MILTON INDUSTRIAL



HYDRAULICS PRODUCT CATALOG

2021

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HYDRAULIC HOSE ASSEMBLIES: THE MILTON INDUSTRIAL WAY

From start to finish you can have the peace of mind knowing we use high quality equipment to create, assemble, and test our hoses to industry standards. We have specially trained team members operating our hose assembly equipment at all times



Uniflex EM 6 P

Starting with our Uniflex EM 6 P Hydraulic Hose Cutter we make precise, straight cuts with a quality steel blade. Our safety guards allow for an accurate length cut with every assembly



Uniflex HM220

After cutting the hose to length, our team moves over to our greaseless Uniflex HM 220 Production Hose Crimper. This machine has the ability to let the operator chose which side they want to work on, allowing the team member to get the most accurate and clean crimp possible. We have standard operating procedures in place that call for regular quality testing of the assemblies' crimp diameters, and our tolerances for any variances are extremely low



Uniflex P160

After our team members have cut and crimped the appropriate fittings onto our hoses, the team then moves over to our Uniflex P160 Hydraulic Test Bench. This testing bench has a fully enclosed test chamber that can test the hoses' burst and static pressure. We understand that hose lines that cannot withstand the high pressure for which they are designed can cause serious damage. We test our medium-high pressure hoses with a 4:1 safety factor and our extreme high-pressure hoses at 2:1. The Hydraulic Test Bench allows for the efficient and safe final inspection and testing of our hose lines



In addition to our top of the line hose cutting, crimping, and test bench, we are proud to use a Uniflex KS6 Calibration Crimper for our hydraulic fittings. This calibration press is for the pre-assembly of one-piece fittings. Having this calibration crimper on site has allowed us the opportunity to offer all our fittings in either a two-piece or a one-piece "crimp" style, depending on your specific needs



HOW TO READ A HOSE ASSEMBLY PART NUMBER:

Example: M17-R2-04-1NPT

M17 = Category R2 = Hose Type 04 = Hose ID 1NPT = 1 foot length with NPT fittings attached

ALL HOSE ASSEMBLIES COME IN THE FOLLOWING LENGTHS: 1ft, 2ft, 3ft, 6ft, 9ft.

If an assembly has the same category, same hose type, and has the same hose ID, regardless of the length, they will have the same product information (product description, maximum working pressure, fittings attached, etc) unless otherwise noted. The only differentiation will be length and weight of product

100R2AT HOSE ASSEMBLY (M17)

Our Milton® Industrial 100R2AT hydraulic hose assemblies come with male NPT (National Pipe Thread) fittings installed on each end of the hose and are ready to connect to equipment. They are suitable for general purpose industrial and hydraulic applications with petroleum and water-based fluids. The hoses have a synthetic rubber tube and cover, and they are reinforced with two high-tensile steel wire braids meeting, or exceeding, SAE 100R2AT requirements. These assemblies come in both 1/4" and 3/8" ID. Each are assembled and individually labeled showing ID, length, and product specification

Features:

- · Male NPT fittings on each end
- · Reinforced with two braids of high-tensile steel wire
- · Attached fittings made of carbon steel and zinc coated
- · High-grade nitrile tubes
- · Flexible and durable hydraulic hose
- · All hoses assembled and regularly tested for quality in house
- Meets or exceeds the performance requirements of: SAE 100R2AT; EN 853 2SN; DIN 20022 2SN
- Meets Flame Resistance USMSHA Designation
- · SAE J1942/U.S. Coast Guard
- Black polychloroprene cover





	R2 Hose Assemblies											
				Hos	е		Fitti	ngs	MAX			
Part No.	Туре	Length	ID	OD (in)	OD (mm)	Cover Type	Туре	Size	Working PSI			
M17-R2-04-1NPT		1 FT										
M17-R2-04-2NPT		2 FT										
M17-R2-04-3NPT		3 FT	-04	0.59	15.10			1/4" NPT	5800			
M17-R2-04-6NPT		6 FT										
M17-R2-04-9NPT	SAE	9 FT				Black	Male					
M17-R2-06-1NPT	100R2AT	1 FT				Polychloroprene	iviale					
M17-R2-06-2NPT		2 FT										
M17-R2-06-3NPT		3 FT	-06	0.75	19.10			3/8" NPT	4800			
M17-R2-06-6NPT		6 FT										
M17-R2-06-9NPT		9 FT										



HYDRAULIC HOSE ASSEMBLIES

100R16 HOSE ASSEMBLIES (M18)

Our Milton® Industrial 100R16 hydraulic hose assemblies come with male NPT (National Pipe Thread) fittings installed on each end of the hose and are ready to connect to equipment. They are suitable for general purpose industrial and hydraulic applications with petroleum and water-based fluids. The hoses have a nitrile rubber tube and cover, and they are reinforced with two high-tensile steel wire braids meeting, or exceeding, SAE 100R16 requirements. These assemblies come in both 1/4" and 3/8" ID. Each are assembled and labeled showing ID, length, and product specifications



Features:

- · Male NPT fittings on each end
- · Reinforced with two braids of high-tensile steel wire
- · Attached fittings made of carbon steel and zinc coated
- Hoses are built and tested according to industry specifications such as SAE and EN
- · All hoses assembled and regularly tested for quality in house
- · High-grade nitrile tubes
- Excellent impulse performance and flexibility exceeding SAE100R2 and SAE100R16 standards
- Meets or exceeds the performance requirements of: SAE 100R16; EN 857 2SC
- Meets Flame Resistance USMSHA Designation
- SAE J1942/U.S. Coast Guard
- Has an extra abrasion, oil and weather resistance nitrile rubber cover



			F	R16 Hose As	semblies					
			Hose					Fittings		
Part No.	Туре	Length	ID	OD (in)	OD (mm)	Cover Type	Туре	Size	MAX Working PSI	
M18-R16-04-1NPT		1 FT					Male			
M18-R16-04-2NPT		2 FT	-04		13.70	Extra abrasion, oil and weather				
M18-R16-04-3NPT		3 FT		0.54				1/4" NPT	5800	
M18-R16-04-6NPT		6 FT								
M18-R16-04-9NPT	SAE	9 FT								
M18-R16-06-1NPT	100R16	1 FT				resistant nitrile rubber				
M18-R16-06-2NPT		2 FT				rubber				
M18-R16-06-3NPT		3 FT	-06	0.70	17.70			3/8" NPT	5000	
M18-R16-06-6NPT		6 FT								
M18-R16-06-9NPT		9 FT								



JACK HOSE ASSEMBLIES (M49)

Our Milton® Industrial hydraulic hose assemblies for jacking systems come with male NPT (National Pipe Thread) fittings installed on the ends of the hoses and are ready to connect to equipment. These hydraulic hose assemblies are used for hydraulic jacking applications with petroleum and water-based fluids, and they are suitable for extreme high-pressure applications. The hoses have a nitrile rubber tube and cover, and they are reinforced with two high-tensile steel wire braids and meets Flame Resistance USMSHA Designation. These assemblies come in both 1/4" and 3/8" ID. Each are assembled and labeled showing ID, length, and product specifications



			R	2 HOSE AS	SEMBLIES				
				Hos		Fitti	ngs	MAX	
Part No.	Туре	Length	ID	OD (in)	OD (mm)	Cover Type	Туре	Size	Working PSI
M49-SHJ-04-1NPT		1 FT							
M49-SHJ-04-2NPT		2 FT							
M49-SHJ-04-3NPT		3 FT	-04	0.58	14.70			1/4" NPT	
M49-SHJ-04-6NPT		6 FT							
M49-SHJ-04-9NPT	Jack	9 FT				Black	Male		10,000
M49-SHJ-06-1NPT	Hose	1 FT				Polychloroprene	Iviale		10,000
M49-SHJ-06-2NPT		2 FT							
M49-SHJ-06-3NPT		3 FT	-06	0.74	18.70			3/8" NPT	
M49-SHJ-06-6NPT		6 FT							
M49-SHJ-06-9NPT		9 FT]						



JIC Hydraulic Fittings (M32, M33, M52)

Milton®'s Hydraulic Joint Industry Council (JIC) industrial hose fittings provide an ease of assembly, a wide range of fittings that can connect to any foreign or American port, and can expand or reduce between any size which grants extensive use across markets. For hydraulic high-pressure applications, the Society of Automotive Engineers (SAE) recommends using a 37° cone, commonly known as JIC. This cost-effective line is permanent and come already crimped (one-piece) for easy installation All our JIC fittings are SAE J514 compliant



	Female JIC 45° Bend										
Part No.	Thread	Hose ID	Length (in)	Width (in)	Height (in)	Port Connection					
M32-C45-4-4	7/16-20	1/4"	2.58	0.59	0.55	7/16"					
M32-C45-6-6	9/16-18	3/8"	3.64	0.75	0.63	9/16"					
M32-C45-8-8	3/4-16	1/2"	3.72	0.75	0.75	3/4"					



	Female JIC 90° Bend										
Part No.	Thread	Hose ID	Length (in)	Width (in)	Height (in)	Port Connection					
M32-C90-4-4	9/16-18	1/4"	3.64	0.75	0.63	9/16"					
M32-C90-6-6	9/16-18	3/8"	2.58	0.75	1.30	9/16"					
M32-C90-8-8	3/4-16	1/2"	2.81	0.87	1.54	3/4"					



	Female JIC Double Hexagon									
Part No.	Thread	Hose ID	Length (in)	Width (in)	Height (in)	Port Connection				
M33-C00-4-4	7/16-20	1/4"	1.87	0.59	0.59	7/16"				
M33-C00-6-6	9/16-18	3/8"	2.00	0.75	0.75	9/16"				
M33-C00-8-8	3/4-16	1/2"	2.91	0.94	0.94	3/4"				



	Male JIC Straight										
Part No.	Thread	Hose ID	Length (in)	Width (in)	Height (in)	Port Connection					
M52-C00-4-4	7/16-20	1/4"	2.08	0.47	0.47	7/16"					
M52-C00-6-6	9/16-18	3/8"	2.28	0.67	0.67	9/16"					
M52-C00-8-8	3/4-16	1/2"	2.51	0.75	0.75	3/4"					



ORFS Hydraulic Fittings (M35, M38)

Milton®'s Hydraulic O-Ring Face Seal (ORFS) industrial hose fittings are cost-effective, permanent, and they come as a crimp-style (one piece) fitting. ORFS fittings are becoming the most popular international fitting type used on global OEM machines due to their high level of sealing and their good vibration resistance. The female fittings have flat faces and straight threaded UNF swivel nuts. The male fittings have the O-ring in a groove in the flat face. All our ORFS fittings are ISO 121-51-1 / ISO 8434-3 / SAE J1453 compliant



	Female ORFS Double Hexagon										
Part No.	Thread	Hose ID	Length (in)	Width (in)	Heigh (in)	Port Connection					
M35-C00-4-4	9/16-18	1/4"	2.15	0.75	0.94	9/16"					
M35-C00-6-6	11/16-16	3/8"	2.46	0.87	0.94	11/16"					
M35-C00-8-8	13/16-16	1/2"	2.59	0.94	0.67	13/16"					



	Female ORFS 45° Bend										
Part No.	Thread	Hose ID	Length (in)	Width (in)	Heigh (in)	Port Connection					
M35-C45-4-4	9/16-18	1/4"	2.89	0.67	0.47	9/16"					
M35-C45-6-6	11/16-16	3/8"	3.33	0.87	0.55	11/16"					
M35-C45-8-8	13/16-16	1/2"	3.68	0.94	0.63	13/16"					



Female ORFS 90° Bend										
Part No.	Thread	Hose ID	Length (in)	Width (in)	Heigh (in)	Port Connection				
M35-C90-4-4	9/16-18	1/4"	2.34	0.67	0.94	9/16"				
M35-C90-6-6	11/16-16	3/8"	2.70	0.87	1.14	11/16"				
M35-C90-8-8	13/16-16	1/2"	2.85	0.94	1.42	13/16"				



Male ORFS Straight										
Part No.	Thread	Hose ID	Length (in)	Width (in)	Heigh (in)	Port Connection				
M38-C00-4-4	9/16-18	1/4"	2.01	0.67	0.67	9/16"				
M38-C00-6-6	11/16-16	3/8"	2.28	0.75	0.75	11/16"				
M38-C00-8-8	13/16-16	1/2"	2.49	0.87	0.87	13/16"				



Metric Hydraulic Fittings (M34, M55)

Milton®'s Hydraulic Metric fittings seal using angled sealing surfaces (metal-to-metal) and are designed to deliver a leak proof seal. We have a limited offering of metric fittings available in the light (L) series and they come already crimped (one-piece) for easy installation. Our Industrial Metric fittings are highly resistant to vibration and create a strong, reliable, leak-free connection. Their cutting ring design dampens the effects of the vibration to your hydraulic systems. Milton® Hydraulic Metric fittings are compatible with petroleum-based hydraulic fluids and lubricating oils and with phosphate-ester-based hydraulic fluids. Perfect for following applications: constant working pressure, high temperature, low temperature, suction and return. All our metric fittings are DIN 2353 / DIN 3865 / ISO 8434-1 compliant



Female Metric Light Straight										
Part No.	Thread	Hose ID	Length (in)	Width (in)	Height (in)	Port Connection				
M34-C00-16-4	M16x1.5	1/4"	2.01	0.75	0.75	M16x1.5				
M34-C00-16-6	M16x1.5	3/8"	2.32	0.75	0.75	M16x1.5				
M34-C00-22-8	M22x1.5	1/2"	2.27	1.06	1.06	M22x1.5				



	Female Metric Light 45° Bend						
Part No.	Thread	Hose ID	Length (in)	Width (in)	Height (in)	Port Connection	
M34-C45-16-4	M16x1.5	1/4"	3.84	1.06	0.83	M16x1.5	
M34-C45-16-6	M16x1.5	3/8"	3.05	0.75	0.71	M16x1.5	
M34-C45-22-8	M22x1.5	1/2"	3.68	1.06	0.98	M22x1.5	



	Female Metric Light 90° Bend						
Part No. Thread Hose ID Length (in) Width (in) Height (in) Port Connec							
M34-C90-16-4	M16x1.5	1/4"	2.22	0.75	1.42	M16x1.5	
M34-C90-16-6	M16x1.5	3/8"	2.58	0.75	1.77	M16x1.5	
M34-C90-22-8	M22x1.5	1/2"	2.85	1.06	1.46	M22x1.5	



	Male Metric Light Straight						
Part No. Thread Hose ID Length (in) Width (in) Height (in) Port Conn							
M55-C00-16-4	M16x1.5	1/4"	1.94	0.67	0.67	M16x1.5	
M55-C00-16-6	M16x1.5	3/8"	2.13	0.67	0.67	M16x1.5	
M55-C00-22-8	M22x1.5	1/2"	2.31	0.75	0.87	M22x1.5	

NPT Hydraulic Fittings (M37)

Milton®'s Hydraulic National Pipe Thread (NPT) industrial hose fittings are a cost-effective line of permanent crimp-style (one piece) hydraulic fittings. An NPT pipe thread is your classic tapered thread fitting that is used widely in hydraulic and pneumatic systems. It is recommended to use Teflon tape or pipe thread sealant to prevent leakage with any pipe thread fitting. The taper on NPT threads allows them to form a seal when torqued as the flanks of the threads compress against each other, as opposed to parallel/straight thread fittings, or compression fittings, in which the threads merely hold the pieces together and do not provide the seal. All our NPT fittings are SAE J516 compliant



			Male NPT			
Part No.	Thread	Hose ID	Length (in)	Width (in)	Height (in)	Port Connection
M37-C00-4-4	1/4-18	1/4"	2.11	0.59	0.75	1/4"
M37-C00-6-6	3/8-18	3/8"	2.33	0.75	0.75	3/8"
M37-C00-8-8	1/2-14	1/2"	2.66	0.87	0.87	1/2"



Hydraulic Flanges (Flange Heads and Split Flanges) (M50, M51, M53, M54)

Milton®'s Hydraulic Code 61 & Code 62 Flanges are a cost-effective line of permanent crimp-style (one piece) industrial hydraulic fittings. We offer both code 61 (3,000 PSI) and code 62 (6,000 PSI) flanges. All our flanges are SAE J518 / ISO 6162-1 / ISO 6162-2 compliant. We offer both the flange head and the split flange as two separate part numbers for ease of ordering



Flange Head Code 61 Straight								
Part No. Hose ID Length (in) Width (in) Height (in) Port Connection Flange Size								
M50-C00-8-8	M50-C00-8-8 1/2" 3.20 1.19 1.19 1/2" 1/2"							
M50-C00-12-12 3/4" 3.89 1.50 1.50 3/4" 3/4"								
M50-C00-16-16	1"	4.53	1.75	1.75	1"	1"		



Flange Head Code 61 45° Bend								
Part No.	Part No. Hose ID Length (in) Width (in) Height (in) Port Connection Flange Size							
M50-C45-8-8	1/2"	3.80	1/2" 1/2"	1/2"				
M50-C45-12-12 3/4" 4.89 1.50 0.94 3/4" 3/4"								
M50-C45-16-16	1"	6.59	1.75	1.34	1"	1"		



Flange Head Code 61 90° Bend						
Part No.	Hose ID	Length (in)	Width (in)	Height (in)	Port Connection	Flange Size
M50-C90-8-8	1/2"	2.62	1.19	1.46	1/2"	1/2"
M50-C90-12-12	3/4"	3.63	1.50	1.97	3/4"	3/4"
M50-C90-16-16	1"	4.97	1.75	2.76	1"	1"



Flange Head Code 62 Straight							
Part No.	Part No. Hose ID Length (in) Width (in) Height (in) Port Connection Flange						
M51-C00-8-8	1/2"	1/2"	1/2"				
M51-C00-12-12 3/4" 4.05 1.63 1.63 3/4"							
M51-C00-16-16	1"	4.74	1.87	1.87	1"	1"	



Flange Head Code 62 45° Bend							
Part No. Hose ID Length (in) Width (in) Height (in) Port Connection Flange Size							
M51-C45-8-8	M51-C45-8-8 1/2" 3.84 1.25 0.87 1/2"						
M51-C45-12-12 3/4" 5.01 1.63 1.06 3/4" 3/4"							
M51-C45-16-16	1"	6.63	1.87	1.34	1"	1"	



Flange Head Code 62 90° Bend						
Part No.	Hose ID	Length (in)	Width (in)	Height (in)	Port Connection	Flange Size
M51-C90-8-8	1/2"	3.84	1.25	0.87	1/2"	1/2"
M51-C90-12-12	3/4"	5.01	1.63	1.06	3/4"	3/4"
M51-C90-16-16	1"	6.63	1.87	1.34	1"	1"



Split Flange Code 61							
Part No.	Hose ID	Length (in)	Width (in)	Height (in)			
M53-SEMI308	M53-SEMI308 1/2" 2.89 0.35 0.75						
M53-SEMI312	M53-SEMI312 3/4" 3.68 0.44 0.89						
M53-SEMI316	1"	2.22	0.52	0.94			



Split Flange Code 62							
Part No. Hose ID Length (in) Width (in) Height (in)							
M54-SEMI608	1/2"	2.58	0.36	0.86			
M54-SEMI612 3/4" 2.85 0.47 0.98							
M54-SEMI616	1"	2.58	0.55	1.11			



3/8" High Flow Hydraulic Coupling (M42)

This 3/8" NPTF high flow coupling, with its threaded union locking system and precision check valves, is designed for extreme high-pressure applications, such as portable hydraulic jacks. Our couplings include a dust cap for protection against dust and debris when not in use and are ISO 14540 compliant



	Part No.	Size NPT	Connection	Valve Type	Max Flow Capacity (GPM)	Max Operating PSI	Dust Cap?
	M42-06HFCFP		Female				
	M42-06HFCMP	3/8"	Male	Poppet	9.25	10,000	YES
,	M42-06HFCSP		Complete Set (Male & Female)	,,,,,,		,	

Flush Face Hydraulic Couplings (M43, M47, M48)

Flush face couplers are widely used in the public utility market where hydraulic oil spillage can be a serious safety hazard. These couplers are used for the quick change of hydraulic tools in a variety of industries. Our couplings include a dust cap for protection against dust and debris when not in use and are ISO 16028 compliant



	Part No.	Size NPT	Connection	Valve Type	Max Flow Capacity (GPM)	Max Operating PSI	Dust Cap?
	M43-06FFCF		Female				
Ī	M43-06FFCM	3/8"	Male	Flush Face	5.9	5.000	YES
	M43-06FFCS		Complete Set (Male & Female)			,	



Part No.	Size NPT	Connection	Valve Type	Max Flow Capacity (GPM)	Max Operating PSI	Dust Cap?
M47-12FFCF	3/4"	Coupler				
M47-12FFCM		Plug	Flush Face	28.0	5,000	YES
M47-12FFSF		Complete Set (Male & Female)			,	



Part No.	Size NPT	Connection	Valve Type	Max Flow Capacity (GPM)	Max Operating PSI	Dust Cap?
M48-08FFCF		Coupler				
M48-08FFCM	1/2"	Plug	Flush Face	12.0	5,000	YES
M48-08FFCS		Complete Set (Male & Female)			,	



3/8" Speedy Hydraulic Coupling (M44)

These 3/8" NPTF quick-connect speedy couplers and plugs are suitable for medium-duty applications. They quickly allow the disconnection and reconnection of your equipment from our coupler, maximizing your efficiency in all aspects. Our speedy Coupling would typically be used in a situation where the coupling needs to be changed out one or more times a week. This coupling is ISO 14540 compliant



	Part No.	Size NPT	Connection	Valve Type	Max Flow Capacity (GPM)	Max Operating PSI	Dust Cap?
Ì	M44-06SPCFP		Female				
Ì	M44-06SPCMP	3/8"	Male	Poppet	5.9	10.000	YES
	M44-06SPCSP		Complete Set (Male & Female)	- 1/1		-,000	

1/4" Regular Flow Hydraulic Coupling (M45)

This 1/4" NPTF regular flow coupling is used for the quick disconnection and reconnection of hydraulic lines and comes with a ball valve providing a metal-to-metal seal between the ball and coined seat. This coupling is ISO 14540 compliant and is machined from solid steel barstock for durability



	Part No.	Size NPT	Connection	Valve Type	Max Flow Capacity (GPM)	Max Operating PSI	Dust Cap?
	M45-04RFCFB		Female				
	M45-04RFCMB	1/4"	Male	Ball	2.9	10.000	YES
)	M45-04RFCSB		Complete Set (Male & Female)			-,000	

1/4" Spin-On Hydraulic Coupling (M46)

This 1/4" NPTF Spin-On hydraulic coupling is for use with torque wrenches and has a locking ball valve. Our couplings include a dust cap for protection against dust and debris when not in use. The interface seal on this coupling is polyurethane, which resists high pressure extrusion, and is ISO 14540 compliant



Part No.	Size NPT	Connection	Valve Type	Max Flow Capacity (GPM)	Max Operating PSI	Dust Cap?
M46-04SOCFB		Female				
M46-04SOCMB	1/4"	Male	Ball	2.9	10,000	YES
M46-04SOCSB		Complete Set (Male & Female)			.,	





WARRANTY INFORMATION

- Hose Assemblies: 2-Year Limited Warranty
- Couplers and Fittings: 1-Year Limited Warranty

ISO/SAE CERTIFICATION

- All our Hydraulic Couplings are either ISO 14540 or ISO 16028 compliant
- SAE 10R2AT, also called DIN EN 853 2SN hydraulic hose, is suitable for engineering machinery and continuous working hydraulic equipment. Meets Flame Resistance USMSHA Designation
- SAE 100R16 recommended for high pressure hydraulic oil lines where extra flexibility is required. Meets or exceeds requirements of SAE 100R16 EN 857 2 SC. Meets Flame Resistance USMSHA Designation
- **Jack Hose Assemblies** recommended for extreme high pressure hydraulic lines and jacking systems. Meets Flame Resistance USMSHA Designation
- · All of our JIC fittings are SAE J514 compliant
- All of our ORFS fittings are ISO 121-51-1 / ISO 8434-3 / SAE J1453 compliant
- All of our metric fittings are DIN 2353 / DIN 3865 / ISO 8434-1 compliant
- All of our NPT fittings are SAE J516 compliant
- All of our flanges are SAE J518 / ISO 6162-1 / ISO 6162-2 compliant