

Discharge Report

Workspace: 72341-2FSRURegas

Study: FSRU in rigassificazione

Equipment Item: 9R Compressore BOG LD

72341-2FSRURegas\FSRU in rigassificazione\9R Compressore BOG LD

Material	GAS NATURALE	
East	0	m
North	0	m

Scenario (Leak) : 75mm

72341-2FSRURegas\FSRU in rigassificazione\9R Compressore BOG LD\75mm

Weather: Category 2/F

INPUT DATA

Inventory data

Mass in vessel	38,7479	kg
----------------	----------------	----

Stagnation Data (upstream end for long pipe)

Initial pressure (gauge)	7,5	bar
Initial temperature	45	degC
Fluid state	Pressurized gas	

Scenario data

Phase to be released	Vapour	
Hole diameter	75	mm
Discharge coefficient	0,62	fraction

OUTPUT DATA

Mass flow rate	3,96329	kg/s
Release duration	9,77671	s

Orifice or pipe exit data (before atmospheric expansion)

Pressure	4,6402	bar
----------	--------	-----

Temperature	3,65916	degC
Liquid mass fraction	0	fraction
Velocity at vena contracta (at exit for pipe releases)	417,621	m/s
Discharge coefficient	0,62	

Final Data (after atmospheric expansion)

Temperature	21,2178	degC
Liquid mass fraction	0	fraction
Droplet diameter	0	um
Expanded diameter	0,154527	m
Velocity	300	m/s

Weather: Category 5/D

INPUT DATA

Inventory data

Mass in vessel	38,7479	kg
----------------	---------	----

Stagnation Data (upstream end for long pipe)

Initial pressure (gauge)	7,5	bar
Initial temperature	45	degC
Fluid state	Pressurized gas	

Scenario data

Phase to be released	Vapour	
Hole diameter	75	mm
Discharge coefficient	0,62	fraction

OUTPUT DATA

Mass flow rate	3,96329	kg/s
Release duration	9,77671	s

Orifice or pipe exit data (before atmospheric expansion)

Pressure	4,6402	bar
Temperature	3,65916	degC
Liquid mass fraction	0	fraction
Velocity at vena contracta (at exit for pipe releases)	417,621	m/s
Discharge coefficient	0,62	

Final Data (after atmospheric expansion)

Temperature	21,2178	degC
Liquid mass fraction	0	fraction
Droplet diameter	0	um
Expanded diameter	0,154527	m
Velocity	300	m/s

