

## Medium Pressure Hydraulic Hose

Bulletin 4480-F01/UK June 2004

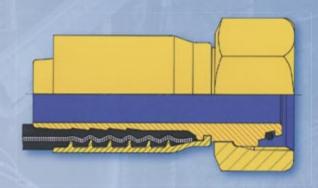


# Elite No-Shive Compact Hoses the definitive range of medi

Ho-Skive Compact hydraulic hoses exceeding EN specifications, for the more demanding OEM and MRO hydraulic markets/applications

Classic No-Shive hydraulic hoses according to SAE and EN specifications

Based on the proven Parker No-Shive technology



A streamline selection of wire braided hoses, with wide ranging technical properties that provide flexibility to cover all major applications. This hose range is complemented by a full selection of compatible fittings in steel and stainless steel.

Complete No-Skive fitting technology across the full range of medium pressure hoses providing simpler, quicker and safer hose assembly

Extended range of working temperature: low (down to -50 °C) and high (up to +150 °C)

Selected hoses feature nitrile inner tubes suitable for mineral and bio-degradable oils

Full range of fluid compatibility; oil, water phosphate ester etc.

Using high quality cover compounds allows thin covers – less weight – long service life still assured

High flexibility for easier installation and increased impulse life

Small bend radii and light weight for applications where space and weight are determining factors

High abrasion resistance hose covers superior to ISO 6945 requirements, extending service life

High ozone resistant cover compounds - extending weathering/ageing resistance

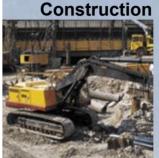
Parkrimp machines, portable or bench mounted for easy assembly operation – hose assemblies meet CE directives

## + Classic No-Shive Hoses

## um pressure hydraulic hoses

### **Mobile Hydraulic Applications**

Selecting the right product for the application requirements of today and tomorrow



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Products: 462, 492, 462ST, 492ST, 402

High impulse resistance,

high flexibility



Type approved, long service life

Products: 441, 462, 492

### **Agriculture**



Bio-oil resistant, competitive market environment,

Products: 421SN, 301SN, 441, 462, 492





Extreme mechanical wear and forces

Products: 462, 462ST, 492, 492ST, 402

Materials Handling



Limited space environment, high flexibility

Products: 692, 692 Twin, 462, 492

Hot Water Cleaning



Resistance to solvents, mechanical wear, weathering

Products: 463, 493

## **Industrial Hydraulic Applications**

## Automotive / Machine Tool



Cutting fluid compatibility, competitive market environment

Products: 421SN, 301SN, 462, 492

Aerospace



Phosphate ester compatibility

Products: 424, 304

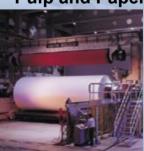
Injection Moulding



High impulse life, high safety requirements

Products: 462, 492

**Pulp and Paper** 



Agressive environment, resistance to solvents

Products: 462, 492, 426, 436

## Elite No-Shive Compact Hoses

402 - Elite



1 layer hose (10,0 MPa), small OD and bend radii, highly flexible, ideal for mobile equipment pilot lines



492 - Elite



462 - Flito



1 & 2 layers - exceeds EN 857 1SC and 2SC. ideal for highly demanding hydraulic applications in both the mobile and industrial markets



461LT - Elite



2 layers - exceeds EN 857 2SC, low temperature hose -50 °C; ideal for mobile and forestry equipment in cold climates



492ST - Elite



462ST - Elite



1 & 2 layers - exceeds EN 857 1SC and 2SC with highly abrasion resistant hybrid polymeric (ST) cover, extreme abrasion and mechanical resistance typically required in forestry and construction equipment applications



692 - Elite





Single- and twin-line constant pressure hose 21,0 MPa with tight bend radii;

ideal for limited space environments or aerial lift, telescopic handlers, fork lift trucks, hose reels etc.



## Classic No-Shive Hoses



1 & 2 layers – exceeds EN 853 1SN and 2SN for common use in standard hydraulic applications



1 layer high-pac construction – characteristics according to SAE 100 R16, for hydraulic applications up to +125 °C, transportation, agriculture, power steering etc.



21,0 MPa constant pressure SAE100 R17 hose, with extra abrasion resistant **TOUGH** Cover (MSHA approved)



1 & 2 layers – exceeds SAE 100R1AT & R16 for hydraulic fluids up to +150 °C, typically for use in paper, plastic and chemical industries



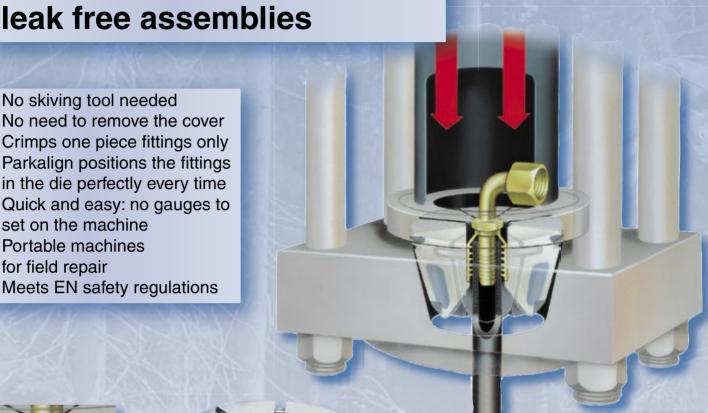
1 & 2 layers – high pressure water cleaning hose, maximum constant working temperature 120 °C for car-washes and garages



1 & 2 layers – EPDM inner tube and cover, equivalent to SAE100 R1AT & R2AT – phospate ester resistant ideal for aircraft maintenance, test benches, steel mills and foundries

## Parkrimp® No-Shive The system for fast and

- · No skiving tool needed
- No need to remove the cover
- · Crimps one piece fittings only
- · Parkalign positions the fittings in the die perfectly every time
- · Quick and easy: no gauges to set on the machine
- Portable machines for field repair
- · Meets EN safety regulations





Parkalign® Parker's exclusive Parkalign® positions the fitting in the dies perfectly every time.



Parker's color-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.



The perfect match

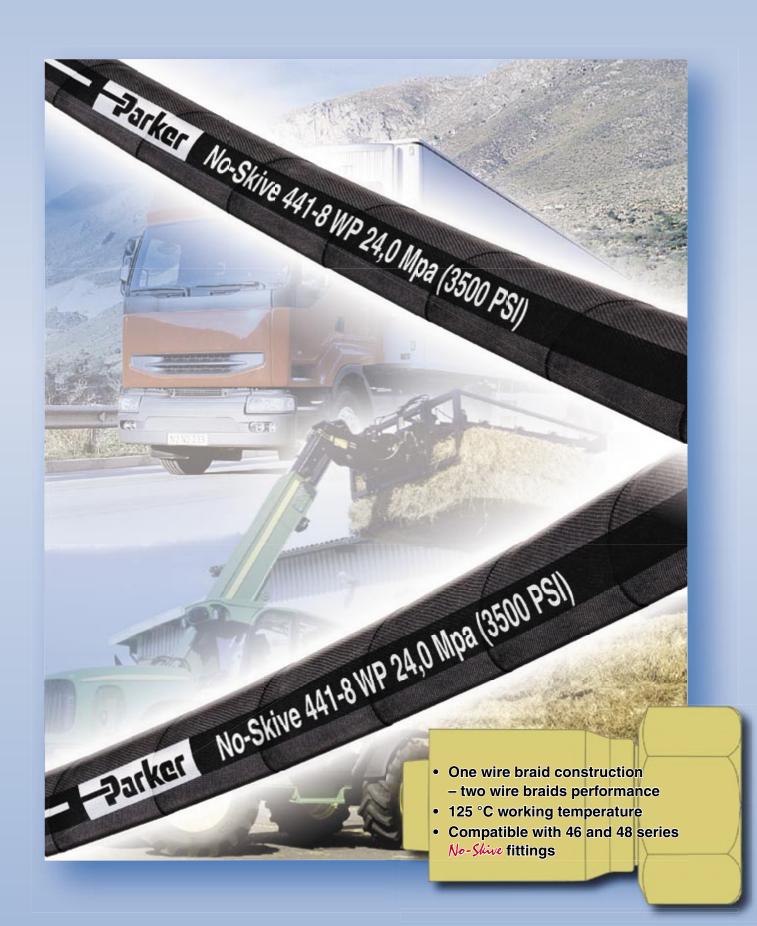
The complete system from one source. No-Slive hose, No-Shive fitting and crimping machine with world-wide quarantee and availability.







## 441 No-Shive Hi-Pac Compact Hose



# 441 – No-Skive Hi-Pac Compact Hose SAE 100 R2 working pressures SAE 100 R16 bending radii

Parker's upgraded 441 hose provides 2 wire braided performance with only 1 high quality wire braid and is now approved for a working temperature of 125 °C.

The Hi-Pac construction of the hose braid allows the technical characteristics of an SAE 100 R16 hose to be met, but offers higher flexibility and therefore improved ease of installation in machines or equipment.

The 441 hose is ideal for many industrial and mobile applications, with typical usage seen on agricultural machines or in power steering circuits.

#### Features:

- 1 wire braid construction 2 wire braids performance
- 125° C working temperature\*
- Compatible with both 46 and 48 series No-Skive fittings
- No-Skive design eliminates the need to remove the cover before crimping

## 441 – No-Shive 1-Layer Compact Hose for small bend radii SAE 100 R16, exceeds SAE 100 R2

### **Hose construction:**

Synthetic Rubber tube; one braid of high tensile steel wire reinforcement; oil, weather and abrasion resistant black synthetic rubber cover.

<b>Temperature</b>	range:40	°C to	125	°C
الله الراس	Exceptions: Air*	max.	+70	°C
Na maria	Water*	max.	+85	°C

### **Applications:**

High pressure service with petroleum based hydraulic fluids, water\*-glycol and water\*-oil emulsion hydraulic fluids, grease, lubricants, crude and fuel oils, air\* and water\*. Pin prick cover for air or gas applications above 17 bar (250 psi).

Crimped fittings: 46 and 48 series

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XXXX-XX-XX Part Number	DN	Hos	e I.D.	mm	Hose O.D.		Pressur . dynamic pressure	min. bend radius mm	Weight kg/m		
441-4	6	1/4	-4	6,3	13,4	34,5	5000	138,0	20000	50	0,27
			•					,			
441-5	8	5/16	-5	7,9	15,0	29,3	4250	117,0	17000	55	0,32
441-6	10	3/8	-6	9,5	17,4	27,5	4000	110,0	16000	65	0,42
441-8	12	1/2	-8	12,7	20,7	24,0	3500	96,0	14000	90	0,50
441-10	16	5/8	-10	15,9	23,8	19,0	2750	76,0	11000	100	0,65
441-12	20	3/4	-12	19,0	27,8	15,5	2250	62,0	9000	120	0,80
441-16	25	1	-16	25,4	35,8	13,8	2000	55,0	8000	150	1,22

The combination of high temperature and high pressure could reduce the hose life. Reels (RL) available upon request. e. g. 441-xx-RL



Parker Hannifin GmbH
Hose Products Division Europe

e-mail: hpde@parker.com www.parker.com/euro\_hpd

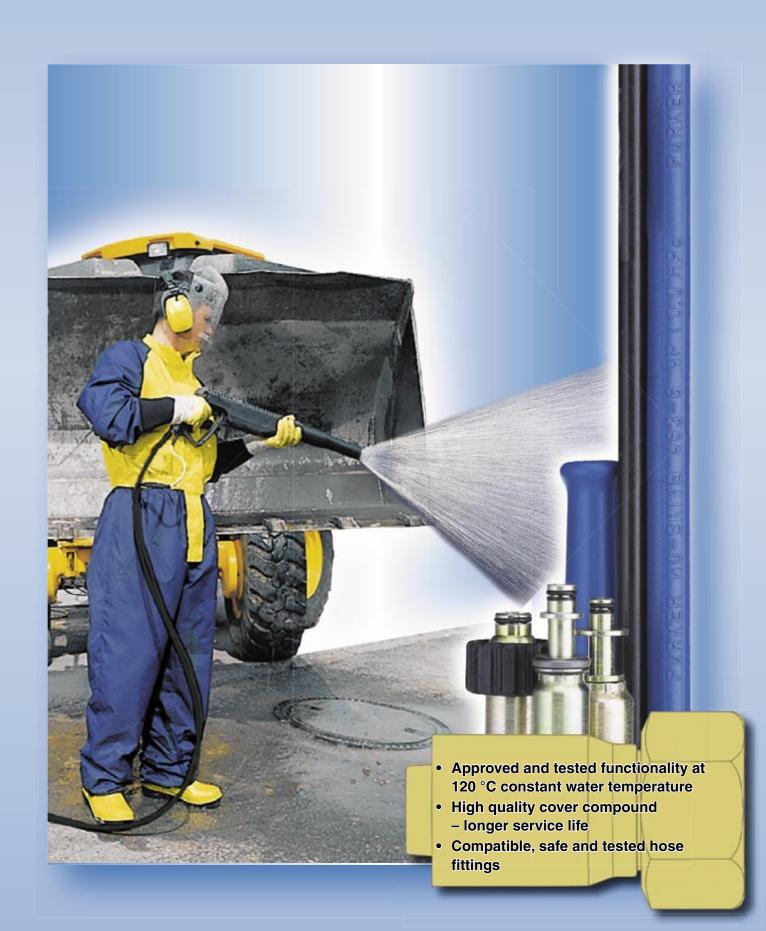
## Parkrimp series fittings and crimpers

Parker's 441 hose is compatible with both 46 and 48 series fittings and the Parkrimp family of crimpers. From the assembly speed of the PHastkrimp to the portable ease of the KarryKrimpers, there is a Parkrimp machine that meets vour needs. A broad range of fittings, with over 60 end configurations, combined with Parker hose and crimpers allows simple and safe assembly whenever and wherever needed.





# 493 & 463 No-Shive Hoses for High Pressure Water Cleaning



### 493/463 - No-Skive Hoses

Parker's 493 and 463, 1 and 2 wire high pressure water cleaning hoses offer safe, high pressure, hot water cleaning up to 120 °C constant water temperature.

The combination of high quality rubber compounds used for the hose covers – offering excellent abrasion and ozone resistance, together with the approved and tested Parker fittings, maximises the working life of the hoses and reduces running costs.

#### Features:

- Approved and tested functionality at 120 °C constant water temperature
- High quality cover compound longer service life
- Compatible, safe and tested hose fittings

### 493/463 - No-Skive 1 & 2-Layer Hoses

#### **Hose construction:**

Inner tube of synthetic rubber, one or two braids of hightensile steel wire reinforcement and an oil and weather resistant black or blue (BLU) synthetic cover.

#### Temperature range:

Water ..... max. +120 °C

#### Applications:

Designed for use with water only, for constant water temperatures up to 120 °C. The hose is not recommended for steam service.

Crimped fittings: 493 → 48 series

463 **→** 46 series

WaterIllax. +120 C											
XXXX XX XX Part Number	<b>5</b> 4		se I.D.	l	Hose O.D.	working	Pressure	min. bend radius	Weight		
	DN	Inch	Size	mm	mm	MPa	psi	MPa	psi	mm	kg/m
493-4-RL	6	1/4	-4	6,3	13,4	20,0	2898	60,0	8695	60	0,18
493-4-BLU-RL	6	1/4	-4	6,3	13,4	20,0	2898	60,0	8695	60	0,18
493-5-RL	8	5/16	-5	7,9	15,0	20,0	2898	60,0	8695	75	0,21
493-5-BLU-RL	8	5/16	-5	7,9	15,0	20,0	2898	60,0	8695	75	0,21
493-6-RL	10	3/8	-6	9,5	17,4	20,0	2898	60,0	8695	90	0,25
493-6-BLU-RL	10	3/8	-6	9,5	17,4	20,0	2898	60,0	8695	90	0,25
493-8-RL	12	1/2	-8	12,7	20,6	17,5	2536	52,5	7608	110	0,33
493-8-BLU-RL	12	1/2	-8	12,7	20,6	17,5	2536	52,5	7608	110	0,33
463-5-RL	8	5/16	-5	7,9	15,0	40,0	5800	120,0	17400	75	0,31
463-5-BLU-RL	8	5/16	-5	7,9	15,0	40,0	5800	120,0	17400	75	0,31
463-6-RL	10	3/8	-6	9,5	17,4	40,0	5800	120,0	17400	90	0,38
463-6-BLU-RL	10	3/8	-6	9,5	17,4	40,0	5800	120,0	17400	90	0,38
463-8-RL	12	1/2	-8	12,7	20,6	35,0	5075	105,0	15225	110	0,48
463-8-BLU-RL	12	1/2	-8	12,7	20,6	35,0	5075	105,0	15225	110	0,48

RL = only available on reels



Parker Hannifin GmbH Hose Products Division Europe

e-mail: hpde@parker.com www.parker.com/euro\_hpd

## Parkrimp series fittings and crimpers

Parker's 493/463 hoses are compatible with Parkrimp series fittings and the Parkrimp family of crimpers. From the assembly speed of the PHastkrimp to the portable ease of the KarryKrimpers, there is a Parkrimp machine that meets your needs.

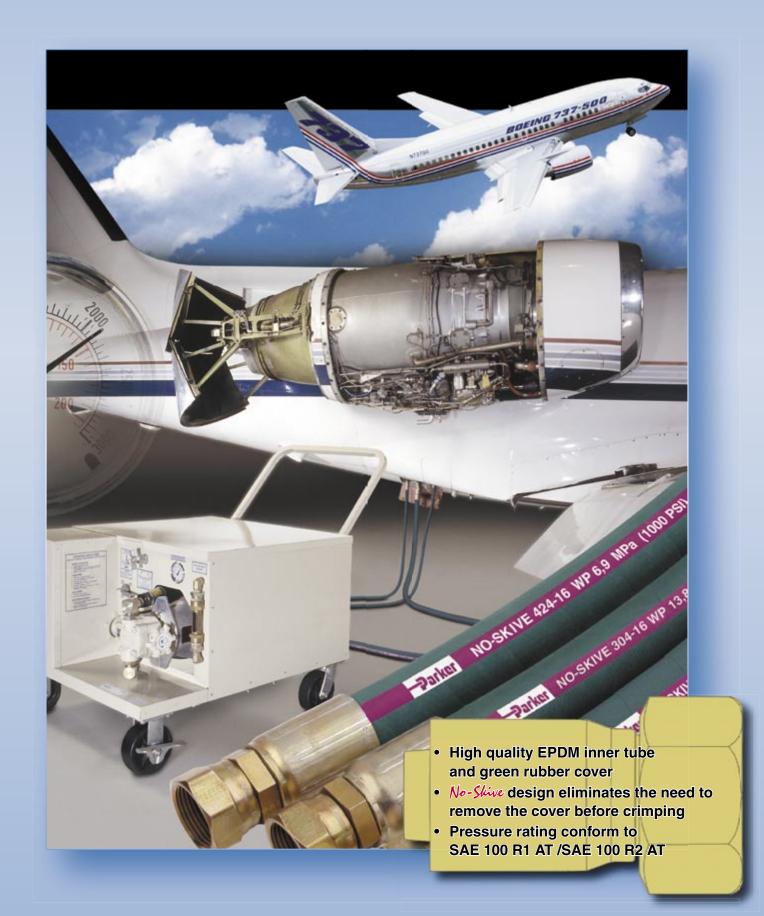
A broad range of fittings, with over 60 end configurations, combined with Parker hose and crimpers allows simple and safe assembly – whenever and wherever needed.







# **424 & 304** No-Shive Hoses for Phosphate Ester Fluids



## 424 and 304 – No-Skive Hoses for Phosphate Ester Fluids

If getting aircraft into the air is your job, leaking hydraulic hose assemblies on your test equipment should be the last of your worries.

That's why Parker's line of phosphate-ester fluid compatible EPDM rubber hoses should be your first choice. Parker's 1 and 2 wire braided medium pressure hoses feature inner tubes and outer covers that resist aggressive phosphate-ester fluids typical to the aircraft industry but also found in other industries such as foundries and steel mills.

The hose constructions of the 424 and 304 hoses are according to the SAE 100 R1 AT /SAE 100 R2 AT respectively, and form a part of a larger range of EPDM hoses covering the lower and higher pressures (see catalogue 4400)

### **Features:**

- · High quality EPDM inner tube and green EPDM cover
- No-Skive design eliminates the need to remove the cover before crimping
- Pressure ratings conform to SAE 100 R1 AT / SAE 100 R2 AT

## Parkrimp series fittings and crimpers

Parker's 424 and 304 hoses are compatible with 43 series fittings and the Parkrimp family of crimpers. From the assembly speed of the PHastkrimp to the portable ease of the KarryKrimpers, there is a Parkrimp machine that meets your needs. A broad range of fittings, with over 60

end configurations, combined with Parker hose and crimpers allows simple and safe assembly – whenever and wherever needed.

## 424 / 304 - No-Shive 1 & 2-Layer EPDM Hoses

### **Hose construction:**

EPDM synthetic rubber tube; one or two braids of high tensile steel wire reinforcement; phosphate ester and weather resistant green synthetic rubber cover.

Temperature range: ....-40 °C to +80 °C

Exceptions: Air..... max. +70 °C Water ...... max. +85 °C

#### **Applications:**

High pressure service hose for use with phosphate ester base hydraulic fluids. Do not allow tube to contact any petroleum based fluids. Use soap as lubricant.

Crimped fittings: 43 series

XXXX-XX-XX XXX-XX-XX Part Number		Hos	e I.D.		Hose O.D.		Pressure . dynamic pressure	( <b>)</b> m	in. burst ressure	min. bend radius	Weight
	DN	Inch	Size	mm	mm	MPa	psi	MPa	psi	mm	kg/m
424-16	25	1	-16	25,4	36,0	6,9	1000	28,0	4000	300	0,94
424-20	32	1-1/4	-20	31,8	45,0	4,3	625	17,0	2500	420	1,19
424-24	40	1-1/2	-24	38,1	51,0	3,5	500	14,0	2000	500	1,49
424-32	50	2	-32	50,8	64,6	2,4	375	10,0	1500	630	2,23
304-4	6	1/4	-4	6,3	15,0	34,5	5000	138,0	20000	100	0,39
304-6	10	3/8	-6	9,5	19,0	27,5	4000	110,0	16000	130	0,55
304-8	12	1/2	-8	12,7	22,0	24,0	3500	96,0	14000	180	0,67
304-12	20	3/4	-12	19,1	30,0	15,5	2250	62,0	9000	240	1,00
304-16	25	1	-16	25,4	38,0	13,8	2000	55,0	8000	300	1,49
304-20	32	1-1/4	-20	31,8	48,0	11,2	1625	45,0	6500	420	1,73
304-24	40	1-1/2	-24	38,1	55,0	8,6	1250	35,0	5000	500	2,14
304-32	50	2	-32	50,8	68,0	7,8	1125	31,0	4500	630	2,96

The combination of high temperature and high pressure could reduce the hose life.



Parker Hannifin GmbH Hose Products Division Europe

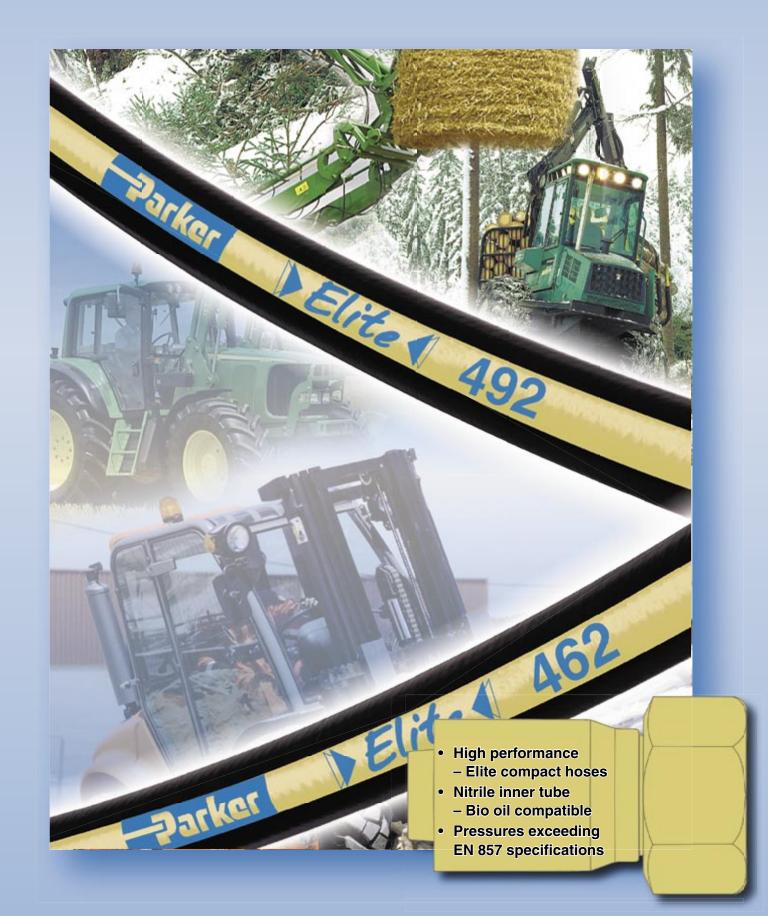
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## 492 & 462 Elite No-Skive Compact Hoses



### 492/462 - Elite Compact Hoses

Parker's new *Elite* 1 and 2 wire braided compact hoses, exceeding EN857-1SC and EN857-2SC respectively, have been upgraded to meet the ever increasing demands of modern applications. The hoses are the ideal choice where lower weight, high pressures and tight bending radii are the driving factors influencing product selection.

In addition to the already high performance of the hoses, they are now also constructed with nitrile rubber inner tubes for improved fluid compatibility and resistance to bio-oils and improved ozone and abrasion resistance covers; resulting in even longer service lives and lowering overall equipment costs.

### **Features:**

- Exceeding specified working pressures of EN857-1SC/2SC respectively
- High quality cover compound longer service life
- Tight bending radii compact hoses allowing compact machine designs
- Nitrile inner tubes bio-oil resistant

### 492/462 - Elite 1/2-Wire Compact Hoses

### **Hose construction:**

Nitrile rubber tube; one or two braids of high tensile steel wire reinforcement; oil, weather and a high abrasion resistant black synthetic rubber cover.

Temperature range:	40 °C to +100 °C
Exceptions: Air*	max. +70 °C
Water*	max. +85 °C

### **Applications:**

High pressure service with petroleum based hydraulic fluids, water\*-glycol and water\*-oil emulsion hydraulic fluids, grease, lubricants, crude and fuel oils, air\* and water\*. Pin prick cover for air or gas applications above 17 bar (250 psi).

Crimped fittings: 46 series

YYYYYYYYY XXXXYXXXXX Part Number	Hose I.D.				Hose O.D.	· · · · · · · · · · · · · · · · · · ·			in. burst ressure	min. bend radius	Weight
	DN	Inch	Size	mm	mm	MPa	psi	MPa	psi	mm	kg/m
492-4	6	1/4	-4	6,3	11,5	28,0	4060	112,0	16240	75	0,18
492-5	8	5/16	-5	7,9	13,6	25,0	3625	100,0	14500	85	0,21
492-6	10	3/8	-6	9,5	15,5	22,5	3260	90,0	13050	90	0,25
492-8	12	1/2	-8	12,7	18,9	19,0	2755	76,0	11020	130	0,33
492-10	16	5/8	-10	15,9	22,2	15,0	2175	60,0	8700	150	0,41
492-12	20	3/4	-12	19,0	26,0	15,0	2175	60,0	8700	180	0,56
492-16	25	1	-16	25,4	33,3	11,0	1595	44,0	6380	230	0,75
492-20	32	1.1/4	-20	31,8	40,0	7,5	1085	30,0	4350	335	0,93
462-4	6	1/4	-4	6,3	13,4	42,5	6160	170,0	24640	75	0,30
462-5	8	5/16	-5	7,9	15,0	40,0	5800	160,0	23200	85	0,35
462-6	10	3/8	-6	9,5	17,2	35,0	5075	140,0	20300	90	0,42
462-8	12	1/2	-8	12,7	20,4	31,0	4495	124,0	17980	130	0,52
462-10	16	5/8	-10	15,9	23,9	28,0	4060	112,0	16240	160	0,66
462-12	20	3/4	-12	19,0	27,7	28,0	4060	112,0	16240	195	0,86
462-16	25	1	-16	25,4	35,4	21,0	3045	84,0	12180	250	1,17
462-20	32	1.1/4	-20	31,8	43,0	17,2	2495	68,8	9980	335	1,50
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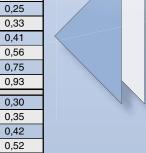
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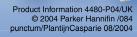
## Parkrimp series fittings and crimpers

Parker's 492/462 hoses are compatible with 46 series fittings and the Parkrimp family of crimpers. From the assembly speed of the PHastkrimp to the portable ease of the KarryKrimpers, there is a Parkrimp machine that meets your needs.

A broad range of fittings, with over 60 end configurations, combined with

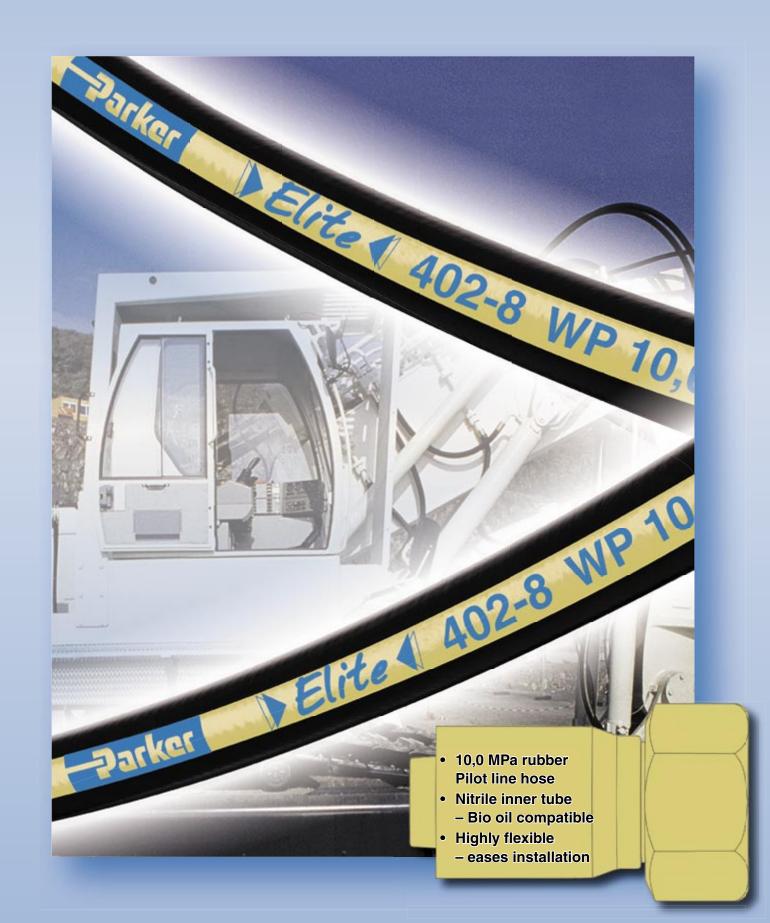
Parker hose and crimpers allows simple and safe assembly – whenever and wherever needed.







# Elite No-Skive Compact Hose for Pilot Lines



## **402** – *Elite* Compact Pilot Line Hose

Parker's 402 *Elite* Pilot Line hose is a highly flexible 10,0 MPa constant pressure hose, ideally suited to the compact build requirements of modern equipment.

The combination of a high abrasion and ozone resistant outer cover, with its small outside diameter and the upgraded fluid compatibility of the hose, through its nitrile inner tube, results in a pilot line hose that meets the demands of a wide ranging customer base.

The 402 hose is ideal for many industrial and mobile applications, with typical usage seen in mobile construction equipment.

### Features:

- Nitrile inner tube bio-oil resistant
- Tight bending radii allowing compact machine designs
- High quality cover compound longer service life
- Compatible with 2 piece No-Shive fittings
- No-Skive design eliminates the need to remove the cover before crimping

## Parker fittings and crimpers

Parker's 402 pilot line hose is compatible with Parker 2 piece fittings (47 series nipple plus 49 series shell). The No-Skive design of the fittings eliminates the need to remove the hose cover before crimping and provides a user-friendly, cleaner and quicker assembly procedure. Parker offers a full range of fittings containing all popular end confirgurations, together with a compatible crimp machine and assembly instructions, which combined assures safe working practices and with long service life hose assemblies.

### 402 - Elite Compact Pilot Line Hose

### Hose construction:

Nitrile rubber tube; one braid of high tensile steel wire reinforcement; oil, weather and abrasion resistant black synthetic rubber cover.

Temperature	range:	-40 °C to +100 °C
	Exceptions: Air*	max. +70 °C
	Water*	max. +85 °C

### **Applications:**

High pressure service with petroleum based hydraulic fluids, water-glycol and water-oil emulsion hydraulic fluids, grease, lubricants, crude and fuel oils, air\* and water. Pin prick cover for air or gas applications above 17 bar (250 psi). **Crimped fittings:** 2-piece 47/49 nipple/shell

YXXX-XX-XX Part Number		Hos	e I.D.		Hose O.D.	Pressure rating  max. dynamic working pressure  min. burst pressure			min. bend radius	Weight	
	DN	Inch	Size	mm	mm	MPa	psi	MPa	psi	mm	kg/m
402-4	6	1/4	-4	6,3	11,6	10,0	1450	40,0	5800	50	0,15
402-5	8	5/16	-5	7,9	13,2	10,0	1450	40,0	5800	60	0,18
402-6	10	3/8	-6	9,5	14,8	10,0	1450	40,0	5800	65	0,21
402-8	12	1/2	-8	12,7	18,6	10,0	1450	40,0	5800	75	0,29



Parker Hannifin GmbH Hose Products Division Europe

e-mail: hpde@parker.com www.parker.com/euro\_hpd

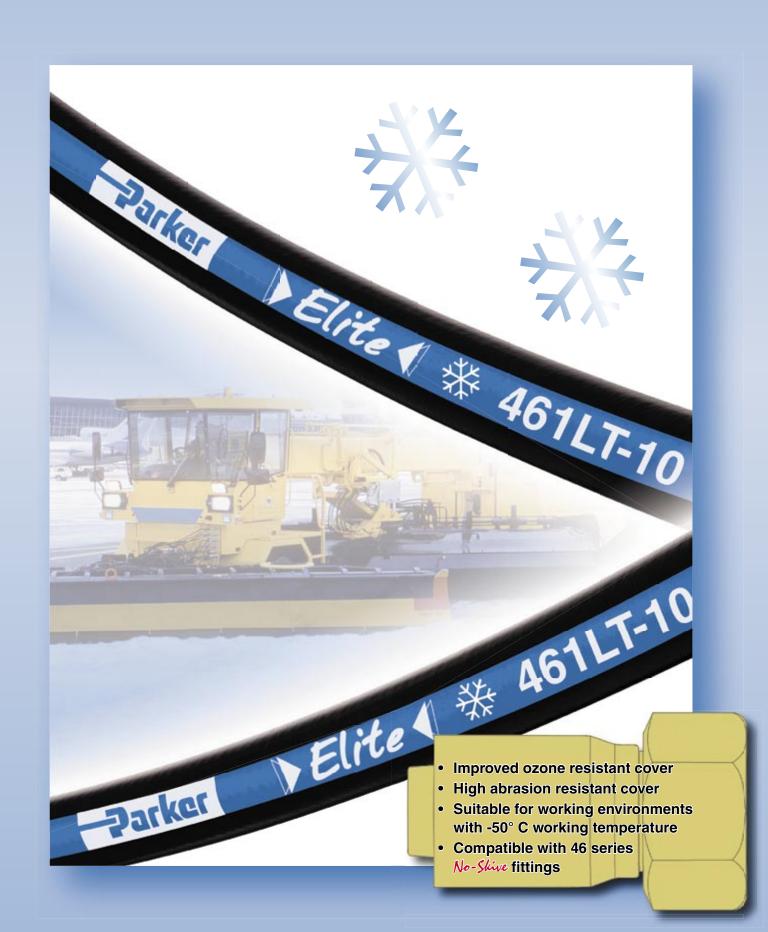


Polykrimp II TH8-520



### 461LT Elite

## No-Skive Low Temperature Compact Hose



## Parker 461LT *Elite*Low Temperature Compact Hose

Parker's 461LT *Elite* low temperature EN857-2SC hose is the ideal candidate to stand out in the cold. With technical performance that exceeds the EN857-2SC combined with a working temperature of down to -50° C, the 461LT offers high performance and flexibility, in the harshest of conditions.

### **Features:**

- Improved Ozone resistant cover
- High abrasion resistant cover
- Suitable for working environments down to -50 °C
- Compatible with 46 series No-Shive fittings
- No-Skive design eliminates the need to remove the cover before crimping

## Parkrimp series fittings and crimpers

Parker's 461LT hose is compatible with 46 series fittings and the Parkrimp family of crimpers. From the assembly speed of the PHastkrimp to the portable ease of the KarryKrimpers, there is a Parkrimp machine that meets your needs. A broad range of fittings, with over 60 end configurations, combined with Parker hose and crimpers allows simple and safe assembly -

whenever and wherever needed.

### 461LT - Elite Low Temperature Compact Hose

#### Hose construction:

Synthetic rubber tube; two braids of high tensile steel wire reinforcement separated by a synthetic rubber layer; oil, ozone, weather and highly abrasion resistant synthetic black rubber cover.

Temperature range:	50 °C to +100 °C
Exceptions: Air*	max. +70 °C
Water*	may ±85 °C

### **Applications:**

High pressure service with petroleum based hydraulic fluids, water\*-glycol and water\*-oil emulsion hydraulic fluids, grease, lubricants, crude and fuel oils, air\* and water\*. Pin prick cover for air or gas applications above 17 bar (250 psi).

Crimped fittings: 46 series

YYXX-XX-XX Part Number	DN	Hos	e I.D.	l mm	Hose O.D.	Pressure rating  max. dynamic working pressure  MPa psi MPa psi			min. bend radius mm	Weight kg/m	
461LT-4	6	1/4	-4	6,3	13	42,5	6160	170.0	24640	75	0,30
461LT-5	8	5/16	-5	7,9	15	40,0	5800	160,0	23200	85	0,35
461LT-6	10	3/8	-6	9,5	17	35,0	5075	140,0	20300	90	0,42
461LT-8	12	1/2	-8	12,7	21	31,0	4495	124,0	17980	130	0,52
461LT-10	16	5/8	-10	15,9	24	28,0	4060	112,0	16240	160	0,66
461LT-12	20	3/4	-12	19,1	28	28,0	4060	112,0	16240	195	0,86
461LT-16	25	1	-16	25,4	35	21,0	3045	84,0	12180	250	1,17



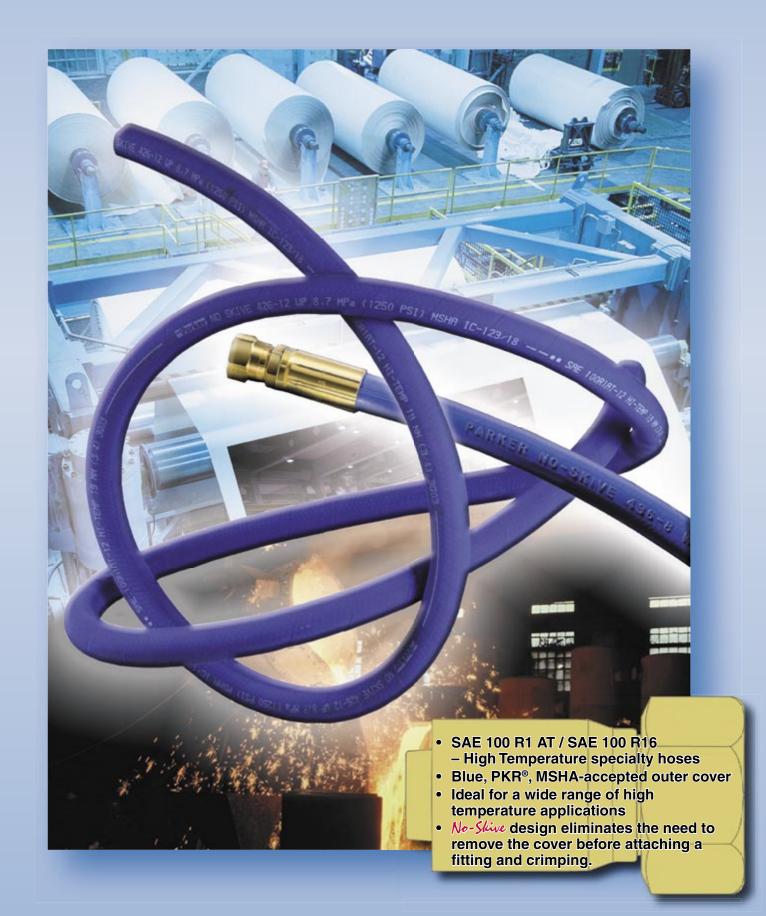
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e-mail: hpde@parker.com www.parker.com/euro\_hpd





# **426 & 436** No-Shive Hoses for High Temperature Applications



## 426/436 – No-Skive SAE 100 R1 AT / SAE 100 R16 High Temperature Hoses

Parker 426, 1 wire hose is perfect for both internal and external high-temperature applications. Used in foundry, injection molding, fleet oil cooler lines and ideal for thermal transfer fluids. Parker's NEW 426 hose with a PKR inner tube and PKR Hypalon® outer cover, is ideal for both internal and external high-temperature applications.

To complete the range of wire braided hoses for high temperature, Parker also has the 436 hose with 2 wire braids. The 436 hose meets the SAE 100 R16 pressure and bending radius specification, but is approved to work with petroleum based fluids oils up to 150 °C.

Both the 426 and the 436 hoses offer versatility, long service life and dependability for a wide range of applications and are approved with Parkrimp series fittings.

### Features:

- SAE 100 R1 AT / SAE 100 R16
   high temperature specialty hoses
- Blue, PKR®, MSHA-accepted outer cover
- · Ideal for a wide range of high temperature applications
- No-Skive design eliminates the need to remove the cover before attaching a fitting and crimping.

## Parkrimp series fittings and crimpers

Parker's 426/436 hoses are compatible with 43/48 series fittings and the Parkrimp family of crimpers. From the assembly speed of the PHastkrimp to the portable ease of the KarryKrimpers, there is a Parkrimp machine that meets your needs. A broad range of

fittings, with over 60 end configurations, combined with Parker hose and crimpers allows simple and safe assembly – whenever and wherever needed.

### 426/436 - No-Skive High Temperature Compact Hoses

### Hose construction:

Synthetic Rubber tube; one or two braids of high tensile steel wire reinforcement separated by a synthetic rubber layer; oil, weather and abrasion resistant synthetic rubber blue cover.

**Temperature range:** .....-46 °C to +150 °C Exceptions: Air\*..... max. +70 °C

Water\* ..... max. +85 °C

### **Applications:**

High pressure service with petroleum based hydraulic fluids, water\*-glycol and water\*-oil emulsion hydraulic fluids, grease, lubricants, crude and fuel oils, air\* and water\*. Pin prick cover for air or gas applications above 17 bar (250 psi).

Crimped fittings: 426 → 43 series 436 → 43 & 48 series

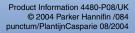
VVVV-VV-VV VVVV-VV-VV Part Number		Hos	e I.D.		Hose O.D.	max. working	Pressure dynamic pressure	mi	n. burst essure	min. bend radius	Weight
	DN	Inch	Size	mm	mm	MPa	psi	MPa	psi	mm	kg/m
426-4	6	1/4	-4	6,3	13,4	19,2	2750	77,0	11000	100	0,24
426-6	10	3/8	-6	9,5	17,4	15,7	2250	63,0	9000	125	0,34
426-8	12	1/2	-8	12,7	20,7	14,0	2000	56,0	8000	180	0,43
426-10	16	5/8	-10	15,9	23,9	10,5	1500	42,0	6000	200	0,49
426-12	20	3/4	-12	19,1	27,8	8,7	1250	35,0	5000	240	0,65
426-16	25	1	-16	25,4	35,8	7,0	1000	28,0	4000	300	0,98
436-6-BLU-RL	10	3/8	-6	9,5	17,0	27,5	4000	110,0	16000	65	0,42
436-8-BLU-RL	12	1/2	-8	12,7	20,0	24,0	3500	96,0	14000	90	0,51
436-10-BLU-RL	16	5/8	-10	15,9	24,0	19,0	2750	76,0	11000	100	0,66
436-12-BLU-RL	20	3/4	-12	19,1	28,0	15,5	2250	62,0	9000	120	0,80
436-16-BLU-RL	25	1	-16	25,4	36,0	13,8	2000	55,0	8000	150	1,22

The combination of high temperature and high pressure could reduce the hose life. RL = only available on reels



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Hose Products Division Europe

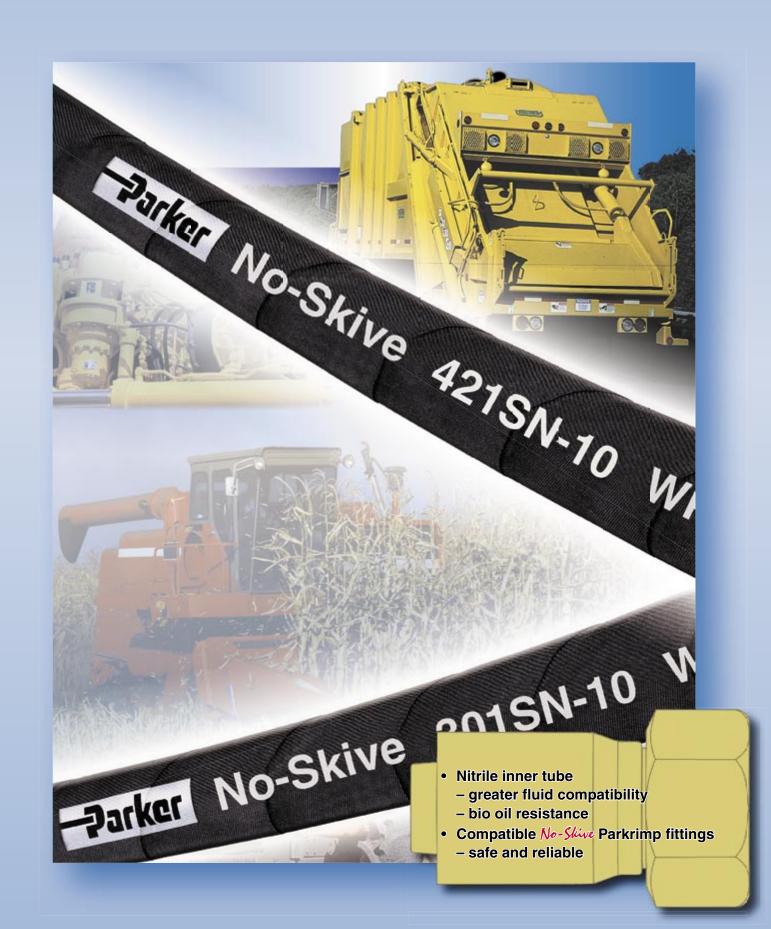
e-mail: hpde@parker.com www.parker.com/euro\_hpd





### 421SN & 301SN

No-Shive Hoses



### 421SN/301SN - No-Skive Hoses

Keeping pace with ever increasing market requirements the 421SN and 301SN have been upgraded with nitrile inner tubes for greater fluid compatibility as with as improved ozone and abrasion resistant covers.

Although the 1SN and 2SN are often the typically specified hoses for standard hydraulic applications, the 421SN and 301SN offer more than just standard performance. The combination of the hoses technical features with the compatible Parkrimp 48 series fittings offers a safe and reliable assembly that increases service life and cuts costs.

### **Features:**

- Nitrile inner tube for greater fluid compatibility and bio oil resistance
- Exceed EN853 1SN/2SN specifications
- No-Slive design eliminates the need to remove the cover before attaching a fitting and crimping.
- Compatible No-Skive 48 series Parkrimp fittings
  - safe and reliable

421SN - No-Skive Hose SAE 100 R1 AT / DIN 20 022-1SN /EN 853-1SN 301SN - No-Slive Hose ISO S 1436 /II /SAE 100 R2 AT / DIN 20 022 -2SN /EN 853-2SN

Hose construction:

Nitrile rubber tube; one / two braids of high tensile steel wire reinforcement; oil, weather and abrasion resistant black synthetic rubber cover.

Temperature range: .....-40 °C to +100 °C Exceptions: Air\*..... max. +70 °C

Water\* ..... max. +85 °C

Applications:
High pressure service with petroleum based hydraulic fluids, water\*-glycol and water\*-oil emulsion hydraulic fluids, grease, lubricants, crude and fuel oils, air\* and water\*. Pin prick cover for air or gas applications above 17 bar (250 psi).

Crimped fittings: 48 series

XXXX-XX-XX Part Number	Hose I.D. Hose O.D.				Pressure rating  max. dynamic working pressure  min. burst pressure				Weight		
	DN	Inch	Size	mm	mm	MPa	psi	MPa	psi	radius mm	kg/m
421SN-4	6	1/4	-4	6,3	13,4	22,5	3250	90,0	13000	100	0,24
421SN-5	8	5/16	-5	7,9	15,0	21,5	3125	86,0	12500	115	0,27
421SN-6	10	3/8	-6	9,5	17,4	18,0	2600	72,0	10400	130	0,34
421SN-8	12	1/2	-8	12,7	20,7	16,0	2325	64,0	9300	180	0,43
421SN-10	16	5/8	-10	15,9	23,9	13,0	1875	52,0	7500	200	0,49
421SN-12	20	3/4	-12	19,0	27,8	10,5	1525	42,0	6100	240	0,63
421SN-16	25	1	-16	25,4	35,8	8,8	1275	35,0	5100	300	0,94
421SN-20	32	1.1/4	-20	31,8	44,8	6,3	900	25,0	3600	420	1,19
421SN-24	40	1.1/2	-24	38,1	51,1	5,0	725	20,0	2 900	500	1,49
421SN-32	50	2	-32	50,8	64,7	4,0	575	16,0	2 300	630	2,23
301SN-4	6	1/4	-4	6,3	15,0	40,0	5800	160,0	23200	100	0,39
301SN-5	8	5/16	-5	7,9	16,6	35,0	5075	140,0	20300	115	0,42
301SN-6	10	3/8	-6	9,5	19,0	33,0	4775	132,0	19100	130	0,55
301SN-8	12	1/2	-8	12,7	22,2	27,5	4000	110,0	16000	180	0,67
301SN-10	16	5/8	-10	15,9	25,4	25,0	3600	100,0	14500	200	0,77
301SN-12	20	3/4	-12	19,0	29,3	21,5	3100	86,0	12400	240	1,00
301SN-16	25	1	-16	25,4	38,1	16,5	2400	66,0	9600	300	1,49
301SN-20	32	1-1/4	-20	31,8	47,5	12,5	1800	50,0	7200	420	1,73
301SN-24	40	1-1/2	-24	38,1	55,0	9,0	1300	36,0	5200	500	2,14
301SN-32	50	2	-32	50,8	67,0	8,0	1150	32,0	4600	630	2,96

The combination of high temperature and high pressure could reduce the hose life.



Parker Hannifin GmbH Hose Products Division Europe

e-mail: hpde@parker.com www.parker.com/euro\_hpd

Parkrimp series fittings

compatible with 48 series

fittings and the Parkrimp

family of crimpers. From

the assembly speed of

KarryKrimpers, there is

a Parkrimp machine that

combined with Parker hose

the PHastkrimp to the

portable ease of the

meets your needs.

fittings, with over 60

end configurations.

and crimpers allows

simple and safe

wherever needed.

assembly whenever and

A broad range of

Parker's 421SN and

301SN hoses are

and crimpers

Product Information 4480-P09/UK punctum/PlantijnCasparie 08/2004



## 692 & 692Twin Elite No-Skive Compact Hoses



### 692 / 692Twin - Elite Compact Hoses

High flexibility and small bending radii of hoses are becoming more and more crucial for hydraulic circuit designers as market requirements mean smaller and more compact machines.

Parker's 21,0 MPa 692 rubber compact hoses with nitrile inner tubes for greater fluid compatibility, together with improved ozone and abrasion resistant covers offer the flexibility required to meet these needs.

An exclusive feature of the 692 range is the 692Twin line hose, where two hoses are extruded and vulcanised as one. The 692Twin hose is the ideal product for applications such as fork lift masts, telescopic arms or stabilisers, hose reels and other applications where it is beneficial to have pressure and return line attached together. The 692 hoses are approved with compatible Parkrimp 46 series fittings and assure a long term, leak free and reliable hose assembly.

### **Features:**

- Single and twin line compact hoses
- Nitrile inner tube greater fluid compatibility and bio oil resistance
- 21,0 MPa constant working pressure
- Extremely small bending radii under half of SAE 100 R2
- Highly flexible
- Abrasion and ozone resistant covers

### Parkrimp series fittings and crimpers

Parker's 692/692Twin hoses are compatible with 46 series fittings and the Parkrimp family of crimpers. From the assembly speed of the PHastkrimp to the portable ease of the KarryKrimpers, there is a Parkrimp machine that meets your needs. A broad range of

fittings, with over 60 end configurations, combined with Parker hose and crimpers allows simple and safe assembly whenever and wherever needed.

## 692/692Twin - Elite Constant pressure Compact Hoses

#### **Hose construction:**

Nitrile rubber tube; 1 or 2 braids of high tensile steel wire reinforcement; oil, weather and abrasion resistant black synthetic rubber cover

Temperature range: .....-40 °C to +80 °C

Exceptions: Air..... max. +70 °C

### Applications:

High pressure service with petroleum based hydraulic fluids, water-glycol and water-oil emulsion hydraulic fluids, grease, lubricants, crude and fuel oils, air and water. Pin prick cover for air or gas applications above 17 bar (250 psi). Crimped fittings: 46 series

\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Hose I.D.				Hose O.D.	Hose O.D. Twin		Pr ax. dynan king pres	min. bend radius	Weight		
	DN	Inch	Size	mm	mm	mm	MPa	psi	MPa	psi	mm	kg/m
692-4	6	1/4	-4	6,3	11,5		21,0	3045	84,0	12180	40	0,18
692-5	8	5/16	-5	7,9	13,6		21,0	3045	84,0	12180	40	0,21
692-6	10	3/8	-6	9,5	15,5	UP-17	21,0	3045	84,0	12180	40	0,25
692-8	12	1/2	-8	12,7	20,4		21,0	3045	84,0	12180	50	0,52
692-10	16	5/8	-10	15,9	23,9	. OH A	21,0	3045	84,0	12180	60	0,66
692-4-4	6	1/4	-4	6,3		25,8	21,0	3045	84,0	12180	40	0,34
692-5-5	8	5/16	-5	7,9	100	27,4	21,0	3045	84,0	12180	40	0,40
692-6-6	10	3/8	-6	9,5		31,2	21,0	3045	84,0	12180	40	0,48
692-8-8	12	1/2	-8	12,7		41,5	21,0	3045	84,0	12180	50	1,02
692-10-10	16	5/8	-10	15,9		48,7	21,0	3045	84,0	12180	60	1,30



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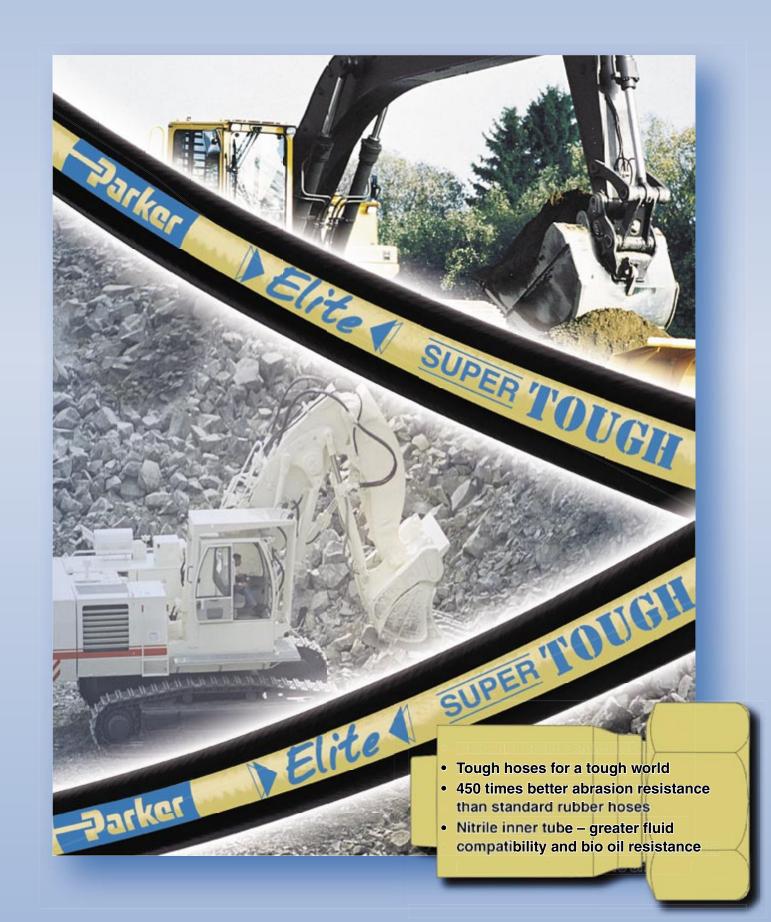
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## 492ST & 462ST Elite

No-Skive Super Tough Compact Hoses



## 492ST/462ST- Elite Compact Hoses

### **Tough Hoses for a Tough World!**

Parker's 492ST and 462ST **SUPER TOUGH** hoses combine the high performance of the Parker compact hoses with an extremely high abrasion resistance Polymeric cover, that increases the hoses service life when the hoses are exposed to extreme mechanical wear.

The **SUPER TOUGH** cover offers up to 450 times the abrasion resistance specified in the ISO 6945 for standard rubber hoses and provides the perfect alternative to expensive and cumbersome protective sleaving.

With the added benefit of the nitrile innertube, it makes the 492ST and 462ST ideal products for a huge range of industrial and mobile applications.

Most typical usage is seen on rugged applications such as with mobile construction equipment.

### Features:

- Nitrile inner tube
  - greater fluid compatibility and bio oil resistance
- 450 times better abrasion resistance than required in the ISO 6945 for standard rubber hoses
- Exceed EN857 1SC/2SC requirements
- ST covers offer an alternate to expensive and cumbersome protective sleaving

## Parkrimp series fittings and crimpers

Parker's 492ST/462ST hoses are compatible with 46 series fittings and the Parkrimp family of crimpers. From the assembly speed of the PHastkrimp to the KarryKrimpers, there is a Parkrimp machine that meets your needs.

A broad range of fittings, with over 60 end configurations, combined with

Parker hose and crimpers allows simple and safe assembly – whenever and wherever needed.

## needed

## 492ST/462ST - Elite SUPER TOUGH Compact Hoses

### **Hose construction:**

Nitrile rubber tube; one or two braids of high tensile steel wire reinforcement; oil, weather and a high abrasion resistant Super Tough (ST) polymeric cover.

Temperature range:	40 °C to +100 °C
Exceptions: Air	max. +70 °C
Water*	max. +85 °C

### **Applications:**

High pressure service with petroleum based hydraulic fluids, water\*-glycol and water\*-oil emulsion hydraulic fluids, grease, lubricants, crude and fuel oils and water\*.

Crimped fittings: 46 series

YXXX XX XX XXX XX XX Part Number		Hos	e I.D.		Hose O.D.		Pressur . dynamic pressure	( <b>3</b> m	in. burst ressure	min. bend radius	Weight
	DN	Inch	Size	mm	mm	MPa	psi	MPa	psi	mm	kg/m
492ST-4	6	1/4	-4	6,3	12,0	28,0	4000	112,0	16240	75	0,18
492ST-5	8	5/16	-5	7,9	13,6	25,0	3625	100,0	14500	85	0,21
492ST-6	10	3/8	-6	9,5	15,5	22,5	3260	90,0	13050	90	0,25
492ST-8	12	1/2	-8	12,7	18,9	19,0	2755	76,0	11020	130	0,33
492ST-10	16	5/8	-10	15,9	22,3	15,0	2175	60,0	8700	150	0,41
492ST-12	20	3/4	-12	19,1	26,0	15,0	2175	60,0	8700	180	0,56
492ST-16	25	1	-16	25,4	33,6	11,0	1595	44,0	6380	230	0,75
462ST-4	6	1/4	-4	6,3	13,4	42,5	6500	170,0	24600	75	0,30
462ST-5	8	5/16	-5	7,9	15,0	40,0	5800	160,0	23200	85	0,35
462ST-6	10	3/8	-6	9,5	17,2	35,0	5000	140,0	20000	90	0,42
462ST-8	12	1/2	-8	12,7	20,4	31,0	4450	124,0	17800	125	0,52
462ST-10	16	5/8	-10	15,9	23,9	28,0	4000	112,0	16000	160	0,66
462ST-12	20	3/4	-12	19,1	27,7	28,0	4000	112,0	16000	195	0,86
462ST-16	25	1	-16	25,4	35,4	21,0	3000	84,0	12000	250	1,17

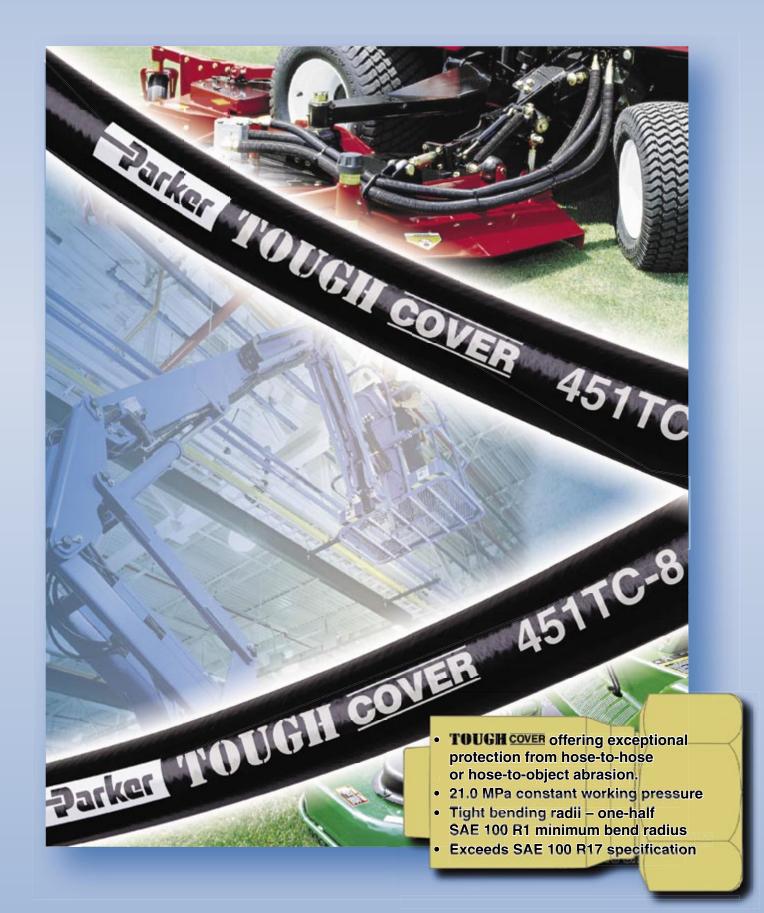
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e-mail: hpde@parker.com www.parker.com/euro\_hpd





## 451TC No-Shive Tough Cover Compact Hose



## 451TC - No-Shive TOUGH COVER Hose

Parker's 451TC combines small bending radii and high flexibility with a highly abrasion resistant **TOUGH COVER**, that makes the hose ideal for a wide range of industrial and mobile hydraulic applications where resisting mechanical wear is the crucial factor that leads to an increased service life of the hoses.

### **Features:**

- TOUGH COVER offering exceptional protection from hose-to-hose or hose-to-object abrasion.
- 21.0 MPa constant working pressure across all sizes
- Tight bending radii
  - one-half SAE 100 R1 minimum bend radius
- Exceeds SAE 100 R17 specification

ICATIOUGH

## Parkrimp series fittings and crimpers

Parker's 451TC hose is compatible with 48 series fittings and the Parkrimp family of crimpers. From the assembly speed of the PHastkrimp to the KarryKrimpers, there is a Parkrimp machine that meets your needs.

A broad range of fittings, with over 60 end configurations, combined with Parker hose and crimpers

and safe assembly – whenever and wherever needed.

allows simple

## 451TC - No-Shive TOUGH COVER Compact Hose

#### **Hose construction:**

Synthetic rubber tube; one braid of high tensile steel wire reinforcement; oil, weather and highly abrasion resistant MSHA accepted synthetic rubber cover.

Temperature range: .....-40 °C to +100 °C Exceptions: Air\*..... max. +70 °C

Water\* ...... max. +85 °C

### Applications:

High pressure service with petroleum based hydraulic fluids, water\*-glycol and water\*-oil emulsion hydraulic fluids, grease, lubricants, crude and fuel oils, air and water. Pin prick cover for air or gas applications above 17 bar (250psi)

Crimped fittings: 48 series

XXXX-XX-XX Part Number	DN	Hos	e I.D.	l	Hose O.D.	Pressure rating  max. dynamic working pressure  min. burst pressure				min. bend radius	Weight
	DN	inch	Size	mm	mm	MPa	psi	MPa	psi	mm	kg/m
451TC-4-RL	6	1/4	-4	6,3	13,4	21,0	3000	84,0	12000	50	0,24
451TC-6-RL	10	3/8	-6	9,5	17,2	21,0	3000	84,0	12000	65	0,34
451TC-8-RL	12	1/2	-8	12,7	20,4	21,0	3000	84,0	12000	90	0,52
451TC-10-RL	16	5/8	-10	15,9	23,8	21,0	3000	84,0	12000	100	0,66
451TC-12-RL	20	3/4	-12	19,1	27,8	21,0	3000	84,0	12000	120	0,86
451TC-16-RL	25	1	-16	25,4	35,4	21,0	3000	84,0	12000	150	1,17

The combination of high temperature and high pressure could reduce the hose life. RL = only available on reels



Parker Hannifin GmbH
Hose Products Division Europe

e-mail: hpde@parker.com www.parker.com/euro\_hpd



## Fluid Connectors Europe Sales Offices

Parker Hannifin GmbH

**A -** 2700 Wiener Neustadt Tel: +43 (0) (26 22) 23 501 Fax: +43 (0) (26 22) 66 212

Parker Hannifin Corporation

**AZPAR** 

**AZ -** 370 000 Baku Tel/Fax: +994 129 83 966

Parker Hannifin S.A.-N.V.

**B -** 1400 Nivelles Tel: +32 (0) 67 280 900 Fax: +32 (0) 67 280 999

Parker Hannifin s.r.o.

**CZ -** 184 00 Prague 8 Tel: +420 (0) (2)83 085 221 Fax: +420 (0) (2)83 085 360

Parker Hannifin GmbH

Fluid Connectors Group **D** - 33659 Bielefeld

Tel: +49 (0) (521) 4048-0

Fax: +49 (0) (521) 4048-4280

Parker Hannifin Danmark A/S

**DK -** 2750 Ballerup Tel: +45 43 56 04 00 Fax: +45 43 73 31 07

Parker Hannifin España S.A

**E -** 28850 Torrejón de Ardoz (Madrid) Tel: +34 91 675 73 00

Fax: +34 91 675 77 11

**Parker Hannifin France SAS** 

**F -** 74130 Contamine-sur-Arve Tel: +33 (0) 4 50 25 80 25 Fax: +33 (0) 4 50 97 86 60 **Parker Hannifin Oy** 

FIN - 01510 Vantaa Tel: +358 (0) 9 476 731 Fax: +358 (0) 9 476 732 00

Parker Hannifin plc

**GB -** Derby DE24 8JH Tel: +44 (0) 1332 36 56 31 Fax: +44 (0) 1332 29 21 46

**Parker Hannifin Corporation** 

**GR -** 171 21 Athens Tel: +30 (210) 933-6450 Fax: +30 (210) 933-6451

**Parker Hannifin Corporation** 

**HU -** 1149 Budapest Tel: +36 (1) 220-4155 Fax: +36 (1) 422-1525

Parker Hannifin S.p.A.

I - 20094 Corsico (MI) Tel: +39 02 451921 Fax: +39 02 4479340

**Parker Sales Ireland Ltd** 

**IE** - Blackrock, Co. Dublin Tel: +353 (0) 1 293 9999 Fax: +353 (0) 1 293 9900

**Parker Hannifin Corporation** 

Gateway Ventures Ca Ltd. **KZ** - 480100 Almaty Tel: +7 327 2 543 081 Fax: +7 327 2 541 100

Parker Hannifin A/S

**N -** 1402 Ski Tel: +47 64 91 10 00 Fax: +47 64 91 10 90

Parker Hannifin B.V.

**NL** - 7570 AT Oldenzaal Tel: +31 (0) 541 585000 Fax: +31 (0) 541 585459 Parker Hannifin Sp.z.o.o.

**PL -** 02-445 Warszawa Tel: +48 (0) (22) 863 49 42 Fax: +48 (0) (22) 863 49 44

Parker Hannifin Portugal Lda

**PT -** 4450-625 Leça da Palmeira Tel: +351 22 9997360

Tel: +351 22 9997360 Fax: +351 22 9961527

**Parker Hannifin Corporation** 

Hidro Consulting Impex Srl **RO** - 00001 Bucharest Tel: +40 (21) 252-1382 Fax: +40 (21) 252-3381

**Parker Hannifin Corporation** 

**RU -** 123001 Moscow Tel: +7 (095) 234 0054 Fax: +7 (095) 234 0528

**Parker Hannifin Corporation** 

**RU -** 693000 Yuzhno-Sakhalinsk Tel/Fax: + 7 4242 727 242

Parker Hannifin AB

**S** - 16308 Spånga-Stockholm Tel: +46 (0) 8 5979 5000 Fax: +46 (0) 8 5979 5120

**Parker Hannifin Corporation** 

**SI** - 8000 Novo Mesto Tel: +386 (7) 337-6650 Fax: +386 (7) 337-6651

**Parker Hannifin Africa** 

**ZA -** Kempton Park Tel: +27 (0) 11 961-0700 Fax: +27 (0) 11 392-7213

**Parker Hannifin Corporation** 

**UA -** 01004 Kiev

Tel: +380 (0) (44) 2207 432 Fax: +380 (0) (44) 2206 534

Internet: http://www.parker.com/europe

For further information on other Parker Products, call the European Product Information Centre free of charge on 00800 27 27 5374.



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