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Compact Spiral™ Hose

The Next Evolution In Hydraulic Hose



ENGINEERING YOUR SUCCESS.

Unprecedented 35.0 and 42.0 MPa (5000- and 6000-psi)

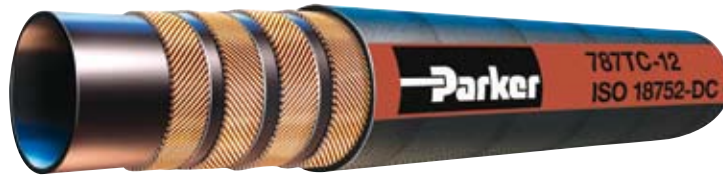
Hose performance in a compact design

Compared with conventional spiral hose, Parker's Compact Spiral™ 787TC/797TC Hose offers measurably greater advantages in routing and installation, product size and weight, inventory savings and much more. A world's first, this development is the most significant advancement in hydraulic hose since the introduction of Parker's No-Skive™ technology more than 25 years ago.

Compact Spiral was developed in concurrence with the industry trend toward high-pressure hose manufactured to ISO specifications.

Its many innovative and proprietary features set new standards in value and deliver hose characteristics deemed most important by OEM and aftermarket customers.





787TC ISO 18752-DC

Part Number #	Hose I.D.			Hose O.D. mm	Pressure Rating				min. bend radius mm	Weight kg	Parkrimp Serie 77	
	DN	Zoll	Size		mm	max. dynamic working pressure MPa	psi	min. burst pressure MPa				psi
787TC-8	12	1/2	-8	12.7	21.1	35	5000	140	20000	90	0.67	●
787TC-10	16	5/8	-10	15.9	23.9	35	5000	140	20000	100	0.80	●
787TC-12	20	3/4	-12	19.1	27.9	35	5000	140	20000	120	1.16	●
787TC-16	25	1	-16	25.4	35.7	35	5000	140	20000	150	1.74	●

Application: Petroleum base hydraulic fluids and lubricating oils

Inner tube: Proprietary synthetic rubber

Reinforcement: Four spiral steel wire

Cover: Synthetic rubber, MSHA accepted

Temperature range:
-40°C to +125°C
(-40°F to +257°F)



797TC ISO 18752-DC

Part Number #	Hose I.D.			Hose O.D. mm	Pressure Rating				min. bend radius mm	Weight kg	Parkrimp Serie 77	
	DN	Zoll	Size		mm	max. dynamic working pressure MPa	psi	min. burst pressure MPa				psi
797TC-8	12	1/2	-8	12.7	21.1	42	6000	168	24000	100	0.67	●
797TC-10	16	5/8	-10	15.9	23.9	42	6000	168	24000	115	0.80	●
797TC-12	20	3/4	-12	19.1	27.9	42	6000	168	24000	135	1.16	●
797TC-16	25	1	-16	25.4	35.7	42	6000	168	24000	165	1.74	●

Application: Petroleum base hydraulic fluids and lubricating oils

Inner tube: Proprietary synthetic rubber

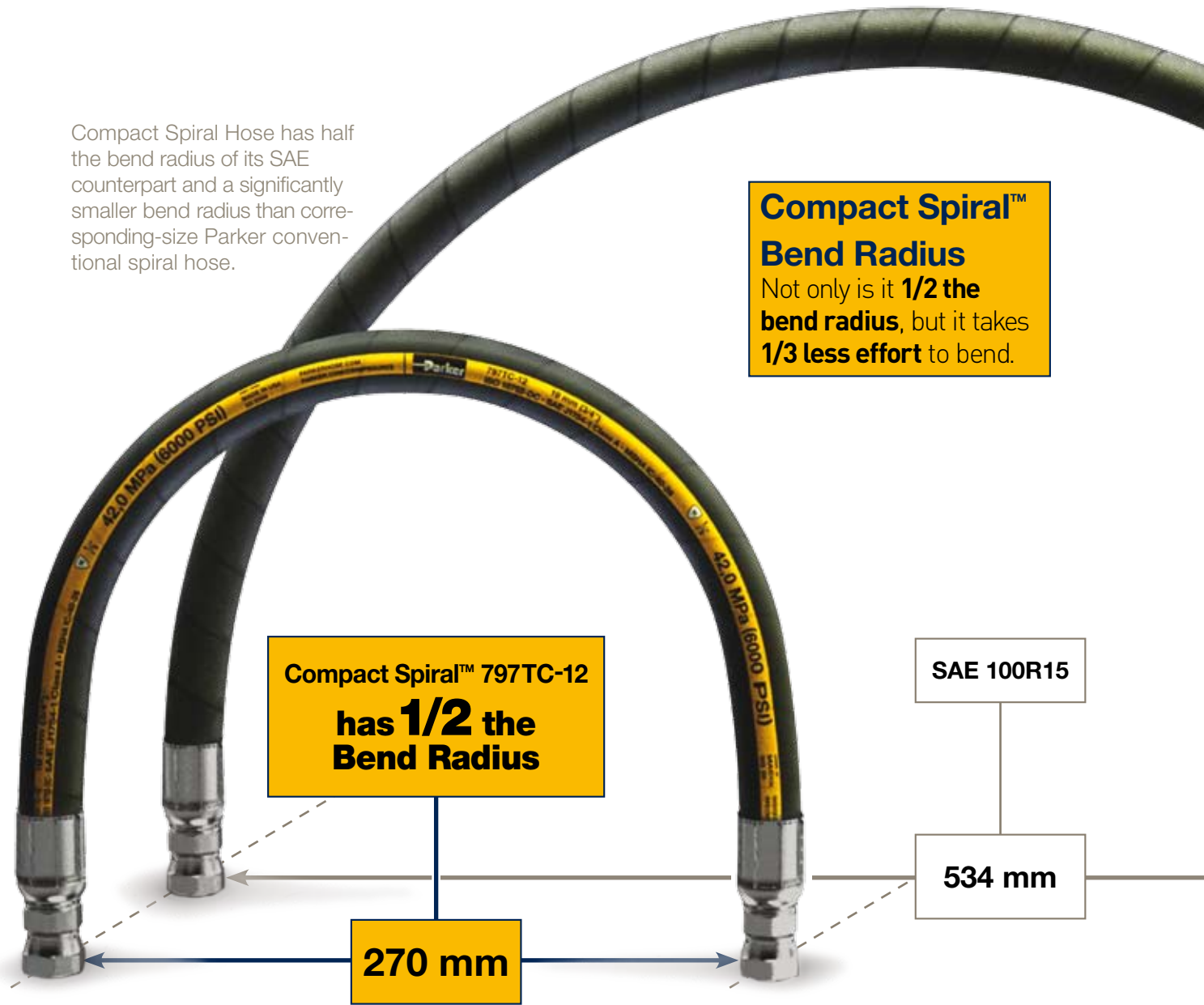
Reinforcement: Four spiral steel wire

Cover: Synthetic rubber, MSHA accepted

Temperature range:
-40°C to +125°C
(-40°F to +257°F)

Manufactured to ISO 18752-DC specifications, Parker Compact Spiral Hose delivers significant advantages in routing and installation ease, system size and weight, inventory savings and much more, over SAE 100R13 and 100R15 hose.

Compact Spiral Hose has half the bend radius of its SAE counterpart and a significantly smaller bend radius than corresponding-size Parker conventional spiral hose.



Compact Spiral™
Bend Radius
 Not only is it **1/2 the bend radius**, but it takes **1/3 less effort** to bend.

Compact Spiral™ 797TC-12
 has **1/2 the Bend Radius**

SAE 100R15

534 mm

270 mm

Half the bend radius with one-third less effort

Providing remarkable flexibility and routing ease, the bend radius of Compact Spiral 787TC/797TC is respectively half that of SAE 100R13/SAE 100R15 conventional spiral hose.

VALUE
 Half the bend radius can reduce your hose needs 20 % to 55 %.

Nearly 30 % smaller O.D.

A key reason for Compact Spiral's notably easier handling and routing, this feature also enables bends to start sooner than with conventional spiral, resulting in hose savings, reduction of shaped hose ends – and there is less chance of over-bending.

VALUE
 Smaller O.D. enables you to fit more hose in tight quarters or helps you jump up a hose size for better flow characteristics.

Twice the impulse

Compact Spiral Hose is tested to 2,000,000 cycles – two times the ISO 18752-DC impulse cycle standard and four times the SAE impulse requirement. The result is a hose superior in both performance and service life.

VALUE
 Twice the impulse life increases your hose life in your application, extending the time between replacements.



High abrasion resistance

The highly abrasion-resistant cover of Compact Spiral Hose delivers long, dependable service life in rigorous and/or remote installations.

VALUE

Parker's Tough Cover™ will outlast non-abrasion resistant covers, extending hose life and increasing intervals between hose change outs.

Less hose weight

This compact design weighs 25 % less than conventional spiral for significant savings in fuel, shipping and packaging costs over its conventional counterparts.

VALUE

A lighter hose helps improve fuel economy, reduces shipping costs, is easier to handle and easier to install.

Constant pressure

Made to ISO 18752-DC hose specifications, Compact Spiral 787TC (5000 psi) and 797TC (6000 psi) each provide constant-pressure performance across all sizes.

Two-thirds less hose inventory

Where 35.0 MPa and 42.0 MPa applications were each previously covered by up to three SAE hose types, Compact Spiral 787TC covers all 32.0 MPa applications, and 797TC meets all 42.0 MPa hose needs.

Simplified fitting selection

The 77 Series of hose ends covers all sizes of both Compact Spiral 787TC and 797TC hose. This simplifies fitting selection when making assemblies and reduces hose fitting inventory by half.

VALUE

One hose with a single pressure rating covers all sizes, reduces your inventory and diminishes pressure rating confusion. Combined with one fitting, not only is your crimping operation simplified, but also the chance of mismatched hose and fittings is eliminated.

100R5

797TC-12



Less-bulky inner tube and outer wall construction results in up to one-third smaller Compact Spiral Hose O.D. area, enabling easier routing, hose savings and space savings.

Compact Spiral™ 787TC/797TC is rated to ISO 18752 Type DC

ISO 18752 Performance Definitions (4.2 Grades and Types)				
Grade	Type ^a	Resistance to Impulse		
		Temperature °C	Impulse Pressure (% of MBD ^b)	Minimum Number of Cycles
A	AS	100	133 %	200.000
	AC			
B	BS	100	133 %	500.000
	BC			
C	CS	120	133 % and 120 % ^c	500.000
	CC			
D	DC	120	133 %	1.000.000

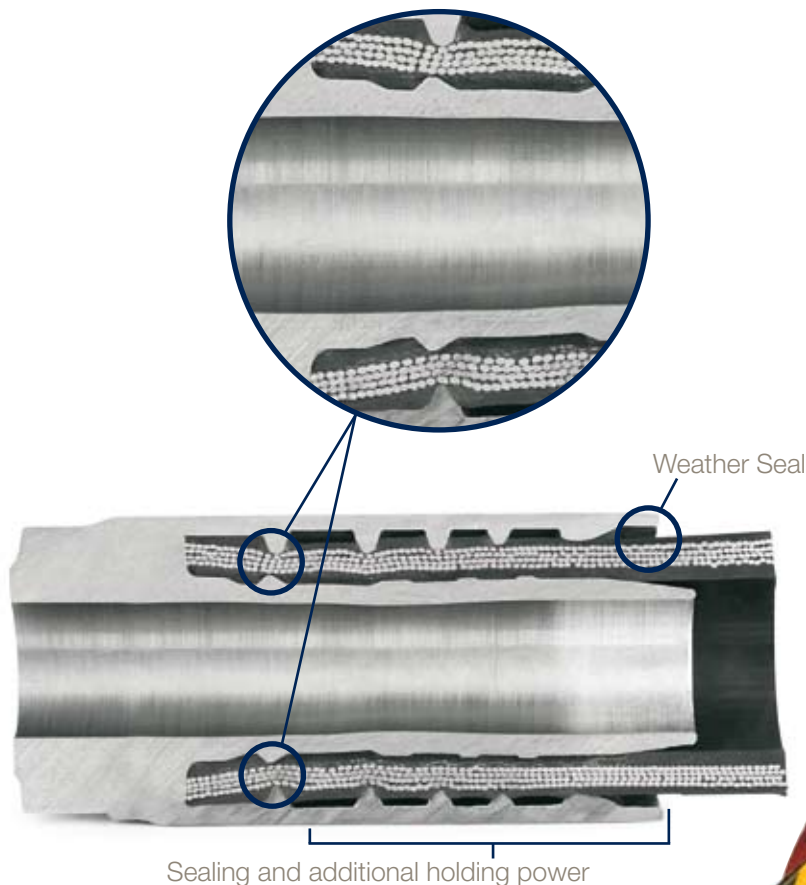
^a Standard or compact, e.g. CS is grade C and standard type.

Standard types have larger outside diameters and larger bend radii and compact types have smaller outside diameters and smaller bend radii.

^b Maximum working pressure.

^c 120 % of the MWP shall be used for classes 350, 420 and 560 instead of 133 %.

ISO 18752 classifies according to their resistance to impulse into four grades: A, B, C and D. Each grade is classified by outside diameter into standard types (AS, BS and CS) and compact types (AC, BC, CC and DC) as shown in this table



Interlock No-Skive design

Compact Spiral Hose features Parker's exclusive Interlock No-Skive design, with both internal and external "Bite the Wire" technology for assured connection strength.

VALUE

Better hose to fitting connection reduces leaks and increases holding power.





Just one series of hose ends, Parker's 77 Series, covers all sizes of both 787TC and 797TC Compact Spiral Hose, simplifying fitting selection and reducing hose-end inventory.

Wide fluid compatibility

Parker's patent-pending inner tube compound provides enhanced fluid compatibility (e.g., environmental fluids, Polyol Esters), improved tube aging and prolonged life.

VALUE

Reduces need for specialty hoses for non standard fluids. Better heat aging of tube extends hose life.

Advancing the industry

Compact Spiral Hose delivers substantial performance and value for systems with high pressure, high impulse applications. These include injection molding, oil and gas, and large mobile equipment including off-highway, construction, forestry and mining.

Surveys in these markets have indicated pressure rating, routing ease, abrasion resistance, bend radius and weight as being top priorities in hose selection for such applications.



Many Parker crimper models such as KarryKrimp® 2, used for crimping smaller-size hose, can be used to crimp 787TC and 797TC Compact Spiral Hose.

Contact your local Parker representative for a demonstration of Compact Spiral today! Visit us at www.compactspiral.com.



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