

# 3M™ CTG-Klean Encapsulated Filter System GPJ Series

3M™ CTG-Klean Encapsulated Filter System GPJ Series is a completely enclosed filtration system that uses a separate pressure vessel and disposable filter pack to isolate the product to be filtered from the housing. This design reduces the extensive time and labour involved with filter change-outs and cleaning of conventional housings.

Environmental concerns and operator exposure to product and cleaning solvents can be reduced. The streamlined system, coupled with high performance, long-life filters, make GPJ Series the clear choice for safe, environmentally friendly and cost-effective filtration.

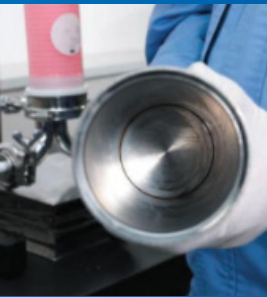



This series contains a filter cartridge in a transparent soft capsule. It can be used for the filtration of various compatible fluids with 3M filters.

## Applications:

- Chemicals
- Battery Manufacturing (e.g., Li-ion Battery)
- Cathode/Anode/Electrolytes Filtration
- Paints and Coatings
- Inks
- Adhesives

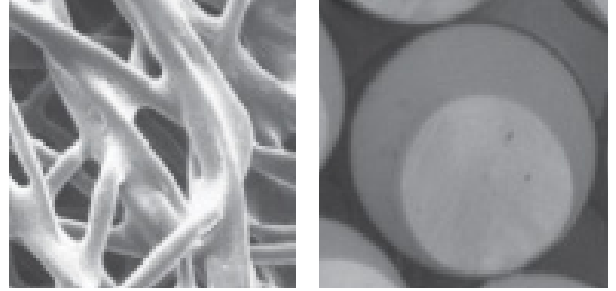


## Filter System Features:

Contactless approach	Reduced odours	Product recovery	See-through design
Easy, fast and clean	Operator's safety	Compressible package reducing waste	Transparent package visual inspection
			
Cleaning time is shortened, reduced process cycle time.	Exposure to volatile organic compounds is reduced to a minimum due to a sealed operating system.	Lower risk of environmental contamination, less waste of product.	Minimize risk of spillage.

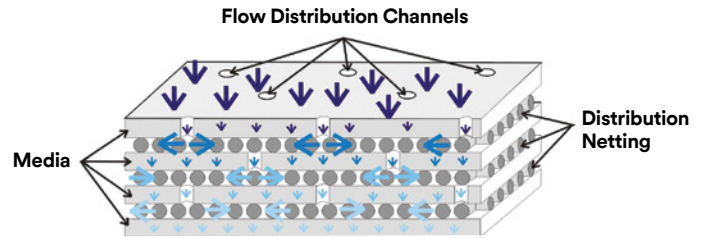
### 3M™ Betapure™ AU Series

3M™ Betapure™ AU Series are made from bi-component fibres with polypropylene core and polyethylene sheath. The outcome of this construction is a rigid structure that resists fibre migration and pore size change over a wide range of differential pressure offering great benefits in filtrations applications needing particle screening. The Betapure AU series is available in nominal ratings of 75, 100 and 150 µm in 1GPJ encapsulated format.



### 3M™ Betapure™ NT-T Series

The all-polypropylene filter is constructed using a design that utilizes flow enhancing filter media and an innovative flow pattern. The result is an absolute-rated filter with high on-stream life for cost-effective filtration over conventional melt-blown filter technologies. The 3M™ Betapure™ NT-T Series was designed to provide significantly superior service life while maintaining a consistent filtration efficiency. This filter design is available in absolute filtration rating of 1, 2, 3, 5, 10, 20, 40, 50 and 70 µm.



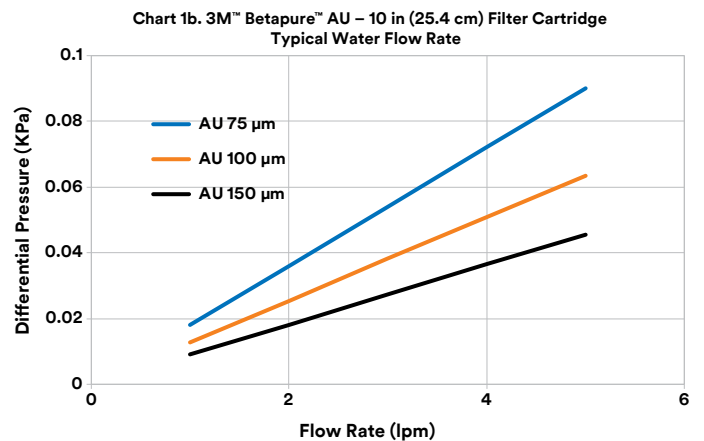
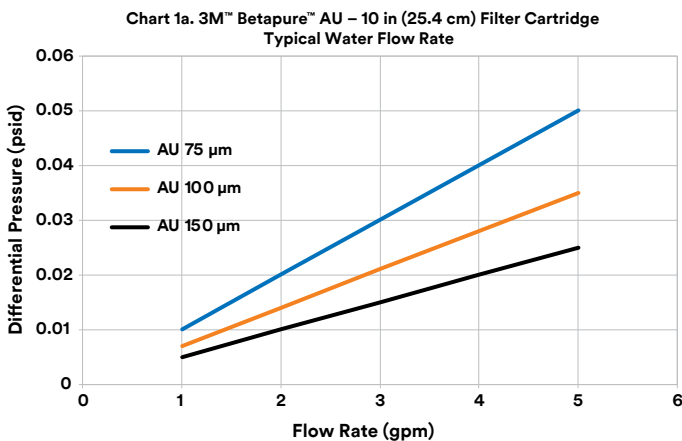
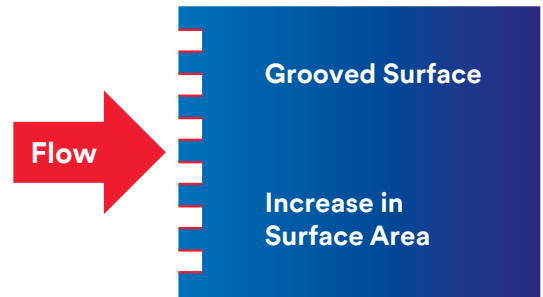
### 3M™ Betapure™ SKYL Series

Non-woven polypropylene depth filters provide filtration efficiency as well as high flow rates and offered in two nominal micron ratings of 0.5 and 1.0 micron. This filter design offer all polypropylene components for applications which are compatible with polypropylene. These applications include where clarification or classification is the filtration objective needing low extractables.



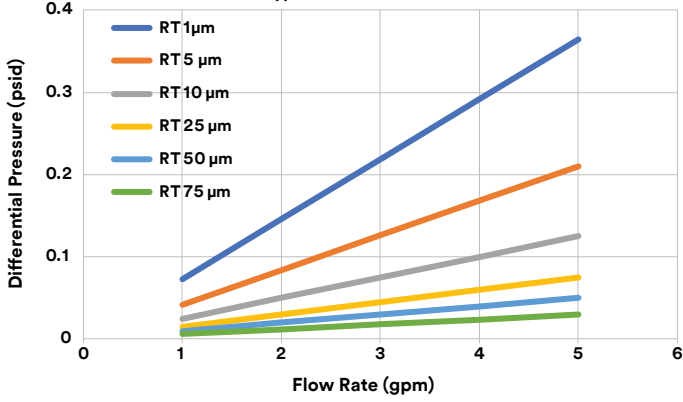
### 3M™ Micro-Klean™ RT Series

3M™ Micro-Klean™ RT Series provide cost effective depth filtration combined with high surface area provided with machined upstream surface grooves. This design provides continuous bonding from downstream surface to upstream surface, eliminating the risk of layering during operation as the pressure drop increases. The Micro-Klean RT Series are available in 1, 5, 10, 25, 50 and 75 µm nominal ratings.

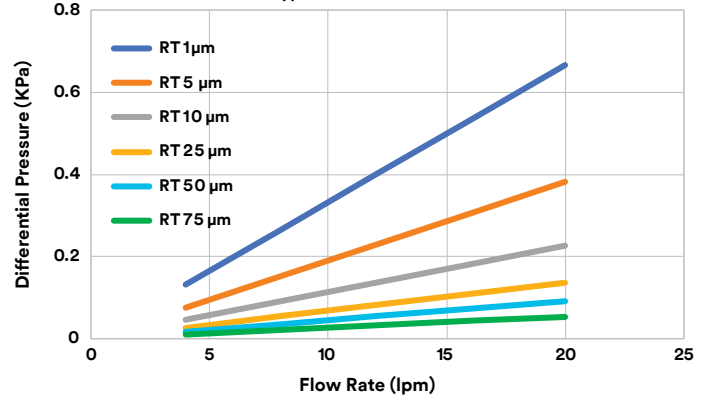


# 3M™ CTG-Klean Encapsulated Filter System GPJ Series

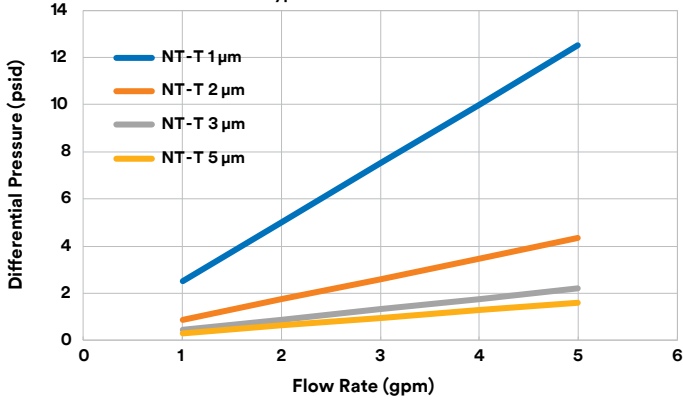
**Chart 2a. 3M™ Micro-Klean™ RT – 10 in (25.4 cm) Filter Cartridge  
Typical Water Flow Rate**



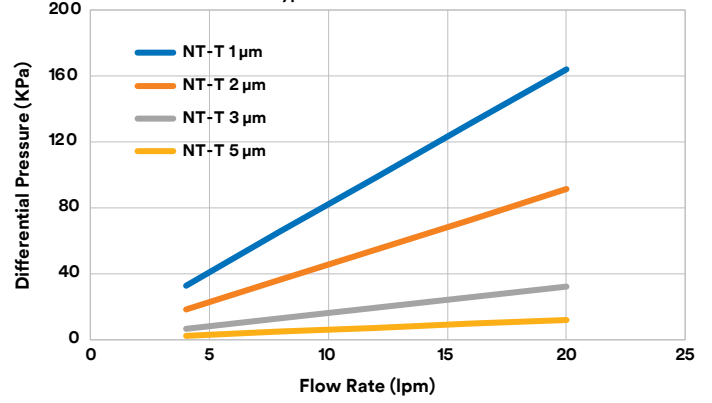
**Chart 2b. 3M™ Micro-Klean™ RT – 10 in (25.4 cm) Filter Cartridge  
Typical Water Flow Rate**



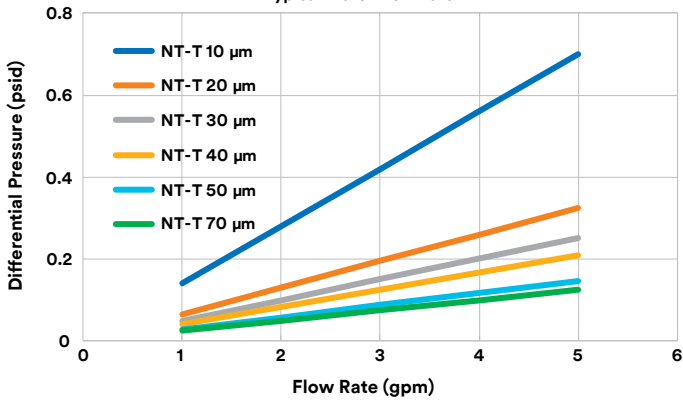
**Chart 3a. 3M™ Betapure™ NT-T – 10 in (25.4 cm) Filter Cartridge  
Typical Water Flow Rate**



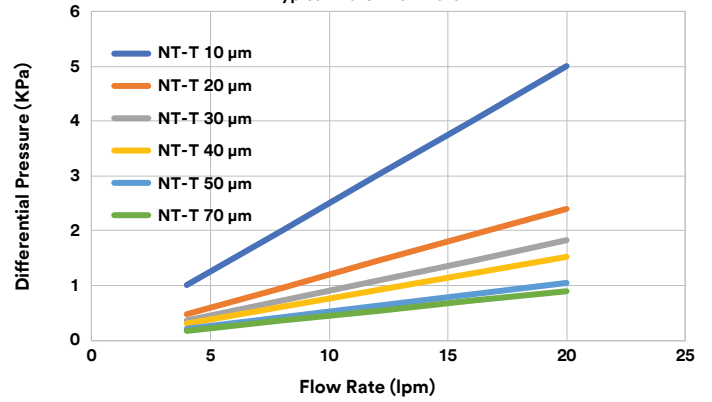
**Chart 3b. 3M™ Betapure™ NT-T – 10 in (25.4 cm) Filter Cartridge  
Typical Water Flow Rate**



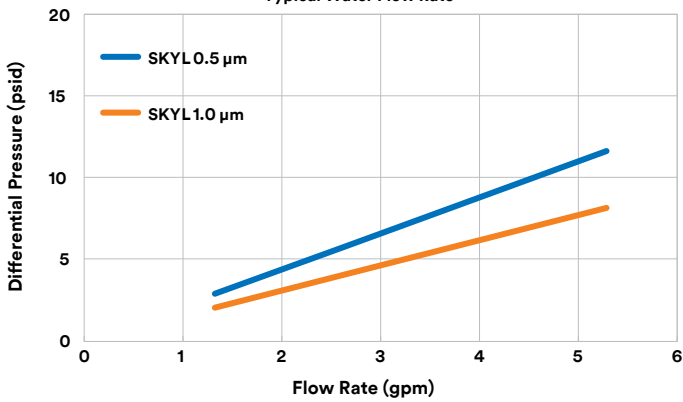
**Chart 4a. 3M™ Betapure™ NT-T – 10 in (25.4 cm) Filter Cartridge  
Typical Water Flow Rate**



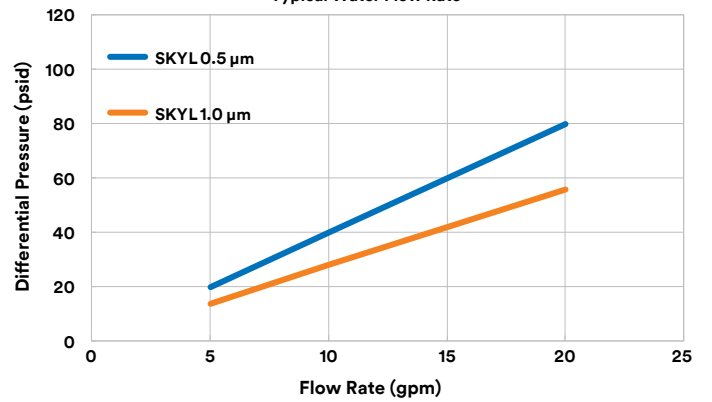
**Chart 4b. 3M™ Betapure™ NT-T – 10" Filter Cartridge  
Typical Water Flow Rate**



**Chart 5a. 3M™ Betapure™ SKYL – 10 in (25.4 cm) Filter Cartridge  
Typical Water Flow Rate**



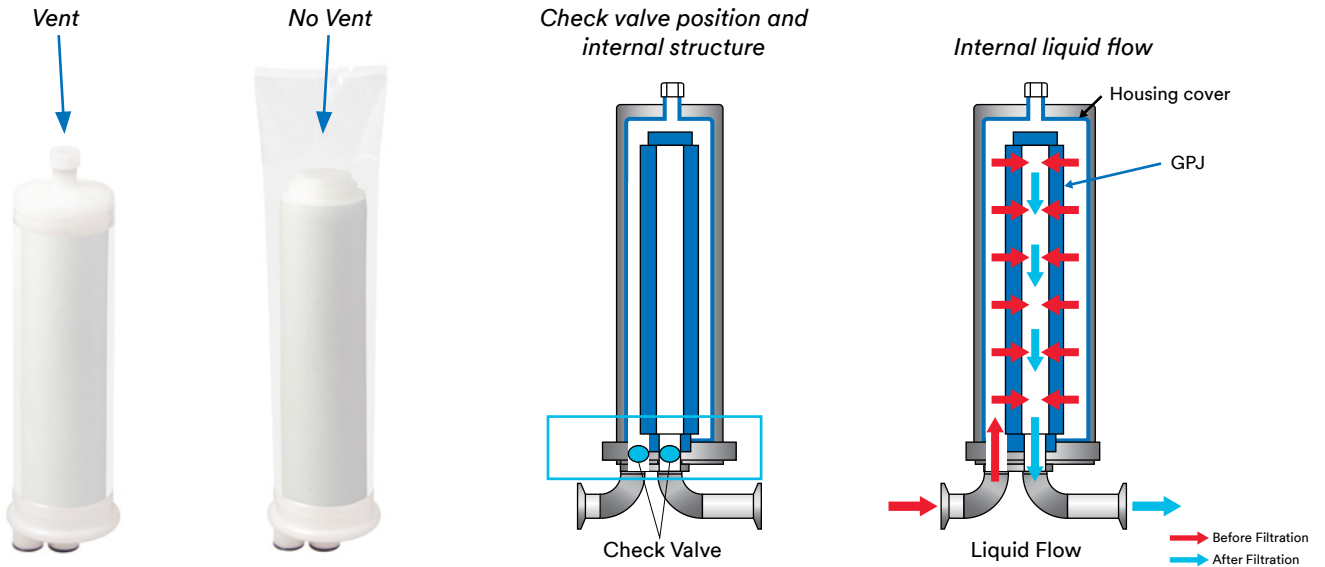
**Chart 5b. 3M™ Betapure™ SKYL – 10 in (25.4 cm) Filter Cartridge  
Typical Water Flow Rate**



## Filter System Design:

There are several designs to fit various applications. If the presence of air bubbles in the filtrates is a concern, the design with vent option is more appropriate.

### Vent Options:



### Check Valve Options:



### Specifications:

<b>Cartridge Length</b>	10 in (25.4 cm) and 20 in (50.8 cm)
<b>Head</b>	Polyolefin
<b>Bag Layers</b>	Outside Nylon and Inside (Wetted Surface) Polyethylene
<b>Vent</b>	HDPE
<b>O-Ring</b>	EPDM
<b>Check valve parts (ball)</b>	Polypropylene
<b>Valve parts (Spring)</b>	304 Stainless Steel
<b>Maximum Use Temperature</b>	104°F (40°C)
<b>Maximum Operation Pressure</b>	0.5 MPa @ 104°F (40°C)

# 3M™ CTG-Klean Encapsulated Filter System GPJ Series Ordering Guide

Table 1: 3M™ CTG-Klean Encapsulated Filter System 1GPJ Series

Media Type	Model No	3M ID	SAP ID	Materials Description	Grade (µm)	Length (in/cm)	Check Valve	Air Vent
3M™ Betapure™ AU	1GPJ1AUQN1	XA-0064-7996-9	7100292770	3M™ Betapure™ AU Series Filter Cartridge 1GPJ1AUQN1 CTG 1x1 75UM	75	10/25.4	ball	Yes
	1GPJ2AUQN1	XA-0064-7993-6	7100292736	3M™ Betapure™ AU Series Filter Cartridge 1GPJ2AUQN1 CTG 1x2 75UM	75	20/50.8	ball	Yes
	1GPJ1AUVN1	XA-0064-7994-4	7100292769	3M™ Betapure™ AU Series Filter Cartridge 1GPJ1AUVN1 CTG 1x1 100UM	100	10/25.4	ball	Yes
	1GPJ2AUVN1	XA-0064-7995-1	7100292737	3M™ Betapure™ AU Series Filter Cartridge 1GPJ2AUVN1 CTG 1x2 100UM	100	20/50.8	ball	Yes
	1GPJ1AUWN1	XA-0064-7992-8	7100292772	3M™ Betapure™ AU Series Filter Cartridge 1GPJ1AUWN1 CTG 1x1 150UM	150	10/25.4	ball	Yes
	1GPJ2AUWN1	XA-0064-7991-0	7100292771	3M™ Betapure™ AU Series Filter Cartridge 1GPJ2AUWN1 CTG 1x2 150UM	150	20/50.8	ball	Yes
3M™ Micro-Klean™ RT	1GPJ1RTYN0	XA-0064-7998-5	7100291967	3M™ Micro-Klean™ RT Series Filter Cartridge 1GPJ1RTYN0 CTG 1X1 1UM	1	10/25.4	ball	No
	1GPJ2RTYN0	XA-0064-8077-7	7100292017	3M™ Micro-Klean™ RT Series Filter Cartridge 1GPJ2RTYN0 CTG 1X2 1UM	1	20/50.8	ball	No
	1GPJ1RTBN0	XA-0064-7988-6	7100291936	3M™ Micro-Klean™ RT Series Filter Cartridge 1GPJ1RTBN0 CTG 1X1 5UM	5	10/25.4	ball	No
	1GPJ2RTBN0	XA-0064-7987-8	7100292014	3M™ Micro-Klean™ RT Series Filter Cartridge 1GPJ2RTBN0 CTG 1X2 5UM	5	20/50.8	ball	No
	1GPJ2RTBS0	XA-0064-7990-2	7100291935	3M™ Micro-Klean™ RT Series Filter Cartridge 1GPJ2RTBS0 CTG 1X2 5UM	5	20/50.8	ball with SS spring	No
	1GPJ2RTBS1	XA-0064-7989-4	7100291966	3M™ Micro-Klean™ RT Series Filter Cartridge 1GPJ2RTBS1 CTG 1X2 5UM	5	20/50.8	ball with SS spring	Yes
	1GPJ1RTCNO	XA-0064-7986-0	7100291865	3M™ Micro-Klean™ RT Series Filter Cartridge 1GPJ1RTCNO CTG 1X1 10UM	10	10/25.4	ball	No
	1GPJ2RTCNO	XA-0064-7985-2	7100292015	3M™ Micro-Klean™ RT Series Filter Cartridge 1GPJ2RTCNO CTG 1X2 10UM	10	20/50.8	ball	No
	1GPJ1RTFN1	XA-0064-8078-5	7100292501	3M™ Micro-Klean™ RT Series Filter Cartridge 1GPJ1RTFN1 CTG 1X1 25UM	25	10/25.4	ball	Yes
	1GPJ1RTFN0	XA-0064-8079-3	7100292500	3M™ Micro-Klean™ RT Series Filter Cartridge 1GPJ1RTFN0 CTG 1X1 25UM	25	10/25.4	ball	No
	1GPJ2RTFN0	XA-0064-8081-9	7100292502	3M™ Micro-Klean™ RT Series Filter Cartridge 1GPJ2RTFN0 CTG 1X2 25UM	25	20/50.8	ball	No
	1GPJ1RTLNO	XA-0064-8082-7	7100292763	3M™ Micro-Klean™ RT Series Filter Cartridge 1GPJ1RTLNO CTG 1X1 50UM	50	10/25.4	ball	No
	1GPJ2RTLNO	XA-0064-8083-5	7100292764	3M™ Micro-Klean™ RT Series Filter Cartridge 1GPJ2RTLNO CTG 1X2 50UM	50	20/50.8	ball	No
	1GPJ1RTQN1	XA-0064-8084-3	7100292765	3M™ Micro-Klean™ RT Series Filter Cartridge 1GPJ1RTQN1 CTG 1X1 75UM	75	10/25.4	ball	Yes
	1GPJ1RTQN0	XA-0064-8076-9	7100292766	3M™ Micro-Klean™ RT Series Filter Cartridge 1GPJ1RTQN0 CTG 1X1 75UM	75	10/25.4	ball	No
	1GPJ2RTQN1	XA-0064-8075-1	7100292767	3M™ Micro-Klean™ RT Series Filter Cartridge 1GPJ2RTQN1 CTG 1X2 75UM	75	20/50.8	ball	Yes
	1GPJ2RTQN0	XA-0064-7999-3	7100292768	3M™ Micro-Klean™ RT Series Filter Cartridge 1GPJ2RTQN0 CTG 1X2 75UM	75	20/50.8	ball	No
	3M™ Betapure™ NT-T	1GPJ1NTT010N0	JN-7220-3861-7	7100279604	3M™ Betapure™ NTT Series Filter Cartridge 1GPJ1NTT010N0 LF CTG 1X1 1UM	1	10/25.4	ball
1GPJ1NTT020N0		JN-7220-3862-5	7010692605	3M™ Betapure™ NTT Series Filter Cartridge 1GPJ1NTT020N0 LF CTG 1X1 2UM	2	10/25.4	ball	No
1GPJ2NTT020N0		JN-7220-3866-6	7010692606	3M™ Betapure™ NTT Series Filter Cartridge 1GPJ2NTT020N0 LF CTG 1X2 2UM	2	20/50.8	ball	No
1GPJ1NTT030N0		JN-7220-3863-3	7100279605	3M™ Betapure™ NTT Series Filter Cartridge 1GPJ1NTT030N0 LF CTG 1X1 3UM	3	10/25.4	ball	No
1GPJ1NTT050N0		UU-0119-0244-0	7100279320	3M™ Betapure™ NTT Series Filter Cartridge 1GPJ1NTT050N0 LF CTG 1X1 5UM	5	10/25.4	ball	No
1GPJ2NTT050N0		UU-0117-6763-7	7100273143	3M™ Betapure™ NTT Series Filter Cartridge 1GPJ2NTT050N0 LF CTG 1X2 5UM	5	20/50.8	ball	No
1GPJ1NTT100N0		UU-0117-7947-5	7100273368	3M™ Betapure™ NTT Series Filter Cartridge 1GPJ1NTT100N0 LF CTG 1X1 10UM	10	10/25.4	ball	No
1GPJ2NTT100N0		UU-0117-6762-9	7100273142	3M™ Betapure™ NTT Series Filter Cartridge 1GPJ2NTT100N0 LF CTG 1X2 10UM	10	20/50.8	ball	No
1GPJ1NTT200N0		UU-0117-7946-7	7100273367	3M™ Betapure™ NTT Series Filter Cartridge 1GPJ1NTT200N0 LF CTG 1X1 20UM	20	10/25.4	ball	No
1GPJ2NTT200N0		UU-0117-6761-1	7100273141	3M™ Betapure™ NTT Series Filter Cartridge 1GPJ2NTT200N0 LF CTG 1X2 20UM	20	20/50.8	ball	No
1GPJ1NTT400N0		JN-7220-3386-5	7100279606	3M™ Betapure™ NTT Series Filter Cartridge 1GPJ1NTT400N0 LF CTG 1X1 40UM	40	10/25.4	ball	No
1GPJ2NTT400N0		JN-7220-3388-1	7010692488	3M™ Betapure™ NTT Series Filter Cartridge 1GPJ2NTT400N0 LF CTG 1X2 40UM	40	20/50.8	ball	No
1GPJ1NTT500N0		UU-0117-7117-5	7100276484	3M™ Betapure™ NTT Series Filter Cartridge 1GPJ1NTT500N0 LF CTG 1X1 50UM	50	10/25.4	ball	No
1GPJ2NTT500N0		JN-7220-3870-8	7100279610	3M™ Betapure™ NTT Series Filter Cartridge 1GPJ2NTT500N0 LF CTG 1X2 50UM	50	20/50.8	ball	No
1GPJ2NTT500N1		UU-0119-0245-7	7100279321	3M™ Betapure™ NTT Series Filter Cartridge 1GPJ2NTT500N1 LF CTG 1X2 50UM	50	20/50.8	ball	Yes
1GPJ1NTT700N0		JN-7220-3527-4	7100279607	3M™ Betapure™ NTT Series Filter Cartridge 1GPJ1NTT700N0 LF CTG 1X1 70UM	70	10/25.4	ball	No
1GPJ2NTT700N0		JN-7220-3871-6	7010692607	3M™ Betapure™ NTT Series Filter Cartridge 1GPJ2NTT700N0 LF CTG 1X2 70UM	70	20/50.8	ball	No
3M™ Betapure™ SKYL		1GPJ2SKYL0050S0	JN-7220-3297-4	7010692468	3M™ Betapure™ SKYL Series Filter Cartridge 1GPJ2SKYL0050S0 CTG 1X2 0.5UM	0.5	20/50.8	ball with SS spring
	1GPJ2SKYL0100S0	JN-7220-3140-6	7010692437	3M™ Betapure™ SKYL Series Filter Cartridge 1GPJ2SKYL0100S0 CTG 1X2 1UM	1	20/50.8	ball with SS spring	No

# 3M™ CTG-Klean Encapsulated Filter System GPJ Series Housing:

When using 3M™ CTG-Klean Encapsulated Filter System GPJ Series Capsules, please use the dedicated housing. Please contact a 3M representative for more details on housings.



**Table 2: Housing Specifications**

Model Number	3M ID	SAP ID	Inlet/Outlet Fittings	Housing Material	Design Pressure (Mpa/psi)	Cartridge Size	Cartridge Vent	Housing Weight (Kg/lb)	Opening and Closing Method
<b>C1-J1-SZ</b>	UU-0125-1669-4	7100303706	1.5 in (3.8 cm) Sanitary/ Tri-Clover	304 SS	0.5 /72	1 × 10 in (25.4 cm)	No	5 / 11	C-Clamp
<b>C1-J1-SVZ</b>	UU-0125-1513-4	7100303708					Yes		
<b>C1-J2-SZ</b>	UU-0125-1670-2	7100303705				1 × 20 in (50.8 cm)	No	7 / 15.4	
<b>C1-J2-SVZ</b>	UU-0125-1514-2	7100303707					Yes		

**Intended Use and Product Selection:** 3M™ CTG-Klean Encapsulated Filter Systems GPJ Series are intended for use in industrial filtration applications of aqueous fluids in accordance with the applicable product instructions and specifications. 3M CTG-Klean Encapsulated Filter Systems GPJ Series products are also intended for use with non-aqueous fluids where materials of construction are compatible. Since there are many factors that can affect a product’s use, the customer and user remain responsible for determining whether the 3M product is suitable and appropriate for the user’s specific application, including user conducting an appropriate risk assessment and evaluating the 3M product in user’s application.

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