

- One-half SAE 100R1 minimum bend radius - Flexible, easy to work with and install
- Specially engineered TC and ST covers prolong hose life
- 3,000 psi constant working pressure in all sizes
- Exceeds SAE 100R17 specification

## Product Bulletin

# Parker 451TC and 451ST Constant Working Pressure Hoses



*We Keep Ideas Flowing™*

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**Parker**  
 FluidConnectors

## 451TC and 451ST Hydraulic Hoses: abrasion resistance and versatility

Parker 451TC and 451ST hydraulic hoses are what to specify when abrasion resistance and ease of use are required. Plus, you can choose the cover that provides the abrasion resistance for your application.

- **Tough Cover** — 451TC features a specially formulated MSHA-accepted cover that offers exceptional protection from hose-to-hose or hose-to-object abrasion. Hose lines last longer, minimizing maintenance and down time.
- **Super Tough cover** — When only maximum abrasion resistance will do, specify 451ST with the polymeric cover.
- **Flexible** — 451 features a one-half SAE 100R1 minimum bend radius, making installation in tight spaces fast and simple.
- **Constant pressure rating in all sizes** — With a 3,000 psi constant working pressure through all sizes, 451 is the one hose you can specify to cover almost every hydraulic application. So you can stock fewer hose types and simplify your inventory.



### Construction

Synthetic rubber tube compatible with most petroleum-base hydraulic fluids; high-tensile steel wire reinforcement; and an oil-, weather-, and an abrasion-resistant black synthetic MSHA-accepted rubber cover or a high abrasion-resistant polymeric cover.

### Applications and temperature ranges

- Most petroleum-based hydraulic fluids and lubrication oils within a temperature range of -40°F to +212°F (-40°C to +100°C).
- Water, water/oil emulsion, and water/glycol hydraulic fluids up to +185°F (+85°C).
- Air up to +158°F (+70°C).

### Parkrimp compatible

Parker 43 Series crimp fittings, 451TC hose, and 451ST hose are compatible with the Parkrimp system of crimpers.

So assembly is as simple as 1-2-3.



# Part Number	Hose I.D.		Hose O.D.		Maximum Working Pressure		Minimum Burst Pressure		Minimum Bend Radius		Weight		Crimp Fitting Series	
	inch	mm	inch	mm	psi	MPa	psi	MPa	inch	mm	lbs/ft	kg/m		
451TC-4	451ST-4	1/4	6,3	0.52	13	3000	21,0	12000	84,0	2	50	0.16	0,24	43
451TC-6	451ST-6	3/8	10	0.68	17	3000	21,0	12000	84,0	2 1/2	65	0.23	0,34	43
451TC-8	451ST-8	1/2	12,5	0.80	20	3000	21,0	12000	84,0	3 1/2	90	0.35	0,52	43
451TC-10	451ST-10	5/8	16	0.94	24	3000	21,0	12000	84,0	4	100	0.44	0,66	43
451TC-12	451ST-12	3/4	19	1.09	28	3000	21,0	12000	84,0	4 3/4	120	0.58	0,86	43
451TC-16	451ST-16	1	25	1.40	36	3000	21,0	12000	84,0	6	150	0.79	1,17	43
451TC-20*	451ST-20*	1 1/4	31,5	1.85	47	3000	21,0	12000	84,0	8 1/4	210	1.50	2,23	43

**NOTE:** The silver die ring must be used when crimping 43 Series Parkrimp fittings onto 451TC and 451ST hoses.

\*-20 sizes must use Karrykrimp 2, Superkrimp, Parkrimp 2, or PHastkrimp.

### DANGER

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

Before selecting or using any Parker hose or fittings or related accessories, it is important that you read and follow Parker Safety Guide for Selecting and Using Hoses, Fittings, and Related Accessories (Parker Publication No. 4400-B.1).

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