



### REDUCTION RATIO

(1 to 3 digits)  
see table overleaf

**H L 8 3 X X X X X X**

E = Easy duty  
S = Standard duty  
H = Heavy duty

### OPTION

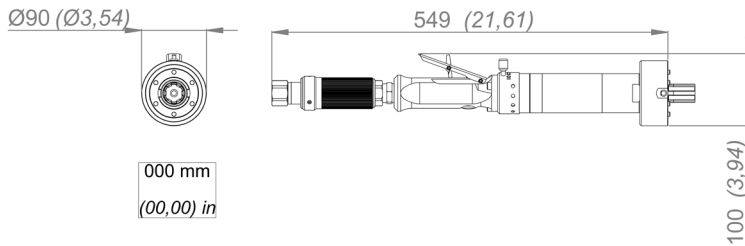
(2 digits)  
see table overleaf

modtec pneumatic portable valve actuators are the most **compact**, **light** and **powerful**. They offer a wide choice in terms of power and **can be used in all environments**, even the very difficult ones.

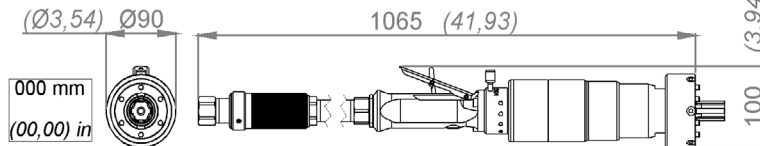
You can have them **ATEX II 2 GD c IIC T6 to T4** certified, they can go to stall and they don't generate heat, sparks or smoke.

## LAYOUT

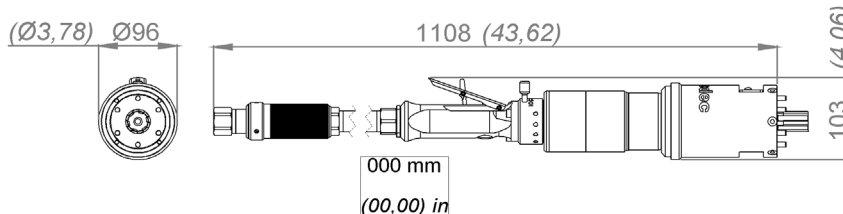
HL83E



HL83S



HL83H



| LAYOUT | Weight kg (lb) |
|--------|----------------|
| HL83E  | 3,6 (7,9)      |
| HL83S  | 6,5 (14,3)     |
| HL83H  | 8,4 (18,5)     |

Watt → Horse power

W x 0,001341 = cv

Newton meter → Foot pound

Nm x 0,7376 = lb.ft

Millimeter → inch

mm x 0,03937 = in

Kv → Cv

Kv x 0,07 = Cv

Bar → pound / square inch

Bar x 14,5 = psi

Normo liter / minute → Standard cube feet / minute

NL / min x 0,03531 = scfm

Kilogramme → Pound

Kg x 2,205 = lb

## OPTIONS AND ACCESSORIES

| OPTIONS (page 5)           |    |    |    |    |    |    |
|----------------------------|----|----|----|----|----|----|
| Right-angled head RA20     |    | ▶  |    |    | ▶  |    |
| Digital revolution counter |    |    | ▶  |    |    | ▶  |
| Torque limiter*            |    |    |    | ▶  | ▶  | ▶  |
| CODE                       | 00 | 01 | 02 | 03 | 04 | 05 |

| ACCESSORIES             | Page  |
|-------------------------|-------|
| Drive head              | 6     |
| Adaptors and interfaces | 7-14  |
| Torque reaction systems | 15-17 |
| Air management          | 18-19 |
| Other accessories       | 20    |

\*see torque and speed values page 5 : « Options »  
 Not all options are available for all models.  
 See below for availability.

! Check the technical data sheet to see which options and accessories are capable of withstanding the torque created by the actuator !

## CONNECTION AND LUBRICATION

| CONNECTION & LUBRICATION | Air consumption<br>NI/min (scfm) | Connection | Minimum Ø for fittings mm (in) | Minimum Ø for pipes mm (in) | Lubrication Drops/min | FRL unit | SAT Box |
|--------------------------|----------------------------------|------------|--------------------------------|-----------------------------|-----------------------|----------|---------|
| HL83S/H                  | 2000 (71)                        | G 3/4      | 8,2 (0,32)                     | 12 (0,47)                   | 6                     | AC107    | AC118   |

Make sure you use a good quality FRL unit (Filtration, Pressure Regulation and Lubrication), capable of filtering air at 40µm.

## PERFORMANCE

| Straight or with RA30 | Free speed (rpm) |                 |                  | Max torque (Nm (lb.ft)) |                 |                  | Starting torque (Nm (lb.ft)) |                 |                  | Options available |    |     |     |     |
|-----------------------|------------------|-----------------|------------------|-------------------------|-----------------|------------------|------------------------------|-----------------|------------------|-------------------|----|-----|-----|-----|
|                       | 4 bars (58 psi)  | 5 bars (72 psi) | 62 bars (90 psi) | 4 bars (58 psi)         | 5 bars (72 psi) | 62 bars (90 psi) | 4 bars (58 psi)              | 5 bars (72 psi) | 62 bars (90 psi) | 01                | 02 | 03* | 04* | 05* |
| HL83E-023             | 500              | 530             | 560              | 13 (10)                 | 17 (13)         | 21 (15)          | 10 (7)                       | 14 (10)         | 17 (13)          | ▶                 |    |     |     |     |
| HL83E-054             | 220              | 230             | 240              | 31 (23)                 | 39 (29)         | 49 (36)          | 25 (18)                      | 31 (23)         | 39 (29)          | ▶                 |    |     |     |     |
| HL83S-035             | 230              | 250             | 270              | 100 (74)                | 120 (89)        | 145 (107)        | 80 (59)                      | 96 (71)         | 116 (85)         | ▶                 | ▶  | ▶   | ▶   | ▶   |
| HL83S-060             | 130              | 140             | 150              | 170 (125)               | 200 (150)       | 250 (180)        | 130 (96)                     | 160 (120)       | 200 (150)        | ▶                 | ▶  | ▶   | ▶   | ▶   |
| HL83H-111             | 70               | 76              | 83               | 250 (180)               | 300 (220)       | 370 (270)        | 230 (170)                    | 280 (210)       | 350 (260)        |                   | ▶  | ▶   | ▶   | ▶   |
| HL83H-169             | 46               | 50              | 54               | 380 (280)               | 450 (330)       | 570 (420)        | 300 (220)                    | 360 (270)       | 450 (330)        |                   | ▶  | ▶   | ▶   | ▶   |
| HL83H-321             | 24               | 26              | 29               | 720 (530)               | 860 (640)       | 1070 (790)**     | 670 (490)                    | 810 (600)       | 1010 (750)**     |                   | ▶  | ▶   |     | ▶   |



| With RA20 right angle head | Free speed (rpm) |                 |                  | Max torque (Nm (lb.ft)) |                 |                  | Starting torque (Nm (lb.ft)) |                 |                  | Options available |    |     |     |     |
|----------------------------|------------------|-----------------|------------------|-------------------------|-----------------|------------------|------------------------------|-----------------|------------------|-------------------|----|-----|-----|-----|
|                            | 4 bars (58 psi)  | 5 bars (72 psi) | 62 bars (90 psi) | 4 bars (58 psi)         | 5 bars (72 psi) | 62 bars (90 psi) | 4 bars (58 psi)              | 5 bars (72 psi) | 62 bars (90 psi) | 01                | 02 | 03* | 04* | 05* |
| HL83E-023                  | 380              | 400             | 420              | 18 (13)                 | 22 (16)         | 28 (21)          | 14 (10)                      | 18 (13)         | 22 (16)          | ▶                 |    |     |     |     |
| HL83E-054                  | 160              | 170             | 180              | 41 (30)                 | 52 (38)         | 65 (48)          | 33 (24)                      | 42 (31)         | 52 (38)          | ▶                 |    |     |     |     |
| HL83S-035                  | 170              | 180             | 190              | 120 (90)                | 160 (120)       | 190 (140)        | 96 (71)                      | 130 (95)        | 150 (110)        | ▶                 |    |     | ▶   |     |
| HL83S-060                  | 100              | 105             | 115              | 220 (160)               | 270 (200)       | 330 (240)        | 175 (130)                    | 215 (160)       | 265 (200)        | ▶                 |    |     | ▶   |     |
| HL83H-111                  | Not available    |                 |                  |                         |                 |                  |                              |                 |                  |                   |    |     |     |     |
| HL83H-169                  | Not available    |                 |                  |                         |                 |                  |                              |                 |                  |                   |    |     |     |     |
| HL83H-321                  | Not available    |                 |                  |                         |                 |                  |                              |                 |                  |                   |    |     |     |     |



| With banjo head BJH01 | Free speed (rpm) |                 |                  | Max torque (Nm (lb.ft)) |                 |                  | Starting torque (Nm (lb.ft)) |                 |                  | Options available |    |     |     |     |
|-----------------------|------------------|-----------------|------------------|-------------------------|-----------------|------------------|------------------------------|-----------------|------------------|-------------------|----|-----|-----|-----|
|                       | 4 bars (58 psi)  | 5 bars (72 psi) | 62 bars (90 psi) | 4 bars (58 psi)         | 5 bars (72 psi) | 62 bars (90 psi) | 4 bars (58 psi)              | 5 bars (72 psi) | 62 bars (90 psi) | 01                | 02 | 03* | 04* | 05* |
| HL83E-023             | 120              | 130             | 140              | 54 (40)                 | 65 (48)         | 82 (60)          | 52 (38)                      | 64 (47)         | 72 (53)          |                   |    |     |     |     |
| HL83E-054             | 52               | 56              | 60               | 125 (92)                | 150 (110)       | 190 (140)        | 115 (84)                     | 150 (110)       | 180 (130)        |                   |    |     |     |     |
| HL83S-035             | 57               | 62              | 67               | 350 (260)               | 430 (320)       | 530 (390)        | 280 (210)                    | 340 (250)       | 420 (310)        |                   | ▶  | ▶   |     | ▶   |
| HL83S-060             | Not available    |                 |                  |                         |                 |                  |                              |                 |                  |                   |    |     |     |     |
| HL83H-111             | Not available    |                 |                  |                         |                 |                  |                              |                 |                  |                   |    |     |     |     |
| HL83H-169             | Not available    |                 |                  |                         |                 |                  |                              |                 |                  |                   |    |     |     |     |
| HL83H-321             | Not available    |                 |                  |                         |                 |                  |                              |                 |                  |                   |    |     |     |     |



| With banjo head BJH02 | Free speed (rpm) |                 |                  | Max torque (Nm (lb.ft)) |                 |                  | Starting torque (Nm (lb.ft)) |                 |                  | Options available |    |     |     |     |
|-----------------------|------------------|-----------------|------------------|-------------------------|-----------------|------------------|------------------------------|-----------------|------------------|-------------------|----|-----|-----|-----|
|                       | 4 bars (58 psi)  | 5 bars (72 psi) | 62 bars (90 psi) | 4 bars (58 psi)         | 5 bars (72 psi) | 62 bars (90 psi) | 4 bars (58 psi)              | 5 bars (72 psi) | 62 bars (90 psi) | 01                | 02 | 03* | 04* | 05* |
| HL83E-023             | 160              | 170             | 180              | 40 (30)                 | 49 (36)         | 62 (46)          | 32 (24)                      | 39 (29)         | 50 (37)          |                   |    |     |     |     |
| HL83E-054             | 70               | 75              | 80               | 95 (70)                 | 115 (84)        | 145 (110)        | 76 (56)                      | 92 (68)         | 115 (84)         |                   |    |     |     |     |
| HL83S-035             | 75               | 82              | 90               | 260 (190)               | 320 (240)       | 400 (290)        | 210 (155)                    | 260 (190)       | 320 (240)        |                   | ▶  | ▶   |     | ▶   |
| HL83S-060             | 44               | 48              | 52               | 450 (330)               | 550 (400)       | 680 (500)        | 360 (270)                    | 440 (320)       | 540 (400)        |                   | ▶  | ▶   |     | ▶   |
| HL83H-111             | 23               | 25              | 28               | 750 (550)               | 900 (660)       | 1100 (810)**     | 690 (510)                    | 840 (620)       | 1050 (770)**     |                   | ▶  | ▶   |     | ▶   |
| HL83H-169             | Not available    |                 |                  |                         |                 |                  |                              |                 |                  |                   |    |     |     |     |
| HL83H-321             | Not available    |                 |                  |                         |                 |                  |                              |                 |                  |                   |    |     |     |     |



\*see torque and speed values page 5 : « Options »

\*\*Warning ! Do not use the actuator when the torque is higher than 1000 Nm (740 lb.ft) or use a torque limiter

### IMPORTANT

For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.