## SELECTIVE CATALYTIC REDUCTION (SCR) / DIESEL EMISSION FLUID (DEF) HEATED LINES

**ENGINE HOSE** 

SCR

Selective Catalytic Reduction is an aftertreatment technology based on a chemical reaction to convert Nitrogen Oxides (NOx) into water and harmless nitrogen.





SCR as part of Gates Emission Control Solutions:

- > A firm commitment to reduce air pollution and fuel consumption.
- > A dedication to help our customers to meet present and future emission standards.
- A continued search for new and greener technologies.

RECOMMENDED FOR	Transfer of Diesel Emission Fluids or urea solutions such as AdBlue® used in exhaust treatment of diesel engines equiped with Selective Catalytic Reduction (SCR) Technology.
CONSTRUCTION	PA (nylon) or p-EPDM rubber tube.
	Carbon fibre heat sleeve.
	Heated quick connect couplings.
	Dense closed cell EPDM insulation or thermoplastic convolute.
	Thermoplastic overmoulded ends.
TEMPERATURE RANGE	-40°C to +125°C.
STANDARDS	SAE J2044 quick connect couplings.
CHARACTERISTICS/BENEFITS	Electrical connections per customer specification.
	Patented technology.
	12V or 24V power source.
	Carbon fibre sleeve provides fast, uniform heating across the entire assembly.
	Woven design provides redundancy in case of damage.
	The carbon fibre can be varied allowing for design flexibility in terms of length and heating capacity to meet end user needs. Lengths from 170 to 5000 mm have been produced.
	The overmoulded ends seal electronics providing excellent corrosion protection for weatherproof design.
OPTIONAL	The SCR heated lines may be fitted with a special heat sleeve to provide heat protection in demanding applications.
	Gates also offers solutions for urea transfer hoses (long lengths) and urea tank fill / vent hoses (formed or straight short lengths).
	Please consult Gates' Product Application Engineers on minimum assembly



Please consult Gates' Product Application Engineers on minimum assembly length questions to avoid overheating and melting of the SCR assembly.



#### **BLUE STRIPE**<sup>™</sup>



$\bigcirc$		O		©				R	C kg	(	
-size	DN			mm	PSI	MPa	PSI	MPa	mm	kg/100m	REF.
-6	10	3/8	0.68	17.3	62	0.4	250	1.7	130	20	BLUE STRIPE 3/8"
-8	12	1/2	0.82	20.8	75	0.5	300	2.1	155	26	BLUE STRIPE 1/2"
-10	16	5/8	0.94	23.9	62	0.4	250	1.7	180	30	BLUE STRIPE 5/8"
-12	19	3/4	1.06	26.9	50	0.3	200	1.4	195	35	BLUE STRIPE 3/4"
-14	22	7/8	1.30	33.0	75	0.5	300	2.1	265	62	BLUE STRIPE 7/8"
-16	25	1	1.34	34.0	44	0.3	175	1.2	230	49	BLUE STRIPE 1"
-18	28	1.1/8	1.55	39.4	125	0.9	500	3.4	315	76	BLUE STRIPE 1 1/8"
-20	31	1.1/4	1.67	42.4	100	0.7	400	2.8	340	81	BLUE STRIPE 1 1/4"
-24	38	1.1/2	1.92	48.8	100	0.7	400	2.8	390	96	BLUE STRIPE 1 1/2"
-28	44	1.3/4	2.17	55.1	75	0.5	300	2.1	445	109	BLUE STRIPE 1 3/4"
-32	51	2	2.42	61.5	62	0.4	250	1.7	495	123	BLUE STRIPE 2"
-36	57	2.1/4	2.67	67.8	62	0.4	250	1.7	545	137	BLUE STRIPE 2 1/4"

RECOMMENDED FOR	High-temperature coolant, water and air applications. Suitable for OAT (organic additive technology) engine fluids.
TUBE	EPDM.
REINFORCEMENT	-4 to -12 and -16: 4230SB - aramid spiral; -14 and -18 to -36: 4175SC - nylon cord.
COVER	EPDM based.
TEMPERATURE RANGE	-40°C to +150°C.
STANDARDS	4230SB - normal duty heater hose to SAE 20R3 EC Class D-1.
	4175SC - heavy duty radiator hose to SAE 20R1 EC Class D-1, standard wall
CHARACTERISTICS/BENEFITS	Premium engine hose.
	Compounded to resist electro-chemical degradation, the leading cause of hose failure.
	Wrapped cover on size 7/8" and as of size 1.1/8".
NOTE	Also available as customer-made curved hose to SAE 20R4 EC D-1 to fit specific applications and meeting customer specifications. Curved hose recommended for upper, lower, by-pass, heater and other coolant applications. Can be installed without buckling, bending out of shape or straining at the connections.
	Can be used with PowerGrip® Shrink Band Clamps, made from a heat-sensitive thermoplastic with a memory to prevent over- or under-tightening. Retains dynamic tension and never needs retightening. Eliminates the risk for antifreeze leaks and ground water contamination. Can be installed with an ordinary heat gun.

IMPORTANT



#### Do not use for fuel or oil transfer applications.

#### ENGINE HOSE COOLANT

#### **4230S**

RECOMMENDED FOR	Engine coolant hose such as cab heater or oil cooler.
	Also suitable for air, water, or oil.
CONSTRUCTION	NBR tube, synthetic fiber reinforcement, CR cover.
	Straight hose specification, available in bulk or cut lengths.
TEMPERATURE RANGE	-40°C to +100°C.
STANDARDS	Meets SAE 20R3 Class B tube, Class C cover.
INTERNAL DIAMETER	Available in 3/8", 1/2", 5/8", 3/4", and 1" standard IDs.
CHARACTERISTICS/BENEFITS	Oil resistant.
	Small diameters (heater hose) up to 1" ID.

## 4256LS/4256VT

RECOMMENDED FOR	Engine coolant hose such as cab heater or oil cooler.
	Also suitable for air or water.
CONSTRUCTION	p-EPDM tube, aramid knit reinforcement, p-EPDM cover.
	Curved hose specification, customised design.
TEMPERATURE RANGE	-40°C to +150°C.
STANDARDS	Meets SAE 20R3 EC Class D3 (from size 19/32" to 1") or SAE 20R4 EC Class D3 (from size 1.06" to 2.1/2").
INTERNAL DIAMETER	Available in 19/32" to 2.1/2" standard IDs.
CHARACTERISTICS/BENEFITS	High-temperature resistant.
	Material used is p-EPDM.
	Electrochemically resistant (ECR).
	Small diameters (heater hose) up to 1" ID.
	Compatible with DEF.
IMPORTANT	Do not use for fuel or oil transfer applications.

#### 4280MH

RECOMMENDED FOR	Engine coolant hose such as cab heater or oil cooler.
	Also suitable for air or water.
CONSTRUCTION	EPDM tube, synthetic knit reinforcement, EPDM cover.
	Curved hose specification, customised design.
TEMPERATURE RANGE:	-40°C to +125°C.
STANDARDS	Meets SAE 20R3 EC Class D1 (from size 1/4" to 7/8") or SAE 20R4 EC Class 1 (from size 0.74" to 4").
INTERNAL DIAMETER	Available in 1/4" to 4" standard IDs.
CHARACTERISTICS/BENEFITS	Price-by-performance.
	Electrochemically resistant (ECR).
	Small diameters (heater hose) up to 1" ID.
IMPORTANT	Do not use for fuel or oil transfer applications.



#### 4219BG BARRICADE® GREENSHIELD®

BARRICADE® GreenShield® FUEL HOSE 5/16" (7.9 mm) NOT FOR FUEL MULECTION SYSTEMS 50 PSI WP

$\bigcirc$		ĨO		$\odot$					$\bigcirc$		(	
-size	DN			mm	PSI	MPa	PSI	MPa	mm	mm/Hg	kg/100m	REF.
-3	5	3/16	0.41	10.4	50	0.3	250	1.7	55	610	7	4219BG 3/16"
-4	6	1/4	0.50	12.7	50	0.3	250	1.7	65	610	13	4219BG 1/4"
-5	8	5/16	0.56	14.3	50	0.3	250	1.7	75	610	15	4219BG 5/16"
-6	10	3/8	0.62	15.9	50	0.3	250	1.7	85	610	18	4219BG 3/8"
-8	12	1/2	0.78	19.8	35	0.2	175	1.2	120	250	24	4219BG 1/2"

RECOMMENDED FOR	Recommended for carbureted engines in cars, light trucks, off-road vehicles and small engines on which a barrier fuel hose is required.
TUBE	NBR (nitrile) based.
BARRIER	Thermoplastic liner.
REINFORCEMENT	Polyester fibre.
COVER	NBR / PVC based.
TEMPERATURE RANGE	-40 to +100°C for bio-diesel use (up to B100) and up to +125°C for non-bio-diesel use.
STANDARDS	CARB small engine off-road (CARB certificate Q09-019A) - 15g/m²/day.
	EPA Non-Road Fuel Lines (EPA Verify Family Name: GTSPLINEBG1) – 15g/m²/day.
	Exceeds SAE J30R14 T1 specification.
CHARACTERISTICS/BENEFITS	Permeation rate less than 15g/m²/day at +40°C.
	For use with gasoline, gasoline / ethanol blends (E10, E15, E85), 100% methanol only (methanol blends are not recommended), diesel, diesel / bio-diesel blends, 100% bio-diesel.
NOTE	Most fuel constructions are considered to not be electrically conductive unless specifically marked as such.
	Do not submerse in fuel.
THINK SAFETY!	Do not use on pressure lines on fuel injection systems or cooling

system applications.

Use Barricade® GreenShield® 4219BF hose for multi-port injection systems.

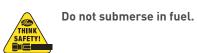
## 4219BF BARRICADE® GREENSHIELD® FUEL INJECTION

S FUEL INJECTION HOSE 5/16" (7.9 mm) 225 FSIWP BARRICADE GreenShield Technology

$\bigcirc$		IO		$\odot$				R	$\bigcirc$		(	
-size	DN			mm	PSI	MPa	PSI	MPa	mm	mm/Hg	kg/100m	REF.
-3	5	3/16	0.41	10.4	225	1.5	1125	7.8	55	610	7	4219BF 3/16"
-4	6	1/4	0.50	12.7	225	1.5	1125	7.8	65	610	13	4219BF 1/4"
-5	8	5/16	0.56	14.3	225	1.5	1125	7.8	75	610	15	4219BF 5/16"
-6	10	3/8	0.62	15.9	225	1.5	1125	7.8	85	610	18	4219BF 3/8"
-8	12	1/2	0.78	19.8	225	1.5	1125	7.8	140	250	24	4219BF 1/2"

RECOMMENDED FOR	Any fuel injected engine application (1985 and newer) in cars, light trucks, off-road vehicles and small engines on which a barrier fuel hose is required.
TUBE	HNBR based.
BARRIER	Thermoplastic liner.
REINFORCEMENT	Aramid fibre.
COVER	CPE.
TEMPERATURE RANGE	-40°C to +135°C continuous service for bio-diesel use and up to +150°C intermittent service for non-bio-diesel use.
STANDARDS	CARB small engine off-road (CARB certificate Q09-019A) - 15g/m²/day.
	EPA Non-Road Fuel Lines (EPA Verify Family Name: GTSPLINEBF1) – 15g/m²/day.
	Exceeds SAE J30 R14 T2 (except kink) with SAE J30 R12 burst.
CHARACTERISTICS/BENEFITS	Permeation rate less than 15g/m²/day at +40°C.
	For use with gasoline, gasoline / ethanol blends (E10, E15, E85), 100% methanol only (methanol blends are not recommended), diesel, diesel / bio-diesel blends, 100% bio-diesel.
NOTE	Most fuel constructions are considered to not be electrically conductive unless specifically marked as such.

IMPORTANT





#### 4219G

🙈 4219G FUEL LINE 5/16" (7.9 mm) SAE 30R7 Not For Fuel Injection Systems

$\Theta$		IO		$\bigcirc$					$\bigcirc$		(	
-size	DN			mm	PSI	MPa	PSI	MPa	mm	mm/Hg	kg/100m	REF.
-3	5	3/16	0.41	10.4	50	0.3	250	1.7	80	610	10	4219G 3/16"
-4	6	1/4	0.50	12.7	50	0.3	250	1.7	80	610	13	4219G 1/4"
-5	8	5/16	0.56	14.2	50	0.3	250	1.7	80	610	15	4219G 5/16"
-6	10	3/8	0.62	15.8	50	0.3	250	1.7	105	610	18	4219G 3/8"
-8	12	1/2	0.78	19.8	35	0.2	175	1.2	130	250	24	4219G 1/2"
-10	16	5/8	0.94	23.9	35	0.2	175	1.2	155	250	34	4219G 5/8"
-12	19	3/4	1.13	28.6	35	0.2	175	1.2	180	250	48	4219G 3/4"

RECOMMENDED FOR	Low pressure and return lines on fuel systems. Specially designed for fuel circuits (leaded and unleaded petrol, diesel) in passenger cars and industrial vehicles. It can also be used in evaporative emission control systems and as a vent line.
TUBE	NBR (Nitrile) based.
REINFORCEMENT	Synthetic high tensile textile.
COVER	NBR / PVC based.
TEMPERATURE RANGE	-40°C to +125°C.
STANDARDS	Exceeds the requirements of SAE 30R6 and SAE 30R7 specifications for fuel line hoses.
CHARACTERISTICS/BENEFITS	Also used for crankcase ventilation.

NOTE

Most fuel constructions are considered to not be electrically conductive unless specifically marked as such.

IMPORTANT



Not recommended for fuel injection systems.

Do not submerse in fuel.

#### SUBMERSIBLE FUEL HOSE

SUBMERSIBLE FUEL LINE 5/16" (7.9 mm) SAE 30R10 Not For Fuel Injection Systems

	$\bigcirc$			C	¢	2				$\bigcirc$		
-size	DN			mm	PSI	MPa	PSI	MPa	mm	mm/Hg	kg/100m	REF.
-4	6	1/4	0.50	12.7	100	0.7	500	3.4	*	*	15	SUBMERSIBLE FUEL 1/4"
-5	8	5/16	0.56	14.3	100	0.7	500	3.4	*	*	22	SUBMERSIBLE FUEL 5/16"
-6	10	3/8	0.62	15.9	100	0.7	400	2.8	*	*	27	SUBMERSIBLE FUEL 3/8"

RECOMMENDED FOR	Fuel line or vent inside the fuel tank.
TUBE	FKM.
REINFORCEMENT	Synthetic fibre braid.
COVER	FKM.
TEMPERATURE RANGE	-40°C to +150°C continuous service.
STANDARDS	Meets SAE 30R10.
CHARACTERISTICS/BENEFITS	Capable of handling petrol, alcohol-extended petrol or diesel fuel in fully immersed mobile and stationary applications.

NOTE

Most fuel constructions are considered to not be electrically conductive unless specifically marked as such.

IMPORTANT



#### Not recommended for other applications.

3284A (RLA)	
RECOMMENDED FOR	Fuel line from tank to engine.
	Also suitable for low pressure hydraulic oil, engine oil, or air.
CONSTRUCTION	NBR tube, synthetic fiber reinforcement, NBR/PVC cover.
	Straight hose specification, available in bulk or cut lengths.
TEMPERATURE RANGE	-40°C to +100°C.
STANDARDS	Meets SAE 30R2 Type 1 or Type 2 except OD and tolerance.
	Burst, vacuum, and bend radius exceed SAE 30R2.
INTERNAL DIAMETER	Available in 3/16", 1/4", 5/16", 3/8", 0.510", 5/8", 3/4", and 1".
CHARACTERISTICS/BENEFITS	Higher pressure.
IMPORTANT	Do not use for in-tank, gaseous fuels, or biodiesel applications.

**ENGINE HOSE** 

FUEL

#### 42780B

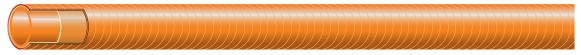
42780B	
RECOMMENDED FOR	Engine oil and hydraulic suction applications.
CONSTRUCTION	NBR tube, aramid knit reinforcement, NBR/PVC cover.
	Curved hose specification, customised design.
TEMPERATURE RANGE	-40°C to +125°C.
STANDARDS	Meets SAE 30R2 Type 1 except burst on the $\frac{1}{2}$ " and 1" sizes, and thickness.
INTERNAL DIAMETER	Available in 1/2" to 1.1/2" standard IDs.
CHARACTERISTICS/BENEFITS	Higher pressure.
IMPORTANT	Do not use for fuel injection or air applications.

## 4278CN

4278CN	
RECOMMENDED FOR	Engine oil, fuel filler, and hydraulic suction.
	Also suitable for tank vent and crank case vent.
CONSTRUCTION	NBR tube, synthetic knit reinforcement, NBR/PVC cover.
	Curved hose specification, customised design.
TEMPERATURE RANGE	-40°C to +125°C.
STANDARDS	Meets SAE 30R7 except the oxidised gasoline test, or SAE 30R6.
INTERNAL DIAMETER	Available in 3/16" to 3.5/8"standard IDs.
CHARACTERISTICS/BENEFITS	Price-by-performance.
IMPORTANT	Do not use for fuel injection or air intake applications.

#### **ENGINE HOSE** AIR INTAKE

#### 4171H



	$\odot$			C	¢	9	0			$\bigcirc$		(
-size	DN			mm	PSI	MPa	PSI	MPa	mm	mm/Hg	kg/100m	REF.
-14	22	7/8	1.09	27.8	200	1.4	800	5.5	220	*	30	HIGH-TEMP AIR INTAKE 7/8"
-16	25	1	1.22	31.0	200	1.4	800	5.5	245	*	33	HIGH-TEMP AIR INTAKE 1"
-20	31	1.1/4	1.47	37.4	200	1.4	800	5.5	295	*	40	HIGH-TEMP AIR INTAKE 1.1/4"
-22	35	1.3/8	1.59	40.5	200	1.4	800	5.5	320	*	43	HIGH-TEMP AIR INTAKE 1.3/8"
-24	38	1.1/2	1.72	43.7	200	1.4	800	5.5	345	*	46	HIGH-TEMP AIR INTAKE 1.1/2"
-28	45	1.3/4	1.97	50.1	180	1.2	720	5.0	400	*	54	HIGH-TEMP AIR INTAKE 1.3/4"
-32	51	2	2.22	56.4	160	1.1	640	4.4	450	*	61	HIGH-TEMP AIR INTAKE 2"
-36	57	2.1/4	2.47	62.8	160	1.1	640	4.4	500	*	67	HIGH-TEMP AIR INTAKE 2.1/4"
-38	60	2.3/8	2.59	65.9	140	1.0	560	3.9	525	*	70	HIGH-TEMP AIR INTAKE 2.3/8"
-40	63	2.1/2	2.72	69.1	134	0.9	534	3.7	550	*	74	HIGH-TEMP AIR INTAKE 2.1/2"
-44	70	2.3/4	2.97	75.5	120	0.8	480	3.3	600	*	88	HIGH-TEMP AIR INTAKE 2.3/4"
-48	76	3	3.22	81.8	113	0.8	452	3.1	650	*	95	HIGH-TEMP AIR INTAKE 3"
-52	83	3.1/4	3.47	88.2	105	0.7	418	2.9	705	*	98	HIGH-TEMP AIR INTAKE 3.1/4"
-54	86	3.3/8	3.60	91.3	100	0.7	400	2.8	730	*	126	HIGH-TEMP AIR INTAKE 3.3/8"
-56	89	3.1/2	3.77	95.8	120	0.8	480	3.3	765	*	135	HIGH-TEMP AIR INTAKE 3.1/2"
-60	95	3.3/4	4.02	102.1	120	0.8	480	3.3	815	*	144	HIGH-TEMP AIR INTAKE 3.3/4"
-64	102	4	4.27	108.5	113	0.8	452	3.1	865	*	152	HIGH-TEMP AIR INTAKE 4"
-72	114	4.1/2	4.77	121.2	100	0.7	400	2.8	965	*	161	HIGH-TEMP AIR INTAKE 4.1/2"
-80	127	5	5.27	133.9	90	0.6	360	2.5	1070	*	177	HIGH-TEMP AIR INTAKE 5"

RECOMMENDED FOR	High-temperature turbo hose or connector.
TUBE	Orange silicone.
REINFORCEMENT	High-temperature fabric.
COVER	Orange silicone – wrapped appearance.
TEMPERATURE RANGE	-40°C to +288°C continuous service.

## CHARGE AIR COOLER - COLD SIDE: 4177W (GREEN STRIPE®)

RECOMMENDED FOR	Vibration dampening connector on the air filter.
	Also suitable for coolant or cold-side charge air connections.
CONSTRUCTION	NBR tube, synthetic fabric reinforcement plies, CR cover with wrapped appearance.
	Hump hose specification, fixed lengths.
TEMPERATURE RANGE	-40°C to +100°C.
STANDARDS	Exceeds SAE 20R1 Class B tube, Class C cover.
INTERNAL DIAMETER	Available in 1.1/4" to 6" standard IDs.
CHARACTERISTICS/BENEFITS	Oil resistant.
IMPORTANT	Do not use for conveying fuel or oil.
	There is no vacuum rating specification.

**ENGINE HOSE** AIR INTAKE



#### AIR INTAKE HOSE: 4289N

RECOMMENDED FOR	Engine air intake with internal oil mist, exhaust fumes, or crank case fumes, or external oily environment.
	Also suitable for water suction.
CONSTRUCTION	CR tube with no reinforcement.
	Curved hose specification, customised design.
TEMPERATURE RANGE	-40°C to +100°C.
STANDARDS	Meets SAE J200 M3BC 707 E014 E034 F17 Z1 (8.28MPa Tb), or SAE J200 M3BC 707 A14 C12 E014 E034 F17.
INTERNAL DIAMETER	Available in 5/8" to 5" standard IDs.
CHARACTERISTICS/BENEFITS	All rubber.
	Oil resistant.
IMPORTANT	Do not use for conveying fuel.



## AIR INTAKE HOSE: 4289E

RECOMMENDED FOR	Engine air intake or air ducting.
	Also suitable for water suction.
CONSTRUCTION	EPDM tube with no reinforcement.
	Curved hose specification, customised design.
TEMPERATURE RANGE	-40°C to +135°C continuous with peaks of +150°C.
STANDARDS	Meets SAE J200 M3CA 707 A25 B35 C32 F17 Z1 (Duro 60-75), or SAE J200 M3CA 710 A25 B35 C32 EA14 F17 G21 Z1 (EPDM) Z2 (Duro 60-75).
INTERNAL DIAMETER	Available in 7/32" to 4.21" standard IDs.
CHARACTERISTICS/BENEFITS	All rubber.
IMPORTANT	Do not use for conveying fuel or oil.

#### **ENGINE HOSE** HOT OIL LINES

#### C5CXH

0  $\bigcirc$ R  $\odot$ ſ DN .... ... PSI MPa PSI MPa kg/100m REF. -size mm mm 3000 -5 6.3 1/4 0.58 14.7 20.7 12000 82.7 85 28 5C5CXH 8.0 5/16 0.68 17.3 2250 15.5 9000 62.1 100 33 6C5CXH -6 37 -8 11.0 13/32 0.77 19.6 2000 13.8 8000 55.2 115 8C5CXH -10 12.5 1/2 0.92 23.4 1750 12.1 7000 48.3 140 57 10C5CXH -12 16.0 5/8 1.08 27.4 1500 10.3 6000 41.4 165 66 12C5CXH -16 22.2 7/8 1.23 31.2 800 5.5 3200 22.1 188 71 16C5CXH -20 28.6 1.1/8 1.50 38.1 625 4.3 2500 17.2 229 77 20C5CXH

Sescence and the set and the

RECOMMENDED FOR	High-temperature lube oil lines for on-highway truck and bus, off-road construction and agricultural vehicles. Turbo charger oil supply. Air brake applications. Diesel fuel applications.
TUBE	CPE (Chlorinated polyethylene) based.
REINFORCEMENT	Braided high tensile wire and textiles.
COVER	Oil and mildew resistant polyester/textile braid. Blue.
TEMPERATURE RANGE	-40°C to +150°C for hot oil applications.
STANDARDS	Meets the requirements of SAE 100R5 for hydraulic applications, SAE 1405 hot oil circulation. DOT FMVSS-106-74 type AII and SAE J1402 type AII for air brake applications (-4 to -12).
COUPLINGS	-5, -6, -8, -16 and -20 : MegaCrimp® ; -10, -12 : GlobalSpiral.
CHARACTERISTICS/BENEFITS	Compatible with both petroleum and phosphate ester fluids.
	Acceptable for use with oil and air for maximum application flexibility.

Has passed the tube fuel resistance requirements of SAE 30R2.

$\bigcirc$	Hose ID specificati in mr			Couplings for C5CXH hose sizes
-size	ISO 11237 2SC R16S	100 R5	REF.	
-5	7.7 - 8.5	6.4 - 7.2	5C5CXH	4G
-6	9.3 – 10.1	7.9 - 8.7	6C5CXH	5G
-8	12.3 – 13.5	10.3 – 11.1	8C5CXH	6G
-10	15.5 – 16.7	12.7 – 13.7	10C5CXH	8GS + 8GB1F-PS
-12	18.6 – 19.8	15.9 – 17.0	12C5CXH	10GS + 10GS1F-4
-16	25.0 - 26.4	22.2 - 23.3	16C5CXH	12G
-20	31.4 - 33.0	28.6 - 29.8	20C5CXH	16G



#### **MEGATECH®**

🍩 8MegaTech\*1000 🔮 7.0 MPa (1000 PSI) 1/2" (12.5 mm) D07/SAE J1402 Type All

$\Theta$		O		$\odot$					$\bigcirc$		(	
-size	DN			mm	PSI	MPa	PSI	MPa	mm	mm/Hg	kg/100m	REF.
-4	6	1/4	0.52	13.2	1000	7.0	4000	28.0	50	760	18	4MEGATECH1000
-6	10	3/8	0.66	16.8	1000	7.0	4000	28.0	65	760	28	6MEGATECH1000
-8	12	1/2	0.80	20.3	1000	7.0	4000	28.0	90	760	36	8MEGATECH1000
-10	16	5/8	0.93	23.6	1000	7.0	4000	28.0	100	760	45	10MEGATECH1000
-12	19	3/4	1.15	29.2	1000	7.0	4000	28.0	120	760	60	12MEGATECH1000
-16	25	1	1.37	34.8	1000	7.0	4000	28.0	150	760	71	16MEGATECH1000
-20	31	1.1/4	1.64	41.7	1000	7.0	4000	28.0	210	760	124	20MEGATECH1000
-24	38	1.1/2	1.95	49.5	500	3.5	2000	14.0	380	760	149	24MEGATECH500
-32	51	2	2.48	63.0	500	3.5	2000	14.0	460	760	205	32MEGATECH500
-40	63	2.1/2	2.97	75.4	500	3.5	2000	14.0	560	760	219	40MEGATECH500
-48	76	3	3.50	88.9	500	3.5	2000	14.0	610	760	274	48MEGATECH500

RECOMMENDED FOR	Pressurised hot oil return lines and air compressor lines, power steering, tilt cab cylinders, engine and transmission coolant and filtration lines.
TUBE	CPE (Chlorinated polyethylene) based.
REINFORCEMENT	One braid of high tensile steel wire.
COVER	Oil resistant textile braid, impregnated with synthetic rubber.
TEMPERATURE RANGE	-40°C to +150°C. Air: -40°C to +121°C. Phosphate ester fluids: -40°C to +100°C. For water emulsions, etc. see Temperature Limits Table.
STANDARDS	Meets the requirements of SAE J1405 performance specifications for use in high-temperature transmission oil systems and high-temperature lubrication oil systems using petroleum based oils.
	-4 to -10: meets SAE J1402.
COUPLINGS	-4 to -20: MegaCrimp®; -24, -32: GlobalSpiral Plus.
CHARACTERISTICS/BENEFITS	Very good resistance to weathering and ozone.
	${\sf MegaTech}^{\circledast}$ is compatible with a variety of fluids such as hydraulic oil, phosphate esters, diesters.

IMPORTANT



Not recommended for gasoline or diesel fuel applications.



#### WINDSHIELD WIPER/ VACUUM HOSE: 4040A

RECOMMENDED FOR	Windshield washer lines and engine vacuum lines.
	Also suitable for coolant overflow or vent or pressure sensor tubing.
CONSTRUCTION	EPDM tube with no reinforcement.
	Straight hose specification, available in bulk or cut lengths.
TEMPERATURE RANGE	-40°C to +125°C.
STANDARDS	Meets SAE J1037, SAE 942, SAE J200 M4CA710 A25 B35 C32 EA14 F19.
INTERNAL DIAMETER	Available in 7/64", 5/32", 7/32", 1/4", 5/16", and 3/8" standard IDs.
CHARACTERISTICS/BENEFITS	Tubing.
IMPORTANT	Do not use for conveying fuel or oil.

## AIR BRAKE HOSE: TR500

RECOMMENDED FOR	Air brake hose, high-temperature pressurised oil return lines and rotary oil/air compressor lines, engine and transmission coolant lines and lube oil lines.
CONSTRUCTION	NBR based tube, steel wire reinforcement, synthetic rubber impregnated textile braided cover.
	Straight hose specification, available in bulk or cut lengths.
TEMPERATURE RANGE	-40°C to +121°C.
STANDARDS	Meets or exceeds DOT FMVSS 106-74, SAE J1402 for 1/4", 3/8", 1/2", and 5/8".
INTERNAL DIAMETER	Available in 1/4", 3/8", 1/2", 5/8", 3/4", and 1" standard IDs.
CHARACTERISTICS/BENEFITS	High-temperature resistant.
	Oil and mildew resistant cover.
	Validated with MegaCrimp®.
IMPORTANT	Do not use for gasoline or diesel fuel applications.

## REFRIGERANT HOSE: POLARSEAL® II

RECOMMENDED FOR	AC systems for light duty (truck & bus), and other heavy equipment.
	Liquid and gaseous R134a and R12 refrigerants in automotive AC and industrial systems.
CONSTRUCTION	Synthetic elastomeric rubber tube, fabric braid reinforcement, synthetic elastomeric cover, nylon liner barrier.
	Straight hose specification, available in bulk or cut lengths.
TEMPERATURE RANGE	-30°C to +125°C.
STANDARDS	Meets SAE J2064 Type C, Class 1.
INTERNAL DIAMETER	Available in 5/16", 13/32", 1/2", 5/8", and 7/8" standard IDs.
CHARACTERISTICS/BENEFITS	Designed to minimise permeation of R134a refrigerant.
	Heat, moisture and ozone resistant cover.

INTEGRATED FLUID POWER SOLUTIONS



## **INDUSTRIAL HOSE**

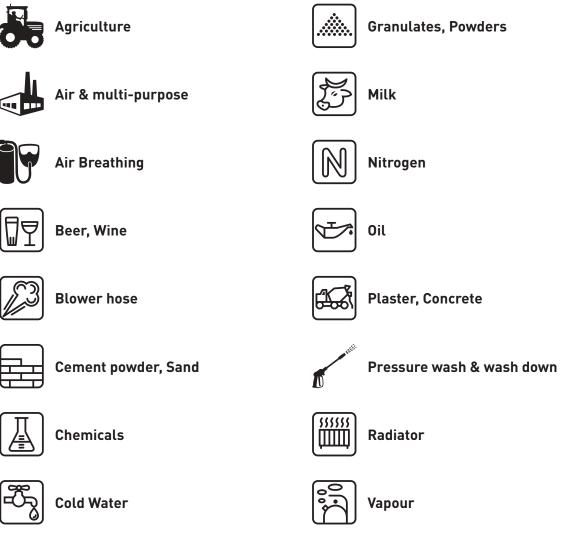




# EXPLANATION OF THE SYMBOLS USED IN THIS DOCUMENT

THE WORLD OF HOSE

## **APPLICATION ICONS**





Food

888 (

Water, Sea Water, Waste Water, Mud, Slurry

## **HOMOLOGATION ICONS**



FDA (US Food and Drug Administration) is an agency within the Department of Health and Human Services and consists of centres and offices. The FDA is responsible for protecting the public health by assuring the safety, efficacy, and security of human and veterinary drugs, biological products, medical devices, our nation's food supply, cosmetics, and products that emit radiation.



The Federal Institute for Risk Assessment (BfR) is active in the field of consumer health protection. Its tasks include the assessment of existing and the identification of new health risks, the drawing up of recommendations on risk reduction, and the communication of this process.



The United States Pharmacopeia (USP) is a non–governmental, official public standardssetting authority for prescription and over–the–counter medicines and other healthcare products manufactured or sold in the United States. USP also sets widely recognised standards for food ingredients and dietary supplements. USP sets standards for the quality, purity, strength, and consistency of these products – critical to the public health.



A hose which is capable of discharge is a hose with a resistance of more than 10<sup>3</sup>  $\Omega$ /m and less than 10<sup>6</sup>  $\Omega$ /m and is indicated with an  $\Omega$  icon. An object or device is capable of discharge if its surface resistance is between 10<sup>4</sup>  $\Omega$  and 10<sup>9</sup>  $\Omega$  measured at +23°C and 50% relative humidity. The characteristic of being able to discharge is also referred to as being "anti-static".

Animal Derived Ingredients (ADI) can cause the disease BSE and should therefore be avoided in products that may come into contact with products that are intended for human consumption. Hose liner material ingredients and process aids can contain ADI. GATES has therefore checked the compound portfolio and can now offer a broad selection of ADI free food and beverage hoses.



#### WATER BLAST

💭 12WB-XTF WATER BLAST 🐑 100.0 MPa (15000 PSI) 3/4" (19.0 mm) Flame Resistant MSHA 26-11C 2.5:1 SF

$\Theta$		$\Theta$		$\odot$				()
-size	mm	"	mm	MPa	MPa	mm	kg/100m	REF.
-6	10	3/8	21.2	100.0	250.0	230	88	6WB-XTFxLL
-8	13	1/2	24.6	100.0	250.0	230	141	8WB-XTFxLL
-12	19	3/4	34.5	100.0	250.0	230	228	12WB-XTFxLL

RECOMMENDED FOR	Ultra high pressure cold water cutting devices, blasting applications and cleaning equipment including high pressure stream of sea water to remove marine growth on off-shore oil rigs.
TUBE	CR (Chloroprene) based.
REINFORCEMENT	Four (six for -12) alternating layers of spiralled, high tensile wire.
COVER	XtraTuff™. MSHA approved.
TEMPERATURE RANGE	-20°C to +70°C.
STANDARDS	Gates proprietary.
COUPLINGS	WTB.
CHARACTERISTICS/BENEFITS	Outstanding resistance to weather, oil and abrasion.
	Very flexible spiral wire design.

NOTE

Gates Water Blast hose is not to be used for impulse applications.

IMPORTANT



In line with international standards (EN 1829-2), each hose assembly should be subjected to a proof pressure hold test. The test pressure shall be 1.5 times the maximum allowable working pressure, the safety factor for burst pressure shall be at least 2.5 times the maximum allowable working pressure.

#### JETCLEAN<sup>™</sup> 2JC

2JC06 JetClean™ ③ 40.0 MPa (5800 PSI) 3/8" (9.5 mm) 155°C (Not For Steam)

	$\Theta$			$\odot$		(Fr)	A kg	(
-size	mm		mm	MPa	MPa	mm	kg/100m	REF.
-5	8	5/16	16.3	40.0	140.0	55	38	2JC05
-6	10	3/8	18.8	40.0	132.0	65	49	2JC06
-5	8	5/16	16.3	40.0	140.0	55	38	2JC05B
-6	10	3/8	18.8	40.0	132.0	65	49	2JC06B
-8	13	1/2	21.8	40.0	110.0	90	63	2JC08B
-6	10	3/8	18.8	40.0	132.0	65	49	2JC06G

RECOMMENDED FOR	Use on hot and cold water high pressure cleaning equipment where heavy-duty service is required. Suited for agricultural, sports, valet and maintenance service applications.
TUBE	NBR (Nitrile) based.
REINFORCEMENT	Two wire braid.
COVER	NBR/PVC based. Available in black, blue (B) and grey (G).
TEMPERATURE RANGE	-40°C to +155°C.
STANDARDS	Gates proprietary.
COUPLINGS	MegaCrimp®.
CHARACTERISTICS/BENEFITS	Grey and blue JetClean™ are suitable for use in hospitals, swimming pools and other applications where hygiene is of the utmost importance.
	Premium temperature resistance up to +155°C.

IMPORTANT



#### Not recommended for steam service.



## JETCLEAN<sup>™</sup> 1JC

31JC08 JetClean™ ③ 20.0 MPa (2900 PSI) 1/2" (12.5 mm) 155°C (Not For Steam)

	$\Theta$			$\odot$		R	C kg	()	
-size	mm		mm	MPa	MPa	mm	kg/100m	REF.	
-4	6	1/4	13.5	20.0	90.0	50	22	1JC04	
-5	8	5/16	15.1	20.0	86.0	55	25	1JC05	
-6	10	3/8	17.1	20.0	72.0	65	32	1JC06	
-5	8	5/16	15.1	20.0	86.0	55	25	1JC05B	
-6	10	3/8	17.1	20.0	72.0	65	32	1JC06B	
-8	13	1/2	20.3	20.0	64.0	90	41	1JC08B	
-6	10	3/8	17.1	20.0	72.0	65	32	1JC06G	
-8	13	1/2	20.3	20.0	64.0	90	41	1JC08G	

RECOMMENDED FOR	Use on hot and cold water high pressure cleaning equipment where heavy-duty service is required. Suited for agricultural, sports, valet and maintenance service applications.
TUBE	NBR (Nitrile) based.
REINFORCEMENT	One wire braid.
COVER	NBR/PVC based. Available in black, blue (B) and grey (G).
TEMPERATURE RANGE	-40°C to +155°C.
STANDARDS	Gates proprietary.
COUPLINGS	MegaCrimp®.
CHARACTERISTICS/BENEFITS	Grey and blue JetClean™ are suitable for use in hospitals, swimming pools and other applications where hygiene is of the utmost importance.
	Premium temperature resistance up to +155°C.

IMPORTANT



Not recommended for steam service.

#### **CLEAN MASTER™ PRESSURE WASH** FORMERLY POWERCLEAN

CLEAN MASTER" PRESSURE WASH 🦯

	$\odot$			$\odot$				()
-size	mm		mm	MPa	MPa	mm	kg/100m	REF.
-4	6	1/4	13.5	24.0	90.0	100	23	CLEAN MASTER PRESSURE WASH 3500 1WB 1/4"
-5	8	5/16	15.1	25.0	100.0	130	23	CLEAN MASTER PRESSURE WASH 3600 1WB 5/16"
-5	8	5/16	16.3	35.0	132.0	130	40	CLEAN MASTER PRESSURE WASH 5000 2WB 5/16"
-6	10	3/8	17.2	21.0	84.0	130	33	CLEAN MASTER PRESSURE WASH 3000 1WB 3/8"
-6	10	3/8	18.8	35.0	132.0	130	52	CLEAN MASTER PRESSURE WASH 5000 2WB 3/8"
-5	8	5/16	15.1	25.0	100.0	130	23	CLEAN MASTER PRESSURE WASH 3600B 1WB 5/16"
-5	8	5/16	16.3	35.0	132.0	130	40	CLEAN MASTER PRESSURE WASH 5000B 2WB 5/16"
-6	10	3/8	17.2	21.0	84.0	130	33	CLEAN MASTER PRESSURE WASH 3000B 1WB 3/8"
-6	10	3/8	18.8	35.0	132.0	130	52	CLEAN MASTER PRESSURE WASH 5000B 2WB 3/8"
-8	13	1/2	20.3	17.5	64.0	180	43	CLEAN MASTER PRESSURE WASH 2500B 1WB 1/2"
-8	13	1/2	21.8	28.0	110.0	180	62	CLEAN MASTER PRESSURE WASH 4000B 2WB 1/2"
-6	10	3/8	17.2	21.0	84.0	130	33	CLEAN MASTER PRESSURE WASH 3000G 1WB 3/8"
-6	10	3/8	18.8	35.0	132.0	130	52	CLEAN MASTER PRESSURE WASH 5000G 2WB 3/8"
-8	13	1/2	20.3	17.5	64.0	180	43	CLEAN MASTER PRESSURE WASH 2500G 1WB 1/2"

RECOMMENDED FOR	Use on pressure cleaning equipment. Specially compounded to handle high pressure water service.
TUBE	Type C (Nitrile), black.
REINFORCEMENT	One or two braid of high tensile steel wire.
COVER	C2 (Modified Nitrile). Available in black, blue (B) and grey (G). Blue and grey covers are nonmarking.
TEMPERATURE RANGE	-40°C to +121°C.
STANDARDS	Gates proprietary.
COUPLINGS	MegaCrimp®.
BRANDING TRANSFER LABEL	GATES® CLEAN MASTER™ PRESSURE WASH (2500-5000) NOT FOR STEAM SERVICE MADE IN U.S.A.

IMPORTANT



#### Not recommended for steam service.



#### PREMIUM<sup>™</sup> FUEL MASTER D



$\Theta$			$\odot$			O kg	<b> </b> ◀───►	(
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
19	31	6.0	2.0	8.0	133	60	40	FUEL MASTER D 19mm x CL40
19	31	6.0	2.0	8.0	133	60	61*	FUEL MASTER D 19mm x CL61
25	37	6.0	2.0	8.0	175	80	40	FUEL MASTER D 25mm x CL40
25	37	6.0	2.0	8.0	175	80	61*	FUEL MASTER D 25mm x CL61
32	44	6.0	2.0	8.0	224	90	40	FUEL MASTER D 32mm x CL40
32	44	6.0	2.0	8.0	224	90	61*	FUEL MASTER D 32mm x CL61
38	51	6.5	2.0	8.0	266	120	40	FUEL MASTER D 38mm x CL40
38	51	6.5	2.0	8.0	266	120	61*	FUEL MASTER D 38mm x CL61
50	66	8.0	2.0	8.0	350	160	40	FUEL MASTER D 50mm x CL40
51	67	8.0	2.0	8.0	357	160	40	FUEL MASTER D 51mm x CL40
51	67	8.0	2.0	8.0	357	160	61*	FUEL MASTER D 51mm x CL61
63	79	8.0	2.0	8.0	441	210	40	FUEL MASTER D 63mm x CL40
75	91	8.0	2.0	8.0	525	240	40	FUEL MASTER D 75mm x CL40
76	92	8.0	2.0	8.0	532	250	40	FUEL MASTER D 76mm x CL40
76	92	8.0	2.0	8.0	532	250	61*	FUEL MASTER D 76mm x CL61
100	116	8.0	2.0	8.0	700	340	40	FUEL MASTER D 100mm x CL40
102	118	8.0	2.0	8.0	714	350	40	FUEL MASTER D 102mm x CL40
102	118	8.0	2.0	8.0	714	350	61*	FUEL MASTER D 102mm x CL61
152	172	10.0	2.0	8.0	1050	680	40	FUEL MASTER D 152mm x CL40

\* 61 m coils are made to order

RECOMMENDED FOR	Premium pressure hose (D) for mineral oil products and fuel mixtures with a maximum 50% aromatic content. Ideal for offshore/onshore transfer applications involving discharge service for diesel oils and other similar petroleum products where an extremely lightweight, flexible hose with a high rated working pressure and a small minimum bend radius is required.
TUBE	Black NBR1 rubber, smooth and oil resistant.
REINFORCEMENT	High tensile synthetic textile cord, two crossing anti-static wires.
COVER	CR rubber, black, smooth with cloth impression, good resistance to weather and abrasion, chemical and oil resistance.
TEMPERATURE RANGE	-30°C to +90°C.
BURST PRESSURE	4 x WP.
ELECTRICALLY CONDUCTIVE	R < 10 <sup>6</sup> Ohm.
STANDARDS	EN 12115, EN 1761.
BRANDING TRANSFER LABEL	PREMIUM™ FUEL MASTER D - EN 12115/ EN 1761 FUEL TRANSFER 20 BAR Ω
BRANDING EMBOSSED LABEL	GATES PREMIUM™ FUEL MASTER D - EN 12115/ EN 1761 NBR1 - DIAM mm - 20 BAR - Ω - ℚ - year

#### **PREMIUM™ FUEL MASTER SD**

$\Theta$		→€	$\odot$			C kg	<b>i</b> ≺>i	(
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
19	31	6.0	1.6	6.4	105	70	40	FUEL MASTER SD 19mm x CL40
19	31	6.0	1.6	6.4	105	70	61*	FUEL MASTER SD 19mm x CL61
25	37	6.0	1.6	6.4	138	80	40	FUEL MASTER SD 25mm x CL40
25	37	6.0	1.6	6.4	138	80	61*	FUEL MASTER SD 25mm x CL61
32	44	6.0	1.6	6.4	176	110	40	FUEL MASTER SD 32mm x CL40
32	44	6.0	1.6	6.4	176	110	61*	FUEL MASTER SD 32mm x CL61
38	51	6.5	1.6	6.4	209	130	40	FUEL MASTER SD 38mm x CL40
38	51	6.5	1.6	6.4	209	130	61*	FUEL MASTER SD 38mm x CL61
50	66	8.0	1.6	6.4	275	230	40	FUEL MASTER SD 50mm x CL40
51	67	8.0	1.6	6.4	281	230	40	FUEL MASTER SD 51mm x CL40
51	67	8.0	1.6	6.4	281	230	61*	FUEL MASTER SD 51mm x CL61
63	79	8.0	1.6	6.4	347	290	40	FUEL MASTER SD 63mm x CL40
75	91	8.0	1.6	6.4	413	330	40	FUEL MASTER SD 75mm x CL40
76	92	8.0	1.6	6.4	418	330	40	FUEL MASTER SD 76mm x CL40
76	92	8.0	1.6	6.4	418	330	61*	FUEL MASTER SD 76mm x CL61
100	116	8.0	1.6	6.4	550	440	40	FUEL MASTER SD 100mm x CL40
102	118	8.0	1.6	6.4	561	450	40	FUEL MASTER SD 102mm x CL40
102	118	8.0	1.6	6.4	561	450	61*	FUEL MASTER SD 102mm x CL61
127	147	10.0	1.6	6.4	688	690	40	FUEL MASTER SD 127mm x CL40
152	174	11.0	1.6	6.4	825	960	40	FUEL MASTER SD 152mm x CL40

\* 61 m coils are made to order \*\* Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Premium vacuum and pressure hose (SD) for mineral oil products and fuel mixtures with maximum 50% aromatic content. Ideal for offshore/onshore transfer applications involving suction and discharge service for diesel oils and other similar petroleum products where an extremely lightweight, hard wall, flexible hose with a high rated working pressure and a small minimum bend radius is required.
TUBE	Black NBR1 rubber, smooth and oil resistance.
REINFORCEMENT	High tensile synthetic textile cord, steel wire helix and two crossing anti-static wires.
COVER	CR rubber, black, smooth with cloth impression, good resistance to weather and abrasion, chemical and oil resistance.
TEMPERATURE RANGE	-30°C to +90°C.
BURST PRESSURE	4 x WP.
ELECTRICALLY CONDUCTIVE	R < 10 <sup>6</sup> Ohm.
STANDARDS	EN 12115, EN 1761.
BRANDING TRANSFER LABEL	PREMIUM™ FUEL MASTER SD - EN 12115/ EN 1761 – FUEL TRANSFER 16 BAR Ω
BRANDING EMBOSSED LABEL	GATES PREMIUM™ FUEL MASTER SD - EN 12115/ EN 1761 – NBR 1 - DIAM mm - 16 BAR - Ω – Q - vear

#### **ESSENTIAL™ OIL MASTER SD**

Sessential Oil Master SD - 10 BARΩ

$\bigcirc$	IO	→€	$\odot$				<b>i →</b> i	(
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
19	29	5.0	1.0	3.0	95	50	40	OIL MASTER SD 19mm x CL40
25	35	5.0	1.0	3.0	125	60	40	OIL MASTER SD 25mm x CL40
32	42	5.0	1.0	3.0	160	90	40	OIL MASTER SD 32mm x CL40
38	48	5.0	1.0	3.0	190	100	40	OIL MASTER SD 38mm x CL40
50	60	5.0	1.0	3.0	250	140	40	OIL MASTER SD 50mm x CL40
65	77	6.0	1.0	3.0	325	230	40	OIL MASTER SD 65mm x CL40
75	88	6.5	1.0	3.0	375	270	40	OIL MASTER SD 75mm x CL40
100	114	7.0	1.0	3.0	500	390	40	OIL MASTER SD 100mm x CL40
125	141	8.0	1.0	3.0	625	600	40	OIL MASTER SD 125mm x CL40
152	168	8.0	1.0	3.0	750	790	40	OIL MASTER SD 152mm x CL40

\*\* Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Vacuum and pressure hose (SD) for transfer of fuel oil and other petroleum based products in home delivery, commercial and industrial service or in low pressure return lines. Transfer of refined fuels (commercial gasoline and diesel fuel), oils and other petroleum products. Ideal for oilfield service truck use. Service life of transfer hoses can be extended by draining hoses after use. Max 50% aromatic content.
TUBE	Black NBR rubber, smooth and oil resistant.
REINFORCEMENT	High tensile synthetic textile cord, steel wire helix, two crossing anti-static wires.
COVER	CR rubber, black, smooth with cloth impression, good resistance to weather and abrasion, chemical and oil resistance.
TEMPERATURE RANGE	-30°C to +100°C.
BURST PRESSURE	> 30 bar.
ELECTRICALLY CONDUCTIVE	R < 10 <sup>6</sup> Ohm.
BRANDING TRANSFER LABEL	ESSENTIAL™ OIL MASTER SD - 10 BAR Ω

#### **INDUSTRIAL HOSE** PETROLEUM TRANSFER

#### **ESSENTIAL™ OIL MASTER LITE SD**



$\bigcirc$	IO		$\odot$				<b>i⊲ →</b> i	(
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
19	29	5.0	1.0	3.0	95	50	40	OIL MASTER Lite SD 19mm x CL40
25	35	5.0	1.0	3.0	125	60	40	OIL MASTER Lite SD 25mm x CL40
32	42	5.0	1.0	3.0	160	90	40	OIL MASTER Lite SD 32mm x CL40
38	48	5.0	1.0	3.0	190	100	40	OIL MASTER Lite SD 38mm x CL40
51	61	5.0	1.0	3.0	255	140	40	OIL MASTER Lite SD 51mm x CL40
65	77	6.0	1.0	3.0	325	230	40	OIL MASTER Lite SD 65mm x CL40
76	88	6.0	1.0	3.0	380	270	40	OIL MASTER Lite SD 76mm x CL40
90	104	7.0	1.0	3.0	450	350	40	OIL MASTER Lite SD 90mm x CL40
100	114	7.0	1.0	3.0	500	390	40	OIL MASTER Lite SD 100mm x CL40
127	143	8.0	1.0	3.0	635	610	40	OIL MASTER Lite SD 127mm x CL40
152	168	8.0	1.0	3.0	760	790	40	OIL MASTER Lite SD 152mm x CL40

\*\* Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Very flexible corrugated vacuum and pressure hose (SD) for transfer of fuel oil and other petroleum based products in home delivery, commercial and industrial service or in low pressure return lines. Transfer of refined fuels (commercial gasoline and diesel fuel), oils and other petroleum products. Ideal for oilfield service truck use. Service life of transfer hoses can be extended by draining hoses after use. Max 50% aromatic content.
TUBE	Black NBR rubber, smooth and oil resistant.
REINFORCEMENT	High tensile synthetic textile cord, steel wire helix and two crossing anti-static wires.
COVER	CR rubber, black, corrugated with cloth impression, good resistance to weather and abrasion, chemical and oil resistance.
TEMPERATURE RANGE	-30°C to 100°C.
BURST PRESSURE	> 30 bar.
ELECTRICALLY CONDUCTIVE	R < 10 <sup>6</sup> Ohm.
COUPLINGS	-12 to -20: MegaCrimp®; -24: GlobalSpiral Plus.
BRANDING TRANSFER LABEL	ESSENTIAL™ OIL MASTER LITE SD - 10 BAR Ω

### **ESSENTIAL™ REEL MASTER D**

ESSENTIAL" REEL MASTER D - 16 BAR O

$\bigcirc$			$\odot$				<b> </b> ←──►	(
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
25	35	5.0	1.6	4.8	175	70	61	REEL MASTER D 25mm x CL61
32	43	5.5	1.6	4.8	224	80	61	REEL MASTER D 32mm x CL61
35	46	5.5	1.6	4.8	245	90	61	REEL MASTER D 35mm x CL61
38	50	6.0	1.6	4.8	266	110	61	REEL MASTER D 38mm x CL61
40	52	6.0	1.6	4.8	280	110	61	REEL MASTER D 40mm x CL61
51	65	7.0	1.6	4.8	357	190	61	REEL MASTER D 51mm x CL61

RECOMMENDED FOR	Pressure domestic fuel reel hose for tank trucks and oil delivery in heavy duty reeling applications. Also suitable for tank cleaning.
TUBE	Black NBR rubber, smooth and oil resistant.
REINFORCEMENT	High tensile synthetic textile cord and two crossing anti-static wires.
COVER	CR rubber, black, smooth with cloth impression, good resistance to weather and abrasion, chemical and oil resistance.
TEMPERATURE RANGE	-30°C to +70°C.
BURST PRESSURE	48 bar.
ELECTRICALLY CONDUCTIVE	R < 10 <sup>6</sup> Ohm.
STANDARDS	EN 1360, EN 1761.
BRANDING TRANSFER LABEL	ESSENTIAL™ REEL MASTER D - 16 BAR Ω

#### **ESSENTIAL™ BUNKER MASTER D**

SSENTIAL<sup>™</sup> BUNKER MASTER D - 16 BAR Ω 🗺 —

$\Theta$		→€	$\odot$			C kg	<b>i</b> ≺>i	(
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
76	94	9.0	1.6	4.8	532	300	40	BUNKER MASTER D 76mm x CL40
102	120	9.0	1.6	4.8	714	400	40	BUNKER MASTER D 102mm x CL40
127	145	9.0	1.6	4.8	889	490	40	BUNKER MASTER D 127mm x CL40
152	170	9.0	1.6	4.8	1064	500	40	BUNKER MASTER D 152mm x CL40
203	223	10.0	1.6	4.8	1421	850	40	BUNKER MASTER D 203mm x CL40
254	276	11.0	1.6	4.8	1778	1150	40	BUNKER MASTER D 254mm x CL40

RECOMMENDED FOR	Ship-to-shore oil bunker delivery hose for crude oil and liquid petroleum products with a maximum of 50% aromatic content, for tankers and bunkering vessels.
TUBE	Black NBR rubber, smooth and oil resistant.
REINFORCEMENT	High tensile synthetic textile cord, two crossing anti-static wires.
COVER	CR rubber, black, smooth with cloth impression, good resistance to weather and abrasion, chemical and oil resistance.
TEMPERATURE RANGE	-30°C to +90°C.
BURST PRESSURE	48 bar.
ELECTRICALLY CONDUCTIVE	R < 10 <sup>6</sup> Ohm.
BRANDING TRANSFER LABEL	ESSENTIAL™ BUNKER MASTER D - 16 BAR Ω

#### **PREMIUM™ TAR MASTER SD**

TREMILIM" TAR MASTER SD-HOTTAR & ASPHALT ()

$\odot$	ĨO	-→€	$\odot$		<b>F</b>		<b>i →</b> i	(
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
25	39	7.0	1.8	7.2	175	110	40	TAR MASTER SD 25mm x CL40
32	47	7.5	1.8	7.2	224	140	40	TAR MASTER SD 32mm x CL40
38	54	8.0	1.8	7.2	266	180	40	TAR MASTER SD 38mm x CL40
51	67	8.0	1.8	7.2	357	250	40	TAR MASTER SD 51mm x CL40
63	81	9.0	1.4	5.6	441	340	40	TAR MASTER SD 63mm x CL40
76	95	9.5	1.4	5.6	532	420	40	TAR MASTER SD 76mm x CL40
102	123	10.5	1.4	5.6	714	610	40	TAR MASTER SD 102mm x CL40

\*\* Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Premium hose designed for the bulk transfer and delivery of hot petroleum products, such as tar, asphalt, and oil. This hose is designed for suction and discharge.
TUBE	Acrylic rubber with outstanding resistance to hot oil.
REINFORCEMENT	High tensile synthetic textile cord, steel wire helix, static wire.
COVER	CR based rubber, black, smooth with cloth impression, good resistance to weather and abrasion, chemical and oil resistance.
TEMPERATURE RANGE	-30°C to +160°C, intermittent up to +180°C.
BURST PRESSURE	4 x WP.
ELECTRICALLY CONDUCTIVE	R < 10 <sup>6</sup> Ohm.
BRANDING TRANSFER LABEL	PREMIUM™ TAR MASTER SD - HOT TAR & ASPHALT Ω

#### **PREMIUM<sup>™</sup> STEAM MASTER**

$\Theta$		→€	$\odot$			C kg	<b>i⊲</b> →i	()
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
13	25	6.0	1.8	18.0	91	50	40	STEAM MASTER 13mm x CL40
16	30	7.0	1.8	18.0	112	70	40	STEAM MASTER 16mm x CL40
19	33	7.0	1.8	18.0	133	80	40	STEAM MASTER 19mm x CL40
25	40	7.5	1.8	18.0	175	110	40	STEAM MASTER 25mm x CL40
32	48	8.0	1.8	18.0	224	150	40	STEAM MASTER 32mm x CL40
38	54	8.0	1.8	18.0	266	180	40	STEAM MASTER 38mm x CL40
51	67	8.0	1.8	18.0	357	230	40	STEAM MASTER 51mm x CL40

PREMILIM" STEAM MASTER - EN EX 60 61342005-2A STEAM 18 BAR 210\*C O - DRAIN AFTER USE)

RECOMMENDED FOR	Premium steam hose for the transport of pressurised saturated steam at +210°C up to a max. 18 bar working pressure or pressurised hot water.
TUBE	Black EPDM, smooth, conductive.
REINFORCEMENT	Two high tensile steel braids.
COVER	EPDM rubber, smooth, black, all sizes are pinpricked. Extremely weather resistant cover.
TEMPERATURE RANGE	-40°C to +210°C.
BURST PRESSURE	180 bar.
ELECTRICALLY CONDUCTIVE	R < 10º 0hm.
STANDARDS	EN ISO 6134:2005-2A.
BRANDING TRANSFER LABEL	PREMIUM™ STEAM MASTER - EN ISO 6134:2005-2A STEAM 18 BAR 210°C Ω - DRAIN AFTER USE
BRANDING EMBOSSED LABEL	GATES PREMIUM™ STEAM MASTER - EN ISO 6134:2005-2A STEAM 18 BAR - DIAM mm - Ω – Q – year



## PREMIUM<sup>™</sup> STEAM MASTER RED

|--|

$\odot$			$\odot$			O kg	<b>i⊲ →</b> i	()
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
13	25	6.0	1.8	18.0	91	50	40	STEAM MASTER RED 13mm x CL40
16	30	7.0	1.8	18.0	112	70	40	STEAM MASTER RED 16mm x CL40
19	33	7.0	1.8	18.0	133	80	40	STEAM MASTER RED 19mm x CL40
25	40	7.5	1.8	18.0	175	110	40	STEAM MASTER RED 25mm x CL40
32	48	8.0	1.8	18.0	224	150	40	STEAM MASTER RED 32mm x CL40
38	54	8.0	1.8	18.0	266	180	40	STEAM MASTER RED 38mm x CL40
51	67	8.0	1.8	18.0	357	230	40	STEAM MASTER RED 51mm x CL40

RECOMMENDED FOR	Premium steam hose for the transport of pressurised saturated steam at +210°C up to a max. 18 bar working pressure or pressurised hot water.
TUBE	Black EPDM, smooth, conductive.
REINFORCEMENT	Two high tensile steel braids.
COVER	EPDM rubber, smooth, red, all sizes are pinpricked. Extremely weather resistant cover.
TEMPERATURE RANGE	-40°C to +210°C.
BURST PRESSURE	180 bar.
ELECTRICALLY CONDUCTIVE	Liner R < 10 <sup>6</sup> Ohm.
STANDARDS	EN ISO 6134:2005-2A.
BRANDING TRANSFER LABEL	PREMIUM™ STEAM MASTER RED - EN ISO 6134:2005-2A STEAM 18 BAR 210°C - DRAIN AFTER USE
BRANDING EMBOSSED LABEL	GATES PREMIUM™ STEAM MASTER RED - EN ISO 6134:2005-2A STEAM 18 BAR - DIAM mm – Q – year

#### **PREMIUM™ HEATER MASTER**

$\odot$		-€	Steam	() water					(
mm	mm	mm	MPa	MPa	MPa	mm	kg/100m	m	REF.
13	25	6.0	0.6	2.0	6.0	91	50	40	HEATER MASTER 13mm x CL40
16	30	7.0	0.6	2.0	6.0	112	60	40	HEATER MASTER 16mm x CL40
19	33	7.0	0.6	2.0	6.0	133	80	40	HEATER MASTER 19mm x CL40
25	40	7.5	0.6	2.0	6.0	175	90	40	HEATER MASTER 25mm x CL40
32	48	8.0	0.6	2.0	6.0	224	120	40	HEATER MASTER 32mm x CL40
38	54	8.0	0.6	2.0	6.0	266	140	40	HEATER MASTER 38mm x CL40
51	67	8.0	0.6	2.0	6.0	357	180	40	HEATER MASTER 51mm x CL40

RECOMMENDED FOR	Premium hot water (20 bar up to +90°C) delivery and steam hose up to +164°C, 6 bar working pressure in general industrial applications.
TUBE	Black EPDM, smooth.
REINFORCEMENT	High tensile textile cord.
COVER	EPDM rubber, smooth, black. Extremely weather resistant cover.
TEMPERATURE RANGE	-20°C to +164°C.
BURST PRESSURE	60 bar.
ELECTRICALLY CONDUCTIVE	R < 10 <sup>6</sup> Ohm.
STANDARDS	Exceeds BS 5122/A2.
BRANDING TRANSFER LABEL	PREMIUM™ HEATER MASTER - STEAM OPEN SYSTEM 6 BAR 164°C Ω



## PREMIUM<sup>™</sup> CHEM MASTER XLPE SD

👁 PREMILUM" CHEMMASTER XLIPE SD-CHEMICAL TRANSFER 16BAR)

$\bigcirc$			$\odot$				<b>i →</b> i	(
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
19	31	6.0	1.6	4.8	95	70	40	CHEM MASTER XLPE SD 19mm x CL40
25	37	6.0	1.6	4.8	125	80	40	CHEM MASTER XLPE SD 25mm x CL40
32	44	6.0	1.6	4.8	160	100	40	CHEM MASTER XLPE SD 32mm x CL40
38	51	6.5	1.6	4.8	190	120	40	CHEM MASTER XLPE SD 38mm x CL40
50	66	8.0	1.6	4.8	250	210	40	CHEM MASTER XLPE SD 50mm x CL40
51	67	8.0	1.6	4.8	255	220	40	CHEM MASTER XLPE SD 51mm x CL40
65	81	8.0	1.6	4.8	325	260	40	CHEM MASTER XLPE SD 65mm x CL40
75	91	8.0	1.6	4.8	375	310	40	CHEM MASTER XLPE SD 75mm x CL40
76	92	8.0	1.6	4.8	380	310	40	CHEM MASTER XLPE SD 76mm x CL40
100	116	8.0	1.6	4.8	500	410	40	CHEM MASTER XLPE SD 100mm x CL40

\*\* Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Premium hose for tank truck, barge, ship, or storage tank transfer applications of a variety of chemical products. The hose contains a wire helix for full suction capability, as well as for routing hoses through tight bends. A heavy duty suction and discharge hose (SD) for use with various acids and chemicals.
TUBE	XLPE, black smooth.
REINFORCEMENT	High tensile synthetic textile cord, steel wire helix and crossing anti-static wires.
COVER	EPDM rubber, smooth, green. Extremely weather resistant cover.
TEMPERATURE RANGE	-20°C to +65°C.
BURST PRESSURE	> 48 bar.
BRANDING TRANSFER LABEL	PREMIUM™ CHEM MASTER XLPE SD – CHEMICAL TRANSFER 16 BAR

#### **INDUSTRIAL HOSE** ACID-CHEMICAL

## PREMIUM<sup>™</sup> CHEM MASTER EPDM D

$\bigcirc$			$\odot$				<b>i⊲ →</b> i	(
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
13	25	6.0	1.6	6.4	91	50	40	CHEM MASTER EPDM D 13mm x CL40
19	31	6.0	1.6	6.4	133	60	40	CHEM MASTER EPDM D 19mm x CL40
22	34	6.0	1.6	6.4	154	70	40	CHEM MASTER EPDM D 22mm x CL40
25	37	6.0	1.6	6.4	175	70	40	CHEM MASTER EPDM D 25mm x CL40
32	44	6.0	1.6	6.4	224	90	40	CHEM MASTER EPDM D 32mm x CL40
38	51	6.5	1.6	6.4	266	120	40	CHEM MASTER EPDM D 38mm x CL40
50	66	8.0	1.6	6.4	350	180	40	CHEM MASTER EPDM D 50mm x CL40
51	67	8.0	1.6	6.4	357	180	40	CHEM MASTER EPDM D 51mm x CL40
63	79	8.0	1.6	6.4	441	220	40	CHEM MASTER EPDM D 63mm x CL40
75	91	8.0	1.6	6.4	525	260	40	CHEM MASTER EPDM D 75mm x CL40
76	92	8.0	1.6	6.4	532	270	40	CHEM MASTER EPDM D 76mm x CL40
100	116	8.0	1.6	6.4	700	350	40	CHEM MASTER EPDM D 100mm x CL40
102	118	8.0	1.6	6.4	714	350	40	CHEM MASTER EPDM D 101.5mm x CL40

RECOMMENDED FOR	Premium delivery hose (D) for handling a variety of chemical products such as acids, alkalis, esters and ketones with a medium or low concentration. Tank truck, barge, ship, or storage tank transfer of a variety of mild chemical products.				
TUBE	Black EPDM, smooth, conductive.				
REINFORCEMENT	High tensile synthetic textile cord with crossing anti-static wires.				
COVER	CSM rubber, black, superior resistance to weather and abrasion, excellent chemical and oil resistance.				
TEMPERATURE RANGE	-40°C to +95°C.				
BURST PRESSURE	4 x WP.				
ELECTRICALLY CONDUCTIVE	R < 10 <sup>6</sup> Ohm.				
STANDARDS	EN 12115.				
BRANDING TRANSFER LABEL	PREMIUM™ CHEM MASTER EPDM D - EN 12115 CHEMICAL TRANSFER 16 BAR Ω				
BRANDING EMBOSSED LABEL	GATES PREMIUM™ CHEM MASTER EPDM D - EN 12115 - EPDM - DIAM 16 BAR - 0 - 0 - vear				

## PREMIUM<sup>™</sup> CHEM MASTER EPDM SD

$\Theta$		<b>→</b> ⊖	$\odot$			O kg	<b>i →</b> i	
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
19	31	6.0	1.6	6.4	95	70	40	CHEM MASTER EPDM SD 19mm x CL40
25	37	6.0	1.6	6.4	125	90	40	CHEM MASTER EPDM SD 25mm x CL40
32	44	6.0	1.6	6.4	160	100	40	CHEM MASTER EPDM SD 32mm x CL40
38	51	6.5	1.6	6.4	190	130	40	CHEM MASTER EPDM SD 38mm x CL40
50	66	8.0	1.6	6.4	250	220	40	CHEM MASTER EPDM SD 50mm x CL40
51	67	8.0	1.6	6.4	255	220	40	CHEM MASTER EPDM SD 51mm x CL40
63	79	8.0	1.6	6.4	315	280	40	CHEM MASTER EPDM SD 63mm x CL40
75	91	8.0	1.6	6.4	375	320	40	CHEM MASTER EPDM SD 75mm x CL40
76	92	8.0	1.6	6.4	380	330	40	CHEM MASTER EPDM SD 76mm x CL40
100	116	8.0	1.6	6.4	500	430	40	CHEM MASTER EPDM SD 100mm x CL40
102	118	8.0	1.6	6.4	508	430	40	CHEM MASTER EPDM SD 101.5mm x CL40
152	174	11.0	1.6	6.4	750	900	40	CHEM MASTER EPDM SD 150mm x CL40

\*\* Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Premium suction and discharge hose (SD) for handling a variety of chemical products such as acids, alkalis, esters and ketones with a medium or low concentration. Tank truck, barge, ship, or storage tank transfer of a variety of mild chemical products.
TUBE	Black EPDM, smooth, conductive.
REINFORCEMENT	High tensile synthetic textile cord, steel wire helix with crossing anti-static wires.
COVER	CSM rubber, black, superior resistance to weather and abrasion, excellent chemical and oil resistance.
TEMPERATURE RANGE	-40°C to +95°C.
BURST PRESSURE	4 x WP.
ELECTRICALLY CONDUCTIVE	R < 10 <sup>6</sup> Ohm.
STANDARDS	EN 12115.
BRANDING TRANSFER LABEL	PREMIUM™ CHEM MASTER EPDM SD - EN 12115 CHEMICAL TRANSFER 16 BAR Ω
BRANDING EMBOSSED LABEL	GATES PREMIUM™ CHEM MASTER EPDM SD – EN 12115 - EPDM - DIAM 16 BAR - Ω – Q - year

#### **INDUSTRIAL HOSE** ACID-CHEMICAL

#### **PREMIUM™ CHEM MASTER UHMWPE SD**

$\odot$			$\odot$				<b>i⊲ →</b> i	
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
13	23	5.0	1.6	6.4	65	40	40	CHEM MASTER UHMWPE SD 13mm x CL40
19	31	6.0	1.6	6.4	95	70	40	CHEM MASTER UHMWPE SD 19mm x CL40
25	37	6.0	1.6	6.4	125	80	40	CHEM MASTER UHMWPE SD 25mm x CL40
32	44	6.0	1.6	6.4	160	100	40	CHEM MASTER UHMWPE SD 32mm x CL40
38	51	6.5	1.6	6.4	190	120	40	CHEM MASTER UHMWPE SD 38mm x CL40
50	66	8.0	1.6	6.4	250	210	40	CHEM MASTER UHMWPE SD 50mm x CL40
51	67	8.0	1.6	6.4	255	220	40	CHEM MASTER UHMWPE SD 51mm x CL40
63	79	8.0	1.6	6.4	315	260	40	CHEM MASTER UHMWPE SD 63mm x CL40
75	91	8.0	1.6	6.4	375	310	40	CHEM MASTER UHMWPE SD 75mm x CL40
100	116	8.0	1.6	6.4	500	410	40	CHEM MASTER UHMWPE SD 100mm x CL40
102	118	8.0	1.6	6.4	508	420	40	CHEM MASTER UHMWPE SD 101.5mm x CL40

\*\* Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Very universal suction and discharge hose (SD) capable of handling a wide spectrum of corrosive chemicals and acids. Tank truck, barge, ship, or storage tank transfer of a variety of chemical products. The hose contains a wire helix for full suction capability.			
TUBE	UHMWPE, black, smooth and conductive.			
REINFORCEMENT	High tensile synthetic textile cord, steel wire helix and crossing anti-static wires.			
COVER	CSM rubber, black, superior resistance to weather and abrasion, excellent chemical and oil resistance.			
TEMPERATURE RANGE	-35°C to +100°C, suitable for steam at +130°C with intermittent usage.			
BURST PRESSURE	4 x WP.			
ELECTRICALLY CONDUCTIVE	R < 10º 0hm.			
STANDARDS	EN 12115.			
BRANDING TRANSFER LABEL	PREMIUM™ CHEM MASTER UHMWPE SD - EN12115 CHEMICAL TRANSFER 16 BAR Ω			
BRANDING EMBOSSED LABEL	GATES PREMIUM™ CHEM MASTER UHMWPE SD – EN 12115 - UHMWPE - DIAM 16 BAR - Ω – Q - year			



# CHEM MASTER™ XTREME™ FEP (125-200) SD FORMERLY STALLION® HOSE



$\Theta$		J.	$\odot$			C kg		(
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
19	33	6.9	1.3	5.5	102	80	30.5	CHEM MASTER XTREME FEP SD 3/4"
25	40	7.1	1.3	5.5	127	100	30.5	CHEM MASTER XTREME FEP SD 1"
38	52	7.0	1.3	5.5	203	140	30.5	CHEM MASTER XTREME FEP SD 1 1/2"
51	65	7.0	1.3	5.5	229	180	30.5	CHEM MASTER XTREME FEP SD 2"
64	78	7.3	1.3	5.5	305	220	30.5	CHEM MASTER XTREME FEP SD 2 1/2"
76	91	7.5	1.3	5.5	457	270	30.5	CHEM MASTER XTREME FEP SD 3"
102	118	8.4	1.3	5.5	610	410	30.5	CHEM MASTER XTREME FEP SD 4"

\*\* Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Tank truck, barge, ship, or storage tank transfer of a variety of chemical products. With wire helix for full suction capability. The tube stock (Teflon* or Neoflon**) has excellent chemical resistance and is backed by Gates Gatron™ for flex fatigue safety at the coupling. Designed for easy cleaning in a bath containing 10% (NaOH) @ +100°C. Cleaning in place (CIP) methods may be used. Applications include most basic chemicals which are building blocks for numerous chemicals used in a variety of industries. Compatible with commercially available Bio-Diesel fuels up to B-100.
TUBE	Type T (FEP) Teflon* or Neoflon**, white. Backed with Gatron™ (Modified XLPE).
REINFORCEMENT	Synthetic, high tensile textile with steel wire helix.
COVER	Type P (EPDM), blue corrugated with red spiral stripe.
TEMPERATURE RANGE	-40°C to +149°C normal service. Designed to withstand fluid temperatures to +149°C, however the rating is dependent on the specific chemical conveyed.
BURST PRESSURE	55 bar.
BRANDING TRANSFER LABEL	Continuous transfer label. Example: "GATES® CHEM MASTER™ XTREME™ FEP (125-200)SD U.S. PAT. NO. 5,647,400 ACID-CHEMICAL SUCTION/DISCHARGE 200 PSI (1.38MPA) WP MADE IN U.S.A." For your safety: Use Permanent Fittings Only
IMPORTANT	Use of Damaged Hose Could be Hazardous.



\* Teflon® is a Registered Trademark of DuPont. \*\* Neflon® is a Registered Trademark of DuPont.

### CHEM MASTER™ PAINT SPRAY FORMERLY 77B PAINT SPRAY AND CHEMICAL

EHEM MASTER<sup>™</sup> PAINT SPRAY

$\Theta$			$\odot$			C kg	<b> </b> ←──→	(
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
6	13	3.4	3.5	13.8	76	13	182.9-243.8m	CHEM MASTER PAINT SPRAY 1/4"
8	15	3.6	3.5	13.8	76	16	182.9-243.8m	CHEM MASTER PAINT SPRAY 5/16"
10	17	3.8	3.5	13.8	76	21	182.9-243.8m	CHEM MASTER PAINT SPRAY 3/8"
13	22	4.7	5.2	20.7	127	34	182.9-243.8m	CHEM MASTER PAINT SPRAY 1/2"
19	30	5.2	5.2	20.7	152	52	91.44-121.9m	CHEM MASTER PAINT SPRAY 3/4"

RECOMMENDED FOR	Paint spray applications, as well as transfer of petroleum based products (aliphatic, aromatic and chlorinated hydrocarbon such as Toluene, Xylene, Benzene, gasoline and carbon tetrachloride). Compatible with commercially available Bio-Diesel fuels up to B-100.
TUBE	Type Z (special flexible nylon 11), clear.
REINFORCEMENT	Synthetic, high tensile textile cord.
COVER	Type A (neoprene), black.
TEMPERATURE RANGE	-40°C to +66°C continuous service.
BURST PRESSURE	> 138 bar.
BRANDING TRANSFER LABEL	GATES® CHEM MASTER™ PAINT SPRAY (500-750) 3/8" (9.5MM) 500 PSI (3.45MPA) WP MADE IN U.S.A.

NOTE

Contact Gates when conveying chemicals above +49°C.

IMPORTANT



Not recommended for acids or use in high pressure paint spray applications requiring a static conductive hose.

## PREMIUM<sup>™</sup> DAIRY MASTER SD

$\Theta$			$\odot$		R			(
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
32	44	6.0	1.0	3.0	160	100	40	DAIRY MASTER SD 32mm x CL40
38	50	6.0	1.0	3.0	190	120	40	DAIRY MASTER SD 38mm x CL40
40	52	6.0	1.0	3.0	200	130	40	DAIRY MASTER SD 40mm x CL40
45	59	7.0	1.0	3.0	225	150	40	DAIRY MASTER SD 45mm x CL40
51	65	7.0	1.0	3.0	255	200	40	DAIRY MASTER SD 51mm x CL40
63	77	7.0	1.0	3.0	315	240	40	DAIRY MASTER SD 63mm x CL40
76	90	7.0	1.0	3.0	380	310	40	DAIRY MASTER SD 76mm x CL40
102	118	8.0	1.0	3.0	510	480	40	DAIRY MASTER SD 102mm x CL40

102 118 8.0 1.0 \*\* Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Premium vacuum and pressure hose (SD) for food products. Tank truck, barge, ship, or storage tank transfer of a variety of food products such as animal fat, vegetable oil and other edible oils requiring an FDA sanitary hose. Also suitable for ice cream and other dairy products.
TUBE	NBR based white food quality rubber, resistant to animal fat and vegetable oils.
REINFORCEMENT	Synthetic, high tensile textile with steel wire helix.
COVER	NBR based rubber, blue, resistant to animal fat and vegetable oils.
TEMPERATURE RANGE	-30°C to +90°C, intermittent up to +130°C / 30 minutes for cleaning.
BURST PRESSURE	> 30 bar.
STANDARDS	FDA, BfR, animal derived ingredient free.
BRANDING TRANSFER LABEL	PREMIUM™ DAIRY MASTER SD - FOOD 10 BAR

#### **INDUSTRIAL HOSE** FOOD & BEVERAGE

### PREMIUM<sup>™</sup> DAIRY MASTER LITE SD

$\bigcirc$			$\odot$		R			(
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
32	43	5.5	1.0	3.0	88	87	40	DAIRY MASTER lite SD 32mm x CL40
38	49	5.5	1.0	3.0	104	101	40	DAIRY MASTER lite SD 38mm x CL40
40	51	5.5	1.0	3.0	110	105	40	DAIRY MASTER lite SD 40mm x CL40
45	56	5.5	1.0	3.0	124	120	40	DAIRY MASTER lite SD 45mm x CL40
51	63	6.0	1.0	3.0	140	145	40	DAIRY MASTER lite SD 51mm x CL40
63	76	6.5	1.0	3.0	173	182	40	DAIRY MASTER lite SD 63mm x CL40
76	89	6.5	1.0	3.0	209	216	40	DAIRY MASTER lite SD 76mm x CL40
102	116	7.0	1.0	3.0	306	351	40	DAIRY MASTER lite SD 102mm x CL40

\*\* Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Very flexible corrugated vacuum and pressure hose (SD) for food products. Tank truck, barge, ship, or storage tank transfer of a variety of food products such as animal fat, vegetable oil and other edible oils requiring an FDA sanitary hose. Also suitable for ice cream and other dairy products.
TUBE	NBR based white food quality rubber, resistant to animal fat and vegetable oils.
REINFORCEMENT	Synthetic, high tensile textile with steel wire helix.
COVER	NBR based rubber, blue, corrugated and resistant to animal fat and vegetable oils.
TEMPERATURE RANGE	-30°C to +90°C, intermittent up to +130°C / 30 minutes for cleaning.
BURST PRESSURE	> 30 bar.
STANDARDS	FDA, BfR, animal derived ingredient free.
BRANDING TRANSFER LABEL	PREMIUM™ DAIRY MASTER LITE SD - FOOD 10 BAR

## **PREMIUM™ WASHDOWN MASTER**

👁 PREMILIM" WASHDOWN MASTER-FDA & BAR-STEAM OPEN SYSTEM) 👔 🕅 🔐

$\Theta$		<b>→⊖</b>	$\odot$			C kg	<b>i </b> i	0
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
10	18	4.0	0.6	6.0	70	20	40	WASHDOWN MASTER 10mm x CL40
13	23	5.0	0.6	6.0	91	40	40	WASHDOWN MASTER 13mm x CL40
16	26	5.0	0.6	6.0	112	40	40	WASHDOWN MASTER 16mm x CL40
19	31	6.0	0.6	6.0	133	60	40	WASHDOWN MASTER 19mm x CL40
25	37	6.0	0.6	6.0	175	70	40	WASHDOWN MASTER 25mm x CL40
32	45	6.5	0.6	6.0	224	90	40	WASHDOWN MASTER 32mm x CL40
38	52	7.0	0.6	6.0	266	120	40	WASHDOWN MASTER 38mm x CL40
51	65	7.0	0.6	6.0	357	150	40	WASHDOWN MASTER 51mm x CL40

RECOMMENDED FOR	Premium hot water and open steam system washdown hose for the food and dairy industry. Used for paper mill, food handling or processing plant washdown service requiring a hose with a non-marking cover.
TUBE	EPDM based rubber, white, smooth.
REINFORCEMENT	High tensile textile cords.
COVER	EPDM based rubber, blue.
TEMPERATURE RANGE	-30°C to +164°C.
BURST PRESSURE	> 60 bar.
STANDARDS	FDA, animal derived ingredient free.
BRANDING TRANSFER LABEL	PREMIUM™ WASHDOWN MASTER - FDA 6 BAR – STEAM OPEN SYSTEM

#### **INDUSTRIAL HOSE** FOOD & BEVERAGE

## PREMIUM<sup>™</sup> MILK MASTER SD

$\bigcirc$	<u>IO</u>	→Ð	$\odot$			C kg		0
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
38	48	5.0	0.6	1.8	190	100	40	MILK MASTER SD 38mm x CL40
40	50	5.0	0.6	1.8	200	100	40	MILK MASTER SD 40mm x CL40
45	55	5.0	0.6	1.8	225	110	40	MILK MASTER SD 45mm x CL40
51	62	5.5	0.6	1.8	255	150	40	MILK MASTER SD 51mm x CL40
63	75	6.0	0.6	1.8	315	190	40	MILK MASTER SD 63mm x CL40
70	82	6.0	0.6	1.8	350	230	40	MILK MASTER SD 70mm x CL40
76	90	7.0	0.6	1.8	380	290	40	MILK MASTER SD 76mm x CL40
102	118	8.0	0.6	1.8	510	420	40	MILK MASTER SD 102mm x CL40

\*\* Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Premium hose construction for filling and discharge in milk tanker applications.
TUBE	NR based white food quality rubber.
REINFORCEMENT	Synthetic, high tensile textile, 2 steel wire helix.
COVER	NR based rubber, blue.
TEMPERATURE RANGE	-30°C to +70°C, intermittent up to +120°C / 20 minutes for cleaning.
BURST PRESSURE	> 18 bar.
STANDARDS	FDA, BfR, animal derived ingredient free.
BRANDING TRANSFER LABEL	PREMIUM™ MILK MASTER SD - FOOD 6 BAR

## PREMIUM<sup>™</sup> BEVERAGE MASTER D

$\odot$			$\odot$		R		<b> </b> ←	(
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
13	21	4.0	1.6	4.8	91	30	40	BEVERAGE MASTER D 13mm x CL40
19	29	5.0	1.6	4.8	133	50	40	BEVERAGE MASTER D 19mm x CL40
25	37	6.0	1.6	4.8	175	70	40	BEVERAGE MASTER D 25mm x CL40
32	44	6.0	1.6	4.8	224	90	40	BEVERAGE MASTER D 32mm x CL40
38	51	6.5	1.6	4.8	266	110	40	BEVERAGE MASTER D 38mm x CL40
40	53	6.5	1.6	4.8	280	120	40	BEVERAGE MASTER D 40mm x CL40
51	65	7.0	1.6	4.8	357	160	40	BEVERAGE MASTER D 51mm x CL40
63	77	7.0	1.6	4.8	441	190	40	BEVERAGE MASTER D 63mm x CL40
76	92	8.0	1.6	4.8	532	260	40	BEVERAGE MASTER D 76mm x CL40
80	96	8.0	1.6	4.8	560	280	40	BEVERAGE MASTER D 80mm x CL40
102	118	8.0	1.6	4.8	714	330	40	BEVERAGE MASTER D 102mm x CL40

RECOMMENDED FOR	Premium pressure hose (D) for beer, ale, wines, alcohols (95%) and alcoholic beverages or liquid food. Transfer of milk, juice, soft drinks, pharmaceuticals, cosmetics or water-based products requiring an FDA sanitary hose.
TUBE	CR/NR based white food quality rubber, oil and fat resistant (max.40%), odorand tasteless.
REINFORCEMENT	Synthetic, high tensile textile.
COVER	EPDM red, ozone and chemicals resistant with cloth impression.
TEMPERATURE RANGE	-30°C to +90°C intermittent up to +130°C / 30 minutes for cleaning.
BURST PRESSURE	> 30 bar.
STANDARDS	FDA and BfR, ADI-free.
BRANDING TRANSFER LABEL	PREMIUM™ BEVERAGE MASTER D - BEER & WINE 16 BAR

## **ESSENTIAL™ WATER MASTER D**

$\Theta$			$\odot$		R		<b>i⊲−−−</b> -i	(
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
25	35	5.0	1.0	3.0	175	60	40	WATER MASTER D 25mm x CL40
25	35	5.0	1.0	3.0	175	60	61*	WATER MASTER D 25mm x CL61
32	42	5.0	1.0	3.0	224	70	40	WATER MASTER D 32mm x CL40
32	42	5.0	1.0	3.0	224	70	61*	WATER MASTER D 32mm x CL61
38	48	5.0	1.0	3.0	266	90	40	WATER MASTER D 38mm x CL40
51	63	6.0	1.0	3.0	357	140	40	WATER MASTER D 51mm x CL40
51	63	6.0	1.0	3.0	357	140	61*	WATER MASTER D 51mm x CL61
63	76	6.5	1.0	3.0	441	180	40	WATER MASTER D 63mm x CL40
63	76	6.5	1.0	3.0	441	180	61*	WATER MASTER D 63mm x CL61
76	89	6.5	1.0	3.0	532	220	40	WATER MASTER D 76mm x CL40
102	116	7.0	1.0	3.0	714	300	40	WATER MASTER D 102mm x CL40
102	116	7.0	1.0	3.0	714	300	61*	WATER MASTER D 102mm x CL61
127	142	7.5	1.0	3.0	889	400	40	WATER MASTER D 127mm x CL40
152	169	8.5	1.0	3.0	1064	550	40	WATER MASTER D 152mm x CL40
203	224	10.5	1.0	3.0	1421	950	40	WATER MASTER D 203mm x CL40

\* 61 m coils are made to order

RECOMMENDED FOR	Pressure hose (D) for water, waste water, sea water, mud, slurry. Water discharge in heavy duty service requiring a compact, rugged and lightweight hose.
TUBE	Black EPDM, smooth.
REINFORCEMENT	Synthetic, high tensile textile cord.
COVER	EPDM rubber, black, good weather and aging resistance.
TEMPERATURE RANGE	-35°C to +95°C.
BURST PRESSURE	> 30 bar.
BRANDING TRANSFER LABEL	ESSENTIAL™ WATER MASTER D - 10 BAR



## **ESSENTIAL™ WATER MASTER SD**

SESENTIAL WATER MASTER SD - 10 BAR

$\odot$			$\odot$			O kg	<b>i⊲ →</b> i	(
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
25	35	5.0	1.0	3.0	125	70	40	WATER MASTER SD 25mm x CL40
25	35	5.0	1.0	3.0	125	70	61*	WATER MASTER SD 25mm x CL61
32	42	5.0	1.0	3.0	160	90	40	WATER MASTER SD 32mm x CL40
32	42	5.0	1.0	3.0	160	90	61*	WATER MASTER SD 32mm x CL61
38	48	5.0	1.0	3.0	190	110	40	WATER MASTER SD 38mm x CL40
38	48	5.0	1.0	3.0	190	110	61*	WATER MASTER SD 38mm x CL61
51	63	6.0	1.0	3.0	255	160	40	WATER MASTER SD 51mm x CL40
51	63	6.0	1.0	3.0	255	160	61*	WATER MASTER SD 51mm x CL61
63	76	6.5	1.0	3.0	315	230	40	WATER MASTER SD 63mm x CL40
63	76	6.5	1.0	3.0	315	230	61*	WATER MASTER SD 63mm x CL61
76	89	6.5	1.0	3.0	380	280	40	WATER MASTER SD 76mm x CL40
76	89	6.5	1.0	3.0	380	280	61*	WATER MASTER SD 76mm x CL61
102	116	7.0	1.0	3.0	510	390	40	WATER MASTER SD 102mm x CL40
102	116	7.0	1.0	3.0	510	390	61*	WATER MASTER SD 102mm x CL61
127	142	7.5	1.0	3.0	635	570	40	WATER MASTER SD 127mm x CL40
152	169	8.5	1.0	3.0	760	800	40	WATER MASTER SD 152mm x CL40
203	224	10.5	1.0	3.0	1015	1290	40	WATER MASTER SD 203mm x CL40

\* 61 m coils are made to order \*\* Vacuum resistance up to -0.9 bar

RECOMMENDED FOR	Vacuum and pressure hose (SD) for water, waste water, sea water, mud, slurry. Water suction in heavy duty service requiring a compact, rugged and light weight hose.
TUBE	Black EPDM, smooth.
REINFORCEMENT	Synthetic, high tensile textile with steel wire helix.
COVER	EPDM rubber, black, good weather and aging resistance.
TEMPERATURE RANGE	-35°C to +95°C.
BURST PRESSURE	> 30 bar.
BRANDING TRANSFER LABEL	ESSENTIAL™ WATER MASTER SD - 10 BAR

### **GP80 PLUS**



$\bigcirc$	→€	$\odot$			$\bigcirc$	C kg	(
mm	mm	MPa	MPa	mm	mm/Hg	kg/100m	REF.
6	13.0	3.7	11.0	35	760	13	GP80+ - 6mm
8	15.0	3.7	11.0	50	760	16	GP80+ - 8mm
10	17.0	3.7	11.0	60	760	20	GP80+ - 10mm
13	20.5	3.7	11.0	70	635	26	GP80+ - 13mm
16	24.2	3.0	9.0	90	500	33	GP80+ - 16mm
19	29.0	3.0	9.0	110	500	47	GP80+ - 19mm
25	35.6	3.0	9.0	130	500	61	GP80+ - 25mm
32	42.8	3.0	9.0	200	250	75	GP80+ - 32mm
38	51.0	3.0	9.0	300	250	101	GP80+ - 38mm
51	64.0	3.0	9.0	500	125	144	GP80+ - 50mm

RECOMMENDED FOR	General industrial applications such as oil, alcohols, aqueous solutions, hydraulic fluids, acids, detergents and chemicals. Static conductive for more security.
TUBE	NBR (Nitrile) based.
REINFORCEMENT	One or two fibre braids.
COVER	NBR/PVC based.
TEMPERATURE RANGE	-40°C to +100°C.
STANDARDS	Gates proprietary.
COUPLINGS	-4 to -20: MegaCrimp®; -24 to -32: GlobalSpiral Plus.



THE WORLD OF HOSE

### **LOCK-ON PLUS**

🔊 LOL PLUS 6LOLA+ 2.1 MPa (300 PSI) 3/8" (9.5 mm)

$\bigcirc$		J⊖€	$\odot$		(Rev)	$\bigcirc$		()
mm	mm	mm	MPa	MPa	mm	mm/Hg	kg/100m	REF.
6	1/4	11.9	2.1	8.4	45	710	13	LOLA+04
10	3/8	15.9	2.1	8.4	75	710	16	LOLA+06
13	1/2	19.6	2.1	8.4	80	710	23	LOLA+08
16	5/8	23.9	2.1	8.4	115	710	30	LOLA+10
19	3/4	26.9	2.1	8.4	135	380	36	LOLA+12
6	1/4	11.9	2.1	8.4	45	710	13	LOLB+04
10	3/8	15.9	2.1	8.4	75	710	16	LOLB+06
13	1/2	19.6	2.1	8.4	80	710	23	LOLB+08
16	5/8	23.9	2.1	8.4	115	710	30	LOLB+10
19	3/4	26.9	2.1	8.4	135	380	36	LOLB+12
6	1/4	11.9	2.1	8.4	45	710	13	LOLC+04
10	3/8	15.9	2.1	8.4	75	710	16	LOLC+06
13	1/2	19.6	2.1	8.4	80	710	23	LOLC+08
16	5/8	23.9	2.1	8.4	115	710	30	LOLC+10
19	3/4	26.9	2.1	8.4	135	380	36	LOLC+12
6	1/4	11.9	2.1	8.4	45	710	13	LOLG+04
10	3/8	15.9	2.1	8.4	75	710	16	LOLG+06
13	1/2	19.6	2.1	8.4	80	710	23	LOLG+08
16	5/8	23.9	2.1	8.4	115	710	30	LOLG+10
19	3/4	26.9	2.1	8.4	135	380	36	LOLG+12
6	1/4	11.9	2.1	8.4	45	710	13	LOLR+04
10	3/8	15.9	2.1	8.4	75	710	16	LOLR+06
13	1/2	19.6	2.1	8.4	80	710	23	LOLR+08
16	5/8	23.9	2.1	8.4	115	710	30	LOLR+10
19	3/4	26.9	2.1	8.4	135	380	36	LOLR+12

### **LOCK-ON PLUS**

Contraction of the second seco	<b>S 6LOLA+</b> 2.1 MPa (300 PSI) 3/6" (9.5 mm)
RECOMMENDED FOR	Petroleum-based hydraulic oils, antifreeze solutions, water, hot lubricating oils and air. Suitable for low-pressure cleaning and pneumatic systems, return lines and low pressure lines. Lock-On hose and couplings are not recommended for pressure surge applications or critical applications.
TUBE	NBR (Nitrile) based.
REINFORCEMENT	One fibre braid.
COVER	NBR/PVC based.
TEMPERATURE RANGE	-40°C to +100°C constant and +121°C intermittent. For water emulsions, etc. see Temperature Limits Table.
STANDARDS	Gates proprietary.
COUPLINGS	Lock-On Plus reusable couplings.
CHARACTERISTICS/BENEFITS	Available in 5 colours for easy colour coding.
	Easy to assemble.
	A = black
	R = red
	B = blue
	C = grey

G = green



THE WORLD OF HOSE

### **PREMIUM™ GP MASTER**



$\bigcirc$	<u>IO</u>	-€	$\odot$			kg		()
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
6	14	4.0	2.5	8.0	50	17	60	GP MASTER 6mm x CL60
8	16	4.0	2.5	8.0	50	21	60	GP MASTER 8mm x CL60
10	18	4.0	2.5	8.0	75	24	60	GP MASTER 10mm x CL60
13	21	4.0	2.5	8.0	100	30	60	GP MASTER 13mm x CL60
16	25	4.5	2.5	8.0	125	40	60	GP MASTER 16mm x CL60
19	29	5.0	2.5	8.0	125	54	60	GP MASTER 19mm x CL60
25	37	6.0	2.5	8.0	200	83	60	GP MASTER 25mm x CL60

RECOMMENDED FOR	Applications requiring a premium grade spiralled hose with excellent flexibility and maximum resistance to compressor air, water, gasoline, fuel oil and lubricant oils. Suitable for 20% biodiesel blends.
TUBE	Black NBR, smooth, conductive.
REINFORCEMENT	Textile layers, spiralled.
COVER	CR rubber, smooth cover, excellent resistance to weather and abrasion, good chemical and oil resistance, 1 extruded yellow longitudinal stripe.
TEMPERATURE RANGE	-40°C to +95°C.
BURST PRESSURE	> 3.15 x WP.
ELECTRICALLY CONDUCTIVE	R < 10 <sup>6</sup> Ohm.
INKJET LABEL	PREMIUM™ GP MASTER - 25 BAR - AIR_WATER_OIL NBR - DN Ω

### **GP60**

See - GP 60 - 16 mm ID - MIN. BURST PRESSURE 60 BAR - OIL RESISTANT - R < 1 MEGOHM/M -

$\bigcirc$	→€	$\odot$		R	$\bigcirc$		(
mm	mm	MPa	MPa	mm	mm/Hg	kg/100m	REF.
6	13.0	2.0	6.0	45	760	13	GP60 - 6mm
8	15.0	2.0	6.0	65	760	16	GP60 - 8mm
10	17.0	2.0	6.0	75	760	20	GP60 - 10mm
13	20.5	2.0	6.0	100	635	26	GP60 - 13mm
16	24.2	2.0	6.0	115	500	33	GP60 - 16mm
19	29.0	2.0	6.0	135	500	47	GP60 - 19mm
25	35.6	2.0	6.0	165	500	61	GP60 - 25mm

RECOMMENDED FOR	Hot water washdown applications up to +100°C, general industrial applications such as oil and hydraulic fluids (+100°C), alcohols and aqueous solutions.
TUBE	NBR (Nitrile) based.
REINFORCEMENT	One fibre braid.
COVER	NBR/PVC based.
TEMPERATURE RANGE	-40°C to +100°C.
STANDARDS	Gates proprietary.
COUPLINGS	MegaCrimp®.



THE WORLD OF HOSE

### **PREMIUM™ MULTI MASTER**

See PREMIUM™ MULTI MASTER - 20 BAR - AIR\_WATER - EPDM - DN 6 Ω

$\odot$	O	J→€	$\odot$		R		<b>i →</b> i	()
mm	mm	mm	MPa	MPa	mm	kg/100m	m	REF.
6	13	3.5	2.0	8.0	50	14	100	MULTI MASTER 6mm x CL100
8	15	3.5	2.0	8.0	50	18	100	MULTI MASTER 8mm x CL100
10	17	3.5	2.0	8.0	75	21	100	MULTI MASTER 10mm x CL100
13	21	4.0	2.0	8.0	100	29	100	MULTI MASTER 13mm x CL100
16	25	4.5	2.0	8.0	125	40	50	MULTI MASTER 16mm x CL50
19	29	5.0	2.0	8.0	125	53	50	MULTI MASTER 19mm x CL50
25	37	6.0	2.0	8.0	200	83	50	MULTI MASTER 25mm x CL50
32	44	6.0	2.0	7.0	250	99	30	MULTI MASTER 32mm x CL30
38	50	6.0	2.0	7.0	300	115	30	MULTI MASTER 38mm x CL30

RECOMMENDED FOR	Premium multi-purpose hose for air and water applications requiring maximum flexibility in any industry, including mining, construction, agriculture, vehicle repair and in-plant operations. Outstanding resistance to heat and ozone. Suitable for light agricultural spraying, such as diluted solutions of herbicides.
TUBE	Black EPDM, smooth.
REINFORCEMENT	Textile layers, spiralled.
COVER	EPDM rubber, smooth with 1 blue extruded longitudinal stripe.
TEMPERATURE RANGE	-40°C to +100°C.
BURST PRESSURE	4 x WP.
ELECTRICALLY CONDUCTIVE	R < 10 <sup>6</sup> Ohm.
INKJET LABEL	PREMIUM™ MULTI MASTER - 20 BAR - AIR_WATER - EPDM - DNΩ

### PLANT MASTER™ XTREME™ 250 FORMERLY PREMO FLEX™

See Plant Master<sup>™</sup> XTREME<sup>™</sup> 250 degle

$\bigcirc$			$\odot$			$\bigcirc$	Okg	(
mm	mm	mm	MPa	MPa	mm	mm/Hg	kg/100m	REF.
6	1/4	12.7	1.7	5.2	50	760	13	PLANT MASTER XTREME 250 1/4"
10	3/8	16.8	1.7	5.2	75	760	20	PLANT MASTER XTREME 250 3/8"
13	1/2	21.6	1.7	5.2	100	635	33	PLANT MASTER XTREME 250 1/2"
16	5/8	24.9	1.7	5.2	130	510	39	PLANT MASTER XTREME 250 5/8"
19	3/4	29.2	1.7	5.2	130	510	52	PLANT MASTER XTREME 250 3/4"
25	1	37.3	1.7	5.2	200	250	82	PLANT MASTER XTREME 250 1"
32	1.1/4	44.5	1.7	5.2	250	250	98	PLANT MASTER XTREME 250 1 1/4"
38	1.1/2	50.8	1.7	5.2	300	250	115	PLANT MASTER XTREME 250 1 1/2"

RECOMMENDED FOR	Applications requiring a premium grade spiral hose with excellent flexibility and maximum resistance to air, water, petroleum oils and lubricating oils (up to +100°C). Recommended for gasoline, kerosene and fuel oil transfer of (up to +48°C). Excellent weather and ozone resistance. Approved for breath applications such as supplied air respirators.				
TUBE	NBR (Nitrile) based, black.				
REINFORCEMENT	Synthetic, high tensile cord.				
COVER	Modified nitrile, red.				
TEMPERATURE RANGE	-40°C to +100°C.				
STANDARDS	Gates proprietary.				
CHARACTERISTICS/BENEFITS	Non-conductive at 1000 volts DC. Meets electrical resistance of one Megaohm per inch when subjected to 1000 volts DC. Storage and use may adversely affect electrical properties.				
BRANDING	GATES® PLANT MASTER™ XTREME™ 250 MULTI-PURPOSE 3/8 INCH (9.5MM) 250 PSI (1.72MPA) WP NON-CONDUCTIVE AT 1000V DC (>1 MEGOHM/IN.) MADE IN USA				