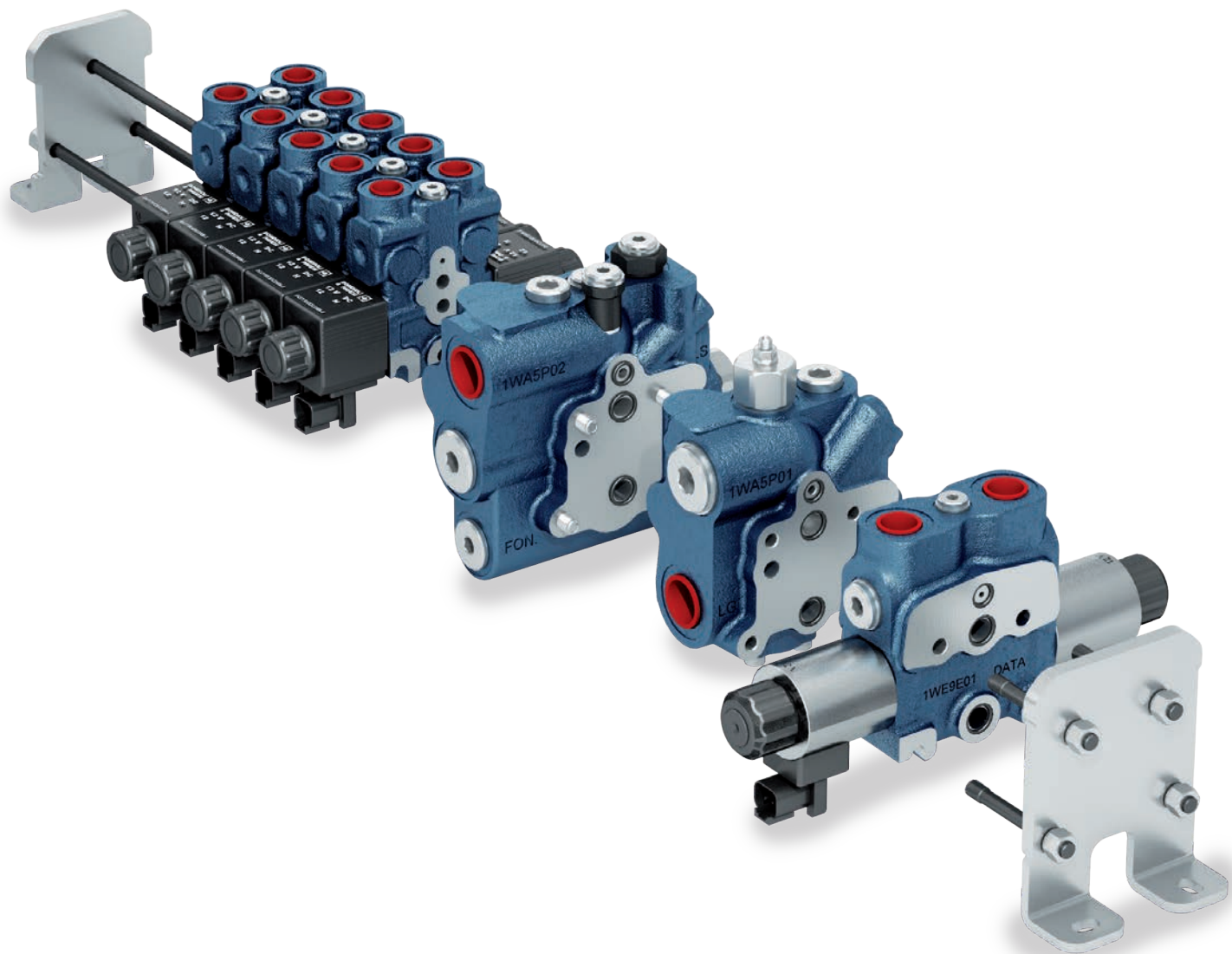


Ordering guide



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ByWire system **ByWire** is the **Modular directional control valve** system developed by Bondioli&Pavesi designed to optimise hydraulic systems and achieve a dynamic approach of the machine. This is thanks to a wide range of standard elements which, when suitably assembled, mean it can be configured on the basis of specific requirements and the circuit to be used, starting from the performance of each function required.

In **ByWire**, all the exchanges and compensations are made directly in the body and the elements. These have been studied to offer larger flow sections compared to cartridge systems of the same external dimensions, with clear advantages in **limiting load loss** and in terms of **energy savings**.

The consolidated technologies are used by the system intuitively and flexibly, **allowing the individual modules to be selected on the basis of the functions of the machine**. **ByWire** is therefore the ideal partner for ensuring optimal performance and better use for the operator, through an easy-to-use and intuitive control. **ByWire** can be used in sectors which require complex hydraulic circuits, with high performance levels, such as agricultural machinery or power machinery for urban works, lifting systems and earth moving machinery.

Features

- The **ByWire** system offers solutions with **proportional** and **on-off electric actuators** with **parallel** or **tandem circuits**
- The system can have **pre-compensated** or **flow sharing** elements, suitable for working in circuits with **fixed pump** or **variable pump**
- **All the exchanges and compensations are performed in the body**

Benefits

- Overall optimization of the hydraulic circuit
- Simplification of all the design steps: easy to control even with self-managing solutions
- Limited size and weight
- Flexibility thanks to the modularity of the components (up to 63 elements) and easy configuration
- Reduced consumption levels thanks to less energy dissipation

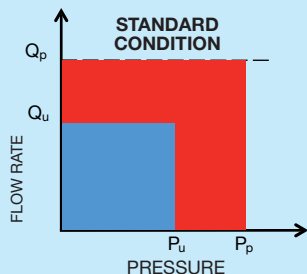
Platforms **ByWire** can be configured according to the specific circuit requirements on the basis of different platforms.

OC platform Open Center Platform

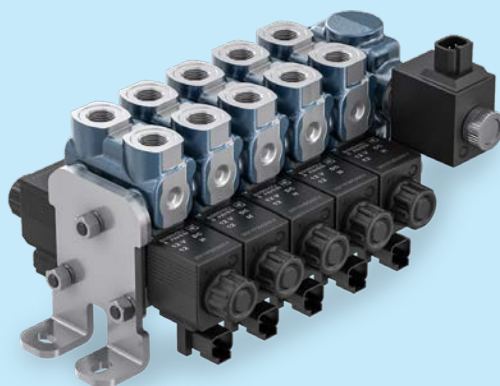
Allows the circuit to be pressurised through the ON-OFF switch, and offers the possibility of integrating different sized modules, including proportionally controlled modules.



**Fixed
displacement pump**



Q_p = Pump Flow P_p = Pump Pressure
 Q_u = Section Flow P_u = Pressure Load

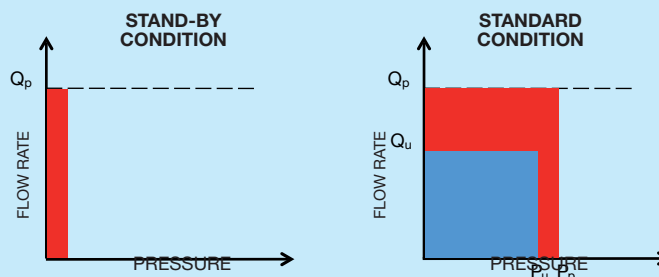


LS platform Load Sensing Platform

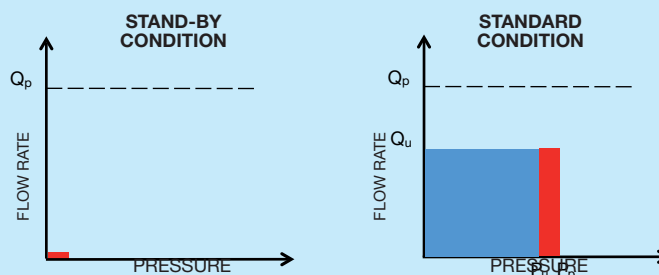
The Load Sensing control improves the performance of the valve-pump system by reducing energy dissipation since the flow rate is adjusted according to the real needs of each function. The LS platform can be configured either with variable flow rate pumps or with fixed flow rate pumps.



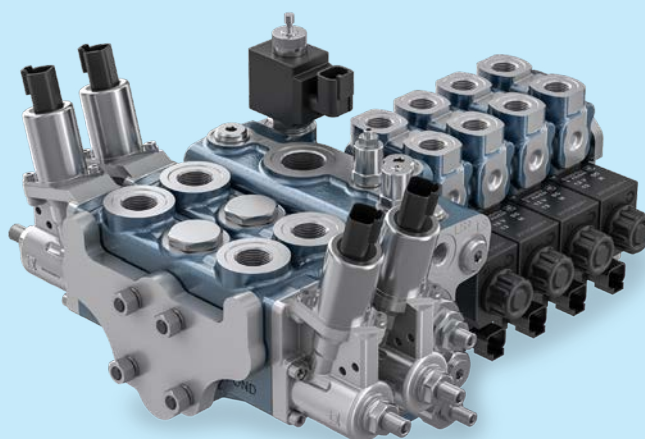
Fixed displacement pump



Variable displacement pump



Q_p = Pump Flow
 Q_u = Section Flow
 P_p = Pump Pressure
 P_u = Pressure Load

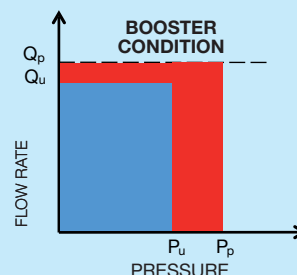
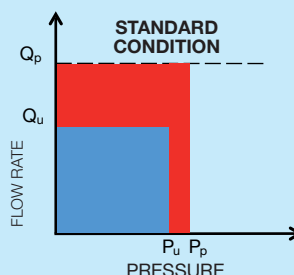
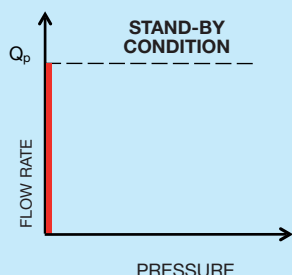


HL platform Hybrid Load Sensing Platform

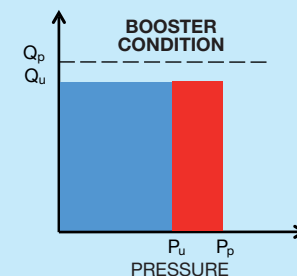
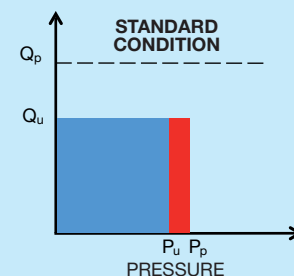
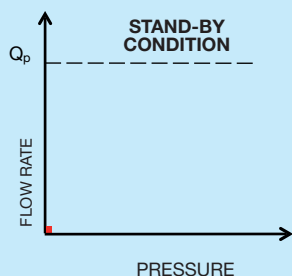
Through a hydraulic/electronic control system, the HL platform optimizes the behaviour of the Load Sensing signal on each function according to a programmed logic.
The system guarantees the use of the minimum necessary power for each function.



Fixed displacement pump



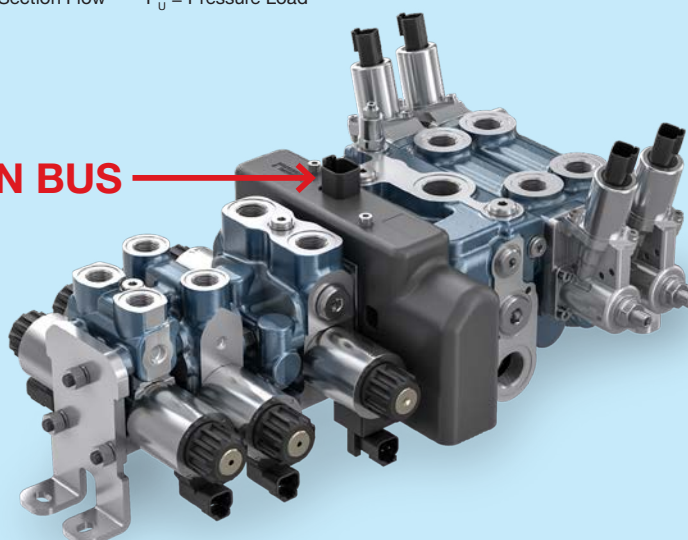
Variable displacement pump



■ LOST POWER ■ WORKING POWER

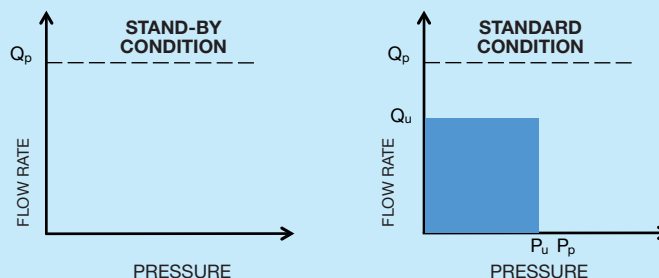
Q_p = Pump Flow P_p = Pump Pressure
 Q_u = Section Flow P_u = Pressure Load

CAN BUS



EL platform Electronic Load Sensing Platform

The EL platform represents the most advanced system, open to future developments of the IOT. The entire control of the system (adjustments and compensations) takes place electronically, obtaining maximum performance in terms of system optimization and safety. The sensors in the system (pressure, flow rate etc.) detect the need for each individual hydraulic function of the machine, allowing rapid management in maximum precision.

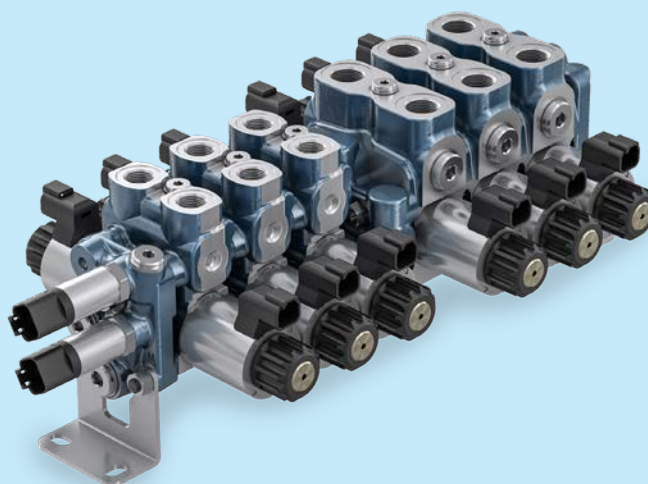


LOST
POWER

WORKING
POWER

Q_p = Pump Flow
 Q_u = Section Flow

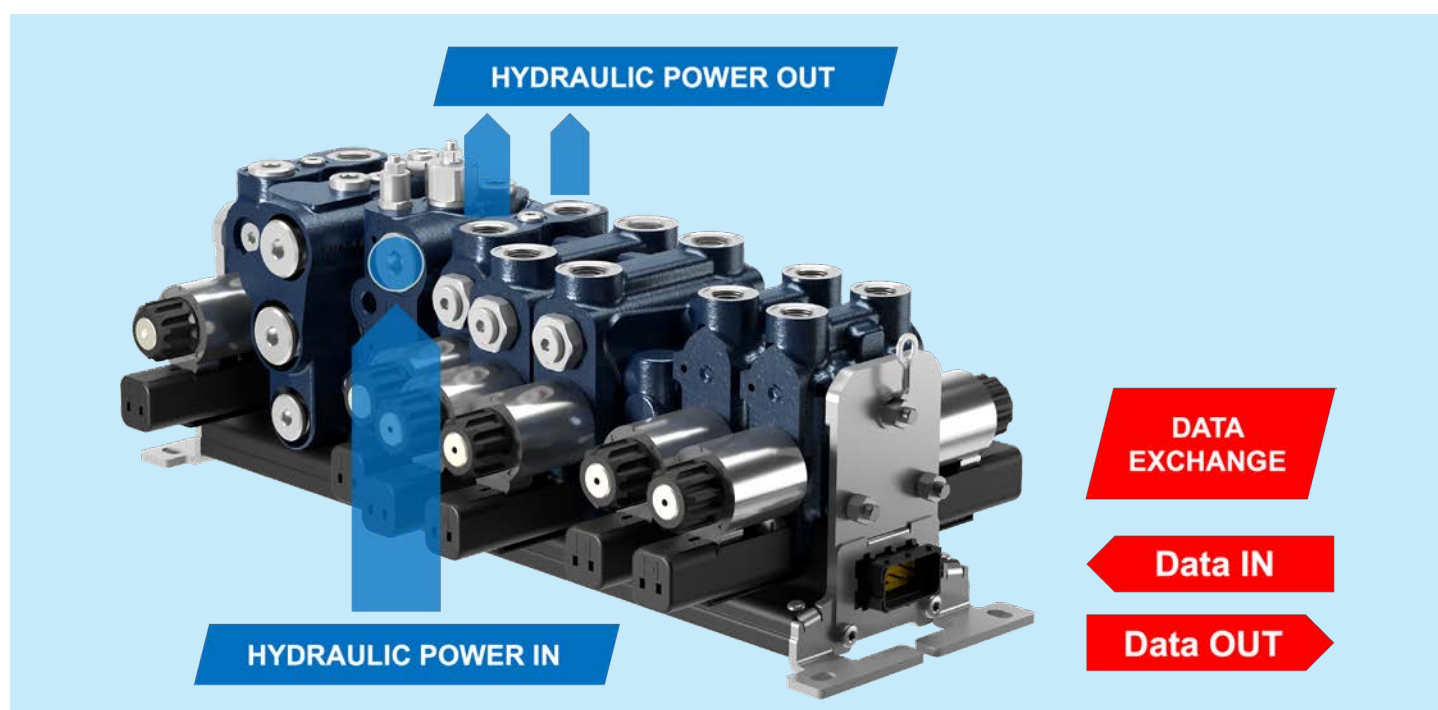
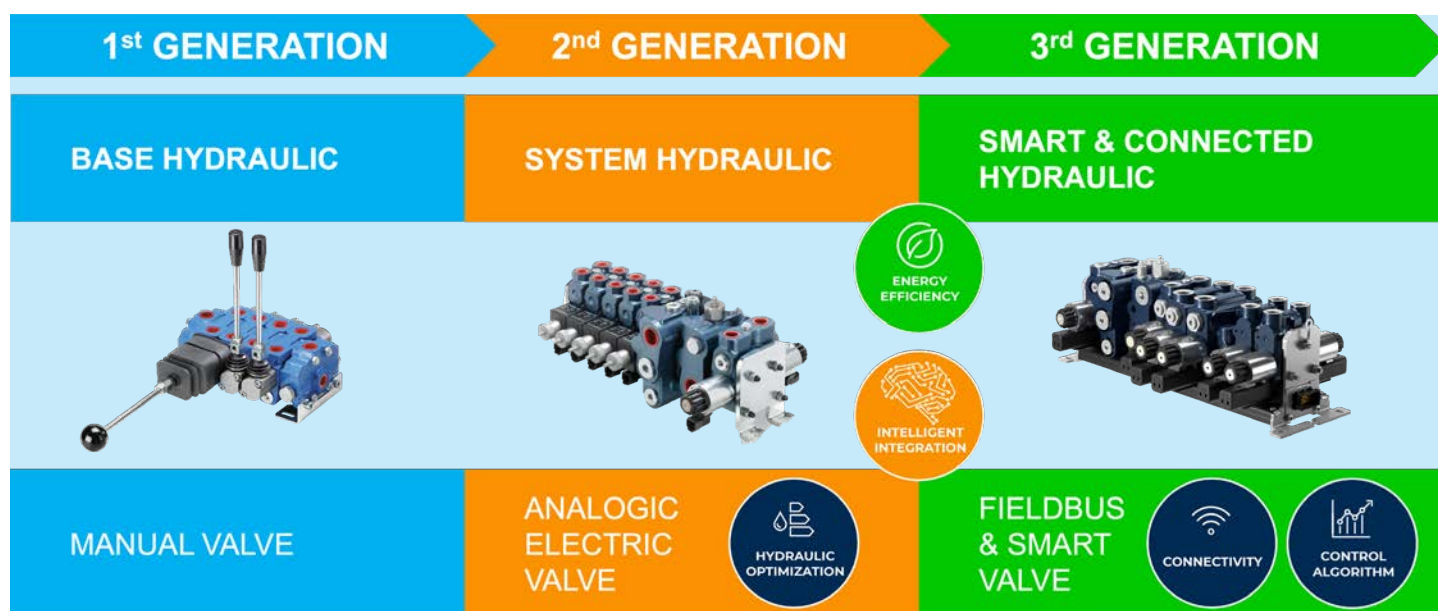
P_p = Pump Pressure
 P_u = Pressure Load



ByWire HUB system

ByWire HUB is a new approach to hydraulic management, moving from analogue control (valve actuated by an analogue signal) to Fieldbus control in which the ByWire valve is connected to all other machine parts with continuous exchange of digital data, controls and diagnostic signals. A new generation of intelligent and connected hydraulics.

The Fieldbus system offers easy connection between the valve and all parts of the machine connected to the CAN-Bus network. Integration of dedicated sensors and the implementation of a specific algorithm allow for complete management of the data from sensors and controls from the CAN-Bus line. This provides continuous information on the system's operation, such as, for example, hydraulic power consumption, pressure drops in the system, or the power required for an individual section.

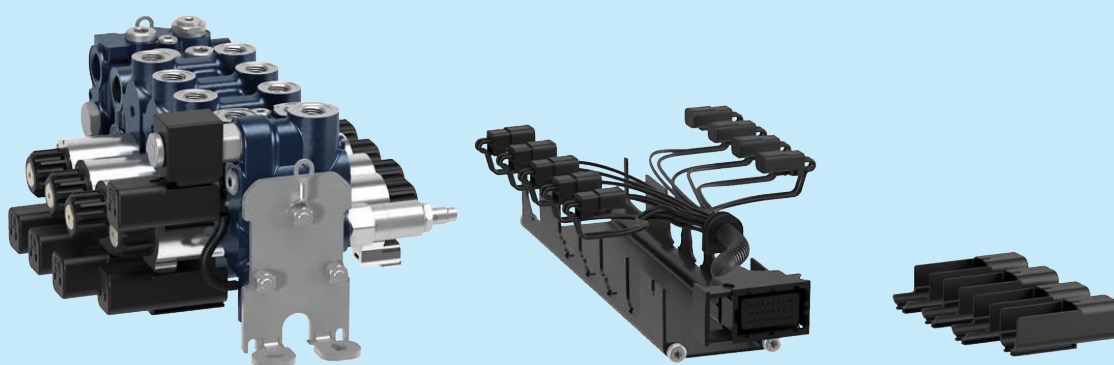


The three versions of ByWire HUB

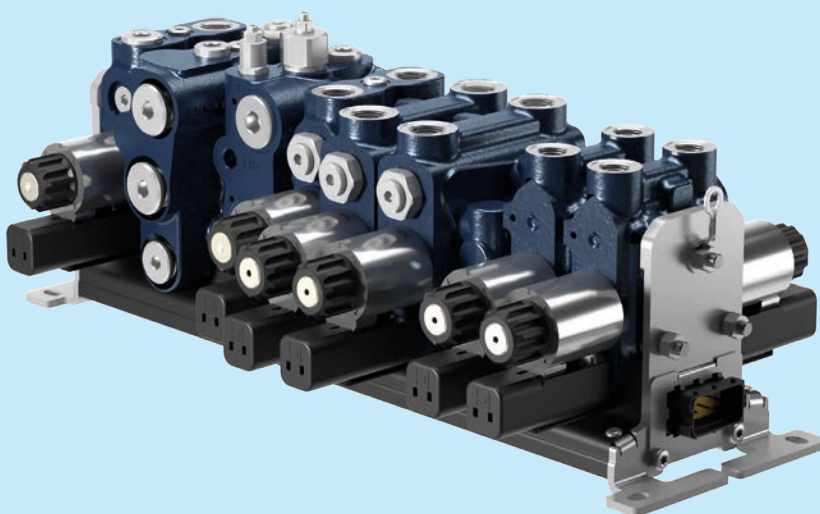
- **E-HUB:** connection of the valve to the other machine components is simplified thanks to a single electric connector positioned right in front of the valve
- **I-HUB:** this is a combination of two main components: an ECU and a wiring
- **I-HUB Plus:** incorporates all the features of the I-HUB, but the ECU is programmed with custom control logic.

The common goal of all three systems, E-HUB, I-HUB and I-HUB PLUS, is to create a customised, integrated and intelligent system.

E-HUB



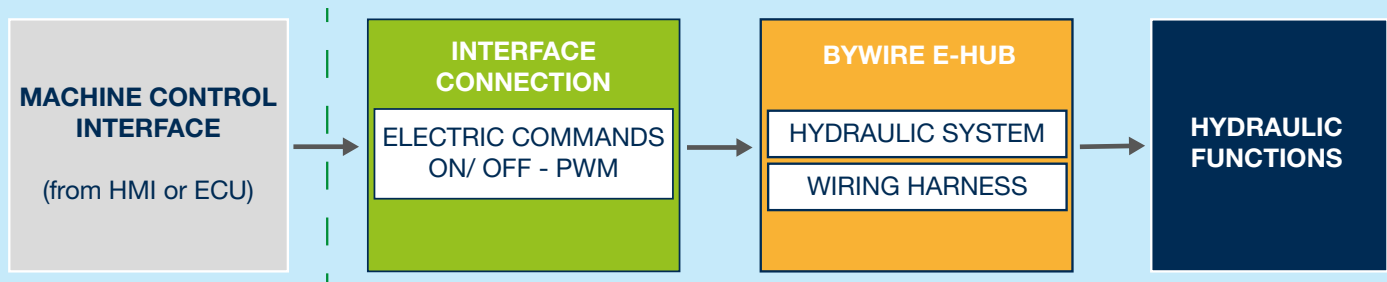
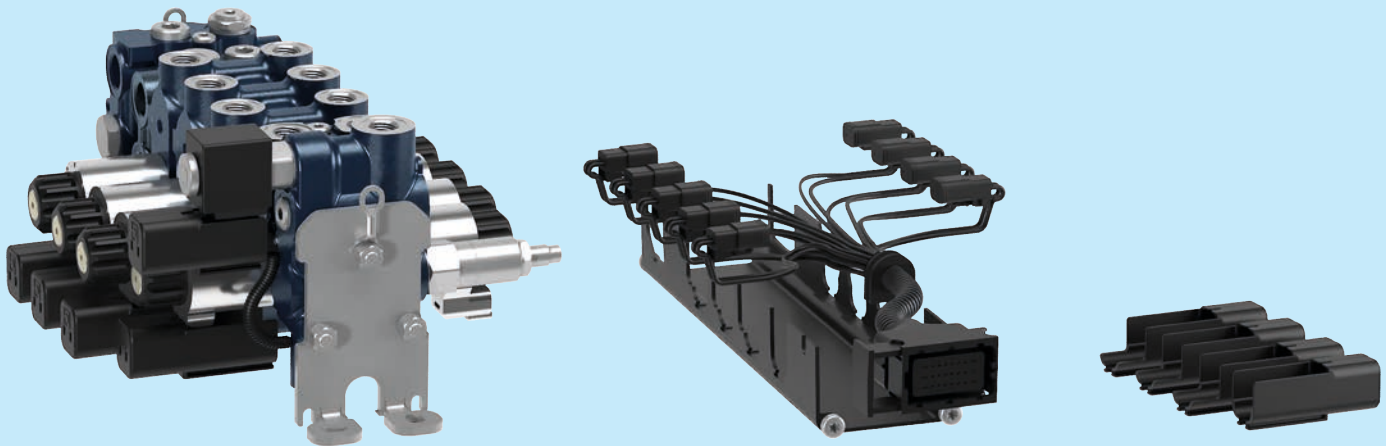
**I-HUB
I-HUB Plus**



E-HUB The connection of the valve to the other machine components is simplified thanks to a single electric connector positioned in front of the valve. E-HUB simplifies not only the connection of the wiring, but represents an additional protection from the external environment (water, sludge, grease etc.) via the protective cover.

The benefits are:

- Reduced installation time by the customer (one electrical connection connects the entire electro-hydraulic system)
- Additional protection from the exterior environment
- Plug and Play solution
- Clean, industrialised solution (no more messy cables around the valve block)



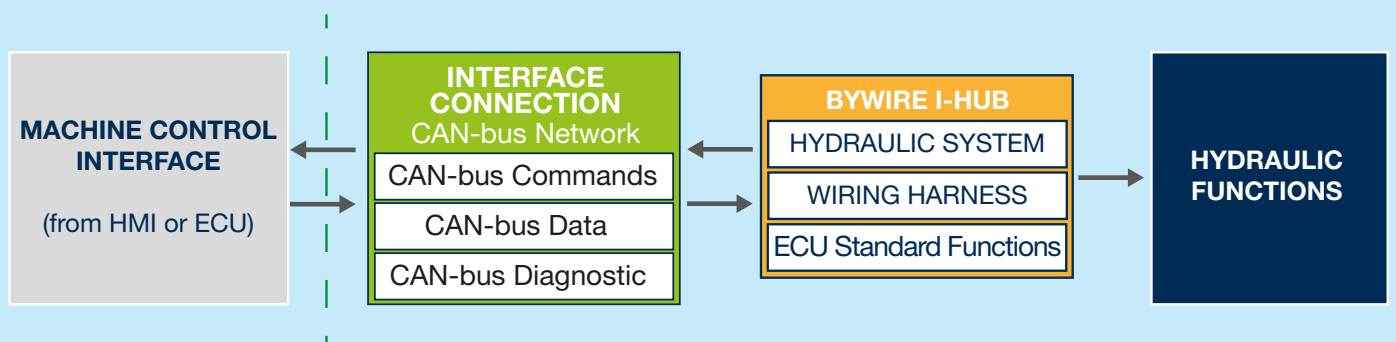
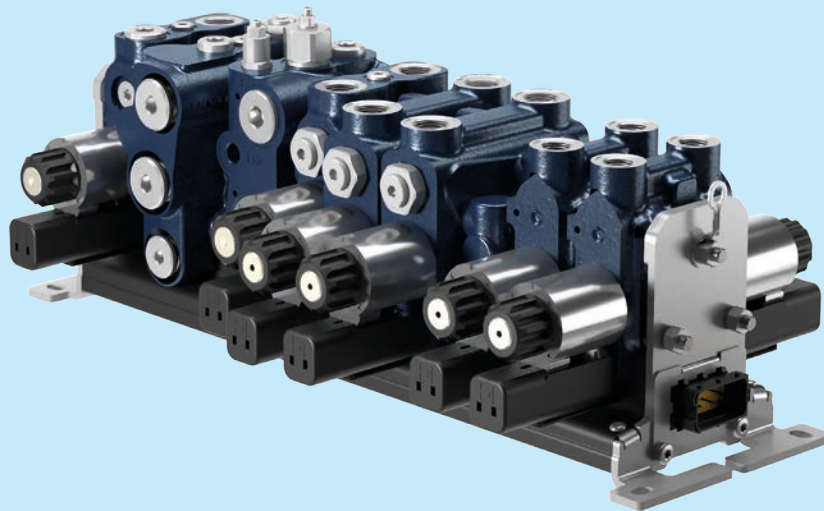
I-HUB I-HUB means the integration of two main components: an ECU and a wiring.

It allows for the exchange of data, controls and signals with all other machine components via a CAN-Bus line with standardised protocol network. The Bywire valve receives functional commands which are processed by the ECU to activate a specific coil of the valve, exchange data from sensors and diagnostic information with all components connected to the same CAN-Bus line. In the I-HUB too, all signals and controls pass through a single connector and the internal parts are protected from the external environment.

A dedicated wiring allows an external valve or sensors to be connected to the CAN-Bus via the I-HUB.

The benefits of I-HUB are:

- CAN-Bus communication with all other parts of the machine
- Diagnostic warnings for external valves and sensors as well
- Standardised communication protocol



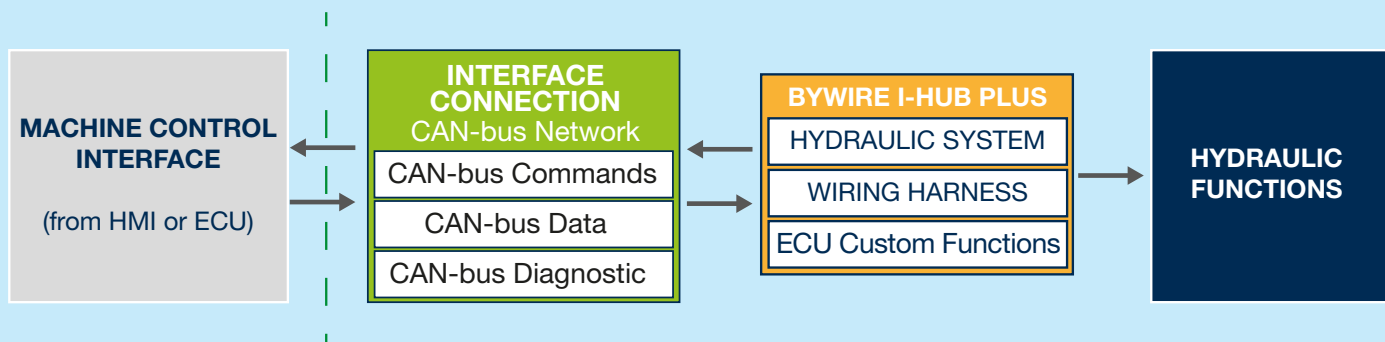
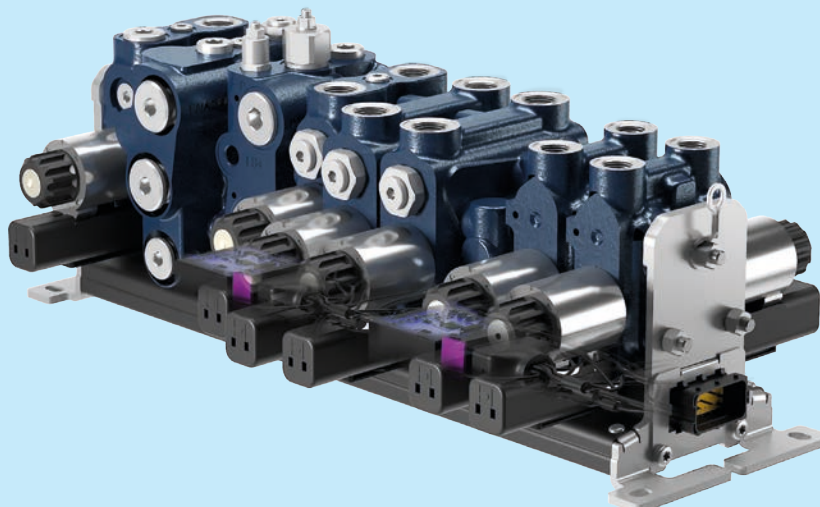
- Reduced installation time by the customer (one electrical connection connects the entire electro-hydraulic system)
- ECU integration, in other words more precise, IoT-ready control
- Additional protection from the exterior environment

I-HUB Plus

I-HUB PLUS incorporates all the features of I-HUB, but in addition a customised control logic is integrated into the ECU. This means that the ByWire I-HUB PLUS devices not only exchange information and data with all other machine components connected to the CAN-Bus line, but also incorporate parts or the entire custom control logic or of a specific subsystem.

The benefits are:

- Integrated custom software
- CAN-Bus communication with all other parts of the machine
- Diagnostic warnings for external valves and sensors as well
- Standardised communication protocol
- Reduced installation time by the customer (one electrical connection connects the entire electro-hydraulic system)
- Additional protection from the exterior environment



Configuring a ByWire directional control valve **ByWire**

ByWire is a modular system. To order the most suitable control valve for your requirements, identify all the modules which make up the system and state the order in which they will be assembled.

How to proceed Identify the Platform type of the hydraulic system:

- Platforms**
- OC Platform - Open Center Platform
 - LS Platform - Load Sensing Platform
 - HL Platform - Hybrid Load Sensing Platform
 - EL platform - Electronic Load Sensing Platform

TE10C

Platform	OC	LS	HL	EL
Size	10			
Nominal flow	120 l/min			
Nominal pressure	250 bar			
Description:				
L.S. inlet cover with 3-way compensator				

Size Identify the size for the modules to be used

- 05
- 10
- 14

TE10C

Platform	OC	LS	HL	EL
Size		10		
Nominal flow		120 l/min		
Nominal pressure		250 bar		
Description:				
L.S. inlet cover with compensator				

Select each module from the models which are compatible with the previous options (Platform and Size).

ByWire Configuring a ByWire directional control valve

Ordering instructions

Define each module in the detail, following the **Ordering instructions** in the technical sheet available for each module.

TE10C

Ordering instructions



	1	2	3	4	5	6	11	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
TE10C	F	D	N	N	F	F	F	L	E	A	N	N	N	N	N	N	N	G	O	1	8	A	
1	Left side interface																						
	N None					B IBW1033					D IBW0511					F TE10P							
2	Right side interface																						
	N None					B IBW1033					D IBW0511												
3	4	Bracket height																					
	H3 High					NN None																	
5	Thread type																						
	F Female					M Male																	
6	Thread Port P																						
	B 1/2" GAS ISO 1179					N M22x1,5 ISO 9974					5 M27x2 ISO 9974					R 7/8" - 14 SAE ISO 11926							
	F 3/4" GAS ISO 1179					J M22x1,5 ISO 6149					U M27x2 ISO 6149					V 1" 1/16 - 12 SAE ISO 11926							
11	Thread Port T																						
	B 1/2" GAS ISO 1179					N M22x1,5 ISO 9974					5 M27x2 ISO 9974					R 7/8" - 14 SAE ISO 11926							
	F 3/4" GAS ISO 1179					J M22x1,5 ISO 6149					U M27x2 ISO 6149					V 1" 1/16 - 12 SAE ISO 11926							
8	Thread Port LS/LS+																						
	L 1/4" GAS ISO 1179					3 M14x1,5 ISO 9974					K M14x1,5 ISO 6149					P 9/16" - 18 SAE ISO 11926							
9	Options on port P-T-LS																						
	A P-T-LS open					C P open, T-LS plugged					E P-LS plugged, T open					G T-LS open, P plugged							
	B P-T open, LS plugged					D P-LS open, T plugged					F P-T plugged, LS open					H P-T-LS plugged							
10	Options for main compensator																						
	A Standard					B With handwheel																	
11	Options on line LS+																						
	N None					A Booster valve version					B Fixed calibration booster valve					C Adjustable calibration booster valve							
12	13	Booster valve calibration																					
	NN None					15 15 bar					30 30 bar												
	05 5 bar					20 20 bar					35 35 bar												
	10 10 bar					25 25 bar					40 40 bar												
14	Port LS+ options																						
	N None					A Open					B Plugged												
15	Thread Port MP																						
	N None					3 M14x1,5 ISO 9974					P 9/16" - 18 SAE ISO 11926												
	L 1/4" GAS ISO 1179					K M14x1,5 ISO 6149																	
16	Thread Port MT																						
	N None					3 M14x1,5 ISO 9974					P 9/16" - 18 SAE ISO 11926												
	L 1/4" GAS ISO 1179					K M14x1,5 ISO 6149																	
17	Options on Ports MP - MT																						
	N None					C MP not processed, MT open					F MP and MT plugged												
	A MP open, MT not processed					D MP not processed, MT plugged					G MP open, MT plugged												
	B MP plugged, MT not processed					E MP and MT open					H MP plugged, MT open												
18	LS line unloading pilot valve type																						
	I Compensated orifice					N Replacement plug					B 24V DIN 43650					H 24V Deutsch							
	L Compensated orifice					A 12V DIN 43650					G 12V Deutsch												
19	LS line emergency unloading pilot valve																						
	N None					O Standard terminal					S Emergency screw												
20	21	Maximum pressure valve type																					
	00 VMP replacement plug					10 100 bar					16 160 bar					22 220 bar							
	05 50 bar					11 110 bar					17 170 bar					23 230 bar							
	06 60 bar					12 120 bar					18 180 bar					24 240 bar							
	07 70 bar					13 130 bar					19 190 bar					25 250 bar							
	08 80 bar					14 140 bar					20 200 bar												
	09 90 bar					15 150 bar					21 210 bar												
22	External coating																						
	A External coating					N None																	

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Configuring a ByWire directional control valve **ByWire**

Ordering sequence

The ordering sequence of the distributor must follow **the hydraulic logic**. It always starts from the inlet module, either on the left side or in an intermediate position in the distributor. It is not necessary to choose the tie rod for the assembly of the distributor, this will be done by the Bondioli & Pavesi - Dinoil technical office. Then proceed as follows:

CASE 1 Inlet module on the left side

- Choose the inlet module

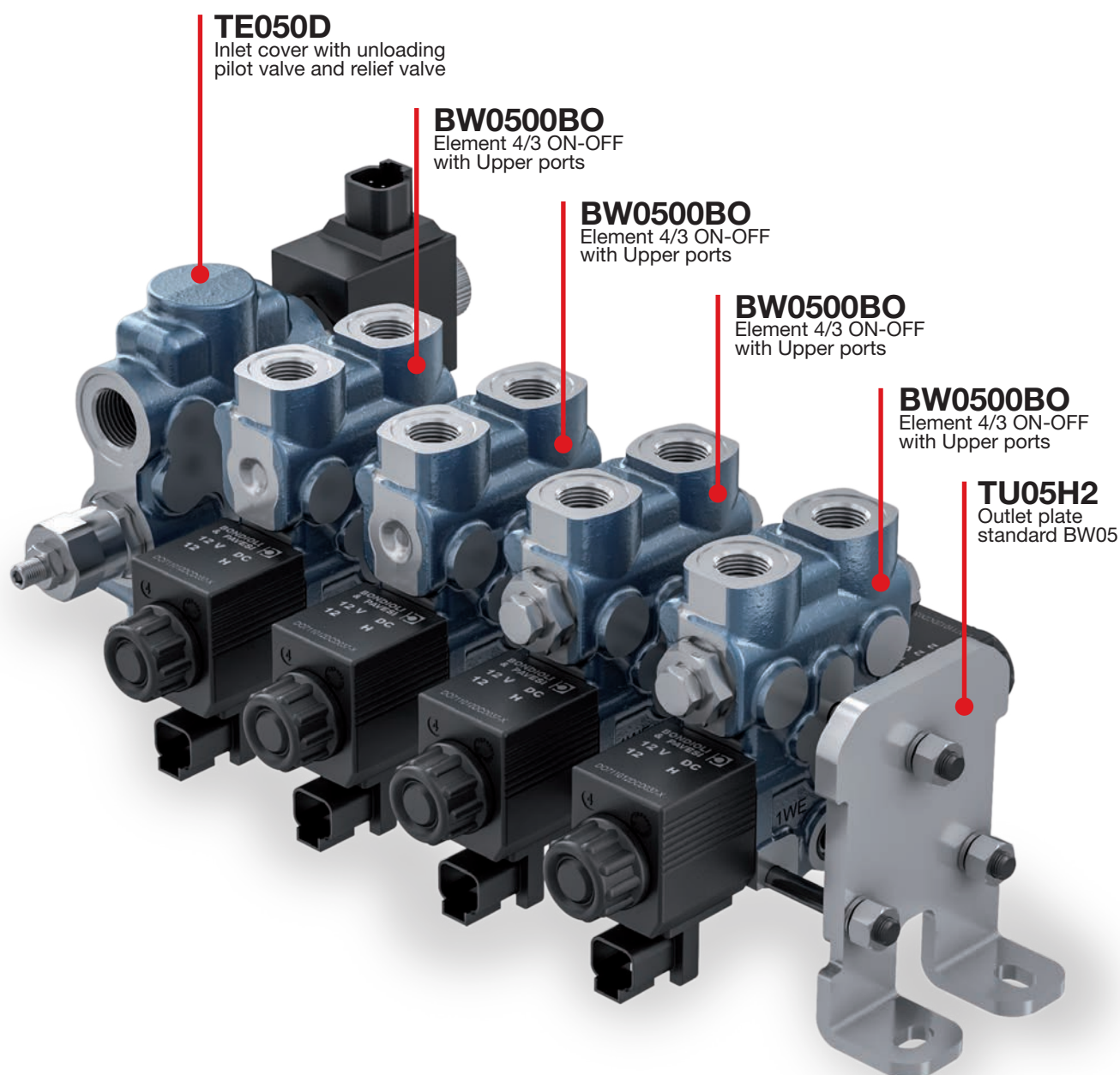
TE = inlet cover or RF = Flow regulator

- All ByWire elements are selected

Starting from the inlet module towards the right

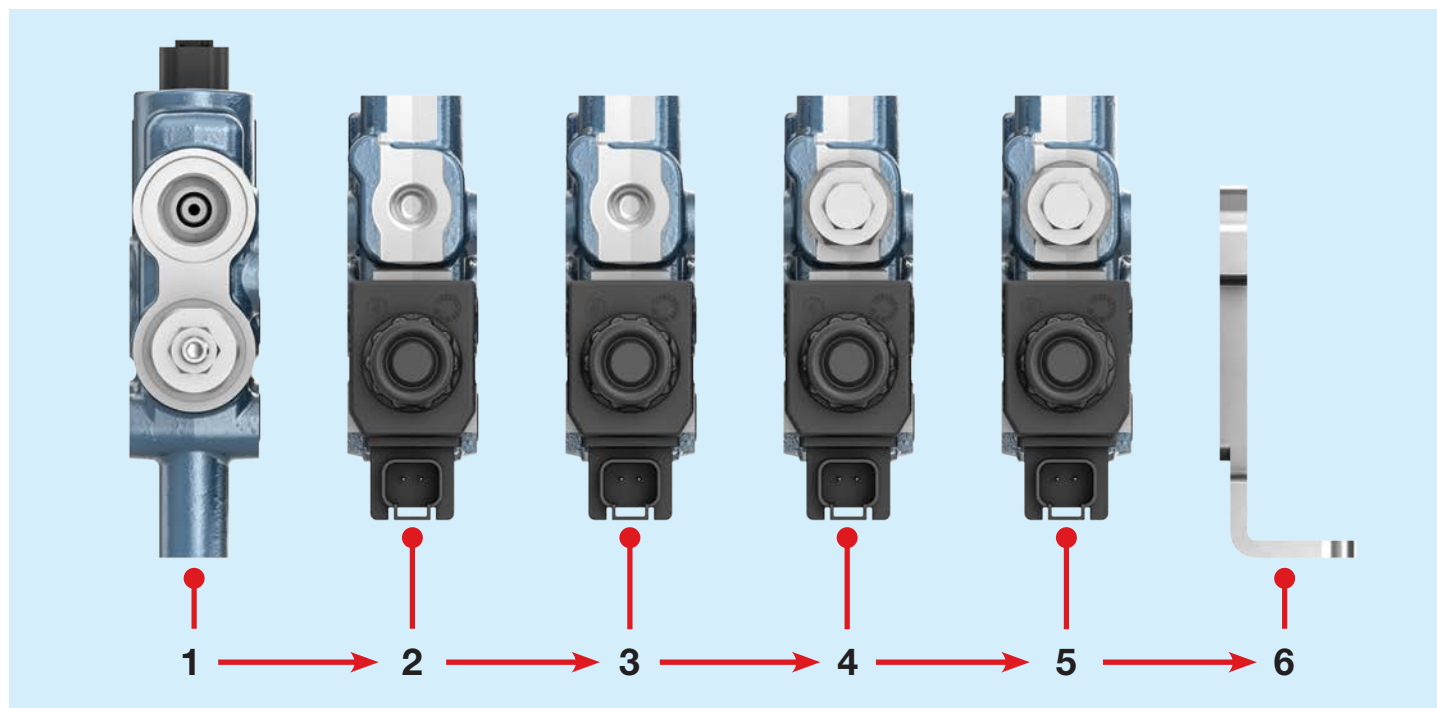
- Choose the outlet module

TU = outlet cover or outlet plate



ByWire Configuring a ByWire directional control valve

CASE 1
Inlet module
on the left side Ordering sequence



1 - TE050D F B B N S H 2 N N N G O 1 8 R 0 A

2 - BW0500BO A 0 0 1 F A N N N N N N N N N N G A

3 - BW0500BO A 0 0 1 F A N N N N N N N N N N G A

4 - BW0500BO A 0 0 3 F A N N N N V B N N V B N N G A

5 - BW0500BO A 0 0 3 F A N N N N V B N N V B N N G A

6 - TU05H2 H 2

Configuring a ByWire directional control valve **ByWire**

CASE 2 Inlet module intermediate

- Choose the inlet module
TE = inlet cover or RF = Flow regulator

Select all ByWire elements

Starting from the inlet module towards the right

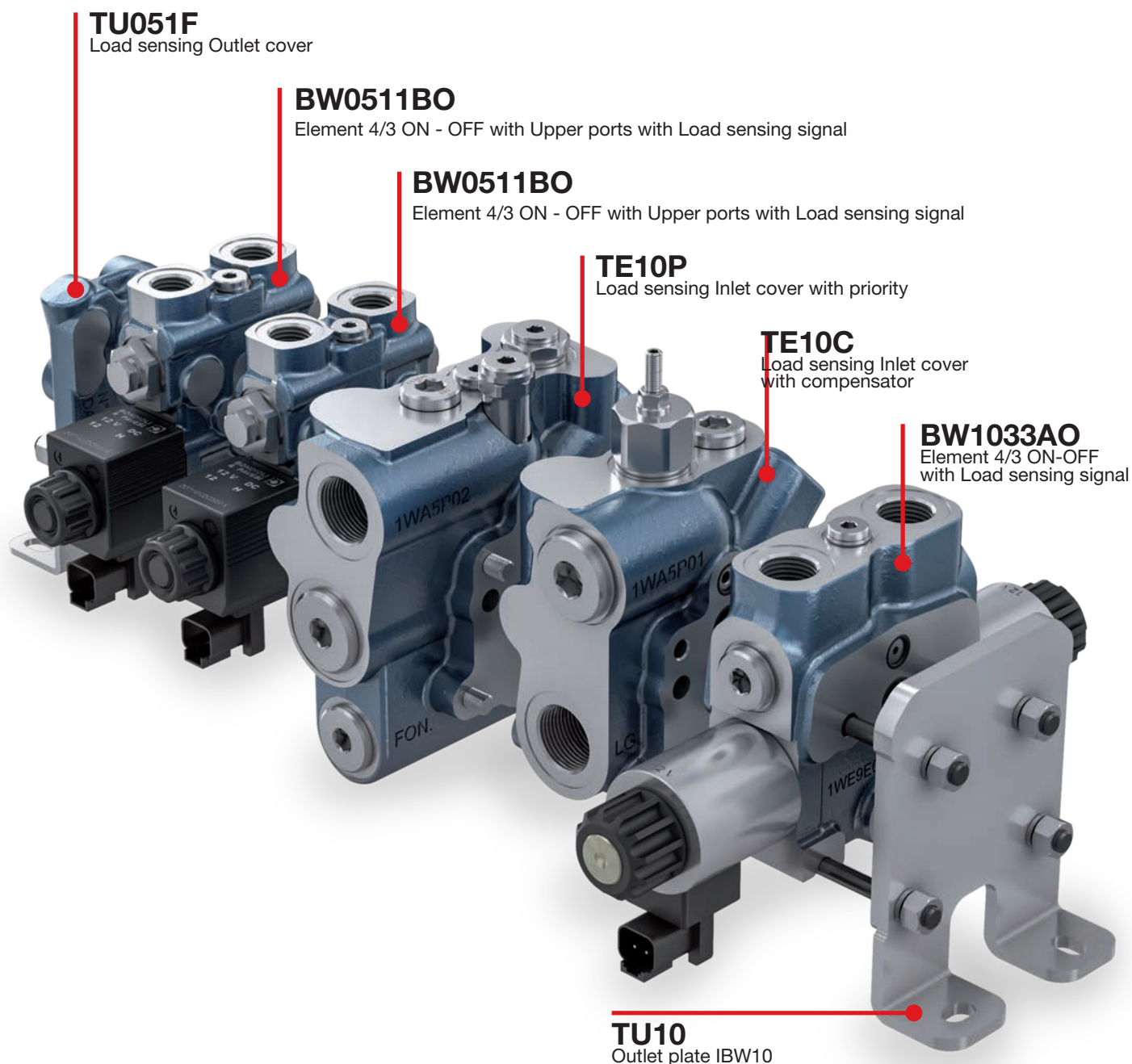
- Choose the outlet module

TU = outlet cover or outlet plate of the right branch

Select all ByWire elements

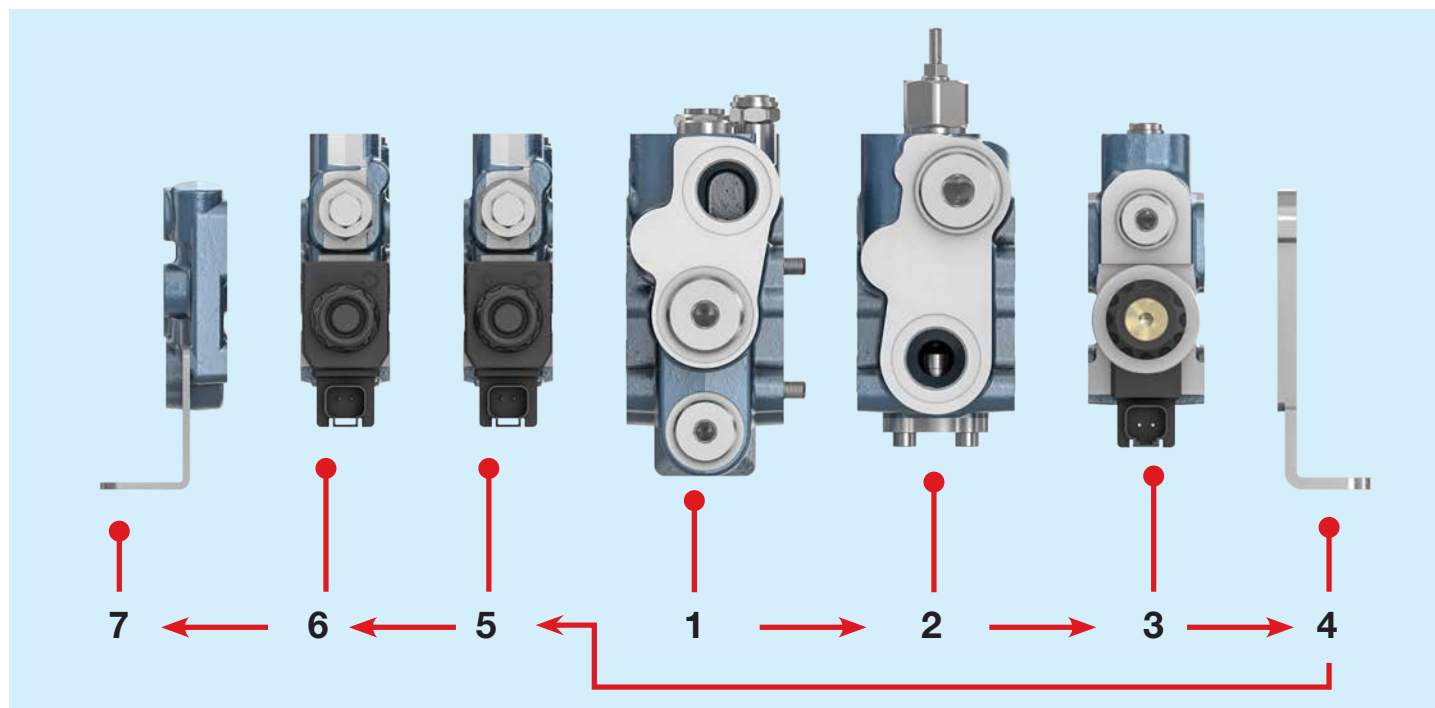
Starting from the inlet module towards the left

- Choose the outlet module of the left branch



ByWire Configuring a ByWire directional control valve

CASE 2
Inlet module
intermediate Ordering sequence

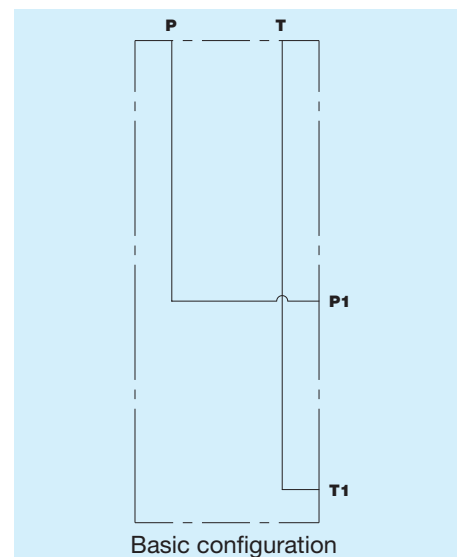


- 1 - TE10P B N N N D F N N F F 0 L B N N N N I N 1 8 A
- 2 - TE10C F B N N F B F L E R N N N N N N I N 1 8 A
- 3 - BW1033AO A 0 0 3 O D B T P T P G A
- 4 - TU10 H 3
- 5 - BW0511BO A 0 0 3 0 G A N N N N V B 1 8 A N N G A
- 6 - BW0511BO A 0 0 3 0 G A N N N N V B N N V B N N G A
- 7 - TU051F F A B L A A A N H 3 N N N A

TE050L A

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Compatible brackets	H1 H2 H3
For tie rod calculation	20,5 mm
Weight	0,7 Kg

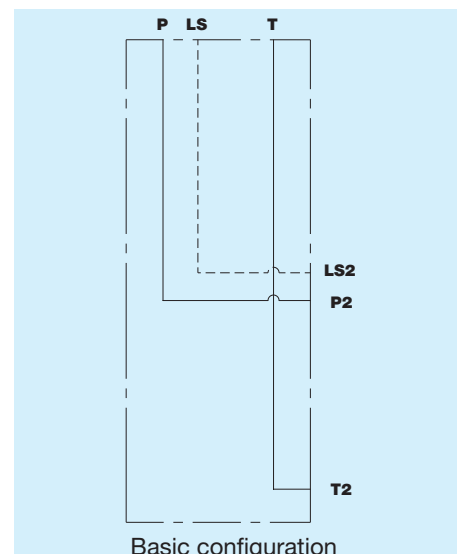
Description:
Inlet cover P-T.



TE051L A

Platform	LS HL EL
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Compatible brackets	H1 H2 H3
For tie rod calculation	20,5 mm
Weight	0,7 Kg

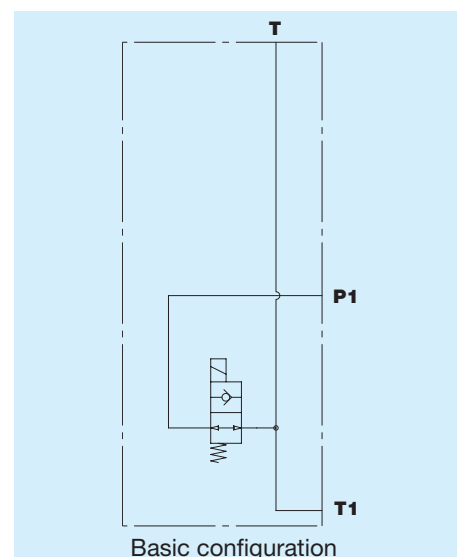
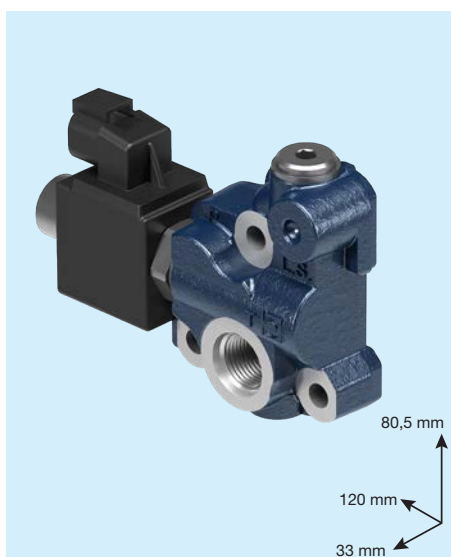
Description:
Inlet cover P-T-LS.



TE050L B

Platform	OC
Size	05
Nominal flow	30 l/min
Nominal pressure	250 bar
Compatible brackets	H1
For tie rod calculation	20,5 mm
Weight	0,8 Kg

Description:
Inlet cover with unloading pilot valve.

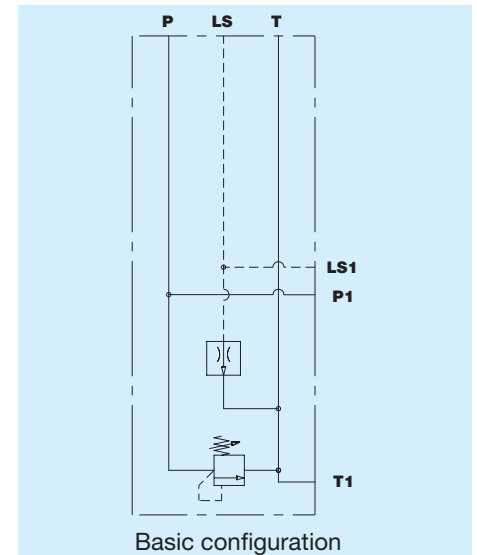


TE051L B

Platform	LS	HL	EL
Size	05		
Nominal flow	30 l/min		
Nominal pressure	250 bar		
Compatible brackets	H1 H2 H3		
For tie rod calculation	20,5 mm		
Weight	0,8 Kg		

Description:

Inlet cover P-T-LS with direct relief valve in P and BLEED OFF compensated.

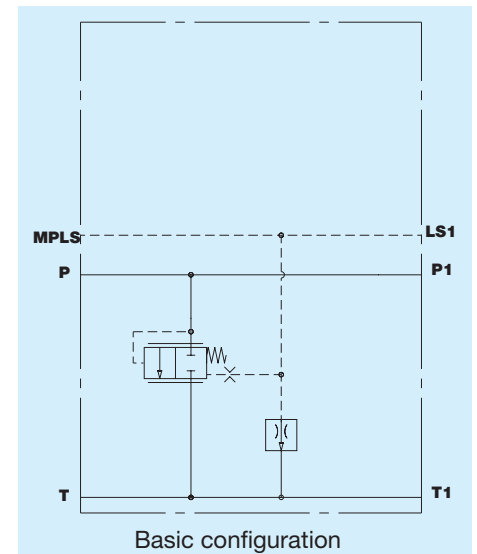


TE051L C

Platform	LS	HL	EL
Size	05		
Nominal flow	30 l/min		
Nominal pressure	250 bar		
Compatible brackets	H1 H2 H3		
For tie rod calculation	20,5 mm		
Weight	0,8 Kg		

Description:

Inlet cover P-T-LS with compensator and BLEED OFF compensated.



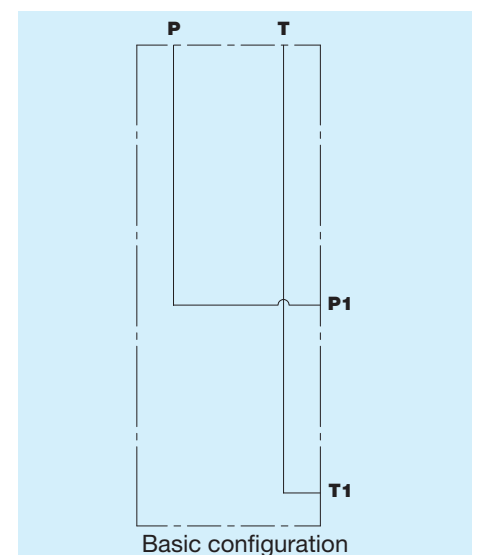
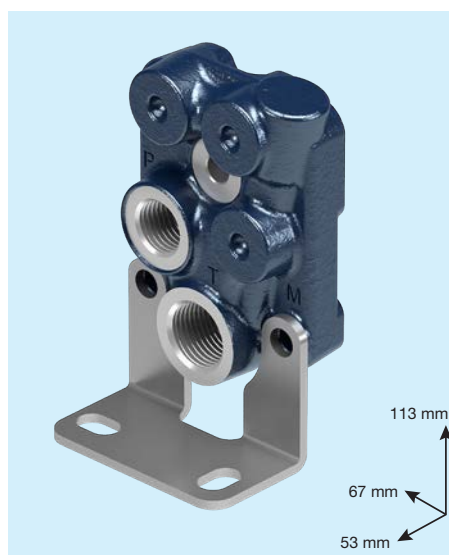
TE050F

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Compatible brackets	H2(low) H3(high)
For tie rod calculation	19 mm
Weight	0,4 Kg

Description:

Inlet cover P-T.

Standard version dimensions with H2 bracket



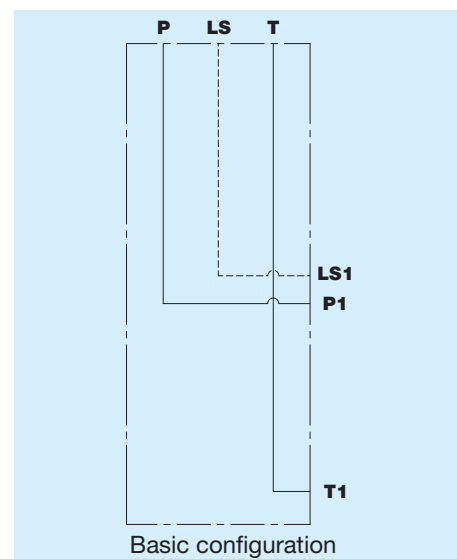
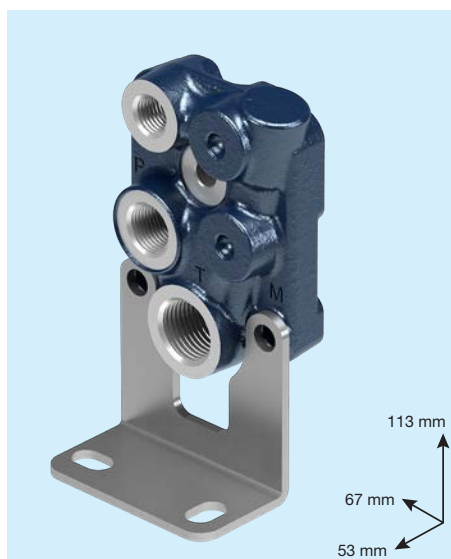
TE051F

Platform	LS	HL	EL
Size	05		
Nominal flow	50 l/min		
Nominal pressure	250 bar		
Compatible brackets	H2(low) H3(high)		
For tie rod calculation	19 mm		
Weight	0,4 Kg		

Description:

Inlet cover P-T-LS.

Standard version dimensions with H2 bracket



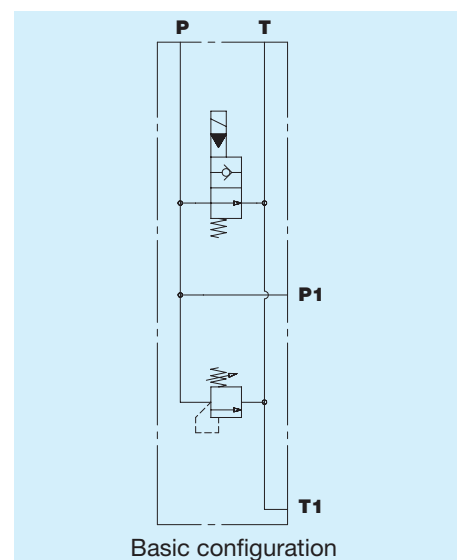
TE050E

Platform	OC
Size	05
Nominal flow	30 l/min
Nominal pressure	250 bar
Compatible brackets	NN (none)
For tie rod calculation	37 mm
Weight	1.6 Kg

Description:

Inlet cover with unloading pilot valve and relief valve.

Standard version dimensions



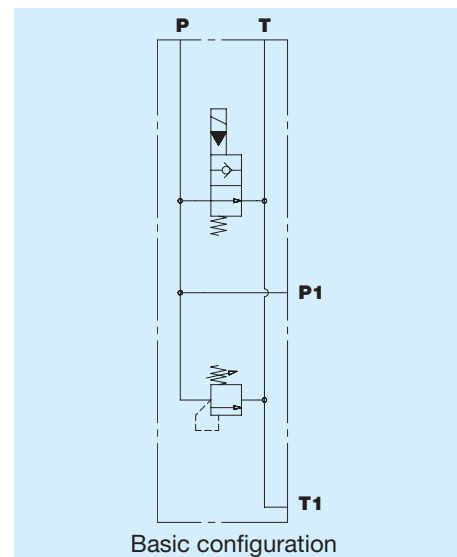
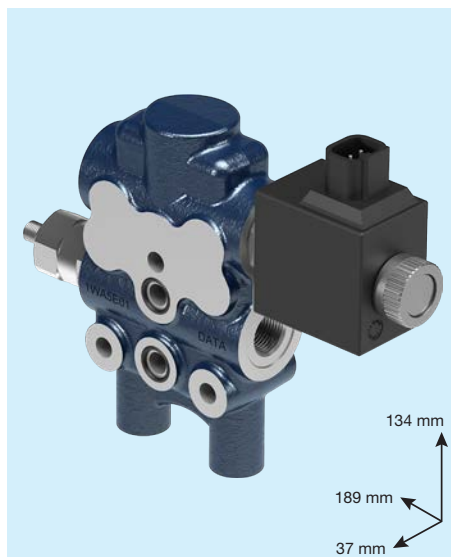
TE050D

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Compatible brackets	NN (none)
For tie rod calculation	37 mm
Weight	1.6 Kg

Description:

Inlet cover with unloading pilot valve and relief valve.

Standard version dimensions

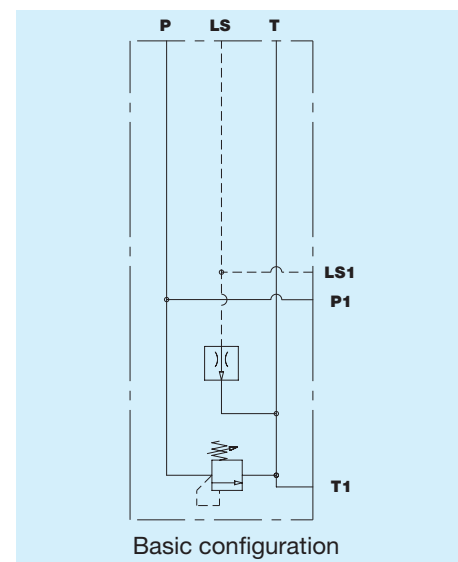


TE051T

Platform	LS HL EL
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Compatible brackets	NN
For tie rod calculation	37 mm
Weight	1,6 Kg

Description:

Inlet cover P-T-LS with relief valve in P and BLEED OFF compensated.

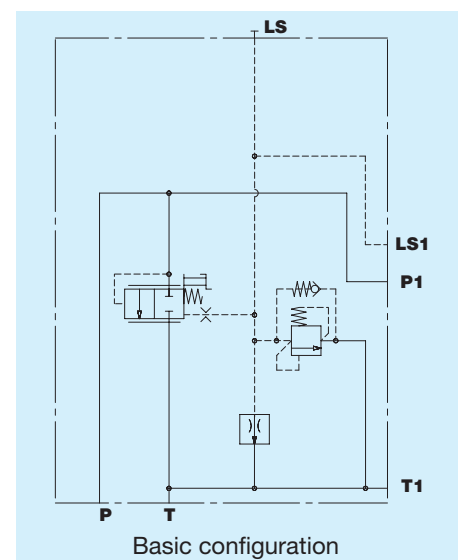


TE05C

Platform	LS HL EL
Size	05
Nominal flow	70 l/min
Nominal pressure	250 bar
Compatible brackets	H2(low) H3(high)
For tie rod calculation	37 mm
Weight	2 Kg

Description:

P-T-L.S. inlet cover with compensator, BLEED OFF compensated and pressure relief valve.

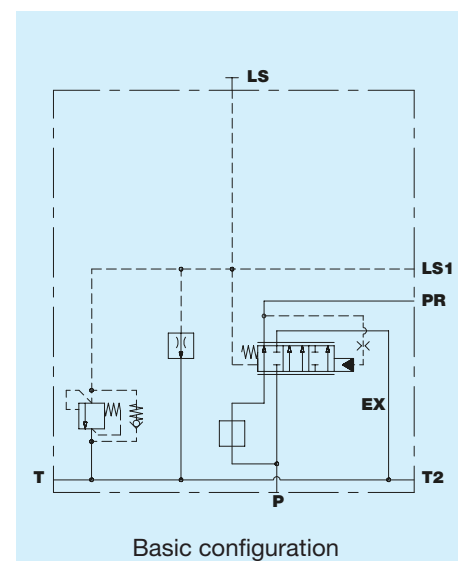
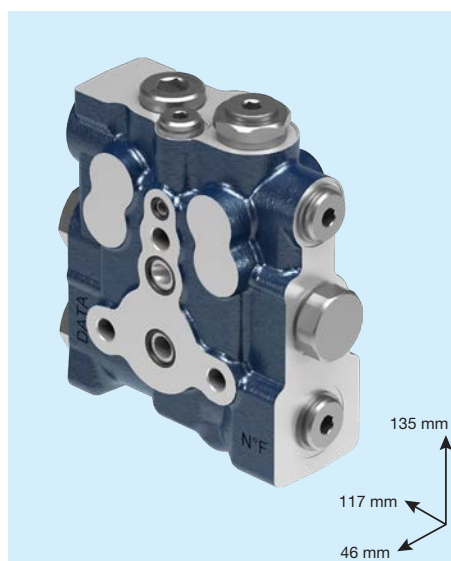


TE05P C N

Platform	LS HL EL
Size	05
Nominal flow	70 l/min
Nominal pressure	250 bar
Compatible brackets	H2(low) H3(high)
For tie rod calculation	46 mm
Weight	3 Kg

Description:

P-T-L.S. inlet cover with compensator, BLEED OFF compensated and pressure relief valve.



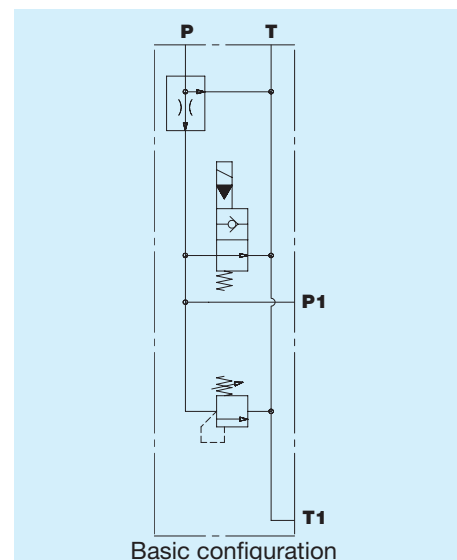
TE050T

Platform	OC
Size	05
Nominal flow	60 l/min
Nominal pressure	250 bar
Compatible brackets	NN (none)
For tie rod calculation	37 mm
Weight	1.7 Kg

Description:

Flow rate size inlet cover with unloading pilot valve and relief valve.

Standard version dimensions



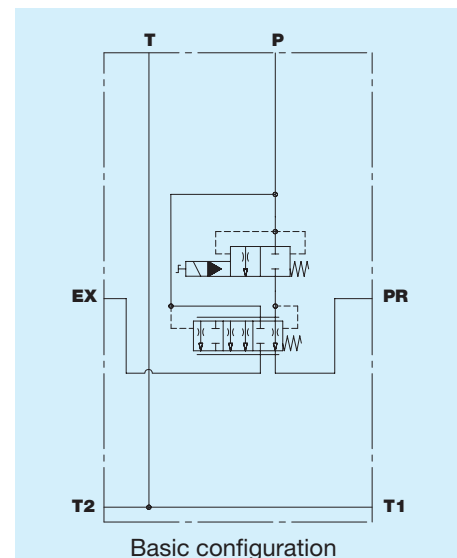
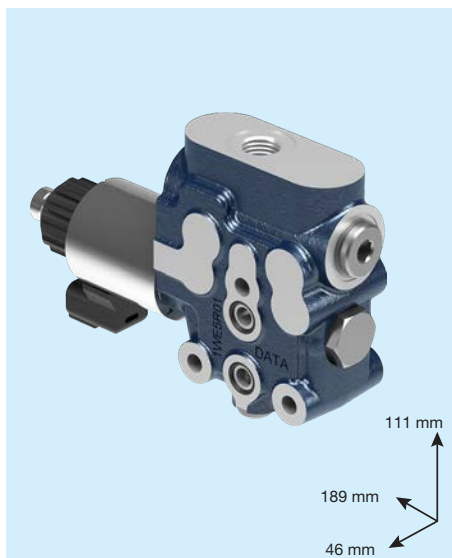
RF0500AO

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	20/40 l/min
For tie rod calculation	46 mm
Weight	2.6 Kg

Description:

Compensated flow rate regulator cover ON-OFF.

Standard version dimensions



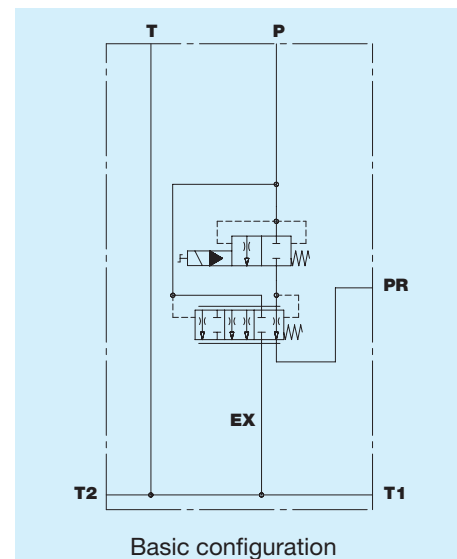
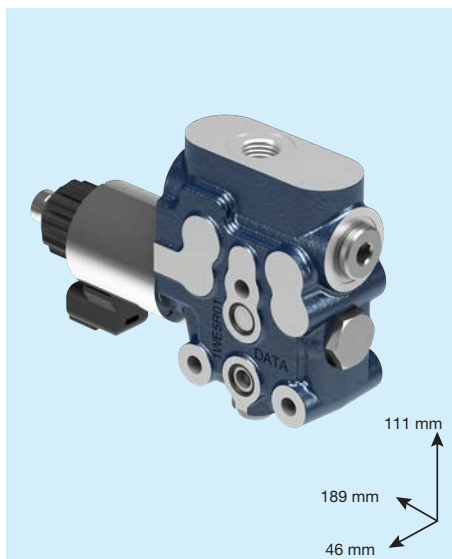
RF0500BO

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	20/40 l/min
For tie rod calculation	46 mm
Weight	2.6 Kg

Description:

Compensated flow rate regulator cover ON-OFF with excess on unloading.

Standard version dimensions



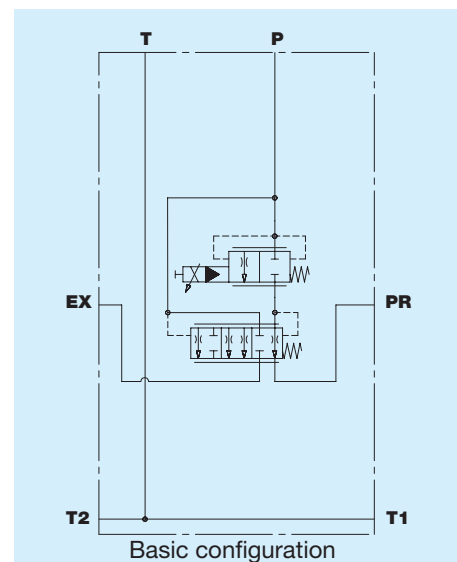
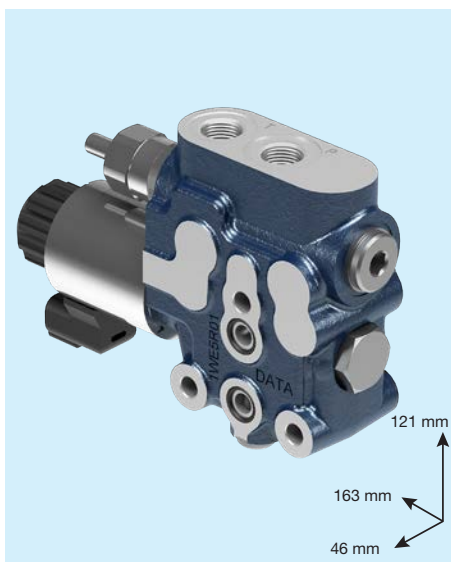
RF0500AP

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	20/40 l/min
For tie rod calculation	46 mm
Weight	2.6 Kg

Description:

Proportional compensated flow rate regulator cover.

Standard version dimensions



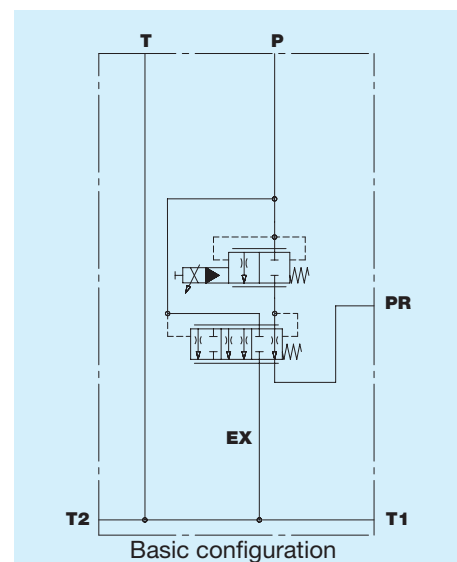
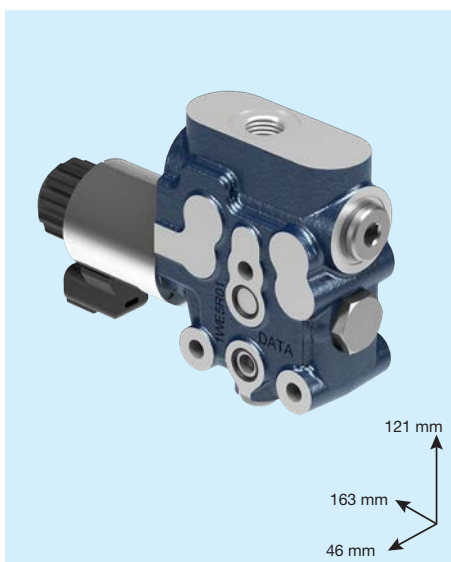
RF0500BP

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	20/40 l/min
For tie rod calculation	46 mm
Weight	2.6 Kg

Description:

Proportional compensated flow rate regulator cover with excess on unloading.

Standard version dimensions



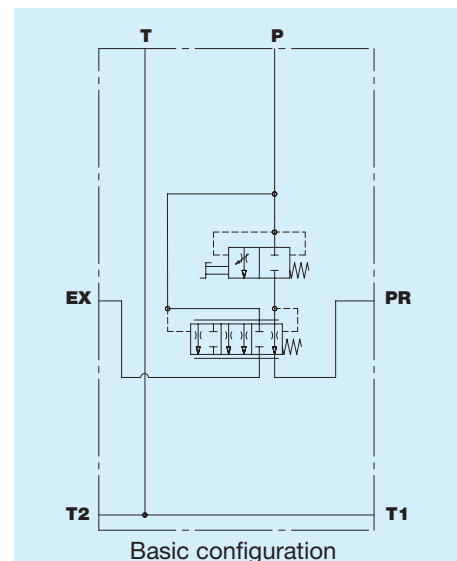
RF0500AM

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	20/40 l/min
For tie rod calculation	46 mm
Weight	2.6 Kg

Description:

Manual compensated flow rate regulator cover.

Standard version dimensions

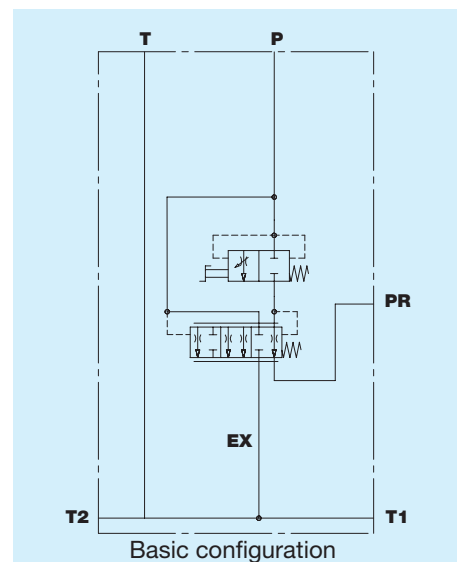
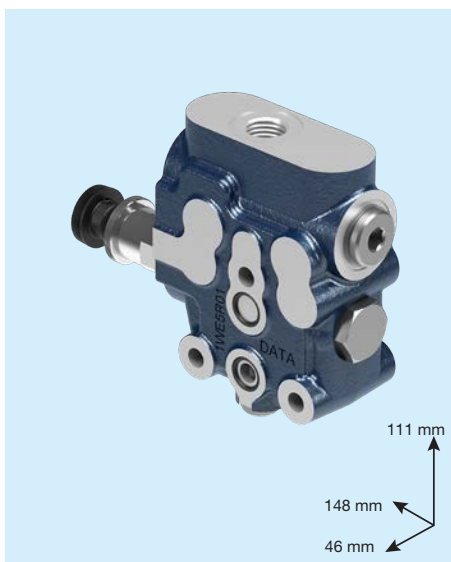


RF0500BM

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	20/40 l/min
For tie rod calculation	46 mm
Weight	2.6 Kg

Description:

Manual compensated flow rate regulator cover with excess on unloading.

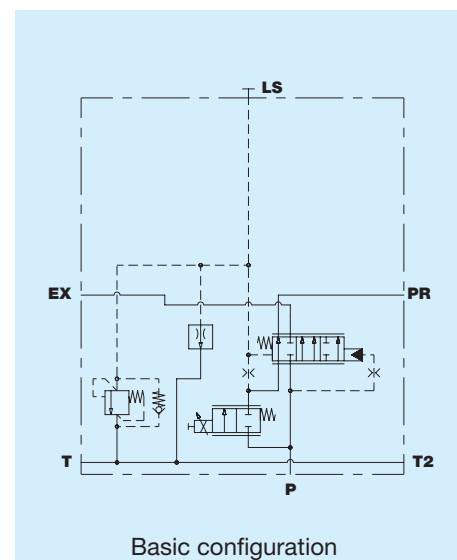
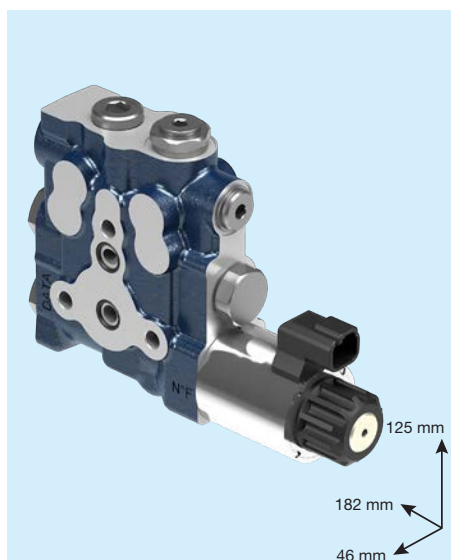


TE05P A P

Platform	OC
Size	05
Nominal flow	70 l/min
Nominal pressure	250 bar
Compatible brackets	NN
For tie rod calculation	46 mm
Weight	3,1 Kg

Description:

Priority and excess flow inlet cover with proportional control, BLEED OFF compensated and pressure relief valve.

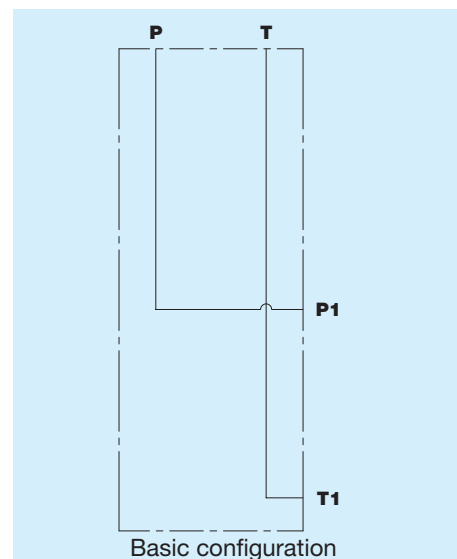
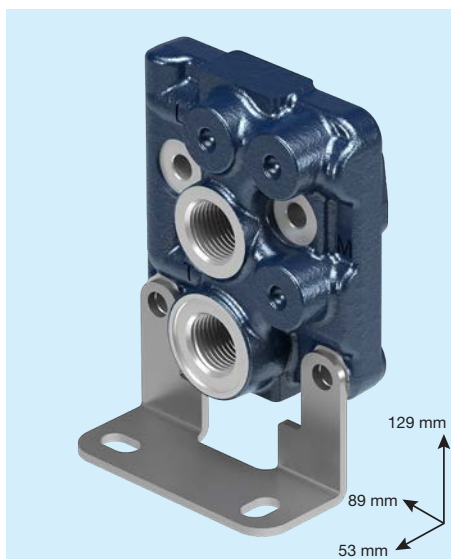


TE102F

Platform	OC
Size	10
Nominal flow	100 l/min
Nominal pressure	250 bar
Compatible brackets	H3(high)
For tie rod calculation	19 mm
Weight	1,4 Kg

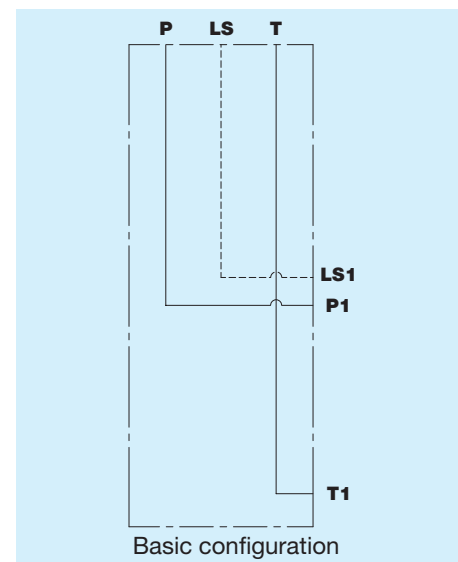
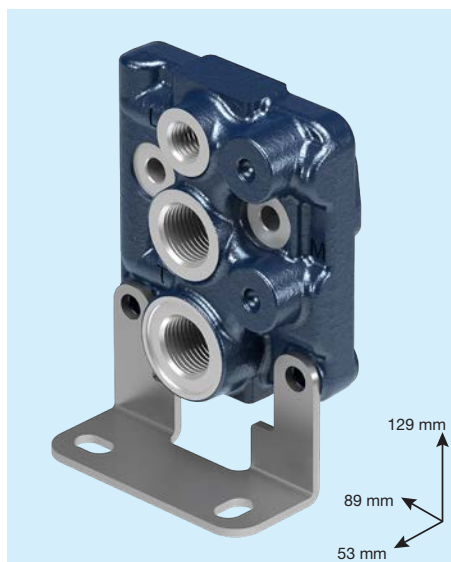
Description:

Inlet cover P-T.



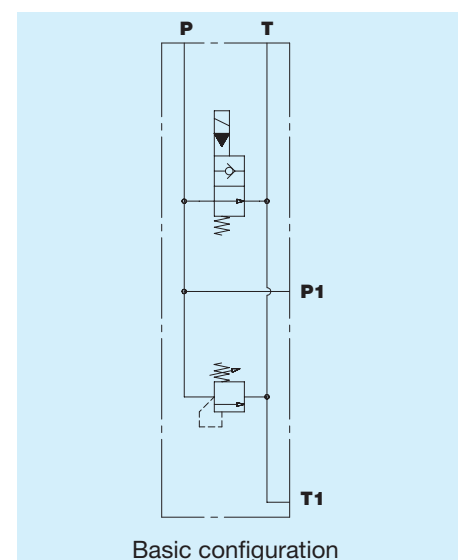
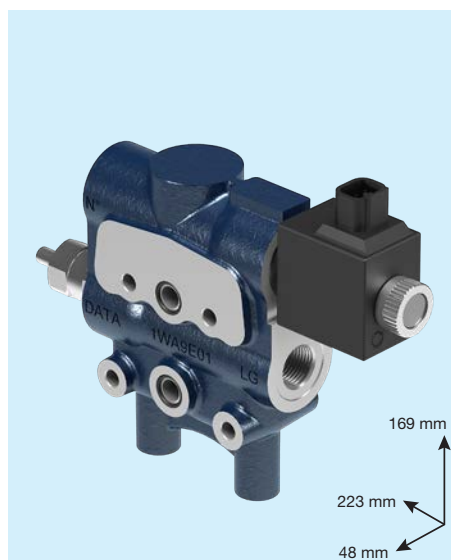
TE103F

Platform	LS	HL	EL
Size	10		
Nominal flow	100 l/min		
Nominal pressure	250 bar		
Compatible brackets	H3(high)		
For tie rod calculation	19 mm		
Weight	1,4 Kg		
Description:			
Inlet cover P-T-LS.			



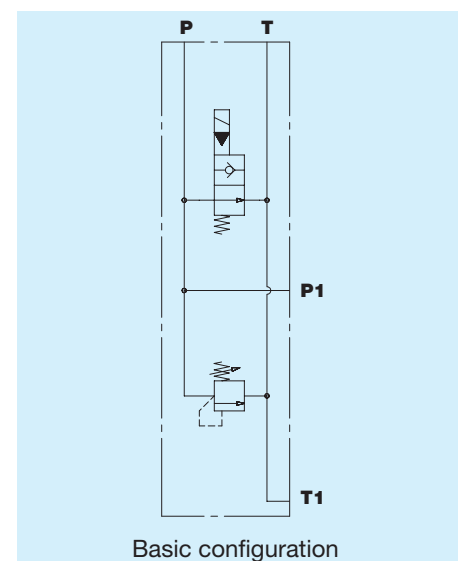
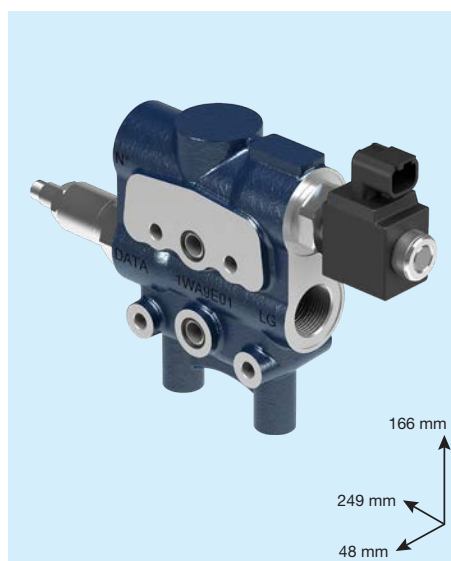
TE102E

Platform	OC
Size	10
Nominal flow	70 l/min
Nominal pressure	250 bar
Compatible brackets	NN (none)
For tie rod calculation	48 mm
Weight	3,4 Kg
Description:	
Inlet cover with unloading pilot valve and relief valve.	



TE102D

Platform	OC
Size	10
Nominal flow	100 l/min
Nominal pressure	250 bar
Compatible brackets	NN (none)
For tie rod calculation	48 mm
Weight	3,4 Kg
Description:	
Inlet cover with unloading pilot valve and relief valve.	

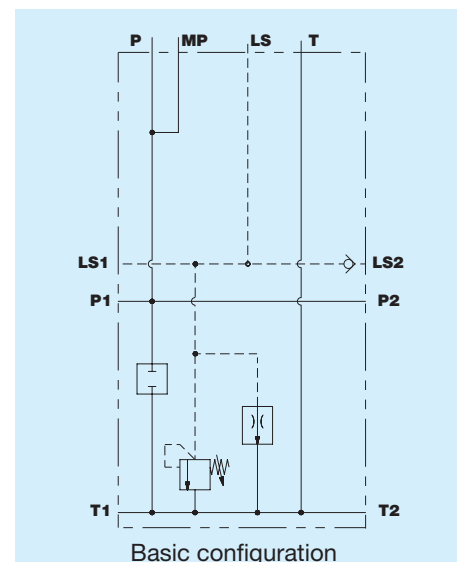


TE103D

Platform	LS	HL	EL
Size	10		
Nominal flow	100 l/min		
Nominal pressure	250 bar		
Compatible brackets	NN		
For tie rod calculation	48 mm		
Weight	3,2 Kg		

Description:

Inlet cover P-T-LS with BLEED OFF compensated and relief valve on L.S. signal.

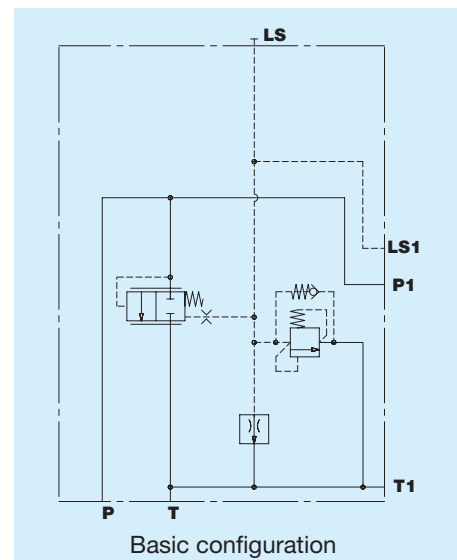
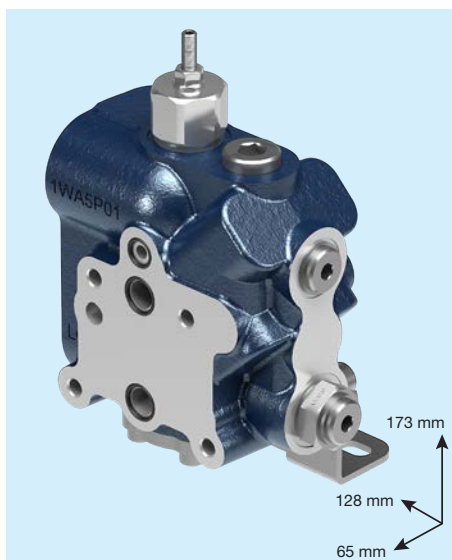


TE10C

Platform	LS	HL	EL
Size	10		
Nominal flow	120 l/min		
Nominal pressure	250 bar		
Compatible brackets	H3(high)		
For tie rod calculation	Contact the Technical Office		
Weight	5 Kg		

Description:

L.S. inlet cover with compensator, BLEED OFF compensated and pressure relief valve.

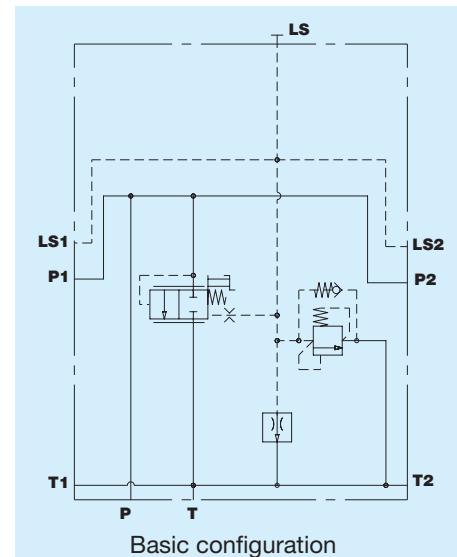


TE103CL

Platform	LS	HL	EL
Size	10		
Nominal flow	100 l/min		
Nominal pressure	250 bar		
Compatible brackets	NN		
For tie rod calculation	Contact the Technical Office		
Weight	7 Kg		

Description:

Inlet cover LS with compensator, BLEED OFF compensated and pressure relief valve.

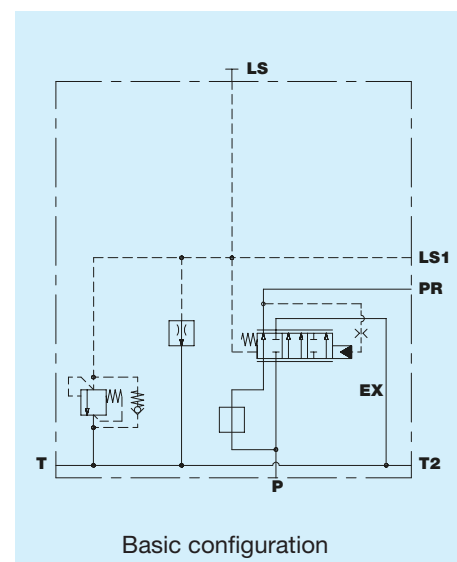


TE10P C N

Platform	LS	HL	EL
Size	10		
Nominal flow	120 l/min		
Nominal pressure	250 bar		
Compatible brackets	H3(high)		
For tie rod calculation	Contact the Technical Office		
Weight	7 Kg		

Description:

L.S. inlet cover with priority, BLEED OFF compensated and pressure relief valve.

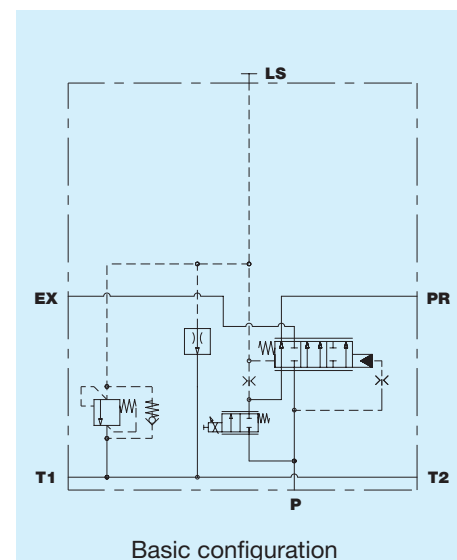
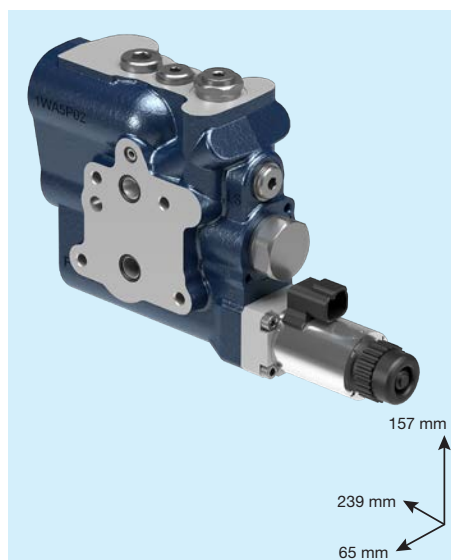


TE10P C P

Platform	OC
Size	10
Nominal flow	120 l/min
Nominal pressure	250 bar
Compatible brackets	NN
For tie rod calculation	Contact the Technical Office
Weight	7,1 Kg

Description:

Priority and excess flow inlet cover with proportional control.

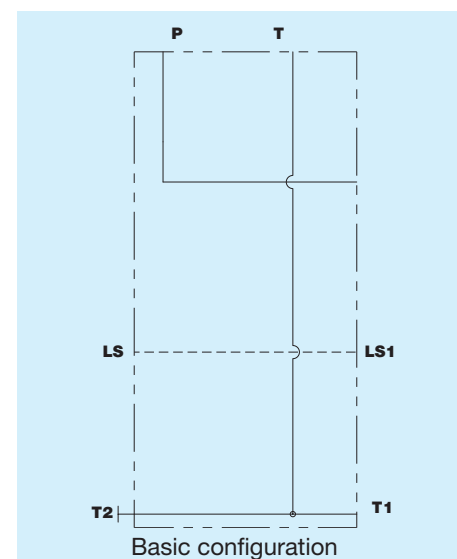


TE14A C

Platform	LS	EL
Size	14	
Nominal flow	140 l/min	
Nominal pressure	300 bar	
Compatible brackets	NN	
For tie rod calculation	44 mm	
Weight	3,6 Kg	

Description:

Inlet cover P-T-LS.

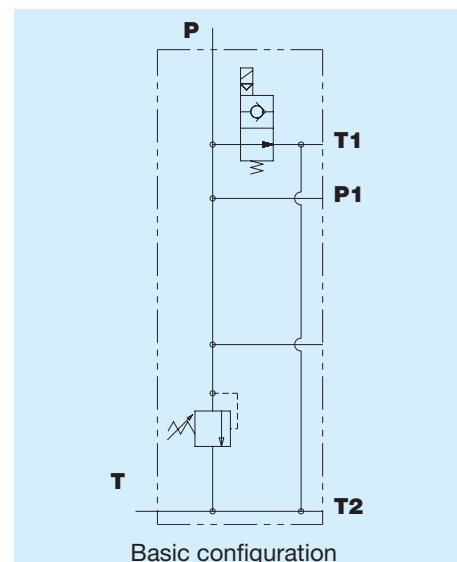
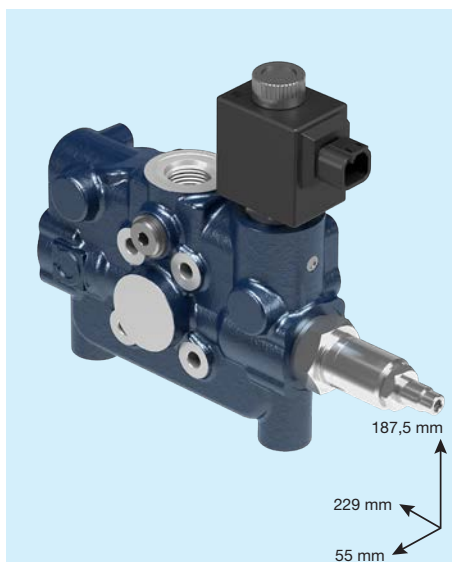


TE14B

Platform	OC
Size	14
Nominal flow	100 l/min
Nominal pressure	300 bar
Compatible brackets	NN
For tie rod calculation	44 mm
Weight	4,4 Kg

Description:

Inlet cover with unloading pilot valve and relief valve.

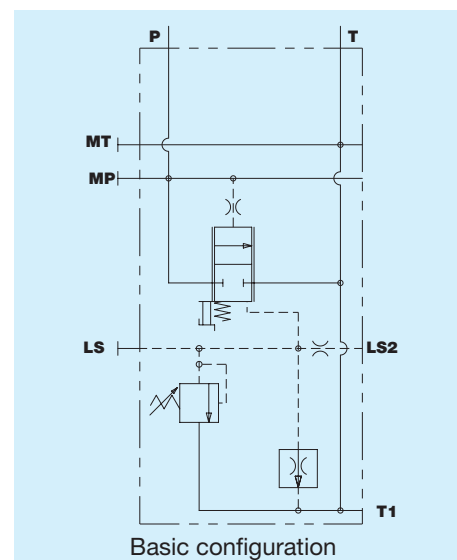


TE14A B

Platform	LS
Size	14
Nominal flow	120 l/min
Nominal pressure	300 bar
Compatible brackets	NN
For tie rod calculation	44 mm
Weight	4,4 Kg

Description:

Inlet cover LS with compensator, BLEED OF and relief valve.

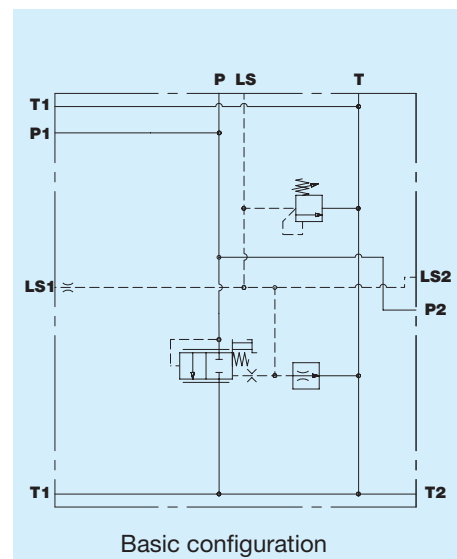


TE14C

Platform	LS	HL	EL
Size	14		
Nominal flow	150 l/min		
Nominal pressure	250 bar		
Compatible brackets	NN (none)		
For tie rod calculation	Contact the Technical Office		
Weight	9 Kg		

Description:

L.S. inlet cover with compensator, BLEED OFF compensated and relief valve.

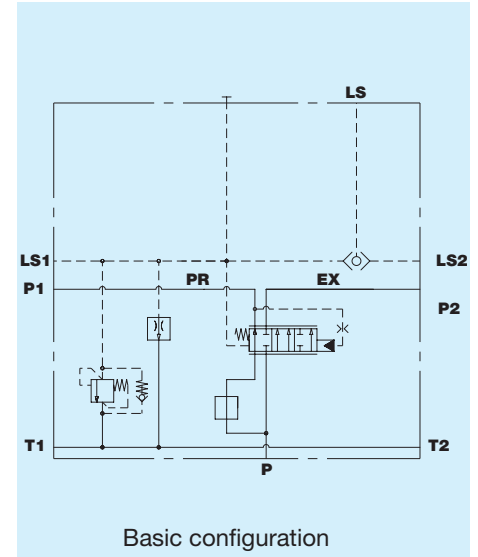


TE14P

Platform	LS HL EL
Size	14
Nominal flow	120 l/min
Nominal pressure	250 bar
Compatible brackets	NN
For tie rod calculation	Contact the Technical Office
Weight	7,1 Kg

Description:

Priority and excess flow inlet cover with proportional control, BLEED OFF compensated and pressure relief valve.

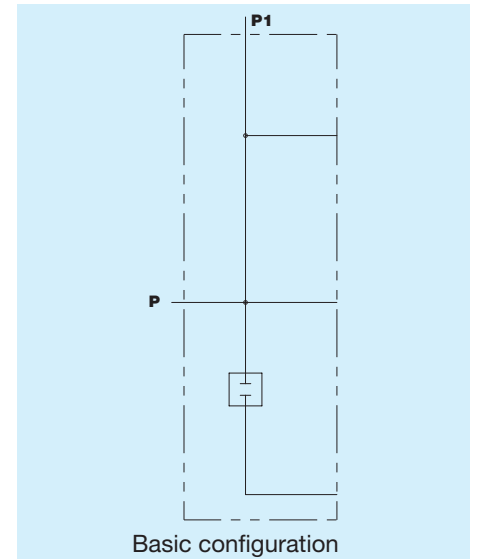
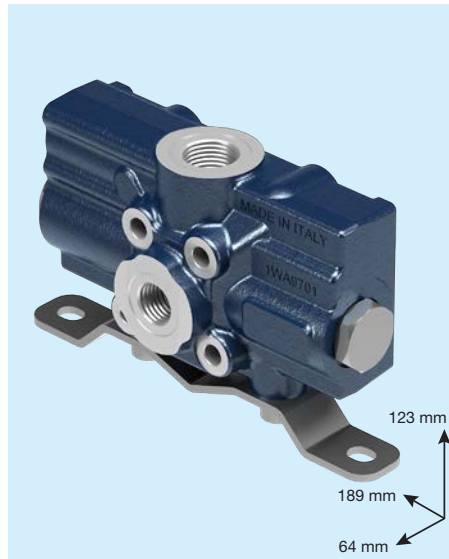


TE16B A

Platform	OC
Size	16
Nominal flow	160 l/min
Nominal pressure	300 bar
Compatible brackets	NN
For tie rod calculation	53,5 mm
Weight	4,4 Kg

Description:

Inlet cover P-P1.

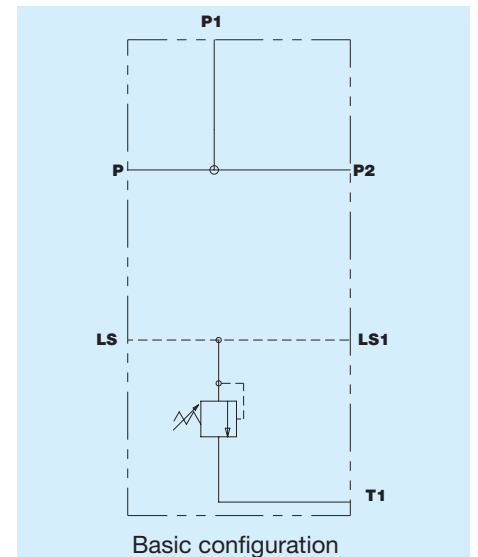


TE16A

Platform	LS
Size	16
Nominal flow	160 l/min
Nominal pressure	300 bar
Compatible brackets	NN
For tie rod calculation	53,5 mm
Weight	4,5 Kg

Description:

Inlet cover P-L.S. with relief valve.

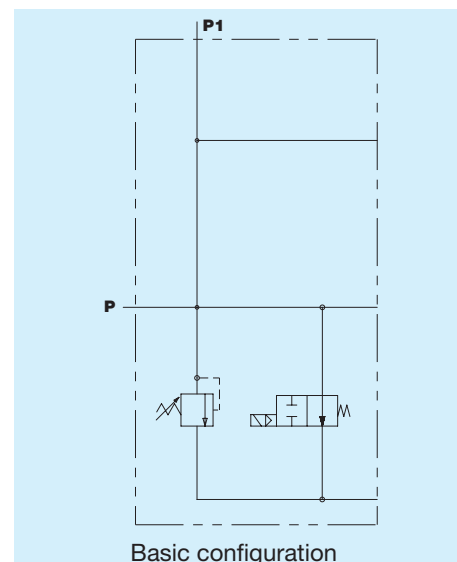


TE16B B

Platform	OC
Size	16
Nominal flow	120 l/min
Nominal pressure	300 bar
Compatible brackets	NN
For tie rod calculation	53,5 mm
Weight	4,9 Kg

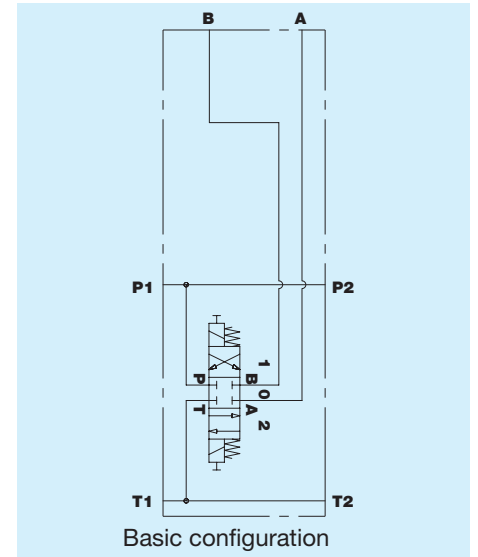
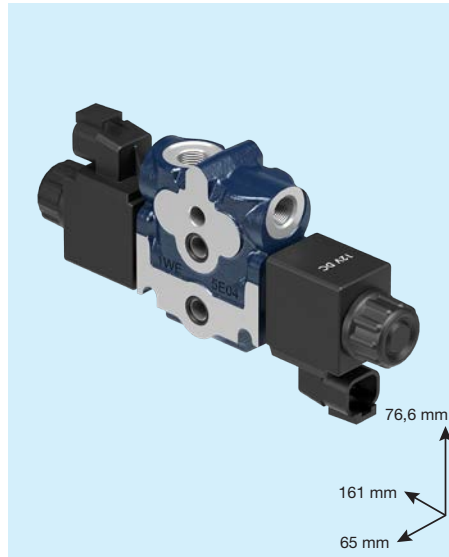
Description:

Inlet cover with unloading pilot valve and relief valve.



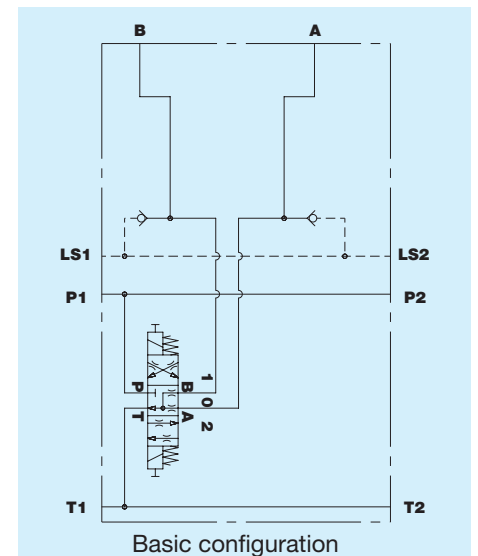
BW0500NO

Platform	OC
Size	05
Nominal flow	25 l/min
Nominal pressure	250 bar
Compatible brackets	---
For tie rod calculation	31 mm
Weight	1 Kg
Description:	
Element 4/3 ON-OFF.	



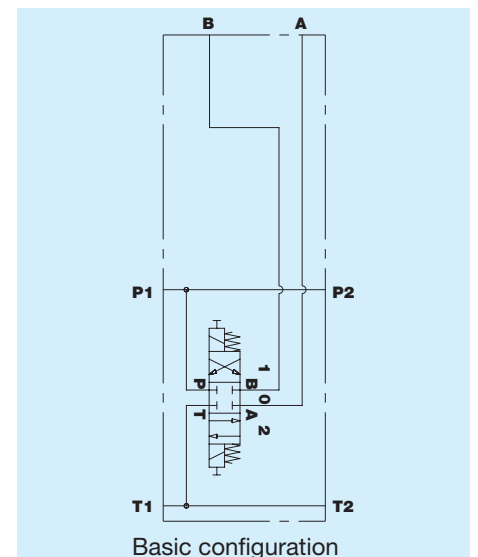
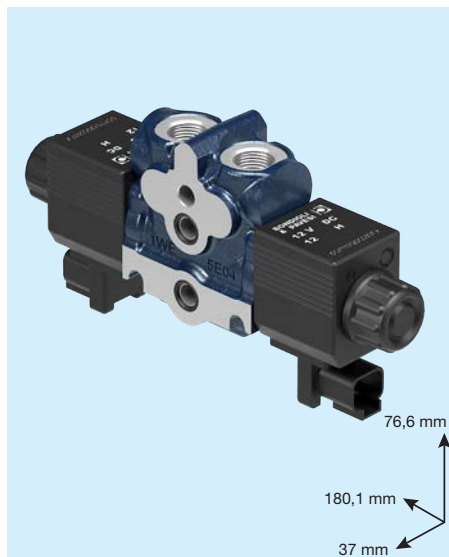
BW0511NO

Platform	LS	HL	EL
Size	05		
Nominal flow	25 l/min		
Nominal pressure	250 bar		
Compatible brackets	---		
For tie rod calculation	31 mm		
Weight	1 Kg		
Description:			
Element 4/3 ON-OFF with L.S. signal.			



BW0500DO

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Compatible brackets	---
For tie rod calculation	37 mm
Weight	1,4 Kg
Description:	
Element 4/3 ON-OFF upper port.	

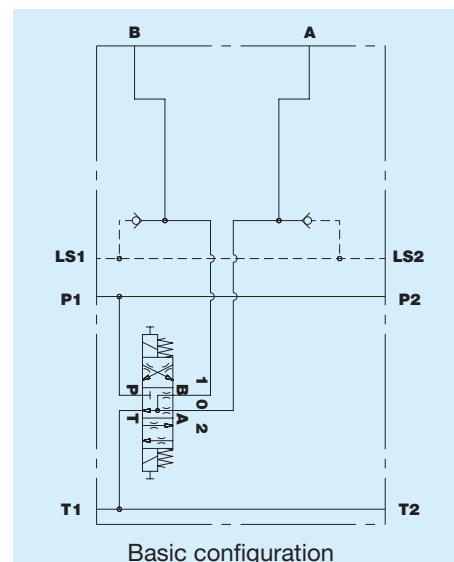
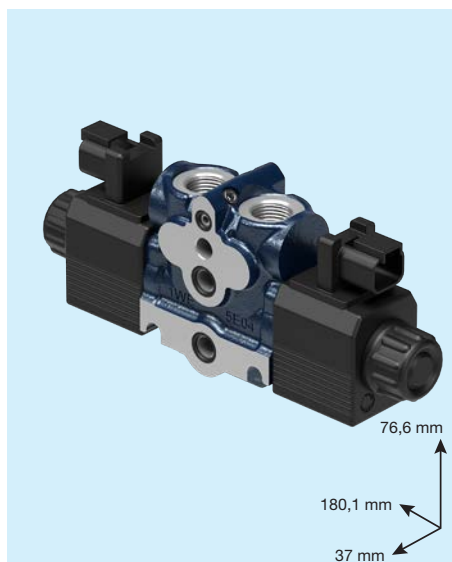


BW0511DO

Platform	LS	HL	EL
Size	05		
Nominal flow	50 l/min		
Nominal pressure	250 bar		
Compatible brackets	---		
For tie rod calculation	37 mm		
Weight	1,4 Kg		

Description:

Element 4/3 ON-OFF with upper ports and with L.S. signal.

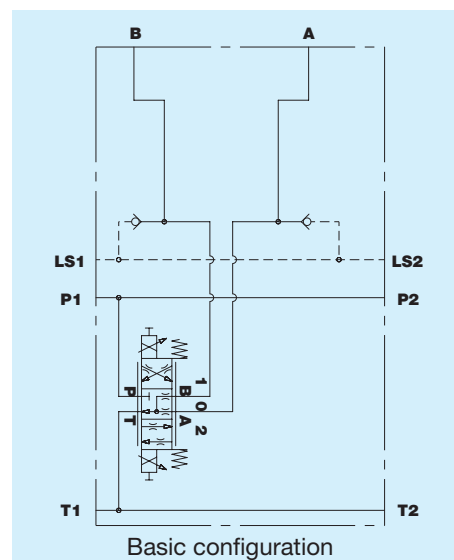


BW0511GP

Platform	LS	HL	EL
Size	05		
Nominal flow	25 l/min		
Nominal pressure	250 bar		
Compatible brackets	---		
For tie rod calculation	38 mm		
Weight	1,4 Kg		

Description:

Element 4/3 proportional with upper ports and with L.S. signal

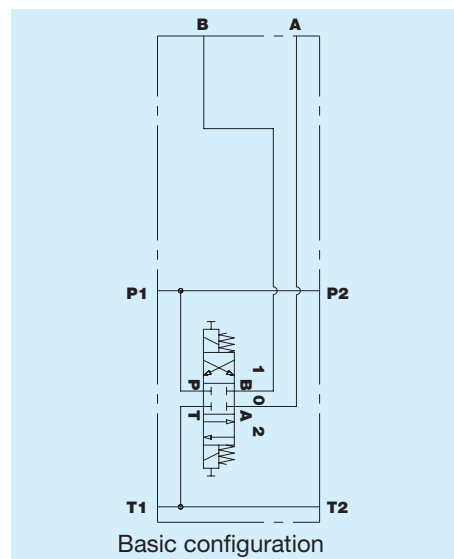
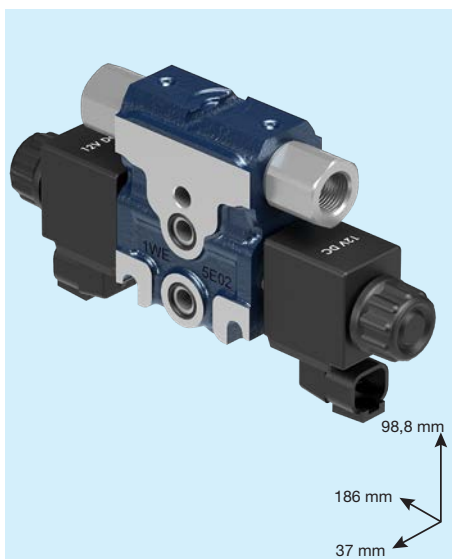


BW0500AL

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Compatible brackets	---
For tie rod calculation	37 mm
Weight	1,5 Kg

Description:

Element 4/3 ON-OFF lateral port.

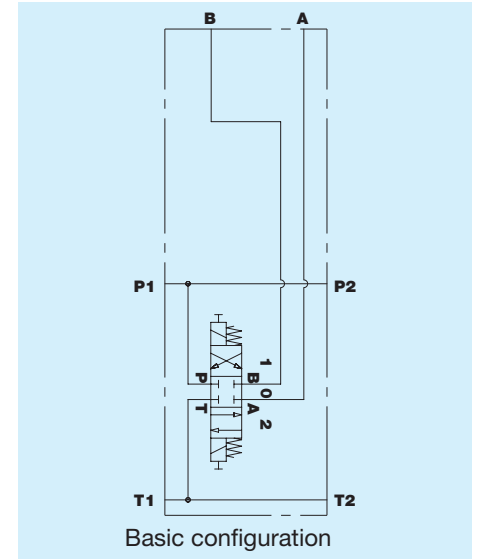
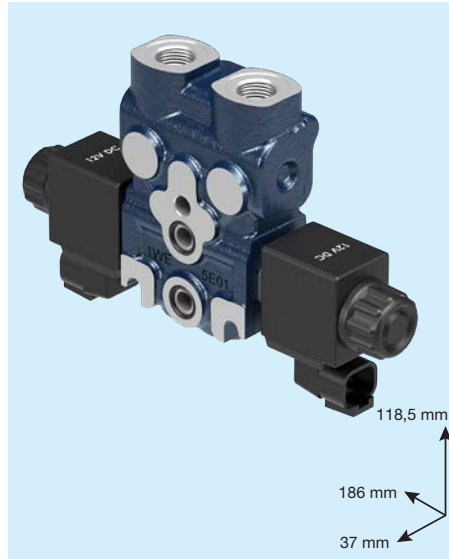


BW0500BL

Platform	OC
Size	05
Nominal flow	25 l/min
Nominal pressure	250 bar
Compatible brackets	---
For tie rod calculation	37 mm
Weight	1,5 Kg

Description:

Element 4/3 ON-OFF upper port.

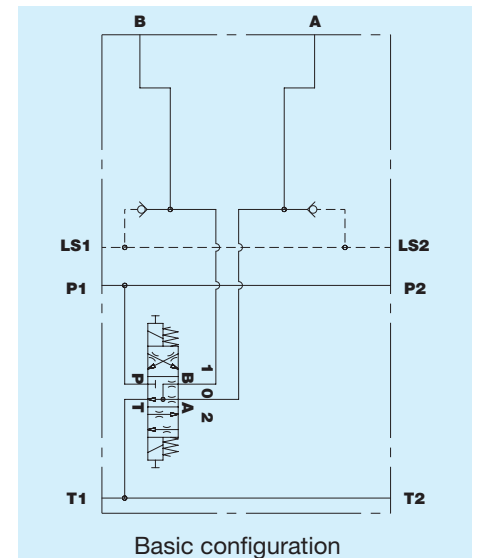
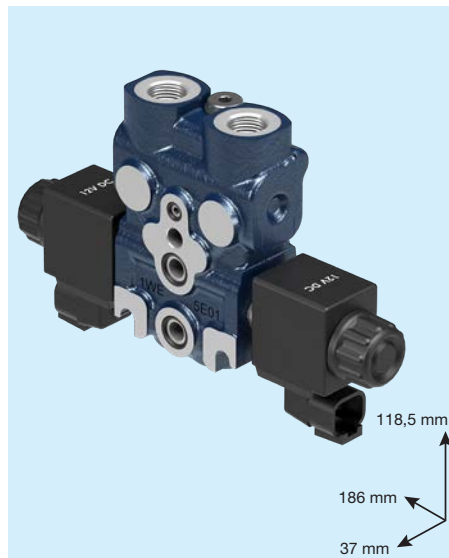


BW0511BL

Platform	LS	HL	EL
Size	05		
Nominal flow	25 l/min		
Nominal pressure	250 bar		
Compatible brackets	---		
For tie rod calculation	37 mm		
Weight	1,4 Kg		

Description:

Element 4/3 ON-OFF with upper ports and with L.S. signal.

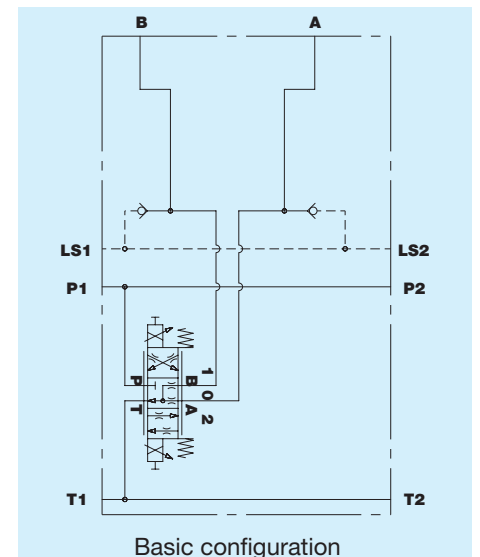
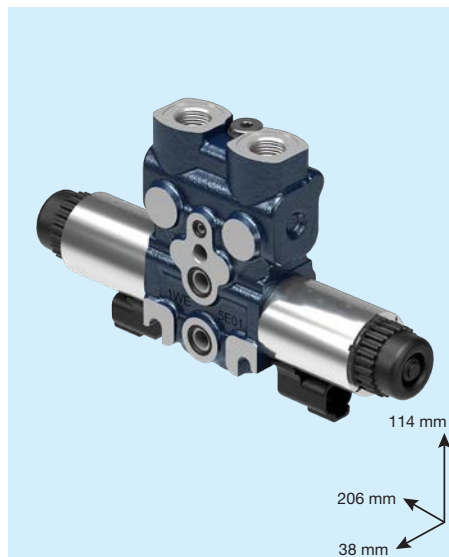


BW0511EP

Platform	LS	HL	EL
Size	05		
Nominal flow	25 l/min		
Nominal pressure	250 bar		
Compatible brackets	---		
For tie rod calculation	38 mm		
Weight	1,7 Kg		

Description:

Element 4/3 proportional with upper ports and with L.S. signal.

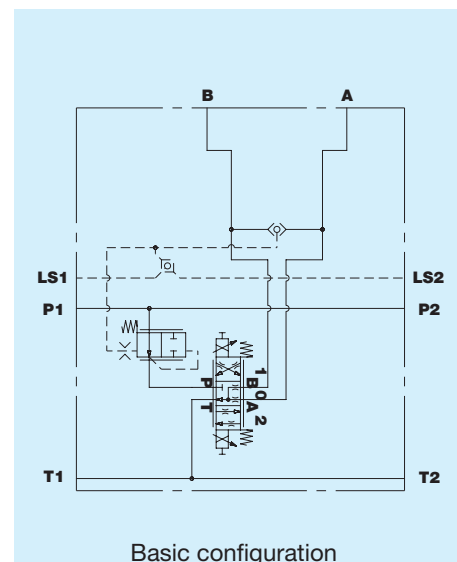
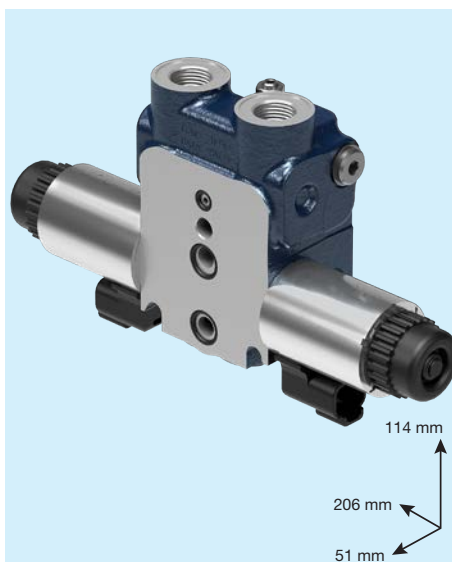


BW0511CR

Platform	LS	HL	EL
Size	05		
Nominal flow	25 l/min		
Nominal pressure	250 bar		
Spacer plate	---		
For tie rod calculation	46 mm		
Weight	2,2 Kg		

Description:

Element 4/3 proportional pre-compensated with L.S. signal.

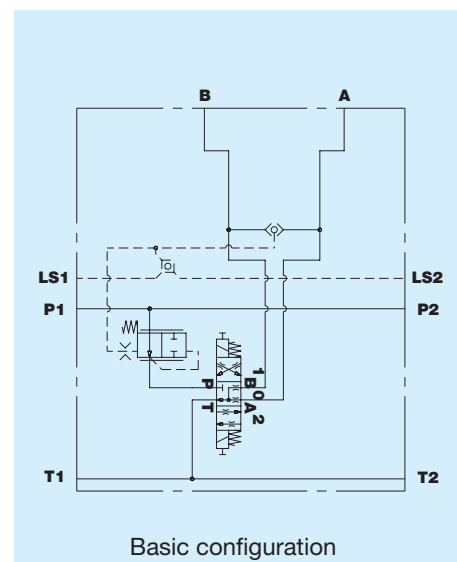
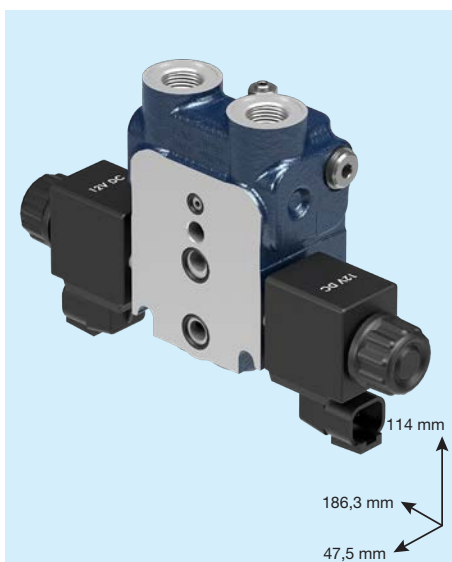


BW0511CL

Platform	LS	HL	EL
Size	05		
Nominal flow	25 l/min		
Nominal pressure	250 bar		
Spacer plate	---		
For tie rod calculation	46 mm		
Weight	2,1 Kg		

Description:

Element 4/3 ON-OFF pre-compensated with L.S. signal.

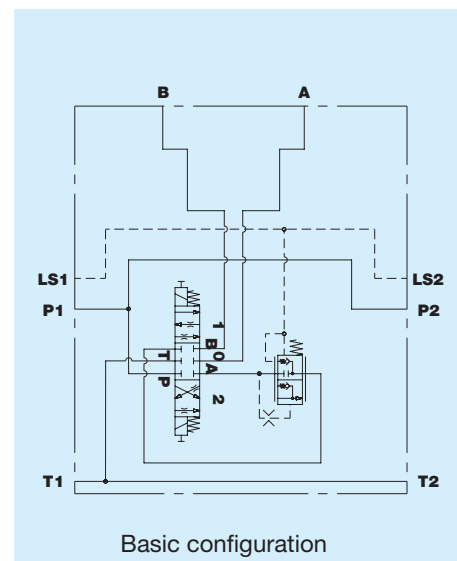
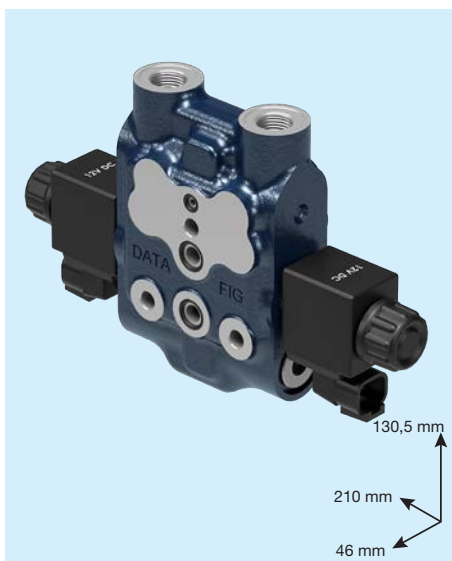


BW0511FL

Platform	LS	HL	EL
Size	05		
Nominal flow	25 l/min		
Nominal pressure	250 bar		
Spacer plate	---		
For tie rod calculation	46 mm		
Weight	3,1 Kg		

Description:

Element ON-OFF flow sharing post-compensated with L.S. signal.

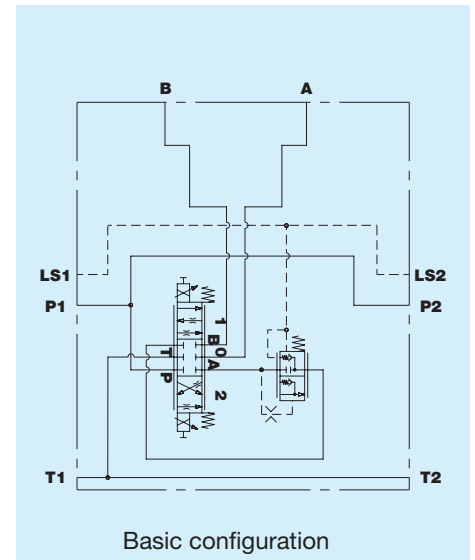
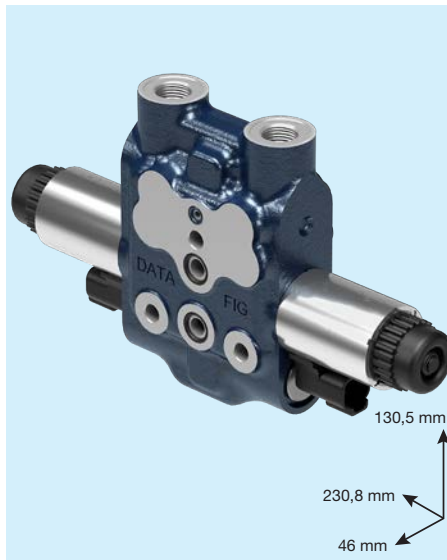


BW0511FR

Platform	LS	HL	EL
Size	05		
Nominal flow	25 l/min		
Nominal pressure	250 bar		
Spacer plate	---		
For tie rod calculation	46 mm		
Weight	3,8 Kg		

Description:

Flow sharing proportional element post-compensated with L.S. signal.

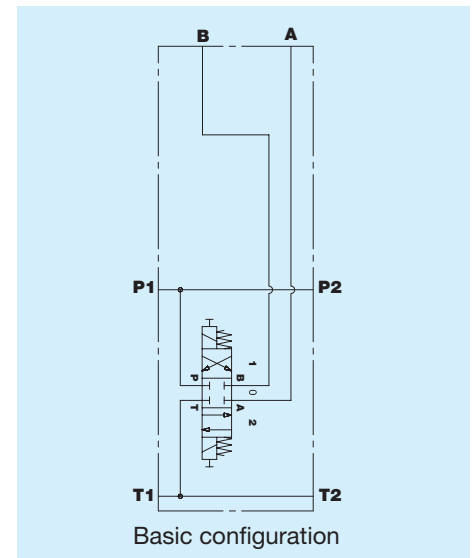
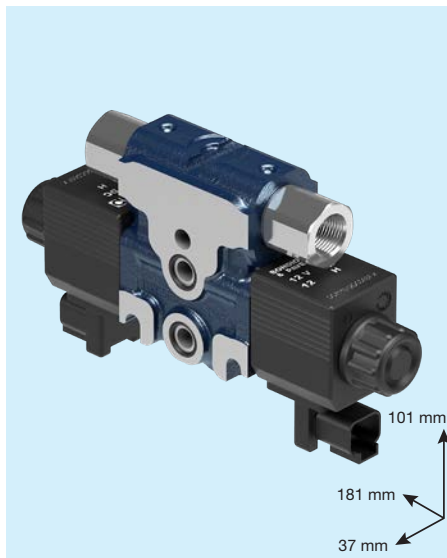


BW0500AO

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Spacer plate	---
For tie rod calculation	37 mm
Weight	1.6 Kg

Description:

Element 4/3 ON-OFF lateral port.

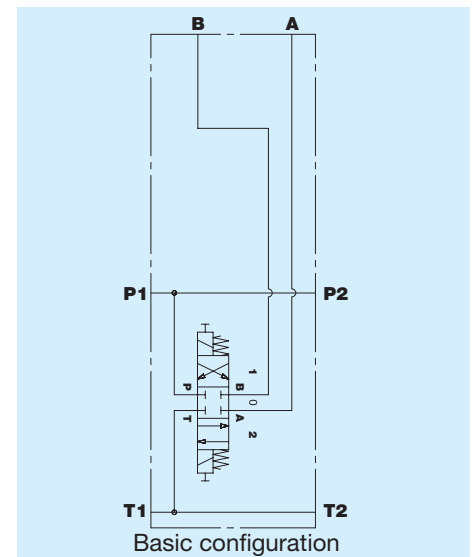
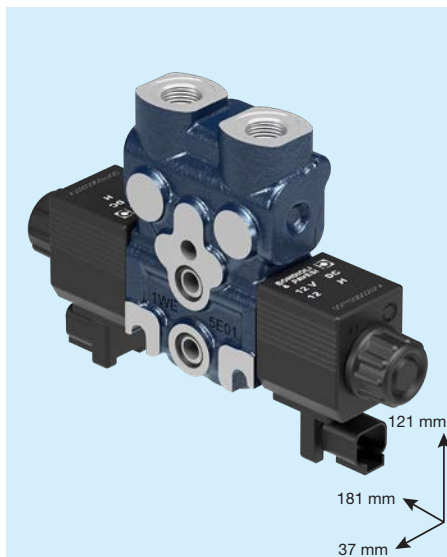


BW0500BO

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Spacer plate	---
For tie rod calculation	37 mm
Weight	1.6 Kg

Description:

Element 4/3 ON-OFF upper port.

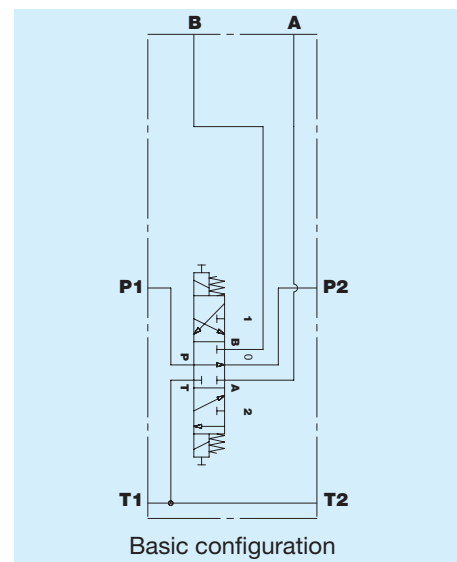
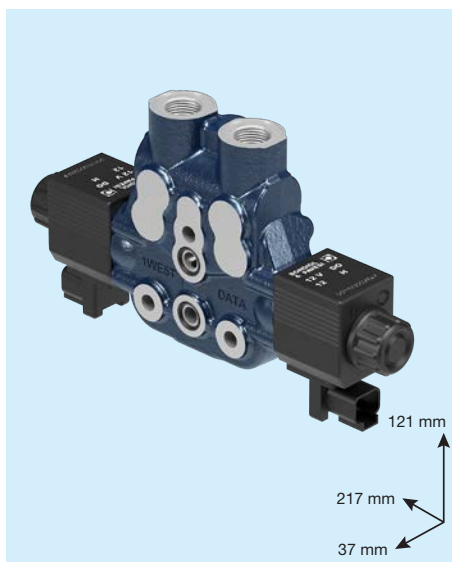


BW0500TO

Platform	OC
Size	05
Nominal flow	35 l/min
Nominal pressure	210 bar
Spacer plate	---
For tie rod calculation	37 mm
Weight	1.6 Kg

Description:

Element 5/3 ON-OFF Tandem upper port

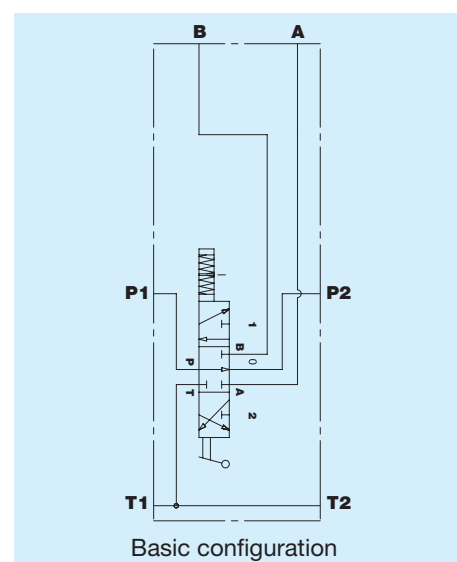


BW0500TM

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	210 bar
Spacer plate	---
For tie rod calculation	37 mm
Weight	1.6 Kg

Description:

Element 5/3 Manual Tandem upper port

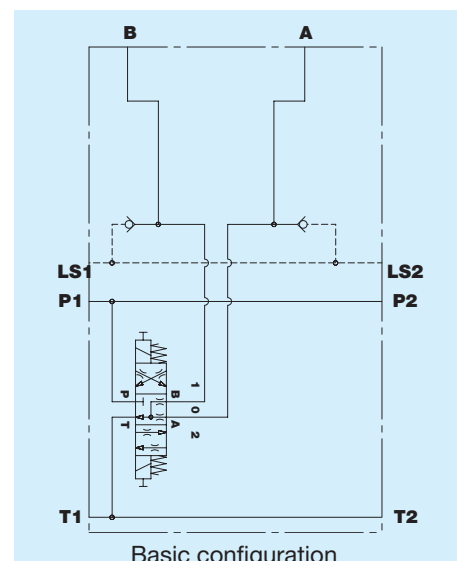
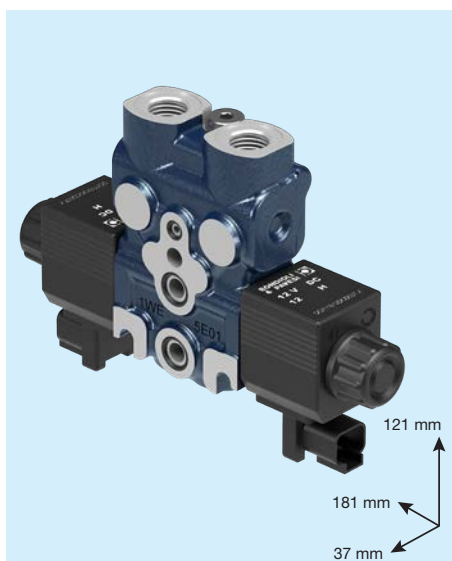


BW0511BO

Platform	LS HL EL
Size	05
Nominal flow	42 l/min
Nominal pressure	250 bar
Spacer plate	---
For tie rod calculation	37 mm
Weight	1.6 Kg

Description:

Element 4/3 ON-OFF with upper ports with L.S. signal

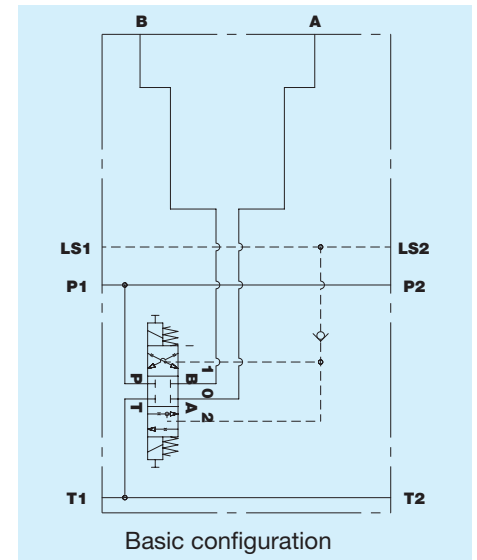
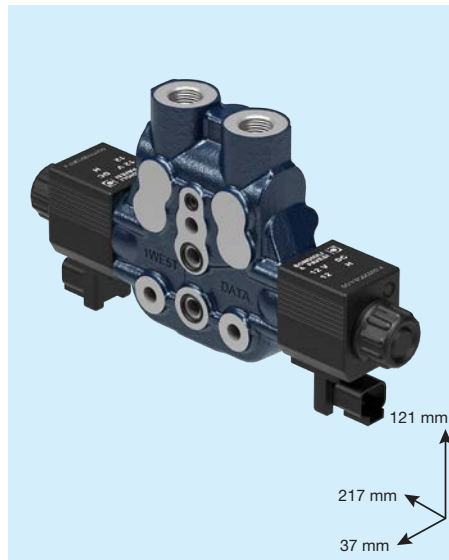


BW0511HO

Platform	LS	HL	EL
Size	05		
Nominal flow	35 l/min		
Nominal pressure	250 bar		
Spacer plate	---		
For tie rod calculation	37 mm		
Weight	1,6 Kg		

Description:

Element 4/3 ON-OFF L.S. with spool sealing.



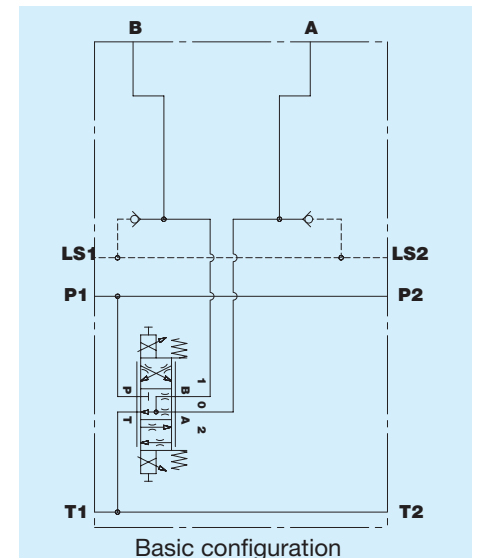
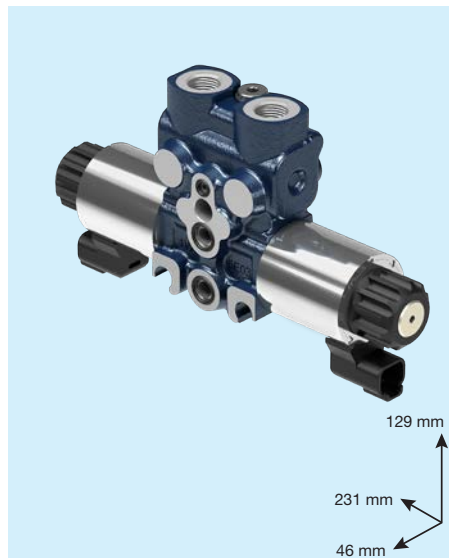
BW0511LP

Platform	LS	HL	EL
Size	05		
Nominal flow	50 l/min		
Nominal pressure	250 bar		
Spacer plate	---		
For tie rod calculation	46 mm		
Weight	1.7 Kg		

Description:

Wide element 4/3 proportional with upper ports and with L.S. signal

Standard version dimensions

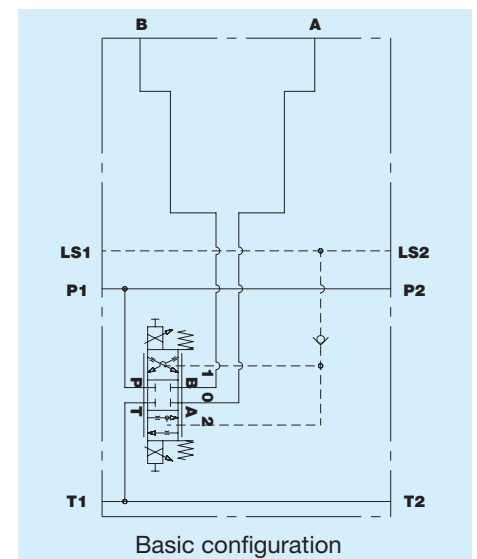
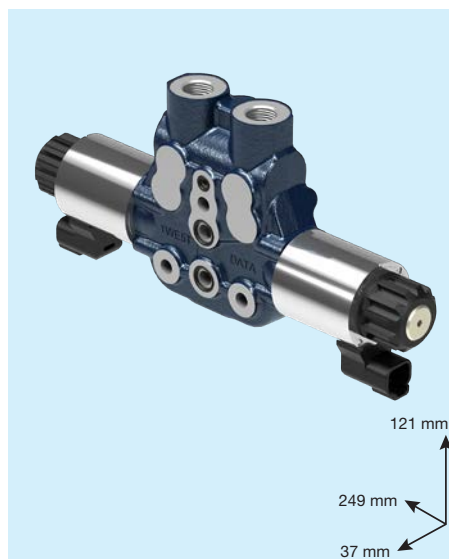


BW0511HP

Platform	LS	HL	EL
Size	05		
Nominal flow	50 l/min		
Nominal pressure	250 bar		
Spacer plate	PI05		
For tie rod calculation	37 mm		
Weight	1,7 Kg		

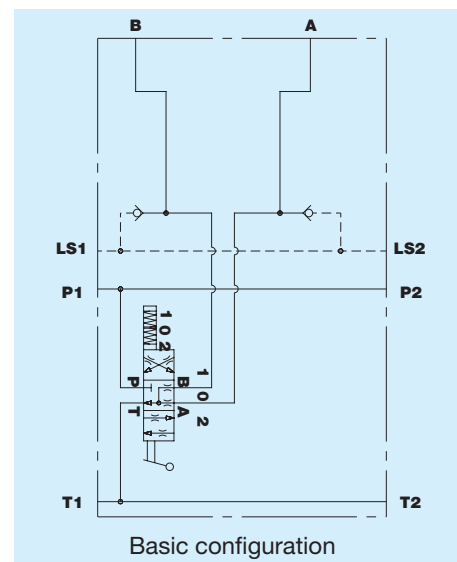
Description:

Element 4/3 proportional L.S with spool sealing.



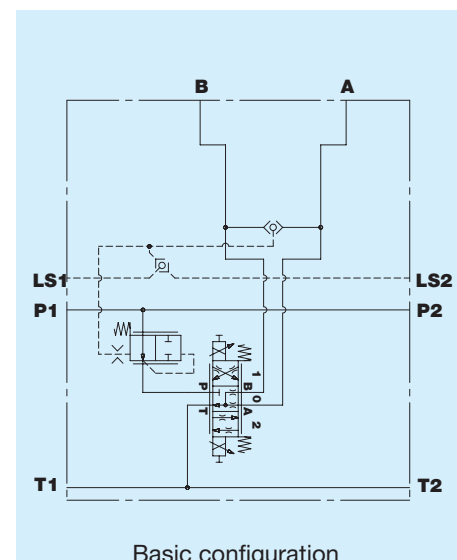
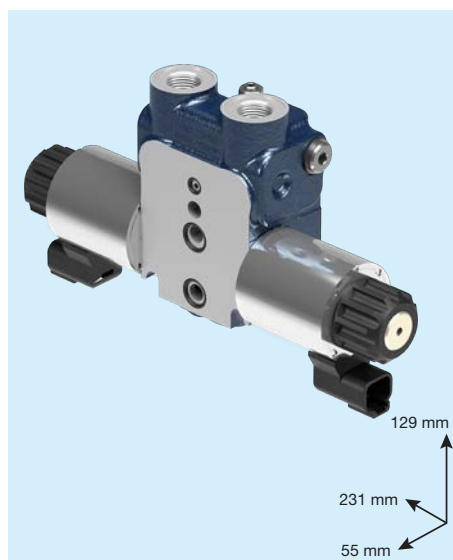
BW0511TM

Platform	LS
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Spacer plate	---
For tie rod calculation	37 mm
Weight	1,6 Kg
Description:	
Element 4/3 manual L.S. open center.	



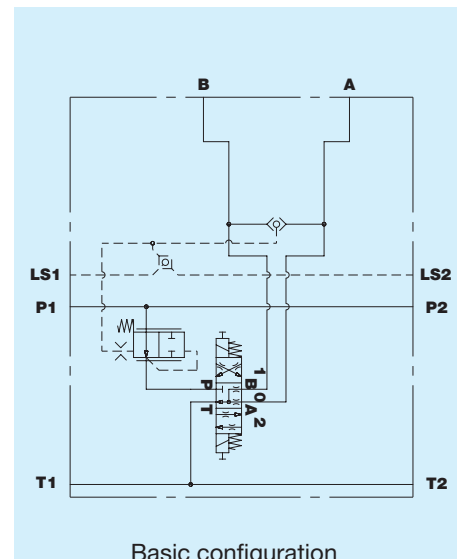
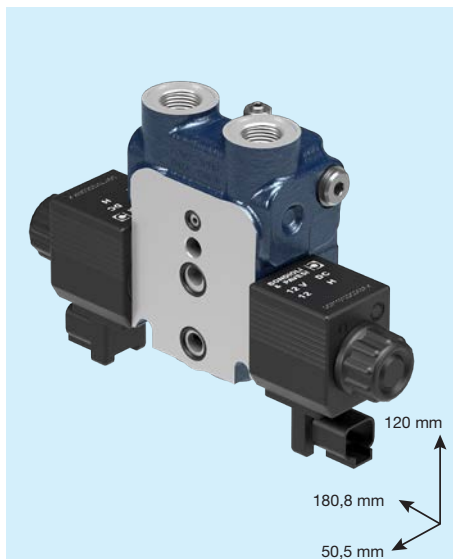
BW0511CP

Platform	LS	HL	EL
Size	05		
Nominal flow	50 l/min		
Nominal pressure	250 bar		
Spacer plate	---		
For tie rod calculation	46 mm		
Weight	2.2 Kg		
Description:			
Element 4/3 Proportional pre-compensated with L.S. signal.			



BW0511CO

Platform	LS	HL	EL
Size	05		
Nominal flow	45 l/min		
Nominal pressure	250 bar		
Spacer plate	---		
For tie rod calculation	46 mm		
Weight	2,1 Kg		
Description:			
Element 4/3 ON-OFF pre-compensated with L.S. signal.			

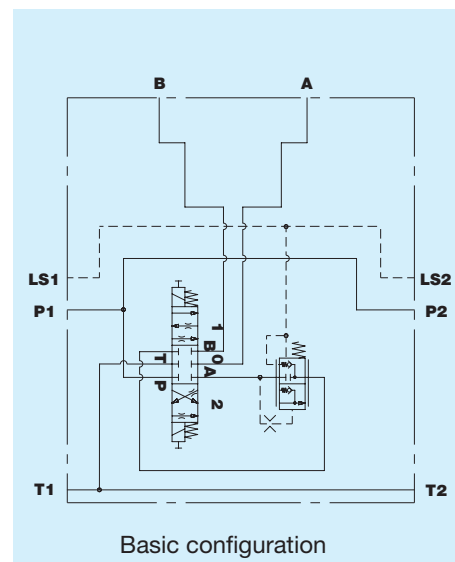
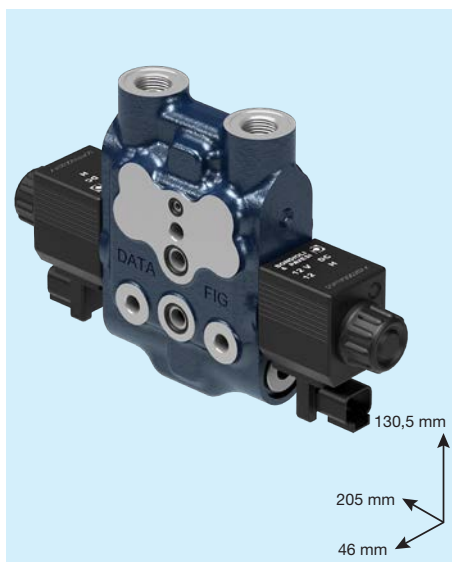


BW0511FO

Platform	LS	HL	EL
Size	05		
Nominal flow	35 l/min		
Nominal pressure	250 bar		
Spacer plate	---		
For tie rod calculation	46 mm		
Weight	3,2 Kg		

Description:

Element ON-OFF flow sharing post-compensated with L.S. signal.

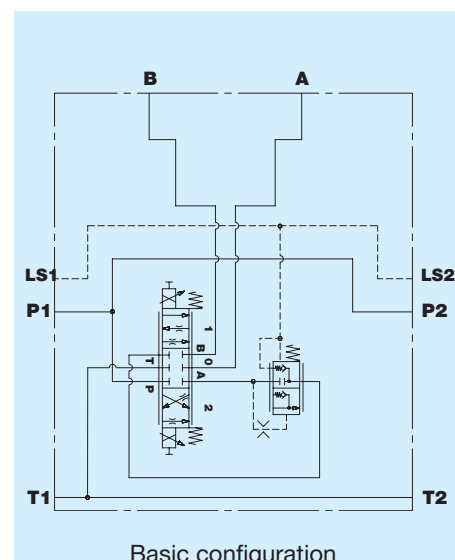
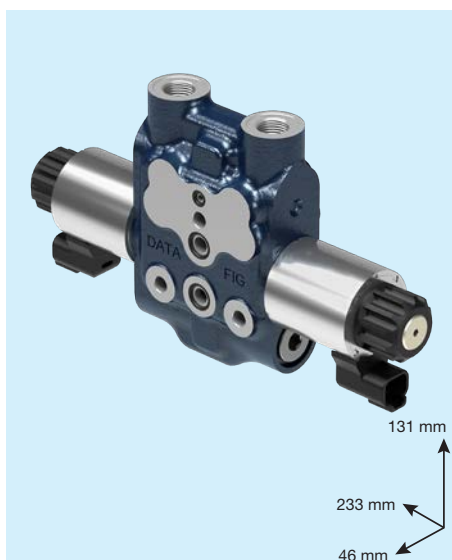


BW0511FP

Platform	LS	HL	EL
Size	05		
Nominal flow	45 l/min		
Nominal pressure	250 bar		
Spacer plate	---		
For tie rod calculation	46 mm		
Weight	3.8 Kg		

Description:

Proportional pre-compensated flow sharing element with L.S. signal.

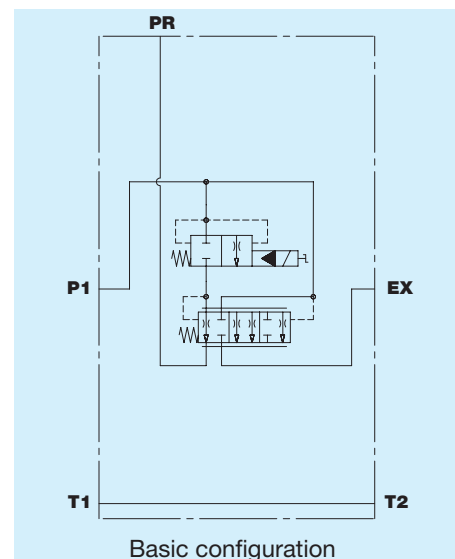
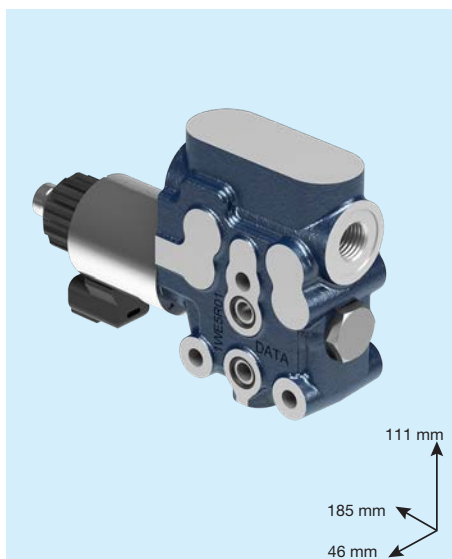


RF0500CO

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	20/40 l/min
For tie rod calculation	46 mm
Weight	2.6 Kg

Description:

Compensated flow rate regulator ON-OFF.

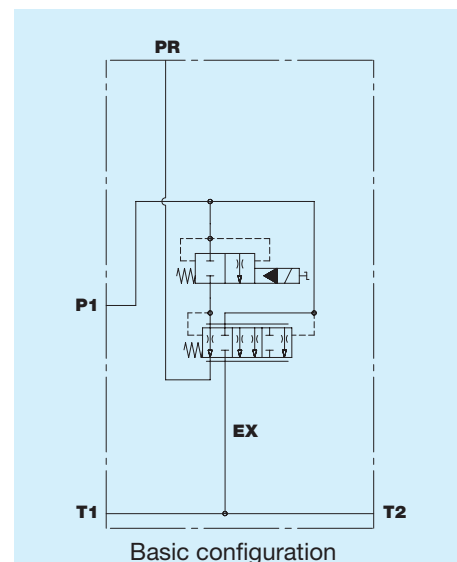
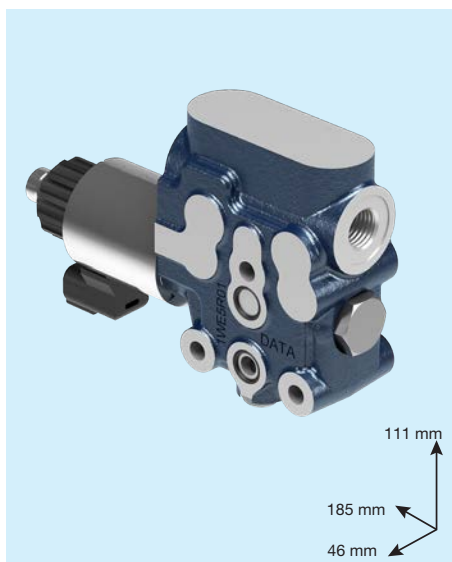


RF0500DO

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	20/40 l/min
For tie rod calculation	46 mm
Weight	2.6 Kg

Description:

Compensated flow rate regulator ON-OFF with excess on unloading.

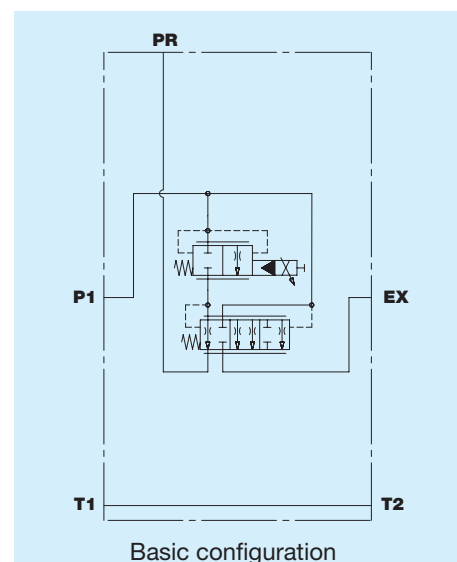
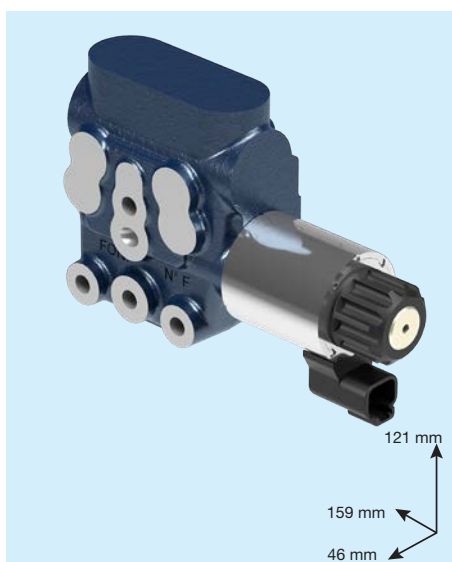


RF0500CP

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	20/40 l/min
For tie rod calculation	46 mm
Weight	2.6 Kg

Description:

Proportional compensated flow rate regulator.

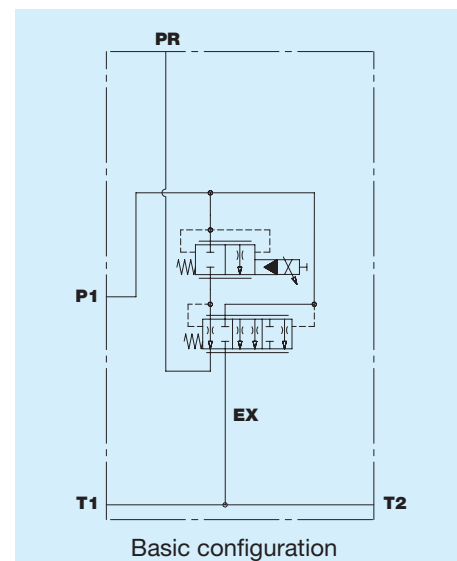
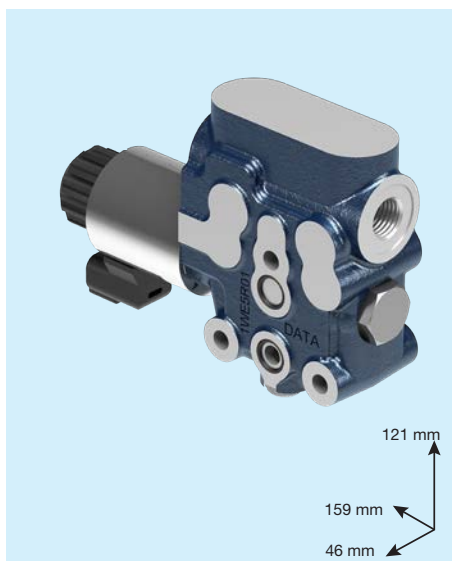


RF0500DP

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	20/40 l/min
For tie rod calculation	46 mm
Weight	2.6 Kg

Description:

Proportional compensated flow rate regulator with excess on unloading.

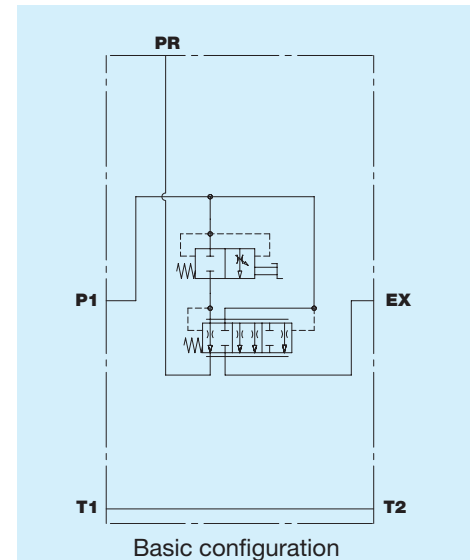
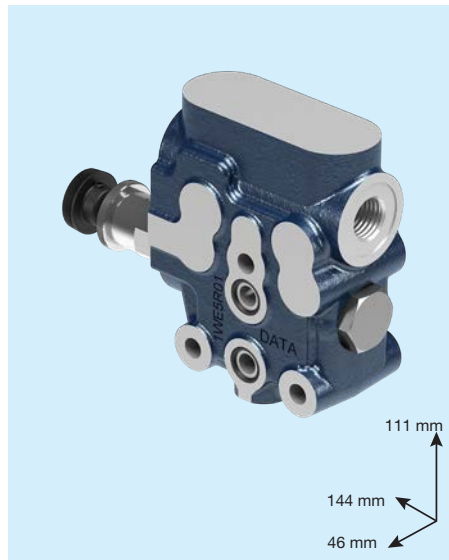


RF0500CM

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	20/40 l/min
For tie rod calculation	46 mm
Weight	2.6 Kg

Description:

Manual compensated flow rate regulator.

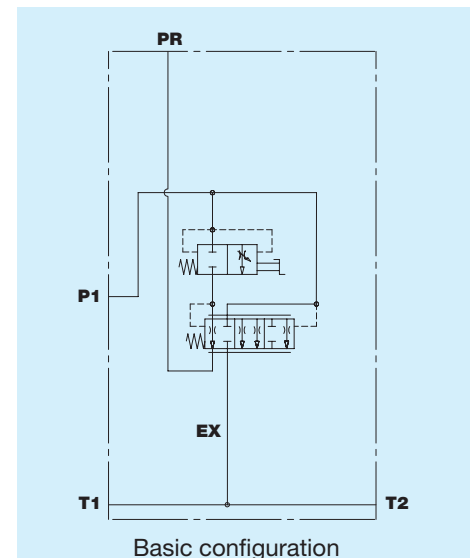
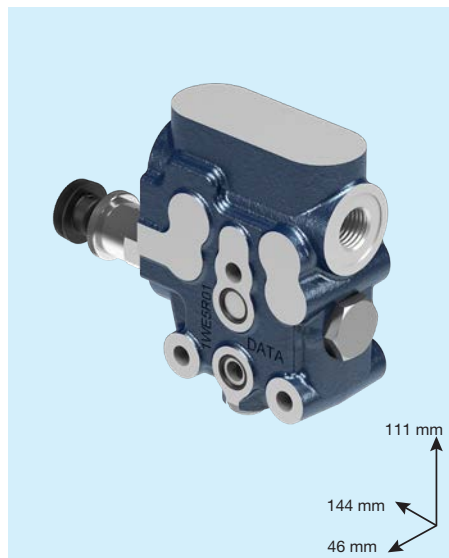


RF0500DM

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	20/40 l/min
For tie rod calculation	46 mm
Weight	2.6 Kg

Description:

Manual element with flow rate regulation and with excess on unloading.

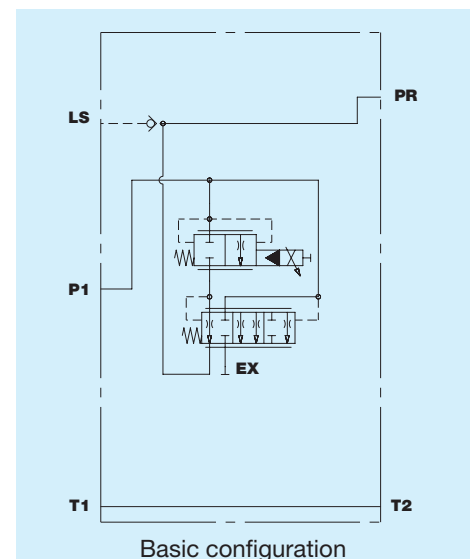
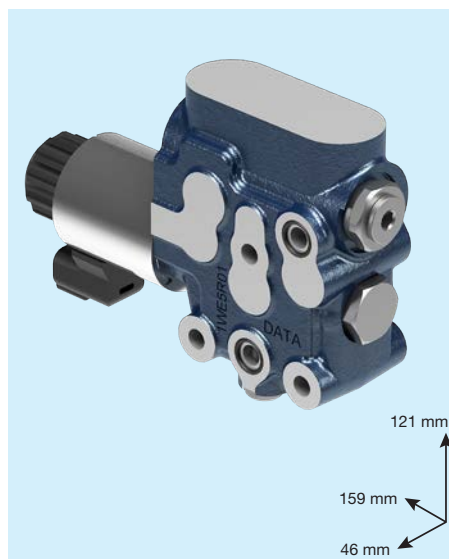


RF051QDP

Platform	LS
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	40 l/min
For tie rod calculation	46 mm
Weight	2,6 Kg

Description:

Proportional L.S. compensated flow rate regulator.

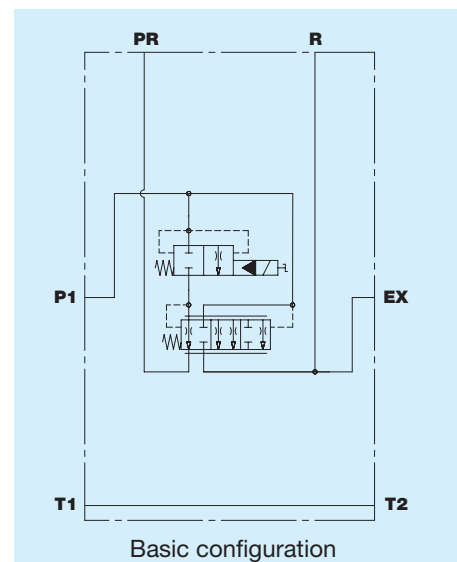
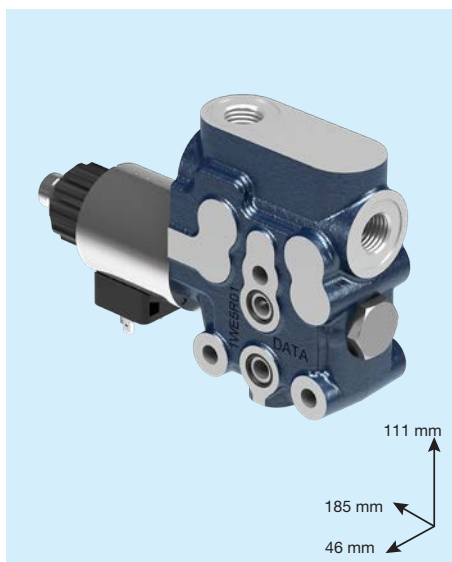


RF0500EO

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	20/40 l/min
For tie rod calculation	46 mm
Weight	2.6 Kg

Description:

Compensated flow rate regulator ON-OFF with recovery.

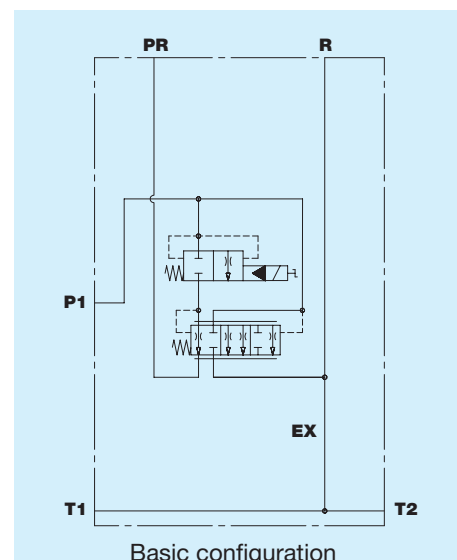


RF0500FO

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	20/40 l/min
For tie rod calculation	46 mm
Weight	2.6 Kg

Description:

Compensated flow rate regulator ON-OFF with recovery and excess on unloading.

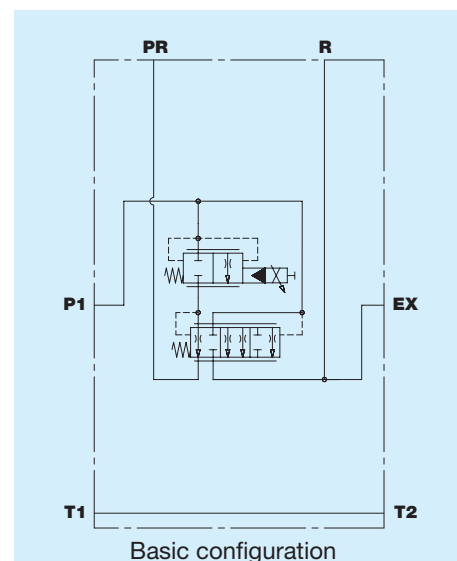
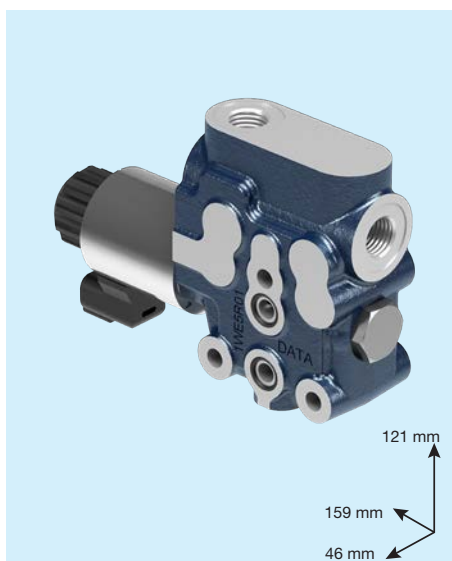


RF0500EP

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	20/40 l/min
For tie rod calculation	46 mm
Weight	2.6 Kg

Description:

Proportional compensated flow rate regulator with recovery.

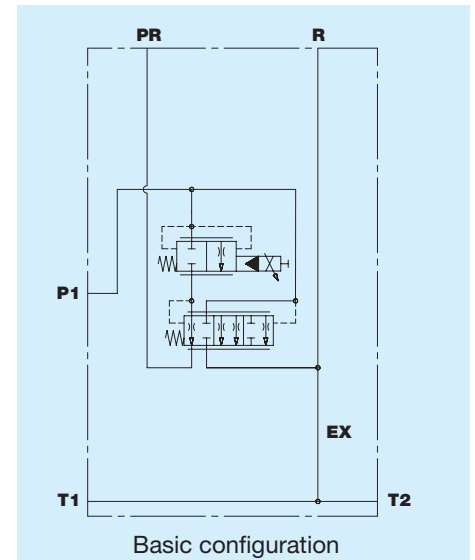
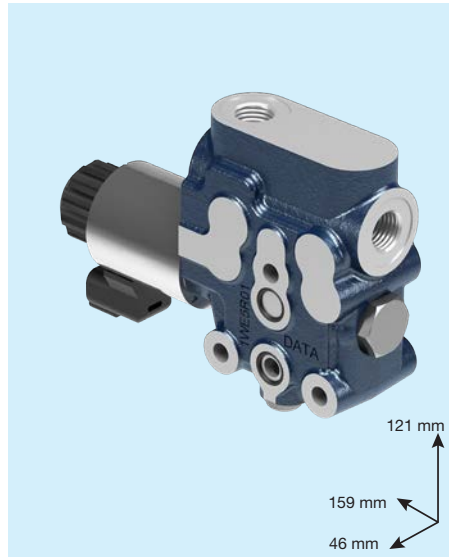


RF0500FP

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	20/40 l/min
For tie rod calculation	46 mm
Weight	2.6 Kg

Description:

Proportional compensated flow rate regulator with recovery and excess on unloading.

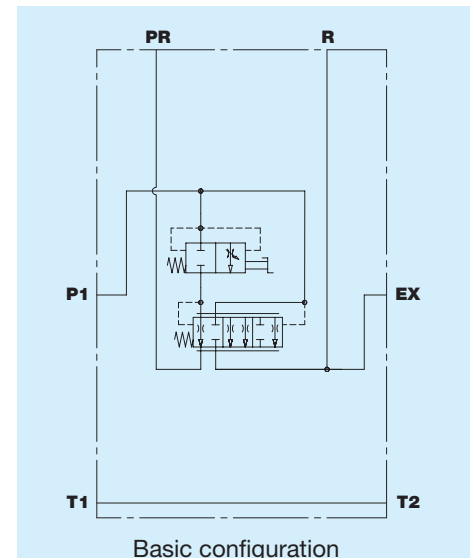
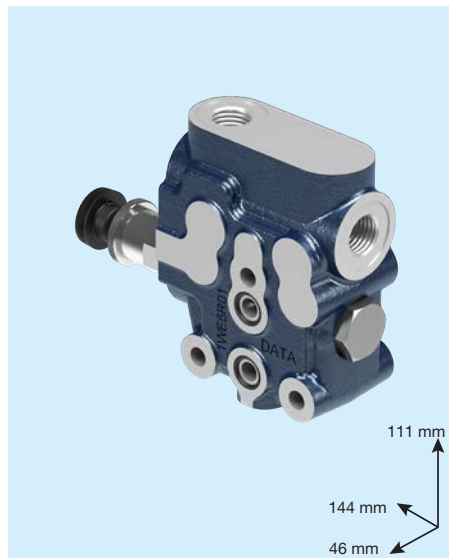


RF0500EM

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	20/40 l/min
For tie rod calculation	46 mm
Weight	2.6 Kg

Description:

Manual compensated flow rate regulator with recovery.

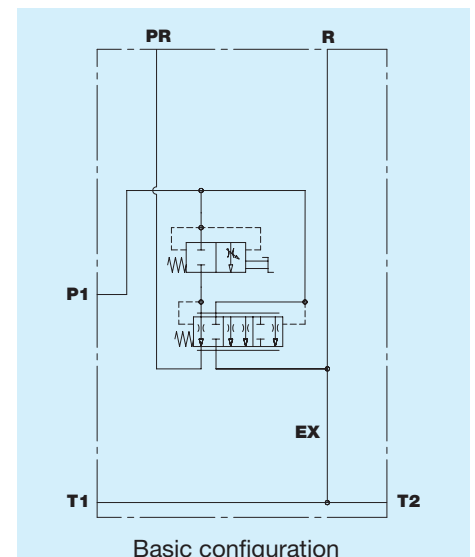


RF0500FM

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Priority regulated flow rate	20/40 l/min
For tie rod calculation	46 mm
Weight	2.6 Kg

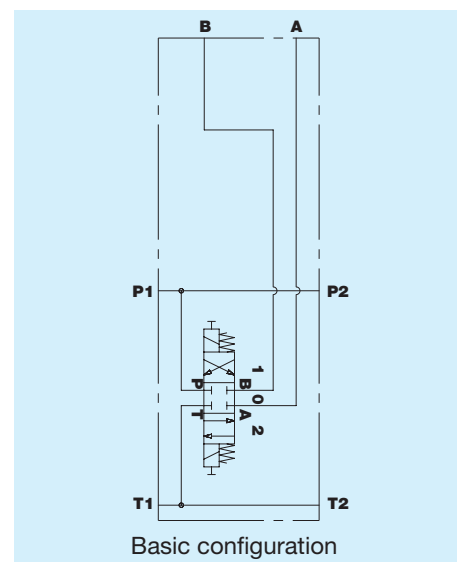
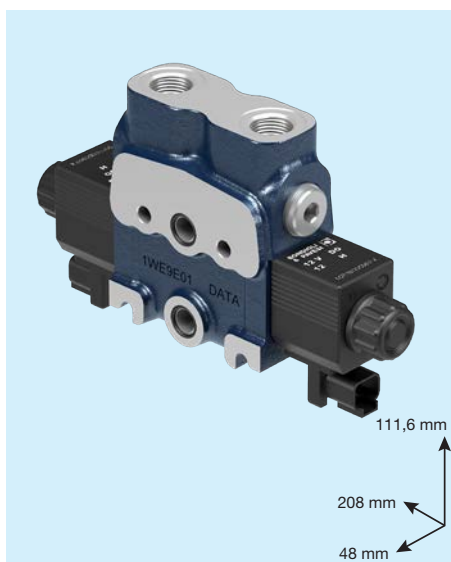
Description:

Manual compensated flow rate regulator with recovery and excess on unloading.



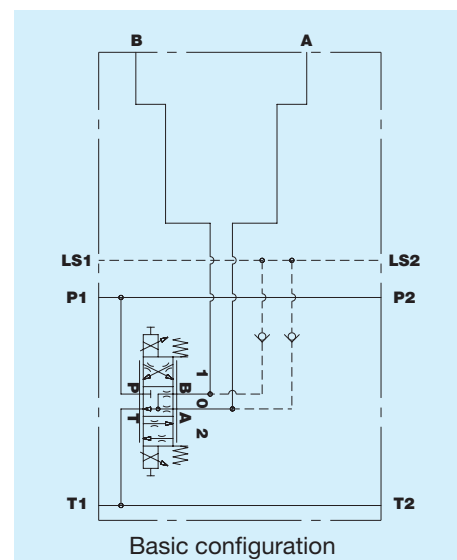
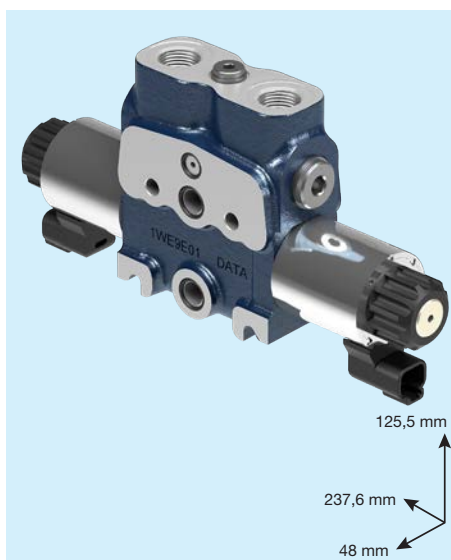
BW1022AL

Platform	OC
Size	10
Nominal flow	35 l/min
Nominal pressure	250 bar
Spacer plate	---
For tie rod calculation	48 mm
Weight	3 Kg
Description:	
Element 4/3 ON-OFF.	



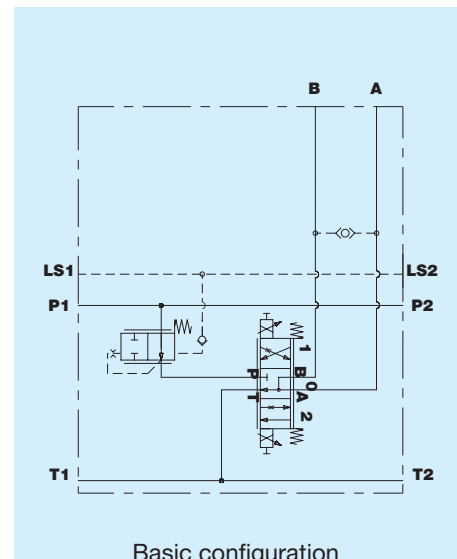
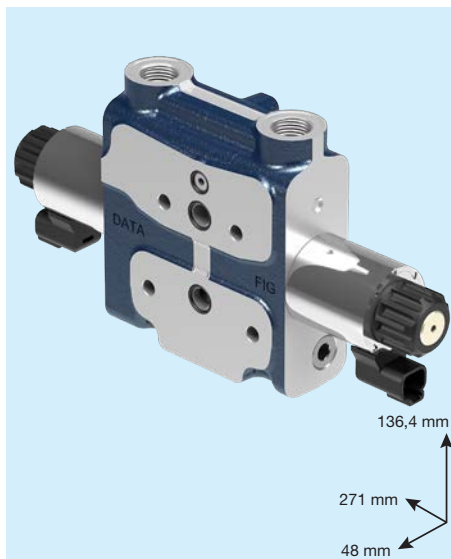
BW1033BR

Platform	LS	HL	EL
Size	10		
Nominal flow	70 l/min		
Nominal pressure	250 bar		
Spacer plate	---		
For tie rod calculation	48 mm		
Weight	3,2 Kg		
Description:			
Element 4/3 proportional with L.S. signal.			



BW1033XP

Platform	LS	HL	EL
Size	10		
Nominal flow	70 l/min		
Nominal pressure	250 bar		
Spacer plate	---		
For tie rod calculation	48 mm		
Weight	4,8 Kg		
Description:			
Element 4/3 proportional pre-compensated with L.S. signal.			

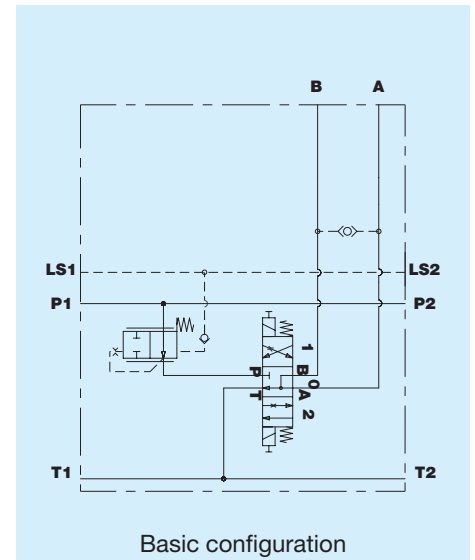


BW1033XO

Platform	LS	HL	EL
Size	10		
Nominal flow	70 l/min		
Nominal pressure	250 bar		
Spacer plate	---		
For tie rod calculation	48 mm		
Weight	4,8 Kg		

Description:

Element 4/3 ON-OFF pre-compensated with L.S. signal

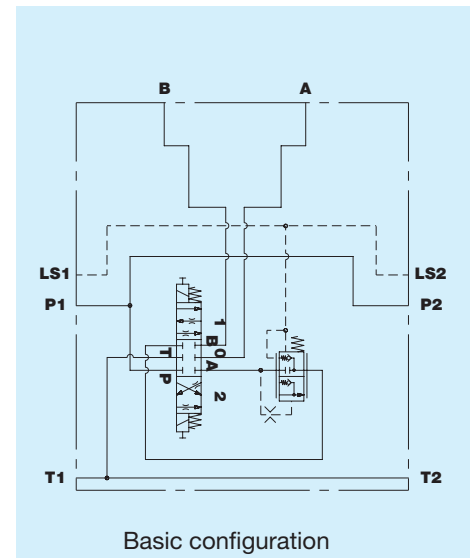


BW1033FO

Platform	LS	HL	EL
Size	10		
Nominal flow	70 l/min		
Nominal pressure	250 bar		
Spacer plate	---		
For tie rod calculation	48 mm		
Weight	4,8 Kg		

Description:

Element ON-OFF flow sharing post-compensated with L.S. signal.

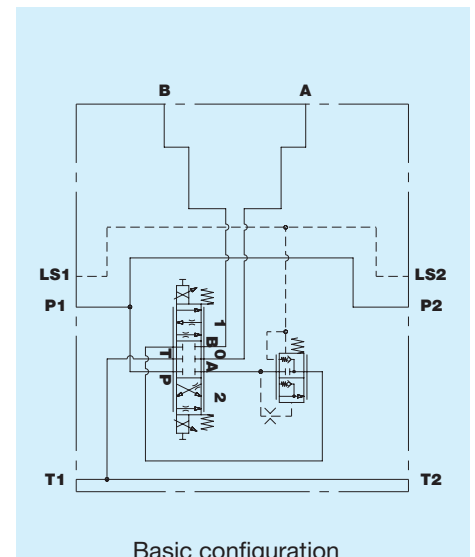
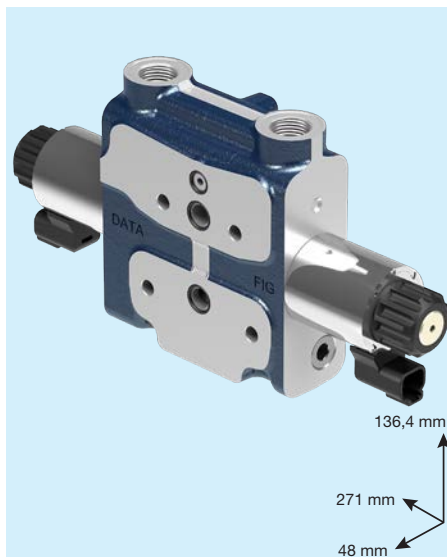


BW1033FP

Platform	LS	HL	EL
Size	10		
Nominal flow	70 l/min		
Nominal pressure	250 bar		
Spacer plate	---		
For tie rod calculation	48 mm		
Weight	4,8 Kg		

Description:

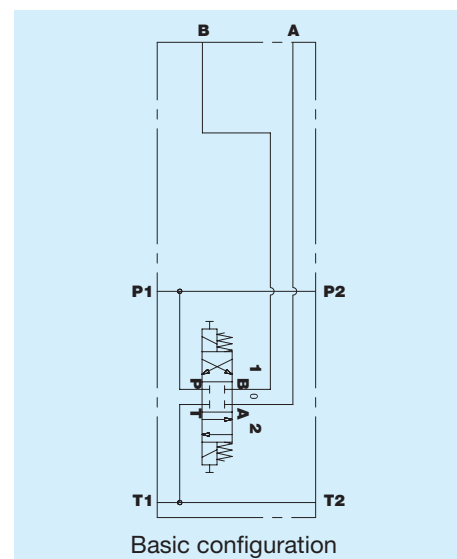
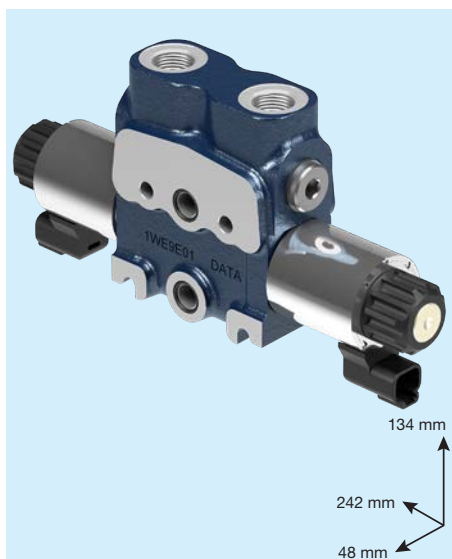
Element proportional flow sharing post-compensated with L.S. signal.



BW1022AO

Platform	OC
Size	10
Nominal flow	90 l/min
Nominal pressure	250 bar
Spacer plate	---
For tie rod calculation	48 mm
Weight	4.1 Kg

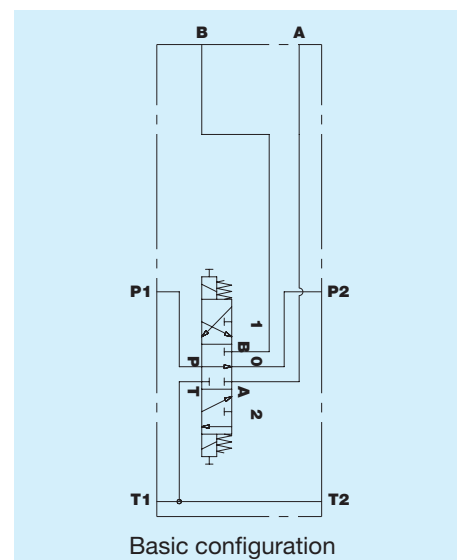
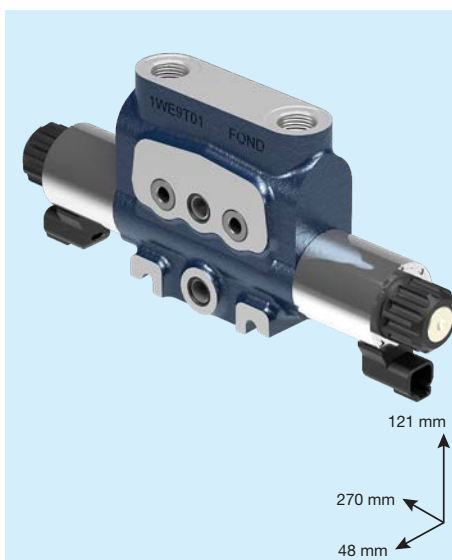
Description:
Element 4/3 ON-OFF.



BW1022TO

Platform	OC
Size	10
Nominal flow	80 l/min
Nominal pressure	250 bar
Spacer plate	---
For tie rod calculation	48 mm
Weight	4,4 Kg

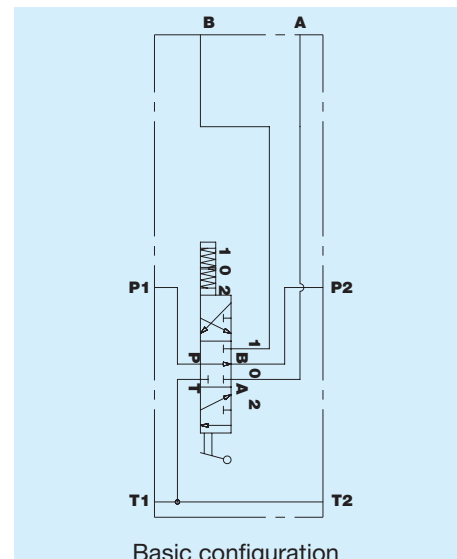
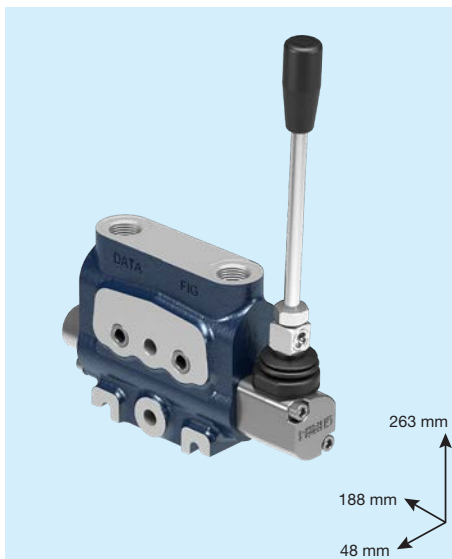
Description:
Element 5/3 ON-OFF tandem.



BW1022TM

Platform	OC
Size	10
Nominal flow	80 l/min
Nominal pressure	250 bar
Spacer plate	---
For tie rod calculation	48 mm
Weight	4,4 Kg

Description:
Element 5/3 manual tandem.

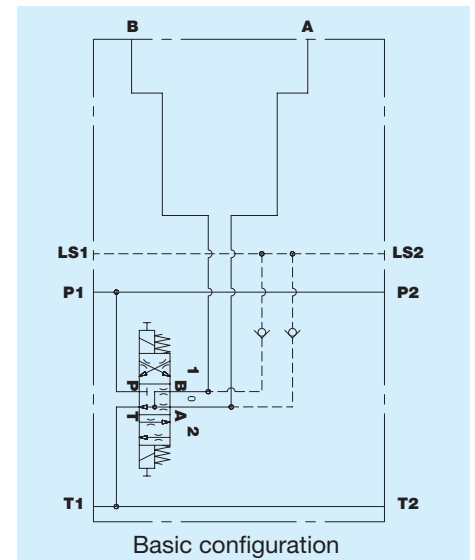
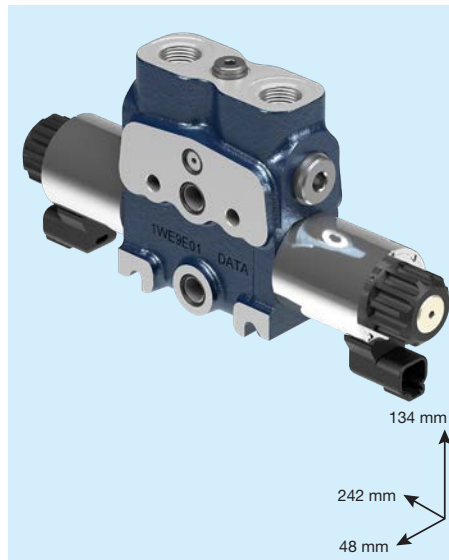


BW1033AO

Platform	LS	HL	EL
Size	10		
Nominal flow	80 l/min		
Nominal pressure	250 bar		
Spacer plate	---		
For tie rod calculation	48 mm		
Weight	4.1 Kg		

Description:

Element 4/3 ON-OFF upper ports with L.S. signal.

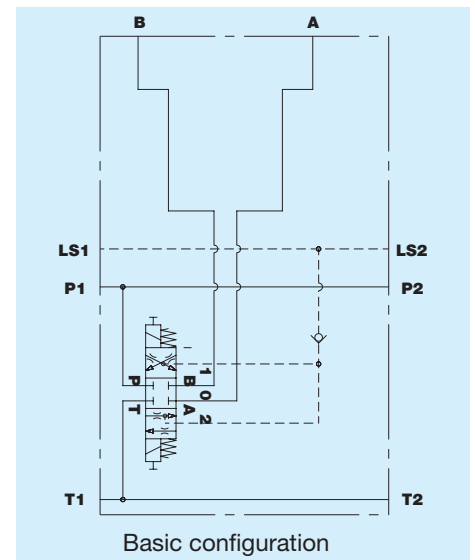
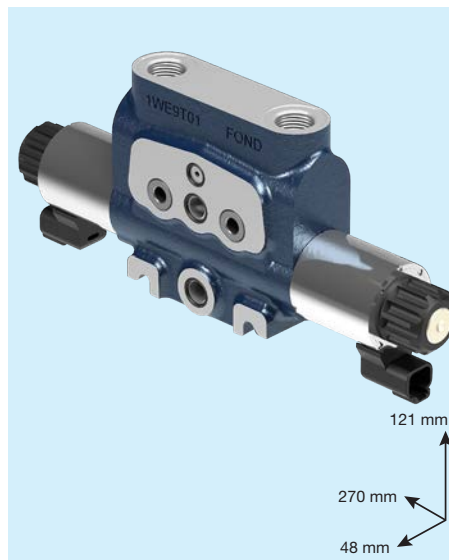


BW1033HO

Platform	LS	HL	EL
Size	10		
Nominal flow	70 l/min		
Nominal pressure	250 bar		
Spacer plate	---		
For tie rod calculation	48 mm		
Weight	4,8 Kg		

Description:

Element 4/3 ON-OFF L.S with spool sealing.

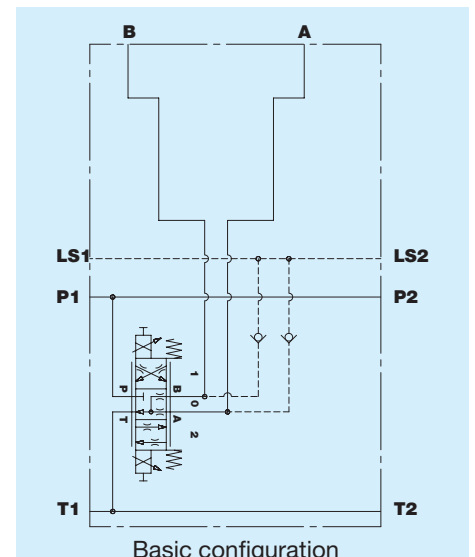


BW1033BP

Platform	LS	HL	EL
Size	10		
Nominal flow	85 l/min		
Nominal pressure	250 bar		
Spacer plate	Contact the Technical Office		
For tie rod calculation	48 mm		
Weight	4.5 Kg		

Description:

Element 4/3 Proportional L.S. with upper ports.

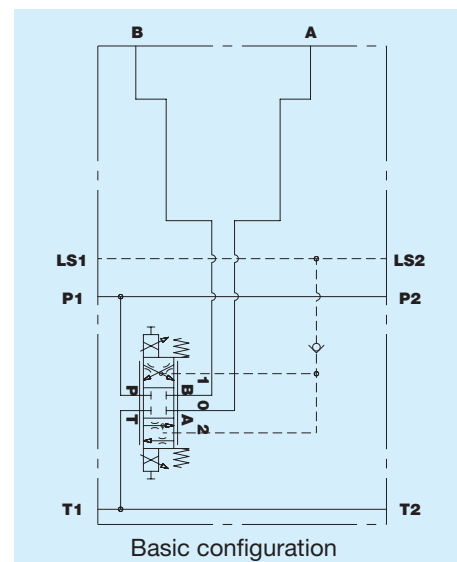
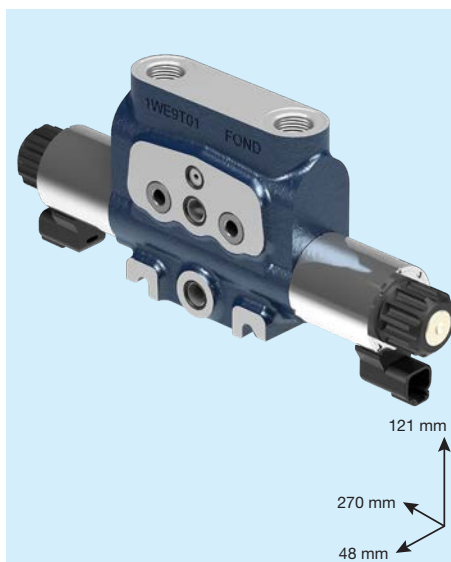


BW1033HP

Platform	LS	HL	EL
Size	10		
Nominal flow	70 l/min		
Nominal pressure	250 bar		
Spacer plate	---		
For tie rod calculation	48 mm		
Weight	4,8 Kg		

Description:

Element 4/3 proportional L.S. with spool sealing.

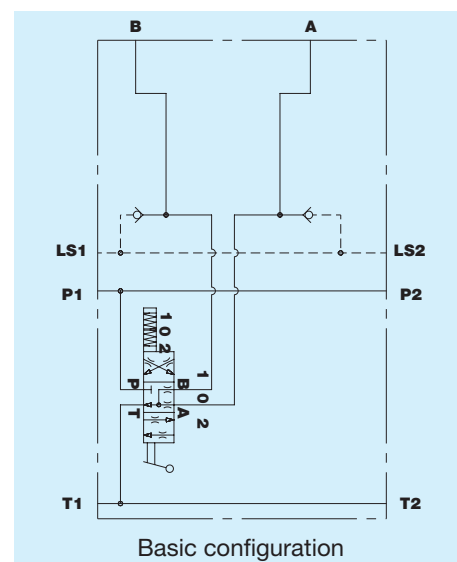
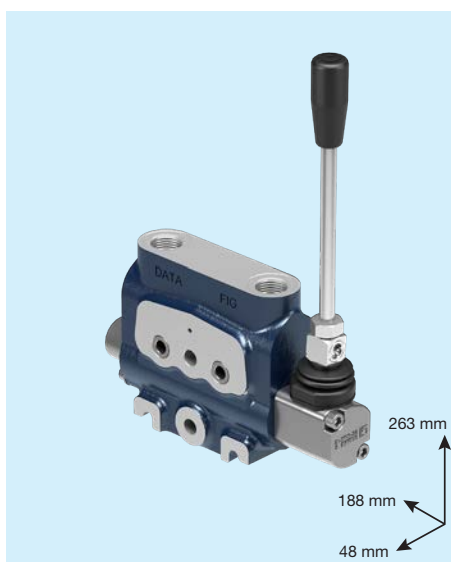


BW1033TM

Platform	LS
Size	10
Nominal flow	80 l/min
Nominal pressure	250 bar
Spacer plate	---
For tie rod calculation	48 mm
Weight	4,4 Kg

Description

Element 4/3 manual L.S. open center.

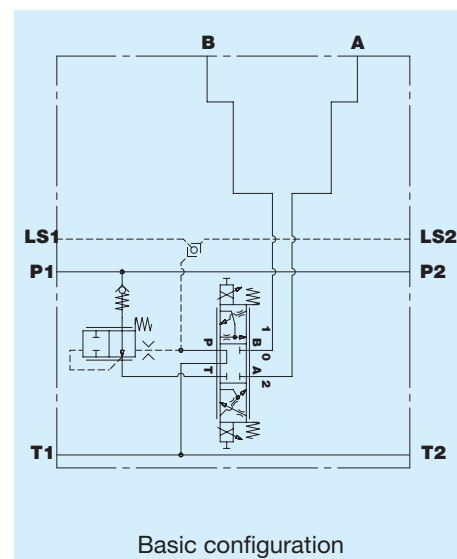


BW1033CP

Platform	LS	HL	EL
Size	10		
Nominal flow	90 l/min		
Nominal pressure	300 bar		
Spacer plate	Contact the Technical Office		
For tie rod calculation	66 mm		
Weight	6.8 Kg		

Description:

Element 4/3 Proportional pre-compensated with L.S. signal.

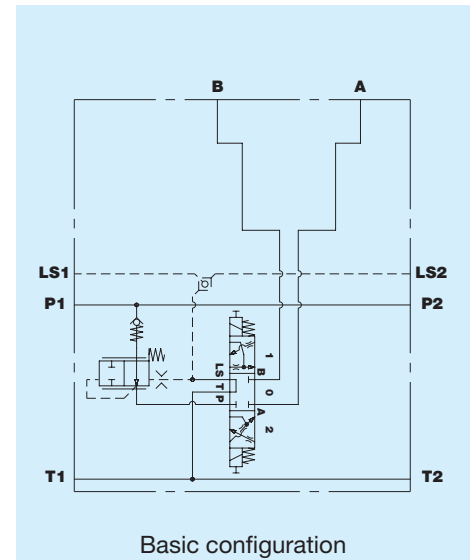
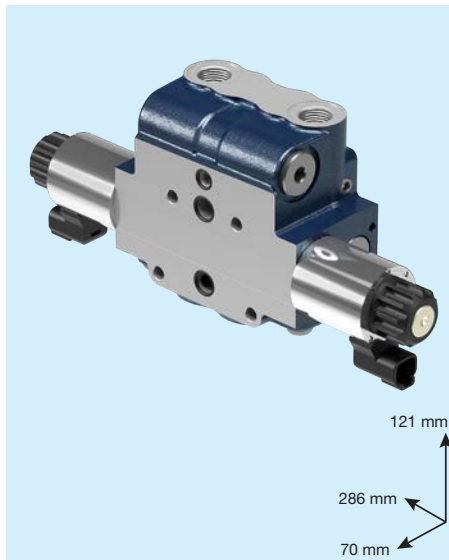


BW1033CO

Platform	LS	HL	EL
Size	10		
Nominal flow	70 l/min		
Nominal pressure	250 bar		
Spacer plate	Contact the Technical Office		
For tie rod calculation	66 mm		
Weight	4,8 Kg		

Description:

Element 4/3 ON-OFF pre-compensated with L.S. signal.

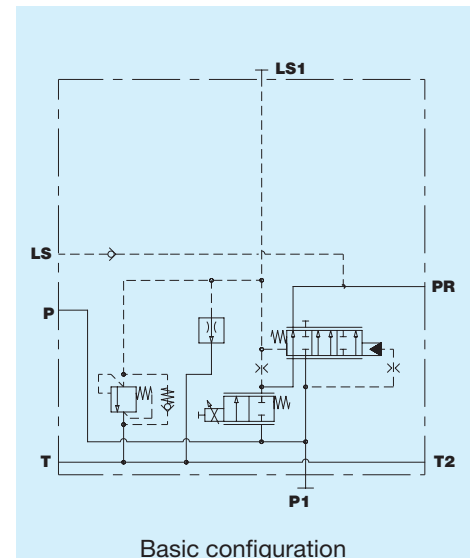
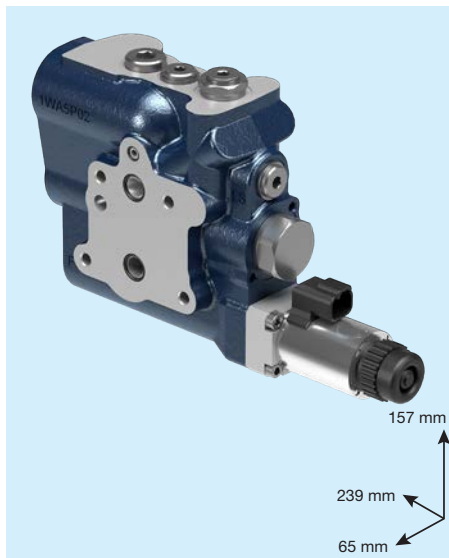


RF10A2P

Platform	LS	HL	EL
Size	10		
Nominal flow	120 l/min		
Nominal pressure	250 bar		
Priority regulated flow rate	70 l/min		
For tie rod calculation	Contact the Technical Office		
Weight	7 Kg		

Description:

Proportional L.S. compensated flow rate regulator.

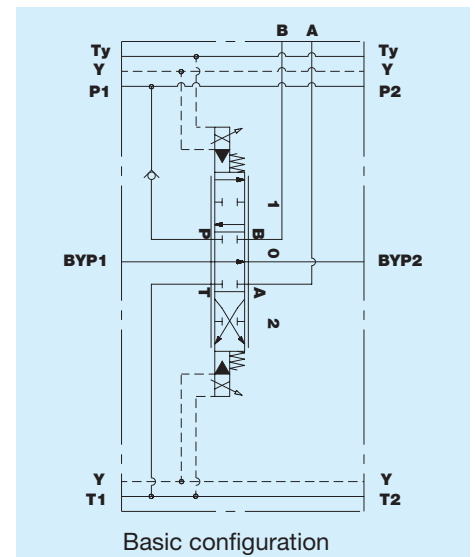
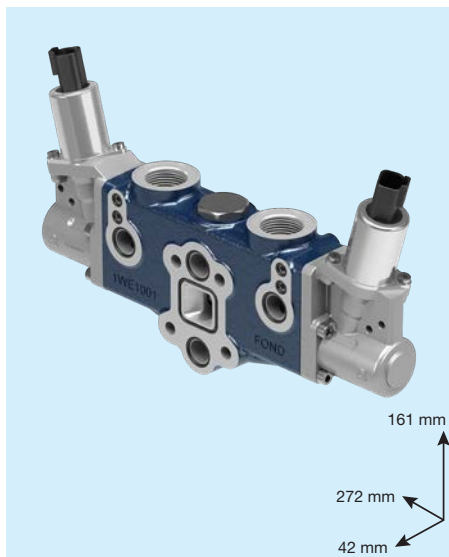


BW1477BP

Platform	OC
Size	14
Nominal flow	120 l/min
Nominal pressure	300 bar
Spacer plate	---
For tie rod calculation	42 mm
Weight	3,6 Kg

Description:

Element 6/3 proportional.



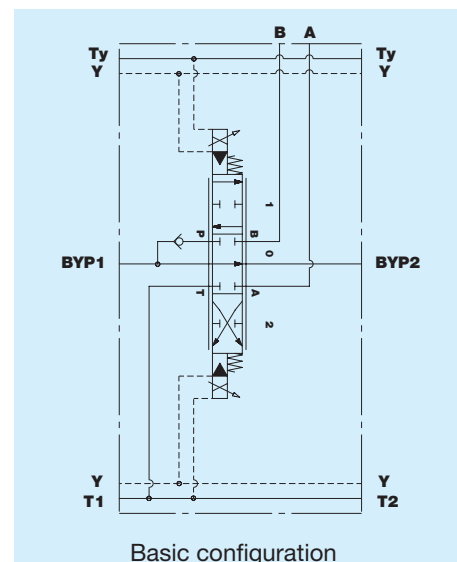
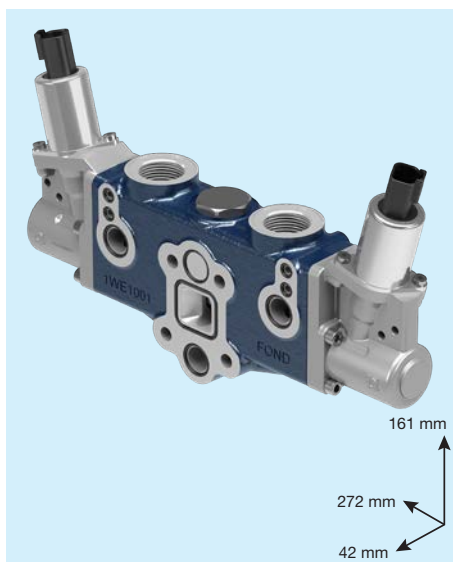
BW1477TP

Platform	OC
Size	14
Nominal flow	120 l/min
Nominal pressure	300 bar
Spacer plate	---
For tie rod calculation	42 mm
Weight	3,6 Kg

Descrizione:

Elemento 6/3 proporzionale tandem.

Dimensioni d'ingombro versione standard

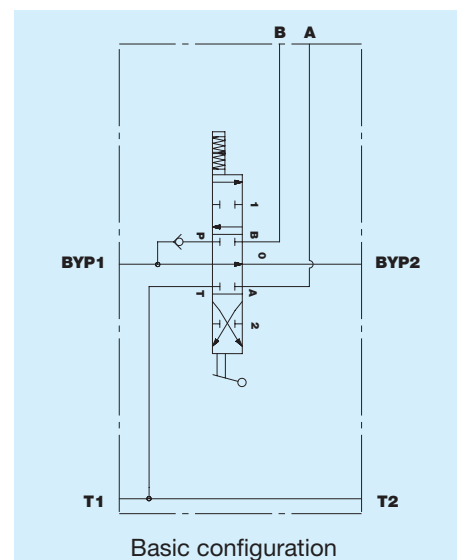


BW1455TM

Platform	OC
Size	14
Nominal flow	120 l/min
Nominal pressure	300 bar
Spacer plate	---
For tie rod calculation	42 mm
Weight	3,6 Kg

Description:

Element 6/3 manual tandem.

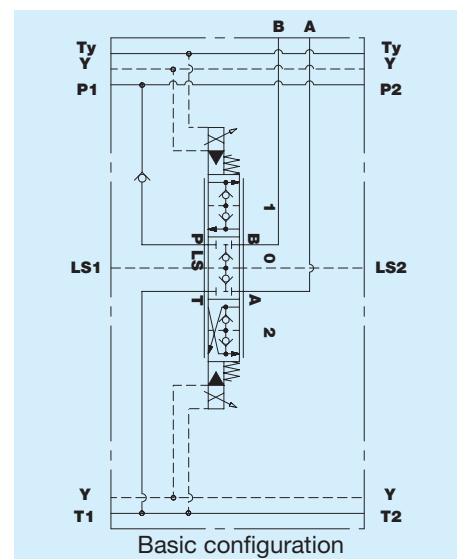
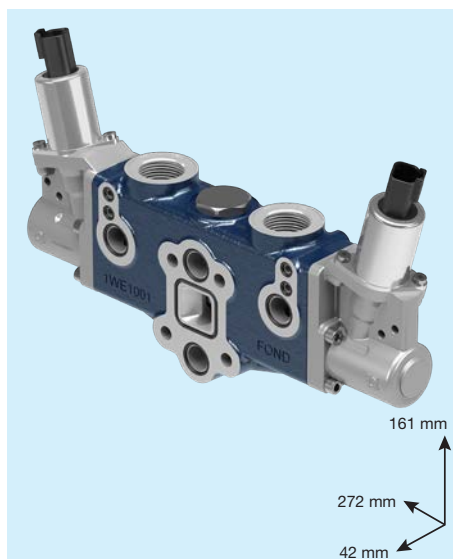


BW1477AP

Platform	LS	HL	EL
Size	14		
Nominal flow	120 l/min		
Nominal pressure	300 bar		
Spacer plate	---		
For tie rod calculation	42 mm		
Weight	3,6 Kg		

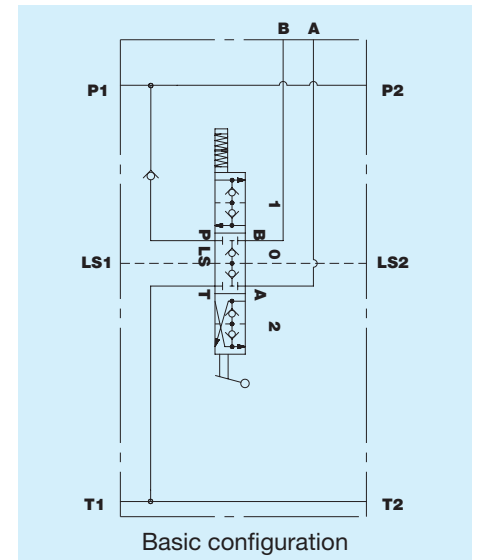
Description:

Element 6/3 L.S. with electro-hydraulic actuation.



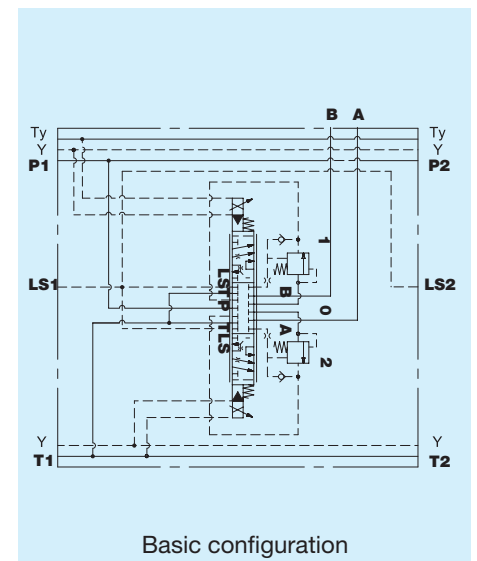
BW1455AM

Platform	LS
Size	14
Nominal flow	120 l/min
Nominal pressure	300 bar
Spacer plate	---
For tie rod calculation	42 mm
Weight	3,6 Kg
Description:	
Element 6/3 manual L.S.	



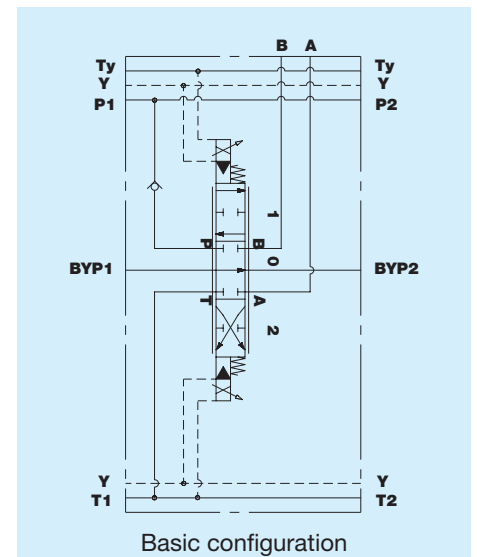
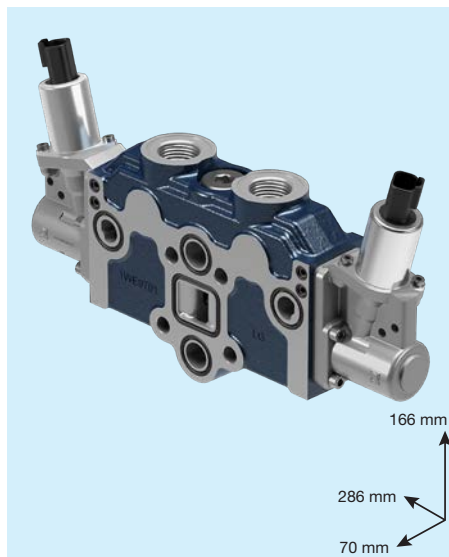
BW1477FP

Platform	LS	HL	EL
Size	14		
Nominal flow	120 l/min		
Nominal pressure	300 bar		
Spacer plate	---		
For tie rod calculation	42 mm		
Weight	4,6 Kg		
Description:			
Element Flow Sharing with proportional electro-hydraulic actuation.			



BW1677BP

Platform	OC
Size	16
Nominal flow	160 l/min
Nominal pressure	300 bar
Spacer plate	---
For tie rod calculation	46 mm
Weight	4,9 Kg
Description:	
Element 6/3 proportional.	

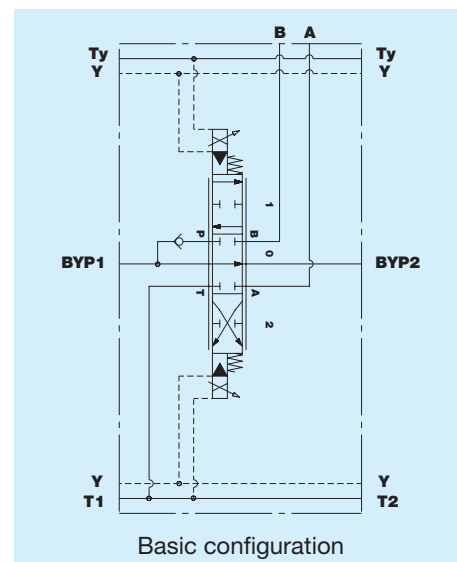
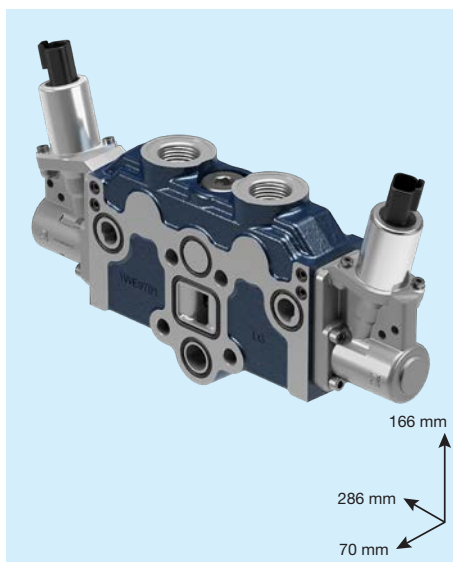


BW1677TP

Platform	OC
Size	16
Nominal flow	160 l/min
Nominal pressure	300 bar
Spacer plate	---
For tie rod calculation	46 mm
Weight	4,9 Kg

Description:

Element 6/3 proportional tandem.

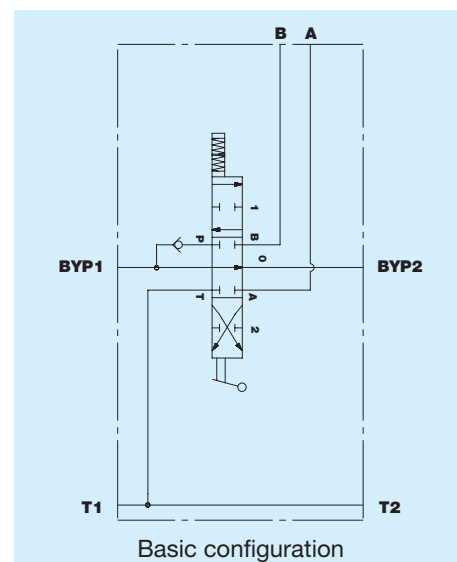


BW1655TM

Platform	OC
Size	16
Nominal flow	160 l/min
Nominal pressure	300 bar
Spacer plate	---
For tie rod calculation	46 mm
Weight	4,5 Kg

Description:

Element 6/3 manual tandem.

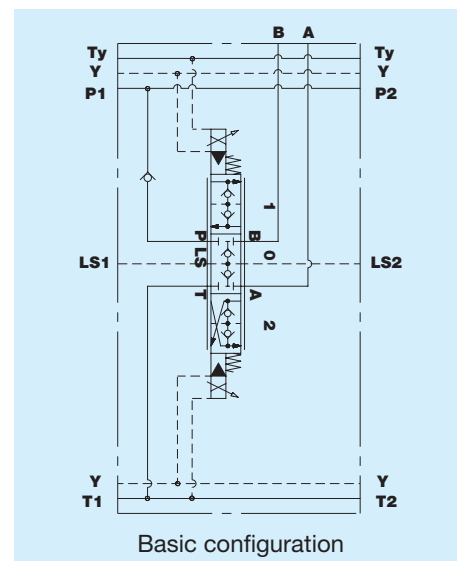
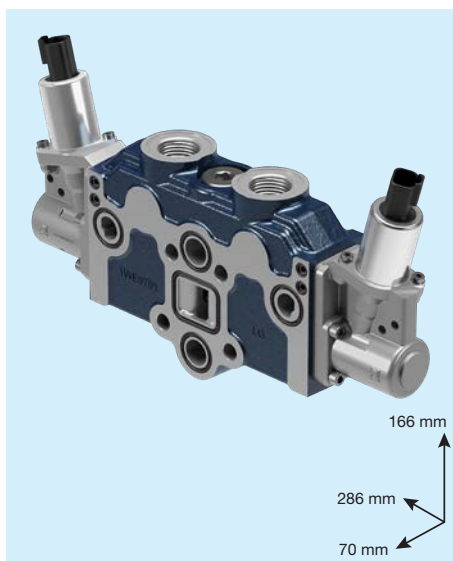


BW1677AP

Platform	LS
Size	16
Nominal flow	160 l/min
Nominal pressure	300 bar
Priority regulated flow rate	---
For tie rod calculation	46 mm
Weight	4,9 Kg

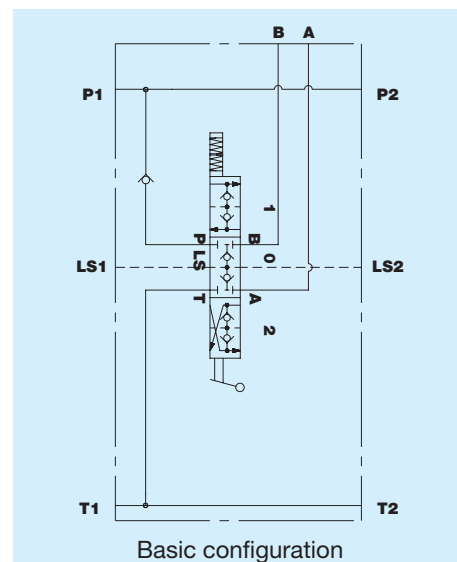
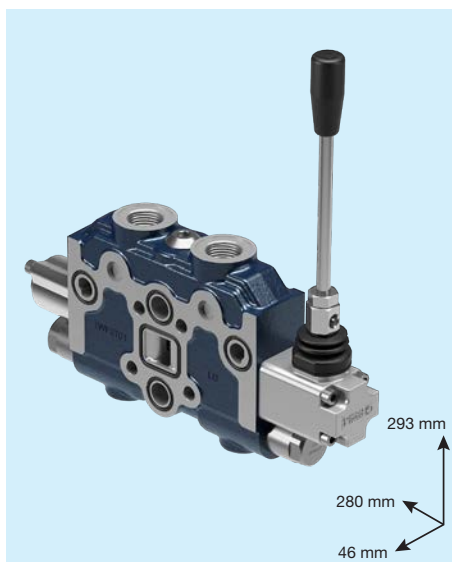
Description:

Element 6/3 L.S. with electro-hydraulic actuation.



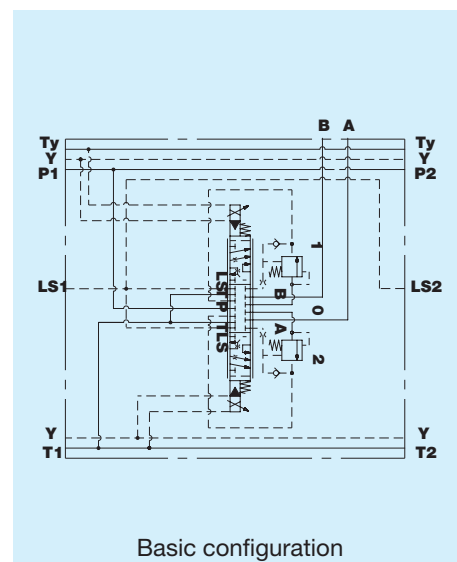
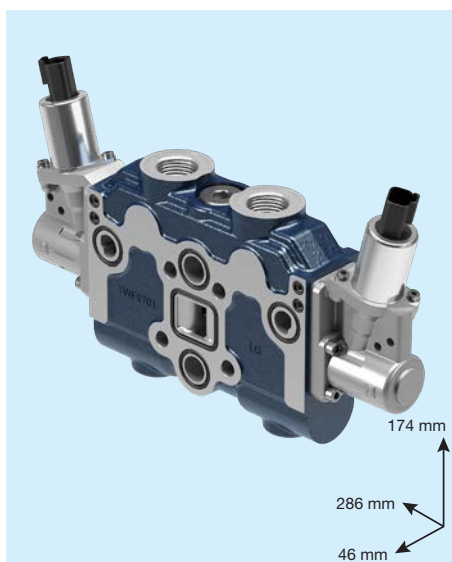
BW1655AM

Platform	LS
Size	16
Nominal flow	160 l/min
Nominal pressure	300 bar
Priority regulated flow rate	---
For tie rod calculation	46 mm
Weight	4,5 Kg
Description:	
Element 6/3 manual L.S.	



BW1677FP

Platform	LS	HL	EL
Size	16		
Nominal flow	160 l/min		
Nominal pressure	300 bar		
Priority regulated flow rate	---		
For tie rod calculation	46 mm		
Weight	6 Kg		
Description:			
Element Flow Sharing with proportional hydraulic actuation.			

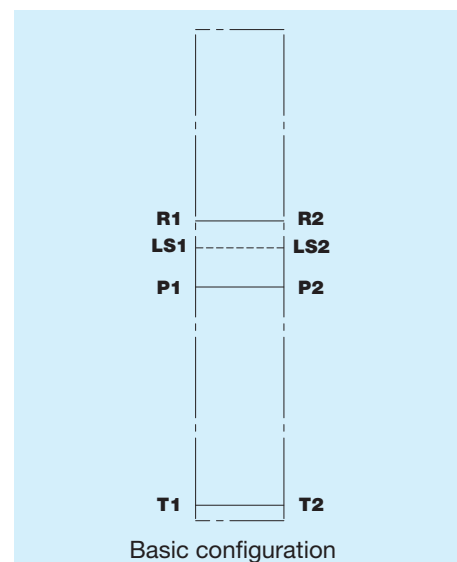


PI05

Platform	OC LS HL EL
Size	05
For tie rod calculation	10 mm
Weight	0.3 Kg

Description:

Intermediate plate for BW05 with P-T-LS-R feedthroughs.

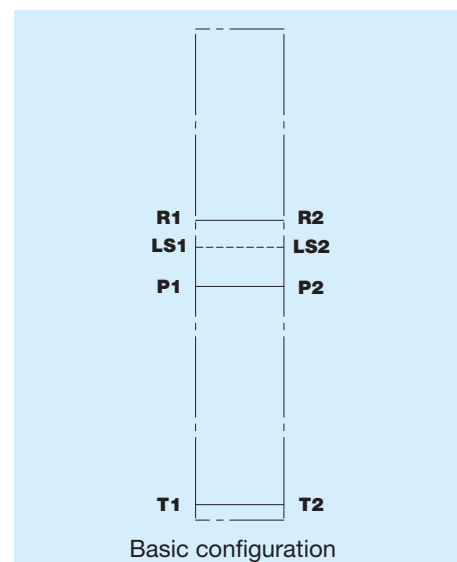


PI10

Platform	OC LS HL EL
Size	10
For tie rod calculation	10 mm
Weight	0,4 Kg

Description:

Intermediate plate for BW10 with P-T-LS-R feedthroughs.

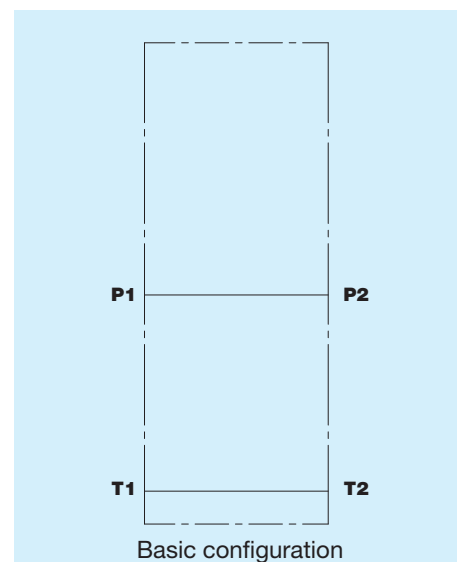


PI5012

Platform	OC
Size	05-10
Nominal flow	90 l/min
Nominal pressure	300 bar
For tie rod calculation	Contact the Technical Office
Weight	1,1 Kg

Description:

Interface change module for BW0500 – BW1022.

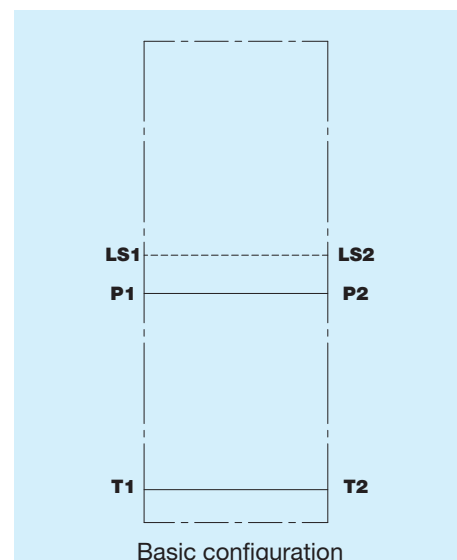


PI5113

Platform	LS	HL	EL
Size	05-10		
Nominal flow	90 l/min		
Nominal pressure	300 bar		
For tie rod calculation	Contact the Technical Office		
Weight	1,1 Kg		

Description:

Interface change module with L.S. for BW0511 – BW1033.

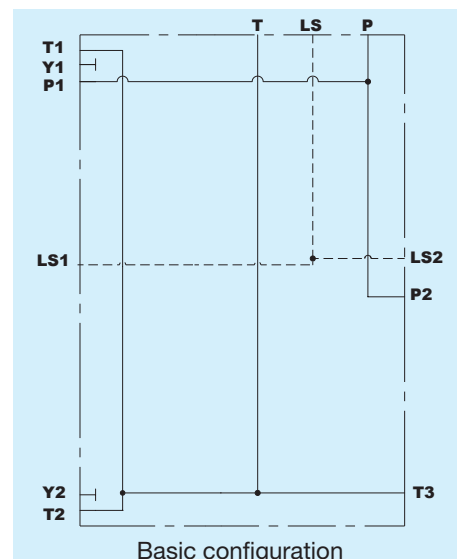
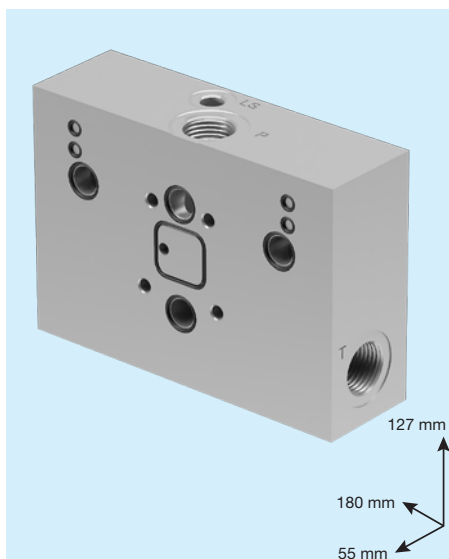


PI1405

Platform	LS	HL	EL
Size	14-05		
Nominal flow	140 l/min		
Nominal pressure	250 bar		
For tie rod calculation	Contact the Technical Office		
Weight	9 Kg		

Description:

Interface change module with L.S. for BW14 – BW0511.

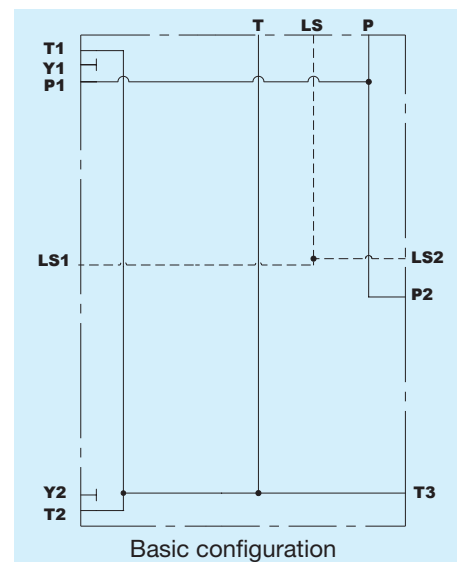
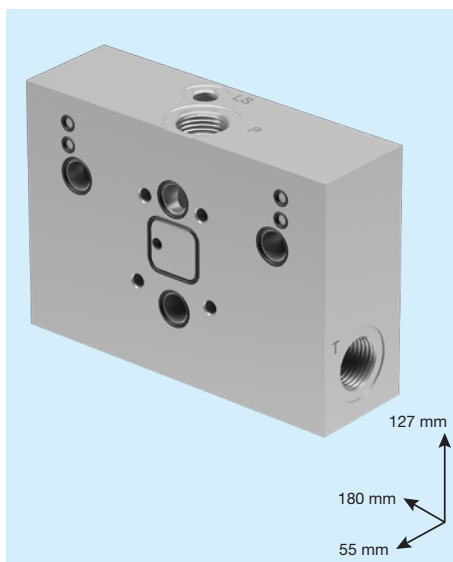


PI1410

Platform	LS HL EL
Size	14-05
Nominal flow	140 l/min
Nominal pressure	250 bar
For tie rod calculation	Contact the Technical Office
Weight	9 Kg

Description:

Interface change module with L.S. for BW14 – BW1033.

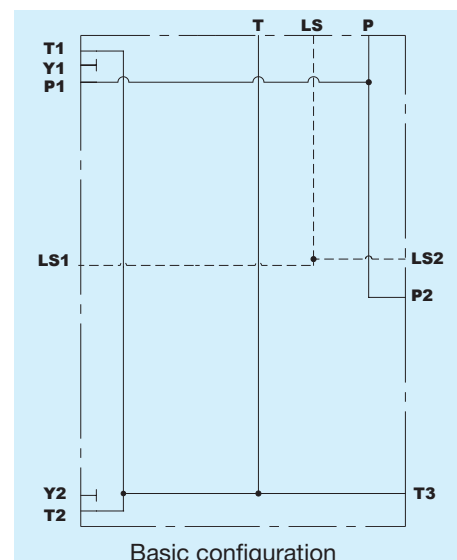


PI1605

Platform	LS HL EL
Size	16-05
Nominal flow	160 l/min
Nominal pressure	300 bar
For tie rod calculation	Contact the Technical Office
Weight	6,5 Kg

Description:

Interface change module with L.S. for BW16 – BW0511.

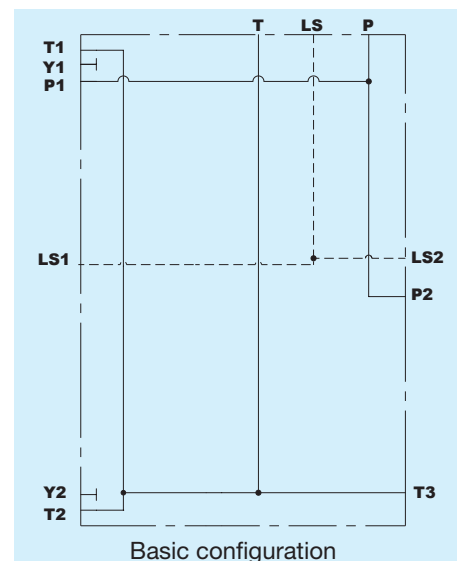


PI1610

Platform	LS HL EL
Size	16-10
Nominal flow	160 l/min
Nominal pressure	300 bar
For tie rod calculation	Contact the Technical Office
Weight	6,5 Kg

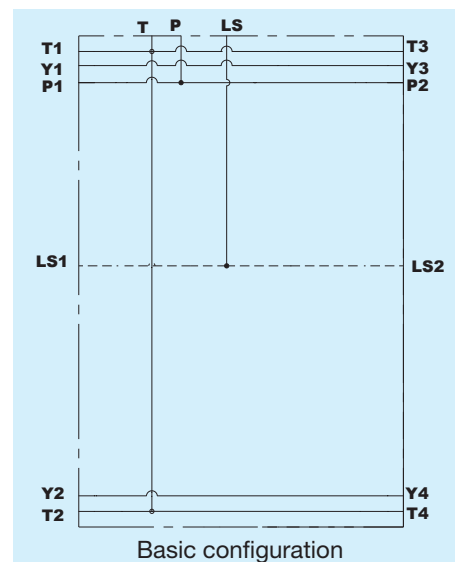
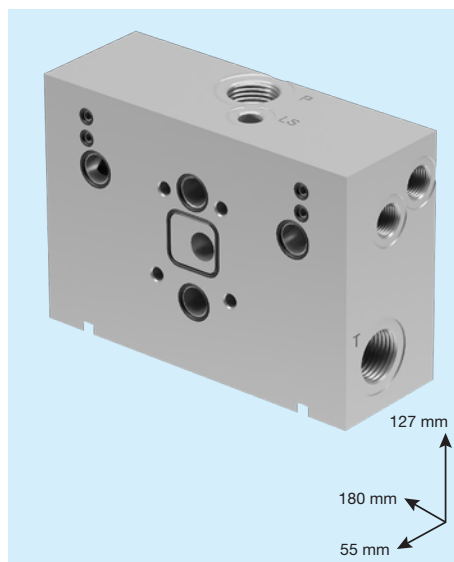
Description:

Interface change module with L.S. for BW16 – BW1033



PI1614

Platform	LS	HL	EL
Size	16-14		
Nominal flow	160 l/min		
Nominal pressure	300 bar		
For tie rod calculation	Contact the Technical Office		
Weight	9 Kg		
Description:			
Interface change module with L.S. for BW16 – BW14.			
Standard version dimensions			

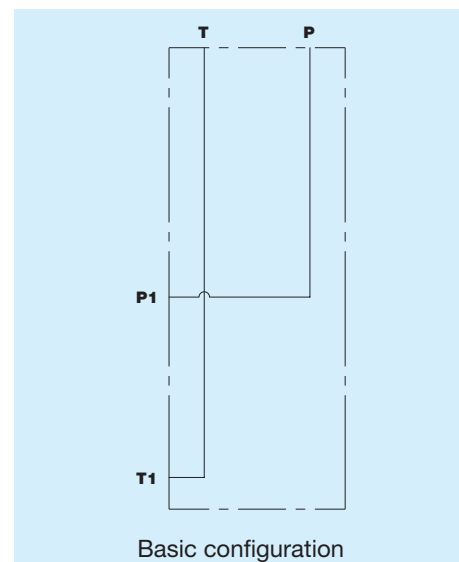


TU050L

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Compatible brackets	H1
For tie rod calculation	20,5 mm
Weight	0,7 Kg

Description:

Outlet cover P-T.

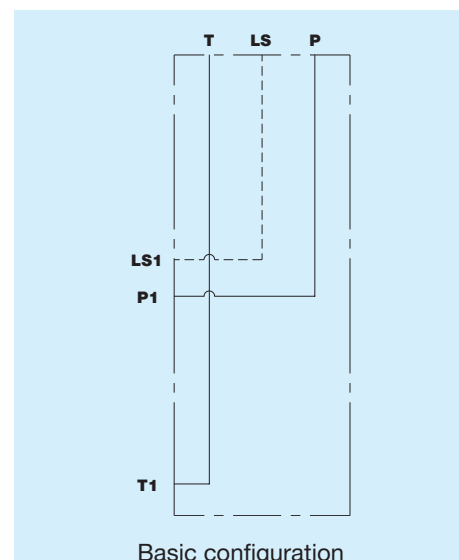


TU051L

Platform	LS	HL	EL
Size	05		
Nominal flow	50 l/min		
Nominal pressure	250 bar		
Compatible brackets	H1		
For tie rod calculation	20,5 mm		
Weight	0,7 Kg		

Description:

Outlet cover P-T-LS.

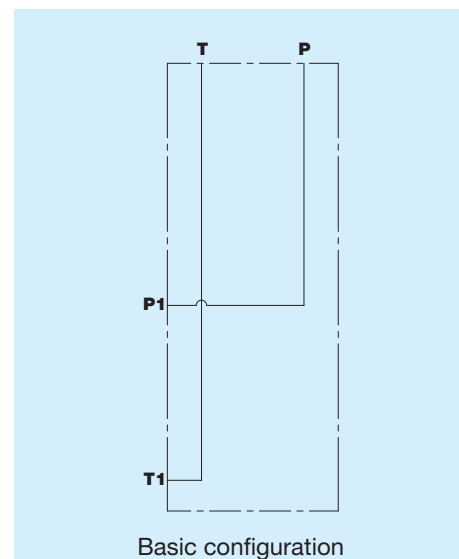
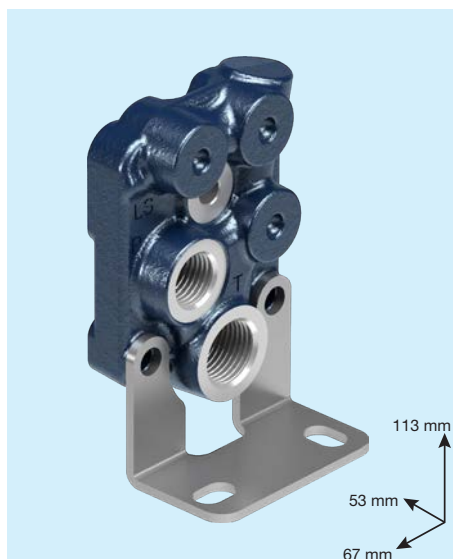


TU050F

Platform	OC
Size	05
Nominal flow	50 l/min
Nominal pressure	250 bar
Compatible brackets	H2(low) H3(high)
For tie rod calculation	19 mm
Weight	0,4 Kg

Description:

Outlet cover P-T.

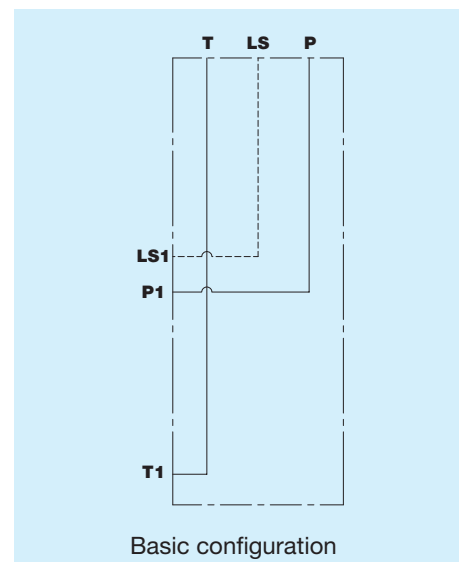
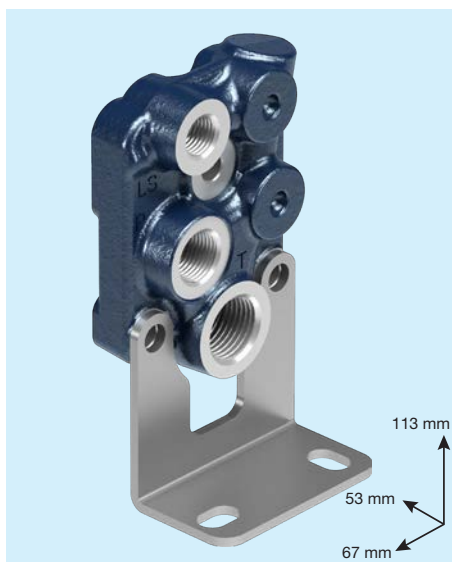


TU051F

Platform	LS	HL	EL
Size	05		
Nominal flow	50 l/min		
Nominal pressure	250 bar		
Compatible brackets	H2(low) H3(high)		
For tie rod calculation	19 mm		
Weight	0,4 Kg		

Description:

Outlet cover P-T-LS.

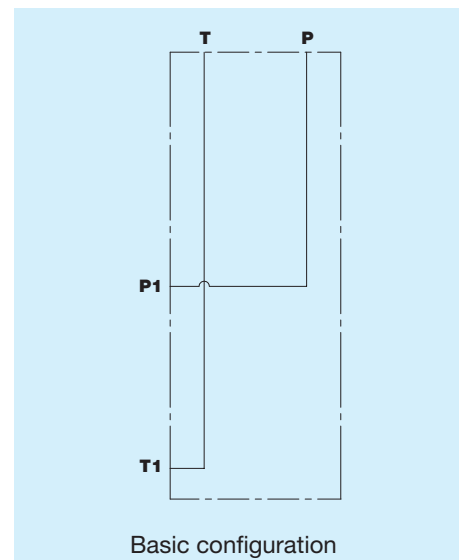
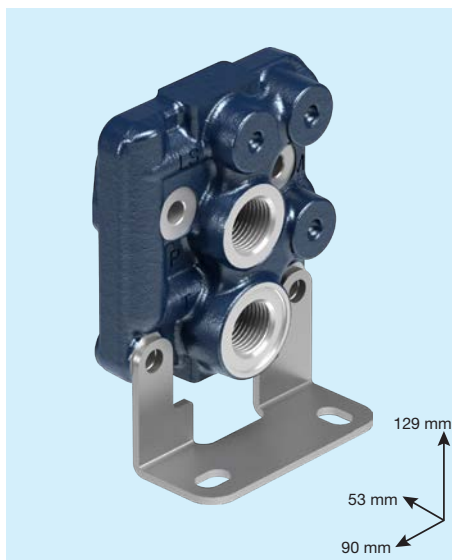


TU102F

Platform	OC
Size	10
Nominal flow	100 l/min
Nominal pressure	250 bar
Compatible brackets	H3(high)
For tie rod calculation	19 mm
Weight	1,4 Kg

Description:

Outlet cover P-T.

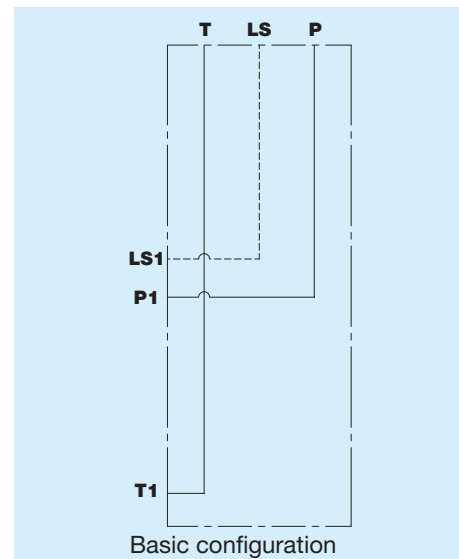
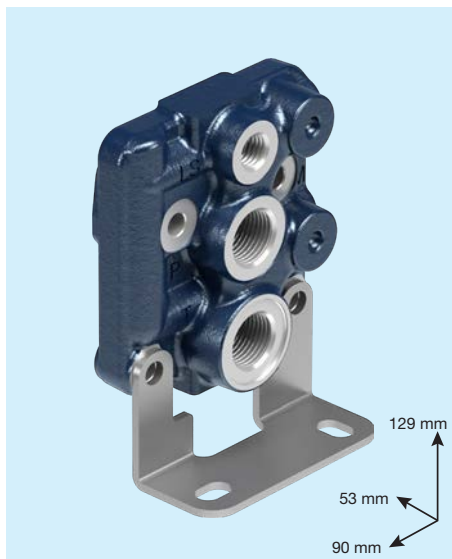


TU103F

Platform	LS	HL	EL
Size	10		
Nominal flow	100 l/min		
Nominal pressure	250 bar		
Compatible brackets	H3(high)		
For tie rod calculation	16 mm		
Weight	1,4 Kg		

Description:

Outlet cover P-T-LS.

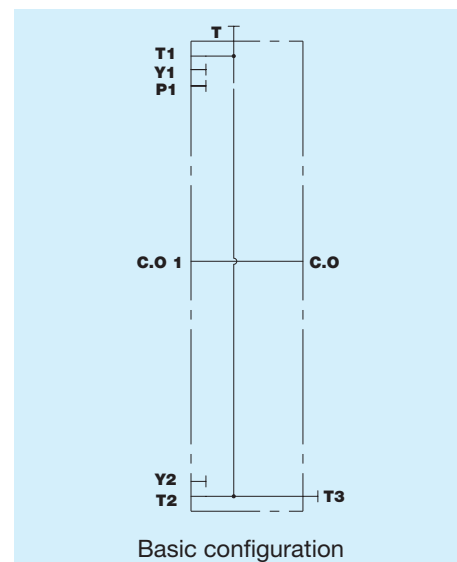


TU14B

Platform	OC
Size	14
Nominal flow	140 l/min
Nominal pressure	300 bar
Compatible brackets	NN
For tie rod calculation	44 mm
Weight	3,8 Kg

Description:

Outlet cover with carry-over.

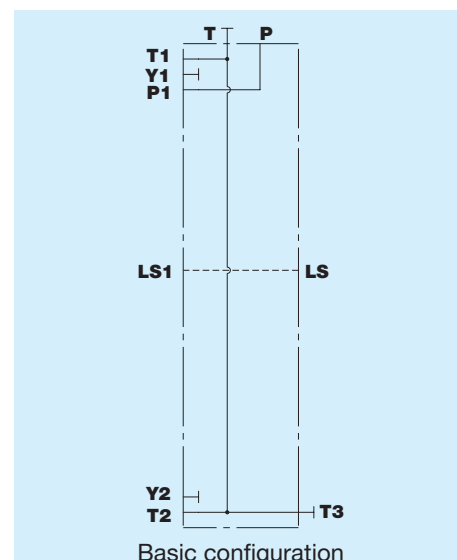


TU14A

Platform	LS	EL
Size	14	
Nominal flow	140 l/min	
Nominal pressure	300 bar	
Compatible brackets	NN	
For tie rod calculation	44 mm	
Weight	3,8 Kg	

Description:

Outlet cover P-T-LS.

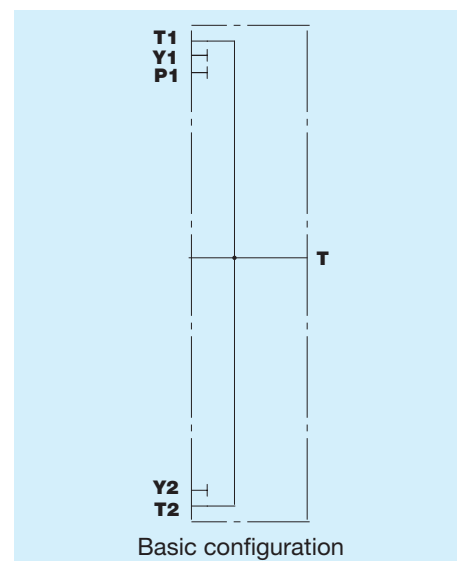
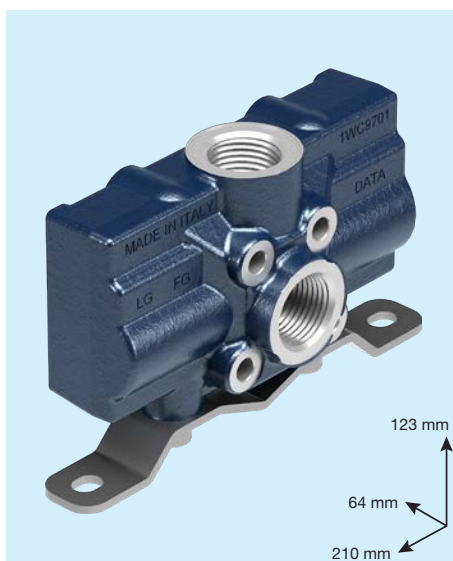


TU16B

Platform	OC
Size	16
Nominal flow	160 l/min
Nominal pressure	300 bar
Compatible brackets	NN
For tie rod calculation	53,5 mm
Weight	4,5 Kg

Description:

Outlet cover P-T.



TU05LH1

Platform **OC LS HL EL**

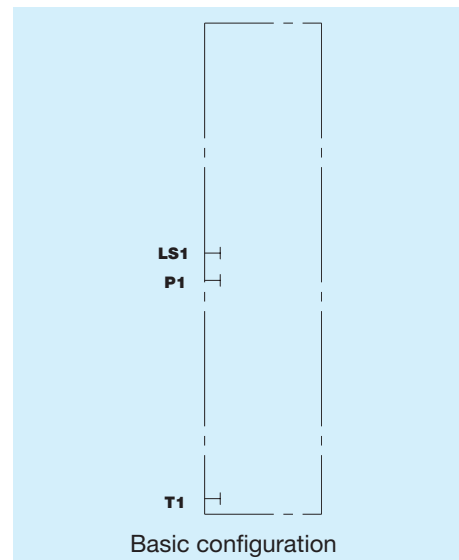
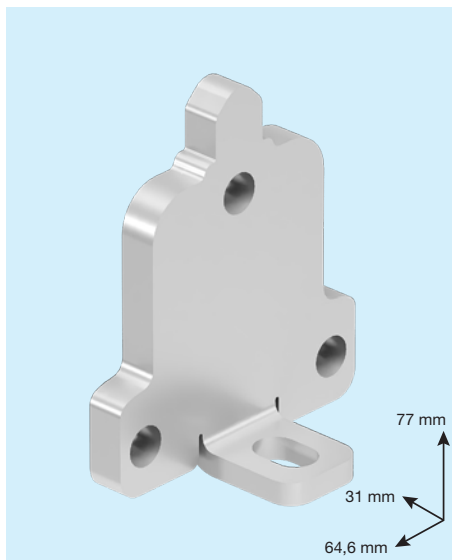
Size 05

For tie rod calculation 8 mm

Weight 0,2 Kg

Description:

Outlet plate.



TU05LH2

Platform **OC LS HL EL**

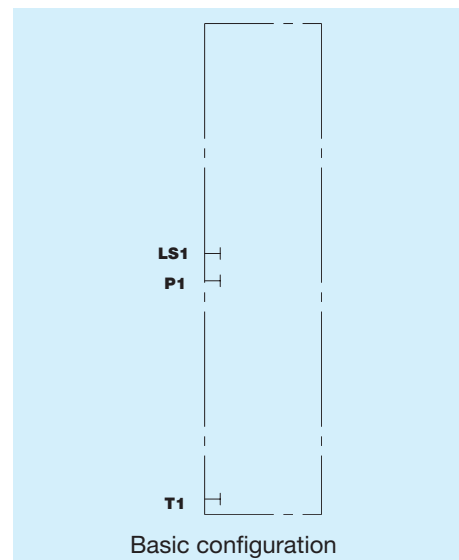
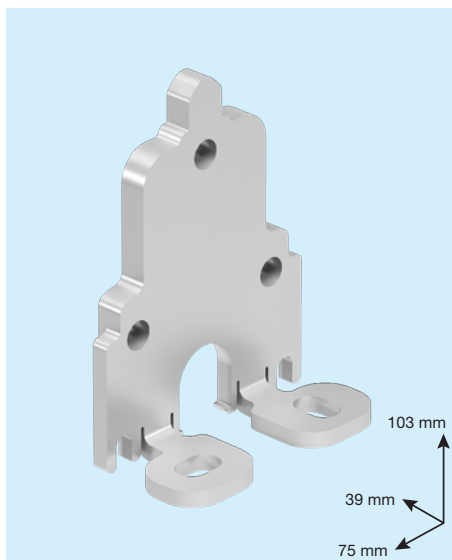
Size 05

For tie rod calculation 8 mm

Weight 0,3 Kg

Description:

Outlet plate.



TU05 H1

Platform **OC LS HL EL**

Size 05

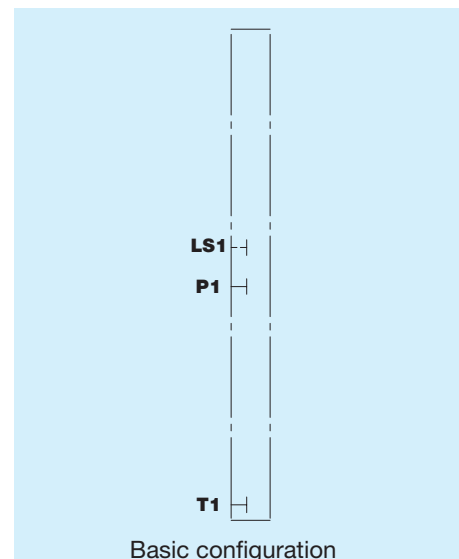
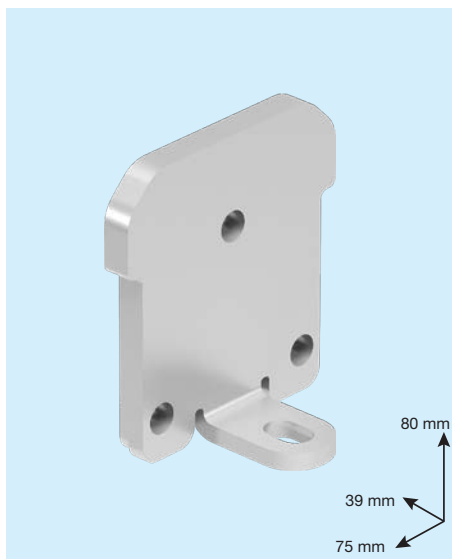
For tie rod calculation 8 mm

Weight 0,4 Kg

Description:

Outlet plate.

Standard version dimensions



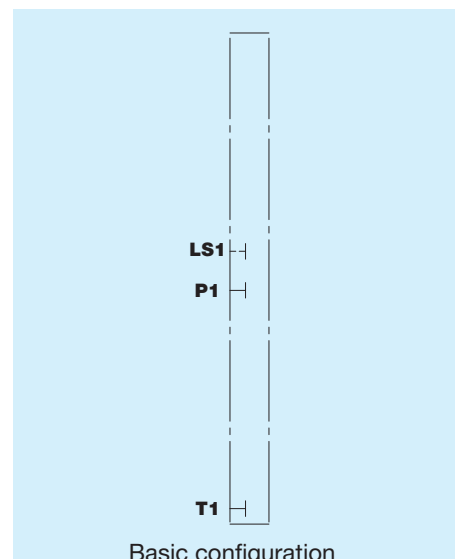
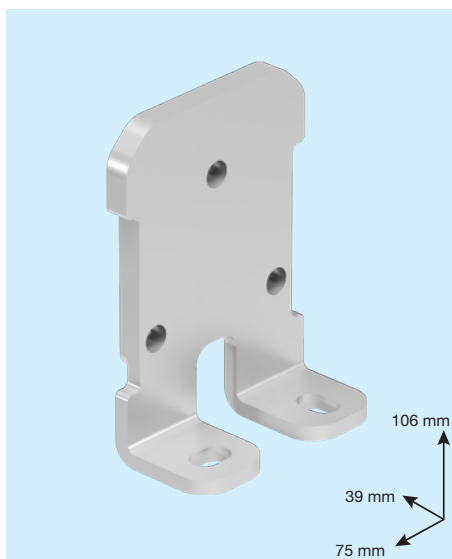
TU05 H2

Platform	OC LS HL EL
Size	05
For tie rod calculation	8 mm
Weight	0,5 Kg

Description:

Outlet plate.

Standard version dimensions



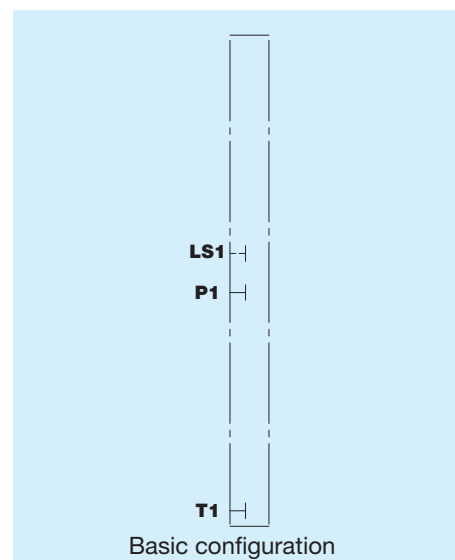
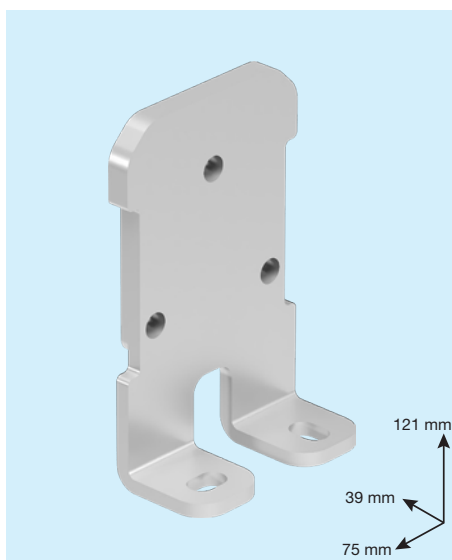
TU05 H3

Platform	OC LS HL EL
Size	05
For tie rod calculation	8 mm
Weight	0,6 Kg

Description:

Outlet plate.

Standard version dimensions



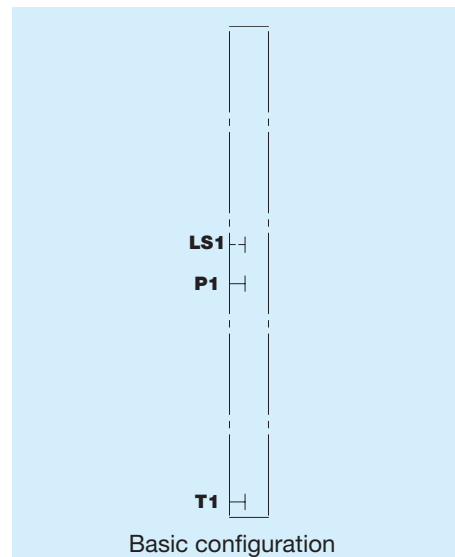
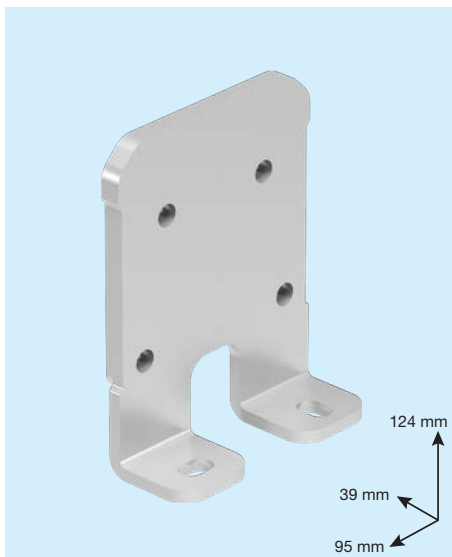
TU10

Platform	OC LS HL EL
Size	10
For tie rod calculation	8 mm
Weight	0,7 Kg

Description:

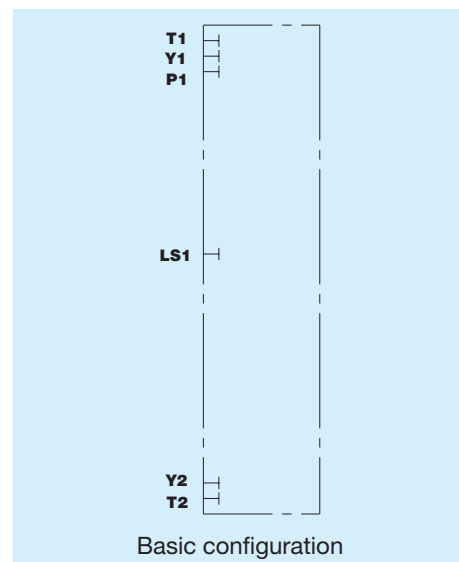
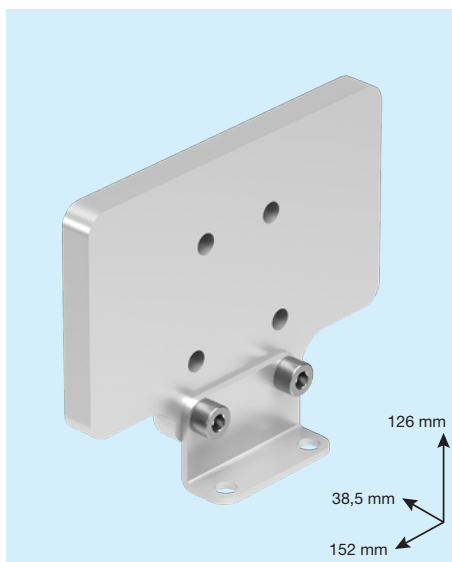
Outlet plate.

Standard version dimensions



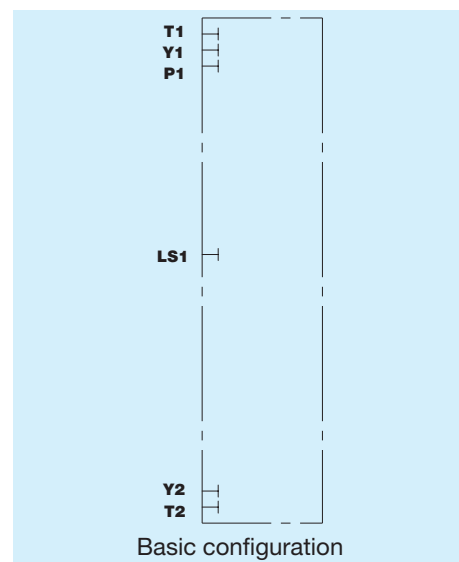
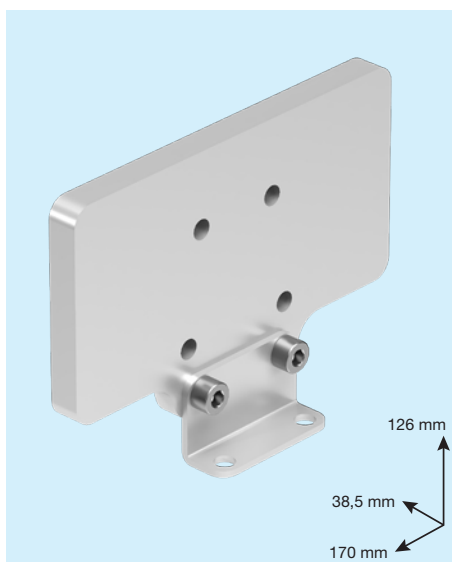
TU14

Platform	OC LS HL EL
Size	14
For tie rod calculation	13 mm
Weight	1,6 Kg
Description:	
Outlet plate.	



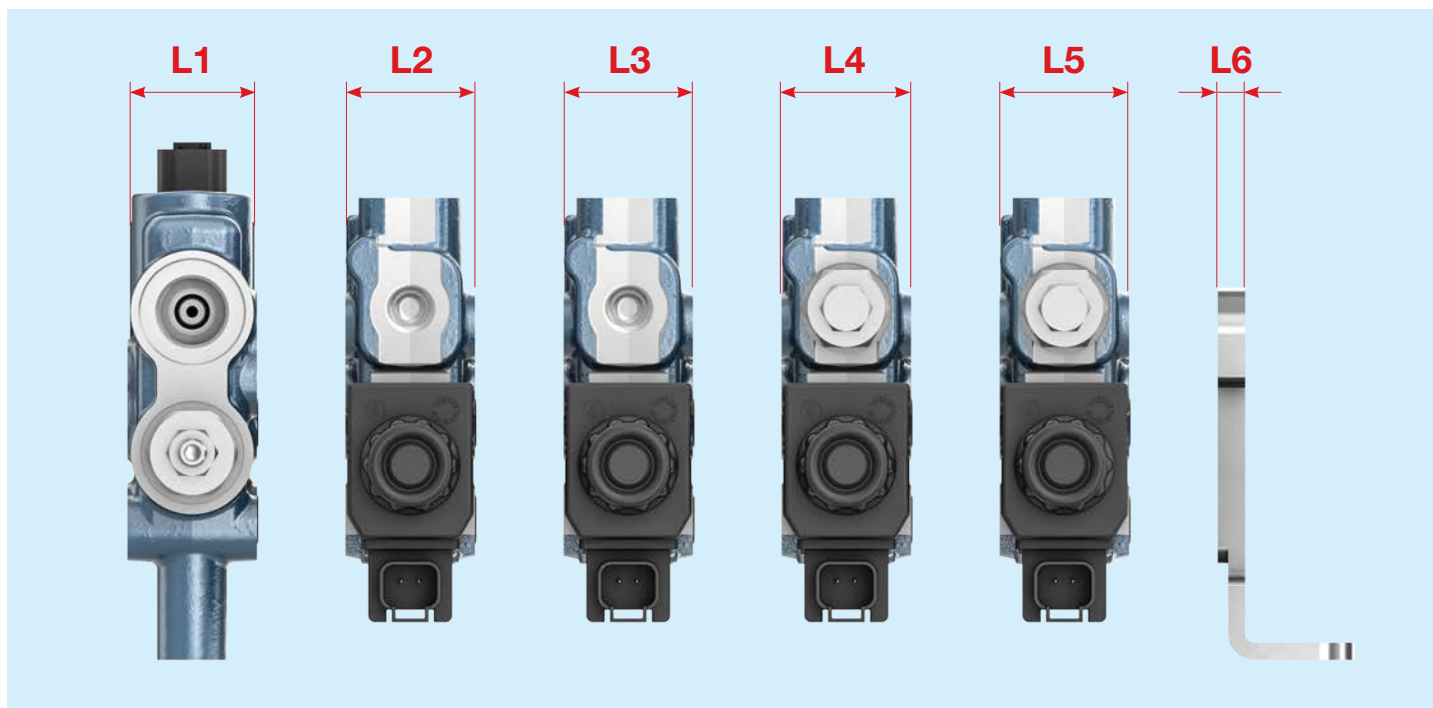
TU16

Platform	OC LS HL EL
Size	16
For tie rod calculation	13 mm
Weight	1,7 Kg
Description:	
Outlet plate.	



The tie rods

Tie rods must be used to assemble several loose ByWire modules together. To select the tie rods and define the code, proceed as follows.



Calculation for the definition

Refer to the following formula to calculate the total length of the tie rod:

L tot = total length of the tie rod

L tot (L1 + L2 + L3 + L4 + L5 + L6) + 20 mm
round up to number 5 or 0.

L1 represents the length of the tie rod required by **module 1**; **L2** required by **module 2**, **L3** by **module 3** etc.

The value of **20 mm is fixed** and represents the sum of the threads on which the nuts and washers are screwed on both ends.

In the example of the distributor shown on the page, we have:

L1 (37mm) + L2 (37mm) + L3 (37mm) + L4 (37mm) + L5 (37mm) + L6 (8mm)
 + 20 mm = **213 mm**
rounded up = **215 mm**

The length of the tie rod you need is: L tot = 215 mm.

If the final sum is 217 mm, *rounding up* the result will be: **L tot = 220 mm.**

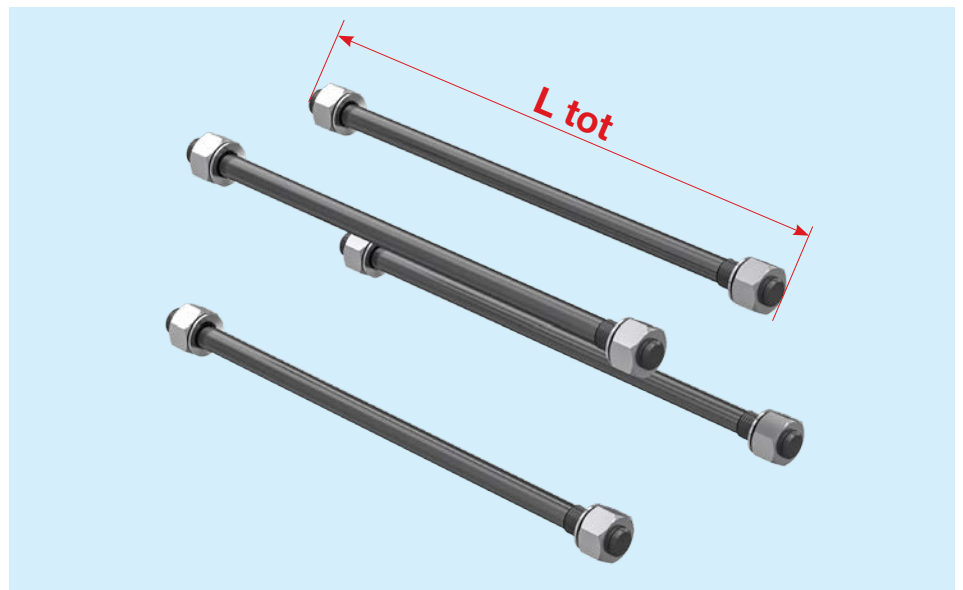
The BW05 interface provides a kit consisting of 3 tie rods.
 The IBW10 and IBW14 interfaces provide a kit consisting of 4 tie rods.

0	1	2
D0590	2 1 5	0 1 6

1	Length
000	Length of the tie rod in mm

2	Interface
016	IBW05 interface
018	IBW10 – IBW14 interface

KIT - IBW10 and IBW14



KIT - IBW05

