

Structure of the Hydraulic Catalogue

		Poppet Valve			FlatFace			
		S	SS	PE	S	SS	PE	
Medium Pressure	Ball Locking ISO Standard Profile	ISO-A <ul style="list-style-type: none"> • 6600-Series • 2000-Series • RSD-Series • 5500-Series ISO-B <ul style="list-style-type: none"> • 60-Series • IB-Series 	15 17 21 23		23	ISO-F <ul style="list-style-type: none"> • FEM- / IF-Series 	37 40	38
	Ball Locking Tema Profile	<ul style="list-style-type: none"> • T-Series • H-Series 	45 53	48	47 54	<ul style="list-style-type: none"> • FF-Series 	57	58
	Ball Locking Parker Profile	<ul style="list-style-type: none"> • SM-Series • ST-Series 	61 65	66		<ul style="list-style-type: none"> • NS-Series 	69	
	Scerw-to-Connect	<ul style="list-style-type: none"> • QHPA-Series 	71			<ul style="list-style-type: none"> • 6100-Series 	75	
	Multi-Couplings	<ul style="list-style-type: none"> • MACH • MACH2 	79 83			<ul style="list-style-type: none"> • C-Line Compact • C-Line Standard • C-Line Accessories 	94	85 88
High Pressure	700 up to 1500 bar	<ul style="list-style-type: none"> • 3000-Series (700 bar) • SK10-Series (750 bar) • SK06-Series (1100 bar) • HP1000-Series (1000 bar) • HP1500-Series (1500 bar) • High Pressure Adapters 	103 109 111 112	105 105		<ul style="list-style-type: none"> • FF2500-Series (800 bar) 	107	
Diagnostics		<ul style="list-style-type: none"> • System 100 • PJS • PD-Series 	114 120 123					
Accessories		<ul style="list-style-type: none"> • Swivels (DG/KR) • Pressure Relief Valve • Check Valves • Thermal Valve 	126 130 133 134					

S = Standard Version

SS = Stainless Steel Version

PE = Pressure Eliminator Version

ARE YOU HOPING TO FIND WITHOUT LOOKING? THEN WE HAVE JUST THE THING FOR YOU!

Ball Locking Systems

ISO Standard Profile

ISO A	Page	14 to 25
ISO B	Page	26 to 35
ISO F	Page	36 to 43



Tema Profile

T-Series	Page	44 to 51
H-Series	Page	52 to 55
FF-Series	Page	56 to 59



Parker Profile

SM-Series	Page	60 to 63
ST-Series	Page	64 to 67
NS-Series	Page	68 to 69



Screw-to-Connect

QHPA-Series	Page	70 to 73
6100-Series	Page	74 to 77



Multi Couplings

MACH	Page	78 to 81
MACH2	Page	82 to 83
C-Line Compact	Page	84 to 87
C-Line Standard	Page	88 to 93
C-Line Accessories	Page	94 to 101



3000-Series (700 bar)	Page	102 to 103
SK-Series (750/1100 bar)	Page	104 to 105
FF2500-Series (800 bar)	Page	106 to 107
HP1000-Series (1000 bar)	Page	108 to 109
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Swivels (DG/KR)	Page	126 to 129
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Important Notes:

- Please note that the technical data, specifications and drawings in the catalogue are not binding. This information is subject to change without notice in the interest of improvement.
- We reserve the right to make technical modifications for the purposes of improvement.
- January 2013: With the actual catalogue the older versions are no longer valid.
- The interchangeability is guaranteed under the assumption that the manufacturer of the relevant product has not changed any functional part in the meantime.
- You will find important safety instructions on pages 12 and 13.



Medium Pressure

Find information about our wide range of medium pressure products on these pages used for pressures up to 300 bar. We clustered the products in their profiles such as ISO, Tema and Parker profiles to ease up your selection process. Here you can also find a chapter for our screw-to-connect couplings and our multi-coupling solutions where you can handle up to six couplings in a single operation.



FlatFace Systems

Identify all products with a FlatFace coupling design from this sign. They have a non-drip, dry-break function that also avoids air and dirt insertion in the hydraulic circuit. The flat surfaces ensure an easy cleaning especially in harsh mobile hydraulic applications. So it's an ideal alternative and an environmental friendly solution.



Pressure Eliminator

By using this technology residual pressures in hydraulic lines that avoid coupling can be overcome smoothly and without enormous efforts. A special valve design automatically releases any residual pressure and guarantees the functionality of the coupling.

High Pressure

This chapter provides information on our systems for use with high pressures up to 1500 bar for various applications in mobile, stationary industrial and hydraulic

areas. In here you can also find our range of high pressure adapters for a lot of hydraulic tasks.

Diagnostics

Hydraulic lines or circuits have to be checked constantly due to pressure or quality of the hydraulic medium. With our diagnostic products these test can

be done easier even under working pressure conditions, to reduce disturbances of the processes to the bare minimum.

Accessories

Besides our wide range of coupling solutions we also provide you with high-quality, helpful accessories that complete our offer and gives you the opportunity to

get all components you need from a single and reliable source.

Key to Symbols in Application Area

- Machinery Construction
- Food Technology
- Chemical Technology
- Mobile Hydraulics
- Trade
- Medical Technology
- Safety Technology
- Electrical Engineering
- Aeronautics
- Automotive

ABOVE ALL ELSE, OUR SYSTEMS OFFER YOU GREATER SAFETY.



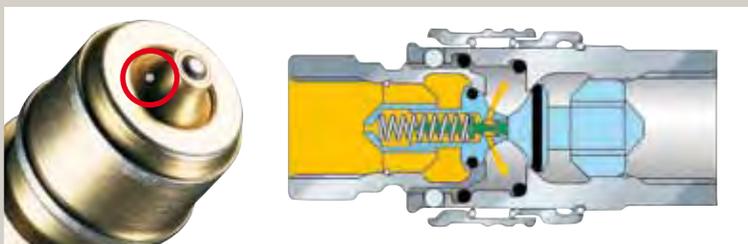
The FlatFace Concept

Dirt-proof FlatFace couplings have the following advantages: Non-drip, dry-break function on disconnection, no air is trapped in the system during connection and extremely flat surfaces to ensure easy cleaning. Depending on the application, the FlatFace concept is the ideal alternative for an environmental high-quality solution.



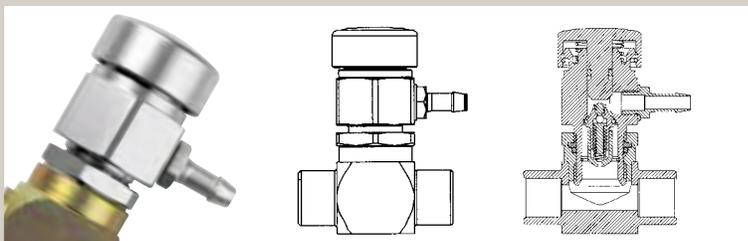
The Pressure Eliminator

By using this innovative Tema patented technology, residual pressures in hydraulic lines can be overcome smoothly and without effort. The use of a micro-valve, incorporated in the coupling or plug will automatically release any residual pressure on reconnection.



The Pressure Relief Valve

A pressure relief valve mounted directly in the pressurised line will release the dynamic pressure in this hydraulic system by pushing a button. Attached couplings can now be coupled pressure-free! After connection, release the button to re-pressurise.



Lubrication Nipple

The Tema lubrication nipple is a vital accessory item in order to prevent dirt to enter into couplings in disconnected position. It will also prevent freezing up of the coupling mechanism. The nipple is simple to use, just connect onto coupling body and you can easily protect internal mechanical parts using a standard grease-gun. A valuable accessory item in many climate zones.





O-Rings / Profile Rings

Depending on the application, couplings are equipped with seals in various alternative material qualities, e.g. NBR, FKM, EPDM or PUR. In many ranges, double O-ring seals are even used as standard in order to increase safety.



ISO 7241-1, A Series



ISO 7241-1, B Series



ISO 16028

ISO-Profiles

In order to offer maximum interchangeability, our ISO A-Series (s. p. 14), ISO-B Series (s. p. 26) and ISO F-Series (s. p. 36) have been designed to conform to the latest international ISO-specifications. This will ensure full compatibility with all standard couplings and plugs which conform to the same specifications.



Steel



Brass



Stainless Steel

Material Qualities

Depending on working pressures and applications, Parker coupling systems are being offered in hardened steel or brass. In addition, numerous series can be supplied as standard in stainless steel.



Zinc pl., pass., sealed



Chrome III plated



additional sealed



nitrocarburised

Surface Finish

Galvanised, passivated and sealed: to prevent corrosion.

Nitrocarburisation: a surface hardening. The product acquires a black colour.

FLUID COMPATIBILITY CHART IN ALPHABETICAL ORDER

The following seal compound and body material compatibility chart is provided as an aid in selecting a specific synthetic rubber compound or body material for a particular application. Shown here is a list of the seal materials available, with

their temperature ranges. Operating and environmental conditions must be considered when making the selection of a quick coupling. For recommendations for media not listed here, please contact your Parker representative.

Media	Body Material				Seal Material			
	Brass	Steel	AISI316	AISI303	NBR	EPDM	FKM	CR
3M FC -75	4	4	4	4	1	1	2	1
Acetamide	4	4	1	2	1	1	3	1
Acetic acid (5%)	3	3	1	1	2	1	1	1
Acetone	1	2	1	1	3	1	3	3
Acetophenone	2	2	2	1	3	1	3	3
Acetyl acetone	2	2	2	2	3	1	3	3
Acetyl chloride	4	2	2	2	3	3	1	3
Acetylene	3	2	1	1	1	1	1	2
Air (100 °C)	1	2	1	1	1	1	1	1
Air (150 °C)	1	2	1	1	2	2	1	2
Air (200 °C)	1	2	1	1	3	3	1	3
Aluminium acetate	4	4	4	4	2	1	3	2
Aluminium bromide	4	4	4	4	1	1	1	1
Aluminium chloride (10%)	3	3	3	3	1	1	1	1
Aluminium chloride (100%)	3	2	2	2	1	1	1	1
Aluminium fluoride	3	3	3	3	1	1	1	1
Aluminium nitrate	3	3	2	2	1	1	1	1
Aluminium salts	4	4	4	4	1	1	1	1
Aluminium sulphate	2	3	2	3	1	1	1	1
Alums (NH3- Cr-K)	4	4	4	4	1	1	3	1
Ammonia (anhydrous)	3	2	1	1	2	1	3	1
Ammonia (cold, gas)	3	2	4	1	1	1	3	1
Ammonia (hot, gas)	3	2	4	1	3	2	3	2
Ammonium carbonate	3	2	3	3	3	1	1	1
Ammonium chloride	3	3	2	3	1	1	1	1
Ammonium hydroxide	3	3	1	2	3	1	3	1
Ammonium nitrate	3	3	1	1	1	1	4	1
Ammonium persulfate solution	3	3	1	2	3	1	4	4
Ammonium phosphate (Mono-, Di-, Tri-basic)	3	3	3	2	1	1	4	1
Ammonium salts	4	4	4	4	1	1	3	1
Ammonium sulphate	3	3	2	3	1	1	3	1
Amyl borate	4	4	4	4	1	3	1	1
Amyl chloride	4	2	1	1	4	3	1	3
Amyl chloronaphthalene	4	4	4	4	3	3	1	3
Amyl naphthalene	4	4	4	4	3	3	1	3
Animal oil (lard oil)	2	2	2	2	1	2	1	2
Aroclor 1248	2	3	3	3	3	2	1	3
Aroclor 1254	2	3	3	3	3	2	1	3
Aroclor 1260	2	3	3	3	1	4	1	1
Aromatic fuel -50%	4	4	4	4	2	3	1	3
Arsenic acid	3	3	1	1	1	1	1	1
Asphalt	3	3	1	1	2	3	1	2
ASTM oil, n° 1	1	1	1	1	1	3	1	1
ASTM oil, n° 2	1	1	1	1	1	3	1	2
ASTM oil, n° 3	1	1	1	1	1	3	1	3
ASTM oil, n° 4	1	1	1	1	2	3	1	3
ASTM reference fuel A	3	2	1	1	1	3	1	2
ASTM reference fuel B	3	2	1	1	1	3	1	3
ASTM reference fuel C	3	2	1	1	2	3	1	3
Automotive brake fluid	4	4	4	4	3	1	3	2
Barium chloride	3	3	2	3	1	1	1	1
Barium hydroxide	3	2	2	3	1	1	1	1
Barium salts	4	4	4	4	1	1	1	1
Barium sulphide	3	2	3	3	1	1	1	1

Codes:

- 1 = satisfactory
 2 = fair
 3 = not recommended
 4 = insufficient data available

Seal Material	Temperature Range
NBR	-40°C up to +110°C
EPDM	-50°C up to +150°C
FKM	-25°C up to +200°C
CR	-50°C up to +150°C

Media	Body Material				Seal Material			
	Brass	Steel	AISI316	AISI303	NBR	EPDM	FKM	CR
Beer	3	3	1	1	1	1	1	1
Beet sugar liquors	3	3	1	1	1	1	1	2
Benzaldehyde	3	3	2	3	3	1	3	3
Benzene	3	2	3	3	3	3	1	3
Benzenesulfonic acid (10%)	3	3	3	3	3	3	1	2
Benzine	4	4	4	4	1	3	1	2
Benzoic acid	3	3	3	3	3	3	1	3
Benzyl alcohol	4	3	1	2	3	2	1	2
Benzyl chloride	3	3	2	3	3	3	1	3
Bleach liquor	4	4	4	4	3	1	1	2
Borax	3	2	3	3	2	1	1	3
Bordeaux mixture	4	4	4	4	2	1	1	2
Boric acid	3	3	2	3	1	1	1	1
Brake fluid (non-petroleum)	2	2	4	4	3	1	3	2
Brine (sodium chloride)	3	3	1	1	1	1	1	1
Bromine	4	4	4	4	3	3	1	3
Bromine water	4	4	4	4	3	2	1	3
Bunker oil	4	4	4	4	1	3	1	3
Butadiene (monomer)	3	2	1	2	3	3	1	3
Butane	3	1	1	1	1	3	1	1
Butane (2,2 & 2,3-dimethyl)	4	4	4	4	1	3	1	2
Butanol (butyl alcohol)	2	1	1	1	1	2	1	1
Butter (animal fat)	2	3	1	2	1	1	1	2
Butyl butyrate	4	4	4	4	3	1	1	3
Butyl stearate	4	4	4	4	2	3	1	3
Calcine liquors	4	4	4	4	1	1	1	4
Calcium acetate	4	4	4	4	2	1	3	2
Calcium bisulphite	3	3	2	3	2	1	2	2
Calcium carbonate	3	2	3	2	1	1	1	1
Calcium chloride	3	3	2	3	1	1	1	1
Calcium hydroxide	3	3	2	3	1	1	1	1
Calcium hypochlorite	3	3	2	3	2	1	1	2
Calcium salts	4	4	4	4	1	1	1	1
Calcium sulphide	3	3	2	2	1	1	1	1
Caliche liquors	4	4	4	4	1	1	1	1
Cane sugar liquors	4	2	1	1	1	1	1	1
Carbon bisulphide	4	4	4	4	3	3	1	3
Carbon dioxide	1	2	1	1	1	1	1	1
Carbon disulfide	2	2	2	2	3	3	1	3
Carbon monoxide	1	1	1	1	1	1	1	2
Carbon tetrachloride	2	3	1	3	2	3	1	3
Carbon acid	3	3	1	2	2	1	1	1
Castor oil	1	1	1	1	1	2	1	1
Cellulube (now fyrquel)	4	4	4	4	3	1	1	3
China wood oil (Tung oil)	2	2	1	1	1	3	1	2
Chlorinated salt brine	4	4	4	4	3	3	1	3
Chlorinated solvents	4	4	4	4	3	3	1	3
Chlorobenzene	3	3	2	3	3	3	1	3
Chlorobutadiene	4	4	4	4	3	3	1	3
Chloroform	3	2	2	1	3	3	1	3
Chlorophenol	4	4	4	4	3	3	1	3
Coconut oil	4	4	4	4	1	3	1	3
Copper chloride	4	4	4	4	1	1	1	2
Copper salts	4	4	4	4	1	1	1	1

FLUID COMPATIBILITY CHART

IN ALPHABETICAL ORDER

Media	Body Material				Seal Material			
	Brass	Steel	AISI316	AISI303	NBR	EPDM	FKM	CR
Copper sulphate	3	3	2	3	1	1	1	1
Corn oil	2	1	1	1	1	3	1	3
Cottonseed oil	3	2	1	2	1	3	1	3
Creosols	3	2	1	2	3	3	1	3
Creosote	3	3	2	1	1	3	1	2
Cresylic acid	4	2	1	2	3	3	1	3
Crude oil	3	2	1	1	2	3	1	3
Cutting oil	4	1	1	1	1	3	1	2
Decane	4	4	4	4	1	3	1	3
Denatured alcohol	4	4	4	4	1	1	1	1
Detergent (water solution)	3	3	1	1	1	1	1	2
Diesel fuel	1	1	1	1	1	3	1	3
Diethylene glycol	3	1	1	1	1	1	1	1
Dimethyl formamide	4	4	1	1	2	1	3	3
Dow chemical HD50-4	4	4	4	4	4	1	3	2
Dow corning 200, 510, 550	4	4	4	4	2	1	1	1
Dowtherm A, E	3	1	2	2	3	3	1	3
Ethanol	1	3	3	3	3	1	3	1
Ethyl chloride	2	3	1	3	1	3	1	3
Ethyl hexanol	4	4	4	4	1	1	1	1
Ethylene dichloride	3	3	1	2	3	3	1	3
Ethylene glycol	2	2	1	2	1	1	1	1
Fatty acids	3	3	1	2	2	3	1	2
Freon 11	1	4	4	4	2	3	2	3
Freon 12	1	1	3	1	2	3	1	1
Freon 22	1	3	1	1	3	3	3	1
Fuel oil	3	1	1	1	1	3	1	2
Gallic acid	3	3	2	2	2	2	1	2
Gas, liquid, propane (LPG)	1	3	1	1	1	3	1	2
Gas, natural	2	3	1	1	1	3	1	1
Gasoline / petrol	1	2	1	1	1	3	1	3
Gelatine	3	3	1	1	1	1	1	1
Glucose	1	1	1	1	1	1	1	1
Glycerine (glycerol)	2	1	1	1	1	1	1	1
Glycols	3	2	2	2	1	1	1	1
Green sulphate liquor	3	3	3	3	2	1	1	2
Gulf - FR fluid emulsion	4	4	4	4	1	3	1	2
Gulf - FR fluid G	4	4	4	4	1	1	1	1
Gulf - FR fluid P	4	4	4	4	3	2	2	3
Helium	1	1	1	1	1	1	1	1
Heptane	1	1	1	1	1	3	1	2
Hydraulic oil (petroleum base)	1	1	1	1	1	3	1	1
Hydraulic oil (water base)	4	1	1	1	2	1	3	2
Hydrazine	4	3	1	1	2	1	3	2
Hydrogen gas	2	2	1	1	1	1	1	1
Hydrolube	4	4	4	4	1	1	1	2
Iso octane	1	1	1	1	1	3	1	2
Isobutyl alcohol	4	4	1	1	2	1	1	1
Isopropyl alcohol	1	1	2	1	2	1	1	2
Isopropyl ether	1	1	1	1	2	3	3	3
JP3 and JP4	1	1	1	1	1	3	1	3
Kerosene	1	1	1	1	1	3	1	2
Lard (animal fat)	1	1	1	1	1	2	1	2
Linseed oil	3	1	1	1	1	3	1	3
Lubricating oil SAE 10, 20, 30, 40,50	1	1	1	1	1	3	1	2
Magnesium salts	4	4	4	4	1	1	1	1
Magnesium sulphate	3	3	2	2	1	1	1	1
Mercury	3	3	1	1	1	1	1	1
Methane	1	3	1	1	1	3	1	2
Methanol	1	1	1	1	1	1	3	1
Methyl bromide	4	1	1	1	2	3	1	3
Methyl chloride (wet)	1	3	1	3	3	3	1	3

Media	Body Material				Seal Material			
	Brass	Steel	AISI316	AISI303	NBR	EPDM	FKM	CR
Methyl chloride (dry)	2	3	1	1	3	3	1	3
Methyl ether	4	4	4	4	1	3	1	3
Methyl ethyl ketone (MEK)	1	1	1	1	3	1	3	3
MIL-F81912 (JP-9)	1	1	1	1	3	3	1	3
MIL-H-5606	1	1	1	1	1	3	1	2
MIL-H-6083	1	1	1	1	1	3	1	1
MIL-H-7083	1	1	1	1	1	1	2	2
MIL-H-8446 (MLO-8515)	2	1	1	1	2	3	1	1
MIL-L-2104 & 2104B	1	1	1	1	1	3	1	2
MIL-L-7808	3	2	1	1	2	3	1	3
Milk	2	1	1	1	1	1	1	1
Mineral oils	1	1	1	1	1	3	1	2
MLO-7277 and MLO-7557	2	1	1	1	3	3	1	3
Mobile HF	1	1	1	1	1	3	1	2
Monomethyl hydrazine	4	4	4	4	2	1	4	2
Naphtha (coal or petroleum)	2	1	2	2	2	3	1	3
Naphthalene	2	1	2	2	3	3	1	3
Naphthenic acid	2	1	2	2	2	3	1	3
Neatsfoot oil	4	4	4	4	1	2	1	3
Nickel acetate	3	2	1	1	2	1	3	2
Nickel chloride	3	3	2	2	1	1	1	2
Nickel salts	4	4	4	4	1	1	1	2
Nickel sulphate	3	3	1	1	1	1	1	1
Nitrogen	1	1	1	1	1	1	1	1
Nitrous oxide	2	2	2	1	1	4	4	4
Octyl alcohol	1	1	1	1	2	3	1	2
Olive oil	2	1	1	1	1	2	1	2
Ortho-dichlorobenzene	2	2	2	2	3	3	1	3
Oxalic acid	3	3	2	1	2	1	1	2
Oxygen (100-200 °C)	1	1	1	1	3	3	2	3
Oxygen (cold)	1	1	1	1	2	1	1	1
Ozone	3	3	1	1	3	1	1	3
Palmitic acid	1	2	1	1	1	2	1	2
Para-dichlorobenzene	2	1	1	2	3	3	1	3
Parker O-Lube	1	1	1	1	1	3	1	1
Peanut oil	2	1	1	1	1	3	1	3
Pentane (2-3 methyl & 2-4 dimethyl)	2	2	2	2	1	3	1	2
Perchloric acid - 2N	3	3	2	2	3	2	1	2
Perchloroethylene	3	2	2	2	2	3	1	3
Petrolatum	1	1	1	1	1	3	1	2
Petroleum oil (below 120 °C)	1	1	1	1	1	3	1	2
Phenol	1	1	1	1	3	3	1	3
Phosphoric acid (3 molar)	3	3	2	2	1	1	1	2
Phosphoric acid (concentrated)	3	3	2	2	3	1	1	3
Phosphorous trichloride	3	3	1	1	3	1	1	3
Picric acid (molten)	3	3	2	2	2	2	1	2
Picric acid (water solution)	3	3	2	2	1	1	1	1
Pine oil	2	2	1	2	1	3	1	3
Plating solutions (chrome)	1	3	1	1	4	1	1	3
Plating solutions (other)	4	1	1	1	1	1	1	3
Potassium acetate	2	1	2	2	2	1	3	2
Potassium chloride	3	3	1	2	1	1	1	1
Potassium cyanide	3	2	2	2	1	1	1	1
Potassium dichromate	3	1	2	2	1	1	1	1
Potassium hydroxide (50%)	3	2	1	2	2	1	3	2
Potassium nitrate	2	1	1	1	1	1	1	1
Potassium salts	4	4	4	4	1	1	1	1
Potassium sulphate	3	2	1	1	1	1	1	1
PRL - high temp. hydr. Oil	4	4	4	4	2	3	1	2
Producer gas	2	1	1	1	1	3	1	2
Propane	1	3	1	1	1	3	1	2
Propyl acetate	3	1	1	1	3	2	3	3

FLUID COMPATIBILITY CHART

IN ALPHABETICAL ORDER

Media	Body Material				Seal Material			
	Brass	Steel	AISI316	AISI303	NBR	EPDM	FKM	CR
Propyl alcohol	1	1	1	1	1	1	1	1
Propylene	1	1	1	1	3	3	1	3
Pydraul 10E	3	1	1	1	3	1	3	3
Pydraul A-200 (C series)	3	1	1	1	3	3	1	3
Pydraul (3 series)	3	1	1	1	3	1	1	3
Pyrogard 42, 43, 53, 55 (phosphate ester)	4	4	4	4	3	1	1	3
Pyrogard D	4	4	4	4	1	3	3	2
Sea water (salt water)	2	3	1	1	1	1	1	2
Shell irus 905	4	4	4	4	1	3	1	2
Silicone greases	1	1	1	1	1	1	1	1
Silver nitrate	3	3	1	2	2	1	1	1
Skydrol 500 (type 2)	3	1	1	1	3	1	3	3
Skydrol 7000 (type 2)	3	1	1	1	3	1	2	3
Soap solutions	3	3	1	1	1	1	1	2
Sodium acetate	1	1	1	1	2	1	3	2
Sodium bicarbonate	2	2	1	1	1	1	1	1
Sodium bisulphate or bisulphite	3	3	2	1	1	1	1	1
Sodium borate	3	2	2	2	1	1	1	1
Sodium carbonate	4	1	1	1	1	1	1	1
Sodium chloride	3	2	2	2	1	1	1	1
Sodium cyanide	3	1	1	1	1	1	4	1
Sodium hydroxide	3	2	1	2	2	1	2	2
Sodium hydroxide (50%)	3	3	1	2	2	1	2	2
Sodium metaphosphate	2	1	2	2	1	1	1	2
Sodium nitrate	3	2	1	1	2	1	4	2
Sodium perborate	3	3	1	1	2	1	1	2
Sodium peroxide	3	1	2	2	2	1	1	2
Sodium phosphates	1	3	2	1	1	1	1	2
Sodium salts	4	4	4	4	1	1	1	2
Sodium sulphate	3	2	1	1	1	1	1	1
Sodium sulphite & sulphide	3	3	2	3	1	1	1	1
Sodium thiosulphate	3	3	1	2	2	1	1	1
Soybean oil	2	1	1	1	1	3	1	3
Stannous chloride (15 %)	3	3	2	3	1	1	1	1
Steam (below 200 °C)	1	3	1	1	3	1	3	3
Stoddard solvents	2	1	1	1	1	3	1	2
Sucrose solutions	1	1	1	1	1	1	1	2
Sulphur	2	1	1	1	3	1	1	1
Sulphur liquors	1	1	1	1	2	2	1	2
Sulphur (molten)	3	3	1	1	3	3	1	3
Sulphur dioxide (dry)	3	1	1	3	3	1	3	3
Sulphur trioxide (dry)	2	2	2	3	3	2	1	3
Tannic acid (10%)	1	3	2	3	1	1	1	2
Tar (bituminous)	2	1	1	1	2	3	1	3
Tartaric acid	2	3	3	2	1	2	1	2
Terpineol	4	4	4	4	2	3	1	3
Tertiary butyl alcohol	1	1	1	1	2	2	1	2
Tetrachloroethane	4	2	1	2	3	3	1	3
Tetrachloroethylene	3	2	2	4	3	3	1	3
Tetraethyl lead	1	1	1	1	2	3	1	2
Tetraethyl lead (blend)	1	1	1	1	2	3	1	3
Titanium tetrachloride	2	1	2	3	2	3	1	3
Toluene	1	1	1	1	3	3	1	3
Transformer oil	1	1	1	1	1	3	1	2
Transmission fluid (type A)	1	1	1	1	1	3	1	2
Trichloroethane	4	2	1	4	3	3	1	3
Trichloroethylene	3	2	2	2	3	3	1	3
Tricresyl phosphate	4	1	2	2	3	1	2	3
Turbine oil #15 (MIL-L-7808A)	4	2	1	1	2	3	1	3
Turpentine	3	2	1	1	1	3	1	3
Varnish	1	1	1	1	2	3	1	3
Water	1	3	1	1	1	1	2	2

Media	Body Material				Seal Material			
	Brass	Steel	AISI316	AISI303	NBR	EPDM	FKM	CR
Whiskey	1	3	1	1	1	1	1	1
Wine	1	3	1	1	1	1	1	1
Wood oil	4	2	1	1	1	3	1	2
Xylene	1	2	1	1	3	3	1	3
Zinc sulphate	3	3	2	2	1	1	1	1

Note: This chart is intended as a guide only and is not to be considered as a recommendation to use Parker quick couplings in a specific application or with a specific fluid. Other factors that must be considered include but are not limited to: fluid and ambient temperature, system pressure, both operating and peaks, frequency of connection and disconnection, and applicable standards or regulations.

SAFETY GUIDE FOR SELECTING AND USING QUICK CONNECT COUPLINGS AND RELATED ACCESSORIES

DANGER: failure or improper selection or improper use of quick connect couplings or related accessories can cause death, personal injury and property damage. Possible consequences of failure or

- Couplings or parts thrown off at high speed
- High velocity fluid discharge
- Contact with suddenly moving or falling objects that are to be held in position or moved by the conveyed fluid
- Dangerously whipping hose

improper selection or improper use of quick connect couplings or related accessories include but are not limited to:

- Explosion or burning of the conveyed fluid
- Contact with conveyed fluids that may be hot, cold, toxic, or otherwise injurious
- Sparking or explosion while paint or flammable liquid spraying

Before selecting or using any Parker RectusTema quick connect couplings or related accessories, it is important that you read and follow the following instructions.

1.0 GENERAL INSTRUCTIONS

1.1 Scope: this catalogue provides instructions for selecting and using (including installing connecting, disconnecting, and maintaining) quick connect couplings and related accessories (including caps, plugs, hoses, blow guns). This safety instruction is a supplement to and is to be used with the specific Parker publications for the specific quick connect couplings and related accessories that are being considered for use.

1.2 Fail-Safe: quick connect couplings or the hose they are attached to can fail without warning for many reasons. Design all systems and equipment in a fail-safe mode, so that failure of the quick connect coupling or hose will not endanger persons or property.

1.3 Distribution: provide a copy of this safety guide to each person who is responsible for selecting or using quick connect coupling products. Do not select or use quick connect couplings without thoroughly reading and understanding this safety guide as well as the specific Parker publications for the products considered or selected.

1.4 User responsibility: due to the wide variety of operating conditions and uses for quick connect couplings, Parker RectusTema and its distributors do not represent or warrant that any particular coupling system is suitable for any specific end use system. This safety instructions do not analyse all technical parameters that must be considered in selecting a product. The user, through its own analysis and testing, is solely responsible for:

- Making the final selection of the quick connect couplings.
- Assuring that the user's requirements are met and that the use presents no health or safety hazards.
- Providing all appropriate health and safety warnings on the equipment on which the quick connect couplings are used.

1.5 Additional questions: call the appropriate Parker customer service department if you have any questions or require any additional information. For the telephone numbers of the appropriate customer service department, see the Parker publication for the product being considered or used.

2.0 SELECTION INSTRUCTIONS

2.1 Pressure: quick connect couplings selection must be made so that the published rated pressure of the coupling is equal to or greater than the maximum system pressure. Pressure surges in the system higher than the rated pressure of the coupling will shorten the quick connect coupling's life. Do not confuse burst pressure or other pressure values with rated pressure and do not use burst pressure or other pressure values for this purpose.

2.2 Fluid compatibility: quick connect couplings selection must assure compatibility of the body and seal materials with the fluid media used. See the fluid compatibility chart.

2.3 Temperature: be certain that fluid and ambient temperatures, both steady and transient, do not exceed the limitations of the quick connect couplings. Use caution and hand protection when connecting or disconnecting quick connect couplings that are heated or cooled by the media they are conducting or by their environment.

2.4 Size: transmission or power by means of pressurised liquid varies with pressure and rate of flow. The size of the quick connect couplings and other components of the system must be adequate to keep pressure losses to a minimum and avoid damage due to heat generation or excessive fluid velocity.

2.5 Pressurised connection or disconnection: if connecting or disconnecting under pressure is a requirement, use only quick connect couplings designed for that purpose. The rated operating pressure of a quick connect coupling may not be the pressure at which it may be safely connected or disconnected.

2.6 Environment: care must be taken to ensure that quick connect couplings are either compatible with or protected from the environment (that is, surrounding conditions) to which they are exposed. Environmental conditions including but not limited to ultraviolet radiation, ozone, moisture, water, salt water, chemicals, and air pollutants can cause degradation and premature failure.



2.7 Locking means: ball locking quick connect couplings can unintentionally disconnect if they are dragged over obstructions on the end of a hose or if the sleeve is bumped or moved enough to cause disconnection. Sleeves designed with flanges to provide better gripping for oily or gloved hands are especially susceptible to accidental disconnection and should not be used where these conditions exist. Sleeve lock or union (threaded) sleeve designs should be considered where there is a potential for accidental uncoupling.

2.8 Mechanical loads: external forces can significantly reduce quick connect couplings' life or cause failure. Mechanical loads which must be considered include excessive tensile or side loads and vibration. Unusual applications may require special testing prior to quick connect couplings selection.

2.9 Specifications and standards: when selecting quick connect couplings, government, industry and Parker specifications must be reviewed and followed as applicable.

2.10 Vacuum: not all quick connect couplings are suitable or recommended for vacuum service. Quick connect couplings used for vacuum applications must be selected to ensure that the quick connect couplings will withstand the vacuum and pressure of the system.

2.11 Fire resistant fluids: some fire resistant fluids require seals other than the standard NBR (nitrile) used in many coupling systems.

2.12 Radiant heat: quick connect couplings can be heated to destruction or loss of sealing without contact by such nearby items as hot manifolds or molten metal. The same heat source may then initiate a fire. This can occur despite the presence of cool air around the quick connect couplings.

2.13 Welding and brazing: heating of plated parts, including quick connect couplings and port adapters, above 450 °F (232 °C) such as during welding, brazing, or soldering may emit deadly gases and may cause coupling seal damage.

3.0 INSTALLATION INSTRUCTIONS

3.1 Pre-installation inspection: before installing a quick connect coupling, visually inspect it and check for correct style, body material, seal material, and catalogue number. Before final installation, coupling halves should be connected and disconnected with a sample of the mating half with which they will be used.

3.2 Quick connect coupling halves from other manufacturers: if a quick connect coupling assembly is made up of one Parker RectusTema half and one half from another manufacturer, the lowest pressure rating of the two halves should not be exceeded.

3.3 Fitting installation: use a thread sealant, when assembling taper pipe thread joints in quick connect couplings. Be sure the sealant is compatible with the system fluid or gas. To avoid system contamination, use a liquid or paste type sealant rather than a tape style. Use the flats provided to hold the quick connect coupling when installing fittings. Do not use pipe wrenches or a vice on other parts of the coupling to hold it when installing or a removing fittings as damage or loosening of threaded joints in the coupling assembly could result. Do not apply excessive torque to taper pipe threads because cracking or splitting of the female component can result.

3.4 Caps and plugs: use dust caps and plugs when quick connect couplings are not coupled to exclude dirt and contamination and to protect critical surfaces from damage.

3.5 Coupling location: locate quick connect couplings where they can be reached for connection or disconnection without exposing the operator to slipping, falling, getting sprayed or coming in contact with hot or moving parts.

3.6 Hose whips: use a hose whip (a short length of hose between the tool and the coupling half) instead of rigidly mounting a coupling half on hand tools or other devices. This reduces the potential for coupling damage if the tool is dropped and provides some isolation from mechanical vibration which could cause uncoupling.

4.0 MAINTENANCE INSTRUCTIONS

4.1 Even with proper selection and installation, quick connect coupling life may be significantly reduced without a continuing maintenance program. Frequency should be determined by the severity of the application and risk potential. A maintenance program must be established and followed by the user and must include the following as a minimum:

4.2 Visual inspection of quick connect couplings: any of the following conditions require immediate shut down and replacement of the quick connect coupling:

- Cracked, damaged, or corroded quick connect couplings parts.
- Leaks at the fitting, valve or mating seal.
- Broken coupling mounting hardware, especially breakaway clamps.

4.3 Visual inspection all other:

- Leaking seals or port connections.
- Excess dirt build-up on the coupling locking means or on the interface area of either coupling half.
- Defective clamps, guards, and shields.
- System fluid level, fluid type and any entrapment.

4.4 Functional test: operate the system at maximum operating pressure and check for possible malfunctions and freedom from leaks. Personnel must avoid potential hazardous areas while testing and using the system.

4.5 Replacement intervals: specific replacement intervals must be considered based on previous service life, government or industry recommendations, or when failures could result in unacceptable downtime, damage or injury risk. See instruction 1.2 above.