

• HYDROSTAB VALVE

# **BAYARD** RANGE

# DOWNSTREAM HYDROSTAB PREMIUM REGULATION VALVE PRESSURE REDUCING VALVE

## SERIES K1 11

Based on the latest developments of the Hydrobloc system, the Downstream Hydrostab Premium K1 11 uses high quality materials and a proven design to guarantee our customers exceptional service life, accuracy and functionality.



## FUNCTION

Downstream Hydrostab Premium Series K1 11 is an automatic regulation valve that reduces and stabilises downstream pressure.

### MAIN ADVANTAGES: Performance & Durability

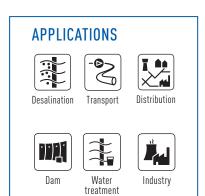
- Strength and durability with a pilot circuit entirely\* made from stainless steel 316. The internal moving parts are entirely made from stainless- steel 316 up to DN200mm —<u>unique solution on the market</u> <u>as standard</u> — provides high durability and performance even in harsh conditions of use, such as major upstream/downstream pressure differences.
- □ Resistance to corrosion by application of a minimum 250µm coating and the use of connecting pieces passing through the valve body.

⊢ High performance and durability ensured by the use of a new, high density, EPDM, <u>preformed diaphragm</u>.

► Accuracy on the downstream pressure ensured by the new pilot <u>51P</u> and its diaphragm with its increased active surface area.

**Easy service and simplified maintenance:** 

delivered with simplified instructions and upstream and downstream pressure gauges. The pilot circuit is completely disassembled in three points using new axial, gasketless leaktightness connecting pieces.



#### COMPLIANCE WITH STANDARDS:

- NF EN 1074-5.
- Category A leak-tightness as per ISO 5208-2.
- Compliance with Standard EN 12266.
- Face-to-face dimensions NF EN 558-1 and ISO 5752-1.
- Connection flange drilling as per EN 1092-2 and ISO 7005-2 ISO PN 10 as standard, ISO PN 16, ISO PN 25 or other drillings for ND 50 to 300 (please consult us).
- Attestation of Sanitary Conformity (ACS)

HYDROSTAB PREMIUM K111 & K121

#### USES

L Regulation valves can be:

- Installed both in new works or existing installations.
- Installed in valve chambers or buildings, in all cases with frost protection.
- □ The use of **Downstream Hydrostab Premium** regulation valves makes it possible to reduce and stabilise the pressure of a downstream network supplied by a higher pressure upstream network, irrespective of variations in the upstream pressure and the flow rate. Thus, they make it possible to:
  - Reduce and stabilise pressure on a network (regulation and configuration of multi-stage networks).
  - Supply a low-service network with a high-service network.
  - Assist a lower pressure network generally supplied by another service.
  - By-pass reservoirs (semi-buried or in water towers).
  - Balance the supply of an interconnected network with a number of resources with higher and different pressures.

#### MAIN TECHNICAL DATA

- PN 16 or 25 bar depending on the applications
  (PN 40 bar, please consult us)
- L DN 40 to 300 with standardised flanges
- Leak-tightness at nil flow rate
- $\square$  Operating temperatures from 0 °C to 65 °C
- igsquare Flow medium: 2 mm screened potable or raw water
- Assembly of the pilot circuit on the right strand as standard, on the left strand by request

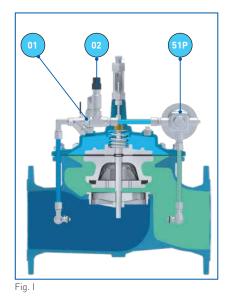
# PILOT CIRCUIT OPERATING PRINCIPLE

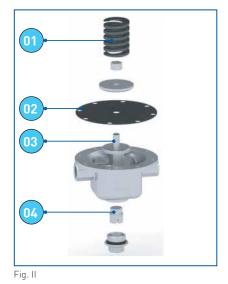
## **OPERATION OF THE DOWNSTREAM PILOT CIRCUIT (FIG. I):**

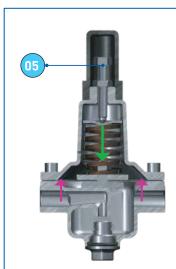
- The action of the pilot spring (51P) determines the downstream pressure setpoint and tends to open the water throughway in the pilot.
- The downstream pressure (green areas) is applied under the pilot membrane and the action of the spring. The increase in downstream pressure tends to reduce the flow of the water in the pilot (see instruction leaflet T Downstream Pilot series 51P).
- Dark blue area = upstream pressure; green area = downstream pressure; light blue area = balancing pressure variable between the diaphragm (01) and the pilot (51P).
- The opening retarder OR (02) makes it possible to control the draining of the chamber. The filling of the chamber cannot be regulated to ensure safe closing of the device and thus protect the downstream network from any risk of overpressure.

## **OPERATION OF THE DOWNSTREAM PILOT P51 IN DETAIL:**

- The downstream pilot mainly comprises of (Fig. II):
  - A spring (01) to adjust the setpoint pressure.
  - A diaphragm (02) under which the pressure to be regulated is applied (downstream pressure).
  - A Disk holder (03) made from stainless steel 316 to reverse the direction of operation of the disk.
  - A disk (04) made from EPDM.







- The downstream pilot 51P is sensitive to the pressure applied under the diaphragm, in direct relation to the outlet of the device (downstream pressure area).
- The compression of the spring by the calibrating screw (05) exerts a downward force (green arrow) which, thanks to the holder, allows the disc to descend and open the water way through the pilot (Fig.III).
- The downstream pressure, being applied under the diaphragm, exerts an upward force (purple arrows) that counters the force exerted by the spring, tends to make the disk move up again, closing the water way through the pilot.

Fig. III

#### Hydraulic engineer's notes:

This design means that the downstream pilot is a normally open (N.O.) pilot. Only the action of the downstream pressure under the diaphragm can control the closure of this device.

 $\Box$  Tighten the adjusting screw = increase the compression of the spring = increase the downstream pressure.  $\Box$  Untighten the adjusting screw = reduce the compression of the spring = reduce the downstream pressure.

# THE TECHNICAL ADVANTAGES OF THE DOWNSTREAM HYDROSTAB PREMIUM

# MAIN VALVE OPTIMISED FOR LONG-LASTING INVESTMENT:

EASY COMMISSIONING AND CONTROL: NO RISK OF CORROSION: Position indicator made from stainless steel 316 Full hot epoxy coating with with high resistance glass. minimum thickness 250µ. Integrated manual air release valve. Specific boss profile (pilot Upstream/downstream pressure gauges supplied as standard. circuit connection areas): all drilling coated and protected. EASY INSTALLATION: Lifting rings on all diameters. Reduced overall size of the pilot circuit. No straight length upstream or EASY MAINTENANCE: downstream required. The use of *studs* and a perforated diaphragm facilitates disassembly and re-assembly operations. ECONOMY: All moving parts and seat made entirely from stainless steel 316\* ensure exceptional durability and reliability. This improves and reduces the cost of network operation. PERFORMANCE AND DURABILITY: High density preformed diaphragm (individual manufacturing process), naturally positioned in the body of the Hydrobloc without elongation for increased service life and

responsiveness. New body design for enhanced flow performance and reduced loss of pressure.

# THE TECHNICAL ADVANTAGES OF THE DOWNSTREAM HYDROSTAB PREMIUM

# PILOT CIRCUIT OPTIMISED FOR DURABILITY, ACCURACY AND EASIER MAINTENANCE:

**RELIABILITY AND** DURABILITY: **Circuit and components** entirely made from stainless steel 316\* for high resistance to conditions of use, even the most extreme. Unalterable external appearance regardless of the environment.

#### EASY MAINTENANCE: Pilot circuit disassembled in three points. New axial metal/

metal leak-tightness connecting pieces facilitate disassembly, reassembly or modifications.

New maintenance-free opening retarder. New filter with increased filtering surface area for reduced maintenance frequency.

New BAYARD Leak-tightness axial leaktightness connectina pieces without insert. Previous version with insert.

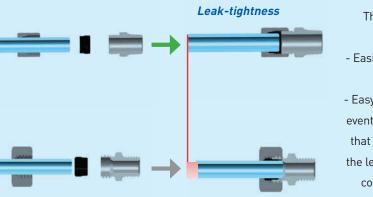
New downstream pilot 100% stainless steel 316. Active diaphragm surface area increased for enhanced response to variations in pressure related to the flow rate.

SENSITIVITY AND ACCURACY:

#### Adjustment range:

[1-16 bar] as standard [0.3-2 bar], [15-25 bar], or others as an option.

EASY COMMISSIONING and CONTROL: New isolation control valves made from stainless steel 316 and plastic coated. Simplified installation, commissioning and maintenance instruction leaflet.



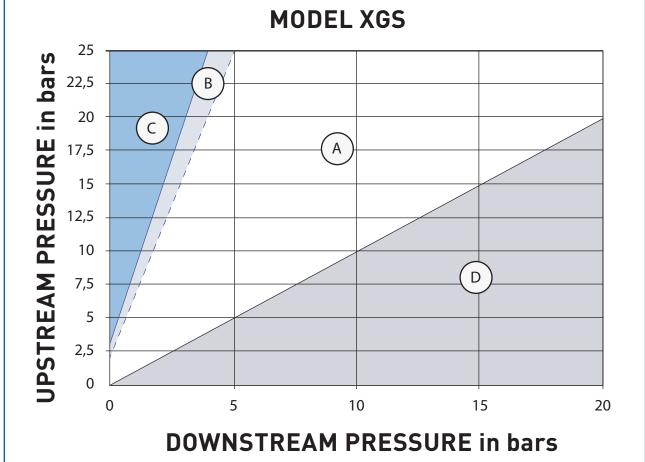
The new connecting piece enables:

- Easier lateral disconnection for quick maintenance.

- Easy piping disconnection in the event of modification to be made that no longer takes account of the length to be inserted into the connecting piece (Part ).

### CAVITATION:

Depending on the reduction of pressure desired, it is worth making sure that the device will not be in a cavitation zone. To determine whether a risk exists, please refer to the graphics below.



**Zone A:** Conditions not including cavitation.

Zone B: Harsh area of use. Make sure you have a polyurethane disk kit.

Zone C: Cavitation zone. Make sure you have an anti-cavitation kit ACD040 or cascaded devices.

In the case of downstream pressure below 1 bar, an air inlet device may be considered (consult us).

Zone D: Impossible zone, upstream pressure lower than downstream pressure.

#### Hydraulic engineer's notes:

The potential damage created by cavitation in the regulation valve are detrimental to its service life and therefore to the precision of the downstream pressure controlled. The anti-cavitation device addresses this threat. Furthermore, this device only requires the installation of a single device on the network, unlike some manufacturers' recommendations (two devices in series). This avoids higher hardware costs, a larger valve chamber and more complex maintenance.

Request Hydrosize II to help you with the dimensioning of the device!

# HYDROSTAB PREMIUM UPSTREAM CONTROL VALVE PRESSURE RELIEF VALVE

## SERIES K1 21

Based on the latest developments of the Hydrobloc system, The Hydrostab Premium Upstream K1 21 uses high quality materials and a proven design to guarantee our customers exceptional service life, accuracy and functionality.



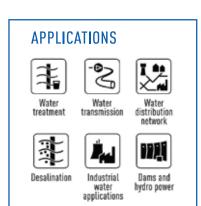
The Hydrostab Premium Upstream K1 21 series is an automatic control valve which enables a minimum upstream pressure to be maintained, or which acts as a discharge valve.

#### MAIN ADVANTAGES:

#### **PERFORMANCE & DURABILITY**

- L Strength and durability with a pilot circuit entirely\* made from stainless steel 316. The internal moving parts are entirely made from stainless- steel 316 up to DN 200 mm —unique solution on the market as standard — provides high durability and performance even in harsh conditions of use, such as major upstream/downstream pressure differences.
- L Resistance to corrosion by application of a minimum 250 µm coating and the use of connecting pieces passing through the valve body.
- ⊢ High performance and durability ensured by the use of a new, high density, EPDM, preformed diaphragm
- Clarification relating to the pressure settings upstream thanks to the new <u>52P</u> pilot and its diaphragm with an augmented active surface.
- Easy service and simplified maintenance: delivered with simplified instructions and upstream and downstream pressure gauges. The pilot circuit is completely disassembled in three points using new axial, gasketless leaktightness connecting pieces.





#### COMPLIANCE WITH STANDARDS:

- NF EN 1074-5
- Category A leak-tightness as per ISO 5208-2
- Compliance with Standard EN 12266.
- Face-to-face dimensions NF EN 558-1 and ISO 5752-1
- Connection flange drilling as per EN 1092-2 and ISO 7005-2 ISO PN 10 as standard, ISO PN 16, ISO PN 25 or other drillings for ND 50 to 300 (please consult us)
- Attestation of Sanitary Conformity (ACS)

## **BAYARD** RANGE

#### **USES**

- L Regulation valves can be:
  - Installed both in new works or existing installations.
  - Installed in valve chambers or buildings, in all cases with frost protection.
- L The use of the Hydrostab Premium Upstream control valves enables:
  - Upstream Pressure Maintenance: a stable minimum pressure rating to be maintained in the upstream network regardless of the variations in the downstream pressure and the flow rate (installed in parallel):
  - A minimum pressure to be maintained at a high point, or for supplying a poorly served connection.
  - An excessive loss of pressure to be avoided when supplying a tank, and the time taken to fill it to be increased.

- A minimum pressure to be maintained at a pump, and consequently to limit the flow rate so that it does not operate at a level which causes cavitation. (to be checked according to the pump curve).

- **Upstream Discharger:** limits any pressure within a network which exceeds the specified pressure rating by drawing pressure off towards another network, a cistern, or an atmospheric relief valve (installation depends on the type of pipeline).
  - Avoids over-pressure in a network when a cut-off device is closed.
  - Ensures a minimum flow rate at the outlet of a pump so as to protect it from the effects of operating at an insufficient flow ra

#### MAIN TECHNICAL DATA

- □ PN 16 or 25 bar depending on the applications (PN 40 bar, please consult us)
- └ DN 40 to 300 with standardised flanges
- Leak-tightness at nil flow rate
- └─ Operating temperatures from 0 °C to 65 °C
- └─ Flow medium: 2 mm screened potable or raw water
- Assembly of the pilot circuit on the right strand as standard, on the left strand by request

# PILOT CIRCUIT OPERATING PRINCIPLE

## FUNCTIONING OF THE UPSTREAM PILOT CIRCUIT (FIG. I):

- The operation of the pilot spring (52P) determines the minimum value used for maintaining the upstream pressure, and it tends to shut off the flow of water in the pilot.
- The upstream pressure (blue zone) applies below the diaphragm of the pilot and the action of the spring. The increasing of the upstream pressure tends to increase the flow of water in the pilot (see notice for T Pilot upstream series 52P).
- Dark blue zone = upstream pressure, green zone = downstream pressure, light blue zone = variable equilibrium pressure between the diaphragm (01) and the pilot.
- The bi-directional retarder (02) enables the filling and emptying of the chamber to be controlled.

# FUNCTIONING OF THE UPSTREAM PILOT 52P IN DETAIL:

- The upstream pilot mainly comprises of (Fig. II):
  - A spring (01) to adjust the setpoint pressure.
  - A diaphragm (02) under which the pressure to be regulated is applied (upstream pressure)
  - From a valve stem mounting (03) which crosses the measuring chamber
  - From a collar (04), a measuring chamber linked to the upper section of the device
  - From a valve (05)

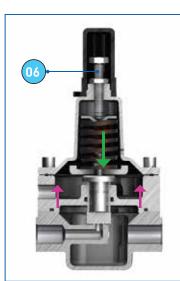
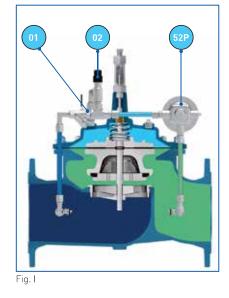
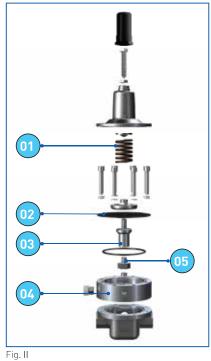


Fig.III





- The compression of the spring by the calibrating screw (05) exerts a downward force (green arrow) which, thanks to the holder, allows the disc to descend and open the water way through the pilot (Fig.III).
  - The upstream pressure on the diaphragm exerts an upwards force (violet arrows) which counteracts the force of the spring and tends to raise the valve and to open the flow of water through the pilot.

#### Comment by hydraulic engineer:

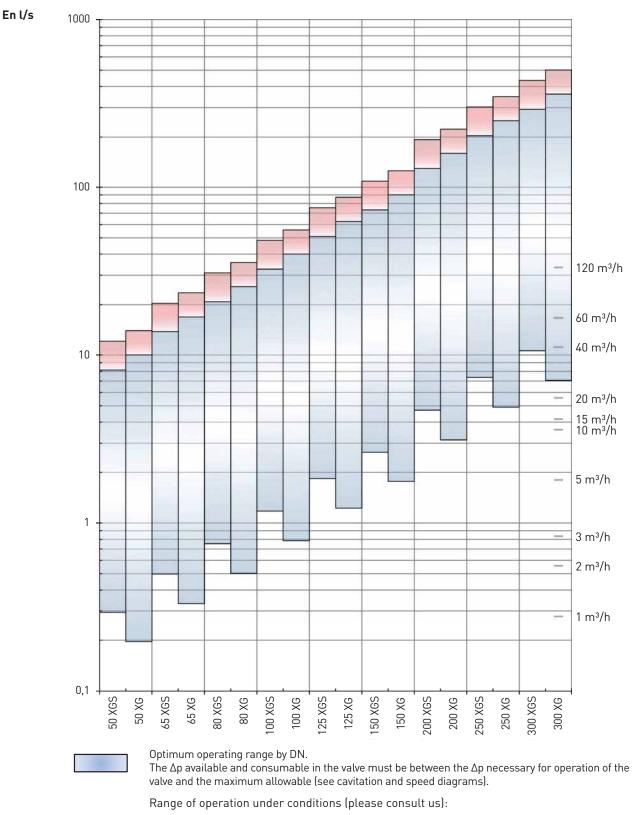
This design means that the upstream pilot is an N.C. pilot (Normally Closed). Only the action of the upstream pressure below the diaphragm can actuate the opening of this device.

- L Tightening the adjusting screw = increases the compression of the spring = increases the upstream pressure threshold.
- L Loosening the adjusting screw = reduces the compression of the spring = reduces the upstream pressure threshold.

# THE HYDROBLOC SYSTEM ESTABLISHING A PROJECT OPERATING RANGES

#### FLOW SPEEDS:

The table below summarises the flow coefficients as well as the flow rates under certain speeds. The Hydrobloc Premium series allows an exceptional speed, which can be used for flows related to fire-fighting (red zone).



- XGS: speeds of between 4 m/s and 6 m/s.
- $\bullet$  XG: speeds of between 5 m/s and 7 m/s.

**CTALIS** 

## RANGE OF ADJUSTMENT OF THE SPRING:

Pressure reduction pilot 51P offers several adjustment ranges:

- Standard: 1 to 16 bar
- Option 1: 0.3 to 2 bar (for a reservoir by-pass, for example)
- Option 2: 15 to 25 bar (other ranges: please consult us)

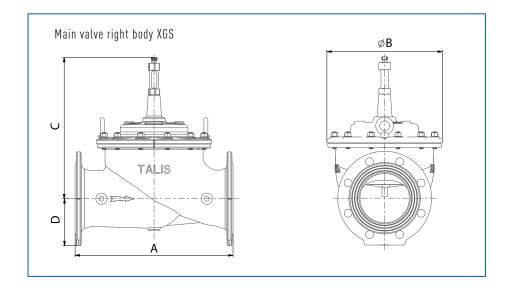
**NB:** it is possible to modify the range in-situ without changing the regulation valve or the pilot. Only the pilot spring is replaced by simply removing the pilot bonnet!

# DIMENSIONS

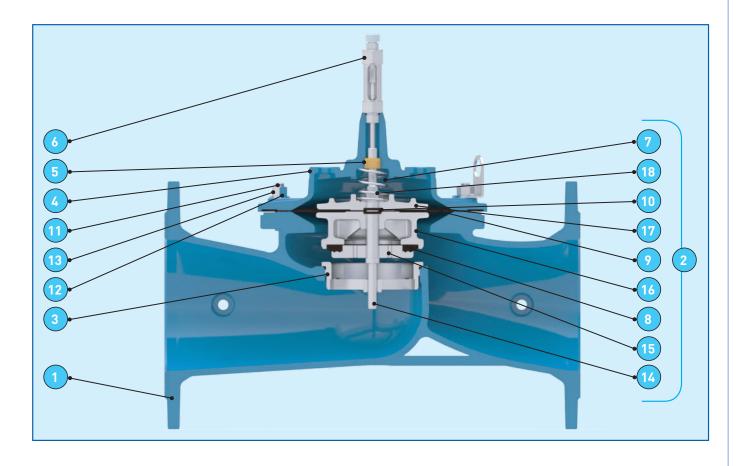
## MAIN VALVE TYPE XGS

REDUCED THROUGHWAY

DN	A (mm)	B (mm)	C (mm)	D (mm)	Weight* (kg)
40/50	230	145	195	80	10.2
65	290	173	237	95	15
80	310	198	257	102	21
100	350	226	277	112	27
125	400	265	312	127	34
150	480	265	376	145	37
200	600	351	431	172	68
250	730	436	521	205	125
300	850	524	647	232	200

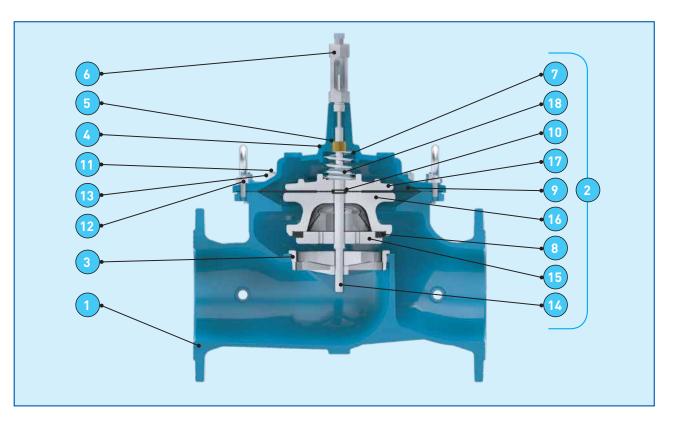


# **NOMENCLATURE - HYDROBLOC PREMIUM:** XGS [DN50-200MM]



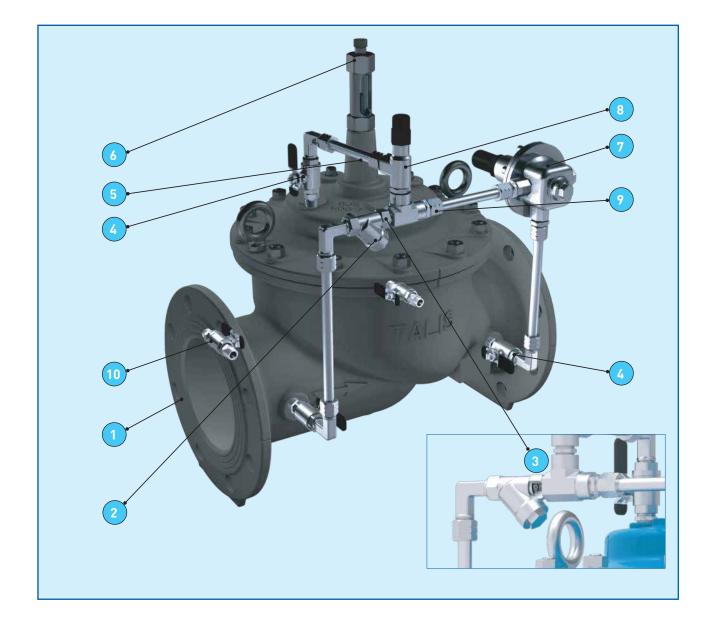
Part no.	Name	Туре	Name	Number	Standard			
1	BODY	DUCTILE IRON	EN-GJS-500-7	5.3200	EN 1563			
2	MOBILE PARTS Nos. 14-15-16-8-17-18							
3	SEAT	STAINLESS-STEEL	GX5CrNiMo19-11-2	1.4408	EN 10213-4			
4	BONNET	DUCTILE IRON	EN-GJS-500-7	5.3200	EN 1563			
5	GUIDE	BRASS	CuZn21Si3P (CR)	CW724R	EN 12164			
6	INDICATOR	STAINLESS STEEL	X5CrNiMo17-12-2 (AISI 316)	1.4401	EN 10088			
7	SPRING	STAINLESS STEEL	X5CrNiMo17-12-2	1.4401	EN 10088			
8	DISK	ELASTOMER	EPDM		ISO 1629			
9	DIAPHRAGM	ELASTOMER	EPDM		ISO 1629			
10	0-RINGS	ELASTOMER	EPDM		ISO 1629			
11	STUD	STAINLESS STEEL	A2		ISO 3506			
12	WASHER	STAINLESS STEEL	A2		ISO 3506			
13	NUT	STAINLESS STEEL	A4		ISO 3506			
14	SHAFT	STAINLESS STEEL	X5CrNiMo17-12-2 (AISI 316)	1.4401	EN 10088			
15	DISK RETAINER	STAINLESS STEEL	GX5CrNiMo19-11-2 (CF8M)	1.4408	EN 10213-4			
16	DISK HOLDER	STAINLESS STEEL	GX5CrNiMo19-11-2 (CF8M)	1.4408	EN 10213-4			
17	DIAPHRAGM RETAINER	STAINLESS STEEL	GX5CrNiMo19-11-2 (CF8M)	1.4408	EN 10213-4			
18	NUT	STAINLESS STEEL	A2		ISO 3506			

# **NOMENCLATURE - HYDROBLOC PREMIUM:** XGS[DN250-300MM]



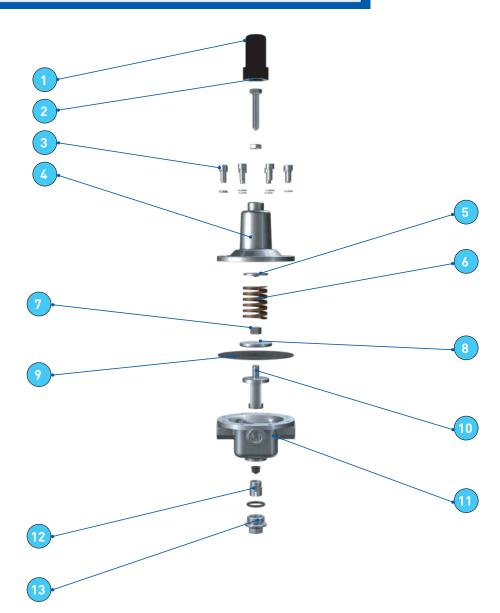
Part no.	Name	Туре	Name	Number	Standard			
1	BODY	DUCTILE IRON	EN-GJS-500-7	5.3200	EN 1563			
2	MOBILE PARTS Nos. 14-15-16-8-17-18							
3	SEAT	STAINLESS STEEL	GX5CrNiMo19-11-2	1.4408	EN 10213-4			
4	BONNET	DUCTILE IRON	EN-GJS-500-7	5.3200	EN 1563			
5	GUIDE	BRASS	CuZn21Si3P (CR)	CW724R	EN 12164			
6	INDICATOR	STAINLESS STEEL	X5CrNiMo17-12-2 (AISI 316)	1.4401	EN 10088			
7	SPRING	STAINLESS STEEL	X5CrNiMo17-12-2	1.4401	EN 10088			
8	DISK	ELASTOMER	EPDM		ISO 1629			
9	DIAPHRAGM	ELASTOMER	EPDM		ISO 1629			
10	0-RINGS	ELASTOMER	EPDM		ISO 1629			
11	STUD	STAINLESS STEEL	A2		ISO 3506			
12	WASHER	STAINLESS STEEL	A2		ISO 3506			
13	NUT	STAINLESS STEEL	A4		ISO 3506			
14	SHAFT	STAINLESS STEEL	X5CrNiMo17-12-2	1.4401	EN 10088			
15	DISK RETAINER	STAINLESS STEEL	GX5CrNiMo19-11-2	1.4408	EN 10213-4			
16	DISK HOLDER	DUCTILE IRON	EN-GJS-500-7	5.3200	EN 1563			
17	DIAPHRAGM RETAINER	DUCTILE IRON	EN-GJS-500-7	5.3200	EN 1563			
18	NUT	STAINLESS STEEL	A2		ISO 3506			

# NOMENCLATURE OF THE DOWNSTREAM PILOT CIRCUIT



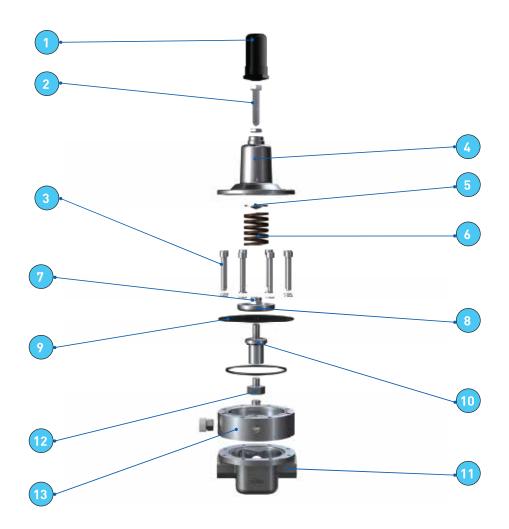
Part no.	Name	N.B.	Туре	Name	Number	Standard
01	Main valve	1	-	See detail pages 15-16		
02	Filter with G 3/8 screen	1	STAINLESS STEEL	GX5CrNiMo19-11-2 (CF8M)	1.4408	EN 10213-4
03	Diaphragm in the filter 02	1	STAINLESS STEEL	X2CrNiMo17-12-2 (AISI 316L)	1.4408	EN 10088
04	Ball valve FF G 3/8	3	CUPRO / STAIN- LESS STEEL	-	-	
05	Pipe connection piece kit	1	STAINLESS STEEL	X2CrNiMo17-12-2 (AISI 316L)	1.4408	EN 10088
06	Position indicator	1	STAINLESS STEEL / glass	X5CrNiMo17-12-2 (AISI 316)	1.4401	EN 10088
07	Downstream type pilot 51P	1	-	See details page 15	-	-
08	Opening retarder OR	1	STAINLESS STEEL	-	-	-
09	Connection cross	1	STAINLESS STEEL	GX5CrNiMo19-11-2 (CF8M)	1.4408	EN 10213-4
10	Pressure-gauge holding valve G 3/8	2	CUPRO / STAIN- LESS STEEL	-	-	

# NOMENCLATURE OF THE DOWNSTREAM PILOT TYPE 51P



Part no.	Name	N.B.	Туре	Name	Number	Standard
01	Protective cap	1	PLASTIC	ABS	-	-
02	Pilot calibrating screw + locknut	1	STAINLESS STEEL	A4	-	ISO 3506
03	CHc screw	8	STAINLESS STEEL	Α4	-	ISO 3506
04	Pilot cap	1	STAINLESS STEEL	GX5CrNiMo19-11-2 (CF8M)	1.4408	EN 10213-4
05	Calibrating screw supporting plate	1	STAINLESS STEEL	X5CrNiMo17-12-2 (AISI 316)	1.4401	EN 10088
06	Spring 1 to 16 bar	1	STEEL	SWOSC-V	-	JIS G3561
	Spring 0.3 to 2 bar (optional)	1	STAINLESS STEEL	X10CrNi18-8 (AISI 302)	1.4310	EN 10088
	Spring 15 to 25 bar (optional)	1	Please consult us.	-	-	-
07	Diaphragm retaining nut.	1	STAINLESS STEEL	Α4	-	ISO 3506
08	Flange	1	STAINLESS STEEL	X5CrNiMo17-12-2 (AISI 316)	1.4401	EN 10088
09	Pilot diaphragm	1	ELASTOMER CLOTH	EPDM	-	ISO 1629
10	Disk holder	1	STAINLESS STEEL	GX5CrNiMo19-11-2 (CF8M)	1.4408	EN 10213-4
11	Pilot body	1	STAINLESS STEEL	GX5CrNiMo19-11-2 (CF8M)	1.4408	EN 10213-4
12	Disk	1+1	EPDM + STAINLESS STEEL	-	-	ISO 1629
13	Plug - pilot guide stop	1	STAINLESS STEEL	GX5CrNiMo19-11-2 (CF8M)	1.4408	EN 10213-4

# NOMENCLATURE OF THE UPSTREAM PILOT TYPE 52P



Part no.	Name	N.B.	Туре	Name	Number	Standard
01	Protective cap	1	PLASTIC	ABS	-	-
02	Pilot calibrating screw + locknut	1	STAINLESS STEEL	A4	-	ISO 3506
03	CHc screw	8	STAINLESS STEEL	А4	-	ISO 3506
04	Pilot cap	1	STAINLESS STEEL	GX5CrNiMo19-11-2 (CF8M)	1.4408	EN 10213-4
05	Calibrating screw supporting plate	1	STAINLESS STEEL	X5CrNiMo17-12-2 (AISI 316)	1.4401	EN 10088
06	Spring 1 to 16 bar	1	STEEL	SWOSC-V	-	JIS G3561
	Spring 0.3 to 2 bar (optional)	1	STAINLESS STEEL	X10CrNi18-8 (AISI 302)	1.4310	EN 10088
	Spring 15 to 25 bar (optional)	1	Please consult us.	-	-	-
07	Diaphragm retaining nut.	1	STAINLESS STEEL	Α4	-	ISO 3506
08	Flange	1	STAINLESS STEEL	X5CrNiMo17-12-2 (AISI 316)	1.4401	EN 10088
09	Pilot diaphragm	1	ELASTOMER CLOTH	EPDM	-	ISO 1629
10	Disk holder	1	STAINLESS STEEL	GX5CrNiMo19-11-2 (CF8M)	1.4408	EN 10213-4
11	Pilot body	1	STAINLESS STEEL	GX5CrNiMo19-11-2 (CF8M)	1.4408	EN 10213-4
12	Disk	1+1	EPDM + STAINLESS STEEL	-	-	ISO 1629
13	Collar	1	STAINLESS STEEL	GX5CrNiMo19-11-2 (CF8M)	1.4408	EN 10213-4



TALIS remains the best choice for water flow management solutions. Our company provides the best adapted solution for water and energy management, as well as for industrial or municipal applications. With a comprehensive range of over 20,000 products, we provide global solutions for each phase of the water cycle: pumping, distribution, connections, etc. Our experience, innovative technologies and all-encompassing, in-depth expertise form the basis for the development of lasting solutions and the best possible management of the vital resource which is water.



#### BAYARD

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The characteristics and performance data are subject to change without notice as a result of technical developments. Images and photos are non-binding.

