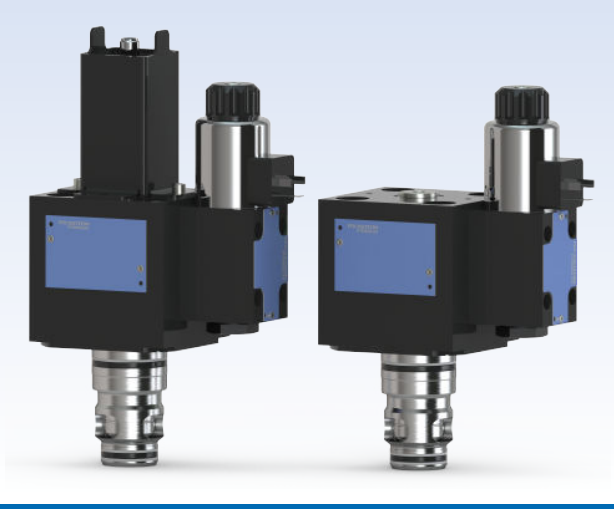
X750 SERIES 2-WAY ACTIVE CARTRIDGE VALVES

Sizes 25, 32 and 40 acc. to ISO 7368

Fast, pressure-independent safe closing



The AXXERON Hydrolux Active Cartridge Valve was designed to eliminate many of the limitations of standard cartridge valves. The Active Cartridge contains an additional control area that provides more robust control of switching pressure for high-speed and high-response machines, where low system pressure can delay closing times.

As a result, the Active Cartridge can offer improvements in:

- Fast, pressure-independent safe closing
- Active opening independent of main port pressures
- Smooth opening and rapid closing through integrated throttle check function

The new design of the main stage cartridge valve results in very high flow performance. Combined with its robustness, the AXXERON Hydrolux X750 Series provides reliable control for plastic injection moulding machines, presses and heavy industrial equipment, as well as for other applications.

This product family is easily integrated and configurable to meet your exact application and performance needs. These valves are available with an additional monitoring function of the closed valve position (valve function RSE) or without monitoring function (valve function RHE). The RSE function is approved acc. to DGUV GS-HM-23 “Injection moulding machines” for safety-related functions.

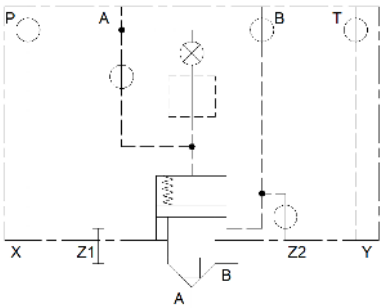
ADVANTAGES

- Robust design for a nominal pressure of 420 bar (6,000 psi)
- Increased machine safety through monitoring of closed valve position
- Increased energy efficiency due to lowest pressure drops
- Integrated throttle check function to allow fast closing and soft opening

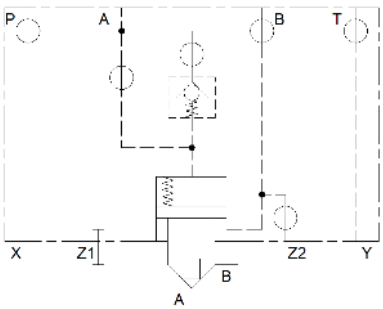
APPLICATIONS

- Plastic injection moulding machines
- Metal forming and presses
- General industrial machinery
- Safety-critical applications

Valve function RHE

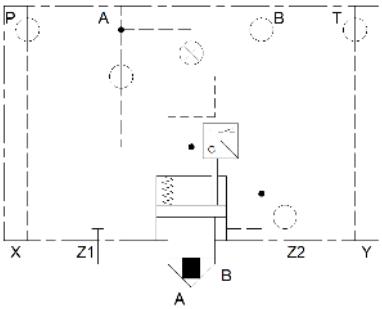


without throttle check function

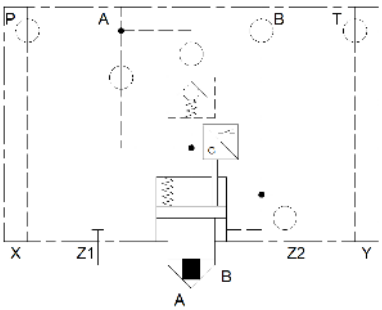


with throttle check function

Valve function RSE



without throttle check function



with throttle check function



AXXERON HYDROLUX

www.axxeron-hydrolux.com

TECHNICAL DATA

Valve design		2-Way Active Cartridge Valve, seat design								
Size according to ISO 7368		Size 25			Size 32			Size 40		
Main stage: maximum operating pressure of port A, B, X, Z2, Y [2]		420 bar (6,000 psi)								
Rated flow at Δp_N 5 bar (75 psi) in l/min [1]	**Poppet type**	**GX**	**SX**	**TX**	**GX**	**SX**	**TX**	**GX**	**SX**	**TX**
	flow direction A-B	725	825	595	1,160	1,333	825	2,246	2,489	1,743
	flow direction B-A	550	588	451	865	926	680	1,547	1,584	1,238
Seals for hydraulic fluids [3]		**NBR** → N-RSE/RHE: mineral oil-based hydraulic fluids, HFA-, HFB- and HFC-based hydraulic fluids **FKM** → V-RSE/RHE: mineral oil-based hydraulic fluids, HFD-based hydraulic fluids Others on request								
Position monitoring – valve function RSE only										
Temperature drift (0 … +80 °C)		≤ ±0.1 mm								
EMC		DIN EN 61000-6-1/2/3/4								
Protection class		IP65								
Vibration resistance (0 … 500 Hz)		max. 20 g								
Shock resistance		max. 50 g (11 ms)								

[1] Expected flow values depending on flow direction and recommended cavity diameters of port A and B.
[2] Maximum pressure for port Y depending on the pilot valve used.
[3] FKM: Fluoroelastomer (Viton®); NBR: Nitrile Rubber (Buna N)

AXXERON HYDROLUX

PRODUCT CODE

Type designation

1		2	3	4	5	6	7	8	9	10	11	12	13		14
□	-	□	□	□	□	□	□	□	□	□	□	□	□	/	□

1	Seal material
N	NBR (standard)
V	FKM

2	Valve type
RH	2-way slip-in cartridge valve – active operated
RS	2-way slip-in cartridge valve – active operated, position monitored

3	Connection
E	Manifold installation

4	Size
025	Size 25
032	Size 32
040	Size 40

5	Series
M	Assigned by factory

6	Manifold interface
6	ISO 7368

7	Poppet type
SX	Active cartridge poppet, directional function, differential area $A_B > 0$
TX	Active cartridge poppet, directional function – dampening nose, differential area $A_B > 0$
GX	Active cartridge poppet for position monitoring

8	Spring
Z	Without spring
R	0.5 bar
S	1.0 bar
T	2.0 bar
U	4.0 bar

9	Pilot oil supply
X	X and Y through cover interface

10	Function
0	Without pilot
1	Actively opened when the solenoid is energized via 4/2 directional control valve → de-energized: closed
2	Actively closed when the solenoid is energized via 4/2 directional control valve → de-energized: open
6	Externally pilot operated through crossover plate, open through X

11	Solenoid supply
B	24 V

12	Solenoid type
N	Wet solenoid, oil-immersed, with manual override
O	Wet solenoid, oil-immersed, without manual override

13	Electrical connection
0	Connection as per DIN 43650, without plug

14	Modifications
Pxx **Zxx**	Orifice configuration in 1/10 mm, e.g. P08 → Ø 0.8 mm in P, Z220 → Ø 2.0 mm in Z2
RH1	Cover type (Pilot A-port closes the cartridge)
FDR	Optional throttle check function

Model number	
X750	Control cover for 2-way active cartridge
X751	2-way active cartridge (without control cover)
X752	2-way active cartridge valve
X753	2-way active cartridge valve, position monitored

AXXERON HYDROLUX

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X750-RHE/RSE-2-Way Active Cartridge Valve-Datasheet-EN
X750-RHE-RSE-CDL66656-010-09_2026-EN

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