



TECHNICAL GUIDE

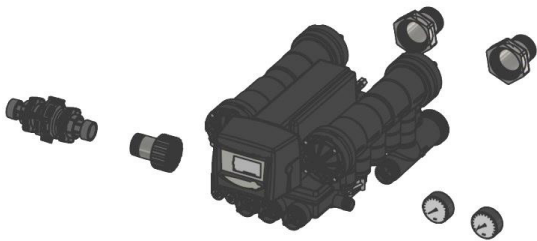
PACKAGED PRODUCTS - COMMERCIAL & INDUSTRIAL SYSTEM SOLUTIONS

MAGNUM 293 FILTRATION KIT





MAGNUM 293 FILTRATION KIT



KIT DESCRIPTION

- All components and accessories are included to build various types of filtration systems
- Suitable for a wide range of filter applications and adaptable to various vessel sizes: 21x60, 24x69, 30x72 & 36x72 inches
- Two possible versions: Premium & Budget

BUDGET KIT

TECHNICAL DATA

- Valve : Magnum 293 IT
- Controller : Logix 742
- Voltage : 230V 50/60 Hz - transformer 12 VAC 50/60 Hz
- IP rating : 23
- Operating pressure : 1,7 – 6,9 bar
- Regeneration start mode :
 - Timeclock

FEATURES

- DLFC adaptable for different applications
- Inlet and outlet pressure gauges included
- Possible to combine 21x60, 24x69, 30x72 & 36x72 Structural tanks
- Tank kit includes a rise tube and a star lower screen system
- PVC fittings

Part number	Description
CI-F-293742-0000	Budget filtration kit - Autotrol 293 742, NBP during backwash
CI-F21602937420000	Budget filtration kit - Autotrol 293 742 with tank 21x60, NBP during backwash. No complete piping and frame. No auxiliary microswitch
CI-F24692937420000	Budget filtration kit - Autotrol 293 742 with tank 24x69, NBP during backwash. No complete piping and frame. No auxiliary microswitch
CI-F30722937420000	Budget filtration kit - Autotrol 293 742 with tank 30x72, NBP during backwash. No complete piping and frame. No auxiliary microswitch
CI-F36722937420000	Budget filtration kit - Autotrol 293 742 with tank 36x72, NBP during backwash. No complete piping and frame. No auxiliary microswitch

PREMIUM KIT

TECHNICAL DATA

- Valve: Magnum 293 IT
- Controller : Logix 764
- Voltage: 230V 50/60 Hz - transformer 12 VAC 50/60 Hz
- IP rating : 23
- Operating pressure : 1,7 – 6,9 bar
- Regeneration start mode:
 - Timeclock
 - Differential pressure input
 - Volumetric (adding a water meter)

FEATURES

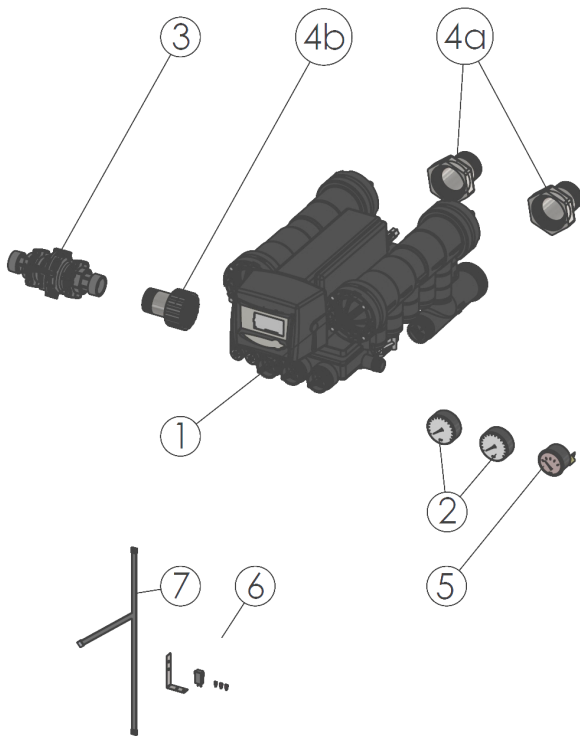
- DLFC adaptable for different applications
- Inlet and outlet pressure gauges included
- Possible to combine 21x60, 24x69, 30x72 & 36x72 Structural tanks
- Tank kit includes a rise tube and a star lower screen system
- Differential pressure switch
- Multi-tank interlock & remote start cable included
- Auxiliary microswitch with breakaway camshaft included
- Stainless steel fittings

Part number	Description
CI-F-293764-0001	Premium filtration kit - Autotrol 293 764. NBP during backwash. Differential pressure switch and auxiliary microswitch
CI-F21602937640001	Premium filtration kit - Autotrol 293 764 with tank 21x60. NBP during backwash. No complete piping and frame. Differential pressure switch and auxiliary microswitch
CI-F24692937640001	Premium filtration kit - Autotrol 293 764 with tank 24x69. NBP during backwash. Differential pressure switch and auxiliary microswitch
CI-F30722937640001	Premium filtration kit - Autotrol 293 764 with tank 30x72. NBP during backwash. Differential pressure switch and auxiliary microswitch
CI-F36722937640001	Premium filtration kit - Autotrol 293 764 with tank 36x72. NBP during backwash. Differential pressure switch and auxiliary microswitch

PERFORMANCE (service flow rate: 0,7 - 15,5 m³/h)

Common applications	21x60	24x69	30x72	36x72
Service flow Multi media [m ³ /h]	5,7	7,2	11,2	15,5
Service flow Anthracite [m ³ /h]	3,4	4,3	6,7	9,3
Service flow GAC Cl [m ³ /h]	1,8	2,3	3,6	5,0
Service flow GAC organics [m ³ /h]	0,7	0,9	1,3	1,9
Service flow Birm [m ³ /h]	2,3	2,9	4,5	6,2
Service flow with sand [m ³ /h] (Best filtration quality)	1,6	2,0	3,1	4,3
Service flow with sand [m ³ /h] (Good filtration quality)	2,3	2,9	4,5	6,2
Service flow with sand [m ³ /h] (Average filtration quality)	3,4	4,3	6,7	9,3
Service flow with sand [m ³ /h] (Rough filtration)	4,5	5,8	9,0	12,4

EXPLODED VIEW



BUDGET VERSION

1. 293 Logix 742 timer
2. Inlet and outlet pressure gauges included
3. DLFC adaptable for different applications
4. Fittings in PVC DN 50 (in/out) & DN 40 for drain

PREMIUM VERSION

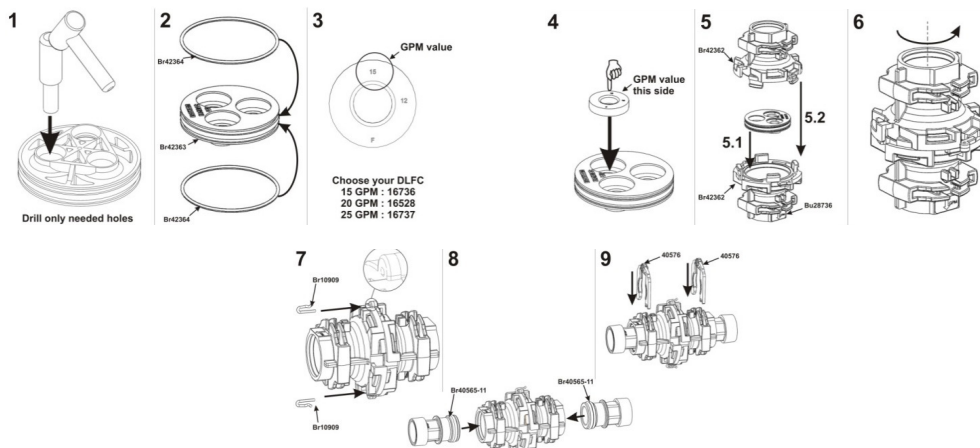
1. 293 Logix 764 timer
2. Inlet and outlet pressure gauges included
3. DLFC adaptable for different applications
4. Fittings in SS 2" BSP male (in/out) 1,5" BSP male drain
5. Differential pressure switch
6. Auxiliary microswitch kit
7. Y-cable for remote start or multi-tank interlock

DLFC ASSEMBLY & SETTING

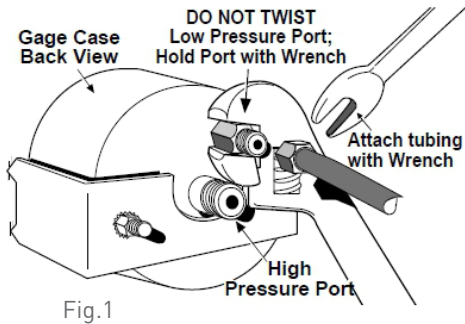
Suggested DLFC settings per media types:

Type of media	21" tank	24" tank	30" tank	36" tank
Sand (ca. 40 m/h)	40 gpm (2x20)	50 gpm (25x2)	75 gpm (3x25)	N/A
Birm (ca. 30 m/h)	30 gpm (2x15)	35 gpm (20+15)	60 gpm (3x20)	N/A
GAC (ca. 20 m/h)	20 gpm (1x20)	25 gpm (1x25)	40 gpm (20 + 20)	55 gpm (2x20 + 15)
Multi media and anthracite (ca.35 m/h)	35 gpm (20 + 15)	45 gpm (20 + 25)	70 gpm (2x25 + 20)	N/A

DLFC assembly procedure:

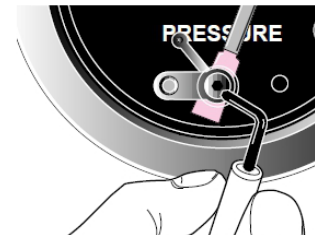


CONNECTION OF THE DIFFERENTIAL PRESSURE SWITCH

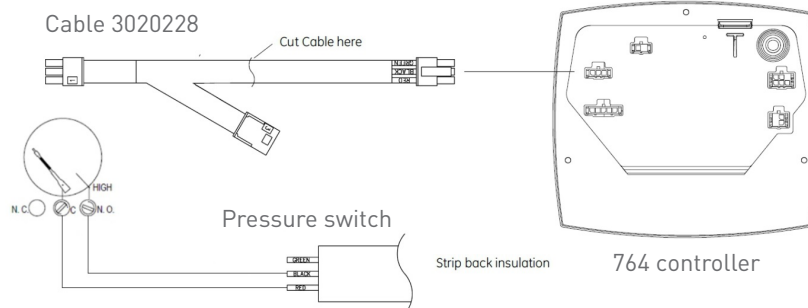


- The “high” pressure port (center mounted) is piped to the inlet side of the filter. The “Low” pressure port (top center mounted) is piped to the outlet side of the filter.

- You MUST use a second wrench on the low pressure port when tightening tube fittings (see Fig.1)
- Notice that a wrench is used for holding the low pressure port while a second wrench will tighten the pressure tubing/hose fitting onto the port.



- All contacts are set using a 1/16 inch hex wrench. Rotate the contact until you reach the wanted setting. Set the contact slightly below the desired maximum differential pressure. Default setting is 2 bar.
- Connect the switch to the cable 3020228, and the cable to the 764 as shown below.



Note: Performance and flow settings advised by Pentair are calculated upon common media manufactures data sheets. We advise to always check with the filter media supplier the service and backwash velocities to use, and contact Pentair technical support whenever is needed to adapt the kit to different values from the ones specified in this document.



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