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Proprietary Limited

**INDUSTRIAL**

**CATALOGUE**

# SPECIALTY HOSE



Quality  
ISO 9001

SAI GLOBAL  
CERT NO QEC22270

**Industrial • Hydraulics • Ducting • Pneumatics**

## **WESTERN BRANCH**

28 Spencer Street  
Sunshine West Vic 3020  
Tel: (03) 8311 7400  
Fax: (03) 9311 2322

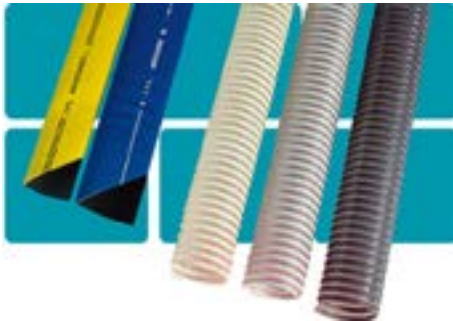
## **EASTERN BRANCH**

73-81 Bessemer Drive  
Dandenong South Vic 3175  
Tel: (03) 9794 9299  
Fax: (03) 9794 9992

## **NORTHERN BRANCH**

169-171 Northbourne Rd  
Campbellfield Vic 3061  
Tel: (03) 9305 4600  
Fax: (03) 9305 4231

## Other Catalogues Available:



► *IPL Plastic Hose*



► *Barfell Plastic Hoses & Tubes*



► *Industrial Rubber Hose*



► *Plastic Tubing & Recoil Hose*



► *Flexible Ducting*



► *Hose Clamps & Clips*

- Hose Clips
- Hose Clamps
- Normaconnect
- Oetiker Swing Couplers

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## POLYPROPYLENE SUCTION & DELIVERY HOSE

### FOR ACIDS, CHEMICALS, SOLVENTS & FUEL

#### HOSE SELECTION

The heart of a composite hose is in the materials selection.

All hoses are manufactured on the mandrel wrapped principle, using a range of materials such as polypropylene, polyester and polyamide depending on the hose application. The wire helix can be galvanised steel, aluminium, stainless steel or polypropylene coated steel.

#### HOSE CONNECTIONS

Polypropylene hose is available with end fittings in all metals compatible with the medium to be handled. Types available include fixed male, fixed flanges, polypropylene-flanges, quick action couplings to NATO and Australian standards, swivel flange, floating flanges. Special composite hoses are available for liquid gas, hot bitumen and hot tallow.

#### GENERAL DESCRIPTION

Lengthy research proved that polypropylene was the most suitable material to use in the hose wall, due

to its tensile strength and resistance to mineral acids, most alkalis and inorganic reagents.

Thus, the hose is particularly versatile:

being suitable for acids - hydrochloric, nitric, sulphuric, phosphoric

and many more, while being able to cope just as adequately with water, ink, solvents and beverages.

#### APPLICATION

Polypropylene is specifically a hose to handle a wide range of chemicals including acids and solvents, for in-plant transfer, wharf, road and rail tanker use.



## TRANSFUEL CODE 1000 HOSE

This hose is made from polypropylene fabrics and films with a PVC coated fabric cover. Inner and outer wire is mild steel galvanised. Colour: **GREEN WITH A YELLOW STRIPE**.

Manufactured to AS 2683 and BS 3492-1987. A group 1 hose where electrical continuity is maintained by both hose wires being connected to the fittings. Resistance on correctly fitted hoses range from 0.16ohm/M to 0.3ohm/M depending on bore size. Transfuel is a light suction discharge hose mainly for the transfer of petroleum products. *Temperature range:* -30°C to +80°C.



I.D. mm	O.D. mm	Bend Radius mm	Max. Work. Press. psi	Max. Work. Press. bar	Weight per metre/kg
25	32	50	100	7	1.00
32	40	75	100	7	1.20
38	50	75	100	7	1.40
50	61	80	100	7	1.70
65	76	90	100	7	2.60
75	88	125	100	7	3.10
100	112	220	100	7	4.10

All pressures are based on a safety factor of 6:1.

## TRANSOIL CODE 901 HOSE

This hose is made from polypropylene fabrics and films with a PVC coated fabric cover. Colour: **GREEN WITH A RED STRIPE (ALSO AVAILABLE BLACK WITH A WHITE STRIPE)**. Manufactured to AS 2117-1991 Type 2, Type 3, BS 3492-1987 type BX and BS 5842. A group 1 hose

where electrical continuity is maintained by both hose wires being connected to the fittings. Resistance on correctly fitted hoses range from 0.16ohm/M to 0.3ohm/M depending on bore size. Transoil is designed for the transfer of petroleum products. It is an excellent hose for conveying tallow and can be modified for high aromatic hydrocarbons. For heavy duty suction discharge for road, rail tanker use, dockside and ship to shore duties. *Temperature range:* Depending on the conveyant -20°C to +80°C.



I.D. mm	O.D. mm	Bend Radius mm	Max. Work. Press. psi	Max. Work. Press. bar	Weight per metre/kg
25	38	70	150	10	1.00
32	44	90	150	10	1.20
38	52	100	150	10	1.60
50	64	140	150	10	2.00
65	80	180	150	10	2.70
75	92	210	150	10	3.20
100	120	430	150	10	6.00
150	170	480	150	10	9.00

All pressures are based on a safety factor of 4:1.

REF: 12-1007



## TRANSCHEM CODE 951 HOSE



This hose is made from polypropylene fabrics and films with a PVC coated fabric cover. Colour: **GREY WITH A RED STRIPE**. Manufactured to AS 2117-1991 Type 2, Type 3 and BS 5842-1980. It has an inner wire of polypropylene coated steel wire and an outer wire of galvanised steel. This hose is designed for the transfer of acids and alkalines. *Temp. range:* Depending on the conveyant -30°C to +80°C.

I.D. mm	O.D. mm	Bend Radius mm	Max. Work. Press.		Weight per metre/kg
			psi	bar	
25	39	90	150	10	1.00
38	52	125	150	10	1.60
50	64	160	150	10	1.80
65	82	200	150	10	2.60
75	93	270	150	10	2.60
100	120	450	150	10	5.40

All pressures are based on a safety factor of 4:1.

## SOLFLON CODE HOSE



Composite hose made from polypropylene fabrics and films with an abrasion resistant PVC coated fabric cover. The hose has an inner wire of stainless steel 3/16 and is lined with layers of PTFE film. The outer wire is galvanised mild steel. Standard colour: **RED WITH A WHITE STRIPE**. Solflon is suitable for the transfer of the most aggressive chemicals and searching solvents. The PTFE liner has a low co-efficient of friction making the hose also suitable for the conveyance of high viscosity products such as paint. *Temp. range:* Depending on the conveyant -30°C to +80°C.

I.D. mm	O.D. mm	Bend Radius mm	Max. Work. Press.		Weight per metre/kg
			psi	bar	
25	38	90	150	10	0.90
38	52	120	150	10	1.60
50	64	150	150	10	1.80
65	80	180	150	10	2.50
75	92	210	150	10	2.90
100	120	340	150	10	5.30
150	170	480	150	10	8.20
200	230	600	150	10	11.60

All pressures are based on a safety factor of 4:1.

## SOLFLON - S CODE HOSE

Product specifications as above except comes with outer stainless steel wire.

I.D. mm	O.D. mm	Bend Radius mm	Max. Work. Press.		Weight per metre/kg
			psi	bar	
38	52	120	150	10	1.60
50	64	150	150	10	1.80
75	92	210	150	10	2.90

## SOLCHEM CODE 969 HOSE



This hose is made from polypropylene fabrics & films with a PVC coated fabric cover. Standard colour: **ORANGE WITH A BLUE STRIPE**. Manufactured to AS 2117, AS 2683, AS 2594 & BS 3492. It has an inner wire of stainless steel and an outer wire of galvanised steel. Solchem is a compromise between Transchem and Transoil hose where it is required to convey chemicals and solvents through the same hose or where static electricity is a problem and galvanised wire cannot be used because of product attack. It is a heavy duty suction discharge hose for road and rail tanker use, in-house transfer, ship-to-shore/dockside duties.

*Temp. range:* Depending on the conveyant -30°C to +90°C.

I.D. mm	O.D. mm	Bend Radius mm	Max. Work. Press.		Weight per metre/kg
			psi	bar	
25	38	70	150	10	0.90
38	52	100	150	10	1.60
50	64	140	150	10	1.80
65	80	170	150	10	2.50
75	92	200	150	10	2.90
100	120	340	150	10	5.30
150	180	700	150	10	9.00

All pressures are based on a safety factor of 4:1.

## TRANSHEAT CODE 966 HOSE



This hose is made from polyester and polyamide fabrics and films with an outer cover of fibreglass. Colour: **WHITE**. This hose has an inner and outer wire of galvanised steel. Transheat is suitable for temperatures to +180°C, however, pressure ratings should be reduced by 50% when temperatures exceed 100°C. Ideal for the transfer of hot viscous petroleum by-products such as tar and bitumen.

*Temperature range:* -20°C to +150°C continuous, 180°C in surges.

I.D. mm	O.D. mm	Bend Radius mm	Max. Work. Press.	
			psi	bar
25	38	120	100	7
38	50	150	100	7
50	65	200	100	7
65	75	250	100	7
75	90	280	100	7

All pressures are based on a safety factor of 4:1.  
Working pressure @ ambient temperature

ALL HOSES AVAILABLE IN A MAXIMUM PRODUCTION LENGTHS OF 18.3M.

## TESTING

Hoses should be hydrostatically tested with water to one and a half times maximum working pressure of hose is under pressure and immediately after draining check for electrical continuity. Note: Where the hose and coupling working pressure differ the maximum working pressure of the assembly is the lesser value. Elongation is not a satisfactory way of judging deterioration of a composite hose as by its design it is supposed to elongate. USED AND OLD HOSES SHOULD BE HYDROSTATICALLY TESTED AT LEAST EVERY 12 MONTHS TO 1.25 TIMES MAX. WORKING PRESSURE OF HOSE.



SPECIALTY HOSES

COMPOSITE HOSE



# SPECIALTY HOSES

## TEFLON HOSE

## TEFLON RTH1 STAINLESS STEEL BRAIDED

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

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.

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 H.I.S. Hose technical department.**

**TUBE:** PTFE. (TEFLON\*).

**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 complies with the SAE Impulse Test requirements at these pressures.

Suitable for use up to 204°C (399°F) at these pressures.

Dynamic 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.

Dynamic working pressure is dependant on working temperature. Refer to chart below for dynamic working pressure correction factors.



Product No.	Hose Size ID-Dash	Max. Working Pressure (Bar)	Max. Working Pressure (psi)	Min. Burst Pressure (Bar)	Min. Burst Pressure (psi)	Max. SAE 100R14 Working Pressure (Bar)	Max. SAE 100R14 Working Pressure (psi)
RTH14	04	170	2450	680	9800	103	1500
RTH16	06	165	2375	660	9500	103	1500
RTH18	08	120	1750	485	7000	55	800
RTH110	10	105	1500	420	6000	55	800
RTH112	12	85	1250	345	5000	55	800
RTH116	16	55	800	220	3200	55	800

### HOSE DIMENSIONS

Product No.	Min. Bend Radius mm	Min. Bend Radius inch	Average Weight kg/m	Nom. Hose OD mm	Nom. Hose OD Inch	Bitelok Two-Piece Crimp
RTH14	75	3	0.12	9.4	0.37	1100
RTH16	125	5	0.14	11.7	0.46	1100
RTH18	140	5.5	0.22	15.4	0.61	1100
RTH110	165	6.5	0.28	18.4	0.72	1100
RTH112	200	8	0.33	22.1	0.87	1100
RTH116	300	12	0.46	28.6	1.13	1100

### MATCHED COUPLINGS

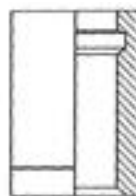


# 1100 SERIES TWO-PIECE CRIMP COUPLINGS



## FERRULE

Hose Size Inch	Dash Size	Product No.
1/4	-04	<b>1RT200-04</b>
3/8	-06	<b>1RT200-06</b>
1/2	-08	<b>1RT200-08</b>
5/8	-10	<b>1RT200-10</b>
3/4	-12	<b>1RT200-12</b>
1	-16	<b>1RT200-16</b>



## BSP THREAD

### 60° SEAT

Hose Size Inch	Thread Size Inch	Dash Size	BSPT Male Product No.	BSPP Female Product No.	BSPP Female 90° Tube Bend Product No.
1/4	1/4	-0404	<b>R01-0404</b>	<b>R02-0404</b>	<b>R26-0404</b>
3/8	1/4	-0604	<b>R01-0604</b>		
3/8	3/8	-0606	<b>R01-0606</b>	<b>R02-0606</b>	<b>R26-0606</b>
3/8	1/2	-0608	<b>R01-0608</b>		
1/2	1/2	-0808	<b>R01-0808</b>	<b>R02-0808</b>	<b>R26-0808</b>
5/8	1/2	-1008		<b>R02-1008</b>	
3/4	3/4	-1212	<b>R01-1212</b>	<b>R02-1212</b>	<b>R26-1212</b>
1	1	-1616	<b>R01-1616</b>	<b>R02-1616</b>	<b>R26-1616</b>



**R01**



**R02**



**R26**



**R09**

## NPT THREAD

### 60° SEAT

Product No.	Hose Size Inch	Thread Size Inch	Dash Size
<b>R09-0404</b>	1/4	1/4	-0404
<b>R09-0606</b>	3/8	3/8	-0606
<b>R09-0808</b>	1/2	1/2	-0808
<b>R09-1212</b>	3/4	3/4	-1212
<b>R09-1616</b>	1	1	-1616



**SPECIALTY HOSES**

**TEFLON HOSE**



H.I.S. HOSE

## SPECIALTY HOSES

TEFLON HOSE



R03

## 37° FLARE JIC MALE

Product No.	Hose Size Inch	Thread Size Inch	Tube Size Inch	Dash Size
R03-0407	1/4	7/16	1/4	-0407
R03-0408	1/4	1/2	5/16	-0408
R03-0409	1/4	9/16	3/8	-0409
R03-0609	3/8	9/16	3/8	-0609
R03-0612	3/8	3/4	1/2	-0612
R03-0813	1/2	3/4	1/2	-0812
R03-0814	1/2	7/8	5/8	-0814



R04

## 37° FLARE JIC FEMALE

Product No.	Hose Size Inch	Thread Size Inch	Tube Size Inch	Dash Size
R04-0407	1/4	7/16	1/4	-0407
R04-0408	1/4	1/2	5/16	-0408
R04-0409	1/4	9/16	3/8	-0409
R04-0609	3/8	9/16	3/8	-0609
R04-0612	3/8	3/4	1/2	-0612
R04-0813	1/2	3/4	1/2	-0812
R04-0814	1/2	7/8	5/8	-0814
R04-1014	5/8	7/8	5/8	-1014
R04-1017	5/8	1.1/16	3/4	-1017
R04-1214	3/4	7/8	5/8	-1214
R04-1217	3/4	1.1/16	3/4	-1217
R04-1621	1	1.5/16	1	-1621



R25

## 37° FLARE JIC FEMALE 45° TUBE BEND

Product No.	Hose Size Inch	Thread Size Inch	Tube Size Inch	Dash Size
R25-0609	3/8	9/16	3/8	-0609
R25-0814	1/2	7/8	5/8	-0814



R24

## 37° FLARE JIC FEMALE 90° TUBE BEND

Product No.	Hose Size Inch	Thread Size Inch	Tube Size Inch	Dash Size
R24-0407	1/4	7/16	1/4	-0407
R24-0408	1/4	1/2	5/16	-0408
R24-0609	3/8	9/16	3/8	-0609
R24-0612	3/8	3/4	1/2	-0612
R24-0812	1/2	3/4	1/2	-0812
R24-0814	1/2	7/8	5/8	-0814
R24-1014	5/8	7/8	5/8	-1014
R24-1217	3/4	1.1/16	3/4	-1217
R24-1621	1	1.5/16	51	-1621

## 45° FLARE SAE FEMALE



R54

Product No.	Hose Size Inch	Thread Size Inch	Tube Size Inch	Dash Size
R54-0407	1/4	7/16	1/4	-0407
R54-0408	1/4	1/2	5/16	-0408
R54-0610	3/8	5/8	3/8	-0610
R54-0612	3/8	3/4	1/2	-0612
R54-0812	1/2	3/4	1/2	-0812
R54-0814	1/2	7/8	5/8	-0814
R54-1014	5/8	7/8	5/8	-1014
R54-1214	3/4	7/8	5/8	-1214
R54-1217	3/4	1.1/16	3/4	-1217



## EASYFLEX CONVOLUTED TEFLON HOSE

Easyflex was developed to simplify the assembly of convoluted TEFLON hose using standard hydraulic fitting. The tube is manufactured in a seamless, extruded convoluted TEFLON. This process allows the manufacture of maximum lengths of 60 metres and gives control over product quality. When you have an application restricted by space, Easyflex hose is the ideal solution.



Hose Product No.	Size Inches	ID Min. mm	ID Max. mm	Wall Thickness mm	OD Min. mm	OD Max. mm	Min. Bend Radius	Max. Working Press. Bar	Max. Working Press. psi	Min. Burst Press. Bar	Min. Burst Press. psi
8004	1/4	6.73	7.49	0.76	11.94	12.70	17.8	172	2500	517	7500
8006	3/8	9.14	9.91	0.76	14.73	15.75	20.3	138	2000	414	6000
8008	1/2	12.45	13.21	0.89	18.29	19.30	25.4	103	1500	310	4500
8010	5/8	15.37	16.38	0.89	21.59	22.81	50.8	83	1200	248	3600
8012	3/4	18.54	19.56	0.89	24.00	25.27	63.5	69	1000	207	3000
8014	7/8	21.84	22.86	0.89	27.94	29.46	76.2	57	830	172	2500
8016	1	24.89	26.16	1.02	32.13	33.66	88.9	46	667	138	2000
8020	1.1/4	31.00	33.00	1.02	39.00	42.00	88.9	34	500	103	1500
8024	1.1/2	37.50	40.50	1.02	46.99	49.20	152.4	30	435	90	1300
8032	2	38.00	52.00	1.09	58.67	59.70	190.5	23	329	69	1000

## HYDRALINE CONVOLUTED TEFLON HOSE

Hydraline is unlike any other PTFE hose product currently available.

The PTFE inner tube is smooth bore on the inside but convoluted on the outside, to combine the ease of assembly and high flow rates of a smooth bore hose with the flexibility and kink resistance of a Hydraline FX in one product.



Hose Product No.	SS Ferrule Product No.	MS Ferrule Product No.	Actual Hose Bore Size mm	Tube Only O.D. Size mm	SS Braid O.D. mm	Min. Bend Radius mm	Max. Working Press. psi	Burst Press. psi
040102	040403	040404	6.8	8.6	9.6	19	1300	5200
060102	060603	060604	10.0	12.5	13.5	25	1200	4800
080102	080803	080804	13.6	16.4	17.5	32	850	3400
100102	101003	101004	16.7	20.2	21.6	50	750	3000
120102	121203	121204	19.8	24.3	25.6	60	625	2500



**SPECIALTY HOSES**

**CONVOLUTED  
TEFLON HOSE**



### SPECIAL APPLICATION HOSE 2807 TEFLON HOSE

**CONSTRUCTION:**

Extruded Teflon tube with single stainless steel wire braid.

**APPLICATION:**

Steam, compressor discharge and virtually all chemical applications. Not recommended for steam-cold water cycling.

**OPERATING TEMPERATURE RANGE:**

-100°F to +450°F (-73°C to +232°C) Steam, 200psi at +388°F (198°C) maximum.

**FITTINGS:**

"Super Gem" Reusable.

Product No.	Nom. ID inches	Nom. OD inches	Max. Op. Press. psi**	Min. Burst Press. psi	Min. Bend Radius	Vacuum in/Hg	Weight lbs/ft
2807-3	.13	.25	3000	12000	1.50"	28	.04
2807-4	.19	.30	3000	12000	2.00"	28	.06
2807-5	.26	.37	3000	12000	3.00"	28	.08
2807-6	.32	.43	2500	10000	4.00"	28	.10
2807-8	.42	.54	2000	8000	5.25"	28	.12
2807-10	.51	.63	1500	6000	6.50"	28	.15
2807-12	.64	.76	1200	4800	7.75"	28	.18
2807-16	.88	1.03	1000	4000	9.00"	12	.26
2807-20	1.12	1.29	625	2500	16.00"	12	.35

\*\* Steam 200 psi at +388°F (200°C) max. Engineering information is available for specific critical temperature requirements.

\* Maximum negative pressures shown for -16 and larger are suitable for hose which has suffered no external damage or kinking. If greater negative pressures are required for -16 and larger hoses, the use of an internal support coil is recommended. Use of an internal support coil in -6 and larger Teflon hose is recommended for tube support where extended or continuous service at high temperature together with low or negative pressure is expected.

### SUPER GEM REUSABLE FITTINGS FOR SMOOTH BORE TEFLON HOSE

**SAE 45° FEMALE SWIVEL**

Product No.	Thread	Hose Size
63-190990-4	7/16-20	-4
63-190990-5	1/2-20	-5
63-190990-6	5/8-18	-6
63-190990-8	3/4-16	-8
63-190990-10	7/8-14	-10
63-190990-12	1.1/16-14	-12

**MALE PIPE (NPT)**

Product No.	Thread	Hose Size
38-190627-2-4	1/8-27	-4
38-190627-4-4	1/4-18	-4
38-190627-4-5	1/4-18	-5
38-190627-4-6	1/4-18	-6
38-190627-6-6	3/8-18	-6
38-190627-6-8	3/8-18	-8
38-190627-8-10	1/2-14	-10
38-190627-12-12	3/4-14	-12

**SAE 37° (JIC) FEMALE SWIVEL**

Product No.	Thread	Hose Size
63-190600-4	7/16-20	-4
63-190600-5	1/2-20	-5
63-190600-6	9/16-18	-6
63-190600-8	3/4-16	-8
63-190600-10	7/8-14	-10
63-190600-12	1.1/16-12	-12
63-190600-16	1.5/16-12	-16
63-190600-20	1.5/8-12	-20

**COMPRESSION BALL SLEEVE**

Product No.	Tube Size	Hose Size
38-191074-8	1/2"	-8
38-191074-10	5/8"	-10

**SAE BALL**

Product No.	Thread	Hose Size
190718-8S	11/16-20	-8
190718-10-8S	13/16-18	-8
190718-10S	13/16-18	-10

**BSP FEMALE SWIVEL**

Product No.	Thread	Hose Size
07.022-4-4	1/4-19	-4
07.022-4-5	1/4-19	-5
07.022-6-6	3/8-19	-6
07.022-8-8	1/2-14	-8
07.022-12-12	3/4-14	-12
07.022-16-16	1-11	-16

## SPECIAL APPLICATION HOSE 2808 TEFLON HOSE

**Construction:** Extruded Teflon tube with two stainless steel braids.

**Application:** For use where a tight bend radius is required. Not recommended for steam-cold water cycling.

**Operating Temperature Range:** -100°F to +450°F (-73°C to +232°C)  
Steam,

200psi at +388°F (198°C) maximum.

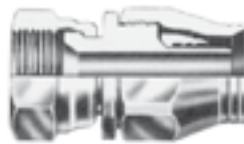
**Fittings:** "Super Gem" Reusable.



Product No.	Nom. ID inches	Nom. OD inches	Max. Op. Press. psi**	Min. Burst Press. psi	Min. Bend Radius	Vacuum Serv. in/Hg	Weight lbs/ft
<b>2808-8</b>	.42	.58	2750	11000	4.62"	28	.20
<b>2808-10</b>	.51	.68	2500	10000	5.50"	28	.26
<b>2808-12</b>	.64	.82	1750	7000	6.50"	20	.30
<b>2808-16</b>	.88	1.09	1500	6000	7.38"	15	.44

### REUSABLE FITTINGS FOR USE WITH 2808 JIC 37° FEMALE SWIVEL

Product No.	Thread	Hose Size
<b>63-190535-8</b>	3/4-16	-8
<b>63-190535-10</b>	7/8-14	-10
<b>63-190535-12</b>	1.1/16-12	-12
<b>63-190535-16</b>	1.5/16-12	-16
<b>63-190535-20</b>	1.5/8-12	-20
<b>63-190535-24</b>	1.7/8-12	-24



## AIRLESS PAINT SPRAY HOSE

As good as our airless paint spray hose has always been, our metallic braided version is superior. That's because a polyester braid reinforcement has been replaced by innovative metallic braided design that provides very little volumetric expansion which reduces the number of pump cycles and increases pump life.

At the same time the new design maximises hose kink resistance to provide flex impulse life. Other features include bonded urethane sheath for extended cover life. The nylon core tube is compatible with most paints, coatings and solvents.

*Note: Hose is available in bulk or made up hose assemblies.*

Product No.	Nom. ID inches	Min. Bend Radius	Working Pressure psi
<b>AIRLESS-04</b>	1/4	1"	4350

### FITTINGS TO SUIT

Product No.	Thread Size
<b>AIRLESS-04204</b>	1/4" NPSM Female



# SPECIALTY HOSES

AIRLESS PAINT  
SPRAY HOSE



### STRIPWOUND METAL HOSE GALVANISED/STAINLESS STEEL

**Description:** Casing made by helically winding a preformed galvanised or stainless steel strip into a fully interlocked hose-flat profile, the hose gets its flexibility and suppleness from the sliding of metal components in the interlocked section.

**Manufacture:** Galvanised Steel and Stainless Steel.

**Principal applications:** The ideal hose for conveyance of truck exhaust gas and all applications requiring a very strong and flexible hose. Very efficient mechanical protection (armouring against impact, crushing) of rubber hose, electrical cables and heat insulation of technical hoses.

**Temperature:**

Galvanised Steel: up to 350°C.

Stainless Steel: up to 750°C.

Product No.	ID mm	ID inches	OD mm	Bend Rad. mm	Bend Rad. inches
SAGRA019G	19	3/4"	22.0	140	5.5
SAGRA025G	25	1"	28.0	152	6.0
SAGRA032G	32	1.1/4"	36.0	160	6.3
SAGRA038G	38	1.1/2"	41.3	166	6.6
SAGRA044G	44	1.3/4"	41.3	166	7.5
SAGRA051G	51	2"	54.3	205	8.1
SAGRA057G	57	2.1/4"	60.3	235	9.2
SAGRA063G	63	2.1/2"	66.3	260	10.2
SAGRA076G	76	3"	79.3	305	12.0
SAGRA090G	90	3.1/2"	94.2	350	13.7
SAGRA102G	102	4"	106.2	370	14.6
SAGRA114G	114	4.1/2"	118.2	490	19.3
SAGRA127G	127	5"	131.2	515	20.2
SAGRA152G	152	6"	156.2	655	25.7
SAGRA203G	203	8"	208.0	800	31.5
SAGRA019SS	19	3/4"	22.0	140	5.5
SAGRA025SS	25	1"	28.0	152	6.0
SAGRA032SS	32	1.1/4"	36.0	160	6.3
SAGRA038SS	38	1.1/2"	41.3	166	6.6
SAGRA044SS	44	1.3/4"	41.3	166	7.5
SAGRA051SS	51	2"	54.3	205	8.1
SAGRA057SS	57	2.1/4"	60.3	235	9.2
SAGRA063SS	63	2.1/2"	66.3	260	10.2
SAGRA076SS	76	3"	79.3	305	12.0

### STRIPWOUND METAL HOSE POLYLOCK STAINLESS STEEL

**Description:** Casing made by helically winding a preformed metal strip into a fully interlocked profile. The flats are formed by a polygonal mandrel, which gives the hose anti-torsion properties. **Principal applications:** Ideal hose for conveyance of exhaust gas from truck engines. Because of the flats built into the wall, Polylock will not unwind when cut, so avoiding tack welding the hose before cutting to length.

We recommend the use of wide band sealing clamps for POLYLOCK hose, as sealing of ends can be a problem if standard U bolt type clamps are used.

Product No.	ID mm	ID inches	OD mm	Bend Rad. mm	Bend Rad. inches
POLYLOCK032SS	32	1.1/4"	38	165	6.1/2"
POLYLOCK038SS	38	1.1/2"	44	188	7.1/2"
POLYLOCK044SS	44	1.3/4"	51	225	8.7/8"
POLYLOCK051SS	51	2"	57	230	9.1/8"
POLYLOCK057SS	57	2.1/4"	63	270	10.5/8"
POLYLOCK063SS	63	2.1/2"	69	280	11"
POLYLOCK076SS	76	3"	83	360	14.1/4"
POLYLOCK090SS	90	3.1/2"	97	375	14.3/4"
POLYLOCK102SS	102	4"	111	450	17.3/4"
POLYLOCK127SS	127	5"	136	525	20.3/4"
POLYLOCK152SS	152	6"	158	610	24"

Galvanised Polylock also available



## CORRUGATED STAINLESS STEEL HOSE

**Description:** Corrugated flexible metal hose with close pitch annular corrugations from butt-welded tube. Can be reinforced by one or two metallic braids. Provides good flexibility.

**Manufacture:** Stainless steel grades: Type 321, Type 316L on request. Reinforcement by 1 or 2 stainless steel braids.

**Principal applications:** Conveyance of all fluids within a wide range of temperatures. Static assemblies or cyclic motions. Being inherently leakproof, the hose suits numerous uses in chemical, petrochemical, cryogenic, nuclear, thermal and many other fields. We strongly advise not to use in torsion.

**Temperature:** Excellent behaviour subject to the above considerations from - 269°C (liquid helium) up to + 600°C.

\* Pressure: 1 bar = 14.5psi = 100kpa

Nom. ID mm	ID inches	No. of Braids	OD mm	Nom. Press. Bars	BP Bars	Bend Rad. Static mm	Bend Rad. Constant mm	Weight kg/mt
6	1/4	0	9.7	12	-			0.05
		1	11.6	175	700	20	125	0.16
		2	13.5	200	800			0.27
10	3/8	0	15	16	-			0.09
		1	16.5	100	400	40	160	0.26
		2	18	120	480			0.43
12	1/2	0	20	12	-			0.12
		1	22	95	380	45	210	0.36
		2	24	105	420			0.59
16	5/8	0	23	7	-			0.15
		1	25	75	300	50	230	0.42
		2	27	90	360			0.69
20	3/4	0	28	5	-			0.24
		1	30	60	240	50	240	0.53
		2	32	80	320			0.83
25	1	0	36	4	-			0.33
		1	38	40	160	60	250	0.73
		2	40	65	260			1.13
32	1.1/4	0	44	3	-			0.42
		1	46.5	40	160	80	265	1.07
		2	49	60	250			1.72
38	1.1/2	0	51	2	-			0.50
		1	55	40	160	110	310	1.37
		2	58	58	235			2.24
50	2	0	66	1.5	-			0.78
		1	70	35	140	140	355	1.84
		2	73	45	180			2.90
63	2.1/2	0	81	1	-			1.31
		1	85	30	120	180	415	2.72
		2	88	40	160			4.13
75	3	0	96	0.7	-			1.55
		1	100	24	96	200	475	3.18
		2	103	33	135			4.81
100	4	0	127	0.5	-			2.26
		1	131	20	80	225	585	4.65
		2	134	26	105			7.04
125	5	0	152	0.3	-			3.30
		1	156	1.2	48	425	850	5.90
		2	159	14	56			8.50
150	6	0	174	0.2	-			4.70
		1	178	10	40	525	1050	7.30
		2	181	12	48			9.90
200	8	0	233	0.2	-	600	1100	6.30
		1	238	10	40			11.00



# SPECIALTY HOSES



STAINLESS STEEL  
METALLIC HOSE





# SPECIALTY HOSES

## FIRE HOSE

### EXCALIBUR FIRE HOSE

This is the typical hose used for fire fighting applications. It is made from woven polyester and is lined on the inside with synthetic rubber. This "canvas type" fire hose is rot proof and does not require any drying after use.

This hose is light weight and flexible making it easy to roll up and store in a compact box. This hose can also be supplied in a kit form including nozzle and couplings.

Sizes from 19mm to 102mm internal diameter and lengths up to 300m continuous.

- Genuine woven fire hose
- Light and quick to deploy
- Maintenance and hassle free
- Reliability when you need it most
- Secure stainless steel clamps if required
- Standard BSP fitting convenience
- 12 month replacement warranty

#### **25 mm Specifications:**

Length: 20 metres (Other lengths available on request)

Rating: 6700 kPa (1000 PSI)

Shut-off nozzle: Optional

Fitting: 1" BSP male & female

#### **38 mm Specifications:**

Length: 20 metres (Other lengths available on request)

Rating: 4500 kPa (650 PSI)

Shut-off nozzle: Optional

Fitting: 1 1/2" BSP male & female



### CENTURION EASY-TO-HANDLE FIRE HOSE

This is a high pressure fire hose which is also maintenance free.

Used mainly by fire brigades who require a Class H (5250kPa) bursting pressure hose.

This hose carries the approval of the Australian Army (DEF 5195 A) standard

- Easy-to-handle
- Virtually maintenance free
- 100% synthetic
- Manufactured in Australia to AS2792-1992 standard.

**Standard Diameters:** 25mm, 38mm, 50mm, 64mm, 76mm, 102mm (others available on request)

**Features:** Fully Woven Fire Hose, Space Saving, Light Weight, Low Maintenance

**Length:** Fire - 30 metres (Custom lengths are available up to 300 metres)

**Burst Pressure:** Class M - 3500 kPa; Class H - 5250 kPa

**Uses:** Fire brigade and plant wash-down



### RAPIER FIRE HOSE

This heavy duty PVC/Nitrile rubber - covered fire hose is abrasion and chemical resistant, flexible and compact. This hose is not only suitable for fire fighting applications but also plant wash-down, mine dewatering, chemical transfer and for multi-purpose industrial use.

- Hard wearing PVC/Nitrile rubber coated
- Many diameters to choose from
- Perfect for fire and industrial applications

**Standard Diameters:** 38mm, 50mm, 64mm, 76mm, 90mm, 102mm, 152mm (others available on request)

**Features:** Abrasion Resistant, Chemical Resistant, Easy to wipe clean

**Length:** Fire - 30 metres; Industry - 100 metres (Custom lengths are available up to 300 metres)

**Burst Pressure:** Class M - 3500 kPa; Class H - 5250 kPa

**Uses:** Fire brigade, plant wash-down, mine dewatering and chemical transfer



# EATON's SAFESHIELD EC910

**Choose the natural, eco-safe alternative and get the highest performance water blast hose.**

*High pressure water blasting is gaining popularity as a non-polluting safe method for industrial cleaning, stripping and removal of corrosion, paint, chemical and organic residues, Due to the extremely high pressures found in waterblast applications, safety is key and Eaton's new SAFESHIELD water blast hose is designed for ultimate protection while providing the best performance in the industry.*

*Eaton's new SAFESHIELD EC910 hose assemblies offer pressures capable of meeting the most stringent of these applications. Eaton has supplied reliable high quality water blast hose assemblies for decades.*



*Eaton's new EC910 hose, internal skive fittings and/or hose assemblies are available in sizes, -08, -12, -16 and are approved for pressures from 1100 bar (16,000 psi) to 700 bar (10,000 psi) in order to withstand the higher pressure requirements for water blast applications. EC910 has a special steel wire reinforcement construction and an excellent abrasion resistant cover resulting in increased strength while providing good flexibility for long service life and ease of handling in the field.*

## RECOMMENDATION

For correct and safe use of Eaton assemblies in waterblasting, Eaton states the following recommendations:

- Don't Mix and Match: Eaton strictly recommends the use of its integrated package for waterblasting. The use of alternative hose or fittings with Eaton products can result in poor quality of the assembly and uncertain reliability.
- In line with international regulations, all waterblasting assemblies should be tested to 1.25% of the indicated maximum static working pressure before being put in service.
- Using waterblast assemblies with pressures exceeding the stated max. working pressures leads to over stressing of the internal structure. Relief valves should be used to preserve waterblast equipment and hose assemblies.
- Pulsating pressures also lead to over-stressing of the hose internal structure and need to be avoided on use with waterblasting equipment.
- Waterblast assemblies should never be used 'hanging down': this appears to be a widespread habit, however, it leads to hose reinforcement over stress, restriction of free hose contraction/elongation and excessive stress of the fitting, which is supporting the weight of the hanging hose
- External forces leading to axial tension, twisting crushing or kinking of the hose assembly must be strictly avoided
- Resistance to leakage at the fittings of the assemblies is influenced by temperature: in order to avoid performance loss, working temperature should be maintained below +70 °C
- Any damage of the hose cover (abrasion, cuts, acid chemical attack, water corrosion of carbon steel wires) or reinforcement (crushing, twisting) requires assembly replacement to avoid the risk of unexpected hose failure or injury.

High pressure water has always been considered extremely dangerous. Anyone handling waterblasting equipment should wear adequate protective clothing, boots and eye protection.



**SPECIALTY HOSES**

**WATER BLAST HOSE**



# SPECIALTY HOSES

## WATER BLAST HOSE

## RUBBER WATER BLAST HOSE ASSEMBLIES



### Applications:

- pipe cleaning
- water treatment facilities
- marine surfaces
- stucco removal
- runway cleaning
- swimming pool cleaning
- paint removal
- bridge renovation

### Features:

- sizes -08, -12 and -16
- four heavy spiral wire construction
- Eaton's high abrasion resistant DURA-TUFF hose cover
- 2.5:1 hose safety factor
- exceeds ISO 7751 performance
- meets global specifications EN1829-2 (impulse) and AS/NZ4233.2

### Benefits:

- customer security, knowing that the assemblies were made by professionally trained Eaton personnel
- superior hose flexibility provides ease of use in the field

## SAFESHIELD WATERBLAST EC910

**Construction:** Synthetic rubber inner tube, 4 heavy spiral wire reinforcement and highly abrasion resistant DURA-TUFF synthetic rubber cover

**Approved applications:** Waterblast service with water water-soap emulsion exceeds ISO 7751 requirements

**Operating temperature range:** Max. operating temperature -40C to +93C

Product No.	Hose Size ID mm	Hose Size ID inch	Hose Size OD	Max. Working Pressure (psi)	Burst Pressure (psi)	Min. Bend Radius inch	Weight kg/m
EC910-08	12.7	0.50	0.97	16000	40000	9"	1.12
EC910-12	19.0	0.75	1.29	14500	36250	11"	1.75
EC910-16	25.4	1.00	1.59	10000	25000	12"	2.25



\* EC910-16 Manufactured on request

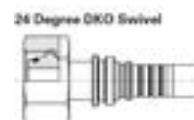
## 24 DEGREE DKO SWIVEL

Product No.	Thread Metric	Hose Size
1F50554M1208-S	M24 x 1.5	12



## 24 DEGREE DKO SWIVEL

Product No.	Thread Metric	Hose Size
1F50554M2012-S	M36 x 2	19



## GUARDIAN PROTECTION SLEEVE

*Eaton's Guardian Sleeve offers a higher level of safety in addition to providing longer hose life.*

*To protect your operators and nearby personnel while operating water blast equipment, we recommend the use of Eaton's burst suppression Guardian sleeve. Eaton's Guardian sleeve will deflect a hose burst up to 1100 bar (16000 psi) providing peace of mind when using high pressure products.*

*The Guardian sleeve also has excellent abrasion resistance so it provides longer hose life – it adds an extra layer of protection for the hose assembly from excessive cover wear.*

## GUARDIAN SLEEVE - HOSE BURST SUPPRESSION

Capable of containing hose pressure up to 16,000 psi. Sustained 4,000 psi pin hole deflection from focussed 1mm pin hole. Survives up to 250,000 abrasion cycles ISO 6945

Product No.	Hose Size DN	Galvanised Steel Clamp Part #	Max. ID of Clamp in
FF90754-157	12	FF9217-0630s	1.88
FF90754-209	19	FF9217-0648s	2.88
FF90754-238	25	FF9217-0648s	2.88



## EC600 X-FLEX

### 1/2 Bend Radius 420 bar (6100 psi) Spiral Hydraulic Hose

Eaton is excited to introduce EC600, a more flexible SAE100R15 spiral hose to complement the current offering of Eaton's FC500 X-FLEX SAE 100R13 spiral hose offering. FC500 and EC600 were designed to perform in very demanding high impulse applications at 50% of the SAE 100R13 and SAE 100R15 bend radii, respectively.

In order to install a spiral hose in a much smaller area, Eaton designed our X-FLEX spiral hoses to be up to 38% more flexible for easier handling during installation. EC600 hose meets and exceeds SAE 100R15 performance at 1/2 the bend radius of a standard SAE 100R15 hose. EC600 has been tested to beyond SAE 100R15 impulse cycle requirements with an operating pressure of 420 bar (6100 psi). EC600 high pressure spiral hydraulic hose was designed to meet the most demanding applications where very high pressure and the need for easy installation in tight spaces come together. EC600 X-FLEX exceeds SAE 100R15 performance and ISO 18752-DC.

## EC600 X-FLEX

Four spiral wire / Six spiral wire



Product No.	Hose Size ID mm	Hose Size OD mm	Max. Operating Pressure psi	Burst Pressure psi	Min. Bend Radius mm
EC600-12	19.1	33.3	6100	24,400	135
EC600-16	25.4	39.4	6100	24,400	165
EC600-20	31.8	50.5	6100	24,400	225

Construction:

- synthetic rubber tube
- 4 and 6 spiral wire reinforcement
- High abrasion resistant cover
- Ink transfer layline

Operating temperature:

-40C to +121C



SPECIALTY HOSES

HYDRAULIC HOSE





## ULTRA HIGH PRESSURE WATER-BLAST HOSE – THERMOPLASTIC

### SPIR STAR PRODUCT OVERVIEW

For water-blasting we recommend thermoplastic high-pressure hoses reinforced with spiralized high-tensile steel. For this industry, we provide hoses with 2-, 4-, 6- and 8 layers tested at working pressure ratings of up to 3200 bar.

Our top sellers in this area include the following types of hoses:

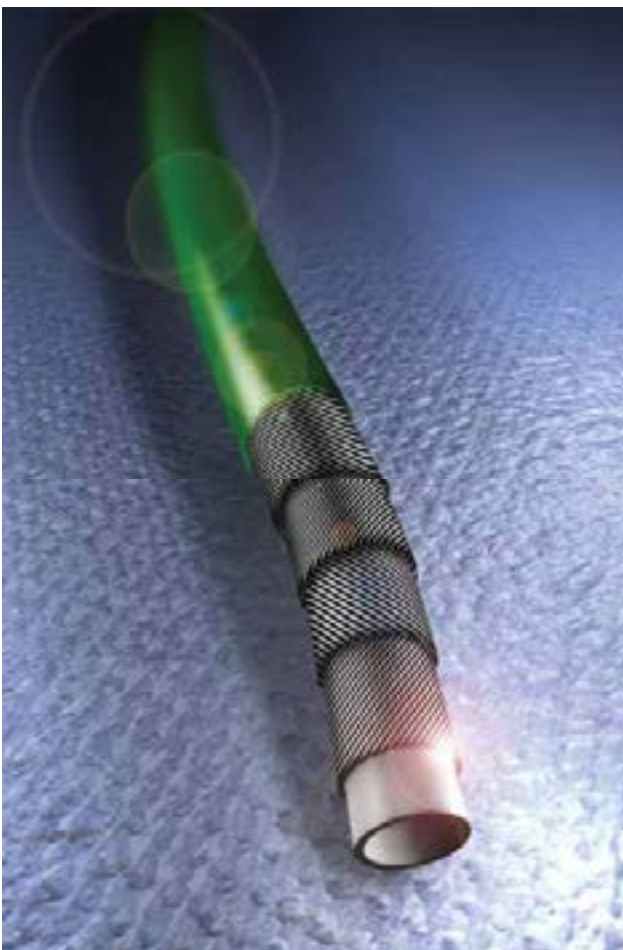
5mm UHP	Inner hose diameter	4.5mm	Working pressure rating	3200 bar
6mm UHP	Inner hose diameter	5.8mm	Working pressure rating	3200 bar
8mm UHP	Inner hose diameter	7.6mm	Working pressure rating	3200 bar
13/2WR	Inner hose diameter	12.8 mm	Working pressure rating	1040 bar

### COMPREHENSIVE KNOW-HOW DERIVED FROM OUR NUMEROUS YEARS OF EXPERIENCE

We have many years of hand-on experience in the water-blasting sector, which we've used to develop & produce hose assemblies that are used for concrete removal, sewer cleaning, water jet cutting, pipe cleaning, heat exchanger tube cleaning, and surface preparation, as well as the removal of deposits of all kinds.

Our advanced Hightech Duralife Flex™ Hose was developed for the use in tube cleaning applications. Due to the special manufacturing process of applying the polyamide outer cover, the abrasion to the cover is reduced as proven in field tests and therefore the working life will increase.

Our Blast Pro™ series of fittings was developed for cleaning smaller I.D. tubes like those found in heat-exchanger. By decreasing the sleeve O.D., larger I.D. hoses can be used in smaller tubes producing greater efficiency. With a sleeve length 50% shorter than conventional lances, it makes quick work of tight bends and U-tubes.



E	STAINLESS STEEL
F	PTFE INNER CORE
H	REINFORCED VERSION
HCR	INCREASED EXTERNAL PRESSURE RESISTANCE
HT	FOR VERY HIGH TEMPERATURES
K	BRAIDED LAYER
L	EXTREMELY FLEXIBLE
M PA11	INNER CORE FOR METHANOL SERVICE
PPA PVDF	INNER CORE, PA OUTER COVER
R	REINFORCED OUTER COVER
DC1 DC1	DOUBLE COVER (THE NUMBER STANDS FOR THE MATERIAL COMBINATION)
S	SEAWATER RESISTANT
T	ARAMIDE FIBRE
W	WIDE LAYERS OF SPIRALIZED WIRE 5/4HT ID: 5MM
LAYERS:	4
HIGH TEMPERATURES (HT)	



### SAFETY INFORMATION

- Trained personnel may only execute the installation of our product and setting it into operation.
- Check the high-pressure hose assemblies for kinks, wear and tear, corrosion, cracks and other damages each time before using them.
- High-pressure hose assemblies showing kinks, cracks, corrosion, leaking fittings or damages of the outer cover reaching down to the reinforcing steel wires have to be exchanged.
- Use only high-pressure hose assemblies whose allowed working pressure you know.
- Do not use high-pressure hose assemblies that leak.
- Use only clean, filtered media in order to extend the “life span” of the high-pressure hoses.
- If a malfunction is suspected, the product or the machine it was mounted to shall be put out of operation immediately and the high-pressure hose assembly exchanged.



### DANGERS

- Danger by a bursting hose assembly. A threat can originate from fragments flying around.
- Danger by a leaking hose assembly. Leaking media, especially if emerging in a very thin jet, may cause serious cuts and even cut-off limbs. Hot media may lead to scalding. Admixtures to the water may cause irritations and causticizations.
- Danger by a hot medium inside the hose assembly. Touching the hot surface of the hose assembly may lead to burns.
- Danger by the alteration of the length of the hose assembly. High-pressure hose assemblies shorten under pressure. This can make the operator lose his stability, and the hose assembly loses its operational safety.
- Danger by hose fittings and components joining hose assemblies. Threats can originate from hose fittings and components joining hose assemblies if these come loose, break off or are pulled out as this may lead to an uncontrollable lashing movement of the hose assembly (whip effect).
- Danger by hoses lying about. Hoses lying about are a potential danger for stumbling.



### MARKING

Hose type and batch number are printed on the hose at regular distances. The ferrules are marked with the max. authorized working pressure, the name of the manufacturer and the date of production (quarter of the year and year).

### PURPOSE

SPIR STAR High-pressure hose is thought for applications with water using pressure sources with low pulsation rates ( $\pm 5\%$ ).

The following working temperatures are allowed:

Product series	Allowed working temperatures
In general	-30 °C to +60 °C
Series HT	-20 °C to +150 °C
Series PPA	-20 °C to +80 °C
Series F*)	-70 °C to +200 °C



If SPIR STAR High-pressure hoses are to be used with aggressive media like alkaline solutions and acids for example, it is necessary to send a written inquiry to SPIR STAR AG before using them.

If SPIR STAR High-pressure hoses are to be used with gaseous media, a safety factor of 1:6 between working pressure and burst pressure is to be observed. In this case the outer cover of the hose has to be pricked (perforated) every 10 mm with a suitable device or a spring-actuated prick punch. The maximum working pressure given on the ferrules must not be exceeded under any circumstances. This applies also to pressure peaks.

\* **CAUTION** – IMPORTANT NOTE: Please contact our sales department for any technical information outside of the above specifications for these products.



Proprietary Limited



**ON-SITE INSTALLATION & SERVICE**

**1800 803 222**

**FLUID POWER SERVICE**