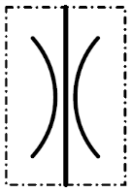
- **common orifices**
- **orifices with included edge filters**



Description

Orifices are also known as throttles. The throttle section is kept as short as possible to ensure the advantage of the typical orifice, viscosity independence. To avoid the risk of blocked orifice by dirt, use the type with included edge filters. There is a filter gap in front of the orifices, with a gap about $^1/_3$ of the orifice diameter. The filter gap and the thereby greatly reduced flow velocity help a lot to reduce the risk of blocked orifices.

Technical Data

General Specifications	**G**
Design:	common orifice or orifice with included edge filter
Mounting method:	screw-in thread
Thread size:	Metric threads M3 … M8 Inch thread cylindrical G1/8" and G1/4"
Mounting position:	unrestricted
Accuracy:	±0.02mm (higher accuracy on request)

Hydraulic Specifications	
Max. pressure:	Brass: 300 bar, Steel 600 bar
Fluid:	hydraulic oils HL and HLP according DIN 51524
Temperature range:	-20°C … + 100°C
Viscosity range:	10 … 500 mm²/s (cSt)
Min. fluid cleanliness	20/18/15 acc. to ISO 4406 / max. class 9 acc. to NAS 1638

Type code

G	SV	-M5	x	0.8	- ST

Material:
ST = steel
MS = brass

Orifice diameter:
øD in the chart

Thread size:
M3, M4, M5, M6, M7, M8 (other sizes on request)
G1/8" and G1/4" (only full thread orifice possible)

omit = common orifice, without edge filter
V = edge filter in screw direction in front (steel only)
H = edge filter in screw direction in back (steel only)

G = full thread
B = with shaft
J = with cylinder head

Option:
Other dimensions and materials on request.

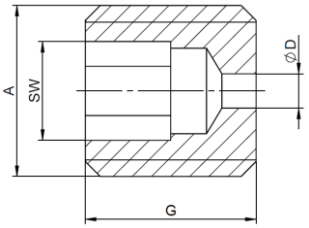
Dimensions

Common orifices

full thread G

A	G	øD	SW (AF)
M3	3.5	0.2 - 1.2	1.5
M4	4.0 (MS 4.5)	0.2 - 2.0	2.0
M5	5.0	0.2 - 2.2	2.5
M6	6.0	0.2 - 2.7	3.0
M7	7.0	0.2 - 2.7	3.0
M8	8.0	0.2 - 3.7	4.0
G1/8"	10.0	0.2 - 4.0	5.0
G1/4"	12.0	0.2 - 4.0	6.0

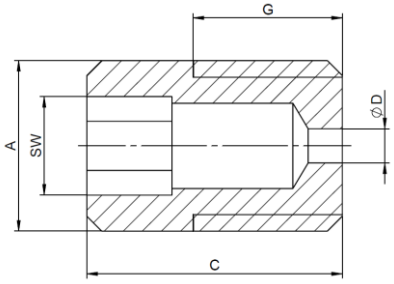
G



with shaft B

A	C		G		øD	SW	
	St	Ms	St	Ms		St	Ms
M3	6.0	6.0	3.5	3.5	0.2 - 1.2	1.5	2.0
M4	6.0	7.0	3.5	3.5	0.2 – 1.7	2.0	2.5
M5	7.5	7.0	4.0	4.0	0.2 - 2.2	2.5	2.5
M6	8.0	9.0	5.0	6.0	0.2 - 2.7	3.0	3.0
M8	11.0	10.0	6.0	6.0	0.2 - 3.7	4.0	4.0

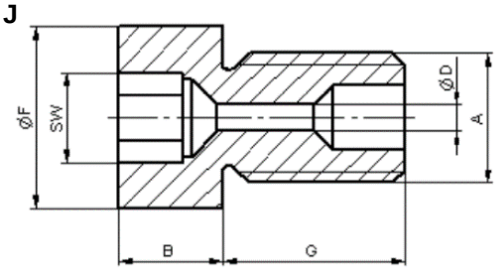
B



with cylinder head J brass version

A	G	B	øF	øD	SW
M3	3.8	2.7	5.0	0.2 - 1.5	2.0
M4	4.5	3.0	6.0	0.2 - 2.0	2.5
M5	5.0	4.0	7.0	0.2 - 2.9	3.0
M6	6.0	4.0	8.0	0.2 - 3.9	4.0
M8	7.5	2.5	9.0	0.2 - 3.9	4.0

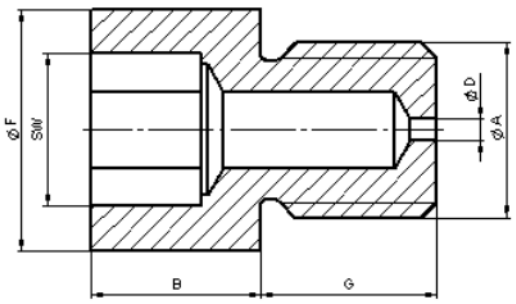
J



with cylinder head J steel version

A	G	B	øF	øD	SW
M3	4.0	2.8	5.0	0.2 - 1.7	2.5
M4	5.0	3.8	6.0	0.2 - 1.7	3.0
M5	5.0	4.0	7.0	0.2 - 2.2	3.0
M6	6.0	5.7	9.0	0.2 - 2.2	5.0
M8	8.0	7.7	11.0	0.2 - 3.7	6.0

J



Orifice with included edge filter

full thread GSV / GSH

A	G	øD	øE	SW (AF)
M5	7.5	0.2 - 0.8	3.0	3.0
M6	8.0	0.2 - 0.8	3.0	3.0
M8	11.0	0.2 - 1.0	5.0	4.0

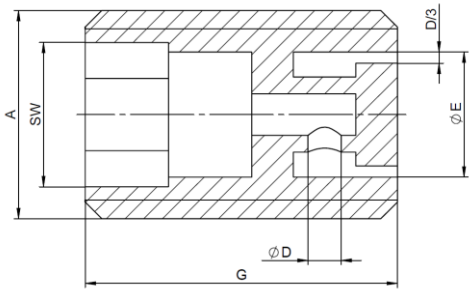
with shaft BSV / BSH

A	C	G	øD	øE	SW (AF)
M5	7.5	4.0	0.2 - 0.8	3.0	3.0
M6	8.0	5.0	0.2 - 0.8	3.0	3.0
M8	11.0	6.0	0.2 - 1.0	5.0	4.0

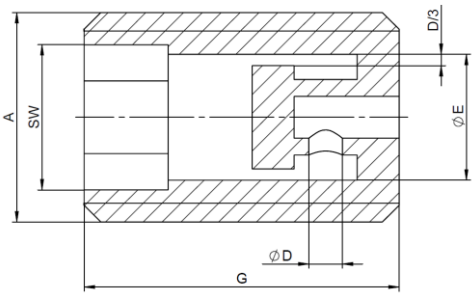
with cylinder head JSV / JSH

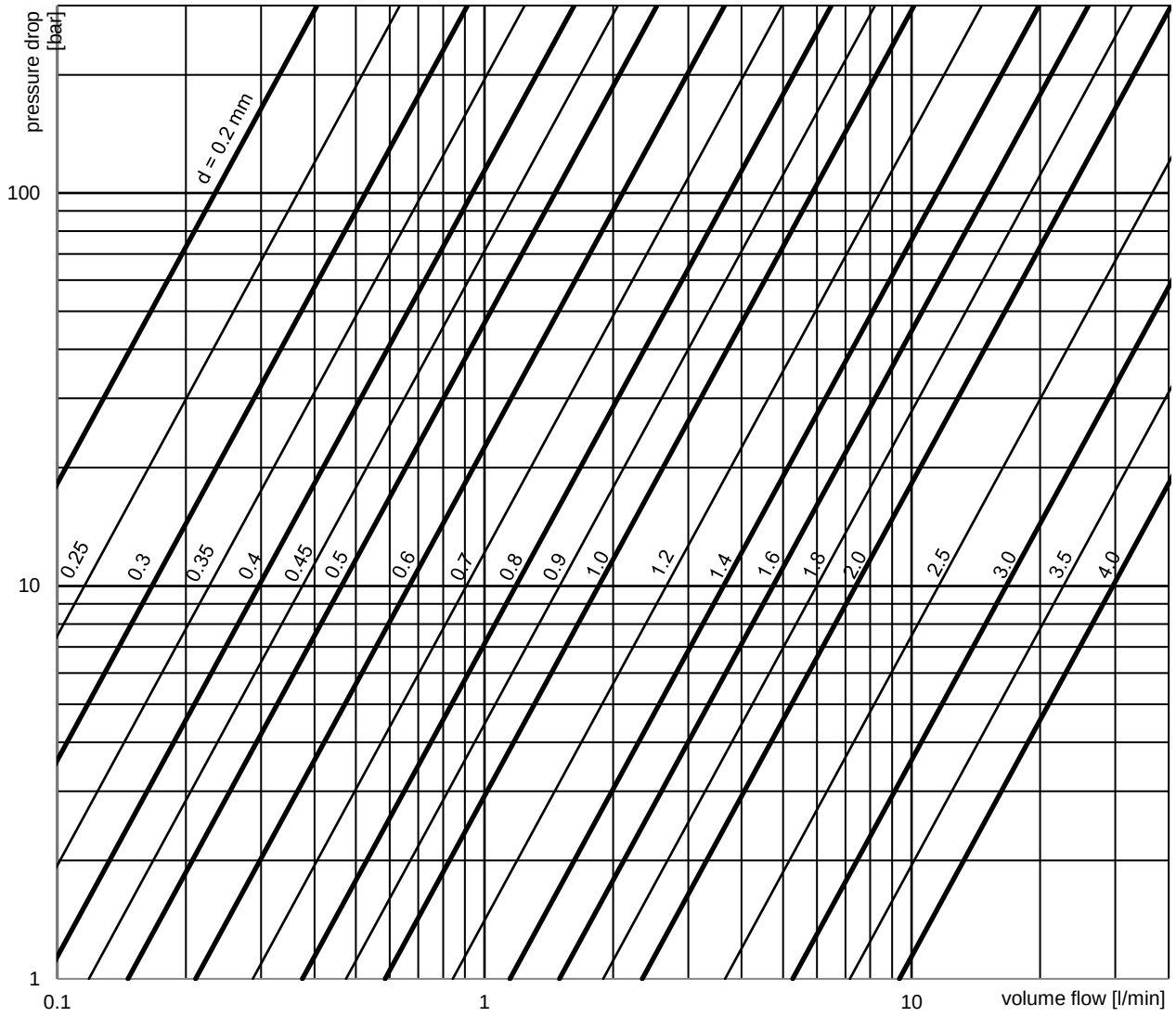
A	G	B	F	øD	øE	SW (AF)
M5	5.0	4.0	7.0	0.2 - 0.8	3.0	3.0
M6	6.0	5.7	9.0	0.2 - 0.8	3.0	5.0
M8	8.0	7.7	11.0	0.2 - 1.0	5.0	6.0

GSV



GSH





Flow coefficient approx. 0.5
Density 0.9 kg/dm³