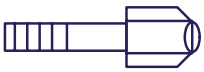
Shapes and Components - 1

Original schematics, not to scale. Identify the shape separately from the thread and seal.

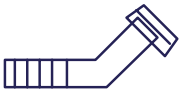


Straight Female Swivel

Use: Connects an in-line hose end while the captive nut turns for assembly.

Recognise: Straight stem and internal-thread nut. Identify the seat separately; an assembly swivel is not automatically a live rotary joint.

RHPL Category: fittings/threaded

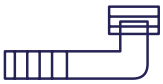


45° Female Swivel

Use: Turns the hose connection through 45 degrees where the route needs an angled end.

Recognise: Bent tube between stem and swivel nut; confirm drop, orientation and sealing family.

RHPL Category: fittings/threaded

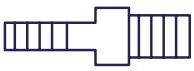


90° Female Swivel

Use: Turns the connection through a right angle at the hose end.

Recognise: L-shaped tube and captive nut. Short and long drops can have the same thread but different clearance.

RHPL Category: fittings/threaded

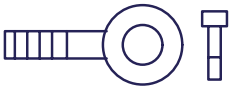


Male Stud End

Use: Connects a hose or adapter to a matching threaded port.

Recognise: External thread and spanner flats. Check whether sealing is at the thread, shoulder seal or specified seat.

RHPL Category: fittings/threaded

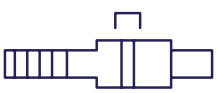


Banjo Eye and Hollow Bolt

Use: Routes flow through an eye around a hollow bolt where a compact side connection is required.

Recognise: Ring-shaped eye with a side stem; the matching bolt has fluid passages. Confirm bolt thread, eye width and seals. Identification only; ask RHPL to confirm supply.

RHPL Category: fittings



Staple-Lock Connection

Use: Provides a retained plug-and-socket connection used in mining hydraulic systems.

Recognise: Grooved insert, matching socket and transverse retaining staple. Identify the exact interface and seal arrangement; similar staple ends are not universal.

RHPL Category: staple-lock

Shapes and Components - 2

Original schematics, not to scale. Identify the shape separately from the thread and seal.

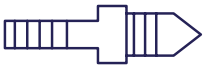


Ferrule / Crimp Socket

Use: Secures the hose around the matched insert when crimped to its specified assembly dimensions.

Recognise: Outer cylindrical sleeve over the hose. Select the exact hose, stem and ferrule system; appearance alone cannot prove compatibility.

RHPL Category: fittings

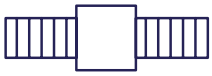


Hose Insert / Nipple

Use: Carries fluid from the hose bore to the machine-end connection.

Recognise: Ribbed stem enters the hose; the opposite end carries the connection. Distinguish a hose insert from a male-to-male hex nipple.

RHPL Category: fittings

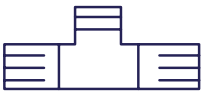


Hex Nipple / Straight Adapter

Use: Joins two identified connections in a straight arrangement.

Recognise: Two externally threaded ends separated by a hexagon for a spanner. Record both ends, even when they look alike. Identification only; confirm the requested type with RHPL.

RHPL Category: adapters



Tee Adapter

Use: Creates a three-way junction between specified interfaces.

Recognise: T-shaped body with three connection ends. Specify the run and branch separately, including thread, seal and size.

RHPL Category: adapters



Elbow Adapter

Use: Changes direction between a port, tube or hose connection without being a crimped hose end.

Recognise: Rigid angled body with two connection interfaces. Identify each end and whether the port end is adjustable.

RHPL Category: adapters

Original schematic line drawings, not to scale. Hidden features are simplified. These are identification cues, not manufacturing drawings, pressure ratings or proof of interchangeability. Confirm the exact hose, fitting, seal and application before selection.

Thread and Sealing Families - 1

Original schematics, not to scale. Identify the shape separately from the thread and seal.



JIC 37° Flare

Use: Joins matching flared interfaces with a metal-to-metal sealing seat.

Recognise: Parallel UN/UNF thread with the JIC flare seat. Verify 37 degrees with a seat gauge; a similar 45-degree seat is a different interface.

RHPL Category: fittings/threaded



ORFS - O-Ring Face Seal

Use: Seals against a flat mating face by compressing an O-ring in the male end face.

Recognise: Flat face with a visible O-ring groove on the male end, rather than a flare cone. Match thread, face and seal size.

RHPL Category: fittings/threaded



BSP 60° Cone

Use: Uses a BSP parallel threaded swivel connection with the specified cone seat.

Recognise: Internal cone at the male end and matching female swivel nose. BSPP describes the thread; it does not establish the seal. Do not confuse with BSP taper or flat-seat versions.

RHPL Category: fittings/threaded

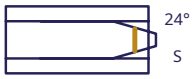


DIN 24° Light Series - DKOL

Use: Connects a matching metric 24-degree light-series interface using the O-ring cone hose end.

Recognise: Metric swivel nut and O-ring on the cone. Confirm L series, tube-size designation, thread and seat; DKOL and DKOS are not selected by nut size alone.

RHPL Category: fittings/threaded



DIN 24° Heavy Series - DKOS

Use: Connects a matching metric 24-degree heavy-series interface using the O-ring cone hose end.

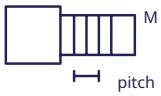
Recognise: Metric swivel nut and O-ring on the cone. Confirm S series, tube-size designation, thread and seat; DKOL and DKOS are not selected by nut size alone.

RHPL Category: fittings/threaded

Original schematic line drawings, not to scale. Hidden features are simplified. These are identification cues, not manufacturing drawings, pressure ratings or proof of interchangeability. Confirm the exact hose, fitting, seal and application before selection.

Thread and Sealing Families - 2

Original schematics, not to scale. Identify the shape separately from the thread and seal.

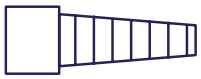


Metric Thread - Specify the Seat

Use: Identifies a metric thread system used with several different sealing arrangements.

Recognise: An M diameter-by-pitch designation is only part of the description. Inspect the actual cone, face or port seal; metric does not automatically mean DIN 24 degrees.

RHPL Category: fittings/threaded



NPT Taper Pipe Thread

Use: Connects mating tapered pipe threads with the specified sealing procedure.

Recognise: Thread diameter tapers along the end. Verify diameter and pitch against NPT data; BSPT and NPT are different. Do not assume NPTF and NPT requirements are identical.

RHPL Category: fittings/threaded

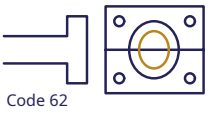


SAE Flange - Code 61

Use: Uses a flange head, O-ring and four-bolt clamp arrangement in the standard-pressure series.

Recognise: Identify the code using flange-head diameter and thickness, bolt pattern and the manufacturer drawing. Code 61 and Code 62 are distinct; the schematic is not a size or pressure rating.

RHPL Category: fittings/flange



SAE Flange - Code 62

Use: Uses a flange head, O-ring and four-bolt clamp arrangement in the high-pressure series.

Recognise: Identify the code using flange-head diameter and thickness, bolt pattern and the manufacturer drawing. Code 61 and Code 62 are distinct; the schematic is not a size or pressure rating.

RHPL Category: fittings/flange

Original schematic line drawings, not to scale. Hidden features are simplified. These are identification cues, not manufacturing drawings, pressure ratings or proof of interchangeability. Confirm the exact hose, fitting, seal and application before selection.

Size Identification Checklist

A fitting name is not a size. Hose bore, nominal thread size and measured diameter are different features.

Threaded Ends

Record: Male thread outside diameter (or female internal diameter), pitch in mm or TPI, parallel or tapered form, and sealing face.

Check: Match a named thread standard and the manufacturer size row; hose bore and thread diameter are different measurements.

Swivels and Elbows

Record: Thread and seat, straight/45°/90° shape, drop length and end orientation.

Check: A swivel nut helps assembly; it does not imply continuous rotation in service.

Metric DIN Ends

Record: Thread diameter and pitch, tube-size designation, L/S series and O-ring cone.

Check: Identify DKOL or DKOS from the full interface, not just the spanner size.

Flange Ends

Record: Head diameter and thickness, bolt spacing, nominal size and code.

Check: Use the correct Code 61/62 drawing; do not infer a code from the illustration.

Hose-Side Components

Record: Hose manufacturer, series and bore; exact insert and ferrule identification.

Check: Use the manufacturer-approved combination and crimp specification.

Related Identification Resources

Hydraulic Thread Identification Chart

Fitting Identification: Thread and Seal Checks

BSP Thread Chart

Send Photos and Dimensions

Share end-face and side-view photographs, markings, measured dimensions, quantity and delivery location. Confirm the exact specification and availability with RHPL.

Request a Quotation | WhatsApp RHPL

Questions and Technical References

Identification guidance only. Manufacturer references do not imply endorsement of RHPL.

Can I Download a Hydraulic Fittings Names PDF?

Yes. The free RHPL PDF contains the same 20 illustrated entries and identification notes as this page, with links to the relevant categories.

Is This a Hydraulic Fitting Size Chart?

It is a names and identification chart with a measurement checklist. Numeric thread dimensions belong in the thread-specific chart. Hose bore, thread nominal size and measured diameter are not interchangeable.

Are Straight, 45° and 90° Different Thread Types?

No. Those names describe shape. Any enquiry must separately identify the thread, seal, size and male or female form.

Does a Similar Thread Mean Two Fittings Will Seal?

No. Threads can look similar while pitch, taper, seat or seal location differ. Check both mating interfaces against the specified connection standard.

Does Every Illustrated Type Mean RHPL Has It in Stock?

No. This is an identification reference. Send the exact specification and quantity for supply confirmation, especially for banjo and hex-nipple requests.

Technical References

Parker - Permanent Hose Fittings, Visual Index
Parker - Basics About Hose and Fittings
Parker - Hydraulic Hose Fittings, WC4400-1/UK
Parker - Thread and Fitting Identification Training
Swagelok - Thread and End Connection Identification Guide
Parker - Hydraulic Flanges and Components
Parker - Tube Fittings and Adapters Training
Gates - PRO Series Matched Hose and Couplings
Manuli - Staple Hose Inserts
Manuli - Stud-End Staple Adapters and Banjo Components