90

Komatsu Female Swivel & Straight, 45° & 90° Flanges

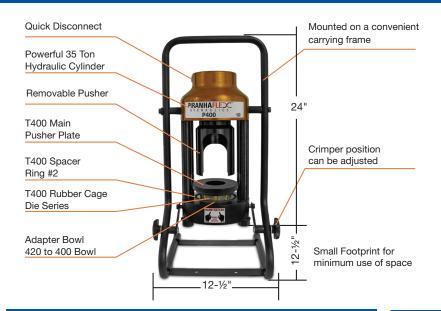


A-XXXX-FPWS

Pressure Wash Female (Type K)

P400 Portable Hose Press

PIRANHAFLE THE H Y D R A U L I C S



The P400 Portable hose press is light weight making it truly "portable" and can be carried to almost any location where service is required. It can be paired with either a Hand Pump, Pneumatic Pump or Electric Pump ,make the perfect combination for shop or portable crimping requirements.

| Technical Data | | | | | |
|--------------------------------|--|--|--|--|--|
| 35 Ton | | | | | |
| 1" - 2 Wire | | | | | |
| 3/4" - 4SP | | | | | |
| L: 12-½" x W: 12-½" x H: 24" | | | | | |
| Weight: 47 lbs | | | | | |
| Die Series: PF402 Rubber Caged | | | | | |

ENGINEERED TO ACCOMMODATE YOUR NEEDS

- 35 Tons of crimping force.
- Hose capacity up to 1" 2 wire and 3/4" 4SP.
- Available ValPower® Hand Pump, Pneumatic Pump 10,000 psi or Electric Pump.
- Removable Pusher and 2 piece PF402 rubber caged die set make accurate fitting positioning easy.
- PF402 rubber caged dies sets for heavy duty environments.
- Color-coded die rubber cages for easy identification.
- Base mounting holes allow the crimper to be bench or truck bed mounted if required.

DURABLE, RELIABLE DESIGN = PROFITABILITY

- Crimper position can be adjusted for optimum crimping position or dropped to vertical position for better balance when the crimper is being carried.
- Open design to provide excellent operator visibility.
- Complete range of dies and accessories available.

Pump Options & Accessories:



T420 Micrometer (Available) P/N:103085



Hand Pump (Available) P/N:VHP-10-43



Pneumatic Pump (Available) P/N:VAP-10-100



Electric Pump (Available) P/N:VEP1001



Die Removal Magnet (Included) P/N:104679



CRIMPX Die Lubricant: Oil 4 oz bottle with dauber cap (Included) P/N:103886



CRIMPX Die Lubricant (Available) Grease 4 oz can with brush P/N:104162



Die Storage Shelf (Available) P/N:101431



P402 Tooling



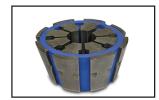
T400 12mm Die Set P/N:PF402-12D



T400 14.2mm Die Set P/N:PF402-14.2D



T400 17.4mm Die Set P/N:PF402-17.4D



T400 22.2mm Die Set P/N:PF402-22.2D



Adapter Bowl 420 to 400 Bowl P/N:PF420/400-AB



T400 Main Pusher Plate W/ Magnets P/N:PF400-MPP



T400 Spacer Ring #1 P/N:PF402-1-SR



T400 Spacer Ring #2 P/N:PF402-2-SR



Light Weight Portable Unit: Truly "portable" crimper can be carried to almost any location where services is required.





T400 Main Pusher Plate With Nose Down

T400 Spacer Ring #2

PF402 Die Set

Die Ring

ENGINEERED TO ACCOMMODATE YOUR NEEDS

- 2 piece PF402 rubber caged die set make accurate fitting positioning easy.
- PF402 rubber caged dies sets for heavy duty environments.
- · Color-coded die rubber cages for easy identification.













Because we continually examine ways to improve our products, we reserve the right to alter specifications or discontinue products without prior notice.

Hose Cutters





Part No. - HCMD **Medium Cutter**

- Medium Hose and Tubing Cutter
- Cuts up to 1 5/8" Hose and Tubing
- Weight 4.3 oz.



Part No. - HCMD-BLADE **Replacement blade for Medium Cutter**

Medium Hose and Tubing Cutter



Part No. - HCLG **Large Cutter**

- Large Hose Tubing Cutter
- Cuts up to 1 7/8" OD Hose and Tubing
- Weight 5.0 oz



Part No. - HCLG-BLADE **Replacement blade for Large Cutter**

Large Bundle - Hose - Tubing Cutter



Part No. - HCRCT **One Handed Ratchet Hose Cutter**

- Cuts up to 2 1/2" OD Hoses
- Weight 1.4 lbs



Part No. - HCRCT-BLADE Replacement blade for One Handed Ratchet Cutter

Large Bundle - Hose - Tubing Cutter

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Hose or tubing used in bent configurations will be subjected to increased abrasion. Hose clamps or couplings may loosen after initial installation and all sections of hose and tubing including connections, couplings, clamps, conductivity and bonding should be inspected frequently, regularly and consistently, and should be replaced, adjusted or re-tightened for the avoidance of leakage, for the prevention of injuries or damages, and for general safety purposes. Except as indicated in its Limited Warranty, Seller shall not be liable or responsible for direct or indirect injuries or damages caused by or attributed to the failure or malfunction of any Products sold or distributed by it.

Purchasers or users of the Products should frequently and consistently undertake inspections and protective measures with respect to the use and application of Products, which should include the examination of tube and cover, conditions of the hose or tubing, and the identification, repair or replacement of sections showing cracking, blistering, separations, internal and external abrasions, leaking or slipped couplings or connections and make proper proof tests.

Limited Warranty

The Products sold or distributed by Seller are warranted to its customers to be free from defects in material and workmanship at the time of shipment by us, subject to the following provisions. ALL WARRANTY CLAIMS SHALL BE MADE WITHIN SIX (6) MONTHS AFTER SELLER SHIPPED THE PRODUCTS. SELLER'S LIABILITY HEREUNDER IS LIMITED AT SELLER'S EXCLUSIVE DISCRETION, TO 1) THE PURCHASE PRICE OF ANY PRODUCTS PROVING DEFECTIVE; 2) REPAIR OF ANY DEFECTIVE PRODUCT OR PART THEREOF; OR 3) REPLACEMENT OF ANY DEFECTIVE PRODUCT OR PART UPON ITS AUTHORIZED RETURN TO SELLER.

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