HE2-Series

High efficiency power clamps conforming to the NAAMS Standard

GLOBAL STANDARD COMPONENTS NAAMS

Patented

Air consumption saving up to 41%

The perfect combination between **functionality** and **efficiency**: same clamping moment, same holding moment, same overall and functional dimensions, same load capacity of a standard clamp with International and NAAMS mounts available.

Technical features

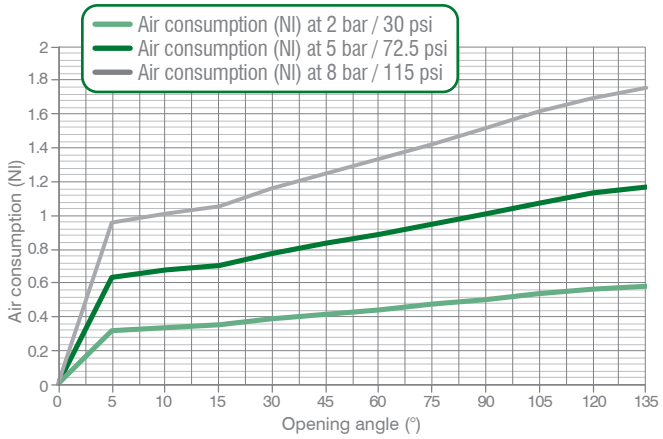
Manual release button to open the linkage when air pressure is removed during setup. **Pneumatic ports on both sides** of the cylinder.

Operating features	
Operating pressure	from 2 to 8 bar / from 30 to 115 psi
Lubrication	all the devices are lubricated for life at the factory. Inline air lubrication isn't required

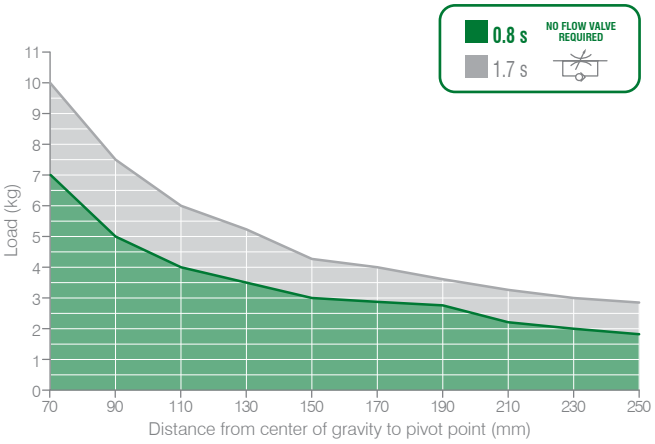
Functional charts

HE2P1E

- **Air consumption**
  Air consumption for complete cycle (opening and closing)
  REV. 00 - 31/03/2015



- **Tooling weight chart**
  5 bar operating pressure – 135° opening angle
  REV. 00 - 17/06/2015



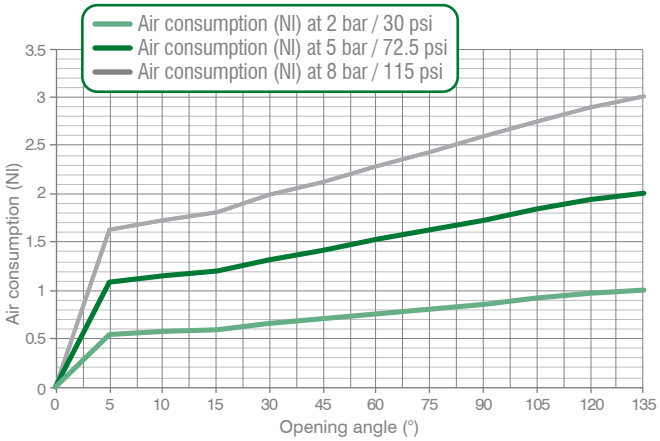
- **Clamping moment (at 5 bar / 72.5 psi)**
  185 N m / 136,44 lb·ft

- **Holding moment**
  800 N m / 590,04 lb·ft

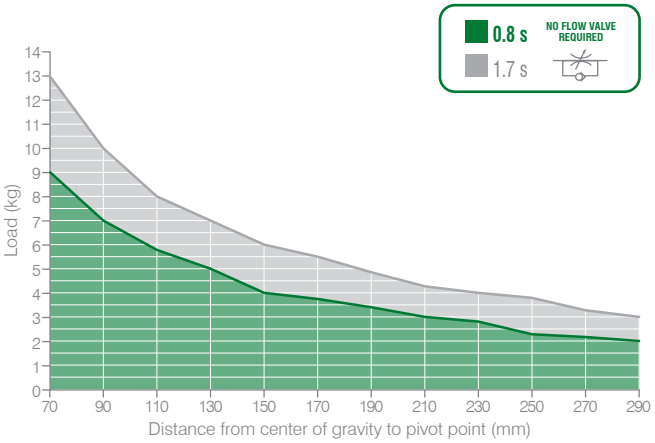
The above data are meant for correct working conditions of the clamp with the same performance level during its life time.
For applications which exceed the above data, please contact our sales representatives.

HE2P2E

- **Air consumption**
  Air consumption for complete cycle (opening and closing)
  REV. 00 - 31/03/2015



- **Tooling weight chart**
  5 bar operating pressure – 135° opening angle
  REV. 00 - 17/06/2015



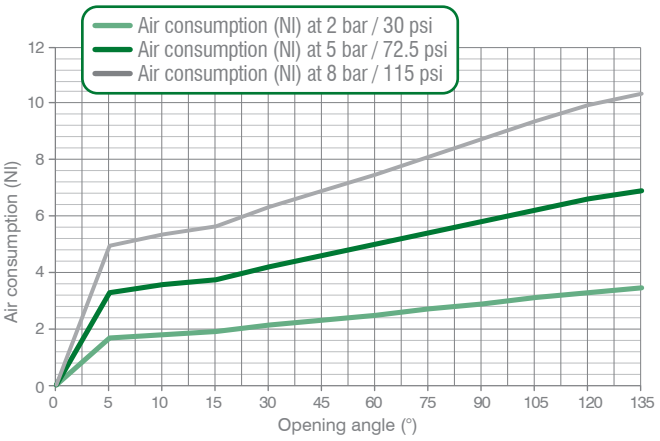
- **Clamping moment (at 5 bar / 72.5 psi)**
  390 N m / 287,64 lb·ft

- **Holding moment**
  1500 N m / 1.106,34 lb·ft

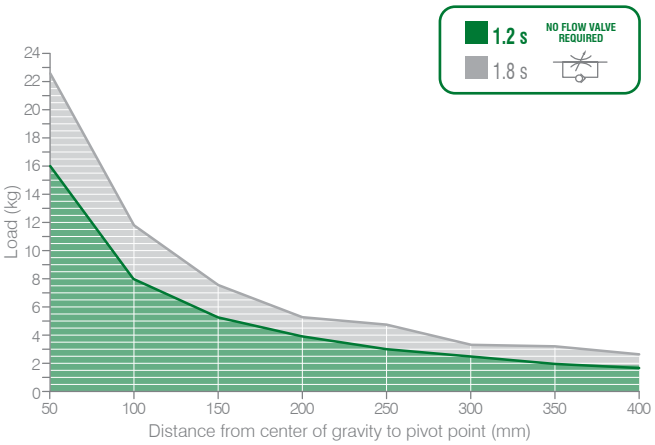
The above data are meant for correct working conditions of the clamp with the same performance level during its life time.
For applications which exceed the above data, please contact our sales representatives.

HE2P3E

- **Air consumption**
  Air consumption for complete cycle (opening and closing)
  REV. 00 - 21/01/2016



- **Tooling weight chart**
  5 bar operating pressure – 135° opening angle
  REV. 00 - 17/06/2015



- **Clamping moment (at 5 bar / 72.5 psi)**
  850 N m / 626,92 lb·ft

- **Holding moment**
  2500 N m / 1.843,90 lb·ft

The above data are meant for correct working conditions of the clamp with the same performance level during its life time.
For applications which exceed the above data, please contact our sales representatives.

HE2-Series / Ordering string

HE2-Series

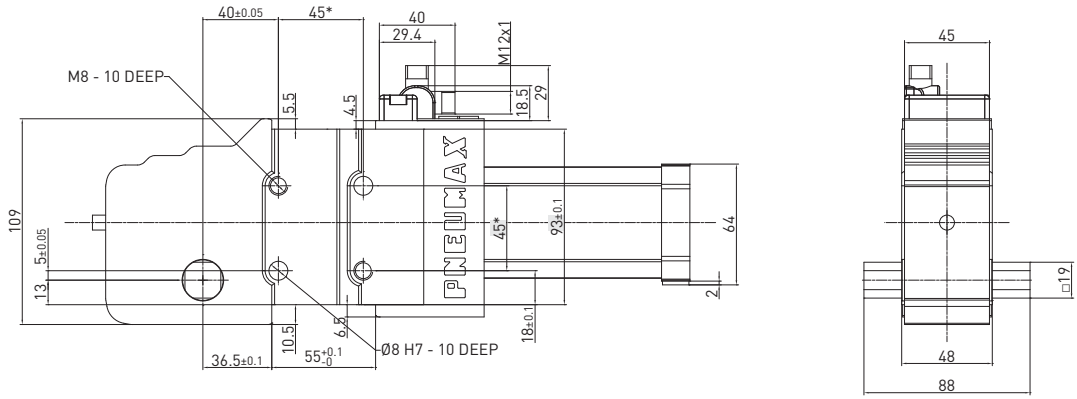
HE	2	P	2	E	G	L

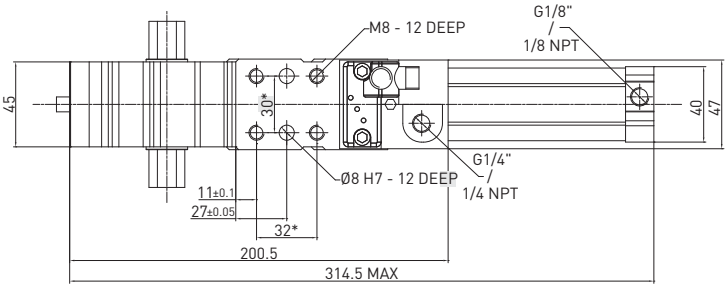
HE	**VERSION**	**HE** = high efficiency clamp
2	**MOUNTING PATTERN**	**2** = NAAMS Standard
P	**OPERATION**	**P** = pneumatic
2	**SIZE**	**1** = housing size 50 / cylinder Ø 40 mm **2** = housing size 63 / cylinder Ø 50 mm **3** = housing size 80 / cylinder Ø 63 mm
E	**SENSOR**	**E** = electronic sensor with M12 swivel connector - PNP **A** = electronic sensor with M12 swivel connector - NPN **N** = no sensor **B** = electronic sensor with M8 swivel connector - PNP
G	**PORTS**	**G** = G thread – BSPP **N** = NPT
L	**SHAFT OUTPUT**	= dual output **L** = single output - LEFT **R** = single output - RIGHT

Please see the charts in the datasheets
for arm position as well as for max. opening angle.
NAAMS clamping arms to be ordered separately
*for size 3 > 20 mm offset

HE2P1E / **High Efficiency clamp** - NAAMS Std - Housing size 50/cylinder Ø 40 mm

WEIGHT 2.5 kg





* DIMENSIONAL TOLERANCE
FOR DOWEL HOLES: ±0.02

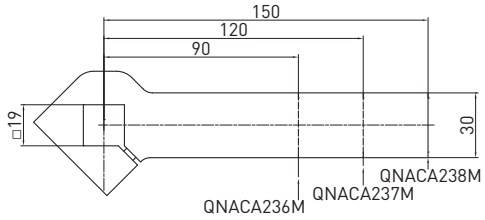
DIMENSIONAL TOLERANCE
FOR THREADED HOLES: ±0.1

REV. 02 - 29/03/2019

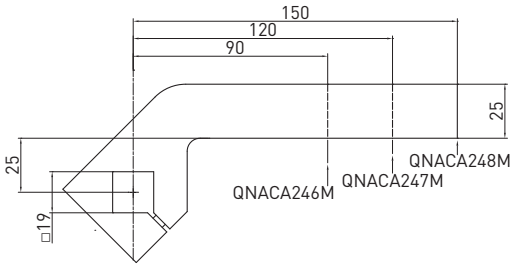
Clamping arms / 19 mm shaft - NAAMS Std

REV 03 - 29/03/2019

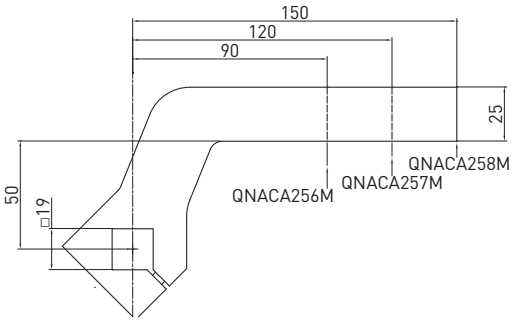
0 mm OFFSET

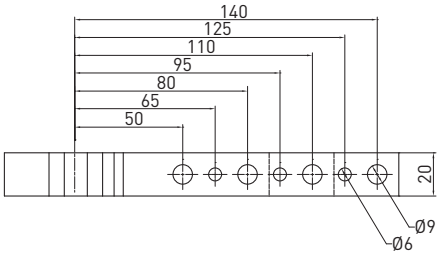


25 mm OFFSET



50 mm OFFSET





19 mm shaft – 0 mm offset

Part no.	Material	Length (mm)	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
QNACA236M	**Steel**	**90**	**0.4**	**135°**	**135°**	**135°**	**135°**
QNACA237M	**Steel**	**120**	**0.49**	**135°**	**135°**	**135°**	**135°**
QNACA238M	**Steel**	**150**	**0.58**	**135°**	**135°**	**135°**	**135°**

Screws: M6x25 **Tightening torque:** 10 N m / 7.37 lb·ft

19 mm shaft – 25 mm offset

Part no.	Material	Length (mm)	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
QNACA246M	**Steel**	**90**	**0.44**	**135°**	**135°**	**135°**	**135°**
QNACA247M	**Steel**	**120**	**0.52**	**135°**	**135°**	**135°**	**135°**
QNACA248M	**Steel**	**150**	**0.6**	**135°**	**135°**	**135°**	**135°**

Screws: M6x25 **Tightening torque:** 10 N m / 7.37 lb·ft

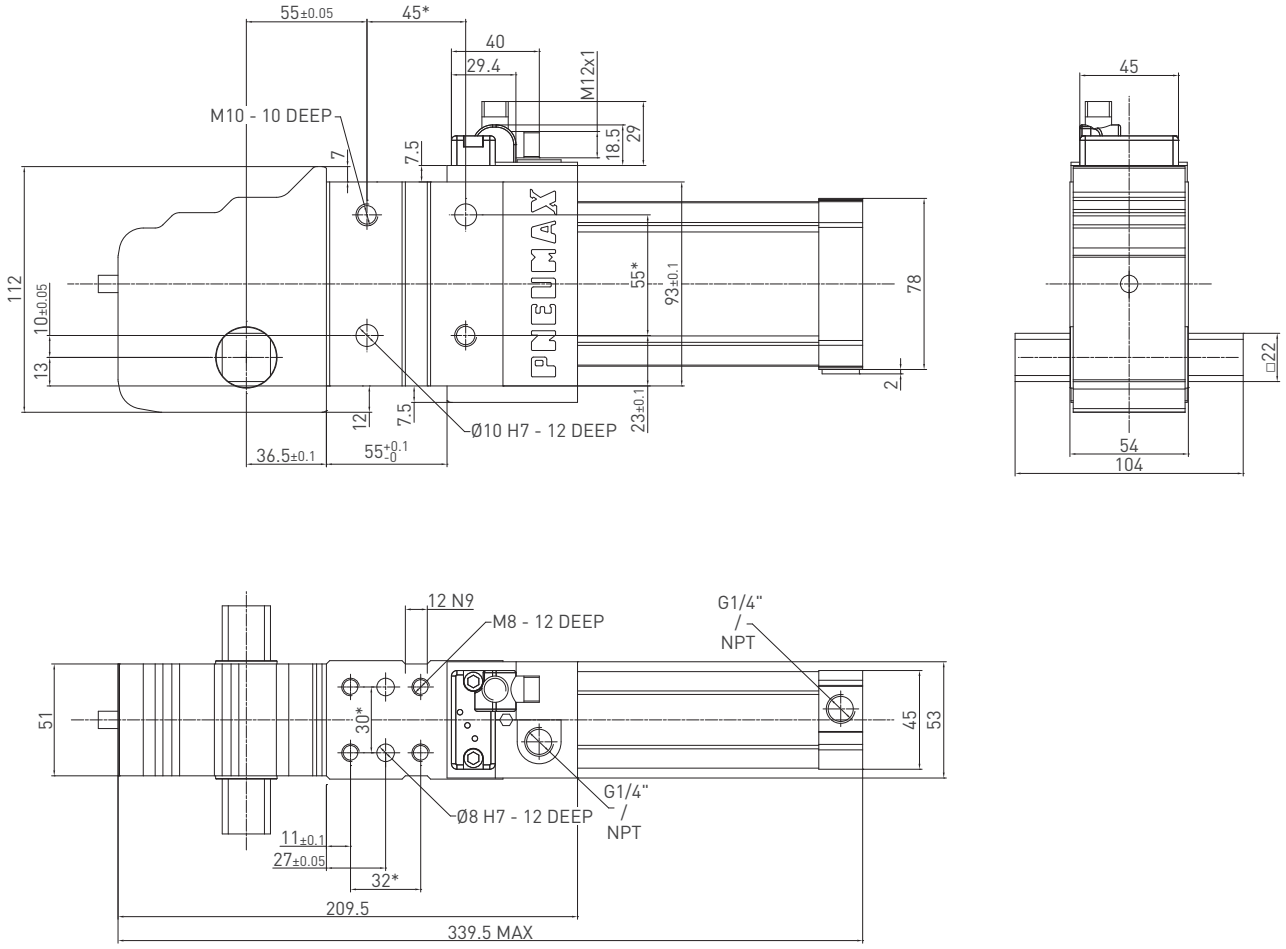
19 mm shaft – 50 mm offset

Part no.	Material	Length (mm)	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
QNACA256M	**Steel**	**90**	**0.52**	**135°**	**135°**	**135°**	**135°**
QNACA257M	**Steel**	**120**	**0.6**	**135°**	**135°**	**135°**	**135°**
QNACA258M	**Steel**	**150**	**0.68**	**135°**	**135°**	**135°**	**135°**

Screws: M6x25 **Tightening torque:** 10 N m / 7.37 lb·ft

HE2P2E / **High efficiency clamp** - NAAMS Std - Housing size 63 / cylinder Ø 50 mm

WEIGHT 2.8 kg



* DIMENSIONAL TOLERANCE FOR DOWEL HOLES: ±0.02

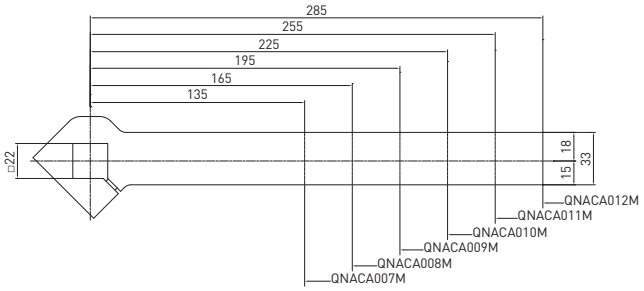
DIMENSIONAL TOLERANCE FOR THREADED HOLES: ±0.1

REV. 00 - 02/10/2015

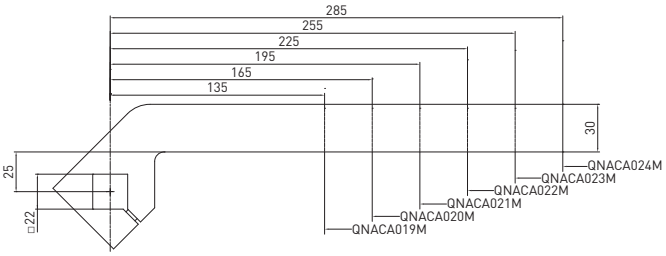
Clamping arms / 22 mm shaft - NAAMS Std

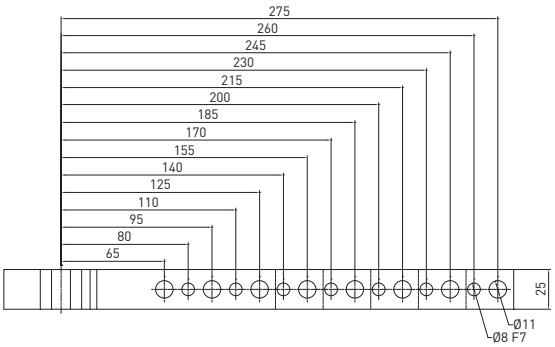
REV 02 - 29/03/2019

0 mm OFFSET



25 mm OFFSET





22 mm shaft – 0 mm offset

Part no.	Material	Length (mm)	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
QNACA007M	**Steel**	**135**	**0.72**	**135°**	**135°**	**135°**	**135°**
QNACA008M	**Steel**	**165**	**0.83**	**135°**	**135°**	**135°**	**135°**
QNACA009M	**Steel**	**195**	**0.94**	**135°**	**135°**	**135°**	**135°**
QNACA010M	**Steel**	**225**	**1.05**	**135°**	**135°**	**135°**	**135°**
QNACA011M	**Steel**	**255**	**1.16**	**135°**	**135°**	**135°**	**135°**
QNACA012M	**Steel**	**285**	**1.28**	**135°**	**135°**	**135°**	**135°**

Screws: M8x25 **Tightening torque:** 25 N m / 18.43 lb ft

22 mm shaft – 25 mm offset

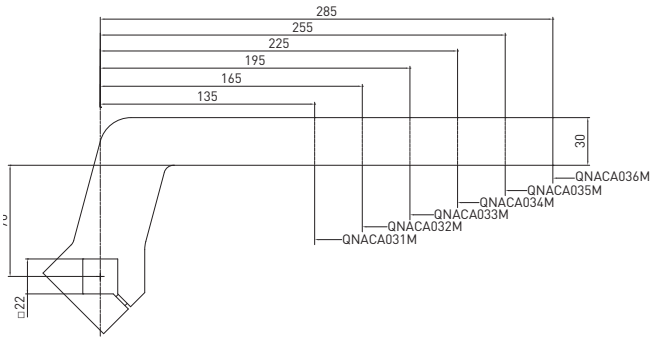
Part no.	Material	Length (mm)	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
QNACA019M	**Steel**	**135**	**0.84**	**135°**	**135°**	**135°**	**135°**
QNACA020M	**Steel**	**165**	**0.95**	**135°**	**135°**	**135°**	**135°**
QNACA021M	**Steel**	**195**	**1.05**	**135°**	**135°**	**135°**	**135°**
QNACA022M	**Steel**	**225**	**1.16**	**135°**	**135°**	**135°**	**135°**
QNACA023M	**Steel**	**255**	**1.26**	**135°**	**135°**	**135°**	**135°**
QNACA024M	**Steel**	**285**	**1.37**	**135°**	**135°**	**135°**	**135°**

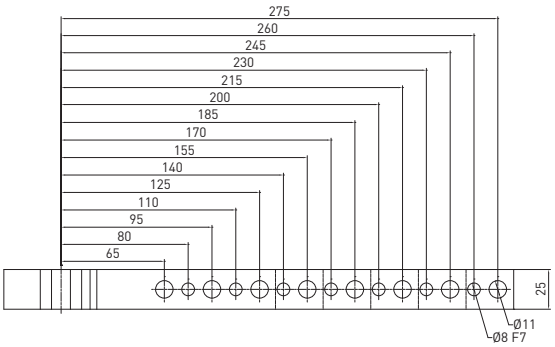
Screws: M8x25 **Tightening torque:** 25 N m / 18.43 lb ft

Clamping arms / 22 mm shaft - NAAMS Std

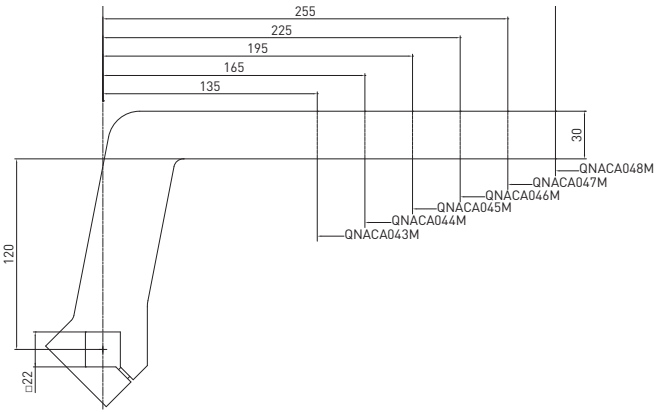
REV. 01 - 31/07/2015

70 mm OFFSET





120 mm OFFSET



22 mm shaft – 70 mm offset

Part no.	Material	Length (mm)	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
QNACA031M	**Steel**	**135**	**1.05**	**135°**	**135°**	**135°**	**135°**
QNACA032M	**Steel**	**165**	**1.16**	**135°**	**135°**	**135°**	**135°**
QNACA033M	**Steel**	**195**	**1.27**	**135°**	**135°**	**135°**	**135°**
QNACA034M	**Steel**	**225**	**1.38**	**135°**	**135°**	**135°**	**135°**
QNACA035M	**Steel**	**255**	**1.49**	**135°**	**135°**	**135°**	**135°**
QNACA036M	**Steel**	**285**	**1.6**	**135°**	**135°**	**135°**	**135°**

Screws: M8X25 **Tightening torque:** 25 N m / 18.43 lb ft

22 mm shaft – 120 mm offset

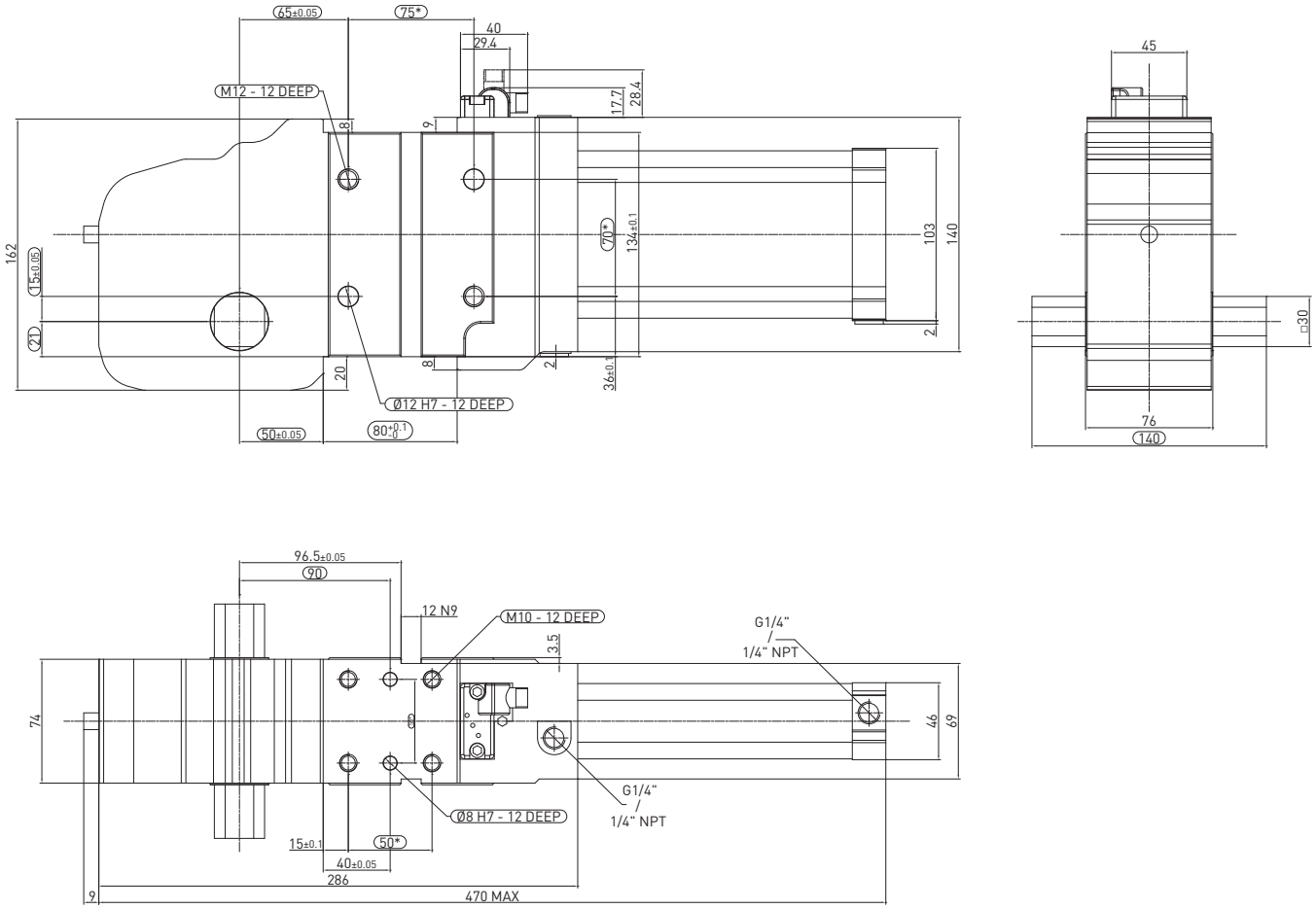
Part no.	Material	Length (mm)	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
QNACA043M	**Steel**	**135**	**1.27**	**135°**	**135°**	**135°**	**135°**
QNACA044M	**Steel**	**165**	**1.37**	**135°**	**135°**	**135°**	**135°**
QNACA045M	**Steel**	**195**	**1.48**	**135°**	**135°**	**135°**	**135°**
QNACA046M	**Steel**	**225**	**1.58**	**135°**	**135°**	**135°**	**135°**
QNACA047M	**Steel**	**255**	**1.69**	**135°**	**135°**	**135°**	**135°**
QNACA048M	**Steel**	**285**	**1.8**	**135°**	**135°**	**135°**	**135°**

Screws: M8X25 **Tightening torque:** 25 N m / 18.43 lb ft

CLAMPING

HE2P3E / **High Efficiency clamp** - NAAMS Std - Housing size 80 / cylinder Ø 63 mm

WEIGHT 7.76 kg



* DIMENSIONAL TOLERANCE
FOR DOWEL HOLES: ±0.02

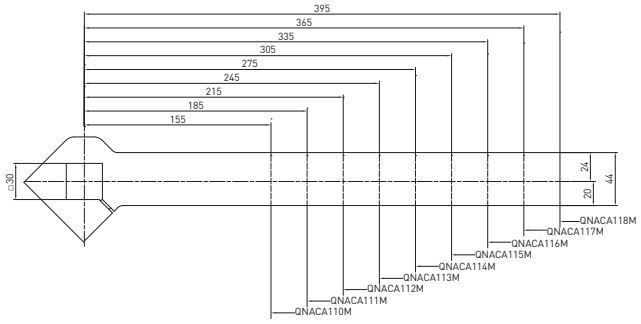
DIMENSIONAL TOLERANCE
FOR THREADED HOLES: ±0.1

REV. 00 - 20/10/2015

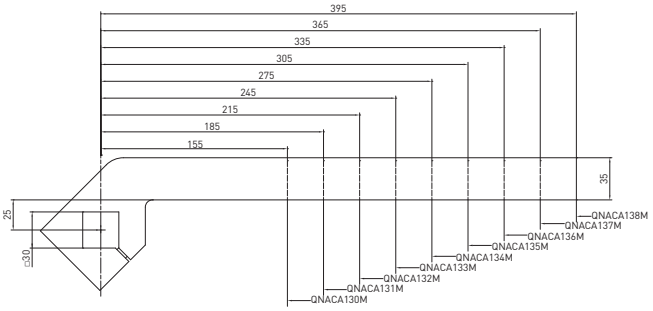
Clamping arms / 30 mm shaft - NAAMS Std

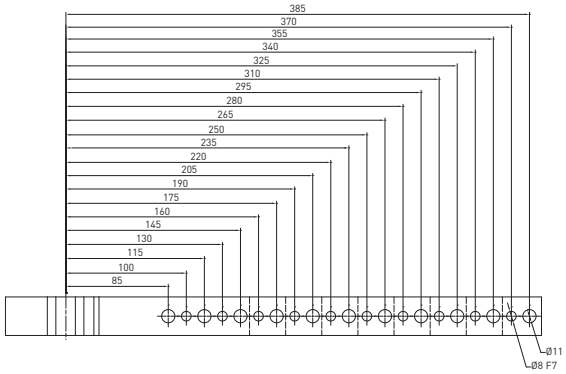
REV. 01 - 31/03/2015

0 mm OFFSET



25 mm OFFSET





30 mm shaft – 0 mm offset

Part no.	Material	Length (mm)	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
QNACA110M	**Steel**	**155**	**1.41**	**135°**	**135°**	**135°**	**135°**
QNACA111M	**Steel**	**185**	**1.58**	**135°**	**135°**	**135°**	**135°**
QNACA112M	**Steel**	**215**	**1.76**	**135°**	**135°**	**135°**	**135°**
QNACA113M	**Steel**	**245**	**1.93**	**135°**	**135°**	**135°**	**135°**
QNACA114M	**Steel**	**275**	**2.1**	**135°**	**135°**	**135°**	**135°**
QNACA115M	**Steel**	**305**	**2.27**	**135°**	**135°**	**135°**	**135°**
QNACA116M	**Steel**	**335**	**2.45**	**135°**	**135°**	**135°**	**135°**
QNACA117M	**Steel**	**365**	**2.62**	**135°**	**135°**	**135°**	**135°**
QNACA118M	**Steel**	**395**	**2.8**	**135°**	**135°**	**135°**	**135°**

Screws: M10x40 **Tightening torque:** 35 N m / 25.81 lb ft

30 mm shaft – 25 mm offset

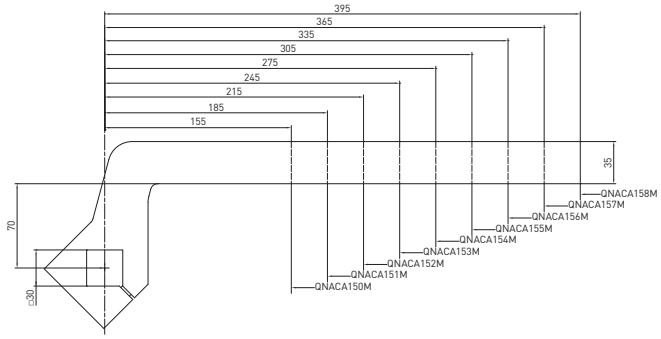
Part no.	Material	Length (mm)	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
QNACA130M	**Steel**	**155**	**1.24**	**135°**	**135°**	**135°**	**135°**
QNACA131M	**Steel**	**185**	**1.39**	**135°**	**135°**	**135°**	**135°**
QNACA132M	**Steel**	**215**	**1.54**	**135°**	**135°**	**135°**	**135°**
QNACA133M	**Steel**	**245**	**1.69**	**135°**	**135°**	**135°**	**135°**
QNACA134M	**Steel**	**275**	**1.84**	**135°**	**135°**	**135°**	**135°**
QNACA135M	**Steel**	**305**	**2**	**135°**	**135°**	**135°**	**135°**
QNACA136M	**Steel**	**335**	**2.14**	**135°**	**135°**	**135°**	**135°**
QNACA137M	**Steel**	**365**	**2.29**	**135°**	**135°**	**135°**	**135°**
QNACA138M	**Steel**	**395**	**2.45**	**135°**	**135°**	**135°**	**135°**

Screws: M10x40 **Tightening torque:** 35 N m / 25.81 lb ft

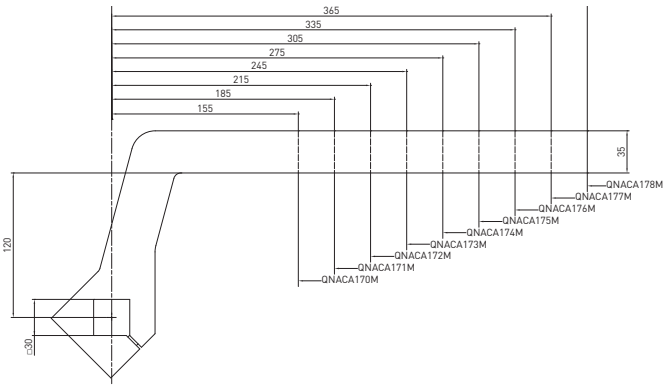
Clamping arms / 30 mm shaft - NAAMS Std

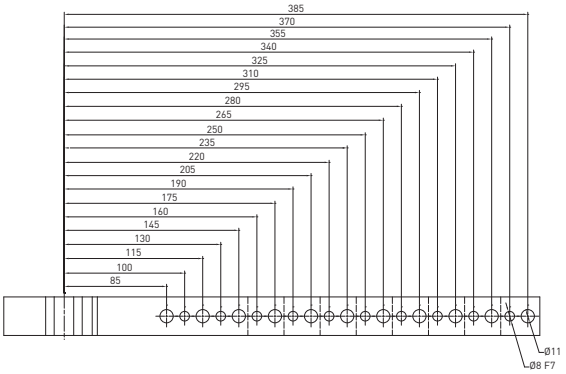
REV. 01 - 31/03/2015

70 mm OFFSET



120 mm OFFSET





30 mm shaft – 70 mm offset

Part no.	Material	Length (mm)	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
QNACA150M	Steel	155	1.7	135°	135°	135°	135°
QNACA151M	Steel	185	1.85	135°	135°	135°	135°
QNACA152M	Steel	215	2	135°	135°	135°	135°
QNACA153M	Steel	245	2.15	135°	135°	135°	135°
QNACA154M	Steel	275	2.3	135°	135°	135°	135°
QNACA155M	Steel	305	2.45	135°	135°	135°	135°
QNACA156M	Steel	335	2.6	135°	135°	135°	135°
QNACA157M	Steel	365	2.76	135°	135°	135°	135°
QNACA158M	Steel	395	2.92	135°	135°	135°	135°

Screws: M10x40 **Tightening torque:** 35 N m / 25.81 lb ft

30 mm shaft – 120 mm offset

Part no.	Material	Length (mm)	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
QNACA170M	Steel	155	1.97	135°	135°	135°	135°
QNACA171M	Steel	185	2.12	135°	135°	135°	135°
QNACA172M	Steel	215	2.27	135°	135°	135°	135°
QNACA173M	Steel	245	2.42	135°	135°	135°	135°
QNACA174M	Steel	275	2.57	135°	135°	135°	135°
QNACA175M	Steel	305	2.72	135°	135°	135°	135°
QNACA176M	Steel	335	2.87	135°	135°	135°	135°
QNACA177M	Steel	365	3.02	135°	135°	135°	135°
QNACA178M	Steel	395	3.19	135°	135°	135°	135°

Screws: M10x40 **Tightening torque:** 35 N m / 25.81 lb ft