

HE1-Series

High Efficiency power clamps International mount

INTERNATIONAL
MOUNT



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

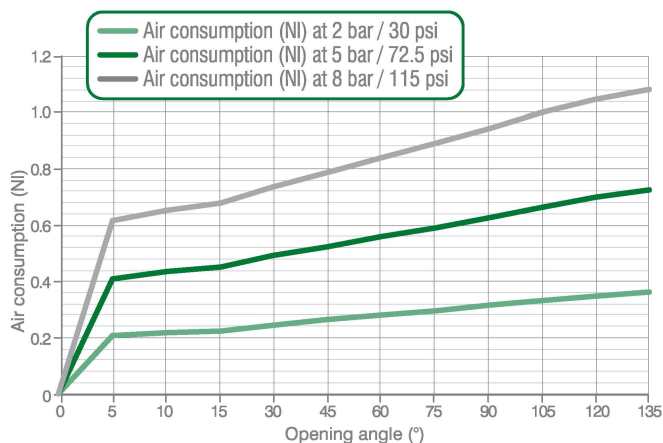
Operating pressure	from 2 to 8 bar / from 30 to 115 psi
Lubrication	all the devices are lubricated for life at the factory. Inline air lubrication isn't required

Functional charts

HE1P0E

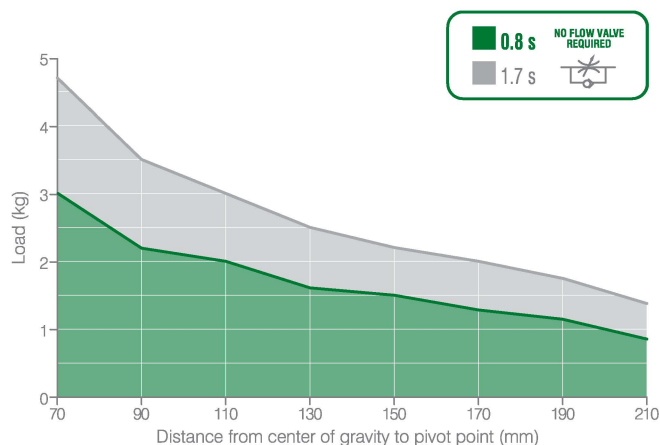
• Air consumption

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)

130 N m / 95,88 lb-ft

• Holding moment

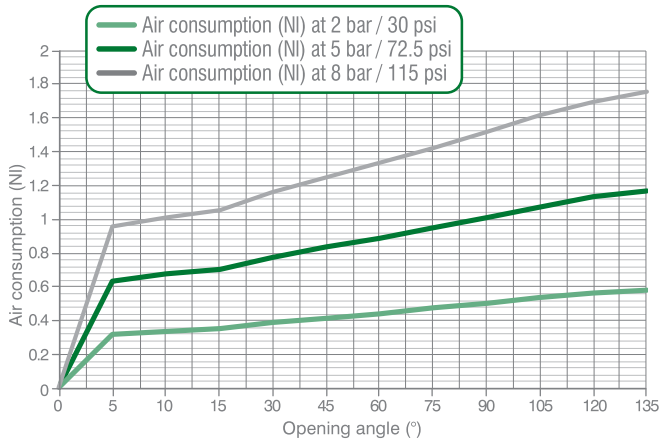
380 N m / 280,27 lb-ft

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.

HE1P1E

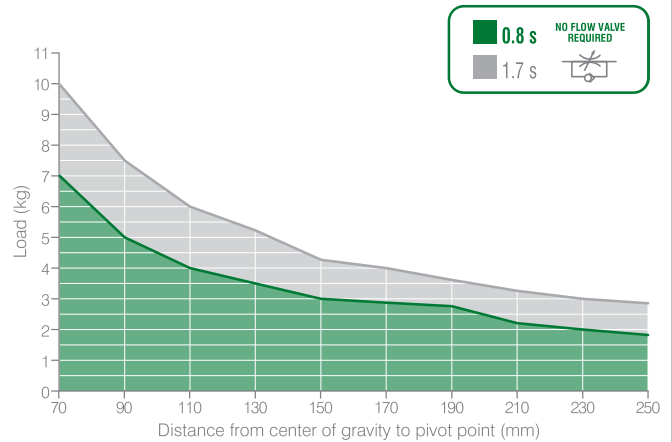
• Air consumption

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

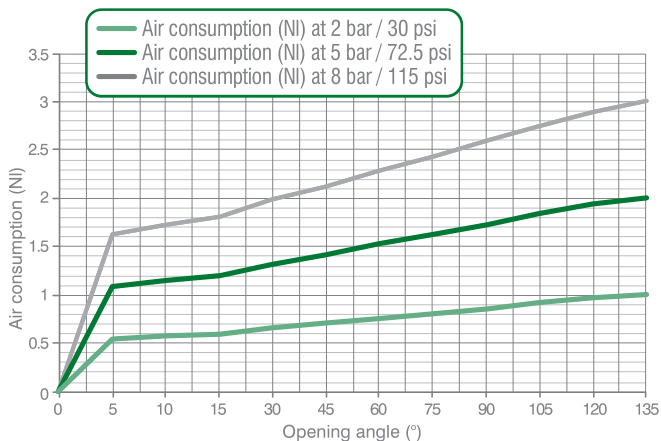
800 N m / 590,04 lb·ft

The above data are meant for correct working conditions of the clamp with the same performance level during its life time.
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HE1P2E

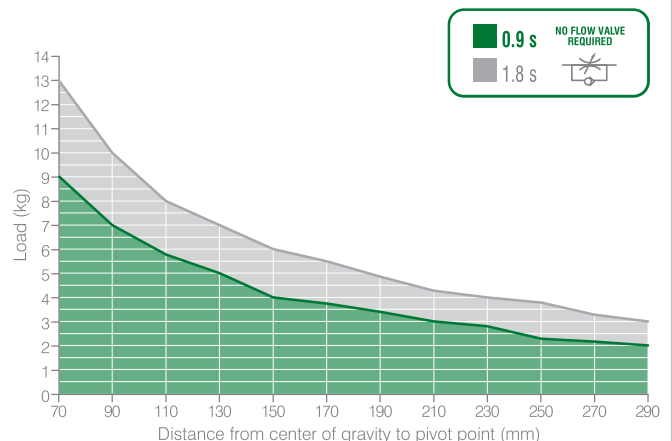
• Air consumption

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)

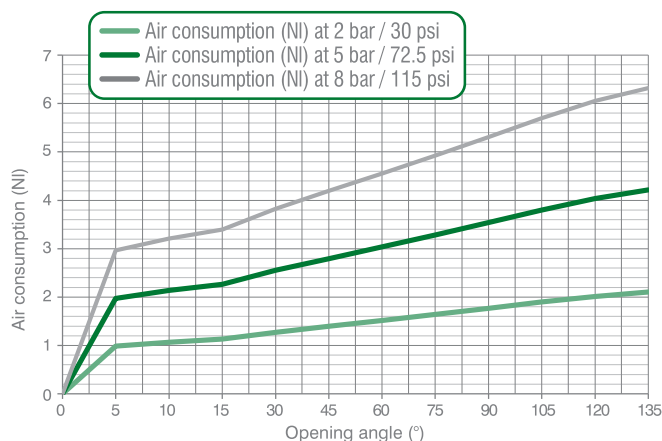
390 N m / 287,64 lb·ft

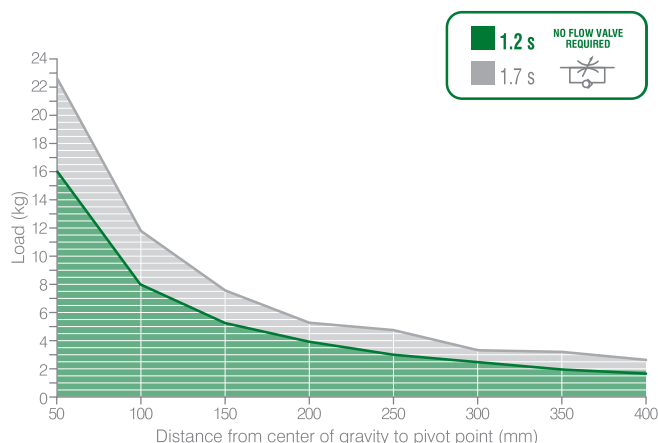
• Holding moment

1500 N m / 1.106,34 lb·ft

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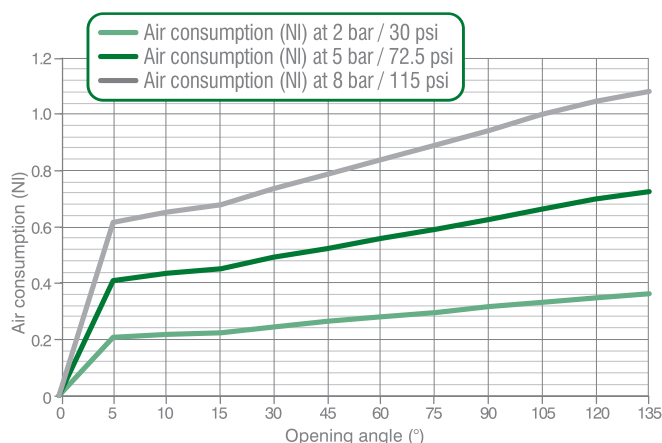
HE1-Series / Functional charts (continued)
HE1P3E
• Air consumption

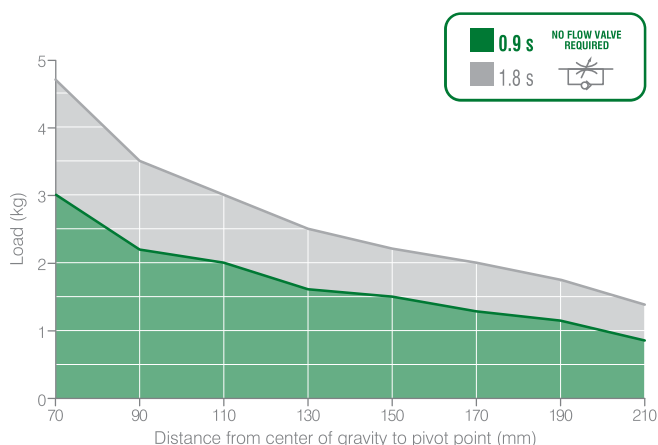
 Air consumption for complete cycle (opening and closing)
REV. 01 - 17/09/2024

• 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 / 1843,90 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.

HE1P4E
• 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)
130 N m / 95,88 lb-ft
• Holding moment
380 N m / 280,27 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.

Ordering string

HE1-Series

HE 1 P 1 E G 1 A 01

HE	VERSION	HE = high efficiency clamp	
1	MOUNTING PATTERN	1 = International mount	
P	OPERATION	P = pneumatic	
1	SIZE	0 = housing size 40 / cylinder Ø 32 mm 2 = housing size 63 / cylinder Ø 50 mm 1 = housing size 50 / cylinder Ø 40 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	
1	ARM MOUNT	1 =  2 =  3 =  4 = 	
A	ARM MATERIAL	A = aluminum S = steel	
01	CLAMP ARM TYPE	01 = wishbone, central, 15 mm offset* 04 = wishbone, central, 45 mm offset 02 = wishbone, right, 15 mm offset* 05 = wishbone, right, 45 mm offset 03 = wishbone, left, 15 mm offset* 06 = wishbone, left, 45 mm offset	

* for size 80 mm > 20 mm offset

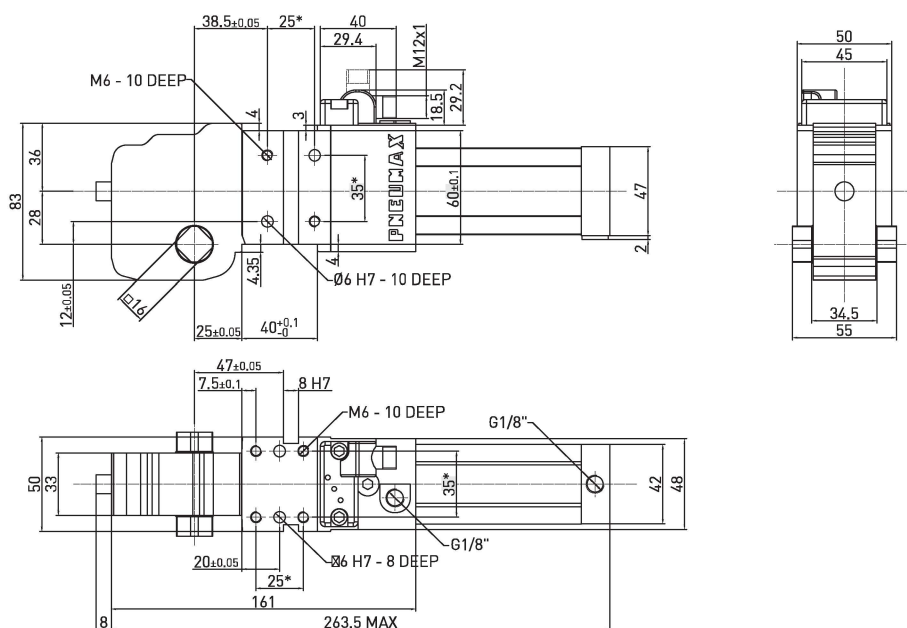
HE1-Series

HE 1 P 4 E G 1 A 54

HE	VERSION	HE = high efficiency clamp	
1	MOUNTING PATTERN	1 = International mount	
P	OPERATION	P = pneumatic	
4	SIZE	4 = housing size 40 / cylinder Ø 32 mm Mounting pattern interchangeable to 50 and 63 mm bore clamps	
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	
1	ARM MOUNT	1 =  2 =  3 =  4 = 	
A	ARM MATERIAL	A = aluminum	
54	CLAMP ARM TYPE	54 = wishbone, central, 45 mm offset 55 = wishbone, right, 45 mm offset 56 = wishbone, left, 45 mm offset	

HE1P0E / High Efficiency clamp - International mount - Housing size 40 / cylinder Ø 32 mm

WEIGHT 1.36 kg



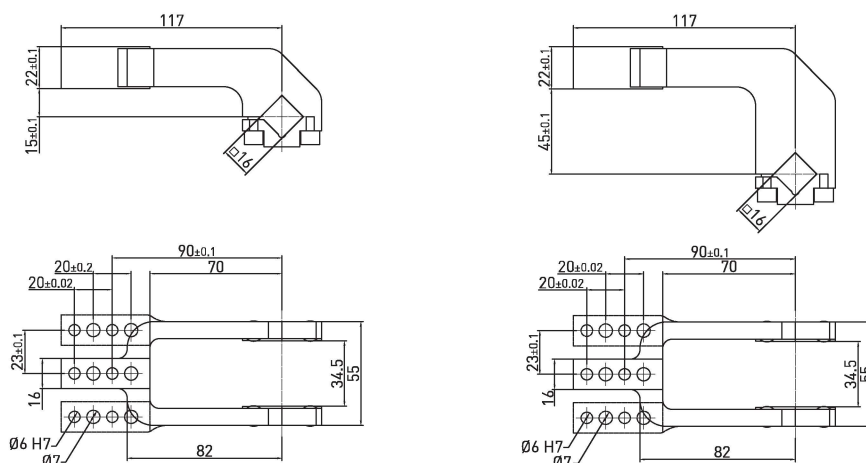
* DIMENSIONAL TOLERANCE
FOR DOWEL HOLES: ± 0.02

DIMENSIONAL TOLERANCE
FOR THREADED HOLES: ± 0.1

REV. 00 - 02/10/2015

Clamping arms / 16 mm shaft for clamps' size 40 mm

REV. 02 - 07/10/2015



16 mm shaft – 15 mm offset

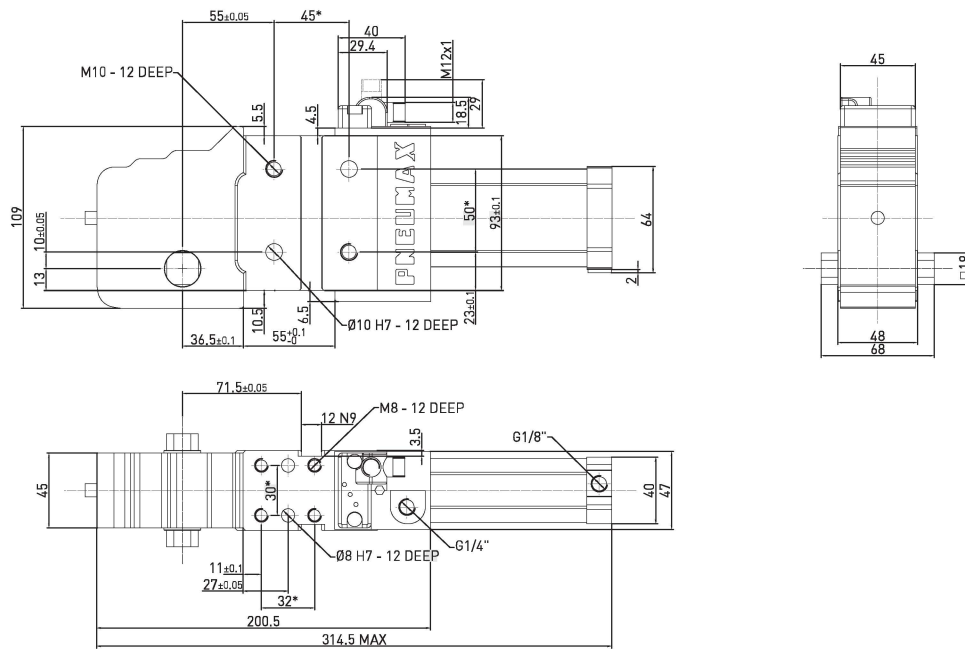
Part no.	Material	Version	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
B1601	Aluminum	Central	0.24	135°	135°	N/A	45°
Q1601	Steel	Central	0.44	135°	135°	N/A	45°
B1602	Aluminum	Right	0.24	135°	135°	N/A	45°
Q1602	Steel	Right	0.46	135°	135°	N/A	45°
B1603	Aluminum	Left	0.24	135°	135°	N/A	45°
Q1603	Steel	Left	0.46	135°	135°	N/A	45°

Screws: M6x20 **Tightening torque:** 10 N m / 7.37 lb ft

16 mm shaft – 45 mm offset

Part no.	Material	Version	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
B1604	Aluminum	Central	0.3	135°	135°	N/A	45°
Q1604	Steel	Central	0.55	135°	135°	N/A	45°
B1605	Aluminum	Right	0.3	135°	135°	N/A	45°
Q1605	Steel	Right	0.57	135°	135°	N/A	45°
B1606	Aluminum	Left	0.3	135°	135°	N/A	45°
Q1606	Steel	Left	0.57	135°	135°	N/A	45°

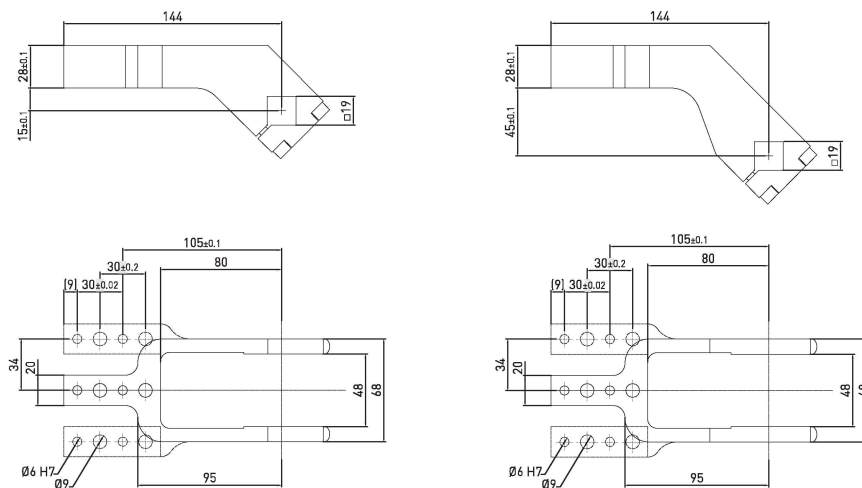
Screws: M6x20 Tightening torque: 10 N m / 7.37 lb ft

HE1P1E / High Efficiency clamp - International mount - Housing size 50 / cylinder Ø 40 mm**WEIGHT 2.53 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 for clamps' size 50 mm

REV. 01 - 08/02/2019

**19 mm shaft – 15 mm offset**

Part no.	Material	Version	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
B1901	Aluminum	Central	0.41	135°	115°	135°	80°
Q1901	Steel	Central	0.71	135°	115°	135°	80°
B1902	Aluminum	Right	0.43	135°	115°	135°	80°
Q1902	Steel	Right	0.79	135°	115°	135°	80°
B1903	Aluminum	Left	0.43	135°	115°	135°	80°
Q1903	Steel	Left	0.79	135°	115°	135°	80°

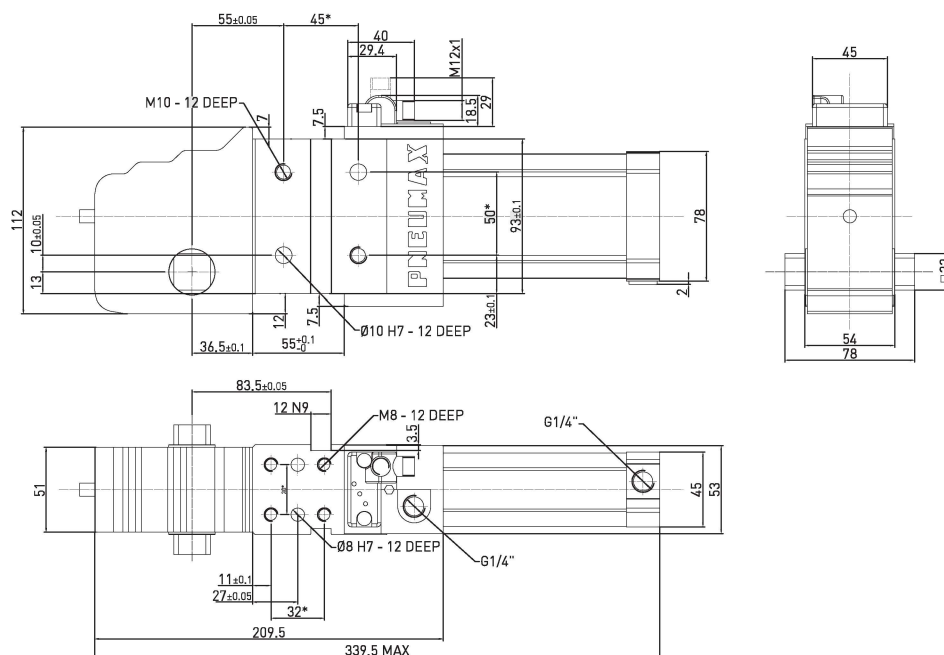
Screws: M6x25 Tightening torque: 10 N m

19 mm shaft – 45 mm offset

Part no.	Material	Version	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
B1904	Aluminum	Central	0.45	135°	135°	135°	80°
Q1904	Steel	Central	0.77	135°	135°	135°	80°
B1905	Aluminum	Right	0.46	135°	135°	135°	80°
Q1905	Steel	Right	0.81	135°	135°	135°	80°
B1906	Aluminum	Left	0.46	135°	135°	135°	80°
Q1906	Steel	Left	0.81	135°	135°	135°	80°

Screws: M6x25 Tightening torque: 10 N m

HE1P2E / High Efficiency clamp - International mount - Housing size 63 / cylinder Ø 50 mm

WEIGHT 3.3 kg


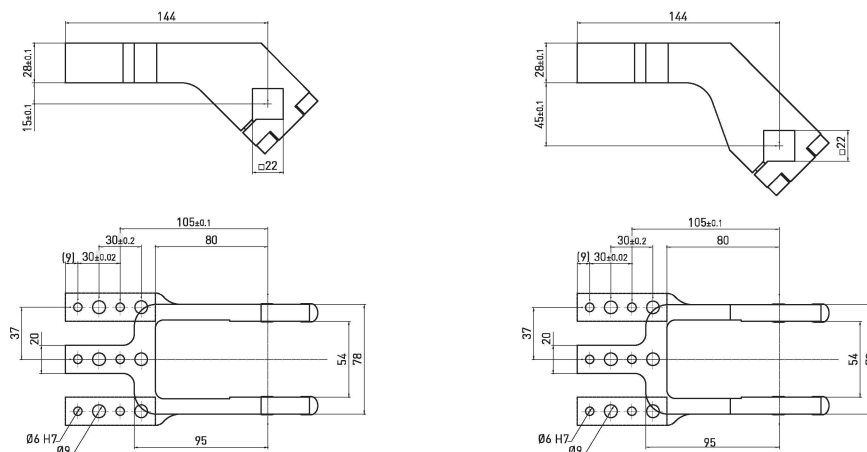
* DIMENSIONAL TOLERANCE
FOR DOWEL HOLES: ±0.02

DIMENSIONAL TOLERANCE
FOR THREADED HOLES: ±0.1

REV. 00 - 31/03/2015

Clamping arms / 22 mm shaft

REV. 01 - 08/02/2019



22 mm shaft – 15 mm offset

Part no.	Material	Version	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
B2201	Aluminum	Central	0.52	135°	115°	135°	80°
Q2201	Steel	Central	0.9	135°	115°	135°	80°
B2202	Aluminum	Right	0.54	135°	115°	135°	80°
Q2202	Steel	Right	0.93	135°	115°	135°	80°
B2203	Aluminum	Left	0.54	135°	115°	135°	80°
Q2203	Steel	Left	0.93	135°	115°	135°	80°

Screws: M8x25 Tightening torque: 25 N m

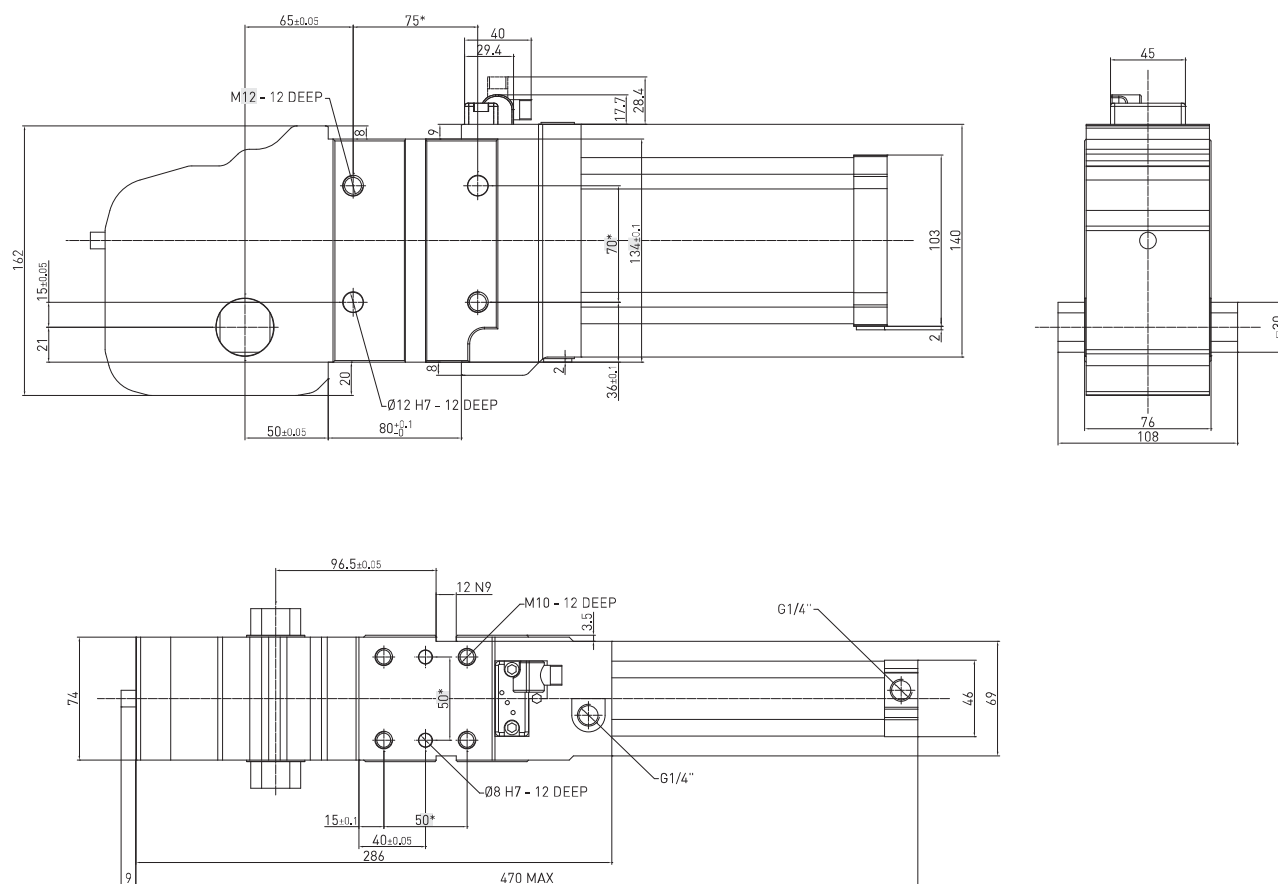
22 mm shaft – 45 mm offset

Part no.	Material	Version	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
B2204	Aluminum	Central	0.57	135°	135°	135°	75°
Q2204	Steel	Central	0.98	135°	135°	135°	75°
B2205	Aluminum	Right	0.58	135°	135°	135°	75°
Q2205	Steel	Right	1.02	135°	135°	135°	75°
B2206	Aluminum	Left	0.58	135°	135°	135°	75°
Q2206	Steel	Left	1.02	135°	135°	135°	75°

Screws: M8x25 Tightening torque: 25 N m

HE1P3E / High Efficiency clamp - International mount - Housing size 80 / cylinder Ø 63 mm

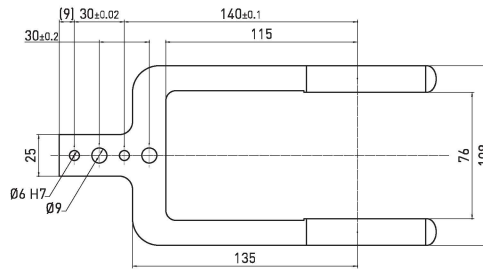
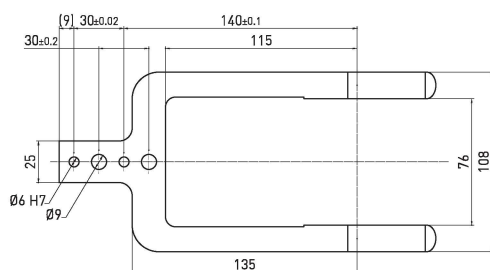
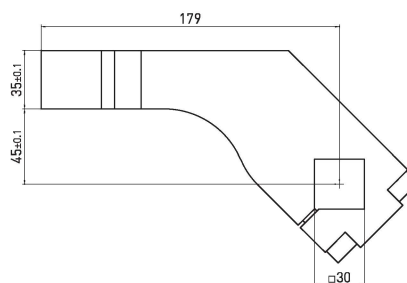
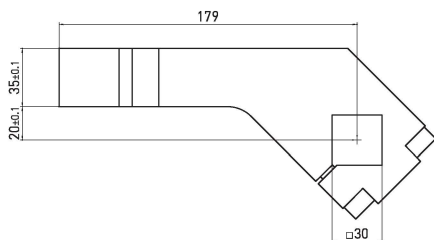
WEIGHT 7.55 kg

* DIMENSIONAL TOLERANCE
FOR DOWEL HOLES: ± 0.02 DIMENSIONAL TOLERANCE
FOR THREADED HOLES: ± 0.1

REV. 00 - 20/10/2015

Clamping arms / 30 mm shaft

REV. 01 - 08/02/2019



30 mm shaft – 20 mm offset

Part no.	Material	Version	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
B3001	Aluminum	Central	1.1	135°	110°	135°	75°
B3002	Aluminum	Right	1.15	135°	110°	135°	75°
B3003	Aluminum	Left	1.15	135°	110°	135°	75°

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

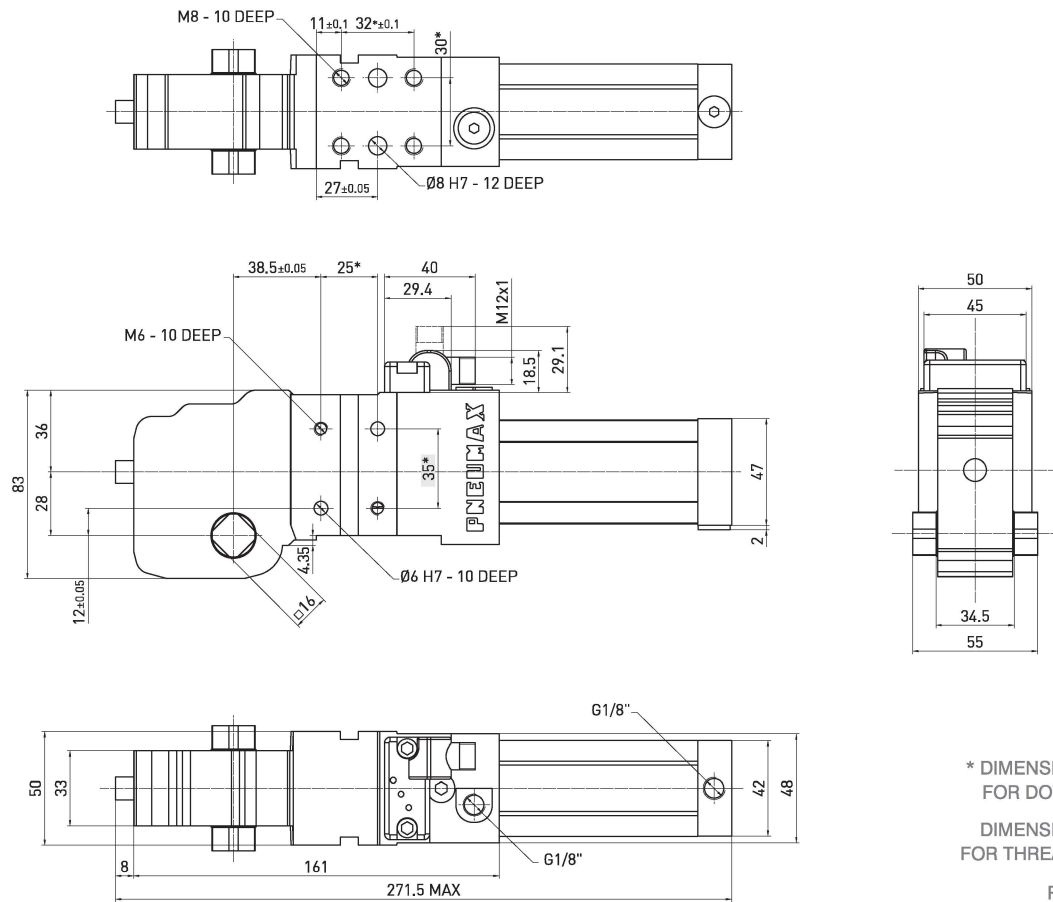
30 mm shaft – 45 mm offset

Part no.	Material	Version	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
B3004	Aluminum	Central	1.18	135°	110°	135°	75°
B3005	Aluminum	Right	1.2	135°	110°	135°	75°
B3006	Aluminum	Left	1.2	135°	110°	135°	75°

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

HE1P4EG / Power clamp - 32 mm bore cylinder and mounting pattern interchangeable to 50 and 63 mm bore clamps

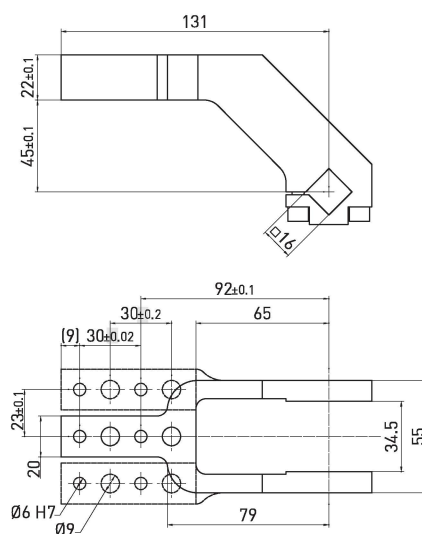
WEIGHT 1.36 kg



CLAMPING

Clamping arms / 16 mm shaft

REV. 00 - 23/04/2019



16 mm shaft – 45 mm offset

Part no.	Material	Version	Weight (kg)	Max op. angle pos. 1	Max op. angle pos. 2	Max op. angle pos. 3	Max op. angle pos. 4
B1654	Aluminum	Central	0.3	135°	135°	N/A	45°
B1655	Aluminum	Right	0.3	135°	135°	N/A	45°
B1656	Aluminum	Left	0.3	135°	135°	N/A	45°

Screws: M6x20 Tightening torque: 10 N m / 7.37 lb ft