

HTI 300

STEELE BURNER CONE

HTI 300 S/40 - MV Ø315

| | | |
|---|---|------|
| Maximum output [kW] | | 3500 |
| Minimum output (air/gas modulating) [kW] | | 175 |
| Minimum output (fixed air) [kW] | | 1800 |
| Fuel pressure at maximum capacity [mbar] (measured at P _{1,F} - pag. 2) | Natural gas (8250 kcal/Nm ³) | 40 |
| | LPG (22500 kcal/Nm ³) | |
| Air pressure at maximum capacity [mbar] (measured at P _{1,A} - pag. 2) | Natural gas (8250 kcal/Nm ³) | 38 |
| | LPG (22500 kcal/Nm ³) | |
| Flame length at maximum capacity [mm] (measured from the end of the burner body) | Natural gas (8250 kcal/Nm ³) | 3100 |
| | LPG (22500 kcal/Nm ³) | 3400 |
| Flame speed at maximum capacity [m/s] (with 20% excess of air) | Medium speed | 77 |
| Flame detection | Ionization probe or UV cell | |
| Fuel | Natural gas (LPG and other fuel on request) | |

All information is based on laboratory tests in a neutral pressure chamber. Different conditions and chamber sizes can affect the data.

All information is based on a standard combustor design. Modifications to the combustor will alter performance and pressures.

All data are based on gross calorific values.

All information is based on tests conducted on generally acceptable air and gas piping systems.

Data reported in this technical sheet are subject to change without notice.

Performance data and dimensions are guidelines only and are not binding.

ELCO reserves the right to modify the construction and / or configuration of its products at any time

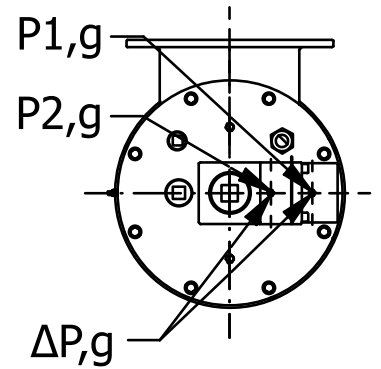
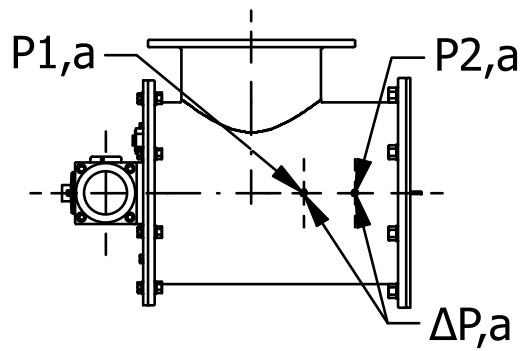
CHARACTERISTICS OF THE BURNER

Fuel 1: NG
 Fuel 1 diaphragm: Ø55

Fuel 2: LPG
 Fuel 2 diaphragm: Ø42

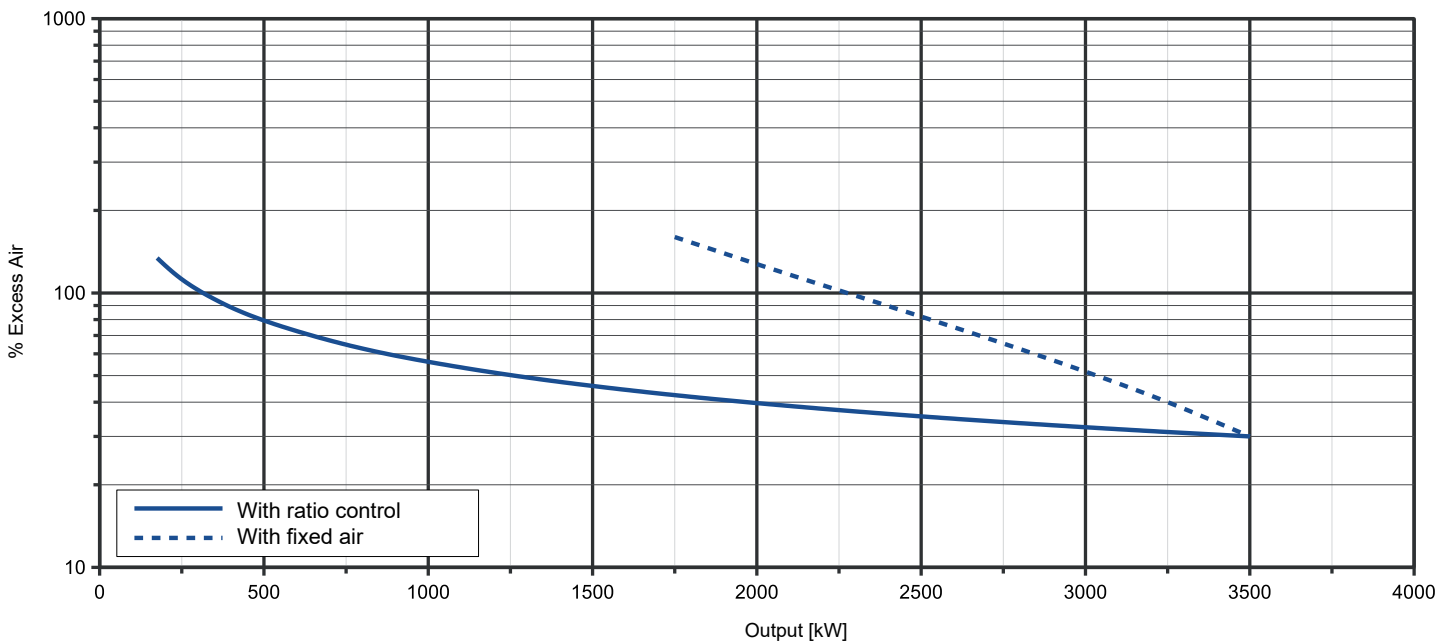
Comburent: Air
 Comburent diaph.: 40%

Stainless steel cone exit: Ø315



OPERATING RANGE

TYPICAL OPERATING RANGE



LEGENDA

Q_F Fuel flow
 Q_A Air flow

$P_{1,F}$ Fuel pressure upstream the diaphragm
 $P_{1,A}$ Air pressure upstream the diaphragm
 $P_{2,F}$ Fuel pressure downstream the diaphragm

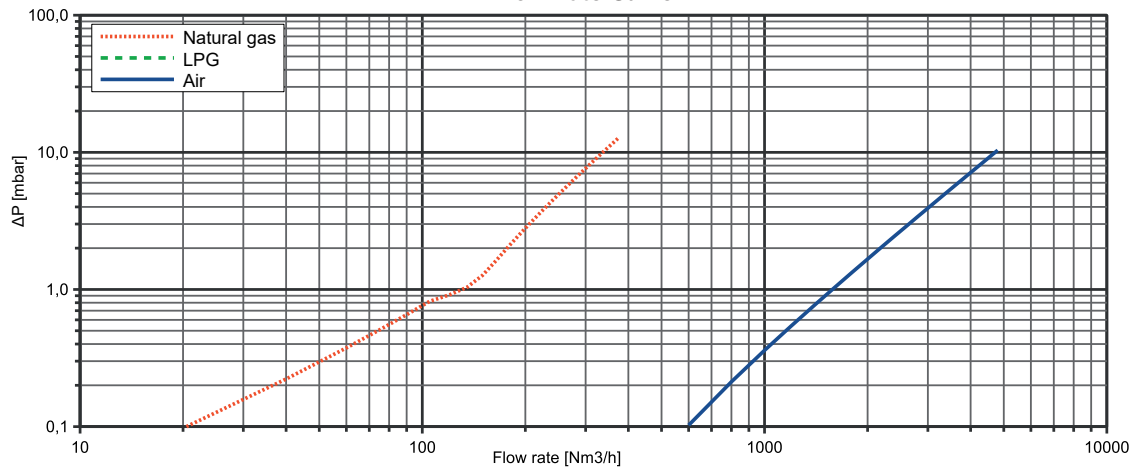
$P_{2,A}$ Air pressure downstream the diaphragm
 ΔP_F Differential fuel pressure between ports 1 and 2
 ΔP_A Differential air pressure between ports 1 and 2

FLOW RATE CURVES

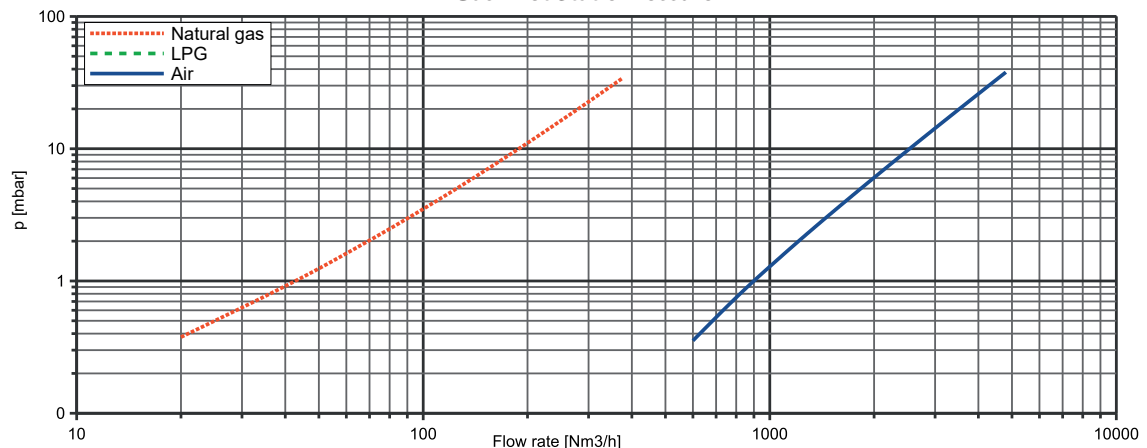
| Q_F [Nm ³ /h] | FUEL | |
|----------------------------|---------------------------------|------------------------------------|
| | $P_{1,F}$ [mbar] Natural gas | ΔP_F [mbar] Natural gas |
| 20 | 0,38 | 0,10 |
| 40 | 0,91 | 0,22 |
| 60 | 1,61 | 0,37 |
| 75 | 2,25 | 0,51 |
| 90 | 2,97 | 0,66 |
| 105 | 3,78 | 0,82 |
| 120 | 4,69 | 0,91 |
| 135 | 5,68 | 1,04 |
| 150 | 6,77 | 1,27 |
| 165 | 7,95 | 1,64 |
| 180 | 9,22 | 2,10 |
| 195 | 10,58 | 2,61 |
| 210 | 12,03 | 3,18 |
| 225 | 13,57 | 3,79 |
| 240 | 15,21 | 4,46 |
| 255 | 16,93 | 5,18 |
| 270 | 18,75 | 5,95 |
| 285 | 20,65 | 6,77 |
| 300 | 22,65 | 7,64 |
| 315 | 24,74 | 8,57 |
| 330 | 26,92 | 9,54 |
| 345 | 29,19 | 10,57 |
| 360 | 31,56 | 11,65 |
| 375 | 34,01 | 12,78 |

| Q_A [Nm ³ /h] | AIR | |
|----------------------------|------------------|---------------------|
| | $P_{1,A}$ [mbar] | ΔP_A [mbar] |
| 600 | 0,35 | 0,10 |
| 800 | 0,75 | 0,21 |
| 1000 | 1,28 | 0,36 |
| 1200 | 1,96 | 0,55 |
| 1400 | 2,77 | 0,77 |
| 1600 | 3,72 | 1,03 |
| 1800 | 4,81 | 1,33 |
| 2000 | 6,04 | 1,67 |
| 2200 | 7,41 | 2,04 |
| 2400 | 8,92 | 2,45 |
| 2600 | 10,57 | 2,90 |
| 2800 | 12,35 | 3,39 |
| 3000 | 14,28 | 3,92 |
| 3200 | 16,34 | 4,48 |
| 3400 | 18,55 | 5,08 |
| 3600 | 20,89 | 5,72 |
| 3800 | 23,37 | 6,40 |
| 4000 | 25,99 | 7,12 |
| 4200 | 28,75 | 7,87 |
| 4400 | 31,65 | 8,66 |
| 4500 | 33,15 | 9,07 |
| 4600 | 34,68 | 9,49 |
| 4700 | 36,26 | 9,92 |
| 4800 | 37,86 | 10,36 |

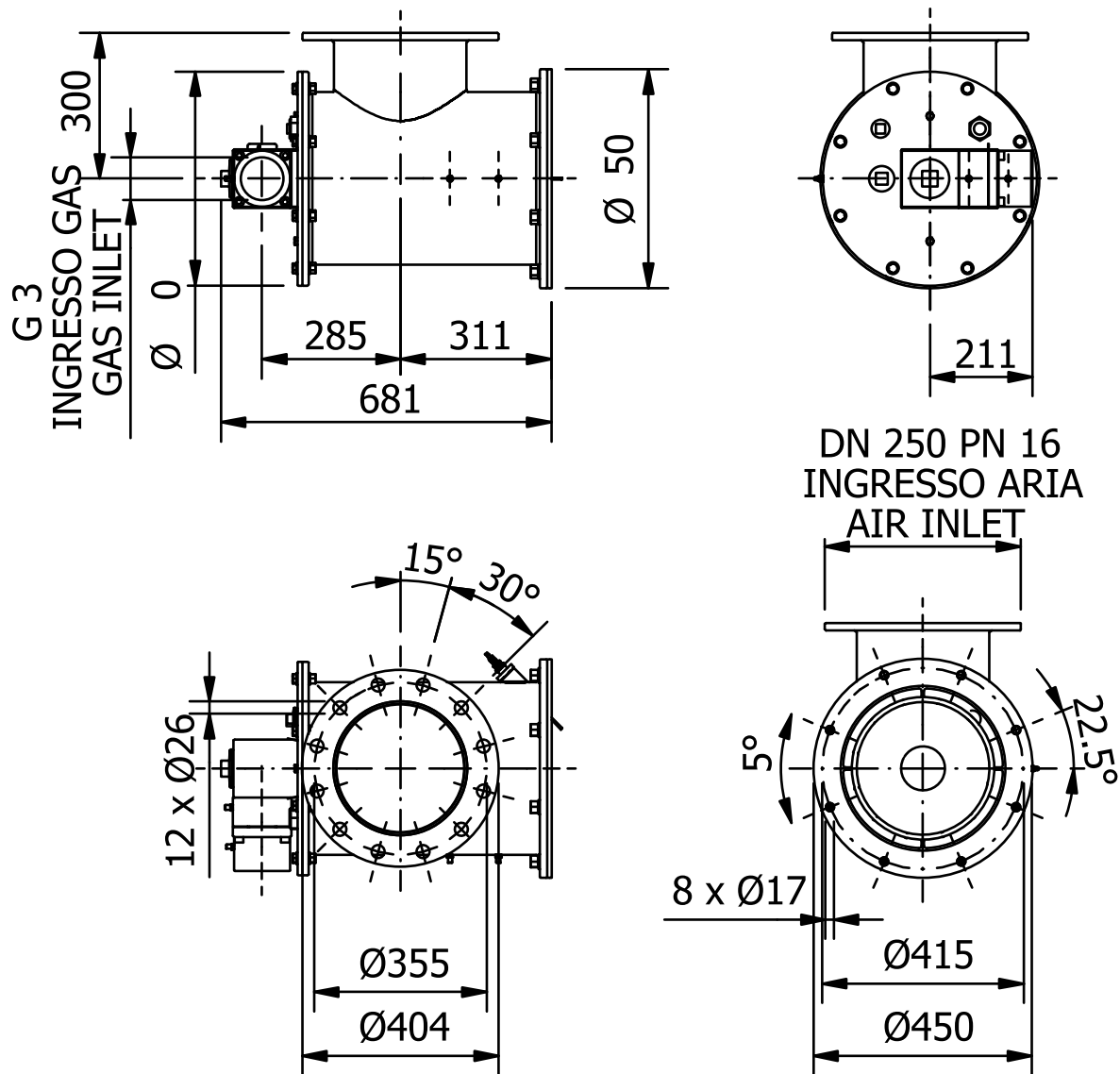
Flow Rate Curve



Gas Inlet Static Pressure



DIMENSIONS [mm]



Steel cone dimensions:

