

Introduction

About Schroeder Industries

Schroeder Industries is a family company of 76 years which manufactures, designs, and markets a complete range of Advanced Fluid Conditioning Solutions®. Headquartered in Leetsdale, PA, we are in the heart of manufacturing country.

Schroeder Brothers Corporation was founded after Bill Schroeder returned from WW2. Bill wrote a letter to his brother Jack, a young engineer, describing an opportunity to distribute an important new product to the mining industry. In the letter, Bill explained that he believed they could build a business around this technology.

Schroeder Brothers Corporation grew rapidly, adding additional mining products and eventually becoming the largest mining equipment distributor in the Appalachia's. Over time, Schroeder began to manufacture hydraulic systems and components for the mines. The systems came first, and with the systems came issues related to contamination.

To this day, underground mining is still one of the most difficult hydraulic system operating environments. With his system experience, Bill realized that there was a critical need for high efficiency filtration. Together with his brothers Jack & Reed, Bill pioneered the development of many hydraulic and lubrication filtration concepts, products, and standards that are still the benchmarks of performance today. Time continued to march on, and Schroeder's business continued to evolve further into a manufacturing company.

Today, Schroeder Industries serves almost every market where high efficiency fluid filtration is required. Our Advanced Fluid Conditioning Solutions® are forged through the real-world experience gained in the world's toughest operating environments.

Mission Statement

Our success is a product of customer-driven innovation and technically advanced fluid conditioning products and services, in which our people deliver value to our stakeholders, communities and environment.

Quality Policy

Continuous improvement in our business to ensure a quality product, shipped on time, without compromise.

Vision

To be the global leader of engineered, fluid conditioning products & services.

Core Values (F.I.L.T.E.R.S)

- Fueled: By the success of our customer.
- Ingenuity: Engineered solutions for a complex environment.
- Lead by example: Better every day through continuous improvement.
- Together: We excel through clear communication & teamwork.
- **Empowering:** Employees to provide exceptional quality & service.
- **Responsiveness:** With determination, we make it happen.
- Safety: We pride ourselves on a safe, fun & family-oriented work environment.

Limitations of Liability

The information contained in the catalog (including, but not limited to, specifications, configurations, drawings, photographs, dimensions and packaging) is for descriptive purposes only. Any description of the products contained in this catalog is for the sole purpose of identifying the products and shall not be deemed a warranty that the products shall conform to such description. No representation or warranty is made concerning the information contained in this catalog as to the accuracy or completeness of such information. Schroeder Industries LLC reserves the right to make changes to the products included in this catalog without notice. A copy of our warranty terms and other conditions of sale are available upon request. A placed order constitutes acceptance of Schroeder's terms and conditions

Failure, improper selection or improper use of the products and/or systems described herein or related items can cause death, personal injury and property damage.

This catalog and other documentation from Schroeder Industries provides product information for consideration by users possessing technical expertise.

It is important that the user analyze all aspects of the specific application and review the current product information in the current catalog. Due to the variety of operating conditions and applications for these products, the user is solely responsible for making the final product selection and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, design, availability and pricing are subject to change at any time without notice



Contents at a Glance Table of Contents

Introduction to Quality Protection	5
What is Quality Protection?	5
Quality Protection Means	5
Why do my end users need Quality Protection?	5
How To Use: New Model Codes	6
Old Model Code	6
New Model Code	6
Quality Protection Designs	7
GeoSeal® Patented Quality Protection	7
HydraSPIN Filters	7
Lock & Key	7
Section 1: Base Ported Pressure Filters	8
GKF30/GKF50	9
GKC50	11
GMKF50	13
GKC65	15
GK9	17
G2K9	19
G3K9	21
Section 2: Top Ported Filters	24
GH	25
GKF5	27
GKF3	29
GKL3	31
GMLF1	33
NFLK30	35
Section 3: Tank Mounted Filters	36
AFT	39
GPT	41
BRT	43
TRT	45
GZT	47
GRT	49
GRTB	51
GLRT	53
Appendix A: Indicators	57
L	

Contents at a Glance

		Pressure psi (bar)	Flow gpm (L/min)	Page
	Base Ported Filters			
	<u>GKF30/GKF50</u>	3000-5000 (210-345)	100/150 (380/570)	9
	<u>GKC50</u>	5000 (345)	100/150 (380/570)	11
on 1	GMKF50	5000 (345)	200 (760)	13
ectic	<u>GKC65</u>	6500 (450)	100 (380)	15
S	<u>GK9</u>	900 (100)	100/150 (380/570)	17
	<u>G2K9</u>	900 (100)	100/150 (380/570)	19
	<u>G3K9</u>	900 (100)	100/150 (380/570)	21

		Pressure psi (bar)	Flow gpm (L/min)	Page
	Top Ported Filters			
Section 2	<u>GH</u>	500 - 725 (35 - 50)	35 - 112 (130-425)	25
	<u>GKF5</u>	500 (100)	100/150 (380/570)	27
	<u>GKF3</u>	300 (100)	100/150 (380/570)	29
	<u>GKL3</u>	300 (120)	100/150 (380/570)	31
	<u>GMLF1</u>	300 (20)	200 (760)	33

		Pressure psi (bar)	Flow gpm (L/min)	Page
	Tank Mounted Filters			
Section 3	<u>AFT</u>	100 (7)	40 (151)	37
	BRT	145 (10)	160 (600)	39
	TRT	145 (10)	100 (400)	41
	GZT	100 (7)	40 (150)	43
	<u>GRT</u>	100 (7)	100 (380)	45
	<u>GRTB</u>	100 (7)	100 (380)	47
	<u>GLRT</u>	100 (7)	150 (570)	49

This page is intentionally left blank

Quality Service Integrity at Schroeder Industries

What is Quality Protection?

Far too often, customers make purchasing decisions based solely on price, only to be extremely disappointed with the poor quality delivered by low-cost imitations. To make the matter worse, the customer often points an accusing finger at the filter housing manufacturer for poor performance, rather than the inadequate element they used as a replacement. That is where Quality Protection is the answer.

Quality Protection Means:

- · End users cannot use "will-fit", low quality elements
- OEM's will capture aftermarket revenue; exponential growth year over year
- · An increase in machine productivity and reliability
- · Overall reduction in warranty claims
- · Peace of Mind!







Schroeder KZ5

of pleats Pleat Height (in)

Media Layers

DHC (g)

Beta 200

Beta 1000

"Will-Fit" K-series

0.63

6

119

4.8

6.3

Schroeder

	100,000											\$5,000,000	
	90,000					7						\$4,500,000	
	80,000		Margi	n with stra	ategy							\$4,000,000	
7	70 000		Quan	tity with st	rategy							\$3 500 000	
[bcs	. 0,000		Marg	in without	strategy							******	5
titiy	60,000		Quan	tity withou	it strategy							\$3,000,000	jin [5
Quar	50,000											\$2,500,000	Març
-	40,000											\$2,000,000	
	30,000							_	_		2	\$1,500,000	
	20,000					\checkmark		_				\$1,000,000	
	10,000				\checkmark							\$500,000	
	0											\$0	
		1	2	3	4	5	6	7	8	9	10	<u> </u>	
							Year						

Quantity & Margin Developement - 10 years

Why Should I Use Quality Protection?

If you've ever experienced downtime with your hydraulic equipment, you know how costly and frustrating it can be. Just because you have a filter in place, it doesn't mean that you are capturing the particulate that prevents your equipment from performing at the level it should be at. Cut-rate imitations may claim that "All filtration elements are guaranteed to meet or surpass all specifications of the original equipment manufacturer" but that's not always the case. Take a look at the numbers below and see for yourself:

KZ5	"Will-Fit" replacement	Elements	Schroeder 27KZ1	"Will-Fit" replacement
	71	# of pleats	80	71
	0.61	Pleat Height (in) 0.63	0.61
	5	Media Layer	s 6	5
	84.3	DHC (g)	378.1	233.1
	12.2	Beta 200	<4	12.4
	18.1	Beta 1000	<4	18.3

Why do my users need Quality Protection?

Hydraulic system downtime and repairs represent a significant

portion of overall costs to end users. As much as 70% of all premature machine failures can be attributed to contamination (ref. NORIA Corp.). Adding in superior filtration to your end user's hydraulic system will help prevent premature machine failures and keep uncontrolled contamination effects from occurring. Here is a graph that shows the average percentage of costs per uncontrolled contamination effect versus the cost of superior filtration:



How To: Use Model Codes

New Model Code

Merging certain deciding factors together from our previous model codes, the new examples will have fewer boxes and make for a more streamlined creative process. Each row is its own category, while inside of that row, the columns are the different breakdowns within that selection. From left to right, there will be several options to choose from for each breakdown. Footnotes will be included in each model code.

Look out for footnotes for certain categories. They will be numbered consecutively and listed below each model code. Example below.

Quality Service Integrity at Schroeder Industries Quality Protection Designs

GeoSeal[®] | Patented Quality Protection US Patent D658740

GeoSeal[®] is a patented offering from Schroeder that provides a unique way for OEMs to retain replacement element business and to keep a filter's performance at the level that it was supplied. The critical sealing arrangement between a filter housing and its replacement element takes on a shape other than the standard circular arrangement, which prevents the use of imitation elements. Specifically, the element grommet & mating bushing are given a new geometric shape.

GH6, GH9, GH11, & GH14 HydraSPIN Filters US Patent US 9126129 and US 8550255

The Schroeder GH HydraSPIN filters offer a unique and proprietary bowl to element seal that minimizes potential leakage points by the use of one seal on the element. The GH HydraSPIN cartridge style elements are also patented with integrated bypass valve features. The filter housing has mounting interchangeability with competitor filter heads and the assembly is capable of delivering the best performance in hydrostatic or CVT applications.

Lock & Key Patent Pending

Our Lock & Key technology is a patented offering from Schroeder that provides a unique interface between the bushing and the element in some filter housings. This interface takes on a specific shape that only a specific "Lock and Key" pattern will allow the element to seal correctly. This patent protected design that can be customizable to specific OEM requirements.

GKF30/GKF50 GKF30-3000 psi - 210 bar GKF50-5000 psi - 345 bar 100/150 gpm - 380/570 L/min

Features and Benefits

- Base-ported pressure filter
- Can be installed in vertical or horizontal position
- HF4 Footprint filter with patented Quality Protection Element
- Element changeout from top minimizes oil spillage
- Offered in pipe, SAE straight thread, flanged and ISO 228 porting
- Integral inlet and outlet female test points option available
- Offered in conventional subplate porting
- Double and triple stacking of KG-size elements can be replaced by single, KKG, or 27KG-size elements

Model No. of filter in photograph is GKF30/GKF501KGZ10SD.

Filter Housing Specifications

1		
	Flow Rating:	Up to 100 gpm (380 L/min) for 150 SUS (32 cSt) fluids With 2" porting only, up to 150 gpm (570 L/min) for 150 SUS (32 cSt) fluids
	Max. Operating Pressure:	GKF30- 3000 psi (210 bar) GKF50- 5000 psi (345 bar)
	Min. Yield Pressure:	GKF30- 12,000 psi (830 bar), per NFPA T2.6.1 GKF50- 15,000 psi (1025 bar), per NFPA T2.6.1
	Rated Fatigue Pressure:	GKF30- 2500 psi (170 bar), per NFPA T2.6.1-2005 GKF50- 3500 psi (240 bar), per NFPA T2.6.1-2005
	Temp. Range:	-20°F to 225°F (-29°C to 107°C)
	Bypass Setting:	Cracking: 40 psi (2.8 bar) Full Flow: 61 psi (4.2 bar)
	Porting Base & Cap: Element Case:	Ductile Iron Steel
	Weight of GKF30-1KG: Weight of GKF30-2KG: Weight of GKF30-3KG: Weight of GKF50-1KG: Weight of GKF50-2KG: Weight of GKF50-3KG:	48 lbs. (22 kg) 65 lbs. (30 kg) 81 lbs. (37 kg) 59.7 lbs. (27.1 kg) 80.7 lbs. (36.6 kg) 102.0 lbs. (46.3 kg)
	Element Change Clearance:	8.50" (215 mm) for 1KG; 17.50" (445 mm) for KKG; 26.5" (673 mm) for 27KG

GKF30/GKF50 How to Build a Valid Model Number for a Schroeder GKF30/GKF50: GKF30/GKF50 **Bowl Length** Porting/Test Points Element Indicator Options **Bowl Length 1** = 9"/18"/27" Bowl with one (1) element 18" Bowl with two (2) 9" elements 2 = 3 = 27" Bowl with three (3) 9" elements Element Element Media Micron Rating Seals KG (9", 18", or Z = Excellement Z-Media (Synthetic) 1 = 1µ (Z, ZW Media) Omit = Buna Note: Element code 27" Bowl) Omit = E Media (Cellulose) $3 = 3\mu$ (E, Z, AS, ZW Media) V = Viton can also be used to (18" Bowl) KKG AS = Anti-Stat Media (Synthetic) $5 = 5\mu$ (Z, AS, ZW Media) build a replacement 27KG (27" Bowl) **ZW =** Aqua-Excellement ZW Media 10 = 10µ (E, Z, AS, ZW, ED Media) element. W = W Media (Water Removal) 25 = 25µ (E, Z, ZW Media) ED = Electic Drive Media Omit = (W Media Only) Porting/Test Points Porting **Test Points Bypass P** = 1-1/2" NPTF Omit = 40 PSI Omit = None Two 1/4" NPTF inlet & outlet P32 = 2" NPTF 50 PSI 50 = L = S = SAE-24 60 = 60 PSI female test ports F = 1-1/2" SAE 4-bolt flange (KF30 Code 61)(KF50 Code 62) Series 1215 7/6 UNF Test Point U = F32 = 2" SAE 4-bolt flange Code 61(KF30) *KF30 Only in cap (upstream) **O** = Subplate UU = Series 1215 7/16 UNF B24 = ISO 228 G-1-1/2 Test Point in block (upstream & downstream Indicator¹ Omit = None **Electrical Indicator** Current/Thermal Lockout Normally Open/Closed MS5 = 12" 4-Conductor Cable Omit = None Omit = None (All except MS18 & MS19) MS10 = Male DIN Connector LC = Low Current NO = Normally Open (Only MS18 & MS19) MS12 = Male 5 Pin Brad Harrison Connector T = Thermal Lockout NC = Normally Closed (Only MS18 & MS19) LCT = Low Current with Thermal Lockout MS16 = Weather Packed Seal Connector MS17 = Male Micro 4 Pin Brad Harrison Connector **MS18** = 2 Pin Amp Junior Power Timer Connector MS19 = 2 Pin Deutsch Connector MS11 = 12 ft 4-Conductor Cable MS15DC = 3000 PSI max #8-32 Post for Wire Connection **Electrical Visual Indicator** Current/Thermal Lockout MS13DC = Threaded Connector and Light (Direct Current) Omit = None MS14DC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) LC = I ow Current MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) T = Thermal Lockout LCT = Low Current with Thermal Lockout MS = Cam Operated Switch with 1/2" Conduit, Female Connection Visual Indicator D = Pointer D8 = Visual with Thermal Lockout D5 = Latching Visual Pop-Up D10 = Non-Latching Indicator D5AS = Latching Visual Pop-Up with aluminum shroud D13 = Stainless Steel Latching Indicator with Music Wire Spring Options Omit = None C = Indicator in cap G509 = Dirt alarm and drain opposite standard G588 = Electric Switch and drain opposite standard

1. Starting from the left you will choose your Indicator Type (visual or electrical), if it's visual you will use the visual column and that will complete this box. If it's electrical you will populate the column under "MS = Electrical." If no indicator is required you will omit the whole section and move onto the next section

GKC50

5000 psi - 345 bar

100/150 gpm - <u>380/570 L/min</u>

Features and Benefits

- Base-ported pressure filter
- Patented dirt-tolerant cap design
- Can be installed in vertical or horizontal position
- HF4 Footprint filter with patented Quality Protection element
- Element changeout from top minimizes oil spillage
- Offered in pipe, SAE straight thread, flanged and ISO 228 porting
- Integral inlet and outlet female test points option available
- Offered in conventional subplate porting
- Double and triple stacking of KG-size elements can be replaced by single, KKG, or 27KG-size elements

Filter Housing Sp	pecifications
-------------------	---------------

	Flow Rating:	Up to 100 gpm (380 L/min) for 150 SUS (32 cSt) fluids With 2" porting only, up to 150 gpm (570 L/min) for 150 SUS (32 cSt) fluids
M	ax. Operating Pressure:	5000 psi (345 bar)
	Min. Yield Pressure:	15,000 psi (1035 bar), per NFPA T2.6.1
F	Rated Fatigue Pressure:	3500 psi (240 bar), per NFPA T2.6.1-2005
	Temp. Range:	-20°F to 225°F (-29°C to 107°C)
	Bypass Setting:	Cracking: 40 psi (2.8 bar) Full Flow: 61 psi (4.2 bar)
	Porting Base & Cap: Element Case:	Ductile Iron Steel
	Weight of GKF30-1KG: Weight of GKF30-2KG: Weight of GKF30-3KG:	66.8 lbs. (30.3 kg) 87.8 lbs. (39.8 kg) 109.6 lbs. (49.7 kg)
Elem	nent Change Clearance:	8.50" (215 mm) for 1KG; 17.50" (445 mm) for KKG; 26.5" (673 mm) for 27KG

How to Build a V	alid Model Num	ber for a Schroede	r GKFC50:				
GKC50			_				
Bowl Len	gth Element	Porting/Test Points In	dicator Op	otions			
Bowl Length							
	1 = 9"/18"/27"	Bowl with one (1) element					
	2 = 18" Bowl v	vith two (2) 9" elements					
	3 = 27" Bowl v	vith three (3) 9"elements			1		
Element	Element	Media		Micron Rating	Seals		
Note: Element code	KG (9", 18", or 27" Bowl)	Z = Excellement Z-Me Omit = E Media (Cellulose	dia (Synthetic)	1 = 1μ (Ζ, ΖW Media) 3 = 3μ (Ε, Ζ, ΑS, ΖW Media)	Omit = Buna		
can also be used to build a replacement	KKG (18" Bowl)	AS = Anti-Stat Media (S	ynthetic)	5 = 5μ (Z, AS, ZW Media)	V = Vitori		
element.	27KG (27" Bowl)	ZW = Aqua-Excellement	ZW Media	10 = 10µ (E, Z, AS, ZW, ED Media)			
		W = W Media (Water R ED = Electic Drive Media	emoval)	$25 = 25\mu$ (E, Z, ZW Media) Omit = (W Media Only)			
Porting/Test Points	Magnet	Porting	Bypass	Test Points			
	Omit = None	P = 1-1/2" NPTF	Omit = 40 P	SI Omit = None			
	M = Magnet Ins	erts P32 = 2" NPTF	50 = 50 P	SI L = Two 1/4" NPTF female te	st ports		
	(Not availa with indica	ble $S = SAE-24$	Rolt	U = Series 1215 7/16 UNF Te	st Point installed in		
	in cap)	flange (code 6	62)	UU = Series 1215 7/16 UNF Te	st Point installed in		
		O = Subplate		block (upstream and dow	nstream)		
		B24 = ISO 228 G-1-	1/2				
Indicator ¹							
Omit = None							
Electrical Indicator		Current/Thermal I	ockout	Normally Open/Closed			
MS5 = 12" 4-Conduct	tor Cable	Omit = None	+	Omit = None (All except MS1	8 & MS19)		
MS12 = Male 5 Pin Bra	ad Harrison Connector	T = Thermal Lo	ckout	NC = Normally Closed (Only	NC = Normally Closed (Only MS18 & MS19)		
MS16 = Weather Pack	ed Seal Connector	LCT = Low Curren	t with Thermal Lock	cout	,		
MS17 = Male Micro 4	Pin Brad Harrison Conne	ector					
MS18 = 2 Pin Amp Jur	nior Power Timer Conne	ctor					
MS19 = 2 Pin Deutsch	Connector						
MS11 = 12 ft 4-Condu	ctor Cable						
Electrical Visual Indic	cator		Current/Ther	malLockout			
MS13DC = Threaded (Connector and Light (Dir	ect Current)	Omit = None				
MS14DC = Male 5 Pin	Brad Harrison Connecto	or & Light (Direct Current)	LC = Low C	Current			
MS14AC = Male 5 Pin	Brad Harrison Connecto	or & Light (Alternating Curre	I = Iherm	al Lockout			
MS = Cam Opera	ted Switch with 1/2" Con	duit, Female Connection					
Visual Indicator							
D = Pointer		D8 = Visual	with Thermal Lock	out			
D5 = Latching Vis D5AS = Latching Vis	sual Pop-Up sual Pop-Up with alumin	um shroud D10 = Non-L	atching Indicator ess Steel Latching I	ndicator with Music Wire Spring			
Options							
	Omit = None						
	G509 = Dirt Alarm a	nd drain opposite standard					
	G588 = Electric Sw	itch and drain opposite stand	ard				
1. Starting from the left you If it's electrical you will popu	will choose your Indicator Ty Ilate the column under "MS =	pe (visual or electrical), if it's vis Electrical." If no indicator is req	ual you will use the visi uired you will omit the	ual column and that will complete this box. whole section and move onto the next sect	ion		

GMKF50

5000 psi - 345 bar

200 gpm - 760 L/min

Features and Benefits

- Base-ported high pressure dual filter manifold mounted
- HF4 Footprint filter with patented Quality Protection element
- Element changeout from top minimizes oil spillage
- Offered in pipe porting
- Integral inlet and outlet female test points option available

Model No. of filter in photograph is GMKF50KG21PD5

Filter Housing Spe	cifications
Flow Rating:	Up to 200 gpm (760 L/min) for 150 SUS (32 cSt) fluids
Max. Operating Pressure:	5000 psi (345 bar)
Min. Yield Pressure:	15,000 psi (1035 bar), per NFPA T2.6.1
Rated Fatigue Pressure:	3500 psi (240 bar), per NFPA T2.6.1-2005
Temp. Range:	-20°F to 225°F (-29°C to 107°C)
Bypass Setting:	Cracking: 40 psi (2.8 bar) Full Flow: 61 psi (4.2 bar)
Porting Base & Cap: Element Case:	Ductile Iron Steel
Weight of GMKF50-2KG: Weight of GMKF50-4KG: Weight of GMKF50-6KG: Weight of GMKC50-2KG: Weight of GMKC50-4KG: Weight of GMKC50-6KG:	214.0 lbs. (97.3 kg) 243.0 lbs. (110.2 kg) 284.4 lbs. (129.0 kg) 216.0 lbs. (98.0 kg) 245.0 lbs. (111.1 kg) 286.4 lbs. (129.9 kg)
Element Change Clearance:	8.50" (215 mm) for 1KG; 17.50" (445 mm) for KKG; 26.5" (673 mm) for 27KG

GMKF50

GMKF50							-		
	Bowl I	ength Element	Por	ting/Test Poir	nts Inc	dicator	Opt	ions	
Bowl Length									
		2 = 9"/18"/27"	bowl wit	th one (1) el	ement in ea	ich bowl			
		4 = 18" Bowl v	with two	(2) 9" eleme	nts in each	bowl			
					ients in eac	II DOWI		-	•
Element		Element	Media	a			Micro	on Rating	Seals
Note: Elemen can also be us build a replace element.	t code sed to ement	KG (9", 18", or 27" Bowl) KKG (18" Bowl) 27KG (27" Bowl)	Z : Omit : AS : ZW : W : ED :	 Excelleme E Media (Anti-Stat I Aqua-Exc W Media Electic Dr 	ent Z-Media (Cellulose) Media (Synth ellement ZW (Water Remo ive Media	Synthetic) etic) Media oval)	1 2 Omi	1 = 1μ (Z, ZW Media) 3 = 3μ (E, Z, AS, ZW Media) 5 = 5μ (Z, AS, ZW Media) 0 = 10μ (E, Z, AS, ZW, ED Media) 5 = 25μ (E, Z, ZW Media) t = (W Media Only)	Omit = Bun V = Vito
Porting/Test	Points	Porting			Bypass		Test Po	nts	
		P = 2-1/2" NPTF F40 = 2-1/2" SAE 4 F32 = 2" SAE 4-bol P32 = 2" NPTF B32 = ISO 228 G-2	-bolt flang t flange c	ge code 62 code 62	Omit = 50 =	None 50 PSI	Omit = L = U =	None Two 1/4" NPTF inlet & outlet female Series 1215 7/6 UNF Test Point in c	test ports ap (upstream)
Indicator ¹									
Omit = Non	e								
Electrical Ind	licator			Current/Th	ermal Locl	kout		Normally Open/Closed	
 MS5 = 12" 4-Conductor Cable MS10 = Male DIN Connector MS12 = Male 5 Pin Brad Harrison Connector MS16 = Weather Packed Seal Connector MS17 = Male Micro 4 Pin Brad Harrison Connector MS18 = 2 Pin Amp Junior Power Timer Connector MS19 = 2 Pin Deutsch Connector 			ector ctor	LC = Low Current NO = Normally Open (Only T = Thermal Lockout NC = Normally Closed (Only LCT = Low Current with Thermal Lockout NC = Normally Closed (Only			MS18 & MS19) MS18 & MS19)		
MS11 = 12 ft 4	4-Conduc	ctor Cable	I					1	
Electrical Visi	ual Indic	ator				Current	t/Thermal	Lockout	
MS13DC = Th MS14DC = Ma MS14AC = Ma	nreaded (ale 5 Pin ale 5 Pin	Connector and Light (Dir Brad Harrison Connecto Brad Harrison Connecto	ect Curr or & Ligh or & Ligh	rent) nt (Direct Cu nt (Alternatin	rrent) g Current)	Omit = LC = T = ⁻ LCT =	None Low Curre Thermal L Low Curre	nt ockout nt with Thermal Lockout	
MS = Car	m Operat	ed Switch with 1/2" Con	duit, Fe	male Conne	ction				
Visual Indica	tor								
D = Poi D5 = Late D5AS = Late	inter ching Vis ching Vis	ual Pop-Up ual Pop-Up with alumin	um shro	D8 = D10 = ud D13 =	Visual witi Non-Latch Stainless	h Thermal hing Indica Steel Lato	Lockout ator hing Indic	ator with Music Wire Spring	
Options									

How to Build a Valid Model Number for a Schroeder GMKF50:

1. Starting from the left you will choose your Indicator Type (visual or electrical), if it's visual you will use the visual column and that will complete this box. If it's electrical you will populate the column under "MS = Electrical." If no indicator is required you will omit the whole section and move onto the next section

GKC65

6500 psi - 450 bar

100 gpm - 380 L/min

Features and Benefits

- Base-ported high pressure filter
- Patented dirt-tolerant cap design
- Can be installed in vertical or horizontal position
- HF4 Footprint filter with patented Quality Protection element
- Element changeout from top minimizes oil spillage
- Offered in flanged porting
- Integral inlet and outlet female test points option available
- Double and triple stacking of K-size element can be replaced by single, KKG. or 27KG-size element

Model No. of filter in photograph is GKC651KG10FD9.

Filter Housing Specifications		
Flow Rating:	Up to 100 gpm (380 L/min) for 150 SUS (32 cSt) fluids	
Max. Operating Pressure:	6500 psi (450 bar)	
Min. Yield Pressure:	19,500 psi (1345 bar), per NFPA T2.6.1	
Rated Fatigue Pressure:	5000 psi (345 bar), per NFPA T2.6.1-2005	
Temp. Range:	-20°F to 225°F (-29°C to 107°C)	
Bypass Setting:	Cracking: 40 psi (2.8 bar) Full Flow: 75 psi (5.2 bar)	
Porting Base & Cap: Element Case:	Ductile Iron Steel	
Weight of GKC65-1KG: Weight of GKC65-2KG: Weight of GKC65-3KG:	80 lbs. (36.3 kg) 102 lbs. (46.3 kg) 124 lbs. (56.3 kg)	
Element Change Clearance:	8.50" (215 mm) for 1KG; 17.50" (445 mm) for KKG; 26.5" (673 mm) for 27KG	

GKC65

How to Build a Valid Model Number for a Schroeder GKC65: GKC65 **Bowl Length** Element Porting/Test Points Indicator Options **Bowl Length** 9"/18"/27" bowl with one (1) element 1 = 2 = 18" Bowl with two (2) 9" elements 27" Bowl with three (3) 9" elements 3 = Element Element Media **Micron Rating** Seals 1µ (Z, ZW Media) KG (9", 18", or Excellement Z-Media (Synthetic) Z = 1 = Omit = Buna Note: Element code 3 = 3µ (E, Z, AS, ZW Media) Omit = E Media (Cellulose) V = Viton 27" Bowl) can also be used to $5 = 5\mu$ (Z, AS, ZW Media) KKG (18" Bowl) Anti-Stat Media (Synthetic) AS = build a replacement 10 = 10µ (E, Z, AS, ZW, ED Media) 27KG (27" Bowl) ZW = Aqua-Excellement ZW Media element. 25 = 25µ (E, Z, ZW Media) W Media (Water Removal) W = Omit = (W Media Only) ED = Electic Drive Media Porting/Test Points Porting **Test Points Bypass** Omit = 40 PSI F = 1-1/2" SAE 4-Bolt Omit = None 50 = 50 PSI Two 1/4" NPTF inlet and outlet female test ports L= Flange Code 62 U =Series 1215 7/16 UNF Schroeder Check Test Point installed in cap (upstream) UU = Series 1215 7/16 UNF Schroeder Check Test Point installed in block (upstream and downstream) Indicator¹ Omit = None **Electrical Indicator** MS5SS = 12" 4-Conductor Cable MS12SSLC = Low current MS12SS MS5SSLC = Low current MS5SS MS16SS = Weather Packed Seal Connector MS5SST = MS5SS with thermal lockout MS16SST = MS16SS with thermal lockout MS10SS = Male DIN Connector MS17SSLC = Low current MS17SS MS10SSI C = Low current MS10SS MS17SSLCT = Low current MS17SS with thermal lockout MS11SS = 12 ft 4-Conductor Cable MS19SSNC = 2 Pin Deutsch Connector (Normally Closed) MS12SS = Male 5 Pin Brad Harrison Connector **Electrical Visual Indicator** MS13SSDC = Threaded Connector and Light (Direct Current) MS14SSDCT = MS14SSDC with thermal lockout MS13SSDCLC = Low current MS13SSDC MS14SSDCLCT = Low current MS14SSDC with thermal lockout MS13SSDCT = MS13SSDC with thermal lockout MS14SSACLC = Low current Male 5 Pin Brad Harrison Connector & Light MS14SSDC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) (Direct Current) MS14SSACLCT = Low current Male 5 Pin Brad Harrison Connector & Light MS14SSDCLC = Low current MS14SSDC (Alternating Current) with thermal lockout Visual Indicator D9 = Stainless Steel Latching Pop-Up Indicator D13 = Stainless Steel Latching Indicator with Music Wire Spring D10SS = Stainless Steel Non-Latching Indicator Options Omit = None G509 = Dirt Alarm and drain opposite standard 1. Starting from the left you will choose your Indicator Type (visual or electrical), if it's visual you will use the visual column and that will complete this box.

If it's electrical you will populate the column under "MS = Electrical." If no indicator is required you will omit the whole section and move onto the next section

Medium Pressure Filter

900 psi - 60 bar

100 gpm - 380 L/min

GK9

Features and Benefits (GK9)

- Extremely versatile multiple inlet and outlet ports; can be used alone or in series with another GK9
- Top loading for easy access for element change-out
- Allows consolidation of inventoried replacement elements by using KG-size elements
- Multiple inlet and outlet porting options reduce the need for additional adapters on installation
- Can be fitted with test ports for oil sampling
- Small profile allows filter to be mounted in tight areas
- Various Dirt Alarm[®] options
- HF4 Footprint filter with patented Quality Protection element

Filter Housing Specifications

• .	
Flow Rating:	Up to 100 gpm (380 L/min) for 150 SUS (32 cSt) fluids
Max. Operating Pressure:	900 psi (60 bar)
Min. Yield Pressure:	3200 psi (220 bar), per NFPA T2.6.1
Rated Fatigue Pressure:	750 psi (52 bar) per NFPA T2.6.1-R1-2005
Temp. Range:	-20°F to 225°F (-29°C to 107°C)
Bypass Setting:	Cracking: 40 psi (2.8 bar) Full Flow: 80 psi (5.5 bar)
Porting Base & Cap: Element Case:	Cast Aluminum Steel
Weight of GK9-1KG: Weight of GK9-2KG: Weight of GK9-3KG:	19 lbs. (8.6 kg) 30 lbs. (13.6 kg) 41 lbs. (18.6 kg)
Element Change Clearance:	8.50" (215 mm) for 1KG; 17.50" (445 mm) for KKG; 26.5" (673 mm) for 27KG

How to Build a Valid Model Number for a Schroeder GK9

GK9			-		-						
	Bowl Length	Eleme	ent Po	rting/Test P	oints Indicator	C	Options				
Bowl L	.ength										
		1 = 2 = 3 =	 9"/18"/27" 18" Bowl v 27" Bowl v 	bowl with vith two (2 vith three	one (1) element 2) 9" elements (3) 9" elements						
Eleme	nt	Eleme	nt	Media			M	licron I	Rating	Seals	
Note: E can als build a elemen	Element code o be used to replacement it.	KG KKG 27KG	(9", 18", or 27" Bowl) (18" Bowl) (27" Bowl)	Z = Omit = AS = ZW = W = ED =	Excellement Z-Med E Media (Cellulose) Anti-Stat Media (Sy Aqua-Excellement Z W Media (Water Re Electic Drive Media	ia (Synth) 'nthetic) ZW Media ∌moval)	etic) a C	1 = 3 = 5 = 10 = 25 = Omit =	1μ (Z, ZW Media) 3μ (E, Z, AS, ZW Media) 5μ (Z, AS, ZW Media) 10μ (E, Z, AS, ZW, ED Media) 25μ (E, Z, ZW Media) (W Media Only)	Omit = V =	Buna Viton

Medium Pressure Filter GK9

(Model code builder continued)

Porting/Test Points	Port 1	Port 2	Port 3	Port 4	Bypass	Test Points
	N = None P16 = 1" NPTF P20 = $1-\frac{1}{4}$ " NPTF P24 = $1-\frac{1}{2}$ " NPTF S16 = SAE-16 S20 = SAE-20 S24 = SAE-24 B16 = ISO 228 G-1" B20 = ISO 228 G-1-\frac{1}{4}" B24 = ISO 228 G-1-\frac{1}{4}"	N = None P16 = 1" NPTF" P20 = 1-¼" NPTF P24 = 1-½" NPTF S16 = SAE-16 S20 = SAE-20 S24 = SAE-24 F16 = 1" SAE 4-bolt flange Code 61 F20 = 1-¼" SAE 4-bolt flange Code 61 F24 = 1-1/2" SAE 4-bolt flange Code 61 B16 = ISO 228 G-1" B20 = ISO 228 G-1-¼ B24 = ISO 228 G-1-½"	N = None P16 = 1" NPTF P20 = 1-¼" NPTF P24 = 1-½" NPTF S16 = SAE-16 S20 = SAE-20 S24 = SAE-24 B16 = ISO 228 G-1" B20 = ISO 228 G-1-¼" B24 = ISO 228 G-1-½"		Omit = 40 PSI 10 = 10 PSI 20 = 20 PSI 25 = 25 PSI 30 = 30 PSI 60 = 60 PSI	Omit = None U = Test point in cap (Upstream) UU = Test points in block (upstream and downstream)

Indicator¹

Omit = None

Electrical Indicator	Current/Thermal Lockout	Normally Open/Closed
MS5 = 12" 4-Conductor Cable	Omit = None	Omit = None (All except MS18 & MS19)
MS10 = Male DIN Connector	LC = Low Current	NO = Normally Open (Only MS18 & MS19)
MS12 = Male 5 Pin Brad Harrison Connector	T = Thermal Lockout	NC = Normally Closed (Only MS18 & MS19)
MS16 = Weather Packed Seal Connector	LCT = Low Current with Thermal Lockout	
MS17 = Male Micro 4 Pin Brad Harrison Connector		
MS18 = 2 Pin Amp Junior Power Timer Connector		
MS19 = 2 Pin Deutsch Connector		

MS11 = 12 ft 4-Conductor Cable

MS15DC = #8-32 Post for Wire Connection

Electrical Visual Indicator	Current/Thermal Lockout
MS13DC = Threaded Connector and Light (Direct Current)	Omit = None
MS14DC = Male 5 Pin Brad Harrison Connector & Light (Direct Current)	LC = Low Current
MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current)	T = Thermal Lockout
	LCT = Low Current with Thermal Lockout
Visual Indicator	·
D5 = Latching Visual Pop-Up D10 = Non-Latch	ning Indicator

D5AS = Latching Visual Pop-Up with aluminum shroud D13 = Stainless Steel Latching Indicator with Music Wire Spring

D8 = Visual with Thermal Lockout

Options C = Indicator in cap

1. Starting from the left you will choose your Indicator Type (visual or electrical), if it's visual you will use the visual column and that will complete this box. If it's electrical you will populate the column under "MS = Electrical." If no indicator is required you will omit the whole section and move onto the next section

2. If location 1 is used as inlet port, dirt alarm will occupy location 2. If location 2 is used as inlet port, dirt alarm will occupy location 1. If dual inlet ports are specified, the only dirt alarm option is pop-up indicator in cap (D5C).

G2K9

900 psi - 60 bar

100 gpm - 380 L/min

Features and Benefits

- Two patented-pending GK9 filters supplied in series as a single filter assembly providing in-line single pass particulate and water filtration
- HF4 Footprint filter with patented Quality Protection element
- 900 psi rating covers almost all transfer line pressure specs including air driven transfer systems
- Top loading for easy access for element change out
- Can be fitted with test points for oil sampling

Filter Housing Specifications

Flow Rating:	Up to 100 gpm (380 L/min) for 150 SUS (32 cSt) fluids
Max. Operating Pressure:	900 psi (60 bar)
Min. Yield Pressure:	3200 psi (220 bar), per NFPA T2.6.1
Rated Fatigue Pressure:	750 psi (52 bar) per NFPA T2.6.1-R1-2005
Temp. Range:	-20°F to 225°F (-29°C to 107°C)
Bypass Setting:	Cracking: 40 psi (2.8 bar) each filter housing
Porting Base & Cap: Element Case:	Cast Aluminum Steel
Weight of GK9-1KG: Weight of GK9-2KG: Weight of GK9-3KG:	19 lbs. (8.6 kg) 30 lbs. (13.6 kg) 41 lbs. (18.6 kg)
Element Change Clearance:	8.50" (215 mm) for 1KG; 17.5" (445 mm) for KKG; 26.5" (673 mm) for 27KG

How to Build a Valid Model Number for a Schroeder G2K9:

G2K9 Bowl Length	Element	Porting Indicator	Test Points		
Bowl Length					
	1 = 9"/18"/27 2 = 18" Bowl 3 = 27" Bowl	" bowl with one (1) element with two (2) 9" elements with three (3) 9" elements			
Element	Element	Media	Micron Rating for Housing 1	Micron Rating for Housing 2	Seals
Note: Element code can also be used to build a replacement element.	KG (9", 18", or 27" Bowl) KKG (18" Bowl) 27KG (27" Bowl)	 Z = Excellement Z-Media (Synthetic) Omit = E Media (Cellulose) AS = Anti-Stat Media (Synthetic) ZW = Aqua-Excellement ZW Media W = W Media (Water Removal) ED = Electic Drive Media 			B = Buna V = Viton

G2K9

(Model code builder continued)

Porting **Inlet Porting Outlet Porting Bypass P16 =** 1" NPTF P16 = 1" NPTF Omit = 40 PSI P20 = 1-1/4" NPTF P20 = 1-1/4" NPTF 30 = 30 PSI **P24 =** 1-1/2" NPTF **P24 =** 1-1/2" NPTF 50 = 50 PSI **S16 = SAE-16 S16 = SAE-16 S20 = SAE-20 S20 = SAE-20 S24 = SAE-24** S24 = SAE-24 F16 = 1" SAE 4-bolt flange Code 61 F16 = 1" SAE 4-bolt flange Code 61 F20 = 1-1/4" SAE 4-bolt flange Code 61 F20 = 1-1/4" SAE 4-bolt flange Code 61 F24 = 1-1/2" SAE 4-bolt flange Code 61 F24 = 1-1/2" SAE 4-bolt flange Code 61 B16 = ISO 228 G-1" B16 = ISO 228 G-1" B20 = ISO 228 G-1-1/4" B20 = ISO 228 G-1-1/4" B24 = ISO 228 G-1-1/2 B24 = ISO 228 G-1-1/2

Indicator¹

Omit = None

Electrical Indicator	Current/Thermal Lockout	Normally Open/Closed
MS5 = 12" 4-Conductor Cable	Omit = None	Omit = None (All except MS18 & MS19)
MS10 = Male DIN Connector	LC = Low Current	NO = Normally Open (Only MS18 & MS19)
MS12 = Male 5 Pin Brad Harrison Connector	T = Thermal Lockout	NC = Normally Closed (Only MS18 & MS19)
MS16 = Weather Packed Seal Connector	LCT = Low Current with Thermal Lockout	
MS17 = Male Micro 4 Pin Brad Harrison Connector		
MS18 = 2 Pin Amp Junior Power Timer Connector		
MS19 = 2 Pin Deutsch Connector		

MS11 = 12 ft 4-Conductor Cable

MS15DC = #8-32 Post for Wire Connection

Electrical Visual Indicator	Current/Thermal Lockout
MS13DC = Threaded Connector and Light (Direct Current)	Omit = None
MS14DC = Male 5 Pin Brad Harrison Connector & Light (Direct Current)	LC = Low Current
MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current)	T = Thermal Lockout
	LCT = Low Current with Thermal Lockout

Visual Indicator

D5 = Latching Visual Pop-UpD10 = Non-Latching IndicatorD5AS = Latching Visual Pop-Up with aluminum shroudD13 = Stainless Steel Latching Indicator with Music Wire Spring

D8 = Visual with Thermal Lockout

Test Points ²		
	Omit =	None
	C =	Indicator in cap
	U =	Test point in cap (upstream)
	UU =	Test points in block (upstream and downstream)

1. Starting from the left you will choose your Indicator Type (visual or electrical), if it's visual you will use the visual column and that will complete this box. If it's electrical you will populate the column under "MS = Electrical." If no indicator is required you will omit the whole section and move onto the next section

2. Option UU will not be available in combination with indicator in block.

G3K9

900 psi - 60 bar

100 gpm - 380 L/min

Features and Benefits

- Three patented-pending K9 filters supplied in series as a single filter assembly providing in-line single pass particulate and water filtration
- HF4 Footprint filter with patented Quality Protection element
- 900 psi rating covers almost all transfer line pressure specs including air driven transfer systems
- Top loading for easy access for element change out
- Can be fitted with test points for oil sampling

Filter Housing Specifications

Flow Rating:	Up to 100 gpm (380 L/min) for 150 SUS (32 cSt) fluids
Max. Operating Pressure:	900 psi (60 bar)
Min. Yield Pressure:	3200 psi (220 bar), per NFPA T2.6.1
Rated Fatigue Pressure:	750 psi (52 bar) per NFPA T2.6.1-R1-2005
Temp. Range:	-20°F to 225°F (-29°C to 107°C)
Bypass Setting:	Cracking: 40 psi (2.8 bar) each filter housing
Porting Base & Cap: Element Case:	Cast Aluminum Steel
Element Change Clearance:	8.50" (215 mm) for 1KG; 17.5" (445 mm) for KKG; 26.5" (673 mm) for 27KG

How to Build a Valid Model Number for a Schroeder G3K9:

G3K9 Bowl Len	gth	– Element	Por	ting India	- cator	- Test Points						
Bowl Length												
	1 2 3	= 9"/18"/27 = 18" Bowl = 27" Bowl	" bowl wi with two with thre	th one (1) element (2) 9" elements e (3) 9" elements								
Element	Eleme	nt	Media		Micron for Ho	Rating using 1	Micror Housir	Rating for	Micron Housir	Rating for	Seal	S
Note: Element code can also be used to build a replacement element.	KG KKG 27KG	(9", 18", or 27" Bowl) (18" Bowl) (27" Bowl)	Z = Omit = AS = ZW = W = ED =	Excellement Z-Media (Synthetic) E Media (Cellulose) Anti-Stat Media (Synthetic) Aqua-Excellement ZW Media W Media (Water Removal) Electic Drive Media	1 = 3 = 5 = 10 = 25 = Omit =	$\begin{array}{c} & \\ 1 \mu (Z, ZW \\ Media) \\ 3 \mu (E, Z, AS, \\ ZW Media) \\ 5 \mu (Z, AS, \\ ZW Media) \\ 10 \mu (E, Z, \\ AS, ZW, ED \\ Media) \\ 25 \mu (E, Z, \\ ZW Media) \\ (W Media \\ Only) \end{array}$	1 = 3 = 5 = 10 = 25 = Omit =	$\begin{array}{c} 1 \mu (Z, ZW \\ Media) \\ 3 \mu (E, Z, AS, \\ ZW Media) \\ 5 \mu (Z, AS, \\ ZW Media) \\ 10 \mu (E, Z, \\ AS, ZW, ED \\ Media) \\ 25 \mu (E, Z, \\ ZW Media) \\ (W Media \\ Only) \end{array}$	1 = 3 = 5 = 10 = 25 = Omit =	1μ (Z, ZW Media) 3μ (E, Z, AS, ZW Media) 5μ (Z, AS, ZW Media) 10μ (E, Z, AS, ZW, ED Media) 25μ (E, Z, ZW Media) (W Media Only)	B = V =	Buna Viton

(Model code builder continued)

G3K9

Porting	Inlet Porting 0			Porting	Bypass	
	P16 =	1" NPTF	P16 =	1" NPTF	Omit =	40 PSI
	P20 =	1-1/4" NPTF	P20 =	1-1/4" NPTF	30 =	30 PSI
	P24 =	1-1/2" NPTF	P24 =	1-1/2" NPTF	50 =	50 PSI
	S16 =	SAE-16	S16 =	SAE-16		
	S20 =	SAE-20	S20 =	SAE-20		
	S24 =	SAE-24	S24 =	SAE-24		
	F16 =	1" SAE 4-bolt flange Code 61	F16 =	1" SAE 4-bolt flange Code 61		
	F20 =	1-1/4" SAE 4-bolt flange Code 61	F20 =	1-1/4" SAE 4-bolt flange Code 61		
	F24 =	1-1/2" SAE 4-bolt flange Code 61	F24 =	1-1/2" SAE 4-bolt flange Code 61		
	B16 =	ISO 228 G-1"	B16 =	ISO 228 G-1"		
	B20 =	ISO 228 G-1-1/4"	B20 =	ISO 228 G-1-1/4"		
	B24 =	ISO 228 G-1-1/2	B24 =	ISO 228 G-1-1/2		

Indicator¹

Omit = None		
Electrical Indicator	Current/Thermal Lockout	Normally Open/Closed
MS5 = 12" 4-Conductor Cable	Omit = None	Omit = None (All except MS18 & MS19)
MS10 = Male DIN Connector	LC = Low Current	NO = Normally Open (Only MS18 & MS19)
MS12 = Male 5 Pin Brad Harrison Connector	T = Thermal Lockout	NC = Normally Closed (Only MS18 & MS19)
MS16 = Weather Packed Seal Connector	LCT = Low Current with Thermal Lockout	
MS17 = Male Micro 4 Pin Brad Harrison Connector		
MS18 = 2 Pin Amp Junior Power Timer Connector		
MS19 = 2 Pin Deutsch Connector		

MS11 = 12 ft 4-Conductor Cable

MS15DC = #8-32 Post for Wire Connection

Electrical Visual Indicator	Current/Thermal Lockout
MS13DC = Threaded Connector and Light (Direct Current)	Omit = None
MS14DC = Male 5 Pin Brad Harrison Connector & Light (Direct Current)	LC = Low Current
MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current)	T = Thermal Lockout
	LCT = Low Current with Thermal Lockout

Visual Indicator

D5 = Latching Visual Pop-Up

D10 = Non-Latching Indicator

D5AS = Latching Visual Pop-Up with aluminum shroud

D8 = Visual with Thermal Lockout

D13 = Stainless Steel Latching Indicator with Music Wire Spring

Test Points

Omit =	None
C =	Indicator in cap
U =	Test point in cap (Upstream)
UU =	Test points in block (upstream and downstream)

1. Starting from the left you will choose your Indicator Type (visual or electrical), if it's visual you will use the visual column and that will complete this box. If it's electrical you will populate the column under "MS = Electrical." If no indicator is required you will omit the whole section and move onto the next section

2. Option UU will not be available in combination with indicator in block.

This page is intentionally left blank

HydraSPIN Filter Series

500-725 psi - 35-50 bar

GH6

GH

GH14

Features and Benefits

- Variety of differential indicator port options (visual and electrical indicators)
- Leak proof bar indicator, rugged visual indicator with protective aluminum shield is standard
- Proprietary bowl to element seal minimizes potential leakage point by use of one seal on element

35-112 gpm - 130-425 L/min

- Cartridge style element (non spin-on) that is proprietary and patented with integrated bypass valve features
- Wide variety of media grades that can be application specific
- Light weight bowl design with replaceable element minimizes landfill waste
- Mounting interchangeability with competitor's filter head

Part of Schroeder Industries' 2030 Initiative

GH11 Model No. of filters in photographs are GH6, GH9, GH11, and GH14

Filter Housing Specifications									
	GH6	GH9	GH11	GH14					
Flow Rating: (150 SUS (32 cSt) fluids)	Up to 35 gpm (130 L/min)	Up to 35 gpm (130 L/min)	Up to 87 (325 L/min)	Up to 112 gpm (425 L/min)					
Max. Operating Pressure:	725 psi (50 bar)	725 psi (50 bar)	500 psi (35 bar)	500 psi (35 bar)					
Min. Yield Pressure:	2600 psi (179 bar)	2600 psi (179 bar)	2700 psi (186 bar)	2700 psi (186 bar)					
Rated Fatigue Pressure:	725 psi (50 bar)	725 psi (50 bar)	500 psi (35 bar)	500 psi (35 bar)					
Temp. Range:	-20°F to 225°F (-29°C to 107°C)	-20°F to 225°F (-29°C to 107°C)	-22F° to 212°F (-30°C to 100°C)	-22F° to 212°F (-30°C to 100°C)					
Bypass Setting:	25 psi (1.7 bar) standard 50 psi (3.5 bar) optional Non-Bypassing	25 psi (1.7 bar) standard 50 psi (3.5 bar) optional Non-Bypassing	43 psi (3 bar) standard 87 psi (6 bar) optional Non-Bypassing	43 psi (3 bar) standard 87 psi (6 bar) optional Non-Bypassing					
Porting Head:	Cast Aluminum	Cast Aluminum	Cast Aluminum	Cast Aluminum					
Element Case:	Aluminum	Aluminum	Aluminum	Aluminum					
Weight:	3.2 lbs (1.4 kg)	3.8 lbs (1.7 kg)	8.0 lbs (3.6 kg)	10.0 lbs (4.5 kg)					
Element Change Clearance:	2" (50 mm)	2" (50 mm)	7.4" (187 mm)	7.4" (187 mm)					

HydraSPIN Filter Series GH

How to Build a Valid Model Number for a Schroeder GH6/9:

GH	Element	Porting Indi	cator						
Element	Element	Media	1	Micron Rating		Bypass		Seals	
Note: Element code can also be used to build a replacement element.	6G = 6" Bowl 9G = 9" Bowl Porting \$12 = \$A \$16 = \$A B12 = \$SA B16 = \$SA	Z = Excellemer (Synthetic) Omit = E Media (C AS = Anti-Stat M ZW = Aqua-Exce ZW Media W = W Media (\ ED = Electic Driv H = Excellemer Media	nt Z-Media cellulose) ledia (Synthetic) llement Water Removal) re Media nt Hydraspin	$3 = 3\mu (E ZW M ZW M S = 5\mu (Z, Media S = 10\mu (I ZW, E Media S = 25\mu (I Media S = 25\mu (I Media S = 25\mu (I Media S = (W M S = 10 M M M S = 10 M M S = 10 M M M M S = 10 M M M M M M M M M M M M M M M M M M $, Z, AS, fedia) , AS, ZW a) E, Z, AS, ED, H a) E, Z, ZW a) edia Only)	Omit = 50 = N =	25 PSID 50 PSID Non-Bypassing	Omit =	Buna
Indicator	Visual		Electrica	al					
Bar Indicator Locations	S: Omit = No L = Ba R = Ba B = Ba VA = Vis VM = Vis	ne r Indicator Left Side r Indicator Right Side r Indicator Left & Right sual Pop-Up w/ Auto Ro sual Pop-Up w/ Manual	Omit = M = DTC = Side DTO = eset DW = Reset	None Drilled, tapped DC 2 Wire, No DC 2 Wire, No AC/DC 3-wire	d, plugged ormally Clos ormally Ope (NO or NC	sed n)			

How to Build a Valid Model Number for a Schroeder GH11/14:

GH

Element Porting Indicator

Element	Element	Media	Micron Rating	Bypass	Seals
Note: Element code can also be used to build a replacement element. 11G = 11" Bowl 14G = 14" Bowl Porting Porting B24 = ISO 228 S24 = SAF 24		 Z = Excellement Z-Media (Synthetic) Omit = E Media (Cellulose) AS = Anti-Stat Media (Synthetic) ZW = Aqua-Excellement ZW Media W = W Media (Water Removal) ED = Electic Drive Media H = Excellement Hydraspin Media 	3 = 3μm (E, Z, AS, ZW Media) 5 = 5μm (Z, AS, ZW Media) 10 = 10μm (E, Z, AS, ZW, ED, H Media) 25 = 25μm (E, Z, ZW Media)	Omit = 47 PSID 87 = 87 PSID N = Non- Bypassing	Omit = Buna V = Viton
		_			
Indicator	Visual	Electrical			
	Omit = None VA = Visual P VM = Visual P VF = Visual A	op-Up w/ Auto Reset op-Up w/ Manual Reset nalog	ne ectric Switch - SDPT ectrical Switch and LED lig	ght - SPDT	

Medium Pressure Filter

GKF5

500 psi - 35 bar

100 gpm - 380 L/min

Features and Benefits

- HF4 Footprint filter with patented Quality Protection element
- Offered in pipe, SAE straight thread, flange and ISO 228 porting
- Available with NPTF inlet and outlet female test ports
- Various Dirt Alarm[®] options
- Allows consolidation of inventoried replacement elements by using KG-size elements

Model No. of filter in photograph is GKF51KGZ10SD5.

Filter Housing Specifications							
Flow Rating:	Up to 100 gpm (380 L/min) for 150 SUS (32 cSt) fluids						
Max. Operating Pressure:	500 psi (35 bar)						
Min. Yield Pressure:	1500 psi (100 bar) , per NFPA T2.6.1						
Rated Fatigue Pressure:	300 psi (35 bar), per NFPA T2.6.1-2005						
Temp. Range:	-20°F to 225°F (-29°C to 107°C)						
Bypass Setting:	Cracking: 40 psi (2.8 bar) Full Flow: 61 psi (4.2 bar)						
Porting Base & Cap: Element Case:	Gray Cast Iron Steel						
Weight of GKF5-1KG:	23.2 lbs. (10.5 kg)						
Element Change Clearance:	2.0" (51 mm)						

Medium Pressure Filter GKF5

How	to	Build	а	Valid	Model	Number	for a	a Schroeder	GKF5:
110 11	ιU	Dana	ч.	vana	model	NULLINCI			O IG 3 .

GKF5	_	-		_	
	Bowl Length	Element	Porting/Test Points		Indicato

Bowl Length											
	1 = One 9'	1 = One 9" Bowl Length									
Element	Element	Media		Micro	n Rating	Seals					
Note: Element code can also be used to build a replacement element.	KG (9"Bowl)	a (Synthetic) hthetic) W Media moval)	1 3 5 10 25 Omit	 1μ (Z, ZW Media) 3μ (E, Z, AS, ZW Media) 5μ (Z, AS, ZW Media) 10μ (E, Z, AS, ZW, ED Media) 25μ (E, Z, ZW Media) (W Media Only) 	Omit = Buna V = Viton						
Porting/Test Points	Porting		Bypass	1	Test Points						
	P24 = 1-1/2" N P32 = 2" NPTF S24 = SAE-24 S32 = SAE-32 F24 = 1-1/2" S B24 = ISO 228	Omit = 40 F 50 = 50 F	PSI PSI	Omit = None L = Two 1/4" NPTF inlet an ports	d outlet female test						
Indiantar1			·								

Indicator

Omit = None

Electrical Indicator	Current/Thermal Lockout	Normally Open/Closed
MS5 = 12" 4-Conductor Cable	Omit = None	Omit = None (All except MS18 & MS19)
MS10 = Male DIN Connector	LC = Low Current	NO = Normally Open (Only MS18 & MS19)
MS12 = Male 5 Pin Brad Harrison Connector	T = Thermal Lockout	NC = Normally Closed (Only MS18 & MS19)
MS16 = Weather Packed Seal Connector	LCT = Low Current with Thermal Lockout	
MS17 = Male Micro 4 Pin Brad Harrison Connector		
MS18 = 2 Pin Amp Junior Power Timer Connector		
MS19 = 2 Pin Deutsch Connector		

MS11 = 12 ft 4-Conductor Cable

MS15DC = #8-32 Post for Wire Connection

Electrical Visual Indicator	Current/Thermal Lockout
MS13DC = Threaded Connector and Light (Direct Current)	Omit = None
MS14DC = Male 5 Pin Brad Harrison Connector & Light (Direct Current)	LC = Low Current
MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current)	T = Thermal Lockout
	LCT = Low Current with Thermal Lockout

MS = Cam Operated Switch with 1/2" Conduit, Female Connection

Visual Indicator

- **D** = Pointer
- **D5** = Latching Visual Pop-Up

D8 = Visual with Thermal Lockout **D10** = Non-Latching Indicator

- **D5AS** = Latching Visual Pop-Up with aluminum shroud
- D13 = Stainless Steel Latching Indicator with Music Wire Spring

1. Starting from the left you will choose your Indicator Type (visual or electrical), if it's visual you will use the visual column and that will complete this box. If it's electrical you will populate the column under "MS = Electrical." If no indicator is required you will omit the whole section and move onto the next section

Return Line Filter

GKF3

300 psi - 20 bar

100 gpm - 380 L/min

v.122223

Features and Benefits

- HF4 Footprint filter with patented Quality Protection element
- Offered in pipe, SAE straight thread, flange, and ISO 228 porting
- Various Dirt Alarm[®] options
- Available with NPTF inlet and outlet female test ports
- Available with magnet inserts
- Available with housing drain plug
- Takes the standard "KG" element in KG, KKG or 27KG lengths
- Allows consolidation of inventoried replacement elements by using KG-size elements

Model No. of filter in photograph is GKF31K10SD5.

Filter Housing Specifications		
Flow Rating:	Up to 100 gpm (380 L/min) for 150 SUS (32 cSt) fluids	
Max. Operating Pressure:	300 psi (20 bar)	
Min. Yield Pressure:	1000 psi (70 bar), per NFPA T2.6.1	
Rated Fatigue Pressure:	290 psi (20 bar), per NFPA T2.6.1-2005	
Temp. Range:	-20°F to 225°F (-29°C to 107°C)	
Bypass Setting:	Cracking: 30 psi (2 bar) Full Flow: 51 psi (4 bar)	
Porting Base & Cap: Element Case:	Die Cast Aluminum Steel	
Weight of KF3-1KG: Weight of KF3-2KG: Weight of KF3-3KG:	10.5 lbs. (4.8 kg) 14.2 lbs. (6.4 kg) 18.5 lbs. (8.4 kg)	
Element Change Clearance:	1.50" (40 mm) for all lengths	

How to Build a Valid Model Number for a Schroeder GKF3:

GKF3

	_	-		
Bowl Length	n Element	Magnet/Porting/ Bypass	Indicator	Options

Bowl Length				
	 1 = 9"/18"/27" bowl with one (1) element 2 = 18" Bowl with two (2) 9" elements 3 = 27" Bowl with three (3) 9" elements 			
Element	Element	Media	Micron Rating Seals	
Note: Element code can also be used to build a replacement element.	KG (9", 18", or 27" Bowl) KKG (18" Bowl) 27KG (27" Bowl)	 Z = Excellement Z-Media (Synthetic) Omit = E Media (Cellulose) AS = Anti-Stat Media (Synthetic) ZW = Aqua-Excellement ZW Media W = W Media (Water Removal) ED = Electic Drive Media 	1 = 1μm (Z, ZW Media) Omit = Buna 3 = 3μm (E, Z, AS, ZW Media) V = Viton Media) 5 = 5μm (Z, AS, ZW Media) V = Viton 10 = 10µm (E, Z, AS, ZW, Media) Hedia Hedia Hedia 25 = 25µm (E, Z, ZW Media) Hedia Hedia Hedia Omit = (W Media Only) Hedia Hedia Hedia	
Magnet/Porting/Bypass	Magnet Option	Porting	Bypass	
	Omit = None M = Magnet	P = 1-1/2" NPTF S = SAE-24 F = 1-1/2" SAE split 4-bolt flange code B = ISO 228 G-1-1/2	Omit = 30 PSI 40 = 40 PSI 61 50 = 50 PSI 60 = 60 PSI	
Indicator ¹				
Omit = None				
Electrical Indicator		Current/Thermal Lockout	Normally Open/Closed	
MS5 = 12" 4-Conducto	or Cable	Omit = None	Omit = None (All except MS18 & MS19)	
MS10 = Male DIN Connector MS12 = Male 5 Pin Brad Harrison Connector MS16 = Weather Packed Seal Connector MS17 = Male Micro 4 Pin Brad Harrison Connector MS18 = 2 Pin Amp Junior Power Timer Connector MS19 = 2 Pin Deutsch Connector		T = Thermal Lockout LCT = Low Current with Thermal Lockou	NC = Normally Closed (Only MS18 & MS19) NC = Normally Closed (Only MS18 & MS19)	
MS11 = 12 ft 4-Conductor Cable MS15DC = 3000 PSI max #8-32 Post for Wire Connection				
	tor	Current/Thorne		

Electrical Visual Indicator	Current/Inermal Lockout
MS13DC = Threaded Connector and Light (Direct Current)	Omit = None
MS14DC = Male 5 Pin Brad Harrison Connector & Light (Direct Current)	LC = Low Current
MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current)	T = Thermal Lockout
	LCT = Low Current with Thermal Lockout
MS = Cam Operated Switch with 1/2" Conduit, Female Connection	·
Visual Indianter	

V	isu	al	Indi	ica	tor

D = Pointer	D8 = Visual with Thermal Lockout
D5 = Latching Visual Pop-Up	D10 = Non-Latching Indicator
D5AS = Latching Visual Pop-Up with aluminum shroud	D13 = Stainless Steel Latching Indicator with Music Wire Spring
Options	

· · ·	
	Omit = None
	L = Two 1/4" NPTF inlet and outlet test ports
	G426 = 3/4" drain on bottom of housing
	G440 = 1/2" drain on bottom of housing

1. Starting from the left you will choose your Indicator Type (visual or electrical), if it's visual you will use the visual column and that will complete this box. If it's electrical you will populate the column under "MS = Electrical." If no indicator is required you will omit the whole section and move onto the next section

Return Line Filter

GKF3

Return Line Filter with Threaded Bowl

GKL3

300 psi - 20 bar

120 gpm - *455 L/min*

Features and Benefits

- Threaded bowl allows for easier removal and facilitates element changes
- Available with KG-size elements
- Available with 1½" and 2" porting
- Offered in pipe, SAE straight thread, ISO 228, and flange porting
- Various Dirt Alarm[®] options
- Available with NPTF inlet and outlet female test ports
- Available with housing drain plug

Model No. of filter in photograph is GKL31KGZ10F24.

Filter Housing Spe	cifications
Flow Rating:	Up to 100 gpm (380 L/min) for 150 SUS (32 cSt) fluids for P24, S24, F24 and B24 porting
	Up to 120 gpm (455 L/min) for 150 SUS (32 cSt) fluids for P32, S32 and B32 porting
Max. Operating Pressure:	300 psi (20 bar)
Min. Yield Pressure:	1000 psi (70 bar), per NFPA T2.6.1
Rated Fatigue Pressure:	300 psi (20 bar), per NFPA T2.6.1-2005
Temp. Range:	-20°F to 225°F (-29°C to 107°C)
Bypass Setting:	Cracking: 30 psi (2 bar) Full Flow: 68 psi (4.7 bar)
Porting Base & Cap: Element Case:	Cast Aluminum Steel
Weight of KL3-18LCG: Weight of KL3-1KG: Weight of KL3-2KG: Weight of KL3-3KG:	20.00 lbs. (9.1 kg) 14.75 lbs. (6.7 kg) 18.50 lbs. (8.4 kg) 22.75 lbs. (10.3 kg)
Element Change Clearance:	2.50" (64 mm)

Return Line Filter with Threaded Bowl GKL3

How to Build a	Valid Model Numb	er for a Schroeder	GKL3:		
GKL3			_		
	Bowl Length Element	Porting	ndicator Tes	t Points/	
L					
Bowl Length					
	1 = 9"/18"/27" bowl w	vith one (1) element			
	2 = 18" Bowl with two	o (2) 9" elements			
	$3 = 27^{\circ}$ Bowl with thr	ee (3) 9" elements			1
Element	Element	Media	N	licron Rating	Seals
Note: Element code	KG (9", 18", or	Z = Excellement Z-Medi	a (Synthetic)	1 = 1μ (Ζ, ΖW Media)	Omit = Buna
can also be used to	27" Bowl)	$AS = \Delta nti_Stat Media (Svi$	nthetic)	$3 = 3\mu$ (E, Z, AS, ZW Media) $5 = 5\mu$ (Z AS, ZW Media)	V = Viton
build a replacement	27KG (27" Bowl)	ZW = Aqua-Excellement Z	ZW Media	$10 = 10\mu$ (E, Z, AS, ZW, ED	
element.		W = W Media (Water Re	moval)	Media)	
		Electic Drive Media		25 = 25µ (E, Z, ZW Media)	
D				Omit = (W Media Only)	
Porting	Porting		Bypass		
	P24 = 1-1/2" NPTF P32 = 2" NPTF		On	nit = 30 PSI 40 = 40 PSI	
	S24 = SAE-24			50 = 50 PSI	
	\$32 = SAE-32	lt flamma and a Od			
	F24 = 1-1/2" SAE 4-b0 B24 = ISO 228 G-1-1/2	2"			
	B32 = ISO 228 G-2"	-			
Indicator ¹					
Omit = None					
Electrical Indicator	Electrical Indicator Current/Thermal Lockout Normally Open/Closed				
MS5 = 12" 4-Conductor Cable Omit = None Omit = None (All except MS18 & MS19)			& MS19)		
MS10 = Male DIN Cor	inector	LC = Low Current		NO = Normally Open (Only MS18 & MS19)	
MS12 = Male 5 Pin Br	ad Harrison Connector	T = Thermal Lockout		NC = Normally Closed (Only MS18 & MS19)	
MS16 = Weather Pack	ed Seal Connector	LUI = Low Current with	n Thermal Lockout		
MS17 = Male Micro 4 Pin Brad Harrison Connector MS18 = 2 Pin Amp Junior Power Timer Connector					
MS19 = 2 Pin Deutsch	Connector				
MS11 – 12 ft /-Con	luctor Cable				
MS15DC = #8-32 Post	for Wire Connection				
Electrical Visual India	Electrical Visual Indicator				
MS13DC = Threaded	Connector and Light (Direct 0	Current)	Omit = None		
MS14DC = Male 5 Pin	Brad Harrison Connector & I	Light (Direct Current)	LC = Low Currer	nt	
MS14AC = Male 5 Pin	Brad Harrison Connector & I	Light (Alternating Current)	T = Thermal Lo	ockout	
	LCT = Low Current with Thermal Lockout				
Visual Indicator					
D5 = Latching Vis	sual Pop-Up	D10 = Non-Latch	ing Indicator		
D5AS = Latching Vis	sual Pop-Up with aluminum s	hroud D13 = Stainless S	Steel Latching Indica	tor with Music Wire Spring	
lest Points/Bowl Drain	Test Point		Bowl Dr	ain	
	Omit = None	- inlat and autlat famals to	Omi	t = None	· · · ·
			DF	$x = 3/8^{\circ}$ drain on bottom of house	sing
1. Starting from the left you	will choose your Indicator Type (vi	isual or electrical), if it's visual yo	ou will use the visual col	lumn and that will complete this box.	

If it's electrical you will populate the column under "MS = Electrical." If no indicator is required you will omit the whole section and move onto the next section

Top-Ported Return Line Filter

v.122223

GMLF1

300 psi - 20 bar

200 gpm - 760 L/min

Features and Benefits

- Equipped with inlet and outlet manifolds
- HF4 Footprint filter with patented Quality Protection element
- Offered in pipe and flange porting
- Available in 2, 4, or 6 element configurations
- Various Dirt Alarm[®] options
- Available with NPTF inlet and outlet female test ports
- Available with housing drain plugs

Model No. of filter in photograph is GMLF14KG10PD.

Filter Housing Specifications		
Flow Rating:	Up to 200 gpm (760 L/min) for 150 SUS (32 cSt) fluids	
Max. Operating Pressure:	300 psi (20 bar)	
Min. Yield Pressure:	1000 psi (70 bar), per NFPA T2.6.1	
Rated Fatigue Pressure:	250 psi (17 bar), per NFPA T2.6.1-2005	
Temp. Range:	-20°F to 225°F (-29°C to 107°C)	
Bypass Setting:	Cracking: 25 psi (2 bar) Full Flow: 60 psi (4 bar)	
Porting Base & Cap: Element Case:	Anodized Cast Aluminum Steel	
Weight of MLF1-2KG: Weight of MLF1-4KG: Weight of MLF1-6KG:	44.0 lbs. (20.0 kg) 50.0 lbs. (23.0 kg) 58.0 lbs. (26.0 kg)	
Element Change Clearance:	2.0" (55 mm)	

Top-Ported Return Line Filter GMLF1

GMLF1 Image: Description of the second basis Porting Indicator Test Points/ Test Points/ Stand Data Bowl Length Element Porting Indicator Test Points/ Test Points/ Stand Data Bowl Length 2 = 97/18/127* bowl with one (1) element in each bowl 4 = 18* Bowl with two (2) 9* elements in each bowl 6 = 27* Bowl with three (3) 9* elements in each bowl Micron Rating Seals Chement and side bue used and side bue used and side bue used build a replacement element. Media (27* Bowl) Ze Excellement Z-Media (Synthetic) 2* Excellement Z-Media (Synthetic) 2* Excellement Z-Media (Synthetic) 2* Excellement Z-Media (Synthetic) 2* Excellement Z-Media (Synthetic) 1 = 1 µ (2, ZM Media) 3 = 3 µ (2, ZA, S, ZW, Media) 2* Excellement Z-Media 9* Wedia(Media (Synthetic)) 2* Excellement Z-Media 0* Wedia(Media (Synthetic)) 2* Excellement Z-Media 0* Wedia(Media Only) Omit = Bue 2* Excellement Z-Media 0* Wedia 0* Wedia(Media Only) Omit = Son 2* Ze 25 µ (E, Z, Z, ZW Media) 0* Test = 2* DP Site 5* E 2* Localustor Cable Media) Omit = None 2* Ze 25 µ (E, Z, Z, ZW Media) 0* Test = 2* DP Site 5* De 5* D	How to Build a	a Valid Mo	del Numb	oer f	or a Schroeder G	MLF1:				
Indicator Test Pointer Bowl Length Element Porting Indicator Feet Pointer Bowl Bowl Length 2 = 97181/27* bowl with two e (1) element in each bowl 4 = 18* Bowl with two (2) 9* elements in each bowl 6 = 27* Bowl with twe (2) 9* elements in each bowl 6 = 27* Bowl with twe (2) 9* elements in each bowl 6 = 27* Bowl (2) I = 10 (2, 2W Media) Seals Note: Element code can also be used to an also be used to be used to an also be used to an also be used to an also be used to be used to an also be used to an al	GMLF1	_	-	-	_	_				
Bowl Length 2 = 9'18'/2'' bowl with one (1) elements in each bowl Seals 6 = 27'' Bowl with two (2) 9' elements in each bowl 6 = 27''' Seals Seals Element Element Media Media (Synthetic) 1 = 10 / 2. W Media) 3 = 30 / 2. X, 2.W Media) 3 = 30 / 2. X, 2.W Media) Onti = Bune Und a replacement KG (19'' Bowl) Z = Excellement Z-Media (Synthetic) 1 = 10 / 2. Z W Media) 3 = 30 / 2. X, 2.W Media) Y = Vition Und a replacement KG (19'' Bowl) As = Anti-Stat Media (Synthetic) 5 = 50 / 2. A, 2.W Media) Y = Vition Y = Vition Und a replacement Media (Water Removal) ED = Electic Drive Media D = 2 + 12'' NPTF Media (Water Removal) ES = 250 / 2. K, 2.W Media) Ontit = 25 PSI Porting Magnet Inserts F = 2 + 12'' NPTF Bypass Ontit = 25 PSI Media (Water Removal) ES = 50 PSI Electrical Indicator Current/Thermal Lockout Normally Open/Closed Omtit = None (Under None (Under None Media No19) N = Nomally Closed (Only MSI & MS19) N = Nomally Closed (Only MSI & MS19		Bowl Length	Element		Porting India	cator	Test Po Bowl D	ints/ Irain		
Bown Length 2 = 9'118'22' bowl with wor (2) 9' elements in each bowl 4 = 18'' Bowl with two (2) 9' elements in each bowl Element Element Media Micron Rating Seals Note: Element code can also be used to build a replacement. KG (9'', 18', or 27'' Bowl) Z = Excellement Z-Media (Synthetic) 27'' Bowl) 1 = 1 µ (Z, ZW Media) 3 = 0 µ (E, Z, AS, ZW, Redia) Omit = Bona 3 = 0 µ (E, Z, AS, ZW, Redia) Omit = Bona 3 = 0 µ (E, Z, AS, ZW, Redia) V = Vition Verified Word (2''' Bowl) Z''' Bowl Z'''' Bowl Z'''' Bowl S = 5 µ (Z, AS, ZW, Redia) Omit = Bona 3 = 0 µ (E, Z, AS, ZW, Redia) Omit = Bona 2 = 25 µ (E, Z, S, ZW, Redia) Omit = Bona 2 = 25 µ (E, Z, S, ZW, Redia) Omit = U V = Vition Porting Magnet Porting Bypass Omit = 0 µ (E, Z, S, ZW, Redia) Omit = 25 PSI 50 = 50 PSI So = 50 PSI Indicator Omit = None Ms Magnet Inserts F = 2·1/2' NPTF F = 2·1/2' SAE 4-Bolt Flange Code 61 Omit = -25 PSI 50 = 50 PSI Omit = None (All except MS18 & MS19) No = Normally Open/Closed MS5 12 / A conductor Cable MS10 = Male DIN Connector Omit = None LC = Low Current Normally Open/Closed Omit = None LC = Low Current Normally Open/Closed Omit = None MS12 = Pin Anglunor Power Timer Connector MS12 = Pin Anglunor Power Timer Connector MS1	David Law oth									
Image: Series of the series	Bowl Length	2 -	0"/18"/27" h		ith one (1) element in eac	ah howl				
6 = 27" Bowl with three (3) 9' elements in each bowl Element Element code can also be used build a replacement element. KG (9', 16', or 27' Bowl) Z = Excellement Z-Media (Synthetic) D'mit = E Media (Cellulose) AS = Anti-Stat Media (Synthetic) ZW = Aqua-Scellement ZW Media B = 3µ (E, Z, AS, ZW Media) S = 5µ (Z, AS, ZW Media) S = 5µ (Z, AS, ZW Media) S = 2µ (Z, AS, ZW Media) D'mit = None ED = Electic Drive Media Omit = None ED = Electic Drive Media Omit = None S = 22µ (Z, Z, ZW Media) D'mit = None ED = Electic Drive Media Omit = None S = 22µ (Z, Z, ZW Media) D'mit = None ED = 2.1/2' NPTF F = 2.1/2' SAE 4-Bolt Flange Code 61 Omit = None S = 25P (S, Z, W Media) D'mit = None Electrical Indicator Omit = None Current/Thermal Lockout Normally Open/Closed MS5 = 12' 4-Conductor Cable MS10 = Male DIN Connector MS12 = Ale S Pin Brad Harrison Connector MS12 = Ale S Pin Brad Harrison Connector MS13 = 2 Pin Datus Harrison Connector MS13 = 2 Pin Datus Harrison Connector MS14 = 2 Pin Ap Junic Power Imer Connector MS14 = 2 Pin Datus Harrison Connector MS14 = 2 Pin Datus Pin Brad Harrison Connector MS14 = 2 Pin Datus Harrison Connector AL Light (Direct Current) MS14 = 2 Pin Datus Harrison Connector AL Light (Direct Current) MS14 = 2 Pin Brad Harrison Connector AL Light (Matemating Current) MS14 = 2 Male S Pin Brad Harrison Connector AL Light (Matemating Current) MS14 = 2 Pin Datus Harrison Connector A		2 = 4 =	18" Bowl wi	th two	(2) 9" elements in each l	bowl				
Element Media Micron Rating Seals Note: Element code can also be used to build a replacement element. KG (9: 18', or 27' Bow) Z = Excellement Z-Media (Synthetic) AS = Anti-Stat Media (Synthetic) ZYKG (13' Bow) 1 = 10 (2: Z. M. Sz W. Media) S = 30 (E: Z. AS, ZW. Media) S = 50 (Z, AS, ZW. Media) Omit = Nune W = Windia (Vater Remova) 3 = 50 (Z, AS, ZW. Media) S = 50 (Z, AS, ZW. Media) Omit = None Media 2 = 25 (E, Z. XW. Media) D = 100 (E, Z. AS, ZW. Media) V = Vition Porting Magnet Porting Bypass Dmit = None M = Magnet Inserts P = 2-1/2" NPTF F = 2-1/2" NPTF F = 2-1/2" SAE 4-Boit Flange Code 61 Omit = 25 PSI 50 = 50 PSI Dmit = 25 PSI 50 = 50 PSI Indicator' Omit = None M = Magnet Inserts P = 2-1/2" NPTF F = 2-1/2" NPTF F = 2-1/2" NET Conductor Cable Omit = None LC = Low Current T = Thermal Lockout Omit = 25 PSI 50 = 50 PSI Omit = 25 PSI 50 = 50 PSI MS10 = Male DN Connector MS = 12" 4-Conductor Cable Omit = None LC = Low Current T = Thermal Lockout Omit = None (All except MS18 & MS19) NC = Normally Open/Closed MS10 = Male DN Connector MS10 = Male DN Connector Current/Thermal Lockout LC = Low Current MS11 = 21 A 4-Conductor Cable Omit = None LC = Low Current MS13D = Threaded Connector and Light (Direct Current) MS14D = Male 5 PIn Brad Harrison Connector & Light (Alternating Current) MS14D = Male 5 PIn Brad Harrison Connector & Light (6 =	27" Bowl wi	th thre	e (3) 9" elements in each	n bowl				
Note: Element code can also be used to build a replacement element. KG (9', 18', or 27' Bowl) Z = Excellement Z/Media (Synthetic) AS = Anti-Stat Media (Synthetic) AS = Anti-Stat Media (Synthetic) ZYKG (2'' Bowl) 1 = 11 (2, Z, Z/W Media) S = 5 (2, Z, Z/W Media) S = 5 (2, Z, Z/W Media) S = 5 (2, Z, Z/W Media) D = 10 (E, Z, Z, Z/W Media) D = 10 (W Media Only) D = 1	Element	Element Element		Med	Media			Micron Rating Seals		
Non-induction 27" Bowl (a) Omit = E Media (Cellulose) 3 = 3µ (E, Z, AS, ZW Media) V = Viton Duild a replacement element. XFG (27" Bowl) As = Anti-Statt Media (Synthetic) 3 = 3µ (E, Z, AS, ZW Media) V = Viton Porting Magnet Porting Bypass Domit = Common (Wedia) Domit = C	Note: Element cod	KG	(9", 18", or		Z = Excellement Z-Med	ia (Synthetic)		1 = 1µ (Z, ZW Media)	Omit = Buna	
build a replacement element. XRS (18 BOW) 27KG (27 BoW) XP = Aque-Scelement ZVW Media W = W Media (Water Removal) ED = Electic Drive Media 3 = 91, U, EZ, AS, ZW, ED Media) 3 = 91, U, EZ, AS, ZW, ED Media) Porting Magnet Porting Bypass Omit = None M = Magnet Inserts P = 2:1/2' NPTF F = 2:1/2' SAE 4-Bolt Flange Code 61 Omit = 25 PSI 50 = 50 PSI Indicator Omit = None M = Magnet Inserts F = 2:1/2' SAE 4-Bolt Flange Code 61 Omit = 25 PSI 50 = 50 PSI Indicator Omit = None Electrical Indicator Normally Open/Closed MS10 = Male DN Connector MS10 = Male DN Connector Omit = None L C = Low Current with Thermal Lockout Normally Open (On) MS18 & MS19) NC = Normally Closed (Only MS18 & MS19) NC = Normally Closed (On	can also be used to		27" Bowl)	Omi	it = E Media (Cellulose)	nthatia)		$3 = 3\mu (E, Z, AS, ZW Media)$	V = Viton	
element. Brits (Er both) W = W Media (Water Removal) ED = Electic Drive Media Z5 = 25µ (E, Z, W Media) Omit = 25 µ (Z, ZW Media) Omit = (W Media Only) Porting Magnet Porting Bypass Omit = None M = Magnet Inserts P = 2-1/2" NPTF F = 2-1/2" SAE 4-Bolt Flange Code 61 Bypass Omit = None Electrical Indicator Current/Thermal Lockout Normally Open/Closed Omit = None Electrical Indicator Cable MS10 = Male DIN Connector MS12 = Male 5 Pin Brad Harrison Connector MS13 = 2 Pin Brad Harrison Connector MS13 = 2 Pin Amp Junior Power Timer Connector MS19 = 2 Pin Amp Junior Power Timer Connector MS10 = #8-32 Post for Wire Connector Current/Thermal Lockout MS10 = Threaded Connector and Light (Direct Current) MS10 = 12 ft 4-Conductor Cable MS10 = #8-32 Post for Wire Connector Omit = None LC = Low Current with Thermal Lockout MS10 = Threaded Connector and Light (Direct Current) MS14 AC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) MS14AC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) MS14AC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) MS14AC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) MS14AC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) MS14AC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) MS14AC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) MS14AC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) D5 = Laching Visual Pop-Up Dif D = Non-Laching Indicator D5 = Latching Visual Pop-Up MS D13 = Sta	build a replacemen	1 27KG	(18" BOWI) (27" Bowl)	ZV	V = Aqua-Excellement 2	ZW Media		$5 = 5\mu$ (Z, AS, ZW Media) $10 = 10\mu$ (E, Z, AS, ZW, ED		
Both Section Both Section Both Section Both Section Porting Magnet Porting Sypass Omit = None M = Magnet Inserts P = 2·1/2' NPT F F = 2·1/2' SAE 4-Bolt Flange Code 61 Omit = 25 PSI 50 = 50 PSI Indicator! Omit = None F = 2·1/2' SAE 4-Bolt Flange Code 61 Omit = 25 PSI 50 = 50 PSI Indicator! Omit = None Current/Thermal Lockout Normally Open/Closed MS5 = 12' - Conductor Cable Omit = None LC = Low Current Omit = None (All except MS18 & MS19) NG = Normally Open (Only MS18 & MS19) NG = Normally Closed (Only MS18 & MS19) NG = Norn-Latching Indicator D1 = Norn-Latching Indicator MS1 = 12' Tool 14''' Conduit, Female Connection Visual	element.		(27 0000)	v	V = W Media (Water Re	moval)		Media)		
Porting Magnet Porting Dimit = None P = 2·1/2" NPTF Bypass Omit = None Magnet Inserts F = 2·1/2" SAE 4-Bolt Flange Code 61 Omit = 25 PSI 50 = 50 PSI Indicator* Omit = None Electrical Indicator Current/Thermal Lockout Normally Open/Closed MS5 = 12" 4-Conductor Cable Omit = None Omit = None Normally Open/Closed MS10 = Male DIN Connector LC = Low Current Normally Open/Closed NO = Normally Open (Only MS18 & MS19) MS12 = Male Din Connector LC = Low Current T = Thermal Lockout NC = Normally Open (Only MS18 & MS19) MS14 = 2 Pin Deutsch Connector MS11 = 12 ft 4-Conductor Cable LC = Low Current with Thermal Lockout NC = Normally Closed (Only MS18 & MS19) MS12D = Threaded Connector and Light (Direct Current) MS11 = 12 ft 4-Conductor Cable Omit = None LC = Low Current MS14DC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) MR1 = None LC = Low Current T = Thermal Lockout MS14DC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) MS12 = Can Operated Switch with 1/2" Conduit, Female Connection T = Thermal Lockout LC = Low Current T = Thermal Lockout				E	D = Electic Drive Media			25 = 25µ (E, Z, ZW Media)		
Porting Magnet Porting Bypass Omit = None M = Magnet Inserts P = 2·1/2" NPTF F = 2·1/2" SAE 4-Bolt Flange Code 61 Omit = 25 PSI 50 = 50 PSI Indicator1 Omit = None See 50 PSI Electrical Indicator Current/Thermal Lockout Normally Open/Closed MS1 = None Omit = None Le Low Current Normally Open/Closed MS1 = Alle S Pin Brad Harrison Connector MS1 = 2 Pin Deutsch Connector T = Thermal Lockout Omit = None LC = Low Current with Thermal Lockout MS1 = 12 ft 4-Conductor Cable MS19 = 2 Pin Deutsch Connector T = Thermal Lockout Normally Open (Only MS18 & MS19) NC = Normally Open (Only MS18 & MS19) NC = Normally Open (Only MS18 & MS19) MS1 = 12 ft 4-Conductor Cable MS19 = 2 Pin Deutsch Connector UCT = Low Current with Thermal Lockout Normally Closed (Only MS18 & MS19) MS11 = 12 ft 4-Conductor Cable MS13DC = ##-32 Post for Wire Connector Omit = None LC = Low Current Omit = None LC = Low Current MS14AC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) MS14AC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) Omit = None LC = Low Current MS14AC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) D = Pointer D = Pointer D = Pointer D = Pointer D = Von-Latching Indicator <t< th=""><th>-</th><th></th><th></th><th></th><th></th><th></th><th>On</th><th>nit = (vv Media Only)</th><th></th></t<>	-						On	nit = (vv Media Only)		
Omit = None M = Magnet Inserts P = 2-1/2" NPTF F = 2-1/2" SAE 4-Bolt Flange Code 61 Omit = 25 PS1 50 = 50 PS1 Indicator1 Omit = None Electrical Indicator Current/Thermal Lockout Normally Open/Closed MS5 = 12" 4-Conductor Cable MS10 = Male DIN Connector Omit = None Dift = None LC = Low Current T = Thermal Lockout Omit = None (L = Low Current with Thermal Lockout) Omit = None (L = Low Current with Thermal Lockout) MS16 = Weather Packed Seal Connector T = Thermal Lockout CT = Low Current with Thermal Lockout Normally Open (Only MS18 & MS19) MS16 = Weather Packed Seal Connector T = Thermal Lockout CT = Low Current with Thermal Lockout Normally Open (Only MS18 & MS19) MS16 = Veather Packed Seal Connector CT = Low Current with Thermal Lockout Normally Open (Only MS18 & MS19) MS17 = Male Micro 4 Pin Brad Harrison Connector CT = Low Current with Thermal Lockout Normally Open (Only MS18 & MS19) MS19 = 2 Pin Deutsch Connector MS11 = 12 ft 4-Conductor Cable MS150 = HS - 22 Post for Wire Connection Electrical Visual Indicator Current/Thermal Lockout Omit = None MS14DC = Threaded Connector and Light (Direct Current) Omit = None MS14DC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) T = Thermal Lockout MS14DC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) Dit = None <td>Porting</td> <td>Magnet</td> <td></td> <td></td> <td>Porting</td> <td></td> <td></td> <td>Bypass</td> <td></td>	Porting	Magnet			Porting			Bypass		
Indicator Omit = None Electrical Indicator Current/Thermal Lockout Normally Open/Closed MS5 = 12*4-Conductor Cable Omit = None MS5 = 12*4-Conductor Cable Omit = None MS10 = Male DIN Connector Current/Thermal Lockout Omit = None (All except MS18 & MS19) MS12 = Male DIN Connector T = Thermal Lockout Omit = None (Control of Control		Omit =	None	anta	P = 2-1/2" NPTF			Omit = 25 PSI		
Indicator' Verrent/Thermal Lockout Normally Open/Closed Omit = None Current/Thermal Lockout Omit = None (All except MS18 & MS19) MS10 = Male DIN Connector Omit = None Current/Thermal Lockout Omit = None (All except MS18 & MS19) MS10 = Male DIN Connector LC = Low Current T = Thermal Lockout De Normally Closed (Only MS18 & MS19) MS11 = Male Micro 4 Pin Brad Harrison Connector MS17 = Male Micro 4 Pin Brad Harrison Connector LCT = Low Current with Thermal Lockout De Normally Closed (Only MS18 & MS19) MS11 = 12 ft 4-Conductor Cable MS19 = 2 Pin Deutsch Connector LCT = Low Current with Thermal Lockout MS19 = 2 Pin Amy Junior Power Timer Connector MS19 = 2 Pin Deutsch Connector MS11 = 12 ft 4-Conductor Cable MS19 = 2 Pin Amy Junior Power Timer Connector MS19 MS19 = 2 Pin Amy Junior Power Timer Connector LGT = Low Current With Thermal Lockout MS19 Omit = None Lectrical Visual Indicator Current/Thermal Lockout Omit = None LC = Low Current T = Thermal Lockout MS14DC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) MS = Cam Operated Switch with 1/2" Conduit, Female Connection DT = Thermal Lockout LCT = Low Current with Thermal Lockou		IVI =	Magnet Ins	ens	F = 2-1/2 SAE 4-	Boil Flange Co	ode o	30 = 00101		
Omit = None Electrical Indicator Current/Thermal Lockout Normally Open/Closed MS5 = 12" 4-Conductor Cable MS1 = Male DIN Connector Omit = None Current/Thermal Lockout Omit = None (All except MS18 & MS19) MS10 = Male DIN Connector T = Thermal Lockout C = Low Current with Thermal Lockout No = Normally Open (Only MS18 & MS19) MS11 = Male Micro 4 Pin Brad Harrison Connector T = Thermal Lockout CT = Low Current with Thermal Lockout No = Normally Closed (Only MS18 & MS19) MS11 = 12 ft 4-Conductor Cable MS11 = 12 ft 4-Conductor Cable CT = Low Current with Thermal Lockout Normally Closed (Only MS18 & MS19) MS11 = 12 ft 4-Conductor Cable MS11 = 12 ft 4-Conductor Cable CT = Low Current Thermal Lockout Normally Closed (Only MS18 & MS19) MS11 = 12 ft 4-Conductor Cable MS11 = 12 ft 4-Conductor Cable CT = Low Current Thermal Lockout CT = Low Current MS12 = Male 5 Pin Brad Harrison Connector & Light (Direct Current) Omit = None C = Low Current Thermal Lockout MS14DC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) T = Thermal Lockout CT = Low Current MS14DC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) D = Non-Latching Visual Pop-Up D = Non-Latching Indicator	Indicator ¹									
Electrical Indicator Current/Thermal Lockout Normally Open/Closed MS5 12" 4-Conductor Cable Omit = None Current/Thermal Lockout Omit = None (All except MS18 & MS19) MS12 Male DIN Connector T = Thermal Lockout CT = Low Current with Thermal Lockout No = Normally Open/Closed (Only MS18 & MS19) MS16 Weather Packed Seal Connector CT = Low Current with Thermal Lockout NC = Normally Closed (Only MS18 & MS19) MS19 2 Pin Deutsch Connector CT = Low Current with Thermal Lockout NC = Normally Closed (Only MS18 & MS19) MS19 2 Pin Deutsch Connector CT = Low Current with Thermal Lockout NC = Normally Closed (Only MS18 & MS19) MS19 2 Pin Deutsch Connector CT = Low Current with Thermal Lockout NC = Normally Closed (Only MS18 & MS19) MS19 2 Pin Deutsch Connector CT = Low Current with Thermal Lockout CT = Low Current/Thermal Lockout MS19 Thereaded Connector and Light (Direct Current) Omit = None C = Low Current Thermal Lockout MS14DC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) T = Thermal Lockout CT = Low Current with Thermal Lockout MS14DC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) T = Thermal Lockout CT = Low Current	Omit = None									
MS5 = 12" 4-Conductor Cable Omit = None Omit = None (All except MS18 & MS19) MS10 = Male DIN Connector T = Thermal Lockout T = Thermal Lockout MS17 = Male S Pin Brad Harrison Connector T = Thermal Lockout NC = Normally Open (Only MS18 & MS19) MS17 = Male Micro 4 Pin Brad Harrison Connector LC = Low Current with Thermal Lockout NC = Normally Closed (Only MS18 & MS19) MS11 = 12 ft 4-Conductor Cable MS150C = #8-32 Post for Wire Connector Current/Thermal Lockout NC = Normally Closed (Only MS18 & MS19) MS11 = 12 ft 4-Conductor Cable MS10C = #8-32 Post for Wire Connector Current/Thermal Lockout NC = Normally Closed (Only MS18 & MS19) MS12 = Z Pin Deutsch Connector MS11 = (Direct Current) Current/Thermal Lockout NC = Normally Closed (Only MS18 & MS19) MS12 = Threaded Connector and Light (Direct Current) MS140C = Male 5 Pin Brad Harrison Connector & Light (Direct Current) Omit = None MS144C = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) MS144C = Low Current with Thermal Lockout T = Thermal Lockout MS144C = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) MS14 = Carm Operated Switch with 1/2" Conduit, Female Connection MS14 = Lockout LC = Low Current MS = Carm Operated Switch with 1/2" Conduit, Female Connection D10 = Non-Latching Indicator <	Electrical Indicato	or			Current/Thermal Lockout			Normally Open/Closed		
MS10 = Male DIN Connector LC = Low Current NO = Normally Open (Only MS18 & MS19) MS12 = Male 5 Pin Brad Harrison Connector T = Thermal Lockout NC = Normally Open (Only MS18 & MS19) MS16 = Weather Packed Seal Connector LCT = Low Current with Thermal Lockout NC = Normally Open (Only MS18 & MS19) MS17 = Male Micro 4 Pin Brad Harrison Connector LCT = Low Current with Thermal Lockout NC = Normally Open (Only MS18 & MS19) MS18 = 2 Pin Amp Junior Power Timer Connector LCT = Low Current with Thermal Lockout NC = Normally Open (Only MS18 & MS19) MS19 = 2 Pin Deutsch Connector LCT = Low Current with Thermal Lockout NC = Normally Open (Only MS18 & MS19) MS19 = 2 Pin Amp Junior Power Timer Connector LCT = Low Current with Thermal Lockout NC = Normally Open (Only MS18 & MS19) MS19 = 2 Pin Deutsch Connector LCT = Low Current with Thermal Lockout NC = Normally Open (Only MS18 & MS19) MS19 = 2 Pin Deutsch Connector MS19 = 2 Pin Deutsch Connector Current/Thermal Lockout MS19 = 2 Pin Brad Harrison Connector & Light (Direct Current) Omit = None LC = Low Current T T = Thermal Lockout MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) T = Thermal Lockout LCT = Low Current T T = Thermal Lockout MS = Cam Operated Switch with 1/2" Conduit, Female Connection D8 = Visual with Th	MS5 = 12" 4-Cond	ductor Cable			Omit = None			Omit = None (All except MS18 & MS19)		
MS12 = Male S Fin Brad Harrison Connector T = Thermal Lockout NC = Normally Closed (Only MS16 & MS16) MS16 = Weather Packed Seal Connector LCT = Low Current with Thermal Lockout ICT = Low Current with Thermal Lockout MS17 = Male Micro 4 Pin Brad Harrison Connector LCT = Low Current with Thermal Lockout ICT = Low Current with Thermal Lockout MS19 = 2 Pin Deutsch Connector MS16 = Yeaded Connector Cable Current/Thermal Lockout MS1DC = #8-32 Post for Wire Connection Electrical Visual Indicator Current/Thermal Lockout MS14AC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) Omit = None LC = Low Current MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) T = Thermal Lockout Current MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) T = Thermal Lockout LC = Low Current MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) T = Thermal Lockout LC = Low Current MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) T = Thermal Lockout LC = Low Current MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) T = Thermal Lockout LC = Low Current MS = Cam Operated Switch with 1/2" Conduit, Female Connection D8 = Visual with Thermal Lockout D10 = Non-Latching Indi	MS10 = Male DIN Connector				LC = Low Current		NO = Normally Open (Only MS18 & MS19)			
MS17 = Male Micro 4 Pin Brad Harrison Connector MS18 = 2 Pin Amp Junior Power Timer Connector MS19 = 2 Pin Deutsch Connector MS11 = 12 ft 4-Conductor Cable MS15DC = #8-32 Post for Wire Connection Electrical Visual Indicator Current/Thermal Lockout MS14D = Male 5 Pin Brad Harrison Connector & Light (Direct Current) Omit = None MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) Omit = None MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) Mit = None MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) Mit = None MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) T = Thermal Lockout MS15 = Cam Operated Switch with 1/2" Conduit, Female Connection T = Thermal Lockout MS = Cam Operated Switch with 1/2" Conduit, Female Connection D10 = Non-Latching Indicator D = Pointer D8 = Visual with Thermal Lockout D10 = Non-Latching Indicator D5AS = Latching Visual Pop-Up D13 = Stainless Steel Latching Indicator with Music Wire Spring Test Point/ Omit = None Qmit = None L = Two 1/4" NPTF inlet and outlet test ports G426 = 3/4"drain on bottom of housing G440 = 1/2" drain on bottom of housing <td colspan="4">MS16 = Weather Packed Seal Connector</td> <td colspan="2">LCT = Low Current with Thermal Loc</td> <td>kout</td> <td>NC = Normally Closed (Only M</td> <td>510 & 101519)</td>	MS16 = Weather Packed Seal Connector				LCT = Low Current with Thermal Loc		kout	NC = Normally Closed (Only M	510 & 101519)	
MS18 = 2 Pin Amp Junior Power Timer Connector MS19 = 2 Pin Deutsch Connector MS19 = 2 Pin Deutsch Connector MS11 = 12 ft 4-Conductor Cable MS15DC = #8-32 Post for Wire Connection Current/Thermal Lockout Electrical Visual Indicator Current/Thermal Lockout MS14D = Male 5 Pin Brad Harrison Connector & Light (Direct Current) Omit = None LC = Low Current T T = Thermal Lockout MS = Cam Operated Switch with 1/2" Conduit, Female Connection Usual indicator Visual Indicator D8 = Visual with Thermal Lockout D = Pointer D8 = Visual with Thermal Lockout D5 = Latching Visual Pop-Up with aluminum shroud D13 = Stainless Steel Latching Indicator with Music Wire Spring Test Point/Sow Drain Test Point Bowl Drain Qmit = None Carrent G426 = 3/4"drain on bottom of housing G426 = 3/4"drain on bottom of housing G440 = 1/2" drain on bottom of housing	MS17 = Male Micro 4 Pin Brad Harrison Connector									
MS19 = 2 Pin Deutsch Connector MS11 = 12 ft 4-Conductor Cable MS15DC = #8-32 Post for Wire Connection Electrical Visual Indicator Current/Thermal Lockout MS13DC = Threaded Connector and Light (Direct Current) Omit = None MS14AC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) Description MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) T = Thermal Lockout MS = Cam Operated Switch with 1/2" Conduit, Female Connection UC = Low Current with Thermal Lockout Visual Indicator D = Pointer D = Visual with Thermal Lockout D = Pointer D = Visual with Thermal Lockout D10 = Non-Latching Indicator D = Pointer D = Non-Latching Indicator D13 = Stainless Steel Latching Indicator with Music Wire Spring Test Points/Bowl Drain Test Point Bowl Drain Omit = None L = Two 1/4" NPTF inlet and outlet test ports Gmit = None L = Two 1/4" NPTF inlet and outlet test ports Gmit = None G426 = 3/4 "drain on bottom of housing G426 = 3/4 "drain on bottom of housing G426 = 1/2" drain on bottom of housing G426 = 1/2" drain on bottom of housing	MS18 = 2 Pin Amp Junior Power Timer Connector									
MS11 = 12 ft 4-Conductor Cable MS15DC = #8-32 Post for Wire Connection Electrical Visual Indicator Current/Thermal Lockout MS13DC = Threaded Connector and Light (Direct Current) Omit = None MS14DC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) Omit = None LC = Low Current T = Thermal Lockout MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) Description MS = Cam Operated Switch with 1/2" Conduit, Female Connection Usual Indicator Visual Indicator D8 = Visual with Thermal Lockout D = Pointer D8 = Visual with Thermal Lockout D5 = Latching Visual Pop-Up D10 = Non-Latching Indicator D5AS = Latching Visual Pop-Up with aluminum shroud D13 = Stainless Steel Latching Indicator with Music Wire Spring Test Points/Bowl Drain Test Point Bowl Drain Omit = None Qurit = None Qurit = None L = Two 1/4" NPTF inlet and outlet test ports Gat26 = 3/4" drain on bottom of housing Out = None Qurit = None Qurit = None L = Two 1/4" NPTF inlet and outlet test ports Cmit = None Qurit = None D = Not 1/4" in potential control of housing Qurit drain on bottom of housing	MS19 = 2 Pin Deut	sch Connector								
Electrical Visual Indicator Current/Thermal Lockout MS13DC = Threaded Connector and Light (Direct Current) Omit = None MS14DC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) LC = Low Current MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) T = Thermal Lockout MS = Cam Operated Switch with 1/2" Conduit, Female Connection LCT = Low Current with Thermal Lockout Visual Indicator D = Pointer D8 = Visual with Thermal Lockout D5 = Latching Visual Pop-Up D10 = Non-Latching Indicator D13 = Stainless Steel Latching Indicator with Music Wire Spring Test Points/Bowl Drain Test Point Bowl Drain Omit = None L = Two 1/4" NPTF inlet and outlet test ports Omit = None G426 = 3/4"drain on bottom of housing G440 = 1/2" drain on bottom of housing G440 = 1/2" drain on bottom of housing	MS11 = 12 ft 4-C MS15DC = #8-32 Pc	Conductor Cable	nection							
MS13DC = Threaded Connector and Light (Direct Current) Omit = None MS14DC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) LC = Low Current MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) T = Thermal Lockout MS = Cam Operated Switch with 1/2" Conduit, Female Connection LCT = Low Current with Thermal Lockout MS = Cam Operated Switch with 1/2" Conduit, Female Connection D8 = Visual with Thermal Lockout Visual Indicator D = Pointer D8 = Visual with Thermal Lockout D5 = Latching Visual Pop-Up D10 = Non-Latching Indicator D10 = Non-Latching Indicator D5AS = Latching Visual Pop-Up with aluminum shroud D13 = Stainless Steel Latching Indicator with Music Wire Spring Test Points/Bowl Drain Test Point Bowl Drain Mit = None Omit = None G426 = 3/4"drain on bottom of housing L = Two 1/4" NPTF inlet and outlet test ports G440 = 1/2" drain on bottom of housing	Electrical Visual Ir				Current/Thermal Lockout					
MS14DC = Male 5 Pin Brad Harrison Connector & Light (Direct Current) LC = Low Current MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) LC = Low Current T = Thermal Lockout LCT = Low Current with Thermal Lockout MS = Cam Operated Switch with 1/2" Conduit, Female Connection Visual Indicator Visual Indicator D = Pointer D8 = Visual with Thermal Lockout D5 = Latching Visual Pop-Up D10 = Non-Latching Indicator D5AS = Latching Visual Pop-Up with aluminum shroud D13 = Stainless Steel Latching Indicator D5AS = Latching Visual Pop-Up with aluminum shroud D13 = Stainless Steel Latching Indicator D5AS = Latching Visual Pop-Up with aluminum shroud D13 = Stainless Steel Latching Indicator D13 = Stainless Steel Latching Indicator with Music Wire Spring Omit = None L = Two 1/4" NPTF inlet and outlet test ports G426 = 3/4"drain on bottom of housing G440 = 1/2" drain on bottom of housing G440 = 1/2" drain on bottom of housing	MS13DC = Thread	nd Light (Dire	ct Cur	rrent)	Omit = None					
MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current) T = Thermal Lockout LCT = Low Current with Thermal Lockout MS = Cam Operated Switch with 1/2" Conduit, Female Connection Visual Indicator D = Pointer D8 = Visual with Thermal Lockout D5 = Latching Visual Pop-Up D10 = Non-Latching Indicator D5AS = Latching Visual Pop-Up with aluminum shroud D13 = Stainless Steel Latching Indicator with Music Wire Spring Test Points/Bowl Drain Test Point Bowl Drain Omit = None Omit = None G426 = 3/4"drain on bottom of housing L = Two 1/4" NPTF inlet and outlet test ports G426 = 1/2" drain on bottom of housing	MS14DC = Male 5	on Connector	⁻ & Lig	ht (Direct Current)	LC = Low Current					
MS = Cam Operated Switch with 1/2" Conduit, Female Connection Visual Indicator D = Pointer D8 = Visual with Thermal Lockout D5 = Latching Visual Pop-Up D10 = Non-Latching Indicator D5AS = Latching Visual Pop-Up with aluminum shroud D13 = Stainless Steel Latching Indicator with Music Wire Spring Test Points/Bowl Drain Test Point Bowl Drain Omit = None Omit = None L = Two 1/4" NPTF inlet and outlet test ports G426 = 3/4"drain on bottom of housing G440 = 1/2" drain on bottom of housing G440 = 1/2" drain on bottom of housing	MS14AC = Male 5 Pin Brad Harrison Connector & Light (.				ht (Alternating Current)	ernating Current) T = Thermal Lockout LCT = Low Current with Thermal Lockout				
Visual Indicator D = Pointer D8 = Visual with Thermal Lockout D5 = Latching Visual Pop-Up D10 = Non-Latching Indicator D5AS = Latching Visual Pop-Up with aluminum shroud D13 = Stainless Steel Latching Indicator with Music Wire Spring Test Points/Bowl Drain Test Point 0mit = None Omit = None L = Two 1/4" NPTF inlet and outlet test ports G426 = 3/4"drain on bottom of housing G440 = 1/2" drain on bottom of housing G440 = 1/2" drain on bottom of housing	MS = Cam Op	erated Switch w	vith 1/2" Cond	luit, Fe	emale Connection					
D = Pointer D8 = Visual with Thermal Lockout D5 = Latching Visual Pop-Up D10 = Non-Latching Indicator D5AS = Latching Visual Pop-Up with aluminum shroud D13 = Stainless Steel Latching Indicator with Music Wire Spring Test Points/Bowl Drain Test Point 0mit = None Omit = None L = Two 1/4" NPTF inlet and outlet test ports G426 = 3/4"drain on bottom of housing G440 = 1/2" drain on bottom of housing	Visual Indicator									
Test Points/Bowl Drain Test Point Bowl Drain Omit = None Omit = None Omit = None L = Two 1/4" NPTF inlet and outlet test ports G426 = 3/4"drain on bottom of housing G440 = 1/2" drain on bottom of housing	D = Pointer D5 = Latching D5AS = Latching	Visual Pop-Up Visual Pop-Up	with aluminu	m shro	D8 = Visual with D10 = Non-Latch D13 = Stainless S	Thermal Lock ing Indicator Steel Latching	out Indicat	tor with Music Wire Spring		
Omit = None Omit = None L = Two 1/4" NPTF inlet and outlet test ports G426 = 3/4"drain on bottom of housing G440 = 1/2" drain on bottom of housing	Test Points/Bowl Dr	ain Test Poin	t			Bowl Drain	n			
L = Two 1/4" NPTF inlet and outlet test ports G426 = 3/4"drain on bottom of housing G440 = 1/2" drain on bottom of housing		None		Omit =	Omit = None					
	L = Two 1/4" NF			PTF ir	nlet and outlet test ports	G426 = G440 =	= 3/4"drain on bottom of housing= 1/2" drain on bottom of housing			
Starting from the left you will choose your indicator Type (visual or electrical) if it's visual you will use the visual column and that will complete this hav. If it's electrical you	Starting from the left		ur Indicator Tur		al or electrical) if it's visual ve			ump and that will complete this har. If it	s electrical you	

Top-Ported Pressure Filter

NFLK30

3000 psi - 210 bar

20 gpm - 75 L/min

Features and Benefits

- Top-ported pressure filter
- All aluminum assembly
- Offered in pipe, SAE straight thread and ISO 228 porting
- Lock & Key Quality Protected Elements (NFLK30)

Model No. of filter in photograph is NFLK301NLKZ105D5

Filter Housing Specifications							
Flow Rating:	Up to 20 gpm (75 L/min) for 150 SUS (32 cSt) fluids						
Max. Operating Pressure:	3000 psi (210 bar)						
Min. Yield Pressure:	10,000 psi (690 bar), per NFPA T2.6.1						
Rated Fatigue Pressure:	2400 psi (165 bar), per NFPA T2.6.1						
Temp. Range:	-20°F to 225°F (-29°C to 107°C)						
Bypass Setting:	Cracking: 40 psi (2.8 bar) Full Flow: 85 psi (5.9 bar)						
Porting Head: Element Case:	Aluminum Aluminum						
Weight of NFLK30-1NLK: Weight of NFLK30-1NNLK:	3.4 lbs. (1.5 kg) 4.4 lbs. (2.0 kg)						
Element Change Clearance:	4.50" (115 mm)						
Top-Ported Pressure Filter NFLK30

NFLK30			_		
	Bowl Length Elei	ment Porting Indica	ator Options		
Bowl Length					
Down Longar	1 = 1 sing	le element/bowl length			
Element	Element	Media	Micron	Rating	Seals
Note: Element code can also be used to build a replacement element.	NLK = Single Length NNLK = Double Length	Z = Excellement Z-Media Omit = E Media (Cellulose) AS = Anti-Stat Media (Synt ZW = Aqua-Excellement ZV W = W Media (Water Rem ED = Electic Drive Media	(Synthetic) 1 = 3 = 3 = thetic) 5 = V Media 10 = noval) 25 = Omit = 0	 1μ (Z, ZW Media) 3μ (E, Z, AS, ZW Media) 5μ (Z, AS, ZW Media) 10μ (E, Z, AS, ZW, ED Media) 25μ (E, Z, ZW Media) (W Media Only) 	Omit = Buna V = Viton
Porting	Porting	'			
	B = ISO2 P = 3/4" N S = SAE-	28 G-3⁄4" IPTF 12			
Indicator ¹					
Omit = None				1	
Electrical Indicato		Current/Thermal Loo	ckout	Normally Open/Closed	
MS10 = Male DIN C $MS12 = Male 5 Pin$ $MS16 = Weather Pa$ $MS17 = Male Micro$ $MS18 = 2 Pin Amp$ $MS19 = 2 Pin Deuts$	ionnector Brad Harrison Conn acked Seal Connecto 4 Pin Brad Harrison Junior Power Timer ich Connector	ector LC = Low Current T = Thermal Lock Connector Connector	out vith Thermal Lockout	NO = Normally Open (Only NC = Normally Closed (On	MS18 & MS19) y MS18 & MS19
MS11 = 12 ft 4-Con	ductor Cable			1	
Electrical Visual In	dicator		Current/Thermal	Lockout	
MS13DC = Threade MS14DC = Male 5 F MS14AC = Male 5 F	d Connector and Lig Pin Brad Harrison Co Pin Brad Harrison Co	ght (Direct Current) onnector & Light (Direct Current) onnector & Light (Alternating Current)	Omit = None LC = Low Currer T = Thermal Lo LCT = Low Currer	nt ockout nt with Thermal Lockout	
MS = Cam Ope	rated Switch with 1/	2" Conduit, Female Connection			
Visual Indicator					
D = Pointer	Visual Pop-Up	D8 = Visual w D10 = Non-Late	ith Thermal Lockout ching Indicator	ator with Music Wire Spring	

This page is intentionally left blank



Air Fusion Technology

AFT

100 psi - 7 bar

40 gpm - 151 L/min



- Features and Benefits
- Patent Pending in-tank filter design
- Lightweight and as part of a tank optimization package can reduce reservoir size
- Lock & Key Quality Protected, OEM specific interfaces available
- Superior de-aeration performance
- 360 degree swivel connection, lines stay connected during element changeouts
- Anti-Drain check valve option to keep lines from emptying during element changeouts
- 20 ft-lb max loading torque on inlet port

50 Part of Schroeder Industries' Energy Sustainability Initiative

Model No. of filter in photograph is AFT8LKZ10L16N

Filter Housing Spe	cifications
Flow Rating:	40 gpm (151 L/min)
Max. Operating Pressure:	100 psi (7 bar)
Min. Yield Pressure:	350 psi (24 bar)
Rated Fatigue Pressure:	100 psi (7 bar)
Temp. Range:	-20°F to 225°F (-29°C to 107°C)
Bypass Setting:	Cracking: 30 psi (2 bar) Full Flow: 45 psi (3 bar)
Element Change Clearance:	4L = 5.28" [134mm] 8L = 8.62" [219mm] 12L = 11.96" [304mm] 16L = 15.30" [389mm]
Element Case:	12 elements
Type Fluid:	Appropriate Schroeder Media
Petroleum Based Fluids:	All E media (cellulose), Z-Media® and ASP® media (synthetic)
High Water Content:	All Z-Media® and ASP® media (synthetic)
Invert Emulsions:	10 and 25 μ Z-Media® and 10 μ ASP® media (synthetic)
Water Glycols:	3, 5, 10 and 25 μ Z-Media® and all ASP® media (synthetic)
Phosphate Esters:	All Z-Media® (synthetic) with H (EPR) seal designation and all ASP® media (synthetic)

How to Build a Valid Model Number for a Schroeder AFT:

AFT

	-	-	
Element	Porting	Indicator	

Element	Element	Media		Micron Rating	Seals
Note: Element code can also be used to build a replacement element.	4LK =4" Element8LK =8" Element12LK =12" Element16LK =16" Element	Z =ExcellenAS =Anti-StarZW =Aqua-ExW =W MediaED =Electic I	nent Z-Media (Synthetic) Media (Synthetic) cellement ZW Media (Water Removal) Prive Media	3 = 3μ (Z, AS, ZW Media) 5 = 5μ (Z, AS, ZW Media) 10 = 10μ (Z, AS, ZW, ED Media) 25 = 25μ (Z, ZW Media) Omit = (W Media Only)	Omit = Buna V = Viton
Porting	Porting	Bypas	S	Check Valve	
	S12 = SAE 12 S16 = SAE 16 L12 = 90 Deg SAE 1 L16 = 90 Deg SAE 1 HB16 = 1" Hose Barb	2 40 2	= 30 PSI = 25 PSI = 40 PSI	Omit = Check valve N = No check valve	
Indicator					
	Omit = None				
	N = Plugged				
	Y2 = Back-Mounted Tri-Color gauge				
	Y2C Tricolor visual indicator (Bottom Mounted)				
	ES = Electric Swit	ES = Electric Switch with Screw Terminals			
	ES1 = Electric Swit	ch with 24" wire I	eads		
	ES2 = Electric Swit	ch with 2-Pin Deu	Itche Connector		
	ES3 = Electric Swit	ch with DIN 4365	0		

GPT

150 psi - 10.3 bar

175 gpm - <mark>662 L/min</mark>

v.122223



Features and Benefits

- Filter bypass in cap vs base, cleaner cold start
- Patent Pending In-Tank Design
- Lock & Key Quality Protected

Model No. of filter in photograph is GPT15DCLKZ25S24S24

Filter Housing Specifications				
Flow Rating:	Up to 175 GPM (662 L/min) FOR 150 SUS (32 cSt) Fluids			
Max. Operating Pressure:	150 PSI (10.3 bar)			
Min. Yield Pressure:	Consult Factory			
Rated Fatigue Pressure:	89 psi (6 bar)			
Temp. Range:	-20 F to 225 F (-29 C to 107 C)			
Bypass Setting:	Cracking: 35 PSI (2.4 bar)			
Ported Head and Cap:	Die Cast Aluminum			
Weight:	7 LBS. (3.18 kg)			
Element Change Clearance:	20.0" (508 mm)			
Type Fluid:	Appropriate Schroeder Media			
High Water Content:	All Z-Media (synthetic)			
Invert Emulsions:	10 and 25 micron Z-Media (synthetic)			
Water Glycols:	3, 5, 10, and 25 micron Z-Media (synthetic)			
Phosphate Esters:	All Z-Media (synthetic) with H (EPR) seal designation			

GPT

How to Build a Valid Model Number for a Schroeder GPT:

Element	Porting	Indicator

Element	Element	Media		Micron Rating	J	Seals
	15DCLK = 15" Element	Z = Exce Omit = E Me AS = Anti- ZW = Aqua W = W M ED = Elect	Ilement Z-Media (Synthetic) edia (Cellulose) Stat Media (Synthetic) a-Excellement ZW Media edia (Water Removal) ic Drive Media	$\begin{array}{rcl} {\bf 3} = & 3\mu ({\rm E},{\rm Z},{\rm Z}) \\ {\bf 5} = & 5\mu ({\rm Z},{\rm A}) \\ {\bf 10} = & 10\mu ({\rm E},{\rm Z}) \\ {\rm Media} \\ {\bf 25} = & 25\mu ({\rm E},{\rm Z}) \end{array}$, AS, ZW Media) S, ZW Media) Z, AS, ZW, ED Z, ZW Media)	Omit = Buna V = Viton H = EPR
Porting	Porting 1		Porting 2		Bypass	
	N = None DF32S24 = Dual Port Con SAE-24	de 61 2" and/or	N = None DF32S24 = Dual Port Co SAE-24	ode 61 2" and/or	Omit = 35 F	2SI
Indicator					, 	
	Y2 = Tricolor Visual Indicator (Back Mounted) Y2C= Tricolor Visual Indicator (Bottom Mounted) ES5 = Electric Switch with 3-Pin Deutsch Connector					

The 15DCLK element assembly is made up of the GPT diverter cap and the 15TLK element. A list of model code pairings is shown below:

15DCLKZ10,ELEMENT = DIVERTER, ASSY, GPT, BUNA + 15TLKZ10, ELEMENT	
15DCLKZ25,ELEMENT = DIVERTER, ASSY, GPT, BUNA + 15TLKZ25, ELEMENT	
15DCLKZ3,ELEMENT = DIVERTER, ASSY, GPT, BUNA + 15TLKZ3, ELEMENT	
15DCLKZ5,ELEMENT = DIVERTER, ASSY, GPT, BUNA + 15TLKZ5, ELEMENT	

Return Line Filter

BRT

145 psi - 10 bar

160 gpm - <u>600 L/min</u>



Features and Benefits

Filer is mounted in the tank and flow comes to it from a pipe connection below it or from the side v.122223

- Optimal flow conditions created by flow from beneath guaranteeing optimal air separation, even tank mixing, and long element service intervals
- Patented de-aeration windows around the housing offer superior air bubble coalescence in a 360 degree discharge
- Quality Protected Inside-Out Flow Element Design
- **5** Part of Schroeder Industries' Energy Sustainability Initiative

Model No. of filter in photograph is BRT6RBZ102.

Filter Housing Specifications				
Flow Rating:	Up to 160 gpm (600 L/min) for 150 SUS (32 cSt) fluids			
Max. Operating Pressure:	145 psi (10 bar)			
Temp. Range:	-22°F to 248°F (-30°C to 120°C)			
Bypass Setting:	Cracking: 36 psi (2.5 bar)			
Filter Head & Cover: Inlet Section:	BRT 2 - 6: Aluminum Nylon (PA66)			
Seals:	Buna N			
Installation:	As in-tank filter			

Return Line Filter

How to Build a Valid Model Number for a Schroeder BRT:



Element

Porting Indicator

Element	Element Length	Media	Micron Rating	Seals
Note: Element code can also be used to build a replacement element.	2RB 3RB 4RB 6RB	Z = Excellement Z Media (synthetic) Note: Other media is available upon request.	10 = 10μ (Z Media) 25 = 25μ (Z Media)	Omit = Buna V = Viton
Porting	Inlet Porting			
L. P. dec	2 = Side Inlet 1 = Bottom Inl	et		
Indicator	Visual Omit = None VA = Visual/Elec VE = Electrical VO = Visual India	cator		

TRT

145 psi - 10 bar

100 gpm - 380 L/min



Features and Benefits

- Filter head is mounted on the tank like standard return-line solution
- The protective tube can be supplied in various optional versions: 1.) as a closed tube with the outlet opening facing downwards or with a closed base and rows of operating holes at the height of the tank's oil level 2.) with an optional magnetic core connected to the filter element guaranteeing effective magnetic pre-filtration
- Patented de-aeration windows around the housing offer superior air bubble coalescence in a 360 degree discharge
- Quality Protected Inside-Out Flow Element Design
- 50 Part of Schroeder Industries' Energy Sustainability Initiative

Model No. of filter in photograph is TRT3RTZ10MS.

Filter Housing Specifications			
Flow Rating:	Up to 100 gpm (400 L/min) for 150 SUS (32 cSt) fluids		
Max. Operating Pressure:	145 psi (10 bar)		
Temp. Range:	-22°F to 248°F (-30°C to 120°C)		
Bypass Setting:	Cracking: 36 psi (2.5 bar)		
Filter Head & Cover: Inlet Section:	BRT 2 - 6: Aluminum Nylon (PA66)		
Seals:	Buna N and Viton		
Installation:	As in-tank filter		

Return Line Filter

How to Build a Valid Model Number for a Schroeder TRT:



Element	Element Length (in)	Media		Micron Rating	Seals
Note: Element code can also be used to build a replacement element.	1RT 2RT 3RT 4RT	Z = Excellement Note: Other media upon request.	t Z Media (synthetic) a is available	5 = 5μ (Z Mea 10 = 10μ (Z Mea 25 = 25μ (Z Mea	dia) Omit = Buna edia) V = Viton edia)
Porting	Bypass I	Magnet	Inlet Porting		Housing Options
	Omit = 36 PSID 12 = 12 PSID	Omit = None M = Magnetic Core	G = 1-½" BSPP S = G 1-½" BSPP, S24 = SAE-24 (requ bushing to ex dimensions)	, SAE DN 40 (1-½") uires BSPP to SAE ttend port to port	Omit = Standard Housing with Diffuser
Indicator	Visual				
	Omit =NoneVA =Visual/ElectricVE =ElectricalVO =Visual Indicato	al			



100 psi - 7 bar

40 gpm - 150 L/min



Features and Benefits

- Low pressure tank-mounted filter
- Available with dual inlet porting
- Offered in pipe, SAE straight thread, and ISO 228 porting
- Various Dirt Alarm[®] options
- Optional PAB1 breather
- Optional dipstick

Filter Housing Spe	cifications
Flow Rating:	Up to 40 gpm (150 L/min) for 150 SUS (32 cSt) fluids
Max. Operating Pressure:	100 psi (7 bar)
Min. Yield Pressure:	300 psi (21 bar), per NFPA T2.6.1
Rated Fatigue Pressure:	90 psi (6 bar), per NFPA T2.6.1-R1-2005
Temp. Range:	-20°F to 225°F (-29°C to 107°C)
Bypass Setting:	Cracking: 25 psi (1.7 bar) Full Flow: 39 psi (2.7 bar)
Porting Base & Cap: Element Case:	Nylon Aluminum
Weight of ZT-8ZG:	3.3 lbs. (1.49 kg)
Element Change Clearance:	10.0" (254 mm)

GZT

How to Build a Valid Model Number for a Schroeder GZT:

GZT	Element Length		Micron Rating Seals	Porting Ir		Options
Eleme	nt	Element Lengt	h Media		Micron Rating	Seals
Note: E can also build a elemen	lement code o be used to replacement t.	8GTZ = 8" Bow	Image: A state of the stat	lia (Synthetic)) rnthetic) ZW Media emoval) a) Omit = Buna
Porting)	Porting				
		P = 1" NPTI PP = Dual 1" S = SAE-16 SS = Dual SA B = ISO 228 BB = Dual ISI	= NPTF AE-16 3 G-1" O 228 G-1"			
Indica	tor					
		Omit = None Y2 = Visual Y2C = Visual Y5 = Visual ES = Electr ES1 = Electr ES2 = Electr ES3 = Electr	Back-Mounted Tri-Color gau Bottom-Mounted Tri Color Gau Back-Mounted Tri-Color Gau ic Switch with Screw Terminal ic Switch with 24" wire leads ic Switch with 2-Pin Deutche G ic Switch with DIN 43650	ge auge in Cap ige s Connector		
Option	S	Outlet Porting	Options	Options		
		Omit = G3039 = D = T =	1-1/2" NPT male 1.5" NPT outlet removed Diffuser 13" Tube extension	Omit = B = M =	None Breather Mounting gasket (Buna N)	

GRT

100 psi - 7 bar

100 gpm - 380 L/min



Features and Benefits

- Low pressure tank-mounted filter with up to 3 inlet ports
- HF4 Footprint filter with patented Quality Protection element
- Top, side, or bottom mounting
- Optional check valve prevents reservoir siphoning
- RTW model allows filter to be welded to tank, instead of being bolted
- Double and triple stacking of KG-size element can be replaced by single KBG, KKBG, or 27KBG-size element
- Various Dirt Alarm[®] options
- Allows consolidation of inventoried replacement elements by using KBG, KKBG, or 27KBG-size elements

Filter Housing Specifications

Flow Rating:	Up to 100 gpm (380 L/min) for 150 SUS (32 cSt) fluids
Max. Operating Pressure:	100 psi (7 bar)
Min. Yield Pressure:	400 psi (28 bar), per NFPA T2.6.1
Rated Fatigue Pressure:	90 psi (6 bar), per NFPA T2.6.1-2005
Temp. Range:	-20°F to 225°F (-29°C to 107°C)
Bypass Setting:	Cracking: 25 psi (1.7 bar) Full Flow: 48 psi (3.3 bar)
Porting Base & Cap: Element Case:	Die Cast Aluminum Steel
Weight of RT-1KG: Weight of RT-2KG:	11.4 lbs. (5.2 kg) 14.5 lbs. (6.6 kg)
Element Change Clearance:	8.0" (205 mm) for 1KG; 17.50" (445 mm) for KKG; 26.5" (673 mm) for 27KG

v.122223

GRT	-	_	_		_	_				
Bowl L	ength	Element	Рс	orting	Indicator	Options				
Bowl Length										
		1 =	9"/18"/27 B	owl with or	ne (1) element					
Element		Element		Media			Micron	Rating		Seals
Note: Element c can also be used build a replacem element.	ode d to nent	KBG = KKBG = 27KBG =	(9" Bowl) (18" Bowl) (27" Bowl)	Z = Omit = AS = ZW = W = ED =	Excellement Z-Med E Media (Cellulose Anti-Stat Media (Sy Aqua-Excellement W Media (Water Re Electic Drive Media	lia (Synthetic)) /nthetic) ZW Media emoval)	1 = 3 = 5 = 10 = 25 = Omit =	 1μ (Z, ZW Me 3μ (E, Z, AS, ZW 5μ (Z, AS, ZW 10μ (E, Z, AS, Media) 25μ (E, Z, ZW W Media Onl 	dia) ZW Media) / Media) , ZW, ED / Media) y)	Omit = Buna
Porting		Port A		Port E	3	Port C	Вур	ass	Outlet Porti	ng Options
A C View	F Standard	P16 = 1" P20 = 1- P24 = 1- P32 = 2" S16 = S/ S20 = S/ S24 = S/ S32 = S/ F20 = 1- flat F22 = 2" flat F32 = 2" flat F32 = 1S Flange Pc M = M	NPTF 1/4" NPTF 1/2" NPTF AE-16 AE-20 AE-24 AE-32 1/4" SAE 4-bol inge Code 61 1/2" SAE 4-bolt inge Code 61 O 228 G-1-1/2 ort Option Only etric SAE 4 olt Flange		None 1" NPTF 1-1/4" NPTF 1-1/2" NPTF 2" NPTF SAE-16 SAE-20 SAE-24 SAE-32 1-1/4" SAE 4-bolt flange Code 61 1-1/2" SAE 4-bolt flange Code 61 2" SAE 4-bolt flange Code 61 ISO 228 G-1-1/2"	N = None P2 = 1/8" NI P16 = 1" NP" S16 = SAE-1	PTF TF 6	mit = 25 PSI	Omit = 1-1/2 C = Chec D = Diffus CD = Chec T = 13" T A = Non-	" NPT male k valve ser k Valve & Diffuser ube Extension threaded output
Indicator			on riango			1			1	
		Omit = Y2 = Y2C = Y2R = ES = ES1 = ES2 = ES3 = ESR = ES1R =	None Visual Bac Visual Bac Back-mou Electric Sy Electric Sy Electric Sy Electric Sy Electric Sy Electric sy Heavy-dut	k-Mounte tom-Mour k-Mounte nted gaug vitch with vitch with vitch with vitch with vitch mou y electric	ed Tri-Color gaug nted Tri Color Gaug ed Tri-Color Gaug ge mounted on o Screw Terminals 24" wire leads 2-Pin Deutche (DIN 43650 nted on opposite switch mounted	ge auge in Cap ge pposite side o s Connector e side of stand on opposite s	of standard ard locatio ide of sta	d location on ndard location	٦	
Options										
		Omit G2293 G547 G820	t = None = Cork G = Two 1/8 = Stampe	asket 3'' Gauge I 9d Cap	Ports					

How to Build a Valid Model Number for a Schroeder GRT:

Tank-Mounted Return Line Filter GRTB

100 psi - 7 bar

v.122223



Features and Benefits

- Various Dirt Alarm[®] options
- Cost optimized for in-tank applications
- Plastic bowl and cap lower cost and minimize weight

100 gpm - 380 L/min

UV resistant cap

Model No. of filter in photograph is GRTB1KBGZ10S.

Filter Housing Spe	cifications
Flow Rating:	Up to 100 gpm (380 L/min) for 150 SUS (32 cSt) fluids
Max. Operating Pressure:	100 psi (7 bar)
Min. Yield Pressure:	400 psi (28 bar)
Rated Fatigue Pressure:	145 psi (10 bar), per NFPA T2.6.1-2005
Temp. Range:	-20°F to 200°F (-29°C to 93°C)
Bypass Setting:	Cracking: 25 psi (1.7 bar) Full Flow: 42 psi (2.9 bar)
Cap & Bowl: Porting Head:	Nylon Aluminum
Weight of GRTB-1K:	5.2 lbs. (2.36 kg)
Element Change Clearance:	9.5" (240 mm)

Tank-Mounted Return Line Filter GRTB

How to	Build a	Valid	Model	Number	for a	Schroeder	
110 10 10	build a	vanu	wouci	NULLIDEL	iu a	JULIOCUCI	UNID.

GRTB	

Bowl Length Element Porting Indicator

Bowl Length							
	1 = One 9" ele	ement					
Element	Element	Media		Micron	Rating	Seals	
Note: Element code can also be used to build a replacement element.	KBG = (9" Bowl)	Z = Omit = AS = ZW = W = ED =	Excellement Z-Media (Synthetic) E Media (Cellulose) Anti-Stat Media (Synthetic) Aqua-Excellement ZW Media W Media (Water Removal) Electic Drive Media	1 = 3 = 5 = 10 = 25 = Omit =	1μ (Z, ZW Media) 3μ (E, Z, AS, ZW Media) 5μ (Z, AS, ZW Media) 10μ (E, Z, AS, ZW, ED Media) 25μ (E, Z, ZW Media) (W Media Only)	Omit =	Buna
Porting	Port		Outlet Porting Options				
	P = 1-1/4" NPT S = SAE-20 B = ISO 228 G	1-1/4	Omit =1-1/2" NPT maleC =Check valveD =DiffuserCD =Check valve & diffuserT =13" Tube extension				
Indicator							
	Omit = None Y2 = Visual Back-Mounted Tri-Color gauge ES = Electric Switch with Screw Terminals ES1 = Electric Switch with 24" wire leads ES2 = Electric Switch with 2-Pin Deutche Connector ES3 = Electric Switch with DIN 43650						

GLRT

100 psi - 7 bar

150 gpm - **570 L/min**



Features and Benefits

- Low pressure tank-mounted filter
- Multiple inlet/outlet porting options
- Top, side, or bottom mounting
- Optional check valve prevents reservoir siphoning
- Can also be used in return line application (contact factory)
- Visual gauge or electrical switch dirt alarms
- Offered in pipe, SAE straight thread, flanged, and ISO 228 porting

Model No. of filter in photograph is GLRT18LGZ10S24NP16Y2.

Filter Housing Spe	cifications
Flow Rating:	Up to 150 gpm (570 L/min) for 150 SUS (32 cSt) fluids
Max. Operating Pressure:	100 psi (7 bar)
Min. Yield Pressure:	400 psi (28 bar), per NFPA T2.6.1
Rated Fatigue Pressure:	90 psi (6 bar), per NFPA T2.6.1-2005
Temp. Range:	-20°F to 225°F (-29°C to 107°C)
Bypass Setting:	Cracking: 25 psi (1.7 bar) Full Flow: 34 psi (2.3 bar)
Porting Base & Cap: Element Case:	Die Cast Aluminum Steel
Weight of GLRT-18L:	14.6 lbs. (6.6 kg)
Element Change Clearance:	17.0" (432 mm)

How to Build a Valid Model Number for a Schroeder GLRT:

GLRT

Element Porting Indicator Options

Element	Element Longth	Modia		Micron Poting	Soole
Note: Element code can also be used to build a replacement element.	18LG = (18" Bowl)	Z = Excellement Z-Media Omit = E Media (Cellulose) AS = Anti-Stat Media (Synth ZW = Aqua-Excellement ZW W = W Media (Water Remoted ED = Electic Drive Media	(Synthetic) netic) / Media oval)) Omit = Buna edia) V, ED edia)
Porting	Port A	Port B	Port C	Bypass Options	Outlet Porting Options
D 1/3" NPTF Standard	P16 = 1" NPTF P20 = 1- $\frac{1}{4}$ " NPTF P24 = 1- $\frac{1}{4}$ " NPTF P32 = 2" NPTF S16 = SAE-16 S20 = SAE-20 S24 = SAE-24 S32 = SAE-32 F20 = 1- $\frac{1}{4}$ " SAE 4-Bolt flange Code 61 F24 = 1 $\frac{1}{2}$ " SAE 4-Bolt flange Code 61 F32 = 2" SAE 4-Bolt flange Code 61 B24 = ISO 228 G-1 $\frac{1}{2}$ " Flange Port Option Only: M = Metric SAE 4 Bolt Flange	N = None P16 = 1" NPTF P20 = $1-\frac{1}{4}$ " NPTF P24 = $1-\frac{1}{2}$ " NPTF P32 = 2" NPTF S16 = SAE-16 S20 = SAE-20 S24 = SAE-20 S24 = SAE-24 S32 = SAE-32 F20 = $1-\frac{1}{4}$ " SAE 4-Bolt flange Code 61 F24 = $1\frac{1}{2}$ " SAE 4-Bolt flange Code 61 F32 = 2" SAE 4-Bolt flange Code 61 B24 = ISO 228 G-1\frac{1}{2}"	N = Nor P2 = 1/8" P16 = 1" N S16 = SAE	DefOmit =25 PSIDVPTF40 =40 PSIDE-1640 =40 PSID	Omit = 2" NPT male C = Check valve D = Diffuser T = 13" Tube Ext. A = Non-thread outlet
Indicator				1	
	Omit = None Y2 = Visual Back Y2C = Visual Botto Y5 = Visual Back Y2R = Back-mount ES = Electric Swi ES1 = Electric Swi ES2 = Electric Swi ES3 = Electric Swi ESR = Electric swit ES1R = Heavy-duty	Mounted Tri-Color gauge om-Mounted Tri-Color Gauge Mounted Tri-Color Gauge ted gauge mounted on opposite tch with Screw Terminals tch with 24" wire leads tch with 2-Pin Deutche Conn tch with DIN 43650 tch mounted on opposite side electric switch mounted on c	in Cap site side of ector e of standar opposite sid	standard location rd location le of standard location	
Options					
	Omit = None G2293 = Cork gas G547 = Two 1/8" G820 = Stamped	sket gauge ports I cap			

This page is intentionally left blank







Filter Dirt Alarms



Dirt Alarms

Dirt alarms are essential to monitoring the filter element life and ensuring your downstream equipment gets filtered oil and meets the desired ISO code of the equipment. As filter elements collect contaminant the differential pressure across the filter housing rises until the bypass starts to crack and dump contaminated fluid downstream. Placing an indicator on your filter will trip 5 PSID before the bypass cracks open. This is good to warn the user the differential pressure is getting too high before the bypass valve opens.

B) Schroeder offers a variety of dirt alarms to meet a wide range of customer applications.

Differential Indicators

Nisual indicators provide an economical way to know quickly when a filter element needs to be replaced. A variety of styles are available, ranging from gauges to mechanical pointers to pop-up cartridges.

Electrical

The electrical indicators provide an electrical signal for activating various electric alarms. These cartridge-style indicators are available on Schroeder high pressure, medium pressure, and low-pressure filters.

Thermal Lockout

The thermal lockout feature prevents activation of the indicator below fluid temperatures of 90°F (32°C). This feature can be helpful in mobile applications where fluid temperatures may be well below 90°F at equipment start-up and will prevent the indicator from tripping prematurely.

Pressure Switch

Pressure switches measure inlet pressure and trip at a desired pressure setting. Schroeder offers a wide variety of electrical and visual indicator switches for return line and vacuum filtration applications.

Building a Differential Indicator Part Number

(before element - dirty side)

In	d	00	to	r 1
			нu	

Omit = 1	None
----------	------

Current/Thermal Lockout	Normally Open/Closed
Omit = None	Omit = None (All except MS18 & MS19)
LC = Low Current	NO = Normally Open (Only MS18 & MS19)
T = Thermal Lockout	NC = Normally Closed (Only MS18 & MS19)
LCT = Low Current with Thermal Lockout	
	Current/Thermal Lockout Omit = None LC = Low Current T = Thermal Lockout LCT = Low Current with Thermal Lockout

MS11 = 12 ft 4-Conductor Cable

MS15DC = 3000 PSI max #8-32 Post for Wire Connection

Electrical Visual Indicator	Current/Thermal Lockout
MS13DC = Threaded Connector and Light (Direct Current)	Omit = None
MS14DC = Male 5 Pin Brad Harrison Connector & Light (Direct Current)	LC = Low Current
MS14AC = Male 5 Pin Brad Harrison Connector & Light (Alternating Current)	T = Thermal Lockout
	LCT = Low Current with Thermal Lockout

MS = Cam Operated Switch with 1/2" Conduit, Female Connection

Visual Indicator

- D = Pointer
- **D5** = Latching Visual Pop-Up

D8 = Visual with Thermal Lockout

D5AS = Latching Visual Pop-Up with aluminum shroud

D10 = Non-Latching Indicator

shroud D13 = Stainless Steel Latching Indicator with Music Wire Spring

ъ	1 11
1	h
1	J

N H	Application	Visual Dirt Alarm	
	Max Pressure	6,000 PSI	
Contraction of the local division of the loc	Max Cyclic Pressure	4,000 PSI	
	Trip Pressure (Bypass Cracking Pressure)	10 (15), 15 (20), 20 (25), 25 (30), 35 (40), 45 (50), 55 (60), 70 (75), 85 (90), 95 (100) PSID	RESE
	Thread	3/4-16 UNF - 2A	
•	Switch Type	Latching	
	Seal	Buna, Viton	2.65 [67]
	Material	Aluminum	
	Order Example	D5-20, D5V-40	<u> </u>



D8

D9

	Application	Visual Dirt Alarm with Thermal Lockout	THERMALLOCKOUT T - 60° F
	Max Pressure	6000 PSI	
	Max Cyclic Pressure	4000 PSI	CRANGE POPUJP INDICATOR
	Trip Pressure (Bypass Cracking Pressure)	20 (25), 25 (30), 35 (40), 45 (50), 55 (60), 85 (90) PSID	
	Thread	3/4-16 UNF - 2A	RESET
	Switch Type	Latching	
	Seal	Buna, Viton	
	Material	Aluminum	1.62 [41]
	Order Sample	D8-60, D8V-40	

	Application	Visual Dirt Alarm	. 1.12 .
	Max Pressure	6,500 PSI	[28]
and the second s	Max Cyclic Pressure	6,000 PSI	
	Trip Pressure (Bypass Cracking Pressure)	10 (15), 15 (20), 20 (25), 25 (30), 35 (40), 45 (50), 55 (60), 70 (75), 85 (90), 95 (100) PSID	
	Thread	3/4-16 UNF - 2A	
	Switch Type	Latching	
	Seal	Buna, Viton	
	Material	Stainless Steel	
	Order Sample	D9-30, D9V-30	

Visual Indicators

D10

-	
-	20

Application	Visual Dirt Alarm
Max Pressure	6,500 PSI
Max Cyclic Pressure	4,000 PSI
Trip Pressure (Bypass Cracking Pressure)	10 (15), 15 (20), 20 (25), 25 (30), 35 (40), 45 (50), 55 (60), 70 (75), 85 (90), 95 (100) PSID
Thread	3/4-16 UNF - 2A
Switch Type	Non-latching
Seal	Buna, Viton
Material	Aluminum
Order Sample	D10-30, D10V-50





D13

	Application	Visual Dirt Alarm	1.12
and service same	Max Pressure	6,500 PSI	
	Max Cyclic Pressure	6,000 PSI	
	Trip Pressure (Bypass Cracking Pressure)	10 (15), 15 (20), 20 (25), 25 (30), 35 (40), 45 (50), 55 (60), 70 (75), 85 (90), 95 (100) PSID	
	Thread	3/4-16 UNF - 2A	
	Switch Type	Latching	
	Seal	Buna, Viton	
	Material	Stainless Steel with music wire spring	
	Order Sample	D13-50, D13V-75	

				MS5
		Application	Electrical Dirt Alarm	1 10 50
		Max Pressure	6,000 psi	[30]
		Max Cyclic Pressure	4,000 psi	
2. NO. 4		Temperature Range	-20°F to 225°F (-29°C to 107°C)	
		Trip Pressure (Bypass Cracking Pressure)	10 (15), 15 (20), 20 (25), 25 (30), 35 (40), 45 (50), 55 (60), 70 (75), 85 (90), 95 (100) PSID	
		Connector	1 ft. 18 gauge 4 conductor cable	
		Thread	¾-16UNF-2A	
		Switch Type	N.O./N.C	2.74
Schroudel Henorital Pressue Pri Mission			Buna, Viton	3.94
THERMAL LOCKOUT	BLACK I N	Available Options	Low Current, Thermal Lockout	
	GROUND GREEN	Electrical Ratings	Reference Table 1	
		Order Example	MS5-40, MS5LC-40, MS5LCT-40, MS5VLCT-50	·

MS10

Schrader 1400-7224810 DIFFERENTIAL PRESSU PA: MS10-30 HERMAL LOCKOUT: N	
Ē	COM (1 N.C.

|

Application	Electrical Dirt Alarm
Max Pressure	6,000 psi
Max Cyclic Pressure	4,000 psi
Temperature Range	-20°F to 225°F (-29°C to 107°C)
Trip Pressure (Bypass Cracking Pressure)	10 (15), 15 (20), 20 (25), 25 (30), 35 (40), 45 (50), 55 (60), 70 (75), 85 (90), 95 (100) PSID
Connector	DIN 43650 Connector, Male
Thread	¾-16UNF-2A
Switch Type	N.O./N.C
Seal	Buna, Viton
Available Options	Low Current, Thermal Lockout
Electrical Ratings	Reference Table 1
Order Example	MS10-40, MS10LC-40, MS10LCT-40, MS10VT-40



1.19 SQ. [30]

Electrical Indicator

MS11



	Application	Electrical Dirt Alarm	
	Max Pressure	6,000 psi	
	Max Cyclic Pressure	4,000 psi	
	Temperature Range	-20°F to 225°F (-29°C to 107°C)	
Februardes	Trip Pressure (Bypass Cracking Pressure)	10 (15), 15 (20), 20 (25), 25 (30), 35 (40), 45 (50), 55 (60), 70 (75), 85 (90), 95 (100) PSID	1.75 [44]
140-722-410 ERENTIAL PRESSURE SI	Connector	5 Pin Brad Harrison Connector	
NS12-40 PSU *	Thread	¾-16UNF-2A	
	Switch Type	N.O./N.C	2.80
	Seal	Buna, Viton	4.00
	Available Options	Low Current, Thermal Lockout	
	Electrical Ratings	Reference Table 1	
= <u>N.C.</u> <u>N.O.</u>	Order Example	MS12-40, MS12LC-40, MS12LCT-40, MS12VLCT-40	<u>†</u>

MS13DC

	Application	Electrical Visual Dirt Alarm	
	Max Pressure	6,000 psi	
	Max Cyclic Pressure	4,000 psi	
	Temperature Range	-20°F to 225°F (-29°C to 107°C)	- 1.25
SEMPERATING 180-722-0510 MIN MISJOC-30 MIN MISJOC-30 MIN MISJOC-30 MIN MISJOC-30 MIN MISJOC-30 MIN MISJOC-30 MIN MINISJOC-30 M	Trip Pressure (Bypass Cracking Pressure)	10 (15), 15 (20), 20 (25), 25 (30), 35 (40), 45 (50), 55 (60), 70 (75), 85 (90), 95 (100) PSID	
-	Connector	1/2" NPT Connection	
	Thread	¾-16UNF-2A	
	Switch Type	N.O./N.C	
	Seal	Buna, Viton	
COM (PIN 1)	Available Options	Low Current, Thermal Lockout	
I (PIN 2) I (PIN 2) I (PIN 3)	Electrical Ratings	Reference Appendix A	
	Order Example	MS13DC-40, MS13D- CLC-40, MS13DCLCT-30, MS13VDC-60	

MS14DC

		<u> </u>	COM 2 1 -03 4 5	
		N.	с.	N.O.
COM (PIN 1) COM (PIN 2)		•	N.C. (PIN 4) N.O. (PIN 5)	
GROUND (PIN 3)	• -	φJ		

Application	Electrical Visual Dirt Alarm			
Max Pressure	6,000 psi			
Max Cyclic Pressure	4,000 psi			<u>_</u>
Temperature Range	-20°F to 225°F (-29°C to 107°C)		AC DC	
Trip Pressure (Bypass Cracking Pressure)	10 (15), 15 (20), 20 (25), 25 (30), 35 (40), 45 (50), 55 (60), 70 (75), 85 (90), 95 (100) PSID	[71]		
Connector	5 Pin Brad Harrison w/ light	3.98		
Thread	¾-16UNF-2A] +		
Switch Type	N.O./N.C] <u> </u>		
Seal	Buna, Viton			
Available Options	Low Current, Thermal Lockout			
Electrical Ratings	Reference Table 1			
Order Example	MS14-40, MS14LC-40, MS14LCT-40, MS14VT-40			

Electrical Indicator

MS15DC

£1	Application	Electrical Dirt Alarm	
II.	Max Pressure	3,000 psi	
	Max Cyclic Pressure	2,000 psi	
37	Temperature Range	-20°F to 225°F (-29°C to 107°C)	-
	Trip Pressure (Bypass Cracking Pressure)	10 (15), 15 (20), 20 (25), 25 (30), 35 (40), 45 (50), 55 (60), 70 (75), 85 (90), 95 (100) PSID	#8-32 POST FOR WIRE CONNECTIO
	Connector	#8-32 post for wire connection	
	Thread	¾-16UNF-2A	
That	Switch Type	N.O.	
	Seal	Buna, Viton	
THE	Electrical Ratings	Reference Table 1	
	Order Example	MS15DC-40	

	Application	Electrical Dirt Alarm	
	Max Pressure	6,000 psi	Í
	Max Cyclic Pressure	4,000 psi	
	Temperature Range	-20°F to 225°F (-29°C to 107°C)	
	Trip Pressure (Bypass Cracking Pressure)	10 (15), 15 (20), 20 (25), 25 (30), 35 (40), 45 (50), 55 (60), 70 (75), 85 (90), 95 (100) PSID	
Sector	Connector	3 Contact Weather packed	
-	Thread	¾-16UNF-2A	
	Switch Type	N.O./N.C	17.50 [445]
	Seal	Buna, Viton	
	Available Options	Low Current, Thermal Lockout	
A COM I B	Electrical Ratings	Reference Table 1	
N.O. C	Order Example	MS16-40, MS16LC-90, MS16VLC-40	





MS17LC

	Application	Low Current Electrical Dirt Alarm		
	Max Pressure	6,000 psi		
	Max Cyclic Pressure	4,000 psi		
	Temperature Range	-20°F to 225°F (-29°C to 107°C)		
Schroeder In Sur 727 451 FERENTIAL DOESSUR	Trip Pressure (Bypass Cracking Pressure)	18 (15), 15 (20), 20 (25), 25 (30), 35 (40), 45 (50), 55 (60), 70 (75), 85 (90), 95 (100) PSID		
ERMAL LOCKOUT: NA	Connector	4 Pin Brad Harrison "Micro"		
•	Thread	¾-16UNF-2A		
	Switch Type	N.O./N.C	[11]	
_ N.C.	Seal	Buna, Viton	3.98	
	Available Options	Thermal Lockout		
$\frac{1}{=} \left \left(\begin{array}{c} 3 & 2 \\ 0 & 4 & 1 \end{array} \right) \right $	Electrical Ratings	Reference Table 1		
N.O. COM	Order Example	MS17LCT-40, MS17VLC-30,		

	Application	Electrical Dirt Alarm
	Max Pressure	6,000 psi
	Max Cyclic Pressure	4,000 psi
1 1	Temperature Range	-20°F to 225°F (-29°C to 107°C)
Schroeder 1900-722-4810 Differential Press Press	Trip Pressure (Bypass Cracking Pressure)	19 (15), 15 (20), 20 (25), 25 (30), 35 (40), 45 (50), 55 (60), 70 (75), 85 (90), 95 (100) PSID
MS17-40	Connector	4 Pin M12 "Micro" Connector
	Thread	¾-16UNF-2A
	Switch Type	N.O./N.C
N.C.	Seal	Buna, Viton
	Available Options	Thermal Lockout
= 04 10	Electrical Ratings	Reference Table 1
N.O COM	Order Example	MS17-30, MS17T-40, MS17VT-50

^{1.12} [28]	-
Ô	

- 3.41 [87]	2.22	
	<u>.</u>	

Electrical Indicator

MS18

	Application	Electrical Dirt Alarm		
	Max Pressure	6,000 psi		1.12
	Max Cyclic Pressure	4,000 psi		
E. Contraction	Temperature Range	-20°F to 225°F (-29°C to 107°C)		
Schroeder 1800-722-4810 DFFERENTIAL PRESS/R PN MS18NC-40 PS0	Trip Pressure (Bypass Cracking Pressure)	10 (15), 15 (20), 20 (25), 25 (30), 35 (40), 45 (50), 55 (60), 70 (75), 85 (90), 95 (100) PSID		
	Connector	2 Pin Amp Junior power tim- er connector	.	
	Thread	¾-16UNF-2A		
	Switch Type	N.O./N.C. (Must designate NO or NC)	2.30	
	Seal	Buna, Viton	- 3.45 [89]	
(PIN 2)	Available Options	Low Current, Thermal Lockout	<u> </u>	
	Electrical Ratings	Reference Table 1		
COM (PIN 2) (PIN 1) N.O.	Order Example	MS18LCNO-40, MS18NC40, MS18TNO-50, MS18LCT- NO-40	<u>+</u>	



Application	Electrical Dirt Alarm		
Max Pressure	6,000 psi		
Max Cyclic Pressure	4,000 psi		
Temperature Range	-20°F to 225°F (-29°C to 107°C)		
Trip Pressure (Bypass Cracking Pressure)	10 (15), 15 (20), 20 (25), 25 (30), 35 (40), 45 (50), 55 (60), 70 (75), 85 (90), 95 (100) PSID		
Connector	2 Pin Deutsch Connector (DTO4-2-P)		1
Thread	¾-16UNF-2A		
Switch Type	N.O./N.C. (Must designate NO or NC)	84	2.65
Seal	Buna	<u>.</u>	
Available Options	Low Current, Thermal Lockout		<u> </u>
Electrical Ratings	Reference Table 1		
Order Example	MS19NC-15, MS19NO-40, MS19LCNO-40, MS19T- NC-50, MS19VNC-75	<u>+</u>	





Application Visual Vacuum Gauge Trip Pressure (Bypass Cracking Pressure) 0-30 inch HG Thread 1/8" NPT Switch Type Gauge Seal Buna, Viton Material Steel Order Semple Context Factory				Y
Trip Pressure (Bypass Cracking Pressure) 0-30 inch HG Thread 1/8" NPT Switch Type Gauge Seal Buna, Viton Material Steel Order Semple Context Featery		Application	Visual Vacuum Gauge	
Image: Seal of the seal o	200 in Hg	Trip Pressure (Bypass Cracking Pressure)	0-30 inch HG	
Switch Type Gauge Seal Buna, Viton Material Steel		Thread	1/8" NPT	
Seal Buna, Viton Material Steel Order Semple Centert Factory	25 5 5	Switch Type	Gauge	
Material Steel Order Semple Centert Factory	- 30 VACUUM	Seal	Buna, Viton	2.0#
	SENTE	Material	Steel	
		Order Sample	Contact Factory	U

			VS
-	Application	Vacuum	
	Temperature Range	Contact Factory	
	Trip Pressure (Bypass Cracking Pressure)	10" HG	
TOTAL CONTRACT OTHER	Connector	Yes	
	Thread	1/8" NPT	
	Switch Type	N.O.	
	Seal	Buna	
	Available Options	N/A	1.95
сом N.O.	Electrical Ratings	8 AMPS @ 12 VDC 4 AMPS @ 24 VDC 1 AMPS @ 120 VAC 0.5 AMPS @ 240 VAC	
	Order Example	Contact Factory	I

	Application	Vacuum	
	Temperature Range	Contact Factory	
· `	Trip Pressure (Bypass Cracking Pressure)	10" HG	
	Connector	Yes	
004. N D. N C.	Thread	1/8" NPT	
	Switch Type	N.O./ N.C.	
	Seal	Buna	
BLUE	Available Options	N/A	2.75
BLACK COM	Electrical Ratings	10 AMPS @ 125/250 VAC 5 AMPS @ 30 VDC	
• RED N.O.	Order Example	Contact Factory	1/8-27 NPT



٦	/	^
	(Ζ

	Application	Visual Tank Mounted Gauge	
CHANGE	Max Pressure	Up to 100 psi	
PRESSUR	Max Cyclic Pressure	Contact Factory	
	Trip Pressure (Bypass Cracking Pressure)	25PSI option: (Green) 20 psi (Yellow) 25 psi (Red) 60 psi; 40PSI option: (Green) 35 psi (Yellow) 40 psi (Red) 100 psi	2.0e
	Thread	1/8" NPT	
	Switch Type	Gauge	
	Seal	Buna, Viton	
	Material	Steel	69
B	Order Sample	Y2	

ES			
	Application	Tank Mounted	
	Pressure Range	23, 37, 47 PSi	
and the second se	Thermal Lockout	Yes	
	Connector	Screw terminals with rubber boot	
	Thread 1/8" NPT		
	Switch Type	N.O.	
- 160.	Order Info	Contact Factory	

ES1			
	Application	Tank Mounted	
N. A.	Pressure Range	12, 23, 30, 37, 47 PSI	
	Thermal Lockout		
	Connector	1/2" male NPT conduit with 24" wire leads	
LFT-10 702083	Thread	1/8" NPT	89 89 89 89
BLUE N.C.	Switch Type	N.O., N.C.	
COM RED N.O.	Order Info	Contact Factory	18-27 NPT

Tank Mounted Indicators

	Application	Tank Mounted	↓ - 1.17 SQ ↓
>	Pressure Range	37 PSI	
	Thermal Lockout	Yes	
9]]	Connector	2 Pin Deutsche connector DT04-2P	
CONTACT TO OPENAT 37 PS	Thread	1/8" NPT	
CONTACT TO DEEX AT 89TP	Switch Type	N.C.	
(PN #1 ON DEUTSCH	Order Info	Contact Factory	1/8-27 NPT

 Application	Tank Mounted	• Ø1.71•
Pressure Range	22, 37 PSI	
Thermal Lockout	No	
Connector	DIN 43650 connector	
Thread	1/8" NPT	
Switch Type	N.O., N.C.	
Order Sample	Contact Factory	1/8-27 NPT



Table 1

Electrical Ratings: Electrical Cartridge Indicators Without Thermal Lockout

Voltage	Voltage Volts@ Amps	Current Range (amps)	MS5	MS5LC	MS10	MS10LC	MS11	MS12	MS12LC	MS13DC	MS13DCLC	MS14DC	MS14DCLC	MS15DC	MS16	MS16LC	MS17	MS17LC	MS14AC	MS14ACLC	MS18	MS18LC	MS19	MS19LC
AC	240 @ 3	0.02 to 3	\checkmark		\checkmark		\checkmark	\checkmark										\checkmark						
AC	220 @ 0.05	0.005 to 0.05		\checkmark		\checkmark			\checkmark													\checkmark		\checkmark
AC	120 @ 5	0.02 to 5	\checkmark		\checkmark		\checkmark	\checkmark																
AC	120 @ 0.05	0.005 to 0.05		\checkmark		\checkmark			\checkmark											\checkmark		\checkmark		\checkmark
AC	24 @ 0.10	0.005 to 0.10		\checkmark		\checkmark			\checkmark											\checkmark				
AC	12 @ 0.25	0.005 to 0.25		\checkmark		\checkmark			\checkmark											\checkmark				
AC	120 @ 4	0.05 to 4																	\checkmark					
AC	115 @ 0.05	0.01 to 0.05															\checkmark				\checkmark		\checkmark	
DC	110 @ 0.3	0.02 to 0.3	\checkmark		\checkmark		\checkmark	\checkmark							\checkmark		\checkmark				\checkmark		\checkmark	
DC	110 @ 0.05	0.005 to 0.05		\checkmark		\checkmark			\checkmark							\checkmark		\checkmark				\checkmark		\checkmark
DC	24 @ 3	0.01 to 3																			\checkmark		\checkmark	
DC	24 @ 2	0.02 to 2	\checkmark		\checkmark		\checkmark	\checkmark		\checkmark		\checkmark			\checkmark									
DC	24 @ 1	0.01 to 1															\checkmark							
DC	24 @ 0.20	0.0 to 0.20												\checkmark										
DC	24 @ 0.10	0.005 to 0.10		\checkmark		\checkmark			\checkmark		\checkmark		\checkmark			\checkmark		\checkmark				\checkmark		\checkmark
DC	12 @ 5	0.01 to 5																			\checkmark		\checkmark	
DC	12 @ 2	0.02 to 2	\checkmark		\checkmark		\checkmark	\checkmark		\checkmark		\checkmark			\checkmark									
DC	12 @ 1	0.01 to 1															\checkmark							
DC	12 @ 0.25	0.005 to 0.25		\checkmark		\checkmark			\checkmark		\checkmark		\checkmark			\checkmark		\checkmark				\checkmark		\checkmark

Electrical Ratings: Electrical Cartridge Indicators With Thermal Lockout*

Voltage	Voltage Volts@ Amps	Current Range (amps)	MS5T	MS5LCT	MS10T	MIS10LCT	MS12T	MS12LCT	MS13DCT	MS13DCLCT	MS14DCT	MS14DCLCT	MS16T	MS16LCT	MS17T	MS17LCT	MS14ACT	MS18T	MS18LCT	MS19T	MS19LCT
AC	120 @ 5	0.02 to 5	\checkmark		\checkmark		\checkmark														
AC	220 @ 0.05	0.005 to 0.05		\checkmark		\checkmark		\checkmark											\checkmark		\checkmark
AC	120 @ 5	0.05 to 4															\checkmark				
AC	115 @ 0.05	0.01 to 0.05																\checkmark		\checkmark	
DC	24 @ 2	0.02 to 2	\checkmark		\checkmark		\checkmark		\checkmark		\checkmark		\checkmark		\checkmark			\checkmark		\checkmark	
DC	24 @ 0.10	0.005 to 0.10		\checkmark		\checkmark		\checkmark		\checkmark		\checkmark		\checkmark		\checkmark			\checkmark		\checkmark
DC	12 @ 2	0.02 to 2	\checkmark		\checkmark		\checkmark		\checkmark		\checkmark		\checkmark		\checkmark			\checkmark		\checkmark	
DC	12 @ 0.25	0.005 to 0.25		\checkmark		\checkmark		\checkmark		\checkmark		\checkmark		\checkmark		\checkmark			\checkmark		\checkmark

*Thermal lockout prevents activation below 90°

Notes		



2024 | L-4952





To access more information about Schroeder, scan the code with your app-enabled smartphone.

© Copyright 2024 Schroeder Industries. All rights reserved

www.schroederindustries.com | 580 West Park Road | Leetsdale, PA 15056-1025 | 724.318.1100 p | sisales@schroederindustries.com

C