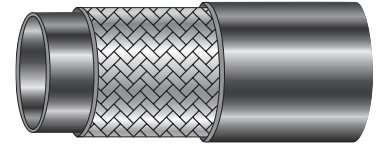


## PRODUCT INFORMATION UPDATE

### T3KA AVENGER T3KD DIEHARD

Meets or exceeds the performance requirements of SAE 100R17



### T3K4A and T3K4D (1/4" HOSE SIZES)

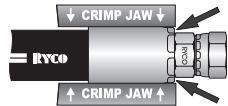
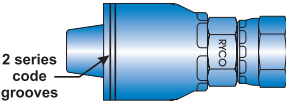
RYCO T3K4A and T3K4D (1/4" hose sizes) Compact Isobaric hydraulic hose Maximum Working Pressures have been upgraded to **3,300 psi / 230 bar** (was 3,050 psi / 210 bar).

#### PERFORMANCE

- T3K4A and T3K4D Maximum Working Pressure upgraded to **3,300 psi / 230 bar**
- Exceeds minimum Safety Factor requirement of 4:1 (Maximum Working Pressure to Minimum Burst Pressure)
- Exceeds Impulse Test requirements of SAE J517 when tested in accordance with SAE J343

#### ASSEMBLY

- Matched couplings: T200 Series Bitelok (unchanged)
- Crimp Dimension and Tolerance has changed (refer to table below)
- T3K4A and T3K4D **New Crimp Diameter: Ø17,3 mm ±0,10 mm**
- All other assembly parameters remain unchanged
- Assembly operation procedure remains unchanged (as per current edition of RYCO Hydraulics Product Technical Manual)

T3K 210 BAR WIRE BRAID NON-SKIVE HOSE		CRIMP Ø ±0,10 mm	MARK LENGTH mm
AVENGER	DIEHARD		
T3KA	T3KD	T200 COUPLINGS	
		Mark III	
T3K4A	T3K4D	17,3	25
NOTE: Crimp the full length of Mark III ferrules including the nose crimp where the ferrule is attached to the insert:  PICTORIAL REPRESENTATION ONLY		T200 Mark III Couplings are identified by TWO series code grooves at end of the ferrule:  2 series code grooves	

#### COUPLINGS

- T200 Bitelok Series (unchanged).

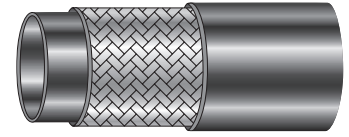
#### AVAILABILITY

- T3K4A and T3K4D manufactured from September 2008 (Batch Code 0809 and beyond) will be rated at the new, higher Maximum Working Pressure of **3,300 psi / 230 bar**.

# AVENGER T3KA

Meets or exceeds the performance requirements of SAE 100R17.

**COMPACT ISOBARIC 210 BAR (3050 PSI)  
WIRE BRAID HOSE**



**NOTE: Sizes -10 to -16 are 2 Wire Braid**

**Recommended For:**

High pressure hydraulic oil lines.  
Constant Working Pressure (Isobaric) of 210 bar (3,050 psi), all sizes except 1/4" ID at 230 bar (3,300psi).  
Small bend radius and compact dimensions are advantages in installations where space is minimal. (Tighter Bend Radius than SAE 100R1 & R2, and EN 853 Type 1SN & 2SN).

**Tube:**

Black, oil resistant synthetic rubber. (Nitrile).

**Reinforcement:**

**T3K4A to T3K8A:**

One braid of high tensile steel wire.

**T3K10A to T3K16A:**

Two braids of high tensile steel wire.

**Cover:**

Black, oil resistant and abrasion resistant synthetic rubber.  
No skiving required with T200 Series BITELOK Crimp Couplings.

**Not suitable for use with Field Attachable Couplings.**

**Temperature Range:**

From -40°C to +100°C (-40°F to +212°F).  
For water, emulsions etc. see page 29\*.

**Working Pressure:**

Maximum working pressures are based on 4:1 safety factor (minimum burst to maximum working pressure).

**Flame Resistance:**

Complies with Flame Resistant requirements of Australian Standard AS 2660 and Method of Test AS 1180.10B.  
Meets Flame Resistant Designation "U.S. MSHA" of the US Department of Labor, Mine Safety and Health Administration.

**Couplings:**

**BITELOK NON-SKIVE ONE-PIECE CRIMP**

T200 Series (sizes -4 to -16) pages 102 to 123\*.  
Assembly Instructions page 404\*.

**Not suitable for use with Field Attachable Couplings.**

**\* Refer to product technical manual RHY-RHC0707AUS**

**T3KA Hose Working Pressures**

**1 bar = 14.5 psi 1 MPa = 10 bar**

PART NO	HOSE SIZE ID			MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE	
	DN	inch	Dash	bar	psi	bar	psi
T3K4A	6	1/4	-04	230	3300	920	13200
T3K5A	8	5/16	-05	210	3050	840	12200
T3K6A	10	3/8	-06	210	3050	840	12200
T3K8A	12	1/2	-08	210	3050	840	12200
T3K10A	16	5/8	-10	210	3050	840	12200
T3K12A	19	3/4	-12	210	3050	840	12200
T3K16A	25	1	-16	210	3050	840	12200

**HIGHER WORKING PRESSURE**

**T3KA Hose Dimensions**

**Matched Couplings**

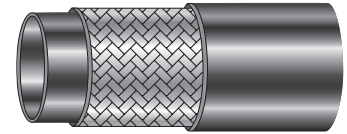
PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		BITELOK ONE-PIECE CRIMP
	mm	inch	kg/m	lb/ft	mm	inch	NON-SKIVE
T3K4A	50	2.0	0,22	0.15	11,9	0.47	T200 SERIES
T3K5A	55	2,2	0,25	0.17	13,5	0.53	T200 SERIES
T3K6A	65	2.5	0,33	0.22	15,8	0.62	T200 SERIES
T3K8A	90	3.5	0,42	0.28	18,9	0.74	T200 SERIES
T3K10A	105	4.1	0,78	0.52	24,1	0.95	T200 SERIES
T3K12A	125	4.9	0,94	0.63	28,1	1.11	T200 SERIES
T3K16A	150	5.9	1,50	0.93	36,2	1.43	T200 SERIES

**NEW CRIMP SPECIFICATION**

Contact RYCO Hydraulics for Crimp Diameter and Mark Length for BITELOK Couplings.

# DIEHARD T3KD

**EXTRA ABRASION RESISTANT  
COMPACT ISOBARIC 210 BAR (3050 PSI)  
WIRE BRAID HOSE**



Meets or exceeds the performance requirements of SAE 100R17.

**NOTE: Sizes -10 to -16 are 2 Wire Braid**

**Recommended For:**

High pressure hydraulic oil lines.  
Constant Working Pressure (Isobaric) of 210 bar (3,050 psi), all sizes except 1/4" ID at 230 bar (3,300psi).  
Small bend radius and compact dimensions are advantages in installations where space is minimal. (Tighter Bend Radius than SAE 100R1 & R2, and EN 853 Type 1SN & 2SN).

**Tube:** Black, oil resistant synthetic rubber. (Nitrile).

**Reinforcement:**

**T3K4D to T3K8D:**  
One braid of high tensile steel wire.  
**T3K10D to T3K16D:**  
Two braids of high tensile steel wire.

**Cover:**

Black, extra abrasion resistant and oil resistant rubber.  
"FRAS" Flame Resistant and Anti-Static.  
The weight loss of the cover under ISO 6945 method of test for abrasion resistance is less than 10% (less than 0,05 g) of that allowed by DIN 20022-2SN and EN 853 Type 2SN.  
Highly visible layline branding for easy and permanent identification.  
No skiving required with T200 Series BITELOK Crimp Couplings.

**Not suitable for use with Field Attachable Couplings.**

**Temperature Range:**

From -40°C to +100°C (-40°F to +212°F).  
For water, emulsions etc. see page 29\*.

**Working Pressure:**

Maximum working pressures are based on 4:1 safety factor (minimum burst to maximum working pressure).

**Flame Resistance:**

Complies with Flame Resistant and Electrical Resistance (Anti-Static) requirements of Australian Standard AS 2660 and Methods of Test AS 1180.10B and 13A.  
Meets Flame Resistant Designation "U.S. MSHA" of the US Department of Labor, Mine Safety and Health Administration.

**Couplings:**

**BITELOK NON-SKIVE ONE-PIECE CRIMP**  
T200 Series (sizes -4 to -16) pages 102 to 123\*.  
Assembly Instructions page 404\*.

**Not suitable for use with Field Attachable Couplings.**

**\* Refer to product technical manual RHY-RHC0707AUS**

**T3KD Hose Working Pressures**

**1 bar = 14.5 psi 1 MPa = 10 bar**

PART NO	HOSE SIZE ID			MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE	
	DN	inch	Dash	bar	psi	bar	psi
T3K4D	6	1/4	-04	230	3300	920	13200
T3K5D	8	5/16	-05	210	3050	840	12200
T3K6D	10	3/8	-06	210	3050	840	12200
T3K8D	12	1/2	-08	210	3050	840	12200
T3K10D	16	5/8	-10	210	3050	840	12200
T3K12D	19	3/4	-12	210	3050	840	12200
T3K16D	25	1	-16	210	3050	840	12200

**HIGHER WORKING PRESSURE**

**T3KD Hose Dimensions**

**Matched Couplings**

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		BITELOK ONE-PIECE CRIMP
	mm	inch	kg/m	lb/ft	mm	inch	NON-SKIVE
T3K4D	50	2.0	0,21	0.15	11,9	0.47	T200 SERIES
T3K5D	55	2,2	0,24	0,18	13,5	0.53	T200 SERIES
T3K6D	65	2.5	0,32	0.23	15,8	0.62	T200 SERIES
T3K8D	90	3.5	0,40	0.29	18,9	0.74	T200 SERIES
T3K10D	105	4.1	0,75	0.54	24,1	0.95	T200 SERIES
T3K12D	125	4.9	0,90	0.64	28,1	1.11	T200 SERIES
T3K16D	150	5.9	1,44	0.93	36,2	1.43	T200 SERIES

**NEW CRIMP SPECIFICATION**

Contact RYCO Hydraulics for Crimp Diameter and Mark Length for BITELOK Couplings.