



Thermoplastic Hoses for Hydraulics & Industry

Catalogue 4460-UK



ENGINEERING YOUR SUCCESS.



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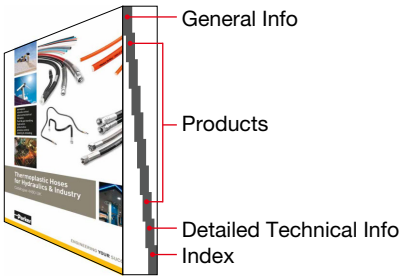
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The content contained in this catalogue has been compiled with the greatest care and corresponds to the information currently available to us.

However, we would like to point out that we reserve the right to make technical changes and we kindly request you to contact us should you have any special questions.

How to use the catalogue

Overall structure of the catalogue:



Hose and fittings for hydraulic and industrial applications

580N

580N – Standard hydraulic hose
Performance exceeds SAE 100 R8 /
ISO 3849 Type R8 / DIN EN 855 Type R8

MAIN FEATURES

- Excellent abrasion resistance
- Small bend radii
- Low weight
- Excellent chemical resistance due to polyamide core tube

APPLICATIONS High pressure service for general industrial and mobile hydraulic applications as well as with gases. Usable for a wide variety of fluids due to the polyamide core tube.

CONSTRUCTION

- Core tube : Polyamide
- Pressure reinforcement : Multiple braided layers of high tensile synthetic fibre
- Cover : Polyurethane, pinpricked
- Colour : black

TEMPERATURE RANGE -40°C up to +100°C for petroleum or synthetic hydraulic fluids.

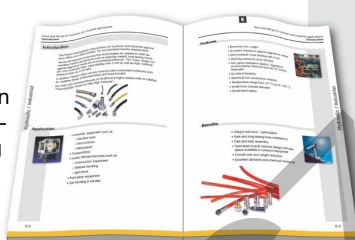
Part No.	DN	size	mm	inch	mm	Max. working pressure MPa / psi	Min. burst pressure MPa / psi	Min. bend radius mm	Weight kg/m	Fittings
580N-8	12	-08	12.7	1/2	23.0	24.1 3,500	98.0 14,000	102	0.31	58
580N-10	16	-10	15.9	5/8	24.9	19.0 2,750	76.0 11,000	162	0.32	56/58
580N-12	20	-12	19.1	3/4	29.5	15.5 2,250	62.0 9,000	203	0.35	56/58
580N-16	25	-16	25.4	1	37.6	14.0 2,000	56.0 8,000	254	0.56	56/58

NOTES Also available as twinline or multiline hose, see page XXIII.

Parker E-22 Catalogue 4460-UK

Hose data is always colored in blue

For general information
please refer also to the over-
view pages at the beginning
of the individual chapters



Chapter selector

if you know the chapter you are looking for –
this is the quickest way to get there

On fitting pages: supported hose types
which hose works with which fitting?

510A • 518C • 520N/528N • 53DM • 540N • 550 • 55LT •
560 • 560N/568N • 590 • 53DM • 2040N • 2040H

1D056 – Metric male 24°
Light series – ISO 12151-2

Hose fittings
1D056 – 1C356

MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN	size	mm	inch	Connection type		Tube OD mm	A mm	B mm	H mm	Max. WP MPa
					Thread size						
1D056-6-3	6	-05	4.8	3/16	M12x1.5	6	41.0	23.0	12	25.0	
1D056-8-4	8	-05	6.4	1/4	M14x1.5	8	45.9	22.4	14	42.9	
1D056-10-5	10	-05	7.9	5/16	M16x1.5	10	49.8	24.0	17	40.0	
1D056-12-5	12	-05	9.5	3/8	M18x1.5	12	51.7	25.9	19	35.0	
1D056-10-6	10	-06	9.5	3/8	M18x1.5	10	49.5	24.3	19	35.0	
1D056-12-6	12	-06	9.5	3/8	M18x1.5	12	49.5	24.3	19	35.0	
1D056-15-6	15	-06	12.7	1/2	M22x1.5	15	51.7	26.5	22	31.5	
1D056-18-8	18	-10	15.9	5/8	M26x1.5	18	63.8	30.3	27	31.5	
1D056-22-12	22	-12	19.0	3/4	M30x2	22	67.6	33.7	30	26.0	
1D056-28-16	28	-16	25.4	1	M36x2	28	81.9	33.8	36	21.0	

1C356 – Metric female swivel 24°/60°
Light series – Metric swivel nut

MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN	size	mm	inch	Connection type		Tube OD mm	A mm	B mm	J mm	Max. WP MPa
					Thread size						
1C356-6-3	6	-03	4.8	3/16	M12x1.5	6	37.4	19.7	14	25.0	
1C356-8-4	8	-04	6.4	1/4	M14x1.5	8	44.1	19.8	17	25.0	
1C356-10-4	10	-04	6.4	1/4	M16x1.5	10	45.0	20.0	19	25.0	
1C356-10-5	10	-05	7.9	5/16	M16x1.5	10	46.1	20.3	19	25.0	
1C356-12-5	12	-05	7.9	5/16	M18x1.5	12	47.0	21.1	22	25.0	
1C356-10-6	10	-06	9.5	3/8	M16x1.5	10	45.8	20.6	19	25.0	
1C356-12-6	12	-06	9.5	3/8	M18x1.5	12	46.6	21.4	22	25.0	
1C356-15-8	15	-08	12.7	1/2	M22x1.5	15	49.6	21.2	27	25.0	
1C356-18-12	18	-12	15.9	5/8	M26x1.5	18	57.6	23.7	32	16.0	
1C356-22-12	22	-12	19.0	3/4	M30x2	22	60.4	25.5	36	16.0	

Hose fittings

Category selector
superordinates chapters,
the quickest way to find
product groups

Part number system

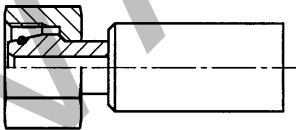
Hoses



2370 N - 06 V10

Hose type	Core tube material	Hose inner diameter (Dash size)	Option
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Fittings














1 C9 9X - 12 - 06 C

Fitting 1 = Crimp-on fitting 2 = Field attachable fitting 3 = Push-Lok® fitting	Conne- ction code	Parker fitting series	Conne- ction size thread/ tube	Hose inner diameter (Dash size)	Material • Without extension = galvanised steel • C = stainless steel • B = brass
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Explanation of symbols

Symbol	Definition	Symbol	Definition
#	Part number		Volumetric expansion
	Hose ID		Weight
	Hose OD		Thread size
	Working Pressure		Hex size
	Burst pressure		Diameter
	Minimum bend radius		Vacuum

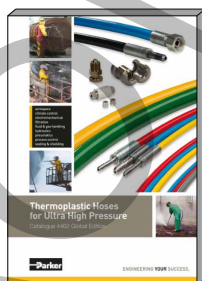
Parker Hannifin – Polymer Hose Division Europe

Parker Hannifin offers an extensive programme of systems and components for fluid technology. Parker is structured by sales offices and manufacturing divisions to guarantee optimum focus on our customers' demands and market interests at any time.

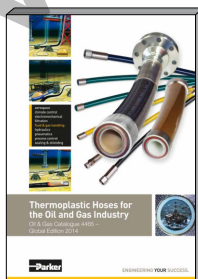
The Polymer Hose Division Europe, with headquarters located in Hüttenfeld, Germany, provides thermoplastic hoses and tubes. These are applied in a variety of different markets such as standard hydraulics, ultra high pressure applications, and oil & gas industry. As a market leader in many areas and with a unique product range we are pleased to assist you with all your queries.

This catalogue includes hoses and fittings for a pressure range up to 70 MPa. The indicated fittings are always adapted to the correspondent hose and offer optimum performance.

Other catalogues with thermoplastic hoses



Catalogue 4462-UK



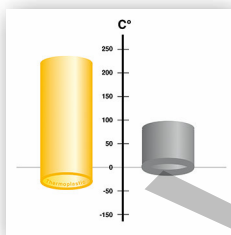
Catalogue 4465-UK

Why use Parker thermoplastic hoses?

Parker thermoplastic hose is the right answer for many technical challenges. With unique features and performance characteristics thermoplastic hose outperforms even established alternatives. Whether the task requires extreme temperatures, pressures, robustness or special custom designs, these hoses will not disappoint you.

See below the features offered by our hose range – in comparison to other standard hose types :

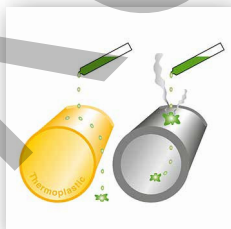
Temperature Range



- Operating temperatures ranging from -50°C up to +230°C
- Best choice for dynamic applications even at very low temperatures
- Full working pressure even at extreme temperatures



Chemical Resistance

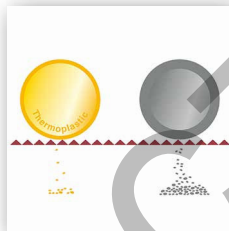


- Chemically inert, no interaction with the media
- Resistant against virtually all acids and alkalines

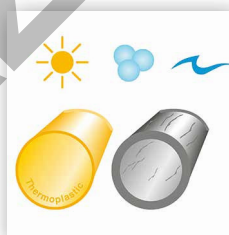


Abrasion

- Outer covers to withstand extreme wear
- Superior resistance and extended service life

**UV / Ozone & Seawater Resistance**

- Build for harsh and exposed installations
- Environmental influences have minimal effect on hose life

**Compact OD**

- Space saving due to very small diameters
- Optimized routing and design in constricted installation spaces
- Prevent using overdimensioned hoses



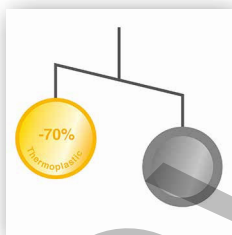
Small ID



- Only thermoplastic hoses allow small IDs down to below 2mm
- Space saving
- Offers improved technical solutions in constricted installation spaces



Low Weight



- Major weight savings
- Energy savings as less mass needs to be moved



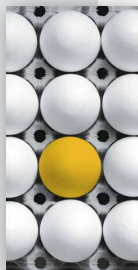
Non-Conductive



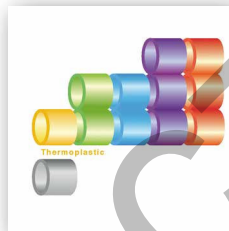
- Mandatory safety feature for applications with high voltage and high frequency
- Electrically isolating according to SAE J517



Customization



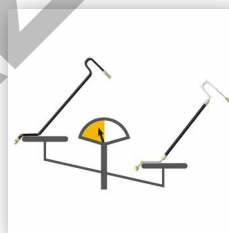
- Multiple colors
- Twin and multiple lines
- Hose bundles
- Customer specific designs



Preforming



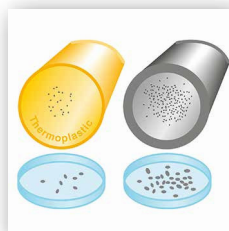
- Combining the advantages of bent metal pipe with the flexibility of hose
- Reducing weight, noise and vibration compared to bent metal pipe solutions
- Preformed hoses are maintaining their full technical specifications

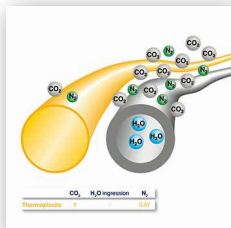


Cleanliness

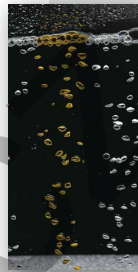


- Less abrasion and contamination inside the hose
- Reduced residue build up
- Extended lifetime for filters, valves and hydraulic systems



Permeation Resistance

- Low gas permeation
- Reduced ingress reduced risk of media contamination

**Long Length**

- Up to 5,000 m and more continuous length
- Reduced scrap of bulk hose
- Easy winching and handling offer fast deployment of long length

**Highest Pressure**

- Up to 4,000 bar working pressure
- Highest technical standards and production controls assure safety



Wide range of applications



- Standard hydraulics
- Industrial hydraulics e.g.
 - alternative energies
 - machine tools
 - injection molding
- Mobile hydraulics e.g.
 - material handling
 - construction
 - agriculture
- Automotive and truck industry
- Mini hydraulics
- Chemical industry
- Process industry
- Industrial gases
- Alternative fuels
- Boats and yachts
- Pneumatics
- Life Science
- Media transfer

Preformed hose

Technical benefits of Polyflex thermoplastic preformed assemblies

- **Little space required:**

The assemblies have a very compact design and can be installed or just clipped on wherever they disturb least and where the designer wants them to be.

- **Installation feasible even in difficult to reach places:**

The assemblies can be preformed into almost any shape.

- **Reduction of potential leaks:**

In many cases, the flexible assemblies can replace hose / rigid tube combinations. This means fewer fittings and fewer screwed connections.

- **Compensation of manufacturing inaccuracies:**

Thanks to their flexibility, the assemblies can easily compensate manufacturing tolerances between different components during installation.

- **Noise reduction:**

The good vibrational behaviour reduces wear and tear caused by vibration and lowers the noise level.

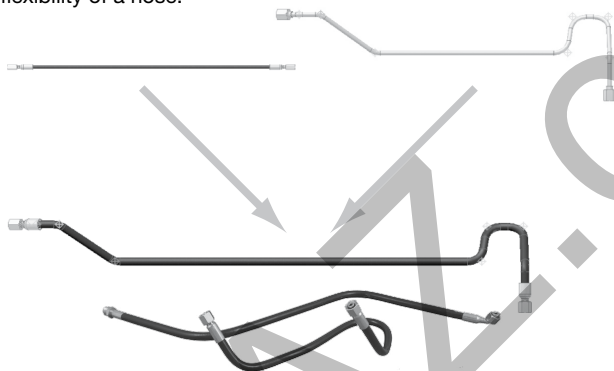
- **Weight reduction:**

As compared to steel tubes but also to conventional hose assemblies, Polyflex preformed assemblies are extremely light-weight.



Preformed thermoplastic products

From high pressure hose to thermoplastic tube – combines the advantages of a custom formed steel tube with the flexibility of a hose.



Your advantages:

- Improvement of efficiency
- Cost reduction
- Improvement of quality

Please contact us for individual custom solutions.

Hose coils

For applications where the hose assembly has to be able to perform long distance back and forth movements, hose coils are the ideal solution.

Hose coils from following hose types are available:

540N -3,-4,-5,-6,-8

520N -3,-4,-5

Other hose types on request.



Non conductive hoses

Non conductive hoses are required in many situations:

- non-conductive connection required against electrostatic discharge
- environments with strong magnetic fields or high frequency fields

Common applications for these products are

- work on high voltage lines
- cooling applications of high-power switchboards or other electric systems
- metal processing, e.g. Aluminum smelters (crust breakers), aluminium melting furnaces
- non-conductive cooling systems with de-ionized water

Parker's thermoplastic hoses are electrically non-conductive according to SAE J517 (less than 50 microAmpere and 250.000 Volts per meter)



Twinline and multiline hose

Applications

Twinline or multiline hoses ensure easier installation, and especially in applications such as fork-lift trucks, aerial lifts and hydraulic cranes they form a compact unit. On request twinline and multiline hose can be joined using various combinations of hose sizes and types.

Tools

For separating multiline hose and the appropriate tools see page G-10.

Examples

Part No. #	Part No. for twin hose #
2040H-04V10	2040H-04-04V10V10
2040H-05V10	2040H-05-05V10V10
2040H-06V10	2040H-06-06V10V10
2040H-08V10	2040H-08-08V10V10

Part No. #	Part No. for twin hose #
550H-4	550H-4-4
550H-5	550H-5-5
550H-6	550H-6-6
550H-8	550H-8-8



The following hose types are available in twinline or multiline configuration:

540N	2040H
550H	520N
53DM	580N
55LT	2370N
590TJ	560TJ
5CNG	

Other hose types on request.

General comment:

All hoses with Polyurethane cover can be supplied as twinline or multiline hose.

Hose bundles

In Parker hose bundles, multiple hoses are combined into one compact unit. Hoses with different pressure ratings and sizes can be combined.

Options:

- With integrated electric cables
- With strain relief (avoids destructive tensile stress of the hose)
- Integrated cutting protection in the cover as safeguard for the hoses

Advantages:

- Extremely compact and space saving unit
- No abrasion between the individual hoses
- Length compensation of the hoses due to twisted construction



Parkrimp system

Parkrimp is synonymous with the best solution for assembling hydraulic and related hose and fittings from both the technical and the manufacturing points of view!

Throughout the progressive thermoplastic material and metal compression during the crimping process, the reinforcement always remains intact. The meticulous design, testing and manufacturing processes of Parkrimp hose and one piece fittings, combined with the approved crimping diameters provide an excellent mechanical connection between the hose and the fitting. This absolutely leak-free connection gives long service life even with the highest pressures associated most thermoplastic hoses below 700bar and one-piece fittings.

The smartly designed and timetested Parkrimp assembling equipment combined with Parker's assembling know how allow the safest, most efficient and mistake-proof assembly process. The Parkrimp equipment allows cost and time savings to the assembler and guarantees a defect-free, reliable and durable final product to the end-user.

Parkrimp – the system for fast and leak-free assemblies

- For crimping Parkrimp One-Piece fittings (not for two piece and re-usable fittings)
- Quick and easy: no gauges to set on the machine
- Portable machines for field repair
- Meets EN safety regulations
- Both thermoplastic and rubber hoses can be crimped on the same machine (only different die rings are needed)

The perfect match

- The complete system from one source
- Thermoplastic hoses, matching one piece fittings and crimping machine
- World-wide guarantee and availability

Parker's colour-coded die sets

- No loose parts to mismatch or misplace
- Die set segments linked together
- Die sets provide 360° evenly applied crimping forces for an ideal crimp result

Value added services

Parker Polymer Hose Division Europe and the Parker Sales Companies offer value added services that compliment our production capabilities and product portfolio. These services are in place to meet the increasing customization and system criteria that our customers expect from a world-class supplier. The value added services detailed below are typical of the products and secondary services that we provide to our customers. If you have additional service needs that we have not detailed below please contact us. We are happy to discuss all potential solutions for your requirements.

ParkerStore™

At Parker Hannifin, we're continually looking for ways to deliver more products, more efficiently.

The Global ParkerStore™ network enables Parker to provide:

- Prompt, efficient, professional in-store services while you wait
- Expert local services and support
- A safe, friendly and convenient shopping environment
- A greater range of parts options so you get exactly what you're looking for.



Customers trust ParkerStores to provide OEM and MRO customers with direct access to:

- Custom-made hydraulic hose assemblies and complementary products to support their applications and decrease their downtime
- Expert technical support
- Professional, personalized services, including 24/7/365 support
- The convenience, comfort and amenities of a local service provider.

The Parker® Tracking System Enterprise (PTS)



is designed to help customers reduce vehicle or asset down-time through increases in the speed, timing and accuracy of necessary repairs. PTS provides a unique 8 digit identification code and bar code printed on a durable label for each hose assembly. PTS labels are specifically engineered to withstand harsh chemicals, temperatures, UV exposure and other challenging conditions.

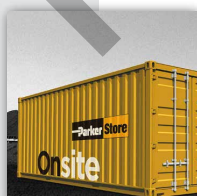
- PTS captures, records and recalls unique hose assembly information – on demand
- Provides fast and accurate product identification to speed up replacement regardless of where the original assembly was made.
- Assembly can be replaced with only the 8 digit PTS ID number/bar code eliminating the need to remove hoses prior to replacement. This can provide critical machine uptime and enable more conveniently scheduled repair.
- PTS includes additional reporting tools to assist in continuous improvement programmes and preventative maintenance initiatives.

Parker HOSE DOCTORS



are a network of independently-owned, mobile service technicians built around the commitment to identify and replace hose assemblies wherever their customers need them, with the fastest response times possible. HOSE DOCTORS® are an extension of the worldwide Parker distribution network, coupling their service commitment with Parker products – the highest quality hoses and fittings available in the market today.

Parker Store Container Service



The ParkerStore container is a transportable workshop, providing on-site maintenance and product support for large construction projects such as roadworks, tunnels, railways, underground systems, etc. Provides an on-site product and hose replacement service. With this service on your site, you can reduce your downtime keeping your project on time and on budget!

Tech Services

Optimises the performance of your hydraulic and pneumatic circuits

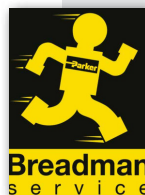
- With Parker Tech Services involved, your time to market is shorter, which saves on development costs
- The 3 year no-leak guarantee enhances your reputation and lowers your warranty costs
- More reliable operation lowers your customer's operating costs
- More efficient performance and no-leak guarantee is beneficial to the environment
- Parker worldwide coverage ensures you can use the service and save costs wherever you are



Breadman

Lean logistics and delivery of Parker products and kits directly to the customer's assembly line, work stations or warehouse

- 100 % parts availability minimises downtime, increases production and reduces costs
- Elimination of stock checking reduces manpower and maintains production levels
- Daily delivery reduces inventory and overheads
- Electronic order processing eliminates paperwork and reduces administration costs



Kitting

Multiple components are supplied under a single part number

- Reduced number of suppliers
- Reduced stocks and no obsolete items
- Optimized management (stock and supplies)
- Simplified and optimised order handling
- Reduced assembly costs
- Greater productivity



Chapter A

Hose and Fitting Selection

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Fitting selection.....A-18

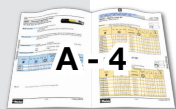
Fittings overview	A-19
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Hose selection

Several criteria must be considered, when selecting the optimal hose for your application. According to the particular application there is – as a rule – at least one of these characteristics crucial for the selection. In this section you will find the most important criteria and relevant selection guidelines.



Hose selection by application

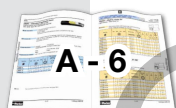


A - 4

This overview designates some application ranges together with hoses, which have proved to be especially suited for the associated application. Please note that only the most important applications can be listed. Moreover, the suitability of the desired hose for the individual environmental conditions must be verified.

When working pressure and ID are given, use this table to

Hose selection by working pressure and ID

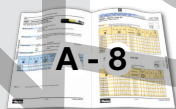


A - 6

select the possible hoses for the desired pressure range.

Many applications require highly chemical resistant

Hose selection by fluid compatibility/chemical resistance

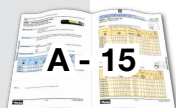


A - 8

materials due to aggressive media. The table lists chemical fluids and rating codes for different hose materials.

This overview lists hose types by international standards,

Hose selection by standards and approvals

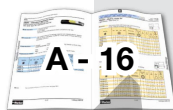


A - 15

approvals and certificates.

Determination of hose size

If you are not sure about the hose ID suitable for your application, the flow capacity nomogram and the pressure drop chart will assist you in selecting the correct hose size.



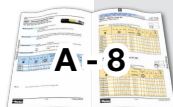
Hose selection by temperature

Ambient and fluid temperatures must not exceed the hose/fittings rated design temperature. Also the rated ambient temperature of the fluid inside the hose must not be exceeded. Attempt to route hose or shield hose from high temperature sources.



Hose selection by environment

Conditions such as ozone, UV light, harsh chemicals, salt water, and other airborne contaminants can degrade hose and shorten its life.

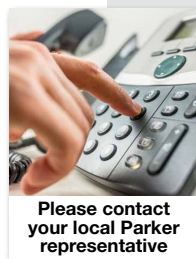


Further Selection Criteria

Always follow manufacturers specifications and do not mix components of different manufacturers.

If the end-connections are pre-defined, always follow manufacturers specifications and do not mix components of different manufacturers.

Conditions such as tensile and side loads, vibration, excessive flexing, and twist will reduce hose life. Use swivel fittings and adaptors to avoid hose twisting. Test the hose if the application is potentially problematic or unusual.



Hose selection by application

Hose type \ Application	2010H	2020N	2030T	2030T - V70CON	2033T	2040H	2040N	2245N	2246F	2370N	2380F
2-component systems			●		●			●			●
Aluminium plants											
Cranes						●					
Chemical industry			●	●	●						
Steam applications											
Diagnosis & test systems		●									
Compressed-air systems						●					
Electrically non-conductive applications											
Energy chains						●					
Earth-moving machines/construction machines	●	●				●					
Paint spray systems (airless)			●		●		●	●		●	
Fire fighting equipment							●				
Motor and Sailing boats		●					●				
Gas applications		●	●				●	●		●	
Operating tables	●	●			●						
Platforms for lifting persons						●					
Hot melt applications									●		
High temperature applications			●	●	●				●		●
Lifting devices/fork-lifts											
Cooling systems											
Agricultural machinery	●	●				●					
Food industry											
Mini hydraulics	●	●				●	●				
General hydraulics		●				●		●		●	
Engines											
PU foaming			●					●			
Tyre press machines			●								
Hose reels						●				●	
Lubricating systems	●										
Welding robots											
Solar plants		●				●					
Telehandler		●									
Low temperature applications (dynamic & static)											
Pilot lines	●										
Machine tools		●				●					
Wind turbines						●					
Page	E-5	E-6	C-4 E-33	C-5	C-6 E-34	E-18 E-31	E-17	E-27	C-12	E-26 E-32	C-11

Note: Please refer also to our safety guide when selecting hoses (page G-18 ff.)

[illegible]

Hose selection by working pressure and ID

Pressure and ID / Hose selection by working pressure

	nom. size	Working pressure (MPa)																Fitting series	P.
		DN	2	2.5	3	4	5	6	8	10	12	16	20	25	32	40	50		
		size	-012	-016	-02	-025	-03	-04	-05	-06	-08	-10	-12	-16	-20	-24	-32		
		mm*	2.0	2.4	3.2	4.0	4.8	6.4	7.9	9.5	12.7	15.9	19.0	25.4	31.8	38.1	50.8		
		inch	5/64	3/32	1/8	5/32	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1	1 1/4	1 1/2	2		
Push-Lok® hose																			
830M								1.6		1.6	1.6	1.6	1.6					82	B-4
838M								1.6		1.6	1.6	1.6	1.6					82	B-5
PTFE-/FEP hose																			
2030T						27.5	24.0	20.0	17.5	15.0	12.5	10.0	8.0					YX	C-4
2030T - V70C0N							15.0	12.5	11.0	10.0	7.0	6.3	4.0	3.0				F6	C-5
2033T						27.5	25.0	22.5	20.0	17.5	15.0	11.0						PX/YX	C-6
919						21.0	21.0	17.5	14.0	10.3	8.3	6.9						91N	C-7
919U						21.0		17.5	14.0		8.3	6.9						91N	C-8
929/929B						21.0		17.5	14.0		8.4	8.8						91N	C-9
939/939B								10.3	9.5	6.9	7.5	6.9	6.9	5.0	1.7			93N	C-10
2380F						42.5	37.5	35.0	32.5	30.0	27.5	22.5						NX	C-11
2246F						41.5	37.5	34.0	32.5	30.0	26.5	21.0						NX	C-12
Hose for alternative fuels																			
5CNG							34.5		34.5	34.5		34.5	34.5					CG	D-5
8LPG						3.0	3.0	3.0	3.0									PX-LPG	D-6
Small bore hose/Mini hydraulic hose																			
2010H					21.0													EX	E-5
2020N (V30)	47.5	40.0	40.0	44.0														EX	E-6
2020N (V50)	63.0																	EX	E-6
Medium pressure hose																			
550H						22.5	21.0	17.5	15.5	14.0	10.0	8.5	7.0					56	E-8
540N				21.0		21.0	19.0	17.5	15.5	14.0		8.5						56	E-9
560TJ					25.0	22.4	20.6	19.0	17.2	13.7	12.0							56	E-10
518C				17.5		22.5	20.7	17.5	15.5	15.5	10.5	8.5	7.0					56	E-11
510D				21.0		22.4	21.0	17.5	15.8	15.8	19.2	8.8	7.0					56	E-12
518D					22.4	21.0	17.5	15.8	15.8	19.2	8.8	7.0						56	E-13
53DM									20.7	20.7	20.7							56	E-14
55LT				21.0		22.5	21.0	17.5	15.5	14.0								56	E-15

*: Exact value may vary, please check hose spec

		Working pressure (MPa)															Fitting series	P.
nom. size	DN	2	2.5	3	4	5	6	8	10	12	16	20	25	32	40	50		
	size	-012	-016	-02	-025	-03	-04	-05	-06	-08	-10	-12	-16	-20	-24	-32		
	mm*	2.0	2.4	3.2	4.0	4.8	6.4	7.9	9.5	12.7	15.9	19.0	25.4	31.8	38.1	50.8		
	inch	5/64	3/32	1/8	5/32	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1	1 1/4	1 1/2	2		
High pressure hose																		
2040N (V00)				35.0		34.0	31.0	25.0	24.0	18.5	14.0	12.5	10.0				56/PX	E-17
2040H						34.0	31.0	25.0	24.0	18.5	14.0	12.5	10.0				56/PX	E-18
520N						34.5	34.5	31.0	27.5	24.0							56	E-19
528N						34.5	34.5	31.0	27.5	24.0							56	E-20
580N										24.5	19.0	15.5	14.0				56	E-21
588N										24.5	19.0	15.5	14.0				56	E-22
590TJ							34.5		27.6	24.1		17.2	13.8				43/48/56	E-23
594TJ										28.0	28.0						43/46/48	E-24
575X							34.5		34.5	34.5		34.5	34.5				CG	E-25
2370N							46.5	44.0	42.0	35.0							9X/NX	E-26
2245N							45.0	40.0	37.5	35.0	33.0	30.0	27.5				9X/NX	E-27
Paint spray hose																		
2040N				35.0		34.0	31.0	25.0	24.0	18.5	14.0	12.5	10.0				56/PX	E-31
2370N							46.5	44.0	42.0	35.0							9X/NX	E-32
2030T						27.5	24.0	20.0	17.5	15.0	12.5	10.0	8.0				YX	E-33
2033T							27.5	25.0	22.5	20.0	17.5	15.0	11.0				PX/YX	E-34
Gas hose																		
527BA						48.3	48.3										CG	E-40
5CNG							34.5		34.5	34.5		34.5	34.5				CG	E-41
8LPG						3.0	3.0	3.0	3.0								PX-LPG	E-42

Hose selection by fluid compatibility/ chemical resistance

Ratings code

- G : Good to excellent. Little or no swelling, tensile or surface changes. Preferred choice.
- L : Marginal or conditional. Noticeable effects but not necessarily indicating lack of safety. Further testing suggested for specific application.
- P : Poor or unsatisfactory. Not recommended without extensive and realistic testing.
- : Indicates that this was not tested.
- * : Biopetroleum must be tested individually due to its varying composition.

Material codes for hose core tubes		polyflex / Parflex Part No.
H	Polyester elastomer	2040H, 518C, 550H, 55LT, 560TJ, 590TJ, 53DM
N	Polyamide	2020N, 2040N, 2245N, 2370N, 510D, 518D, 520N, 528N, 540N, 575X, 580N, 588N, 8LPG, SCR
NC	Nylon copolymer	5CNG
FEP	Fluorethylenpropylen	2380F, 2246F
TFE	Polytetrafluoroethylene (PTFE)	2030T (V70, CON), 2033T, 929/929B, 939/939B, 919U
EPDM	Ethylen Propylen Dien	SCR
Material codes for hose covers		
U	Polyurethane	2010N, 2040N (V00), 2040H, 2245N, 2370N, 510D, 830, 838, 540N, 550H, 560TJ, 520N, 528N, 580N, 588N, 590TJ, 919U, 5CNG
HF	Special elastomer	55LT, 53DM
PFX	Special elastomer	518C
N	Polyamide	2010N, 2020N, 2245N, 518D, 8LPG
Material code for sealing components		
V	FKM	

Notes on the chemical resistance table

- (1) The fluid resistance tables are simplified rating tabulations based on immersion tests at 24 °C. Higher temperatures tend to reduce ratings. Since final selection depends on pressure, fluid and ambient temperature and other factors not known to Parker Hannifin, no performance guarantee is expressed or implied. The indications do not imply any compliance with standards and regulations and do not refer to possible changes of colour, taste or smell. For food and drinking water specially approved materials have to be used. For fluids not listed or for advice on particular applications, please consult Parker Hannifin Manufacturing Germany GmbH & Co. KG, Polymer Hose Division Europe in Hüttenfeld, Germany.
- (2) Hose applications for these fluids must take into account legal and insurance regulations. The chemical resistance indicated does not express or imply approval by certain institutions.
- (3) Satisfactory at some concentrations and temperatures, unsatisfactory at others.
- (4) For gas applications, the cover should be pin-pricked and the pressure must not be released quickly. Special safety guard accessories are to be used to prevent damage or personal injury in the event of failure.
- (5) Chemical resistance does not imply low permeation rates. Please consult Parker Hannifin GmbH for a recommendation for your specific requirements.
- (6) The indication of chemical resistance does not imply any special food compatibility; it refers only to the chemical resistance of the material.
- (7) Chemical resistance does not imply acceptability for use in airless paint spray applications. These applications require a special, electrically conductive hose.

Hose selection by fluid compatibility/chemical resistance

Chemical	H	N	U	HF	V	NC	PFX	FEP	TFE
Acetaldehyde	G	L	L	L	P	—	L	G	G
Acetic Acid Glacial	L	L	L	L	G	P	L	L	G
Acetone	L	G	P	P	P	G	P	G	G
Acetylene	—	—	—	—	—	—	—	—	—
Air (4)	G	G	G	G	G	G	G	G	G
Ammonium Chloride	G	P	G	G	G	P	G	L	G
Ammonium Hydroxide	L	G	P	P	L	—	P	G	G
Anhydrous Ammonia	P	P	P	P	P	P	P	—	P
Aniline	P	P	P	P	P	P	P	G	G
Animal Oils (6)	G	G	G	G	G	G	G	—	G
Aromatic Hydrocarbons	L	G	L	L	P	G	L	—	G
Asphalt	G	G	G	G	G	G	G	L	G
Baygon (insecticide)	L	G	P	P	—	—	P	—	G
Beer	G	G	G	G	G	—	G	G	G
Benzene	L	G	L	L	P	L	L	G	G
Biopetroleum	*	*	*	*	*	*	*	*	*
Brake Fluid (DOT #3)	—	G	P	P	P	—	P	—	G
Butane (2) (4)	G	G	L	L	L	P	L	—	—
Butter (6)	G	G	G	G	G	—	G	—	G
Calcium Chloride	G	—	G	G	L	—	G	G	G
Carbon Dioxide (4)	G	G	G	G	G	G	G	—	—
Carbon Monoxide (4)	G	—	G	G	G	—	G	—	—
Carbon Tetrachloride	L	G	P	P	L	G	P	G	G
Castor Oil	G	L	L	L	G	L	L	—	G
Chlordane (insecticide)	L	G	P	P	—	—	P	—	—
Chlorinated Hydrocarbon Base Fluids	L	G	L	L	P	—	L	—	G
Chlorinated Petroleum Oil	G	G	L	L	—	L	L	—	—
Chlorinated Solvents	P	—	P	P	L	—	P	—	G
Chlorine, Gaseous, Dry	P	P	P	P	G	P	P	—	—
Chloroform	P	P	P	P	P	P	P	G	G
Chromic Acid	P	—	P	P	G	P	P	L	G
Citric Acid Solutions	G	G	L	L	G	G	L	G	G
Crude Petroleum Oil	G	G	G	G	G	G	G	—	G
Cyclohexane (2)	G	G	G	G	—	—	G	G	G
Cygon (insecticide)	L	G	P	P	—	—	P	—	—
Diazon (insecticide)	L	G	P	P	—	—	P	—	—
Diesel Fuel (2)	G	G	G	G	L	G	G	—	G

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Hose and Fitting Selection

Hose selection by fluid compatibility/chemical resistance

Chemical	H	N	U	HF	V	NC	PFX	FEP	TFE
Diester Oils	L	G	P	P	P	—	P	—	G
Enamels	G	G	G	G	L	—	G	—	G
Ethanol (6)	G	G	L	L	L	L	L	—	G
Ethers	L	G	P	P	L	G	P	G	G
Ethylene Glycol	G	G	L	L	G	G	L	G	G
Ethylene Oxide	G	G	L	L	P	—	L	—	—
Fatty Acids	G	G	—	—	G	G	—	G	G
Formaldehyde	L	L	P	P	L	L	P	G	G
Formic Acid J	P	P	P	P	G	P	P	G	G
Freon 12 (5)	P	G	L	L	G	G	L	—	—
Freon 22 (5)	P	G	L	L	G	G	L	—	—
Fruit Juices	G	G	G	G	G	—	G	—	G
Fuel Oil (2)	G	G	L	L	L	G	L	G	G
Gas (Oil) (2)	G	G	G	G	G	G	G	—	G
Gasoline	G	G	—	—	P	G	—	G	G
Glue	—	—	—	—	—	—	—	—	—
Glycerine	G	G	L	L	G	G	L	G	G
Glycols (to 135 °F)	G	G	L	L	G	G	L	G	G
Grease (petroleum base)	G	G	G	L	G	G	G	—	G
Heptachlor (insecticide)	L	G	P	L	L	—	P	—	G
Hexane (2)	G	G	G	L	L	G	G	G	G
Houghto Safe-1000 Series (phosphate esters)	L	G	P	P	G	G	P	—	G
Houghto Safe-600 Series (hydraulic fluid)	G	G	L	L	G	G	L	—	G
Hydraulic Fluid (petroleum base)	G	G	G	G	G	G	G	L	G
Hydraulic Fluid (phosphate ester base)	L	G	L	L	L	G	P	—	G
Hydraulic Fluid (water glycol base)	G	G	G	G	L	G	G	—	G
Hydraulic Oil (petroleum base)	G	G	G	G	G	G	G	L	G
Hydrochloric Acid	P	L	P	P	L	P	P	G	G
Hydrofluoric Acid	P	P	P	P	L	P	P	G	G
Hydrolube (hydraulic fluid/water glycol base)	G	G	L	L	G	G	L	—	G
IRUS 902 (hydraulic fluid/water-oil emulsion)	G	G	G	G	G	G	G	—	G
Isocyanates (2)	L	L	L	L	P	—	L	—	G
Isooctane (2)	G	G	G	G	L	G	L	G	G
Isopropyl Alcohol	G	G	L	L	L	G	L	G	G
Kerosene (2)	G	G	L	L	L	G	P	G	G
Ketones	L	G	P	P	P	G	P	G	G
Lacquer Solvents	L	G	P	P	P	—	P	L	G

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Hose selection by fluid compatibility/chemical resistance

Chemical	H	N	U	HF	V	NC	PFX	FEP	TFE
Lactic Acid	P	G	P	P	G	G	P	G	G
Lime (calcium oxide)	G	G	G	G	G	—	G	G	G
Lindol (hydraulic fluid/phosphate esters)	L	G	P	P	—	—	P	—	G
Linseed Oil	G	G	G	G	L	G	G	G	G
LP-Gas	—	—	—	—	—	—	—	—	—
Lubricating Oils (diester base)	L	G	P	P	—	G	P	—	G
Lubricating Oils (petroleum base)	G	G	G	G	G	G	G	G	G
Magnesium Hydroxide	L	G	L	L	G	—	L	G	G
Magnesium Salts	—	G	G	G	G	—	G	—	G
Malathion (insecticide)	L	G	P	P	—	—	P	—	G
Mercury	G	G	G	G	G	G	G	G	G
Meropa Oil (sulphur base)	G	G	—	—	—	—	—	—	G
Methane	—	—	—	—	—	—	—	—	—
Methanol	G	G	P	P	P	G	P	—	G
Methoxychlor (insecticide)	L	G	P	P	—	—	P	—	G
Methyl Alcohol (6)	G	G	P	P	P	G	P	G	G
Methyl Ethyl Ketone (MEK)	L	G	P	P	P	G	P	G	G
Methyl Ethyl Ketone Peroxide (MEKP)	—	L	P	P	—	—	P	—	G
Methyl Isobutyl Ketone (MIBK)	L	G	P	P	P	G	P	G	G
Methylene Chloride	P	L	P	P	L	P	P	G	G
Milk (6)	G	G	G	G	G	—	G	G	G
Mineral Oil	G	G	G	G	G	G	G	G	G
Mineral Spirits	P	—	L	L	P	—	L	—	G
Motor Oils	G	G	G	G	G	G	G	G	G
Naphta	L	G	P	P	P	G	P	G	G
Natural Gas (4)	—	—	—	—	—	—	—	—	—
Nitric Acid	P	P	P	P	L	P	P	L	G
Nitrobenzene	P	G	P	P	P	G	P	G	G
Nitrogen, Gaseous (4) (5)	G	G	G	G	G	G	G	G	G
Nitrous Oxide	—	L	—	—	G	—	G	—	—
Oil (SAE)	G	G	G	G	G	G	G	—	G
Oil of Turpentine	G	G	P	P	G	G	P	—	G
Oleic Acid	G	G	G	G	L	G	G	G	G
OS 45 Type 3 Hydraulic Fluid (silicate esters)	L	G	L	L	P	—	L	—	—
Ozone	L	P	L	L	G	P	P	G	G
Paint (Oil Base) (7)	G	G	G	G	P	—	G	—	G
Paint Solvents (Oil base)	L	G	L	L	P	—	L	—	G

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Hose and Fitting Selection
Hose selection by fluid compatibility/chemical resistance

Chemical	H	N	U	HF	V	NC	PFX	FEP	TFE
Pentane (2)	G	G	L	L	L	—	L	G	G
Perchloric Acid	P	P	P	P	L	P	P	L	G
Perchloroethylene	P	P	P	P	L	P	P	—	G
Petroleum Ether	—	—	—	—	P	—	—	—	—
Petroleum Oils	G	G	G	G	G	G	G	—	G
Phenols	P	P	P	P	L	P	P	—	G
Phosphate Esters (above 135 °F)	P	G	P	P	P	—	P	—	G
Phosphate Esters (to 135 °F)	G	G	P	P	P	G	P	—	G
Polyol Esters	L	G	P	P	P	—	P	—	G
Potassium Hydroxide, 50%	P	P	P	P	L	—	P	G	G
Propane (4) (5)	—	—	—	—	—	—	—	—	—
Propylene Glycol	—	—	G	G	G	—	—	G	G
Pydraul 312C, 625 (to 135 °F)	P	G	P	P	P	G	P	—	G
Pydraul F-9, 150, 160 (to 135 °F)	G	G	P	P	P	G	P	—	G
Quintolubric 822 Fluid	—	G	G	G	—	—	—	—	G
Salt Water	—	—	G	—	—	—	—	G	G
Sevin (insecticides in water)	G	G	G	G	—	—	G	—	G
Silicone Greases	G	G	G	G	G	G	G	—	G
Silicone Oils	G	G	G	G	G	G	G	—	G
Skydrol 500 & 7000	L	G	P	P	P	G	P	G	G
Soap Solutions	G	G	G	G	G	G	G	G	G
Soda Water	G	G	G	G	G	G	G	—	G
Sodium Borate	G	G	G	G	G	G	G	G	G
Sodium Carbonate	—	—	—	—	—	—	—	—	—
Sodium Chloride Solutions	G	G	G	G	G	—	G	G	G
Sodium Hydroxide, 50%	L	P	P	P	L	P	P	G	G
Sodium Hypochloride	L	P	P	P	L	—	P	G	G
Steam	P	P	P	P	P	P	P	G	G
Stoddard Solvent	P	G	P	P	L	G	P	G	G
Straight Synthetic Oils (phosphate esters)	L	G	P	P	P	G	P	—	G
Sulphur	G	G	G	P	G	—	G	G	G
Sulphur Dioxide	P	L	L	L	L	—	L	G	G
Sulphur Hexafluoride Gas (4) (5)	G	G	G	G	G	—	G	—	G
Sulphuric Acid	P	P	P	P	—	P	P	—	G
Toluol, Toluene	L	G	L	L	P	G	P	G	G
Transmission Fluid	G	G	G	G	P	G	G	—	G
Trichlorethylene	P	L	P	P	L	G	P	G	G

G : Good to excellent. Little or no swelling, tensile or surface changes. Preferred choice.

L : Marginal or conditional. Noticeable effects but not necessarily indicating lack of safety. Further testing suggested for specific application.

P : Poor or unsatisfactory. Not recommended without extensive and realistic testing.

— : Indicates that this was not tested.

* : Biopetroleum must be tested individually due to its varying composition.

Hose selection by fluid compatibility/chemical resistance

Chemical	H	N	U	HF	V	NC	PFX	FEP	TFE
Trisodium Phosphate Solutions	L	G	P	P	G	G	P	G	G
Turpentine	G	G	L	L	L	G	P	G	G
Ucon (hydraulic fluid/water glycol base)	G	G	L	L	G	G	L	–	G
Varnish	G	G	G	G	P	G	G	–	G
Vinegar (6)	L	G	L	L	G	G	L	G	G
Water (above 60 °C) (6)	P	G	P	P	L	–	P	L	G
Water (to 60 °C) (6)	G	G	G	G	G	G	L	G	G
Water Glycols (above 60 °C)	P	G	P	P	L	–	P	–	G
Water Glycols (to 60 °C)	G	G	L	L	G	G	L	–	G
Water in oil Emulsions (above 60 °C)	P	G	P	P	L	–	P	–	G
Water in oil Emulsions (to 60 °C)	G	G	L	L	G	G	L	–	G
Whiskey, Wines (6)	G	G	L	L	G	G	G	G	G
Wood Oils	G	G	L	L	G	G	G	–	G
Xylene	L	G	P	P	P	G	P	G	G
Zinc Chloride	G	G	G	G	G	P	G	G	G

G : Good to excellent. Little or no swelling, tensile or surface changes. Preferred choice.

L : Marginal or conditional. Noticeable effects but not necessarily indicating lack of safety. Further testing suggested for specific application.

P : Poor or unsatisfactory. Not recommended without extensive and realistic testing.

– : Indicates that this was not tested.

* : Biopetroleum must be tested individually due to its varying composition.

Hose selection by standards and approvals

Standards, approvals and certificates		<i>polyflex</i> /Parflex hose (page no.)
International standards	Pressure ratings for hydraulic service:	
	SAE 100R1	560TJ (E-10)
	SAE 100R2	590TJ (E-23)
	SAE 100R7	550H (E-8), 540N (E-9), 518C (E-11), 510D (E-12), 518D (E-13), 55LT (E-15)
	SAE 100R8	520N (E-19), 528N (E-20), 580N (E-21), 588N (E-22)
	SAE 100R9	2245N (E-27)
	SAE 100R14	919 (C-7)
	SAE 100R18	53DM (E-14)
	ISO 3949 Typ R7	550H (E-8), 540N (E-9), 518C (E-11), 510D (E-12), 518D (E-13), 55LT (E-15)
	ISO 3949 Typ R8	520N (E-19), 528N (E-20), 580N (E-21), 588N (E-22)
	ISO 3949 Typ R18	53DM (E-14)
	DIN EN 853-1SN	560TJ (E-10), 2040N (E-17), 2040H (E-18)
	DIN EN 853-2SN	2370N (E-26)
	DIN EN 855 Typ R7	550H (E-8), 540N (E-9), 518C (E-11), 55LT (E-15)
	DIN EN 855 Typ R8	520N (E-19), 528N (E-20), 580N (E-21), 588N (E-22)
	Electrical non-conductivity:	
	SAE J517	518C (E-11), 528N (E-20), 588N (E-22), 838M (B-5)
	Flame resistance:	
	AS/NZS 1869	8LPG- with additional flame resistant outer cover type -FR (D-6)
Approvals and certificates	DNV (Det Norske Veritas):	
	Marine steel vessels, mobile and stationary offshore drilling units	540N (E-9), 560TJ (E-10), 520N (E-19), 580N (E-21), 588N (E-22), 590TJ (E-23), 575X (E-25), 2020N (E-6), 2245N (E-27)
	FDA approved material:	
	FDA 21 CFR 177.1550 (dry food contact)	2030T (C-4), 2030T - V70CON (C-5), 919 (C-7), 2033T (C-6), 2246F (C-12), 2380F (C-11), 919U (C-8), 929 (C-9), 939 (C-10)
	CSA:	
	ANSI/IAS NGV4.2-CSA 12.52	5CNG (D-5)
	ECE:	
	ECE R110	5CNG (D-5), 8LPG (D-6)
	ECE R67	8LPG and 8LPG-FR version (D-6)

Determination of hose size

Flow capacities of Parker hose at recommended flow velocities

The chart below is provided as an aid in the determination of the correct hose size.

Example:

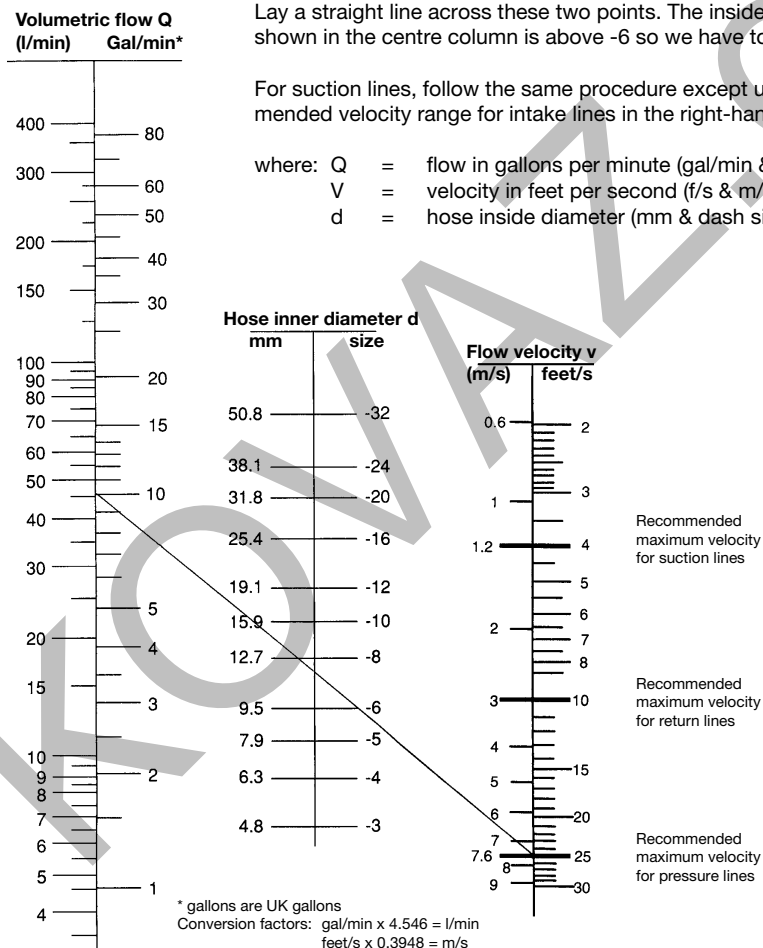
At 10 gallons per minute (gal/min), what is the proper hose size within the recommended velocity range for pressure lines?

Locate 10 gallons per minute in the left-hand column and 25 feet per second in the right-hand column (the maximum recommended velocity range for pressure lines).

Lay a straight line across these two points. The inside diameter shown in the centre column is above -6 so we have to use -8 (1/2").

For suction lines, follow the same procedure except use recommended velocity range for intake lines in the right-hand column.

where: Q = flow in gallons per minute (gal/min & l/min)
V = velocity in feet per second (f/s & m/s)
d = hose inside diameter (mm & dash size)



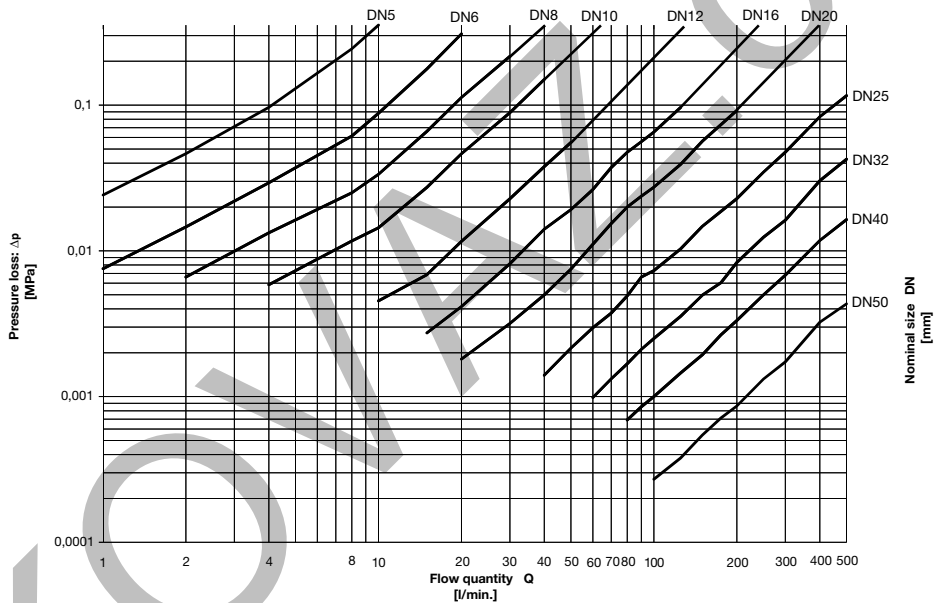
* Recommended velocities are according to hydraulic fluids of maximum viscosity 315 S.S.U. at 38 °C working at room temperature within 18 ° and 68 °C.

Pressure drop

When sizing hydraulic systems, internal pressure drops must be taken into account. These pressure drops result from friction loss of the flowing hydraulic fluids.

For calculation of the pressure drop in a straight line the following pressure loss diagram can be used, when flow quantity Q and nominal size are given.

The resulting pressure drop Δp applies to one metre line length.



Fitting selection

Which is the approved fitting series for the selected hose?

For each hose type at least one fitting series is approved. Please refer to the related hose table contained in each hose description to find out which fitting series is available for the desired hose type.

Which is the correct fitting with the required end connection for the relevant hose assembly?

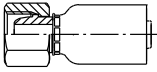
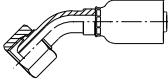
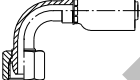
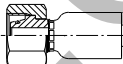
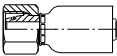
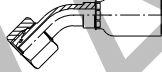
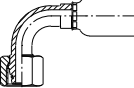
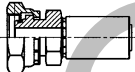
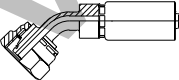
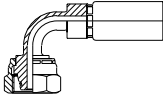
Each end connection in this catalogue has its own alphanumeric code. For example, the alphanumeric code for a DKOL connection with 90° elbow is "CF". Pages A-19 to A-24 show a complete overview of all end connections and the related codes.

You have problems to locate the desired fitting? Please contact your local dealer.

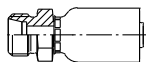
For new designs according to current industry standards, standpipes are no longer recommended.

Fittings overview

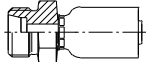
Metric DIN fittings

C3 Metric female swivel 24°/60° Light series – Metric swivel nut 		56 E-46 91N C-13 9X E-58 NX E-72 PX E-78 YX C-30 F6 C-42		Correspondence between Fitting Part No. and fitting representation in this overview Example: 1 C5 56 - 10 - 06 See fittings table on page E-45.	
C4 Metric female swivel 24°/60° 45° elbow – Light series – Metric swivel nut 		56 E-47		C5 Metric female swivel 24°/60° 90° elbow – Light series – Metric swivel nut 	
56 E-47		56 E-47 F6 C-43		C6 Metric female swivel 24°/60° Heavy series – Metric swivel nut 	
56 E-50 NX E-72					
CA Metric female swivel 24° with O-ring Light series – Metric swivel nut – ISO 12151-2 		56 E-44 EX E-65 PX E-79 YX C-31 F6 C-40		CE Metric female swivel 24° with O-ring 45° elbow – Light series – Metric swivel nut – ISO 12151-2 	
56 E-45 PX E-81 F6 C-41		CF Metric female swivel 24° with O-ring 90° elbow – Light series – Metric swivel nut – ISO 12151-2 		56 E-45 PX E-82 F6 C-41	
C9 Metric female swivel 24° with O-ring Heavy series – Metric swivel nut – ISO 12151-2 		56 E-48 9X E-58 EX E-65 NX E-73 PX E-80 YX C-31 F6 C-43		OC Metric female swivel 24° with O-ring 45° elbow – Heavy series – Metric swivel nut – ISO 12151-2 	
56 E-48 9X E-59 NX E-73 PX E-81		1C Metric female swivel 24° with O-ring 90° elbow – Heavy series – Metric swivel nut – ISO 12151-2 		56 E-49 9X E-59 NX E-74 PX E-82	

Metric DIN fittings

D0 Metric male 24°Light series –
ISO 12151-2

56 E-46
91N C-14
PX E-83
YX C-32
F6 C-42

D2 Metric male 24°Heavy series –
ISO 12151-2

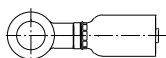
56 E-49
9X E-60
NX E-74
PX E-83
YX C-32

Correspondence between
Fitting Part No. and fitting
representation in this overview

Example:

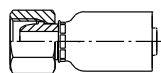
1 49 EX - 8 - 02See fittings table
on page E-68.**49** Banjo union

DIN 7642



56 E-50
EX E-70

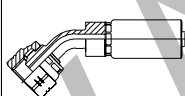
BSP fittings

92 BSP female swivel
60° cone

56 E-51
91N C-17
9X E-60
EX E-67
NX E-75
PX E-85
YX C-33
F6 C-44

B1 BSP female swivel
60° cone

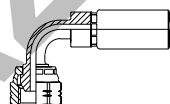
45° elbow



56 E-51
PX E-85
YX C-34

B2 BSP female swivel
60° cone

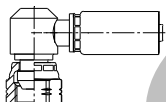
90° elbow



56 E-52
PX E-86
YX C-34
F6 C-44

B4 BSP female swivel
60° cone

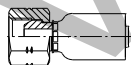
90° compact elbow



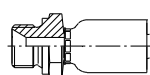
PX E-86
YX C-36

U0 BSP female swivel (ballnose)

BSP swivel nut



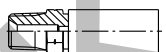
NX E-75
PX E-87
YX C-36

D9 BSP maleDIN 3852
Form A

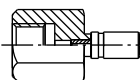
56 E-53
91N C-17
EX E-67
PX E-88
YX C-37
F6 C-45

91 BSP male taper pipe

PX E-89

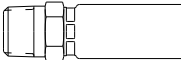

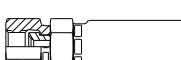






**BP** BSP female

Rigid

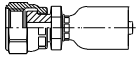
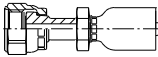
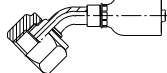
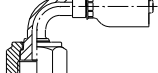
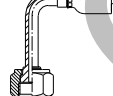
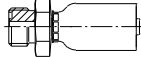


EX E-68

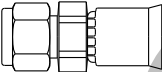
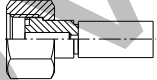
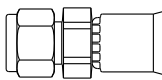
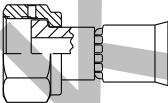
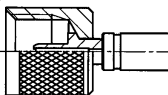
SAE and JIC fittings

01 National Pipe Tapered (NPT) male  <table><tr><td>56</td><td>.....</td><td>E-53</td></tr><tr><td>91N</td><td>.....</td><td>C-18</td></tr><tr><td>93N</td><td>.....</td><td>C-27</td></tr><tr><td>CG</td><td>.....</td><td>D-7/E-62</td></tr><tr><td>EX</td><td>.....</td><td>E-68</td></tr><tr><td>NX</td><td>.....</td><td>E-76</td></tr><tr><td>PX</td><td>.....</td><td>E-89</td></tr><tr><td>YX</td><td>.....</td><td>C-35</td></tr></table>	56	E-53	91N	C-18	93N	C-27	CG	D-7/E-62	EX	E-68	NX	E-76	PX	E-89	YX	C-35	03 SAE (JIC) 37° male  <table><tr><td>56</td><td>.....</td><td>E-54</td></tr><tr><td>NX</td><td>.....</td><td>E-76</td></tr><tr><td>PX</td><td>.....</td><td>E-90</td></tr><tr><td>YX</td><td>.....</td><td>C-35</td></tr><tr><td>F6</td><td>.....</td><td>C-45</td></tr></table>	56	E-54	NX	E-76	PX	E-90	YX	C-35	F6	C-45																						
56	E-53																																																												
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06 SAE (JIC) 37° female swivel UNF swivel nut  <table><tr><td>56</td><td>.....</td><td>E-54</td></tr><tr><td>91N</td><td>.....</td><td>C-19</td></tr><tr><td>93N</td><td>.....</td><td>C-27</td></tr><tr><td>9X</td><td>.....</td><td>E-61</td></tr><tr><td>CG</td><td>.....</td><td>D-7/E-62</td></tr><tr><td>EX</td><td>.....</td><td>E-69</td></tr><tr><td>NX</td><td>.....</td><td>E-77</td></tr><tr><td>PX</td><td>.....</td><td>E-90</td></tr><tr><td>YX</td><td>.....</td><td>C-38</td></tr><tr><td>F6</td><td>.....</td><td>C-46</td></tr></table>	56	E-54	91N	C-19	93N	C-27	9X	E-61	CG	D-7/E-62	EX	E-69	NX	E-77	PX	E-90	YX	C-38	F6	C-46	37 SAE (JIC) 37° female swivel 45° elbow – UNF swivel nut  <table><tr><td>56</td><td>.....</td><td>E-55</td></tr><tr><td>91N</td><td>.....</td><td>C-20</td></tr><tr><td>PX</td><td>.....</td><td>E-91</td></tr><tr><td>YX</td><td>.....</td><td>C-39</td></tr></table>	56	E-55	91N	C-20	PX	E-91	YX	C-39	39 SAE (JIC) 37° female swivel 90° elbow – UNF swivel nut  <table><tr><td>56</td><td>.....</td><td>E-55</td></tr><tr><td>91N</td><td>.....</td><td>C-20</td></tr><tr><td>CG</td><td>.....</td><td>D-8/E-63</td></tr><tr><td>PX</td><td>.....</td><td>E-92</td></tr><tr><td>YX</td><td>.....</td><td>C-39</td></tr><tr><td>F6</td><td>.....</td><td>C-46</td></tr></table>	56	E-55	91N	C-20	CG	D-8/E-63	PX	E-92	YX	C-39	F6	C-46
56	E-54																																																												
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YX	C-39																																																												
F6	C-46																																																												
07 NPSM female swivel  <table><tr><td>91N</td><td>.....</td><td>C-19</td></tr><tr><td>NX</td><td>.....</td><td>E-77</td></tr><tr><td>PX</td><td>.....</td><td>E-91</td></tr><tr><td>YX</td><td>.....</td><td>C-38</td></tr></table>	91N	C-19	NX	E-77	PX	E-91	YX	C-38																																																		
91N	C-19																																																												
NX	E-77																																																												
PX	E-91																																																												
YX	C-38																																																												
08 SAE (JIC) 45° female swivel UNF swivel nut  <table><tr><td>91N</td><td>.....</td><td>C-21</td></tr></table>	91N	C-21	77 SAE (JIC) 45° female swivel 45° elbow – UNF swivel nut  <table><tr><td>91N</td><td>.....</td><td>C-21</td></tr></table>	91N	C-21	79 SAE (JIC) 45° female swivel 90° elbow – UNF swivel nut  <table><tr><td>91N</td><td>.....</td><td>C-22</td></tr></table>	91N	C-22																																																			
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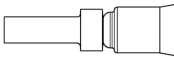
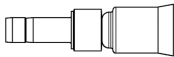
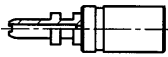
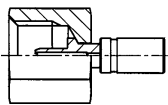
ORFS fittings

JC O-Lok® ORFS swivel nut Short version – UNF swivel nut ISO 12151-1 	JS O-Lok® ORFS swivel nut Long version – UNF swivel nut ISO 12151-1 	Correspondence between Fitting Part No. and fitting representation in this overview Example: 1 J9 91N - 10 - 10 See fittings table on page C-22.
J7 O-Lok® ORFS swivel nut 45° elbow – UNF swivel nut ISO 12151-1 	J9 O-Lok® ORFS swivel nut 90° elbow – UNF swivel nut ISO 12151-1 	J1 O-Lok® ORFS swivel nut 90° elbow – Long drop length – UNF swivel nut ISO 12151-1 
J0 O-Lok® ORFS male ISO 12151-1 		

Others

AL A-Lok® connector with clamp ring 	GA Female gas joint according to NEN 176 	P6 CPI® connector with female swivel and clamp ring 
Q1 "Ultra Seal" connector UNF swivel nut 	R8 Quick connect fitting with metric swivel nut Knurled 	

Others

<div>TU</div> <div>A-Lok® tube stub end</div> <div>  </div> <div> <div>91N</div> <div>C-25</div> </div>	<div>YW</div> <div>A-Lok® metric standpipe</div> <div>  </div> <div> <div>91N</div> <div>C-25</div> </div>
<div>YP</div> <div>Quick connect fitting with clip</div> <div>  </div> <div> <div>EX</div> <div>E-69</div> </div>	<div>YR</div> <div>Quick connect fitting with metric swivel nut</div> <div>  </div> <div> <div>EX</div> <div>E-69</div> </div>

Correspondence between
Fitting Part No. and fitting
representation in this overview

Example:
1 YR EX - 10 - 012

See fittings table
on page E-69.

Chapter B

Push-Lok® Hose and Fittings

Push-Lok® hose .....	B – 4

Introduction	B-2
830M – Push-Lok® self-grip hose	B-4
838M – Push-Lok® self-grip hose, electrically non-conductive	B-5

Fittings for Push-Lok® hose

Push-Lok® fittings – 82 series, see Catalogue CAT/4400-UK

Introduction

Parker Push-Lok® – The Most Complete Line of Premium-Quality, Low-Pressure Hose and Fittings.

Push-lok® is a registered trademark of Parker and is used for low pressure applications up to working pressures of 1.6 Mpa with all sizes of Parker Thermoplastic Hose. The Push Lok® hose and fittings are a qualified system with a design factor of 4:1 (burst pressure > 64 bar). With its “tool-free” assembly due to Parker Push-Lok® fittings it is very well recommended for many applications.



Application



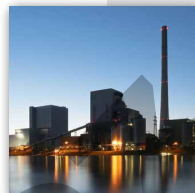
The Push Lok® hose range can be used for a wide range of applications and media such as

- Air systems
- Hydraulic applications
- In plant automotive applications for air, water, lubricating oils and antifreeze fluids.
- Non-conductive cooling systems with de-ionized water
- Energy chains

For details of fluid compatibility please refer to chapter A “Hose selection by fluid compatibility/chemical resistance”

Features

- High abrasion resistance
- Electrically non-conductive
- Free of paint effecting substances (labs free, compliant with automotive requirements)
- Tight bend radius
- Excellent UV and OZONE resistance
- Temperature range from -40°C up to +80°C
- Fast & easy assembly
- No hose clamps required
- Colour variety



Benefits

- Long product lifetime
- Less downtime in the application
- Less maintenance necessary compared to other solutions
- Suitable for in plant automotive equipment
- Easy identification of hose function due to colouring
- Safe and fast hose assembly



830M – Push-Lok® self-grip hose
Labs free



MAIN FEATURES

- High abrasion resistance
- Free of paint effecting substances (labs free)
(complies with the requirements of the automotive industry)
- Colour variety
- Assembly with Parker Push-Lok® fittings (no additional clamps required)
- Excellent UV and OZONE resistance

APPLICATIONS

Factory air systems, many hydraulic applications (fluid compatibility see page A-8 ff.); automotive applications for air, water, lubricating oils and antifreeze fluids.
Not recommended for applications where extreme pulsations are encountered.

CONSTRUCTION

Core tube : Polyurethane
Pressure reinforcement : One layer of high tensile synthetic fibre

Cover : Polyurethane
Colour : black, red, green, blue, grey

TEMPERATURE RANGE

-40°C up to +80°C.

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
830M-4-xxx-RL	6	-04	6.3	1/4	11.2	1.6	232	6.4	928	30	0.10	82
830M-6-xxx-RL	10	-06	9.5	3/8	15.0	1.6	232	6.4	928	50	0.14	82
830M-8-xxx-RL	12	-08	12.7	1/2	19.1	1.6	232	6.4	928	70	0.18	82
830M-10-xxx-RL	16	-10	16	5/8	23.0	1.6	232	6.4	928	75	0.24	82
830M-12-xxx-RL	20	-12	19	3/4	26.0	1.6	232	6.4	928	110	0.28	82

NOTES

Colour code (xxx):
BLK = black
BLU = blue
GRN = green
TRA = transparent
RED = red

Example: 830M-6-GRN-RL

838M – Push-Lok® self-grip hose**Electrically non-conductive / labs free**

Push-Lok®

MAIN FEATURES

- **Electrically non-conductive**
- High abrasion resistance
- Free of paint effecting substances (labs free)
(complies with the requirements of the automotive industry)
- Assembly with Parker Push-Lok® fittings
- Excellent UV and OZONE resistance

APPLICATIONS

Especially for applications where a non-conductive hose is required (min. 5 MΩ/m), for example:
for **non-conductive cooling systems with de-ionised water**; factory air systems; many hydraulic applications (fluid compatibility see page A-8 ff.)
Not recommended for applications where extreme pulsations are encountered.

CONSTRUCTION

Core tube : Polyurethane
Pressure reinforcement : One layer of high tensile synthetic fibre

Cover : Polyurethane
Colour : orange

TEMPERATURE RANGE

-40°C up to +80°C.

[Visite the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
838M-4-RL	6	-04	6.3	1/4	11.2	1.6	232	6.4	928	30	0.10	82
838M-6-RL	10	-06	9.5	3/8	15.0	1.6	232	6.4	928	50	0.14	82
838M-8-RL	12	-08	12.7	1/2	19.1	1.6	232	6.4	928	70	0.18	82
838M-10-RL	16	-10	16	5/8	23.0	1.6	232	6.4	928	75	0.24	82
838M-12-RL	20	-12	19	3/4	26.0	1.6	232	6.4	928	110	0.28	82

NOTES

Electrically non-conductive acc. to SAE J517 (less than 50 µA leakage under 250,000 Volts per metre).

Chapter C

PTFE / Fluoropolymer Hose and Fittings

PTFE hose

Introduction	.....	C-2
2030T	– PTFE hose.....	C-4
2030T – V70CON	– PTFE hose.....	C-5
2033T	– PTFE hose.....	C-6
919	– PTFE hose.....	C-7
919U	– PTFE hose with PU cover	C-8
929/929B	– Heavy-wall PTFE hose	C-9
939/939B	– PTFE hose – convoluted	C-10
2380F	– FEP high pressure hose	C-11
2246F	– FEP high pressure hose	C-12

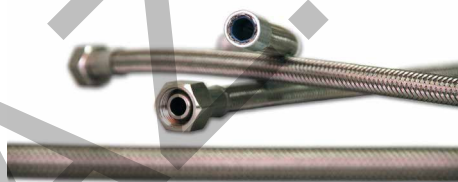
Fittings for PTFE hose

91N series	.....	C-13
93N series	.....	C-27
YX series	.....	C-30
F6 series	.....	C-40

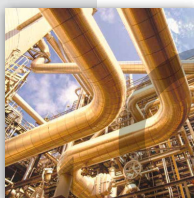
Introduction

PTFE (polytetrafluoroethylene) is a high performance fluoroplastic with high crystallinity and high molecular weight, discovered in 1938 by DuPont chemist, Dr. Roy J. Plunkett.

Parker PTFE hose provides full conveyance solutions for a wide array of markets and applications because of the unique properties of PTFE. A flexible fluoropolymer tubing with unmatched chemical resistance and a non-stick surface that facilitates flow and eliminates media build up. The Parker PTFE hose portfolio ranges from smooth bore and convoluted hose types to high pressure types with FEP inner core for up to 42.5 MPa.



Application



PTFE hoses are used in many different industries and applications

- Transportation and Mobile Hydraulics such as compressor discharge lines and coolant lines
- Fluid Transfer and Handling such as chemicals transfer lines and steam lines, e.g. in the process industry
- Industrial Hydraulics and Pneumatics such as thermo oil line and supply line for hot air

Features

- Chemical resistant to virtually all chemicals and mixed media
- Extreme Temperature range from -73 °C up to +230 °C
- Low friction minimizes pressure drop and build up of deposits
- Convoluted design available for small bend radius and great flexibility
- Resists moisture – no hydrolysis
- Low permeation rate



Benefits

- High operating temperatures
- Handles aggressive Chemicals
- Non-stick and easy to clean
- Low tendency to hydrolysis
- Convoluted versions can be used in very tight installation areas or critical applications to avoid hose kinking



2030T – PTFE hose



MAIN FEATURES

- Suitable for high temperatures
- Inert to virtually all hydraulic and chemical fluids

APPLICATIONS

Medium pressure service for use with hydraulic fluids at high temperatures and aggressive chemicals in the chemical industry, surface engineering, 2-component systems.
The core tube material conforms to FDA 21 CFR177.1550.

CONSTRUCTION

Core tube : Polytetrafluoroethylene
Pressure reinforcement : One braided layer of stainless steel wire

Cover : –
Colour : –

TEMPERATURE RANGE

-50°C up to +150°C permanent temperature
+230°C at working pressures up to 2 MPa

[Visite the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
2030T-03V70	5	-03	4.7	3/16	7.8	27.5	3,985	110.0	15,950	50	0.09	YX
2030T-04V70	6	-04	6.3	1/4	9.5	24.0	3,480	96.0	13,920	75	0.13	YX
2030T-05V70	8	-05	8.2	5/16	11.5	20.0	2,900	80.0	11,600	100	0.17	YX
2030T-06V70	10	-06	9.7	3/8	13.0	17.5	2,535	70.0	10,150	120	0.19	YX
2030T-08V70	12	-08	12.8	1/2	16.7	15.0	2,175	60.0	8,700	135	0.29	YX
2030T-10V70	16	-10	16.0	5/8	20.0	12.5	1,810	50.0	7,250	160	0.34	YX
2030T-12V70	20	-12	19.4	3/4	23.5	10.0	1,450	40.0	5,800	200	0.41	YX
2030T-16V70	25	-16	25.0	1	29.0	8.0	1,160	32.0	4,640	250	0.51	YX

NOTES

- Not recommended for dynamic applications.
- Convuluted version on request

2030T – V70CON – PTFE hose



MAIN FEATURES

- Suitable for high temperatures
- Inert to virtually all hydraulic and chemical fluids
- **Extremely flexible and small bend radius**

APPLICATIONS

Medium pressure service for use with hydraulic fluids at **high temperatures** and **aggressive fluids** in the chemical and other industries, when **small bend radii and high flexibility** are required.
The core tube material conforms to FDA 21 CFR177.1550.

CONSTRUCTION

Core tube : Polytetrafluoroethylene
Pressure reinforcement : One braided layer of stainless steel wire

Cover : –
Colour : –

TEMPERATURE RANGE

–70 °C up to +230 °C

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
2030T-04V70CON	6	-04	6.0	1/4	10.6	15.0	2,175	60.0	8,700	18	0.12	F6
2030T-05V70CON	8	-05	8.0	5/16	14.0	12.5	1,813	50.0	7,250	19	0.15	F6
2030T-06V70CON	10	-06	9.7	3/8	16.4	11.0	1,595	44.0	6,380	20	0.19	F6
2030T-08V70CON	12	-08	13.0	1/2	19.0	10.0	1,450	40.0	5,800	25	0.24	F6
2030T-10V70CON	16	-10	15.5	5/8	22.6	7.0	1,015	28.0	4,060	50	0.32	F6
2030T-12V70CON	19	-12	19.6	3/4	26.0	6.3	942	25.2	3,654	65	0.38	F6
2030T-16V70CON	25	-16	24.4	1	33.7	4.0	580	16.0	2,320	90	0.55	F6
2030T-20V70CON	31	-20	32.5	1 1/4	40.3	3.0	435	12.0	1,740	110	0.68	F6

NOTES

Max vacuum rating : 95 kPa. Value listed is for negative gage pressure in kPa.

For temperatures above 150 °C working pressure to be adjusted by 1 % for each temperature increase of 1 °C, i. e. for an increase of 80 °C to 230 °C the WP needs to be reduced by 80 %.
Example: WP at 150 °C for 2030T-04V70CON is 15 MPa, WP at 230 °C is 3 MPa.

Conductive version with black inner core on request (recommended for antistatic requirements).

2033T – PTFE hose



MAIN FEATURES

- Increased working pressure due to two braided layers of stainless steel wire
- Suitable for high temperatures
- Inert to virtually all hydraulic and chemical fluids

APPLICATIONS

Medium pressure service for use with hydraulic fluids at high temperatures and aggressive chemicals in the chemical industry, surface engineering, 2-component systems.
The core tube material conforms to FDA 21 CFR177.1550.

CONSTRUCTION

Core tube : Polytetrafluoroethylene
Pressure reinforcement : Two braided layers of stainless steel wire

Cover : –
Colour : –

TEMPERATURE RANGE

-50°C up to +150°C permanent temperature
+230°C at working pressures up to 2 MPa

[Visite the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
2033T-04V70	6	-04	6.3	1/4	11.0	27.5	3,985	110.0	15,950	75	0.23	PX ¹⁾
2033T-05V70	8	-05	8.2	5/16	13.2	25.0	3,625	100.0	14,500	100	0.26	PX ¹⁾
2033T-06V70	10	-06	9.7	3/8	15.0	22.5	3,260	90.0	13,050	120	0.34	PX ¹⁾
2033T-08V70	12	-08	12.8	1/2	18.6	20.0	2,900	80.0	11,600	135	0.47	PX ¹⁾
2033T-10V70	16	-10	16.0	5/8	21.5	17.5	2,535	70.0	10,150	160	0.53	YX
2033T-12V70	20	-12	19.4	3/4	25.5	15.0	2,175	60.0	8,700	200	0.69	YX
2033T-16V70	25	-16	25.0	1	31.0	11.0	1,595	44.0	6,380	250	0.81	YX

NOTES

- 1) Please refer to chapter E for the PX series fittings (page E-78 ff.).
- Not recommended for dynamic applications.

919 – PTFE hose

Performance acc. to SAE 100 R14A



MAIN FEATURES

- **Conforms to requirements of SAE 100R14**
- 100% working pressure at continuous temperatures of 232 °C max.
- Inert to virtually all hydraulic and chemical fluids
- One-piece fittings suitable for the Parker assembly system

APPLICATIONS

Medium pressure service for use with hydraulic fluids at high temperatures, steam and aggressive chemicals in the chemical industry. Especially suitable for the food industry.

The core tube material conforms to FDA 21 CFR177.1550.

CONSTRUCTION

Core tube : Polytetrafluoroethylene

Pressure reinforcement : One braided layer of stainless steel wire (AISI304)

Cover : -

Colour : -

TEMPERATURE RANGE

-73°C up to +232°C

[Visite the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
919-4	5	-4	4.7	3/16	7.8	21.0	3,000	84.0	12,000	51	0.09	91N
919-5	6	-5	6.5	1/4	9.5	21.0	3,000	84.0	12,000	76	0.13	91N
919-6	8	-6	7.9	5/16	11.0	17.5	2,500	70.0	10,000	102	0.15	91N
919-8	10	-8	10.5	13/32	13.5	14.0	2,000	56.0	8,000	127	0.19	91N
919-10	12	-10	12.7	1/2	15.9	10.5	1,500	42.0	6,000	165	0.22	91N
919-12	16	-12	15.9	5/8	19.1	8.4	1,200	33.5	4,800	191	0.28	91N
919-16	22	-16	22.2	7/8	26.2	7.0	1,000	28.0	4,000	229	0.40	91N

NOTES

- Vacuum rating: 95 kPa (13.8 psi) size -4 up to -10
40 kPa (5.8 psi) size -12
47 kPa (6.8 psi) size -16

919U – PTFE hose with PU cover
Performance exceeds SAE 100 R14A



- MAIN FEATURES**
- With polyurethane cover
 - Inert to virtually all hydraulic and chemical fluids
 - One-piece fittings suitable for the Parker assembly system

APPLICATIONS Medium pressure service for use with hydraulic fluids at high temperatures and aggressive chemicals in the chemical industry, when **high abrasion resistance** is required.
Suitable for the food industry. The core tube material conforms to FDA 21 CFR177.1550.

CONSTRUCTION

Core tube : Polytetrafluoroethylene
Pressure reinforcement : One braided layer of stainless steel wire

Cover : Polyurethane
Colour : black

TEMPERATURE RANGE -40°C up to +135°C

[Visit the webpage](#)

Part No. #	ID mm 	ID inch	OD mm 	OD inch	Wall thickness mm	Max. working pressure MPa / psi 		Min. burst pressure MPa / psi 		Min. bend radius mm 	Weight kg/m 	Fittings
919U-4	4.8	3/16	9.5	3/8	0.76	21.0	3,000	83.0	12,000	51	0.12	91N
919U-6	7.9	5/16	12.7	1/2	0.76	17.5	2,500	69.0	10,000	101	0.20	91N
919U-8	10.3	13/32	15.9	5/8	0.76	14.0	2,000	56.0	8,000	127	0.22	91N
919U-12	15.9	5/8	21.4	27/32	0.76	8.3	1,200	34.5	5,000	191	0.33	91N
919U-16	22.2	7/8	27.0	1 1/16	0.89	6.9	1,000	27.5	4,000	229	0.47	91N

- NOTES**
- Vacuum rating: 95 kPa (13.8 psi) size -4 up to -8
40 kPa (5.8 psi) size -12
47 kPa (6.8 psi) size -16.
 - Cover must be skived prior to fitting attachment.

929/929B – Heavy-wall PTFE hose**929:** Performance acc./exceeds SAE 100 R14A**929B:** Performance exceeds SAE 100 R14B**MAIN FEATURES**

- **Heavy-wall core tube**
- Suitable for high temperatures
- Inert to virtually all hydraulic and chemical fluids
- One-piece fittings suitable for the Parker assembly system

APPLICATIONS

Medium pressure service for use with hydraulic fluids at high temperatures, steam and aggressive chemicals in the chemical industry, when **low permeation is essential**.

Suitable for the food industry. The core tube material conforms to FDA 21 CFR177.1550 (except 929B).

CONSTRUCTION

Core tube : Heavy-wall polytetrafluoroethylene; 929B: conductive
Pressure reinforcement : One braided layer of stainless steel wire

Cover : –

Colour : –

TEMPERATURE RANGE -73°C up to +232°C

[Visite the webpage](#)

Part No. #	ID mm	ID inch	OD mm	OD inch	Wall thickness mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
929/929B-4	4.8	3/16	7.9	5/16	1.02	21.0	3,000	83.0	12,000	38	0.12	91N
929/929B-6	7.9	5/16	11.1	7/16	1.02	17.5	2,500	69.0	10,000	89	0.18	91N
929/929B-8	10.3	13/32	14.3	9/16	1.07	14.0	2,000	56.0	8,000	114	0.23	91N
929B-12	15.9	5/8	19.1	3/4	1.22	8.4	1,200	33.6	4,800	165	0.28	91N
929B-16	22.2	7/8	28.6	1 1/8	1.22	8.8	1,250	35.0	5,000	188	0.73	91N

NOTES

- Vacuum rating: 95 kPa (13.8 psi) size -4 up to -8
40 kPa (5.8 psi) size -12
47 kPa (6.8 psi) size -16.
- 929B for use in explosion protected areas with black, static dissipative core tube.

939/939B – PTFE hose – convoluted



MAIN FEATURES

- Suitable for high temperatures
- Inert to virtually all hydraulic and chemical fluids
- **Extremely flexible and small bend radius**

APPLICATIONS

Medium pressure service for use with hydraulic fluids at **high temperatures** and **aggressive fluids** in the chemical and other industries, when **small bend radii and high flexibility** are required.
The core tube material conforms to FDA 21 CFR177.1550 (except 939B).

CONSTRUCTION

Core tube : Polytetrafluoroethylene, 939B: conductive
Pressure reinforcement : One braided layer of stainless steel wire

Cover : -
Colour : -

TEMPERATURE RANGE

-73°C up to +232°C

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
939/939B-6	10	-06	9.5	3/8	15.0	10.3	1,500	41.5	6,000	57	0.18	93N
939/939B-8	12	-08	12.7	1/2	20.1	9.5	1,350	37.5	5,400	73	0.31	93N
939/939B-10	16	-10	15.9	5/8	22.4	6.9	1,000	27.5	4,000	76	0.36	93N
939/939B-12	20	-12	19.1	3/4	27.7	7.5	1,100	30.5	4,400	95	0.47	93N
939/939B-16	25	-16	25.4	1	33.8	6.9	1,000	27.5	4,000	127	0.67	93N
939/939B-20	32	-20	31.8	1 1/4	44.5	6.9	1,000	27.5	4,000	159	1.04	93N
939/939B-24	40	-24	38.1	1 1/2	52.1	5.0	750	21.0	3,000	191	1.18	93N
939/939B-32	50	-32	50.8	2	65.0	1.7	250	6.9	1,000	254	1.50	93N

NOTES

- Vacuum rating: 95 kPa (13.8 psi) size -6 up to -16
67 kPa (9.8 psi) size -20
40 kPa (5.8 psi) size -24
17 kPa (2.5 psi) size -32.

2380F – FEP high pressure hose



MAIN FEATURES

- Working pressures up to 42 MPa
- With polyurethane cover
- Inert to virtually all hydraulic and chemical fluids

APPLICATIONS

Glue applications in the automotive industry and material lines for temperatures below +80°C.

CONSTRUCTION

Core tube : Fluoroethylenepropylene
Pressure reinforcement : Two spiral layers and two open spiral layers of high tensile steel wire
Cover : Polyurethane
Colour : grey

TEMPERATURE RANGE

-40°C up to +80°C

[Visite the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
2380F-04V07	6	-04	6.3	1/4	12.5	42.5	6,160	170.0	24,650	60	0.26	NX ¹⁾
2380F-05V07	8	-05	8.0	5/16	14.3	37.5	5,435	150.0	21,750	85	0.35	NX ¹⁾
2380F-06V07	10	-06	9.7	3/8	17.0	35.0	5,075	140.0	20,300	110	0.41	NX ¹⁾
2380F-08V07	12	-08	12.8	1/2	20.5	32.5	4,710	130.0	18,850	140	0.58	NX ¹⁾
2380F-10V07	16	-10	16.0	5/8	24.5	30.0	4,350	120.0	17,400	175	0.75	NX ¹⁾
2380F-12V07	20	-12	19.4	3/4	28.5	27.5	3,985	110.0	15,950	205	0.96	NX ¹⁾
2380F-16V07	25	-16	25.0	1	34.0	22.5	3,260	90.0	13,050	240	1.28	NX ¹⁾

NOTES

- 1) Please refer to chapter E for the NX series fittings (page E-72 ff.).
- For pinpricked hose please add "-P", e.g. **2380F-04V07-P**.
 - Not recommended for applications where extreme pulsations are encountered.

2246F – FEP high pressure hose



MAIN FEATURES

- Working pressures up to 41.5 MPa
- Without hose cover
- Suitable for temperatures up to 150 °C
- Inert to virtually all hydraulic and chemical fluids

APPLICATIONS

Suitable for applications with additional heating elements, hotmelt applications in the automotive industry

CONSTRUCTION

Core tube : Fluoroethylenepropylene
Pressure reinforcement : Two spiral layers and one braided layer of high tensile steel wire
Cover : –
Colour : –

TEMPERATURE RANGE

-50°C up to +150°C

[Visite the webpage](#)

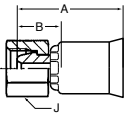
Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
2246F-04V70	6	-04	6.3	1/4	11.4	41.5	6,015	165.0	23,925	60	0.26	NX ¹⁾
2246F-05V70	8	-05	8.2	5/16	13.8	37.5	5,435	150.0	21,750	85	0.33	NX ¹⁾
2246F-06V70	10	-06	9.7	3/8	16.0	34.0	4,930	136.0	19,720	110	0.35	NX ¹⁾
2246F-08V70	12	-08	12.8	1/2	18.5	32.5	4,710	130.0	18,850	140	0.53	NX ¹⁾
2246F-10V70	16	-10	16.0	5/8	23.4	30.0	4,350	120.0	17,400	175	0.70	NX ¹⁾
2246F-12V70	20	-12	19.4	3/4	27.0	26.5	3,840	106.0	15,370	205	0.92	NX ¹⁾
2246F-16V70	25	-16	25.0	1	32.5	21.0	3,045	84.0	12,180	240	1.18	NX ¹⁾

NOTES

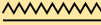

- 1) Please refer to chapter E for the NX series fittings (page E-72 ff.).
- Not recommended for applications where extreme pulsations are encountered.



1C391N – Metric female swivel 24°/60° Light series – Metric swivel nut



MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
For stainless steel (AISI 316) please add **C** to the Part No. Example: 1C391N-6-4**C**.
Other materials available on request.

Part No. #	DN size mm inch				Connection type		A mm	B mm	J mm	Max. WP MPa
	DN	size	mm	inch	Thread size 	Tube OD mm 				
1C391N-6-4-RD	5	-04	4.8	3/16	M12x1.5	6	29	14	14	25.0
1C391N-6-5-RD	6	-05	6.4	1/4	M12x1.5	6	30	14	14	25.0
1C391N-8-5-RD	6	-05	6.4	1/4	M14x1.5	8	31	14	17	25.0
1C391N-8-6-RD	8	-06	7.9	5/16	M14x1.5	8	32	14	17	25.0
1C391N-10-6-RD	8	-06	7.9	5/16	M16x1.5	10	34	16	19	25.0
1C391N-10-8-RD	10	-08	10.3	13/32	M16x1.5	10	36	17	19	25.0
1C391N-12-8-RD	10	-08	10.3	13/32	M18x1.5	12	35	15	22	25.0
1C391N-12-10-RD	12	-10	12.7	1/2	M18x1.5	12	38	18	22	25.0
1C391N-15-10-RD	12	-10	12.7	1/2	M22x1.5	15	37	17	27	25.0
1C391N-18-10-RD	12	-10	12.7	1/2	M26x1.5	18	37	17	32	16.0
1C391N-18-12-RD	16	-12	15.9	5/8	M26x1.5	18	40	17	32	16.0
1C391N-22-16-RD	22	-16	22.2	7/8	M30x2	22	49	22	36	16.0

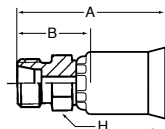
PTFE / FEP



1D091N – Metric male 24°

Light series
ISO 12151-2

MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
For stainless steel (AISI 316) please add **C** to the
Part No. Example: 1D091N-8-6**C**.
Other materials available on request.



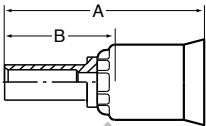
Part No. #	DN size mm inch				Connection type		A mm	B mm	H mm	Max. WP MPa
	DN	size	mm	inch	Thread size	Tube OD mm				
1D091N-6-4	5	-04	4.8	3/16	M12x1.5	6	31	16	12	25.0
1D091N-8-5	6	-05	6.4	1/4	M14x1.5	8	33	16	14	42.5
1D091N-8-6	8	-06	7.9	5/16	M14x1.5	8	34	16	14	42.5
1D091N-10-6	8	-06	7.9	5/16	M16x1.5	10	35	17	17	40.0
1D091N-10-8	10	-08	10.3	13/32	M16x1.5	10	39	19	17	40.0
1D091N-12-8	10	-08	10.3	13/32	M18x1.5	12	39	19	19	35.0
1D091N-12-10	12	-10	12.7	1/2	M18x1.5	12	41	20	19	35.0
1D091N-15-10	12	-10	12.7	1/2	M22x1.5	15	42	21	22	31.0
1D091N-18-12	16	-12	15.9	5/8	M26x1.5	18	46	23	27	28.0
1D091N-22-16	22	-16	22.2	7/8	M30x2	22	54	27	30	28.0

KOVAR



11D91N – Metric standpipe Light series

MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
For stainless steel (AISI 316) please add **C** to the Part No. Example: 11D91N-8-6**C**.
Other materials available on request.



Part No. #	DN	size	mm	inch	Tube OD mm	A mm	B mm	Max. WP MPa
11D91N-6-4	5	-04	4.8	3/16	6	44	29	25.0
11D91N-6-5	6	-05	6.4	1/4	6	43	26	25.0
11D91N-8-5	6	-05	6.4	1/4	8	47	30	25.0
11D91N-8-6	8	-06	7.9	5/16	8	46	28	25.0
11D91N-10-6	8	-06	7.9	5/16	10	45	27	25.0
11D91N-10-8	10	-08	10.3	13/32	10	47	27	25.0
11D91N-12-8	10	-08	10.3	13/32	12	53	34	25.0
11D91N-12-10	12	-10	12.7	1/2	12	47	27	25.0
11D91N-15-10	12	-10	12.7	1/2	15	49	29	25.0
11D91N-18-10	12	-10	12.7	1/2	18	50	30	16.0
11D91N-18-12	16	-12	15.9	5/8	18	53	30	16.0
11D91N-22-16	22	-16	22.2	7/8	22	60	33	16.0

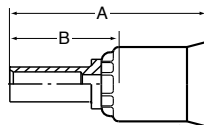
PTFE / FEP



13D91N – Metric standpipe

Heavy series

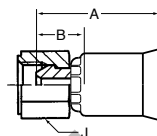
MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
For stainless steel (AISI 316) please add **C** to the
Part No. Example: 13D91N-6-3**C**.
Other materials available on request.



Part No. #	DN	size	mm	inch	Tube OD mm	A mm	B mm	Max. WP MPa
13D91N-6-3	3	-03	3.2	1/8	6	41	30	63.0
13D91N-8-4	5	-04	4.8	3/16	8	43	27	63.0
13D91N-10-5	6	-05	6.4	1/4	10	46	29	63.0
13D91N-12-6	8	-06	7.9	5/16	12	48	30	63.0
13D91N-14-8	10	-08	10.3	13/32	14	53	33	63.0
13D91N-16-10	12	-06	12.7	1/2	16	55	35	40.0
13D91N-20-12	16	-10	15.9	5/8	20	63	40	40.0
13D91N-25-16	22	-12	22.2	7/8	25	71	44	40.0
13D91N-30-16	22	-16	22.2	7/8	30	75	48	25.0

19291N – BSP female swivel 60° cone

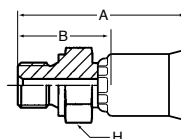
MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
For stainless steel (AISI 316) please add **C** to the
Part No. Example: 19291N-4-4**C**-RD.
Other materials available on request.



Part No. #	DN size mm inch				Connection type		A mm	B mm	J mm	Max. WP MPa
	DN	size	mm	inch	Thread size	Tube OD inch				
19291N-4-4-RD	5	-04	4.8	3/16	G 1/4	1/4	27	11	19	63.0
19291N-4-5-RD	6	-05	6.4	1/4	G 1/4	1/4	28	11	19	63.0
19291N-6-6-RD	8	-06	7.9	5/16	G 3/8	3/8	33	15	22	55.0
19291N-6-8-RD	10	-08	10.3	13/32	G 3/8	3/8	34	15	22	55.0
19291N-8-10-RD	12	-10	12.7	1/2	G 1/2	1/2	37	17	27	43.0
19291N-12-12-RD	16	-12	15.9	5/8	G 3/4	3/4	40	17	32	35.0
19291N-12-16-RD	22	-16	22.2	7/8	G 3/4	3/4	46	19	32	35.0

1D991N – BSP male
DIN 3852 Form A

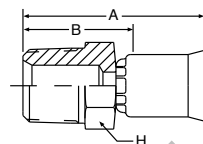
MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
For stainless steel (AISI 316) please add **C** to the
Part No. Example: 1D991N-6-6**C**.
Other materials available on request.






Part No. #	DN size mm inch				Connection type		A mm	B mm	H mm	Max. WP MPa
	DN	size	mm	inch	Thread size	Tube OD inch				
1D991N-4-4	5	-04	4.8	3/16	G 1/4	1/4	38	23	19	63.0
1D991N-4-5	6	-05	6.4	1/4	G 1/4	1/4	38	22	19	63.0
1D991N-6-6	8	-06	7.9	5/16	G 3/8	3/8	40	22	22	55.0
1D991N-6-8	10	-08	10.3	13/32	G 3/8	3/8	41	21	22	55.0
1D991N-8-10	12	-10	12.7	1/2	G 1/2	1/2	47	27	27	43.0
1D991N-12-12	16	-12	15.9	5/8	G 3/4	3/4	51	28	32	35.0
1D991N-12-16	22	-16	22.2	7/8	G 3/4	3/4	57	30	32	35.0



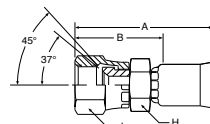
10191N – National Pipe Tapered (NPT) male



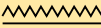

MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
For stainless steel (AISI 303) please add **C** to the
Part No. Example: 10191N-4-6**C**.
Other materials available on request.

Part No. #	DN	size	mm	inch	Connection type Thread size 	A mm	B mm	H inch 	Max. WP MPa 
10191N-2-4	5	-04	4.8	3/16	1/8 - 27NPTF	32	19	1/2	34.5
10191N-4-4	5	-04	4.8	3/16	1/4 - 18NPTF	38	24	1/2	34.5
10191N-4-5	6	-05	6.4	1/4	1/4 - 18NPTF	39	25	9/16	34.5
10191N-4-6	8	-06	7.9	5/16	1/4 - 18NPTF	41	24	5/8	34.5
10191N-6-6	8	-06	7.9	5/16	3/8 - 18NPTF	42	25	5/8	27.5
10191N-4-8	10	-08	10.3	13/32	1/4 - 18NPTF	50	30	7/8	34.5
10191N-6-8	10	-08	10.3	13/32	3/8 - 18NPTF	43	25	3/4	27.5
10191N-8-8	10	-08	10.3	13/32	1/2 - 14NPTF	49	32	3/4	24.0
10191N-8-10	12	-10	12.7	1/2	1/2 - 14NPTF	50	32	7/8	24.0
10191N-8-12	16	-12	15.9	5/8	1/2 - 14NPTF	61	38	1 1/8	24.0
10191N-12-12	16	-12	15.9	5/8	3/4 - 14NPTF	56	35	1	21.0
10191N-16-16	22	-16	22.2	7/8	1 - 11 1/2NPTF	60	38	1 3/8	17.0

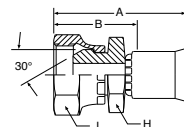
10691N – SAE (JIC) 37° female swivel UNF swivel nut





MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
For stainless steel (AISI 316) please add **C** to the
Part No. Example: 10691N-6-6**C**.
Other materials available on request.

Part No. #	DN size mm inch				Connection type		A mm	B mm	H inch	J inch	Max. WP MPa
					Thread size 	Tube OD inch 					
10691N-4-4	5	-04	4.8	3/16	7/16 - 20UNF	1/4	36	22	3/8	9/16	41.0
10691N-5-5	6	-05	6.4	1/4	1/2 - 20UNF	5/16	40	24	7/16	5/8	41.0
10691N-6-6	8	-06	7.9	5/16	9/16 - 18UNF	3/8	41	25	1/2	11/16	34.5
10691N-8-8	10	-08	10.3	13/32	3/4 - 16UNF	1/2	48	30	11/16	7/8	34.5
10691N-10-10	12	-10	12.7	1/2	7/8 - 14UNF	5/8	52	33	13/16	1	34.5
10691N-12-12	16	-12	15.9	5/8	1 1/16 - 12UNF	3/4	54	33	1	1 1/4	34.5
10691N-16-16	22	-16	22.2	7/8	1 5/16 - 12UNF	1	62	40	1 1/4	1 1/2	27.5

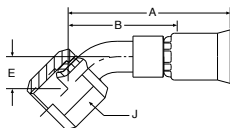
10791N – NPSM female swivel








MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
For stainless steel (AISI 303) please add **C** to the
Part No. Example: 10791N-4-4**C**.
Other materials available on request.

Part No. #	DN size mm inch				Connection type		A mm	B mm	H inch	J inch	Max. WP MPa
					Thread size 	Tube OD inch 					
10791N-4-4	5	-04	4.8	3/16	1/4 - 18NPSM	1/4	38	24	9/16	3/4	34.5
10791N-6-6	8	-06	7.9	5/16	3/8 - 18NPSM	3/8	42	25	5/8	7/8	27.5
10791N-8-8	10	-08	10.3	13/32	1/2 - 14NPSM	1/2	46	29	3/4	1	24.0
10791N-12-12	16	-12	15.9	5/8	3/4 - 14NPSM	3/4	53	33	1	1 1/4	21.0
10791N-16-16	22	-16	22.2	7/8	1 - 11 1/2NPSM	1	57	33	1 3/16	1 3/8	17.0

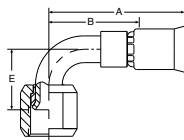
13791N – SAE (JIC) 37° female swivel 45° elbow – UNF swivel nut








MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

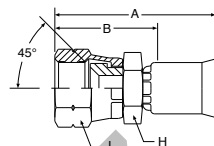
Part No. #	DN size mm inch				Connection type		A mm	B mm	E mm	J inch	Max. WP MPa
					Thread size	Tube OD inch					
											
13791N-4-4	5	-04	4.8	3/16	7/16 - 20UNF	1/4	44	29	8	9/16	41.0
13791N-5-5	6	-05	6.4	1/4	1/2 - 20UNF	5/16	50	30	9	5/8	41.0
13791N-6-6	8	-06	7.9	5/16	9/16 - 18UNF	3/8	51	32	14	11/16	34.5
13791N-8-8	10	-08	10.3	13/32	3/4 - 16UNF	1/2	59	41	14	7/8	34.5
13791N-10-10	12	-10	12.7	1/2	7/8 - 14UNF	5/8	65	49	16	1	34.5
13791N-12-12	16	-12	15.9	5/8	1 1/16 - 12UNF	3/4	72	52	20	1 1/4	34.5
13791N-16-16	22	-16	22.2	7/8	1 5/16 - 12UNF	1	80	57	23	1 1/2	27.5

13991N – SAE (JIC) 37° female swivel 90° elbow – UNF swivel nut



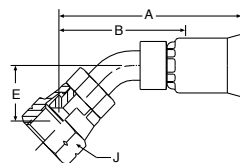
MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size mm inch				Connection type		A mm	B mm	E mm	J inch	Max. WP MPa
					Thread size	Tube OD inch					
											
13991N-4-4	5	-04	4.8	3/16	7/16 - 20UNF	1/4	41	27	24	9/16	41.0
13991N-5-5	6	-05	6.4	1/4	1/2 - 20UNF	5/16	43	29	20	5/8	41.0
13991N-6-6	8	-06	7.9	5/16	9/16 - 18UNF	3/8	49	32	22	11/16	34.5
13991N-8-8	10	-08	10.3	13/32	3/8 - 16UNF	1/2	52	30	28	7/8	34.5
13991N-10-10	12	-10	12.7	1/2	7/8 - 14UNF	5/8	61	43	31	1	34.5
13991N-12-12	16	-12	15.9	5/8	1 1/16 - 12UNF	3/4	76	54	46	1 1/2	34.5
13991N-16-16	22	-16	22.2	7/8	1 5/16 - 12UNF	1	80	56	54	1 1/2	27.5

10891N – SAE (JIC) 45° female swivel
UNF swivel nut

MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

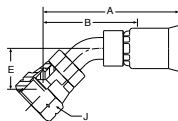
Part No. #	DN size mm inch				Connection type		A mm	B mm	H inch	J inch	Max. WP MPa
	DN	size	mm	inch	Thread size	Tube OD inch					
10891N-6-6	8	-06	7.9	5/16	5/8 - 18UNF	3/8	43	27	5/8	3/4	34.5
10891N-12-12	16	-12	15.9	5/8	1 1/16 - 14UNF	3/4	54	33	1	1 1/4	34.5

17791N – SAE (JIC) 45° female swivel
45° elbow – UNF swivel nut

MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size mm inch				Connection type		A mm	B mm	E mm	J inch	Max. WP MPa
	DN	size	mm	inch	Thread size	Tube OD inch					
17791N-6-6	8	-06	7.9	5/16	5/8 - 18UNF	3/8	52	33	10	3/4	34.5
17791N-12-12	16	-12	15.9	5/8	1 1/16 - 14UNF	3/4	78	62	20	1 1/4	34.5

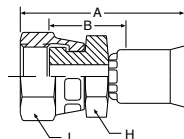
17991N – SAE (JIC) 45° female swivel 90° elbow – UNF swivel nut








MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size mm inch				Connection type		A mm	B mm	E mm	J inch	Max. WP MPa
	DN	size	mm	inch	Thread size	Tube OD inch					
17991N-6-6	8	-06	7.9	5/16	5/8 - 18UNF	3/8	52	49	30	3/4	34.5
17991N-12-12	16	-12	15.9	5/8	1 1/16 - 14UNF	3/4	74	54	46	1 1/4	34.5

1JC91N – O-Lok® ORFS swivel nut Short version – UNF swivel nut – ISO 12151-1

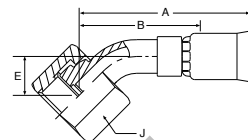


MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
For stainless steel (AISI 303) please add **C** to the Part No. Example: 1JC91N-8-8**C**.
Other materials available on request.

Part No. #	DN size mm inch				Connection type	A mm	B mm	H inch	J inch	Max. WP MPa
	DN	size	mm	inch	Thread size					
										
1JC91N-4-4	5	-04	4.8	3/16	9/16 - 18UNF	37	16	9/16	11/16	41.0
1JC91N-6-6	8	-06	7.9	5/16	11/16 - 16UNF	39	14	5/8	13/16	41.0
1JC91N-8-8	10	-08	10.3	13/32	13/16 - 16UNF	49	21	3/4	15/16	41.0
1JC91N-10-10	12	-10	12.7	1/2	1 - 14UNF	48	30	7/8	1 1/8	41.0
1JC91N-12-10	12	-10	12.7	1/2	1 3/16 - 12UNF	50	32	15/16	1 1/4	41.0
1JC91N-12-12	16	-12	15.9	5/8	1 3/16 - 12UNF	52	32	15/16	1 3/8	41.0
1JC91N-16-16	16	-12	15.9	5/8	1 7/16 - 12UNF	65	40	1.1	1 5/8	41.0
1JC91N-20-16	22	-16	22.2	7/8	1 11/16 - 12UNF	58	35	1 5/8	1 7/8	27.5

1J791N – O-Lok® ORFS swivel nut

45° elbow – UNF swivel nut

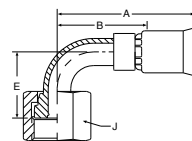


MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size				Connection type		A mm	B mm	E mm	J inch	Max. WP MPa
	mm	inch	Thread size	Tube OD inch							
1J791N-4-4	5	-04	4.8	3/16	9/16 - 18UNF	1/4	44	32	10	11/16	41.0
1J791N-4-6	8	-06	7.9	5/16	9/16 - 18UNF	1/4	49	33	10	11/16	41.0
1J791N-6-6	8	-06	7.9	5/16	11/16 - 16UNF	3/8	51	35	11	13/16	41.0
1J791N-8-8	10	-08	10.3	13/32	13/16 - 16UNF	1/2	55	38	15	15/16	41.0
1J791N-10-10	12	-10	12.7	1/2	1 - 14UNF	5/8	63	44	15	1 1/8	41.0
1J791N-12-12	16	-12	15.9	5/8	1 3/16 - 12UNF	3/4	70	49	21	1 3/8	41.0
1J791N-16-16	22	-16	22.2	7/8	1 7/16 - 12UNF	1	89	64	24	1 5/8	41.0

1J991N – O-Lok® ORFS swivel nut

90° elbow – UNF swivel nut



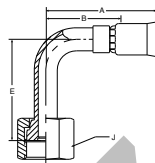
MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size				Connection type		A mm	B mm	E mm	J inch	Max. WP MPa
	mm	inch	Thread size	Tube OD inch							
1J991N-4-4	5	-04	4.8	3/16	9/16 - 18UNF	1/4	45	32	21	11/16	41.0
1J991N-6-6	8	-06	7.9	5/16	11/16 - 16UNF	3/8	47	32	23	13/16	41.0
1J991N-8-8	10	-08	10.3	13/32	13/16 - 16UNF	1/2	53	35	29	15/16	41.0
1J991N-10-10	12	-10	12.7	1/2	1 - 14UNF	5/8	57	38	32	1 1/8	41.0
1J991N-12-12	16	-12	15.9	5/8	1 3/16 - 12UNF	3/4	67	48	47	1 3/8	41.0
1J991N-16-16	22	-16	22.2	7/8	1 7/16 - 12UNF	1	88	65	56	1 5/8	41.0








1J191N – O-Lok® ORFS swivel nut

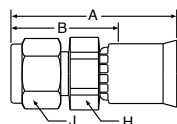
90° elbow – Long drop length – UNF swivel nut



MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size mm inch				Connection type		A mm	B mm	E mm	J inch	Max. WP MPa
	Thread size	Tube OD inch									
											
1J191N-4-4	5	-04	4.8	3/16	9/16 - 18UNF	1/4	42	27	46	11/16	41.0
1J191N-6-5	6	-05	6.4	1/4	11/16 - 16UNF	3/8	49	30	54	13/16	41.0
1J191N-6-6	8	-06	7.9	5/16	11/16 - 16UNF	3/8	49	30	54	13/16	41.0
1J191N-8-8	10	-08	10.3	13/32	13/16 - 16UNF	1/2	55	37	64	15/16	41.0
1J191N-16-16	22	-16	22.2	7/8	1 7/16 - 12UNF	1	80	57	114	1 1/2	41.0

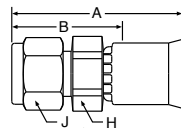
1AL91N – A-Lok® connector with clamp ring



MATERIAL Nipple, swivel nut and ferrule stainless steel (AISI 316);
stainless steel shell (AISI 303)

Part No. #	DN size mm inch	Tube OD inch	A mm	B mm	H inch	J inch	Max. WP MPa
1AL91N-4-4C	5 -04 4.8 3/16	1/4	33	11	1/2	9/16	45.5
1AL91N-4-5C	6 -05 6.4 1/4	1/4	25	11	1/2	9/16	45.5
1AL91N-6-6C	8 -06 7.9 5/16	3/8	39	13	5/8	11/16	36.5
1AL91N-8-8C	10 -08 10.3 13/32	1/2	41	11	13/16	7/8	35.9
1AL91N-12-12C	16 -12 15.9 5/8	3/4	47	13	1 1/8	1 1/8	29.7
1AL91N-16-16C	22 -16 22.2 7/8	1	54	11	1 3/8	1 1/2	31.0

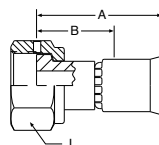
1P691N – CPI® connector with female swivel and clamp ring



MATERIAL Nipple, swivel nut and ferrule stainless steel (AISI 316);
stainless steel shell (AISI 303)

Part No. #	DN	size	mm	inch	Tube OD inch	A mm	B mm	H inch	J inch	Max. WP MPa
1P691N-4-4C	5	-04	4.8	3/16	1/4	33	11	1/2	9/16	45.5
1P691N-6-6C	8	-06	7.9	5/16	3/8	39	13	5/8	11/16	36.5
1P691N-8-8C	10	-08	10.3	13/32	1/2	41	11	13/16	7/8	35.9

PTFE / FEP

1Q191N – “Ultra Seal” connector
UNF swivel nut

MATERIAL Nipple and swivel nut stainless steel (AISI 316);
stainless steel shell (AISI 303)

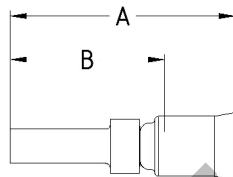
Part No. #	DN	size	mm	inch	Connection type		A mm	B mm	J inch	Max. WP MPa
					Thread size 	Tube OD inch 				
1Q191N-4-4C	5	-04	4.8	3/16	9/16 - 20UNF	1/4	41	19	11/16	21.0
1Q191N-8-8C	10	-08	10.3	13/32	7/8 - 20UNF	1/2	41	24	1	14.0



1TU91N – A-Lok® tube stub end

MATERIAL Stainless steel (AISI 303).
Other materials available on request.

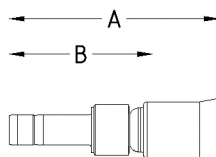
Part No. #	DN	size	mm	inch	Tube OD inch	A mm	B mm	Max. WP MPa
1TU91N-4-4C	5	-04	4.8	3/16	1/4	41.4	28.4	21.0
1TU91N-6-6C	8	-06	7.9	5/16	3/8	46.0	30.4	21.0
1TU91N-8-8C	10	-08	10.3	13/32	1/2	57.9	40.8	17.5
1TU91N-12-12C	16	-12	15.9	5/8	3/4	56.9	37.4	14.0
1TU91N-16-16C	22	-16	22.2	7/8	1	69.4	46.5	8.3



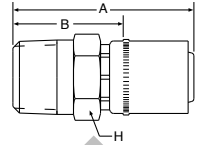
1YW91N – A-Lok® metric standpipe

MATERIAL Stainless steel (AISI 303).
Other materials available on request.

Part No. #	DN	size	mm	inch	Tube OD mm	A mm	B mm	Max. WP MPa
1YW91N-6-4C	5	-04	4.8	3/16	6	41.0	28.0	21.0
1YW91N-8-4C	5	-04	4.8	3/16	8	41.9	28.8	21.0
1YW91N-10-6C	8	-06	7.9	5/16	10	47.6	32.0	17.5
1YW91N-12-8C	10	-08	10.3	13/32	12	55.6	38.5	17.5

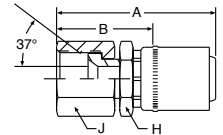


10193N – National Pipe Tapered (NPT) male



MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
For stainless steel (nipple AISI 316, shell AISI 303)
please add **C** to the Part No. Example: 10193N-8-8**C**.
Other materials available on request.

Part No. #	DN	size	mm	inch	Connection type Thread size	A mm	B mm	H inch	Max. WP MPa
10193N-8-8	12	-08	12.7	1/2	1/2 - 14NPTF	50	38	7/8	24.0
10193N-12-12	20	-12	19.0	3/4	3/4 - 14NPTF	66	43	1 1/8	21.0
10193N-16-16	25	-16	25.4	1	1 - 11 1/2NPTF	76	44	1 3/8	17.0
10193N-20-20	32	-20	31.8	1 1/4	1 1/4 - 11 1/2NPTF	79	48	1 11/16	15.0
10193N-24-24	40	-24	38.1	1 1/2	1 1/2 - 11 1/2NPTF	87	52	2	14.0
10193N-32-32	50	-32	50.8	2	2 - 11 1/2NPTF	94	59	2 1/2	14.0

10693N – SAE (JIC) 37° female swivel
UNF swivel nut

MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
For stainless steel (nipple AISI 316, shell AISI 303)
please add **C** to the Part No. Example: 10693N-8-8**C**.
Other materials available on request.

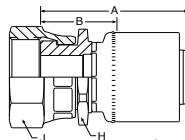
Part No. #	DN	size	mm	inch	Connection type Thread size	A mm	B mm	H inch	J inch	Max. WP MPa
10693N-8-8	12	-08	12.7	1/2	3/4 - 16UNF	48	35	7/8	7/8	34.5
10693N-10-10	16	-10	15.9	5/8	7/8 - 14UNF	63	41	1	1	34.5
10693N-12-12	20	-12	19.0	3/4	1 1/16 - 12UNF	70	44	1 1/8	1 1/4	34.5
10693N-16-16	25	-16	25.4	1	1 5/16 - 12UNF	78	46	1 3/8	1 1/2	27.5
10693N-20-20	32	-20	31.8	1 1/4	1 5/8 - 12UNF	81	49	1 3/4	1 13/16	20.0
10693N-24-24	40	-24	38.1	1 1/2	1 7/8 - 12UNF	91	57	2	2 1/8	17.0
10693N-32-32	50	-32	50.8	2	2 1/2 - 12UNF	98	62	2 1/2	2 3/4	17.0



1JC93N – O-Lok® ORFS swivel nut

Short version – UNF swivel nut – ISO 12151-1

MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
For stainless steel (nipple AISI 316, shell AISI 303)
please add **C** to the Part No. Example: 1JC93N-16-16**C**.
Other materials available on request.

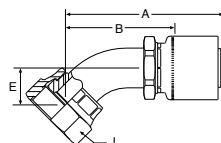


Part No. #	DN size mm inch				Connection type		A mm	B mm	H inch	J inch	Max. WP MPa
	DN	size	mm	inch	Thread size	Tube OD inch					
1JC93N-16-16	25	-16	25.4	1	1 7/16 - 12UNF	1	66	35	1 3/8	1 5/8	41.0
1JC93N-20-20	32	-20	31.8	1 1/4	1 11/16 - 12UNF	1 1/4	65	33	1 5/16	1 7/8	27.5

1J793N – O-Lok® ORFS swivel nut

45° elbow – UNF swivel nut

MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
For stainless steel (AISI 316) please add **C** to the
Part No. Example: 1J793N-16-16**C**.
Other materials available on request.



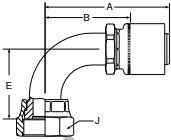
Part No. #	DN size mm inch				Connection type		A mm	B mm	E mm	J inch	Max. WP MPa
	DN	size	mm	inch	Thread size	Tube OD inch					
1J793N-20-20	32	-20	31.8	1 1/4	1 11/16 - 12UNF	1 1/4	106	75	25	1 7/8	27.5



Fittings
1J993N

1J993N – O-Lok® ORFS swivel nut
90° elbow – UNF swivel nut

MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
For stainless steel (AISI 316) please add **C** to the
Part No. Example: 1J993N-16-16**C**.
Other materials available on request.



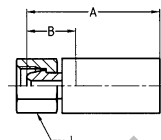
Part No. #	DN size				Connection type		A	B	E	J	Max. WP
	mm	inch	Thread size	Tube OD		inch	mm	mm	mm	inch	MPa
1J993N-20-20	32	-20	31.8	1 1/4	1 11/16 - 12UNF	1 1/4	108	76	64	1 7/8	27.5

PTFE / FEP



1C3YX – Metric female swivel 24°/60°

Light series – Metric swivel nut



MATERIAL

Galvanised steel with transparent Cr(VI)-free plating.

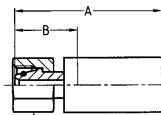
For fittings as mentioned above, but with stainless steel nipple (AISI 303), please add **C2W** to the Part No. Example: 1C3YX-6-03 **C2W**.




Other materials available on request.

Part No. #	DN	size	mm	inch	Connection type Thread size	A mm	B mm	J mm	Max. WP MPa
1C3YX-6-03	5	-03	4.8	3/16	M12x1.5	43	18	14	25.0
1C3YX-8-03	5	-03	4.8	3/16	M14x1.5	43	18	17	25.0
1C3YX-10-03	5	-03	4.8	3/16	M16x1.5	43	18	19	25.0
1C3YX-8-04	6	-04	6.4	1/4	M14x1.5	46	18	17	25.0
1C3YX-10-04	6	-04	6.4	1/4	M16x1.5	46	18	19	25.0
1C3YX-10-05	8	-05	7.9	5/16	M16x1.5	46	18	19	25.0
1C3YX-10-06	10	-06	9.5	3/8	M16x1.5	49	20	22	25.0
1C3YX-12-06	10	-06	9.5	3/8	M18x1.5	48	19	22	25.0
1C3YX-12-08	12	-08	12.7	1/2	M18x1.5	52	20	24	25.0
1C3YX-15-08	12	-08	12.7	1/2	M22x1.5	51	20	27	25.0
1C3YX-18-08	12	-08	12.7	1/2	M26x1.5	52	21	32	25.0
1C3YX-18-10	16	-10	15.9	5/8	M26x1.5	51	20	32	16.0
1C3YX-18-12	20	-12	19.0	3/4	M26x1.5	57	22	32	16.0
1C3YX-22-12	20	-12	19.0	3/4	M30x2	57	23	36	16.0
1C3YX-28-16	25	-16	25.4	1	M36x2	59	25	41	10.0

1CAYX – Metric female swivel 24° with O-ring

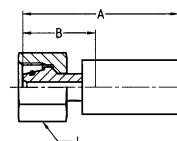
Light series – Metric swivel nut – ISO 12151-2



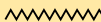

MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size mm inch				Connection type Thread size 	A mm	B mm	J mm 	Max. WP MPa 
	DN	size	mm	inch					
1CAYX-6-03	5	-03	4.8	3/16	M12x1.5	45	20	14	31.5
1CAYX-8-04	6	-04	6.4	1/4	M14x1.5	50	23	17	42.5
1CAYX-10-04	6	-04	6.4	1/4	M16x1.5	50	22	19	40.0
1CAYX-10-05	8	-05	7.9	5/16	M16x1.5	50	22	19	40.0
1CAYX-12-06	10	-06	9.5	3/8	M18x1.5	50	23	22	35.0
1CAYX-15-08	12	-08	12.7	1/2	M22x1.5	59	28	27	31.5
1CAYX-18-10	16	-10	15.9	5/8	M26x1.5	56	25	32	31.5
1CAYX-22-12	20	-12	19.0	3/4	M30x2	62	27	36	28.0
1CAYX-28-16	25	-16	25.4	1	M36x2	64	29	41	21.0

1C9YX – Metric female swivel 24° with O-ring

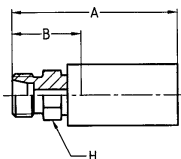
Heavy series – Metric swivel nut – ISO 12151-2

MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size mm inch				Connection type		A mm	B mm	J mm 	Max. WP MPa 
	DN	size	mm	inch	Thread size 	Tube OD mm 				
1C9YX-8-03	5	-03	4.8	3/16	M16x1.5	8	47	22	19	63.0
1C9YX-8-04	6	-04	6.4	1/4	M16x1.5	8	51	24	19	63.0
1C9YX-10-04	6	-04	6.4	1/4	M18x1.5	10	54	27	22	63.0
1C9YX-12-05	8	-05	7.9	5/16	M20x1.5	12	56	28	24	63.0
1C9YX-14-06	10	-06	9.5	3/8	M22x1.5	14	57	30	27	63.0
1C9YX-16-08	12	-08	12.7	1/2	M24x1.5	16	65	34	30	42.0
1C9YX-20-10	16	-10	15.9	5/8	M30x2	20	68	37	36	42.0
1C9YX-25-12	20	-12	19.0	3/4	M36x2	25	77	42	46	42.0
1C9YX-30-16	25	-16	25.4	1	M42x2	30	79	45	50	42.0

1D0YX – Metric male 24°

Light series – ISO 12151-2

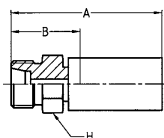


MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size mm inch				Connection type Thread size	A mm	B mm	H mm	Max. WP MPa
1D0YX-6-03	5	-03	4.8	3/16	M12x1.5	48	23	12	25.0
1D0YX-8-04	6	-04	6.4	1/4	M14x1.5	50	23	14	42.5
1D0YX-10-05	8	-05	7.9	5/16	M16x1.5	54	26	17	40.0
1D0YX-12-06	10	-06	9.5	3/8	M18x1.5	54	27	19	35.0
1D0YX-15-08	12	-08	12.7	1/2	M22x1.5	59	28	22	31.0
1D0YX-18-10	16	-10	15.9	5/8	M26x1.5	59	28	27	28.0
1D0YX-22-12	20	-12	19.0	3/4	M30x2	67	32	30	28.0
1D0YX-28-16	25	-16	25.4	1	M36x2	67	32	36	21.0

1D2YX – Metric male 24°

Heavy series – ISO 12151-2

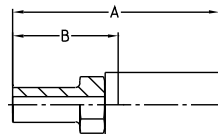


MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

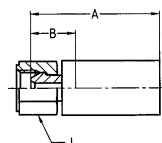
Part No. #	DN size mm inch				Connection type		A mm	B mm	H mm	Max. WP MPa
					Thread size	Tube OD mm				
1D2YX-8-03	5	-03	4.8	3/16	M16x1.5	8	50	25	17	63.0
1D2YX-10-04	6	-04	6.4	1/4	M18x1.5	10	54	27	19	63.0
1D2YX-12-05	8	-05	7.9	5/16	M20x1.5	12	55	27	22	63.0
1D2YX-14-06	10	-06	9.5	3/8	M22x1.5	14	57	30	22	63.0
1D2YX-16-08	12	-08	12.7	1/2	M24x1.5	16	61	30	24	42.0
1D2YX-20-10	16	-10	15.9	5/8	M30x2	20	65	34	30	42.0
1D2YX-25-12	20	-12	19.0	3/4	M36x2	25	71	36	36	42.0
1D2YX-30-16	25	-16	25.4	1	M42x2	30	73	38	46	42.0

11DYX – Metric standpipe

Light series

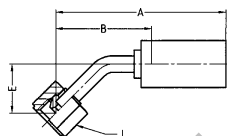
MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN	size	mm	inch	Tube OD mm	A mm	B mm	Max. WP MPa
11DYX-6-03	5	-03	4.8	3/16	6	55	27	25.0
11DYX-6-04	6	-04	6.4	1/4	6	58	30	25.0
11DYX-8-04	6	-04	6.4	1/4	8	57	30	25.0
11DYX-10-05	8	-05	7.9	5/16	10	59	31	25.0
11DYX-10-06	10	-06	9.5	3/8	10	77	32	25.0
11DYX-12-06	10	-06	9.5	3/8	12	79	32	25.0
11DYX-15-08	12	-08	12.7	1/2	15	65	34	25.0
11DYX-18-10	16	-10	15.9	5/8	18	66	35	16.0
11DYX-22-12	20	-12	19.0	3/4	22	72	37	16.0
11DYX-28-16	25	-16	25.4	1	28	74	39	10.0




192YX – BSP female swivel 60° cone**MATERIAL** Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN	size	mm	inch	Connection type Thread size	A mm	B mm	J mm	Max. WP MPa
192YX-4-03	5	-03	4.8	3/16	G 1/4	42	16	17	63.0
192YX-4-04	6	-04	6.3	1/4	G 1/4	44	17	17	63.0
192YX-6-05	8	-05	7.9	3/16	G 3/8	45	17	19	55.0
192YX-6-06	10	-06	9.5	3/8	G 3/8	46	19	22	55.0
192YX-8-06	10	-06	9.5	3/8	G 1/2	46	19	27	43.0
192YX-8-08	12	-08	12.7	1/2	G 1/2	52	21	27	43.0
192YX-12-10	16	-10	15.9	5/8	G 3/4	50	19	32	35.0
192YX-12-12	20	-12	19.0	3/4	G 3/4	56	21	32	35.0
192YX-16-12	20	-12	19.0	3/4	G 1	56	22	41	28.0
192YX-16-16	25	-16	25.4	1	G 1	57	22	41	28.0
192YX-20-16	25	-16	25.4	1	G 1 1/4	58	24	50	25.0

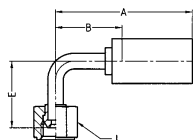
1B1YX – BSP female swivel 60° cone 45° elbow






MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN	size	mm	inch	Connection type Thread size	A mm	B mm	E mm	J mm	Max. WP MPa
										
1B1YX-4-03	5	-03	4.8	3/16	G 1/4	58	32	17	17	63.0
1B1YX-4-04	6	-04	6.4	1/4	G 1/4	69	41	21	17	63.0
1B1YX-6-05	8	-05	7.9	5/16	G 3/8	68	39	17	22	55.0
1B1YX-6-06	10	-06	9.5	3/8	G 3/8	64	36	14	22	55.0
1B1YX-8-06	10	-06	9.5	3/8	G 1/2	65	37	15	27	43.0
1B1YX-8-08	12	-08	12.7	1/2	G 1/2	86	54	18	27	43.0
1B1YX-12-10	16	-10	15.9	5/8	G 3/4	99	68	26	32	35.0
1B1YX-12-12	20	-12	19.0	3/4	G 3/4	117	82	30	32	35.0
1B1YX-16-16	25	-16	25.4	1	G 1	120	85	43	41	28.0
1B1YX-20-16	25	-16	25.4	1	G 1 1/4	116	81	34	50	25.0

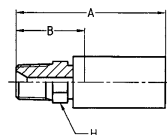
1B2YX – BSP female swivel 60° cone 90° elbow




MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN	size	mm	inch	Connection type Thread size	A mm	B mm	E mm	J mm	Max. WP MPa
										
1B2YX-4-03	5	-03	4.8	3/16	G 1/4	48	22	24	17	63.0
1B2YX-4-04	6	-04	6.4	1/4	G 1/4	58	30	30	17	63.0
1B2YX-6-05	8	-05	7.9	5/16	G 3/8	59	30	28	22	55.0
1B2YX-6-06	10	-06	9.5	3/8	G 3/8	58	30	30	22	55.0
1B2YX-8-06	10	-06	9.5	3/8	G 1/2	58	30	31	27	43.0
1B2YX-8-08	12	-08	12.7	1/2	G 1/2	74	42	38	27	43.0
1B2YX-12-10	16	-10	15.9	5/8	G 3/4	84	53	50	32	35.0
1B2YX-12-12	20	-12	19.0	3/4	G 3/4	100	65	60	32	35.0
1B2YX-16-16	25	-16	25.4	1	G 1	100	65	69	41	28.0
1B2YX-20-16	25	-16	25.4	1	G 1 1/4	100	65	70	50	25.0

101YX – National Pipe Tapered (NPT) male

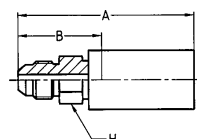


MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.


Part No. #	DN	size	mm	inch	Connection type Thread size 	A mm	B mm	H mm	Max. WP MPa
101YX-2-03	5	-03	4,8	3/16	1/8 - 27NPTF	48	23	12	34,5
101YX-4-03	5	-03	4,8	3/16	1/4 - 18NPTF	52	27	14	34,5
101YX-4-04	6	-04	6,4	1/4	1/4 - 18NPTF	54	27	14	34,5
101YX-6-04	6	-04	6,4	1/4	3/8 - 18NPTF	56	29	19	27,5
101YX-6-05	8	-05	7,9	5/16	3/8 - 18NPTF	57	29	19	27,5
101YX-4-06	10	-06	9,5	3/8	1/4 - 18NPTF	55	28	14	34,5
101YX-6-06	10	-06	9,5	3/8	3/8 - 18NPTF	57	30	19	27,5
101YX-6-08	12	-08	12,7	1/2	3/8 - 18NPTF	61	30	19	27,5
101YX-8-08	12	-08	12,7	1/2	1/2 - 14NPTF	66	35	22	24,0
101YX-12-10	16	-10	15,9	5/8	3/4 - 14NPTF	66	35	27	21,0
101YX-12-12	20	-12	19,0	3/4	3/4 - 14NPTF	70	35	27	21,0
101YX-16-16	25	-16	25,4	1	1 - 11 1/2NPTF	78	42	36	17,0

PTFE / FEP

103YX – SAE (JIC) 37° male

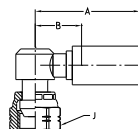


MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN	size	mm	inch	Connection type Thread size 	A mm	B mm	H mm	Max. WP MPa
103YX-4-03	5	-03	4,8	3/16	7/16 - 20UNF	52	27	14	41,0
103YX-5-04	6	-04	6,4	1/4	1/2 - 20UNF	56	29	14	41,0
103YX-6-05	8	-05	7,9	5/16	9/16 - 18UNF	57	29	17	34,5
103YX-8-06	10	-06	9,5	3/8	3/4 - 16UNF	60	33	22	34,5
103YX-10-08	12	-08	12,7	1/2	7/8 - 14UNF	70	38	24	34,5
103YX-12-10	16	-10	15,9	5/8	1 1/16 - 12UNF	71	40	30	34,5
103YX-16-12	20	-12	19,0	3/4	1 5/16 - 12UNF	76	41	36	27,5
103YX-20-16	25	-16	25,4	1	1 5/8 - 12UNF	78	43	46	20,0



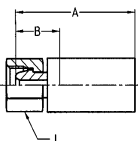
1B4YX – BSP female swivel 60° cone 90° compact elbow



MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN	size	mm	inch	Connection type Thread size	A mm	B mm	J mm	Max. WP MPa
1B4YX-4-04	6	-04	6.3	1/4	G 1/4	46	19	19	63.0
1B4YX-6-05	8	-05	7.9	3/16	G 3/8	51	23	22	55.0
1B4YX-6-06	10	-06	9.5	3/8	G 3/8	51	24	22	55.0
1B4YX-8-08	12	-08	12.7	1/2	G 1/2	57	26	27	43.0

1U0YX – BSP female swivel (ballnose) BSP swivel nut

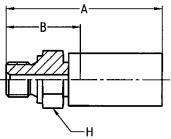


MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
For fittings as mentioned above, but with stainless steel nipple
(AISI 303), please add **C2W** to the Part No. Example: 1U0YX-4-03 **C2W**.
Other materials available on request.

Part No. #	DN	size	mm	inch	Connection type Thread size	A mm	B mm	J mm	Max. WP MPa
1U0YX-2-03	5	-03	4.8	3/16	G 1/8	43	18	17	41.0
1U0YX-4-03	5	-03	4.8	3/16	G 1/4	42	16	17	63.0
1U0YX-4-04	6	-04	6.4	1/4	G 1/4	45	17	17	63.0
1U0YX-6-03	5	-03	4.8	3/16	G 3/8	45	17	17	55.0
1U0YX-6-04	6	-04	6.4	1/4	G 3/8	45	17	17	55.0
1U0YX-6-05	8	-05	7.9	5/16	G 3/8	45	17	19	55.0
1U0YX-6-06	10	-06	9.5	3/8	G 3/8	48	19	22	55.0
1U0YX-8-06	10	-06	9.5	3/8	G 1/2	48	19	27	43.0
1U0YX-8-08	12	-08	12.7	1/2	G 1/2	53	21	27	43.0
1U0YX-10-08	12	-08	12.7	1/2	G 5/8	51	20	27	35.0
1U0YX-12-10	16	-10	15.9	5/8	G 3/4	50	19	32	35.0
1U0YX-12-12	20	-12	19.0	3/4	G 3/4	56	21	32	35.0
1U0YX-16-12	20	-12	19.0	3/4	G 1	56	22	41	28.0
1U0YX-16-16	25	-16	25.4	1	G 1	57	22	41	28.0
1U0YX-20-16	25	-16	25.4	1	G 1 1/4	58	24	50	21.0



1D9YX – BSP male
DIN 3852 Form A



MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

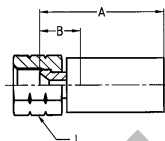
Part No.	DN size				Connection type	A	B	H	Max. WP
#	mm	inch			Thread size	mm	mm	mm	MPa
1D9YX-2-03	5	-03	4.8	3/16	G 1/8	48	22	14	55.0
1D9YX-4-03	5	-03	4.8	3/16	G 1/4	54	29	19	63.0
1D9YX-4-04	6	-04	6.4	1/4	G 1/4	58	29	19	63.0
1D9YX-6-05	8	-05	7.9	5/16	G 3/8	58	29	22	55.0
1D9YX-4-06	10	-06	9.5	3/8	G 1/4	57	30	19	63.0
1D9YX-6-06	10	-06	9.5	3/8	G 3/8	58	30	22	55.0
1D9YX-8-06	10	-06	9.5	3/8	G 1/2	60	33	27	43.0
1D9YX-8-08	12	-08	12.7	1/2	G 1/2	64	33	27	43.0
1D9YX-12-10	16	-10	15.9	5/8	G 3/4	66	35	32	35.0
1D9YX-12-12	20	-12	19.0	3/4	G 3/4	72	37	32	35.0
1D9YX-16-12	20	-12	19.0	3/4	G 1	74	39	41	28.0
1D9YX-20-16	25	-16	25.4	1	G 1 1/4	76	41	50	21.0




PTFE / FEP



106YX – SAE (JIC) 37° female swivel UNF swivel nut

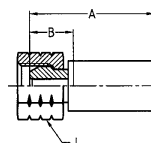
MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.






Part No.	DN	size	mm	inch	Connection type Thread size	A mm	B mm	J mm	Max. WP MPa
#									
106YX-4-03	5	-03	4.8	3/16	7/16 - 20UNF	40	15	17	41.0
106YX-5-04	6	-04	6.4	1/4	1/2 - 20UNF	42	15	19	41.0
106YX-6-05	8	-05	7.9	5/16	9/16 - 18UNF	45	17	19	34.5
106YX-6-06	10	-06	9.5	3/8	9/16 - 18UNF	47	18	19	34.5
106YX-8-06	10	-06	9.5	3/8	3/4 - 16UNF	46	19	24	34.5
106YX-10-08	12	-08	12.7	1/2	7/8 - 14UNF	49	18	27	34.5
106YX-12-10	16	-10	15.9	5/8	1 1/16 - 12UNF	50	19	32	34.5
106YX-16-12	20	-12	19.0	3/4	1 5/16 - 12UNF	56	22	41	27.5
106YX-20-16	25	-16	25.4	1	1 5/8 - 12UNF	56	22	50	20.0

107YX – NPSM female swivel

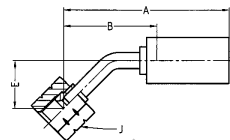
MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
For fittings as mentioned above, but with stainless steel nipple
(AISI 303), please add **C2W** to the Part No. Example: 107YX-4-04 **C2W**.
Other materials available on request.




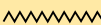


Part No.	DN	size	mm	inch	Connection type Thread size	A mm	B mm	J mm	Max. WP MPa
#									
107YX-4-03	5	-03	4.8	3/16	1/4 - 18NPSM	44	19	17	34.5
107YX-2-03	5	-03	4.8	3/16	1/8 - 27NPSM	47	21	17	34.5
107YX-4-04	6	-04	6.4	1/4	1/4 - 18NPSM	47	19	19	34.5
107YX-6-05	8	-05	7.9	5/16	3/8 - 18NPSM	48	20	22	27.5
107YX-6-06	10	-06	9.5	3/8	3/8 - 18NPSM	50	21	22	27.5
107YX-8-08	12	-08	12.7	1/2	1/2 - 14NPSM	51	19	27	24.0
107YX-12-10	16	-10	15.9	5/8	3/4 - 14NPSM	53	22	32	21.0
107YX-12-12	20	-12	19.0	3/4	3/4 - 14NPSM	59	24	32	21.0



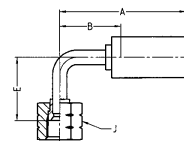
137YX – SAE (JIC) 37° female swivel 45° elbow – UNF swivel nut







MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size mm inch				Connection type Thread size	A mm	B mm	E mm	J mm	Max. WP MPa
										
137YX-4-03	5	-03	4.8	3/16	7/16 - 20UNF	57	31	16	17	41.0
137YX-5-04	6	-04	6.4	1/4	1/2 - 20UNF	69	41	21	19	41.0
137YX-6-05	8	-05	7.9	5/16	9/16 - 18UNF	67	38	16	19	34.5
137YX-8-06	10	-06	9.5	3/8	3/4 - 16UNF	65	37	15	24	34.5
137YX-10-08	12	-08	12.7	1/2	7/8 - 14UNF	81	49	19	27	34.5
137YX-12-10	16	-10	15.9	5/8	1 1/16 - 12UNF	96	65	27	32	34.5
137YX-16-12	20	-12	19.0	3/4	1 5/16 - 12UNF	114	79	32	41	27.5
137YX-20-16	25	-16	25.4	1	1 5/8 - 12UNF	113	78	36	50	20.0

139YX – SAE (JIC) 37° female swivel 90° elbow – UNF swivel nut



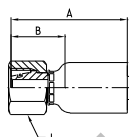
MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size mm inch				Connection type Thread size	A mm	B mm	E mm	J mm	Max. WP MPa
										
139YX-4-03	5	-03	4.8	3/16	7/16 - 20UNF	48	22	24	17	41.0
139YX-5-04	6	-04	6.4	1/4	1/2 - 20UNF	58	30	31	19	41.0
139YX-6-05	8	-05	7.9	5/16	9/16 - 18UNF	59	30	28	19	34.5
139YX-8-06	10	-06	9.5	3/8	3/4 - 16UNF	58	30	31	24	34.5
139YX-10-08	12	-08	12.7	1/2	7/8 - 14UNF	74	42	39	27	34.5
139YX-12-10	16	-10	15.9	5/8	1 1/16 - 12UNF	84	53	52	32	34.5
139YX-16-12	20	-12	19.0	3/4	1 5/16 - 12UNF	100	65	62	41	27.5
139YX-20-16	25	-16	25.4	1	1 5/8 - 12UNF	100	65	73	50	20.0



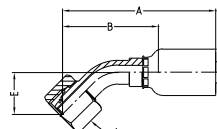
1CAF6 – Metric female swivel 24° with O-ring

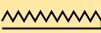

Straight – Light Series – Metric swivel nut – ISO 12151-2-SWS-L – DKOL

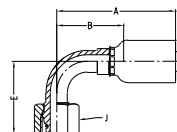


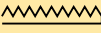

MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size				Connection type		A mm	B mm	J mm	Max. WP MPa
	mm	inch	Thread size	Tube OD mm						
1CAF6-8-4	6	-4	6.4	1/4	M14x1.5	8	45	22	17	42.5
1CAF6-8-5	8	-5	7.9	5/16	M14x1.5	8	55	27	17	42.5
1CAF6-10-5	8	-5	7.9	5/16	M16x1.5	10	49	21	19	40.0
1CAF6-12-6	10	-6	9.5	3/8	M18x1.5	12	49	21	22	35.0
1CAF6-12-8	12	-8	12.7	1/2	M18x1.5	12	55	27	22	35.0
1CAF6-15-8	12	-8	12.7	1/2	M22x1.5	15	52	24	27	31.5
1CAF6-15-8V	12	-8	12.7	1/2	M22x1.5	15	52	24	27	31.5
1CAF6-15-10	16	-10	15.9	5/8	M22x1.5	15	64	30	27	31.5
1CAF6-18-10	16	-10	15.9	5/8	M26x1.5	18	57	23	32	31.5
1CAF6-18-10V	16	-10	15.9	5/8	M26x1.5	18	57	23	32	31.5
1CAF6-22-10	16	-10	15.9	5/8	M30x2	22	59	25	36	28.0
1CAF6-22-12	19	-12	19.1	3/4	M30x2	22	59	25	36	28.0
1CAF6-22-12V	19	-12	19.1	3/4	M30x2	22	59	25	36	28.0
1CAF6-28-16	25	-16	25.4	1	M36x2	28	62	33	41	21.0
1CAF6-35-20	31	-20	31.8	1 1/4	M45x2	35	69	31	50	16.0
1CAF6-42-20	31	-20	31.8	1 1/4	M52x2	42	72	34	60	16.0

1CEF6 – Metric female swivel 24° with O-ring45° elbow – Light series – Metric swivel nut –
ISO 12151-2-SWE -L – DKOL 45°**MATERIAL** Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size mm inch				Connection type		A mm	B mm	E mm	J mm	Max. WP MPa
	DN	size	mm	inch	Thread size 	Tube OD mm 					
1CEF6-10-5	8	-5	7.9	5/16	M16x1.5	10	73	45	16	19	40.0
1CEF6-12-6	10	-6	9.5	3/8	M18x1.5	12	74	46	19	22	35.0
1CEF6-15-8	12	-8	12.7	1/2	M22x1.5	15	76	48	23	27	31.5
1CEF6-15-10	16	-10	15.9	5/8	M22x1.5	15	90	56	27	27	31.5
1CEF6-18-10	16	-10	15.9	5/8	M26x1.5	18	86	52	24	32	31.5
1CEF6-22-12	19	-12	19.1	3/4	M30x2	22	97	63	26	36	28.0
1CEF6-28-16	25	-16	25.4	1	M36x2	28	113	83	32	41	28.0

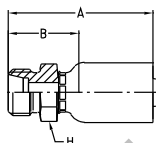
1CFF6 – Metric female swivel 24° with O-ring90° elbow – Light series – Metric swivel nut –
ISO 12151-2-SWE-L – DKOL 90°**MATERIAL** Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size mm inch				Connection type		A mm	B mm	E mm	J mm	Max. WP MPa
	DN	size	mm	inch	Thread size 	Tube OD mm 					
1CFF6-10-5	8	-5	7.9	5/16	M16x1.5	10	66	38	30	19	40.0
1CFF6-12-6	10	-6	9.5	3/8	M18x1.5	12	63	36	36	22	35.0
1CFF6-15-8	12	-8	12.7	1/2	M22x1.5	15	66	37	44	27	31.5
1CFF6-15-8V	12	-8	12.7	1/2	M22x1.5	15	66	37	44	27	31.5
1CFF6-18-10	16	-10	15.9	5/8	M26x1.5	18	76	42	52	32	31.5
1CFF6-18-10V	16	-10	15.9	5/8	M26x1.5	18	76	42	52	32	31.5
1CFF6-22-10	16	-10	15.9	5/8	M30x2	22	76	42	47	36	28.0
1CFF6-22-12	19	-12	19.1	3/4	M30x2	22	88	55	55	36	28.0
1CFF6-22-12V	19	-12	19.1	3/4	M30x2	22	88	58	55	36	28.0
1CFF6-28-16	25	-16	25.4	1	M36x2	28	101	72	71	41	21.0
1CFF6-35-20	31	-20	31.8	1 1/4	M45x2	35	124	86	79	50	16.0



1D0F6 – Metric male 24°

Straight – Light series – Rigid – ISO 12151-2-S-L – CEL

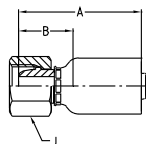


MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size mm inch				Connection type		A mm	B mm	H mm	Max. WP MPa
	DN	size	mm	inch	Thread size	Tube OD mm				
1D0F6-15-8	12	-8	12.7	1/2	M22x1.5	15	52	24	22	31.5
1D0F6-18-10	16	-10	15.9	5/8	M26x1.5	18	61	29	27	31.5
1D0F6-22-12	19	-12	19.1	3/4	M30x2	22	65	35	30	28.0

1C3F6 – Metric female swivel 24°/60°

Straight (Ball Nose for 24° or 60° Cone) – Light series – DKL

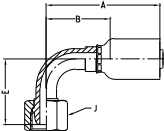


MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size mm inch				Connection type		A mm	B mm	J mm	Max. WP MPa
	DN	size	mm	inch	Thread size	Tube OD mm				
1C3F6-6-4	6	-4	6.4	1/4	M12x1.5	6	44	21	14	25.0
1C3F6-8-4	6	-4	6.4	1/4	M14x1.5	8	41	18	17	25.0
1C3F6-10-5	8	-5	7.9	5/16	M16x1.5	10	46	19	19	25.0
1C3F6-12-6	10	-6	9.5	3/8	M18x1.5	12	47	19	22	25.0
1C3F6-15-8	12	-8	12.7	1/2	M22x1.5	15	47	21	27	25.0
1C3F6-18-10	16	-10	15.9	5/8	M26x1.5	18	54	23	32	16.0
1C3F6-22-12	19	-12	19.1	3/4	M30x2	22	57	27	36	16.0



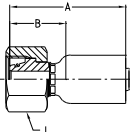
1C5F6 – Metric female swivel 24°/60°
 90° elbow (Ball Nose for 24° or 60° Cone) – Light series – DKL 90°



MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
 Other materials available on request.

Part No. #	DN size mm inch				Connection type		A mm	B mm	E mm	J mm	Max. WP MPa
	DN	size	mm	inch	Thread size	Tube OD mm					
1C5F6-6-4	6	-4	6.4	1/4	M12x1.5	6	49	26	29	14	25.0
1C5F6-8-4	6	-4	6.4	1/4	M14x1.5	8	49	26	26	17	25.0
1C5F6-10-5	8	-5	7.9	5/16	M16x1.5	10	66	39	33	19	25.0
1C5F6-15-8	12	-8	12.7	1/2	M22x1.5	15	65	37	39	27	25.0
1C5F6-18-10	16	-10	15.9	5/8	M26x1.5	18	76	44	43	32	16.0
1C5F6-22-12	19	-12	19.1	3/4	M30x2	22	88	58	50	36	16.0

1C9F6 – Metric female swivel 24° with O-ring
 Straight – Heavy series – ISO 12151-2-SWS-S – DKOS



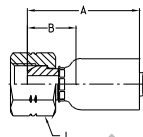
MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
 Other materials available on request.

Part No. #	DN size mm inch				Connection type		A mm	B mm	J mm	Max. WP MPa
	DN	size	mm	inch	Thread size	Tube OD mm				
1C9F6-16-8	12	-8	12.7	1/2	M24x1.5	16	53	25	30	42.0






192F6 – BSP female Parallel Pipe swivel 60° cone

Straight – BS5200-A – DKR

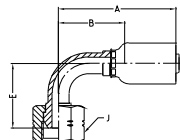


MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.




Part No. #	DN	size	mm	inch	Connection type Thread size 	A mm	B mm	J mm 	Max. WP MPa 
192F6-8-8	12	-8	12.7	1/2	1/2x14	49	20	27	43.0
192F6-10-10	16	-10	15.9	5/8	5/8x14	55	24	30	42.0
192F6-12-12	19	-12	19.1	3/4	3/4x14	57	27	32	35.0

1B2F6 – BSP female Parallel Pipe swivel 60° cone

90° elbow – BS 5200-B – DKR 90°



MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

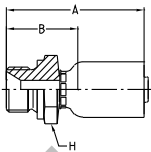
Part No. #	DN	size	mm	inch	Connection type Thread size 	A mm	B mm	E mm	J mm 	Max. WP MPa 
1B2F6-8-8	12	-8	12.7	1/2	1/2x14	67	39	41	27	43.0
1B2F6-12-12	19	-12	19.1	3/4	3/4x14	89	58	53	32	35.0



Fittings
1D9F6 – 103F6

1D9F6 – BSP male Parallel Pipe BS5200 – AGR

MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

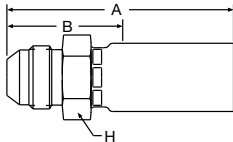


Part No. #	DN	size	mm	inch	Connection type Thread size	A mm	B mm	H mm	Max. WP MPa
1D9F6-8-8	12	-8	12.7	1/2	1/2x14	57	29	27	43.0
1D9F6-10-10	16	-10	15.9	5/8	5/8x14	67	35	30	35.0
1D9F6-12-12	19	-12	19.1	3/4	3/4x14	72	42	32	35.0

PTFE / FEP

103F6 – Metric male (JIC) 37° Rigid – Straight – Heavy series – ISO12151-5-S – AGJ

MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

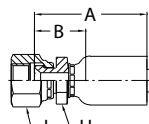


Part No. #	DN	size	mm	inch	Connection type Thread size	A mm	B mm	H mm	Max. WP MPa
103F6-8-8-SM	12	-8	12.7	1/2	3/4x16	58	30	22	35.0
103F6-10-10-SM	16	-10	15.9	5/8	7/8x14	70	39	24	35.0
103F6-12-12-SM	19	-12	19.1	3/4	1 1/16x12	79	45	32	35.0







106F6 – (JIC) 37° female – Swivel

Straight – ISO12151-5-SWS – DKJ

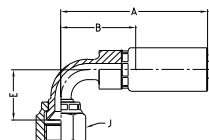


MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.





Part No. #	DN	size	mm	inch	Connection type Thread size 	A mm	B mm	H mm 	J mm 	Max. WP MPa 
106F6-6-6-SM	10	-6	9.5	3/8	9/16x18	56	29	17	19	34.5
106F6-8-8-SM	12	-8	12.7	1/2	3/4x16	62	34	22	22	34.5
106F6-10-10-SM	16	-10	15.9	5/8	7/8x14	73	42	22	27	34.5
106F6-12-12-SM	19	-12	19.1	3/4	1 1/16x12	75	44	27	32	34.5

139F6 – (JIC) 37° female swivel

90° elbow – ISO 12151-5-SWES – DKJ 90°



MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN	size	mm	inch	Connection type Thread size 	A mm	B mm	E mm 	J mm 	Max. WP MPa 
139F6-6-6-SM	10	-6	9.5	3/8	9/16x18	56	29	23	19	34.5
139F6-8-8-SM	12	-8	12.7	1/2	3/4x16	60	32	29	22	34.5
139F6-10-10-SM	16	-10	15.9	5/8	7/8x14	72	38	32	27	34.5
139F6-12-12-SM	19	-12	19.1	3/4	1 1/16x12	96	65	48	32	34.5
139F6-16-16-SM	25	-16	25.4	1	1 5/16x12	98	68	56	41	27.5

Chapter D***Hose and Fittings for Alternative Fuels***

Introduction	.....	D-2
 SCR hose		
SCR	– Parflex SCR Hose Assemblies.....	D-4
 CNG hose		
5CNG	– Compressed natural gas dispense hose	D-5
 LPG hose		
8LPG	– Liquified propane gas and natural gas hose	D-6
 Fittings		
CG series	.....	D-7

Introduction

Parker thermoplastic hoses help to achieve tighter emission standards. To support future emission levels we have designed a wide range of hoses for alternative fuels, like compressed natural gas (CNG) or liquified propane gas (LPG).

The alternative fuel hoses can be used as fuel transfer lines onboard, as well as refueling lines on dispensing equipment.

Selective catalytic reduction systems help to reduce NOx emission level of diesel engines. Parker designed a range of heated and non-heated SCR hoses for DEF/Adblue® transfer.

Application



- Fuel and media transfer on board of trucks, mobile vehicles, busses and cars
- Fuel transfer lines on stationary equipment, like compressors or gensets
- Dispensing lines for refueling equipment used on workshop equipment and public gas stations

Features

- Working pressures up to 34.5 Mpa for CNG dispensing lines
- Conductive hose materials available
- Approvals according to ECE R67 & R110, CSA, AS/NZS 1869
- Flame retardant cover, abrasion guards and heatshield possible
- Preformed hoses on request



Benefits

- High design factor (4:1)
- Large scale field experience for all hoses
- Wide range of products for both refueling and onboard use
- Increased productivity and high quality assembly with preformed Polyflex lines
- High performance materials
- Longer lifetime
- Less leakages



Parflex SCR Hose Assemblies

Electrically Heated



MAIN FEATURES

- Consistent thaw - more reliable than coolant heated lines.
- Multiple options available to fit every application.
- Protective Overmolding
 - Additional protection for water ingress and damage of electrical components
 - Bolsters fitting strength and impact resistance
- Corrugated heat shield offers abrasion resistance.

APPLICATIONS

Heating and conveying DEF (Diesel Exhaust Fluid) throughout the SCR system on commercial vehicles

CONSTRUCTION

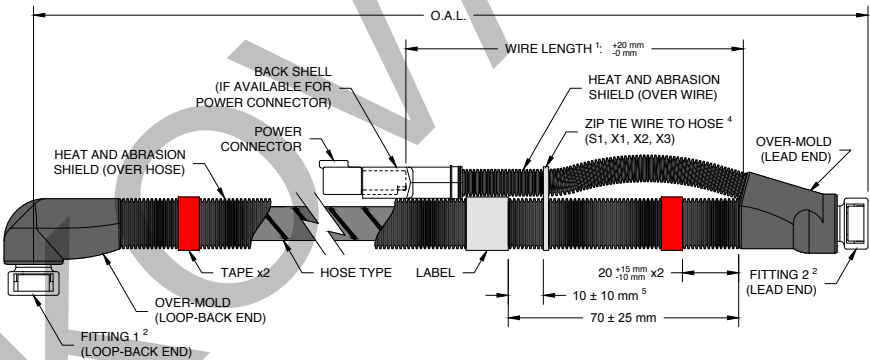
Core tube : Polyamid in 4 and 6mm / EPDM in 4 / 5.5 and 7.5mm
Pressure reinforcement : Fabric

Cover : Thermoplastic elastomeric
Colour : Black

TEMPERATURE RANGE

Suction/return lines: -40° to 70°C
Pressure lines: -40° to 130°C

Configurator for SCR Hose Assemblies



HOSE FAMILY	HOSE TYPE	O.A.L. CODE	FITTING 1 ²	FITTING 2 ²	POWER CONNECTOR	VOLTAGE	WIRE LENGTH ¹	SPECIAL REQUIREMENT
SCR	P2	100	B	A	FA	1	15	X1

NOTES

- Please contact PFDE to define your custom layout and to create a dedicated part number.
- For the available options please refer to the SCR Specification Sheet.
- Please find further information at www.scrhose.com

5CNG – Compressed natural gas hose

According to NFPA 52, AGA 1-93 and AGA/CGA,

ANSI Standards 4.2/12.52,

Approved according to CSA / ECE R110



MAIN FEATURES

- High flexibility, compact construction
- Strong polyurethane cover for high wear and tear resistance
- Working pressure 34.5 MPa
- Also available as twinline or multiline hose
- Customized preforming available (see Bulletin 5200-Preformed)
- Electrically conductive

APPLICATIONS

Dispense hose for natural gas and other gases in stationary and mobile applications, for example:
Natural gas fuelling stations, compressors, chemical plants, gas processing installations and vehicles.

CONSTRUCTION

- Core tube** : Electrically conductive polymer
Pressure reinforcement : Two or more braided layers of high tensile synthetic fibre
Cover : Polyurethane, pinpricked
Colour : Red, other colours available on request

TEMPERATURE RANGE

-40°C up to +82°C

[Visite the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
5CNG-4	6	-04	6.4	1/4	14.0	34.5	5,000	138.0	20,000	51	0.11	CG*
5CNG-6	10	-06	9.9	3/8	16.0	34.5	5,000	138.0	20,000	76	0.13	CG*
5CNG-8	12	-08	12.7	1/2	22.7	34.5	5,000	138.0	20,000	102	0.31	CG*
5CNG-12	20	-12	19.3	3/4	29.2	34.5	5,000	138.0	20,000	191	0.36	CG*
5CNG-16	25	-16	26.0	1	40.0	34.5	5,000	138.0	20,000	254	0.53	CG*

*: Only available on request

NOTES

- Not for use in paint spray applications
- For refuelling systems additionally hose guards and warning tag must be ordered
- Twinline constructions for return lines available
- Factory made assemblies only

8LPG – Liquefied propane gas and natural gas hose
Certified acc. to ECE R 67 class 1,
ECE R110 and AS/NZS 1869



MAIN FEATURES

- Compact construction, high flexibility
- Working pressure 3.0 MPa
- Highly resistant polymer core tube
- Strong polymer cover for high wear and tear resistance, weatherproof, UV- and ozone-resistant
- Customized preforming available (see Bulletin 5200-Preformed)

APPLICATIONS

LPG and CNG system for cars, trucks, busses and forklift trucks

CONSTRUCTION

- Core tube** : Polyamide
Pressure reinforcement : One layer of high tensile synthetic fibre
- Cover** : Polyamide, pinpricked; opt. flame resist. cover Type -FR(*)
Colour : Black, other colours available on request

TEMPERATURE RANGE

-25°C up to +100°C (short time 125°C)

[Visite the webpage](#)

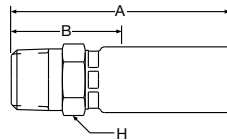
Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
8LPG-3	5	-03	4.8	3/16	8.0	3.0	435	15.0	2,175	50	0.033	PX-LPG
8LPG-4	6	-04	6.3	1/4	9.8	3.0	435	15.0	2,175	75	0.043	PX-LPG
8LPG-5	8	-05	7.9	5/16	12.2	3.0	435	15.0	2,175	90	0.067	PX-LPG
8LPG-6	10	-06	9.5	3/8	13.7	3.0	435	15.0	2,175	100	0.075	PX-LPG
8LPG-3-FR*	5	-03	4.8	3/16	9.5	3.0	435	15.0	2,175	50	0.058	PX-LPG
8LPG-4-FR*	6	-04	6.3	1/4	11.5	3.0	435	15.0	2,175	75	0.071	PX-LPG
8LPG-5-FR*	8	-05	7.9	5/16	13.8	3.0	435	15.0	2,175	90	0.085	PX-LPG
8LPG-6-FR*	10	-06	9.5	3/8	15.3	3.0	435	15.0	2,175	100	0.090	PX-LPG

*Improved mechanical and chemical protection through flame resistant 2nd outer cover





NOTES

- Factory made assemblies only

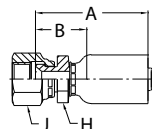
101CG – National Pipe Tapered (NPT) male








MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size mm inch				Connection type		A mm	B mm	H inch	Max. WP MPa
	DN	size	mm	inch	Thread size	Tube OD inch				
										
101CG-2-3	5	-03	4.8	3/16	1/8 - 27 NPTF	1/8	49.4	25.0	9/16	82.7
101CG-4-3	5	-03	4.8	3/16	1/4 - 18 NPTF	1/4	53.9	30.0	11/16	82.7
101CG-4-4	6	-04	6.4	1/4	1/4 - 18 NPTF	1/4	58.8	30.0	11/16	82.7
101CG-6-6	10	-06	9.5	3/8	3/8 - 18 NPTF	3/8	67.6	33.0	3/4	69.0
101CG-8-8	12	-08	12.7	1/2	1/2 - 14 NPTF	1/2	78.6	39.0	15/16	69.0
101CG-12-12	20	-12	19.0	3/4	3/4 - 14 NPTF	3/4	99.4	43.0	1 1/4	51.7
101CG-16-16	25	-16	25.4	1	1 - 11 1/2 NPTF	1	120.9	51.0	1 3/4	44.8

106CG – SAE (JIC) 37° female swivel UNF swivel nut

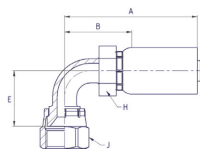


MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size mm inch				Connection type		A mm	B mm	H inch	J inch	Max. WP MPa
	DN	size	mm	inch	Thread size	Tube OD inch					
											
106CG-4-3	5	-03	4.8	3/16	7/16 - 20 UNF	1/4	56.7	33.0	9/16	9/16	41.4
106CG-4-4	6	-04	6.4	1/4	7/16 - 20 UNF	1/4	60.0	31.0	5/8	9/16	41.4
106CG-6-6	10	-06	9.5	3/8	9/16 - 18 UNF	3/8	68.6	34.0	11/16	11/16	34.5
106CG-8-8	12	-08	12.7	1/2	3/4 - 16 UNF	1/2	78.1	38.0	7/8	7/8	34.5
106CG-12-12	20	-12	19.0	3/4	1 1/16-12 UNF	3/4	105.9	46.0	1 1/4	1 5/16	34.5
106CG-16-16	25	-16	25.4	1	1 5/16 - 12 UNF	1	125.3	56.0	1 3/4	1 5/8	27.6



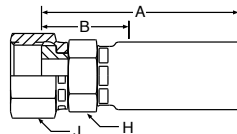
139CG – SAE (JIC) 37° female swivel 90° elbow – UNF swivel nut



MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size mm inch				Connection type		A mm	B mm	E mm	H inch	J inch	Max. WP MPa
	DN	size	mm	inch	Thread size	Tube OD inch						
139CG-4-4	6	-04	6.4	1/4	7/16 - 20 UNF	1/4	63.7	35.0	17.3	5/8	9/16	41.4
139CG-6-6	10	-06	9.5	3/8	9/16 - 18 UNF	3/8	73.2	38.0	21.6	3/4	11/16	34.5

1JCCG – O-Lok® ORFS swivel nut Short version – UNF swivel nut – ISO 12151-1

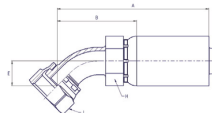


MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size mm inch				Connection type		A mm	B mm	H inch	J inch	Max. WP MPa
	DN	size	mm	inch	Thread size	Tube OD inch					
1JCCG-4-4	6	-04	6.4	1/4	9/16 - 18 UNF	1/4	53.2	25.0	5/8	11/16	63.0
1JCCG-6-6	10	-06	9.5	3/8	11/16 - 16 UNF	3/8	62.7	28.0	11/16	13/16	63.0
1JCCG-8-8	12	-08	12.7	1/2	13/16 - 16 UNF	1/2	69.9	30.0	7/8	15/16	63.0
1JCCG-12-12	20	-12	19.0	3/4	1 - 14 UNF	3/4	97.9	38.0	1 1/4	1 3/8	41.4
1JCCG-16-16	25	-16	25.4	1	1 7/16 - 12 UNF	1	118.3	48.0	1 3/4	1 5/8	41.4

1J7CG – O-Lok® ORFS swivel nut

45° elbow – UNF swivel nut – ISO 12151-1

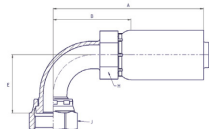


MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size				Connection type		A mm	B mm	E mm	H inch	J inch	Max. WP MPa
	mm	inch	Thread size	Tube OD inch								
1J7CG-6-6	10	-06	9.5	3/8	11/16 - 16 UNF	3/8	75.6	41.0	10.9	3/4	13/16	63.0
1J7CG-8-8	12	-08	12.7	1/2	13/16 - 16 UNF	1/2	88.7	49.0	15.0	7/8	15/16	63.0
1J7CG-12-12	20	-12	19.0	3/4	1 - 14 UNF	3/4	114.5	56.0	20.5	1 1/8	1 3/8	41.4

1J9CG – O-Lok® ORFS swivel nut

90° elbow – UNF swivel nut – ISO 12151-1



MATERIAL Galvanised steel with transparent Cr(VI)-free plating.
Other materials available on request.

Part No. #	DN size				Connection type		A mm	B mm	E mm	H inch	J inch	Max. WP MPa
	mm	inch	Thread size	Tube OD inch								
1J9CG-4-4	6	-04	6.4	1/4	9/16 - 18 UNF	1/4	67.8	39.0	21.1	5/8	11/16	63.0
1J9CG-6-6	10	-06	9.5	3/8	11/16 - 16 UNF	3/8	72.1	37.0	23.1	3/4	13/16	63.0
1J9CG-12-12	20	-12	19.0	3/4	1 - 14 UNF	3/4	112.3	54.0	48.0	1 1/8	1 3/8	41.4
1J9CG-16-16	25	-16	25.4	1	1 7/16 - 12 UNF	1	147.2	76.0	58.4	1 3/4	1 5/8	41.4

Alternative fuels

Chapter E

Hose and Fittings for Hydraulic and Industrial Applications

Introduction	E-2
Part 1 – Small bore hose/mini-hydraulic hose	E-4
Part 2 – Medium pressure hose	E-7
Part 3 – High pressure hose	E-16
Part 4 – Paint spray hose	E-29
Part 5 – Gas hose	E-35
Part 6 – Hose fittings	E-43

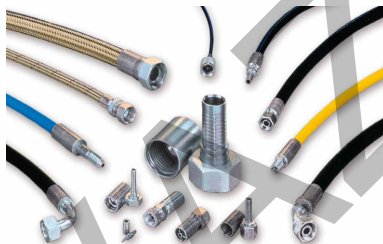
Introduction

The Parker thermoplastic hose portfolio for hydraulic and industrial applications offers an excellent solution for the individual industry requirements.

Advanced materials and production technologies are applied to fulfill demanding market requirements such as reducing weight, long lasting hoses against aggressive media and environmental influence. The hose range covers mini-hydraulic hose types starting with 2 mm as well as high, working pressure hose up to 63 MPa.

In addition Parker offers not only hose but also customized solutions such as multiline hoses, preformed hoses and hose bundles.

For hose with working pressures of 70 MPa and higher please refer to catalog "Thermoplastic Hoses for Ultra High Pressure".



Application



- Industrial equipment such as
 - Machine tools
 - Wind turbines
 - Metal plants
- Transportation
- Mobile Offroad machines such as
 - Construction Equipment
 - Material Handling
 - Agriculture
- Paint spray equipment
- Gas handling & transfer

Features

- Extremely low weight
- Excellent resistance against aggressive media
- Mini hydraulic hose starting from 2 mm ID
- Working pressures up to 63 Mpa
- Very good resistance against aggressive environmental influences such as UV, Ozone, Seawater
- Excellent flexibility
- Electrical non-conductive versions
- Temperature range from -57 °C up to +120 °C
- Small hose outside diameter
- Small bend radius

**Benefits**

- Weight reduction / optimization
- Safe and long lasting hose installations
- Fast and easy assembly
- Optimized overall machine design with less space available in compact equipment
- Overall cost and weight reduction
- Excellent abrasion and chemical resistance



Part 1 – Small bore hose/mini-hydraulic hose

2010H – Small bore hose/mini-hydraulic hose up to 21 MPa.....E-5
2020N – Small bore hose/mini-hydraulic hose up to 63 MPa.....E-6

Hydraulic / Industrial

2010H – Small bore hose/mini-hydraulic hose**MAIN FEATURES**

- Small dimensions
- Small bend radii

APPLICATIONS

Medium pressure services, when **very small hose outer diameters** are required.
Versatile usage in mini-hydraulic and gas applications, for example:
Lubricating systems, measuring systems and diagnosis systems.

CONSTRUCTION

Core tube : Polyester elastomer
Pressure reinforcement : One braided layer of high tensile synthetic fibre
Cover : Polyurethane pinpricked
Colour : black

TEMPERATURE RANGE

-40°C up to +100°C for petroleum or synthetic hydraulic fluids.

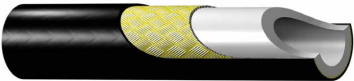
[Visite the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
2010H-025V00	4	-025	4	5/32	8.3	21.0	3,045	84.0	12,180	35	0.052	EX

NOTES

-

2020N – Small bore hose/mini-hydraulic hose
(high pressure)



- MAIN FEATURES**
- Small dimensions
 - Small bend radii
 - Working pressures up to 63 MPa

APPLICATIONS Medium pressure services, when **very small hose outer diameters** are required.
Versatile usage in mini-hydraulic and gas applications, for example:
Lubricating systems, measuring systems and diagnosis systems.

- CONSTRUCTION**
- Core tube** : Polyamide
Pressure reinforcement : One braided layer of high tensile synthetic fibre
- Cover** : Polyamide, pinpricked
Colour : black

TEMPERATURE RANGE -40°C up to +100°C for petroleum or synthetic hydraulic fluids.

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
2020N-012V30	2	-012	2	5/64	4.9	50.0	7,250	200.0	29,000	20	0.016	EX
2020N-016V30	2,5	-016	2.5	3/32	5.9	40.0	5,800	160.0	23,200	20	0.016	EX
2020N-02V30	3	-02	2.9	1/8	6.0	40.0	5,800	160.0	23,200	30	0.023	EX
2020N-025V30	4	-025	4	5/32	8.1	44.0	6,380	176.0	25,520	40	0.042	EX
2020N-012V50	2	-012	2	5/64	4.9	63.0	9,135	200.0	29,000	20	0.016	EX

- NOTES**
- V50: Design factor reduced for diagnostic applications.
 - 2020N-02V30 and 2020N-025V30 with DNV approval for hydraulic systems.

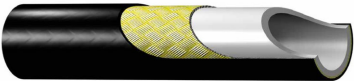
Part 2 – Medium pressure hose

550H*	– Standard hydraulic hose	E-8
540N*	– Medium pressure hose for aggressive fluids	E-9
560TJ	– ToughJACKET™ Hose	E-10
518C*	– Medium pressure hose, electrically non-conductive	E-11
510D	– Multipurpose hose	E-12
518D	– Medium pressure hose, electrically non-conductive	E-13
53DM	– Low temperature hose – constant working pressure	E-14
55LT	– Low temperature hose	E-15



Hose types 550H, 540N and 518C will be replaced by
hose types 510D and 518D, see pages E-12 and E-13.

550H – Standard hydraulic hose
Performance exceeds SAE 100 R7 /
ISO 3949 Type R7 / DIN EN 855 Type R7



MAIN FEATURES

- High abrasion resistance
- Small bend radii
- Low weight
- High flexibility

! As of October 2021, this hose will be replaced by hose type 510D.

APPLICATIONS

Medium pressure service for general industrial and mobile hydraulic applications for example:
Construction and agricultural machinery, material conveying systems/lifting devices, machine tools

CONSTRUCTION








Core tube : Polyester elastomer
Pressure reinforcement : One braided layer of high tensile synthetic fibre

Cover : Polyurethane, pinpricked
Colour : black

TEMPERATURE RANGE

-40°C up to +100°C for petroleum, max. 57°C for synthetic hydraulic fluids and water-based hydraulic fluids.

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
												
550H-3	5	-03	4.8	3/16	10.7	22.5	3,250	90.0	13,000	19	0.08	56
550H-4	6	-04	6.3	1/4	12.6	21.0	3,000	83.0	12,000	32	0.10	56
550H-5	8	-05	7.9	5/16	14.3	17.5	2,500	69.0	10,000	44	0.13	56
550H-6	10	-06	9.5	3/8	16.3	15.5	2,250	62.0	9,000	51	0.14	56
550H-8	12	-08	12.7	1/2	20.3	14.0	2,000	56.0	8,000	76	0.21	56
550H-10	16	-10	15.9	5/8	24.5	10.0	1,500	40.0	6,000	102	0.30	56
550H-12	20	-12	19.1	3/4	27.4	8.5	1,250	34.5	5,000	127	0.31	56
550H-16	25	-16	25.4	1	33.3	7.0	1,000	27.5	4,000	203	0.40	56

NOTES Also available as twinline or multinline hose, see page XVI.

540N – Medium pressure hose

Performance exceeds SAE 100 R7 /

ISO 3949 Type R7 / DIN EN 855 Type R7



MAIN FEATURES

- High abrasion resistance
- Small bend radii
- Low weight
- **Excellent chemical resistance due to polyamide core tube**

! As of October 2021, this hose will be replaced by hose type 510D.

APPLICATIONS

Medium pressure service for general industrial and mobile hydraulic applications, especially when an improved chemical resistance is required with some hydraulic/chemical fluids.

CONSTRUCTION

Core tube : Polyamide
Pressure reinforcement : One braided layer of high tensile synthetic fibre
Cover : Polyurethane, pinpricked
Colour : black

TEMPERATURE RANGE

-40°C up to +100°C

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
540N-2	3	-02	3.2	1/8	8.4	21.0	3,000	83.0	12,000	13	0.05	56
540N-3	5	-03	4.8	3/16	10.7	21.0	3,000	83.0	12,000	19	0.08	56
540N-4	6	-04	6.3	1/4	12.6	19.0	2,750	76.0	11,000	38	0.10	56
540N-5	8	-05	7.9	5/16	14.6	17.5	2,500	69.0	10,000	44	0.12	56
540N-6	10	-06	9.5	3/8	16.4	15.5	2,250	62.0	9,000	51	0.14	56
540N-8	12	-08	12.7	1/2	20.1	14.0	2,000	56.0	8,000	76	0.21	56
540N-12	20	-12	19.1	3/4	26.5	8.5	1,250	34.5	5,000	152	0.25	56

NOTES

Also available as twinline or multiline hose, see page XVI.

560TJ – ToughJACKET™ Hose
Performance exceeds
SAE 100 R1AT / DIN EN 853-1SN



- MAIN FEATURES**
- High abrasion resistance
 - Small bend radii
 - **Steel wire pressure reinforcement**

APPLICATIONS Medium pressure service for general industrial and mobile hydraulic applications.








CONSTRUCTION

Core tube : Polyester elastomer
Pressure reinforcement : One braided layer of high tensile steel wire

Cover : Polyurethane
Colour : black

TEMPERATURE RANGE -40°C up to +121°C for petroleum, max. 57°C for synthetic hydraulic fluids and water-based hydraulic fluids.

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
												
560TJ-3	5	-03	5	3/16	9.9	25.0	3,625	100.0	14,503	19	0.11	56
560TJ-4	6	-04	6	1/4	11.9	22.4	3,250	90.0	13,053	38	0.14	56
560TJ-5	8	-05	8	5/16	13.4	20.6	3,000	86.0	12,473	44	0.16	56
560TJ-6	10	-06	10	3/8	15.5	19.0	2,750	75.8	11,000	51	0.21	56
560TJ-8	12	-08	13	1/2	19.0	17.2	2,500	69.0	10,000	76	0.29	56
560TJ-10	16	-10	16	5/8	23.6	13.7	2,000	55.2	8,000	102	0.47	56
560TJ-12	20	-12	19	3/4	26.4	12.0	1,750	48.3	7,000	108	0.42	56

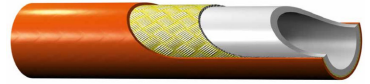
NOTES Also available as twinline or multiline hose, see page XVI.

518C – Medium pressure hose

Electrically non-conductive –

Performance exceeds SAE 100 R7 /

ISO 3949 Type R7 / DIN EN 855 Type R7



MAIN FEATURES

- **Electrically non-conductive**
- High abrasion resistance
- Small bend radii
- Low weight



As of October 2021, this hose will be replaced by hose type 518D.

APPLICATIONS

Medium pressure service for general industrial and mobile hydraulic applications, when **electrically non-conductive** lines are required, for example: Working platforms for high-voltage line repair, aluminium melting furnaces

CONSTRUCTION

Core tube : Polyester elastomer, except -2: polyamide
Pressure reinforcement : One braided layer of high tensile synthetic fibre

Cover : Polyurethane
Colour : orange

TEMPERATURE RANGE

-40°C up to +100°C for petroleum, max. 57°C for synthetic hydraulic fluids and water-based hydraulic fluids.

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
518C-2	3	-02	3.2	1/8	8.4	17.5	2,500	69.0	10,000	13	0.05	56
518C-3	5	-03	4.8	3/16	10.7	22.5	3,250	90.0	13,000	19	0.07	56
518C-4	6	-04	6.3	1/4	11.7	20.7	3,000	83.0	12,000	38	0.08	56
518C-5	8	-05	7.9	5/16	14.3	17.5	2,500	69.0	10,000	44	0.11	56
518C-6	10	-06	9.5	3/8	16.0	15.5	2,250	62.0	9,000	51	0.14	56
518C-8	12	-08	12.7	1/2	20.4	15.5	2,250	62.0	9,000	76	0.22	56
518C-10	16	-10	15.9	5/8	24.9	10.5	1,500	42.0	6,000	102	0.30	56
518C-12	20	-12	19.1	3/4	27.4	8.5	1,250	34.5	5,000	152	0.31	56
518C-16	25	-16	25.4	1	33.5	7.0	1,000	27.5	4,000	203	0.40	56

NOTES

- Field attachable fittings available on request.
- Electrically non-conductive acc. to SAE J517 (less than 50 µA leakage under 250,000 Volts per meter).

510D – Multipurpose hose
Meets/exceeds SAE 100 R7 /
ISO 3949 Type R7



- MAIN FEATURES**
- Excellent chemical resistance
 - High abrasion resistance
 - Small bend radii
 - Low weight
 - High flexibility

APPLICATIONS Due to its characteristics the hose 510D can be used for a wide range of media, for example:
Hydraulic oils, water and water based fluids, air, steam, glues, adhesives, chemicals, gas.

CONSTRUCTION

Core tube : Polyamide size -2 to -12, Polyester Elastomer size -16
Pressure reinforcement : One braided layer of high tensile synthetic fibre

Cover : Abrasion resistant Polyurethane pinpricked
Colour : Black

TEMPERATURE RANGE -40 °C up to +100 °C*

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
510D-2	3	-2	3.2	1/8	8.6	21.0	3,000	84.0	12,000	13.0	0.05	56
510D-3	5	-3	5	3/16	10.7	22.4	3,250	89.6	13,000	19.0	0.07	56
510D-4	6	-4	6.3	1/4	11.7	21.0	3,000	84.0	12,000	38.0	0.09	56
510D-5	8	-5	8	5/16	14.3	17.5	2,500	70.0	10,000	44.0	0.11	56
510D-6	10	-6	10	3/8	16.0	15.8	2,250	63.2	9,000	51.0	0.14	56
510D-8	12	-8	12.5	1/2	20.5	15.8	2,250	63.2	9,000	76.0	0.22	56
510D-10	16	-10	16	5/8	24.6	19.2	2,750	76.8	11,000	152.0	0.31	56
510D-12	19	-12	19	3/4	27.4	8.8	1,250	35.2	5,000	127.0	0.31	56
510D-16	25	-16	25	1	33.4	7.0	1,000	28.0	4,000	203.0	0.40	56

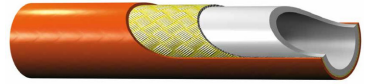
NOTES Also available as twinline or multiline hose, see page XVI.
* Size -16 only: Max +57 °C for synthetic and water based hydraulic fluids

518D – Medium pressure hose

Electrically non-conductive

Performance exceeds SAE 100 R7 /

ISO 3949 Type R7



MAIN FEATURES

- Excellent chemical resistance
- Electrically non-conductive
- High abrasion resistance
- Small bend radii
- Low weight

APPLICATIONS

Medium pressure service for general industrial and mobile hydraulic applications, when electrically non-conductive lines are required, for example:
Working platforms for high-voltage line repair, aluminium melting furnaces.

CONSTRUCTION

Core tube : Polyamide size -2 to -12, Polyester Elastomer size -16
Pressure reinforcement : One braided layer of high tensile synthetic fibre

Cover : Polyamide, non pinpricked
Colour : Orange

TEMPERATURE RANGE

-40 °C up to +100 °C*

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
518D-3	5	-3	5	3/16	10.7	22.4	3,250	89.6	13,000	19.0	0.07	56
518D-4	6	-4	6.3	1/4	11.7	21.0	3,000	84.0	12,000	38.0	0.09	56
518D-5	8	-5	8	5/16	14.3	17.5	2,500	70.0	10,000	44.0	0.11	56
518D-6	10	-6	10	3/8	16.0	15.8	2,250	63.2	9,000	51.0	0.14	56
518D-8	12	-8	12.5	1/2	20.5	15.8	2,250	63.2	9,000	76.0	0.22	56
518D-10	16	-10	16	5/8	24.6	19.2	2,750	76.8	11,000	152.0	0.31	56
518D-12	19	-12	19	3/4	27.4	8.8	1,250	35.2	5,000	127.0	0.31	56
518D-16	25	-16	25	1	33.4	7.0	1,000	28.0	4,000	203.0	0.40	56

NOTES

Electrically non-conductive acc. to SAE J517
(less than 50 µA leakage under 250,000 Volts per meter).

* Size -16 only: Max +57 °C for synthetic and water based hydraulic fluids

53DM – Low temperature hose

Same working pressure for all sizes

Performance exceeds SAE 100 R18 / ISO 3949 Type R18



MAIN FEATURES

- Working pressure 21 MPa for all sizes
- Perfect solution for low temperature applications with dynamic movements
- High abrasion resistance
- Small bend radii
- Very low weight

APPLICATIONS

Medium pressure service for general industrial and mobile hydraulic applications, especially for systems **working at very low temperatures**, for example:

Fork lifts in cold storage houses, construction and agricultural machinery operating in climatic regions with lower temperatures.

CONSTRUCTION

- Core tube** : Polyester elastomer
Pressure reinforcement : One or two braided layers of high tensile synthetic fibre
- Cover** : Special polyester, pinpricked
Colour : black

TEMPERATURE RANGE

-57°C up to +100°C for petroleum, max. 57°C for synthetic hydraulic fluids and water-based hydraulic fluids.

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
53DM-6	10	-06	10.0	3/8	17.0	21.0	3,000	84.0	12,000	51	0.16	56
53DM-8	12	-08	12.5	1/2	21.0	21.0	3,000	84.0	12,000	89	0.26	56
53DM-10	16	-10	16.0	5/8	26.0	21.0	3,000	84.0	12,000	102	0.33	56

NOTES Also available as twinline or multiline hose, see page XVI.

55LT – Low temperature hose

Performance exceeds SAE 100 R7 /

ISO 3949 Type R7 / DIN EN 855 Type R7



MAIN FEATURES

- Ideal for low temperature applications
- High abrasion resistance
- Small bend radii
- Low weight

APPLICATIONS

Medium pressure service for general industrial and mobile hydraulic applications, especially for systems **working at very low temperatures**, for example:

Fork lifts in cold storage houses, construction and agricultural machinery operating in climatic regions with lower temperatures.

CONSTRUCTION








Core tube : Polyester elastomer, except -02: polyamide
Pressure reinforcement : Two braided layers of high tensile synthetic fibre

Cover : Special polyester, pinpricked
Colour : black

TEMPERATURE RANGE

-57°C up to +100°C for petroleum, max. 57°C for synthetic hydraulic fluids and water-based hydraulic fluids.

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
												
55LT-2	3	-02	3.2	1/8	8.6	21.0	3,000	79.0	11,500	13	0.05	56
55LT-3	5	-03	4.8	3/16	10.9	22.5	3,250	90.0	13,000	19	0.08	56
55LT-4	6	-04	6.3	1/4	13.0	21.0	3,000	83.0	12,000	32	0.10	56
55LT-5	8	-05	7.9	5/16	14.3	17.5	2,500	69.0	10,000	44	0.13	56
55LT-6	10	-06	9.5	3/8	16.3	15.5	2,250	62.0	9,000	51	0.14	56
55LT-8	12	-08	12.7	1/2	20.3	14.0	2,000	56.0	8,000	76	0.21	56

NOTES

Also available as twinline or multiline hose, see page XVI.

Part 3 – High pressure hose

2040N	– Multipurpose hose	E-17
2040H	– Standard hydraulic hose	E-18
520N	– Standard hydraulic hose	E-19
528N	– Electrically non-conductive hose	E-20
580N	– Standard hydraulic hose	E-21
588N	– Electrically non-conductive hose	E-22
590TJ	– ToughJACKET™ Hose	E-23
594TJ	– ToughJACKET™ Hose	E-24
575X	– High pressure hose, low volumetric expansion	E-25
2370N	– Multipurpose hose	E-26
2245N	– High pressure hose	E-27

2040N – Multipurpose hosePerformance exceeds DIN EN 853-1SN,
DNV approved**MAIN FEATURES**

- **Excellent chemical resistance due to polyamide core tube**
- Excellent abrasion resistance
- Small bend radii
- Steel wire pressure reinforcement

APPLICATIONS

High pressure service for general industrial and mobile hydraulic applications, especially when an **improved chemical resistance** is required with some hydraulic/chemical fluids. Usable **for a wide variety of fluids** due to the polyamide core tube. The polyamide cover resists aggressive fluids such as **refrigerants** in machine tools or when used in oil tanks.

CONSTRUCTION

Core tube : Polyamide
Pressure reinforcement : One braided layer of high tensile steel wire

Cover : V00: polyurethane
Colour : black

TEMPERATURE RANGE

-40°C up to +100°C for petroleum or synthetic hydraulic fluids.

[Visite the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
2040N-02V00	3	-02	3.2	1/8	7.0	35.0	5,075	140.0	20,300	30	0.07	PX
2040N-03V00	5	-03	4.7	3/16	9.8	34.0	4,930	136.0	19,720	30	0.11	56/PX
2040N-04V00	6	-04	6.3	1/4	11.9	31.0	4,495	124.0	17,980	40	0.16	56/PX
2040N-05V00	8	-05	8.2	5/16	14.0	25.0	3,625	100.0	14,500	50	0.21	56/PX
2040N-06V00	10	-06	9.7	3/8	15.9	24.0	3,480	96.0	13,920	60	0.24	56/PX
2040N-08V00	12	-08	12.8	1/2	19.3	18.5	2,680	74.0	10,730	75	0.29	56/PX
2040N-10V00	16	-10	16.0	5/8	23.5	14.0	2,030	56.0	8,120	110	0.39	PX
2040N-12V00	20	-12	19.4	3/4	26.7	12.5	1,810	50.0	7,250	170	0.50	PX
2040N-16V00	25	-16	25.0	1	33.5	10.0	1,450	40.0	5,800	230	0.60	PX

NOTES

- 2040N with DNV approval for hydraulic systems.
- For pinpricked hose please add "-P", e.g. **2040N-02V00-P**.
- In version V00 also available as twinline or multiline hose, see page XVI.

2040H – Standard hydraulic hose
Performance exceeds DIN EN 853-1SN,
DNV approved



- MAIN FEATURES**
- Excellent abrasion resistance
 - Small bend radii
 - Steel wire pressure reinforcement
 - **Excellent flexibility**

APPLICATIONS High pressure service for general industrial and mobile hydraulic applications.

- CONSTRUCTION**
- Core tube** : Polyester elastomer
Pressure reinforcement : One braided layer of high tensile steel wire
- Cover** : Polyurethane
Colour : black

TEMPERATURE RANGE -40°C up to +100°C for petroleum, max. 57°C for synthetic hydraulic fluids and water-based hydraulic fluids.

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
2040H-03V10	5	-03	4.7	3/16	9.8	34.0	4,930	136.0	19,720	30	0.12	56/PX
2040H-04V10	6	-04	6.3	1/4	11.9	31.0	4,495	124.0	17,980	40	0.17	56/PX
2040H-05V10	8	-05	8.2	5/16	14.0	25.0	3,625	100.0	14,500	50	0.21	56/PX
2040H-06V10	10	-06	9.7	3/8	15.9	24.0	3,480	96.0	13,920	60	0.26	56/PX
2040H-08V10	12	-08	12.8	1/2	19.3	18.5	2,680	74.0	10,730	75	0.31	56/PX
2040H-10V10	16	-10	16.0	5/8	23.5	14.0	2,030	56.0	8,120	110	0.43	PX
2040H-12V10	20	-12	19.4	3/4	26.7	12.5	1,810	50.0	7,250	170	0.53	PX
2040H-16V10	25	-16	25.0	1	33.5	10.0	1,450	40.0	5,800	230	0.72	PX

- NOTES**
- 2040H with DNV approval for hydraulic systems.
 - Also available as twinline or multiline hose, see page XVI.

520N – Standard hydraulic hose

Performance exceeds SAE 100 R8 /

ISO 3949 Type R8 / DIN EN 855 Type R8



MAIN FEATURES

- **Very small hose outer diameters**
- Excellent abrasion resistance
- Small bend radii
- **Low weight**
- **Excellent chemical resistance due to polyamide core tube**

APPLICATIONS

High pressure service for general industrial and mobile hydraulic applications as well as with gases. Usable for a wide variety of fluids due to the polyamide core tube.

Version with white cover: **saltwater-proof, additionally improved UV resistance**, and therefore perfectly suited for boats and yachts.

CONSTRUCTION

Core tube : Polyamide

Pressure reinforcement : One braided layer of high tensile aramide fibre

Cover : Polyurethane, pinpricked

Colour : black

TEMPERATURE RANGE

-40°C up to +100°C for petroleum or synthetic hydraulic fluids.

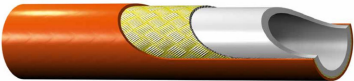
[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
520N-3	5	-03	4.8	3/16	10.6	34.5	5,000	138.0	20,000	38	0.07	56
520N-4	6	-04	6.3	1/4	12.7	34.5	5,000	138.0	20,000	51	0.10	56
520N-5	8	-05	7.9	5/16	14.5	31.0	4,500	124.0	18,000	64	0.12	56
520N-6	10	-06	9.5	3/8	16.1	27.5	4,000	110.0	16,000	64	0.13	56
520N-8	12	-08	12.7	1/2	20.4	24.0	3,500	96.0	14,000	102	0.20	56

NOTES

- Also available as twinline or multiline hose, see page XVI.
- Not recommended for forklift boom applications.

528N – Electrically non-conductive hose
Performance exceeds SAE 100 R8 /
ISO 3949 Type R8 / DIN EN 855 Type R8



MAIN FEATURES

- **Electrically non-conductive**
- Very small hose outer diameters
- Excellent abrasion resistance
- Small bend radii
- Low weight
- Excellent chemical resistance due to polyamide core tube

APPLICATIONS

High pressure service for general industrial and mobile hydraulic applications, where a non-conductive hose is required.

CONSTRUCTION

- Core tube** : Polyamide
Pressure reinforcement : One braided layer of high tensile aramide fibre
- Cover** : Polyurethane, not pinpricked
Colour : orange

TEMPERATURE RANGE

-40°C up to +100°C for petroleum or synthetic hydraulic fluids.

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
528N-3	5	-03	4.8	3/16	10.6	34.5	5,000	138.0	20,000	38	0.07	56
528N-4	6	-04	6.3	1/4	12.7	34.5	5,000	138.0	20,000	51	0.10	56
528N-5	8	-05	7.9	5/16	14.5	31.0	4,500	124.0	18,000	64	0.12	56
528N-6	10	-06	9.5	3/8	16.1	27.5	4,000	110.0	16,000	64	0.13	56
528N-8	12	-08	12.7	1/2	20.4	24.0	3,500	96.0	14,000	102	0.20	56

NOTES

- Electrically non-conductive acc. to SAE J517 (less than 50 µA leakage under 250,000 Volts per meter).
- Not recommended for forklift boom applications.

580N – Standard hydraulic hose

Performance exceeds SAE 100 R8 /

ISO 3949 Type R8 / DIN EN 855 Type R8



MAIN FEATURES

- Excellent abrasion resistance
- Small bend radii
- Low weight
- Excellent chemical resistance due to polyamide core tube

APPLICATIONS

High pressure service for general industrial and mobile hydraulic applications as well as with gases. Usable for a wide variety of fluids due to the polyamide core tube.

CONSTRUCTION

Core tube : Polyamide

Pressure reinforcement : Multiple braided layers of high tensile synthetic fibre

Cover : Polyurethane, pinpricked

Colour : black

TEMPERATURE RANGE

-40°C up to +100°C for petroleum or synthetic hydraulic fluids.

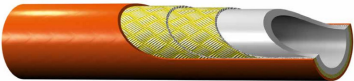
[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
580N-8	12	-08	12.5	1/2	23.0	24.0	3,500	96.0	14,000	102	0.31	56
580N-10	16	-10	15.9	5/8	24.9	19.0	2,750	76.0	11,000	152	0.32	56
580N-12	20	-12	19.1	3/4	29.5	15.5	2,250	62.0	9,000	203	0.35	56
580N-16	25	-16	25.4	1	37.6	14.0	2,000	56.0	8,000	254	0.56	56

NOTES

Also available as twinline or multiline hose, see page XVI.

588N – Electrically non-conductive hose
Performance exceeds SAE 100 R8 /
ISO 3949 Type R8 / DIN EN 855 Type R8



MAIN FEATURES

- Electrically non-conductive
- Very small hose outer diameters
- Excellent abrasion resistance
- Small bend radii
- Low weight
- Excellent chemical resistance due to polyamide core tube

APPLICATIONS

High pressure service for general industrial and mobile hydraulic applications, where a non-conductive hose is required.

CONSTRUCTION








Core tube : Polyamide
Pressure reinforcement : Two braided layers of high tensile synthetic fibre

Cover : Polyurethane
Colour : orange

TEMPERATURE RANGE

-40°C up to +100°C for petroleum or synthetic hydraulic fluids.

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
												
588N-8	12	-08	12.7	1/2	23.0	24.0	3,500	96.0	14,000	102	0.31	56
588N-10	16	-10	15.9	5/8	24.9	19.0	2,750	76.0	11,000	152	0.32	56
588N-12	20	-12	19.1	3/4	29.5	15.5	2,250	62.0	9,000	203	0.35	56
588N-16	25	-16	25.4	1	37.6	14.0	2,000	56.0	8,000	254	0.56	56

NOTES Electrically non-conductive acc. to SAE J517 (less than 50 µA leakage under 250,000 Volts per meter).

590TJ – ToughJACKET™ Hose
Performance exceeds SAE 100 R2**MAIN FEATURES**

- Excellent abrasion resistance
- **Small bend radii**
- Special pressure reinforcement construction made of steel wire/textile fibre
- **Excellent flexibility**
- **Low weight**

APPLICATIONS

High pressure service for general industrial and mobile hydraulic applications. **Especially suited for telescoping booms of telehandlers and loading cranes** – frequently used as twinline hose.

CONSTRUCTION

Core tube : Polyester elastomer
Pressure reinforcement : High tensile wire, or a combination of wire and aramide fibre
Cover : Polyurethane
Colour : black

TEMPERATURE RANGE

-40°C up to +121°C for petroleum, max. 57°C for synthetic hydraulic fluids and water-based hydraulic fluids.

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
590TJ-4	6	-04	6.3	1/4	12.5	34.5	5,000	140.0	20.305	44	0.20	56
590TJ-6	10	-06	10.0	3/8	16.3	27.6	4,000	112.0	16.244	57	0.29	56
590TJ-8	12	-08	12.5	1/2	19.3	24.1	3,500	96.5	14.213	82	0.36	56
590TJ-12	20	-12	19.0	3/4	28.0	17.2	2,500	68.9	10.000	120	0.58	43/48*
590TJ-16	25	-16	25.0	1	36.0	13.8	2,000	56.0	8.122	150	1.06	43/48*

*: For details please review HPDE fitting product range in CAT4400

NOTES

Also available as twinline or multiline hose, see page XVI.

594TJ – ToughJACKET™ Hose
Performance exceeds SAE 100 R19



- MAIN FEATURES**
- Excellent abrasion resistance
 - **Small bend radii**
 - Special pressure reinforcement construction made of steel wire/textile fibre
 - **Excellent flexibility**
 - **Low weight**

APPLICATIONS High pressure service for general industrial and mobile hydraulic applications. **Especially suited for telescoping booms of telehandlers and loading cranes** – frequently used as twinline hose.

- CONSTRUCTION**
- Core tube** : Copolyester
Pressure reinforcement : High tensile wire
- Cover** : Polyurethane
Colour : black

TEMPERATURE RANGE -40°C up to +100°C for petroleum based hydraulic oils, max. 57°C for synthetic hydraulic fluids and water-based hydraulic fluids.

[Visite the webpage](#)

Part No.	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings *
#												
594TJ-8	12	-08	13.0	1/2	21.5	28.0	4,061	112.0	16.244	90	0.58	46/43
594TJ-10	16	-10	16.0	5/8	26.4	28.0	4,061	112.0	16.244	100	0.58	48/43

*For details please review HPDE fitting product range in CAT4400

NOTES Also available as twinline or multiline hose, see page XVI.

575X – High pressure hose

Low volumetric expansion

Same working pressure for all sizes



MAIN FEATURES

- **Same working pressure of 34.5 MPa for all sizes**
- Excellent abrasion resistance
- Small bend radii and very small outer diameters
- **Very low weight**
- Excellent chemical resistance due to polyamide core tube
- **Low volumetric expansion**

APPLICATIONS

High pressure service for general industrial and mobile hydraulic applications.

CONSTRUCTION

Core tube : Polyamide

Pressure reinforcement : One or two braided layers of high tensile aramide fibre

Cover : Polyurethane; 575XN-8: Polyamide

Colour : black

TEMPERATURE RANGE

-40°C up to +100°C for petroleum or synthetic hydraulic fluids.

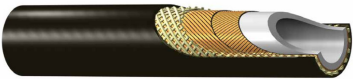
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Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings *
575X-4	6	-04	6.3	1/4	12.8	34.5	5,000	138.0	20,000	51	0.10	CG
575X-6	10	-06	9.5	3/8	16.3	34.5	5,000	138.0	20,000	76	0.13	CG
575XN-8	12	-08	12.7	1/2	20.6	34.5	5,000	138.0	20,000	102	0.21	CG
575X-12	20	-12	19.1	3/4	29.2	34.5	5,000	138.0	20,000	203	0.36	CG
575X-16	25	-16	25.4	1	40.3	34.5	5,000	138.0	20,000	254	0.70	CG

NOTES

-

2370N – Multipurpose hose
Performance exceeds DIN EN 853-2SN



- MAIN FEATURES**
- Working pressures up to 46.5 MPa
 - Excellent chemical resistance due to polyamide core tube

APPLICATIONS High pressure service for general industrial and mobile hydraulic applications as well as with gases. Usable for a wide variety of fluids due to the polyamide core tube.

- CONSTRUCTION**
- Core tube** : Polyamide
 - Pressure reinforcement** : Two spiral layers of high tensile steel wire, two open spiral layers of high tensile synthetic fibre
 - Cover** : Polyurethane
 - Colour** : black; other colours on request

TEMPERATURE RANGE -40°C up to +100°C (short term +120°C) for petroleum or synthetic hydraulic fluids.

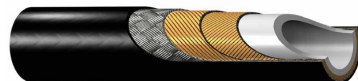
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Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi	Min. burst pressure MPa / psi	Min. bend radius mm	Weight kg/m	Fittings
2370N-04V10	6	-04	6.3	1/4	12.4	46.5 6,740	186.0 26,970	70	0.19	NX
2370N-05V10	8	-05	8.2	5/16	14.3	44.0 6,380	176.0 25,520	100	0.25	NX
2370N-06V10	10	-06	9.8	3/8	16.4	42.0 6,090	168.0 24,360	120	0.33	9X
2370N-08V10	12	-08	12.8	1/2	20.0	35.0 5,075	140.0 20,300	150	0.42	9X

- NOTES**
- Also available as twinline or multiline hose, see page XVI.
 - For pinpricked hose please add "-P", e.g. 2370N-04V10-P.

2245N – High pressure hose

Performance exceeds SAE100R9



MAIN FEATURES

- High working pressures for large sizes
- Excellent chemical resistance due to polyamide core tube

APPLICATIONS

High pressure service for general industrial and mobile hydraulic applications as well as with gases. Usable for a wide variety of fluids due to the polyamide core tube.

CONSTRUCTION

Core tube : Polyamide
Pressure reinforcement : Two spiral layers of high tensile steel wire, one braided layer of steel wire
Cover : Polyurethane; -10 and above: polyamide
Colour : black

TEMPERATURE RANGE

-40°C up to +100°C (short term +120°C) for petroleum or synthetic hydraulic fluids.

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
2245N-04V00	6	-04	6.3	1/4	12.5	45.0	6,525	180.0	26,100	70	0.25	NX
2245N-05V00	8	-05	8.2	5/16	14.3	40.0	5,800	160.0	23,200	100	0.32	NX
2245N-06V00	10	-06	9.7	3/8	17.0	37.5	5,435	150.0	21,750	120	0.42	NX
2245N-08V00	12	-08	12.8	1/2	20.7	35.0	5,075	140.0	20,300	165	0.52	9X
2245N-10V30	16	-10	16.0	5/8	24.5	33.0	4,785	132.0	19,140	200	0.72	NX
2245N-12V30	20	-12	19.6	3/4	28.5	30.0	4,350	120.0	17,400	240	0.92	NX
2245N-16V30	25	-16	25.0	1	34.0	27.5	3,985	110.0	15,950	280	1.15	NX

NOTES

- 2245N with DNV approval for hydraulic systems.
- For pinpricked hose please add "-P", e.g. **2245N-04V00-P**.

Part 4 – Paint spray hose

Airless paint spray applications	– General statements.....	E-30
2040N	– Medium pressure hose	E-31
2370N	– High pressure hose	E-32
2030T	– PTFE hose.....	E-33
2033T	– PTFE hose.....	E-34

Airless paint spray applications – General statements

Hose assembly

Hoses for airless paint spray applications require a specific assembly procedure. It is imperative to have assembly training by Parker on the individual product.

The hose assembly must be silicone-free as silicone interferes with the paint spray quality. This requirement includes all the components and the testing media.

For each hose type specific Parker hose assembly and testing instructions have to be applied.

Conductivity

The hose assemblies must be conductive in order to dissipate the electrostatic charge. The conductivity of the hose assembly must be ensured and proven (100% testing) according to the Parker specification.

2040N – Medium pressure hosePerformance exceeds DIN EN 853-1SN,
DNV approved**MAIN FEATURES**

- Working pressures up to 35 MPa
- Excellent chemical resistance due to polyamide core tube
- Excellent abrasion resistance

APPLICATIONS

Medium pressure paint spray applications.

CONSTRUCTION

Core tube : Polyamide
Pressure reinforcement : One braided layer of high tensile steel wire
Cover : Polyurethane
Colour : black

TEMPERATURE RANGE

-40°C up to +100°C

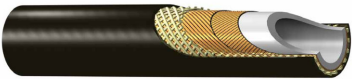
[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
2040N-02V00	3	-02	3.2	1/8	7.0	35.0	5,075	140.0	20,300	30	0.07	PX
2040N-03V00	5	-03	4.7	3/16	9.8	34.0	4,930	136.0	19,720	30	0.11	56/PX
2040N-04V00	6	-04	6.3	1/4	11.9	31.0	4,495	124.0	17,980	40	0.16	56/PX
2040N-05V00	8	-05	8.2	5/16	14.0	25.0	3,625	100.0	14,500	50	0.21	56/PX
2040N-06V00	10	-06	9.7	3/8	15.9	24.0	3,480	96.0	13,920	60	0.24	56/PX
2040N-08V00	12	-08	12.8	1/2	19.3	18.5	2,680	74.0	10,730	75	0.29	56/PX
2040N-10V00	16	-10	16.0	5/8	23.5	14.0	2,030	56.0	8,120	110	0.39	PX
2040N-12V00	20	-12	19.4	3/4	26.7	12.5	1,810	50.0	7,250	170	0.50	PX
2040N-16V00	25	-16	25.0	1	33.5	10.0	1,450	40.0	5,800	230	0.60	PX

NOTES

Sizes -03, -04, and -06 also available with blue cover; please change Part No. to:
 2040N-03V02, 2040N-04V02, or 2040N-06V02

2370N – High pressure hose
Performance exceeds DIN EN 853-2SN










- MAIN FEATURES**
- Working pressures up to 46.5 MPa
 - Excellent chemical resistance due to polyamide core tube
 - Excellent abrasion resistance

APPLICATIONS High pressure paint spray applications.

- CONSTRUCTION**
- Core tube** : Polyamide
 - Pressure reinforcement** : Two spiral layers of high tensile steel wire, two open spiral layers of synthetic fibre
 - Cover** : Polyurethane
 - Colour** : black

TEMPERATURE RANGE -40°C up to +100°C

[Visite the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
												
2370N-04V10	6	-04	6.3	1/4	12.4	46.5	6,740	186.0	26,970	70	0.19	NX
2370N-05V10	8	-05	8.2	5/16	14.3	44.0	6,380	176.0	25,520	100	0.25	NX
2370N-06V10	10	-06	9.8	3/8	16.4	42.0	6,090	168.0	24,360	120	0.33	9X
2370N-08V10	12	-08	12.8	1/2	20.0	35.0	5,075	140.0	20,300	150	0.42	9X

NOTES Sizes -04 and -06 also available with blue cover; please change Part No. to:
2370N-04V02 or 2370N-06V02

2030T – PTFE hose



MAIN FEATURES

- Working pressures up to 27.5 MPa
- Excellent chemical resistance
- Suitable for high temperatures

APPLICATIONS

Medium pressure paint spray applications.

CONSTRUCTION

Core tube : Polytetrafluoroethylene
Pressure reinforcement : One braided layer of steel wire

Cover : –
Colour : –

TEMPERATURE RANGE

-50°C up to +150°C continuous temperature
 +230°C at working pressures up to 2 MPa

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
2030T-03V70	5	-03	4.7	3/16	7.8	27.5	3,985	110.0	15,950	50	0.09	YX
2030T-04V70	6	-04	6.3	1/4	9.5	24.0	3,480	96.0	13,920	75	0.13	YX
2030T-05V70	8	-05	8.2	5/16	11.5	20.0	2,900	80.0	11,600	100	0.17	YX
2030T-06V70	10	-06	9.7	3/8	13.0	17.5	2,535	70.0	10,150	120	0.19	YX
2030T-08V70	12	-08	12.8	1/2	16.7	15.0	2,175	60.0	8,700	135	0.29	YX
2030T-10V70	16	-10	16.0	5/8	20.0	12.5	1,810	50.0	7,250	160	0.34	YX
2030T-12V70	20	-12	19.4	3/4	23.5	10.0	1,450	40.0	5,800	200	0.41	YX
2030T-16V70	25	-16	25.0	1	29.0	8.0	1,160	32.0	4,640	250	0.51	YX

NOTES

–

2033T – PTFE hose



- MAIN FEATURES**
- Improved working pressures due to two braided layers of steel wire
 - Suitable for high temperatures
 - Excellent chemical resistance

APPLICATIONS Medium pressure paint spray applications.

CONSTRUCTION Core tube : Polytetrafluoroethylene
Pressure reinforcement : Two braided layers of steel wire

Cover : –
Colour : –

TEMPERATURE RANGE -50°C up to +150°C continuous temperature
+230°C at working pressures up to 2 MPa

[Visite the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
2033T-04V70	6	-04	6.3	1/4	11.0	27.5	3,985	110.0	15,950	75	0.23	PX
2033T-05V70	8	-05	8.2	5/16	13.2	25.0	3,625	100.0	14,500	100	0.26	PX
2033T-06V70	10	-06	9.7	3/8	15.0	22.5	3,260	90.0	13,050	120	0.34	PX
2033T-08V70	12	-08	12.8	1/2	18.6	20.0	2,900	80.0	11,600	135	0.47	PX
2033T-10V70	16	-10	16.0	5/8	21.5	17.5	2,535	70.0	10,150	160	0.53	YX
2033T-12V70	20	-12	19.4	3/4	25.5	15.0	2,175	60.0	8,700	200	0.69	YX
2033T-16V70	25	-16	25.0	1	31.0	11.0	1,595	44.0	6,380	250	0.81	YX

NOTES

Part 5 – Gas hose

Introduction	E-36
Thermoplastic hose for applications with industrial gases	E-37
Thermoplastic hose types with specific approvals	E-39
- 527BA – Breathing air refill hose	E-40
- 5CNG – Compressed natural gas dispense hose	E-41
- 8LPG – Hose for mobile applications in vehicles	E-42

Gas hose applications – General statements

Hose selection for industrial gases

Parker thermoplastic hoses are perfectly suited for applications with industrial gases and are being used in the field for many years.

When selecting hoses for industrial gases, attention should be paid to the following three criteria:

1. Chemical resistance

Due to the high-grade core tube materials Parker thermoplastic hoses are chemically resistant to most of the industrial gases, such as acetylene, propane, butane, methane, natural gas, CNG, carbon dioxide, nitrogen and inert gases (see chemical resistance table, page A-10).

2. Permeation

Parker thermoplastic hoses have relatively low permeation rates, thus minimising the loss of gases. This leads to an optimisation of operational costs, and gas enrichments in the surroundings caused by permeation are minimised.

3. Perforation

It is mandatory for gas applications to use perforated (pinpricked) hoses in order to avoid bubble formation in the hose cover.

For further information please refer to our Engineering Standard PFDE-ES01, which is available on request at Parker Polymer Hose Division Europe.

Thermoplastic hose for applications with industrial gases

Based on the technical requirements noted in the introduction some hose types are particularly suited for gas applications. These hose types can be classified as follows:

- 1) **Hoses with textile fibre reinforcement** – these have pinpricked covers by default:

540N	5CNG
520N	8LPG
2010N	
2020N	
- 2) **Hoses with steel wire reinforcement** – these have to be pinpricked especially for gas applications:

2040N
2370N
2245N
- 3) **Hoses with core tubes made from fluoropolymer** – these are especially suited for aggressive fluids and/or higher temperatures:

2030T
2033T
939
2246F

Please use the following table to select the desired hose type by size and working pressure.

Gas hose

		Working pressure (MPa)																Fitting series	pg
Nom. size	DN	2	2.5	3	4	5	6	8	10	12	16	20	25	32	40	50			
	size	-012	-016	-02	-025	-03	-04	-05	-06	-08	-10	-12	-16	-20	-24	-32			
	mm*	2.0	2.4	3.2	4.0	4.8	6.4	7.9	9.5	12.7	15.9	19.0	25.4	31.8	38.1	50.8			
	inch	5/64	3/32	1/8	5/32	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1	1 1/4	1 1/2	2			
Hoses with textile fibre reinforcement																			
540N				21.0		21.0	19.0	17.5	15.5	14.0	8.5						56	E-9	
520N						34.5	34.5	31.0	27.5	24.0							56	E-17	
2020N (V30)	47.5	40.0	40.0	44.0													EX	E-6	
5CNG						34.5	34.5		34.5	34.5		34.5	34.5				CG	E-39	
8LPG						3.0	3.0	3.0	3.0								PX-LPG	E-40	
Hoses with steel wire reinforcement																			
2040N (V00)				35.0		34.0	31.0	25.0	24.0	18.5	14.0	12.5	10.0				56/PX	E-29	
2370N							46.5	44.0	42.0	35.0							9X/NX	E-30	
2245N							45.0	40.0	37.5	35.0	33.0	30.0	27.5				NX	E-25	
Hoses with core tubes made from fluoropolymer																			
2030T						27.5	24.0	20.0	17.5	15.0	12.5	10.0	8.0				YX	C-4	
2033T							27.5	25.0	22.5	20.0	17.5	15.0	11.0				PX/YX	C-6	
939/939B									10.3	9.5	6.9	7.5	6.9	6.9	5.0	1.7	93N	C-10	
2246F							41.5	37.5	34.0	32.5	30.0	26.5	21.0				NX	C-12	

*: Exact value may vary, please check hose spec

For gas applications temperature limitations must be considered. For most of the gases the above Parker hose types are suitable for temperatures up to 50°C. For higher temperatures please contact Parker Polymer Hose Division Europe.

For hose applications with gases legal and actuarial regulations must be observed. The specification of the chemical resistance does not replace approval of certain bodies or for specific applications.

The user has to assume full responsibility for hose selection, testing of the application and the environmental conditions, and release for the individual application.

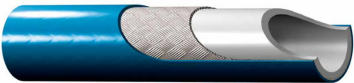
Please refer also to the standards, approvals and certificates when selecting hoses (see page A-15).

Thermoplastic hose types with specific approvals

Some hose types and sizes have approvals for specific gas applications. Please refer to the following overview:

Application	Approval	Hose type	Page
Natural gas, CNG	AGA/CSA approved acc. to ANSI 4,2/12,52	5CNG	D-5, E-39
	ECE R110	5CNG-8	D-5, E-39
LPG	ECE R67 ECE R110 AZ/NZS 1869	8LPG (-3, -4, -5, -6)	D-7, E-40

527BA – Breathing air refill hose
Compliant with CGA G7.1-1997 “Grade E
Breathing Air Standards”



- MAIN FEATURES**
- Compliant with to CGA G7.1-1997 “Grade E Breathing Air Standards”
 - Excellent abrasion resistance
 - Same working pressure of 48.3 MPa for all sizes

- APPLICATIONS**
- Integrated containment fill stations, mobile and stationary systems with or without cascade controls, truck and trailer systems and portable SCBA fill.

- CONSTRUCTION**
- Core tube : Nylon
Pressure reinforcement : High tensile aramide fibre
- Cover : Polyurethane, pinpricked
Colour : blue

- TEMPERATURE RANGE** -40°C up to +82°C

[Visite the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi	Min. burst pressure MPa / psi	Min. bend radius mm	Weight kg/m	Fittings
527BA-3	5	-03	4.8	3/16	10.9	48.3 7,000	193,2 28,000	38	0.07	CG
527BA-4	6	-04	6.4	1/4	13.2	48.3 7,000	193,2 28,000	51	0.11	CG

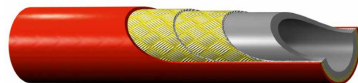
- NOTES**
- Perforated cover
 - Not for use as part of a SCBA systems
 - This hose is not for use between a pressure reducing regulator and breathing mask
 - For fitting attachment lubricate only with water or non-toxic lubricant. Do not assemble with petroleum or hydrocarbon based lubricants. Do not flush with solvents of any kind
 - This hose does not contain a conductive element; therefore, it should not be used with explosive gases such as pure oxygen and hydrogen
 - Hose is compliant with CGA Grade E Breathing Air Standards, however air quality is dependent upon all system components
 - Steel and Stainless Steel connection configurations limited to:
101CG-2-4 101CG-4-4 102CG-2-4 102CG-4-4
103CG-4-4 13ECG-4-4 106CG-4-4 137CG-4-4
139CG-4-4 141CG-4-4 1L9CG-4-4

5CNG – Compressed natural gas hose

According to NFPA 52, AGA 1-93 and AGA/CGA,

ANSI Standards 4.2/12.52,

Approved according to CSA / ECE R110



MAIN FEATURES

- High flexibility, compact construction
- Strong polyurethane cover for high wear and tear resistance
- Working pressure 34.5 MPa
- Also available as twinline or multiline hose
- Customized preforming available (see Bulletin 5200-Preformed)
- Electrically conductive

APPLICATIONS

Dispense hose for natural gas and other gases in stationary and mobile applications, for example:

Natural gas fuelling stations, compressors, chemical plants, gas processing installations and vehicles.

CONSTRUCTION

Core tube : Electrically conductive polymer

Pressure reinforcement : Two or more braided layers of high tensile synthetic fibre

Cover

: Polyurethane, pinpricked

Colour

: Red, other colours available on request

TEMPERATURE RANGE

-40°C up to +82°C

[Visit the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
5CNG-4	6	-04	6.4	1/4	14.0	34.5	5,000	138.0	20,000	51	0.11	CG*
5CNG-6	10	-06	9.9	3/8	16.3	34.5	5,000	138.0	20,000	76	0.13	CG*
5CNG-8	12	-08	12.7	1/2	22.7	34.5	5,000	138.0	20,000	102	0.31	CG*
5CNG-12	20	-12	19.3	3/4	29.2	34.5	5,000	138.0	20,000	191	0.36	CG*
5CNG-16	25	-16	26.0	1	40.4	34.5	5,000	138.0	20,000	254	0.53	CG*

*: Only available on request

NOTES

- Not for use in paint spray applications
- For refuelling systems additionally hose guards and warning tag must be ordered
- Twinline constructions for return lines available
- Factory made assemblies only

8LPG – Liquified propane gas and natural gas hose

Certified acc. to ECE R 67 class 1,
ECE R110 and AS/NZS 1869



MAIN FEATURES

- Compact construction, high flexibility
- Working pressure 3.0 MPa
- Highly resistant polymer core tube
- Strong polymer cover for high wear and tear resistance, weatherproof, UV- and ozone-resistant
- Customized preforming available (see Bulletin 5200-Preformed)

APPLICATIONS

LPG and CNG system for cars, trucks, busses and forklift trucks

CONSTRUCTION

- Core tube** : Polyamide
Pressure reinforcement : One layer of high tensile synthetic fibre
- Cover** : Polyamide, pinpricked; opt. flame resist. cover Type -FR(*)
Colour : Black, other colours available on request

TEMPERATURE RANGE

-25°C up to +100°C (short time 125°C)

[Visite the webpage](#)

Part No. #	DN	size	mm	inch	mm	Max. working pressure MPa / psi		Min. burst pressure MPa / psi		Min. bend radius mm	Weight kg/m	Fittings
8LPG-3	5	-03	4.8	3/16	8.0	3.0	435	15.0	2,175	50	0.033	PX-LPG
8LPG-4	6	-04	6.3	1/4	9.8	3.0	435	15.0	2,175	75	0.043	PX-LPG
8LPG-5	8	-05	7.9	5/16	12.2	3.0	435	15.0	2,175	90	0.067	PX-LPG
8LPG-6	10	-06	9.5	3/8	13.7	3.0	435	15.0	2,175	100	0.075	PX-LPG
8LPG-3-FR*	5	-03	4.8	3/16	9.5	3.0	435	15.0	2,175	50	0.058	PX-LPG
8LPG-4-FR*	6	-04	6.3	1/4	11.5	3.0	435	15.0	2,175	75	0.071	PX-LPG
8LPG-5-FR*	8	-05	7.9	5/16	13.8	3.0	435	15.0	2,175	90	0.085	PX-LPG
8LPG-6-FR*	10	-06	9.5	3/8	15.3	3.0	435	15.0	2,175	100	0.090	PX-LPG

*Improved mechanical and chemical protection through flame resistant 2nd outer cover

NOTES

- Factory made assemblies only