

Flow Measurement

SITRANS F O delta p - Primary differential pressure devices

Orifice plate with single tapping

Selection and ordering data	Article No.	Order code	Selection and ordering data	Article No.	Order code
Orifice plate with single tapplings	7 ME 1 1 2 0 -	- 1	Orifice plate with single tapplings	7 ME 1 1 2 0 -	- 1
for mounting between flanges					
Sealing faces to the mating flanges: plane.					
Nominal diameter acc. to EN					
DN 50			DN 250		
PN 6		1 GA	PN 6		2 FA
PN 10 ... PN 40		1 GE	PN 10 and PN 16		2 FC
PN 63		1 GF	PN 25		2 FD
PN 100 and PN 160		1 GH	PN 40		2 FE
PN 250		1 GJ	PN 63		2 FF
PN 315		1 GK	PN 100 and PN 160		2 FH
DN 65			PN 250		2 FJ
PN 6		1 HA	PN 315		2 FK
PN 10 ... PN 40		1 HE	DN 300		
PN 63		1 HF	PN 6		2 GA
PN 100 and PN 160		1 HH	PN 10		2 GB
PN 250		1 HJ	PN 16		2 GC
PN 315		1 HK	PN 25		2 GD
DN 80			PN 40		2 GE
PN 6		1 JA	PN 63		2 GF
PN 10 ... PN 40		1 JE	PN 100 and PN 160		2 GH
PN 63		1 JF	DN 350		
PN 100 and PN 160		1 JH	PN 6		2 HA
PN 250		1 JJ	PN 10		2 HB
PN 315		1 JK	PN 16		2 HC
DN 100			PN 25		2 HD
PN 6		2 AA	PN 40		2 HE
PN 10 and PN 16		2 AC	PN 63		2 HF
PN 25 and PN 40		2 AE	PN 100		2 HG
PN 63		2 AF	DN 400		
PN 100 and PN 160		2 AH	PN 6		2 JA
PN 250		2 AJ	PN 10		2 JB
PN 315		2 AK	PN 16		2 JC
DN 125			PN 25		2 JD
PN 6		2 BA	PN 40		2 JE
PN 10 and PN 16		2 BC	PN 63		2 JF
PN 25 and PN 40		2 BE	DN 500		
PN 63		2 BF	PN 6		2 KA
PN 100 and PN 160		2 BH	PN 10		2 KB
PN 250		2 BJ	PN 16		2 KC
PN 315		2 BK	PN 25		2 KD
DN 150			PN 40		2 KE
PN 6		2 CA	Nominal diameter acc. to ASME		
PN 10 and PN 16		2 CC	2 inch		
PN 25 and PN 40		2 CE	Class 150		5 GA
PN 63		2 CF	Class 300		5 GB
PN 100 and PN 160		2 CH	Class 600		5 GC
PN 250		2 CJ	2½ inch		
PN 315		2 CK	Class 150		5 HA
DN 200			Class 300		5 HB
PN 6		2 EA	Class 600		5 HC
PN 10 and PN 16		2 EC	3 inch		
PN 25		2 ED	Class 150		5 JA
PN 40		2 EE	Class 300		5 JB
PN 63		2 EF	Class 600		5 JC
PN 100 and PN 160		2 EH	4 inch		
PN 250		2 EJ	Class 150		6 AA
PN 315		2 EK	Class 300		6 AB
			Class 600		6 AC
			5 inch		
			Class 150		6 BA
			Class 300		6 BB
			Class 600		6 BC

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Orifice plate with single tap-pings	7 ME 1 1 2 0 -	- 1	Orifice plate with single tap-pings	7 ME 1 1 2 0 -	- 1
6 inch			Tapping sockets		
Class 150	6 CA		with threaded connection G $\frac{1}{2}$; for liquids and gases PN 160, for steam PN 100		
Class 300	6 CB		• Opposite one another, straight		A
Class 600	6 CC		• Opposite one another, bent- up, for vertical pipelines		B
8 inch			• Any arrangement of tapping sockets (specify angle in plain text -Z Y02)		G
Class 150	6 EA		With threaded connection $\frac{1}{2}$ -14 NPT male		
Class 300	6 EB		• Opposite one another, straight		Q
Class 600	6 EC		• Opposite one another, bent- up, for vertical pipelines		R
10 inch			• Any arrangement of tapping sockets (specify angle in plain text -Z Y02)		T
Class 150	6 FA		With pipe \varnothing 12 mm for pipe union with ferrule, max. 200 °C permissible		
Class 300	6 FB		• Opposite one another, straight		J
Class 600	6 FC		• Opposite one another, bent- up, for vertical pipelines		K
12 inch			• Any arrangement of tapping sockets (specify angle in plain text -Z Y02)		M
Class 150	6 GA		With welding connection \varnothing 21.3 mm; for liquids and gases PN 100 ... 400, for steam PN 100 or \varnothing 24 mm; for liquids and gases over PN 400, for steam over PN 100		
Class 300	6 GB		• Opposite one another, straight		D
Class 600	6 GC		• Opposite one another, bent- up, for vertical pipelines		E
14 inch			• Any arrangement of tapping sockets (specify angle in plain text -Z Y02)		H
Class 150	6 HA		Shape of orifice disk aper- ture		
Class 300	6 HB		(see figure "Shapes of orifice disk aperture")		
Class 600	6 HC		For flow in one direction		
16 inch			• Orifice plate form A		A
Class 150	6 JA		• Quarter-circle nozzle form B		B
Class 300	6 JB		For flow in both directions		
Class 600	6 JC		• Cylindrical orifice plate form D		D
20 inch			Manufactured according to pressure equipment directive		
Class 150	6 KA		None ¹⁾		0
Class 300	6 KB		According to Article 3, Para- graph 3 Design data Y31 to Y35 neces- sary		1
Class 600	6 KC		According to category 1, 2, 3 with CE marking and EC dec- laration of conformity Design data Y31 to Y35 neces- sary.		5
Special version					
Specify Order code and plain text	9 AA 0 0	H 1 Y			
Nominal diameter: ..., nominal pressure: ... material no.: ... and material name: ...					
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		2 3			
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		2 4			
Orifice plate made of P265GH, material no. 1.0425; tapping sockets made of P235GH/C2, material no. 1.0345; metering edge with X 15 CrNiMn 18-8, material no. 1.4370, deposition welded; permissible operating temper- ature -10 to +400 °C		2 5			

¹⁾ Only possible outside Europe.

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Selection and ordering data

Further designs

Add **"-Z"** to Article 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

With third-party calculation

Specify in plain text: No.: ...
Attach calculation protocol to the order

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**

Angle between the tapping sockets

Specify in plain text: Angle between the tapping sockets ...°

Design data according to Pressure equipment directive 97/23/EC

Name of medium

Specify in plain text: Medium:
e. g. natural gas

Aggregate state

Specify in plain text: Aggregate state:
Liquid or gaseous

Fluid group

Specify in plain text: Fluid group:
Group 1: hazardous explosive fluid or
Group 2: All other fluids

Max. permissible pressure

Specify in plain text:
PS = ... in bar or PSI

Max. permissible temperature

Specify in plain text:
TS = ... in °C or °F

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".