100 psi - 7 bar Return Line Filter

TNK1C - 1 Gallon; TNK4 - 4 Gallons TNK7 - 7 Gallons TNK12 - 12 Gallons; TNK18 - 18 Gallons; TNK25 - 25 Gallons



#### **Features and Benefits**

- Complete hydraulic reservoir solution with accessories like gauges, in-tank filters, and air breathers already installed
- Patented insertion ring for filter head flange mounting prevents leakage
- Patented integrated baffle wall creates settling zone for returning oil (degassing) with simultaneous cooling effect
- Tank is optimized for air and heat removal
- Tested for leakage (no end-user testing is required)
- Tank is certified clean, eliminating time-consuming flushing processes and testing
- Lightweight and cost efficient
- No risk of corrosion
- Available in six (6) performance optimized sizes (1, 4, 7, 12, 18, & 25 gal.)
- Return-line filter options available with GeoSeal® aftermarket retaining elements

#### **Specifications**

Tank Materials:	High Density Crosslink Polyethylene (XLPE), Nylon (PA)		
Tank Volumes:	1 gal (4L), 4 gal (15L), 7 gal (26L), 12 gal (45L), 18 gal (68L), or 25 gal (95L)		
Operating Temperature:	High Density Polyethylene (HDPE): -40° Nylon (PA): -40°F to 240°F (-40°C to 116		
Return Line Filter:	TNK1C: AFT TNK4: AFT TNK7: AFT, MTB	TNK12: AFT & AFTF, GZT TNK18: AFT & AFTF, GZT TNK25: AFT & AFTF, GRT, GRTB	
Max. Return Flow:	TNK1C: 15 GPM (57 L/min) TNK4: 25 gpm (95 L/min) TNK7: 35 gpm (135 L/min)	TNK12: 40 gpm (150 L/min) TNK18: 40 gpm (150 L/min) TNK25: 75 gpm (284 L/min)	
Breather:	3 μ phenolic resin impregnated paper ele	ement	
Suction Strainer:	100 μ wire mesh SAE20: 20 gpm SAE24: 30 gpm		
Weight of TNK:	TNK1C: 8.00 lbs (3.6 kg) TNK4 (AFT4): 11.5 lbs (5.2 kg) TNK4 (AFT8): 11.5 lbs (5.2 kg) TNK7: 16 lbs (7.3 kg)	TNK12: 21 lbs (9.7 kg) TNK18: 33 lbs (15 kg) TNK25: 45 lbs (20 kg)	
Element Change Clearance:	TNK1C: 8.00" (203mm) TNK4 (AFT4): 5.3" (134mm) TNK4 (AFT8): 8.6" (219 mm) TNK7: 5" (127mm)	TNK12: 10" (254mm) TNK18: 10" (254mm) TNK25: 9.5" (241mm)	
Ultra Violet Light Rating*:	HDPE = UV-12 Nylon = UV-10		
Filter and Element Selection:	For proper filter and element selection, information and pressure drop calculations, please refer to the individual filters (MTB, ZT, GZT, RT & GRTB) sections in the Schroeder Hydraulic and Lube Catalog (L-2520).		

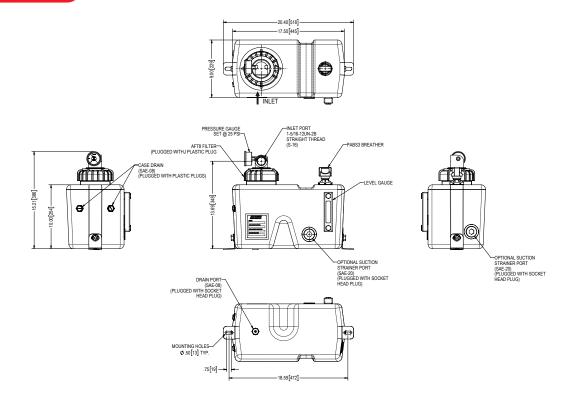
\*UV Rating is determined by the number of years a material can be exposed to direct sunlight and retain a minimum of 50% of its original mechanical properties (ex. High Density Polyethylene with a UV-12 rating would be recommended to be replaced every 12 years if not painted or coated).

# TNK1C



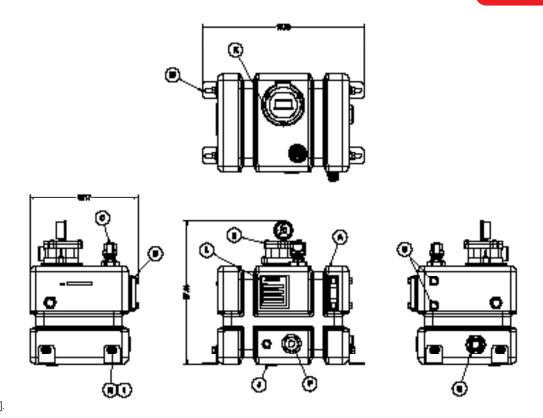
Metric dimensions in [].

# TNK4



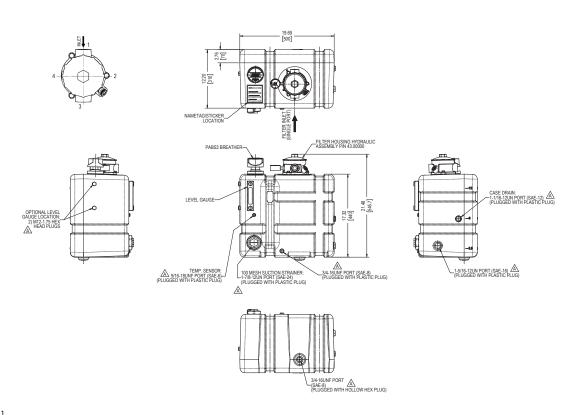
Metric dimensions in [].

# TNK7



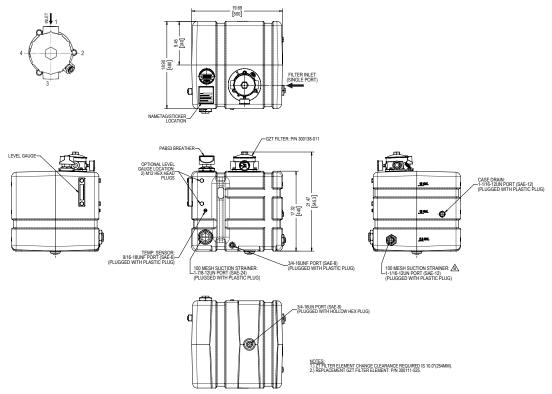
Metric dimensions in [].

# **TNK12**



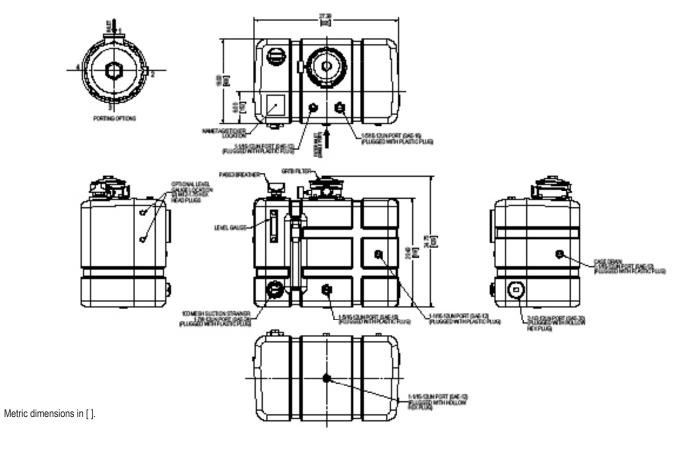
Metric dimensions in [].

# **TNK18**



Metric dimensions in [].

# **TNK25**



#### **Usable Fluid Levels**

	Middle Level of	Top Level of
	Gauge (gal)	Gauge (gal)
TNK1C	-	-
TNK4	2.6	3.7
TNK7	5.4	6.0
TNK12	10.1	11.5
TNK18	14.8	16.6
TNK25	23.4	26.0

#### **Torque Specifications**

SAE-06 PORT: 8ftlbs.	M12 PORT: 8ftlbs.	1/4-20 PORT: 2ftlbs
SAE-08 PORT: 10ftlbs.	M14 PORT: 10ftlbs.	3/8-16 PORT: 6ftlbs
SAE-10 PORT: 20ftlbs.		1/2-13 PORT: 8ftlbs
SAE-12 PORT: 25ftlbs.		
SAE-16 PORT: 25ftlbs.		
SAE-20 PORT: 28ftlbs.		
SAE-24 PORT: 30ftlbs.		
SAE-32 PORT: 30ftlbs.		

<sup>\*</sup> NOT RECOMMENDED TO EXCEED 30ft.-lbs. TORQUE

TNK1C

#### How to Build a Valid Model Number for a Schroeder TNK:

TNK1C	TNK Size	Material	Filter Selection	Filler/Breather	Sight Glass
	TNK1C				

<sup>\*\*</sup>Starting from the left to the right you will choose your TNK Size and work your way through each category as illustrated above.

TNK Size	Material			
☐ TNK1C = 1 Gallon	☐ HD = XLPE			
Filter Option	Element Selectio	n		
i iitei Option	Element Length	Element Media & Micron*	Porting	Gauge Port Option
☐ AFT	☐ 4LK = 4" ☐ 8LK = 8"	☐ <b>Z3</b> = 3 Micron ☐ <b>Z5</b> = 5 Micron ☐ <b>Z10</b> = 10 Micron ☐ <b>Z25</b> = 25 Micron	☐ <b>S16 =</b> SAE-16 ☐ <b>L16 =</b> 90 Deg SAE-16	<ul> <li>N = Plugged</li> <li>Y2 = Tricolor Visual Inidicator (Back Mounted)</li> <li>Y2C = Tricolor Visual Indicator (Bottom Mounted)</li> <li>ES = Electric Switch</li> </ul>
				☐ <b>ES1</b> = Heavy Duty Electric Switch
Filler/Breather	Sight Glass		Note:	
☐ <b>F =</b> PABS1	S2 = Sight Glass Front		Sight Glass Front = Breather Arm on F	tight when facing TNK
	S3 = Sight Glass	Back	Sight Glass Back = Breather Arm on L	eft when facing TNK
	☐ <b>N</b> = No Sight Glas	SS		

\*Micron Rating refers to the return filter element rating.

Note: For fluids that have the potential for electrostatic discharge, please consult factory for anti-stat media options.

#### TNK4

Material

TNK4
TNK Size

#### How to Build a Valid Model Number for a Schroeder TNK:

**Filter Selection** 

Starting from the left to ti	ne right you will choose your	TNK Size and work	your way tnrougi	n each category as illustrated abo	ove.
TNK Size	Material				
☐ <b>TNK4 =</b> 4 Gallon	<ul><li>☐ HD = XLPE</li><li>☐ PA = Nylon</li></ul>				
Filter Option	<b>Element Selection</b>				
Filler Option	Element Length	Element Media	& Micron*	Porting	Gauge Port Option
□ <b>AFT</b>	☐ 4LK = 4" ☐ 8LK = 8"	☐ <b>Z3</b> = 3 Micro ☐ <b>Z5</b> = 5 Micro ☐ <b>Z10</b> = 10 Micro ☐ <b>Z25</b> = 25 Micro	n cron	☐ <b>S16 =</b> SAE-16 ☐ <b>L16 =</b> 90 Deg SAE-16	<ul> <li>N = Plugged</li> <li>Y2 = Tricolor Visual Inidicator (Back Mounted)</li> <li>Y2C = Tricolor Visual Indicator (Bottom Mounted)</li> <li>ES = Electric Switch</li> <li>ES1 = Heavy Duty Electric Switch</li> </ul>
Filler/Breather	Sight Glass	;	Suction Str	ainer	
☐ <b>F =</b> PABS1	<ul><li>☐ S2 = Sight Glass Fro</li><li>☐ N = No Sight Glass</li></ul>	nt [	_	0, Side - Flow Rate: 25 GPM 0, Front - Flow Rate: 25 GPN	

Filler/Breather

Sight Glass

**Suction Strainer** 

\*Micron Rating refers to the return filter element rating.

Note: Tank Mounting Straps sold as a separate part number, please see next page for configurations and options. Note: For fluids that have the potential for electrostatic discharge, please consult factory for anti-stat media options.

TNK7

#### How to Build a Valid Model Number for a Schroeder TNK:

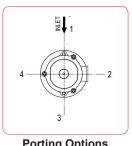
TNK Size	Material	Filter Selection	Filler/Breather	Sight Glass	Suction Strainer	Options
TNK7						

<sup>\*\*</sup>Starting from the left to the right you will choose your TNK Size and work your way through each category as illustrated above.

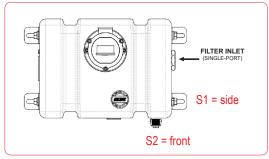
TNK Size	Material			
☐ <b>TNK7 =</b> 7 Gallon	<ul><li>☐ HD = XLPE</li><li>☐ PA = Nylon</li></ul>			
Filter Option 1	Element Selection			
Tiller Option 1	Element Length	Element Media & Micron*	Porting	Gauge Port Option
☐ AFT	☐ 4LK = 4" ☐ 8LK = 8"	☐ Z3 = 3 Micron ☐ Z5 = 5 Micron ☐ Z10 = 10 Micron ☐ Z25 = 25 Micron	☐ <b>S16</b> = SAE-16 ☐ <b>L16</b> = 90 Deg SAE-16	<ul> <li>N = Plugged</li> <li>Y2 = Tricolor Visual Inidicator (Back Mounted)</li> <li>Y2C = Tricolor Visual Indicator (Bottom Mounted)</li> <li>ES = Electric Switch</li> <li>ES1 = Heavy Duty Electric Switch</li> </ul>
				EGT TIOUVY Buty Electric Switch
Filter Option 2	Media & Micron Rating	Porting	Orientation	Filter Options
Filter Option 2		Porting  P12 = 3/4" NPTF P16 = 1" NPTF S12 = SAE-12 S16 = SAE-16 B12 = ISO 228 G-3/4" B16 = ISO 228 G-1"	Orientation  ☐ 1 = Rear ☐ 2 = Right ☐ 3 = Front ☐ 4 = Left	, ,
	Rating  ☐ 3 = 3 Micron ☐ 5 = 5 Micron ☐ 10 = 10 Micron ☐ 25 = 10 Micron *All Media Options above	□ P12 = 3/4" NPTF □ P16 = 1" NPTF □ S12 = SAE-12 □ S16 = SAE-16 □ B12 = ISO 228 G-3/4"	☐ 1 = Rear ☐ 2 = Right ☐ 3 = Front ☐ 4 = Left	Filter Options  OMIT = None Y2C = Bottom-Mounted Gauge in Cap S5 = Back-Mounted Gauge in Cap ESC = Electric Pressure Switch

\*Micron Rating refers to the return filter element rating.

Note: Tank Mounting Straps sold as a separate part number, please see next page for configurations and options. Note: For fluids that have the potential for electrostatic discharge, please consult factory for anti-stat media options.



**Porting Options** (MTB Depicted)



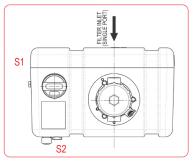
**Sight Glass Options** 

# **TNK12/18**

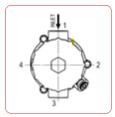
#### How to Build a Valid Model Number for a Schroeder TNK:

TNK12					
TNK Size	Material	Filter Selection	Filler/Breather	Sight Glass	Suction Strainer

TNK Size	Material				
<ul><li>☐ TNK12 = 12 Gallon</li><li>☐ TNK18 = 18 Gallon</li></ul>	<ul><li>☐ HD = XLPE</li><li>☐ PA = Nylon</li></ul>				
	Element Selection	on			
Filter Option 1	Element Length	Element Media & Micron*	Porting	Gauge Port Option	
☐ AFT	☐ 4LK = 4" ☐ 8LK = 8" ☐ 12LK = 12" ☐ 16LK = 16"	☐ Z3 = 3 Micron ☐ Z5 = 5 Micron ☐ Z10 = 10 Micron ☐ Z25 = 25 Micron	☐ <b>S16 =</b> SAE-16 ☐ <b>L16 =</b> 90 Deg SAE-16	<ul> <li>N = Plugged</li> <li>Y2 = Tricolor Visual Inidicator (Back Mounted)</li> <li>Y2C = Tricolor Visual Indicator (Bottom Mounted)</li> </ul>	<ul><li>☐ ES = Electric Switch</li><li>☐ ES1 = Heavy Duty</li><li>Electric Switch</li></ul>
Filter Option 2	Element Selection	on			
	Element Length		Element Media & M	licron*	Porting
☐ AFTF	☐ 4LK = 4" ☐ 8LK = 8"	<ul><li>☐ 12LK = 12"</li><li>☐ 16LK = 16"</li></ul>	<ul><li><b>Z3</b> = 3 Micron</li><li><b>Z5</b> = 5 Micron</li></ul>	<ul><li><b>Z10</b> = 10 Micron</li><li><b>Z25</b> = 25 Micron</li></ul>	S16 = SAE-16
	Orientation	Gauge Port Option			Breather
	<ul> <li>1 = Rear</li> <li>2 = Right</li> <li>3 = Front</li> <li>4 = Left</li> </ul>	<ul> <li>N = Plugged</li> <li>Y2 = Tricolor Visual Inidic</li> <li>Y2C = Tricolor Visual Ind (Bottom Mounted)</li> </ul>	,	<ul><li>☐ ES = Electric Switch</li><li>☐ ES1 = Heavy Duty</li><li>Electric Switch</li></ul>	☐ B = Breather (in filter Head) ☐ Omit = None
Filter Option 3	Media & Micron Rating	Porting	Orientation	Filter Options	
☐ GZT	☐ 1 = 1 Micron ☐ 3 = 3 Micron ☐ 5 = 5 Micron ☐ 10 = 10 Micron ☐ 25 = 25 Micron  *All Media Options above are Z Synthetic Media	P = 1" NPTF         PP = Dual 1" NPTF         S = SAE-16         SS = Duel SAE-16         B = ISO 228 G-1"         BB = Duel ISO 228 G-1"	☐ 1 = Rear ☐ 2 = Right ☐ 3 = Front ☐ 4 = Left	<ul> <li>□ OMIT = None</li> <li>□ D = Diffuser</li> <li>□ Y2 = Back-Mounted Tricolor Gauge</li> <li>□ Y2C = Bottom-Mounted Gauge in Cap</li> </ul>	☐ Y5 = Back-Mounted Gauge in Cap ☐ ES = Electric Switch ☐ ES1 = Heavy-Duty Electric Switch with Conduit Connection
Filler/Breather		Sight Glass		Suction Strainer	
F = PABS1 (in tank) B = Blocked Breather I	Port (AFTF Only)	☐ S1 = Sight Glass Side ☐ S2 = Sight Glass Front ☐ N = No Sight Glass		<ul> <li>S = SAE-20, Side - Flow Rate: 2</li> <li>F = SAE-20, Front - Flow Rate: 2</li> <li>N = No Strainer</li> </ul>	



**Sight Glass Options** 



Porting Options

Applicable to

GZT and AFTF

\*Micron Rating refers to the return filter element rating.

Note: Tank Mounting Straps sold as a separate part number, please see next page for configurations and options.

Note: For fluids that have the potential for electrostatic discharge, please consult factory for anti-stat media options.

<sup>\*\*</sup>Starting from the left to the right you will choose your TNK Size and work your way through each category as illustrated above.

TNK25

#### How to Build a Valid Model Number for a Schroeder TNK:

TNK Size Material	l Filter Sel	ection Filler/Breatl	ner Sight GI	lass Suction Str	ainer
**Starting from the left to the rig	ght you will choose your	TNK Size and work your way th	rough each category a	as illustrated above.	
TNK Size	Material				
☐ <b>TNK25 =</b> 25 Gallon	<ul><li>☐ HD = XLPE</li><li>☐ PA = Nylon</li></ul>				
Filter Option 1	Element Selection	on			
Filter Option 1	Element Length		Element Media 8	& Micron*	Porting
☐ AFT	☐ 4LK = 4" ☐ 8LK = 8"	☐ <b>12LK</b> = 12" ☐ <b>16LK</b> = 16"	☐ <b>Z3</b> = 3 Micron☐ <b>Z5</b> = 5 Micron	<ul><li><b>Z10</b> = 10 Micron</li><li><b>Z25</b> = 25 Micron</li></ul>	S16 = SAE-16 L16 = 90 Deg SAE-16
	Orientation		Gauge Port O	ption	
	1 = Rear 2 = Right 3 = Front 4 = Left			sual Inidicator (Back Mount visual Indicator (Bottom Mo witch	,
Filter Option 2	Element Selection	on			
Filter Option 2	Element Length		Element Media 8	& Micron*	Porting
☐ AFTF	☐ 4LK = 4" ☐ 8LK = 8"	☐ 12LK = 12" ☐ 16LK = 16"	☐ <b>Z3</b> = 3 Micron ☐ <b>Z5</b> = 5 Micron	☐ <b>Z10</b> = 10 Micron ☐ <b>Z25</b> = 25 Micron	☐ <b>S16 =</b> SAE-16
	Orientation	Gauge Port Option		Breather	
	☐ 1 = Rear ☐ 2 = Right ☐ 3 = Front ☐ 4 = Left	N = Plugged  Y2 = Tricolor Visual Inidic  ES = Electric Switch  ES1 = Heavy Duty Electri  ES2 = Electrical Switch w	c Switch	☐ B = Breather (in filte	er Head)

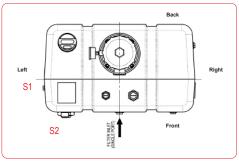
TNK25 Continued on next page:

### TNK25

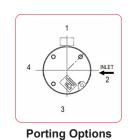
#### **TNK25 Continued:**

Filter Option 3	Media & Micron Rating	Porting A	Porting B		Porting C
☐ GRT	1 = 1 Micron 3 = 3 Micron 5 = 5 Micron 10 = 10 Micron 25 = 25 Micron *All Media Options above are Z Synthetic Media	<ul> <li>P16 = 1" NPTF</li> <li>P20 = 1 1/4" NPTF</li> <li>P24 = 1 1/2" NPTF</li> <li>P32 = 2" NPTF</li> <li>S16 = SAE-16</li> <li>S20 = SAE-20</li> <li>S24 = SAE-24</li> <li>S32 = SAE-32</li> <li>F20 = 1 1/4" SAE 4-Bolt Flange Code 61</li> <li>F24 = 1 1/2" SAE 4-Bolt Flange Code 61</li> <li>F32 = 2" SAE 4-Bolt Flange Code 61</li> <li>F32 = 2" SAE 4-Bolt Flange Code 61</li> <li>B24 = ISO 228 G-1/2"</li> </ul>	N = None         P16 = 1" NPTF         P20 = 1 1/4" NPTF         P24 = 1 1/2" NPTF         P32 = 2" NPTF         S16 = SAE-16         S20 = SAE-20         S24 = SAE-24         S32 = SAE-32         F20 = 1 1/4" SAE 4-Bolt Flange Code 61         F24 = 1 1/2" SAE 4-Bolt Flange Code 61         F32 = 2" SAE 4-Bolt Flange Code         Flange Code		<ul> <li>N = None</li> <li>P16 = 1" NPTF</li> <li>P20 = 1 1/4" NPTF</li> <li>P24 = 1 1/2" NPTF</li> <li>P32 = 2" NPTF</li> <li>S16 = SAE-16</li> <li>S20 = SAE-20</li> <li>S24 = SAE-24</li> <li>S32 = SAE-32</li> <li>F20 = 1 1/4" SAE 4-Bolt Flange Code 61</li> <li>F24 = 1 1/2" SAE 4-Bolt Flange Code 61</li> <li>F32 = 2" SAE 4-Bolt Flange Code</li> </ul>
	Orientation  1 = Rear		Filter Options  ☐ OMIT = None		☐ <b>Y5</b> = Back-Mounted Gauge in Cap
	2 = Right 3 = Front 4 = Left		<ul> <li>□ D = Diffuser</li> <li>□ Y2 = Back-Mount</li> <li>□ Y2C = Bottom-Mo</li> </ul>	•	■ ES = Electric Switch ■ ES1 = Heavy-Duty Electric Switch with Conduit Connection
Filter Option 4	Media & Micron Rating	Porting	Orientation	Filter Options	
☐ GRTB	☐ 1 = 1 Micron ☐ 3 = 3 Micron ☐ 5 = 5 Micron ☐ 10 = 10 Micron ☐ 25 = 25 Micron <sup>*</sup> All Media Options above are Z Synthetic Media	<ul> <li>□ P = 1" NPTF</li> <li>□ S = SAE-16</li> <li>□ B = ISO 228 G-1"</li> <li>□ G = 1.25"</li> </ul>	☐ 1 = Rear ☐ 2 = Right ☐ 3 = Front ☐ 4 = Left	<ul> <li>OMIT = None</li> <li>D = Diffuser</li> <li>Y2 = Back-Mount</li> <li>Y2C = Bottom-M</li> <li>Y5 = Back-Mount</li> <li>ES = Electric Sw</li> <li>ES1 = Heavy-Du</li> </ul>	ounted Gauge in Cap led Gauge in Cap
Filler/Breather		Sight Glass	Suction Straine	er	
☐ <b>F</b> = PABS3 (in Tank) ☐ <b>B</b> = Blocked Breather	Port (AFTF Only)	S1 = Sight Glass Side S2 = Sight Glass Front N = No Sight Glass		Mesh Strainer on FRON	IT Side, Flow Rate:25 GPM I Sides, Flow Rate:25 GPM

\*Micron Rating refers to the return filter element rating. Note: Tank Mounting Straps sold as a separate part number, please see next page for configurations and options. Note: For fluids that have the potential for electrostatic discharge, please consult factory for anti-stat media options.



**Sight Glass Options** 



Applicable to AFTF, GRT, and GRTB

### **Plastic Tank Strap Arrangement**

#### Introduction

Mobile applications have unique requirements for hydraulic components. Often, these components need to be small, compact and as lightweight as possible. Making sure these reservoirs are secure is often overlooked. Schroeder Industries has taken the steps to ensure that customers have all the tools necessary to securely operate their mobile equipment. Schroeder's Plastic Tank (TNK) Reservoir, a money and timesaving solution with an integrated return filter and accessories in one compact package, also includes mounting straps. These mounting straps have been developed to assure a safe and secure connection to the frame or chassis of any mobile vehicle. These straps are offered in three configurations for both sizes of the Plastic Tank in a rubber coated steel strap.

#### **Mounting Possibility**

Represents 12, 18 & 25 Gallon Strap Locations







**Vertical Overhead** 

**Vertical Two-Sided** 

Horizontal

#### **Ordering Information:**

TNK7 Straps*				
Vertical Overhead	443635	Horizontal Upper	444066	

TNK12 Straps*				
Vertical Overhead	443868	Horizontal Upper	444066	
Vertical Two-Sided	443889	Horizontal Lower	444185	

TNK18 Straps*				
Vertical Overhead	3054998	Horizontal Upper	444490	
Vertical Two-Sided	444183	Horizontal Lower	3521866	

TNK25 Straps*				
Vertical Overhead	4231789	Horizontal Upper	444490	
Vertical Two-Sided	444183	Horizontal Lower	4389641	

<sup>\*</sup>Straps are not sold in sets. Each part number designates one strap.