

12.5.1 TECHNICAL DATA

MAX OPERATING PRESSURE: 315 bar

PRESSURE TEST (PT): 1.43 x PS

CRACKING PRESSURE: 0,5 bar

WORKING TEMPERATURE: -20 ÷ +80 °C

FLUID VISCOSITY RANGE: 10 ÷ 400 cSt

RECOMMENDED VISCOSITY: 36 cSt

FLUID CONTAMINATION DEGREE:
class 20/18/15 according to ISO 4406/99

MATERIAL: : phosphated carbon steel or galvanized carbon steel in compliance with Directive 2002/95/CE (RoHS) to resist to corrosion.

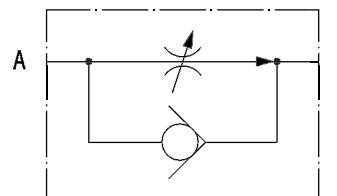
FLOW RATE: see Table 12.5e

WEIGHT: see Table 12.5e



12.5a

12.5.3 HYDRAULIC SYMBOL



12.5b

12.5.2 DESCRIPTION

The valves type WMK are single-acting throttle flow control valves for in-line mounting, directly on the line P, connected to the accumulator or to the safety block. They are designed to control the fluid flow rate in the fluid direction going out from the accumulator and allow a free flow rate in the opposite direction.

When there is a flow in throttle direction, fluid reaches the rear side of the poppet of the check valve which is pushed onto its seat in the housing by the spring. The fluid flows to the variable orifice through the side bores in the poppet. Throttling takes place between the housing and adjustable sleeves. With flow in the opposite direction, the fluid acts on the face surface of the poppet. The poppet is lifted from its seat and the fluid flows freely through the valve. Simultaneously, part of the fluid getting through the ring slot creates the desired effect as self-cleaning.

12.5.4 ORDER CODE

1	2	3	4	5	6	7
WMK	20	G	6	-	C	P 0

1	Series
	Single-acting flow control valves = WMK

2	Nominal size
	Size 6 (1/4") = 6
	Size 8 (3/8") = 8
	Size 10 (1/2") = 10
	Size 15 (3/4") = 15
	Size 20 (1") = 20
	Size 25 (1 1/4") = 25
	Size 30 (1 1/2") = 30

3	Fluid port connection
	Threat BSP ISO 228, female = G

6	Seals material
	Nitrile rubber (NBR) = P

7	Series number
	The overall and mounting dimensions remain unchanged from 0 to 9

5	Body material
	Carbon steel = C

4	Dimension of connection side
	For the type of connection G:
	1/4" = 2
	3/8" = 3
	1/2" = 4
	3/4" = 5
	1" = 6
	1 1/4" = 7
	1 1/2" = 8

12.5.5 SEALS - TEMPERATURE - LIQUID COMPATIBILITY

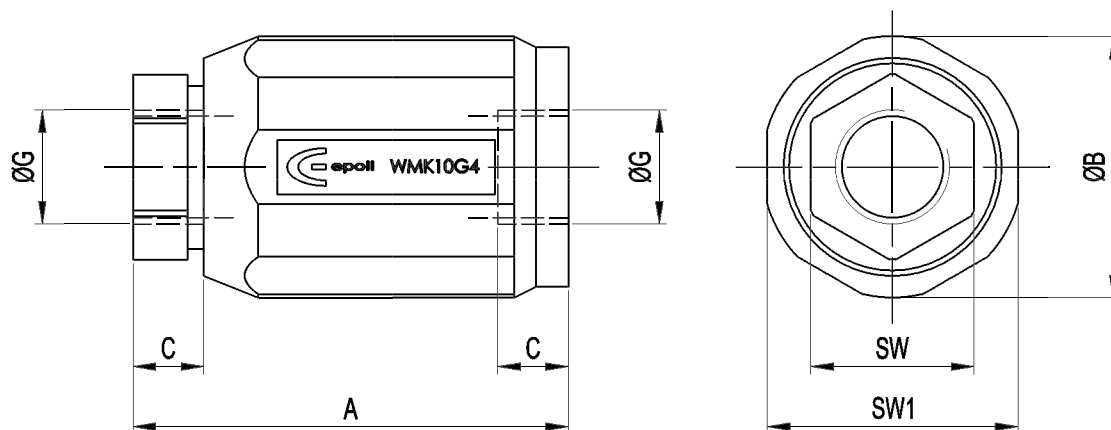
When selecting the valve variants, pay attention to the following non-binding notes with regard to hydraulic fluid, seals material and the permissive temperature range.

Code letter	Polymer	ISO	Temperature range (°C)	Some of the liquids compatible with the polymer
P	Standard nitrile (Perburan)	NBR	-20 ÷ +80	Aliphatic hydrocarbons (propane, butane, gasoline, oils, mineral greases, diesel fuel, fuel oil, kerosene), mineral greases and oils, HFA - HFB - HFC fluids, many dilute acids, alkalis, saline solutions, water, water glycol.

For other hydraulic fluid and/or temperatures, please contact us.

12.5c

12.5.6 DIMENSIONS



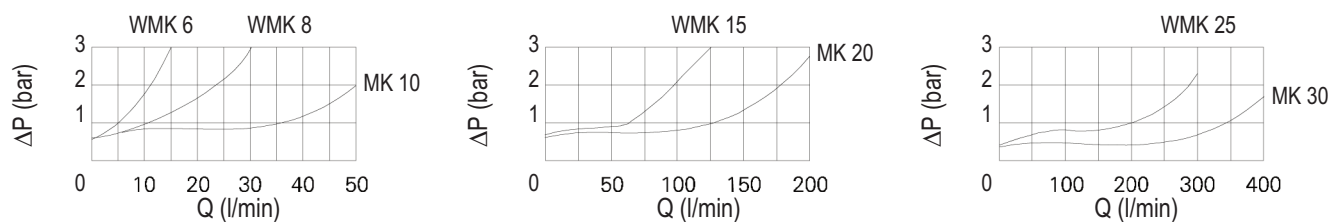
12.5d

Order code	$\varnothing G$ BSP	Flow rate l/min	A mm	$\varnothing B$ mm	C mm	SW mm	SW1 mm	Dry weight Kg
WMK6	1/4"	15	65	34	12	22	32	0.3
WMK8	3/8"	30	65	38	12	24	36	0.4
WMK10	1/2"	50	80	48	14	30	46	0.7
WMK15	3/4"	120	100	58	16	41	55	1.1
WMK20	1"	200	110	72	18	46	70	1.9
WMK25	1" 1/4	300	130	87	20	55	80	3.2
WMK30	1" 1/2	400	150	93	22	60	85	4.1

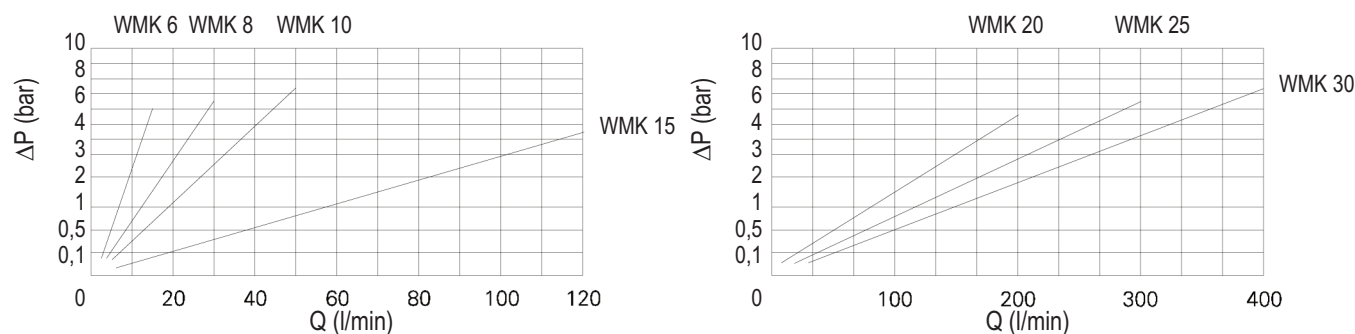
12.5e

12.5.7 CHARACTERISTIC CURVES

Flow rate via open check valve with closed throttle (measured with viscosity of 36 cSt at 50 °C).



Flow rate via closed check valve with open throttle (measured with viscosity of 36 cSt at 50 °C).



12.5f

12.5.8. ASSEMBLY

For the installation into a hydraulic plant, please use the sw hexagon of the valve body.

It isn't allowed to lift up the valve by adjustable sleeve.

Do not adjust under pressure.

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In the spirit of continuous improvement, our products may be changed.