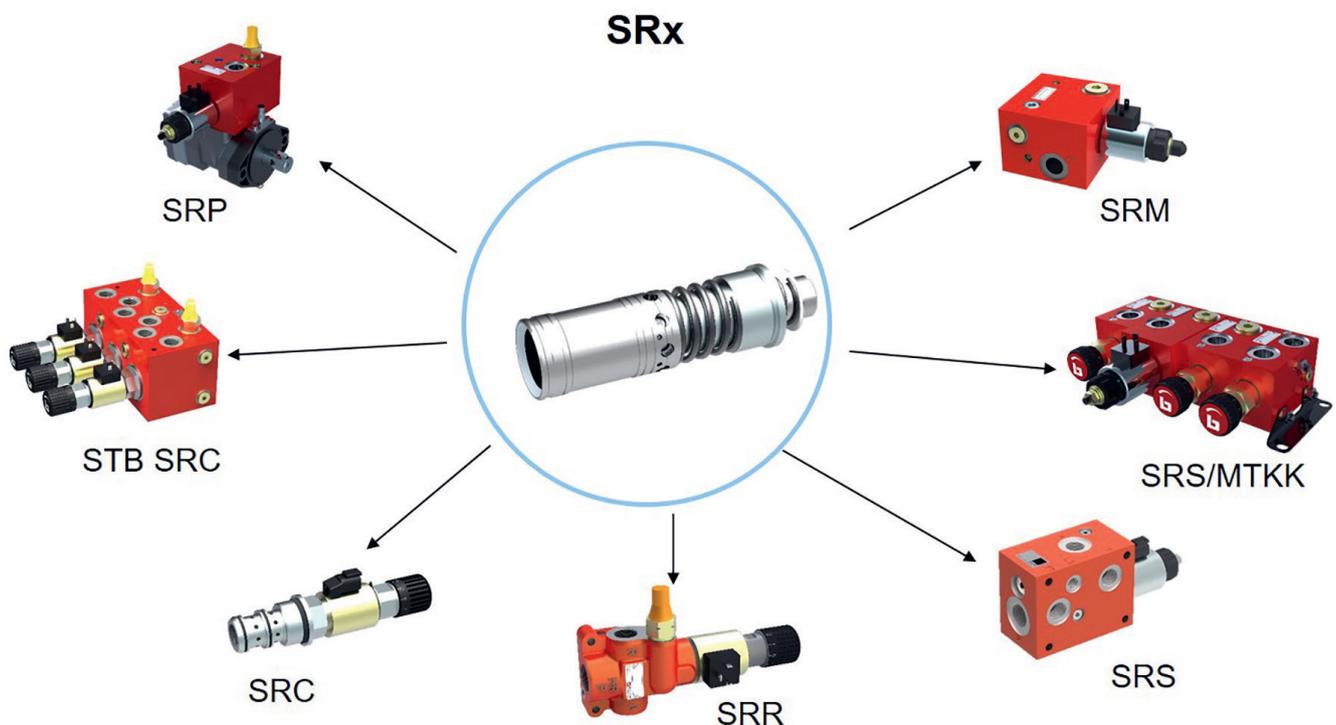
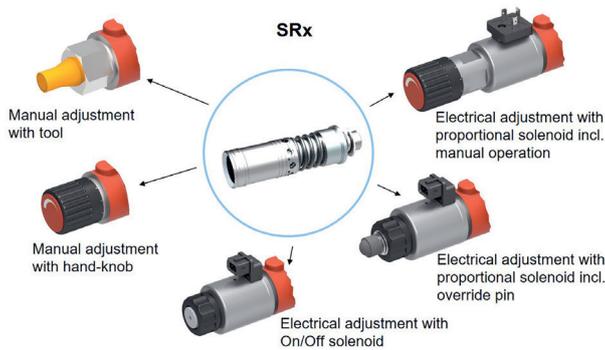


Precise and energy-efficient control of mobile hydraulics

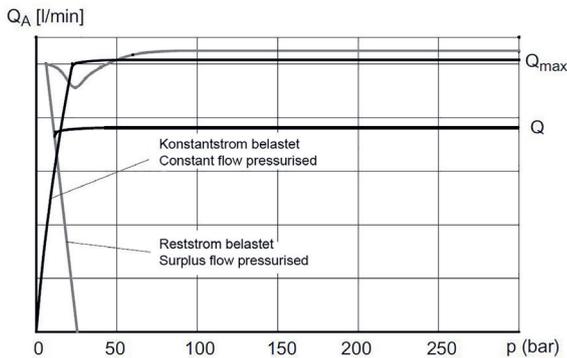


Proportional flow control valves from Bucher Hydraulics prove themselves in every application. Thanks to different series with a wide range of variants, they can be used in many ways and are characterized by reliability and durability in demanding areas of application.

In hydraulic systems, proportional flow control valves ensure that flow rates remain virtually constant. In doing so, they have to meet a large number of criteria that go far beyond their core function of controlling the flow rate. Manufacturers and operators of mobile machines are increasingly placing a special emphasis on energy efficiency. Flow control valves in particular should have a compact design and be easy to incorporate into complex hydraulic systems in every installation situation, saving both time and money. These flow control valves withstand harsh environmental conditions and corrosive attack without difficulty, as they can be supplied ex works with a zinc-nickel coating on all surfaces (> 720 h ISO EN DIN 9227 NSS). Manufacturers of mobile machines thus benefit from efficient, precise, durable and robust components that have a high power density.



In hydraulic systems, proportional flow control valves ensure that flow rates remain virtually constant. To set or adjust these flow rates, Bucher Hydraulics flow control valves offer the right type of operator for every application.



Under perfect control: thanks to the special arrangement of their control lands, Bucher Hydraulics proportional flow control valves keep the flow rate virtually constant, even under changing conditions.



Rugged and economical: a common feature in all models and variants, series SRx proportional flow valves from Bucher Hydraulics provide the highest control quality for reliable and precisely regulated hydraulic drives, even under very difficult operating and environmental conditions.

Save energy by minimizing pressure losses

Series SRx electrically operated proportional flow control valves from Bucher Hydraulics meet these far-reaching requirements. Depending on the particular model, they are suitable for constant flow rates between 0.3 and 80 l/min at inlet pressures up to 315 bar. They are designed as 3-way valves, but under certain conditions, they can also be used as 2-way valves by simply plugging the surplus flow port. Bucher Hydraulics flow control valves have an additional selling point, a unique advantage. They work reliably with a control Δp of only 7 bar, and with just 5 bar in a special version. These values are significantly below the 12 to 15 bar customary in the industry. The extra pump power that is required is thus reduced by up to 5 % during operation. The all-important advantage: with all SRx 3-way flow control valves, the surplus flow port can be pressurized. This means that it can be used for other, secondary applications – for an auxiliary drive, for example. The flow control valves are also ideally equipped for exceptional situations. They have an emergency override. This can be easily adjusted, and in the appropriate version, the flow rate can even be read on a scale.

Compact variants are universally integrable

The SRRB series of proportional flow control valves can be integrated particularly easily and flexibly into almost any hydraulic system. This model is particularly compact and designed for direct mounting in pipelines. A compelling feature is its outstanding power density. The main markets for these flow control valves are found in agricultural and municipal machines. They work reliably even under harsh environmental conditions.

They require only minimal installation space and can be fitted at any point in the pipework system. This proves to be a distinct advantage where a large number of individual hydraulic drives are distributed around the whole machine.

Machine manufacturers enjoy similar advantages with the particularly compact design of the SRM series of monoblock valves. They are also extremely stable and reliable thanks to their control assembly being integrated directly into the cast body. The advantage is that several flow control valves, as well as special features such as directional control valves for reversing the rotation of the connected hydraulic motors, can be integrated into the compact housing – and with minimal space requirements. Especially in the area of construction machines, such Highly Integrated Systems can be created for working pressures of up to 350 bar. In close cooperation with customers, Bucher Hydraulics specialists develop the optimum solutions and configurations for medium and large series.



Minimize the resource requirements for logistics and maintenance: SRC flow control valves are standardized cartridge models, which can be used in any individually designed valve block.

Adaptable thanks to modular design

When machine manufacturers need a highly adaptable hydraulic solution for their various systems, they prefer to use the modular proportional flow control valves.

The design of the SRC flow control valves in the form known as cartridge valves offers special advantages when it comes to flexible installation. The standardized cartridge valves can be fitted into valve blocks easily and quickly. They can also be exchanged just as simply. Lightweight aluminum blocks adapted to the customer's needs are preferred here.

On the one hand, using cartridge valves minimizes maintenance and servicing costs when replacing individual valves. It is not necessary to replace the whole block, only the cartridge valve concerned. On the other hand, it significantly reduces warehousing costs for manufacturers as well as distributors and service partners.

The control assembly of the SRx can also be installed in a slim valve body. As sectional valves (SRS), these can then be combined and assembled together to form a control block. In this way, valve blocks can be designed to meet individual requirements, and the design is adaptable and has a minimal logistics impact for spare parts. This is a particular benefit to manufacturers of municipal vehicles and universal multi-attachment vehicles, which are equipped for a wide range of applications.



When machine manufacturers need a highly adaptable hydraulic solution for their various systems, they prefer to use the modular proportional flow control valves.



Can be positioned anywhere/anyhow: the SRR version of the flow control valve is designed for line-mounting installations.



For decentralized machine layouts: the SRP proportional flow control valve for direct motor-mounting.

Rugged technology for decentralized arrangements

Bucher Hydraulics proportional flow control valves, series SRP, have been specially developed for complex hydraulic systems with numerous individual drives. This body version is designed for direct mounting on hydraulic motors. The time and costs for piping or hoses can thus be considerably reduced. Like all other flow control valves in the SRx series, these models provide a virtually constant flow rate. In fertilizer spreaders and potato planters, for example, they ensure that conveyor belts travel at uniform speeds and that spinner plates likewise rotate at uniform speeds. When planting agricultural products, Bucher Hydraulics proportional flow control valves make a decisive contribution to significantly increasing the final yields and quality.

Smart Solutions. Superior Support.

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