Selection and ordering data	Order No.	Order code
Orifice plate with single tappings	7ME1120 - ☐☐☐☐☐ - 1 ☐☐☐	☐☐☐
for mounting between flanges		
Sealing faces to the mating flanges: plane.		
Nominal diameter acc. to EN		
DN 50		
PN 6	1GA	
PN 10 ... PN 40	1GE	
PN 63	1GF	
PN 100 and PN 160	1GH	
PN 250	1GJ	
PN 315	1GK	
DN 65		
PN 6	1HA	
PN 10 ... PN 40	1HE	
PN 63	1HF	
PN 100 and PN 160	1HH	
PN 250	1HJ	
PN 315	1HK	
DN 80		
PN 6	1JA	
PN 10 ... PN 40	1JE	
PN 63	1JF	
PN 100 and PN 160	1JH	
PN 250	1JJ	
PN 315	1JK	
DN 100		
PN 6	2AA	
PN 10 and PN 16	2AC	
PN 25 and PN 40	2AE	
PN 63	2AF	
PN 100 and PN 160	2AH	
PN 250	2AJ	
PN 315	2AK	
DN 125		
PN 6	2BA	
PN 10 and PN 16	2BC	
PN 25 and PN 40	2BE	
PN 63	2BF	
PN 100 and PN 160	2BH	
PN 250	2BJ	
PN 315	2BK	
DN 150		
PN 6	2CA	
PN 10 and PN 16	2CC	
PN 25 and PN 40	2CE	
PN 63	2CF	
PN 100 and PN 160	2CH	
PN 250	2CJ	
PN 315	2CK	
DN 200		
PN 6	2EA	
PN 10 and PN 16	2EC	
PN 25	2ED	
PN 40	2EE	
PN 63	2EF	
PN 100 and PN 160	2EH	
PN 250	2EJ	
PN 315	2EK	

Selection and ordering data	Order No.	Order code
Orifice plate with single tappings	7ME1120 - ☐☐☐☐☐ - 1 ☐☐☐	☐☐☐
DN 250		
PN 6	2FA	
PN 10 and PN 16	2FC	
PN 25	2FD	
PN 40	2FE	
PN 63	2FF	
PN 100 and PN 160	2FH	
PN 250	2FJ	
PN 315	2FK	
DN 300		
PN 6	2GA	
PN 10	2GB	
PN 16	2GC	
PN 25	2GD	
PN 40	2GE	
PN 63	2GF	
PN 100 and PN 160	2GH	
DN 350		
PN 6	2HA	
PN 10	2HB	
PN 16	2HC	
PN 25	2HD	
PN 40	2HE	
PN 63	2HF	
PN 100	2HG	
DN 400		
PN 6	2JA	
PN 10	2JB	
PN 16	2JC	
PN 25	2JD	
PN 40	2JE	
PN 63	2JF	
DN 500		
PN 6	2KA	
PN 10	2KB	
PN 16	2KC	
PN 25	2KD	
PN 40	2KE	
Nominal diameter acc. to ASME		
2 inch		
Class 150	5GA	
Class 300	5GB	
Class 600	5GC	
2½ inch		
Class 150	5HA	
Class 300	5HB	
Class 600	5HC	
3 inch		
Class 150	5JA	
Class 300	5JB	
Class 600	5JC	
4 inch		
Class 150	6AA	
Class 300	6AB	
Class 600	6AC	
5 inch		
Class 150	6BA	
Class 300	6BB	
Class 600	6BC	

Selection and ordering data	Order No.	Order code
Orifice plate with single tappings	**7ME1120 -**	**- 1**
6 inch		
Class 150	**6CA**	
Class 300	**6CB**	
Class 600	**6CC**	
8 inch		
Class 150	**6EA**	
Class 300	**6EB**	
Class 600	**6EC**	
10 inch		
Class 150	**6FA**	
Class 300	**6FB**	
Class 600	**6FC**	
12 inch		
Class 150	**6GA**	
Class 300	**6GB**	
Class 600	**6GC**	
14 inch		
Class 150	**6HA**	
Class 300	**6HB**	
Class 600	**6HC**	
16 inch		
Class 150	**6JA**	
Class 300	**6JB**	
Class 600	**6JC**	
20 inch		
Class 150	**6KA**	
Class 300	**6KB**	
Class 600	**6KC**	
Special version		
Specify order code and plain text Nominal diameter: ..., nominal pressure: ... material no.: ... and material name: ...	**9AA00**	**H1Y**
Material for corrosive media		
Orifice plate and tapping socket made of X 2 CrNiMo 17-12-2, material no. 1,4404; permissible operating temp. -10 to +400 °C	**23**	
Material for non-corrosive media		
Orifice plate and tapping socket made of 13 CrMo 4-5, material no. 1,7335; permissible operating temp. -10 to +570, high temperature	**24**	
Orifice plate made of P265GH, material no. 1.0425; tapping sockets made of P235GHTC2, material no. 1.0345; metering edge with X 15 CrNiMn 18-8, material no. 1.4370, deposition welded; permissible operating temperature -10 to +400 °C	**25**	

Selection and ordering data	Order No.	Order code
Orifice plate with single tappings	**7ME1120 -**	**- 1**
Tapping sockets		
with threaded connection G½; for liquids and gases PN 160, for steam PN 100		
• Opposite one another, straight		**A**
• Opposite one another, bent-up, for vertical pipelines		**B**
• Any arrangement of tapping sockets (specify angle in plain text -Z Y02)		**G**
With threaded connection ½-14 NPT male		
• Opposite one another, straight		**Q**
• Opposite one another, bent-up, for vertical pipelines		**R**
• Any arrangement of tapping sockets (specify angle in plain text -Z Y02)		**T**
With pipe Ø 12 mm for pipe union with ferrule, max. 200 °C permissible		
• Opposite one another, straight		**J**
• Opposite one another, bent-up, for vertical pipelines		**K**
• Any arrangement of tapping sockets (specify angle in plain text -Z Y02)		**M**
With welding connection ∅ 21.3 mm; for liquids and gases PN 100 ... 400, for steam PN 100 or ∅ 24 mm; for liquids and gases over PN 400, for steam over PN 100		
• Opposite one another, straight		**D**
• Opposite one another, bent-up, for vertical pipelines		**E**
• Any arrangement of tapping sockets (specify angle in plain text -Z Y02)		**H**
Shape of orifice disk aperture (see figure "Shapes of orifice disk aperture")		
For flow in one direction		
• Orifice plate form A		**A**
• Quarter-circle nozzle form B		**B**
For flow in both directions		
• Cylindrical orifice plate form D		**D**
Manufactured according to pressure equipment directive		
None[1]		**0**
According to Article 3, Paragraph 3 Design data Y31 to Y35 necessary		**1**
According to category 1, 2, 3 with CE marking and EC declaration of conformity Design data Y31 to Y35 necessary.		**5**

[1] Only possible outside Europe.

Selection and ordering data	Order code
Further designs Add "-**Z**" to order no. and specify order code(s) and plain text.	
With Siemens calculation protocol Specify in plain text: No.: ... e. g. no.: 110025240101, Attach calculation protocol to the order	**Y21**
With third-party calculation Specify in plain text: No.: ... Attach calculation protocol to the order	**Y22**
Orifice plate without calculation Specify in plain text: Diameter of orifice disk aperture **d = ... mm** Internal diameter of pipe **D=... mm** Radius of quarter-circle nozzle **r = ... mm**	**Y01**
Angle between the tapping sockets Specify in plain text: Angle between the tapping sockets ...°	**Y02**
Design data according to Pressure equipment directive 97/23/EC	
Name of medium Specify in plain text: Medium: ..... e. g. natural gas	**Y31**
Aggregate state Specify in plain text: Aggregate state: ..... Liquid or gaseous	**Y32**
Fluid group Specify in plain text: Fluid group: ..... Group 1: hazardous explosive fluid or Group 2: All other fluids	**Y33**
Max. permissible pressure Specify in plain text: PS = ... in bar or PSI	**Y34**
Max. permissible temperature Specify in plain text: TS = … in °C or °F	**Y35**
Orifice plate degreased for oxygen measurements	
• DN 50 (2") ... DN 150 (6")	**A12**
• DN 200 (8") ... DN 400 (16")	**A13**
• DN 500 (20") ... DN 1000 (40")	**A14**
Material certificate Acceptance test certificate to EN 10204-3.1	**C01**
Cold water pressure test 1.5 x PN, with acceptance test certificate EN 10204	**D11**
Overall length 65 mm (required for tapping sockets arranged on one side)	**on request**
Orifice disk including gasket	**on request**
Sealing face of orifice plate with recess or groove	**on request**

Note on ordering

The "calculation protocol" released by the customer with order code Y21 or Y22 must be attached to the order as an appendix or the statement "orifice plate without calculation" will be made with order code Y01.

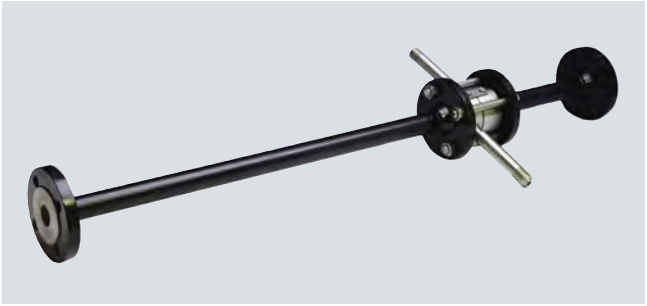
Scope of delivery:

One-part orifice plate with tapping sockets

Accessories:

See "SITRANS P measuring instruments for pressure".

Application



Suitable for non-corrosive and corrosive gases, vapors and liquids; permissible operating temperature -10 to +400 °C.

Design

Orifice plate with annular chambers consisting of two support rings with replaceable orifice disk form A or B (see types of primary differential pressure devices in "Technical description", "Function"); flanged between inlet and outlet pipe sections with lengths according to DIN 19205.

Nominal diameters

- EN: DN 10 to DN 50
- ASME: ½ inch to 2 inch

Nominal pressure

- EN: PN 10 to PN 100
- ASME: class 150 to 600

Sealing face of the end flanges

- Plane, sealing face turned, N10/N12 to DIN ISO 1302
- Plane, sealing face turned, N8 to DIN ISO 1302
- Plane, RF (raised faced) for versions to ASME

Tapping sockets

(For the dimensions of the following tapping sockets, see page 4/401)

- With connection thread G½ DIN ISO 228/1, connection dimensions to DIN 19207 form V
- With threaded connection ½-14 NPT male, for version to ASME
- With Ø 12 mm pipe connection for pipe union with ferrule
- With welding connection, Ø 21.3 mm

For length of tapping sockets for all metering pipe L = 120 mm and position of tapping socket, see "Technical Description" and "Function".