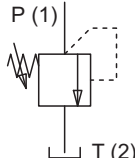
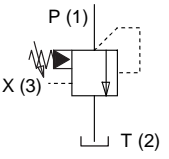
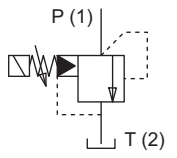
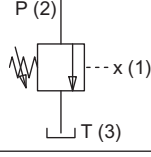
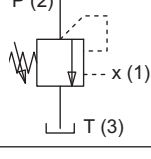
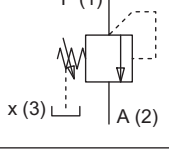
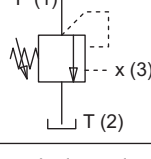
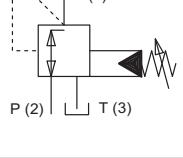
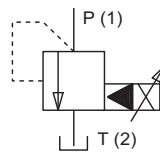
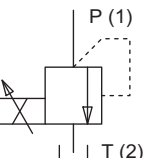
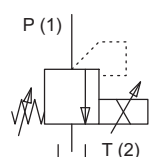
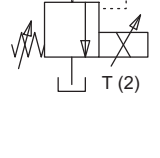
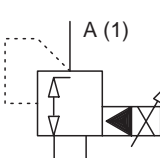
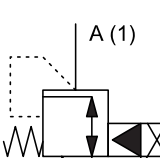



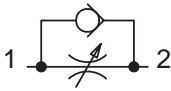

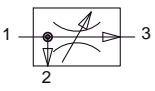
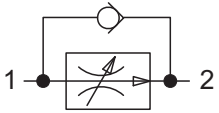
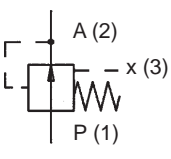
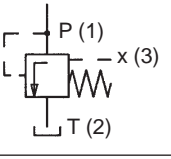
## Pressure valves manual operation

Functions	Sizes		
	M18x1,5	M22x1,5	M33x2
Pressure relief valve: <ul style="list-style-type: none"> <li>• pilot operated</li> <li>• direct operated</li> </ul> 	BV.PM18 2.1-510 BS.PM18 2.1-520	BV.PM22 2.1-530 BA.PM22 2.1-540 BK.PM22 2.1-542	
Pressure relief valve vented 		BV.PM22-Z9 2.1-534	
Pressure relief valve electrically activated 		BVEPM22 2.1-536	
Unloading valve 		BX.PM22 2.1-544 (Wandfluh standard)	
Pressure relief valve remote operated 		BY.PM22 2.1-544 (Wandfluh standard)	
Pressure sequence valve 		FV.PM22 2.1-546	
Accumulator unloading valve 		US.PM22 2.1-548	
Pressure reducing valve 	MV.PM18 2.2-510 (Wandfluh standard)	MV.PM22 2.2-530	

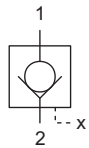
## Pressure valves proportional

Functions	Sizes		
	M18x1,5	M22x1,5	M33x2
Proportional pressure relief valve:  <ul style="list-style-type: none"> <li>• pilot operated</li> </ul>  <ul style="list-style-type: none"> <li>• direct operated</li> </ul>	<b>BVPPM18</b> 2.3-510  <b>BDPPM18</b> 2.3-520	<b>BVPPM22</b> 2.3-530  <b>BVVPM22</b> 2.3-531 (integrated electronics)  <b>BVCPM22</b> 2.3-534  <b>BVBPM22</b> 2.3-535  <b>BDPPM22</b> 2.3-540  <b>BDVPM22</b> 2.3-541 (integrated electronics)  <b>BDCPM22</b> 2.3-544  <b>BDBPM22</b> 2.3-545	<b>BVPPM33</b> 2.3-550  <b>BVVPM33</b> 2.3-552 (integrated electronics)
Prop. inverse pressure relief valve:  <ul style="list-style-type: none"> <li>• pilot operated</li> </ul>  <ul style="list-style-type: none"> <li>• direct operated</li> </ul>		<b>BVIPM22</b> 2.3-532  <b>BDIPM22</b> 2.3-542  <b>BDWPM22</b> 2.3-543 (integrated electronics)	
Proportional pressure reducing valve: 	<b>MVPPM18</b> 2.3-610 (Wandfluh standard)	<b>MVPPM22</b> 2.3-630  <b>MVVPM22</b> 2.3-631 (integrated electronics)  <b>MVCPM22</b> 2.3-634	<b>MVPPM33</b> 2.3-650  <b>MVVPM33</b> 2.3-651 (integrated electronics)
		<b>MQPPM22</b> 2.3-640  <b>MQVPM22</b> 2.3-642 (integrated electronics)	

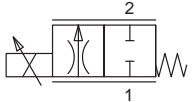
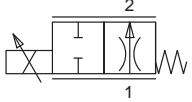
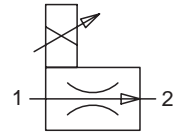
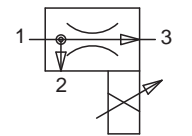
**Flow control valves manual operation**

Functions	Sizes		
	M18x1,5	M22x1,5	M33x2
Throttle valve 	DN.PM18 2.4-510		
Restrictor valve with reverse free flow check 	DR.PM18 2.4-610		
2-way flow control valve:  • 2-way function  • 3-way function	QA.PM18 2.5-510	QZ.PM22 2.5-535  QD.PM22 2.5-540	QZ.PM33 2.5-550  QD.PM33 2.5-555
2-way flow control valve 		QRSPM22 2.5-530	
Pressure compensator:  • 2-way function  • 3-way function		UZFPM22 2.5-630  UDFPM22 2.5-630	UZFPM33 2.5-650  UDFPM33 2.5-650

**Check valves**

Functions	Sizes		
	M18x1,5	M22x1,5	M33x2
Check valve pilot operated 		RNXPM22 2.7-61	RNXPM33 2.7-62

**Flow control valves proportional**

Functions	Sizes		
	M18x1,5	M22x1,5	M33x2
Proportional throttle valve:  • normally closed  • normally open	DNPPM18 2.6-510  DOPPM18 2.6-510	DNPPM22 2.6-530  DNVPM22 2.6-540 (integrated electronics)  DOPPM22 2.6-530	DNPPM33 2.6-550  DNVPM33 2.6-560 (integrated electronics)
Proportional flow control valve:  • 2-way function   • 3-way function	QZPPM18 2.6-610	QNPPM22 2.6-630  QNVPM22 2.6-632 (integrated electronics)  QDPPM22 2.6-645  QDVPM22 2.6-646 (integrated electronics)	QNPPM33 2.6-650  QNVPM33 2.6-660 (integrated electronics)  QDPPM33 2.6-665  QDVPM33 2.6-667 (integrated electronics)

**SETTING VERSIONS FOR SCREW-IN CARTRIDGES**

- Key
- Control knob
- Lock
- Cover



**S:** The version with screw adjustment is the basic version. Irrespective of the hydraulic function, this design permits easy, convenient adjustment of the screw-in cartridge with a screw driver. It is possible to lock the unit in the position with a lock nut.

**D:** Irrespective of the hydraulic function, the design knob allows easy, convenient adjustment of the screw-in cartridge. The design knob version can be advantageously used wherever constantly changing conditions make it necessary to have conveniently easily, adjustable screw-in cartridge, and/or where the design is of great significance.

**K:** The lock knob adjuster version is a option with lockable knob. Irrespective of the hydraulic function, the locking knob allows convenient easy, adjustment of the screw-in cartridge. Removal of the key (locking knob does not engage) prevents unauthorised adjustment of the screw-in cartridge. For logistic reasons, the same key may be used throughout the machine park.

**A:** This is a simple key adjuster type «S» with cover. The screw adjuster with cover can be advantageously used, whenever unauthorised adjustment of a screw-in cartridge must be prevented once it has been set. The degree of protection can be increased by the customer by using sealing lacquer (M4 grub screw) or by using a lead wire seal. If frequent adjustment of the cartridge is necessary we recommend the lock knob adjuster version «K».

**Important:** Neither the «K» lock adjuster version nor the «A» version cap conceal the hex, bolt of the screw-in cartridge. Consequently this does not prevent unscrewing of the screw-in cartridge (theft, replacement).

