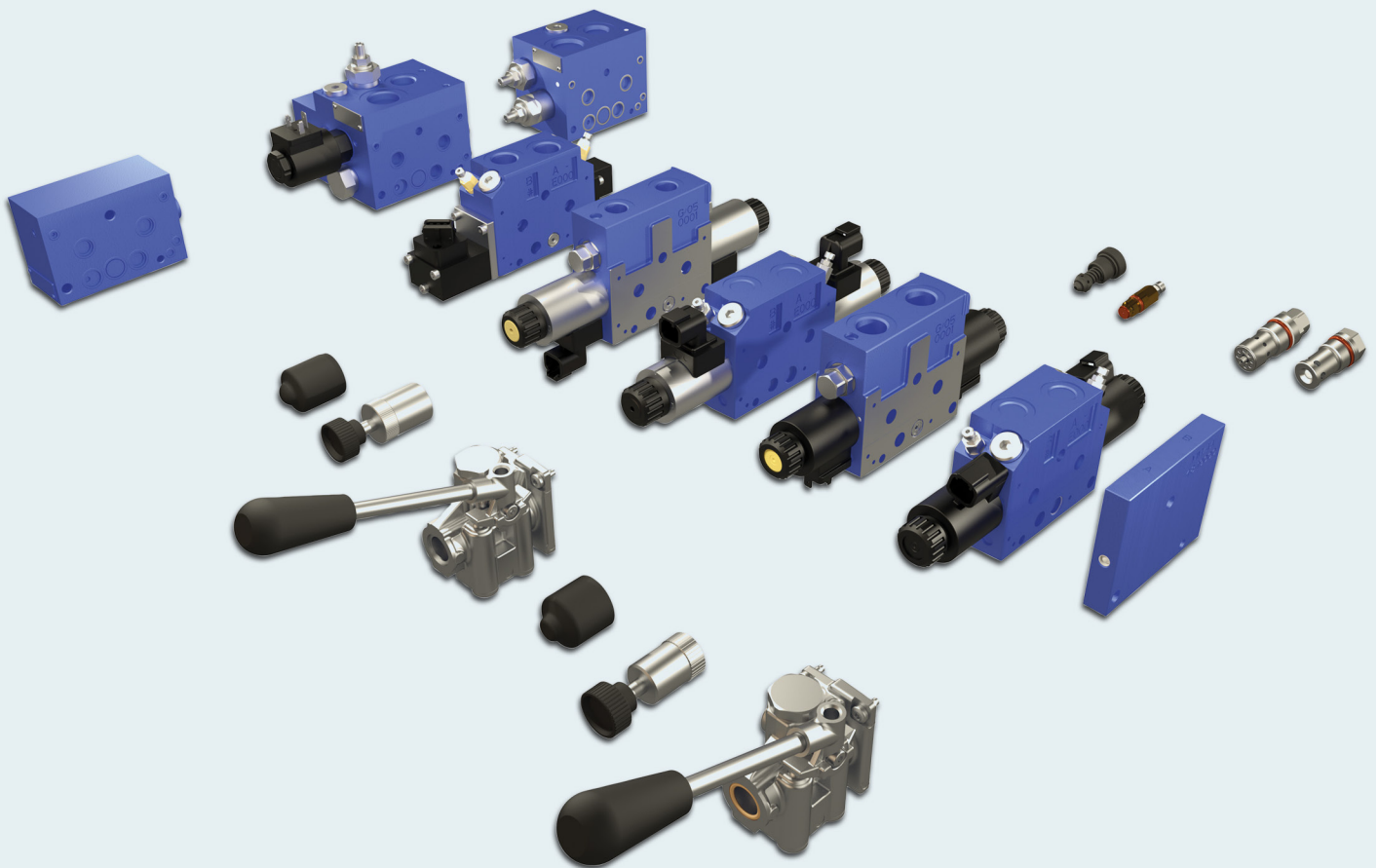
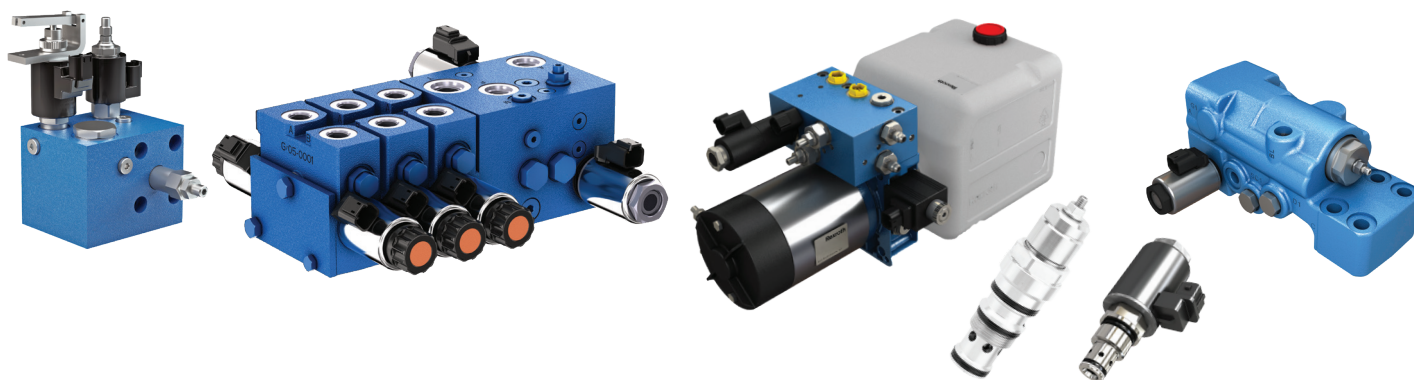


# Modular Directional valves EDG assembly

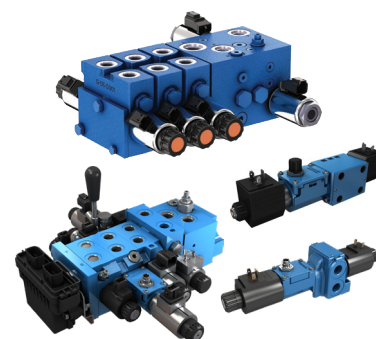
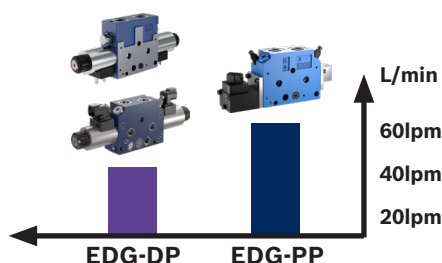




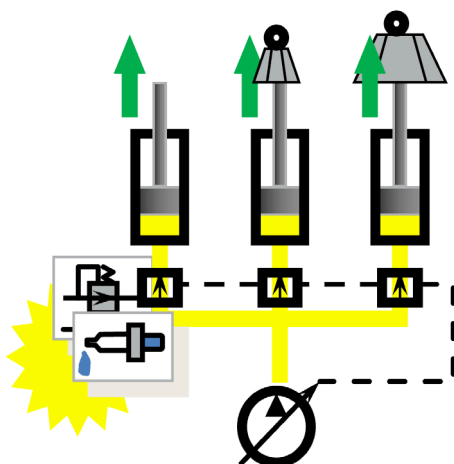
Bosch Rexroth Oil Control introduces the “Modular Directional Valve – EDG assembly brochure”: released to simplify the modular system’s selection, depending on the target applications. The goal was to create a document (which doesn’t replace the product catalog) very simple to consult. Thanks to the complete products list, the clear symbology and feasible options, the brochure can guide the user in the component’s choice. The EDG assembly brochure is based on the “Slice ED concept”, which replaces the traditional “6 ways directional valve system” allowing potentially infinite combinations to match any customers needs and to improve their machines performances. The EDG assembly brochure helps the users in completing the configuration of modular elements for creating on-off and proportional solenoid operated.

Based on the circuit type, it will be easy to choose between the suggested slice elements to configure the proper modular system matching the circuit features. The brochure also includes some hydraulics schemes which can be developed for different circuits/application types.

In case of systems/applications in which the flow request is over 60 lpm per each section, it’s also possible to assemble the EDG slices with the M412/M415 or RM10/RM15 elements, helping in the creation of “Hybrid Solutions”.

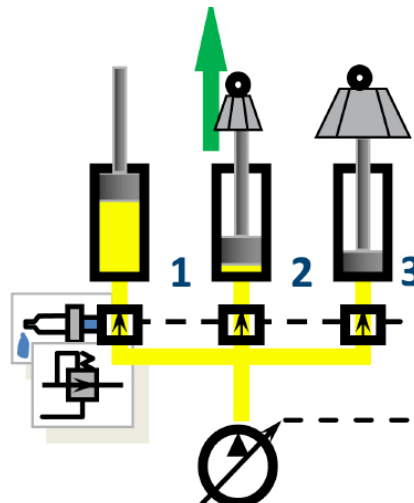


### LUDV Post - compensation

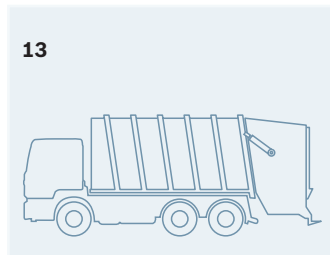
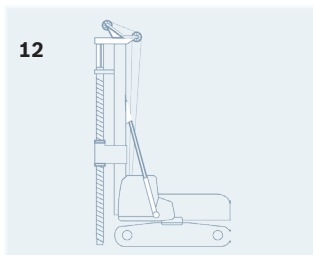
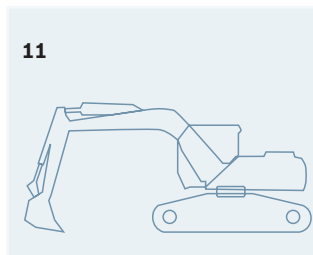
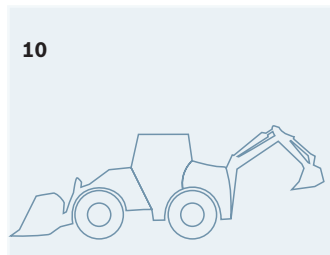
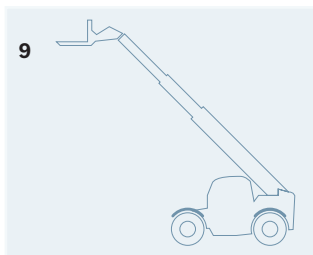
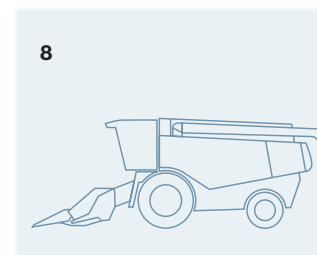
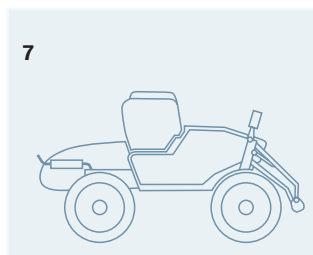
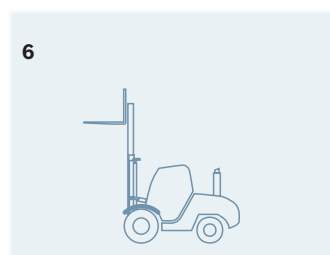
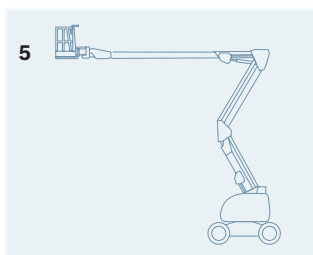
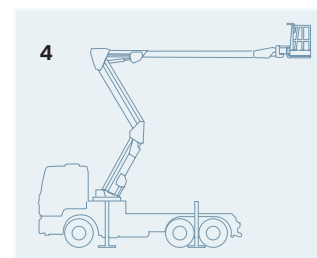
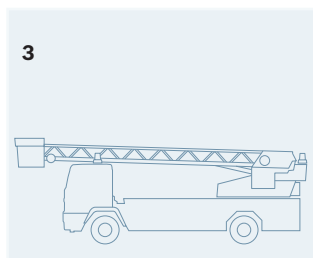
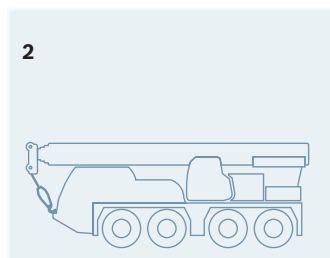
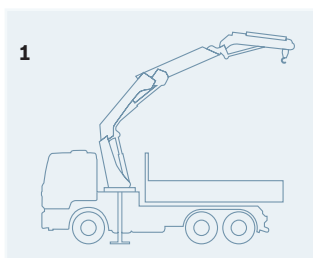


**Flow sharing:** simultaneous movements are assured at different pressure ranges, even in case of saturation condition.

### Load sensing / Pre - compensation



**Load Sensing:** simultaneous movements are allowed until the saturation of the system; then the movement which needs the higher pressure will stop.



#### Applications

- ▶ 1. Truck mounted crane
- ▶ 2. All terrain crane
- ▶ 3. Aerial ladder platform
- ▶ 4. Aerial platform on truck
- ▶ 5. Aerial platform
- ▶ 6. Fork lift
- ▶ 7. Sprayer
- ▶ 8. Harvester
- ▶ 9. Telehandler
- ▶ 10. Backhoe loader
- ▶ 11. Excavator
- ▶ 12. Drilling
- ▶ 13. Garbage truck
- ▶ 14. Sweeper

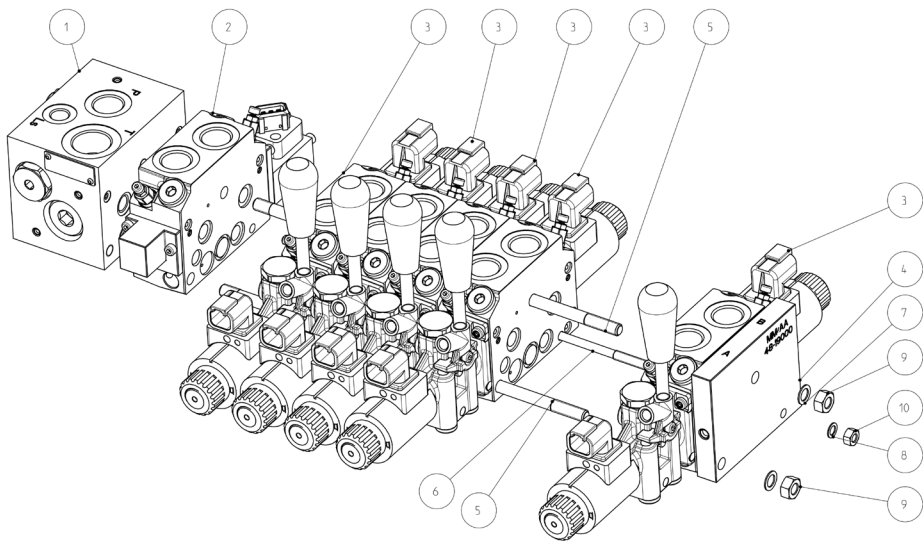


**Hybrid solution**  
**HIC + EDG slices assembly**



**Hybrid solution**  
**RM10 + EDG slices assembly CHC**

# Fixed displacement pump - simultaneous movements (On-Off / Proportional / Piloted)

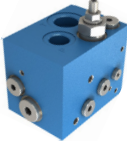


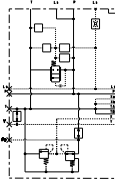
- Some examples of:
- ▶ 1 - Inlet elements
  - ▶ 2 - Outlet elements
  - ▶ 3 - Directional valve elements
  - ▶ 4 - Tie Rods

## 1 - Inlet elements

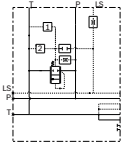
TEG-00	Data sheet 18300-17	Technical Data	
Inlet element with threaded ports to connect the external P and T lines to the P and T channels of the EDG Directional Valve Elements		Max pressure for cast iron version	350 bar 5000 psi
		Max pressure for aluminum version	250 bar 3600 psi
		Max inlet flow	up to 120 l/min 32 gpm
		Material	Cast iron Aluminium
		Port connections	G 1/2-G3/4 SAE 10-12

TEG-13	Data sheet 18300-16	Technical Data	
Inlet element with by-pass compensator, main pressure relief, LS relief and solenoid operated unloading		Max pressure	350 bar 5000 psi
		Max inlet flow	up to 120 l/min 32 gpm
		Material	Cast iron Aluminium
		Port connections	G 1/2-G3/4 SAE 10-12





With main pressure reducing valve MHDRDB (needed with EDG-PP slices)

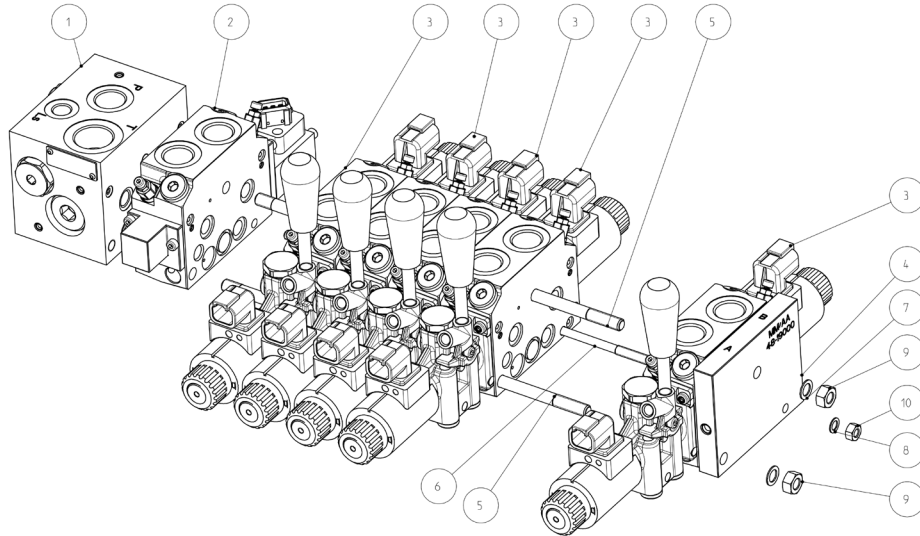


Without main pressure reducing valve MHDRDB

## 2 - Outlet elements

TCG-00	Data sheet 18301-65	Technical Data	
End element basic		Max pressure for cast iron version	350 bar 5000 psi
		Max pressure for aluminum version	250 bar 3600 psi

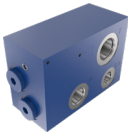

# Variable displacement pump - simultaneous movements (On-Off / Proportional / Piloted)

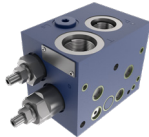
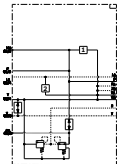
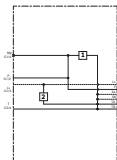


Some examples of:



- ▶ 1 - Inlet elements
- ▶ 2 - Outlet elements
- ▶ 3 - Directional valve elements
- ▶ 4 - Tie Rods

## 1 - Inlet elements

TEG-00	Data sheet 18300-17	Technical Data
<i>Inlet element with threaded ports to connect the external P and T lines to the P and T channels of the EDG Directional Valve Elements</i>		
 	Max pressure for cast iron version	350 bar 5000 psi
	Max pressure for aluminum version	250 bar 3600 psi
	Max inlet flow	up to 120 l/min 32 gpm
	Material	Cast iron Aluminium
	Port connections	G 1/2-G3/4 SAE 10-12

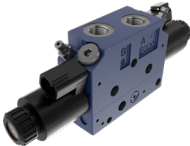
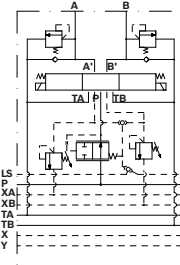
TEG-16	Data sheet 18300-15	Technical Data								
<i>Inlet element with LS Connection and double Pressure relief valve (P and LS lines)</i>										
										
		<table><tr><td>Max pressure</td><td>350 bar 5000 psi</td></tr><tr><td>Max inlet flow</td><td>up to 120 l/min 32 gpm</td></tr><tr><td>Material</td><td>Cast iron</td></tr><tr><td>Port connections</td><td>G 1/2-G3/4 SAE 8-10</td></tr></table>	Max pressure	350 bar 5000 psi	Max inlet flow	up to 120 l/min 32 gpm	Material	Cast iron	Port connections	G 1/2-G3/4 SAE 8-10
Max pressure	350 bar 5000 psi									
Max inlet flow	up to 120 l/min 32 gpm									
Material	Cast iron									
Port connections	G 1/2-G3/4 SAE 8-10									
<div><p>With main pressure reducing valve MHRDB (needed with EDG-PP slices)</p></div>		<div><p>Without main pressure reducing valve MHRDB</p></div>								

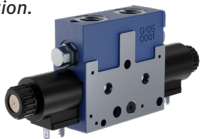
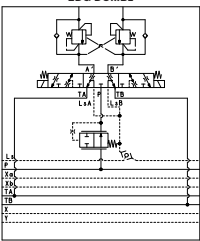
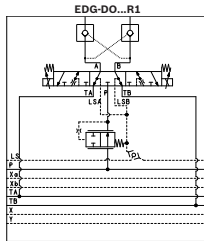
## 2 - Outlet elements

TCG-00	Data sheet 18301-65	Technical Data	
End element basic			
		Max pressure for cast iron version	350 bar 5000 psi
		Max pressure for aluminum version	250 bar 3600 psi

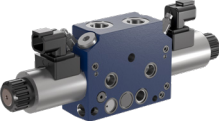
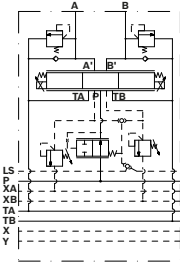


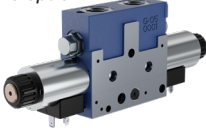
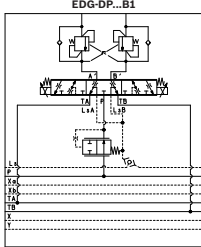
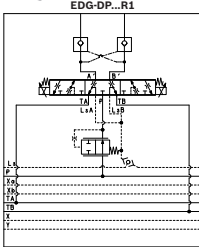
3
- Directional valve elements – On-Off

EDG-DO	Data sheet 18301-21	Technical Data	
L4S/3 -4/2 on-off directional valve element with LS			
 	Size	6	
	Max operating pressure	350 bar 5000 psi	
	Max flow	up to 40 l/min 10.6 gpm	
	Port connections	G3/8 G1/2 SAE6 SAE8	
	Electrical connection	EN 175301-803, AMJ, DT04-2P	

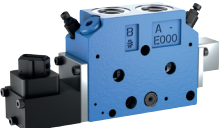
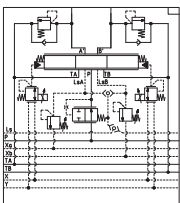
EDG-DO..B1 EDG-DO..R1		Data sheet 18301-23	Technical Data	
4/3-4/2 on-off directional valve element with LS (with cross piloted counterbalance or cross piloted check valve option).			Size	6
			Max operating pressure	350 bar 5000 psi
			Max flow	up to 40 l/min 10.6 gpm
			Port connections	G3/8 G1/2 SAE6 SAE8
			Electrical connection	EN 175301- 803, AMJ, DT04-2P
 				

3
- Directional valve elements Proportional

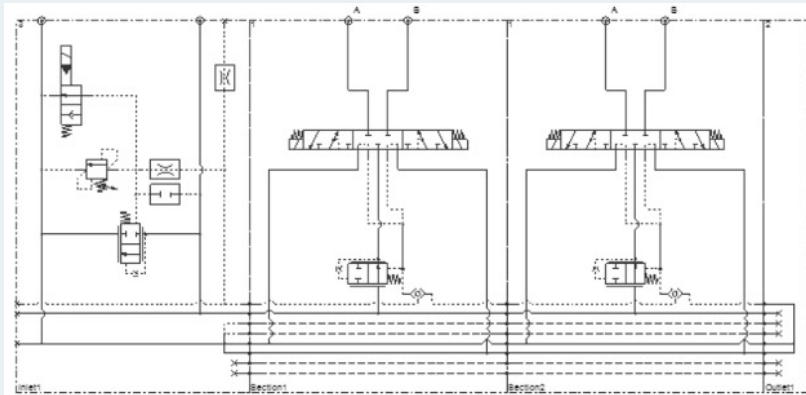
EDG-DP	Data sheet 18301-19	Technical Data	
4/3 -4/2 proportional directional valve element with LS		Size	6
 	Max operating pressure	350 bar 5000 psi	
	Max flow	up to 40 l/min 10.6 gpm	
	Port connections	G3/8 G1/2 SAE6 SAE8	
	Electrical connection	EN 175301-803, AMJ, DT04-2P	

EDG-DP..B1 EDG-DP..R1		Data sheet 18301-23		Technical Data	
<p><i>4/3-4/2 proportional directional valve element with LS (with cross piloted counterbalance or cross piloted check valve option).</i></p>   				Size	6
				Max operating pressure	350 bar 5000 psi
				Max flow	up to 40 l/min 10.6 gpm
				Port connections	G3/8 G1/2 SAE6 SAE8
				Electrical connection	EN 175301-803, AMJ, DT04-2P

3
- Directional valve elements Electrohydraulic Proportional

EDG-PP	Data sheet 18301-24	Technical Data	
4/3-4/2 proportional directional valve element with LS – Electrohydraulic actuation			
 	Size	6	
	Max operating pressure	350 bar 5000 psi	
	Max flow	up to 60 l/min 15.8 gpm	
	Port connections	G3/8 G1/2 SAE8	
	Electrical connection	EN 175301-803, AMJ	

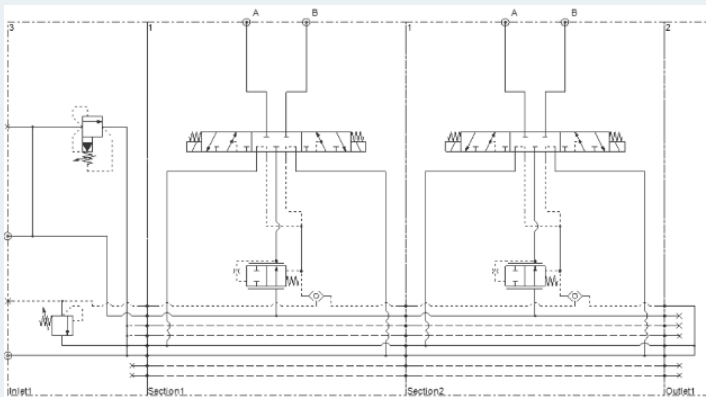
## Fixed displacement pump – simultaneous movements (on-off)



Suitable for:



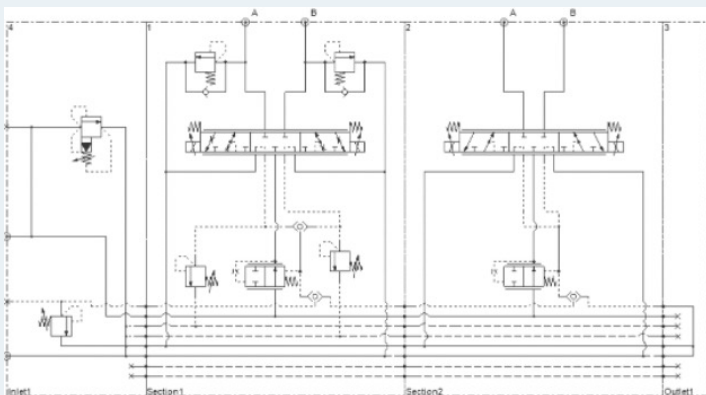
## Variable displacement pump – simultaneous movements (on-off)



Suitable for:



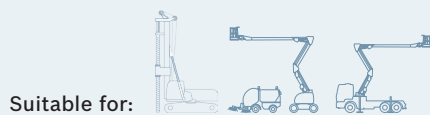
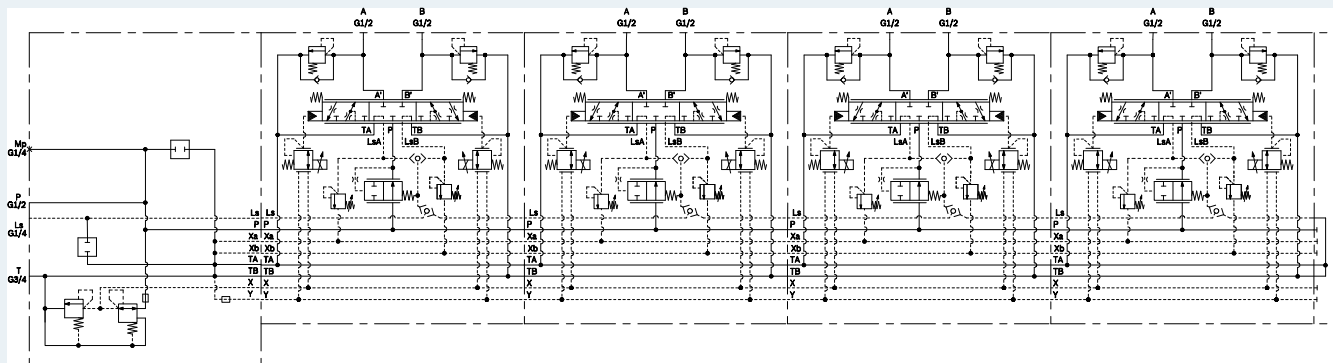
## Variable displacement pump – simultaneous movements (proportional) with auxiliary valves



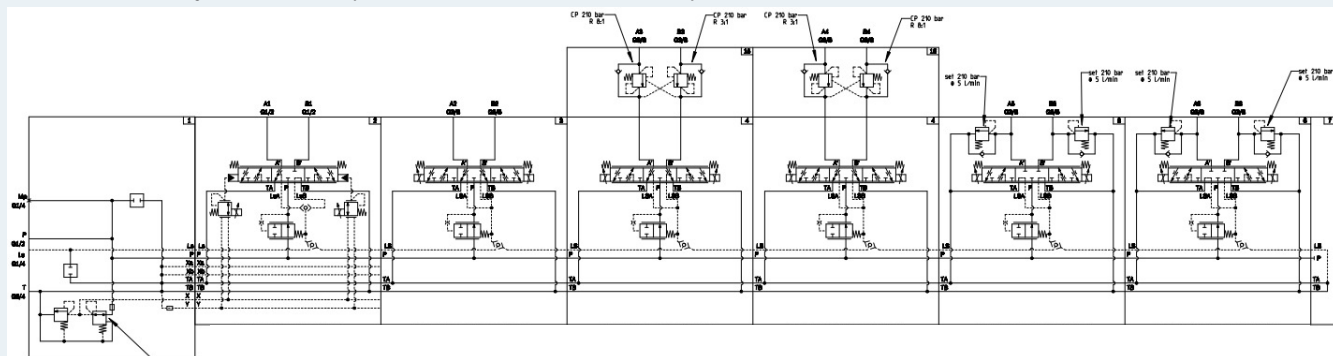
Suitable for:



### Variable displacement pump – simultaneous movements (pilot operated proportional) with auxiliary valves



### Variable displacement pump – simultaneous movements (pilot operated and direct actuated proportional) with auxiliary valves and special modular element on top







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[compact-hydraulics-cdv@boschrexroth.com](mailto:compact-hydraulics-cdv@boschrexroth.com)

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