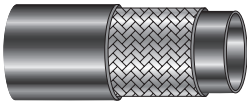
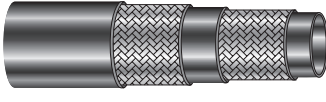
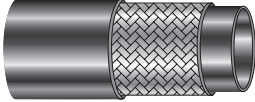
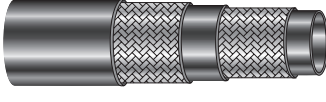
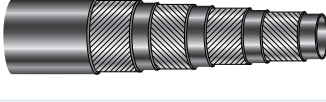
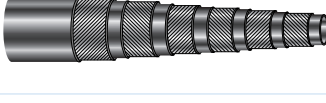
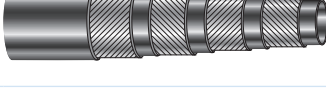
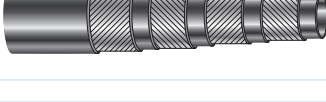
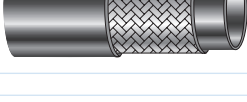
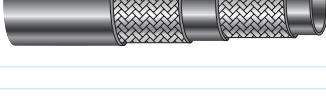
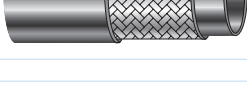

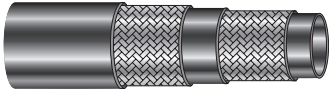
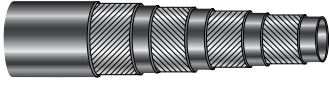
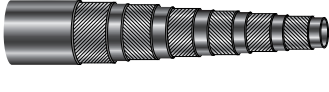
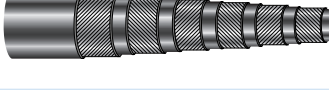
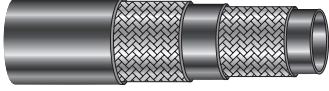
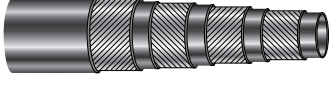

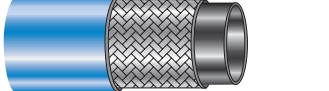
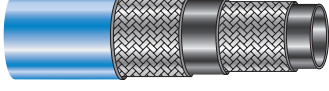
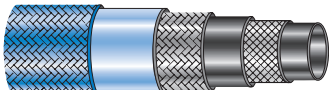
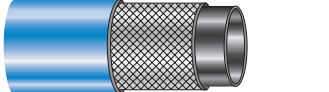
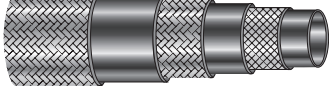




Hydraulic Hose



RYCO Hose Series		Size Inside Diameter	Recommended For	Construction	Performance Specifications Met or Exceeded	
PAGE						
30	T1A AVENGER		-3 to -32 (3/16" to 2")	High pressure hydraulic oil lines.	Synthetic rubber tube. One wire braid. Thin, non-skive black cover.	SAE 100R1AT AS 3791 100R1AT DIN 20022-1SN EN 853 Type 1SN ISO 1436 - R1AT & 1SN
31	T2A AVENGER		-4 to -40 (1/4" to 2.1/2")	High pressure hydraulic oil lines.	Synthetic rubber tube. Two wire braids. Thin, non-skive black cover.	SAE 100R2AT AS 3791 100R2AT DIN 20022-2SN EN 853 Type 2SN ISO 1436 - R2AT & 2SN
32	T3KA AVENGER		-4 to -16 (1/4" to 1")	High pressure hydraulic oil lines, 210 bar (3,050 psi) in all sizes.	Synthetic rubber tube. One or two wire braids. Thin, non-skive black cover.	SAE 100R17
33	DF2A DINFLEX		-4 to -16 (1/4" to 1")	High pressure hydraulic oil lines, two wire hose with one wire dimensions and higher flexibility.	Synthetic rubber tube. Two wire braids. Thin, non-skive black cover.	SAE 100R2AT SAE 100R16 AS 3791 100R2AT EN 857 Type 2SC ISO 1436
34	H12A AVENGER		-06 to -32 (3/8" to 2")	Very high pressure hydraulic oil lines.	Synthetic rubber tube. Four wire spirals. Black cover.	SAE 100R12 AS 3791 100R12 EN 856 Type R12 EN 856 Type 4SP (-12 to -32) ISO 3862 Type R12
35	H13A AVENGER		-12 to -32 (3/4" to 2")	Extremely high pressure hydraulic oil lines.	Synthetic rubber tube. Four or six wire spirals. Black cover.	SAE 100R13 AS 3791 100R13 EN 856 Type R13 ISO 3862 Type R13
36	HSPA AVENGER		-04 to -16 (1/4" to 1")	Extra high pressure hydraulic oil lines.	Synthetic rubber tube. Four wire spirals. Black cover.	EN 856 Type 4SP ISO 3862 Type 4SP
37	HSHA AVENGER		-12 to -32 (3/4" to 2")	Extra high pressure hydraulic oil lines.	Synthetic rubber tube. Four wire spirals. Black cover.	EN 856 Type 4SH ISO 3862 Type 4SH
38	T1D DIEHARD		-4 to -32 (1/4" to 2")	High pressure hydraulic oil lines. Very high abrasion resistant cover.	Synthetic rubber tube. One wire braid. Thin, non-skive black cover.	SAE 100R1AT AS 3791 100R1AT DIN 20022-1SN EN 853 Type 1SN ISO 1436 - R1AT & 1SN
39	T2D DIEHARD		-4 to -32 (1/4" to 2")	High pressure hydraulic oil lines. Very high abrasion resistant cover.	Synthetic rubber tube. Two wire braids. Thin, non-skive black cover.	SAE 100R2AT AS 3791 100R2AT DIN 20022-2SN EN 853 Type 2SN ISO 1436 - R2AT & 2SN
40	T3KD DIEHARD		-4 to -16 (1/4" to 1")	High pressure hydraulic oil lines. Very high abrasion resistant cover. 210 bar (3,050 psi) in all sizes.	Synthetic rubber tube. One or two wire braids. Thin, non-skive black cover.	SAE 100R17
41	TXA2D DIEHARD		-8 to -20 (1/2" to 1.1/4")	Extra high pressure hydraulic oil lines where pressure exceeds 100R2 by at least 30%.	Synthetic rubber tube. Two wire braids. Thin, non-skive black cover.	SAE 100R2AT AS 3791 100R2AT BCS 174 DIN 20022-2SN EN 853 Type 2SN ISO 1436 - R2AT & 2SN

RYCO Hose Series		Size Inside Diameter	Recommended For	Construction	Performance Specifications Met or Exceeded	
PAGE						
42	TJ2D DIEHARD JACK		-4 & -6 (1/4" & 3/8")	High pressure Hydraulic Jack applications. Very high abrasion resistant cover.	Synthetic rubber tube. Two wire braids. Thin, non-skive black cover.	Material Handling Institute Specification IJ 100 (July 1979)
44	H12D DIEHARD		-06 to -32 (3/8" to 2")	Very high pressure hydraulic oil lines. Very high abrasion resistant cover.	Synthetic rubber tube. Four wire spirals. Black cover.	SAE 100R12 AS 3791 100R12 EN 856 Type R12 EN 856 Type 45P (-12 to -32) ISO 3862 Type R12
45	H13D DIEHARD		-12 to -32 (3/4" to 2")	Extremely high pressure hydraulic oil lines. Very high abrasion resistant cover.	Synthetic rubber tube. Four or six wire spirals. Black cover.	SAE 100R13 AS 3791 100R13 EN 856 Type R13 ISO 3862 Type R13
46	H15D DIEHARD		-12 to -32 (3/4" to 2")	Extremely high pressure hydraulic oil lines. Very high abrasion resistant cover.	Synthetic rubber tube. Four or six wire spirals. Black cover.	SAE 100R15 ISO 3862 Type 15 (Except -32 size)
47	T2S SLIDER		-4 to -32 (1/4" to 2")	High pressure hydraulic oil lines. Extremely abrasion resistant exterior protection layer.	Synthetic rubber tube. Two wire braids. Thin, black cover with exterior protection layer.	SAE 100R2AT AS 3791 100R2AT DIN 20022-2SN EN 853 Type 2SN ISO 1436 - R2AT & 2SN
48	H12S SLIDER		-06 to -32 (3/8" to 2")	Very high pressure hydraulic oil lines. Extremely abrasion resistant exterior protection layer.	Synthetic rubber tube. Four wire spirals. Black cover with exterior protection layer.	SAE 100R12 AS 3791 100R12 EN 856 Type R12 EN 856 Type 45P (-12 to -32) ISO 3862 Type R12
49	H13S SLIDER		-12 to -32 (3/4" to 2")	Extremely high pressure hydraulic oil lines. Extremely abrasion resistant exterior protection layer.	Synthetic rubber tube. Four or six wire spirals. Black cover with exterior protection layer.	SAE 100R13 AS 3791 100R13 EN 856 Type R13 ISO 3862 Type R13
50	RQP1 SURVIVOR		-4 to -16 (1/4" to 1")	High temperature, high pressure oil lines; and some phosphate ester fluids.	Synthetic rubber tube. One wire braid. Thin, non-skive blue cover.	SAE 100R1AT AS 3791 100R1AT DIN 20022-1SN EN 853 Type 1SN ISO 1436 - R1AT & 1SN
51	RQP2 SURVIVOR		-4 to -32 (1/4" to 2")	High temperature, high pressure oil lines; and some phosphate ester fluids.	Synthetic rubber tube. Two wire braids. Thin, non-skive blue cover.	SAE 100R2AT AS 3791 100R2AT DIN 20022-2SN EN 853 Type 2SN ISO 1436 - R2AT & 2SN
52	RQP5 SURVIVOR		-4 to -32 (3/16" to 1.13/16")	High temperature, medium to high pressure hydraulic oil lines; some phosphate ester fluids.	Synthetic rubber tube. Polyester inner braid, one wire braid. Blue polyester braid cover.	SAE 100R5 SAE J1402 Type All (Up to -12) AS 3791 100R5
53	RQP6 SURVIVOR PUSH-ON		-4 to -12 (1/4" to 3/4")	Low pressure hydraulic oil lines, air and water. Higher temperatures.	Synthetic rubber tube. One textile braid. Blue cover.	SAE 100R6 AS 3791 100R6 DIN 20021-1TE ISO 4079 Type 1
54	T5 TRUCKER		-4 to -32 (3/16" to 1.13/16")	Medium to high pressure hydraulic oil lines. Also suitable for fuel lines, airbrake lines, etc.	Synthetic rubber tube. Polyester inner braid, one wire braid. Black polyester braid cover.	SAE 100R5 SAE J1402 Type All (Up to -12) AS 3791 100R5

Intro

Hose

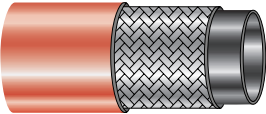
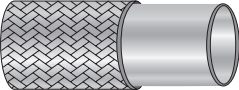
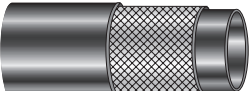
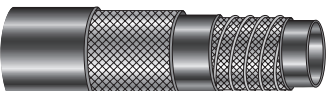
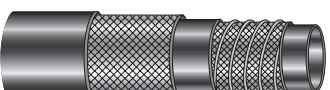
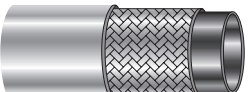
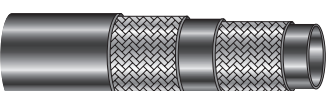
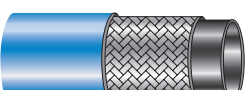
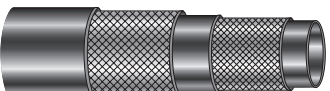
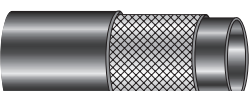
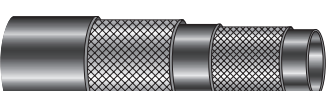
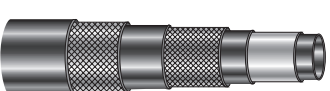
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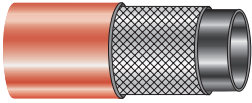
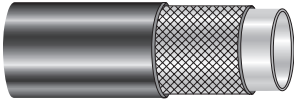
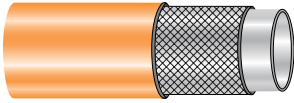
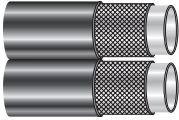
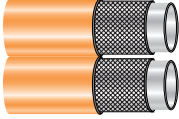
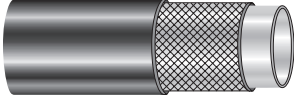
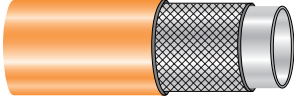
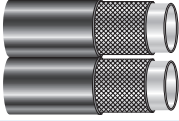
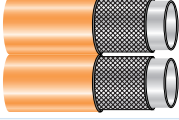
Adaptors

Accessories

Filters

Technical

RYCO Hose Series		Size Inside Diameter	Recommended For	Construction	Performance Specifications Met or Exceeded	
PAGE						
55	T1F FIRE SUPPRESSION		-3 to -12 (1/4" to 3/4")	Fire suppression systems.	Synthetic rubber tube. One wire braid. Red cover.	SAE 100R1AT AS 3791 100R1AT DIN 20022-1SN EN 853 Type 1SN ISO 1436 - R1AT & 1SN
56	RTH1 TEFLON		-4 to -16 (1/4" to 1")	Hydraulic oil, air, water, at high and low temperatures.	PTFE Tube (TEFLON*). Stainless steel wire braid. *DuPont Reg. TM	SAE 100R14
57	PL1 PUSH ON		-4 to -12 (1/4" to 3/4")	Low pressure hydraulic oil lines, air and water.	Synthetic rubber tube. One textile braid. Black cover.	
58	SR SUCTION		-12 to -48 (3/4" to 3")	Hydraulic oil suction and low pressure return lines.	Synthetic rubber tube. Textile reinforcement with spiral helix wire. Black cover.	SAE 100R4 AS 3791 100R4 (except -48 size)
59	SRF COMPACT SUCTION		-12 to -32 (3/4" to 2")	Hydraulic oil suction and low pressure return lines. Half SAE bend radius for compact installations.	Synthetic rubber tube. Textile reinforcement with spiral helix wire. Black cover.	SAE 100R4 AS 3791 100R4
60	TW1 TORNADO WASHER		-5 to -8 (5/16" to 1/2")	Hot water pressure washer applications.	Synthetic rubber tube. One wire braid. Grey, skive type cover.	
61	PW2 PRESSURE WASHER		-4 to -6 (1/4" to 3/8")	Hot water pressure washer applications.	Synthetic rubber tube. Two wire braids. Black, skive type cover.	
62	RQG1 LPG/D		-4 to -16 (1/4" to 1")	LPG and Natural Gas including automotive application. Max working pressure 2,6 MPa, temp +125°C.	Synthetic rubber tube. One wire braid. Blue cover.	Australian Gas Association Approval No. 5523 AS/NZS 1869 Class D
63	M2G LPG/C		-4 to -12 (1/4" to 3/4")	LPG and Natural Gas. Max working pressure 2,6 MPa, temp + 65°C.	Synthetic rubber tube. Two textile braids. Black cover.	Australian Gas Association Approval No. 4247 AS/NZS 1869 Class C
64	M1 FUEL LINE		-4 to -6 (1/4" to 3/8")	Low Pressure fuel lines.	Synthetic rubber tube. One textile braid. Black cover.	SAE 30R7
65	M2 TEXTILE		-4 to -12 (1/4" to 3/4")	Medium pressure hydraulic oil lines, anti freeze solutions and water.	Synthetic rubber tube. Two textile braids. Black cover.	SAE 100R3 AS 3791 100R3 DIN 20021-2TE ISO 4079 Type R3
66	FB2 BARRIER		-6 to -10 (5/16" to 1/2")	Automotive air conditioning and refrigeration. Refrigerants R12, R134a, R22 & R114.	Synthetic rubber tube with Nylon Barrier. Two textile braid. Black cover.	SAE J2064 Type C Class II

RYCO Hose Series		Size Inside Diameter	Recommended For	Construction	Performance Specifications Met or Exceeded	
PAGE						
67	MP1 MULTI-PURPOSE		-4 to -20 (1/4" to 1.1/4")	Multi purpose hose. Air, water, petroleum oils, kerosene and fuel oils.	Synthetic rubber tube. One textile braid. Red cover.	RMA Class A tube. RMA Class B cover.
68	RT7 SPIDERLINE		-2 to -12 (1/8" to 3/4")	High pressure hydraulic oil lines, where light weight & corrosion resistance are required.	Thermoplastic nylon tube. One nylon braid. Black thermoplastic polyurethane cover.	SAE 100R7 AS 3791 100R7 EN 855 Type R7 (except RT72)
69	RT7N ISOLATOR		-4 to -12 (1/4" to 3/4")	High pressure hydraulic oil lines, where electrical non-conductivity is required.	Thermoplastic polyester tube. One polyester braid. Orange thermoplastic polyurethane cover.	SAE 100R7 AS 3791 100R7 EN 855 Type R7
70	RT7T SPIDERLINE TWIN		-4 to -8 (1/4" to 1/2")	High pressure hydraulic oil lines, where twin hoses are required.	Thermoplastic nylon tube. One nylon braid. Black thermoplastic polyurethane cover.	SAE 100R7 AS 3791 100R7 EN 855 Type R7
71	RT7TN ISOLATOR TWIN		-4 to -8 (1/4" to 1/2")	High pressure hydraulic oil lines, where electrical non-conductivity and twin hoses are required.	Thermoplastic polyester tube. One polyester braid. Orange thermoplastic polyurethane cover.	SAE 100R7 AS 3791 100R7 EN 855 Type R7
72	RT8 SPIDERLINE		-4 to -8 (1/4" to 1/2")	High pressure hydraulic oil lines, where light weight & corrosion resistance are required.	Thermoplastic nylon tube. One aramid braid. Black thermoplastic polyurethane cover.	SAE 100R8 AS 3791 100R8 EN 855 Type R8
73	RT8N ISOLATOR		-4 to -8 (1/4" to 1/2")	High pressure hydraulic oil lines, where electrical non-conductivity is required.	Thermoplastic polyester tube. One aramid braid. Orange thermoplastic polyurethane cover.	SAE 100R8 AS 3791 100R8 EN 855 Type R8
74	RT8T SPIDERLINE TWIN		-4 to -8 (1/4" to 1/2")	High pressure hydraulic oil lines, where twin hoses are required.	Thermoplastic nylon tube. One aramid braid. Black thermoplastic polyurethane cover.	SAE 100R8 AS 3791 100R8 EN 855 Type R8
75	RT8TN ISOLATOR TWIN		-4 to -8 (1/4" to 1/2")	High pressure hydraulic oil lines, where electrical non-conductivity and twin hoses are required.	Thermoplastic polyester tube. One aramid braid. Orange thermoplastic polyurethane cover.	SAE 100R8 AS 3791 100R8 EN 855 Type R8

Intro

Hose








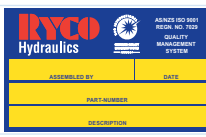
Couplings

Adaptors

Accessories

Filters

Technical

RYCO Hose Protection		Size Inside Diameter	Recommended For	Construction	Performance Specifications Met or Exceeded
PAGE					
76	RWA WIRE ARMOUR 	12 to 75 mm (1/2" to 3")	Protection of hose cover from abrasion and gouges.	Spring Steel Wire, galvanised.	
77	RSG SPIRAL GUARD 	16 to 110 mm (Outside diameter) (5/8" to 4.1/2")	Protection of hoses from abrasion and impact. Bundling hoses together.	Polyethylene plastic spiral. Black RSG Yellow RSGY Dark Grey RSGF	
78	FS1072 FIRE SLEEVE 	-08 to -104 (1/2" to 6.1/2")	Protection of hoses from heat and molten metal splashes.	Braided glass fibre tubing coated with silicon rubber.	SAE Aerospace Standard AS 1072
80	RH RAWHIDE 	23 to 93 mm (7/8" to 3.5/8")	Protection of hoses from severe abrasion. Bundling hoses together.	Woven nylon tubing.	MSHA approved
81	LS LIFESAVER 	23 to 93 mm (7/8" to 3.5/8")	Hose burst suppression, whipcheck protection, abrasion protection.	Single or double layer of woven nylon tubing, special fastenings at ends.	MSHA approved
82	750 SPRING GUARD 	Suits some -4 (1/4") hoses	Control bend radius at end of hose assemblies.	Spring Steel Wire, galvanised.	
82	RHYS PACKAGING SLEEVE 	48 and 79 mm (1.9" and 3.1")	Packaging and protection of hose assemblies during transport and storage.	Heavy duty, low density polyethylene sleeve.	
83	RHYT HOSE TAG 	Suits sizes -04 to -10 & -12 to -32	Permanent identification of hose assemblies.	High performance plastic.	

The tables following on pages 21 to 23 list the approvals RYCO Hydraulics have with various third parties for hoses used in RYCO Matched Hose Assemblies. For each Certification Body/Organisation referenced in the table, listed is; the Approval/Certificate Number held by RYCO Hydraulics, and the Matched Coupling Series approved for the hose.

RYCO HOSE		MARINE EQUIPMENT DIRECTIVE (MED)
SERIES	SIZE	
APPROVAL		T1A: MED-B-3625 T1D: MED-B-3262
T1A T1D	T14A T14D	T200 & K00
	T16A T16D	T200, T700 & K00
	T18A T18D	T200, T700 & K00
	T110A T110D	T200, T700 & K00
	T112A T112D	T200, T700 & K00
	T116A T116D	T200, T700 & K00
	T120A T120D	T200, T700 & A00
	T124A T124D	T700 & A00
	T132A T132D	T700 & A00

Example:

A Hose Assembly using **T112A** needs to meet **Marine Equipment Directive (MED)** approval; the table shows:

The **MED Approval Number** for RYCO Hydraulics **T1A** Series Hose: **MED-B-3625**.

The **Matched Couplings** approved for use with **T112A** hose: **T200 & T700** Series BITELOK Crimp, and **K00** Series Field Attachable Couplings.

RYCO HOSE		AMERICAN BUREAU OF SHIPPING (ABS)	DET NORSKE VERITAS (DNV)	GERMANISCHER LLOYD (GL)	LLOYD'S REGISTER (LR)	MARINE EQUIPMENT DIRECTIVE (MED)	UNITED STATES COAST GUARD* (USCG)	UNITED STATES DEPARTMENT OF TRANSPORTATION (DoT)
SERIES	SIZE							
T1A T1D	APPROVAL	MQ340055-X	P-11671	TBA	03/00096	T1A: MED-B-3625 T1D: MED-B-3262	SAE J1942-1	
	T14A T14D	T200 & K00	T200 & K00	T200 & K00	T200 & K00	T200 & K00	T200	
	T16A T16D	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700	
	T18A T18D	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700	
	T110A T110D	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200	
	T112A T112D	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700	
	T116A T116D	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T700	
	T120A T120D	T200, T700 & A00	T200, T700 & A00	T200, T700 & A00	T200, T700 & A00	T200, T700 & A00	T700	
	T124A T124D	T700 & A00	T700 & A00	T700 & A00	T700 & A00	T700 & A00	T700	
	T132A T132D	T700 & A00	T700 & A00	T700 & A00	T700 & A00	T700 & A00	T700	
T1F	APPROVAL					MED-B-3625	SAE J1942-1	
	T13F							
	T14F					T200 & K00		
	T16F					T200, T700 & K00		
	T18F					T200, T700 & K00		
T112F					T200, T700 & K00			
T2A T2D	APPROVAL	MQ340055-X	P-11670	TBA	03/00097	T2A: MED-B-3625 T2D: MED-B-3263	SAE J1942-1	
	T24A T24D	T200 & L00	T200 & L00	T200 & L00	T200 & L00	T200 & L00	T200	
	T26A T26D	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200 & T700	
	T28A T28D	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200 & T700	
	T210A T210D	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200	
	T212A T212D	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200 & T700	
	T216A T216D	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T700	
	T220A T220D	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T700	
	T224A T224D	T700 & B00	T700 & B00	T700 & B00	T700 & B00	T700 & B00	T700	
	T232A T232D	T700 & B00	T700 & B00	T700 & B00	T700 & B00	T700 & B00	T700	
T240A	1200 SERIES	1200 SERIES	1200 SERIES	1200 SERIES	1200 SERIES	1200 SERIES	1200 SERIES	
T2S	APPROVAL	MQ340055-X	P-11670	TBA	03/00097	MED-B-3625	SAE J1942-1	
	T24S	T200	T200	T200	T200	T200	T200	
	T26S	T200, T700	T200, T700	T200, T700	T200, T700	T200, T700	T200, T700	
	T28S	T200, T700	T200, T700	T200, T700	T200, T700	T200, T700	T200, T700	
	T210S	T200, T700	T200, T700	T200, T700	T200, T700	T200, T700	T200, T700	
	T212S	T200, T700	T200, T700	T200, T700	T200, T700	T200, T700	T200, T700	
	T216S	T200, T700	T200, T700	T200, T700	T200, T700	T200, T700	T200, T700	
	T220S	T200, T700	T200, T700	T200, T700	T200, T700	T200, T700	T200, T700	
	T224S	T700	T700	T700	T700	T700	T700	
	T232S	T700	T700	T700	T700	T700	T700	
TXA2D	APPROVAL	MQ340055-X	P-11670	TBA	03/00097	MED-B-3625	SAE J1942-1	
	TXA28D	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	
	TXA210D	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	
	TXA212D	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	
	TXA216D	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	
	TXA220D	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	

* Refers to Approvals for HYDRAULIC systems only.

RYCO HOSE		AMERICAN BUREAU OF SHIPPING (ABS)	DET NORSKE VERITAS (DNV)	GERMANISCHER LLOYD (GL)	LLOYD'S REGISTER (LR)	MARINE EQUIPMENT DIRECTIVE (MED)	UNITED STATES COAST GUARD* (USCG)	UNITED STATES DEPARTMENT OF TRANSPORTATION (DoT)
SERIES	SIZE							
DF2A	APPROVAL	MQ340055-X	P-11670	TBA	03/00097	MED-B-3625	SAE J1942-1	
	DF24A	T200	T200	T200	T200	T200	T200	
	DF26A	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	
	DF28A	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	
	DF210A	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	
	DF212A	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	
	DF216A	T200 & T700				T200 & T700	T200 & T700	
H12A H12D	APPROVAL	MQ340055-X	P-11653	TBA	03/00098	H12A: MED-B-3625 H12D: MED-B-3260	SAE J1942-1	
	H1206A	H1206D	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T700	
	H1208A	H1208D	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T700	
	H1210A	H1210D	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T700	
	H1212A	H1212D	T700	T700	T700	T700	T700	
	H1216A	H1216D	T700	T700	T700	T700	T700	
	H1220A	H1220D	T700	T700	T700	T700	T700	
	H1224A	H1224D	T700	T700	T700	T700	T700	
	H1232A	H1232D	T700	T700	T700	T700	T700	
H12S	APPROVAL	MQ340055-X	P-11653	TBA	03/00098	MED-B-3625	SAE J1942-1	
	H1206S	T200	T200	T200	T200	T200	T200	
	H1208S	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	
	H1210S	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	
	H1212S	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	
	H1216S	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	
	H1220S	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	
	H1224S	T700	T700	T700	T700	T700	T700	
H1232S	T700	T700	T700	T700	T700	PENDING		
H13A H13D	APPROVAL	MQ340055-X	P-11668	TBA	03/00099	MED-B-3625	SAE J1942-1	
	H1306A	H1306D	T900	T900	T900	T900		
	H1308A	H1308D	T900	T900	T900	T900		
	H1310A	H1310D	T900	T900	T900	T900		
	H1312A	H1312D	T900	T900	T900	T900	T900	
	H1316A	H1316D	T900	T900	T900	T900	T900	
	H1320A	H1320D	T900	T900	T900	T900	T900	
	H1324A	H1324D	T900	T900	T900	T900	T900	
	H1332A	H1332D	T900	T900	T900	T900	T900	
HSPA	APPROVAL	MQ340055-X	P-11653	TBA	03/00101	MED-B-3625	SAE J1942-1	
	HSP04A	T200	T200	T200	T200	T200	T200	
	HSP06A	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	
	HSP08A	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	
	HSP10A	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	T200 & T700	
HSHA	APPROVAL	MQ340055-X	P-11653	TBA	03/00101	MED-B-3625	SAE J1942-1	
	HSH12A	T900	T900	T900	T900	T900	T900	
	HSH16A	T900	T900	T900	T900	T900	T900	
	HSH20A	T700	T700	T700	T700	T700	T700	
	HSH24A	T700	T700	T700	T700	T700	T700	
	HSH32A	T700	T700	T700	T700	T700	T700	
H15D	APPROVAL	MQ340055-X	P-11653	TBA	03/00100	MED-B-3625	SAE J1942-1	
	H1512D	6900N	6900N	6900N	6900N	6900N	6900N	
	H1516D	6900N	6900N	6900N	6900N	6900N	6900N	
	H1520D	6900N	6900N	6900N	6900N	6900N	6900N	
	H1524D	6900N	6900N	6900N	6900N	6900N	6900N	
	H1532D	6900N	6900N	6900N	6900N	6900N	6900N	
RQP1	APPROVAL	MQ340055-X	P-11671	TBA	03/00096	MED-B-3625	SAE J1942-1	
	RQP14	T200 & K00	T200 & K00	T200 & K00	T200 & K00	T200 & K00	T200	
	RQP16	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700	
	RQP18	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700	
	RQP110	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200	
	RQP112	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700	
	RQP116	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T200, T700 & K00	T700	
	RQP120						T700	
	RQP124						T700	
	RQP132						T700	

* Refers to Approvals for HYDRAULIC systems only.

RYCO HOSE		AMERICAN BUREAU OF SHIPPING (ABS)	DET NORSKE VERITAS (DNV)	GERMANISCHER LLOYD (GL)	LLOYD'S REGISTER (LR)	MARINE EQUIPMENT DIRECTIVE (MED)	UNITED STATES COAST GUARD* (USCG)	UNITED STATES DEPARTMENT OF TRANSPORTATION (DoT)
SERIES	SIZE							
RQP2	APPROVAL	MQ340055-X	P-11670	TBA	03/00097	MED-B-3625	SAE J1942-1	
	RQP24	T200 & L00	T200 & L00	T200 & L00	T200 & L00	T200 & L00	T200	
	RQP26	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700	
	RQP28	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700	
	RQP210	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200	
	RQP212	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700	
	RQP216	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T700	
	RQP220	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T200, T700 & L00	T700	
	RQP224	T700 & B00	T700 & B00	T700 & B00	T700 & B00	T700 & B00	T700	
RQP232	T700 & B00	T700 & B00	T700 & B00	T700 & B00	T700 & B00	T700		
RQP5 See Notes 1 & 2	APPROVAL					MED-B-3625	SAE J1942-1	FMVSS No. 106
	RQP54					T400 & V00	T400 & V00	T400 & V00
	RQP55					T400 & V00	T400 & V00	T400 & V00
	RQP56					T400 & V00	T400 & V00	T400 & V00
	RQP58					T400 & V00	T400 & V00	T400 & V00
	RQP510					T400 & V00	T400 & V00	T400 & V00
	RQP512					T400 & V00	T400 & V00	T400 & V00
	RQP516					V00		
	RQP520					V00		
	RQP524					V00		
RQP532					V00			
T5 See Notes 1 & 2	APPROVAL						SAE J1942-1	FMVSS No. 106
	T54						T400 & V00	T400 & V00
	T55						T400 & V00	T400 & V00
	T56						T400 & V00	T400 & V00
	T58						T400 & V00	T400 & V00
	T510						T400 & V00	T400 & V00
	T512						T400 & V00	T400 & V00
	T516							
	T520							
	T524							
T532								
RTH1 See Note 1	APPROVAL					MED-B-3625	SAE J1942-1	
	RTH14					1100 SERIES	1100 SERIES	
	RTH16					1100 SERIES	1100 SERIES	
	RTH18					1100 SERIES	1100 SERIES	
	RTH110					1100 SERIES	1100 SERIES	
	RTH112					1100 SERIES	1100 SERIES	
RTH116					1100 SERIES	1100 SERIES		
M2 See Note 1	APPROVAL	MQ340055-X	P-11680	TBA	03/00102	MED-B-3625	SAE J1942-1	
	M24	T400	T400	T400	T400	T400	T400	
	M26	T400	T400	T400	T400	T400	T400	
	M28	T400	T400	T400	T400	T400	T400	
	M212	T400	T400	T400	T400	T400	T400	
SR See Note 1	APPROVAL	MQ340055-X	P-11680	TBA	03/00102	MED-B-3625	SAE J1942-1	
	SR12	T400	T400	T400	T400	T400	T400	
	SR16	T400	T400	T400	T400	T400	T400	
	SR20	T400	T400	T400	T400	T400	T400	
	SR24	T400	T400	T400	T400	T400	T400	
	SR32	T400	T400	T400	T400	T400	T400	

* Refers to Approvals for HYDRAULIC systems only.

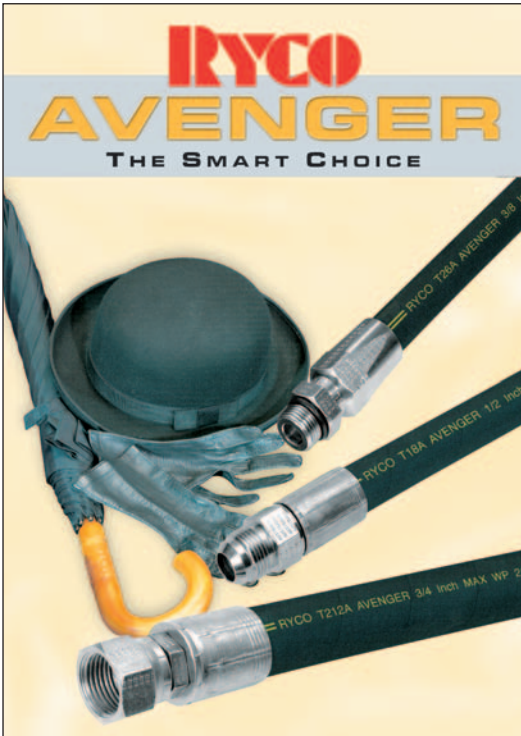
NOTE 1 Approvals shaded orange require the fitment of RYCO FS1072 Fire Sleeve on the hose assembly to satisfy the relevant authorities' requirements.

NOTE 2 Lower operating pressures apply when used for USCG (SAE J1942-1) FUEL Applications. For more information, refer to current edition of SAE J1942-1, or contact RYCO Hydraulics Technical Department.

RYCO Hydraulic Hose Styles Cover Your Needs!

RYCO Hydraulic Hose styles cover a broad range of hydraulic applications. Different applications require different performance criteria. RYCO AVENGER, DIEHARD, SLIDER and SURVIVOR tube and cover compounds offer a perfect choice and are available across a range of our Hose Styles.

RYCO AVENGER - THE SMART CHOICE



- REDUCES COST
- EN/DIN WORKING PRESSURES
- FLAME RESISTANT - MSHA

RYCO AVENGER is specifically designed to reduce costs and is available in **T1A, T2A, T3KA, DF2A, H12A, H13A, HSPA** and **HSHA** Hose Styles.

Flame Resistance.

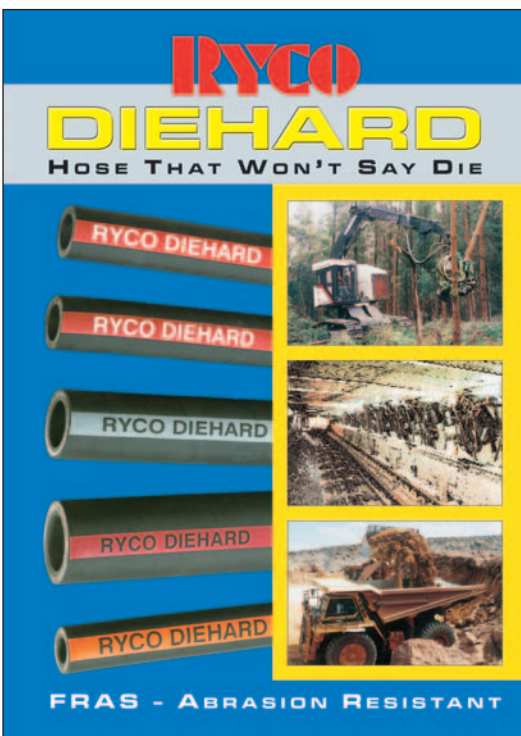
All **RYCO AVENGER** series meet MSHA Flame Resistant requirements.

Type Approvals.

RYCO AVENGER hoses have the following Type Approvals for marine and shipping applications (see pages 21 and 22 for further details).

T1A, T2A, H12A, H13A, HSPA, HSHA and **DF2A AVENGER** hoses have ABS, DNV, GL, Lloyd's Register, MED and US Coast Guard SAE J1942 (Hydraulic Systems) Type Approvals.

RYCO DIEHARD - HOSE THAT WON'T SAY DIE



- EXTRA ABRASION RESISTANT
- EN/DIN WORKING PRESSURES
- HIGHLY FLEXIBLE
- FRAS - FLAME RESISTANT and ANTI-STATIC
- LASTS LONGER
- REDUCES DOWNTIME
- SAVES MONEY

RYCO DIEHARD is specifically designed to last longer and reduce downtime. **RYCO DIEHARD** - 'Hose that won't say die' - is available in **T1D, T2D, T3KD, TXA2D, TJ2D, H12D, H13D** and **H15D** Hose Styles.

Flame Resistance.

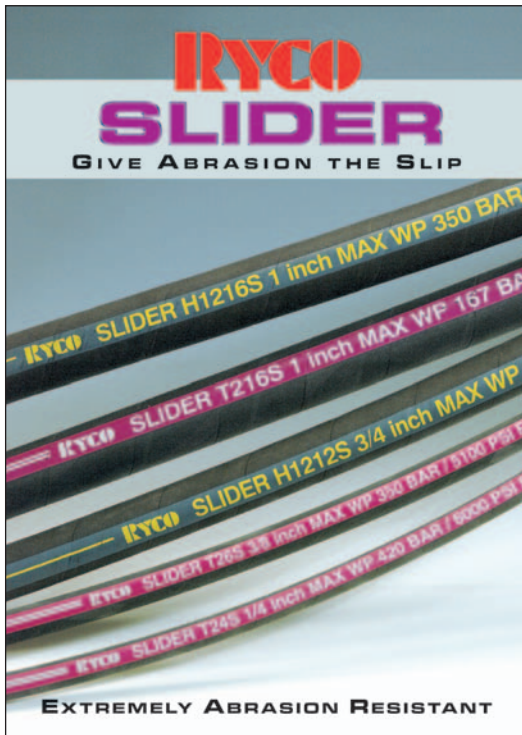
FRAS Hose. **MSHA** Flame Resistant and Anti-Static.

Type Approvals.

RYCO DIEHARD T1D, T2D, TXA2D, H12D, H13D and **H15D DIEHARD** hoses have ABS, DNV, GL, Lloyd's Register, MED and US Coast Guard SAE J1942 (Hydraulic Systems) Type Approvals for marine and shipping applications (see pages 21 and 22 for further details).

HOSE TYPE	HOSE STYLE AVAILABILITY										
	DF2	H12	H13	H15	HSB	HSP	T1	T2	T3K	TJ2	TXA2
AVENGER	DF2A	H12A	H13A		HSB	HSPA	T1A	T2A	T3KA		
DIEHARD		H12D	H13D	H15D			T1D	T2D	T3KD	TJ2D	TXA2D
SLIDER		H12S	H13S					T2S			
SURVIVOR		RQP1	RQP2	RQP5	RQP6						

RYCO SLIDER - GIVE ABRASION THE SLIP



- EXTREMELY ABRASION RESISTANT
- EN/DIN WORKING PRESSURES
- FLAME RESISTANT - MSHA
- FLEXIBLE

Abrasion Resistance.

RYCO SLIDER is specifically designed for applications where abrasion resistance is paramount.

It is available in **T2S**, **H12S** and **H13S** Hose Styles.

RYCO SLIDER provides extreme abrasion resistance whilst maintaining a high degree of flexibility. 'Give abrasion the slip!'

RYCO SLIDER saves additional cost and reduces assembly time by alleviating the need for additional abrasion protection such as RYCO SPIRAL GUARD in many applications.

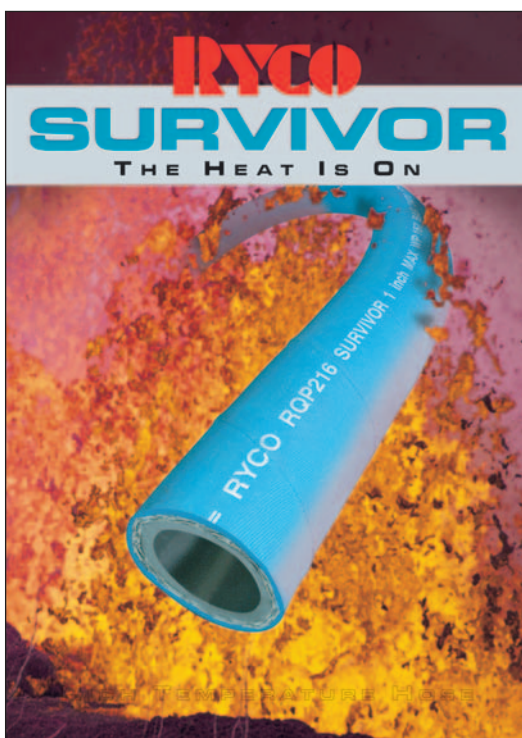
Flame Resistance.

All RYCO SLIDER series meet MSHA Flame Resistant requirements.

Type Approvals.

RYCO SLIDER **T2S**, **H12S** and **H13S** hoses have ABS, DNV, GL, Lloyd's Register and US Coast Guard SAE J1942 (Hydraulic Systems) Type Approvals for marine and shipping applications (see pages 21 and 22 for further details).

RYCO SURVIVOR - THE HEAT IS ON



- HIGH TEMPERATURE (150°C/302°F)
- MULTI FLUID COMPATIBILITY
- FLAME RESISTANT - MSHA
- RESISTS CRACKING
- BLUE COVER
- SAVES MONEY

RYCO SURVIVOR is specifically designed for high temperature applications; to keep performing 'When the heat is on'.

It is suitable for use with many different fluids including high temperature air and some phosphate esters and is available in **RQP1**, **RQP2**, **RQP5** & **RQP6**.

Flame Resistance.

RQP1, **RQP2** & **RQP6** are MSHA Flame Resistant.

Type Approvals.

RYCO SURVIVOR hoses have the following Type Approvals for marine and shipping applications (see pages 22 and 23 for further details).

RQP1, **RQP2** and **RQP5** have ABS, DNV, GL, Lloyd's Register, US Coast Guard SAE J1942 (Hydraulic Systems) Type Approvals.

RQP5 has US Coast Guard SAE J1942 (Fuel Systems) Type Approval.

Maximum Working Pressures:

Maximum Working Pressures shown below (except for **RYCO PL1, RQP6, SR** and **SRF** Series) are Dynamic Working Pressures for use with hydraulic fluid in systems with pressure surges or variable loads and are based on 4:1 safety factor (minimum burst to maximum working pressure).

RYCO PL1 and **RQP6** hoses are recommended for use with RYCO 800 Series Push-On Fittings in systems with Static Working Pressures only, and are not recommended for vibration or pressure surge applications. The Maximum Working Pressures for **PL1** and **RQP6** shown below are Static Working Pressures.

Hose subjected to both maximum temperature and maximum working pressure will have a shortened lifetime.

HOSE SIZE			MP1	SR SRF	PL1	RQP6	M2	RTH1	RT7 RT7N	RQP5 T5	T3KA T3KD	RQP1	T1F	T1A T1D	RT8 RT8N	RQP2	DF2A	T2A	T2D RT25	TXA2D	H12A H12D H12S	HSPA	H13A H13D H13S	H15D	HSHA
DN	inch	Dash	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar
3	1/8	-02						210																	
5	3/16	-03						210				250	250												
6	1/4	-04	13,8		21	28	86	170	190	210	210	225	225	225	345	400	420	420	420			450			
8	5/16	-05			21	28				210	210	215		215		350		350	350						
10	3/8	-06	13,8		21	28	78	165	155	155	210	180	180	180	276	350	350	350	350		350	445			
12	1/2	-08	13,8		21	28	69	120	138	138	210	160	160	160	241	300	295	345	350	375	350	420			
16	5/8	-10	13,8		21	24		105		121	210	130		130		250	250	250	250	350	350	350			
19	3/4	-12	13,8	21	21	21	52	85	86	103	210	120	105	105		215	215	215	215	313	350	350	350	420	435
25	1	-16	13,8	17				55		55		90		90		167	167	175	175	225	350	350	350	420	420
31	1.1/4	-20	13,8	14						43				65		150		140	140	175	275		350	420	350
38	1.1/2	-24		10						35				50		100		100	100		255		350	420	290
51	2	-32		7						24				40		90		90	90		210		350	420	275
63	2.1/2	-40		4,3														69							

Pressure Conversion Chart 1 bar = 14.5 psi 1 MPa = 10 bar

bar	4	7	10	12	14	17	20	24	28	39	55	69	80	90	120	130
psi	58	100	145	175	200	250	300	350	400	565	800	1000	1160	1300	1740	1890
bar	160	180	200	215	225	250	300	337	350	375	400	420	435	500	585	690
psi	2300	2600	2900	3100	3250	3600	4350	4900	5100	5440	5800	6080	6310	7250	8480	10000

The Working Pressure of each Hose Coupling End Termination Style is shown in the Technical section.

In most cases, the Working Pressure of the Hose Coupling End Termination Style that can be chosen for a particular hose exceeds the Maximum Working Pressure of the Hose.

It is possible however, to select a Hose Coupling with End Termination with lower Working Pressure than the Hose.

In this case, as noted in SAE J516 and SAE J517, the rated Working Pressure of the Hose Assembly must not exceed the lower of the respective Working Pressure rated values.

EXAMPLE 1.

T28A Hose Assembly with T204-0812 coupling one end and T209-0808 coupling other end.

From above table or from page 31, Maximum Working Pressure of T28A is 345 bar.

From page 420, Maximum Working Pressure of T204-0812 is 600 bar.

From page 419, Maximum Working Pressure of T209-0808 is 700 bar.

The Maximum Working Pressure of the Hose Assembly is therefore 345 bar, the lowest of the respective Working Pressure rated values (in this case, the hose).

EXAMPLE 2.

H1216D Hose Assembly with T713-1620 coupling one end and T703-1621 coupling other end.

From above table or from page 44, Maximum Working Pressure of H1216D is 350 bar.

From page 422, Maximum Working Pressure of T713-1620 is 280 bar.

From page 420, Maximum Working Pressure of T703-1621 is 420 bar.

The Maximum Working Pressure of the Hose Assembly is therefore 280 bar, the lowest of the respective Working Pressure rated values (in this case, the T713-1620).

See page 100 for more information.

Impulse Life:

Although two or more hoses manufactured to different industry standard specifications may have identical Maximum Working Pressures, their suitability for the application must be considered. An important factor to consider is the magnitude and frequency of the pressure impulses that the hose assembly will experience.

For example, **HSP16**, **H1216**, and **H1316** are all 4-wire multi-spiral reinforced hoses rated at 350 bar (5,100 psi) Maximum Working Pressure, however their abilities to withstand heavy duty pressure impulses varies. **H1316** hose is built to withstand heavy duty impulses, therefore **H1316** hose assemblies are better suited for direct attachment to a hydrostatic drive compared to H1216 or HSP16. **H1216** and **HSP16** may still be used in the same circuit as long as they are connected further down the circuit where the pressure impulses are not as severe.

Flame Resistance:

All RYCO Hoses (except RYCO FB2, M1, MP1, PW2, TW1, RT7, RT7N, RT7T, RT7TN, RT8, RT8N, RT8T, RT8TN, RQP5, SR, SRF, T5, RTH1 & PL1 Series) meet Flame Resistant Designation "U.S. MSHA" of the U.S. Department of Labor, Mine Safety and Health Administration and also comply with Flame Resistant requirements of Australian Standard AS 2660 and Method of Test AS 1180.10B. Contact RYCO Hydraulics Technical Department for more information.

Minimum Bend Radius:

Minimum Bend Radius figures published are the radius to the cover of the Hose at the inside of the bend. RYCO Hose Assemblies exceed the required impulse test requirements when bent to the published Minimum Bend Radius. Hose assemblies bent to smaller than the Minimum Bend Radius will have shortened lifetime.

Anti-Static:

"Anti-Static" refers to Hoses or Hose Assemblies being sufficiently electrically conductive to drain off static electricity. According to the requirements of AS 2660 Clause 2.2, the Hose or Hose assembly shall have an electrical resistance (measured from inside surface to outside surface) of less than 1 megohm per metre, when tested according to Method of Test AS 1180 13A. For applications requiring Anti-Static Hydraulic Hose Assemblies including, but not limited to, underground coal mines, where there is danger of ignition from static electricity discharge, only special Anti-Static Hose can be used.

RYCO DIEHARD Hoses comply with the requirements of AS 2660 and Method of Test AS 1180 13A.

Non-Conductive:

Certain applications require that a Hose, or Hose Assembly, be Non-Conductive to prevent electrical current flow. For applications that require a Hose to be electrically Non-Conductive including, but not limited to, applications near high voltage electric lines, only special Non-Conductive Hoses can be used.

Skive/Non-Skive:

Skiving refers to removing the cover at the ends of the Hose where the Hose Couplings are to be attached*. Most RYCO combinations of Hose and Couplings are Non-Skive.

In a Non-Skive application, RYCO BITELOK couplings bite down through the cover and grip the wire reinforcement. Some combinations of RYCO Hose and Couplings require skiving. If skiving is required, it is clearly stated in both the Hose Section and the Couplings Section.

*** (For H15D with 6900N couplings, a section of the tube must also be skived. This is called Internal Skiving).**

Outside Diameters:

See page 79 for reference chart of outside diameters.

The **Isobaric Working Pressures** chart allows quick selection of the hose required for some common hydraulic circuit pressures. ("Iso" means "same", "bar" is a unit of pressure; so Isobaric means the same pressure regardless of Hose Size).

The Hose Styles listed meet or exceed the Isobaric Working Pressures shown in the table.

EXAMPLE:

To select a 3/4" (-12) size hose for 3,050 psi (210 bar) Working Pressure, follow the 3,050 psi Working Pressure column down to the 3/4" Hose Size row.

ANSWER:

T212 and **T3K12** meet or exceed the required Working Pressure.

Note: "T212" is listed because **T212A AVENGER**, **T212D DIEHARD**, and **T212S SLIDER** are all suitable. Similarly, **T3K12** is listed because **T3KA AVENGER** and **T3KD DIEHARD** are both suitable. The final choice of these Hose Series will be determined by other application factors, such as required Abrasion Resistance or Flame Resistance of cover.

Note: Hoses listed in the columns to the right of the 3,050 psi column also exceed the required 3,050 psi (210 bar) Working Pressure. **H1212**, **TXA212**, **H1312**, **H1512** and **HS12** are all suitable. These Spiral Reinforced Hoses **H1212**, **H1312**, **H1512** and **HS12** have higher Maximum Working Temperature and higher Impulse Life than **T212** and **T3K12**.

RYCO Hydraulics - Isobaric Working Pressures

HOSE SIZE		3,050 psi (210 bar) Working Pressure	4,000 psi (275 bar) Working Pressure	5,100 psi (350 bar) Working Pressure	6,000 psi (420 bar) Working Pressure
1/4	-04	T14, T3K4	T24	T24	HSP04, T24, DF24A
5/16	-05	T15, T3K5	T25	T25	
3/8	-06	T26, T3K6	T26	T26, DF26A	HSP06
1/2	-08	T28, T3K8	T28, DF28A	H1208, T28*, TXA28	HSP08
5/8	-10	T210, T3K10, DF210A	TXA210	HSP10, H1210, TXA210	
3/4	-12	T212, T3K12, DF212A	H1212, TXA212	H1212, H1312	H1512D, HSH12
1	-16	TXA216, T3K16	H1216	H1216, H1316, HSP16	H1516D, HSH16
1.1/4	-20	H1220	H1220	H1320, HSH20	H1520
1.1/2	-24	H1224	HSH24	H1324	H1524
2	-32	H1232	HSH32	H1332	H1532

Hose Styles listed in table, meet or exceed referenced Isobaric Working Pressures.

* T28A is 5,000 psi (345 bar).

Some RYCO Hose Series are not listed on page 29: **T1F, TJ2D, RQG1, M2G, M1, FB2, RTH1, TW1, PW2, MP1**.

These Hoses are specific purpose Hoses, and their temperature limits are specified in the Hose Section of this Product Technical Manual. Contact RYCO Hydraulics Technical Department for any further queries.

Other RYCO Hose Series are listed on page 29. The Maximum Working Temperatures for these hoses, as listed in the Hose Section of this Product Technical Manual are for use with general purpose, mineral (petroleum) oil based hydraulic fluids, except where otherwise stated.

Temperature limits for other hydraulic fluids, and some other common applications, are listed on page 29.

CAUTION:

Life expectancy of hoses is shortened at high temperatures. Detrimental effects increase when temperature is elevated, and also when; operating pressure, flow velocity, duration and frequency of exposure, and level of impurities in the media are high. Actual service life at temperatures approaching the recommended limits will depend on the particular application and the fluid being used.

Maximum Working Temperatures refer to the temperature of the media in the hose; not the environmental temperature around the outside of the hose. Please contact RYCO Hydraulics Technical Department for environmental temperatures in excess of 80°C (176°F), except **RQP1** and **RQP2** Series where environmental temperature is the same as media temperature.

Maximum Working Temperatures shown are for continuous temperatures. Slightly higher intermittent temperatures (up to 10% of time) may be acceptable with some hoses and some fluids, if reduced service life is acceptable. Please contact RYCO Hydraulics Technical Department for more information.

DO NOT expose Hose to Maximum Temperature and Maximum Working Pressure at the same time. The fluid manufacturer's recommended maximum operating temperature for the fluid must not be exceeded. If different to the temperatures listed in the following table, the lower limit must take precedence. We recommend keeping the hose filled with the pressure medium at all times. Further information available on request.

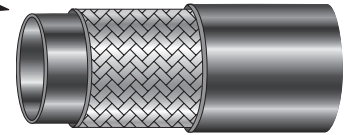
	GROUP 1	GROUP 2	GROUP 3	GROUP 4
AVENGER	T1A, T2A, T3KA, HSHA, HSPA	H12A, H13A		
DIEHARD	T1D, T2D, T3KD, TXA2D	H12D, H13D, H15D		
SLIDER	T2S	H12S, H13S		
SURVIVOR	RQP6		RQP1, RQP2, RQP5	
OTHER SERIES	DF2A, SR, SRF, M2, T5			RT7, RT7N, RT7T, RT7TN RT8, RT8N, RT8T, RT8TN PL1
MEDIA	TEMPERATURE LIMITS			
GENERAL PURPOSE MINERAL (PETROLEUM) BASED HYDRAULIC OIL (see Note 1)	-40°C to +100°C (-40°F to +212°F) RQP6: -40° to +125°C (-40°F to +257°F)	-40°C to +121°C (-40°F to +250°F)	-40°C to +150°C (-40°F to +302°F)	-40°C to +95°C (-40°F to +203°F)
WATER	+71°C (+160°F)	0°C to +71°C (+32°F to +160°F)	0°C to +121°C (+32°F +250°F)	0°C to +70°C (+32°F to +158°F)
WATER IN MINERAL OIL (40% to 80% water)	+85°C (+185°F)	-40°C to +85°C (-40°F to +185°F)	-40°C +121°C (-40°F +250°F)	-40°C to +95°C (-40°F to +203°F)
MINERAL OIL IN WATER (more than 80% water)	+85°C (+185°F)	-40°C to +85°C (-40°F to+185°F)	-40°C to +121°C (-40°F to +250°F)	-40°C to +70°C (-40°F to +158°F)
WATER/GLYCOL	+85°C (+185°F)	-40°C to +85°C (-40°F to +185°F)	-40°C to +121°C (-40°F to +250°F)	-40°C to +70°C (-40°F to +158°F)
GLYCOL	+85°C (+185°F)	-40°C to +85°C (-40°F to +185°F)	-40°C to+85°C (-40°F to +185°F)	-40°C to+70°C (-40°F to +158°F)
PHOSPHATE ESTERS (see Note 2)	Not suitable	Not suitable	-40°C to +82°C (see Note 2) (-40°F to +180°F) (see Note 2)	Not suitable
AIR (see Note 3)	RQP6: -40°C to +100°C (-40°F to +212°F) ***OTHERS: +71°C (+160°F)	-40°C to +71°C (see Note 3) (-40°F to +160°F) (see Note 3)	-40°C to +121°C (see Note 3) (-40°F to +250°F) (see Note 3)	-40°C to +71°C (see Note 3) (-40°F to +160°F) (see Note 3)
PETROL (GASOLINE)	Contact RYCO Hydraulics	Contact RYCO Hydraulics	Contact RYCO Hydraulics	Contact RYCO Hydraulics
DIESEL FUEL	T5: +71°C (+160°F) RQP6: -40°C to +71°C (-40°F to +160°F) OTHERS: +50°C (+122°F)	-40°C to +50°C (-40°F to +122°F)	-40°C to +93°C (-40°F to +200°F)	T5: -40°C to +71°C (-40°F to +160°C) PL1: -40°C to +49°C (-40°F to +120°F)
ENGINE LUBRICATING OIL, GEARBOX OIL	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	-40°C to +95°C (-40°F to +203°F)
AUTOMATIC TRANSMISSION FLUID	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	-40°C to +95°C (-40°F to +203°F)

- Note 1** For highly refined and special purpose mineral based hydraulic oils (for example aviation hydraulic oils, MIL spec oils, etc), contact RYCO Hydraulics Technical Department.
- Note 2** Not suitable for use with aerospace type phosphate esters such as Monsanto Skydrol 500B, Stauffer Aero-Safe 2300W and Chevron Hy-jet IV.
- Note 3** For use with Air at pressures above 17,2 bar (250 psi), cover of hose must be perforated/pin-pricked (except RQP5 and T5), to allow air permeating through hose to escape without blistering the cover. Maximum working pressure of wire braid and spiral reinforced hose must be reduced by 30% (except for RQP1 and RQP2). Observe all State and Federal Safety Regulations.

AVENGER T1A



1 WIRE BRAID HOSE



Meets or exceeds the performance requirements of SAE 100R1AT, AS 3791 100R1AT, DIN 20022-15N, EN 853 Type 15N, ISO 1436 Types R1AT & 15N.
Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 21).

Recommended For:

High pressure hydraulic oil lines.

Tube:

Black, oil resistant synthetic rubber. (Nitrile).

Reinforcement:

One braid of high tensile steel wire.

Cover:

Black, oil resistant and abrasion resistant synthetic rubber.
No skiving required with T200 & T700 Series BITELOK Crimp Couplings and K Series 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 -3 to -20) pages 102 to 123.
T700 Series (sizes -6 to -32) pages 134 to 152.
Assembly Instructions page 404.

FIELD ATTACHABLE NON-SKIVE

K Series (sizes -4 to -16) pages 202 to 219.
Assembly Instructions page 402.

FIELD ATTACHABLE SKIVE

A Series* (sizes -20 to 32) pages 202 to 219.
Assembly Instructions page 403.

T1A 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
T13A	5	3/16	-03	250	3600	1000	14500
T14A	6	1/4	-04	225	3250	900	13000
T15A	8	5/16	-05	215	3100	860	12400
T16A	10	3/8	-06	180	2600	720	10400
T18A	12	1/2	-08	160	2300	640	9200
T110A	16	5/8	-10	130	1900	520	7600
T112A	19	3/4	-12	105	1500	420	6000
T116A	25	1	-16	90	1300	360	5200
T120A	31	1.1/4	-20	65	945	260	3780
T124A	38	1.1/2	-24	50	725	200	2900
T132A	51	2	-32	40	580	160	2320

T1A Hose Dimensions

Matched Couplings

PART NO	MINIMUM BEND RADIUS**		AVERAGE WEIGHT		NOMINAL HOSE OD		A SERIES* SKIVE LENGTH	FIELD ATTACHABLE K (& A) SERIES		BITELOK ONE-PIECE CRIMP	
	mm	inch	kg/m	lb/ft	mm	inch		INSERT	FERRULE	NON-SKIVE	
T13A	35	1.4	0,21	0.14	11,8	0.46				T200	
T14A	38	1.5	0,23	0.15	13,4	0.53		600 SERIES	K00-04	T200	
T15A	50	2.0	0,27	0.18	15,0	0.59				T200	
T16A	50	2.0	0,35	0.24	17,4	0.69		600 SERIES	K00-06	T200	T700
T18A	75	3.0	0,43	0.29	20,5	0.81		600 SERIES	K00-08	T200	T700
T110A	89	3.5	0,51	0.34	23,7	0.93		600 SERIES	K00-10	T200	T700
T112A	109	4.3	0,65	0.44	27,6	1.09		600 SERIES	K00-12	T200	T700
T116A	140	5.5	0,95	0.64	35,7	1.41		600 SERIES	K00-16	T200	T700
T120A	419	16.5	1,30	0.87	43,6	1.72	45	600 SERIES	*A00-20	T200	T700
T124A	500	20.0	1,59	1.07	50,5	1.99	49	600 SERIES	*A00-24		T700
T132A	600	24.0	2,12	1.42	64,1	2.52	66	600 SERIES	*A00-32		T700

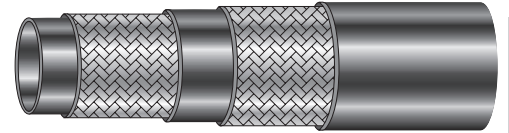
** Tighter Minimum Bend Radius up to 1" does not apply when used with T700 Series Couplings – refer to standard SAE Bend Radius with T700 Series.

*When using A Series Field Attachable Couplings on T1A Series Hose, cover of hose must be skived at ends.

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

AVENGER T2A

2 WIRE BRAID HOSE



Meets or exceeds the performance requirements of SAE 100R2AT, AS 3791 100R2AT, DIN 20022-2SN, EN 853 Type 2SN, ISO 1436 Types R2AT & 2SN.
 NOTE: -40 size is not included in DIN, EN, ISO standards.
 Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 21).

Recommended For:

High pressure hydraulic oil lines.

Tube:

Black, oil resistant synthetic rubber. (Nitrile).

Reinforcement:

Two braids of high tensile steel wire.

Cover:

Black, oil resistant and abrasion resistant synthetic rubber. No skiving required with T200 & T700 Series BITELOK Crimp Couplings and L Series 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 -20) pages 102 to 123.
 T700 Series (sizes -6 to -32) pages 134 to 152.
 Assembly Instructions page 404.

FIELD ATTACHABLE NON-SKIVE

L Series (sizes -4 to -20) pages 202 to 219.
 Assembly Instructions page 402.

FIELD ATTACHABLE SKIVE

B Series* (sizes -24 and -32) pages 202 to 219.
 Assembly Instructions page 403.

SKIVE TWO-PIECE CRIMP

1200-40 (size -40) page 124.
 Assembly Instructions pages 408 and 409.

T2A 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
T24A	6	1/4	-04	420	6000	1680	24000
T25A	8	5/16	-05	350	5100	1400	20400
T26A	10	3/8	-06	350	5100	1400	20400
T28A	12	1/2	-08	345	5000	1380	20000
T210A	16	5/8	-10	250	3625	1000	14500
T212A	19	3/4	-12	215	3120	860	12400
T216A	25	1	-16	175	2540	700	10150
T220A	31	1.1/4	-20	140	2030	560	8120
T224A	38	1.1/2	-24	100	1450	400	5800
T232A	51	2	-32	90	1305	360	5220
T240A	63	2.1/2	-40	69	1000	276	4000

T2A Hose Dimensions

Matched Couplings

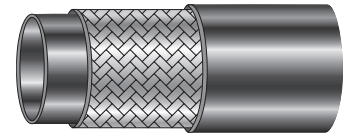
PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		B SERIES* SKIVE LENGTH	FIELD ATTACHABLE L (& B) SERIES		BITELOK ONE-PIECE CRIMP	
	mm	inch	kg/m	lb/ft	mm	inch		INSERT	FERRULE	NON-SKIVE	
T24A	100	4.0	0,39	0.26	15,0	0.59		600 SERIES	L00-04	T200	
T25A	114	4.5	0,45	0.30	16,6	0.65				T200	
T26A	127	5.0	0,56	0.38	19,0	0.75		600 SERIES	L00-06	T200	T700
T28A	178	7.0	0,66	0.44	22,0	0.87		600 SERIES	L00-08	T200	T700
T210A	200	8.0	0,80	0.54	25,2	0.99		600 SERIES	L00-10	T200	T700
T212A	240	9.5	0,96	0.65	29,1	1.15		600 SERIES	L00-12	T200	T700
T216A	300	12.0	1,37	0.92	37,7	1.48		600 SERIES	L00-16	T200	T700
T220A	419	16.5	2,03	1.36	48,0	1.89		600 SERIES	L00-20	T200	T700
T224A	500	20.0	2,75	1.85	54,4	2.14	53	600 SERIES	*B00-24		T700
T232A	600	24.0	3,48	2.34	67,3	2.65	58	600 SERIES	*B00-32		T700
T240A	760	30.0	3,70	2.49	78,6	3.09				1200-40 TWO-PIECE	

*When using B Series Field Attachable Couplings on T2A Series Hose, cover of hose must be skived at ends. Contact RYCO Hydraulics for Crimp Diameter and Mark Length for BITELOK Couplings.

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) in all sizes.
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.

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	210	3050	840	12200
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

T3KA Hose Dimensions

Matched Couplings

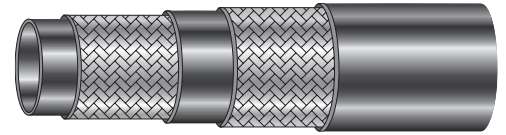
PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		BITELOK ONE-PIECE CRIMP
	mm	inch	kg/m	lb/ft	mm	inch	NON-SKIVE
T3K4A	50	2.0	0,22	0.15	11,9	0.47	T200 SERIES
T3K5A	55	2,2	0,25	0.17	13,5	0.53	T200 SERIES
T3K6A	65	2.5	0,33	0.22	15,8	0.62	T200 SERIES
T3K8A	90	3.5	0,42	0.28	18,9	0.74	T200 SERIES
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	1,38	0.93	36,2	1.43	T200 SERIES

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

DINFLEX DF2A

2 WIRE BRAID COMPACT HOSE

Meets or exceeds the performance requirements of SAE 100R2AT, SAE 100R16, AS 3791 100R2AT, EN 857 Type 2SC, ISO 1436. Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 22).



Recommended For:

High pressure hydraulic oil lines. DINFLEX Hose has the compact outside diameter of one wire braid hose, but exceeds the performance requirements of SAE 100R2 two wire braid hose.

Additionally it has a smaller bend radius and higher flexibility than standard two wire braid hoses.

Not suitable for use with Field Attachable Couplings

Tube:

Black, oil resistant synthetic rubber. (Nitrile).

Reinforcement:

Two braids of high tensile steel wire.

Cover:

Black, oil resistant and abrasion resistant synthetic rubber. No skiving required with T200 & T700 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.
T700 Series (sizes -6 and -12) pages 134 to 152.
Assembly Instructions page 404.

Not suitable for use with Field Attachable Couplings.

DF2A 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
DF24A	6	1/4	-04	420	6000	1680	24000
DF26A	10	3/8	-06	350	5100	1400	20400
DF28A	12	1/2	-08	295	4250	1180	17000
DF210A	16	5/8	-10	250	3600	1000	14500
DF212A	19	3/4	-12	215	3100	860	12400
DF216A	25	1	-16	167	2400	670	9700

DF2A Hose Dimensions

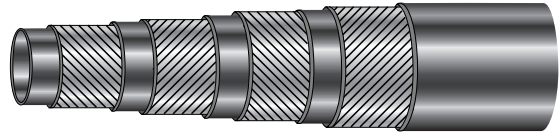
Matched Couplings

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		BITELOK ONE-PIECE CRIMP	
	mm	inch	kg/m	lb/ft	mm	inch	NON-SKIVE	
DF24A	50	2.0	0,27	0.18	13,6	0.54	T200 SERIES	
DF26A	63	2.5	0,41	0.28	17,6	0.69	T200 SERIES	T700 SERIES
DF28A	88	3.5	0,51	0.34	20,5	0.81	T200 SERIES	
DF210A	101	4.0	0,53	0.36	23,7	0.93	T200 SERIES	
DF212A	120	4.8	0,80	0.54	27,7	1.09	T200 SERIES	T700 SERIES
DF216A	152	6.0	1,15	0.77	35,8	1.41	T200 SERIES	

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

AVENGER H12A

VERY HIGH PRESSURE SPIRAL HOSE



Meets or exceeds the performance requirements of SAE 100R12, AS 3791 100R12, EN 856 Type R12, EN 856 Type 4SP (-12 and above), ISO 3862 Type R12.
Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 22).

Recommended For:

Very high pressure hydraulic oil lines.
The extra high working pressures and excellent impulse life when tested to SAE 100R12 test conditions result in, increased service life and minimise equipment downtime.

Tube:

Black, oil resistant synthetic rubber.

Reinforcement:

Four alternating layers of spiralled high tensile steel wire.

Cover:

Black, oil resistant and abrasion resistant synthetic rubber.
Highly visible layline branding for easy and permanent identification.
No skiving required with T700 Series BITELOK Crimp Couplings.

Temperature Range:

From -40°C to +121°C (-40°F to +250°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
T700 Series (sizes -06 to -32) pages 134 to 152.
Assembly Instructions page 404.

BITELOK SKIVE ONE-PIECE CRIMP
T200 Series (sizes -06 to -10) pages 102 to 123.
Assembly Instructions page 405.

H12A 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
H1206A	10	3/8	-06	350	5100	1400	20400
H1208A	12	1/2	-08	350	5100	1400	20400
H1210A	16	5/8	-10	350	5100	1400	20400
H1212A	19	3/4	-12	350	5100	1400	20400
H1216A	25	1	-16	350	5100	1400	20400
H1220A	31	1.1/4	-20	275	4000	1100	16000
H1224A	38	1.1/2	-24	255	3700	1020	14800
H1232A	51	2	-32	210	3050	840	12200

H12A Hose Dimensions

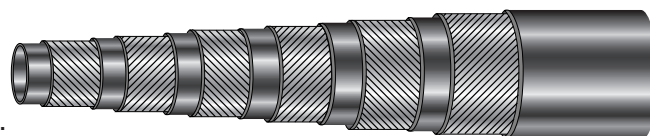
Matched Couplings

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		BITELOK ONE-PIECE CRIMP	
	mm	inch	kg/m	lb/ft	mm	inch	NON-SKIVE	SKIVE
H1206A	127	5.0	0,65	0.44	20,2	0.80	T700 SERIES	T200 (SKIVE)
H1208A	178	7.0	0,80	0.54	23,8	0.94	T700 SERIES	T200 (SKIVE)
H1210A	200	8.0	1,16	0.78	28,2	1.11	T700 SERIES	T200 (SKIVE)
H1212A	240	9.5	1,27	0.85	30,7	1.21	T700 SERIES	
H1216A	300	12.0	1,91	1.28	38,0	1.50	T700 SERIES	
H1220A	400	16.0	2,53	1.70	47,0	1.85	T700 SERIES	
H1224A	500	20.0	3,40	2.28	53,5	2.11	T700 SERIES	
H1232A	600	24.0	4,50	3.02	66,7	2.63	T700 SERIES	

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

AVENGER H13A

EXTREMELY HIGH PRESSURE SPIRAL HOSE



Meets or exceeds the performance requirements of SAE 100R13, AS 3791 100R13, EN 856 Type R13, ISO 3862 Type R13. Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 22).

Recommended For:

Extremely high pressure hydraulic oil lines. The extra high working pressures and excellent impulse life when tested to SAE 100R13 test conditions result in, increased service life and minimise equipment downtime.

Tube:

Black, oil resistant synthetic rubber.

Reinforcement:

Sizes -12 & -16:

Four alternating layers of spiralled high tensile steel wire.

Sizes -20 to -32:

Six alternating layers of spiralled high tensile steel wire.

Cover:

Black, oil resistant and abrasion resistant synthetic rubber. Highly visible layline branding for easy and permanent identification.

No skiving required with T900 Series BITELOK Crimp Couplings.

Temperature Range:

From -40°C to +121°C (-40°F to +250°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

T900 Series (sizes -12 to -32) pages 153 to 161. Assembly Instructions page 404.

BITELOK SKIVE ONE-PIECE CRIMP

T700 Series (sizes -12 to -20) pages 134 to 152. Assembly Instructions page 405.

BITELOK SKIVE TWO-PIECE CRIMP

6900K Series (sizes -20 to -32) pages 168 to 169. 6900T Series (size -32) page 169. Available only as Factory Fitted Hose Assemblies.

H13A 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
H1312A	19	3/4	-12	350	5100	1400	20400
H1316A	25	1	-16	350	5100	1400	20400
H1320A	31	1.1/4	-20	350	5100	1400	20400
H1324A	38	1.1/2	-24	350	5100	1400	20400
H1332A	51	2	-32	350	5100	1400	20400

H13A 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	SKIVE
H1312A	240	9.5	1,65	1.11	32,1	1.26	T900 SERIES	T700 (SKIVE)
H1316A	300	12.0	2,25	1.51	38,7	1.52	T900 SERIES	T700 (SKIVE)
H1320A	419	16.5	3,60	2.42	49,8	1.96	T900 SERIES	T700 (SKIVE)
H1324A	500	20.0	4,95	3.33	57,3	2.26	T900 SERIES	
H1332A	600	24.0	7,00	4.69	72,0	2.83	T900 SERIES	

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

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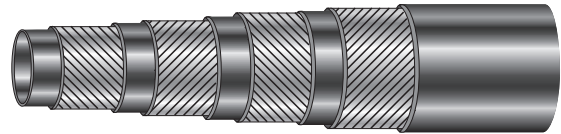
Accessories

Filters

Technical

AVENGER HSPA

EXTRA HIGH PRESSURE
SPIRAL HOSE



Meets or exceeds the performance requirements of EN 856 4SP, ISO 3862 Type 4SP.
Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 22).

Recommended For:

Extra high pressure hydraulic oil lines.

Tube:

Black, oil resistant synthetic rubber.

Reinforcement:

Four alternating layers of spiralled high tensile steel wire.

Cover:

Black, oil resistant and abrasion resistant synthetic rubber.
Highly visible layline branding for easy and permanent identification.
No skiving required with T700 Series BITELOK Crimp 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:

Meets Flame Resistant Designation “U.S. MSHA” of the US Department of Labor, Mine Safety and Health Administration.
Complies with Flame Resistant requirements of Australian Standard AS 2660 and Method of Test AS 1180. 10B.

Couplings:

BITELOK NON-SKIVE ONE-PIECE CRIMP
T700 Series (sizes -06 to -16) pages 134 to 152.
Assembly Instructions pages 404.

BITELOK SKIVE ONE-PIECE CRIMP
T200 Series (sizes -04 to -10) pages 102 to 123.
Assembly Instructions page 405.

HSPA 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
HSP04A	6	1/4	-04	450	6550	1800	26200
HSP06A	10	3/8	-06	445	6450	1780	25800
HSP08A	12	1/2	-08	420	6000	1680	24000
HSP10A	16	5/8	-10	350	5100	1400	20400
HSP12A	19	3/4	-12	350	5100	1400	20400
HSP16A	25	1	-16	350	5100	1400	20400

HSPA Hose Dimensions

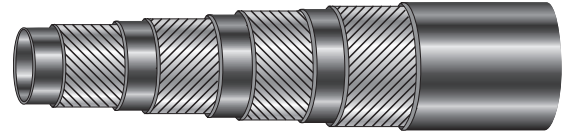
Matched Couplings

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		BITELOK ONE-PIECE CRIMP	
	mm	inch	kg/m	lb/ft	mm	inch	SKIVE	NON-SKIVE
HSP04A	150	6.0	0,63	0.42	17,9	0.70	T200 (SKIVE)	
HSP06A	180	7.0	0,80	0.54	20,0	0.79	T200 (SKIVE)	T700 SERIES
HSP08A	230	9.0	0,96	0.65	24,6	0.97	T200 (SKIVE)	T700 SERIES
HSP10A	250	10.0	1,17	0.79	28,2	1.11	T200 (SKIVE)	T700 SERIES
HSP12A	300	12.0	1,60	1.07	32,0	1.26		T700 SERIES
HSP16A	340	13.5	2,03	1.36	39,7	1.56		T700 SERIES

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

AVENGER HSHA

EXTRA HIGH PRESSURE
SPIRAL HOSE



Meets or exceeds the performance requirements of EN 856 4SH, ISO 3862 Type 4SH.
Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 22).

Recommended For:

Extra high pressure hydraulic oil lines.

Tube:

Black, oil resistant synthetic rubber.

Reinforcement:

Four alternating layers of spiralled high tensile steel wire.

Cover:

Black, oil resistant and abrasion resistant synthetic rubber.
Highly visible layline branding for easy and permanent identification.
No skiving required with T700 & T900 Series BITELOK Crimp 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:

Meets Flame Resistant Designation "U.S. MSHA" of the US Department of Labor, Mine Safety and Health Administration.
Complies with Flame Resistant requirements of Australian Standard AS 2660 and Method of Test AS 1180. 10B.

Couplings:

BITELOK NON-SKIVE ONE-PIECE CRIMP
T700 Series (-20 to -32) pages 134 to 152.
T900 Series (-12 and -16) pages 153 to 161.
Assembly Instructions page 404.

MSHA 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
HSH12A	19	3/4	-12	435	6300	1740	25200
HSH16A	25	1	-16	420	6000	1680	24000
HSH20A	31	1.1/4	-20	350	5100	1400	20400
HSH24A	38	1.1/2	-24	290	4200	1160	16820
HSH32A	51	2	-32	275	4000	1100	16000

MSHA 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	
HSH12A	280	11.0	1,60	1.08	31,7	1.25		T900 SERIES
HSH16A	340	13.5	2,06	1.38	38,2	1.50		T900 SERIES
HSH20A	460	18.0	2,57	1.73	45,2	1.78	T700 SERIES	
HSH24A	560	22.0	3,42	2.30	53,5	2.11	T700 SERIES	
HSH32A	600	24.0	4,50	3.02	68,0	2.68	T700 SERIES	

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

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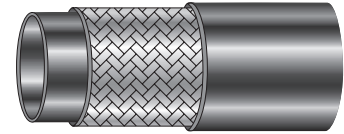
Filters

Technical

DIEHARD T1D



EXTRA ABRASION RESISTANT FRAS 1 WIRE BRAID HOSE



Meets or exceeds the performance requirements of SAE 100R1AT, AS 3791 100R1AT, DIN 20022-1SN, EN 853 Type 1SN, ISO 1436 Types R1AT & 1SN.

Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 21).

Recommended For:

High pressure hydraulic oil lines in applications where the outside cover of the hose is subjected to abrasion that may cause premature failure of standard hoses.

The very high abrasion resistant properties of the cover, combined with the high working pressures and excellent impulse life when tested to EN 853 Type 1SN/SAE 100R1AT test conditions result in, increased service life and minimise equipment downtime.

Tube:

Black, oil resistant synthetic rubber. (Nitrile).

Reinforcement:

One braid 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 20022-1SN and EN 853 Type 1SN.

Highly visible layline branding for easy and permanent identification.

No skiving required with T200 & T700 Series BITELOK Crimp Couplings and K Series 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 -20) pages 102 to 123.

T700 Series (sizes -6 to -32) pages 134 to 152.

Assembly Instructions page 404.

FIELD ATTACHABLE NON-SKIVE

K Series (sizes -4 to -16) pages 202 to 219.

Assembly Instructions page 402.

FIELD ATTACHABLE SKIVE

A Series* (sizes -20 to -32) pages 202 to 219.

Assembly Instructions page 403.

T1D 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
T14D	6	1/4	-04	225	3250	900	13000
T15D	8	5/16	-05	215	3100	860	12400
T16D	10	3/8	-06	180	2600	720	10400
T18D	12	1/2	-08	160	2300	640	9200
T110D	16	5/8	-10	130	1900	5200	7600
T112D	19	3/4	-12	105	1500	420	6000
T116D	25	1	-16	90	1300	360	5200
T120D	31	1.1/4	-20	65	945	260	3780
T124D	38	1.1/2	-24	50	725	200	2900
T132D	51	2	-32	40	580	160	2320

T1D Hose Dimensions

Matched Couplings

PART NO	MINIMUM BEND RADIUS**		AVERAGE WEIGHT		NOMINAL HOSE OD		A SERIES* SKIVE LENGTH	FIELD ATTACHABLE K (& A) SERIES	BITELOK ONE-PIECE CRIMP	
	mm	inch	kg/m	lb/ft	mm	inch	mm	INSERT	FERRULE	NON-SKIVE
T14D	38	1.5	0,24	0.16	13,4	0.53		600 SERIES	K00-04	T200
T15D	50	2.0	0,28	0.19	15,0	0.59				T200
T16D	50	2.0	0,36	0.24	17,4	0.69		600 SERIES	K00-06	T200 T700
T18D	75	3.0	0,45	0.30	20,5	0.81		600 SERIES	K00-08	T200 T700
T110D	89	3.5	0,52	0.35	23,7	0.93		600 SERIES	K00-10	T200 T700
T112D	109	4.3	0,65	0.44	27,6	1.09		600 SERIES	K00-12	T200 T700
T116D	140	5.5	0,96	0.65	35,7	1.41		600 SERIES	K00-16	T200 T700
T120D	419	16.5	1,32	0.89	43,6	1.72	45	600 SERIES	*A00-20	T200 T700
T124D	500	20.0	1,60	1.08	50,5	1.99	49	600 SERIES	*A00-24	T700
T132D	600	24.0	2,20	1.48	64,1	2.52	66	600 SERIES	*A00-32	T700

** Tighter Minimum Bend Radius up to 1" does not apply when used with T700 Series Couplings – refer to standard SAE Bend Radius with T700 Series.

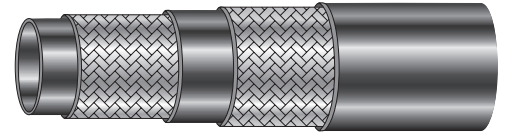
*When using A Series Field Attachable Couplings on T1D Series Hose, cover of hose must be skived at ends.

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

DIEHARD T2D

Meets or exceeds the performance requirements of SAE 100R2AT, AS 3791 100R2AT, DIN 20022 - 2SN, EN 853 Type 2SN, ISO 1436 Types R2AT & 2SN. Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 21).

EXTRA ABRASION RESISTANT FRAS 2 WIRE BRAID HOSE



Recommended For:

High pressure hydraulic oil lines in applications where the outside cover of the hose is subjected to abrasion that may cause premature failure of standard hoses. The very high abrasion resistant properties of the cover, combined with the high working pressures and excellent impulse life when tested to EN 853 Type 2SN/SAE 100R2AT test conditions result in, increased service life and minimise equipment downtime.

Tube:

Black, oil resistant synthetic rubber. (Nitrile).

Reinforcement:

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 & T700 Series BITELOK Crimp Couplings and L Series 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 -20) pages 102 to 123. T700 Series (sizes -6 to -32) pages 134 to 152. Assembly Instructions page 404.

FIELD ATTACHABLE NON-SKIVE

L Series (sizes -4 to -20) pages 202 to 219. Assembly Instructions page 402.

FIELD ATTACHABLE SKIVE

B Series* (sizes -24 & -32) pages 202 to 219. Assembly Instructions page 403.

T2D 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
T24D	6	1/4	-04	420	6000	1680	24000
T25D	8	5/16	-05	350	5100	1400	20400
T26D	10	3/8	-06	350	5100	1400	20400
T28D	12	1/2	-08	350	5100	1400	20400
T210D	16	5/8	-10	250	3600	1000	14500
T212D	19	3/4	-12	215	3100	860	12400
T216D	25	1	-16	175	2540	700	10150
T220D	31	1.1/4	-20	140	2030	560	8120
T224D	38	1.1/2	-24	100	1450	400	5800
T232D	51	2	-32	90	1305	360	5220

T2D Hose Dimensions

Matched Couplings

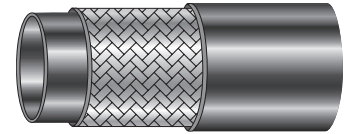
PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		B SERIES* SKIVE LENGTH	FIELD ATTACHABLE L (& B) SERIES		BITELOK ONE-PIECE CRIMP	
	mm	inch	kg/m	lb/ft	mm	inch		INSERT	FERRULE	NON-SKIVE	
T24D	100	4.0	0,39	0.26	15,0	0.59		600 SERIES	L00-04	T200	
T25D	114	4.5	0,46	0.31	16,6	0.65				T200	
T26D	127	5.0	0,57	0.38	19,0	0.75		600 SERIES	L00-06	T200	T700
T28D	178	7.0	0,66	0.44	22,0	0.87		600 SERIES	L00-08	T200	T700
T210D	200	8.0	0,80	0.54	25,2	0.99		600 SERIES	L00-10	T200	T700
T212D	240	9.5	0,96	0.65	29,1	1.15		600 SERIES	L00-12	T200	T700
T216D	300	12.0	1,37	0.92	37,7	1.48		600 SERIES	L00-16	T200	T700
T220D	419	16.5	2,03	1.36	48,0	1.89		600 SERIES	L00-20	T200	T700
T224D	500	20.0	2,75	1.85	54,4	2.14	53	600 SERIES	*B00-24		T700
T232D	600	24.0	3,50	2.35	67,3	2.65	58	600 SERIES	*B00-32		T700

*When using B Series Field Attachable Couplings on T2D Series Hose, cover of hose must be skived at ends. 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) in all sizes.
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.

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	210	3050	840	12200
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

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	
T3K4D	50	2.0	0,23	0.15	11,9	0.47	NON-SKIVE T200 SERIES
T3K5D	55	2,2	0,26	0,18	13,5	0.53	T200 SERIES
T3K6D	65	2.5	0,34	0.23	15,8	0.62	T200 SERIES
T3K8D	90	3.5	0,44	0.29	18,9	0.74	T200 SERIES
T3K10D	105	4.1	0,80	0.54	24,1	0.95	T200 SERIES
T3K12D	125	4.9	0,95	0.64	28,1	1.11	T200 SERIES
T3K16D	150	5.9	1,39	0.93	36,2	1.43	T200 SERIES

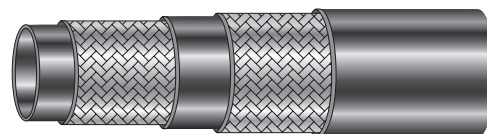
Contact RYCO Hydraulics for Crimp Diameter and Mark Length for BITELOK Couplings.

DIEHARD TXA2D

**EXTRA ABRASION RESISTANT
EXTRA HIGH PRESSURE
FRAS 2 WIRE BRAID HOSE**

Meets or exceeds the performance requirements of SAE 100R2AT, AS 3791 100R2AT, BCS 174, DIN 20022-2SN, EN 853 Type 2SN, ISO 1436 Types R2AT & 2SN.

Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 21).



Intro

Recommended For:

High pressure hydraulic oil lines in applications where the outside cover of the hose is subjected to abrasion that may cause premature failure of standard hoses.

The working pressures of DIEHARD AGGRESSOR exceed the requirements of EN 853 Type 2SN & SAE 100R2AT by at least 30%, and all sizes exceed the working pressure requirements of SAE 100R9.

The very high abrasion resistant properties of the cover, combined with the high working pressures and excellent impulse life when tested to EN 853 Type 2SN/SAE 100R2AT test conditions result in, increased service life and minimise equipment downtime. Ideal for high pressure use that requires a smaller outside diameter (except -20 size), lighter weight, and more flexibility than spiral hose.

Tube:

Black, oil resistant synthetic rubber. (Nitrile).

Reinforcement:

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 & T700 Series BITELOK

Crimp Couplings and L Series 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 -8 to -20) pages 102 to 123.

T700 Series (sizes -8 to -20) pages 134 to 152.

Assembly Instructions page 404.

FIELD ATTACHABLE NON-SKIVE

L Series (sizes -8 to -20) pages 202 to 219.

Assembly Instructions page 402.

Hose

Couplings

Adaptors

Accessories

Filters

Technical

TXA2D 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
TXA28D	12	1/2	-08	375	5440	1500	21760
TXA210D	16	5/8	-10	350	5100	1400	20400
TXA212D	19	3/4	-12	313	4530	1252	18120
TXA216D	25	1	-16	225	3250	900	13040
TXA220D	31	1.1/4	-20	175	2540	700	10160

TXA2D Hose Dimensions

Matched Couplings

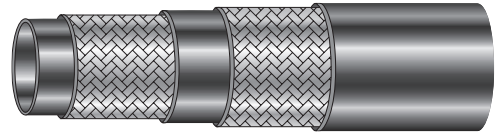
PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		FIELD ATTACHABLE L SERIES		BITELOK ONE-PIECE CRIMP	
	mm	inch	kg/m	lb/ft	mm	inch	INSERT	FERRULE	NON-SKIVE	
TXA28D	178	7.0	0,72	0.48	22,0	0.87	600 SERIES	L00-08	T200	T700
TXA210D	200	8.0	0,87	0.58	25,2	0.99	600 SERIES	L00-10	T200	T700
TXA212D	240	9.5	1,11	0.75	29,1	1.15	600 SERIES	L00-12	T200	T700
TXA216D	300	12.0	1,50	1.01	37,7	1.48	600 SERIES	L00-16	T200	T700
TXA220D	419	16.5	2,28	1.53	48,0	1.89	600 SERIES	L00-20	T200	T700

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

DIEHARD TJ2D

Meets Materials Handling Institute specification IJ 100 (July 1979) for hydraulic hose and assemblies used with jacking systems.

FRAS ABRASION RESISTANT JACK HOSE



Recommended For:

Hydraulic Jack applications requiring a light weight, small outside diameter hose.

The very high abrasion resistant properties of the DIEHARD cover extend the life of the hose when it is subjected to the abrasion that may cause the premature failure of standard hoses.

Tube:

Black, oil resistant synthetic rubber. (Nitrile).

Reinforcement:

Two braids of high tensile steel wire.

Cover:

Black, extra abrasion resistant and oil resistant rubber. "FRAS" Flame Resistant and Anti-Static.

The maximum 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 +49°C (-40°F to +120°F).

Working Pressure:

Specification IJ 100 (July 1979) is based on 2:1 minimum burst to maximum working pressure safety factor.

RYCO TJ2D Series hose has a 2.5:1 safety factor and is suitable for 700 bar/10,000 psi use in hydraulic jack applications ONLY.

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 & -6) pages 102 to 123. Available only as Factory Fitted Hose Assemblies.

NOTE: Ensure rated Working Pressure of chosen End Style meets or exceeds the 700 bar/10,000 psi Maximum Working Pressure of **TJ2D** hose.

Not suitable for use with Field Attachable Couplings.

For hydraulic jack applications, RYCO recommends the use of 3/8" NPTF Male Extended Couplings.

TJ24D:

Part No. T209E-0406 BITELOK One-Piece Crimp. Use of RYCO 750 Spring Guards at each end of the hose assembly is also recommended.

TJ26D:

Part No. T209E-0606 BITELOK One-Piece Crimp. Use of a Bend Restrictor device at each end of the hose assembly is also recommended.

TJ2D 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
TJ24D	6	1/4	-04	700	10000	1750	25000
TJ26D	10	3/8	-06	700	10000	1750	25000

TJ2D 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
TJ24D	100	4.0	0,39	0.26	15,0	0.59	T200 SERIES
TJ26D	127	5.0	0,57	0.38	19,0	0.75	T200 SERIES

JACK HOSE ASSEMBLIES

For ease of ordering, Hose Assemblies can be specified using TJ24 and TJ26 numbers below, followed by overall length in millimetres.

For example, to order a TJ24D Hose Assembly, 1800 mm overall length, with 3/8" NPTF male one end and male Screw-On coupling other end, with Spring Guards at each end; simply order TJ2402-1800.

Standard lengths are 1000 mm, 2000 mm and 3000 mm. Other lengths are available.

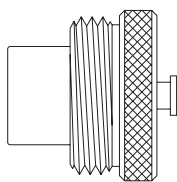
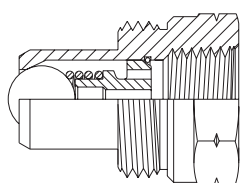
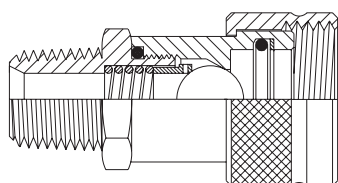
HOSE ASSEMBLY No. Substitute xxxx for overall length (mm)	HOSE END 1 Includes RYCO 750 Spring Guard*	HOSE END 2 Include RYCO 750 Spring Guard*
TJ2401-xxxx TJ2601-xxxx	3/8" NPTF Male	3/8" NPTF Male
TJ2402-xxxx TJ2602-xxxx	3/8" NPTF Male	R100-06M Male Tip
TJ2403-xxxx TJ2603-xxxx	3/8" NPTF Male	R100-06M Male Tip and R100-06DC Dust Cap
TJ2404-xxxx TJ2604-xxxx	3/8" NPTF Male	R100-06FM Male and Female Coupling
TJ2405-xxxx TJ2605-xxxx	3/8" NPTF Male	R100-06FMPC Male and Female Coupling with Dust Cap and Dust Plug

* **NOTE:** RYCO 750 Spring Guard is only available to suit TJ24D hose assemblies.

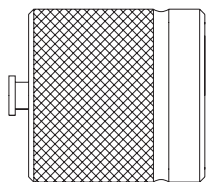


TJ2402 shown

R100 Series Quick Release Couplings, 700 bar/10,000 psi, Thread-to-Connect.



DUST PLUG FOR FEMALE BODY



DUST CAP FOR MALE TIP

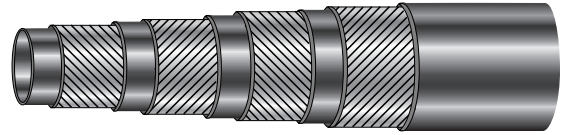
- Designed for use in heavy duty applications on portable cylinders, rams and pumps, where low flow rates and pressures up to 700 bar/10,000 psi are involved.
- Threaded sleeve on female body engages thread on male tip. When the sleeve is screwed completely up, the two coupling halves are secured together. Can connect and disconnect with pressure in line.
- Precision ball type check valves.
- Threaded dust caps and plugs complete with captive chain are available.
- Female body is NPTF male threaded to screw directly into the cylinder or ram.
- Male tip is NPTF female threaded to screw onto hose coupling.

NOMINAL SIZE	NPTF THREAD	MAXIMUM WORKING PRESSURE	RYCO PART NUMBER					
			FEMALE BODY	MALE TIP	COMPLETE COUPLING	DUST PLUG FOR MALE	DUST CAP FOR FEMALE	
inch	inch	bar	psi					
1/4	1/4	700	10000	R100-04F	R100-04M	R100-04FM	R100-06DP	R100-06DC
3/8	3/8	700	10000	R100-06F	R100-06M	R100-06FM	R100-06DP	R100-06DC

See page 322 for further information on RYCO R100 Series Couplings.

DIEHARD H12D

**EXTRA ABRASION RESISTANT
VERY HIGH PRESSURE
FRAS SPIRAL HOSE**



Meets or exceeds the performance requirements of SAE 100R12, AS 3791 100R12, EN 856 Type R12, EN 856 Type 4SP (-12 and above), ISO 3862 Type R12. Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 22).

Recommended For:

Very high pressure hydraulic oil lines, in applications where the outside cover of the hose is subject to abrasion that may cause premature failure of standard hoses. The very high abrasion resistant properties of the cover, combined with the extra high working pressures and excellent impulse life when tested to SAE 100R12 test conditions result in, increased service life and minimise equipment downtime.

Tube:

Black, oil resistant synthetic rubber.

Reinforcement:

Four alternating layers of spiralled high tensile steel wire.

Cover:

Black, extra abrasion resistant and oil resistant synthetic rubber. "FRAS" Flame Resistant and Anti-Static. The maximum weight loss of the cover under ISO 6945 method of test for abrasion resistance is less than 10% (less than 0,10 g) of that allowed by DIN 20023 and EN 856. Highly visible layline branding for easy and permanent identification. No skiving required with T700 Series BITELOK Crimp Couplings.

Temperature Range:

From -40°C to +121°C (-40°F to +250°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
T700 Series (sizes -06 to -32) pages 134 to 152. Assembly Instructions page 404.
BITELOK SKIVE ONE-PIECE CRIMP
T200 Series (sizes -06 to -10) pages 102 to 123. Assembly Instructions page 405.

H12D 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
H1206D	10	3/8	-06	350	5100	1400	20400
H1208D	12	1/2	-08	350	5100	1400	20400
H1210D	16	5/8	-10	350	5100	1400	20400
H1212D	19	3/4	-12	350	5100	1400	20400
H1216D	25	1	-16	350	5100	1400	20400
H1220D	31	1.1/4	-20	275	4000	1100	16000
H1224D	38	1.1/2	-24	255	3700	1020	14800
H1232D	51	2	-32	210	3050	840	12200

H12D Hose Dimensions

Matched Couplings

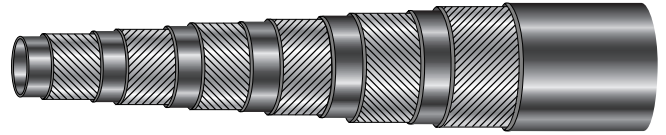
PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		BITELOK ONE-PIECE CRIMP	
	mm	inch	kg/m	lb/ft	mm	inch	NON-SKIVE	SKIVE
H1206D	127	5.0	0,65	0.44	20,2	0.80	T700 SERIES	T200 (SKIVE)
H1208D	178	7.0	0,80	0.54	23,8	0.94	T700 SERIES	T200 (SKIVE)
H1210D	200	8.0	1,16	0.78	28,2	1.11	T700 SERIES	T200 (SKIVE)
H1212D	240	9.5	1,27	0.85	30,7	1.21	T700 SERIES	
H1216D	300	12.0	1,91	1.28	38,0	1.50	T700 SERIES	
H1220D	400	16.0	2,65	1.78	47,0	1.85	T700 SERIES	
H1224D	500	20.0	3,40	2.28	53,5	2.11	T700 SERIES	
H1232D	600	24.0	4,50	3.02	66,7	2.63	T700 SERIES	

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

DIEHARD H13D

**EXTRA ABRASION RESISTANT
EXTREMELY HIGH PRESSURE
FRAS SPIRAL HOSE**

Meets or exceeds the performance requirements of SAE 100R13, AS 3791 100R13, EN 856 Type R13, ISO 3862 Type R13. Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 22).



Recommended For:

Extremely high pressure hydraulic oil lines, in applications where the outside cover of the hose is subject to abrasion that may cause premature failure of standard hoses. The very high abrasion resistant properties of the cover, combined with the extra high working pressures and excellent impulse life when tested to SAE 100R13 test conditions result in, increased service life and minimise equipment downtime.

Tube:

Black, oil resistant synthetic rubber.

Reinforcement:

Sizes -12 & -16:

Four alternating layers of spiralled high tensile steel wire.

Sizes -20 to -32:

Six alternating layers of spiralled high tensile steel wire.

Cover:

Black, extra abrasion resistant and oil resistant synthetic rubber. "FRAS" Flame Resistant and Anti-Static.

The maximum weight loss of the cover under ISO 6945 method of test for abrasion resistance is less than 10% (less than 0,10 g) of that allowed by DIN 20023 and EN 856. Highly visible layline branding for easy and permanent identification.

No skiving required with T900 Series BITELOK Crimp Couplings.

Temperature Range:

From -40°C to +121°C (-40°F to +250°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

T900 Series (sizes -12 to -32) pages 153 to 161. Assembly Instructions page 404.

BITELOK SKIVE ONE-PIECE CRIMP

T700 Series (sizes -12 to -20) pages 134 to 152. Assembly Instructions page 405.

BITELOK SKIVE TWO-PIECE CRIMP

6900K Series (sizes -20 to -32) pages 168 to 169. 6900T Series (size -32) page 169. Available only as Factory Fitted Hose Assemblies.

H13D 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
H1312D	19	3/4	-12	350	5100	1400	20400
H1316D	25	1	-16	350	5100	1400	20400
H1320D	31	1.1/4	-20	350	5100	1400	20400
H1324D	38	1.1/2	-24	350	5100	1400	20400
H1332D	51	2	-32	350	5100	1400	20400

H13D Hose Dimensions

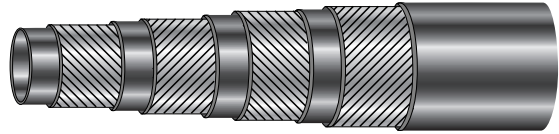
Matched Couplings

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		BITELOK ONE-PIECE CRIMP	
	mm	inch	kg/m	lb/ft	mm	inch	NON-SKIVE	SKIVE
H1312D	240	9.5	1,65	1.11	32,1	1.26	T900 SERIES	T700 (SKIVE)
H1316D	300	12.0	2,28	1.53	38,7	1.52	T900 SERIES	T700 (SKIVE)
H1320D	419	16.5	3,60	2.42	49,8	1.96	T900 SERIES	T700 (SKIVE)
H1324D	500	20.0	4,95	3.33	57,3	2.26	T900 SERIES	
H1332D	630	25.0	7,00	4.69	72,0	2.83	T900 SERIES	

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

DIEHARD H15D

**EXTRA ABRASION RESISTANT
6000 PSI WORKING PRESSURE
FRAS SPIRAL HOSE**



Meets or exceeds the performance requirements of SAE 100R15, ISO 3862 Type R15
 Note: H1532D size is not included in the above standards.
 Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 22).

Recommended For:

Extremely high pressure hydraulic oil lines, in applications where the outside cover of the hose is subject to abrasion that may cause premature failure of standard hoses. Maximum Working Pressure of 420 bar/6,000 psi in all sizes. The very high abrasion resistant properties of the cover, combined with the extra high working pressures and excellent impulse life when tested to SAE 100R15 test conditions result in, increased service life and minimise equipment downtime.

Tube:

Black, oil resistant rubber. (Neoprene).

Reinforcement:

Four layers of alternated, spiralled high tensile steel wire for sizes -12 & -16.
 Six layers of alternated, spiralled high tensile steel wire for sizes -20 & -32.

Cover:

Black, extra abrasion resistant and oil resistant synthetic rubber. "FRAS" Flame Resistant and Anti-Static. The maximum weight loss of the cover under ISO 6945 method of test for abrasion resistance is less than 10% (less than 0,10 g) of that allowed by DIN 20023 and EN 856. Highly visible layline branding for easy and permanent identification. No skiving required with T900 Series BITELOK Crimp Couplings.

Temperature Range:

From -40°C to +121°C (-40°F to +250°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 INTERLOK SKIVE TWO-PIECE CRIMP
 6900N Series (sizes -12 to -32) pages 162 to 166.
 Internal and External Skiving equipment required.
 Assembly instructions page 408.

BITELOK NON-SKIVE ONE-PIECE CRIMP
 T900 Series (sizes -16 and -20) pages 153 to 161.
 Assembly Instructions page 404.

H15D Hose Working Pressures

1 bar = 14.5 psi 1 MPa = 10 bar

PART NO	HOSE SIZE ID			MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE	
	DIN	inch	Dash	bar	psi	bar	psi
H1512D	19	3/4	-12	420	6000	1680	24000
H1516D	25	1	-16	420	6000	1680	24000
H1520D	31	1.1/4	-20	420	6000	1680	24000
H1524D	38	1.1/2	-24	420	6000	1680	24000
H1532D	51	2	-32	420	6000	1680	24000

H15D Hose Dimensions

Matched Couplings

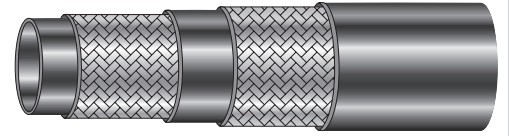
PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		INTERLOK 6900N TWO-PIECE CRIMP		BITELOK ONE-PIECE CRIMP
	mm	inch	kg/m	lb/ft	mm	inch	INSERT	FERRULE	NON-SKIVE
H1512D	265	10.5	1,50	1.01	32,0	1.26	900N	6900N-12	
H1516D	330	13.0	2,10	1.41	38,2	1.50	900N	6900N-16	T900 SERIES
H1520D	445	17.5	3,60	2.42	49,8	1.96	900N	6900N-20	T900 SERIES
H1524D	530	21.0	5,10	3.43	57,2	2.25	900N	6900N-24	
H1532D	600	23.6	6,70	4.50	71,8	2.83	900N	6900N-32	

Contact RYCO Hydraulics for Crimp Diameter and Internal and External Skive Lengths for RYCO Interlok 6900N Two-Piece Couplings.

SLIDER T2S

**EXTREMELY ABRASION RESISTANT
2 WIRE BRAID HOSE**

Meets or exceeds the performance requirements of SAE 100R2AT, AS 3791 100R2AT, DIN 20022-2SN, EN 853 Type 2SN, ISO 1436 Type 2AT.
Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 21).



Recommended For:

High pressure hydraulic oil lines in applications where the outside cover of the hose is subjected to sliding abrasion that may cause premature failure of standard hoses. The extremely high abrasion resistant properties of the polyethylene sheathed cover, combined with the high working pressures and excellent impulse life when tested to EN 853 Type 2SN/SAE 100R2AT test conditions result in, increased service life and minimise equipment downtime.

Tube:

Black, oil resistant synthetic rubber. (Nitrile).

Reinforcement:

Two braids of high tensile steel wire.

Cover:

Black, abrasion resistant and oil resistant rubber sheathed with a layer of extremely abrasion resistant polyethylene. The weight loss of the cover under ISO 6945 method of test for abrasion resistance is less than 0.2% (less than 0,001 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 & T700 Series BITELOK Crimp 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 -20) pages 102 to 123.
T700 Series (sizes -6 to -32) pages 134 to 152.
Assembly Instructions page 404.

T2S Hose Working Pressures

1 bar = 14.5 psi 1 MPa = 10 bar

PART NO	HOSE SIZE ID			MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE	
	DIN	inch	Dash	bar	psi	bar	psi
T24S	6	1/4	-04	420	6000	1680	24000
T26S	10	3/8	-06	350	5100	1400	20400
T28S	12	1/2	-08	350	5100	1400	20400
T210S	16	5/8	-10	250	3600	1000	14500
T212S	19	3/4	-12	215	3100	860	12400
T216S	25	1	-16	167	2400	670	9600
T220S	31	1.1/4	-20	125	1800	500	7200
T224S	38	1.1/2	-24	90	1300	360	5200
T232S	51	2	-32	80	1150	320	4600

T2S Hose Dimensions

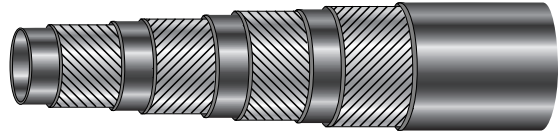
Matched Couplings

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		BITELOK ONE-PIECE CRIMP	
	mm	inch	kg/m	lb/ft	mm	inch	NON-SKIVE	
T24S	100	4.0	0,39	0.26	15,0	0.59	T200	
T26S	127	5.0	0,56	0.38	19,0	0.75	T200	T700
T28S	178	7.0	0,66	0.44	22,0	0.87	T200	T700
T210S	200	8.0	0,80	0.54	25,2	0.99	T200	T700
T212S	240	9.5	0,96	0.65	29,1	1.15	T200	T700
T216S	300	12.0	1,37	0.92	37,7	1.48	T200	T700
T220S	419	16.5	2,03	1.36	48,0	1.89	T200	T700
T224S	500	20.0	2,75	1.85	54,4	2.14		T700
T232S	600	24.0	3,48	2.35	67,3	2.65		T700

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

SLIDER H12S

**EXTREMELY ABRASION RESISTANT
VERY HIGH PRESSURE
SPIRAL HOSE**



Meets or exceeds the performance requirements of SAE 100R12, AS 3791 100R12, EN 856 Type R12, EN 856 Type 4SP (-12 and above), ISO 3862 Type R12.
Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 22).

Recommended For:

Very high pressure hydraulic oil lines, in applications where the outside cover of the hose is subject to sliding abrasion that may cause premature failure of standard hoses. The extremely high abrasion resistant properties of the polyethylene sheathed cover, combined with the extra high working pressures and excellent impulse life when tested to SAE 100R12 test conditions result in, increased service life and minimise equipment downtime.

Tube:

Black, oil resistant synthetic rubber.

Reinforcement:

Four alternating layers of spiralled high tensile steel wire.

Cover:

Black, abrasion resistant and oil resistant rubber sheathed with a layer of extremely abrasion resistant polyethylene. The maximum weight loss of the cover under ISO 6945 method of test for abrasion resistance is less than 0.2% (less than 0,002 g) of that allowed by DIN 20023 and EN 856. Highly visible layline branding for easy and permanent identification. No skiving required with T700 Series BITELOK Crimp Couplings.

Temperature Range:

From -40°C to +121°C (-40°F to +250°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

T700 Series (sizes -06 to -32) pages 134 to 152.
Assembly Instructions pages 404.

BITELOK SKIVE ONE-PIECE CRIMP

T200 Series (sizes -06 to -10) pages 102 to 123.
Assembly Instructions pages 405.

H12S 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
H1206S	10	3/8	-06	350	5100	1400	20400
H1208S	12	1/2	-08	350	5100	1400	20400
H1210S	16	5/8	-10	350	5100	1400	20400
H1212S	19	3/4	-12	350	5100	1400	20400
H1216S	25	1	-16	350	5100	1400	20400
H1220S	31	1.1/4	-20	275	4000	1100	16000
H1224S	38	1.1/2	-24	255	3700	1020	14800
H1232S	51	2	-32	210	3050	840	12200

H12S Hose Dimensions

Matched Couplings

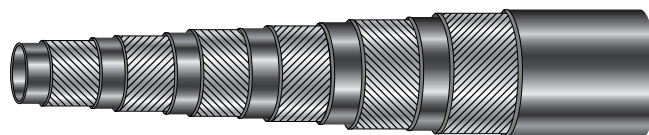
PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		BITELOK ONE-PIECE CRIMP	
	mm	inch	kg/m	lb/ft	mm	inch	NON-SKIVE	SKIVE
H1206S	127	5.0	0,65	0.44	20,2	0.80	T700 SERIES	T200 (SKIVE)
H1208S	178	7.0	0,80	0.54	23,8	0.94	T700 SERIES	T200 (SKIVE)
H1210S	200	8.0	1,16	0.78	28,2	1.11	T700 SERIES	T200 (SKIVE)
H1212S	240	9.5	1,27	0.85	30,7	1.21	T700 SERIES	
H1216S	300	12.0	1,91	1.28	38,0	1.50	T700 SERIES	
H1220S	400	16.0	2,65	1.78	47,0	1.85	T700 SERIES	
H1224S	500	20.0	3,40	2.28	53,5	2.11	T700 SERIES	
H1232S	600	24.0	4,50	3.02	66,7	2.63	T700 SERIES	

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

SLIDER H13S

**EXTREMELY ABRASION RESISTANT
EXTREMELY HIGH PRESSURE
SPIRAL HOSE**

Meets or exceeds the performance requirements of SAE 100R13, AS 3791 100R13, EN 856 Type R13, ISO 3862 Type R13.



Intro

Recommended For:

Extremely high pressure hydraulic oil lines, in applications where the outside cover of the hose is subject to sliding abrasion that may cause premature failure of standard hoses. The extremely high abrasion resistant properties of the polyethylene sheathed cover, combined with the extra high working pressures and excellent impulse life when tested to SAE 100R13 test conditions result in, increased service life and minimise equipment downtime.

Tube:

Black, oil resistant synthetic rubber.

Reinforcement:

Sizes -12 & -16.

Four alternating layers of spiralled high tensile steel wire.

Sizes -20 to -32:

Six alternating layers of spiralled high tensile steel wire.

Cover:

Black, abrasion resistant and oil resistant rubber sheathed with a layer of extremely abrasion resistant polyethylene. The maximum weight loss of the cover under ISO 6945 method of test for abrasion resistance is less than 0.2% (less than 0,002 g) of that allowed by DIN 20023 and EN 856. Highly visible layline branding for easy and permanent identification.

No skiving required with T900 Series BITELOK Crimp Couplings.

Temperature Range:

From -40°C to +121°C (-40°F to +250°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

T900 Series (sizes -12 to -32) pages 153 to 161. Assembly Instructions page 404.

BITELOK SKIVE ONE-PIECE CRIMP

T700 Series (sizes -12 to -20) pages 134 to 152. Assembly Instructions page 405.

BITELOK SKIVE TWO-PIECE CRIMP

6900K Series (sizes -20 to -32) pages 168 to 169. 6900T Series (size -32) page 169.

Available only as Factory Fitted Hose Assemblies.

Hose

Couplings

Adaptors

Accessories

Filters

Technical

H13S 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
H1312S	19	3/4	-12	350	5100	1400	20400
H1316S	25	1	-16	350	5100	1400	20400
H1320S	31	1.1/4	-20	350	5100	1400	20400
H1324S	38	1.1/2	-24	350	5100	1400	20400
H1332S	51	2	-32	350	5100	1400	20400

H13S Hose Dimensions

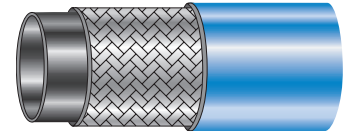
Matched Couplings

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		BITELOK ONE-PIECE CRIMP	
	mm	inch	kg/m	lb/ft	mm	inch	NON-SKIVE	SKIVE
H1312S	240	9.5	1,65	1.11	32,1	1.26	T900 SERIES	T700 (SKIVE)
H1316S	300	12.0	2,28	1.53	38,7	1.52	T900 SERIES	T700 (SKIVE)
H1320S	419	16.5	3,60	2.42	49,8	1.96	T900 SERIES	T700 (SKIVE)
H1324S	500	20.0	4,95	3.33	57,3	2.26	T900 SERIES	
H1332S	630	25.0	7,00	4.69	72,0	2.83	T900 SERIES	

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

SURVIVOR RQP1

HIGH TEMPERATURE, MULTI FLUID
1 WIRE BRAID HOSE



Meets or exceeds the performance requirements of SAE 100R1AT, AS 3791 100R1AT, DIN 20022-1SN, EN 853 Type 1SN, ISO 1436 Types R1AT & 1SN. Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 22).

Recommended For:

High pressure hydraulic oil applications where pressure or temperature requirements exceed the performance requirements of SAE 100R1AT and DIN 20022-1SN, or where resistance to phosphate ester** fluid is required. May be used with compressed air if cover of hose is perforated (pin-pricked) and additional Safety Devices are used.

Tube:

Black, synthetic rubber, specifically compounded for temperature resistance and multi fluid resistance.

Reinforcement:

One braid of high tensile steel wire.

Cover:

Blue, oil resistant and abrasion resistant synthetic rubber. No skiving required with T200 & T700 Series BITELOK Crimp Couplings and K Series Field Attachable Couplings*.

Temperature Range:

From -40°C to +150°C (-40°F to +302°F). For water, water/oil emulsions, diesel fuels, glycol, air, and some phosphate esters** see page 29.

**Not suitable for use with aerospace type phosphate esters such as Monsanto Skydrol 500B, Stauffer Aero-Safe 2300W and Chevron Hy-jet IV.

Working Pressure:

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

Flame Resistance:

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

Couplings:

BITELOK NON-SKIVE ONE-PIECE CRIMP

T200 Series (sizes -4 to -16) pages 102 to 123.
T700 Series (sizes -6 to -16) pages 134 to 152.
Assembly Instructions page 404.

FIELD ATTACHABLE NON-SKIVE*

K Series (sizes -4 to -16) page 202 to 219
Assembly Instructions page 402.

RQP1 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
RQP14	6	1/4	-04	225	3250	900	13000
RQP15	8	5/16	-05	215	3120	860	12480
RQP16	10	3/8	-06	180	2600	720	10400
RQP18	12	1/2	-08	160	2300	640	9200
RQP110	16	5/8	-10	130	1900	520	7600
RQP112	19	3/4	-12	120	1740	480	6960
RQP116	25	1	-16	90	1300	360	5200

RQP1 Hose Dimensions

Matched Couplings

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		FIELD ATTACHABLE K SERIES*		BITELOK ONE-PIECE CRIMP	
	mm	inch	kg/m	lb/ft	mm	inch	INSERT	FERRULE	NON-SKIVE	
RQP14	100	4.0	0,24	0.16	13,4	0.53	600 SERIES	K00-04	T200	
RQP15	114	4.5	0,27	0.18	15,0	0.59			T200	
RQP16	127	5.0	0,34	0.23	17,4	0.69	600 SERIES	K00-06	T200	T700
RQP18	178	7.0	0,44	0.30	20,5	0.81	600 SERIES	K00-08	T200	T700
RQP110	200	8.0	0,51	0.34	23,7	0.93	600 SERIES	K00-10	T200	T700
RQP112	240	9.5	0,64	0.43	27,6	1.09	600 SERIES	K00-12	T200	T700
RQP116	300	12.0	0,98	0.66	35,7	1.41	600 SERIES	K00-16	T200	T700

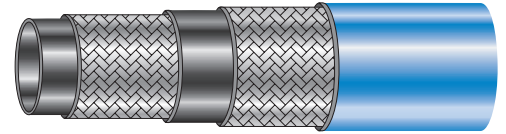
*Field Attachable Couplings should not be used on RQP1 Hose at maximum working pressure when temperature exceeds 121°C (250°F). Field Attachable Couplings may be used on RQP1 Hose at over 121°C but at reduced working pressure. Contact RYCO Hydraulics for more information.

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

SURVIVOR RQP2

Meets or exceeds the performance requirements of SAE 100R2AT, AS 3791 100R2AT, DIN 20022-2SN, EN 853 Type 2SN, ISO 1436 Types R2AT & 2SN. Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 23).

HIGH TEMPERATURE, MULTI FLUID
2 WIRE BRAID HOSE



Recommended For:

High pressure hydraulic oil applications where pressure or temperature requirements exceed the performance requirements of SAE 100R2AT and DIN 20022-2SN, or where resistance to phosphate ester** fluid is required. May be used with compressed air if cover of hose is perforated (pin-pricked) and additional Safety Devices are used.

Tube:

Black, synthetic rubber, specifically compounded for temperature resistance and multi fluid resistance.

Reinforcement:

Two braids of high tensile steel wire.

Cover:

Blue, oil resistant and abrasion resistant synthetic rubber. No skiving required with T200 & T700 Series BITELOK Crimp Couplings and L Series Field Attachable Couplings*.

Temperature Range:

From -40°C to +150°C (-40°F to +302°F). For water, water/oil emulsions, diesel fuels, glycol, air, and some phosphate esters** see page 29.

**Not suitable for use with aerospace type phosphate esters such as Monsanto Skydrol 500B, Stauffer Aero-Safe 2300W and Chevron Hy-jet IV.

Working Pressure:

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

Flame Resistance:

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

Couplings:

BITELOK NON-SKIVE ONE-PIECE CRIMP

T200 Series (sizes -4 to -20) pages 102 to 123.
T700 Series (sizes -6 to -32) pages 134 to 152.
Assembly Instructions page 404.

FIELD ATTACHABLE NON-SKIVE*

L Series (sizes -4 to -20) pages 202 to 219.
Assembly Instructions page 402.

FIELD ATTACHABLE SKIVE*

B Series*** (sizes -24 and -32) pages 202 to 219.
Assembly Instructions page 403.

RQP2 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
RQP24	6	1/4	-04	400	5800	1600	23200
RQP25	8	5/16	-05	350	5100	1400	20400
RQP26	10	3/8	-06	350	5100	1400	20400
RQP28	12	1/2	-08	300	4350	1200	17400
RQP210	16	5/8	-10	250	3600	1000	14500
RQP212	19	3/4	-12	215	3100	860	12400
RQP216	25	1	-16	167	2400	670	9600
RQP220	31	1.1/4	-20	150	2175	600	8700
RQP224	38	1.1/2	-24	100	1450	400	5800
RQP232	51	2	-32	90	1300	360	5200

RQP2 Hose Dimensions

Matched Couplings

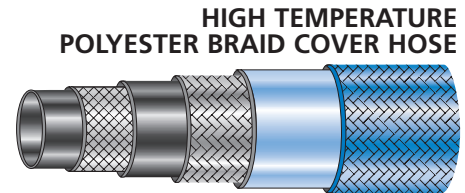
PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		B SERIES*** SKIVE LENGTH	FIELD ATTACHABLE L (& B) SERIES*	BITELOK ONE-PIECE CRIMP	
	mm	inch	kg/m	lb/ft	mm	inch	mm	INSERT	FERRULE	NON-SKIVE
RQP24	100	4.0	0,39	0.26	15,0	0.59		600 SERIES	L00-04	T200
RQP25	114	4.5	0,45	0.30	16,6	0.65				T200
RQP26	127	5.0	0,53	0.36	19,0	0.75		600 SERIES	L00-06	T200 T700
RQP28	178	7.0	0,65	0.44	22,0	0.87		600 SERIES	L00-08	T200 T700
RQP210	200	8.0	0,77	0.52	25,2	0.99		600 SERIES	L00-10	T200 T700
RQP212	240	9.5	0,93	0.62	29,1	1.15		600 SERIES	L00-12	T200 T700
RQP216	300	12.0	1,38	0.93	37,7	1.48		600 SERIES	L00-16	T200 T700
RQP220	419	16.5	2,03	1.36	48,0	1.89		600 SERIES	L00-20	T200 T700
RQP224	500	20.0	2,30	1.55	54,4	2.14	53	600 SERIES	***B00-24	T700
RQP232	600	24.0	3,16	2.12	67,3	2.65	58	600 SERIES	***B00-32	T700

*Field Attachable Couplings should not be used on RQP2 Hose at maximum working pressure when temperature exceeds 121°C (250°F). Field Attachable Couplings may be used on RQP2 Hose at over 121°C but at reduced working pressure. Contact RYCO Hydraulics for more information.

***When using B Series Field Attachable Couplings on RQP2 Series Hose, cover of hose must be skived at ends. Contact RYCO Hydraulics for Crimp Diameter and Mark Length for BITELOK Couplings.

SURVIVOR RQP5

Meets or exceeds the performance requirements of SAE 100R5, SAE J1402 Type All (up to -12 size), AS 3791 100R5. Third Party approvals: MED, USCG - Hydraulic and Fuel Systems, DoT (see page 23).



Recommended For:

Medium to high pressure hydraulic oil applications, or where resistance to phosphate ester** fluid is required. The small bend radius, temperature resistance and light weight of RYCO RQP5 hose make it suitable for under the bonnet automotive/trucking applications including hydraulic oil, diesel fuel, lubrication oil and transmission oil coolers. Sizes RQP54 to RQP512 also comply with SAE J1402 Type All "Automotive Air Brake Hose" for use in truck "air brake systems including flexible connections from frame to axle, tractor to trailer, trailer to trailer, and other unshielded air lines that are exposed to potential pull or impact". RQP5 may be used with compressed air if maximum working pressure is reduced by 30%. RQP5 hose is normally used where there is minimal abrasion to the outside cover. If abrasion is likely, support the hose away from the source of abrasion using mounting clamps, or protect with RWA Wire Armour or RSG Spiral Guard. RQP5 is a reduced bore hose. It has a similar Inside Diameter to steel or copper tubing of the same nominal (Outside Diameter) size. See page 189 for Branding Information.

Tube:

Black, synthetic rubber, specifically compounded for temperature resistance and multi fluid resistance.

Reinforcement:

Polyester inner braid covered with one braid of high tensile steel wire.

Cover:

Blue polyester braid. Skiving of cover is not required.

Temperature Range:

From -40°C to +150°C (-40°F to +302°F). For water, water/oil emulsions, diesel fuels, glycol, air, and some phosphate esters** see page 29.

**Not suitable for use with aerospace type phosphate esters such as Monsanto Skydrol 500B, Stauffer Aero-Safe 2300W and Chevron Hy-jet IV.

Working Pressure:

SAE 100R5 maximum working pressures are based on 4:1 safety factor (SAE 100R5 minimum burst to SAE 100R5 maximum working pressure).

Couplings:

FIELD ATTACHABLE NON-SKIVE

V Series (sizes -4 to -32) pages 188 to 201. Assembly Instructions page 402.

BITELOK NON-SKIVE ONE-PIECE CRIMP

T400 Series (Sizes -4 to -12) pages 124 to 133. Assembly Instructions page 404.

RQP5 Working Pressures

1 bar = 14.5 psi 1 MPa = 10 bar

PART NO	HOSE SIZE			SAE 100 R5 MAXIMUM WORKING PRESSURE*		VACUUM RATING		SAE 100R5 MINIMUM BURST PRESSURE*		
	ACTUAL ID	NOMINAL	DASH	bar	psi	mmHg	inHg	bar	psi	
RQP54	DN 5	3/16	0.19	-04	210	3050	710	28	840	12200
RQP55	6	1/4	0.25	-05	210	3050	710	28	840	12200
RQP56	8	5/16	0.31	-06	155	2250	710	28	620	9000
RQP58	10	13/32	0.41	-08	138	2000	710	28	552	8000
RQP510	12	1/2	0.50	-10	121	1750	710	28	484	7000
RQP512	16	5/8	0.63	-12	103	1500	710	28	414	6000
RQP516	22	7/8	0.88	-16	55	800	510	20	221	3200
RQP520	28	1.1/8	1.12	-20	43	625	510	20	172	2500
RQP524	35	1.3/8	1.38	-24	35	500	380	15	140	2000
RQP532	46	1.13/16	1.81	-32	24	350	280	11	98	1400

***IMPORTANT NOTE:** MAXIMUM WORKING PRESSURE and MINIMUM BURST PRESSURE shown above relate to SAE 100R5 specification and hose used in non Air Brake applications. For Air Brake applications, SAE J1402 Type All Air Brake Hose specification requires Minimum Burst Pressure 900 psi (62,1 bar)

and Proof Pressure of 300 psi (20,7 bar) for all sizes, and reduced Minimum Bend Radii as shown below. RQP54 to RQP512 comply with SAE J1402 Minimum Bend Radius at SAE J1402 pressures, and SAE 100R5 Minimum Bend Radius at SAE 100R5 working pressures.

RQP5 Dimensions

Matched Couplings

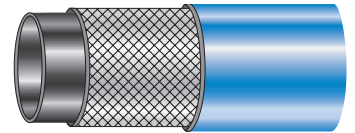
PART NO	SAE 100R5 MINIMUM BEND RADIUS*		SAE J1402 MINIMUM BEND RADIUS*		AVERAGE WEIGHT		NOMINAL HOSE OD		FIELD ATTACHABLE V SERIES			BITELOK ONE-PIECE CRIMP
	mm	inch	mm	inch	kg/m	lb/ft	mm	inch	INSERT	FERRULE	COUPLING	NON-SKIVE
RQP54	75	3.0	51	2.0	0,23	0.15	13,2	0.52	6xx-03	V00-04	Vxx-03	T400-03
RQP55	85	3.3	64	2.5	0,26	0.17	14,8	0.58	6xx-04	V00-05	Vxx-04	T400-04
RQP56	100	4.0	76	3.0	0,30	0.20	17,2	0.68	6xx-05	V00-06	Vxx-05	T400-05
RQP58	117	4.6	89	3.5	0,36	0.24	19,4	0.76	6xx-06	V00-08	Vxx-06	T400-06
RQP510	140	5.5	102	4.0	0,53	0.36	23,4	0.92	6xx-08	V00-10	Vxx-08	T400-08
RQP512	165	6.5	114	4.5	0,65	0.44	27,4	1.08	6xx-10	V00-12	Vxx-10	T400-10
RQP516	187	7.4			0,63	0.42	31,4	1.24	6xx-14	V00-16	Vxx-14	
RQP520	229	9.0			0,90	0.60	38,1	1.50	6xx-18	V00-20	Vxx-18	
RQP524	267	10.5			1,00	0.67	44,5	1.75	6xx-22	V00-24	Vxx-22	
RQP532	337	13.3			1,48	0.99	56,3	2.22	6xx-29	V00-32	Vxx-29	

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

SURVIVOR RQP6

Meets or exceeds the performance requirements of SAE 100R6, AS 3791 100R6, DIN 20021-1TE, ISO 4079 Type 1.

HIGH TEMPERATURE
1 TEXTILE BRAID HOSE



Recommended For:

Hydraulic oil lines, transmission oil cooler lines, glycol antifreeze solutions, water, diesel fuels and air.

Tube:

Black, oil resistant synthetic rubber. (Nitrile).

Reinforcement:

One textile braid.

Cover:

Blue, oil resistant and abrasion resistant synthetic rubber.

Temperature Range:

Petroleum base hydraulic oils & transmission oils:
-40°C to +125°C (-40°F to +257°F) constant, and up to +135°C (+275°F) intermittent (up to 10% of operating time).
Air: -40°C to +100°C (-40°F to +212°F)
Diesel fuels: -40°C to +71°C (-40°F to +160°F).
For water, glycol antifreeze solutions, emulsions etc. see page 29.

Working Pressure:

RQP6 Hose, and 800 Series Push-On Fittings, are recommended for use in systems with Static Working Pressures (constant loads without pressure spikes) only. They are not recommended for vibration or pressure surge applications.

RQP6 Hose should not be used at both maximum working pressure and maximum temperature simultaneously.

Flame Resistance:

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

Couplings:

800 Series Push-On pages 177 to 181.
Assembly instructions page 407.

RQP6 Hose simply pushes on to 800 Series Couplings, and for Static Working Pressures up to 50% of Maximum Static Working Pressures a clamp is not required.

For diesel fuel and other potentially dangerous, or critical applications such as transmission oil cooler lines, and for Static Working Pressures above 50% of maximum; a clamp around the hose is required.

Do not overtighten clamp as this will damage hose. Factory crimped couplings are also available in some sizes. Contact RYCO Hydraulics for more information.

RQP6 Hose Specifications

1 bar = 14.5 psi 1 MPa = 10 bar

PART NO	HOSE SIZE ID			MAXIMUM STATIC WORKING PRESSURE		MINIMUM BURST PRESSURE		VACUUM RATING	
	DN	inch	Dash	bar	psi	bar	psi	inHg	mmHg
RQP64	6	1/4	-04	30	400	120	1600	710	28
RQP65	8	5/16	-05	30	400	120	1600	710	28
RQP66	10	3/8	-06	30	400	120	1600	635	25
RQP68	12	1/2	-08	30	400	120	1600	460	18
RQP610	16	5/8	-10	26	350	105	1400	380	15
RQP612	20	3/4	-12	22	300	88	1200	380	15

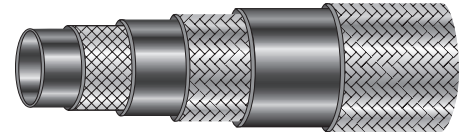
RQP6 Hose Dimensions

Matched Couplings

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		PUSH ON
	mm	inch	kg/m	lb/ft	mm	inch	
RQP64	64	2.5	0,12	0.08	12,7	0.50	800 SERIES
RQP65	75	3.0	0,15	0.10	14,3	0.56	800 SERIES
RQP66	75	3.0	0,17	0.11	15,9	0.63	800 SERIES
RQP68	102	4.0	0,23	0.15	19,8	0.78	800 SERIES
RQP610	127	5.0	0,29	0.19	23,0	0.91	800 SERIES
RQP612	152	6.0	0,36	0.24	26,4	1.04	800 SERIES

TRUCKER T5

POLYESTER BRAID COVER HOSE



Meets or exceeds the performance requirements of SAE 100R5, SAE J1402 Type All (up to -12 size), AS 3791 100R5. Third Party approvals: USCG - Hydraulic Systems, DoT (see page 23).

Recommended For:

Medium to high pressure hydraulic oil applications. The small bend radius, temperature resistance and light weight of RYCO T5 hose make it suitable for under the bonnet automotive/trucking applications including hydraulic oil, diesel fuel, lubrication oil and transmission oil coolers. Sizes T54 to T512 also comply with SAE J1402 Type All "Automotive Air Brake Hose" for use in truck "air brake systems including flexible connections from frame to axle, tractor to trailer, trailer to trailer, and other unshielded air lines that are exposed to potential pull or impact". T5 may be used with compressed air if maximum working pressure is reduced by 30%. T5 hose is normally used where there is minimal abrasion to the outside cover. If abrasion is likely, support the hose away from the source of abrasion using mounting clamps, or protect with RWA Wire Armour or RSG Spiral Guard. T5 is a reduced bore hose. It has a similar Inside Diameter to steel or copper tubing of the same nominal (outside diameter) size. See page 189 for more information.

Tube:

Black, oil resistant synthetic rubber. (Nitrile).

Reinforcement:

Polyester inner braid covered with one braid of high tensile steel wire.

Cover:

Black polyester braid. Skiving of cover is not required.

Temperature Range:

From -40°C to +100°C (-40°F to +212°F). For water/oil emulsions, diesel fuels and lubricating oils, and air see page 29.

Working Pressure:

SAE 100R5 maximum working pressures are based on 4:1 safety factor (SAE 100R5 minimum burst to SAE 100R5 maximum working pressure).

Couplings:

FIELD ATTACHABLE NON-SKIVE

V Series (sizes -4 to -32) pages 188 to 201. Assembly Instructions page 402.

BITELOK NON-SKIVE ONE-PIECE CRIMP

T400 Series (Sizes -4 to -12) pages 124 to 133. Assembly Instructions page 404.

T5 Working Pressures

1 bar = 14.5 psi 1 MPa = 10 bar

PART NO	HOSE SIZE			SAE 100 R5 MAXIMUM WORKING PRESSURE*	VACUUM RATING		SAE 100R5 MINIMUM BURST PRESSURE*			
	ACTUAL ID	NOMINAL	DASH		bar	psi	bar	psi		
T54	DN 5	inch 3/16	0.19	-04	210	3050	710	28	840	12200
T55	6	1/4	0.25	-05	210	3050	710	28	840	12200
T56	8	5/16	0.31	-06	155	2250	710	28	620	9000
T58	10	13/32	0.41	-08	138	2000	710	28	552	8000
T510	12	1/2	0.50	-10	121	1750	710	28	484	7000
T512	16	5/8	0.63	-12	103	1500	710	28	414	6000
T516	22	7/8	0.88	-16	55	800	510	20	221	3200
T520	28	1.1/8	1.12	-20	43	625	510	20	172	2500
T524	35	1.3/8	1.38	-24	35	500	380	15	140	2000
T532	46	1.13/16	1.81	-32	24	350	280	11	98	1400

*IMPORTANT NOTE: MAXIMUM WORKING PRESSURE and MINIMUM BURST PRESSURE shown above relate to SAE 100R5 specification and hose used in non Air Brake applications. For Air Brake applications, SAE J1402 Type All Air Brake Hose specification requires Minimum Burst Pressure 900 psi (62,1 bar)

and Proof Pressure of 300 psi (20,7 bar) for all sizes, and reduced Minimum Bend Radii as shown below. T54 to T512 comply with SAE J1402 Minimum Bend Radius at SAE J1402 pressures, and SAE 100R5 Minimum Bend Radius at SAE 100R5 working pressures.

T5 Dimensions

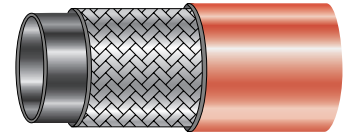
Matched Couplings

PART NO	SAE 100R5 MINIMUM BEND RADIUS*		SAE J1402 MINIMUM BEND RADIUS*		AVERAGE WEIGHT		NOMINAL HOSE OD		FIELD ATTACHABLE V SERIES			BITELOK ONE-PIECE CRIMP
	mm	inch	mm	inch	kg/m	lb/ft	mm	inch	INSERT	FERRULE	COUPLING	NON-SKIVE
T54	75	3.0	51	2.0	0,23	0.15	13,2	0.52	6xx-03	V00-04	Vxx-03	T400-03
T55	85	3.3	64	2.5	0,26	0.17	14,8	0.58	6xx-04	V00-05	Vxx-04	T400-04
T56	100	4.0	76	3.0	0,30	0.20	17,2	0.68	6xx-05	V00-06	Vxx-05	T400-05
T58	117	4.6	89	3.5	0,36	0.24	19,4	0.76	6xx-06	V00-08	Vxx-06	T400-06
T510	140	5.5	102	4.0	0,53	0.36	23,4	0.92	6xx-08	V00-10	Vxx-08	T400-08
T512	165	6.5	114	4.5	0,65	0.44	27,4	1.08	6xx-10	V00-12	Vxx-10	T400-10
T516	187	7.4			0,63	0.42	31,4	1.24	6xx-14	V00-16	Vxx-14	
T520	229	9.0			0,90	0.60	38,1	1.50	6xx-18	V00-20	Vxx-18	
T524	267	10.5			1,00	0.67	44,5	1.75	6xx-22	V00-24	Vxx-22	
T532	337	13.3			1,48	0.99	56,3	2.22	6xx-29	V00-32	Vxx-29	

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

FIRE SUPPRESSION T1F

1 WIRE BRAID HOSE



Meets or exceeds the performance requirements of SAE 100R1AT, AS 3791 100R1AT, DIN 20022-15N, EN 853 Type 15N, ISO 1436 Types R1AT & 15N.
Third Party approvals: MED (see page 21).

Recommended For:

Use in Fire Suppression Systems of off-road vehicles, mining equipment, stationary engines, etc.
The hose is coloured red, for easy identification as part of the Fire Suppression System.

Tube:

Black, synthetic rubber (Nitrile). Resistant to aqueous film forming foam, dry chemical powder, carbon dioxide, and water based fire extinguishing agents.

Reinforcement:

One braid of high tensile steel wire.

Cover:

Red, heat resistant, abrasion resistant and oil resistant rubber. Flame Resistant to Australian Standard AS 2660 and U.S. MSHA requirements.
Highly visible layline branding for easy and permanent identification.
No skiving required with T200 & T700 Series BITELOK Crimp Couplings and K Series Field Attachable Couplings.

Temperature Range:

From -40°C to +100°C (-40°F to +212°F).

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 -3 to -12) pages 102 to 123.
T700 Series (sizes -6 to -12) pages 134 to 152.
Assembly Instructions page 404.

FIELD ATTACHABLE NON-SKIVE

K Series (sizes -4 to -12) pages 202 to 219.
Assembly Instructions page 402.

T1F 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
T13F	5	3/16	-03	250	3600	1000	14500
T14F	6	1/4	-04	225	3250	900	13000
T16F	10	3/8	-06	180	2600	720	10400
T18F	12	1/2	-08	160	2300	640	9200
T112F	19	3/4	-12	105	1500	420	6000

T1F Hose Dimensions

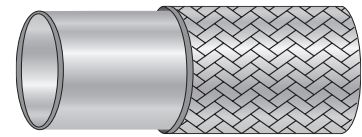
Matched Couplings

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		FIELD ATTACHABLE K SERIES		BITELOK ONE-PIECE CRIMP	
	mm	inch	kg/m	lb/ft	mm	inch	INSERT	FERRULE	NON-SKIVE	
T13F	89	3.5	0,21	0.14	11,8	0.46			T200	
T14F	100	4.0	0,23	0.15	13,4	0.53	600 SERIES	K00-04	T200	
T16F	127	5.0	0,35	0.24	17,4	0.69	600 SERIES	K00-06	T200	T700
T18F	178	7.0	0,43	0.29	20,5	0.81	600 SERIES	K00-08	T200	T700
T112F	240	9.5	0,65	0.44	27,6	1.09	600 SERIES	K00-12	T200	T700

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

TEFLON* RTH1

STAINLESS STEEL BRAID TEFLON* HOSE



Meets or exceeds the performance requirements of SAE 100R14.
 RTH112 meets ID and OD requirements of SAE 100R14.
 Other sizes have ID and OD different to SAE 100R14.
 Third Party approvals: MED, USCG (see page 23).

Recommended For:

High pressure hydraulic oil lines. Fluids at extremes of pressure and temperature.
 RYCO RTH1 Series Hose Lining is chemically pure, inert and contains no leachable additives.
 RYCO RTH1 is remarkably resistant to high temperature and flame. It has a very high melting point, thermal degradation threshold and auto-ignition temperature.
Warning: RTH1 Hose Liner is non-conductive. Do not use with high velocity fluids and gases, as static electricity may be generated and cause premature failure of hose. If in doubt contact RYCO Hydraulics technical department.

Tube:

TEFLON* (PTFE).

Reinforcement & Cover:

One braid of high tensile Grade 304 stainless steel wire.

Temperature Range:

From -60°C to +260°C (-76°F to +500°F). (According to application).

Working Pressure:

SAE 100R14 maximum working pressures are for hydraulic systems with impulsing pressures, and hose that complies with the SAE Impulse Test requirements at these pressures. Suitable for use up to 204°C (399°F) at these pressures.
 Maximum working pressures are based on 4:1 minimum burst to working pressure safety factor, and are suitable for systems where impulsing pressures are not encountered.
 Maximum working pressure is dependant on working temperature. Refer to chart below for working pressure correction factors.

Working Temperature	Percentage of Working Pressure that may be safely used
-60°C to +100°C (-76°F to +212°F)	100
+101°C to +150°C (+214°F to +302°F)	93
+151°C to +200°C (+304°F to +392°F)	85
+201°C to +250°C (+394°F to +482°F)	77
+251°C to +260°C (+484°F to +500°F)	70

Couplings:

TWO-PIECE CRIMP

1100 Series (sizes -4 to -16) pages 172 to 174.
 Assembly instructions page 406.

RTH1 Hose Working Pressures

1 bar = 14.5 psi 1 MPa = 10 bar

PART NO	HOSE SIZE ID			MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE		MAXIMUM SAE 100R14 WORKING PRESSURE	
	DN	inch	Dash	bar	psi	bar	psi	bar	psi
RTH14	6	1/4	-04	170	2450	680	9800	103	1500
RTH16	10	3/8	-06	165	2375	660	9500	103	1500
RTH18	12	1/2	-08	120	1750	485	7000	55	800
RTH110	16	5/8	-10	105	1500	420	6000	55	800
RTH112	19	3/4	-12	85	1250	345	5000	55	800
RTH116	25	1	-16	55	800	220	3200	55	800

RTH1 Hose Dimensions

Matched Couplings

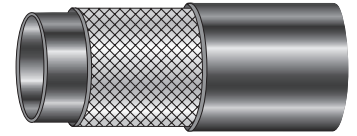
PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		BITELOK TWO-PIECE CRIMP
	mm	inch	kg/m	lb/ft	mm	inch	
RTH14	75	3.0	0,12	0.08	9,4	0.37	1100 SERIES
RTH16	125	5.0	0,14	0.09	11,7	0.46	1100 SERIES
RTH18	140	5.5	0,22	0.15	15,4	0.61	1100 SERIES
RTH110	165	6.5	0,28	0.19	18,4	0.72	1100 SERIES
RTH112	200	8.0	0,33	0.22	22,1	0.87	1100 SERIES
RTH116	300	12.0	0,46	0.31	28,6	1.13	1100 SERIES

*DuPont Registered TM

Contact RYCO Hydraulics for Crimp Diameter and Mark Length for 1100 Couplings.

PUSH-ON PL1

1 TEXTILE BRAID HOSE



Intro

Recommended For:

Petroleum base hydraulic oils, glycol antifreeze solutions, water, diesel fuels, and air.

Tube:

Black, oil resistant synthetic rubber. (Nitrile).

Reinforcement:

One textile braid.

Cover:

Black, oil and abrasion resistant synthetic rubber.

Temperature Range:

From -40°C to +95°C (-40°F to +203°F).
For water, water/oil emulsions, diesel fuels, glycol, and air etc. see page 29.

Working Pressure:

PL1 Hose, and 800 Series Push-On Fittings, are recommended for use in systems with Static Working Pressures (constant loads without pressure spikes) only. They are not recommended for vibration or pressure surge applications. PL1 Hose should not be used at both maximum working pressure and maximum temperature simultaneously.

Flame Resistance:

Meets either Flame Resistance Designation "U.S. MSHA" of the US Department of Labor, Mine Safety and Health Administration; or "GL" Germanischer Lloyd. Contact RYCO Hydraulics for further information.

Couplings:

800 Series Push-On pages 177 to 181. Assembly instructions page 407.
PL1 Hose simply pushes on to 800 Series Couplings, and for Static Working Pressures up to 50% of Maximum Static Working Pressures a clamp is not required. For diesel fuel and other potentially dangerous, or critical applications, and for Static Working Pressures above 50% of maximum; a clamp around the hose is required. Do not overtighten clamp as this will damage hose. Factory crimped couplings are also available in some sizes. Contact RYCO Hydraulics for more information.

Hose

Couplings

Adaptors

PL1 Hose Specifications

1 bar = 14.5 psi 1 MPa = 10 bar

PART NO	HOSE SIZE ID			MAXIMUM STATIC WORKING PRESSURE		MINIMUM BURST PRESSURE		VACUUM RATING	
	DN	inch	Dash	bar	psi	bar	psi	mmHg	inHg
PL14	6	1/4	-04	21	300	84	1200	710	28
PL15	8	5/16	-05	21	300	84	1200	710	28
PL16	10	3/8	-06	21	300	84	1200	635	25
PL18	12	1/2	-08	21	300	84	1200	460	18
PL110	16	5/8	-10	21	300	84	1200	380	15
PL112	19	3/4	-12	21	300	84	1200	380	15

Accessories

PL1 Hose Dimensions

Matched Couplings

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		PUSH ON
	mm	inch	kg/m	lb/ft	mm	inch	
PL14	75	3.0	0,12	0.08	12,7	0.50	800 SERIES
PL15	75	3.0	0,15	0.10	14,3	0.56	800 SERIES
PL16	75	3.0	0,17	0.11	15,9	0.63	800 SERIES
PL18	125	5.0	0,23	0.15	19,8	0.78	800 SERIES
PL110	150	6.0	0,29	0.19	23,0	0.91	800 SERIES
PL112	175	6.9	0,36	0.24	26,4	1.04	800 SERIES

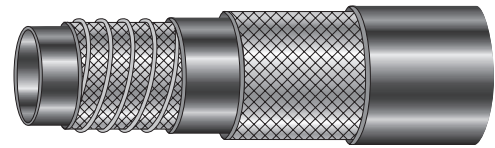
Filters

Technical

SUCTION SR

Meets or exceeds the performance requirements of SAE 100R4, AS 3791 100R4 (except SR48).
Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 23).

SUCTION & RETURN HOSE



Recommended For:

Petroleum and water base hydraulic fluids in suction lines or in low pressure return lines.

Tube:

Black, oil resistant synthetic rubber. (Nitrile).

Reinforcement:

Textile reinforcement with spiral wire to prevent collapsing.

Cover:

Black, oil resistant and abrasion resistant synthetic rubber.

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).

Couplings:

Working pressure shown is for hose performance capabilities. Performance of a hose assembly depends on couplings used.

1. For Suction Applications, and Low Pressure Delivery (up to 25% of Maximum Working Pressure).

3300 SERIES COUPLINGS WITH RSC CLAMP

3300 (sizes -12 to -40) pages 182 to 186.

3300 Series Couplings require a suitable clamp around the outside of the hose.

Refer to RYCO RSC Clamps shown below.

Assembly instructions pages 406.

2. For Suction Applications, and High Pressure Delivery (up to 100% of Maximum Working Pressure).

BITELOK NON-SKIVE ONE-PIECE CRIMP

T400 Series (sizes -12 and -16) pages 124 to 133.

Assembly instructions page 404.

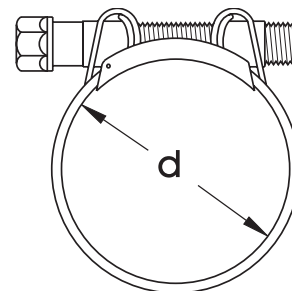
SR Hose Specifications

1 bar = 14.5 psi 1 MPa = 10 bar

PART NO	HOSE SIZE ID			MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE		VACUUM RATING		MINIMUM BEND RADIUS	AVERAGE WEIGHT	NOMINAL HOSE OD
	DN	inch	Dash	bar	psi	bar	psi	mmHg	inHg	mm	kg/m	mm
SR12	19	3/4	-12	21	300	84	1200	635	25	125	0,82	31,5
SR16	25	1	-16	17	250	68	1000	635	25	150	1,00	40,0
SR40	63	2.1/2	-40	4,3	62	17	250	635	25	350	2,37	78,5
SR48	76	3	-48	3,9	56	16	225	635	25	450	2,45	90,7

NOTE: For sizes -20, -24 & -32, use RYCO SRF Hose.

HOSE PART NO	CLAMP PART NO	CLAMP ADJUSTMENT RANGE d mm	RECOMMENDED TIGHTENING TORQUE	
			Nm	ft.lbf
SR12	RSC-3134	31 to 34	20	15
SR16	RSC-3740*	37 to 40	20	15
	RSC-4043*	40 to 43	20	15
SR40	RSC-7379	73 to 79	25	18
SR48	RSC-8591	85 to 91	25	18

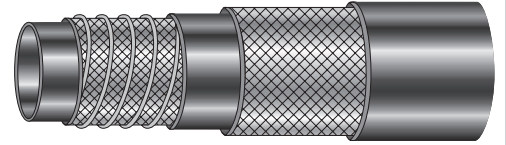


*Due to the manufacturing tolerance on outside diameter of the hose and the range of adjustment of the clamp, it is necessary to confirm correct clamp at time of assembly.

DEFIANT SRF

Meets or exceeds the performance requirements of SAE 100R4, AS 3791 100R4.

COMPACT
SUCTION & RETURN HOSE



Recommended For:

Petroleum and water base hydraulic fluids in suction lines or in low pressure return lines.
Small bend radius is an advantage in installations where space is minimal. (Tighter Bend Radius than SAE 100R4)

Tube:

Black, oil resistant synthetic rubber. (Nitrile).

Reinforcement:

Textile reinforcement with spiral wire to prevent collapsing.

Cover:

Black, oil resistant and abrasion resistant synthetic rubber.

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).

Couplings:

Working pressure shown is for hose performance capabilities. Performance of a hose assembly depends on couplings used.

1. For Suction Applications, and Low Pressure Delivery (up to 25% of Maximum Working Pressure).

3300 SERIES COUPLINGS WITH RSC CLAMP

3300 (sizes -12 to -32) pages 182 to 186.
3300 Series Couplings require a suitable clamp around the outside of the hose.
Refer to RYCO RSC Clamps shown below.
Assembly instructions pages 406.

2. For Suction Applications, and High Pressure Delivery (up to 100% of Maximum Working Pressure).

BITELOK NON-SKIVE ONE-PIECE CRIMP

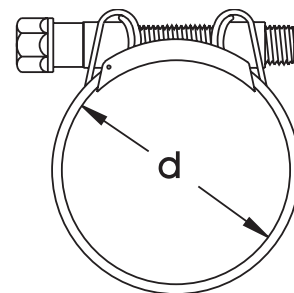
T400 Series (sizes -12 to -32) pages 124 to 133.
Assembly instructions page 404.

SRF Hose Specifications

1 bar = 14.5 psi 1 MPa = 10 bar

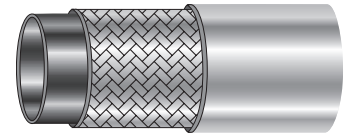
PART NO	HOSE SIZE ID			MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE		VACUUM RATING		MINIMUM BEND RADIUS	AVERAGE WEIGHT	NOMINAL HOSE OD
	DN	inch	Dash	bar	psi	bar	psi	mmHg	inHg	mm	kg/m	mm
SRF12	19	3/4	-12	21	300	84	1200	635	25	63	0,82	31,5
SRF16	25	1	-16	17	250	68	1000	635	25	75	1,00	40,0
SRF20	31	1.1/4	-20	14	200	56	800	635	25	100	1,19	46,5
SRF24	38	1.1/2	-24	10	150	40	600	635	25	125	1,39	53,1
SRF32	51	2	-32	7	100	28	400	635	25	150	1,94	65,5

HOSE PART NO	CLAMP PART NO	CLAMP ADJUSTMENT RANGE d mm	RECOMMENDED TIGHTENING TORQUE	
			Nm	ft.lbf
SRF12	RSC-3134	31 to 34	20	15
SRF16	RSC-3740*	37 to 40	20	15
	RSC-4043*	40 to 43	20	15
SRF20	RSC-4347*	43 to 47	20	15
	RSC-4751*	47 to 51	20	15
SRF24	RSC-5155	51 to 55	20	15
SRF32	RSC-6368	63 to 68	25	18



*Due to the manufacturing tolerance on outside diameter of the hose and the range of adjustment of the clamp, it is necessary to confirm correct clamp at time of assembly.

TORNADO WASHER TW1

**SKIVE HOSE
1 WIRE BRAID**

Recommended For:

Hot Water Pressure Washer Machines.

Tube:

Black synthetic rubber; heat, cleaning chemicals and detergent resistant.

Reinforcement:

One braid of high tensile steel wire.

Cover:

Grey synthetic rubber; oil, chicken fat and abrasion resistant. The cover of TW1 Hose is formulated to resist marking.

Skiving of Cover is required with T200 & T700 Series BITELOK Crimp Couplings.
Temperature Range:

TW1 TORNADO WASHER Hose handles hot water up to +155°C (+310°F).

Working Pressure:

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

Couplings:
BITELOK SKIVE ONE-PIECE CRIMP

 T200 Series (sizes -4 to -8) pages 102 to 123.
 T700 Series (sizes -6 and -8) pages 134 to 152.
 Assembly Instructions page 405.

Not suitable for use with Field Attachable Couplings.

 Common hose couplings used on TW1 Hose include:
 T202S BSPP Female Live Swivel
 T294 PW Female
 T295 PW Gun Handle Tube.

Important Note: Although TW1 is constructed to SAE 100R1AT dimensions, the cover MUST BE SKIVED prior to crimping on hose couplings.
TW1 Hose Specifications
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
TW14	6	1/4	-04	210	3050	840	12200
TW15	8	5/16	-05	210	3050	840	12200
TW16	10	3/8	-06	210	3050	840	12200
TW18	12	1/2	-08	210	3050	840	12200

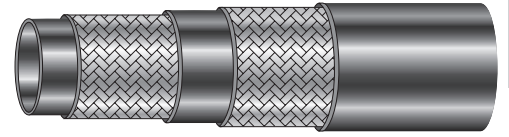
TW1 Hose Dimensions
Matched Couplings

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		BITELOK ONE-PIECE CRIMP	
	mm	inch	kg/m	lb/ft	mm	inch	SKIVE	SKIVE
TW14	45	1.77	0,21	0.14	13,4	0.53	T200 SERIES	
TW15	55	2.17	0,26	0.17	15,0	0.59	T200 SERIES	
TW16	60	2.4	0,34	0.23	17,4	0.69	T200 SERIES	T700 SERIES
TW18	90	3.5	0,45	0.30	20,6	0.81	T200 SERIES	T700 SERIES

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

PRESSURE WASHER PW2

SKIVE HOSE
2 WIRE BRAID



Recommended For:

Hot Water Pressure Washer Machines.

Tube:

Black, heat resistant synthetic rubber.

Reinforcement:

Two braids of high tensile steel wire.

Cover:

Black, oil resistant and abrasion resistant synthetic rubber. The cover of PW2 hose is formulated to resist marking.

Skiving of Cover is required with T200 & T700 Series BITELOK Crimp Couplings.

Temperature Range:

PW2 PRESSURE WASHER Hose handles hot water up to +150°C (+302°F).

Working Pressure:

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

Couplings:

BITELOK SKIVE ONE-PIECE CRIMP

T200 Series (sizes -4 to -6) pages 102 to 123.

T700 series (size -6) pages 134 to 152.

Assembly Instructions page 405.

Not suitable for use with Field Attachable Couplings.

Common hose couplings used on PW2 Hose include:

T202S BSPP Female Live Swivel

T294 PW Female

T295 PW Gun Handle Tube.

(Note: The rated Maximum Working Pressures of T202S

Series couplings are lower than the Maximum Working

Pressures of PW2 Series hoses.)

Important Note: Although PW2 is constructed to SAE 100R2AT dimensions, the cover MUST BE SKIVED prior to crimping on hose couplings.

PW2 Hose Specifications

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
PW24	6	1/4	-04	400	5800	1600	23200
PW25	8	5/16	-05	400	5800	1600	23200
PW26	10	3/8	-06	400	5800	1600	23200

PW2 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	SKIVE	SKIVE
PW24	100	4.0	0,39	0.26	15,0	0.59	T200 SERIES	
PW25	114	4.5	0,46	0.31	16,6	0.65	T200 SERIES	
PW26	130	5.0	0,56	0.38	19,0	0.75	T200 SERIES	T700 SERIES

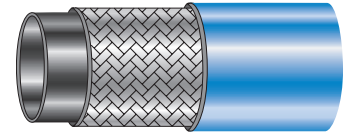
Contact RYCO Hydraulics for Crimp Diameter and Skive Length for BITELOK Couplings.

- Intro
- Hose
- Couplings
- Adaptors
- Accessories
- Filters
- Technical

LPG (CLASS D) RQG1

AUSTRALIAN GAS ASSOCIATION Approval No. 5523.
Meets AS/NZS 1869 Class D (2,6 MPa working pressure, +125°C/+257°F max. temperature).

1 WIRE BRAID HOSE



IMPORTANT INFORMATION

RYCO RQG1 Series LPG Hose has Australian Gas Association approval (AGA approval No. 5523) only when used with RYCO T200 Series BITELOK One-Piece Non-Skive Crimp Couplings, or RYCO K Series Field Attachables.

Available only as Factory Fitted Hose Assemblies.

Warning: Do not use Field Attachable Couplings for domestic applications. (This is a requirement of Australian Standard AS/NZS 1869).

For any queries, please contact RYCO Hydraulics Technical Department.

Recommended For:

Liquefied Petroleum Gas and Natural Gas including automotive applications.
Maximum Working Pressure 2,6 MPa (26 bar, 375 psi).

Tube:

Black, synthetic rubber.

Reinforcement:

One braid of high tensile steel wire.

Cover:

Blue, abrasion resistant synthetic rubber.
Pin-pricked (perforated).
No skiving required with T200 Series BITELOK Crimp Couplings and K Series Field Attachable Couplings.

Temperature Range:

From -40°C to +125°C (-40°F to +257°F).

Couplings:

BITELOK NON-SKIVE ONE-PIECE CRIMP
T200 Series (sizes -4 to -16) pages 102 to 123.
Available only as Factory Fitted Hose Assemblies.

FIELD ATTACHABLE NON-SKIVE
K Series (sizes -4 to -16) pages 202 to 219.
Available only as Factory Fitted Hose Assemblies.

RQG1 Hose Specifications

PART NO	HOSE SIZE ID			MAXIMUM WORKING PRESSURE	
	DN	inch	Dash	MPa	psi
RQG14	6	1/4	-04	2,6	375
RQG16	10	3/8	-06	2,6	375
RQG18	12	1/2	-08	2,6	375
RQG110	16	5/8	-10	2,6	375
RQG112	19	3/4	-12	2,6	375
RQG116	25	1	-16	2,6	375

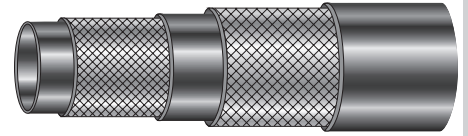
RQG1 Hose Dimensions

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		FIELD ATTACHABLE K SERIES		BITELOK ONE-PIECE CRIMP
	mm	inch	kg/m	lb/ft	mm	inch	INSERT	FERRULE	NON-SKIVE
RQG14	100	4.0	0,24	0.16	13,4	0.53	600 SERIES	K00-04	T200 SERIES
RQG16	130	5.0	0,34	0.23	17,4	0.69	600 SERIES	K00-06	T200 SERIES
RQG18	180	7.0	0,44	0.30	20,5	0.81	600 SERIES	K00-08	T200 SERIES
RQG110	200	8.0	0,51	0.34	23,7	0.93	600 SERIES	K00-10	T200 SERIES
RQG112	240	9.5	0,64	0.43	27,6	1.09	600 SERIES	K00-12	T200 SERIES
RQG116	300	12.0	0,98	0.66	35,7	1.41	600 SERIES	K00-16	T200 SERIES

Matched Couplings

LPG (CLASS C) M2G

2 TEXTILE BRAID HOSE



AUSTRALIAN GAS ASSOCIATION Approval No. 4247.
Meets AS/NZS 1869 Class C (2,6 MPa working pressure, +65°C/+149°F max. temperature).

IMPORTANT INFORMATION

RYCO M2G Series LPG Hose has Australian Gas Association approval (AGA approval No. 4247) only when used with RYCO T400 Series BITELOK One-Piece Non-Skive Crimp Couplings, or RYCO 400 Series Field Attachables.

Available only as Factory Fitted Hose Assemblies.

Warning: Do not use Field Attachable Couplings for domestic applications. (This is a requirement of Australian Standard AS/NZS 1869).

For any queries, please contact RYCO Hydraulics Technical Department.

Recommended For:

Liquefied Petroleum Gas and Natural Gas.
Maximum Working Pressure 2,6 MPa (26 bar, 375 psi).

Tube:

Black, synthetic rubber.

Reinforcement:

Two textile braids.

Cover:

Black, abrasion resistant synthetic rubber.
Pin-pricked (perforated).
No skiving required with T400 Series BITELOK Crimp Couplings and 400 Series Field Attachable Couplings.

Temperature Range:

From -20°C to +65°C (-4°F to +149°F).

Couplings:

BITELOK NON-SKIVE ONE-PIECE CRIMP
T400 Series (sizes -4 to -12) pages 124 to 133.
Available only as Factory Fitted Hose Assemblies.

FIELD ATTACHABLE NON-SKIVE
400 Series (sizes -4 to -12) pages 202 to 219.
Available only as Factory Fitted Hose Assemblies.

M2G Hose Specifications

PART NO	HOSE SIZE ID			MAXIMUM WORKING PRESSURE	
	DN	inch	Dash	MPa	psi
M24G	6	1/4	-04	2,6	375
M26G	10	3/8	-06	2,6	375
M28G	12	1/2	-08	2,6	375
M212G	19	3/4	-12	2,6	375

M2G Hose Dimensions

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		Matched Couplings		
	mm	inch	kg/m	lb/ft	mm	inch	FIELD ATTACHABLE K SERIES	FERRULE	BITELOK ONE-PIECE CRIMP
M24G	75	3.0	0,16	0.11	14,3	0.56	600 SERIES	400-04	T400 SERIES
M26G	100	4.0	0,28	0.19	19,0	0.75	600 SERIES	400-06	T400 SERIES
M28G	125	5.0	0,41	0.28	23,8	0.94	600 SERIES	400-08	T400 SERIES
M212G	240	9.5	0,65	0.44	31,7	1.25	600 SERIES	400-12	T400 SERIES

Intro

Hose

Couplings

Adaptors

Accessories

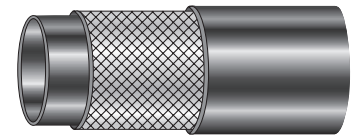
Filters

Technical

FUEL LINE M1

Meets or exceeds SAE 30R7.

1 TEXTILE BRAID HOSE



Recommended For:

Multi-purpose hose for use on fuel lines, PCV and EEC systems, and for fuel return hose connections on diesel fuel injection systems. For use with leaded and unleaded petrol, oil, diesel and other fuels.

WARNING: Do not use for pressure lines on fuel injected engines or for Cooling System Applications.

Tube:

Black synthetic rubber. (Nitrile).

Reinforcement:

One textile braid.

Cover:

Black, oil resistant synthetic rubber. Resists the effects of high heat and ozone found in engine compartments.

Temperature Range:

From -40°C to +125°C (-40°F to +257°F).

M1 Hose Specifications

1 bar = 14.5 psi 1 MPa = 10 bar

PART NO	HOSE SIZE ID			MAXIMUM WORKING PRESSURE		VACUUM RATING AT 20°C (68°F)	
	DN	inch	Dash	bar	psi	mmHg	inHg
M14	6	1/4	-04	3,5	50	610	24
M15	8	5/16	-05	3,5	50	610	24
M16	10	3/8	-06	3,5	50	610	24

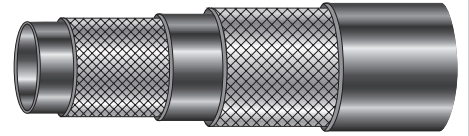
M1 Hose Dimensions

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD	
	mm	inch	kg/m	lb/ft	mm	inch
M14	75	3.0	0,14	0.09	12,7	0.50
M15	75	3.0	0,17	0.11	14,3	0.56
M16	100	4.0	0,18	0.12	15,9	0.63

TEXTILE M2

Meets or exceeds the performance requirements of SAE 100R3, AS 3791 100R3, DIN 20021-2TE, ISO 4079 Type R3.
Third Party approvals: ABS, DNV, GL, LR, MED, USCG (see page 23).

2 TEXTILE BRAID HOSE



Recommended For:

Medium pressure hydraulic oil lines, antifreeze solutions, water.

Tube:

Black, oil resistant synthetic rubber. (Nitrile).

Reinforcement:

Two textile braids.

Cover:

Black, oil resistant and abrasion resistant synthetic rubber.
No skiving required with T400 Series BITELOK Crimp Couplings and 400 Series 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:

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

Couplings:

BITELOK NON-SKIVE ONE-PIECE CRIMP

T400 Series (sizes -4 to -12) pages 124 to 133.
Assembly Instructions page 404.

FIELD ATTACHABLE NON-SKIVE

400 Series (sizes -4 to -12) pages 202 to 219.
Assembly Instructions page 402.

M2 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
M24	6	1/4	-04	88	1250	350	5000
M26	10	3/8	-06	79	1125	315	4500
M28	12	1/2	-08	70	1000	280	4000
M212	19	3/4	-12	52	750	210	3000

M2 Hose Dimensions

Matched Couplings

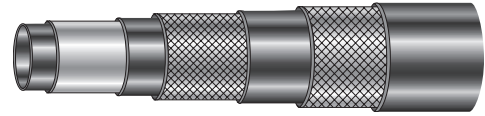
PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		FIELD ATTACHABLE 400 SERIES		BITELOK ONE-PIECE CRIMP
	mm	inch	kg/m	lb/ft	mm	inch	INSERT	FERRULE	NON-SKIVE
M24	75	3.0	0,16	0.11	14,3	0.56	600 SERIES	400-04	T400 SERIES
M26	100	4.0	0,28	0.19	19,0	0.75	600 SERIES	400-06	T400 SERIES
M28	125	5.0	0,41	0.28	23,8	0.94	600 SERIES	400-08	T400 SERIES
M212	240	9.5	0,65	0.44	31,7	1.25	600 SERIES	400-12	T400 SERIES

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

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BARRIER **FB2**

2 TEXTILE BRAID HOSE
NYLON BARRIER



Meets or exceeds the performance requirements of SAE J2064 Type C Class II.

Recommended For:

Automotive air conditioning systems and other refrigeration and air conditioning systems using refrigerants R12 and R134a. Also suitable for use with R22 and R114. The internal rubber layer assures coupling integrity and reduces the risk of refrigerant loss around the couplings, and the nylon barrier reduces the permeation of refrigerant, to protect the environment. FB2 is a reduced bore hose. It has a similar Inside Diameter to metal tubing of the same nominal size. For example, 5/8" (OD) tubing has an Inside Diameter of approximately 1/2". FB210 is also 1/2" Inside Diameter.

Tube:

Black, synthetic rubber internal layer (polychloroprene) with Nylon Barrier.

Reinforcement:

Two braids of synthetic yarn.

Cover:

Black, oil resistant and abrasion resistant synthetic rubber (EPDM). No skiving required with 1G00 Series Crimp Couplings.

Temperature Range:

From -30°C to +125°C (-22°F to +257°F).

Couplings:

1G00 SERIES CRIMP COUPLINGS page 175 and 176. Assembly instruction page 407.

1G00 Series Crimp Couplings consist of G00 Series Insert and 1G00 Series Crimp Ferrule.

Use only with 1G00 Series Crimp Ferrules. Worm drive hose clamps must not be used with FB2 Hose.

FB2 Hose Specifications

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
FB26	8	5/16	-06	35	500	140	2000
FB28	10	13/32	-08	35	500	140	2000
FB210	12	1/2	-10	35	500	140	2000

FB2 Hose Dimensions

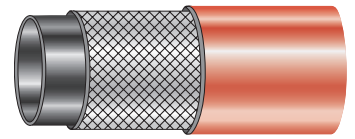
Matched Couplings

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		1G00 CRIMP COUPLINGS	
	mm	inch	kg/m	lb/ft	mm	inch	INSERT	FERRULE
FB26	16	0.6	0,28	0.19	19,0	0.75	G00 SERIES	1G00-06
FB28	25	1.0	0,42	0.28	23,0	0.91	G00 SERIES	1G00-08
FB210	32	1.3	0,48	0.32	25,4	1.00	G00 SERIES	1G00-10

Contact RYCO Hydraulics for Crimp Diameter, Crimp Length and Mark Length for 1G00 Couplings.

MULTI PURPOSE MP1

1 TEXTILE BRAID HOSE



Intro

Hose

Couplings

Adaptors

Accessories

Filters

Technical

Recommended For:

Air, water, petroleum oils, kerosene and fuel oils.

Tube:

Black, oil resistant synthetic rubber (Nitrile).
RMA (USA) Class A High Oil Resistance.

Reinforcement:

One textile braid.

Cover:

Red, oil resistant and abrasion resistant synthetic rubber (Modified Nitrile).
RMA (USA) Class B Medium Oil Resistance.

Electrical Non-Conductivity:

Non-conductive at 1000 volts DC. Meets electrical resistance of one megohm per inch when subjected to 1000 volts DC. Incorrect storage and use may adversely affect electrical properties.

Temperature Range:

Air, water, petroleum & lubricating oils: -40°C to +93°C (-40°F to +200°F).
Petrol, kerosene, fuel oils: -40°C to +49°C (-40°F to +120°F).
For continuous service at upper temperature limit, reduce maximum working pressure by 30%.

Working Pressure:

Maximum working pressures are based on 4:1 safety factor (minimum burst to maximum working pressure), and are for the performance of the hose with RYCO T400 Series BITELOK One-Piece couplings only. Maximum working pressure for a hose assembly with other couplings depends on the type of coupling and the type of clamp used. MP1 Hose should not be used at maximum working pressure and maximum working temperature simultaneously.

Couplings:

BITELOK NON-SKIVE ONE-PIECE CRIMP
T400 Series (sizes -4 to -20) pages 124 to 133.
Assembly instructions page 404.

Standard industrial hose barbed tails with hose clamps may also be suitable depending on working pressure required.

Not suitable for use with RYCO 800 Series Push-On couplings.

MP1 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
MP14	6	1/4	-04	13,8	200	55,2	800
MP16	10	3/8	-06	13,8	200	55,2	800
MP18	12	1/2	-08	13,8	200	55,2	800
MP110	16	5/8	-10	13,8	200	55,2	800
MP112	19	3/4	-12	13,8	200	55,2	800
MP116	25	1	-16	13,8	200	55,2	800
MP120	31	1.1/4	-20	13,8	200	55,2	800

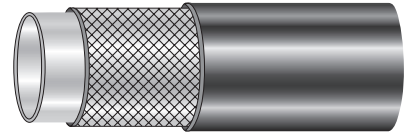
MP1 Hose Dimensions

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
MP14	50	2.0	0,15	0.10	13,5	0.53	T400 SERIES
MP16	75	3.0	0,23	0.15	17,5	0.69	T400 SERIES
MP18	100	4.0	0,31	0.21	21,4	0.84	T400 SERIES
MP110	125	5.0	0,43	0.29	25,4	1.00	T400 SERIES
MP112	125	5.0	0,49	0.33	28,6	1.13	T400 SERIES
MP116	200	8.0	0,80	0.54	37,3	1.47	T400 SERIES
MP120	250	10.0	1,00	0.67	43,9	1.73	T400 SERIES

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

SPIDERLINE RT7



Meets or exceeds the performance requirements (except electrical non-conductivity tests) of SAE 100R7, AS 3791 100R7, EN 855 Type R7.

Note: RT72 size is not included in the above standards.

Recommended For:

High pressure hydraulic oil lines; pilot lines; greasing and lubrication lines; and some pneumatic and water lines. Suitable for use with mineral, vegetable and most ester based hydraulic fluids. Heat and hydrolysis stabilised for use with water based hydraulic fluids up to +70°C (+158°F). Suitable for use with some gases, fluids and chemicals (contact RYCO Hydraulics Technical Department). Cover is perforated (pin-pricked) for use with air and gases. RYCO RT7 Series Hose has lighter weight and more compact outside diameter than wire braided rubber SAE 100R1AT hose. Smooth inner tube for high flow rate; and smooth, easily cleaned cover. The polyester or nylon reinforcement gives RT7 Hose excellent corrosion and fatigue resistance, and low elongation of ±2% at maximum dynamic working pressure.

Tube:

RT72:
Oil resistant seamless thermoplastic (Polyester).
RT73 to RT712:
Oil resistant seamless thermoplastic (Nylon).

Reinforcement:

RT72:
One braid of synthetic yarn (Polyester).
RT73 to RT712:
One or two braids of synthetic yarn (Nylon).

Cover:

Black, oil and abrasion resistant thermoplastic (Polyurethane).

Temperature Range:

From -40°C to +95°C (-40°F to +203°F).

Working Pressure:

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

Couplings:

RT72 to RT712:
BITELOK NON-SKIVE ONE-PIECE CRIMP
T400 Series (sizes -2 to -12) page 124 to 133.
Assembly Instructions page 404.

NOTE: Special Assembly Procedures required for **RT72** Hose. Contact RYCO Hydraulics Technical Department for further information.

RT7 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
RT72	3	1/8	-02	210	3050	840	12200
RT73	5	3/16	-03	210	3050	840	12200
RT74	6	1/4	-04	190	2750	760	11000
RT76	10	3/8	-06	155	2250	620	9000
RT78	12	1/2	-08	138	2000	552	8000
RT712	19	3/4	-12	86	1250	345	5000

RT7 Hose Dimensions

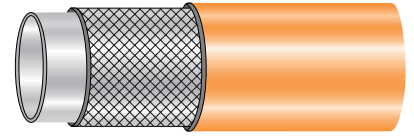
Matched Couplings

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		BITELOK ONE-PIECE CRIMP
	mm	inch	kg/m	lb/ft	mm	inch	NON-SKIVE
RT72	38	1.5	0,05	0.03	8,2	0.32	T400 SERIES
RT73	89	3.5	0,07	0.05	10,5	0.41	T400 SERIES
RT74	100	4.0	0,09	0.06	12,6	0.50	T400 SERIES
RT76	125	5.0	0,15	0.10	16,5	0.65	T400 SERIES
RT78	178	7.0	0,24	0.16	21,2	0.83	T400 SERIES
RT712	240	9.5	0,30	0.20	26,7	1.05	T400 SERIES

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

ISOLATOR RT7N

Meets or exceeds the performance requirements (including electrical non-conductivity tests) of SAE 100R7, AS 3791 100R7, EN 855 Type R7.



Recommended For:

High pressure hydraulic oil lines where electrical non-conductivity is required (for use in applications where there is potential for contact with high voltage sources). Suitable for use with mineral, vegetable and most ester based hydraulic fluids. Heat and hydrolysis stabilised for use with water based hydraulic fluids up to +70°C (+158°F). Smooth inner tube for high flow rate; and smooth, easily cleaned cover. The polyester reinforcement gives RT7N Hose excellent corrosion and fatigue resistance, and low elongation of ±2% at maximum dynamic working pressure.

Electrical Non-Conductivity:

Meets non-conductivity requirements of SAE 100R7, AS 3791 100R7, EN 855 Type 7 (maximum leakage does not exceed 50 µA when subjected to 75 kV/305 mm or 250 kV/m for 5 minutes). Incorrect storage and use, particularly that leading to oil or moisture entering the reinforcement, may adversely affect electrical properties.

Tube:

White, oil resistant seamless thermoplastic (Polyester).

Reinforcement:

One or two braids of synthetic yarn (Polyester).

Cover:

Orange, oil and abrasion resistant thermoplastic (Polyurethane). Cover is unperforated.

Temperature Range:

From -40°C to +95°C (-40°F to +203°F).

Working Pressure:

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

Couplings:

BITELOK NON-SKIVE ONE-PIECE CRIMP

T400 Series (sizes -4 to -12) pages 124 to 133. Assembly Instructions page 404.

RT7N 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
RT74N	6	1/4	-04	190	2750	760	11000
RT76N	10	3/8	-06	155	2250	620	9000
RT78N	12	1/2	-08	138	2000	552	8000
RT712N	19	3/4	-12	86	1250	345	5000

RT7N 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
RT74N	100	4.0	0,09	0.06	12,6	0.50	T400 SERIES
RT76N	125	5.0	0,15	0.10	16,5	0.65	T400 SERIES
RT78N	178	7.0	0,22	0.15	20,6	0.81	T400 SERIES
RT712N	240	9.5	0,33	0.22	26,7	1.05	T400 SERIES

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

Intro

Hose

Couplings

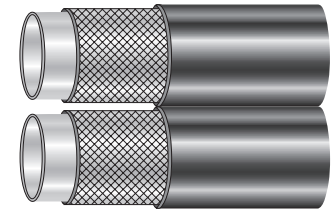
Adaptors

Accessories

Filters

Technical

SPIDERLINE TWIN RT7T



Meets or exceeds the performance requirements (except electrical non-conductivity tests) of SAE 100R7, AS 3791 100R7, EN 855 Type R7.

Recommended For:

RYCO RT7T SPIDERLINE TWIN Hose consists of two RT7 Series Hoses of the same size, permanently joined together in a flat compact form that can be easily reeled onto payout and return reels on forklifts and cranes. It is also used on dispensing equipment and other applications requiring two hoses. Suitable for use with mineral, vegetable and most ester based hydraulic fluids. Heat and hydrolysis stabilised for use with water based hydraulic fluids up to +70°C (+158°F). Suitable for use with some gases, fluids and chemicals (contact RYCO Hydraulics Technical Department). Cover is perforated (pin-pricked) for use with air and gases. Smooth inner tube for high flow rate; and smooth, easily cleaned cover. The nylon reinforcement gives RT7T Hose excellent corrosion and fatigue resistance, and low elongation of ±2% at maximum dynamic working pressure.

Tube:

Oil resistant seamless thermoplastic (Nylon).

Reinforcement:

One or two braids of synthetic yarn (Nylon).

Cover:

Black, oil and abrasion resistant thermoplastic (Polyurethane).

Temperature Range:

From -40°C to +95°C (-40°F to +203°F).

Working Pressure:

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

Couplings:

BITELOK NON-SKIVE ONE-PIECE CRIMP

T400 Series (sizes -4 to -8) pages 124 to 133. Assembly instructions page 404 and 409.

RT7T 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
RT74T	6	1/4	-04	190	2750	760	11000
RT76T	10	3/8	-06	155	2250	620	9000
RT78T	12	1/2	-08	138	2000	552	8000

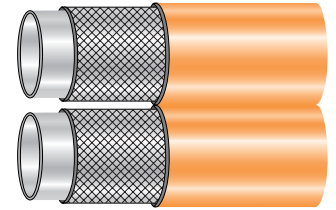
RT7T Hose Dimensions

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
RT74T	100	4.0	0,18	0.12	12,6 (x 2 OFF)	0.50 (x 2 OFF)	T400 SERIES
RT76T	125	5.0	0,30	0.20	16,5 (x 2 OFF)	0.65 (x 2 OFF)	T400 SERIES
RT78T	178	7.0	0,48	0.32	21,2 (x 2 OFF)	0.83 (x 2 OFF)	T400 SERIES

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

ISOLATOR TWIN RT7TN



Meets or exceeds the performance requirements (including electrical non-conductivity tests) of SAE 100R7, AS 3791 100R7, EN 855 Type R7.

Recommended For:

RYCO RT7TN ISOLATOR TWIN Hose consists of two RT7N Series Hoses of the same size, permanently joined together in a flat compact form that can be easily reeled onto payout and return reels on forklifts and cranes. It is also used for hydraulic powered hand tools, such as loppers and chain saws, and other applications requiring two hoses. RT7TN is used where electrical non-conductivity is required (for use in applications where there is potential for contact with high voltage sources). Suitable for use with mineral, vegetable and most ester based hydraulic fluids. Heat and hydrolysis stabilised for use with water based hydraulic fluids up to +70°C (+158°F). Suitable for use with some gases, fluids and chemicals (contact RYCO Hydraulics Technical Department). Smooth inner tube for high flow rate; and smooth, easily cleaned cover. The polyester reinforcement gives RT7TN Hose excellent corrosion and fatigue resistance, and low elongation of ±2% at maximum dynamic working pressure.

Electrical Non-Conductivity:

Meets non-conductivity requirements of SAE 100R7, AS 3791 100R7, EN 855 Type 7 (maximum leakage does not exceed 50 µA when subjected to 75 kV/305 mm or 250 kV/m for 5 minutes). Incorrect storage and use, particularly that leading to oil or moisture entering the reinforcement, may adversely affect electrical properties.

Tube:

White, oil resistant seamless thermoplastic (Polyester).

Reinforcement:

One or two braids of synthetic yarn (Polyester).

Cover:

Orange, oil and abrasion resistant thermoplastic (Polyurethane). Cover is unperforated.

Temperature Range:

From -40°C to +95°C (-40°F to +203°F).

Working Pressure:

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

Couplings:

BITELOK NON-SKIVE ONE-PIECE CRIMP
T400 Series (sizes -4 to -8) pages 124 to 133.
Assembly instructions page 404 and 409.

RT7TN 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
RT74TN	6	1/4	-04	190	2750	760	11000
RT76TN	10	3/8	-06	155	2250	620	9000
RT78TN	12	1/2	-08	138	2000	552	8000

RT7TN Hose Dimensions

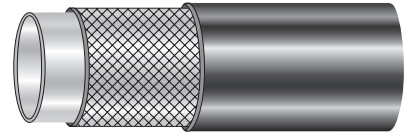
Matched Couplings

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		BITELOK ONE-PIECE CRIMP
	mm	inch	kg/m	lb/ft	mm	inch	NON-SKIVE
RT74TN	100	4.0	0,18	0.12	12,6 (x 2 OFF)	0.50 (x 2 OFF)	T400 SERIES
RT76TN	125	5.0	0,30	0.20	16,5 (x 2 OFF)	0.65 (x 2 OFF)	T400 SERIES
RT78TN	178	7.0	0,45	0.30	20,6 (x 2 OFF)	0.81 (x 2 OFF)	T400 SERIES

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

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SPIDERLINE RT8



Meets or exceeds the performance requirements (except electrical non-conductivity tests) of SAE 100R8, AS 3791 100R8, EN 855 Type R8.

Recommended For:

High pressure hydraulic oil lines; pilot lines; greasing and lubrication lines; and some pneumatic and water lines. Suitable for use with mineral, vegetable and most ester based hydraulic fluids. Heat and hydrolysis stabilised for use with water based hydraulic fluids up to +70°C (+158°F). Suitable for use with some gases, fluids and chemicals (contact RYCO Hydraulics Technical Department). Cover is perforated (pin-pricked) for use with air and gases. RYCO RT8 Series Hose has lighter weight and more compact outside diameter than wire braided rubber SAE 100R1AT hose. Smooth inner tube for high flow rate; and smooth, easily cleaned cover. The aramid reinforcement gives RT8 Hose excellent corrosion and fatigue resistance, and low elongation of ±2% at maximum dynamic working pressure.

Tube:

Oil resistant seamless thermoplastic (Nylon).

Reinforcement:

One or two braids of synthetic yarn (Aramid).

Cover:

Black, oil and abrasion resistant thermoplastic (Polyurethane).

Temperature Range:

From -40°C to +95°C (-40°F to +203°F).

Working Pressure:

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

Couplings:

BITELOK NON-SKIVE ONE-PIECE CRIMP
T400 Series (sizes -4 to -8) page 124 to 133.
Assembly Instructions page 404.

RT8 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
RT84	6	1/4	-04	345	5000	1380	20000
RT86	10	3/8	-06	276	4000	1105	16000
RT88	12	1/2	-08	241	3500	965	14000

RT8 Hose Dimensions

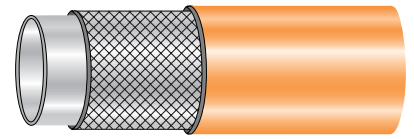
Matched Couplings

PART NO	MINIMUM BEND RADIUS		AVERAGE WEIGHT		NOMINAL HOSE OD		BITELOK ONE-PIECE CRIMP
	mm	inch	kg/m	lb/ft	mm	inch	NON-SKIVE
RT84	100	4.0	0,09	0.04	12,6	0.50	T400 SERIES
RT86	125	5.0	0,13	0.09	16,5	0.65	T400 SERIES
RT88	178	7.0	0,21	0.14	20,6	0.81	T400 SERIES

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

ISOLATOR RT8N

Meets or exceeds the performance requirements (including electrical non-conductivity tests) of SAE 100R8, AS 3791 100R8, EN 855 Type R8.



Recommended For:

High pressure hydraulic oil lines where electrical non-conductivity is required (for use in applications where there is potential for contact with high voltage sources). Suitable for use with mineral, vegetable and most ester based hydraulic fluids. Heat and hydrolysis stabilised for use with water based hydraulic fluids up to +70°C (+158°F). Smooth inner tube for high flow rate; and smooth, easily cleaned cover. The aramid reinforcement gives RT8N Hose excellent corrosion and fatigue resistance, and low elongation of ±2% at maximum dynamic working pressure.

Electrical Non-Conductivity:

Meets non-conductivity requirements of SAE 100R8, AS 3791 100R8, EN 855 Type 8 (maximum leakage does not exceed 50 µA when subjected to 75 kV/305 mm or 250 kV/m for 5 minutes). Incorrect storage and use, particularly that leading to oil or moisture entering the reinforcement, may adversely affect electrical properties.

Tube:

White, oil resistant seamless thermoplastic (Polyester).

Reinforcement:

One or two braids of synthetic yarn (Aramid).

Cover:

Orange, oil and abrasion resistant thermoplastic (Polyurethane). Cover is unperforated.

Temperature Range:

From -40°C to +95°C (-40°F to +203°F).

Working Pressure:

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

Couplings:

BITELOK NON-SKIVE ONE-PIECE CRIMP
T400 Series (sizes -4 to -8) pages 124 to 133.
Assembly Instructions page 404.

RT8N 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
RT84N	6	1/4	-04	345	5000	1380	20000
RT86N	10	3/8	-06	276	4000	1105	16000
RT88N	12	1/2	-08	241	3500	965	14000

RT8N 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
RT84N	100	4.0	0,09	0.04	12,6	0.50	T400 SERIES
RT86N	125	5.0	0,13	0.09	16,5	0.65	T400 SERIES
RT88N	178	7.0	0,21	0.14	20,6	0.81	T400 SERIES

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

Intro

Hose

Couplings

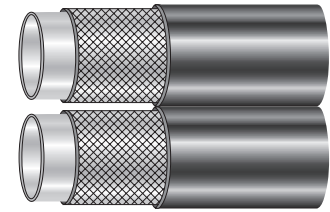
Adaptors

Accessories

Filters

Technical

SPIDERLINE TWIN RT8T



Meets or exceeds the performance requirements (except electrical non-conductivity tests) of SAE 100R8, AS 3791 100R7, EN 855 Type R8.

Recommended For:

RYCO RT8T SPIDERLINE TWIN Hose consists of two RT8 Series Hoses of the same size, permanently joined together in a flat compact form that can be easily reeled onto payout and return reels on forklifts and cranes. It is also used on dispensing equipment and other applications requiring two hoses. Suitable for use with mineral, vegetable and most ester based hydraulic fluids. Heat and hydrolysis stabilised for use with water based hydraulic fluids up to +70°C (+158°F). Suitable for use with some gases, fluids and chemicals (contact RYCO Hydraulics Technical Department). Cover is perforated (pin-pricked) for use with air and gases. Smooth inner tube for high flow rate; and smooth, easily cleaned cover. The aramid reinforcement gives RT8T Hose excellent corrosion and fatigue resistance, and low elongation of ±2% at maximum dynamic working pressure.

Tube:

Oil resistant seamless thermoplastic (Nylon).

Reinforcement:

One or two braids of synthetic yarn (Aramid).

Cover:

Black, oil and abrasion resistant thermoplastic (Polyurethane).

Temperature Range:

From -40°C to +95°C (-40°F to +203°F).

Working Pressure:

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

Couplings:

BITELOK NON-SKIVE ONE-PIECE CRIMP

T400 Series (sizes -4 to -8) pages 124 to 133. Assembly instructions page 404 and 409.

RT8T 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
RT84T	6	1/4	-04	345	5000	1380	20000
RT86T	10	3/8	-06	276	4000	1105	16000
RT88T	12	1/2	-08	241	3500	965	14000

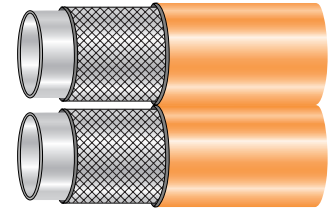
RT8T Hose Dimensions

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
RT84T	100	4.0	0,18	0.08	12,6 (x 2 OFF)	0.50 (x 2 OFF)	T400 SERIES
RT86T	125	5.0	0,26	0.18	16,5 (x 2 OFF)	0.65 (x 2 OFF)	T400 SERIES
RT88T	178	7.0	0,42	0.28	20,6 (x 2 OFF)	0.81 (x 2 OFF)	T400 SERIES

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

ISOLATOR TWIN RT8TN



Meets or exceeds the performance requirements (including electrical non-conductivity tests) of SAE 100R8, AS 3791 100R7, EN 855 Type R8.

Recommended For:

RYCO RT8TN ISOLATOR TWIN Hose consists of two RT8N Series Hoses of the same size, permanently joined together in a flat compact form that can be easily reeled onto payout and return reels on forklifts and cranes. It is also used for hydraulic powered hand tools, such as loppers and chain saws, and other applications requiring two hoses. RT8TN is used where electrical non-conductivity is required (for use in applications where there is potential for contact with high voltage sources). Suitable for use with mineral, vegetable and most ester based hydraulic fluids. Heat and hydrolysis stabilised for use with water based hydraulic fluids up to +70°C (+158°F). Suitable for use with some gases, fluids and chemicals (contact RYCO Hydraulics Technical Department). Smooth inner tube for high flow rate; and smooth, easily cleaned cover. The aramid reinforcement gives RT8TN Hose excellent corrosion and fatigue resistance, and low elongation of ±2% at maximum dynamic working pressure.

Electrical Non-Conductivity:

Meets non-conductivity requirements of SAE 100R8, AS 3791 100R8, EN 855 Type 8 (maximum leakage does not exceed 50 µA when subjected to 75 kV/305 mm or 250 kV/m for 5 minutes). Incorrect storage and use, particularly that leading to oil or moisture entering the reinforcement, may adversely affect electrical properties.

Tube:

White, oil resistant seamless thermoplastic (Polyester).

Reinforcement:

One or two braids of synthetic yarn (Aramid).

Cover:

Orange, oil and abrasion resistant thermoplastic (Polyurethane). Cover is unperforated.

Temperature Range:

From -40°C to +95°C (-40°F to +203°F).

Working Pressure:

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

Couplings:

BITELOK NON-SKIVE ONE-PIECE CRIMP
T400 Series (sizes -4 to -8) pages 124 to 133.
Assembly instructions page 404 and 409.

RT8TN 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
RT84TN	6	1/4	-04	345	5000	1380	20000
RT86TN	10	3/8	-06	276	4000	1105	16000
RT88TN	12	1/2	-08	241	3500	965	14000

RT8TN 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
RT84TN	100	4.0	0,18	0.08	12,6 (x 2 OFF)	0.50 (x 2 OFF)	T400 SERIES
RT86TN	125	5.0	0,26	0.18	16,5 (x 2 OFF)	0.65 (x 2 OFF)	T400 SERIES
RT88TN	178	7.0	0,42	0.28	20,6 (x 2 OFF)	0.81 (x 2 OFF)	T400 SERIES

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

Intro

Hose

Couplings

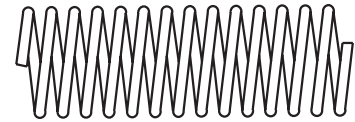
Adaptors

Accessories

Filters

Technical

WIRE ARMOUR **RWA**



Recommended For:

Protection for Hose Cover in arduous operating conditions; especially against abrasion and deep gouges, thus prolonging the life of the Hose.

Construction:

Spring Steel Wire; galvanised for corrosion protection.

Temperature Range:

Suitable for use with all RYCO Hoses at their published temperature ranges.

Assembly Instructions:

Slide RWA Wire Armour over hose after first end of hose assembly is completed. Then complete second end of hose assembly.

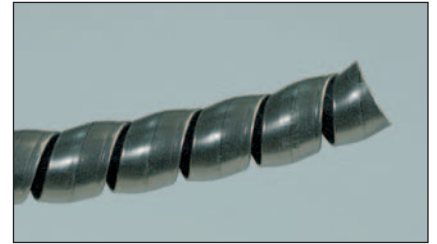
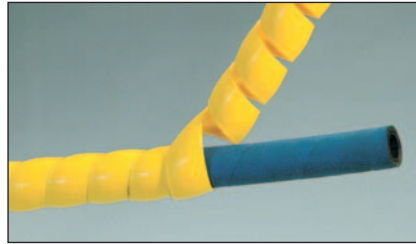
Standard Length:

6 metres (19.7 ft) in all sizes.

PART NO	NOMINAL ID		HOSE SERIES													
	mm	inch	T1A T1D	T2A T2D	T3KA T3KD	DF2A	H12A H12D	H13A H13D	HSPA	HSHA	H15D	TXA2D	TJ2D	RQP1	RQP2	RQP5 T5
RWA-12	12	0.47														
RWA-16	16	0.63	-4,-5	-4	-4,-5	-4							-4	-4,-5	-4	-4,-5
RWA-20	20	0.78	-6	-5	-6,-8	-6			-04					-6	-5	-6
RWA-21	21	0.83		-6									-6		-6	-8
RWA-23	23	0.91	-8	-8		-8	-06		-06			-8		-8	-8	
RWA-27	27	1.06	-10		-10	-10	-08		-08					-10		-10
RWA-30	30	1.19	-12	-10	-12	-12	-10					-10		-12	-10	-12
RWA-31	31	1.22		-12					-10			-12			-12	
RWA-34	34	1.34			-16		-12	-12	-12	-12	-12					-16
RWA-39	39	1.52	-16			-16										
RWA-41	41	1.61		-16			-16	-16	-16	-16	-16	-16		-16	-16	-20
RWA-49	49	1.93	-20	-20			-20			-20		-20			-20	-24
RWA-56	56	2.20	-24	-24			-24	-20		-24	-20				-24	
RWA-61	61	2.40						-24				-24				-32
RWA-68	68	2.68	-32	-32			-32			-32					-32	
RWA-75	75	2.95						-32				-32				

PART NO	NOMINAL ID		HOSE SERIES													
	mm	inch	RQP6	T1F TW1	PL1	RTH1	SR SRF	PW2	RQG1	M2G	M1	M2	FB2	MP1	RT7 RT7N	RT8 RT8N
RWA-12	12	0.47				-4									-2,-3	
RWA-16	16	0.63	-4,-5	-4,-5	-4,-5	-6,-8		-4	-4	-4	-4,-5	-4		-4	-4	-4
RWA-20	20	0.78	-6	-6	-6			-5	-6		-6			-6	-6	-6
RWA-21	21	0.83	-8		-8	-10			-6		-6		-6			
RWA-23	23	0.91		-8					-8				-8	-8	-8	-8
RWA-27	27	1.06	-10		-10	-12			-10	-8			-8	-10	-10	
RWA-30	30	1.19	-12	-12	-12				-12					-12	-12	
RWA-31	31	1.22				-16										
RWA-34	34	1.34								-12			-12			
RWA-39	39	1.52					-12									
RWA-41	41	1.61					-16		-16					-16		
RWA-49	49	1.93					-20							-20		
RWA-56	56	2.20					-24									
RWA-61	61	2.40														
RWA-68	68	2.68					-32									
RWA-75	75	2.95														

SPIRAL GUARD **RSG** (Black) **RSGY** (Yellow) **RSGF** (FRAS)



Recommended For:

Lightweight, cost-effective protection of hoses and cables from abrasion and impact. It can also be used to bundle hoses together in groups.

RSGF meets Flame Resistance Designation “U.S. MSHA” of the US Department of Labor, Mine Safety and Health Administration.

Construction:

Polyethylene plastic spiral, with rounded edges to protect hose cover. RSG Black; RSGY Yellow; RSGF FRAS (Dark Grey). Polyethylene is not affected by exposure to air, water, hydraulic oil and many other fluids.

Temperature Range:

From -40°C to +120°C (-40°F to +248°F).

Assembly Instructions:

RYCO Spiral Guard can easily be applied after hose assembly because of its spiral form. Place one end of completed hose assembly in a vice. Wrap coil onto hose. It is recommended to choose RYCO Spiral Guard size so that it is a tight fit on the hose. This will keep the Spiral Guard in place on the hose.

The Spiral Guard expands to fit the hose or hose bundle. Allow extra length of Spiral Guard to allow for this expansion.

Size Selection:

The tables below show RYCO Spiral Guard size selection for a tight fit on the hose. Due to the Spiral Guard expanding to fit the hose, extra length of Spiral Guard must be allowed. This extra length can be estimated as follows:

T26A Nominal OD = 19,0 mm (see chart on page 79)

RSG-20L Nominal ID = 15,0 mm (from chart below)

Estimated length of RSG-20L to cover 2,3 metres of T26A

$$= \frac{19,0}{15,0} \times 2,3 \text{ m} = 2,91 \text{ metres}$$

How to Order:

Complete the Part Number:

RSG-16L, RSGY-75L, RSGF-50L etc.

Sizes -16L to -90L: 20 m (65.6 ft) coils or cut to length.

Size -110L: 10 m (32.8 ft) coils or cut to length.

DASH SIZE	NOMINAL ID		NOMINAL OD		HOSE SERIES													
	mm	inch	mm	inch	T1A T1D	T2A T2D	T3KA T3KD	DF2A	H12A H12D	H13A H13D	HSPA	HSHA	H15D	TXA2D	TJ2D	RQP1	RQP2	RQP5 T5
-12L	9,0	0.35	13,0	0.51	-3		-4											
-16L	12,0	0.47	16,5	0.65	-4,-5	-4	-5	-4							-4	-4,-5	-4	-4
-20L	15,0	0.59	20,0	0.79	-6,-8	-5,-6,-8	-6,-8	-6,-8	-10		-04,-06			-8	-6	-6,-8	-5,-6,-8	-5,-6,-8
-25L	19,0	0.75	24,5	0.96	-10	-10	-10	-10	-10		-08			-10		-10	-10	-10
-32L	23,0	0.91	30,0	1.18	-12	-12	-12	-12,-16	-10,-12	-12	-10,-12	-12	-12	-12		-12	-12	-12,-16
-40L	30,5	1.20	39,0	1.54	-16	-16	-16		-16	-16	-16	-16	-16	-16		-16	-16	-20
-50L	38,0	1.50	46,5	1.83	-20,-24	-20,-24			-20,-24	-20		-20,-24	-20	-20			-20,-24	-24
-63L	47,0	1.85	58,0	2.28	-32	-32			-32	-24			-24				-32	-32
-75L	61,0	2.40	73,0	2.87		-40				-32		-32	-32					
-90L	70,5	2.78	84,5	3.33	USED TO BUNDLE HOSES													
-110L	84,0	3.31	99,0	3.90	USED TO BUNDLE HOSES													

DASH SIZE	NOMINAL ID		NOMINAL OD		HOSE SERIES													
	mm	inch	mm	inch	RQP6	T1F TW1	PL1	RTH1	SR SRF	PW2	RQG1	M2G	M1	M2	FB2	MP1	RT7 RT7N	RT8 RT8N
-12L	9,0	0.35	13,0	0.51				-4,-6										-3
-16L	12,0	0.47	16,5	0.65	-4,-5	-4,-5	-4,-5	-8		-4	-4	-4	-4,-5	-4		-4	-4	-4
-20L	15,0	0.59	20,0	0.79	-6,-8	-6,-8	-6,-8	-10,-12		-5,-6	-6,-8	-6	-6	-6	-6,-8	-6,-8	-6,-8	-6,-8
-25L	19,0	0.75	24,5	0.96	-10,-12		-10,-12				-10	-8		-8	-10	-10	-12	
-32L	23,0	0.91	30,0	1.18		-12		-16	-12,-16		-12	-12		-12		-12		
-40L	30,5	1.20	39,0	1.54							-16					-16		
-50L	38,0	1.50	46,5	1.83					-20,-24							-20		
-63L	47,0	1.85	58,0	2.28					-32									
-75L	61,0	2.40	73,0	2.87					-40									
-90L	70,5	2.78	84,5	3.33	USED TO BUNDLE HOSES													
-110L	84,0	3.31	99,0	3.90	USED TO BUNDLE HOSES													

FIRE SLEEVE FS1072



Meets or exceeds the performance requirements of SAE Aerospace Standard AS 1072.

Recommended For:

Increasing service life of hoses used in hostile environments. It is a tough, flexible insulation, which not only protects from intense external radiant heat, but also sheds molten metal splash. Consequently, damage to hoses is reduced and service life is increased. In the event of fire, hoses carrying flammable or hazardous materials remain intact longer. It can also be used to protect cables, pipes and wire ropes. RYCO FS1072 FIRE SLEEVE can also be used to reduce heat loss from hoses.

Construction:

RYCO FS1072 FIRE SLEEVE is manufactured from high bulk braided glass fibre tubing, coated with silicon rubber. The "danger red" colour of the silicon rubber is due to heavy loading of iron oxide to improve heat resistance.

Temperature Range:

Continuous exposure:
from -54°C to +260°C (-65°F to +500°F)
15 to 20 minutes:
from +260°C to +1090°C (+500°F to +2000°F)
15 to 30 seconds:
from +1090°C to +1640°C (+2000°F to +3000°F)

Typical Properties:

K Value in $\frac{BTU \cdot ^\circ F \cdot hr}{in^2}$ 1.20
K Value in $\frac{Cal \cdot cm}{sec \cdot cm^2 \cdot ^\circ C}$ 0.0004134

Flame Resistance:

7 seconds to extinguish with no afterglow.

Abrasion Resistance:

Wyzenbeck 9500 cycles, 3.1/3 lb pressure, 6 lb tension using fine emery cloth.

Oil and Fluid Resistance:

Remains functional after immersion for 120hr @ 80°F in MIL-H-5606, MIL-L-6082, Skydrol 500 LD and Skydrol 500.

Size Selection:

FS1072 FIRE SLEEVE performs best when installed with a loose fit over a hose. However, some end users insist on a tight fit for the sake of appearance. To achieve this tight fit, use compressed air to expand FIRE SLEEVE as it is installed over the hose. Length of FIRE SLEEVE will shorten in length as it increases in diameter, so allow for some extra length to compensate for this.

For a loose fit, there is no hard and fast rule to relate the Nominal Inside Diameter of FIRE SLEEVE with the Nominal Outside Diameter of the hose being covered. However, it is important to take two factors into account: hose length and hose cover.

For hoses up to 5 metres (16 ft) long, use a Nominal Inside Diameter of FIRE SLEEVE 15% larger than the Nominal Outside Diameter of hose being covered. For hoses over 5 metres (16 ft) long, use a size 20% larger. Remember the FIRE SLEEVE must slide over the outside of the hose. The longer the hose, the tougher it is to install, especially if enough tolerance on a long hose has not been allowed.

As the FIRE SLEEVE must slide over the outside of the hose, the hose covering also requires special consideration. A hose with a rough rubber cover is more difficult to slide FIRE SLEEVE over than a hose with a smooth cover.

For hose covers that have a high co-efficient of friction, be sure to allow for greater tolerance between the Nominal Inside Diameter of FIRE SLEEVE and the Nominal Outside Diameter of the hose to be covered.

Sizes FS1072-08 to FS1072-104:

Standard coil length is 15,24 metres (50 ft); or cut lengths. Lengths longer than 15,24 metres (50 ft) are also available, contact RYCO Hydraulics Customer Service.

Sizes FS1072-80 and FS1072-104:

Standard coil length is 5 metres (16.4 ft)

FS1072 FIRE SLEEVE can be slit longitudinally to form a flat FIRE TAPE which can be wound around larger diameter hoses and secured with stainless steel ties or FSTAPE-16.



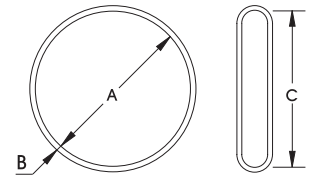
FSTAPE-16 is an iron oxide, red silicone rubber tape. It is designed to be, not only self-bonding and self-curing but to also bond and cure onto FS1072 FIRE SLEEVE.

It can be used to join separate sections of FIRE SLEEVE, as well as to repair any scuffed or nicked areas of FIRE SLEEVE. It can be used as an end sealant (instead of clamps) to prevent moisture and hydraulic oils wicking into the inner fibreglass braid.

FSTAPE-16 is supplied in a roll 25 mm WIDE x 11 metres LONG x 0,5 mm THICK (1 inch x 36 ft x 0.02 inch)

FS1072 FIRE SLEEVE Specifications

PART NO	NOMINAL INSIDE DIAMETER		NOMINAL WALL THICKNESS		NOMINAL INSIDE FLAT DIMENSION		NOMINAL WEIGHT	
	A mm	A inch	B mm	B inch	C mm	C inch	kg/m	lb/ft
FS1072-08	12,7	0.50	4,3	0.17	20,0	0.79	0,19	0.13
FS1072-11	17,5	0.69	4,3	0.17	27,5	1.08	0,29	0.19
FS1072-14	22,2	0.87	4,4	0.17	34,9	1.37	0,28	0.19
FS1072-16	25,4	1.00	4,8	0.19	39,9	1.57	0,31	0.21
FS1072-18	28,6	1.13	4,7	0.19	46,6	1.84	0,37	0.25
FS1072-20	31,8	1.25	4,7	0.19	47,4	1.87	0,36	0.24
FS1072-22	34,9	1.38	4,8	0.19	54,8	2.17	0,43	0.29
FS1072-24	38,1	2.50	4,0	0.16	58,3	2.29	0,46	0.31
FS1072-30	47,6	1.87	4,0	0.16	74,8	2.93	0,54	0.36
FS1072-32	50,8	2.00	4,0	0.16	79,8	3.14	0,55	0.37
FS1072-40	63,5	2.50	4,1	0.16	94,2	3.71	0,84	0.56
FS1072-44	69,9	2.75	5,0	0.20	109,8	4.32	0,85	0.57
FS1072-64	102,0	4.02	5,0	0.20	160,2	6.32	1,07	0.72
FS1072-80	127,0	5.00	5,0	0.20	199,5	7.89	2,26	1.52
FS1072-104	165,0	6.50	5,0	0.20	259,2	10.21	2,86	1.92



Hose Nominal Outside Diameter Reference Chart

This chart may be used as a quick reference to assist in choosing correct size of Hose Protection. Dimensions are nominal only, and are in millimetres. Divide by 25.4 to convert to inches.

HOSE SIZE			HOSE SERIES													
DN	inch	Dash	T1A T1D	T2A T2D	T3KA T3KD	DF2A	H12A H12D	H13A H13D	HSPA	HSHA	H15D	TXA2D	TJ2D	RQP1	RQP2	RQP5 T5
5	3/16	-03	11,8													
6	1/4	-04	13,4	15,0	11,9	13,6			17,9				15,0	13,4	15,0	13,2
8	5/16	-05	15,0	16,6	13,5									15,0	16,6	14,8
10	3/8	-06	17,4	19,0	15,8	17,6	20,2		20,0				19,0	17,4	19,0	17,2
12	1/2	-08	20,5	22,0	18,9	20,5	23,8		24,6			22,0		20,5	22,0	19,4
16	5/8	-10	23,7	25,2	24,1	23,7	28,2		28,2			25,2		23,7	25,2	23,4
19	3/4	-12	27,6	29,1	28,1	27,7	30,7	32,1	32,0	31,7	32,0	29,1		27,6	29,1	27,4
25	1	-16	35,7	37,7	36,2	35,8	38,0	38,7	39,7	38,2	38,2	37,7		35,7	37,7	31,4
31	1.1/4	-20	43,6	48,0			47,0	49,8		45,2	49,8	48,0			48,0	38,1
38	1.1/2	-24	50,5	54,4			53,5	57,3		53,5	57,2				54,4	44,5
51	2	-32	64,1	67,3			66,7	72,0		68,0					67,3	56,3
63	2.1/2	-40		78,6												

HOSE SIZE			HOSE SERIES													
DN	inch	Dash	RQP6	TW1 T1F	PL1	RTH1	SR SRF	PW2	RQG1	M2G	M1	M2	FB2	MP1	RT7 RT7N	RT8 RT8N
3	1/8	-02													8,2	
5	3/16	-03													10,5	
6	1/4	-04	12,7	13,4	12,7	9,4		15,0	13,4	14,3	12,7	14,3		13,5	12,6	12,6
8	5/16	-05	14,3	15,0	14,3			16,6			14,3					
10	3/8	-06	15,9	17,4	15,9	11,7		19,0	17,4	19,0	15,9	19,0	19,0	17,5	16,5	16,5
12	1/2	-08	19,8	20,5	19,8	15,4			20,5	23,8		23,8	23,0	21,4	21,2	20,6
16	5/8	-10	23,0		23,0	18,4			23,7				25,4	25,4		
19	3/4	-12	26,4	27,6	26,4	22,1	31,5		27,6	31,7		31,7		28,6	26,7	
25	1	-16				28,6	40,0		35,7					37,3		
31	1.1/4	-20					46,5							43,9		
38	1.1/2	-24					53,1									
51	2	-32					65,5									
63	2.1/2	-40					78,5									

RAWHIDE RH



Recommended For:

Protection of individual hoses from severe abrasion. Provides a cost effective method of bundling hoses together, while providing abrasion resistance to the bundle. When abrasion occurs, the thousands of tiny filaments in the sleeve bulk up, to continually renew the surface.

Construction:

Densely woven, multi-filament nylon, tubular sleeve. Black colour. Nylon is not affected by exposure to air, water, hydraulic oil and many other fluids. The inside bore of the sleeve is smooth, allowing hose to move inside the sleeve, and allowing easy installation.

Flame Resistance:

Meets Flame Resistant Designation "U.S. MSHA" of the U.S. Department of Labor, Mine Safety and Health Administration.

Temperature Range:

From - 50°C to + 121°C (- 58°F to + 250°F).

Size Selection:

Choose a size that is slightly larger than the hose or hoses to be sleeved (see chart on page 79). If sleeve is to be installed onto fitted hose assemblies, allow for the maximum outside profile of the hose fittings.

Assembly Instructions:

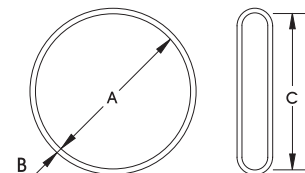
Cut the Nylon Hose Sleeve to length. The loose fibres of the cut edges can be sealed with a heat gun or hot knife, to prevent fraying. Install over hoses or hose assemblies. Secure in place using cable ties, band clamps or hose clamps.

Standard Coil Lengths:

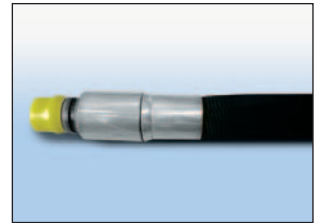
91,4 metre (300 ft) long coils; or cut lengths.

RH RAWHIDE Specifications

PART NO	NOMINAL INSIDE DIAMETER		NOMINAL WALL THICKNESS		NOMINAL INSIDE FLAT DIMENSION		NOMINAL WEIGHT	
	A mm	A inch	B mm	B inch	C mm	C inch	kg/m	lb/ft
RH-23	22,9	0.90	2,3	0.09	29,8	1.41	0,06	0.03
RH-27	26,9	1.06	2,3	0.09	39,8	1.67	0,07	0.04
RH-31	31,0	1.22	2,3	0.09	49,9	1.92	0,08	0.05
RH-36	36,0	1.42	2,5	0.10	56,6	2.23	0,09	0.06
RH-46	46,0	1.81	2,5	0.10	72,1	2.84	0,12	0.08
RH-56	55,6	2.19	2,5	0.10	87,4	3.44	0,15	0.10
RH-61	60,5	2.38	2,5	0.10	95,0	3.74	0,16	0.11
RH-67	66,8	2.63	2,5	0.10	104,6	4.12	0,17	0.12
RH-73	73,2	2.88	2,5	0.10	115,1	4.53	0,19	0.13
RH-93	93,0	3.66	2,5	0.10	146,1	5.75	0,25	0.17



LIFESAVER LS



Intro

Recommended For:

Applications where reducing the risk of injury, and improving safety are foremost; such as mines, or any applications involving personnel in close proximity to hydraulic hose assemblies.

RYCO LIFESAVER® is a “three-in-one” solution for two major safety issues and a major abrasion issue, present in many Mining and other applications for hydraulic hose assemblies:

1. It is a Hose Burst Suppressor; helps protect personnel from deadly oil injection in the event of a hose bursting.
2. It is a Whip Check; helps protect personnel from lethal, violent hose whip in the event of a hose bursting.
3. It is Extremely Abrasion Resistant; helps protect crucial hydraulic hose systems from abrading and failing.

RYCO LIFESAVER® is fitted easily around hose sizes -04 to -32.

Assembly Instructions:

RYCO LIFESAVER® is attached to the hose couplings at each end of a hose assembly. The attachment point must be outboard of the ferrules. For Male RYCOLOK couplings, a steel staple through the grommets in the LIFESAVER locks into the Prying Groove of the Male RYCOLOK, securing the LIFESAVER to the hose assembly. For coupling end style connections other than Male RYCOLOK, the LIFESAVER is clamped to the coupling at the connection end, past the ferrule. In some cases, adaptors are used to extend the connection, to provide a clamping area.

Construction:

Single or Double layer of densely woven, multi-filament nylon, tubular sleeve.

Black colour. Nylon is not affected by exposure to air, water, hydraulic oil and many other fluids.

The inside bore of the sleeve is smooth, allowing hose to move inside the sleeve, and allowing easy installation.

Flame Resistance:

Meets Flame Resistant Designation “U.S. MSHA” of the U.S. Department of Labor, Mine Safety and Health Administration.

Size Selection:

Refer to chart below for selection of 350 bar Working Pressure hoses fitted with male RYCOLOK or RYCO SUPERLOK couplings. For other hoses and connection end styles, please contact RYCO Hydraulics Technical Department.

Hose

Couplings

Adaptors

Accessories

Filters

Technical

LS LIFESAVER Specifications

RYCO HOSE	HOSE OD	NUT SIZE		RECOMMENDED MINIMUM RAWHIDE SIZE
350 bar	mm	RYCOLOK	SUPERLOK	
T24D	15,0	25,4		RH-27
T26D	19,0	30,2		RH-36
T28D	22,0	34,9		RH-36
H1212D	29,1	44,5	45,0	RH-46
H1216D	47,0	55,6		RH-61
H1320D	49,8	60,3	70,0	RH-73
H1324D	57,3			RH-85
H1332D	72,0			RH-93

SPRING GUARD 750



Recommended For:

TJ24D Specialist Jacking Hose Assemblies, to control bend radius at end of hoses to avoid excessive strain on hose couplings.
 Can also be used with PW24, T24A and T24D Hoses.
 Can be used with B and L Series Field Attachable and T200 Series BITELOK Couplings.

Construction:

Spring Steel Wire; galvanised for corrosion protection.

Assembly Instructions:

Slide Spring Guards over the hose before assembling hose ends.
 After ends are assembled, twist and push Spring Guards onto the ferrules.
 The close pitched end of the Spring Guard goes over the ferrule, and the wide pitched end goes over the hose.



PACKAGING SLEEVE RHYS



Recommended For:

Packaging and protection of hose assemblies, in transit and in storage. RYCO RHYS Packaging Sleeve is installed over the finished hose assembly. The ends may be heat sealed, or folded over and stapled, or taped closed.

Construction:

Heavy gauge low density polyethylene clear plastic tubing; printed at intervals with "RYCO Hydraulics" logo, and incorporating an area for the hose assembly Part Number to be written.

Assembly Instructions:

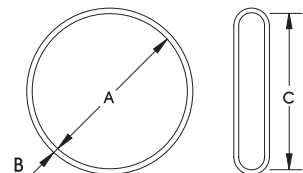
- Select correct size of RYCO RHYS Packaging Sleeve. It must be large enough to allow for the maximum outside profile of the hose couplings.
 Two sizes are available:
RHYS-75 suits most hoses up to -16 (1") hose bore.
RHYS-125 suits most hoses from -16 to -32 (1" to 2") hose.
- If required, write the hose assembly Part Number onto the Packaging Sleeve using a ball point pen.
- Slide the hose assembly into the RHYS Packaging Sleeve.
- Trim Packaging Sleeve to length, and seal ends.

Standard Coil Lengths:

350 metres (1,150 feet).

RHYS HOSE ASSEMBLY PACKAGING SLEEVE Specifications

PART NO	NOMINAL INSIDE DIAMETER		NOMINAL WALL THICKNESS		NOMINAL INSIDE FLAT DIMENSION		NOMINAL WEIGHT	
	A mm	A inch	B mm	B inch	C mm	C inch	kg/m	lb/ft
RHYS-75	48	1.9	0,15	0.006	75	3.0	0,021	0.014
RHYS-125	79	3.1	0,15	0.006	125	5.0	0,035	0.023



HOSE TAG RHYT



Recommended For:

Permanent identification of hose assemblies. RYCO RHYT Hose Tags enable hose assembly information to be attached to the hose assembly in a cost effective manner.

Two sizes of RHYT Hose Tags allow all common hose sizes to be tagged.

Information can be written or printed on the Hose Tag prior to being attached to the hose. When the Hose Tag is wrapped on the hose, a clear panel at the end of the tag wraps over to protect the written or printed information.

Hose Tag remains in position on the hose due to the adhesive backing, and the Hose Tag bends with the hose, ensuring that flexibility is not affected.

The slim profile of the attached Hose Tag reduces the risk of accidental removal. Hose Tag does not damage or cut the cover of the hose.

Construction:

Heat, oil, ozone, sunlight, and weather resistant high performance plastic.

Adhesive-backed for permanent attachment to the hose assembly. Area to write or print information, with a clear panel that wraps over to protect the hose assembly identification information.

Temperature Range:

Suitable for use with all RYCO Hoses at their published temperature ranges.

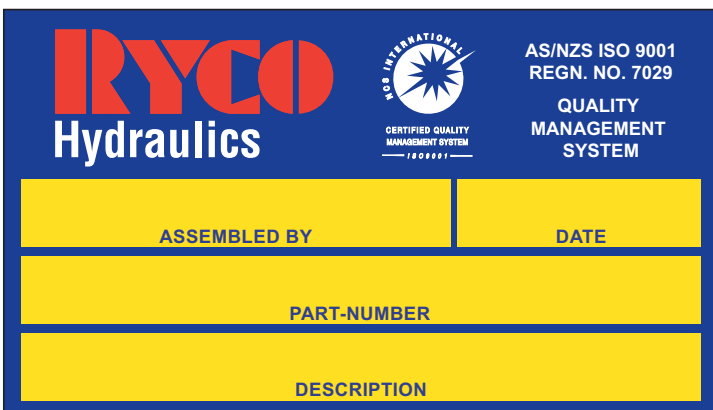
Assembly Instructions:

1. Select correct size of RYCO RHYT Hose Tag for the hose assembly that is to be identified.
RHYT-10 suits hose sizes -04 to -10 (1/4" to 5/8").
RHYT-32 suits hose sizes -12 to -32 (3/4" to 2").
2. Using a ball point pen or label printer, apply the required information onto the Hose Tag.
3. Remove the release paper from the back of the Hose Tag to expose the adhesive.
4. While ensuring that the Hose Tag is parallel to the axis of the hose, wrap the Hose Tag tightly around the hose, then continue to wrap the clear plastic panel over the Hose Tag.
5. Press firmly to ensure that the adhesive bonds.

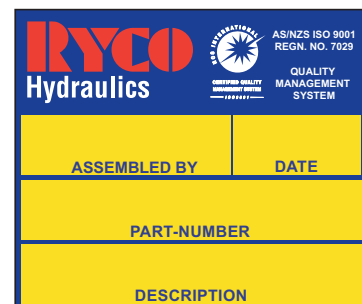
RHYT HOSE TAGS Specifications

PART NO	SUITS HOSE SIZE ID RANGE		
	DN	inch	Dash
RHYT-10	6 to 16	1/4 to 5/8	-04 to -10
RHYT-32	12 to 51	3/4 to 2	-12 to -32

Contact RYCO Hydraulics for further information.



RHYT-32



RHYT-10

(See pages 392 and 393 for “How to Order Hose Assemblies”).

Coil length of RYCO Hydraulic Hose varies according to Hose Series and Size.

Wire braid, textile braid and spiral wire reinforced hydraulic hoses are in most cases manufactured in long lengths on flexible mandrels, which results in coils of hose of different lengths. These hoses are produced and supplied in random lengths.

SR Suction Hose is manufactured on rigid mandrels of a specified length.

SR Hose 20 metres (65.6 ft)

If hose is part of a general stock order, every effort will be made to supply length closest to length ordered, but length supplied may be shorter or longer than length ordered. If ordering “a coil” of hose, please specify the length required. If a specific cut length is required, this must be specified when ordering, e.g. 19,5 metres exact length and may be subject to surcharge.

Shown in the table below is the availability of RYCO Hydraulic Hose in Coils, and on Reels or in Bulk Cartons.

Details of average quantities packed on reels (or in cartons) and their dimensions are available from RYCO on request.

HOSE SERIES	SIZE	COILS	REELS/ BULK CARTONS
T1A, T2A, T3KA	up to and including -16 (1") -20 to -32 (1.1/4" to 2")	● ●	●
DF2A	all sizes	●	●
T1D, T2D, T3KD	up to and including -16 (1") -20 to -32 (1.1/4" to 2")	● ●	●
TXA2D	up to and including -16 (1") -20 (1.1/4")	● ●	●
TJ2D	-4 and -6 (1/4" and 3/8")	●	●
H12A, H12D, H12S	all sizes	●	
H13A, H13D, H13S	all sizes	●	
HSPA, HSHA	all sizes	●	
H15D	all sizes	●	
T2S	all sizes	●	
RQP1	all sizes	●	●
RQP2	up to and including -16 (1") -20 to -32 (1.1/4" to 2")	● ●	●
RQP5	all sizes	●	
RQP6	all sizes	●	
T5	all sizes	●	
T1F	all sizes	●	
PL1	all sizes	●	
RTH1	all sizes	●	
SR	all sizes	●	
SRF	all sizes	●	
TW1	all sizes	●	
PW2	all sizes	●	●
M1	all sizes	●	●
M2	all sizes	●	
FB2	all sizes	●	●
MP1	all sizes	●	●
RT7	all sizes	●	
RT7N	all sizes	●	
RT7T	all sizes	●	
RT7TN	all sizes	●	
RT8	all sizes	●	
RT8N	all sizes	●	
RT8T	all sizes	●	
RT8TN	all sizes	●	