# HYDRAULIC HOSE CATALOG











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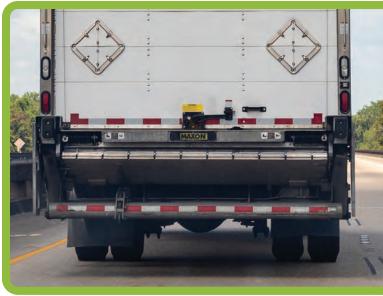
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### INTRODUCTION

Next time you're in traffic, take a look at the back of any medium or heavy-duty truck/trailer and you'll likely find **ProPulse hose** playing a key role in fluid conveyance to power the hydraulic lift gate.

If you broaden your view, you'll find ProPulse innovates, engineers and manufactures custom fluid conveyance solutions for many well-known OEM brands. Our hoses are hard at work throughout mobile and off-highway hydraulic markets around the world.





Our technical service sets us apart from most hose suppliers, thanks to our extensive engineering and design expertise. We collaborate with our customers to ensure development of practical, reliable solutions that fit their individual needs.

As manufacturers, we can satisfy even the strictest OEM requirements in various industries such as construction, agriculture, forestry, material handling, utility, recreational vehicles, transportation and more.

Our customers depend on us, not only for superior quality hose, but for genuine, competent customer service and 100% on-time delivery. We are committed to uptime. Be it our line or our customer's line, line down is never an option.

These core characteristics combined give our customers confidence that we will support their production lines better than anyone else. So, next time you need a hose solution...take a look at ProPulse.



Dependable hydraulic hose assemblies for your unique requirements.



# ASSEMBLIES

## **MEASURING THE LENGTH OF A CRIMPED HOSE ASSEMBLY**

The overall length of the hose assembly is measured to the sealing surface of straight fittings or to the centerline of elbow fittings. See below:

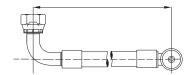
Length Over Nipples



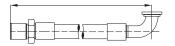
Length Between Male Nipple and Center of Female Nipple



Length Between Center Line of Angle and Banjo



Length Between Male Nipple and Center of Angle



LENGTH TOLERANCES FOR HO	OSE ASSEMBLIES
OVERALL ASSEMBLY LENGTH	TOLERANCE
Up to 300mm (11.811") included	± 3mm (±0.118")
Over 300mm (11.811") through 450mm (17.717") included	± 5mm (± 0.197")
Over 450mm (17.717") through 900mm (35.433") included	± 7mm (± 0.276")
Over 900mm (35.433")	± 1%

When not specified by customer print, the above tolerances will be applied to all hose assemblies. These tolerances are standard as specified by the SAE J517 standard for hydraulic hose.



### **SELECTING** THE PROPER HOSE ASSEMBLY

The "STAMPED" acronym is used to help remember the most important hose attributes to consider when selecting a hose assembly: Size, Temperature, Application, Material, Pressure, Ends and Delivery.



### **SIZE**

What is the size of the hose? Inside Diameter (I.D.)? Outside diameter (O.D.)? Coupled length (OAL)?



### **TEMPERATURE**

> What is the temperature of fluid being conveyed and the enviornmental conditions?



### **APPLICATION**

How is the hose being used? Suction? Discharge? Pressure? Conditions to consider (i.e. abrasion, flexing and routing)?

# M

### **MATERIAL**

> What material is being conveyed through the hose (composition and concentration)?



### **PRESSURE**

> What is the maximum pressure (PSI) or suction (in/HG)? SAE or DIN rating? Bend Radius?



### **ENDS**

> What fittings do you want on each end or do you want it open ended? SAE rating?



### **DELIVERY**

> When do you want the hoses? (Consider time for delivery, including testing, quality assurance and packaging.)



### S.T.A.M.P.E.D. WORKSHEET NAME: COMPANY: At ProPulse, we know that some projects require a custom PHONE #: hose solution. To help us quote and build the perfect hose E-MAIL: assembly for your application, please complete this worksheet. DATE: S - SIZE What size is the hose? Outside diameter (OD): > Inside diameter (ID): Coupled length (OAL): T - TEMPERATURE Temperature of product being transfered: Min: Max: Temperature of the environment: Min: Max: A - APPLICATION How is the hose being used? ☐ Suction ☐ Discharge ☐ Pressure M - MATERIAL What material is going through the hose? (Please include product that is normally transferred, as well as any cleaning fluids.) P - PRESSURE What is the maximum pressure (PSI) or suction (in/HG)? SAE or DIN rating? Bend Radius? E - ENDS What fittings do you want on each end or do you want it open ended? (Type: elbow / long drop / male / female / swivel / plating) D - DELIVERY When do you want the hose? Estimated annual usage (EAU) and typical purchase quantities: Testing required? ☐ Yes □ No Certification required? ☐ Yes □ No **OTHER NOTES** Any issues with your current hose? Or objectives you are trying to address (i.e. flexibility, abrasion, environment, routing)?

### **REQUEST A QUOTE TODAY!**







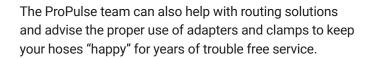
### **HOSE INSTALLATION** AND BEST PRACTICES

The ProPulse team can assist customers with harsh applications by providing the proper solution to meet their need. This can include ozone and UV resistant thermoplastic hose, intermediate abrasion resistant ROCK cover, or the extreme duty SHIELD cover.

For additional protection, a hose wrap or nylon cover can be added to help protect the hose from the rigor of use.



**FIGURE 1** The hose on the left is too short, not allowing for the proper bend radius. This causes strain on the crimp joint. The hose on the right shows the correct length, providing correct bend radius.



Following is a list of basic drawings that help with every day hose routing issues customers face. This guide can help aid in the proper routing and installation of hose assemblies in various applications.



FIGURE 6 Support clamps are a good tool to use when trying to limit hose wear due to abrasion. Clamps can be used to isolate hose and hold them away from abrasive surfaces or environments.

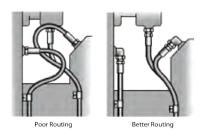


FIGURE 2 The example on the left shows cluttered hose routing that could induce unnecessary hose wear and shortened hose life. A better choice of end fittings and use of adapters helps clean up the routing, facilitating longer hose life and ease of maintenance.

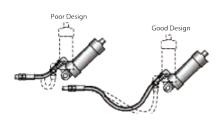
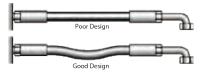


FIGURE 7 When routing hose, all areas of movement must be noted, along with the way the hose will move. No part of the system movement should cause the hose bend radius to be exceeded or cause undue stress at the crimp joint.



**FIGURE 3** Hose length should allow for the flexing of hose when there is contraction and expansion during use.

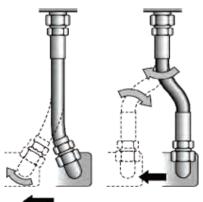


Figure 8 Choosing the correct fittings can improve the life of the hose. In this case, swivel ends are used to limit the torsion in the hose. Swivel ends can aid in maintenance and replacement.

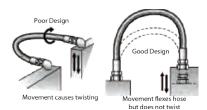


FIGURE 4 Be aware of hose routings with torsion and twisting. Hoses should be routed to limit torsion as it can have a negative effect on the crimp integrity and can reduce hose life.

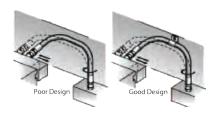


FIGURE 5 The proper use of clamps can help relax the hose when there is movement in more than one plane. Caution must be taken to use the correct clamp so the cover of the hose is not damaged and to provide enough length of hose on either side of the clamp to allow for movement.



# HYDRAULIC HOSE



# **COVER OPTIONS** WIRE SPIRAL/BRAIDED RUBBER

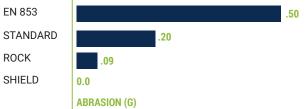




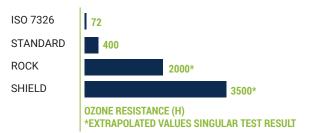


COVER COMPARI	SON CHART		
FEATURE	STANDARD	ROCK	SHIELD
Wear and Abrasion Resistance when Compared to EN/ISO Requirements	Improved	Very High	Ultimate
Ozone Resistance Compared to EN/ISO Requirements	Improved	Very High	Outstanding
Embossed Lay Line (Rubber) for Permanence	<b>✓</b>	<b>~</b>	
Quality Control Traceability on Each Hose/Assembly	<b>✓</b>	<b>✓</b>	<b>~</b>
Flame Retardant		<b>~</b>	<b>~</b>
MSHA Approved Cover is Standard	<b>✓</b>	<b>~</b>	<b>✓</b>
Salt Water and Weather Resistant		<b>✓</b>	<b>✓</b>
Ultra High Molecular Weight Polyethylene (UHMWPE) Protection			<b>/</b>





### **OZONE RESISTANCE ACC. TO ISO 7326**





### THERMOPLASTIC VS RUBBER

Thermoplastic high pressure hose has the same technical specifications as its rubber counterpart. However, thermoplastic hydraulic hose provides numerous benefits which allow it to outperform its rubber equivalent in certain applications. Below are some of the advantages of thermoplastic over rubber. Contact the ProPulse customer service team to see if switching to thermoplastic hydraulic hose can benefit you!

### ABRASION RESISTANT MATTE COVER

ProPulse thermoplastic hose uses a unique, matte textured finish which aids in resistance to abrasion. The distinctive covering gives the impression of a rubber hose and removes the stigma of a "cheap", shiny thermoplastic product. The polyurethane cover and overall lighter weight also provide better abrasion resistance when compared to a wirebraided rubber hose.

### UNLIMITED SHELF LIFE

Rubber never stops curing and UV exposure accelerates the curing process; therefore, rubber hose has a shelf life of only 6 years. Thermoplastic hose, however, is made with urethane, which is UV, ozone and abrasion resistant and has an unlimited shelf life.

### **HIGH IMPULSE LIFE**

Our thermoplastic hose has been impulse tested per SAE protocol to meet 1 million impulses or over.

### **NO PINHOLES**

Many rubber hose manufacturers reuse materials and produce hose using a mandrel. Both of these practices can greatly contribute to contamination, which is the primary cause of pinholes in hydraulic hoses. ProPulse thermoplastic hose is made with 100% virgin material (no regrind) and is produced without a mandrel.

### 20% LIGHTER THAN RUBBER HOSE

Depending on the length, thermoplastic hose can offer +/- 20% decrease in weight compared to rubber.

### UV, OZONE AND CHEMICAL RESISTANCE

Thermoplastic hose utilizes a polyurethane cover which offers excellent resistance to chemicals, as well as UV and ozone resistance, in comparison to rubber. This is a huge advantage as hydraulic hose is often exposed to sunlight. Rubber hose can crack over time, exposing the wire braid and eventually leading to premature failure. With a thermoplastic hose, there is no cracking due to the resilience of the cover.

### MADE IN THE USA

ProPulse thermoplastic hose is manufactured at our facility in Peosta, lowa. By manufacturing in the U.S.A., our lead times are greatly reduced, allowing us to react quickly to increases in customer demand. Rubber hose, especially in today's supply chain, has lengthy lead times and large demand. Our thermoplastic hydraulic hose provides a better alternative, more quickly—many times in just 7-10 days.



# ISOBARIC HOSE SELECTION GUIDE

			PROPU	LSE HOSE SI	ERIES				
	DN	6	10	12	16	19	)	25	31
PROPULSE HOSE SERIES	DASH	-4	-6	-8	-10	-12	2	-16	-20
HOOL OLINEO	INCH	1/4	3/8	1/2	5/8	3/4	4	1	1 1/4
1000 SERIES	7 MPA / 1000 PSI	1000	1000	1000	1SC	180	0	1SC	1000
3000 SERIES	21 MPA / 3000 PSI	1700	1700	1700	1700	1700		1700	Coming Soon
4000 SERIES	28 MPA / 4000 PSI	1900	1900	1600	1900	1900	4000*	4000*	Coming Soon
5000 SERIES	35 MPA / 5000 PSI		5000	5000*	5000*	5000	D*	5000*	5000*
6000 SERIES	42 MPA / 6000 PSI					6000	O*	6000*	6000*

<sup>\* 4</sup> or 6 wire spiral



# SAE J517 HOSE SELECTION GUIDE

	,	WORK	ING P	RESS	URE (F	PSI)							
	DN	3	5	6	8	10	12	16	19	25	31	38	51
PROPULSE	DASH	-02	-03	-04	-05	-06	-08	-10	-12	-16	-20	-24	-32
HOSE SERIES	INCH	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1	1 1/4	1 1/2	2
100 SERIES	SAE 100R1 AT, EN 853 1SN, RUBBER HYDRAULIC HOSE		3625	3262	3117	2610	2320	1885	1522	1276	913	725	580
200 SERIES	SAE 100R2 AT, EN 853 2SN, RUBBER HYDRAULIC HOSE			5800	5075	4785	3987	3625	3117	2392	1812	1305	1160
FLEX400 SERIES	SAE 100R4, RUBBER HYDRAULIC SUCTION HOSE								300	250	200	150	100
700 SERIES	SAE 100R7, THERMOPLASTIC HYDRAULIC HOSE	3045	3045	3045	3045	3045	2030						
800 SERIES	SAE 100R8, THERMOPLASTIC HYDRAULIC HOSE		5075	5075	4500	4060	3552						
1200 SERIES	SAE 100R12, EN 856 R12, MULTI- SPIRAL RUBBER HYDRAULIC HOSE					4060	4060	4060	4060	4060	3045		
1300 SERIES	SAE 100R13, EN 856 R13, MULTI- SPIRAL RUBBER HYDRAULIC HOSE								5075	5075	5075	5075	5075
1400 SERIES	SAE 100R14, SAE J517, STAINLESS STEEL BRAIDED PTFE					See (	Catalog P	age for D	etails				
1500 SERIES	SAE 100R15, MULTI-SPIRAL RUBBER HYDRAULIC HOSE					6090	6090		6090	6090	6090	6090	6090
1600 SERIES	SAE 100R16, EN 857 2SC, COMPACT RUBBER HYDRAULIC HOSE			5800	5075	4785	4060	3687	3117	2392	1812		
1700 SERIES	SAE 100R17, ISO 18752, COMPACT RUBBER HYDRAULIC HOSE			3045	3045	3045	3045	3045	3045	3045			
1800 SERIES	SAE 100R18, THERMOPLASTIC HYDRAULIC HOSE	3045	3045	3045	3045	3045	3045						
1900 SERIES	SAE 100R19, ISO 18752, COMPACT RUBBER HYDRAULIC HOSE			4060		4060	4060	4060	4060				
1SC SERIES	EN 857 1SC, COMPACT RUBBER HYDRAULIC HOSE			3262	3117	2610	2320	1885	1522	1276			
2SC SERIES	EN 857 2SC, COMPACT RUBBER HYDRAULIC HOSE			5800	5075	4785	3988	3625	3118	2393			
4SH SERIES	EEN 856 4SH, MULTI-SPIRAL RUBBER HYDRAULIC HOSE								6090	5510	4700	4200	3625
4SP SERIES	EN 856 4SP, MULTI-SPIRAL RUBBER HYDRAULIC HOSE					6450	6020	5075	5075	4060	3045		



# **HYDRAULIC HOSE** SERIES INDEX

	PROPULSE HOSE SERIES	
HOSE SERIES	DESCRIPTION	PAGE
100 SERIES	SAE 100R1 AT, EN 853 1SN, RUBBER HYDRAULIC HOSE	15
200 SERIES	SAE 100R2 AT, EN 853 2SN, RUBBER HYDRAULIC HOSE	16
FLEX400 SERIES	SAE 100R4, RUBBER HYDRAULIC SUCTION HOSE	17
700 SERIES	SAE 100R7, THERMOPLASTIC HYDRAULIC HOSE	18
800 SERIES	SAE 100R8, THERMOPLASTIC HYDRAULIC HOSE	19
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1000 SERIES	ISO 18752, COMPACT RUBBER HYDRAULIC HOSE	21
1200 SERIES	SAE 100R12, EN 856 R12, MULTI-SPIRAL RUBBER HYDRAULIC HOSE	22
1300 SERIES	SAE 100R13, EN 856 R13, MULTI-SPIRAL RUBBER HYDRAULIC HOSE	23
1400 SERIES	SAE 100R14, SAE J517, STAINLESS STEEL BRAIDED PTFE	24
1500 SERIES	SAE 100R15, MULTI-SPIRAL RUBBER HYDRAULIC HOSE	25
1600 SERIES	SAE 100R16, EN 857 2SC, COMPACT RUBBER HYDRAULIC HOSE	26
1700 SERIES	SAE 100R17, ISO 18752, COMPACT RUBBER HYDRAULIC HOSE	27
1800 SERIES	SAE 100R18, THERMOPLASTIC HYDRAULIC HOSE	28
1800NC SERIES	SAE 100R18, NON-CONDUCTIVE THERMOPLASTIC HYDRAULIC HOSE	29
1900 SERIES	SAE 100R19, ISO 18752, COMPACT RUBBER HYDRAULIC HOSE	30
4000 SERIES	ISO 18752, EN 856 / SAE100R12, MULTI-SPIRAL RUBBER HYDRAULIC HOSE	31
5000 SERIES	ISO 18752, EN 856 / SAE 100R13, MULTI-SPIRAL RUBBER HYDRAULIC HOSE	32
6000 SERIES	ISO 18752, EN 856 / SAE 100R15, MULTI-SPIRAL RUBBER HYDRAULIC HOSE	33
1SC SERIES	EN 857 1SC, COMPACT RUBBER HYDRAULIC HOSE	34
2SC SERIES	EN 857 2SC, COMPACT RUBBER HYDRAULIC HOSE	35
4SH SERIES	EN 856 4SH, MULTI-SPIRAL RUBBER HYDRAULIC HOSE	36
4SP SERIES	EN 856 4SP, MULTI-SPIRAL RUBBER HYDRAULIC HOSE	37



### SAE 100R1 AT / EN 853 1SN RUBBER HYDRAULIC HOSE



IOO SERIES	HOSE											***				к	G G
PROPULSE		HOSE SIZE			E I.D. AX)	HOSE	E O.D. AX)	WOR PRES			OOF SURE	_	RST		RADIUS IN)	HO WEIG	SE
HOSE PART NO.	DN	DASH	INCH	MM	INCH	MM	INCH	BAR	PSI	BAR	PSI	BAR	PSI	MM	INCH	KG/M	LBS/ FT
100 - 03	5	-3	3/16	5.4	0.21	12.5	0.49	250	3625	500	7250	1000	14500	90	3.54	0.16	0.11
100 - 04	6	-4	1/4	7.0	0.28	14.1	0.56	225	3262	450	6524	900	13050	100	3.94	0.19	0.13
100 - 05	8	-5	5/16	8.5	0.33	15.7	0.62	215	3117	430	6234	860	12470	115	4.53	0.22	0.15
100 - 06	10	-6	3/8	10.1	0.40	18.1	0.71	180	2610	360	5220	720	10440	125	4.92	0.28	0.19
100 - 08	12	-8	1/2	13.5	0.53	21.5	0.85	160	2320	320	4640	640	9280	180	7.09	0.4	0.27
100 - 10	16	-10	5/8	16.7	0.66	24.7	0.97	130	1885	260	3770	520	7540	205	8.07	0.47	0.32
100 - 12	19	-12	3/4	19.8	0.78	28.6	1.13	105	1522	210	3044	420	6090	240	9.45	0.59	0.39
100 - 16	25	-16	1	26.4	1.04	36.6	1.44	88	1276	176	2552	352	5104	300	11.81	0.88	0.59
100 - 20	31	-20	1 1/4	33.0	1.30	44.8	1.76	63	913	126	1826	252	3654	420	16.54	1.04	0.7
100 - 24	38	-24	1 1/2	39.3	1.55	52.0	2.05	50	725	100	1450	200	2900	500	19.69	1.41	0.95
100 - 32	51	-32	2	52.0	2.05	65.9	2.59	40	580	80	1160	160	2320	630	24.80	2.04	1.37

### **HOSE CONSTRUCTION:**

- >Inner Tube: Oil and water resistant synthetic rubber
- > Reinforcement: One layer of high tensile steel braid
- > Cover: Oil, abrasion and weather resistant synthetic rubber

### **MAIN APPLICATIONS:**

Low to medium pressure hydraulic and return lines

### **TEMPERATURE RANGE:**

- >-40°F / +212°F
- >-40°C / +100°C

### **INTERMITTENT SERVICE:**

- >-40°F / +257°F
- >-40°C / +125°C

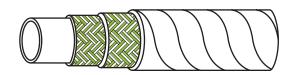
# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

- >SAE 100R1
- >EN 853 1SN
- >ISO 1436-1 1SN / R1AT

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- Available in STANDARD, ROCK and SHIELD cover options.



### SAE 100R2 AT / EN 853 2SN RUBBER HYDRAULIC HOSE



200 SERIES	HOSE			6	<b>→</b>							**				К	G G
PROPULSE		HOSE SIZE		HOS (M.		HOSI (M.	E O.D. AX)	WOR PRES			DOF SURE		RST		RADIUS IN)	HO	SE
HOSE PART NO.	DN	DASH	INCH	ММ	INCH	ММ	INCH	BAR	PSI	BAR	PSI	BAR	PSI	ММ	INCH	KG/M	LBS/ FT
200 - 04	6	-4	1/4	7.0	0.28	15.7	0.62	400	5800	800	11600	1600	23200	100	3.94	0.31	0.21
200 - 05	8	-5	5/16	8.5	0.33	17.3	0.68	350	5075	700	10150	1400	20300	115	4.53	0.43	0.29
200 - 06	10	-6	3/8	10.1	0.40	19.7	0.78	330	4785	660	9570	1320	19140	125	4.92	0.51	0.34
200 - 08	12	-8	1/2	13.5	0.53	23.0	0.91	275	3987	550	7974	1100	15950	180	7.09	0.65	0.44
200 - 10	16	-10	5/8	16.7	0.66	26.2	1.03	250	3625	500	7250	1000	14500	205	8.07	0.74	0.5
200 - 12	19	-12	3/4	19.8	0.78	30.1	1.19	215	3117	430	6234	860	12470	240	9.45	0.84	0.56
200 - 16	25	-16	1	26.4	1.04	38.9	1.53	165	2392	330	4784	660	9570	300	11.81	1.23	0.83
200 - 20	31	-20	1 1/4	33.0	1.30	49.5	1.95	125	1812	250	3624	500	7250	420	16.54	1.79	1.2
200 - 24	38	-24	1 1/2	39.3	1.55	55.9	2.20	90	1305	180	2610	360	5220	500	19.69	2.12	1.42
200 - 32	51	-32	2	52.0	2.05	68.6	2.70	80	1160	160	2320	320	4640	630	24.80	2.79	1.88

### **HOSE CONSTRUCTION:**

- > Inner Tube: Oil and water resistant synthetic rubber
- > Reinforcement: Two layers of high tensile steel braid
- > Cover: Oil, abrasion and weather resistant synthetic rubber

### **MAIN APPLICATIONS:**

> Medium to high pressure hydraulic applications

### **TEMPERATURE RANGE:**

- >-40°F to +212°F
- >-40°C to +100°C

### **INTERMITTENT SERVICE:**

- > -40°F / +257°F
- > -40°C / +125°C

# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

- SAE 100R2 AT
- >EN 853 2SN
- ISO 1436-1 2SN / R2AT

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- > Available in STANDARD, ROCK and SHIELD cover options.



# SAE 100R4 RUBBER HYDRAULIC SUCTION HOSE



FLEX400 SERIES			)									**				К	G G
PROPULSE				HOSE I.I			E O.D. AX)	WORKING PRESSURE		PRC PRES			RST SURE		RADIUS IIN)	HO WEIG	SE SHTS
HOSE PART NO.	DN	DASH	INCH	ММ	INCH	мм	INCH	BAR	PSI	BAR	PSI	BAR	PSI	ММ	INCH	KG/M	LBS/ FT
FLEX400 - 12	19	-12	3/4	19.8	0.78	34.9	1.37	21	300	42	600	83	1200	40	1.57	0.63	0.42
FLEX400 - 16	25	-16	1	26.2	1.03	41.3	1.63	17	250	34	500	69	1000	45	1.77	0.73	0.49
FLEX400 - 20	31	-20	1 1/4	33.0	1.30	50.8	2.00	14	200	28	400	55	800	60	2.36	0.91	0.61
FLEX400 - 24	38	-24	1 1/2	39.3	1.55	57.2	2.25	10.5	150	21	300	41	600	80	3.15	1.1	0.74
FLEX400 - 32	51	-32	2	52.4	2.06	69.8	2.75	7	100	14	200	28	400	160	6.3	1.35	0.91

### **HOSE CONSTRUCTION:**

- Inner Tube: Oil resistant synthetic rubber
- Reinforcement: High tensile textile braids with embedded steel wire helixes
- > Cover: Oil, abrasion and weather resistant synthetic rubber

### **MAIN APPLICATIONS:**

Low pressure hydraulic return or suction lines

### **TEMPERATURE RANGE:**

- >-40°F / +212°F
- >-40°C / +100°C

### **INTERMITTENT SERVICE:**

- >-40°F / +257°F
- >-40°C / +125°C

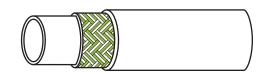
# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

>SAE 100R4

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- › Available in Standard cover only.



# SAE 100R7 THERMOPLASTIC HYDRAULIC HOSE



700 SERIES	( ← →		)								9	**				K	
PROPULSE		SIZE			E I.D. AX)		E O.D. AX)		KING SURE		OOF SURE	_	RST SURE		RADIUS IIN)		SE SHTS
HOSE PART NO.	DN	DASH	INCH	ММ	INCH	ММ	INCH	BAR	PSI	BAR	PSI	BAR	PSI	ММ	INCH	KG/M	LBS/ FT
1800 - 02	3	-2	1/8	4.0	0.16	9.5	0.37	210	3045	420	6090	840	12180	12	0.47	0.04	0.03
1800 - 03	5	-3	3/16	5.4	0.21	10.8	0.43	210	3045	420	6090	840	12180	30	1.18	0.06	0.04
1800 - 04MBK	6	-4	1/4	7.0	0.28	13.5	0.53	210	3045	420	6090	840	12180	32	1.26	0.10	0.07
1800 - 05MBK	8	-5	5/16	8.5	0.33	16.6	0.65	210	3045	420	6090	840	12180	38	1.5	0.14	0.09
1800 - 06MBK	10	-6	3/8	10.3	0.41	18.4	0.72	210	3045	420	6090	840	12180	50	1.97	0.18	0.12
700 - 08MBK	12	-8	1/2	13.5	0.53	22.5	0.89	140	2030	280	4060	560	8120	75	2.95	0.24	0.16

### **HOSE CONSTRUCTION:**

- Inner Tube: Oil resistant thermoplastic
- Reinforcement: One or two layers of high tenacity yarn
- Cover: Oil resistant thermoplastic elastomer with high ozone and abrasion resistance (-2 and -3 are smooth cover; -4 through -8 are matte textured cover)

### MAIN APPLICATIONS:

- Medium pressure hydraulic application that requires high flexibility, tight bend radius and good abrasion resistance to weather and ozone
- Agriculture, construction, forestry and mobile equipment; fork trucks; general hydraulic; hydraulic tools, lubrification systems; marine steering; snow plow
- Non-conductive hose available

### **TEMPERATURE RANGE:**

- >-40°F / +212°F
- >-40°C / +100°C

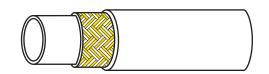
# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

- >SAE 100R18 / 100R7\* (sizes -2 through -6)
- >SAE 100R7 (size -8)

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- See page 10 for the benefits of using thermoplastic hose vs. rubber hose.
- Made in the USA.
- \* This hose is dual branded sizes -2 through -6 meet or exceed all SAE 100R18 requirements. Refer to page 27 for information on SAE 100R18 hose.



# SAE 100R8 THERMOPLASTIC HYDRAULIC HOSE



800 SERIES												**				к	GG
PROPULSE		HOSE SIZE			E I.D. AX)		E O.D. AX)	_	KING SURE		OOF SURE	_	RST SURE		RADIUS IIN)		SE SHTS
HOSE PART NO.	DN	DASH	INCH	ММ	INCH	мм	INCH	BAR	PSI	BAR	PSI	BAR	PSI	ММ	INCH	KG/M	LBS/ FT
800 - 03	5	-3	3/16	5.4	0.21	14.6	0.57	350	5075	700	10150	1400	20300	30	1.18	.05	.03
800 - 04MBK	6	-4	1/4	7	0.28	16.8	0.66	350	5075	700	10150	1400	20300	50	1.97	0.09	0.06
800 - 05MBK	8	-5	5/16	8.5	0.33	18	0.71	310	4500	620	9000	1240	18000	50	1.97	0.11	0.08
800 - 06MBK	10	-6	3/8	10.3	0.41	20.3	0.8	280	4060	560	8120	1120	16240	55	2.17	0.15	0.1
800 - 08MBK	12	-8	1/2	13.5	0.53	24.6	0.97	245	3552	490	7104	980	14208	85	3.35	0.22	0.15

### **HOSE CONSTRUCTION:**

- Inner Tube: Oil resistant thermoplastic
- Reinforcement: Aramid fiber braid
- Cover: Oil and weather resistant thermoplastic elastomer with high ozone and abrasion resistance (-3 is smooth cover; -4 through -8 are matte textured cover)

### **MAIN APPLICATIONS:**

- High pressure hydraulic applications that require high flexibility, tight bend radius and good abrasion, weather and ozone resistance
- Agriculture, construction, forestry and mobile equipment; fluid handling; machine and rescue tools; marine steering
- > Non-conductive hose available

### TEMPERATURE RANGE:

- >-40°F / +212°F
- >-40°C / +100°C

# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

>SAE 100R8

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- See page 10 for the benefits of using thermoplastic hose vs. rubber hose.
- Made in the USA.



# SAE 100R8 NON-CONDUCTIVE THERMOPLASTIC HYDRAULIC HOSE



800NC SERIES	SERIES		)									*				K	(G
PROPULSE		HOSE SIZE			E I.D. AX)	HOSE (M.	E O.D. AX)		KING SURE		OOF SURE		RST SURE		RADIUS		SE GHTS
HOSE PART NO.	DN	DASH	INCH	ММ	INCH	мм	INCH	BAR	PSI	BAR	PSI	BAR	PSI	мм	INCH	KG/M	LBS/ FT
800NC - 03	5	-3	3/16	5.4	0.21	14.6	0.57	350	5075	700	10150	1400	20300	30	1.18	.05	.03
800NC - 04MOR	6	-4	1/4	7	0.28	16.8	0.66	350	5075	700	10150	1400	20300	50	1.97	0.09	0.06
800NC - 05MOR	8	-5	5/16	8.5	0.33	18	0.71	310	4500	620	9000	1240	18000	50	1.97	0.11	0.08
800NC - 06MOR	10	-6	3/8	10.3	0.41	20.3	0.8	280	4060	560	8120	1120	16240	55	2.17	0.15	0.1
800NC - 08MOR	12	-8	1/2	13.5	0.53	24.6	0.97	245	3552	490	7104	980	14208	85	3.35	0.22	0.15

### **HOSE CONSTRUCTION:**

- Inner Tube: Oil resistant thermoplastic
- Reinforcement: Aramid fiber braid
- Cover: Oil and weather resistant thermoplastic elastomer with high ozone and abrasion resistance (-3 is smooth cover; -4 through -8 are matte textured cover)

### **MAIN APPLICATIONS:**

- High pressure hydraulic applications that require high flexibility, tight bend radius and good abrasion, weather and ozone resistance
- Cranes, bucket trucks, scissor lifts, man baskets

### **TEMPERATURE RANGE:**

- >-40°F / +212°F
- >-40°C / +100°C

# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

>SAE 100R8

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- See page 10 for the benefits of using thermoplastic hose vs. rubber hose.
- Made in the USA.



### ISO 18752, 7 MPa ISOBARIC HYDRAULIC HOSE



IOOO SERIES												**				к	G G
PROPULSE		HOSE SIZE			E I.D. AX)	HOSE (M.	O.D. AX)		KING SURE		OOF SURE	BUI PRES	RST SURE		RADIUS IN)		SE SHTS
HOSE PART NO.	DN	DASH	INCH	ММ	INCH	мм	INCH	BAR	PSI	BAR	PSI	BAR	PSI	ММ	INCH	KG/M	LBS/ FT
1000 - 04	6	-4	1/4	6.7	0.26	11.8	0.46	70	1015	140	2030	280	4060	30	1.18	0.14	0.09
1000 - 06	10	-6	3/8	10.1	0.4	14.8	0.58	70	1015	140	2030	280	4060	50	1.97	0.19	0.13
1000 - 08	12	-8	1/2	13.3	0.52	19.7	0.78	70	1015	140	2030	280	4060	60	2.36	0.27	0.18
1000 - 20	31	-20	1 1/4	32.9	1.3	44.3	1.74	70	1015	140	2030	280	4060	140	5.51	1.27	0.86

### **HOSE CONSTRUCTION:**

- Inner Tube: Oil resistant synthetic rubber
- > Reinforcement: One layer of high tensile steel braid
- Cover: Oil, abrasion and weather resistant MSHA approved synthetic rubber

### **MAIN APPLICATIONS:**

Low to medium pressure hydraulic and return lines

### **TEMPERATURE RANGE:**

- >-40°F / +212°F
- >-40°C / +100°C

### **INTERMITTENT SERVICE:**

- >-40°F / +250°F
- >-40°C / +120°C

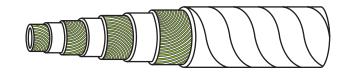
# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

)ISO 18752

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- Available in STANDARD, ROCK and SHIELD cover options.



### SAE 100R12 / EN 856 R12 MULTI-SPIRAL RUBBER HYDRAULIC HOSE



I200 SERIES PROPULSE HOSE PART		HOSE SIZE			E I.D.		€ O.D. AX)		KING	PRO	DOF SURE		RST		RADIUS	но	SE GHTS
NO.	DN	DASH	INCH	мм	INCH	ММ	INCH	BAR	PSI	BAR	PSI	BAR	PSI	ММ	INCH	KG/M	LBS/ FT
1200 - 06	10	-6	3/8	10.1	0.40	21	0.83	280	4060	560	8120	1120	16240	125	4.92	0.67	0.45
1200 - 08	12	-8	1/2	13.5	0.53	24.6	0.97	280	4060	560	8120	1120	16240	180	7.09	0.84	0.56
1200 - 10	16	-10	5/8	16.7	0.66	28.2	1.11	280	4060	560	8120	1120	16240	200	7.87	1.13	0.76
1200 - 12	19	-12	3/4	19.8	0.78	31.5	1.24	280	4060	560	8120	1120	16240	240	9.45	1.33	0.89
1200 - 16	25	-16	1	26.4	1.04	39.2	1.54	280	4060	560	8120	1120	16240	300	11.81	1.79	1.2
1200 - 20	31	-20	1 1/4	33.0	1.30	48.6	1.91	210	3045	420	6090	840	12180	420	16.54	2.59	1.74

### **HOSE CONSTRUCTION:**

- Inner Tube: Oil resistant synthetic rubber
- Reinforcement: Four high tensile steel spirals
- Cover: Abrasion and weather resistant synthetic rubber

### **MAIN APPLICATIONS:**

> Medium to high pressure hydraulic applications

### **TEMPERATURE RANGE:**

- >-40°F / +250°F
- >-40°C / +121°C

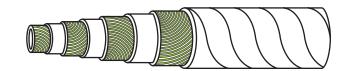
# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

- >SAE 100R12
- >EN 856 R12
- )ISO 3862-1 R12

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- Available in STANDARD, ROCK and SHIELD cover options.



### SAE 100R13 / EN 856 R13 MULTI-SPIRAL RUBBER HYDRAULIC HOSE



I300 SERIES												***				к	GG
PROPULSE		HOSE SIZE		HOS (M.	E I.D. AX)		E O.D. AX)		KING SURE		OOF SURE		RST SURE		RADIUS IN)		SE SHTS
HOSE PART NO.	DN	DASH	INCH	ММ	INCH	мм	INCH	BAR	PSI	BAR	PSI	BAR	PSI	ММ	INCH	KG/M	LBS/ FT
1300 - 12	19	-12	3/4	19.8	0.78	33.2	1.31	350	5075	700	10150	1400	20300	240	9.45	1.44	0.97
1300 - 16	25	-16	1	26.4	1.04	39.8	1.57	350	5075	700	10150	1400	20300	300	11.81	1.99	1.34
1300 - 20	31	-20	1 1/4	33.0	1.30	51.3	2.02	350	5075	700	10150	1400	20300	420	16.54	3.93	2.64
1300 - 24	38	-24	1 1/2	39.3	1.55	58.8	2.31	350	5075	700	10150	1400	20300	500	19.69	4.93	3.31
1300 - 32	51	-32	2	52.0	2.05	72.7	2.86	350	5075	700	10150	1400	20300	640	25.20	6.9	4.64

### **HOSE CONSTRUCTION:**

- Inner Tube: Oil resistant synthetic rubber
- Reinforcement: Four or six high tensile steel spirals
- Cover: Abrasion and weather resistant synthetic rubber

### **MAIN APPLICATIONS:**

> High pressure, heavy duty, high impulse and high temperature

### **TEMPERATURE RANGE:**

- >-40°F / +250°F
- >-40°C / +121°C

# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

- >SAE 100R13
- >EN 856 R13
- >ISO 3862-1 R13

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- › Available in STANDARD, ROCK and SHIELD cover options.



### SAE 100R14 / SAE J517 STAINLESS STEEL BRAIDED PTFE



I400 SERIES												**				к	[G
PROPULSE HOSE PART		HOSE SIZE		HOS (M.	E I.D. AX)		E O.D. AX)	WOR PRES (M	SURE		00F SURE		BURST		RADIUS IN)		SE GHTS
NO.	DN	DASH	INCH	мм	INCH	ММ	INCH	BAR	PSI	MPA	PSI	BAR	PSI	ММ	INCH	KG/M	LBS/ FT
1400 - 03	3	-3	1/8	3.4	0.13	6.4	0.25	225	3260	450	6520	900	13040	40	1.6	0.07	0.04
1400 - 04	5	-4	3/16	4.8	0.19	7.6	0.3	210	3000	420	6000	840	12000	50	2.0	0.08	0.06
1400 - 05	6	-5	1/4	6.5	0.26	9.7	0.38	210	3000	420	6000	840	12000	75	3.0	0.12	0.08
1400 - 06	8	-6	5/16	8	0.31	11.2	0.44	175	2500	350	5000	700	10000	100	4.0	0.16	0.11
1400 - 07	10	-7	3/8	9.7	0.38	12.6	0.5	165	2400	330	4800	660	9600	125	5.0	0.17	0.11
1400 - 08	11	-8	13/32	10.4	0.41	13.8	0.54	140	2000	280	4000	560	8000	135	5.3	0.19	0.12
1400 - 10	12	-10	1/2	12.8	0.51	16.5	0.65	120	1750	240	3000	480	7000	165	6.5	0.23	0.16
1400 - 12	16	-12	5/8	16	0.63	19.8	0.78	88	1270	176	2540	352	5080	200	8.0	0.32	0.22
1400 - 14	19	-14	3/4	19.2	0.76	22.9	0.9	75	1100	150	2200	300	4400	230	9.1	0.4	0.27
1400 - 16	22	-16	7/8	22.2	0.88	26.2	1.03	62	900	124	1800	248	3600	230	9.1	0.46	0.31
1400 - 18	25	-18	1	25.5	1.01	29.5	1.16	62	900	124	1800	248	3600	300	11.8	0.53	0.35
1400 - 20	29	-20	1.1/8	28.6	1.13	33	44	44	630	88	1260	176	2520	410	16.1	0.59	0.39

### **HOSE CONSTRUCTION:**

- Inner Tube: Polytetrafluoroethylene (PTFE)
- Reinforcement: One layer of high tensile stainless steel braid

### **MAIN APPLICATIONS:**

- Extreme heat application
- The tube has very high chemical resistance properties with a low coefficient of friction and resists deterioration due to flow

### **TEMPERATURE RANGE:**

- >-65° to +500°F
- >-54° to +260°C

### **FULLY MEETS OR EXCEEDS THE FOLLOWING** SPECIFICATION(S):

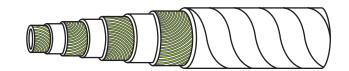
>SAE 100R14

### NOTE:

> Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.



### SAE 100R15 MULTI-SPIRAL RUBBER HYDRAULIC



I500 SERIES PROPULSE HOSE PART		HOSE SIZE			E I.D.	HOSI (M	E O.D. AX)		KING	PRO	DOF		RST		RADIUS	HO	OSE
NO.	DN	DASH	INCH	мм	INCH	ММ	INCH	BAR	PSI	BAR	PSI	BAR	PSI	ММ	INCH	KG/M	LBS/ FT
1500 - 06	10	-6	3/8	10.1	0.40	23.3	0.92	420	6090	840	12180	1680	24360	150	5.90	0.7	0.47
1500 - 08	12	-8	1/2	13.5	0.53	26.8	1.06	420	6090	840	12180	1680	24360	200	7.87	0.84	0.56
1500 - 12	19	-12	3/4	19.8	0.78	36.1	1.42	420	6090	840	12180	1680	24360	265	10.43	1.44	0.97
1500 - 16	25	-16	1	26.4	1.04	42.9	1.69	420	6090	840	12180	1680	24360	330	12.99	2.04	1.37
1500 - 20	31	-20	1 1/4	33.0	1.30	51.5	2.03	420	6090	840	12180	1680	24360	445	17.52	3.93	2.64
1500 - 24	38	-24	1 1/2	39.3	1.55	59.6	2.35	420	6090	840	12180	1680	24360	530	20.87	4.93	3.31

### **HOSE CONSTRUCTION:**

Inner Tube: Oil resistant synthetic rubber

> Reinforcement: Four or six high tensile steel spirals

> Cover: Oil, abrasion, weather resistant synthetic rubber

### **MAIN APPLICATIONS:**

> High pressure, heavy duty, high impulse and high temperature

### **TEMPERATURE RANGE:**

>-40°F / +250°F

>-40°C / +121°C

# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

>SAE 100R15

>ISO 3862-1 R15

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- › Available in STANDARD, ROCK and SHIELD cover options.



### SAE 100R16 / EN857 2SC COMPACT RUBBER HYDRAULIC HOSE



I600 SERIES						1						***				к	G G
PROPULSE		HOSE SIZE		HOS (M.	E I.D. AX)	HOSE (M.	E O.D. AX)	WOR PRES	KING SURE		OOF SURE		RST		RADIUS IN)		SE SHTS
HOSE PART NO.	DN	DASH	INCH	мм	INCH	мм	INCH	BAR	PSI	BAR	PSI	BAR	PSI	мм	INCH	KG/M	LBS/ FT
1600 - 04*	6	-4	1/4	7.0	0.28	14.5	0.57	400	5800	800	11600	1600	23200	50	1.97	0.29	0.19
1600 - 05	8	-5	5/16	8.5	0.33	15.7	0.62	350	5075	700	10150	1400	20300	55	2.17	0.34	0.23
1600 - 06*	10	-6	3/8	10.1	0.40	18.8	0.74	330	4780	660	9570	1320	19140	65	2.56	0.39	0.26
1600 - 08*	12	-8	1/2	13.5	0.53	22.0	0.87	280	4000	560	8120	1120	16240	90	3.54	0.47	0.31
1600 - 10	16	-10	5/8	16.7	0.66	25.4	1.00	250	3625	500	7250	1000	14500	100	3.94	0.64	0.43
1600 - 12	19	-12	3/4	19.8	0.78	29.0	1.14	215	3117	430	6235	860	12470	120	4.72	0.78	0.52
1600 - 16	25	-16	1	26.4	1.04	36.6	1.44	165	2392	330	4785	660	9570	150	5.91	1.16	0.78
1600 - 20	31	-20	1 1/4	33.0	1.30	44.3	1.74	125	1812	250	3625	500	7250	210	8.27	1.57	1.06

### **HOSE CONSTRUCTION:**

- Inner Tube: Oil resistant synthetic rubber
- > Reinforcement: One or two layers of high tensile steel braid
- > Cover: Oil, abrasion and weather resistant synthetic rubber

### **MAIN APPLICATIONS:**

- > Medium to high pressure applications
- This hose is similar to the SAE100R2 / EN853 2SN, but has a smaller outside diameter which achieves a tighter bend radius while providing a lighter weight and compact design when minimal space is available

### **TEMPERATURE RANGE:**

- >-40°F / +212°F
- >-40°C / +100°C

### **INTERMITTENT SERVICE:**

- >-40°F / +257°F
- >-40°C / +125°C

# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

- >SAE 100R16
- > EN857 2SC
- >ISO 11237-1 R16
- )ISO 11237-1 2SC
- >ISO 18752\*

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- Available in STANDARD, ROCK and SHIELD cover options.
- \* Hose as noted above meets or exceeds ISO 18752 requirements for 28 MPa hose



### SAE 100R17 COMPACT RUBBER HYDRAULIC HOSE



I700 SERIES		HOSE SIZE		Hos	E I.D.		E O.D.	WOR		PRO	DOF SURE		RST		RADIUS	HO	SE
HOSE PART NO.	DN	DASH	INCH	ММ	INCH	мм	INCH	BAR	PSI	BAR	PSI	BAR	PSI	мм	INCH	KG/M	LBS/ FT
1700 - 04*	6	-4	1/4	7.0	0.27	13.2	0.52	210	3045	420	6090	840	12180	50	1.97	0.18	0.12
1700 - 05*	8	-5	5/16	8.5	0.33	15.0	0.59	210	3045	420	6090	840	12180	55	2.17	0.22	0.15
1700 - 06*	10	-6	3/8	10.1	0.39	17.0	0.67	210	3045	420	6090	840	12180	65	2.56	0.27	0.18
1700 - 08*	12	-8	1/2	13.5	0.53	21.1	0.83	210	3045	420	6090	840	12180	90	3.54	0.36	0.24
1700 - 10*	16	-10	5/8	16.7	0.66	25.9	1.02	210	3045	420	6090	840	12180	100	3.94	0.58	0.39
1700 - 12*	19	-12	3/4	19.8	0.78	30.3	1.19	210	3045	420	6090	840	12180	120	4.72	0.76	0.51
1700 - 16*	25	-16	1	26.4	1.03	38.6	1.52	210	3045	420	6090	840	12180	150	5.91	1.27	0.85

### **HOSE CONSTRUCTION:**

- >Inner Tube: Oil resistant synthetic rubber
- Reinforcement: One or two layers of high tensile steel braid
- > Cover: Oil, abrasion and weather resistant synthetic rubber

### **MAIN APPLICATIONS:**

Medium pressure small bend radius hose that is highly flexible and specifically designed for use when installation constraints are present

### **TEMPERATURE RANGE:**

- >-40°F / +212°F
- >-40°C / +100°C

### **INTERMITTENT SERVICE:**

- >-40°F / +257°F
- >-40°C / +125°C

# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

- >SAE 100R17
- ISO 11237-1 R17
- ) ISO 18752\*

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- Available in STANDARD, ROCK and SHIELD cover options.
- \* Hose as noted above meets or exceeds ISO 18752 requirements for 21 MPa hose



# SAE 100R18 THERMOPLASTIC HYDRAULIC HOSE



I800 SERIES			)									*				к	G G
PROPULSE		HOSE SIZE			E I.D. AX)		E O.D. AX)		KING SURE		OOF SURE	_	RST SURE		RADIUS IN)		SE SHTS
HOSE PART NO.	DN	DASH	INCH	мм	INCH	ММ	INCH	BAR	PSI	BAR	PSI	BAR	PSI	ММ	INCH	KG/M	LBS/ FT
1800 - 02	3	-2	1/8	4.0	0.16	9.5	0.37	210	3045	420	6090	840	12180	12	0.47	0.04	0.03
1800 - 03	5	-3	3/16	5.4	0.21	10.8	0.43	210	3045	420	6090	840	12180	30	1.18	0.06	0.04
1800 - 04MBK	6	-4	1/4	7.0	0.28	13.5	0.53	210	3045	420	6090	840	12180	32	1.26	0.10	0.07
1800 - 05MBK	8	-5	5/16	8.5	0.33	16.6	0.65	210	3045	420	6090	840	12180	38	1.5	0.14	0.09
1800 - 06MBK	10	-6	3/8	10.3	0.41	18.4	0.72	210	3045	420	6090	840	12180	50	1.97	0.18	0.12
1800 - 08MBK	12	-8	1/2	13.5	0.53	22.8	0.90	210	3045	420	6090	840	12180	90	3.54	0.29	0.19

### **HOSE CONSTRUCTION:**

- Inner Tube: Oil resistant thermoplastic
- > Reinforcement: One or two layers of high tenacity yarn
- Cover: Oil resistant thermoplastic elastomer with high ozone and abrasion resistance (-2 and -3 are smooth cover; -4 through -8 are matte textured cover)

### MAIN APPLICATIONS:

- Medium pressure hydraulic application that requires high flexibility, tight bend radius and good abrasion resistance to weather and ozone
- Agriculture, construction, forestry and mobile equipment; fork trucks; general hydraulic; hydraulic tools, lubrification systems; marine steering; snow plow
- Non-conductive hose available

### **TEMPERATURE RANGE:**

- >-40°F / +212°F
- >-40°C / +100°C

# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

>SAE 100R18 / 100R7\*

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- See page 10 for the benefits of using thermoplastic hose vs. rubber hose.
- Made in the USA.
- \* This hose is dual branded it meets or exceeds all SAE 100R7 requirements



# SAE 100R18 NON-CONDUCTIVE THERMOPLASTIC HYDRAULIC HOSE



I8OONC SERIES		HOSE SIZE	)		E I.D. AX)	HOSE	E O.D. AX)		KING SURE	PRO	DOF SURE		RST		RADIUS	HO	SE
HOSE PART NO.	DN	DASH	INCH	мм	INCH	мм	INCH	BAR	PSI	BAR	PSI	BAR	PSI	ММ	INCH	KG/M	LBS/ FT
1800NC - 02	3	-2	1/8	4.0	0.16	9.5	0.37	210	3045	420	6090	840	12180	12	0.47	0.04	0.03
1800NC - 03	5	-3	3/16	5.4	0.21	10.8	0.43	210	3045	420	6090	840	12180	30	1.18	0.06	0.04
1800NC - 04MOR	6	-4	1/4	7.0	0.28	13.5	0.53	210	3045	420	6090	840	12180	32	1.26	0.10	0.07
1800NC - 05MOR	8	-5	5/16	8.5	0.33	16.6	0.65	210	3045	420	6090	840	12180	38	1.5	0.14	0.09
1800NC - 06MOR	10	-6	3/8	10.3	0.41	18.4	0.72	210	3045	420	6090	840	12180	50	1.97	0.18	0.12
1800NC - 08MOR	12	-8	1/2	13.5	0.53	22.8	0.90	210	3045	420	6090	840	12180	90	3.54	0.29	0.19

### **HOSE CONSTRUCTION:**

- Inner Tube: Oil resistant thermoplastic
- Reinforcement: One or two layers of high tenacity yarn
- Cover: Oil resistant thermoplastic elastomer with high ozone and abrasion resistance (-2 and -3 are smooth cover; -4 through -8 are matte textured cover)

### **MAIN APPLICATIONS:**

- Medium pressure hydraulic application that requires high flexibility, tight bend radius and good abrasion resistance to weather and ozone
- Cranes, bucket trucks, scissor lifts, man baskets

### **TEMPERATURE RANGE:**

- >-40°F / +212°F
- >-40°C / +100°C

# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

>SAE 100R18 / 100R7\*

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- See page 10 for the benefits of using thermoplastic hose vs. rubber hose.
- Made in the USA
- \* This hose is dual branded it meets or exceeds all SAE 100R7 requirements



### SAE 100R19 COMPACT RUBBER HYDRAULIC HOSE



I900 SERIES												**				к	G G
PROPULSE	HOSE SIZE			E I.D. AX)		E O.D. AX)		KING	PR(			RST SURE		RADIUS IN)		SE SHTS	
HOSE PART NO.	DN	DASH	INCH	ММ	INCH	ММ	INCH	BAR	PSI	BAR	PSI	BAR	PSI	ММ	INCH	KG/M	LBS/ FT
1900 - 04*	6	-4	1/4	7.0	0.27	14.4	0.57	280	4060	560	8120	1120	16240	50	1.97	0.18	0.12
1900 - 06*	10	-6	3/8	10.1	0.39	18.0	0.71	280	4060	560	8120	1120	16240	65	2.56	0.39	0.26
1900 - 08*	12	-8	1/2	13.5	0.53	22.6	0.89	280	4060	560	8120	1120	16240	90	3.54	0.47	0.31
1900 - 10*	16	-10	5/8	16.7	0.66	27.5	1.08	280	4060	560	8120	1120	16240	100	3.94	0.68	0.46
1900 - 12*	19	-12	3/4	19.8	0.78	32.5	1.28	280	4060	560	8120	1120	16240	120	4.72	0.84	0.56

### **HOSE CONSTRUCTION:**

- Inner Tube: Oil resistant synthetic rubber
- > Reinforcement: One or two layers of high tensile steel braid
- > Cover: Oil, abrasion and weather resistant synthetic rubber

### MAIN APPLICATIONS:

> High pressure small bend radius hose that is highly flexible and specifically designed for use when installation constraints are present

### **TEMPERATURE RANGE:**

- >-40°F / +212°F
- >-40°C / +100°C

### **INTERMITTENT SERVICE:**

- >-40°F / +257°F
- >-40°C / +125°C

# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

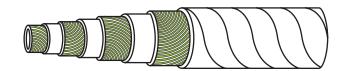
- >SAE 100R19
- ) ISO 18752\*

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- Available in STANDARD, ROCK and SHIELD cover options.



<sup>\*</sup> Hose as noted above meets or exceeds ISO 18752 requirements for 28 MPa hose

### ISO 18752, 28MPa ISOBARIC HYDRAULIC HOSE



4000 SERIES		igorplus	)									**				к	(G
PROPULSE		HOSE SIZE		HOS (M	E I.D. AX)		E O.D. AX)		KING SURE	PR(	OOF SURE	BU	RST SURE	BEND I	RADIUS IN)	HO	SE GHTS
HOSE PART NO.	DN	DASH	INCH	ММ	INCH	ММ	INCH	BAR	PSI	BAR	PSI	BAR	PSI	ММ	INCH	KG/M	LBS/ FT
4000 - 12	19	-12	3/4	19.8	0.78	31	1.22	280	4060	560	8120	1120	16240	120	4.72	1.31	0.88
4000 - 16	25	-16	1	26.3	1.04	38.4	1.51	280	4060	560	8120	1120	16240	150	5.91	1.8	1.21

### **HOSE CONSTRUCTION:**

- Inner Tube: Oil resistant synthetic rubber
- > Reinforcement: Four or six high tensile steel spirals
- Cover: Oil, abrasion and weather resistant MSHA approved synthetic rubber

### **MAIN APPLICATIONS:**

> Medium to high pressure hydraulic applications

### **TEMPERATURE RANGE:**

- >-40°F / +250°F
- >-40°C / +121°C

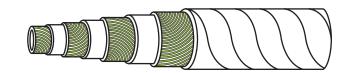
# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

- >SAE 100R12
- DIN EN856
- )ISO 18752

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- Available in STANDARD, ROCK and SHIELD cover options.



### ISO 18752, 35 MPa ISOBARIC HYDRAULIC HOSE



5000 SERIES				6								***				к	GG
PROPULSE		HOSE SIZE			E I.D. AX)		E O.D. AX)		KING SURE		OOF SURE		RST SURE		RADIUS IN)		SE GHTS
HOSE PART NO.	DN	DASH	INCH	ММ	INCH	ММ	INCH	BAR	PSI	BAR	PSI	BAR	PSI	ММ	INCH	KG/M	LBS/ FT
5000 - 06	10	-6	3/8	10.1	0.4	17.1	0.67	385	5585	770	11170	1540	22340	70	2.76	0.39	0.26
5000 - 08	12	-8	1/2	13.3	0.53	23.4	0.92	380	5510	760	11020	1520	22040	90	3.54	0.78	0.52
5000 - 10	16	-10	5/8	17	0.67	26.5	1.04	380	5510	760	11020	1520	22040	100	3.94	1.03	0.69
5000 - 12	19	-12	3/4	19.8	0.78	31	1.22	350	5075	700	10150	1400	20300	120	4.72	1.32	0.89
5000 - 16	25	-16	1	26.2	1.03	38.3	1.51	350	5075	700	10150	1400	20300	150	5.91	1.77	1.19

### **HOSE CONSTRUCTION:**

- Inner Tube: Oil resistant synthetic rubber
- Reinforcement: Two layers of high tensile steel braid (-6 size); four or six high tensile steel wires (sizes -8 to -16)
- Cover: Oil, abrasion and weather resistant MSHA approved synthetic rubber

### **MAIN APPLICATIONS:**

High pressure, heavy duty, high impulse and high temperature applications

### **TEMPERATURE RANGE:**

- >-40°F / +250°F
- >-40°C / +121°C

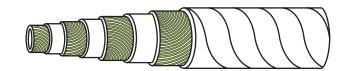
# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

ISO 18752

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- Available in STANDARD, ROCK and SHIELD cover options.



### ISO 18752, 42MPa ISOBARIC HYDRAULIC HOSE



6000 SERIES							0		0		***				кв		
PROPULSE HOSE PART NO.	HOSE SIZE			HOSE I.D. (MAX)		HOSE O.D. (MAX)		WORKING PRESSURE		PROOF PRESSURE		BUI PRES	RST SURE	BEND RADIUS (MIN)		HOSE WEIGHTS	
	DN	DASH	INCH	ММ	INCH	ММ	INCH	BAR	PSI	BAR	PSI	BAR	PSI	ММ	INCH	KG/M	LBS/ FT
6000 - 12	19	-12	3/4	19.8	0.78	31	1.22	420	6090	840	12180	1680	24360	120	4.72	1.33	0.89
6000 - 16	25	-16	1	26.2	1.03	38	1.5	420	6090	840	12180	1680	24360	150	5.91	1.95	1.31

### **HOSE CONSTRUCTION:**

- Inner Tube: Oil resistant synthetic rubber
- Reinforcement: Four or six high tensile steel spirals
- Cover: Oil, abrasion and weather resistant MSHA approved synthetic rubber

### **MAIN APPLICATIONS:**

High pressure, heavy duty, high impulse and high temperature applications

### **TEMPERATURE RANGE:**

- >-40°F / +250°F
- >-40°C / +121°C

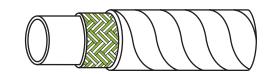
# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

- >SAE 100R12
- >DIN EN856
- ISO 18752

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- Available in STANDARD, ROCK and SHIELD cover options.



### EN 857 1SC COMPACT RUBBER HYDRAULIC HOSE



ISC SERIES PROPULSE	HOSE SIZE			HOS (M.	E I.D.	HOSE O.D.		WORKING PRESSURE		PROOF PRESSURE		BURST		BEND RADIUS (MIN)		HOSE WEIGHTS	
HOSE PART NO.	DN	DASH	INCH	ММ	INCH	ММ	INCH	BAR	PSI	BAR	PSI	BAR	PSI	мм	INCH	KG/M	LBS/ FT
1SC - 04	6	-4	1/4	6.9	0.27	13.5	0.53	225	3262	450	6524	900	13050	75	2.95	0.16	0.11
1SC - 05	8	-5	5/16	8.5	0.33	14.5	0.57	215	3117	430	6235	860	12470	85	3.35	0.21	0.14
1SC - 06	10	-6	3/8	10.1	0.40	16.9	0.67	180	2610	360	5220	720	10440	90	3.54	0.26	0.17
1SC - 08*	12	-8	1/2	13.5	0.53	20.4	0.80	160	2320	320	4640	640	9280	65	2.56	0.34	0.23
1SC - 10*	16	-10	5/8	16.7	0.66	23.0	0.91	130	1885	260	3770	520	7540	75	2.95	0.42	0.28
1SC - 12*	19	-12	3/4	19.8	0.78	26.7	1.05	105	1522	210	3045	420	6090	90	3.54	0.5	0.34
1SC - 16*	25	-16	1	26.4	1.04	34.9	1.37	88	1276	176	2552	352	5104	114	4.49	0.74	0.5

### HOSE CONSTRUCTION:

- Inner Tube: Oil resistant synthetic rubber
- > Reinforcement: One layer of high tensile steel braid
- > Cover: Oil, abrasion and weather resistant synthetic rubber

### **MAIN APPLICATIONS:**

Low to medium pressure lines that require tight bend radius

### **TEMPERATURE RANGE:**

- >-40°F / +212°F
- >-40°C / +100°C

### **INTERMITTENT SERVICE:**

- >-40°F / +257°F
- >-40°C / +125°C

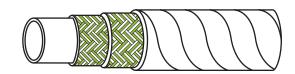
# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

- >EN 857 1SC
- >ISO 11237-1 1SC
- ISO 18752\*

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- > Available in STANDARD, ROCK and SHIELD cover options.
- \* Hose as noted above meets or exceeds ISO 18752 requirements for 7 MPa hose



### EN 857 2SC COMPACT RUBBER HYDRAULIC HOSE



2SC SERIES	HOSE SIZE				E I.D.	HOSE O.D.		WORKING PRESSURE		PROOF PRESSURE		BURST PRESSURE		BEND RADIUS (MIN)		HOSE WEIGHTS	
HOSE PART NO.	DN	DASH	INCH	мм	INCH	ММ	INCH	BAR	PSI	BAR	PSI	BAR	PSI	ММ	INCH	KG/M	LBS/ FT
2SC - 04	6	-4	1/4	6.9	0.27	14.2	0.56	400	5800	800	11600	1600	23200	75	2.95	0.25	0.17
2SC - 05	8	-5	5/16	8.5	0.33	16.0	0.63	350	5075	700	10150	1400	20300	85	3.35	0.32	0.22
2SC - 06	10	-6	3/8	10.1	0.40	18.3	0.72	330	4785	660	9570	1320	19140	90	3.54	0.35	0.24
2SC - 08	12	-8	1/2	13.5	0.53	21.5	0.85	275	3988	550	7975	1100	15950	130	5.12	0.44	0.3
2SC - 10	16	-10	5/8	16.7	0.66	24.7	0.97	250	3625	500	7250	1000	14500	170	6.69	0.61	0.41
2SC - 12	19	-12	3/4	19.8	0.78	28.6	1.13	215	3118	430	6235	860	12470	200	7.87	0.77	0.52
2SC - 16	25	-16	1	26.4	1.04	36.6	1.44	165	2393	330	4786	660	9572	250	9.84	1.15	0.77

### **HOSE CONSTRUCTION:**

>Inner Tube: Oil resistant synthetic rubber

> Reinforcement: Two layers of high tensile steel braid

> Cover: Oil, abrasion and weather resistant synthetic rubber

### **MAIN APPLICATIONS:**

> Medium to high pressure lines that require tight bend radius

### **TEMPERATURE RANGE:**

>-40°F / +212°F

>-40°C / +100°C

### **INTERMITTENT SERVICE:**

>-40°F / +257°F

>-40°C / +125°C

# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

>EN 857 2SC

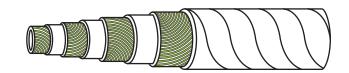
)ISO 11237-1 2SC

>SAE 100R16\*

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- Available in STANDARD, ROCK and SHIELD cover options.
- \* Hose is dual branded meets or exceeds SAE 100R16 requirements



### EN 856 4SH MULTI-SPIRAL RUBBER HYDRAULIC HOSE



45H SERIES																**				К	G.G
PROPULSE	HOSE SIZE				HOSE I.D. HOSE O.D. (MAX)			WORKING PRESSURE		PROOF PRESSURE		BURST PRESSURE		BEND RADIUS (MIN)		HOSE WEIGHTS					
HOSE PART NO.	DN	DASH	INCH	ММ	INCH	мм	INCH	BAR	PSI	BAR	PSI	BAR	PSI	ММ	INCH	KG/M	LBS/ FT				
4SH - 12	19	-12	3/4	19.8	0.78	33.0	1.30	420	6090	840	12180	1680	24360	280	11.02	1.44	0.97				
4SH - 16	25	-16	1	26.4	1.04	39.9	1.57	380	5510	760	11020	1520	22040	340	13.39	1.99	1.34				
4SH - 20	31	-20	1 1/4	33.0	1.30	47.1	1.85	325	4700	650	9400	1296	18800	460	18.11	2.55	1.71				
4SH - 24	38	-24	1 1/2	39.3	1.55	55.1	2.17	290	4200	580	8400	1160	16800	560	22.04	3.26	2.19				
4SH - 32	51	-32	2	52.0	2.05	69.7	2.74	250	3625	500	7250	1000	14500	700	27.56	4.5	3.02				

### **HOSE CONSTRUCTION:**

- Inner Tube: Oil resistant synthetic rubber
- Reinforcement: Four high tensile steel spirals
- > Cover: Oil, abrasion and weather resistant synthetic rubber

### **MAIN APPLICATIONS:**

- > High pressure power/drive lines
- Severe abrasion resistance and good resistance to harsh environmental conditions

### **TEMPERATURE RANGE:**

- >-40°F / +250°F
- >-40°C / +121°C

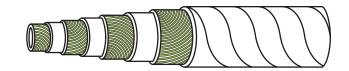
# FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

- >EN 856 4SH
- ISO 3862-1 4SH

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- Available in STANDARD, ROCK and SHIELD cover options.



### EN 856 4SP MULTI-SPIRAL RUBBER HYDRAULIC HOSE



4SP SERIES		HOSE SIZE	)		E I.D.		E O.D. AX)		KING SURE	PRO	DOF		RST		RADIUS	но	SE GHTS
HOSE PART NO.	DN	DASH	INCH	ММ	INCH	мм	INCH	BAR	PSI	BAR	PSI	BAR	PSI	ММ	INCH	KG/M	LBS/ FT
4SP - 06	10	-6	3/8	10.1	0.40	22.2	0.87	445	6450	890	12900	1780	25806	180	7.09	0.7	0.47
4SP - 08	12	-8	1/2	13.5	0.53	25.4	1.00	415	6020	830	12035	1660	24070	230	9.06	0.84	0.56
4SP - 10	16	-10	5/8	16.7	0.66	29.0	1.14	350	5075	700	10150	1400	20300	250	9.84	1.13	0.76
4SP - 12	19	-12	3/4	19.8	0.78	33.0	1.30	350	5075	700	10150	1400	20300	300	11.81	1.41	0.95
4SP - 16	25	-16	1	26.4	1.04	40.9	1.61	280	4060	560	8120	1120	16240	340	13.39	1.85	1.24
4SP - 20	31	-20	1 1/4	33.0	1.30	52.4	2.06	210	3045	420	6090	840	12180	460	18.11	3.2	2.15

#### **HOSE CONSTRUCTION:**

- Inner Tube: Oil resistant synthetic rubber
- > Reinforcement: Four high tensile steel spirals
- > Cover: Oil, abrasion and weather resistant synthetic rubber

### **MAIN APPLICATIONS:**

- High pressure power/drive lines
- Severe abrasion resistance and good resistance to harsh environmental conditions

#### **TEMPERATURE RANGE:**

- >-40°F/+250°F
- >-40°C / +121°C

### FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

- >EN 856 4SP
- ISO 3862-1 4SP

### NOTE:

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- Available in STANDARD, ROCK and SHIELD cover options.



### **HOSE PROTECTION OPTIONS**

Hydraulic hose reliability is crucial for equipment uptime and dependability, but challenging environments and applications push hose design to the limit. Once a hose has experienced cover damage and wear, it's only a matter of time before hose failure and machine down time will occur. When rough applications are the norm, it's essential to protect and prolong hose life to keep equipment functioning. ProPulse offers several solutions to help defend against the leading causes of hose failure: combat abrasion and impact cover damage.













### **TEXTILE SLEEVING**

Sleeving can be applied to a portion, or the entire length of a hose to protect it from abrasion prone environments. ProPulse utilizes very tight knit textile sleeving that is 50% less bulky than Cordura, while still meeting or exceeding industry standards. Our sleeving also meets the stringent requirements for operator line of sight protection. The heavy 1300 denier construction has been abrasion tested to over 250,000 cycles per ISO 6945 testing. Depending on the requirements needed, ProPulse also can permanently attach the sleeving by use of steel crimp collars. This adds an extra guarantee that the hose protection stays where it is needed.

#### **SLEEVE FEATURES:**

- › Ultra tight construction contains oil spillage from pin hole leaks
- Tight, smooth surface to resist water
- >50% less bulky than Cordura
- Densely twisted proprietary engineered fabric offers optimum UV & abrasion protection
- MSHA# IC-234/1

#### SPECIFICATIONS:

- Melting Point: 480°F/248°C
- Denier: 1300
- Material: Proprietary engineered fabric
- Dim. Stability: Great resistance to sun, atmospheric agents and aging
- Toxicity: Non-toxic
- Made in the USA

### FULLY MEETS OR EXCEEDS THE FOLLOWING SPECIFICATION(S):

- >EN982 ISO norm 833 EN414
- Australian MDG41
- RoHS
- )ISO 6945
- >Fed-STD191-Test Method 5309 for abrasion
- ASTM D6770 for abrasion resistance of textile webbing
- ISO 8031

#### NOTE:

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### **SLEEVE SIZE CHART**

PROPULSE		NSIDE ETER		NSIDE ETER
PART NO.	IN	ММ	IN	ММ
TS-068	.68	17	.84	21
TS-079	.79	20	.95	24
TS-091	.91	23	1.03	26
TS-098	.98	25	1.10	28
TS-106	1.06	27	1.18	30
TS-122	1.22	31	1.34	34
TS-142	1.42	36	1.54	39
TS-157	1.57	40	1.73	44
TS-163	1.63	41	1.79	45
TS-173	1.73	44	1.89	48
TS-185	1.85	47	2.01	51
TS-209	2.09	53	2.25	57
TS-219	2.19	55	2.35	60
TS-238	2.38	60	2.54	65
TS-262	2.62	66	2.78	70
TS-288	2.88	73	3.04	77
TS-315	3.15	80	3.31	84
TS-366	3.66	93	3.82	97
TS-394	3.94	100	4.10	105
TS-441	4.41	112	4.57	116
TS-494	4.94	125	5.10	130
TS-550	5.50	140	5.66	144



### **SPIRAL GUARD**



Spiral guarding can be applied during or after a hose is crimped. ProPulse spiral guard is made of heavy-duty high density polyethylene and can be used in applications from -40°F to 280°F. Spiral guarding offers a strong, flexible solution with a flat profile and beveled edges. It can protect hose from impact, abrasion, cuts and crushing loads, as well as provide UV protection. In some applications, spiral guarding is used to keep bundles of hose together to keep routing neat and hoses protected.

#### **SPIRAL FEATURES:**

> High density polyethylene

### **APPLICATIONS:**

- Bundling multiple hoses
- > Prevents hose wear due to impact, abrasion and friction

#### SPECIFICATIONS:

- > Flat profile with beveled edges for safety
- Temperature Range: -40°F to +280°F
- >UV resistant
- > Strong, flexible and lightweight
- Made in the USA

### NOTE:

Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

### **SLEEVE SIZE CHART**

PROPULSE	I.D. INCHES	HOSE O.D. RANGE OPENING			
PART NO.		IN	ММ		
PSG-38	.68	.84	21		
PSG-50	.79	.95	24		
PSG-62	.91	1.03	26		
PSG-95	.98	1.10	28		
PSG-1.125	1.06	1.18	30		
PSG-1.5	1.22	1.34	34		
PSG-1.75	1.42	1.54	39		
PSG-2.25	1.57	1.73	44		
PSG-2.62	1.63	1.79	45		
PSG-3.00	1.73	1.89	48		
PSG-4.00	1.85	2.01	51		
PSG-5.00	2.09	2.25	57		
PSG-6.00	2.19	2.35	60		





### **SPRING GUARD**

Plated steel spring guarding greatly protects hydraulic hoses from damage due to impact and compression. These guards are very common on construction equipment where hoses can be damaged due to the application/environment in which the machinery is working. The spring guard also acts as a bend restrictor or "kink guard" when the hose experiences excessive movement and bending near the coupling.

### **SPRING FEATURES:**

- Made in the USA
- > Protects hoses from impact, bending and compression

#### NOTE:

Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

### **SPRING GUARD SIZE CHART**

PROPULSE	MIN INSIDE	DIAMETER
PART NO.	IN	ММ
MSG-53	0.53	13
MSG-61	0.61	15
MSG-66	0.66	17
MSG-75	0.75	19
MSG-84	0.84	21
MSG-91	0.91	23
MSG-99	0.99	25
MSG-105	1.05	26
MSG-134	1.34	34
MSG-164	1.64	41
MSG-188	1.88	48
MSG-212	2.12	54
MSG-230	2.3	58



## HYDRAULIC FITTINGS



### HYDRAULIC FITTING CORROSION PROTECTION

Ensuring that fittings can endure corrosive environments is vital to long term performance in hydraulic systems. Corrosion resistance of plated steel parts plays a large role in the lifespan and serviceability of hydraulic hose. Customers continue to demand the highest standards of protection against elements for their high-pressure hose, and resistance to corrosion in every environment is a must.

Salt spray testing is a key test for assessing the corrosion resistance of hydraulic fittings. ProPulse rigorously tests supplied steel parts to both ASTM B117 and ISO 9227 standards, which are the most widely accepted methods of determining corrosion resistance in the industry. This method exposes fittings to a controlled saline mist, closely replicating harsh conditions like seawater or road salt exposure.

ProPulse's standard Cr+6 free zinc plating is rated and tested to meet or exceed 500 hours of continuous exposure to salt spray with no corrosive damage to the base metal. This mark greatly exceeds the SAE J516 minimum standard of 144 exposure hours to corrosion of the base metal (red rust). This extended exposure above industry specified duration provides assurance that the fittings used on ProPulse-made hoses will withstand the harshest corrosive conditions.

The Cr+6 free zinc plating acts as a sacrificial layer protecting the underlying base metal of the fittings. The quality and resilience of this layer is the backbone of the fitting's resistance to corrosion.

Addditionally, the Cr+6 free plating is fully compliant with REACH and RoHS environmental regulations regarding hazardous substances. End users can have peace of mind knowing the plating of ProPulse fittings is both safe to handle, as well as environmentally friendly.



Left: Fitting prior to salt spray exposure. Right: Same fitting following 500 hours of continuous salt spray exposure.



### **SMART PART NUMBERING**

SMART part number example with part description:



= Female, ORFS, Straight, Hydraulic, Long "Style B", 3/8" x 3/8"

	1 – PREFIX
5	Schieffer
	2 – FITTING GENDER
1	Male
2	Female
3	Nipple
7	Banjo Fitting
9	ISO Flange
	3 - FITTING SERIES
22	Metric Banjo
26	Metric DKOL
27	Metric DKOS
33	Pressure Washer Nipple
38	NPSM
42	BSP Banjo
44	BSP O-Ring Flat Seal
48	BSP 60° Cone
52	BSPT
64	ORFS
78	NPT
82	Standard ORB
89	JIC
95	Code 61 Flange
98	Code 62 Flange
	4 — FITTING TYPE
I	Straight
2	22.5°
4	45°
6	60°
9	90°
S	Special
	5 - APPLICATION TYPE
I	Hydraulic
3	Pressure Washer Only

	6 - SPECIALTIES (OPTIONAL)
W	Swivel
S	Short
М	Medium
L	Long
D	Double Hex
ВН	Bulk Head
	7 – THREAD SIZE
-2	1/8"
-3	3/16"
-4	1/4"
-5	5/16
-6	3/8"
-8	1/2"
-IO	5/8"
-12	3/4"
-14	7/8"
-16	1"
-20	1 1/4"
-24	1 1/2"
	8 – HOSE SIZE
-2	1/8"
-3	3/16"
-4	1/4"
-5	5/16
-6	3/8"
-8	1/2"
-IO	5/8"
-12	3/4"
-14	7/8"
-16	1"
-20	1 1/4"
-24	1 1/2"
	9 - PLATING/ MATERIAL
(BLANK)	Standard
ZN	Zinc Nickel*
SS	Stainless Steel*

 $<sup>\</sup>ensuremath{^{\star}}$  Consult with sales representative for availability

### **HYDRAULIC FITTINGS** SERIES INDEX

### PROPULSE FITTINGS SERIES

FITTINGS SERIES	DESCRIPTION	PAGE
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2264I SERIES	Metric Female 24° Cone O-Ring DKOL 45° Elbow > DIN 20066/3865	54
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2274I SERIES	Metric Female 24° Cone O-Ring DKOS 45° Elbow > DIN 20066/3865	58
2279I SERIES	Metric Female 24° Cone O-Ring DKOS 90° Elbow > DIN 20066/3865	59
12711 SERIES	Metric Male 24° Cone Seat DKOS Straight > DIN 20066/3861	60
722II SERIES	Metric Banjo > DIN 7642	61
264IIS SERIES	ORFS Female Short Straight > SAE J1453/J516	62
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2644I SERIES	ORFS Female 45° Elbow > SAE J1453/J516	64
2649I SERIES	ORFS Female 90° Elbow > SAE J1453/J516	65
2649IM SERIES	ORFS Female 90° Elbow Medium Drop > SAE J1453/J516	66
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16411 SERIES	ORFS Male Straight > SAE J1453/J516	68
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FITTINGS SERIES	DESCRIPTION	PAGE
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17811W SERIES	NPTF Swivel Male 30° Cone Straight > SAE J516	78
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248II SERIES	BSP Female 60° Cone Straight	80
2484I SERIES	BSP Female 60° Cone 45° Elbow	81
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## 1-PIECE NPTF MALE 30° CONE STRAIGHT SAE J516

## S1 E

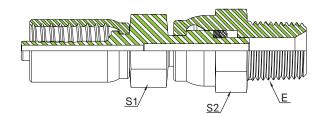
### NOTE:

IPI78II SERIES	THREAD	HOSE	DIMENSIONS (IN)		
PROPULSE FITTING PART NO.	E	DN	DASH	\$1	
1P17811-02-02	1/8" x 27	4	2	7/16"	
1P17811-04-02	1/4" x 18	4	2	5/8"	
1P17811-02-03	1/8" x 27	5	3	9/16"	
1P17811-04-03	1/4" x 18	5	3	11/16"	



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## 1-PIECE NPTF SWIVEL MALE 30° CONE STRAIGHT SAE J516



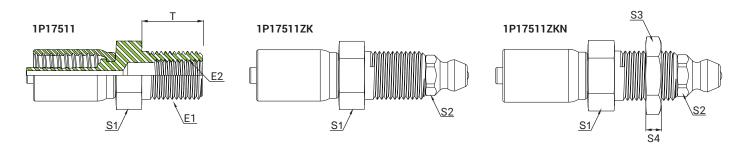
### NOTE:

IPI78IIW SERIES	THREAD	HOSE	BORE	DIMENSIONS (IN)		
PROPULSE FITTING PART NO.	E	DN	DASH	S1	S2	
1P17811W-02-02	1/8" x 27	4	2	7/16"	1/2"	
1P17811W-02-03	1/8" x 27	5	3	1/2"	1/2"	



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

### 1-PIECE STRAIGHT MALE GREASE BULKHEAD



IPI75II SERIES	THREAD		HOSE BORE		THREAD LENGTH (MM)	DIMENSIONS (IN		IN)	
PROPULSE FITTING PART NO.	E1	E2	DN	DASH	Т	<b>S</b> 1	S2	S3	S4
1P17511-02-02	1/8" x 27 NPSM	1/4" x 28 UNF	4	2	13	1/2"	NA	NA	NA
1P17511-02-03	1/8" x 27 NPSM	1/4" x 28 UNF	5	3	13	1/2"	NA	NA	NA
1P17511ZK-02-02	1/8" x 27 NPSM	1/4" x 28 UNF	4	2	13	1/2"	5/16"	NA	NA
1P17511ZK-02-03	1/8" x 27 NPSM	1/4" x 28 UNF	5	3	13	1/2"	5/16"	NA	NA
1P17511ZKN-02-02	1/8" x 27 NPSM	1/4" x 28 UNF	4	2	13	1/2"	5/16"	9/16"	1/8"
1P17511ZKN-02-03	1/8" x 27 NPSM	1/4" x 28 UNF	5	3	13	1/2"	5/16"	9/16"	1/8"

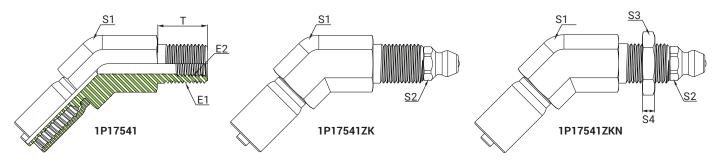
### NOTES:

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- All zerks are made of stainless steel and meet SAE J534 specifications.



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

### 1-PIECE 45° MALE GREASE BULKHEAD



IPI754I SERIES THREAD		HOSE	BORE	THREAD LENGTH (MM)	DIMENSIONS (IN)				
PROPULSE FITTING PART NO.	E1	E2	DN	DASH	Т	S1	S2	S3	S4
1P17541-02-02	1/8" x 27 NPSM	1/4" x 28 UNF	4	2	13	1/2"	NA	NA	NA
1P17541ZK-02-02	1/8" x 27 NPSM	1/4" x 28 UNF	4	2	13	1/2"	5/16"	NA	NA
1P17541ZKN-02-02	1/8" x 27 NPSM	1/4" x 28 UNF	4	2	13	1/2"	5/16"	9/16"	1/8"

### NOTES:

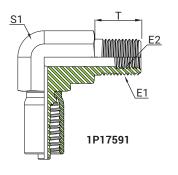


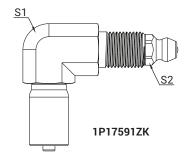
<sup>&</sup>gt; Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

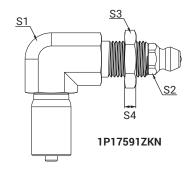
All zerks are made of stainless steel and meet SAE J534 specifications.

<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

### 1-PIECE 90° MALE GREASE BULKHEAD







IPI759I SERIES	THR	EAD	HOSE BORE		THREAD LENGTH (MM)	DII	DIMENSIONS (IN)		IN)
PROPULSE FITTING PART NO.	E1	E2	DN	DASH	Т	<b>S</b> 1	S2	S3	S4
1P17591-02-02	1/8" x 27 NPSM	1/4" x 28 UNF	4	2	13	1/2"	NA	NA	NA
1P17591ZK-02-02	1/8" x 27 NPSM	1/4" x 28 UNF	4	2	13	1/2"	5/16"	NA	NA
1P17591ZKN-02-02	1/8" x 27 NPSM	1/4" x 28 UNF	4	2	13	1/2"	5/16"	9/16"	1/8"

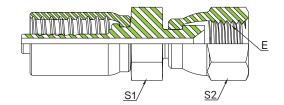
### NOTES:

- Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.
- All zerks are made of stainless steel and meet SAE J534 specifications.



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## 1-PIECE JIC FEMALE 37° CONE DOUBLE HEX STRAIGHT SAE J514/J516



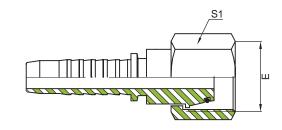
### NOTE:

IP289IID SERIES	THREAD	HOSE BORE		DIMENS	IONS (IN)
PROPULSE FITTING PART NO.	E	DN	DASH	S1	S2
1P28911D-02-02	5/16" x 24	4	2	7/16"	7/16"
1P28911D-03-02	3/8" x 24	4	2	1/2"	9/16"
1P28911D-04-02	7/16" x 20	4	2	1/2"	5/8"
1P28911D-04-03	7/16" x 20	5	3	1/2"	5/8"



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## METRIC FEMALE 24° CONE O-RING DKOL STRAIGHT DIN 20066/3865



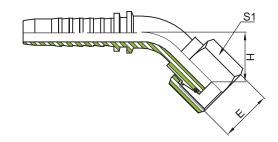
### NOTE:

Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

226II SERIES	THREAD	HOSE	BORE	DIMENSIONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1
S22611-10-02	M10 x 1.0	4	2	12
S22611-12-02	M12 x 1.5	4	2	14
S22611-12-04	M12 x 1.5	6	4	16
S22611-14-04	M14 x 1.5	6	4	17
S22611-16-04	M16 x 1.5	6	4	19
S22611-18-04	M18 x 1.5	6	4	22
S22611-14-05	M14 x 1.5	8	5	17
S22611-16-05	M16 x 1.5	8	5	19
S22611-18-05	M18 x 1.5	8	5	22
S22611-22-05	M22 x 1.5	8	5	27
S22611-14-06	M14 x 1.5	10	6	17
S22611-16-06	M16 x 1.5	10	6	19
S22611-18-06	M18 x 1.5	10	6	22
S22611-22-06	M22 x 1.5	10	6	27
S22611-18-08	M18 x 1.5	12	8	22
S22611-22-08	M22 x 1.5	12	8	27
S22611-22-10	M22 x 1.5	16	10	27
S22611-26-10	M26 x 1.5	16	10	32
S22611-30-10	M30 x 2	16	10	36
S22611-26-12	M26 x 1.5	19	12	32
S22611-30-12	M30 x 2	19	12	36
S22611-36-12	M36 x 2	19	12	41
S22611-30-16	M30 x 2	25	16	36
S22611-36-16	M36 x 2	25	16	41
S22611-45-16	M45 x 2	25	16	50
S22611-36-20	M36 x 2	32	20	41
S22611-45-20	M45 x 2	32	20	50
S22611-52-20	M52 x 2	32	20	60
S22611-52-24	M52 x 2	38	24	60

<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## METRIC FEMALE 24° CONE O-RING DKOL 45° ELBOW DIN 20066/3865



### NOTE:

2264I SERIES	THREAD	HOSE	BORE	DIMENSI	ONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1	Н
S22641-14-04	M14 x 1.5	6	4	17	15.5
S22641-16-05	M16 x 1.5	8	5	19	17
S22641-18-05	M18 x 1.5	8	5	22	18.5
S22641-22-05	M22 x 1.5	8	5	27	19.5
S22641-16-06	M16 x 1.5	10	6	19	17
S22641-18-06	M18 x 1.5	10	6	22	18.5
S22641-22-06	M22 x 1.5	10	6	27	19.5
S22641-22-08	M22 x 1.5	12	8	27	21
S22641-26-08	M26 x 1.5	12	8	32	23.5
S22641-26-10	M26 x 1.5	16	10	32	25.5
S22641-30-10	M30 x 2	16	10	36	25.5
S22641-26-12	M26 x 1.5	19	12	32	23.5
S22641-30-12	M30 x 2	19	12	36	25.5
S22641-36-12	M36 x 2	19	12	41	32
S22641-36-16	M36 x 2	25	16	41	33
S22641-45-20	M45 x 2	32	20	50	38
S22641-52-20	M52 x 2	32	20	60	44.5
S22641-52-24	M52 x 2	38	24	60	44.5

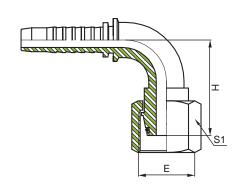


<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## METRIC FEMALE 24° CONE O-RING DKOL 90° ELBOW DIN 20066/3865

### NOTE:

Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.



2269I SERIES	THREAD	HOSE	BORE	DIMENSI	ENSIONS (MM)	
PROPULSE FITTING PART NO.	E	DN	DASH	S1	Н	
S22691-12-04	M12 x 1.5	6	4	14	30	
S22691-14-04	M14 x 1.5	6	4	17	31	
S22691-16-04	M16 x 1.5	6	4	19	33	
S22691-14-05	M14 x 1.5	8	5	17	30.5	
S22691-16-05	M16 x 1.5	8	5	19	33	
S22691-18-05	M18 x 1.5	8	5	22	36	
S22691-16-06	M16 x 1.5	10	6	19	33	
S22691-18-06	M18 x 1.5	10	6	22	36	
S22691-22-06	M22 x 1.5	10	6	27	40	
S22691-22-08	M22 x 1.5	12	8	27	40	
S22691-26-08	M26 x 1.5	12	8	32	51.5	
S22691-26-10	M26 x 1.5	16	10	32	53	
S22691-30-10	M30 x 2	16	10	36	56	
S22691-26-12	M26 x 1.5	19	12	32	51.5	
S22691-30-12	M30 x 2	19	12	36	57	
S22691-36-12	M36 x 2	19	12	41	68.5	
S22691-30-16	M30 x 2	25	16	36	56	
S22691-36-16	M36 x 2	25	16	41	68.5	
S22691-45-16	M45 x 2	25	16	50	78.5	
S22691-36-20	M36 x 2	32	20	41	68.5	
S22691-45-20	M45 x 2	32	20	50	78.5	
S22691-52-20	M52 x 2	32	20	60	95	
S22691-52-24	M52 x 2	38	24	60	95	



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## METRIC MALE 24° CONE SEAT DKOL STRAIGHT DIN 20066/3861

## S1

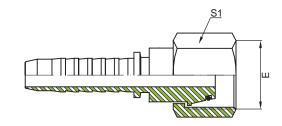
### NOTE:

12611 SERIES	THREAD	HOSE	BORE	DIMENSIONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1
S12611-12-04	M12 x 1.5	6	4	14
S12611-14-04	M14 x 1.5	6	4	17
S12611-16-04	M16 x 1.5	6	4	17
S12611-14-05	M14 x 1.5	8	5	17
\$12611-16-05	M16 x 1.5	8	5	17
S12611-18-05	M18 x 1.5	8	5	19
S12611-16-06	M16 x 1.5	10	6	17
S12611-18-06	M18 x 1.5	10	6	19
\$12611-22-06	M22 x 1.5	10	6	24
S12611-22-08	M22 x 1.5	12	8	24
\$12611-26-08	M26 x 1.5	12	8	27
S12611-22-10	M22 x 1.5	16	10	24
S12611-26-10	M26 x 1.5	16	10	27
\$12611-30-10	M30 x 2	16	10	32
S12611-30-12	M30 x 2	19	12	32
S12611-36-16	M36 x 2	25	16	41
S12611-45-20	M45 x 2	32	20	46
S12611-52-24	M52 x 2	38	24	55



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## METRIC FEMALE 24° CONE O-RING DKOS STRAIGHT DIN 20066/3865



### NOTE:

227II SERIES	THREAD	HOSE	BORE	DIMENSIONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1
S22711-14-04	M14 x 1.5	6	4	17
S22711-16-04	M16 x 1.5	6	4	19
S22711-18-04	M18 x 1.5	6	4	22
S22711-16-05	M16 x 1.5	8	5	19
S22711-20-05	M20 x 1.5	8	5	24
S22711-18-06	M18 x 1.5	10	6	22
S22711-20-06	M20 x 1.5	10	6	24
S22711-22-06	M22 x 1.5	10	6	27
S22711-24-06	M24 x 1.5	10	6	30
S22711-20-08	M20 x 1.5	12	8	24
S22711-22-08	M22 x 1.5	12	8	27
S22711-24-08	M24 x 1.5	12	8	30
S22711-30-10	M30 x 2	16	10	36
S22711-30-12	M30 x 2	19	12	36
S22711-36-12	M36 x 2	19	12	46
S22711-42-12	M42 x 2	19	12	50
S22711-36-16	M36 x 2	25	16	46
S22711-42-16	M42 x 2	25	16	50
S22711-52-20	M52 x 2	32	20	60
S22711-52-24	M52 x 2	38	24	60



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## METRIC FEMALE 24° CONE O-RING DKOS 45° ELBOW DIN 20066/3865

## S1 T

### NOTE:

2274I SERIES	THREAD	HOSE	BORE	DIMENSI	ONS (MM)			
PROPULSE FITTING PART NO.	E	DN	DASH	S1	Н			
S22741-14-04	M14 x 1.5	6	4	17	16			
S22741-16-04	M16 x 1.5	6	4	19	17			
S22741-18-04	M18 x 1.5	6	4	22	17			
S22741-16-05	M16 x 1.5	8	5	19	17			
S22741-18-06	M18 x 1.5	10	6	22	17			
S22741-20-06	M20 x 1.5	10	6	24	18			
S22741-22-06	M22 x 1.5	10	6	27	21			
S22741-20-08	M20 x 1.5	12	8	24	18.5			
S22741-22-08	M22 x 1.5	12	8	27	21			
S22741-24-08	M24 x 1.5	12	8	30	21			
S22741-24-10	M24 x 1.5	16	10	30	21			
S22741-30-10	M30 x 2	16	10	36	25			
S22741-30-12	M30 x 2	19	12	36	25			
S22741-36-12	M36 x 2	19	12	46	30.5			
S22741-42-16	M42 x 2	25	16	50	35.5			
S22741-52-20	M52 x 2	32	20	60	42			
S22741-52-25	M52 x 2	38	24	60	42			



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## METRIC FEMALE 24° CONE O-RING DKOS 90° ELBOW DIN 20066/3865

# S1 E

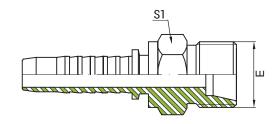
### NOTE:

2279I SERIES	THREAD	HOSE	BORE	DIMENSI	ONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1	Н
S22791-14-04	M14 x 1.5	6	4	17	32
S22791-16-04	M16 x 1.5	6	4	19	32
S22791-18-04	M18 x 1.5	6	4	22	32
S22791-16-05	M16 x 1.5	8	5	19	32
S22791-18-05	M18 x 1.5	8	5	22	32
S22791-20-05	M20 x 1.5	8	5	24	34
S22791-18-06	M18 x 1.5	10	6	22	32
S22791-20-06	M20 x 1.5	10	6	24	35.5
S22791-22-06	M22 x 1.5	10	6	27	40
S22791-20-08	M20 x 1.5	12	8	24	35.5
S22791-22-08	M22 x 1.5	12	8	27	40
S22791-24-08	M24 x 1.5	12	8	30	43
S22791-30-08	M30 x 2	12	8	36	49.5
S22791-24-10	M24 x 1.5	16	10	30	43
S22791-30-10	M30 x 2	16	10	36	49.5
S22791-30-12	M30 x 2	19	12	36	49.5
S22791-36-12	M36 x 2	19	12	46	59
S22791-42-16	M42 x 2	25	16	50	70
S22791-52-20	M52 x 2	32	20	60	87
S22791-52-24	M52 x 2	38	24	60	87



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## METRIC MALE 24° CONE SEAT DKOS STRAIGHT DIN 20066/3861



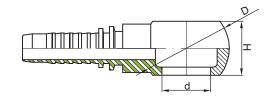
### NOTE:

12711 SERIES	THREAD	HOSE	BORE	DIMENSIONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1
S12711-14-04	M14 x 1.5	6	4	14
S12711-16-04	M16 x 1.5	6	4	17
S12711-18-04	M18 x 1.5	6	4	19
S12711-20-05	M20 x 1.5	8	5	22
S12711-22-05	M22 x 1.5	8	5	22
S12711-20-06	M20 x 1.5	10	6	22
S12711-22-06	M22 x 1.5	10	6	22
S12711-22-08	M22 x 1.5	12	8	22
S12711-24-08	M24 x 1.5	12	8	24
S12711-30-10	M30 x 2	16	10	32
S12711-36-12	M36 x 2	19	12	41
S12711-36-16	M36 x 2	25	16	41
S12711-42-16	M42 x 2	25	16	46
S12711-42-20	M42 x 2	32	20	46
S12711-52-20	M52 x 2	32	20	55



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

### METRIC BANJO DIN 7642



### NOTE:

722II SERIES	DOLT OLZE	HOSE	BORE	DII	MENSIONS (M	IM)
PROPULSE FITTING PART NO.	BOLT SIZE	DN	DASH	d	D	Н
S72211-10-03	M10 x 1	5	3	10.1	17	10
S72211-10-04	M10 x 1	6	4	10.1	17	10
S72211-12-04	M12 x 1.5	6	4	12.1	20	12
S72211-14-04	M14 x 1.5	6	4	14.1	24	14
S72211-16-04	M16 x 1.5	6	4	16.1	28	16
S72211-18-04	M18 x 1.5	6	4	18.1	32	20
S72211-12-05	M12 x 1.5	8	5	12.1	20	12
S72211-14-05	M14 x 1.5	8	5	14.1	24	14
S72211-16-05	M16 x 1.5	8	5	16.1	28	16
S72211-18-05	M18 x 1.5	8	5	18.1	32	20
S72211-12-06	M12 x 1.5	10	6	12.1	20	12
S72211-14-06	M14 x 1.5	10	6	14.1	24	14
S72211-16-06	M16 x 1.5	10	6	16.1	28	16
S72211-18-06	M18 x 1.5	10	6	18.1	32	20
S72211-22-06	M22 x 1.5	10	6	22.1	39	25
S72211-18-08	M18 x 1.5	12	8	18.1	32	20
S72211-22-08	M22 x 1.5	12	8	22.1	39	25
S72211-22-10	M22 x 1.5	16	10	22.1	39	25
S72211-26-12	M26 x 1.5	19	12	26.1	46	30
S72211-30-16	M30 x 1.5	25	16	30.1	54	36
S72211-30-20	M30 x 1.5	32	20	30.1	54	36



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## ORFS FEMALE SHORT STRAIGHT SAE J1453/J516

## <u>S1</u> <u>S2</u>

### NOTE:

Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

264IIS SERIES	THREAD	HOSE	BORE	DIMENSI	ONS (MM)
PROPULSE FITTING PART NO.	Е	DN	DASH	S1	S2
S26411S-04-04	9/16" x 18	6	4	14	17
S26411S-06-04	11/16" x 16	6	4	17	22
S26411S-04-05	9/16" x 18	8	5	17	17
S26411S-06-05	11/16" x 16	8	5	17	22
S26411S-08-05	13/16" x 16	8	5	19	24
S26411S-04-06	9/16" x 18	10	6	17	17
S26411S-06-06	11/16" x 16	10	6	17	22
S26411S-08-06	13/16" x 16	10	6	19	24
S26411S-06-08	11/16" x 16	12	8	19	22
S26411S-08-08	13/16" x 16	12	8	19	24
S26411S-10-08	1" x 14	12	8	24	30
S26411S-12-08	1.3/16" x 12	12	8	30	36
S26411S-08-10	13/16" x 16	16	10	24	24
S26411S-10-10	1" x 14	16	10	24	30
S26411S-12-10	1.3/16" x 12	16	10	30	36
S26411S-10-12	1" x 14	19	12	27	30
S26411S-12-12	1.3/16" x 12	19	12	30	36
S26411S-16-12	1.7/16" x 12	19	12	36	41
S26411S-12-16	1.3/16" x 12	25	16	36	36
S26411S-16-16	1.7/16" x 12	25	16	36	41
S26411S-20-16	1.11/16" x 12	25	16	41	50
S26411S-16-20	1.7/16" x 12	32	20	36	41
S26411S-20-20	1.11/16" x 12	32	20	41	50
S26411S-24-20	2" x 12	32	20	50	60
S26411S-20-24	1.11/16" x 12	38	24	41	50
S26411S-24-24	2" x 12	38	24	50	60



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

### ORFS FEMALE LONG STRAIGHT SAE J1453/J516

## S1 S2

### NOTE:

Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

264IIL SERIES	THREAD	HOSE	BORE	DIMENSI	ONS (MM)
PROPULSE FITTING PART NO.	Е	DN	DASH	S1	S2
S26411L-04-04	9/16" x 18	6	4	14	17
S26411L-06-04	11/16" x 16	6	4	17	22
S26411L-04-05	9/16" x 18	8	5	13	17
S26411L-06-05	11/16" x 16	8	5	17	22
S26411L-04-06	9/16" x 18	10	6	17	17
S26411L-06-06	11/16" x 16	10	6	17	22
S26411L-08-06	13/16" x 16	10	6	19	24
S26411L-06-08	11/16" x 16	12	8	19	22
S26411L-08-08	13/16" x 16	12	8	19	24
S26411L-10-08	1" x 14	12	8	24	30
S26411L-12-08	1.3/16" x 12	12	8	30	36
S26411L-08-10	13/16" x 16	16	10	24	24
S26411L-10-10	1" x 14	16	10	24	30
S26411L-12-10	1.3/16" x 12	16	10	30	36
S26411L-10-12	1" x 14	19	12	27	30
S26411L-12-12	1.3/16" x 12	19	12	30	36
S26411L-16-12	1.7/16" x 12	19	12	36	41
S26411L-12-16	1.3/16" x 12	25	16	36	36
S26411L-16-16	1.7/16" x 12	25	16	36	41
S26411L-20-16	1.11/16" x 12	25	16	41	50
S26411L-16-20	1 7/16" x 12	32	20	41	41
S26411L-20-20	1.11/16" x 12	32	20	41	50
S26411L-24-20	2" x 12	32	20	50	60
S26411L-24-24	2" x 12	38	24	50	60



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## ORFS FEMALE 45° ELBOW SAE J1453/J516

## S1 ±

### NOTE:

Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

2644I SERIES	THREAD	HOSE	BORE	DIMENSI	ONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1	Н
S26441-04-04	9/16" x 18	6	4	17	10
S26441-06-04	11/16" x 16	6	4	22	11
S26441-04-05	9/16" x 18	8	5	17	10
S26441-06-05	11/16" x 16	8	5	22	11
S26441-04-06	9/16" x 18	10	6	17	10
S26441-06-06	11/16" x 16	10	6	22	11
S26441-08-06	13/16" x 16	10	6	24	15
S26441-06-08	11/16" x 16	12	8	22	11
S26441-08-08	13/16" x 16	12	8	24	15
S26441-10-08	1" x 14	12	8	30	15
S26441-12-08	1.3"/16 x 12	12	8	36	21
S26441-08-10	13/16" x 16	16	10	24	15
S26441-10-10	1" x 14	16	10	30	15
S26441-12-10	1.3/16" x 12	16	10	36	21
S26441-10-12	1" x 14	19	12	30	16
S26441-12-12	1.3/16" x 12	19	12	36	21
S26441-16-12	1.7/16" x 12	19	12	41	24
S26441-12-16	1.3/16" x 12	25	16	36	21
S26441-16-16	1.7/16" x 12	25	16	41	24
S26441-20-16	1.11/16" x 12	25	16	50	25
S26441-16-20	1.7/16" x 12	32	20	41	24
S26441-20-20	1.11/16" x 12	32	20	50	25
S26441-24-20	2" x 12	32	20	60	27
S26441-20-24	1.11/16" x 12	38	24	50	25
S26441-24-24	2" x 12	38	24	60	27



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## ORFS FEMALE 90° ELBOW SAE J1453/J516

## T S1

### NOTE:

Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

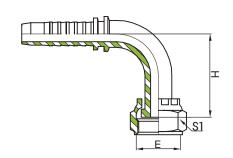
2649I SERIES	THREAD	HOSE	BORE	DIMENSI	ONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	\$1	Н
S26491-04-04	9/16" x 18	6	4	17	22
S26491-06-04	11/16" x 16	6	4	22	23
S26491-04-05	9/16" x 18	8	5	17	21
S26491-06-05	11/16" x 16	8	5	22	23
S26491-04-06	9/16" x 18	10	6	17	21
S26491-06-06	11/16" x 16	10	6	22	24
S26491-08-06	13/16" x 16	10	6	24	30
S26491-06-08	11/16" x 16	12	8	22	23
S26491-08-08	13/16" x 16	12	8	24	29
S26491-10-08	1" x 14	12	8	30	33
S26491-08-10	13"/16 x 16	16	10	24	29
S26491-10-10	1" x 14	16	10	30	32
S26491-12-10	1.3/16" x 12	16	10	36	48
S26491-10-12	1" x 14	19	12	30	32
S26491-12-12	1.3/16" x 12	19	12	36	48
S26491-16-12	1.7/16" x 12	19	12	41	56
S26491-12-16	1.3/16" x 12	25	16	36	48
S26491-16-16	1.7/16" x 12	25	16	41	56
S26491-20-16	1.11/16" x 12	25	16	50	64
S26491-16-20	1.7/16" x 12	32	20	41	56
S26491-20-20	1.11/16" x 12	32	20	50	66
S26491-24-20	2" x 12	32	20	60	69
S26491-20-24	1.11/16" x 12	38	24	50	64
S26491-24-24	2" x 12	38	24	60	69



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## ORFS FEMALE 90° ELBOW MEDIUM DROP SAE J1453/J516

### NOTE:



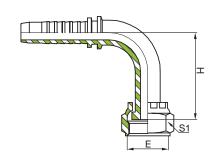
2649IM SERIES	THREAD HOSE BORE			DIMENSIONS (MM)	
PROPULSE FITTING PART NO.	Е	DN	DASH	S1	Н
S26491M-04-04	9/16" x 18	6	4	17	32
S26491M-06-04	11/16" x 16	6	4	22	38
S26491M-06-06	11/16" x 16	10	6	22	38
S26491M-08-06	13/16" x 16	10	6	24	41
S26491M-08-08	13/16" x 16	12	8	24	41
S26491M-10-08	1" x 14	12	8	30	47
S26491M-10-10	1" x 14	16	10	30	47
S26491M-10-12	1" x 14	19	12	30	47
S26491M-12-12	1.3/16" x 12	19	12	36	58
S26491M-16-16	1.7/16" x 12	25	16	41	71
S26491M-20-20	1.11/16" x 12	32	20	50	78
S26491M-24-24	2" x 12	38	24	60	86



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## ORFS FEMALE 90° ELBOW LONG DROP SAE J1453/J516

### NOTE:



2649IL SERIES	THREAD	HOSE	BORE	DIMENSI	ONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1	Н
S26491L-04-04	9/16" x 18	6	4	17	46
S26491L-06-06	11/16" x 16	10	6	22	54
S26491L-08-06	13/16" x 16	10	6	24	64
S26491L-06-08	11/16" x 16	12	8	22	54
S26491L-08-08	13/16" x 16	12	8	24	64
S26491L-10-08	1" x 14	12	8	30	70
S26491L-10-10	1" x 14	16	10	30	70
S26491L-10-12	1" x 14	19	12	30	70
S26491L-12-12	1.3/16" x 12	19	12	36	96
S26491L-12-16	1.3/16" x 12	25	16	36	96
S26491L-16-16	1.7/16" x 12	25	16	41	114
S26491L-20-16	1.7/16" x 12	25	16	50	129
S26491L-20-20	1.11/16" x 12	31	20	50	129
S26491L-24-24	2" x 12	38	24	60	141



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## ORFS MALE STRAIGHT SAE J1453/J516

## S1

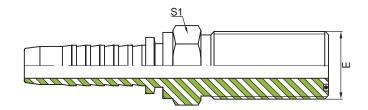
### NOTE:

16411 SERIES	THREAD	HOSE	BORE	DIMENSIONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1
S16411-04-04	9/16" x 18	6	4	17
S16411-06-04	11/16" x 16	6	4	19
S16411-06-06	11/16" x 16	10	6	19
S16411-08-06	13/16" x 16	10	6	22
S16411-08-08	13/16" x 16	12	8	22
S16411-10-08	1" x 14	12	8	27
S16411-12-08	1.3/16" x 12	12	8	32
S16411-08-10	13/16" x 16	16	10	22
\$16411-10-10	1" x 14	16	10	27
S16411-12-10	1.3/16" x 12	16	10	32
S16411-12-12	1.3/16" x 12	19	12	32
S16411-16-12	1.7/16" x 12	19	12	41
S16411-16-16	1.7/16" x 12	25	16	41
S16411-20-16	1.11/16" x 12	25	16	46
\$16411-20-20	1.11/16" x 12	32	20	46
S16411-24-24	2" x 12	38	24	55



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## ORFS MALE STRAIGHT BULKHEAD SAE J1453/J516



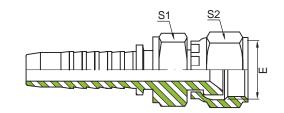
### NOTE:

16411BH SERIES	THREAD	HOSE	BORE	DIMENSIONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1
S16411BH-04-04	9/16" x 18	6	4	22
S16411BH-06-04	11/16" x 16	6	4	27
S16411BH-06-06	11/16" x 16	10	6	27
S16411BH-08-06	13/16" x 16	10	6	30
S16411BH-08-08	13/16" x 16	12	8	30
S16411BH-10-10	1" x 14	16	10	36
S16411BH-12-10	1.3/16" x 12	16	10	41
S16411BH-12-12	1.3/16" x 12	19	12	41
S16411BH-16-16	1.7/16" x 12	25	16	46



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## JIC FEMALE 37° CONE DOUBLE HEX STRAIGHT SAE J514/J516



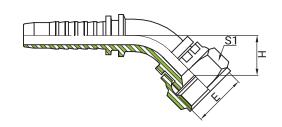
### NOTE:

Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

289IID SERIES	THREAD	HOSE	BORE	DIMENSI	ONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1	S2
S28911D-03-04	3/8" x 24	6	4	14	14
S28911D-04-03	7/16" x 20	5	3	11.11	14
S28911D-04-04	7/16" x 20	6	4	14	14
S28911D-05-04	1/2" x 20	6	4	14	17
S28911D-06-04	9/16" x 18	6	4	14	19
S28911D-05-05	1/2" x 20	8	5	14	17
S28911D-06-05	9/16" x 18	8	5	14	19
S28911D-08-05	3/4" x 16	8	5	19	24
S28911D-04-06	7/16" x 20	10	6	17	14
S28911D-05-06	1/2" x 20	10	6	17	17
S28911D-06-06	9/16" x 18	10	6	17	19
S28911D-08-06	3/4" x 16	10	6	19	22
S28911D-10-06	7/8" x 14	10	6	22	27
S28911D-06-08	9/16" x 18	12	8	19	19
S28911D-08-08	3/4" x 16	12	8	19	22
S28911D-10-08	7/8" x 14	12	8	22	27
S28911D-12-08	1.1/16" x 12	12	8	27	32
S28911D-08-10	3/4" x 16	16	10	22	22
S28911D-10-10	7/8" x 14	16	10	22	27
S28911D-12-10	1.1/16" x 12	16	10	27	32
S28911D-10-12	7/8" x 14	19	12	27	27
S28911D-12-12	1.1/16" x 12	19	12	27	32
S28911D-16-12	1.5/16" x 12	19	12	32	38
S28911D-12-16	1.1/16" x 12	25	16	32	32
S28911D-16-16	1.5/16" x 12	25	16	32	38
S28911D-20-16	1.5/8" x 12	25	16	41	50
S28911D-20-20	1.5/8" x 12	32	20	41	50
S28911D-24-24	1.7/8" x 12	38	24	50	55
S28911D-32-32	2.1/2" x 12	50	32	65	75

<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

### JIC FEMALE 37° CONE 45° ELBOW SAE J514/J516



### NOTE:

Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

2894I SERIES	THREAD	HOSE	BORE	DIMENSI	ONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1	Н
S28941-04-03	7/16" x 20	5	3	14	10
S28941-04-04	7/16" x 20	6	4	14	10
S28941-05-04	1/2" x 20	6	4	17	10
S28941-06-04	9/16" x 18	6	4	19	11
S28941-05-05	1/2" x 20	8	5	17	10
S28941-06-05	9/16" x 18	8	5	19	11
S28941-05-06	1/2" x 20	10	6	17	10
S28941-06-06	9/16" x 18	10	6	19	12
S28941-08-06	3/4" x 16	10	6	24	15
S28941-06-08	9/16" x 18	12	8	19	11
S28941-08-08	3/4" x 16	12	8	24	15
S28941-10-08	7/8" x 14	12	8	27	16
S28941-12-08	1.1/16" x 12	12	8	32	21
S28941-10-10	7/8" x 14	16	10	27	16
S28941-12-10	1.1/16" x 12	16	10	32	21
S28941-10-12	7/8" x 14	19	12	27	16
S28941-12-12	1.1/16" x 12	19	12	32	21
S28941-16-12	1.5/16" x 12	19	12	38	24
S28941-12-16	1.1/16" x 12	25	16	32	21
S28941-16-16	1.5/16" x 12	25	16	38	24
S28941-16-20	1.5/16" x 12	32	20	38	24
S28941-20-20	1.5/8" x 12	32	20	50	25
S28941-24-20	1.7/8" x 12	32	20	60	27
S28941-24-24	1.7/8" x 12	38	24	60	27
S28941-32-32	2.1/2" x 12	50	32	75	34



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## JIC FEMALE 37° CONE 90° ELBOW SAE J514/J516

# T S1

### NOTE:

Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

2899I SERIES	THREAD	HOSE	BORE	DIMENSI	ONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	<b>S</b> 1	Н
S28991-04-04	7/16" x 20	6	4	14	21
S28991-05-04	1/2" x 20	6	4	17	21
S28991-06-04	9/16" x 18	6	4	19	28
S28991-05-05	1/2" x 20	8	5	17	21
S28991-06-05	9/16" x 18	8	5	19	23
S28991-05-06	1/2" x 20	10	6	17	21
S28991-06-06	9/16" x 18	10	6	19	23
S28991-08-06	3/4" x 16	10	6	22	30
S28991-06-08	9/16" x 18	12	8	19	23
S28991-08-08	3/4" x 16	12	8	22	30
S28991-10-08	7/8" x 14	12	8	27	32
S28991-12-08	1.1/16" x 12	12	8	32	48
S28991-08-10	3/4" x 16	16	10	22	29
S28991-10-10	7/8" x 14	16	10	27	32
S28991-12-10	1.1/16" x 12	16	10	32	48
S28991-10-12	7/8" x 14	19	12	27	32
S28991-12-12	1.1/16" x 12	19	12	32	48
S28991-16-12	1.5/16" x 12	19	12	38	56
S28991-12-16	1.1/16" x 12	25	16	32	48
S28991-16-16	1.5/16" x 12	25	16	38	62
S28991-20-16	1.5/8" x 12	25	16	50	60
S28991-16-20	1.5/16" x 12	32	20	38	56
S28991-20-20	1.5/8" x 12	32	20	50	64
S28991-24-20	1.7/8" x 12	32	20	60	69
S28991-24-24	1.7/8" x 12	38	24	60	69
S28991-32-32	2.1/2" x 12	50	32	75	88



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## JIC FEMALE 37° CONE 90° ELBOW MEDIUM DROP SAE J514/J516

# S1 E

#### NOTE:

2899IM SERIES	THREAD	HOSE BORE		THREAD HOSE BORE		DIMENSI	ONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1	Н		
S28991M-04-04	7/16" x 20	6	4	14	32		
S28991M-06-06	9/16" x 18	10	6	19	33		
S28991M-08-06	3/4" x 16	10	6	22	41		
S28991M-08-08	3/4" x 16	12	8	22	41		
S28991M-12-10	1.1/16" x 12	16	10	32	58		
S28991M-12-12	1.1/16" x 12	19	12	32	58		
S28991M-16-16	1.5/16" x 12	25	16	38	71		



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## JIC FEMALE 37° CONE 90° ELBOW LONG DROP SAE J514/J516

# S1 E

#### NOTE:

2899IL SERIES	THREAD	HOSE	BORE	DIMENSI	ONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1	Н
S28991L-04-04	7/16" x 20	6	4	14	46
S28991L-05-04	1/2" x 20	6	4	17	46
S28991L-06-06	9/16" x 18	10	6	19	54
S28991L-08-06	3/4" x 16	10	6	22	62
S28991L-08-08	3/4" x 16	12	8	22	64
S28991L-10-10	7/8" x 14	16	10	27	70
S28991L-12-12	1.1/16" x 12	19	12	32	96
S28991L-14-12	1.3/16" x 12	19	12	36	100
S28991L-16-16	1.5/16" x 12	25	16	38	114
S28991L-20-20	1.5/8" x 12	32	20	50	129
S28991L-24-24	1.7/8" x 12	38	24	60	141
S28991L-32-32	2.1/2" x 12	50	32	75	222



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## JIC MALE 37° CONE STRAIGHT SAE J514/J516

## <u>S1</u>

#### NOTE:

Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

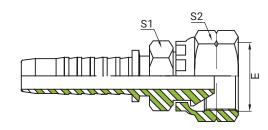
18911 SERIES	THREAD	HOSE	BORE	DIMENSIONS (MM)
PROPULSE FITTING PART NO.	Е	DN	DASH	S1
S18911-04-03	7/16" x 20	5	3	14
S18911-04-04	7/16" x 20	6	4	14
S18911-05-04	1/2" x 20	6	4	14
\$18911-06-04	9/16" x 18	6	4	17
\$18911-05-05	1/2" x 20	8	5	14
\$18911-06-05	9/16" x 18	8	5	17
\$18911-05-06	1/2" x 20	10	6	17
\$18911-06-06	9/16" x 18	10	6	17
\$18911-08-06	3/4" x 16	10	6	19
\$18911-10-06	7/8" x 14	10	6	24
S18911-08-08	3/4" x 16	12	8	19
\$18911-10-08	7/8" x 14	12	8	24
S18911-12-08	1.1/16" x 12	12	8	27
\$18911-10-10	7/8" x 14	16	10	24
S18911-12-10	1.1/16" x 12	16	10	27
S18911-12-12	1.1/16" x 12	19	12	27
\$18911-16-12	1.5/16" x 12	19	12	36
S18911-12-16	1.1/16" x 12	25	16	27
\$18911-16-16	1.5/16" x 12	25	16	36
S18911-20-16	1.5/8" x 12	25	16	46
S18911-20-20	1.5/8" x 12	32	20	46
S18911-24-20	1.7/8" x 12	32	20	50
S18911-24-24	1.7/8" x 12	38	24	50
S18911-32-32	2.1/2" x 12	50	32	65



▲ WARNING: This product can expose you to chemicals including lead which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

#### NPSM FEMALE 30° CONE STRAIGHT



#### NOTE:

238IID SERIES	THREAD	HOSE BORE		DIMENSION	IS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1	S2
S23811D-04-03	1/4" x 18	5	3	14	19
S23811D-04-04	1/4" x 18	6	4	14	19
S23811D-06-04	3/8" x 18	6	4	22	22
S23811D-06-05	3/8" x 18	8	5	22	22
S23811D-04-06	1/4" x 18	10	6	19	19
S23811D-06-06	3/8" x 18	10	6	17	22
S23811D-08-08	1/2" x 14	12	8	22	27
S23811D-12-12	3/4" x 14	19	12	27	32
S23811D-16-16	1" x 11.5	25	16	32	38



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## NPTF MALE 30° CONE STRAIGHT SAE J516

## S1

#### NOTE:

Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

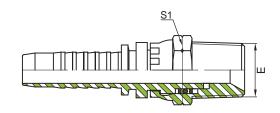
17811 SERIES	THREAD	HOSE	BORE	DIMENSIONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1
S17811-02-03	1/8" x 27	5	3	14
S17811-04-03	1/4" x 18	5	3	14
S17811-02-04	1/8" x 27	6	4	14
S17811-04-04	1/4" x 18	6	4	14
S17811-06-04	3/8" x 18	6	4	19
S17811-08-04	1/2" x 14	6	4	22
S17811-04-05	1/4" x 18	8	5	14
S17811-06-05	3/8" x 18	8	5	19
S17811-04-06	1/4" x 18	10	6	17
S17811-06-06	3/8" x 18	10	6	19
S17811-08-06	1/2" x 14	10	6	22
S17811-06-08	3/8" x 18	12	8	19
S17811-08-08	1/2" x 14	12	8	22
S17811-12-08	3/4" x 14	12	8	27
S17811-08-10	1/2" x 14	16	10	24
S17811-12-10	3/4" x 14	16	10	27
S17811-16-10	1" x 11.5	16	10	36
S17811-12-12	3/4" x 14	19	12	27
S17811-16-12	1" x 11.5	19	12	36
S17811-12-16	3/4" x 14	25	16	32
S17811-16-16	1" x 11.5	25	16	36
S17811-20-16	1.1/4" x 11.5	25	16	46
S17811-20-20	1.1/4" x 11.5	32	20	46
S17811-24-24	1.1/2" x 11.5	38	24	50
S17811-32-32	2" x 11.5	50	32	65



▲ WARNING: This product can expose you to chemicals including lead which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## NPTF SWIVEL MALE 30° CONE STRAIGHT SAE J516



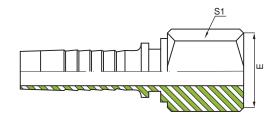
#### NOTE:

17811W SERIES	THREAD	HOSE	BORE	DIMENSIONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1
S17811W-02-04	1/8" x 27	6	4	17
S17811W-04-04	1/4" x 18	6	4	17
S17811W-06-04	3/8" x 18	6	4	19
S17811W-06-05	3/8" x 18	8	5	19
S17811W-04-06	1/4" x 18	10	6	17
S17811W-06-06	3/8" x 18	10	6	19
S17811W-08-06	1/2" x 14	10	6	27
S17811W-08-08	1/2" x 14	12	8	27
S17811W-12-12	3/4" x 14	19	12	36
S17811W-16-16	1" x 11.5	25	16	38



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

#### NPT FEMALE SOLID STRAIGHT



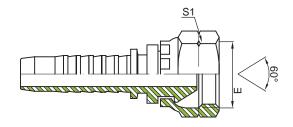
#### NOTE:

278II SERIES	THREAD	HOSE BORE		DIMENSIONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	\$1
S27811-04-04	1/4" x 18	6	4	19
S27811-04-06	1/4" x 18	10	6	19
S27811-06-06	3/8" x 18	10	6	22
S27811-08-06	1/2" x 14	10	6	27



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

#### **BSP FEMALE 60° CONE STRAIGHT**



#### NOTE:

Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

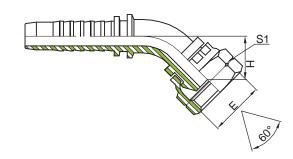
248II SERIES	THREAD	HOSE	BORE	DIMENSIONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1
S24811-02-03	1/8" x 28	5	3	14
S24811-04-03	1/4" x 19	5	3	19
S24811-02-04	1/8" x 28	6	4	14
S24811-04-04	1/4" x 19	6	4	19
S24811-06-04	3/8" x 19	6	4	22
S24811-04-05	1/4" x 19	8	5	19
S24811-06-05	3/8" x 19	8	5	22
S24811-04-06	1/4" x 19	10	6	19
S24811-06-06	3/8" x 19	10	6	22
S24811-08-06	1/2" x 14	10	6	27
S24811-06-08	3/8" x 14	12	8	22
S24811-08-08	1/2" x 14	12	8	27
S24811-10-08	5/8" x 14	12	8	30
S24811-12-08	3/4" x 14	12	8	32
S24811-10-10	5/8" x 14	16	10	30
S24811-12-10	3/4" x 14	16	10	32
S24811-12-12	3/4" x 14	19	12	32
S24811-16-12	1" x 11	19	12	41
S24811-16-16	1" x 11	25	16	41
S24811-20-16	1.1/4" x 11	32	16	50
S24811-20-20	1.1/4" x 11	32	20	50
S24811-24-20	1.1/2" x 11	32	20	55
S24811-24-24	1.1/2" x 11	38	24	55
S24811-32-24	2" x 11	38	24	70
S24811-32-32	2" x 11	50	32	70



▲ WARNING: This product can expose you to chemicals including lead which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

 $<sup>\</sup>mbox{\ensuremath{^{\star}}}\xspace$  Dimensions provided are nominal, for reference only and may vary based on current supply.

#### **BSP FEMALE 60° CONE 45° ELBOW**



#### NOTE:

Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

2484I SERIES	THREAD	HOSE	BORE	DIMENSI	ONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	<b>S</b> 1	Н
S24841-04-04	1/4" x 19	6	4	19	15
S24841-06-04	3/8" x 19	6	4	22	15
S24841-06-05	3/8" x 19	8	5	22	19
S24841-06-06	3/8" x 19	10	6	22	17
S24841-08-06	1/2" x 14	10	6	27	16
S24841-08-08	1/2" x 14	12	8	27	20
S24841-10-08	5/8" x 14	12	8	30	23
S24841-12-08	3/4" x 14	12	8	32	26
S24841-10-10	5/8" x 14	16	10	30	23
S24841-12-10	3/4" x 14	16	10	32	27
S24841-12-12	3/4" x 14	19	12	32	27
S24841-16-12	1" x 11	19	12	41	33
S24841-16-16	1" x 11	25	16	41	34
S24841-20-16	1.1/4" x 11	25	16	50	42
S24841-20-20	1.1/4" x 11	32	20	50	38
S24841-24-24	1.1/2" x 11	38	24	55	49
S24841-32-32	2" x 11	50	32	70	60

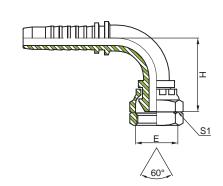


▲ WARNING: This product can expose you to chemicals including lead which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

#### **BSP FEMALE 60° CONE 90° ELBOW**

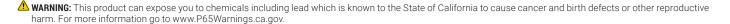
#### NOTE:



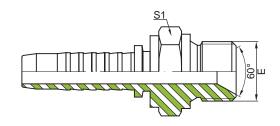
2489I SERIES	B9I SERIES THREAD HOSE BORE		BORE	DIMENSI	ONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1	Н
S24891-04-04	1/4" x 19	6	4	19	29
S24891-06-04	3/8" x 19	6	4	22	30
S24891-04-05	1/4" x 19	8	5	19	29.5
S24891-06-05	3/8" x 19	8	5	22	30
S24891-04-06	1/4" x 19	10	6	19	32
S24891-06-06	3/8" x 19	10	6	22	33.5
S24891-08-06	1/2" x 14	10	6	27	32
S24891-06-08	3/8" x 19	12	8	22	41
S24891-08-08	1/2" x 14	12	8	27	41
S24891-10-08	5/8" x 14	12	8	30	42
S24891-12-08	3/4" x 14	12	8	32	45.5
S24891-08-10	1/2" x 14	16	10	27	55
S24891-10-10	5/8" x 14	16	10	30	50
S24891-12-10	3/4" x 14	16	10	32	55
S24891-12-12	3/4" x 14	19	12	32	55
S24891-16-12	1" x 11	19	12	41	62
S24891-16-16	1" x 11	25	16	41	71
S24891-20-16	1.1/4" x 11	25	16	50	83
S24891-20-20	1.1/4" x 11	32	20	50	84
S24891-20-24	1.1/4" x 11	38	24	50	90
S24891-24-24	1.1/2" x 11	38	24	55	99
S24891-32-24	2" x 11	40	24	70	125
S24891-32-32	2" x 11	50	32	70	128



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.



#### **BSP MALE 60° CONE STRAIGHT**



#### NOTE:

Not all sizes stocked at all times. Some specifications may vary. Please inquire about availability. ProPulse reserves the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

14811 SERIES	THREAD	HOSE	BORE	DIMENSIONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1
S14811-02-03	1/8" x 28	5	3	14
S14811-02-04	1/8" x 28	6	4	14
S14811-04-04	1/4" x 19	6	4	19
S14811-06-04	3/8" x 19	6	4	22
S14811-06-05	3/8" x 19	8	5	22
S14811-04-06	1/4" x 19	10	6	19
\$14811-06-06	3/8" x 19	10	6	22
S14811-08-06	1/2" x 14	10	6	27
\$14811-06-08	3/8" x 19	12	8	22
S14811-08-08	1/2" x 14	12	8	27
\$14811-10-08	5/8" x 14	12	8	30
\$14811-12-08	3/4" x 14	12	8	32
S14811-10-10	5/8" x 14	16	10	30
S14811-12-10	3/4" x 14	16	10	32
S14811-12-12	3/4" x 14	19	12	32
S14811-16-12	1" x 11	19	12	41
S14811-16-16	1" x 11	25	16	41
\$14811-20-16	1.1/4" x 11	25	16	50
S14811-20-20	1.1/4" x 11	32	20	50
\$14811-24-20	1.1/2" x 11	32	20	55
S14811-24-24	1.1/2" x 11	38	24	55
S14811-32-32	2" x 11	50	32	70



▲ WARNING: This product can expose you to chemicals including lead which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

#### **BSPP MALE O-RING FLAT SEAL STRAIGHT**



#### NOTE:

14411 SERIES	THREAD	HOSE	BORE	DIMENSIONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1
S14411-04-04	1/4" x 19	6	4	19
S14411-08-04	1/2" x 14	6	4	27
S14411-04-06	1/4" x 19	10	6	19
\$14411-06-06	3/8" x 19	10	6	22
S14411-08-06	1/2" x 14	10	6	27
S14411-08-08	1/2" x 14	12	8	27
S14411-10-10	5/8" x 14	16	10	27
S14411-12-10	3/4" x 14	16	10	32
S14411-12-12	3/4" x 14	19	12	32
S14411-12-16	3/4" x 14	25	16	32
S14411-16-16	1" x 11	25	16	41
S14411-20-20	1.1/4" x 11	32	20	50



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

#### **BSP FEMALE FLAT SEAL STRAIGHT**

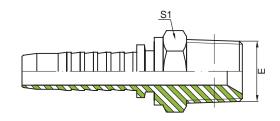
#### NOTE:

244II SERIES	THREAD	HOSE	BORE	DIMENSIONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1
S24411-04-04	1/4" x 19	6	4	19
S24411-06-04	3/8" x 19	6	4	22
S24411-06-05	3/8" x 19	8	5	22
S24411-04-06	1/4" x 19	10	6	19
S24411-06-06	3/8" x 19	10	6	22
S24411-08-06	1/2" x 14	10	6	27
S24411-06-08	3/8" x 19	12	8	22
S24411-08-08	1/2" x 14	12	8	27
S24411-10-08	5/8" x 14	12	8	30
S24411-12-08	3/4" x 14	12	8	32
S24411-10-10	5/8" x 14	16	10	30
S24411-12-10	5/8" x 14	16	10	30
S24411-12-12	3/4" x 14	19	12	32
S24411-16-12	1" x 11	19	12	41
S24411-16-16	1" x 11	25	16	41
S24411-20-20	1.1/4" x 11	32	20	50
S24411-24-24	1.1/2" x 11	38	24	60
S24411-32-32	2" x 11	50	32	70



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

#### **BSPT MALE STRAIGHT**



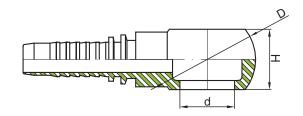
#### NOTE:

I52II SERIES	THREAD	HOSE	BORE	DIMENSIONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	\$1
S15211-02-04	1/8" x 28	6	4	12
S15211-04-04	1/4" x 19	6	4	14
S15211-06-04	3/8" x 19	6	4	19
S15211-04-05	1/4" x 19	8	5	14
S15211-06-05	3/8" x 19	8	5	19
S15211-04-06	1/4" x 19	10	6	14
S15211-06-06	3/8" x 19	10	6	19
S15211-08-06	1/2" x 14	10	6	22
S15211-06-08	3/8" x 19	12	8	19
S15211-08-08	1/2" x 14	12	8	22
S15211-12-08	3/4" x 14	12	8	27
S15211-08-10	1/2" x 14	16	10	22
S15211-12-10	3/4" x 14	16	10	27
S15211-08-12	1/2" x 14	19	12	22
S15211-12-12	3/4" x 14	19	12	27
S15211-16-12	1" x 11	19	12	36
S15211-12-16	3/4" x 14	25	16	27
S15211-16-16	1" x 11	25	16	36
S15211-20-20	1.1/4" x 11	32	20	46
S15211-24-24	1.1/2" x 11	38	24	50
S15211-32-24	2" x 11	38	24	65
S15211-32-32	2" x 11	50	32	65



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

#### **BSP BANJO**



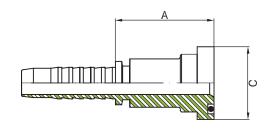
#### NOTE:

742II SERIES	BOLT SIZE	HOSE	BORE	DII	MENSIONS (M	IM)
PROPULSE FITTING PART NO.	BULI SIZE	DN	DASH	d	D	Н
S74211-02-03	1/8" x 28	5	3	9.9	22	16
S74211-04-03	1/4" x 19	5	3	13.3	24	15
S74211-02-04	1/8" x 28	6	4	9.9	22	16
S74211-04-04	1/4" x 19	6	4	13.3	24	15
S74211-03-04	3/8" x 19	6	4	16.7	29	20
S74211-04-05	1/4" x 19	8	5	13.3	24	15
S74211-06-05	3/8" x 19	8	5	16.7	29	20
S74211-08-05	1/2" x 14	8	5	21	38	25
S74211-04-06	1/4" x 19	10	6	13.3	24	15
S74211-06-06	3/8" x 19	10	6	16.7	29	20
S74211-08-06	1/2" x 14	10	6	21	38	25
S74211-06-08	3/8" x 19	12	8	16.7	29	20
S74211-08-08	1/2" x 14	12	8	21	38	25
S74211-16-08	1" x 11	12	8	33.3	60	42
S74211-08-10	1/2" x 14	16	10	21	38	25
S74211-10-10	5/8" x 14	16	10	23	40	27
S74211-12-10	3/4" x 14	16	10	26.5	48	31
S74211-12-12	3/4" x 14	19	12	26.5	48	31
S74211-16-12	1" x 11	19	12	33.3	60	42
S74211-16-16	1" x 11	25	16	33.3	60	42



 $<sup>\</sup>mbox{\ensuremath{^{\star}}}\xspace$  Dimensions provided are nominal, for reference only and may vary based on current supply.

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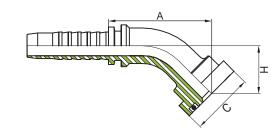
#### NOTE:

995II SERIES	FLANGE SIZE	HOSE	BORE	DIMENSI	ONS (MM)
PROPULSE FITTING PART NO.	FLANGE SIZE	DN	DASH	Α	С
S99511-08-08	1/2"	12	8	38	30.2
S99511-12-08	3/4"	12	8	39	38.1
S99511-12-10	3/4"	16	10	39	38.1
S99511-12-12	3/4"	19	12	39	38.1
S99511-16-12	1"	19	12	46	44.5
S99511-12-16	3/4"	25	16	39	38.1
S99511-16-16	1"	25	16	48	44.5
S99511-20-16	1.1/4"	25	16	49	50.8
S99511-16-20	1"	32	20	59	44.5
S99511-20-20	1.1/4"	32	20	50	50.8
S99511-24-20	1.1/2"	32	20	53	60.3
S99511-24-24	1.1/2"	38	24	53	60.3
S99511-32-24	2"	38	24	75	71.4
S99511-32-32	2"	50	32	79	71.4



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## ISO CODE 61 3000PSI FLANGE 45° ELBOW ISO 12151-3



#### NOTE:

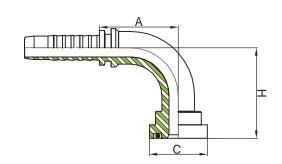
9954I SERIES	FLANGE	HOSE	BORE	DII	MENSIONS (M	IM)
PROPULSE FITTING PART NO.	SIZE	DN	DASH	Α	С	Н
S99541-08-08	1/2"	12	8	55	30.2	19
S99541-12-08	3/4"	12	8	60	38.1	26
S99541-12-10	3/4"	16	10	66	38.1	26
S99541-12-12	3/4"	19	12	69	38.1	26
S99541-16-12	1"	19	12	71	44.5	28
S99541-16-16	1"	25	16	74	44.5	28
S99541-20-16	1.1/4"	25	16	76	50.8	32
S99541-16-20	1"	32	20	76	44.5	28
S99541-20-20	1.1/4"	32	20	88	50.8	32
S99541-24-20	1.1/2"	32	20	90	60.3	38
S99541-24-24	1.1/2"	38	24	100	60.3	38
S99541-32-24	2"	38	24	105	71.4	52
S99541-32-32	2"	50	32	142	71.4	52



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## ISO CODE 61 3000PSI FLANGE 90° ELBOW ISO 12151-3

#### NOTE:



9959I SERIES	FLANGE	HOSE	BORE	DII	MENSIONS (M	IM)
PROPULSE FITTING PART NO.	SIZE	DN	DASH	Α	С	Н
S99591-08-08	1/2"	12	8	47	30.2	40
S99591-12-08	3/4"	12	8	49	38.1	58
S99591-12-10	3/4"	16	10	56	38.1	55
S99591-12-12	3/4"	19	12	56	38.1	56.5
S99591-16-12	1"	19	12	56	44.5	58
S99591-12-16	3/4"	25	16	63	38.1	58
S99591-16-16	1"	25	16	70	44.5	61
S99591-20-16	1.1/4"	25	16	70	50.8	68
S99591-16-20	1"	32	20	102	44.5	61
S99591-20-20	1.1/4"	32	20	87	50.8	68
S99591-24-20	1.1/2"	32	20	85	60.3	81
S99591-20-24	1.1/4"	38	24	92	50.8	68
S99591-24-24	1.1/2"	38	24	104	60.3	81
S99591-32-24	2"	38	24	102	71.4	120
S99591-32-32	2"	50	32	132	71.4	120
S99591-40-32	2.1/2"	50	32	151	84.1	118



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## ISO CODE 62 6000PSI FLANGE STRAIGHT ISO 12151-3

## A A

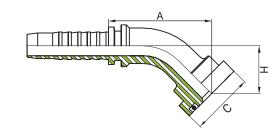
#### NOTE:

998II SERIES	POSE BORE HOSE BORE		DIMENSIONS (MM)		
PROPULSE FITTING PART NO.	FLANGE SIZE	DN	DASH	Α	С
S99811-08-08	1/2"	12	8	47	31.8
S99811-12-10	3/4"	16	10	43	41.3
S99811-12-12	3/4"	19	12	44	41.3
S99811-16-12	1"	19	12	59	47.6
S99811-16-16	1"	25	16	61	47.6
S99811-20-16	1.1/4"	25	16	68	54
S99811-16-20	1"	32	20	67	47.6
S99811-20-20	1.1/4"	32	20	70	54
S99811-24-20	1.1/2"	32	20	76	63.5
S99811-24-24	1.1/2"	38	24	76	63.5
S99811-32-24	2"	38	24	78	79.4
S99811-32-32	2"	50	32	89	79.4



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## ISO CODE 62 6000PSI FLANGE 45° ELBOW ISO 12151-3



#### NOTE:

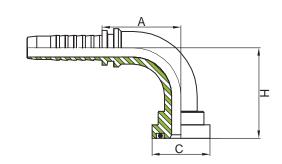
9984I SERIES	FLANGE	HOSE BORE		DIMENSIONS (MI		DIMENSIONS (MM)		IM)
PROPULSE FITTING PART NO.	SIZE	DN	DASH	Α	С	Н		
S99841-08-08	1/2"	12	8	56	31.8	19		
S99841-12-10	3/4"	16	10	68	41.3	26		
S99841-08-12	1/2"	19	12	66	31.8	26		
S99841-12-12	3/4"	19	12	69	41.3	26		
S99841-16-12	1"	19	12	75	47.6	28		
S99841-16-16	1"	25	16	79	47.6	31		
S99841-20-16	1.1/4"	25	16	92	54	32		
S99841-20-20	1.1/4"	32	20	111	54	32		
S99841-24-20	1.1/2"	32	20	115	63.5	38		
S99841-24-24	1.1/2"	38	24	126	63.5	38		
S99841-32-24	2"	38	24	134	79.4	52		
S99841-32-32	2"	50	32	169	79.4	52		



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## ISO CODE 62 6000PSI FLANGE 90° ELBOW ISO 12151-3

#### NOTE:



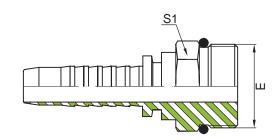
9989I SERIES	FLANGE	HOSE	BORE	DIMENSIONS (MI		IM)
PROPULSE FITTING PART NO.	SIZE	DN	DASH	Α	С	Н
S99891-08-08	1/2"	12	8	47	31.8	40
S99891-12-10	3/4"	16	10	54	41.3	58
S99891-12-12	3/4"	19	12	56	41.3	56.5
S99891-16-12	1"	19	12	56	47.6	65
S99891-16-16	1"	25	16	76	47.6	61
S99891-20-16	1.1/4"	25	16	78	54	68
S99891-16-20	1"	32	20	96	47.6	61
S99891-20-20	1.1/4"	32	20	102	54	68
S99891-24-20	1.1/2"	32	20	102	63.5	81
S99891-24-24	1.1/2"	38	24	111	63.5	81
S99891-32-24	2"	38	24	113	79.4	120
S99891-32-32	2"	50	32	114	79.4	120



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## STANDARD ORB MALE SOLID SAE J514/J516

#### NOTE:

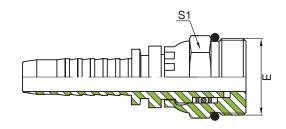


18211 SERIES	THREAD	HOSE	BORE	DIMENSIONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1
S18211-04-04	7/16" x 20	6	4	14
S18211-05-04	1/2" x 20	6	4	17
S18211-06-05	9/16" x 18	8	5	17
S18211-06-06	9/16" x 18	10	6	17
S18211-08-06	3/4" x 16	10	6	22
S18211-08-08	3/4" x 16	12	8	22
S18211-10-08	7/8" x 14	12	8	27
S18211-10-10	7/8" x 14	16	10	27
S18211-12-10	1.1/16" x 12	16	10	32
S18211-12-12	1.1/16" x 12	19	12	32
S18211-16-16	1.5/16" x 12	25	16	41



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## STANDARD ORB MALE SWIVEL SAE J514/516



#### NOTE:

18211W SERIES	THREAD	HOSE	BORE	DIMENSIONS (MM)
PROPULSE FITTING PART NO.	E	DN	DASH	S1
S18211W-04-04	7/16" x 20	6	4	14
S18211W-06-04	9/16" x 18	6	4	17
S18211W-06-06	9/16" x 18	10	6	17
S18211W-08-06	3/4" x 16	10	6	22
S18211W-08-08	3/4" x 16	12	8	22
S18211W-10-08	7/8" x 14	12	8	27
S18211W-12-08	1.1/16" x 12	12	8	27
S18211W-10-10	7/8" x 14	16	10	27
S18211W-12-12	1.1/16" x 12	16	12	32



<sup>\*</sup> Dimensions provided are nominal, for reference only and may vary based on current supply.

## APPENDIX



#### **CHEMICAL RESISTANCE** & APPROVED FLUID MEDIA

ProPulse hoses are suitable for most mineral and synthetic oil based hydraulic fluids. This would include HL, HLP, HLPD and HVLP. Applications for oil-water emulsions HFAE, HFAS and HFB fluids are suitable for use. Additionally, water glycol solutions (HFC) are also suitable for use with ProPulse hydraulic hoses. Vegetable and mineral oil-based lubricants are also acceptable solutions that can be used with ProPulse hydraulic hoses as well. Biodegradable hydraulic fluids such as bio-oils, HETG, HEPG and HEES can also be used with ProPulse hydraulic hoses. In individual cases there may be restrictions due to manufacturer specific oil additives.

The wire braided hydraulic hoses noted in this catalog are also capable of handling compressed air up to a maximum of 725psi (50 bar) at a maximum of 176°F (80°C) with a restricted service life.

**WARNING:** This information shall be intended only as reference to hose compatibility with the internal fluids. No representations, guarantees or warranties of any kind are made to its accuracy, suitability for particular applications or the results obtained. Other operational factors may also impact the service life of the hose. Improper selection of fluid media can cause irreversible damage to hose and lead to premature failure. It is advisable to test the material under actual service conditions before specification. This information must not be used in conjunction with any other compatibility information from previous or future catalog editions, bulletins or publications. Incorrect use of this information can result in death, personal injury or property damage. For compatibility questions on specific fluids or additives please contact ProPulse representatives.



### **COUPLING & ADAPTER** TORQUE RECOMMENDATIONS

#### METRIC 24°, 60° & UNIVERSAL INVERTED CONE

TUDEAD OIZE	TUBE DIA. (DKOS)	TUBE DIA. (DKOL)	SWIVEL NUT T	ORQUE RANGE
THREAD SIZE	MM	MM	NM	FT.LBF
M12 X 1,5		6	10 – 20	7 – 15
M14 X 1,5		8	20 – 35	15 – 26
M16 X 1,5	8	10	25 – 40	18 – 30
M18 X 1,5	10	12	30 – 45	22 – 33
M20 X 1,5	12		35 – 50	26 – 37
M22 X 1,5	14	15	40 - 70	30 - 52
M24 X 1,5	16		40 – 70	30 - 52
M26 X 1,5		18	60 – 100	44 – 74
M30 X 2,0	20	22	80 – 120	59 - 89
M36 X 2,0	25	28	100 – 150	74 – 111
M42 X 2,0	30		150 – 220	74 – 163
M45 X 2,0		35	180 – 250	133 – 184
M52 X 2,0	38	42	200 – 300	148 – 221

#### **ORFS**

THREAD SIZE	DASH SIZE	SAE RECOMMENDED SWIVEL NUT TORQUE RANGE	
		NM	FT.LBF
9/16 - 18	-4	14 – 16	10 – 12
11/16 – 16	-6	24 – 27	18 – 20
13/16 - 16	-8	43 – 47	32 – 35
1 – 14	-10	60 - 68	46 - 50
1.3/16 - 12	-12	90 – 95	65 – 70
1.7/16 - 12	-16	125 – 135	92 – 100
1.11/16 - 12	-20	170 – 190	125 – 140
2 – 12	-24	200 – 225	150 – 165



### **COUPLING & ADAPTER** TORQUE RECOMMENDATIONS

#### JIC 37° & SAE 45° (MACHINED OR FLARED)

THREAD SIZE	DASH SIZE	SAE RECOMMENDED SWIVEL NUT TORQUE RANGE	
		NM	FT.LBF
5/16 - 24	-2	8 – 9	6 – 7
3/8 - 24	-3	11-12	8 – 9
7/16 – 20	-4	15 – 16	11 – 12
1/2 – 20	-5	19 – 21	14 – 15
9/16 - 18	-6	24 – 28	18 – 20
3/4 – 16	-8	49 – 53	36 – 39
7/8 – 14	-10	77 – 85	57 - 63
1.1/16 - 12	-12	107 – 119	79 – 88
1.3/16 - 12	-14	127 – 140	94 – 103
1.5/16 - 12	-16	147 – 154	108 – 113
1.5/8 - 12	-20	172 – 181	127 – 133
1.7/8 - 12	-24	215 – 226	158 – 167
2.1/2 - 12	-32	332 – 350	245 – 258

#### **ORB (O-RING BOSS)**

THREAD SIZE	DASH SIZE	SAE RECEOMMENDED STRAIGHT FITTING OR LOCK NUT TORQUE RANGE	
		NM	FT.LBF
3/8 - 24	-3	11 – 13	8 – 10
7/16 – 20	-4	20 – 22	14 – 16
1/2 - 20	-5	24 – 27	18 – 20
9/16 - 18	-6	33 – 35	24 – 26
3/4 - 16	-8	68 – 78	50 - 60
7/8 – 14	-10	98 – 110	72 – 82
1.1/16 - 12	-12	170 – 183	125 – 135
1.5/16 - 12	-16	270 - 300	200 – 220
1.5/8 -12	-20	285 - 380	210 - 280
1.7/8 - 12	-24	370 - 490	270 - 360

#### **BSPP NUTS**

THREAD SIZE	DASH SIZE	SWIVEL NUT TORQUE RANGE	
		NM	FT.LBF
1/8	-2	11 – 12	8 – 9
1/4	-4	25 – 28	18 – 20
3/8	-6	41 – 48	30 – 35
1/2	-8	72 – 82	55 - 60
5/8	-10	96 – 110	70 – 80
3/4	-12	124 – 137	90 – 100
1	-16	151 – 165	110 – 120
1.1/4	-20	192 – 206	140 – 150
1.1/2	-24	261 – 275	190 – 200
2	-32	343 – 357	250 – 260



#### **CONVERSION TABLES**

#### **ENGLISH TO METRIC EQUIVALENTS**

Inches x 25.4 = Millimeters (mm)

Inches x 2.54 = Centimeters (cm)

Feet x .3048 = Meters (m)

Yard x .9144 = Meters (m)

PSI x .0689 = Bar

PSI x .0069 = Megapascals (MPa)

PSI x .0703 = Kilogram Force per Square Centimeter (Kgf/cm)

Pound Fource x 4.448 = Newtons

Pound Inch x .113 = Newton Meters N \* m

Pound Foot x 1.356 = Newton Meters N \* m

#### METRIC TO ENGLISH EQUIVALENTS

Millimeter x .0394 = Inch (in)

Centimeter x .3937 = Inch (in)

Meters x 3.281 = Feet (ft)

Meters x 1.0936 = Yards (yd)

Bar x 14.5 = PSI

Megapascals x 145.0 = PSI

Kilogram Force per Square Centimeter x 14.22 = PSI

Newtons x .2248 = Pounds Force (lbf)

Newton Meter x 8.850 = Pound Inches (lb \* in)

Newton Meter x .737 = Pound Feet (lb \* ft)

#### **HOSE SIZE CONVERSION TABLE**

#### **HOSE SIZE**

	D.A.G.I.		
DN	DASH	ММ	INCH
3	-2	3.7	1/8"
5	-3	4.8	3/16"
6	-4	6.3	1/4"
8	-5	8.0	5/16"
10	-6	9.5	3/8"
12	-8	12.7	1/2"
16	-10	16.0	5/8"
19	-12	19.0	3/4"
25	-16	25.4	1"
31	-20	32.0	1 1/4"
38	-24	38.0	1 1/2"
51	-32	50.8	2"
60	-38	60.0	2 3/8"
63	-40	63.5	2 1/2"
76	-48	76.2	3"
89	-56	88.9	3 1/2"
102	-64	101.6	4"



#### **WARNINGS**

## Before selecting or using any ProPulse products, it is important that you read and understand the following:

Improper selection or improper use of hose, fittings, assemblies or related accessories ("products") can cause death, personal injury and property damage. Possible consequences of failure or improper selection/improper use of these products include, but are not limited to:

- >Fittings thrown off at high speed
- High velocity fluid discharge
- Explosion or burning of the conveyed fluid
- Electrocution from high voltage electric power lines
- Contact with suddenly moving or falling objects that are controlled by the conveyed fluid
- Injections by high-pressure fluid discharge
- Dangerously whipping hose
- Contact with conveyed fluids that may be hot, cold, toxic or otherwise injurious
- Sparking or explosion caused by static electricity buildup or other sources of electricity
- >Sparking or explosion while spraying paint or flammable liquids
- Injuries resulting from inhalation, ingestion or exposure to fluids

#### IF YOU "SEE IT", STOP IT!

Failure to properly repair or replace hose after exposing braid reinforcement layer can cause death, personal injury and property damage. Like strands in a bridge cable, each reinforcement fiber plays an exact role in the ultimate burst strength of the hose. A minor slice or nick in the reinforcement can result in total hose failure. The age of the hose does not matter! It is unfortunate, but even hose used one (1) time can become damaged in severe applications. These hoses must be immediately removed from service.

#### **HOSE BASICS**

- 1. Never exceed the maximum working pressure.
- 2. Never exceed the maximum working temperature.
- 3. Never apply pressure to a damaged hose.
- 4. High pressure hoses are designed to use specific fittings or tooling. Never use a different brand of fittings to tooling. Failure to do so can cause death, personal injury and/or property damage.
- A kinked, crushed, or blistered hose will eventually fail. Do not risk injury. Immediately repair or remove hose from service.
- Follow the pump/equipment manufacturer's instructions for pressurized hose testing.



#### **PROPULSE LIMITED WARRANTY**

Subject to the limitations stated herein, Schieffer Co. International, L.C., dba ProPulse (Seller) warrants that the products manufactured by Seller identified below shall be free from material defects in materials and workmanship and shall perform the services for which they are intended when properly installed, under normal use, and under ordinary conditions, for:

HYDRAULIC HOSE: A period of 365 days from the date of shipment of the product to BUYER.

HIGH PRESSURE CLEANING HOSE: A period of 180 days from the shipment of the product to the BUYER.

Buyer must notify Seller in writing of a potentially defective product as soon as possible, which notice must provide the appropriate marked date codes, part numbers of the product and a description of the potential defect. Upon receipt of such notice, Seller shall, at its option and at its expense, examine such product at Seller's factory or such other location as Seller shall determine. Should Seller agree to a return of the product, Buyer shall follow in every respect the packaging and transportation instructions provided by Seller. In no case shall a product be returned without first obtaining the permission of Seller. If a product is proven to the satisfaction of Seller to be defective, then Seller shall, at its option and at its expense, repair or replace such product or reimburse Buyer for the price paid by Buyer for such product, and credit will be issued to Buyer to offset the expense of the return shipment to Seller for shipments within the continental United States. The cost of shipping to Buyer a repaired or replaced product shall be paid by Seller on the same shipping terms as the original shipment of such product to Buyer. Except as stated herein, Buyer shall assume all responsibility and expense for any dismantling, removal, reinstallation, and shipping in connection with this Limited Warranty, and no claims will be allowed for labor, shipping, materials, incidental, consequential, or other costs incident to the repair, replacement, or return of a product.

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This Limited Warranty shall not apply to product failure or defect: caused by external or internal abrasion, kinking, twisting, cutting, pulling, impact, use for the transfer or spray of flammable materials (including solvents, petroleum, and gases of any kind), use with fluids which exceed the product's labeled pressure or temperature limits, storm, fire, wind, accident, or similar casualty; where the product has been modified without the prior written authority of Seller; caused by installation or use of the product contrary to any instructions or specifications provided by Seller; caused by the improper installation, use, application, maintenance, repair, transportation, handling, or storage of the product; caused by the fault or negligence of anyone other than Seller or any other act or event beyond the control of Seller. Seller makes no warranties as to any products or product parts or components that are not manufactured by Seller, and such items may be warranted only to the extent of the original manufacturer's warranty, if any. The limitations of liability contained in this Limited Warranty shall be effective without regard to Seller's performance or failure or delay of performance under any other term or condition of any trade customs, warranty, or other agreement. No employee, representative, or agent of Seller, nor any other person, has authority to assume or incur on behalf of Seller any liability, obligation, or responsibility in place of or in addition to this Limited Warrantv.





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