



**EQUALIZER**<sup>TM</sup>  
INTERNATIONAL

FLANGE TOOL INNOVATION



TWENTY  
YEARS OF  
EQUALIZER   
1994 - 2014



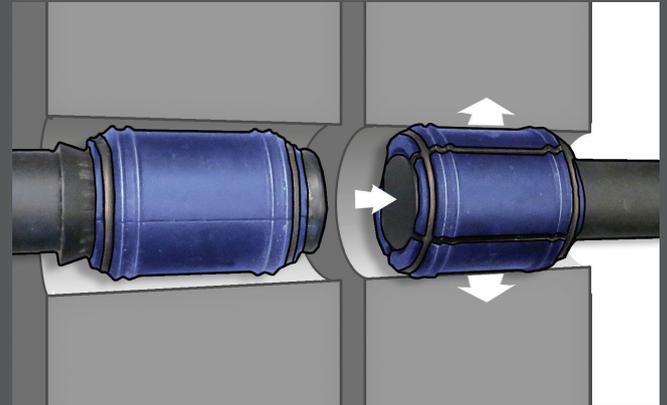
FLANGE TOOL INNOVATION

# SG RANGE

## SECURE-GRIP FLANGE SPREADING TOOLS

Equalizer's globally unique Secure-Grip tools spread via the flange bolt holes and offer, arguably the world's safest flange spreading tools.

These tools use our patented expanding collet technology for application on flanges with a zero gap or where spacers, spectacles or butterfly valves reside between the flange joints.



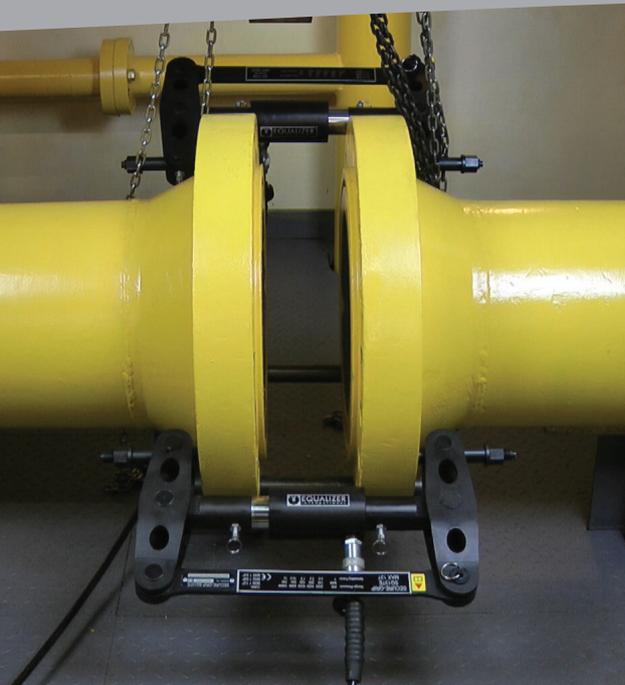
EXPANDING COLLET TECHNOLOGY

# SECURE-GRIP ENHANCEMENTS

## SHORT COLLET HOLDER KITS: SPREADING FLANGE JOINTS WITH SPACERS, BLINDS AND LOW PROFILE VALVES

In response to customer feedback Equalizer International has developed a range of Short Collet Holder (SCH) Kits for each of the Secure-Grip tools. These move the starting position of the collets further apart, effectively enabling the tools to use their full

spreading stroke, despite the extra width of the flange joint. This enables the spreading of flange joints with spacers, blinds, spectacles or even some valves, to be spread.

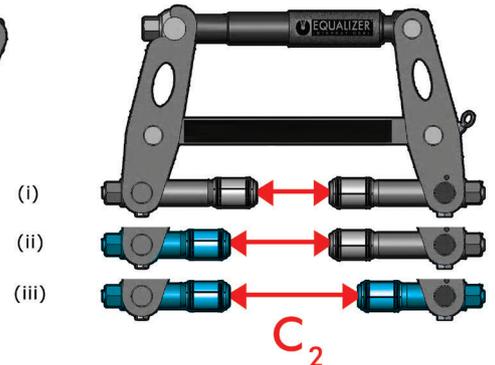
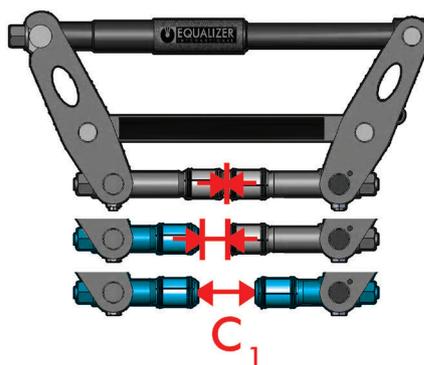




## SHORT COLLET HOLDER KITS

TOOL	Configuration	C <sub>1</sub> (Closed)	C <sub>2</sub> (Open)
SG4TM	standard tool (i)	0mm (0")	75mm (2.95")
	single SCH kit (ii)	42mm (1.65")	117mm (4.61")
	double SCH kit (iii)	84mm (3.31")	159mm (6.26")
SG6TM	standard tool (i)	0mm (0")	80mm (3.15")
	single SCH kit (ii)	60mm (1.42")	140mm (4.57")
	double SCH kit (iii)	120mm (4.72")	200mm (7.87")
SG11TM	standard tool (i)	0 mm (0")	90mm (3.50")
	single SCH kit (ii)	13mm (0.51")	103mm (4.06")
	double SCH kit (iii)	26mm (1.02")	116mm (4.57")

A Short Collet Holder Kit is available for each mechanical Secure-Grip tool. The kit fits on in place of the standard Collet Holder, and uses the standard Collets.





# SG4TM SG6TM SG11TM



## SECURE-GRIP MECHANICAL FLANGE SPREADERS

The smaller lightweight mechanical SG tools are applicable for small to medium sized flanges, are actuated by the supplied torque wrench, and are suitable for bolt holes from 17.5mm (0.69") to 39.0mm (1.54"). Different collets are used to match the tool to the respective bolt hole diameter.



### TOOL CAPABILITIES

- **SG4TM:**  
spreading force of 37kN (3.7T);  
spreading distance of 75.0mm (2.95")  
tool weight: 4.5kg (10.0lb)
- **SG6TM:**  
spreading force of 60kN (6T);  
spreading distance of 80.0mm (3.15")  
tool weight: 7.5kg (16.5lb)
- **SG11TM:**  
spreading force of 110kN (11T)  
spreading distance of 90.0mm (3.55")  
tool weight: 10.5kg (23.2lb)



SG4TM KIT

Includes Collets:  
M16 (5/8")  
M20 (3/4")



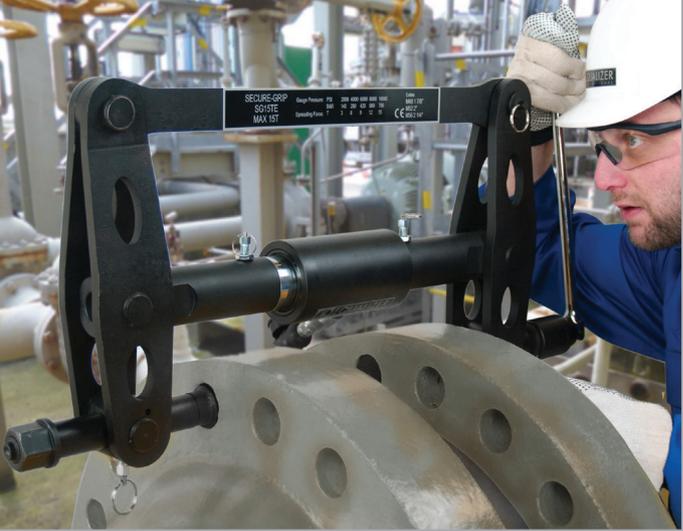
SG6TM KIT

Includes Collets:  
M24 (7/8")  
M27 (1")



SG11TM KIT

Includes Collets:  
M30 (1-1/8")  
M33 (1-1/4")  
M36 (1-3/8")



# SG13TE SG15TE



## SECURE-GRIP HYDRAULIC FLANGE SPREADERS

The hydraulic SG tools are applicable for medium to large sized flanges, are actuated by an external hand-pump and are suitable for bolt holes from 38.0mm (1.49") to 62.0mm (2.44"). Different collets are used to match the tool to the respective bolt hole diameter.



### TOOL CAPABILITIES

- **SG13TE:**  
spreading force of 130kN (13T);  
spreading distance of 115.0mm (4.53")  
tool weight: 21.5kg (47.3lb)
- **SG15TE:**  
spreading force of 150kN (15T);  
spreading distance of 100.0mm (3.94")  
tool weight: 26.0kg (57.3lb)



SG13TE KIT

Includes Collets:  
M39 (1-1/2")  
M42 (1-5/8")  
M45 (1-3/4")



SG15TE KIT

Includes Collets:  
M48 (1-7/8")  
M52 (2")  
M56 (2-1/4")



# SG18TE SG25TE



## SECURE-GRIP IN-LINE HYDRAULIC FLANGE SPREADERS

The large in-line hydraulic SG tools are applicable for larger sized flanges. These are actuated by an external hand-pump and are suitable for bolt holes from 59.5mm (2.34") to 108.0mm (4.25"). Different collets are used to match the tool to the respective bolt hole diameter.



### TOOL CAPABILITIES

- **SG18TE:**  
spreading force of 180kN (18T);  
spreading distance of 100.0mm (3.94")  
tool weight: 14.0kg (30.8lb)
- **SG25TE:**  
spreading force of 250kN (25T);  
spreading distance of 120.0mm (4.72")  
tool weight: 24.0kg (52.9lb)



SG18TE KIT

Includes Collets:  
M60  
M64 (2-1/2")  
M70 (2-3/4")



SG25TE KIT  
(collets supplied separately)

Collets :  
M76 (3") M90 (3-1/2")  
M80 (3-1/4") M95 (3-3/4")  
M84 M100 (4")

## RANGE OF APPLICATION

By flange type, class and diameter

### BS10 flanges:

Class H: 1/2" Thru 24"  
 Class J: 1/2" Thru 24"  
 Class K: 1/2" Thru 20"  
 Class R: 1/2" Thru 20"  
 Class S: 1/2" Thru 16"  
 Class T: 1/2" Thru 13"

### ASME B16.47

(including weld neck and blind flange):

26" Thru 60" for the flange class 150 and 300

### ASME B16.5 weld neck:

2" Thru 48" for the flange class 150  
 3/4" Thru 48" for the flange class 300

### ASME B16.5 socket welded:

2" Thru 3" for the flange 150  
 3/4" Thru 3" for the flange 300

### ANSI reducing application

(including threaded and slip on flange):

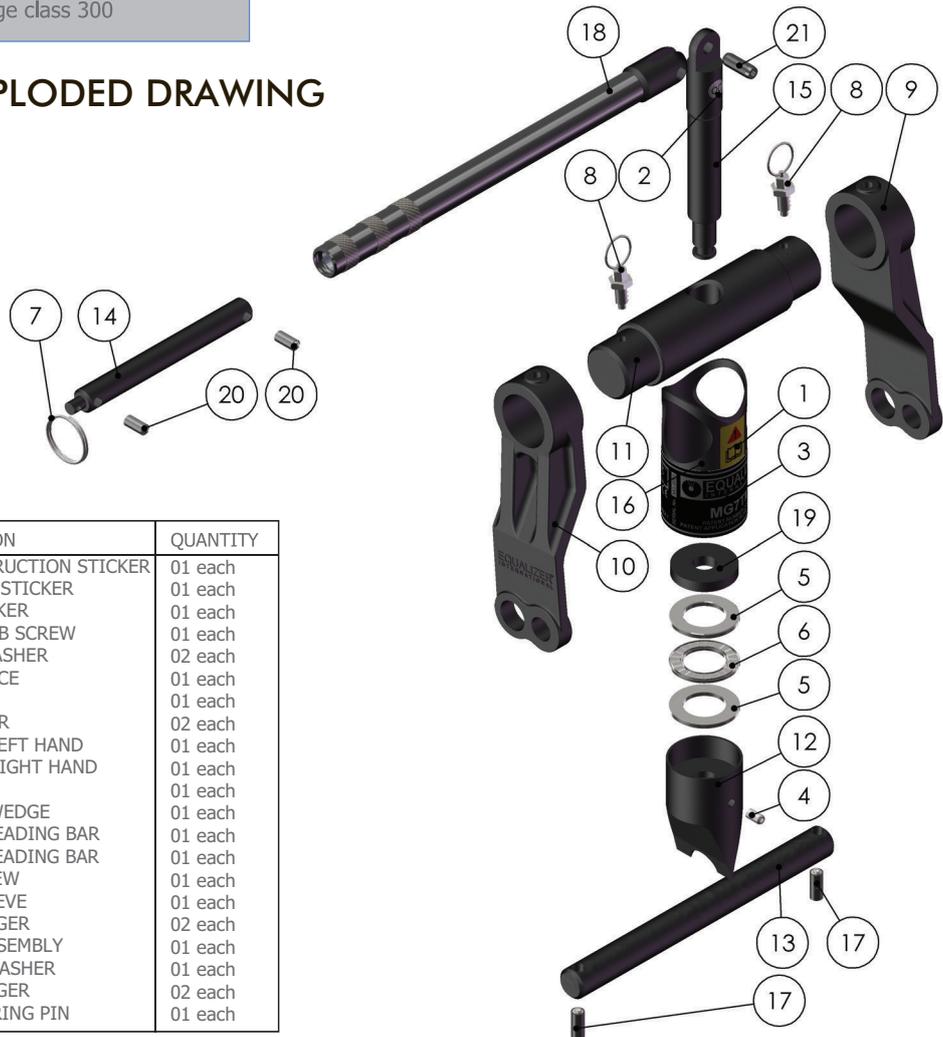
2" Thru 48" for the flange class 150  
 3/4" Thru 48" for the flange class 300

### ANSI orifice application

(including weld neck, threaded and slip on flange):

1" Thru 20" for the flange class 300

## PARTS LIST AND EXPLODED DRAWING



ITEM	PART No.	DESCRIPTION	QUANTITY
01	070001-01	READ INSTRUCTION STICKER	01 each
02	070054-01	QC SEALED STICKER	01 each
03	070237-01	WRAP STICKER	01 each
04	301301-01	M6X12 GRUB SCREW	01 each
05	313401-01	THRUST WASHER	02 each
06	313501-01	THRUST RACE	01 each
07	403102-01	SPLIT RING	01 each
08	632001-01	M8 PLUNGER	02 each
09	740101-01	CAST LEG LEFT HAND	01 each
10	740201-01	CAST LEG RIGHT HAND	01 each
11	740301-01	MAIN BODY	01 each
12	740401-01	SPLITTER WEDGE	01 each
13	740501-01	LARGE SPREADING BAR	01 each
14	740601-01	SMALL SPREADING BAR	01 each
15	740701-01	DRIVE SCREW	01 each
16	740901-01	OUTER SLEEVE	01 each
17	741101-01	8 MM PLUNGER	02 each
18	741802-01	HANDLE ASSEMBLY	01 each
19	742001-01	BEARING WASHER	01 each
20	742101-01	7 MM PLUNGER	02 each
21	743101-01	COILED SPRING PIN	01 each



**EQUALIZER™**  
INTERNATIONAL

FLANGE TOOL INNOVATION

# PRODUCT DATA SHEET

## SG4™

### SECURE-GRIP MECHANICAL FLANGE SPREADER

#### SPREADING FORCE:

With 47N.m (35ft.lb) of torque applied: 3.7T (37kN)  
It is recommended that tools are used in pairs giving:

$$2 \times 3.7T = 7.4T (74kN)$$

SPREADING DISTANCE: 0 - 75mm (0 - 2.95")

TOOL WEIGHT: 4.5kg (10lb)

#### KIT COMPONENTS

- 1 x SG4™ Tool
- 1 x 150mm (6") Vernier Calliper
- 1 x 3/8" Drive Torque Wrench and 16mm Socket
- 1 x Safety Block
- 2 x M16 (5/8") Collets
- 2 x M20 (3/4") Collets
- 1 x Instruction Manual
- 1 x Carry Case with protective foam inserts

Product Code: SG4™STD



#### WEIGHTS AND DIMENSIONS

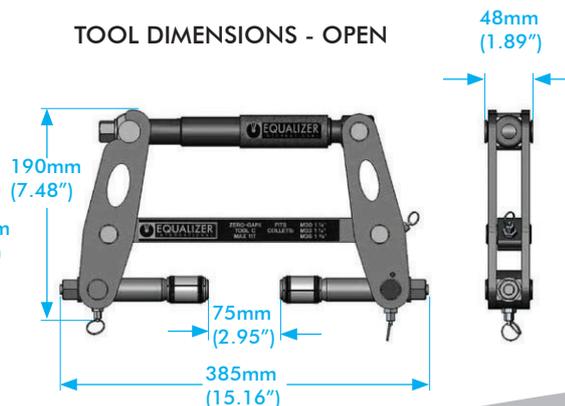
Tool Weight: 4.8Kg (10.6lb)  
Case Weight: 1Kg (2.2lb)  
Gross Kit Weight: 12.8Kg (28.2lb)

Carry Case Dimensions:  
520mm x 375mm x 165mm  
(20.47" x 14.76" x 6.50")

TOOL DIMENSIONS - CLOSED



TOOL DIMENSIONS - OPEN



info@equalizerinternational.com  
www.equalizerinternational.com

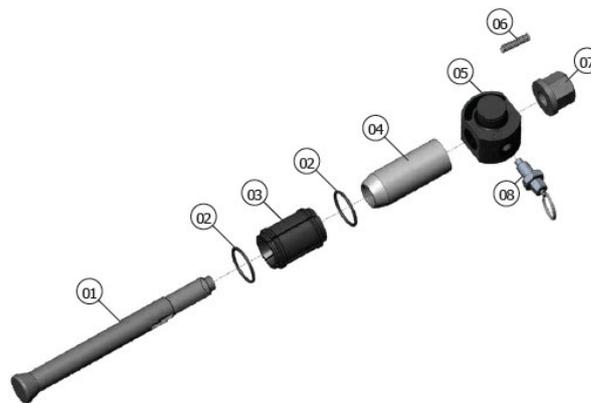
## RANGE OF APPLICATION

The SG4™ is usable on all standard flanges that have been specified to accept the following bolt sizes:  
M16, M20, 5/8", 3/4"  
This includes ANSI, DIN, SPO, ASME, API and BS flanges.

For a detailed range of application please request the Secure-Grip Mechanical Operator Instruction Manual.

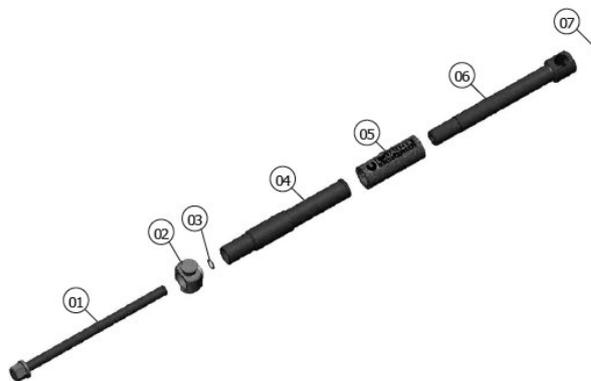
## COLLET HEAD PART LIST AND EXPLODED DRAWING

ITEM	DESCRIPTION	QTY
01	COLLET HOLDER	2
02	M16 SPRING RING*	4
	M20 SPRING RING*	4
03	M16 COLLET*	2
	M20 COLLET*	2
04	DRIVE CONE	2
05	COLLET UNION	2
06	CENTRING SPRING 1	2
07	COLLET NUT	2
08	COLLET SPRING PLUNGER*	2



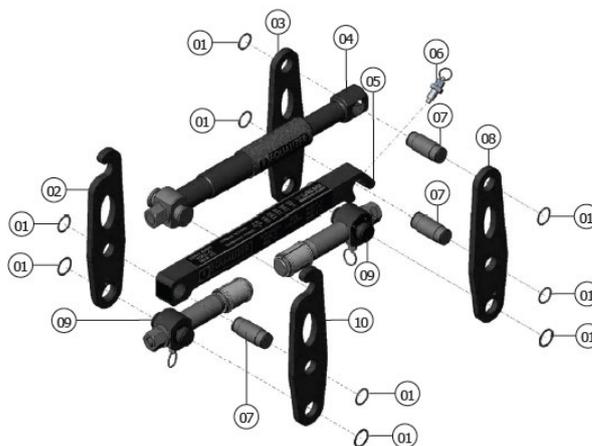
## ACTUATOR PART LIST AND EXPLODED DRAWING

ITEM	DESCRIPTION	QTY
01	ACTUATOR BOLT	1
02	OPEN ACTUATOR UNION	1
03	ACTUATOR RETAINING RING*	1
04	ACTUATOR SLEEVE	1
05	FOAM GRIP	1
06	CLOSED ACTUATOR UNION	1
07	ACTUATOR RETAINING BOLT	1



## SG4™ PART LIST AND EXPLODED DRAWING

ITEM	DESCRIPTION	QTY
01	CANTILEVER RETAINING RING*	10
02	OPEN LEG RH	1
03	CLOSED LEG RH	1
04	SEE ACTUATOR PART LIST	
05	CANTILEVER	1
06	CANTILEVER PLUNGER	1
07	CANTILEVER PIN	3
08	CLOSED LEG LH	1
09	SEE COLLET HEAD PART LIST	
10	OPEN LEG LH	1



\* Items are supplied in Spare Kit Part



"innovation in its most functional form"

# PRODUCT DATA SHEET

## SG6™ SECURE-GRIP MECHANICAL FLANGE SPREADER

**SPREADING FORCE:**  
80 ft/lbs (108Nm) = 6 T (60 kN) per tool  
It is recommended that tools are used in pairs giving  
2 x 6 = 12 T (120 kN)

**SPREADING DISTANCE = 0-80mm (0-3.15")**  
**TOOL WEIGHT = 7.5kg (16.5 lbs)**

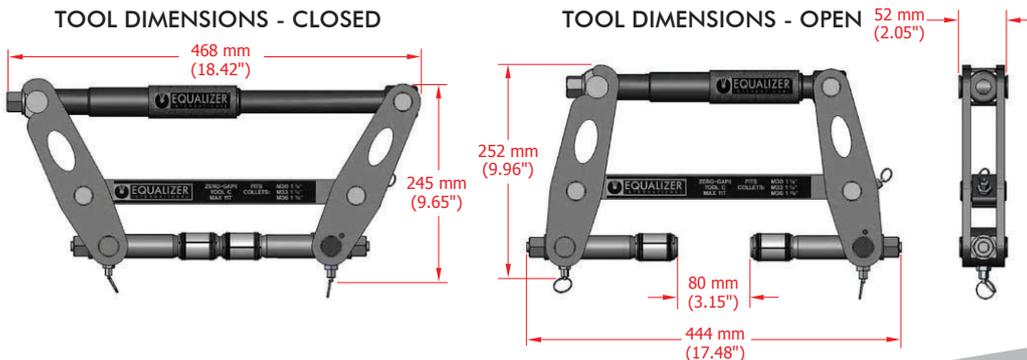
### KIT COMPONENTS

- 1 x SG6™ Tool
  - 1 x 150mm (6") Vernier Calliper
  - 1 x 3/8" Drive Torque Wrench and 21 mm Socket
  - 1 x Safety Block
  - 2 x M24 (7/8") Collets
  - 2 x M27 (1") Collets
  - 1 x Instruction Manual
  - 1 x Carry Case with protective foam inserts
- Product Code: SG6™MSTD



### WEIGHTS AND DIMENSIONS

Tool Weight	= 7.5 kg (16.5 lbs)	Carry Case Dimensions:
Case Weight	= 6 kg (13.2 lbs)	640 x 540 x 165mm (25.20" x 21.26" x 6.50")
Gross Weight	= 16 kg (35 lbs)	



info@equalizerinternational.com  
www.equalizerinternational.com

### RANGE OF APPLICATION

The SG6™ is usable on all standard flanges that have been specified to accept the following bolt sizes:

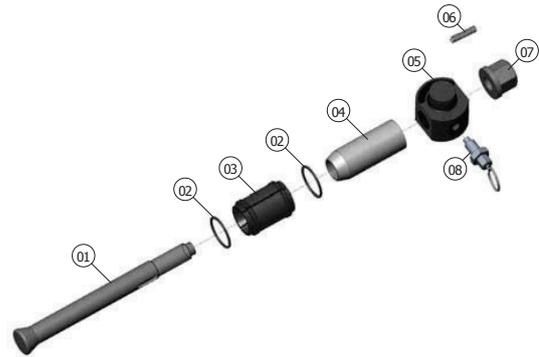
M24, M27, 7/8", 1"

This includes ANSI, DIN, SPO, ASME, API and BS flanges.

For a detailed range of application please request the Secure-Grip Mechanical Operator Instruction Manual.

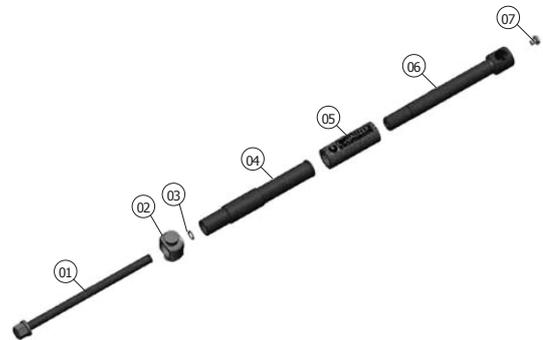
### COLLET HEAD PARTS LIST AND EXPLODED DRAWING

ITEM	PART No.	DESCRIPTION	QUANTITY
01	620401-01	COLLET HOLDER	02 each
02	621001-01	M24 SPRING RING*	04 each
	621101-01	M27 SPRING RING*	04 each
03	620201-01	M24 COLLET*	02 each
	620301-01	M27 COLLET*	02 each
04	620501-01	DRIVE CONE	02 each
05	620601-01	COLLET UNION	02 each
06	620701-01	CENTRING SPRING 1	02 each
07	620801-01	COLLET NUT	02 each
08	632001-01	COLLET SPRING PLUNGER*	02 each



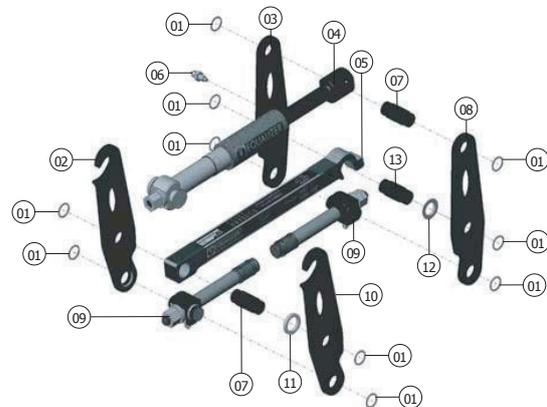
### ACTUATOR PARTS LIST AND EXPLODED DRAWING

ITEM	PART No.	DESCRIPTION	QUANTITY
01	622201-01	ACTUATOR BOLT	01 each
02	622501-01	OPEN ACTUATOR UNION	01 each
03	623101-01	ACTUATOR RETAINING RING*	01 each
04	622701-01	ACTUATOR SLEEVE	01 each
05	632801-01	FOAM GRIP	01 each
06	622901-01	CLOSED ACTUATOR UNION	01 each
07	623001-01	ACTUATOR RETAINING BOLT	01 each



### SG6™ PARTS LIST AND EXPLODED DRAWING

ITEM	PART No.	DESCRIPTION	QUANTITY
01	621501-01	CANTILEVER RETAINING RING*	10 each
02	621401-01	OPEN LEG R/H	01 each
03	621801-01	CLOSED LEG R/H	01 each
04		SEE ACTUATOR PARTS LIST	
05	622101-01	CANTILEVER	01 each
06	632001-01	CANTILEVER PLUNGER	01 each
07	621701-01	CANTILEVER PIN	02 each
08	621901-01	CLOSED LEG L/H	01 each
09		SEE COLLET HEAD PARTS LIST	
10	621301-01	OPEN LEG L/H	01 each
11	623401-01	CANTILEVER SPACER	01 each
12	623501-01	CANTILEVER WASHER	01 each
13	623601-01	HOOK PIN	01 each



\* Items are supplied in Spares Kit Part No: 626060-01



"innovation in its most functional form"

## PRODUCT DATA SHEET

# SG11TM

## SECURE-GRIP MECHANICAL FLANGE SPREADER

**SPREADING FORCE:**  
 85 ft/lbf (120 Nm) = 11 T (110 kN) per tool  
 It is recommended that tools are used in pairs giving  
 2 x 11 = 22 T (220 kN)

**SPREADING DISTANCE = 0-90mm (0-3.55")**  
**TOOL WEIGHT = 10.5kg (23.2 lbs)**

### KIT COMPONENTS

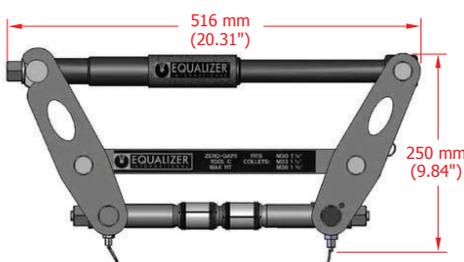
- 1 x SG11TM Tool
  - 1 x 150mm (6") Vernier Calliper
  - 1 x 1/2" Drive Torque Wrench and 24mm Socket
  - 1 x Safety Block
  - 2 x M30 (1 1/8") Collets
  - 2 x M33 (1 1/4") Collets
  - 2 x M36 (1 3/8") Collets
  - 1 x Instruction Manual
  - 1 x Carry Case with protective foam inserts
- Product Code: SG11TMSTD



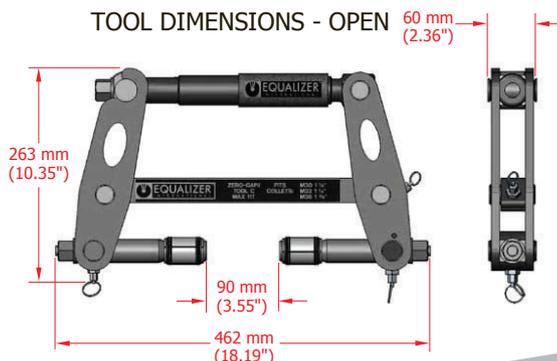
### WEIGHTS AND DIMENSIONS

Tool Weight	= 10.5 kg (23.2 lbs)	Carry Case Dimensions:	
Case Weight	= 6 kg (13.2 lbs)	640 x 540 x 165mm (25.20" x 21.26" x 6.50")	
Gross Weight	= 20 kg (44 lbs)		

TOOL DIMENSIONS - CLOSED



TOOL DIMENSIONS - OPEN



info@equalizerinternational.com  
 www.equalizerinternational.com

# SG11™

SECURE-GRIP MECHANICAL FLANGE SPREADER



"innovation in its most functional form"

## RANGE OF APPLICATION

The SG11™ is usable on all standard flanges that have been specified to accept the following bolt sizes:

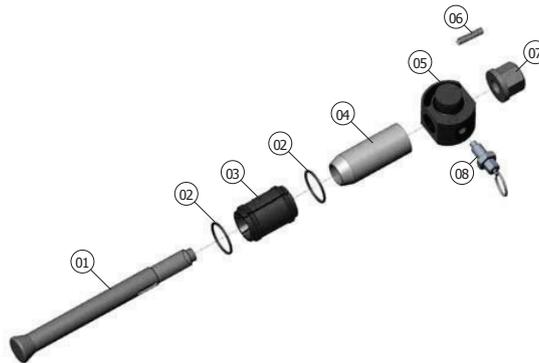
M30, M33, M36, 1 1/8", 1 1/4", 1 3/8"

This includes ANSI, DIN, SPO, ASME, API and BS flanges.

For a detailed range of application please request the Secure-Grip Mechanical Operator Instruction Manual.

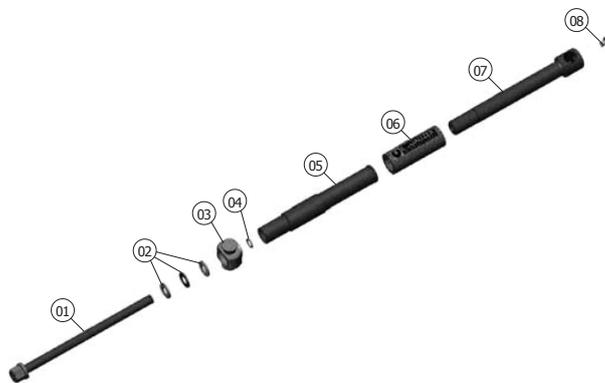
### COLLET HEAD PARTS LIST AND EXPLODED DRAWING

ITEM	PART No.	DESCRIPTION	QUANTITY
01	630101-01	COLLET HOLDER	02 each
02	631001-01	M30 SPRING RING*	04 each
	631101-01	M33 SPRING RING*	04 each
	631201-01	M36 SPRING RING*	04 each
03	630201-01	M30 COLLET*	02 each
	630301-01	M33 COLLET*	02 each
	630401-01	M36 COLLET*	02 each
04	630501-01	DRIVE CONE	02 each
05	630601-01	COLLET UNION	02 each
06	630701-01	CENTRING SPRING 1	02 each
	633201-01	CENTRING SPRING 2	02 each
07	630801-01	COLLET NUT	02 each
08	900502-01	COLLET SPRING PLUNGER*	02 each



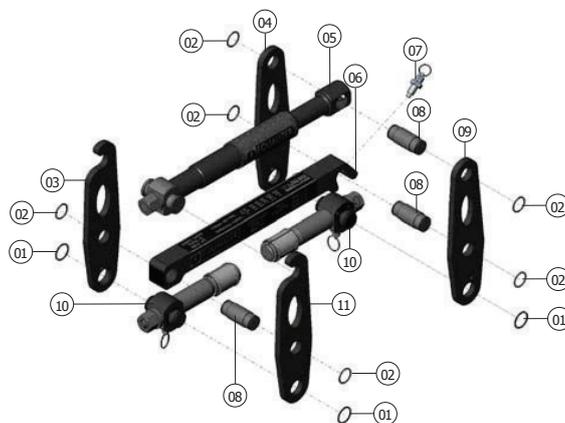
### ACTUATOR PARTS LIST AND EXPLODED DRAWING

ITEM	PART No.	DESCRIPTION	QUANTITY
01	632201-01	ACTUATOR BOLT	01 each
02	632301-01	THRUST BEARING*	01 each
03	632501-01	OPEN ACTUATOR UNION	01 each
04	401301-01	ACTUATOR RETAINING RING*	01 each
05	632701-01	ACTUATOR SLEEVE	01 each
06	632801-01	FOAM GRIP	01 each
07	632901-01	CLOSED ACTUATOR UNION	01 each
08	633001-01	ACTUATOR RETAINING BOLT	01 each



### SG11™ PARTS LIST AND EXPLODED DRAWING

ITEM	PART No.	DESCRIPTION	QUANTITY
01	631601-01	COLLET RETAINING RING*	04 each
02	631501-01	CANTILEVER RETAINING RING*	06 each
03	631401-01	OPEN LEG R/H	01 each
04	631901-01	CLOSED LEG R/H	01 each
05		SEE ACTUATOR PARTS LIST	
06	632101-01	CANTILEVER	01 each
07	632001-01	CANTILEVER PLUNGER	01 each
08	631701-01	CANTILEVER PIN	03 each
09	631801-01	CLOSED LEG L/H	01 each
10		SEE COLLET HEAD PARTS LIST	
11	631301-01	OPEN LEG L/H	01 each



\* Items are supplied in Spares Kit Part No: 636060-01



"innovation in its most functional form"

## PRODUCT DATA SHEET

# SG13TE

## SERURE-GRIP HYDRAULIC FLANGE SPREADER

**SPREADING FORCE:**  
10,000 psi (700 bar) = 13 T (130 kN) per tool  
It is recommended that tools are used in pairs giving  
 $2 \times 13 = 26 \text{ T (260 kN)}$

**SPREADING DISTANCE = 0-115mm (0-4.53")**  
**TOOL WEIGHT = 21.5kg (47.3 lbs)**

### KIT COMPONENTS

- 1 x SG13TE Tool c/w Hydraulic Cylinder
  - 1 x 10,000 psi (700 bar) HP550S Sealed Hand Pump with Gauge
  - 1 x 10,000 psi (700 bar) Hydraulic Hose, 2m (78.75")
  - 1 x 150mm (6") Vernier Calliper
  - 1 x Tommy Bar
  - 1 x 30mm (1 1/8") Drive Socket
  - 1 x Safety Block
  - 2 x M39 (1 1/2") Collets
  - 2 x M42 (1 5/8") Collets
  - 2 x M45 (1 3/4") Collets
  - 1 x Instruction Manual
  - 1 x Carry Case with protective foam inserts
- Product Code: SG13TESTD



### WEIGHTS AND DIMENSIONS

Tool Weight	= 21.5 kg (47.3 lbs)	Carry Case Dimensions:
Case Weight	= 9 kg (19.8 lbs)	890 x 570 x 165mm (35.04" x 22.44" x 6.50")
Gross Weight	= 40.5 kg (89.2 lbs)	

TOOL DIMENSIONS - CLOSED



TOOL DIMENSIONS - OPEN



info@equalizerinternational.com  
www.equalizerinternational.com

# SG13TE

SECURE-GRIP HYDRAULIC FLANGE SPREADER



"innovation in its most functional form"

## RANGE OF APPLICATION

The SG13TE is usable on all standard flanges that have been specified to accept the following bolt sizes:

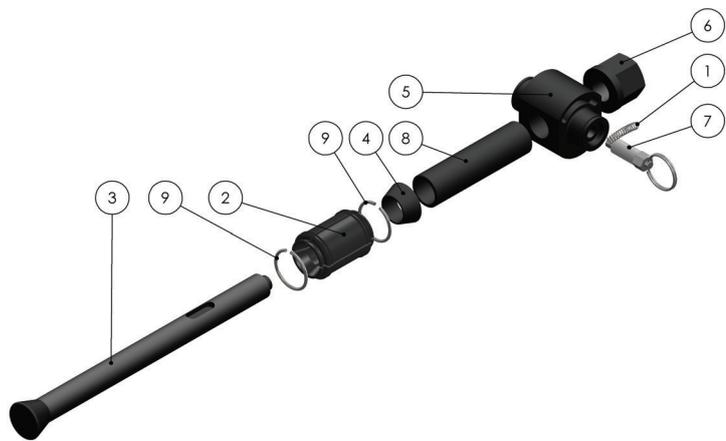
M39, M42, M45, 1 1/2", 1 5/8", 1 3/4"

This includes ANSI, DIN, SPO, ASME, API and BS flanges.

For a detailed range of application please request the Secure-Grip Hydraulic Operator Instruction Manual.

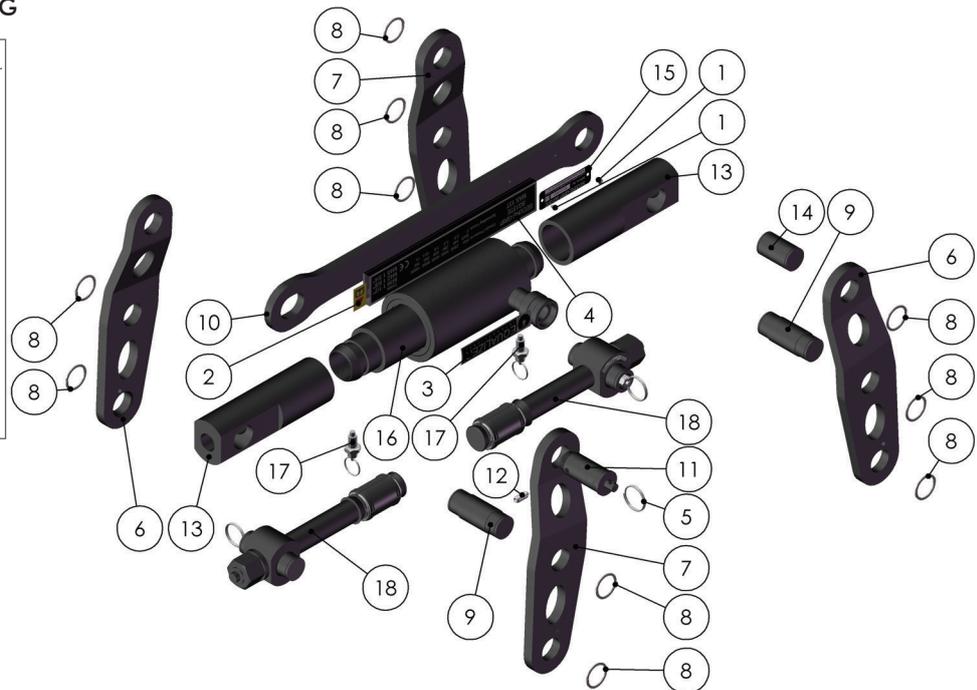
## COLLET HEAD PARTS LIST AND EXPLODED DRAWING

ITEM	DESCRIPTION	PART NO.	QUANTITY
01	CENTERING SPRING	402201-01	01 each
02	M39 COLLET	640101-01	01 each
	M42 COLLET	640201-01	01 each
	M45 COLLET	640301-01	01 each
03	COLLET HOLDER	640401-01	01 each
04	DRIVE CONE	640501-01	01 each
05	COLLET UNION	640601-01	01 each
06	COLLAR NUT	640901-01	01 each
07	M12 PLUNGER	641001-01	01 each
08	DRIVE TUBE	641601-01	01 each
09	M39 SPRING RING	642201-01	02 each
	M42 SPRING RING	642401-01	02 each
	M45 SPRING RING	642601-01	02 each



## SG13TE PARTS LIST AND EXPLODED DRAWING

ITEM	DESCRIPTION	PART NO.	QUANTITY
01	POP RIVET	020706-01	02 each
02	READ INSTR. STICKER	070001-01	01 each
03	EQUALIZER LOGO	070045-01	02 each
04	CANTILIVER STICKER	070129-01	01 each
05	SPLIT RING	403102-01	01 each
06	LEG W/O PIN	641101-01	02 each
07	LEG WITH PIN	641101-02	02 each
08	SPIROL RING	641301-01	10 each
09	ACTUATOR PIN	641401-01	02 each
10	CANTILEVER	641501-01	01 each
11	PULL PIN	641701-01	01 each
12	M8 BALL PLUNGER	641801-01	01 each
13	ACTUATOR UNION	641901-01	02 each
14	CANTILIVER PIN	643201-01	01 each
15	SERIAL PLATE	643501-01	01 each
16	ACTUATOR ASSEMBLY	644001-01	01 each
17	PULL PIN M10	900502-01	02 each
18	COLLET HOLDER ASS.		02 each





**EQUALIZER™**  
INTERNATIONAL

FLANGE TOOL INNOVATION

# PRODUCT DATA SHEET

## SG15TE

### SECURE-GRIP HYDRAULIC FLANGE SPREADER

#### SPREADING FORCE:

With 10,000 psi (700 bar) of hydraulic pressure:  
15T (150kN) per tool

It is recommended that tools are used in pairs giving:  
 $2 \times 15T = 30T (300kN)$

SPREADING DISTANCE: 0 - 100mm (0 - 3.94")

TOOL WEIGHT: 26kg (57.3lb)

#### KIT COMPONENTS

- 1 x SG15TE Tool c/w Hydraulic Cylinder
- 1 x 10,000 psi (700 bar) HP 550S Sealed Hand Pump with Gauge
- 1 x 10,000 psi (700 bar) Hydraulic Hose, 2m (78.74")
- 1 x 300mm (12") Vernier Calliper
- 1 x 1/2" Square drive flexible handle
- 1 x 36mm (1/2") Drive Socket
- 1 x Safety Block
- 2 x M48 (1 7/8") Collets
- 2 x M52 (2") Collets
- 2 x M56 (2 1/4") Collets
- 1 x Instruction Manual
- 1 x Carry Case with protective foam inserts

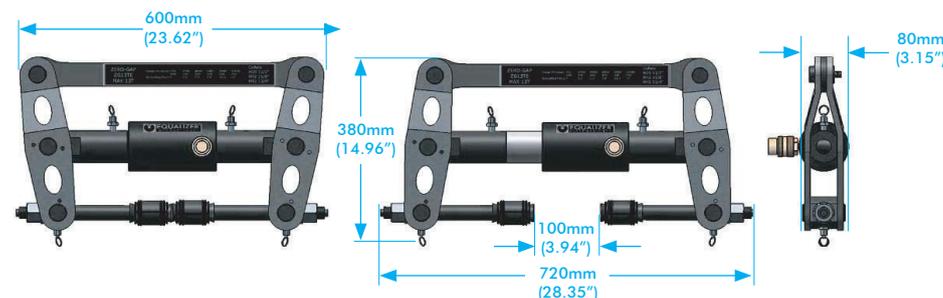
Product Code: SG15TESTD



#### WEIGHTS AND DIMENSIONS

TOOL DIMENSIONS - CLOSED

TOOL DIMENSIONS - OPEN



Tool Weight: 26Kg (57.3lb)  
Case Weight: 9Kg (19.8lb)  
Gross Kit Weight: 45Kg (99.2lb)

Carry Case Dimensions:  
890mm x 570mm x 165mm  
(35.04" x 22.44" x 6.50")

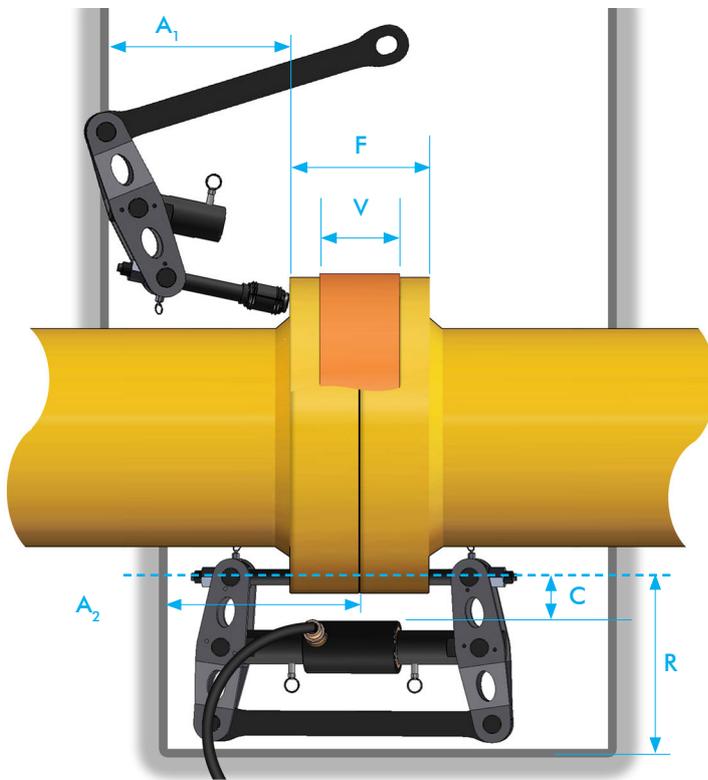
info@equalizerinternational.com  
www.equalizerinternational.com

## RANGE OF APPLICATION

The SG15TE is usable on all standard flanges that have been specified to accept the following bolt sizes:  
M48 (1 7/8"), M52 (2"), M56 (2 1/4")  
This includes ANSI, DIN, SPO, ASME, API and BS flanges.

For a detailed range of application please request the Secure-Grip Hydraulic Operator Instruction Manual.

## SPATIAL ENVELOPE



\*Short Collet Holder Kits (SCH) are available which can offer improved range of application.

\*\* Collet Holders can also be dismantled and inserted through bolt-holes from opposite side.

Contact Equalizer International if your application does not appear to suit standard tools.

	DIMENSION	MEASURED FROM	MEASURED TO	MINIMUM	MAXIMUM
F	Flange Joint Thickness	Outside Face of Flange	Outside Face of Flange	140mm (5.51")	400mm (15.75")
V	Valve/Spacer Thickness	Inside Face of Flange	Inside Face of Flange	*0.0mm (0.0")	*80mm (3.15")
C	Flange Clearance	Bolt-Hole Circle	Largest OD of Valve/Spacer	-	80mm (3.15")
R	Radial space	Bolt-Hole Circle	Closest Obstruction	370mm (14.57")	-
A <sub>1</sub>	Axial space (for installation)	Outside Face of Flange	Closest Obstruction	**380mm (**14.96")	-
A <sub>2</sub>	Axial space (installed)	Inner Face of Flange	Closest Obstruction	315mm (12.4")	-

Contact Equalizer International if your application does not appear to suit standard tools.



FLANGE TOOL INNOVATION

# PRODUCT DATA SHEET

## SG18TE

### SECURE-GRIP IN-LINE HYDRAULIC FLANGE SPREADER

#### SPREADING FORCE:

With 10,000 psi (700 bar) of hydraulic pressure:  
18T (180kN) per tool

It is recommended that tools are used in pairs giving:  
 $2 \times 18T = 36T$  (360kN)

SPREADING DISTANCE: 0 - 100mm (0 - 3.94")

TOOL WEIGHT: 14kg (30.8lb)

#### KIT COMPONENTS

- 1 x SG18TE Tool c/w Hydraulic Cylinder
- 1 x Spreading plug
- 1 x 10,000 psi (700 bar) HP 550S Sealed Hand Pump with Gauge
- 1 x 10,000 psi (700 bar) Hydraulic Hose, 2m (78.74")
- 1 x 300mm (12") Vernier Calliper
- 1 x 12.5mm (0.49") Spacer Plate
- 1 x 5mm Allen Key
- 1 x 50mm (1.97") Spacer
- 1 x Safety Block
- 2 x M60 (2 3/8") Collets
- 2 x M64 (2 1/2") Collets
- 2 x M70 (2 3/4") Collets
- 1 x Instruction Manual
- 1 x Carry Case with protective foam inserts

Product Code: SG18TESTD



#### WEIGHTS AND DIMENSIONS

Tool Weight: 14Kg (30.8lb)  
Case Weight: 9Kg (19.8lb)  
Gross Kit Weight: 45Kg (99.2lb)

Carry Case Dimensions:  
890mm x 570mm x 165mm (35.04" x 22.44" x 6.50")

TOOL DIMENSIONS - CLOSED



TOOL DIMENSIONS - OPEN



SPREADING PLUG DIMENSIONS



info@equalizerinternational.com  
www.equalizerinternational.com

# SG18TE

## SECURE-GRIP IN-LINE HYDRAULIC FLANGE SPREADER



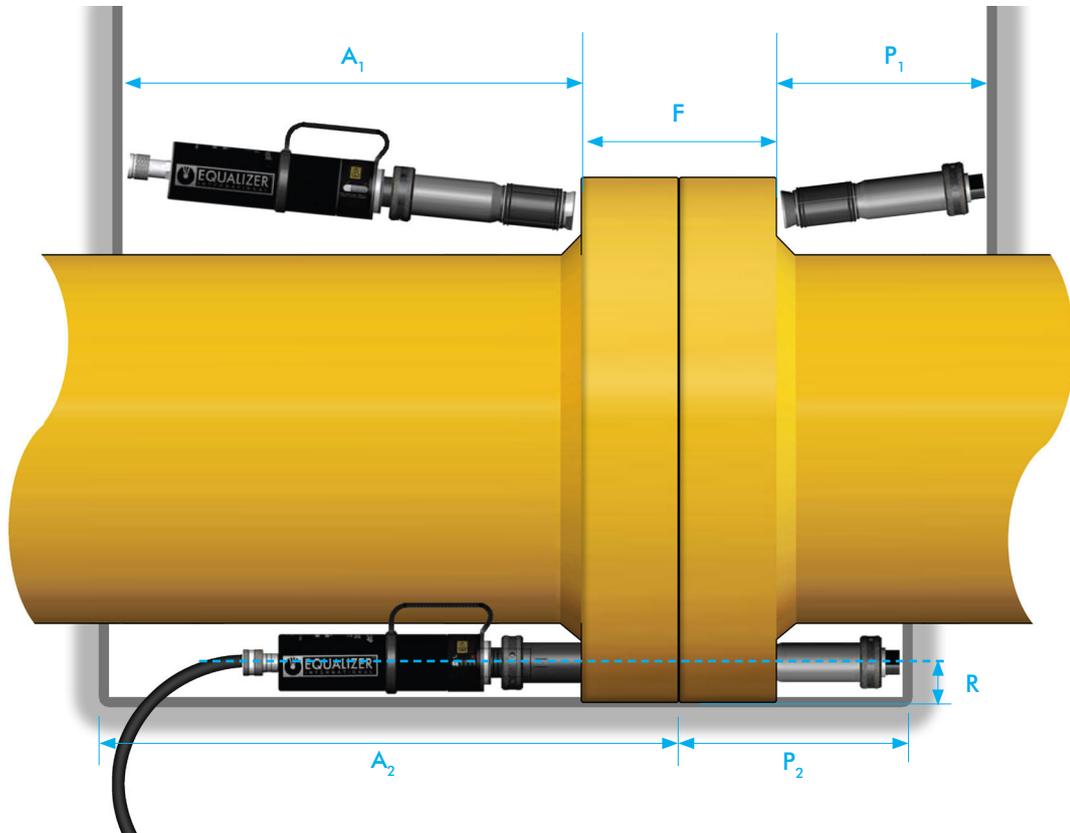
FLANGE TOOL INNOVATION

### RANGE OF APPLICATION

The SG18TE is usable on all standard flanges that have been specified to accept the following bolt sizes:  
 M60 (2 3/8"), M64 (2 1/2"), M70 (2 3/4")  
 This includes ANSI, DIN, SPO, ASME, API and BS flanges.

For a detailed range of application please request the Secure-Grip In Line Hydraulic Operator Instruction Manual.

### SPATIAL ENVELOPE



	DIMENSION	MEASURED FROM	MEASURED TO	MINIMUM	MAXIMUM
F	Flange Joint Thickness	Outside Face of Flange	Outside Face of Flange	190mm (7.48")	450mm (17.72")
R	Radial space	Bolt-Hole Circle	Closest Obstruction	55mm (2.17")	-
A <sub>1</sub>	Axial Tool space (for installation)	Outside Face of Flange	Closest Obstruction	620mm (24.41")	-
A <sub>2</sub>	Axial Tool space (installed)	Inner Face of Flange	Closest Obstruction	900mm (35.43")	-
P <sub>1</sub>	Axial Plug space (for installation)	Outside Face of Flange	Closest Obstruction	283mm (11.14")	-
P <sub>2</sub>	Axial Plug space (installed)	Inner Face of Flange	Closest Obstruction	283mm (11.14")	-

Contact Equalizer International if your application does not appear to suit standard tools.



FLANGE TOOL INNOVATION

# PRODUCT DATA SHEET

## SG25TE

### SECURE-GRIP IN-LINE HYDRAULIC FLANGE SPREADER

#### SPREADING FORCE:

With 10,000 psi (700 bar) of hydraulic pressure:  
25T (250kN) per tool

It is recommended that tools are used in pairs giving:  
 $2 \times 25T = 50T$  (500kN)

SPREADING DISTANCE: 0 - 120mm (0 - 4.72")

TOOL WEIGHT: 24kg (52.9lb)

#### KIT COMPONENTS

- 1 x SG25TE Tool c/w Hydraulic Cylinder
- 1 x Spreading plug
- 1 x 10,000 psi (700 bar) HP 550S Sealed Hand Pump with Gauge
- 1 x 10,000 psi (700 bar) Hydraulic Hose, 2m (78.74")
- 1 x 300mm (12") Vernier Calliper
- 1 x Spacer Plate
- 1 x Safety Block
- 1 x Instruction Manual
- 1 x Carry Case with protective foam inserts

Product Code: SG25TESTD



#### COLLETS (Available Separately)

- |                          |                          |
|--------------------------|--------------------------|
| 2 x M76 (3") Collets     | 2 x M90 (3 1/2") Collets |
| 2 x M80 (3 1/4") Collets | 2 x M95 (3 3/4") Collets |
| 2 x M84 (3 3/8") Collets | 2 x M100 (4") Collets    |

#### WEIGHTS AND DIMENSIONS

Tool Weight: 24Kg (52.9lb)  
Case Weight: 9Kg (19.8lb)  
Gross Kit Weight: 50Kg (110lb)

Carry Case Dimensions:  
890mm x 570mm x 165mm (35.04" x 22.44" x 6.50")

TOOL DIMENSIONS - CLOSED



TOOL DIMENSIONS - OPEN



SPREADING PLUG DIMENSIONS



info@equalizerinternational.com  
www.equalizerinternational.com

# SG25TE

## SECURE-GRIP IN-LINE HYDRAULIC FLANGE SPREADER



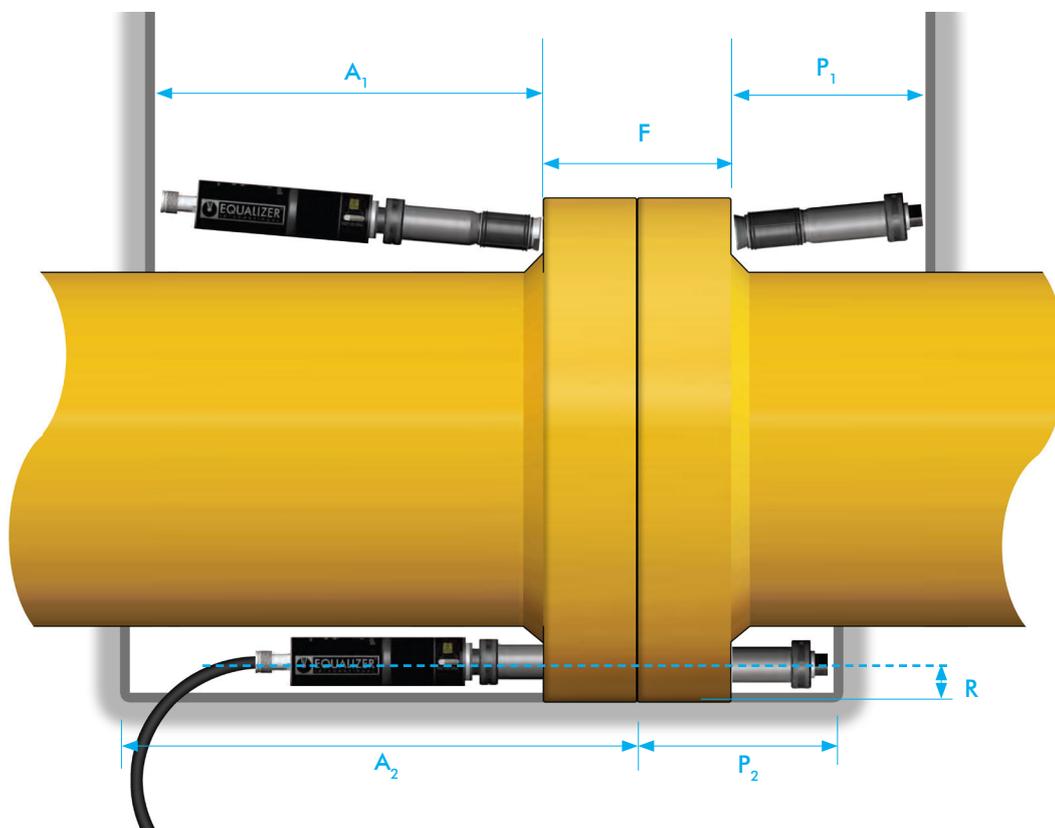
FLANGE TOOL INNOVATION

### RANGE OF APPLICATION

The SG25TE is usable on all standard flanges that have been specified to accept the following bolt sizes: M76 (3"), M80 (3 1/4"), M84 (3 3/8"), M90 (3 1/2"), M95 (3 3/4"), M100 (4") This includes ANSI, DIN, SPO, ASME, API and BS flanges.

For a detailed range of application please request the Secure-Grip In Line Hydraulic Operator Instruction Manual.

### SPATIAL ENVELOPE



	DIMENSION	MEASURED FROM	MEASURED TO	MINIMUM	MAXIMUM
F	Flange Joint Thickness	Outside Face of Flange	Outside Face of Flange	210mm (8.27")	570mm (22.44")
R	Radial space	Bolt-Hole Circle	Closest Obstruction	55mm (2.17")	-
$A_1$	Axial Tool space (for installation)	Outside Face of Flange	Closest Obstruction	750mm (29.53")	-
$A_2$	Axial Tool space (installed)	Inner Face of Flange	Closest Obstruction	1300mm (51.18")	-
$P_1$	Axial Plug space (for installation)	Outside Face of Flange	Closest Obstruction	380mm (14.96")	-
$P_2$	Axial Plug space (installed)	Inner Face of Flange	Closest Obstruction	380mm (14.96")	-

Contact Equalizer International if your application does not appear to suit standard tools.