



QUICK RELEASE COUPLINGS



CONNECTING PARTNERSHIPS

www.RYCO.com.au

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QUICK RELEASE COUPLINGS

INTRODUCTION

RYCO. THE COMPANY.

RYCO Hydraulics started manufacturing hoses, fittings and filters in 1946. As the hydraulics industry evolved, the Company expanded its range and the main product line soon became high-pressure hydraulic hose and fittings.

RYCO Hydraulics' simple belief of "Higher Technology Equals Greater Performance" applies throughout the Company.

The Company's research and development centres and testing facilities are dedicated to developing innovative products and pioneering new processes in fluid conveying systems technology. Our specialised equipment and technology enable us to manufacture our large range of products efficiently and cost effectively.

"HIGHER TECHNOLOGY EQUALS GREATER PERFORMANCE"

RYCO. MISSION STATEMENT.

Our Mission is to listen to our customers and deliver the highest quality and technologically superior fluid conveying connection products and solutions.

RYCO. COMPANY VISION.

Our vision is to be the premier supplier and service provider of choice in every market we participate in.

RYCO. THE QUALITY.

RYCO Hydraulics is certified to current version of AS/NZS ISO 9001 "Quality Management Systems - Requirements" by NATA Certification Services International (NCSI - Registration No. 7029). Company Policy is to supply products and services that meet or exceed our industry standards. These standards include SAE, EN (DIN), AS, ISO, JIS, BS and BCS. The bottom line in Quality Control (QC) & Quality Assurance (QA) is Customer Confidence & Customer Satisfaction.

OUR AIM IS ZERO DEFECTS

RYCO. PRODUCT IDENTIFICATION.

All RYCO Hydraulics products are clearly branded with a unique RYCO Hydraulics part number and batch code, where practical. In today's quality conscious world, RYCO's invaluable batch coding system takes traceability and customer assurance to new levels. Not everyone is an expert in thread identification. Time and money are often wasted identifying goods or despatching the wrong item. Using clearly branded RYCO products reduces the chance of error, saving you time and money.

IF IT'S NOT BRANDED - IT'S NOT RYCO

RYCO. WAREHOUSE & DISTRIBUTION.

At RYCO Hydraulics, we understand that when you need your product, you need it fast. Our network of warehouses and distributors gives the greatest product availability to our customers. Our comprehensive ordering and despatch system ensures that your orders are correct before leaving the warehouse.

WE PRIDE OURSELVES ON SHIPPING CORRECTLY

DISCLAIMER: We reserve the right to alter the design, or discontinue any of the company's products or services without notice. While every effort has been made to ensure the accuracy of the information contained in this publication, our Company Policy of continual research and product development necessitates changes and refinements which may not be reflected in the following pages. If in doubt, please contact your nearest sales office. Illustrations are not to scale, and are indicative only.

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THE COMPANY

An Australian-owned company, RYCO has built a strong reputation since it commenced manufacturing of hydraulic hose and fittings in Melbourne, Australia back in 1946.

Engineering excellence, customer-focus and highest quality products continue to attract new customers, from varied industries right across the world.

RYCO Research & Development centres are dedicated to improving product and pioneering new technologies and processes in fluid conveying systems. RYCO quality range of hydraulic hose and fittings is supported by a network of loyal and committed distributors across the world.

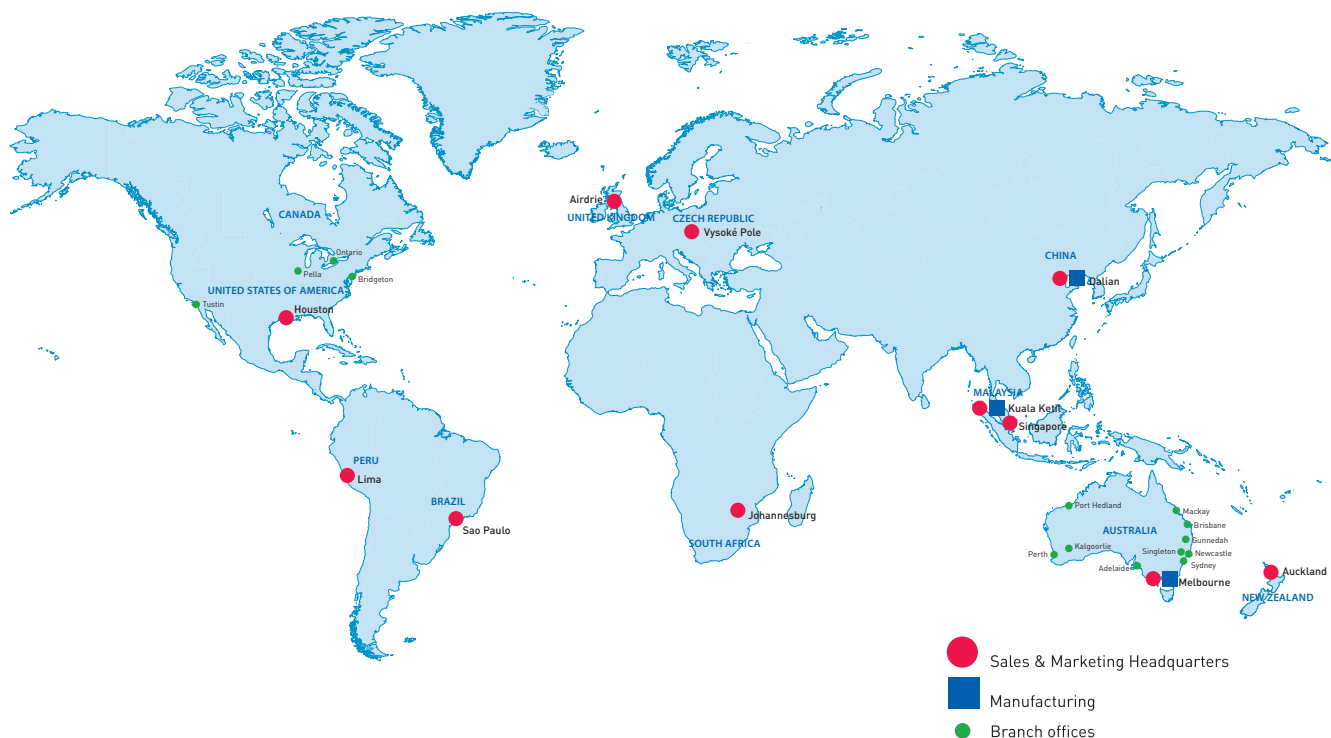
RYCO products supplied to a wide range of industries including mining, construction, utilities, defence, marine, oil & gas, OEMs and more. RYCO continue to expand its product range to meet growing needs of worldwide hydraulic industry.

GLOBAL RESOURCES

In today's competitive international business environment, the requirements for suppliers and customers to work closely together are greater than ever before.

RYCO has expanded its horizons and developed its manufacturing and distribution business on a global scale, working with industries in diverse sectors. RYCO has offices and warehouses strategically placed in Europe, Brazil, Singapore, South and North America and fully Quality Accredited manufacturing centres in Australia, China and Malaysia.

With such an extensive global footprint, RYCO can ensure quality product is delivered to our customers, whenever and wherever required.



QUICK RELEASE COUPLINGS

ABOUT RYCO – POLICIES



RYCO QUALITY

RYCO Hydraulics is certified to the current version of ISO 9001:2008 by the British Standards Institute - Quality Management System.

Company Policy is to supply products and services that meet or exceed our industry standards.

These standards include SAE, EN (DIN), AS, ISO, JIS, BS and BCS.

The bottom line in Quality Control (QC) and Quality Assurance (QA) is Customer Confidence and Customer Satisfaction.

QUALITY POLICY

RYCO specializes in the design, manufacture, distribution and sales of a comprehensive range of high pressure hydraulic hoses and fittings as well as a comprehensive range of industrial hoses and fittings and specialist lubrication products and services. The Company operates on a global scale and its products service a wide range of industrial applications.

Since 1946 RYCO has established an enviable reputation for expertise, service, quality and delivery.

RYCO's Mission is to exceed our clients', shareholders', suppliers' and employees' expectations through continuous improvement driven by innovation, teamwork and the integrity of our people whilst embracing community, cultural and environmental awareness.

RYCO's Quality system and policy requires compliance with applicable industry standards, statutory regulations, world best practice philosophy, value added processes, service and efficiency.

RYCO Management shall ensure that suitable infrastructure and resources are provided and utilized to guarantee Quality is not compromised.

Quality is the responsibility of all RYCO personnel.

RYCO is ISO 9001 certified.



Quality is the responsibility of all. RYCO means quality.

OCCUPATIONAL HEALTH AND SAFETY POLICY

RYCO is committed to protecting the health and safety of employees, contractors, visitors and the general public in the workplace. RYCO shall fulfil this commitment through a health and safety management system that is integrated with RYCO's business activities related to products, services and people.

RYCO employees, contractors and visitors have a duty of care to take reasonable care for their own health and safety and for the health and safety of persons who may be affected by their actions and inactions in the workplace.

RYCO will take reasonably practical steps to improve workplace health and safety conditions and to prevent injury and illness to its employees, contractors, visitors and the general public.

RYCO shall:

- Comply with Legal Obligations and other OHS requirements
- Manage Risk
- Provide appropriate instruction – Training and Supervision
- Involve and Ensure meaningful and effective Consultation
- Communicate
- Establish clear Objectives and Targets

RYCO is OHSAS 18001 certified.



ENVIRONMENTAL POLICY

RYCO is committed to compliance with applicable environmental legislation, regulations and any other requirements to which RYCO subscribes.

RYCO operates a program of continual improvement in environmental performance and pollution prevention, aiming to minimise the environmental impacts resulting from relevant activities.

Improvements in our environmental performance will be achieved by:

- Focusing on the design of products and resource consumed in production to reduce the use of raw materials, packaging and energy associated with manufacture, use and disposal.
- Maintaining an environmental management system which complies with ISO 14001 and enables environmental objectives and targets to be established and implemented.
- Promoting throughout the company a strong environmental ethic as part of its culture.
- Communicating openly and constructively with applicable government authorities, the community and other interested parties.

RYCO is ISO 14001 certified.



QUICK RELEASE COUPLINGS

POPPET CHECK VALVE ISO A QUICK RELEASE COUPLINGS

R85 & R86

**POPPET CHECK VALVE
ISO A
QUICK RELEASE COUPLINGS**



RECOMMENDED FOR:

General purpose steel hydraulic couplings. Heavy Duty Plating. Typical applications include; industrial equipment, hydraulic hand tools, agricultural machinery, construction and mobile plant, hydraulic cylinders, test rigs and power packs, logging equipment, mining machinery, oil processing and steel production.

FEATURES:

- **Poppet Check Valves** with rubber poppet seal for improved sealing when disconnected. Check Valves automatically close on disconnection, and open on connection.
- **Single Acting Sleeve** is manually retracted to connect, or disconnect.
- **Push/Pull Sleeve** can be moved in either direction to connect, or disconnect. When sleeve is held firmly by hand, or in a bracket, Male Tip will simply push in to connect to Female Body.
- 1/2" Nominal Body Sizes can be mounted in dual breakaway bracket, protecting hose from damage if subjected to excessive pulling force, allowing coupling halves to break apart, eg. a towed farm implement disconnecting from tractor. See page 19.
- **RYCO Quick Release Couplings** have full spanner hex for ease of installation and extra balls in locking mechanism for extra security.
- Couplings are able to swivel when unpressurized, reducing hose kinking and twisting. This feature reduces twist on the hose; the couplings should not be used as swivel joints.
- -08, -12 & -16 Nominal Body Sizes of R85 & R86 Series can be interconnected to same Nominal Body Size.
- Individual Nominal Body Sizes of R86 Series, and -08, 12 & -16 Nominal Body Sizes of R85 Series, can be connected to same Nominal Body Size of R94 & R96 Series (Ball Check Valves), however the lower of the flow rates and working pressures apply.

TECHNICAL DATA

SEALS:

Nitrile (Buna N) O Rings. Back Up Washer prevents extrusion of O Ring at high pressures.

OPERATING TEMPERATURE RANGE:

From -25°C to +125°C (-13°F to +257°F).

WORKING PRESSURE:

See chart on opposite page.

PRESSURE DROP AND NOMINAL FLOW RATES:

See page 23 and 24 Improved flow and less pressure drop compared to Ball Type Check Valves.

FLUID COMPATIBILITY:

Mineral/petroleum based hydraulic oils.

SPECIFICATIONS AND CROSS REFERENCE:

R85 Series: all sizes conform to ISO 7241/1 Type A and cross reference with other ISO Type A couplings.

R86 Series: 1/2", 3/4" & 1" Nominal Body sizes conform to ISO 7241/1 Type A and cross reference with other ISO Type A couplings. Refer to your RYCO Representative for a comprehensive cross reference chart

ACCESSORIES:

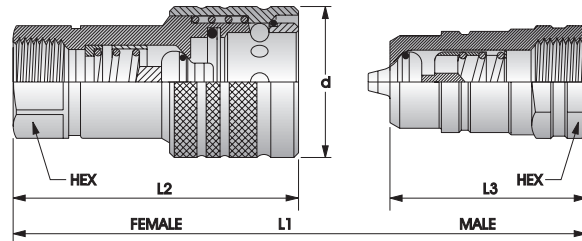
See page 19.

POPPET CHECK VALVE ISO A QUICK RELEASE COUPLINGS

SINGLE ACTING SLEEVE POPPET CHECK VALVE

Single Acting Sleeve is manually retracted to connect, or disconnect.

Poppet Check Valves with rubber poppet seal for improved sealing when disconnected. Check Valves automatically close on disconnection, and open on connection.



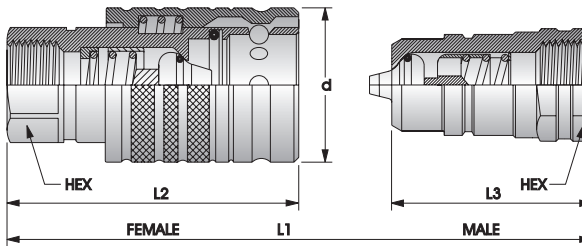
FEMALE THREAD SIZE	NOM. BODY SIZE	RYCO PART NUMBER			MAXIMUM WORKING PRESSURE*		d DIAMETER OF SLEEVE	L1 LENGTH COUPLED TOGETHER	L2 LENGTH FEMALE BODY	L3 LENGTH MALE TIP	SPANNER HEX SIZE
		FEMALE BODY	MALE TIP	COMPLETE COUPLING							
inch	inch				bar	psi	mm	mm	mm	mm	Hex
1/4 NPT	1/4	R85-04F	R85-04M	R85-04FM	345	5000	26	71	50	36	19
3/8 NPT	3/8	R85-06F	R85-06M	R85-06FM	275	4000	32	75	56	37	22
1/2 NPT	1/2	R85-08F	R85-08M	R85-08FM	275	4000	39	88	66	44	27
3/4 NPT	3/4	R85-12F	R85-12M	R85-12FM	207	3000	48	110	80	57	34 (F) 35 (M)
1 NPT	1	R85-16F	R85-16M	R85-16FM	207	3000	56	120	94	60	41
3/4 UNO	1/2	R86-12F	R86-12M	R86-12FM	275	4000	38	88	66	43.5	27

* Warning: Coupling pressure ratings may vary between manufacturers - always confirm product specifications prior to installation.

PUSH/PULL SLEEVE POPPET CHECK VALVE

Push/Pull Sleeve can be moved in either direction to connect, or disconnect. When sleeve is held firmly by hand, or in a bracket, Male Tip will simply push in to connect to Female Body.

Poppet Check Valves with rubber poppet seal for improved sealing when disconnected. Check Valves automatically close on disconnection, and open on connection.



FEMALE THREAD SIZE	NOM. BODY SIZE	RYCO PART NUMBER			MAXIMUM WORKING PRESSURE*		d DIAMETER OF SLEEVE	L1 LENGTH COUPLED TOGETHER	L2 LENGTH FEMALE BODY	L3 LENGTH MALE TIP	SPANNER HEX SIZE
		FEMALE BODY	MALE TIP	COMPLETE COUPLING							
inch	inch				bar	psi	mm	mm	mm	mm	Hex
1/2 NPT	1/2	R85-08P	R85-08M	R85-08PM	300	4350	38	96	70	48	27
3/4 UNO	1/2	R86-12P	R86-12M	R86-12PM	207	3000	38	105.5	69	43.5	34 (F) 27 (M)
7/8 UNO	1/2	R86-14P	R86-14M	R86-14PM	207	3000	38	105.5	74	58	34 (F) 27 (M)

* Warning: Coupling pressure ratings may vary between manufacturers - always confirm product specifications prior to installation.

QUICK RELEASE COUPLINGS

BALL CHECK VALVE ISO A QUICK RELEASE COUPLINGS

R94 & R96

**BALL CHECK VALVE
ISO A
QUICK RELEASE COUPLINGS**



RECOMMENDED FOR:

General purpose steel hydraulic couplings. Heavy Duty Plating. Typical applications include; industrial equipment, hydraulic hand tools, agricultural machinery, construction and mobile plant, hydraulic cylinders, test rigs and power packs, logging equipment, mining machinery, oil processing and steel production.

FEATURES:

- **Ball Check Valves** are precision machined for long reliable life (some slight weeping may occur if couplings are pressurized when disconnected). Check Valves automatically close on disconnection, and open on connection.
- **Single Acting Sleeve** is manually retracted to connect, or disconnect.
- **Push/Pull Sleeve** can be moved in either direction to connect, or disconnect. When sleeve is held firmly by hand, or in a bracket, Male Tip will simply push in to connect to Female Body.
- 1/2" Nominal Body Sizes can be mounted in dual breakaway bracket, protecting hose from damage if subjected to excessive pulling force, allowing coupling halves to break apart, eg. a towed farm implement disconnecting from tractor. See page 19.
- RYCO Quick Release Couplings have full spanner hex for ease of installation and extra balls in locking mechanism for extra security
- Couplings are able to swivel when unpressurized, reducing hose kinking and twisting. This feature is to reduce twist on hose; the couplings should not be used as swivel joints.
- Individual Nominal Body Sizes of R94 & R96 Series can be interconnected. Can be connected to same Nominal Body Size of R86, and -08, -12 & -16 Nominal Body Sizes of R85 Series (Poppet Check Valves), however the lower of the flow rates and working pressures apply.

TECHNICAL DATA

SEALS:

Nitrile (Buna N) O Rings. Back Up Washer prevents extrusion of O Ring at high pressures.

OPERATING TEMPERATURE RANGE:

From -25°C to +125°C (-13°F to +257°F).

WORKING PRESSURE:

See chart on opposite page.

PRESSURE DROP AND NOMINAL FLOW RATES:

See page 23 and 24.

FLUID COMPATIBILITY:

Mineral/petroleum based hydraulic oils.

SPECIFICATIONS AND CROSS REFERENCE:

1/2", 3/4" & 1" Nominal Body sizes conform to ISO 7241/1 Type A and cross reference with other ISO 7241/1 Type A couplings. 1/4", 3/8" & 1/2" Nominal Body sizes cross reference with Pioneer and Safeway. Refer to your RYCO Representative for a comprehensive cross reference chart

ACCESSORIES:

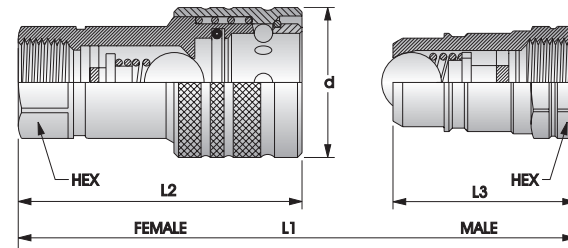
See page 19.

BALL CHECK VALVE ISO A QUICK RELEASE COUPLINGS

SINGLE ACTING SLEEVE BALL CHECK VALVE

Single Acting Sleeve is manually retracted to connect, or disconnect.

Ball Check Valves are precision machined for long reliable life (some slight weeping may occur if couplings are pressurized when disconnected). Check Valves automatically close on disconnection, and open on connection.



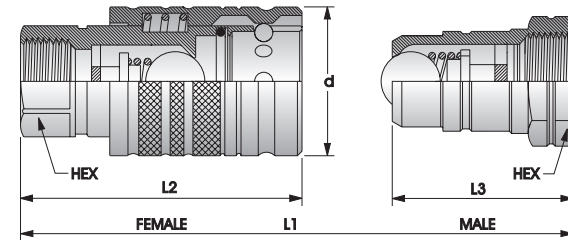
FEMALE THREAD SIZE	NOM. BODY SIZE	RYCO PART NUMBER			MAXIMUM WORKING PRESSURE*		d DIAMETER OF SLEEVE	L1 LENGTH COUPLED TOGETHER	L2 LENGTH FEMALE BODY	L3 LENGTH MALE TIP	SPANNER HEX SIZE
		FEMALE BODY	MALE TIP	COMPLETE COUPLING							
inch	inch				bar	psi	mm	mm	mm	mm	Hex
1/4 NPTF	1/4	R94-04F	R94-04M	R94-04FM	345	5000	27	72.2	52.5	36	19
3/8 NPTF	3/8	R94-06F	R94-06M	R94-06FM	275	4000	34	82.6	63	40	24
1/2 NPTF	1/2	R94-08F	R94-08M	R94-08FM	275	4000	38	87.8	66.3	43.5	27
3/4 NPTF	3/4	R94-12F	R94-12M	R94-12FM	207	3000	48	108	82.5	53.5	34
1 NPTF	1	R94-16F	R94-16M	R94-16FM	207	3000	56	126.8	96.5	63	41

* Warning: Coupling pressure ratings may vary between manufacturers - always confirm product specifications prior to installation.

PUSH/PULL SLEEVE BALL CHECK VALVE

Push/Pull Sleeve can be moved in either direction to connect, or disconnect. When sleeve is held firmly by hand, or in a bracket, Male Tip will simply push in to connect to Female Body.

Ball Check Valves are precision machined for long reliable life (some slight weeping may occur if couplings are pressurized when disconnected). Check Valves automatically close on disconnection, and open on connection.



FEMALE THREAD SIZE	NOM. BODY SIZE	RYCO PART NUMBER			MAXIMUM WORKING PRESSURE*		d DIAMETER OF SLEEVE	L1 LENGTH COUPLED TOGETHER	L2 LENGTH FEMALE BODY	L3 LENGTH MALE TIP	SPANNER HEX SIZE
		FEMALE BODY	MALE TIP	COMPLETE COUPLING							
inch	inch				bar	psi	mm	mm	mm	mm	Hex
1/2 NPTF	1/2	R94-08P	R94-08M	R94-08PM	207	3000	38	105.5	66	44	27
3/4 UNO	1/2	R96-12P	R96-12M	R96-12PM	207	3000	38	105.5	69	43.5	27

* Warning: Coupling pressure ratings may vary between manufacturers - always confirm product specifications prior to installation.

QUICK RELEASE COUPLINGS

POPPET CHECK VALVE ISO B QUICK RELEASE COUPLINGS

R45

POPPET CHECK VALVE

ISO B

QUICK RELEASE COUPLINGS



RECOMMENDED FOR:

General purpose hydraulic industrial interchange couplings suitable for general hydraulics and fluid transfer.

R45: Recommended for general industrial application conveying mineral/petroleum based hydraulic oils.

R45SS: Recommended for harsh applications where excellent corrosion resistance is required, including aggressive chemicals, marine environments, and steam.

R45B: Recommended for harsh applications where excellent corrosion resistance is required but stainless steel couplings are not suitable, including coolant applications.

Heavy Duty Plating. Typical applications include; industrial equipment, hydraulic hand tools, agricultural machinery, construction and mobile plant, hydraulic cylinders, test rigs and power packs, logging equipment, mining machinery, oil processing and steel production.

FEATURES:

- **Poppet Check Valves** with rubber poppet seal for improved sealing when disconnected. Check Valves automatically close on disconnection, and open on connection.
- **Single Acting Sleeve** is manually retracted to connect, or disconnect.
- **RYCO Quick Release Couplings** have full spanner hex for ease of installation and extra balls in locking mechanism for extra security.
- Couplings are able to swivel when unpressurized, reducing hose kinking and twisting. This feature reduces twist on the hose; the couplings should not be used as swivel joints.

TECHNICAL DATA

SEALS:

R45, R45SS: Nitrile (Buna N) O Rings.

R45B: Fluoroelastomer (Viton).

Back Up Washer prevents extrusion of O Ring at high pressures.

OPERATING TEMPERATURE RANGE:

R45, R45SS: From -25°C to +121°C (-13°F to +250°F).

R45B: From -10°C to +200°C (+14°F to +392°F).

WORKING PRESSURE:

See chart on opposite page.

PRESSURE DROP AND NOMINAL FLOW RATES:

See page 23 and 24 . Improved flow and less pressure drop compared to Ball Type Check Valves.

FLUID COMPATIBILITY:

R45: Mineral/petroleum based hydraulic oils.

R45SS, R45B: A wide variety of fluids and chemicals. Contact RYCO for more information.

SPECIFICATIONS AND CROSS REFERENCE:

R45 Series: all sizes conform to ISO 7241/1 Type B and cross reference with other ISO Type B couplings, including Aeroquip FD45, Parker 60, Faster HNV, Hansen HK, Safeway S10.

R45SS, R45B: Cross reference to the respective stainless steel and brass versions of R45 cross references listed above.

ACCESSORIES:

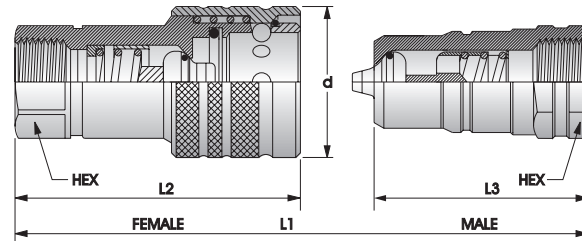
See page 19.

POPPET CHECK VALVE ISO B QUICK RELEASE COUPLINGS

SINGLE ACTING SLEEVE POPPET CHECK VALVE

Single Acting Sleeve is manually retracted to connect, or disconnect.

Poppet Check Valves with rubber poppet seal for improved sealing when disconnected. Check Valves automatically close on disconnection, and open on connection.



FEMALE THREAD SIZE	NOM. BODY SIZE	FEMALE BODY	RYCO PART NUMBER		COMPLETE COUPLING	MAXIMUM WORKING PRESSURE*	
				MALE TIP			
inch	inch					bar	psi
R45 - STEEL							
1/4 NPT	1/4	R45-04F	R45-04M	R45-04FM		345	5000
3/8 NPT	3/8	R45-06F	R45-06M	R45-06FM		276	4000
1/2 NPT	1/2	R45-08F	R45-08M	R45-08FM		276	4000
3/4 NPT	3/4	R45-12F	R45-12M	R45-12FM		207	3000
1 NPT	1	R45-16F	R45-16M	R45-16FM		207	3000
R45SS - STAINLESS STEEL							
1/4 NPT	1/4	R45SS-04F	R45SS-04M	R45SS-04FM		138	2000
3/8 NPT	3/8	R45SS-06F	R45SS-06M	R45SS-06FM		138	2000
1/2 NPT	1/2	R45SS-08F	R45SS-08M	R45SS-08FM		104	1500
3/4 NPT	3/4	R45SS-12F	R45SS-12M	R45SS-12FM		104	1500
1 NPT	1	R45SS-16F	R45SS-16M	R45SS-16FM		70	1000
R45B - BRASS							
1/4 NPT	1/4	R45B-04F	R45B-04M	R45B-04FM		70	1000
3/8 NPT	3/8	R45B-06F	R45B-06M	R45B-06FM		70	1000
1/2 NPT	1/2	R45B-08F	R45B-08M	R45B-08FM		70	1000
3/4 NPT	3/4	R45B-12F	R45B-12M	R45B-12FM		70	1000
1 NPT	1	R45B-16F	R45B-16M	R45B-16FM		70	1000

*Warning: Coupling pressure ratings may vary between manufacturers - always confirm product specifications prior to installation.

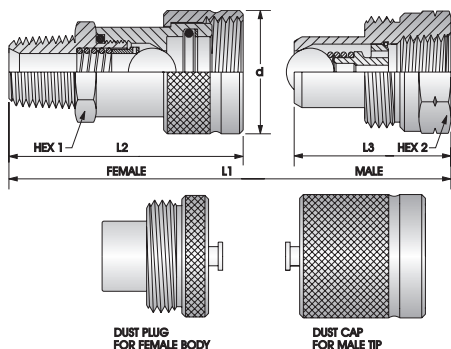
FEM THREAD SIZE	NOM. BODY SIZE	D DIAMETER OF SLEEVE		L1 LENGTH COUPLED TOGETHER		L2 LENGTH FEMALE BODY		L3 LENGTH MALE TIP		SPANNER HEX SIZE	
inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
R45 - STEEL											
1/4 NPT	1/4	29	1.12	72	2.83	58	2.28	36	1.42	19	0.75
3/8 NPT	3/8	35	1.38	81	3.19	65	2.56	40	1.57	24	0.94
1/2 NPT	1/2	45	1.75	94	3.68	74	2.91	46.5	1.83	29	1.12
3/4 NPT	3/4	54	2.13	113	4.45	92	3.62	56	2.20	36	1.42
1 NPT	1	64	2.50	127	5.00	103	4.06	63	2.48	41	1.61
R45SS - STAINLESS STEEL											
1/4 NPT	1/4	27	1.06	72	2.84	58	2.28	36	1.42	19	0.75
3/8 NPT	3/8	35	1.38	81	3.17	65	2.56	40	1.57	24	0.94
1/2 NPT	1/2	42	1.65	92	3.60	73	2.89	46	1.79	27 (M), 30 (F)	1.06 (M), 1.18 (F)
3/4 NPT	3/4	54	2.13	113	4.43	92	3.62	56	2.20	36	1.42
1 NPT	1	65	2.56	127	4.98	103	4.06	63	2.48	45 (M), 41 (F)	1.77 (M), 1.61 (F)
R45B - BRASS											
1/4 NPT	1/4	27	1.06	73	2.85	58	2.28	36	1.42	17 (M), 19 (F)	0.75
3/8 NPT	3/8	35	1.38	81	3.17	65	2.56	40	1.57	22	0.87
1/2 NPT	1/2	45	1.75	90	3.52	72	2.83	44	1.73	27 (M), 29 (F)	1.06 (M), 1.12 (F)
3/4 NPT	3/4	54	2.13	105	4.13	88	3.46	52	2.05	36	1.42
1 NPT	1	64	2.50	125	4.90	102	4.02	62	2.44	41	1.61

QUICK RELEASE COUPLINGS

10,000 PSI SCREW TOGETHER QUICK RELEASE COUPLINGS

R100

**10,000 PSI
SCREW TOGETHER
QUICK RELEASE COUPLINGS**



RECOMMENDED FOR:

Designed for use in high pressure applications on portable cylinders, rams, pumps, and hydraulic rescue equipment where low flow rates and pressures up to 700 bar/10,000 psi are involved. Heavy Duty Silver color plating.

FEATURES:

- Threaded Sleeve on Female Body engages thread on Male Tip. When sleeve is screwed completely up, the two coupling halves are secured together, and the ball check valves open. Can connect and disconnect with residual pressure in lines.
- Precision ball type check valves.
- Metal Threaded Dust Caps, and Dust Plugs, complete with plastic retaining loop are available.
- Female Body is male threaded to screw directly into cylinder or ram.
- Male Tip is female threaded to screw directly onto male threaded hose fitting.

TECHNICAL DATA

FEMALE BODY AND MALE TIP:

Steel, zinc plated and passivated (CrVI free) for corrosion resistance.

SEALS:

Nitrile (Buna N) O Rings. Back Up Washer prevents extrusion of O Ring at high pressures.

OPERATING TEMPERATURE RANGE:

From -20°C to +125°C (-4°F to +257°F).

WORKING PRESSURE:

See chart on opposite page.

PRESSURE DROP AND NOMINAL FLOW RATES:

See page 23 and 24.

FLUID COMPATIBILITY:

Mineral/petroleum based hydraulic oils.

CROSS REFERENCE:

R100-06 cross reference see page opposite.

10,000 PSI SCREW TOGETHER QUICK RELEASE COUPLINGS

PART NUMBERS AND SPECIFICATIONS

THREAD SIZE	NOM. BODY SIZE	FEMALE BODY	MALE TIP	RYCO PART NUMBER			MAXIMUM WORKING PRESSURE*	
				COMPLETE COUPLING	DUST PLUG FOR FEMALE	DUST CAP FOR MALE	bar	psi
1/4 NPTF	3/8	R100-04F	R100-04M	R100-04FM	R100-04DP	R100-04DC	700	10000
3/8 NPTF	3/8	R100-06F	R100-06M	R100-06FM	R100-06DP	R100-06DC	700	10000

* Warning: Coupling pressure ratings may vary between manufacturers - always confirm product specifications prior to installation.

THREAD SIZE	NOM. BODY SIZE	d DIAMETER OF SLEEVE	DIAMETER MALE TIP	DIMENSIONS		L1 LENGTH COUPLED TOGETHER	L2 LENGTH FEMALE BODY	L3 LENGTH MALE TIP
				HEX 1	HEX2			
	inch	mm	mm	mm	mm	mm	mm	mm
1/4 NPTF	3/8	35	19	22 (F)	19 (M)	75	61	33
3/8 NPTF	3/8	35	19	25 (F)	32 (M)	84	74	35

CROSS REFERENCE CHART

	FEMALE BODY	MALE TIP	COMPLETE COUPLING	MALE & FEMALE WITH DUST CAP & PLUG	DUST PLUG	DUST CAP
	PART NO	PART NO	PART NO	PART NO	PART NO	PART NO
RYCO	R100-06F	R100-06M	R100-06FM	R100-06FMPC	R100-06DP	R100-06DC
ENERPAC	CR-400	CH-604		C-604	CD-411	CD-411
POWERTEAM	9796	9798		9795	9797	9799
PARKER/PIONEER	3050-3	3010-3			3005-3	3009-3
SAFEWAY	S35-3P	S31-3P	S30-3P		S34-3	S39-3
FASTER	PWM1/38NPTF	PWM-38NPTM	PWM-38NPT			

SPARE PARTS AND ACCESSORIES

PACK PART NO	PACK CONTAINS		SUITS
R100D-06TO	5 ea	O Ring and Teflon Back Up Washer	R100-06F, R100-04F

NOTE: O Rings and Back Up Washers; sold in packs only

NOTE:

R100-04FMPC is complete 1/4" Male and Female Coupling, with Dust Plug and Dust Cap.

R100-06FMPC is complete 3/8" Male and Female Coupling, with Dust Plug and Dust Cap.

QUICK RELEASE COUPLINGS

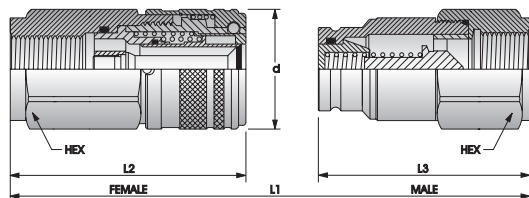
FLAT FACE VALVE QUICK RELEASE COUPLINGS

R111 & R112

FLAT FACE VALVE

ISO 16028

QUICK RELEASE COUPLINGS



RECOMMENDED FOR:

Wherever hydraulic oil spillage is a safety, or environmental hazard, either in plant or in the field. Flat Face Valve design minimizes fluid loss on disconnection for a cleaner, safer environment. Recommended for quick changeover of hydraulic hand tools in "cherry picker" platforms, and in the mining, road construction and maintenance fields, as well as many industrial applications.

FEATURES:

- Heavy Duty Plating.
- High flow rates with low pressure loss.
- Low fluid spillage and air inclusion during connection and disconnection.
- Easily cleaned exterior surfaces reduce possibility of contamination of hydraulic system.
- Easy, one-handed automatic push-to-connect operation when either half of coupling is solid mounted. Sleeve does not have to be retracted to enable connection. Connects against 250 psi /17,2 bar static pressure.
- Rotating Sleeve Lock safety feature (simply rotate the retracting sleeve) guards against unintentional disconnection. Cannot be disconnected unless pin and recess on sleeve are aligned.
- To disconnect, rotate the sleeve to align pin and recess on sleeve. Pull back the sleeve and the halves pop apart.

TECHNICAL DATA

CONNECTION AND DISCONNECTION:

Connects against 250 psi /17,2 bar static pressure.

FEMALE BODY AND MALE TIP:

Steel, zinc plated and passivated (CrVI free) for corrosion resistance.

OPERATING TEMPERATURE RANGE:

From -20°C to +125°C (-4°F to +257°F).

WORKING PRESSURE:

See chart on opposite page.

PRESSURE DROP AND NOMINAL FLOW RATES:

See page 23 and 24.

FLUID COMPATIBILITY:

Mineral/petroleum based hydraulic oils.

SPECIFICATIONS:

All sizes comply with ISO 16028.

3/8" Nominal Body size also conforms to HTMA dimensions (Hydraulic Tool Manufacturers Association), and Specification ANSI/NFPA T3.20.15-1991.

CROSS REFERENCE:

RYCO R111 and R112 Series cross reference with the following

Series: Aeroquip FD89, Parker FE/FF/FEM, Snaptite 74, Stucchi A8008. RYCO R111 and R112 Series will cross reference with other couplings manufactured to comply with ISO 16028.



Dust Cap
Accessories

FLAT FACE VALVE QUICK RELEASE COUPLINGS

PART NUMBERS AND SPECIFICATIONS -R111 (NPT FEMALE)

FEMALE THREAD SIZE NPT	NOM. BODY SIZE	RYCO PART NUMBER			MAXIMUM WORKING PRESSURE*	
		FEMALE BODY	MALE TIP	COMPLETE COUPLING		
inch	inch				bar	psi
1/4	1/4	R111-0404F	R111-0404M	R111-0404FM	335	5000
3/8	3/8	R111-0606F	R111-0606M	R111-0606FM	300	4350
1/2	3/8	R111-0608F	R111-0608M	R111-0608FM	300	4350
1/2	1/2	R111-0808F	R111-0808M	R111-0808FM	300	4350
3/4	1/2	R111-0812F	R111-0812M	R111-0812FM	300	4350
3/4	3/4	R111-1212F	R111-1212M	R111-1212FM	250	3625
1	3/4	R111-1216F	R111-1216M	R111-1216FM	250	3625
1	1	R111-1616F	R111-1616M	R111-1616FM	207	3000
1.1/4	1	R111-1620F	R111-1620M	R111-1620FM	207	3000

* Warning: Coupling pressure ratings may vary between manufacturers - always confirm product specifications prior to installation.

PART NUMBERS AND SPECIFICATIONS -R112 (UNO / ORING BOSS FEMALE)

FEMALE THREAD SIZE NPT	NOM. BODY SIZE	RYCO PART NUMBER			MAXIMUM WORKING PRESSURE*	
		FEMALE BODY	MALE TIP	COMPLETE COUPLING		
inch	inch				bar	psi
1/4	1/4	R112-0404F	R112-0404M	R112-0404FM	335	5000
3/8	3/8	R112-0606F	R112-0606M	R112-0606FM	300	4350
1/2	3/8	R112-0608F	R112-0608M	R112-0608FM	300	4350
1/2	1/2	R112-0808F	R112-0808M	R112-0808FM	300	4350
3/4	1/2	R112-0812F	R112-0812M	R112-0812FM	300	4350
3/4	3/4	R112-1212F	R112-1212M	R112-1212FM	250	3625
1	3/4	R112-1216F	R112-1216M	R112-1216FM	250	3625
1	1	R112-1616F	R112-1616M	R112-1616FM	207	3000
1.1/4	1	R112-1620F	R112-1620M	R112-1620FM	207	3000

* Warning: Coupling pressure ratings may vary between manufacturers - always confirm product specifications prior to installation.

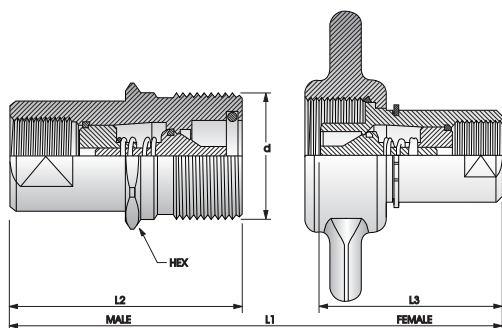
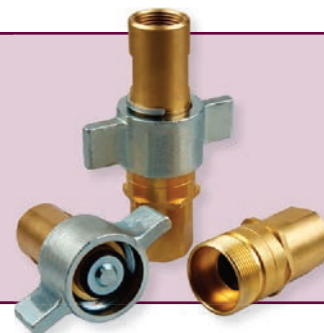
THREAD SIZE	NOM. BODY SIZE	DIMENSIONS									
		d DIAMETER OF SLEEVE	SPANNER HEX SIZE			L1 LENGTH COUPLED TOGETHER		L2 LENGTH FEMALE BODY		L3 LENGTH MALE TIP	
inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1/4	1/4	28	1.10	20	0.79	96	3.78	58	1.89	49	1.30
3/8	3/8	32	1.26	24 (M), 24 (F)	0.95 (M), 0.95 (F)	108	4.25	68	2.52	56	2.20
1/2	3/8	32	1.26	27 (M), 27 (F)	0.95 (M), 1.06 (F)	116	4.60	68	2.52	60	2.36
1/2	1/2	38	1.50	32	1.26	129	4.72	75	2.91	72	2.84
3/4	1/2	38	1.50	36	1.40	137	5.4	79	2.91	76	3.00
3/4	3/4	42	1.65	41	1.60	172	6.77	100	3.11	94	3.70
1	3/4	42	1.65	41	1.60	172	6.77	100	3.11	94	3.70
1	1	48	1.89	55	2.20	178	7.0	112	3.66	90	3.50
1.1/4	1	56	2.20	55	2.17	178	7.0	112	4.21	90	3.50

QUICK RELEASE COUPLINGS

THREAD TO CONNECT HIGH FLOW QUICK RELEASE COUPLINGS

R51

**THREAD TO CONNECT
HIGH FLOW
CONNECT UNDER PRESSURE
QUICK RELEASE COUPLINGS**



RECOMMENDED FOR:

Wherever hydraulic oil spillage is a safety, or environmental hazard, either in plant or in the field. Valve design minimizes fluid loss on disconnection for a cleaner, safer environment. Recommended for hydraulic connections on static or mobile oil field equipment, wet-line circuits on dump trailers, and bulk liquid transfer.

FEATURES:

- Heavy duty wing nut withstands repeated impacts that occur on connection and disconnection.
- High flow rates with low pressure loss.
- Low fluid spillage and air inclusion during connection and disconnection.
- Bonded valve seal does not extrude during connection or disconnection under maximum connection/disconnection pressure of 500 psi / 35 bar.
- Wide variety of fluids can be safely conveyed due to the corrosion resistance of the brass coupling body.

TECHNICAL DATA

CONNECTION AND DISCONNECTION:

Connects against 500 psi / 35 bar static pressure.

FEMALE BODY AND MALE TIP:

Brass for corrosion resistance.

WING NUT, VALVES & INTERNAL COMPONENTS:

Steel, zinc plated and passivated (CrVI free) for corrosion resistance.

SEALS:

Bonded Nitrile (Buna N) Seals prevent extrusion of seal at high pressures and flow rates.

OPERATING TEMPERATURE RANGE:

From -20°C to +121°C (-4°F to +250°F).

WORKING PRESSURE:

See chart on opposite page.

PRESSURE DROP AND NOMINAL FLOW RATES:

See page 23 and 24.

FLUID COMPATIBILITY:

Mineral/petroleum based hydraulic oils and fluids compatible with brass body material.

CROSS REFERENCE:

RYCO R51 Series cross reference with the following Series: Parker 6100, Aeroquip 5100, Snaptite 78, Safeway S51W, Faster FB and Hansen 96.

THREAD TO CONNECT HIGH FLOW QUICK RELEASE COUPLINGS

PART NUMBERS AND SPECIFICATIONS

FEMALE THREAD SIZE NPT	NOM. BODY SIZE	RYCO PART NUMBER			MAXIMUM WORKING PRESSURE*	
		FEMALE BODY	MALE TIP	COMPLETE COUPLING		
inch	inch				bar	psi
1	1	R51-1616F	R51-1616M	R51-1616FM	207	3000
1.1/4	1	R51-1620F	R51-1620M	R51-1620FM	207	3000
1.1/4	1.1/4	R51-2020F	R51-2020M	R51-2020FM	207	3000

* Warning: Coupling pressure ratings may vary between manufacturers - always confirm product specifications prior to installation.

FEMALE THREAD SIZE	NOM. BODY SIZE	DIMENSIONS											
		d DIAMETER OF SLEEVE	SPANNER FEMALE		SPANNER MALE		L1 LENGTH COUPLED TOGETHER		L2 LENGTH FEMALE BODY		L3 LENGTH MALE TIP		
inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
1	1	110	4.33	36	1.42	39,5	1.56	157	6.18	84	3.31	90	3.54
1.1/4	1.1/4	132	5.20	45	1.77	48	1.89	164	6.46	89	3.50	94	3.70

SPARE PARTS AND ACCESSORIES

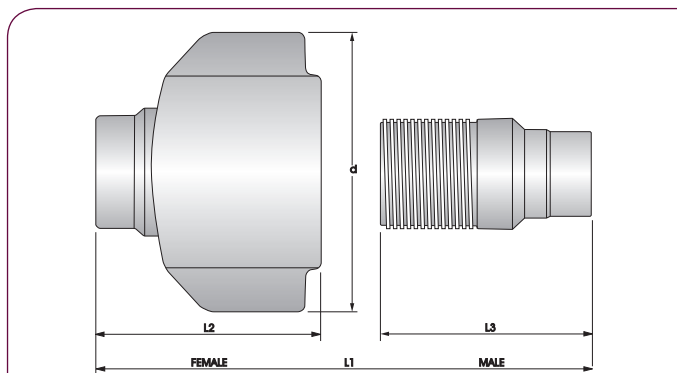
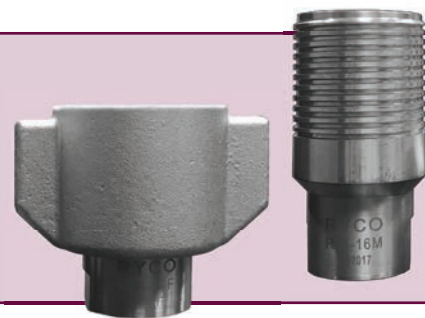
PACK PART NO	PACK CONTAINS
R51-16DC	Dust Cap (brass)
R51-20DC	Dust Cap (brass)
R51-16DP	Dust Plug (brass)
R51-20DP	Dust Plug (brass)

QUICK RELEASE COUPLINGS

THREAD TO CONNECT HIGH FLOW QUICK RELEASE COUPLINGS

R75

**THREAD TO CONNECT
HIGH FLOW
CONNECT UNDER PRESSURE
QUICK RELEASE COUPLINGS**



RECOMMENDED FOR:

Designed for use in high pressure applications on static or mobile oil field hydraulic attachments. Recommended for offshore drilling, cranes, power tongs and swivel hydraulic connections.

FEATURES:

- Large Heavy duty wing nut withstands repeated impacts that occur on connection and disconnection.
- R75 incorporates an Acme thread for strength and durability.
- Designed to connect under pressure with low fluid spillage.
- Wide variety of fluids can be safely conveyed due to the corrosion resistance Zinc Trivalent Chromate coupling body.
- High flow rates with low pressure loss.
- Low fluid spillage and air inclusion during connection and disconnection.
- Bonded valve seal does not extrude during connection or disconnection under maximum connection/disconnection pressure of 5000 psi / 345 bar.

TECHNICAL DATA

CONNECTION AND DISCONNECTION:

Connects up to 5000 psi / 345 bar static pressure.

FEMALE BODY AND MALE TIP:

Carbon Steel complete with Zinc Trivalent Chromate plated for corrosion resistance.

SEALS:

NBR (nitrile) suitable for high pressures and flow rates.

OPERATING TEMPERATURE RANGE:

From -20°C to +80°C (-4°F to +176°F).

WORKING PRESSURE:

See chart on opposite page.

PRESSURE DROP AND NOMINAL FLOW RATES:

See page 23 and 24.

FLUID COMPATIBILITY:

Mineral/petroleum based hydraulic oils.

CROSS REFERENCE:

RYCO R75 Series cross reference with the following Series: Parker Snap-tite 75, Dixon WS, DNP VFF-HD-S series.

ACCESSORIES:

See chart on page 19.

THREAD TO CONNECT HIGH FLOW QUICK RELEASE COUPLINGS

PART NUMBERS AND SPECIFICATIONS

FEMALE THREAD SIZE	NOM. BODY SIZE	RYCO PART NUMBER			MAXIMUM WORKING PRESSURE*	
		FEMALE BODY	MALE TIP	COMPLETE COUPLING		
inch	inch				bar	psi
3/4	3/4	R75-12F	R75-12M	R75-12FM	345	5000
1	1	R75-16F	R75-16M	R75-16FM	345	5000
1 1/4	1 1/4	R75-08F	R75-20M	R75-20FM	345	5000

* Warning: Coupling pressure ratings may vary between manufacturers - always confirm product specifications prior to installation.

DIMENSIONS													
THREAD SIZE	NOM. BODY SIZE	d DIAMETER OF SLEEVE		SPANNER FEMALE		SPANNER MALE		L1 LENGTH COUPLED TOGETHER		L2 LENGTH FEMALE BODY		L3 LENGTH MALE TIP	
inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
3/4	3/4	57	2.24	35	1.39	35	1.39	123	4.86	70	2.74	83	3.28
1	1	71	2.76	45	1.78	45	1.78	175	6.90	85	3.33	106	4.17
1.1/4	1.1/4	83	3.25	54	2.14	54	2.14	184	7.24	109	4.29	136	5.37

SPARE PARTS AND ACCESSORIES

PACK PART NUMBER	PACK CONTAINS
R75-12DP	Dust Plug
R75-16DP	Dust Plug
R75-20DP	Dust Plug
R75-12DC	Dust Cap
R75-16DC	Dust Cap
R75-20DC	Dust Cap

QUICK RELEASE COUPLINGS

QUICK RELEASE COUPLINGS – ACCESSORIES & SPARE PARTS

SEALS

PACK PART NO	PACK CONTAINS		SUITS
R80D-04TO	5 ea	-04 O Ring and Teflon Back Up Washer	R94-04F
R80D-06TO	5 ea	-06 O Ring and Teflon Back Up Washer	R94-06F
R81D-08TO	5 ea	-08 O Ring and Teflon Back Up Washer	R86-12F, R94-08F NOTE: Also suits newer Push/Pull Sleeve Couplings with lip. R85-08P, R86-12P, R91-08F, R94-08P, R96-12P
R81D-08PTO	5 ea	-08 O Ring and Teflon Back Up Washer Push/Pull Sleeve	R85-08P, R86-12P, R94-08P, R96-12P NOTE: Suits older Push/Pull Sleeve couplings without lip. .
R82D-12TO	5 ea	-12 O Ring and Teflon Back Up Washer	R85-12F
R82D-16TO	5 ea	-16 O Ring and Teflon Back Up Washer	R85-16F
R85D-04TO	5 ea	-04 O Ring and Teflon Back Up Washer	R85-04F
R85D-06TO	5 ea	-06 O Ring and Teflon Back Up Washer	R85-06F
R86D-14SK	5 ea	-14 Seal Kit (O Ring and Teflon Back Up Washer)	R86-14F

NOTE: O Rings and Back Up Washers; sold in packs only

CAPS AND PLUGS

RUBBERIZED DUST CAPS AND PLUGS

QDPC = BLACK DUST PLUG/CAP

RDP = RED DUST PLUG

RDC = RED DUST CAP



QDPC Black Dust Plug/Cap shown

PART NUMBER	DESCRIPTION	SUITS
QDP2-04	1/4 Dust Plug	R80/91/94/95/96
QDP2-06	3/8 Dust Plug	
QDP2-12	3/4 Dust Plug	
QDP2-16	1.0 Dust Plug	
QDC2-04	1/4 Dust Cap	R80/91/94/95/96
QDC2-06	3/8 Dust Cap	
QDC2-12	3/4 Dust Cap	
QDC2-16	1.0 Dust Cap	

QUICK RELEASE COUPLINGS – ACCESSORIES & SPARE PARTS

SEALS, CAPS AND PLUGS

PART NO	PACK CONTAINS		SUITS R45 (STEEL)	SUITS R45SS (STAINLESS STEEL)	SUITS R45B (BRASS)
R45D-04MTO	5 ea	O Ring and Back Up Washer	R45-04F	R45SS-04F	
R45D-06MTO	5 ea	O Ring and Back Up Washer	R45-06F	R45SS-06F	
R45D-08MTO	5 ea	O Ring and Back Up Washer	R45-08F	R45SS-08F	
R45D-12MTO	5 ea	O Ring and Back Up Washer	R45-12F	R45SS-12F	
R45D-16MTO	5 ea	O Ring and Back Up Washer	R45-16F	R45SS-16F	
R45BD-04MTO	5 ea	Viton O Ring and Back Up Washer			R45B-04F
R45BD-06MTO	5 ea	Viton O Ring and Back Up Washer			R45B-06F
R45BD-08MTO	5 ea	Viton O Ring and Back Up Washer			R45B-08F
R45BD-12MTO	5 ea	Viton O Ring and Back Up Washer			R45B-12F
R45BD-16MTO	5 ea	Viton O Ring and Back Up Washer			R45B-16F
R45-04DC	Dust Cap		R45-04M	R45SS-04M	R45B-04M
R45-06DC	Dust Cap		R45-06M	R45SS-06M	R45B-06M
R45-08DC	Dust Cap		R45-08M	R45SS-08M	R45B-08M
R45-12DC	Dust Cap		R45-12M	R45SS-12M	R45B-12M
R45-16DC	Dust Cap		R45-16M	R45SS-16M	R45B-16M
R45-04DP	Dust Plug		R45-04F	R45SS-04F	R45B-04F
R45-06DP	Dust Plug		R45-06F	R45SS-06F	R45B-06F
R45-08DP	Dust Plug		R45-08F	R45SS-08F	R45B-08F
R45-12DP	Dust Plug		R45-12F	R45SS-12F	R45B-12F
R45-16DP	Dust Plug		R45-16F	R45SS-16F	R45B-16F

PART NUMBER	DESCRIPTION	SUITS
QDP-04	1/4 Dust Plug	R81/82/85/86
QDP-06	3/8 Dust Plug	
QDP-08	1/2 Dust Plug	
QDP-12	3/4 Dust Plug	
QDP-16	1 Dust Plug	
QDC-04	1/4 Dust Cap	R81/82/85/86
QDC-06	3/8 Dust Cap	
QDC-08	1/2 Dust Cap	
QDC-12	3/4 Dust Cap	
QDC-16	1 Dust Cap	

QUICK RELEASE COUPLINGS

QUICK RELEASE COUPLINGS - SERIES TECHNICAL DATA

PART NUMBER	DESCRIPTION	SUITS
R100-04 DPP	1/4 Plastic Dust Plug	R100
R100-06 DPP	3/8 Plastic Dust Plug	
R100-04 DCP	1/4 Plastic Dust Plug	
R100-06 DCP	3/8 Plastic Dust Plug	

PART NUMBER	DESCRIPTION	SUITS
R110-04 FC	1/4 Plastic Dust Cap	R110
R110-06 FC	3/8 Plastic Dust Cap	
R110-08 FC	1/2 Plastic Dust Cap	
R110-12 FC	3/4 Plastic Dust Cap	
R110-16 FC	1 Plastic Dust Cap	
R110-04 MC	1/4 Plastic Dust Cap	R110
R110-06 MC	3/8 Plastic Dust Cap	
R110-08 MC	1/2 Plastic Dust Cap	
R110-12 MC	3/4 Plastic Dust Cap	
R110-16 MC	1 Plastic Dust Cap	

NOMINAL FLOW RATES FOR QUICK RELEASE COUPLINGS

NOTE:

- Nominal flow rate values are based on maximum flow velocity of oil through the coupling of 9 meters per second (29.5 feet per second). It is the preferred maximum flow rate for maximum life of seals.
- Flow Rate for 2,0 bar 2.9 psi pressure drop values may be used in some applications; but they may reduce seal life. Contact RYCO for more information.
- The data applies to oil of 32 centistoke viscosity, as specified in ISO 7241/2 test methods for quick-action couplings. For oils of viscosity other than 32 centistokes, the change in flow rate and pressure drop is NOT LINEAR. Contact RYCO for more information. See page 433 of the RYCO Product Technical Manual for graph of viscosity change with temperature for popular mineral oil based hydraulic oils.
- To convert liters per minute to gallons per minute: for imperial gallons per minute, divide liters per minute by 4.54, for US gallons per minute, divide liters per minute by 3.78.

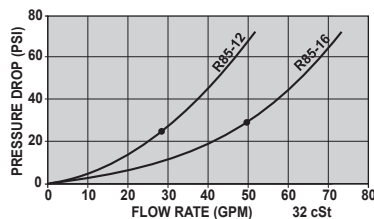
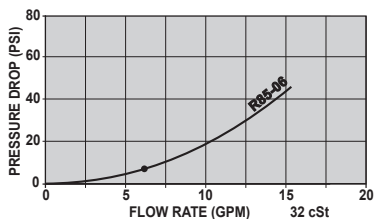
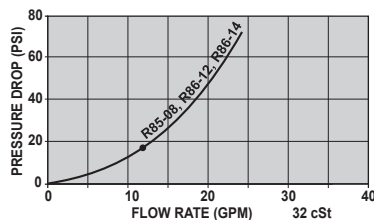
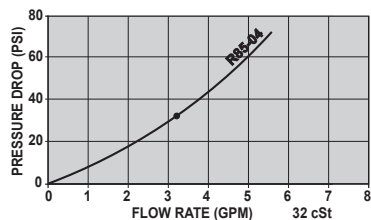
PART NUMBER	NOMINAL BODY SIZE	NOMINAL FLOW RATE		PRESSURE DROP AT NOMINAL FLOW RATE		FLOW RATE FOR 2,0 BAR PRESSURE DROP	
FOR OIL WITH 32 CENTISTOKE VISCOSITY							
	inch	LPM	GPM	bar	psi	LPM	GPM
R80 SERIES POPPET CHECK VALVES ISO A							
R85-04	1/4	11.4	3	2,3	33	11	3
R85-06	3/8	22.7	6	0,5	8	46	12
R85-08	1/2	45.3	12	1,3	18	59	16
R85-12	3/4	106	28.0	1,8	26	116	31
R85-16	1	189	50.0	2,0	30	184	49
R86-12	1/2	45.3	12	1,3	18	59	16
R86-14	1/2	45.3	12	1,3	18	59	16
R90 SERIES POPPET CHECK VALVES ISO A							
R94-04	1/4	11.4	3	2,0	29	29	8
R94-06	3/8	22.7	6	1,6	23	25	7
R94-08	1/2	45.3	12	1,3	18	40	11
R96-12	1/2	45.3	12	1,3	18	40	11
R45 SERIES POPPET CHECK VALVES ISO B							
R45-04F	1/4	12	3.0	0,7	10	23	6
R45-06F	3/8	23	6.0	0,9	12	30	8
R45-08F	1/2	45	12.0	1,0	15	64	17
R45-12F	3/4	106	28.0	1,2	18	140	37.0
R45-16F	1	189	50.0	1,5	22	239	63
R100 SERIES 10,000 psi SCREW TOGETHER							
R100-04	3/8	11.4	3	1,1	16	13	3
R100-06	3/8	22.7	6	1,1	16	13	3
R111 and R112 SERIES FLAT FACE VALVES ISO 16028							
R111-04, R112-04	1/4	11.4	3	1,3	19	18	5
R111-06, R112-06	3/8	22.7	6	0,5	8	46	12
R111-08, R112-08	1/2	45.3	12	0,9	13	75	20
R111-12, R112-12	3/4	106	28	1,1	16	147	39
R111-16, R112-16	1	189	50.0	1,2	17	252	67
R51 SERIES HIGH FLOW							
R51-16	1	189	50.0	2,0	30	189	50.0

QUICK RELEASE COUPLINGS

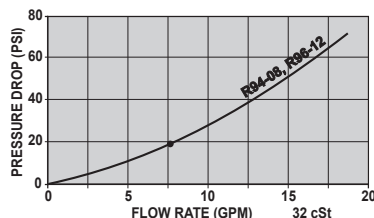
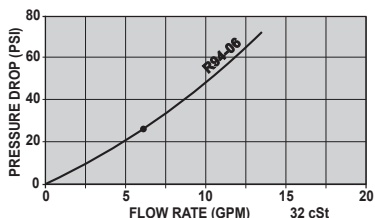
PRESSURE DROP GRAPHS

NOTE: The point marked on the Flow Rate curve is the Nominal Flow Rate value based on maximum flow velocity of oil through the coupling of 9 meters per second. It is the preferred Maximum Flow Rate for maximum life of seals. See page 22 for more information.

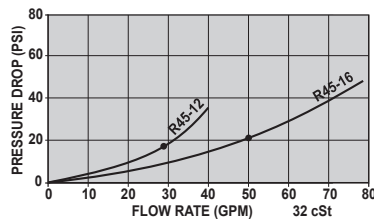
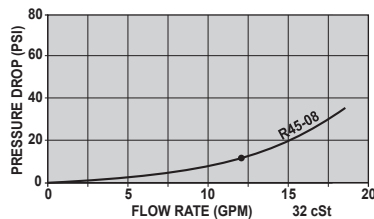
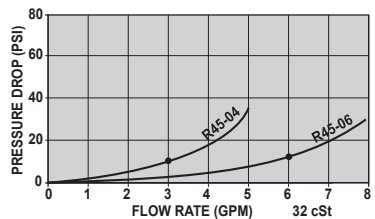
R85 & R86 SERIES – POPPET CHECK VALVES



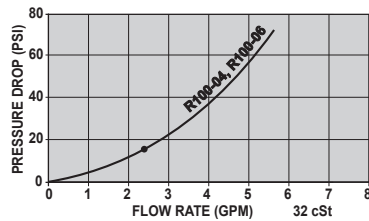
R94 & R96 SERIES – BALL CHECK VALVES



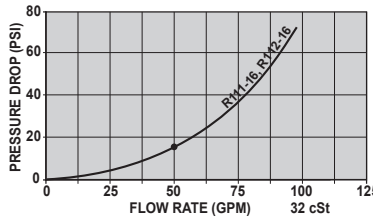
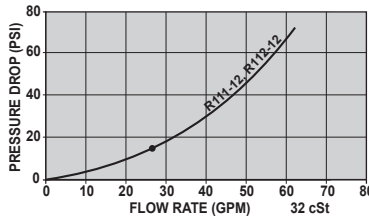
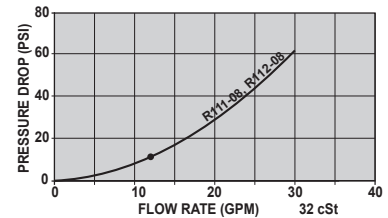
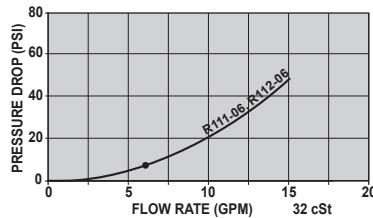
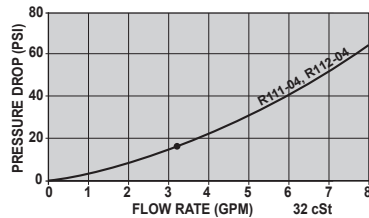
R45 SERIES – THREAD TO CONNECT HIGH FLOW CONNECT UNDER PRESSURE ISO B QUICK RELEASE COUPLINGS



R100 SERIES - 10,000 PSI SCREW TOGETHER QUICK RELEASE COUPLINGS

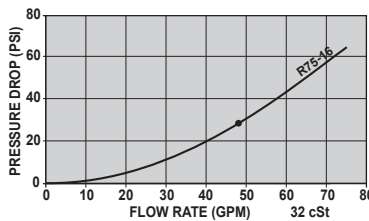


R111 SERIES AND R112 - FLAT FACE VALVE QUICK RELEASE COUPLINGS



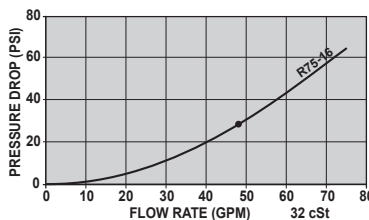
NOTE: Dash numbers for the R111 and R112 Series in these graphs refers to the Nominal Body Size of the Coupling, see pages 13 and 14.

R51 SERIES - THREAD TO CONNECT HIGH FLOW CONNECT UNDER PRESSURE QUICK RELEASE COUPLINGS



NOTE: Dash numbers for the R51 Series in these graphs refers to the Nominal Body Size of the Coupling, see page 15.

R75 SERIES - THREAD TO CONNECT HIGH FLOW CONNECT UNDER PRESSURE QUICK RELEASE COUPLINGS



NOTE: Dash numbers for the R75 Series in these graphs refers to the Nominal Body Size of the Coupling, see page 17.

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