

Diesel Exhaust Fluid (DEF) Hose

Series 7116M Soft-Flex™ DEF Dispenser Hose
Series 7215 Carboblu™ DEF Suction Hose



Bulk Hose, Couplings and Hose Assemblies to Meet Tough DEF Application Requirements

Series 7116M DEF dispenser hose and Series 7215 DEF suction hose are specially designed for emerging segments of the mobile equipment and transportation markets. Parker offers factory-fabricated hose assemblies in popular configurations, as well as bulk hoses and companion crimp couplings. These products enable a local and rapid response to customers presenting new DEF hose assembly opportunities.



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Product Features:

Series 7116M and Series 7215

- Peroxide-cured EPDM tube will not contaminate DEF
- Available in bulk or factory-fabricated assemblies in popular end-styles and lengths, stocked for quick delivery
- Bulk hose available in long continuous lengths for on-site, customized assembly fabrication; maximum inventory utilization
- Stainless steel couplings will not corrode and contaminate system

- Validated crimp specifications with Parker couplings for a qualified, tested and secure DEF delivery/transfer system

Series 7116M

- 4-spiral construction for extra kink resistance, resists fatigue from flexing

Series 7215

- Full suction capability, will not collapse, resists kinking

ENGINEERING YOUR SUCCESS.

Diesel Exhaust Fluid (DEF) Hose

In 2010, the U.S. Environmental Protection Agency (EPA) mandated that diesel engines on all heavy trucks and buses incorporate a selective catalytic reduction (SCR) system to reduce the amount of nitrogen oxide (NO_x) released into the atmosphere. The converter injects a mixture of urea and purified water—called diesel exhaust fluid (DEF)—into the engine exhaust gas, which is then absorbed by a catalyst that strips the nitrogen oxide and converts it to non-polluting diatomic nitrogen (N₂).

Effective in 2014, this mandate also applies to off-road diesel engines; consequently, all agricultural, heavy construction and material handling equipment will be required to incorporate an on-board SCR system. Since this

conversion process has already begun, Parker has developed specially designed DEF dispensing and transfer hoses to supply on-board mobile equipment tanks with the urea and purified water mixture. To avoid DEF contamination, the hoses incorporate a special peroxide-cured EPDM tube, and assemblies feature corrosion-resistant stainless steel couplings.

To meet the needs for buses and heavy trucks and to comply with the mandate for mobile equipment, Parker has developed Series 7116M Soft-Flex DEF dispensing hose which is offered in 1/2", 3/4" and 1" sizes, and Series 7215 Carbobluue suction hose which is offered in 3/4" size.

The dispensing application requires stainless steel couplings, which are offered with NPTF rigid and BSPP rigid end styles.

IHP stocks bulk hose and couplings, as well as factory assemblies in popular lengths and terminations. All hose and coupling combinations are of Parker design, and crimp specifications have been tested, qualified and validated by Parker.



Parker DEF hose complies with EPA mandates for SCR systems in heavy trucks and buses as well as off-road equipment with diesel engines.



WARNING!

- DEF and urea require special formulations of EPDM. Do not use standard EPDM hose in DEF or urea dispensing/transfer applications.
- Do not use in petroleum dispensing/transfer applications.
- Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

Series 7116M Soft-Flex DEF Dispenser Hose • 1/2" - 1"

Tube:	Black customized EPDM, peroxide-cured
Reinforcement:	Multiple textile plies
Cover:	Black customized EPDM; smooth finish
Temp Range:	-40°F to +212°F (-40°C to +100°C)
Brand Method:	White ink
Brand Example:	PARKER SERIES 7116M DEF SOFT-FLEX™ (ID) MAX WP 150 PSI MADE IN USA (DATE CODE)
Design Factor:	4:1
Industry Standards:	None applicable
Applications:	<ul style="list-style-type: none"> • DEF fluids, urea; NOT FOR OIL OR REFINED FUEL • Dispensing for buses, trucks, mobile equipment • Agriculture, construction, transportation
Vacuum:	Not recommended
Compare To:	Veyance DEF Dispensing Hose; Flextral PE60
Packaging:	Reels; assemblies in cartons

Bulk Hose Part Number	ID (in)	ID (mm)	Reinf Plies	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kgs/ft)	Min Bend Rad (in)	Min Bend Rad (mm)	Max Rec WP (psi)	Max Rec WP (bar)	Std Pack Qty (ft)	Perm Cplg Rec	Stock Status **
7116M-500	1/2	12.7	4	0.893	22.7	0.24	0.11	5.0	127.0	150	10.3	550	*	N
7116M-750	3/4	19.1	4	1.156	29.4	0.34	0.15	6.0	152.4	150	10.3	400	HBL-C	Y
7116M-1000	1	25.4	4	1.429	36.3	0.46	0.21	8.0	203.2	150	10.3	300	*	N

Hose Assemblies Part Number	ID (in)	ID (mm)	Length (ft)	Length (mtrs)	Approx Wt (lbs/ea)	Approx Wt (kg/ea)	Max Rec WP (psi)	Max Rec WP (bar)	Coupling Combination	Std Pack Qty (ea)	Stock Status **
71163PRBK-144	3/4	19.1	12	3.66	4.37	1.98	150	10.3	SS Rigid Male BSPP w/Seal Each End	1	Y
71163PRBK-180	3/4	19.1	15	4.57	5.58	2.53	150	10.3	SS Rigid Male BSPP w/Seal Each End	1	Y
71163PRNK-144	3/4	19.1	12	3.66	4.37	1.98	150	10.3	SS Rigid Male NPT Each End	1	Y
71163PRNK-180	3/4	19.1	15	4.57	5.58	2.53	150	10.3	SS Rigid Male NPT Each End	1	Y

* Refer to CrimpSource at www.safehose.com for coupling recommendations and crimp specifications.

** Stock: "Y" indicates stocked item; "N" indicates non-stocked item. Stock status subject to change. Contact Parker Customer Service.

304 Stainless Steel Crimp Couplings/Plated Brass Ferrules

Bulk Couplings Part Number	Description	Hose Series		Hose ID		Std Pack Qty	Stock Status
		7116M	7215	(in)	(mm)	(ea)	**
S1D00NMHBL-12-12C	Stainless Steel Rigid Male BSPP w/Seal	■	■	3/4	19.1	25	Y
S125HBL-12-12C	Stainless Steel Rigid Male NPT	■	■	3/4	19.1	25	Y
SMCP24631	Nickel Plated Brass Ferrule		■	3/4	19.1	25	N
SMCP24633	Nickel Plated Brass Ferrule	■		3/4	19.1	25	Y

** Stock: "Y" indicates stocked item; "N" indicates non-stocked item. Stock status subject to change. Contact Parker Customer Service.

Series 7215 Carboblue DEF Suction Hose • 3/4"

Tube:	Black customized EPDM, peroxide-cured
Reinforcement:	Multiple textile plies with wire helix
Cover:	Black customized EPDM; wrapped finish
Temp Range:	-40°F to +212°F (-40°C to +100°C)
Brand Method:	White text on black stripe
Brand Example:	RUBBER HOSE CARBOBLUE SM 10 BAR MADE IN ITALY PARKER ITR
Design Factor:	3:1
Industry Standards:	None applicable
Applications:	<ul style="list-style-type: none"> • DEF fluids, urea; NOT FOR OIL OR REFINED FUEL • Suction and transfer, tank to pump • Agriculture, construction, transportation
Vacuum:	Full
Packaging:	Coils; assemblies in cartons

Bulk Hose Part Number	ID (in)	ID (mm)	Reinf Plies	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kgs/ft)	Min Bend Rad (in)	Min Bend Rad (mm)	Max Rec WP (psi)	Max Rec WP (bar)	Std Pack Qty (ft)	Perm Cplg Rec	Stock Status **
7215-750	3/4	19.1	2	1.181	27.0	0.38	0.11	3.0	115.0	150	10.3	131	HBL-C	N

Hose Assemblies Part Number	ID (in)	ID (mm)	Length (ft)	Length (mtrs)	Approx Wt (lbs/ea)	Approx Wt (kg/ea)	Max Rec WP (psi)	Max Rec WP (bar)	Coupling Combination	Std Pack Qty (ea)	Stock Status **
72153PRBK-48	3/4	19.1	4	1.22	2.25	1.03	150	10.3	SS Rigid Male BSP w/Seal Each End	1	N
72153PRNK-48	3/4	19.1	4	1.22	2.25	1.03	150	10.3	SS Rigid Male NPT Each End	1	N

Refer to CrimpSource at www.safehose.com for coupling recommendations and crimp specifications.

** Stock: "Y" indicates stocked item; "N" indicates non-stocked item. Stock status subject to change. Contact Parker Customer Service.

Complementary Product:

Series 7373T Blue Thunder® UHMWPE Hose • 3/4" - 4"

Series 7373T is a large diameter suction and discharge hose designed to handle commonly used acids, chemicals, petrochemicals and solvents, including DEF and urea. The UHMWPE tube will not leach into and contaminate the product being conveyed, and the cover is resistant to abrasion, mild chemicals and ozone. Series 7373T is available in 200-foot continuous lengths.



- Applications:**
- DEF fluids, urea; acid, chemicals, petrochemicals, solvents
 - Suction and transfer; in-plant, storage tank and tank truck
 - Agriculture, construction, petrochemical, transportation

Pressure/Temperature: 200 psi max wp/250°F (121°C)

