

▼ SG11TM



#### Range of Application

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

- For use on all flange types with bolt-hole sizes ranging from 0.69 to 2.44 inches
- Unique expanding collet technology
- Little or no access gap required
- Secure bolt-hole locking mechanism.

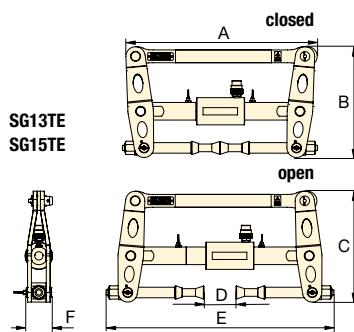
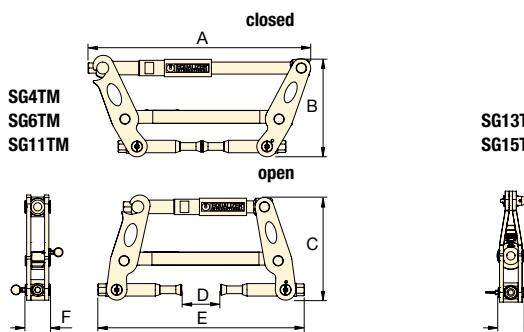
#### OPERATING BENEFITS

- Time-saving, simple operation
- Measurable, controlled flange spreading force
- Virtually universal, the Secure-Grip Flange Spreader range covers ANSI, DIN, SPO, ASME, API and BS flanges.

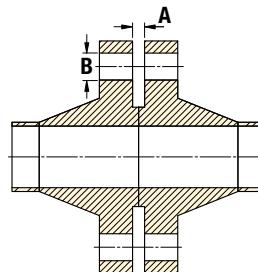


#### Caution

A minimum of two Flange Spreading Tools must be used when opening flange joints. This will enable the operator to maintain an equal spreading distance across the flange faces.



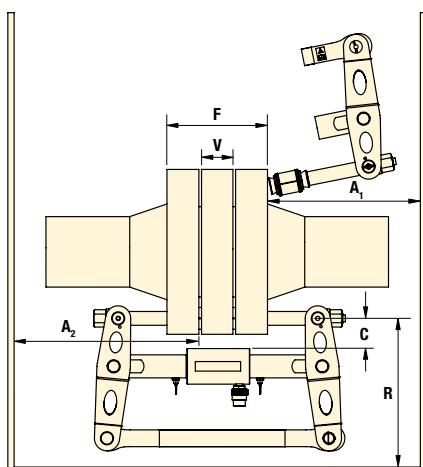
#### Flange Dimensions



Model Number Tool Kit	Type*	Maximum Spreading Force Per Tool (tons)	Spreading Distance Maximum (in)	Flange Dimensions (in)		Tool Dimensions (in)						Tool Weight (lbs)	Kit Weight (lbs)	Case Dimensions (lbs)	Tool Number
				Minimum Access Gap A	Bolt-hole Diameter B	A	B	C	D	E	F				
SG4TMSTD	M	4.2	2.95	0	0.69 - 0.91	15.7	7.5	7.2	3.0	15.2	1.9	9.9	28.2	20.5x14.8x6.5	SG4TM
SG6TMSTD	M	6.7	3.15	0	0.94 - 1.18	18.4	9.6	9.9	3.1	17.5	2.0	16.5	35.3	25.2x21.3x6.5	SG6TM
SG11TMSTD	M	12.4	3.54	0	1.18 - 1.54	20.3	9.8	10.4	3.5	18.2	2.4	23.1	44.1	25.2x21.3x6.5	SG11TM
SG13TESTD	H	14.6	4.53	0	1.50 - 1.93	20.3	11.9	12.4	4.5	24.8	2.8	47.4	89.3	35.0x22.4x6.5	SG13TE
SG15TESTD	H	16.9	3.94	0	1.87 - 2.44	23.6	13.6	15.0	3.9	28.3	3.1	57.3	99.2	35.0x22.4x6.5	SG15TE

\* M = Mechanical  
H = Hydraulic

# Flange Spreading Tools



Spreading Force:  
**4.2 - 16.9 tons**

Spreading Distance:  
**0 - 4.53 inches**

Maximum Operating Pressure:  
**10,000 psi \***

\* Only relevant for hydraulic tools.

**SG**  
Series



Model Number	Flange Joint Thickness F			Valve / Spacer Thickness V			Flange Clearance C		Radial Space R		Axial Space (for installation) A <sub>1</sub>		Axial Space (installed) A <sub>2</sub>		Tool Number
	Min. (in)	Max. (in)	Measured: From / To	Min. (in)	Max. (in)	Measured: From / To	Max. (in)	Measured: From / To	Min. (in)	Measured: From / To	Min. (in)	Measured: From / To	Min. (in)	Measured: From / To	
<b>SG4TMSTD</b>	2.4	7.3	Outside face of flange /	0*	1.8*	Inside face of flange /	2.0	Bolt-hole circle /	6.7		6.7		7.9		<b>SG4TM</b>
<b>SG6TMSTD</b>	2.4	8.3	Outside face of flange /	0*	2.0*	Inside face of flange /	2.2	Bolt-hole circle /	9.1	Bolt-hole circle /	7.9	Outside face of flange /	9.2	Inner face of flange /	<b>SG6TM</b>
<b>SG11TMSTD</b>	3.8	9.4	Outside face of flange /	0*	2.4*	Inside face of flange /	2.4	Largest OD of valve/spacer	9.4	Largest OD of valve/spacer	8.8	Closest obstruction	10.2	Closest obstruction	<b>SG11TM</b>
<b>SG13TESTD</b>	4.7	12.2	Outside face of flange	0*	3.7*	Inside face of flange	2.8		11.0	Closest obstruction	12.2	Closest obstruction	10.2	Closest obstruction	<b>SG13TE</b>
<b>SG15TESTD</b>	5.5	15.7	flange	0*	3.1*	flange	3.1		14.6		15.0		12.4		<b>SG15TE</b>

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

**SG4TM MECHANICAL TOOL KIT**



- 1 x SG4TM Tool
- 1 x 6 inch Vernier Calliper
- 1 x 3/8" Drive Torque Wrench and 16 mm Socket
- 1 x Safety Block
- 2 x M16 (5/8") Collets
- 2 x M20 (3/4") Collets
- 1 x Aluminum Carry Case with Protective Foam Inserts

**SG6TM MECHANICAL TOOL KIT**



- 1 x SG6TM Tool
- 1 x 6 inch 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 Aluminum Carry Case with Protective Foam Inserts

**SG11TM MECHANICAL TOOL KIT**



- 1 x SG11TM Tool
- 1 x 6 inch Vernier calliper
- 1 x 1/2" Drive torque wrench and 24 mm 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 Aluminum Carry Case with Protective Foam Inserts

**SG13TE HYDRAULIC TOOL KIT**



- 1 x SG13TE Tool
- 1 x 10,000 psi HP550S Single Port Sealed Hand Pump with Gauge
- 1 x 10,000 psi Hydraulic Hose, 6.5 ft
- 1 x 6 inch Vernier Calliper
- 1 x 1/2" Square Drive Flexible Handle
- 1 x 30 mm 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 Aluminum Carry Case with Protective Foam Inserts

**SG15TE HYDRAULIC TOOL KIT**



- 1 x SG15TE Tool
- 1 x 10,000 psi HP550S Single Port Sealed Hand Pump with Gauge
- 1 x 10,000 psi Hydraulic Hose, 6.5 ft
- 1 x 12 inch Vernier Calliper
- 1 x 1/2" Square Drive Flexible Handle
- 1 x 36 mm 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 Aluminum Carry Case with Protective Foam Inserts

▼ SG18TE & SG25TE



#### Range of Application

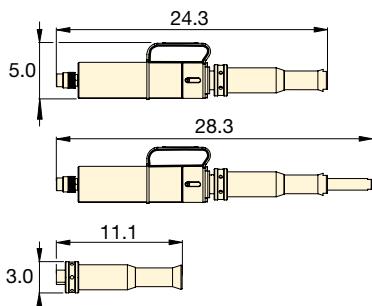
For a detailed range of application please request the Secure-Grip In-Line Hydraulic Operator Instruction Sheet.



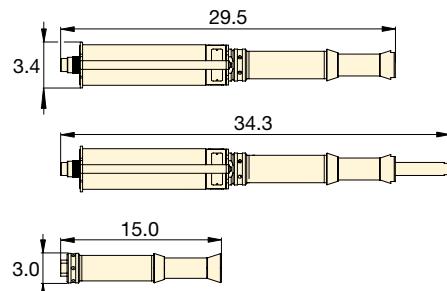
#### Caution

A minimum of two Flange Spreading Tools must be used when opening flange joints. This will enable the operator to maintain an equal spreading distance across the flange faces.

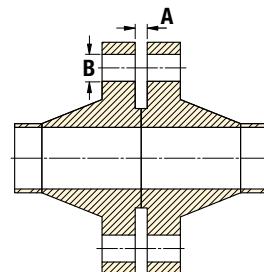
- Applicable for larger-sized flanges
- Actuated by an external hand pump
- Suitable for bolt holes from 2.34 to 4.25 inches.



SG18TE



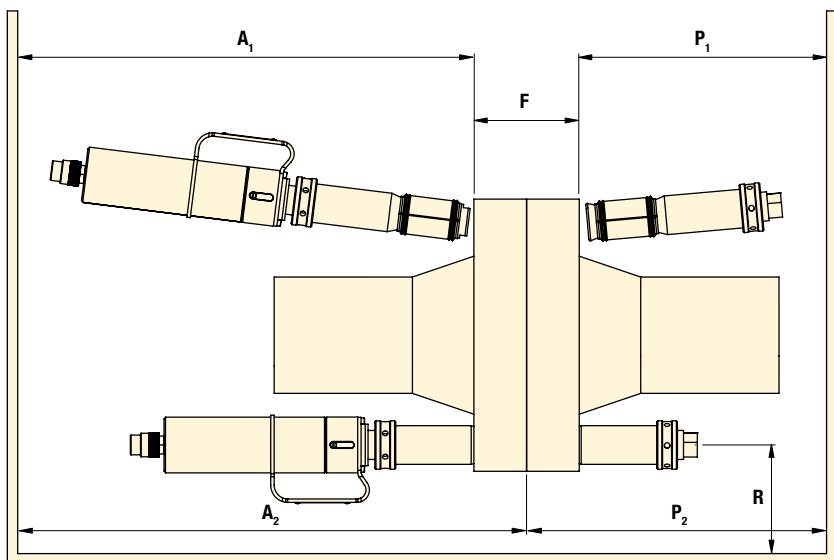
SG25TE



Flange Dimensions

Model Number Tool Kit	Type	Maximum Spreading Force Per Tool (tons)	Spreading Distance Maximum (in)	Flange Dimensions (in)		Tool Weight (lbs)	Kit Weight (lbs)	Case Dimensions (in)	Tool Number
				Minimum Access Gap A	Bolt-hole Diameter B				
SG18TESTD	Hydraulic	20.2	3.93	0	2.34 - 2.95	31	99	35 x 22.4 x 6.5	SG18TE
SG25TESTD	Hydraulic	28.1	4.72	0	2.95 - 4.25	53	110	35 x 22.4 x 6.5	SG25TE

# Flange Spreading Tools



**SG  
Series**



Spreading Force:  
**20.2 - 28.1 tons**

Spreading Distance:  
**0 - 4.72 inches**

Maximum Operating Pressure:  
**10,000 psi**

Model Number Tool Kit	Flange Joint Thickness F			Radial Space R		Axial Space (for installation) A1		Axial Space (installed) A2		Axial Plug Space (for installation) P1		Axial Plug Space (installed) P2		Tool Number
	Min. (in)	Max. (in)	Measured: From / To	Min. (in)	Measured: From / To	Min. (in)	Measured: From / To	Min. (in)	Measured: From / To	Min. (in)	Measured: From / To	Min. (in)	Measured: From / To	
<b>SG18TESTD</b>	7.5	17.7	Outside face of flange / Outside face of flange	2.2	Bolt-hole circle / Closest obstruction	24.4	Outside face of flange / Closest obstruction	35.4	Inner face of flange / Closest obstruction	11.1	Outside face of flange / Closest obstruction	11.1	Inner face of flange / Closest obstruction	SG18TE
<b>SG25TESTD</b>	8.3	22.4	Outside face of flange / Outside face of flange	2.2	29.5	43.3		15.0		15.0		15.0		SG25TE

**SG18TE HYDRAULIC TOOL KIT**



- 1x SG18TE Tool
- 1x Spreading Plug
- 1x 10,000 psi HP550S Single Port Sealed Hand Pump with Gauge
- 1x 10,000 psi Hydraulic Hose, 6.5 ft
- 1x 12 inch Vernier Calliper
- 1x 1/2 inch Spacer Plate
- 1x 5 mm Allen Key
- 1x 2 inch Spacer
- 1x Safety Block
- 2x M60 (2-3/8") Collets
- 2x M64 (2-1/2") Collets
- 2x M70 (2-3/4") Collets
- 1x Aluminum Carry Case with Protective Foam Inserts

**SG25TE HYDRAULIC TOOL KIT**



- 1x SG25TE Tool
- 1x Spreading Plug
- 1x 10,000 psi HP550S Single Port Sealed Hand Pump with Gauge
- 1x 10,000 psi Hydraulic Hose, 6.5 ft
- 1x 12 inch Vernier Calliper
- 1x 1/2 inch Spacer Plate
- 1x Safety Block
- 1x Aluminum Carry Case with Protective Foam Inserts

**SG25TE COLLETS (AVAILABLE SEPARATELY)**

Model Number	Description
673601-01	2x M76 (3") Collets
674801-01	2x M90 (3-1/2") Collets
673901-01	2x M80 (3-1/4") Collets
675101-01	2x M95 (3-3/4") Collets
674501-01	2x M84 (3-3/8") Collets
675601-01	2x M100 (4") Collets