



## Tanker Series

**Tanker T 1000 to 6600 and  
Tanker S 1000 to 6600**



### High Force in Short Heights

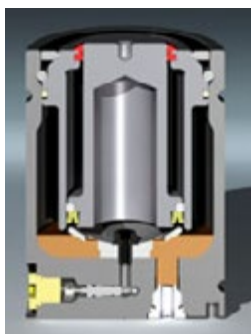
The new TankerT and TankerS, each with four models from which to choose, offer contact forces from 2,700-15,400 lbs. and full stroke forces from 3,900-27,600 lbs. Some models are over an inch shorter than Gas Springs with comparable forces currently available.

### Dynamic Lubrication Extends Gas Spring Life

The patented dynamic lubrication system coats the Gas Spring wall, piston and seal with oil with every stroke of the press to reduce heat build-up and lower operating temperature which in turn reduces wear on die components and extends performance life.



Die Open



Press Closes



Press Opens

### Bore Seal Resists Contamination and Leaking from Rod Damage

Both the TankerT and TankerS seal inside, on the cylinder bore, not on the rod like most Gas Springs. This provides maximum contamination resistance and keeps the Gas Spring operating even if the piston rod is damaged.

### Self-Aligning Piston Rod Accepts Die Movement and a Degree of Sideload

The corrosion-resistant nitrided piston rod is self-aligning, designed to accept normal die movement and a degree of sideload without damaging the sealing surfaces. The TankerT and TankerS have been sideload-tested to more than 500,000 strokes.

### Stroke Lengths to 225 mm

Long stroke lengths are available on all models.

### Self-Contained or Hose System Operation

Both the TankerT and TankerS can be used as Self-Contained Gas Springs or in a Hosed System.

### Wide Range of Mounting Options

Both the TankerT and TankerS offer a variety of mounting options, interchangeable with standard mounts currently in use.



### Product Specifications

Pressure Medium .....	Nitrogen
Force increase by temperature (%/ °C) .....	0.3
Max. charging pressure (bar at 20°C) .....	150
Min. operating temperature (°C) .....	0
Max. operating temperature (°C) .....	80
Max. piston rod velocity (m/s) .....	1.6

### Repair Kits

TNKS Gas Springs are field repairable. There is a seal kit with detailed instructions for each size Gas Spring. Tool kits are also available.

Gas Spring	Seal Kit Number	Tool Kit Number
TNKS1000	60-112-7000	T2TK-250-750
TNKS2400	60-175-7000	T2TK
TNKS4200	60-238-7000	
TNKS6600	60-300-7000	

**NOTE:** All dimensions are nominal. Data shown are typical. Actual data for any particular unit may vary.

### Valve Removal and Installation Tool

Gas Spring	Tool Order Number
TNKS1000	T2TK-IN-M6
TNKS2400	
TNKS4200	
TNKS6600	T2TK-IN-G1/8

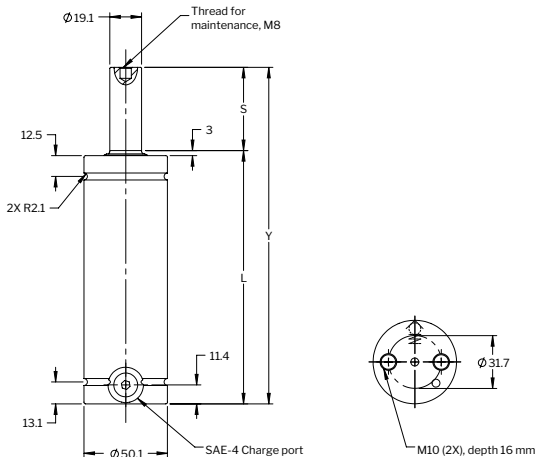
Gas Spring Model	Page		
TNKT 1000	200	TNKS 1000	208
TNKT 2400	202	TNKS 2400	210
TNKT 4200	204	TNKS 4200	212
TNKT 6600	206	TNKS 6600	214

Strokes 25, 50, 80 and 125 are offered as a part of the Hyson Preferred Program which provides optimal delivery.



For general information see “About Gas Springs”.

Min. charging pressure (at 20°C) .....	25 bar
Max. charging pressure (at 20°C) .....	150 bar
Contact Force at max. pressure (N) .....	9630
Contact Force at max. pressure (lbf) .....	2165
Recommended max strokes/min (at 20°C) .....	~ 20-100
Cylinder diameter (mm) .....	50
Charge port .....	SAE-4
Repair kit .....	60-112-7000
Operating temperature .....	0 to +80°C
Max piston rod velocity .....	1.6 m/s
Force increase by temperature .....	±0.3%/°C
Pressure medium .....	Nitrogen



Order Number Model X Stroke	Stroke		Contact Force		Full Stroke Force		Cylinder Height		Body Height	
	S						Y ±0.25	Y ±0.010	L	
	mm	in	N	lbf.	mm	in			mm	in
TNKT1000X13	13	0.51	9,630	2,165	16,280	3,660	78	3.07	65	2.56
TNKT1000X16	16	0.63			16,505	3,710	84	3.31	68	2.68
TNKT1000X19	19	0.75			16,660	3,745	90	3.54	71	2.80
TNKT1000X25	25	0.98			16,860	3,790	102	4.02	77	3.03
TNKT1000X32	32	1.26			17,015	3,825	116	4.57	84	3.31
TNKT1000X38	38	1.50			17,080	3,840	128	5.04	90	3.54
TNKT1000X50	50	1.97			17,215	3,870	152	5.98	102	4.02
TNKT1000X63	63	2.48			17,280	3,885	178	7.01	115	4.53
TNKT1000X75	75	2.95			17,325	3,895	202	7.95	127	5.00
TNKT1000X80	80	3.15			17,350	3,900	212	8.35	132	5.20
TNKT1000X100	100	3.94			17,395	3,910	252	9.92	152	5.98
TNKT1000X125	125	4.92			17,435	3,920	302	11.89	177	6.97
TNKT1000X150	150	5.91	17,460	3,925	365	14.37	215	8.46		
TNKT1000X175	175	6.89	17,480	3,930	415	16.34	240	9.45		
TNKT1000X200	200	7.87	17,505	3,935	465	18.31	265	10.43		

Note: All dimensions are nominal. Data shown are typical. Actual data for any particular unit may vary.



Mounting Possibilities



Top Mount  
FC, FCS



Foot Mount  
SF

Recommended Flanges



FC-750



235



FCS-750



238



SF-750



249

Note!

For dimensions on all mounting flanges, refer to “Flanges” in chapter 3.

**Providing full stroke force between 16,280 N (3,660 lbf) and 17,505 N (3,935 lbf) TNKT-1000 is available in 10 stroke lengths.**

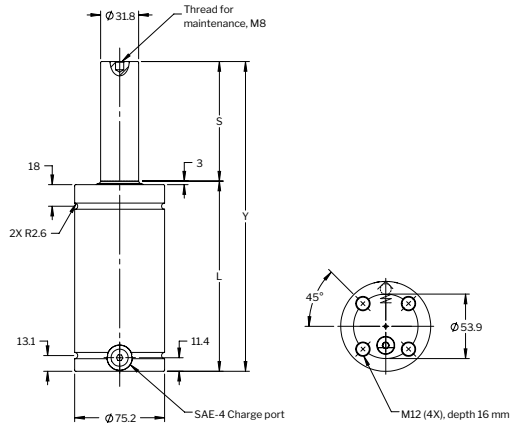
Strokes 25, 50, 80 and 125 are offered as a part of the Hyson Preferred Program which provides optimal delivery.



## Basic Information

For general information see “About Gas Springs”.

Min. charging pressure (at 20°C) .....	25 bar
Max. charging pressure (at 20°C) .....	150 bar
Contact Force at max. pressure (N) .....	9630
Contact Force at max. pressure (lbf) .....	2165
Recommended max strokes/min (at 20°C) .....	~ 20-100
Cylinder diameter (mm) .....	50
Charge port .....	SAE-4
Repair kit .....	60-112-7000
Operating temperature .....	0 to +80°C
Max piston rod velocity .....	1.6 m/s
Force increase by temperature .....	±0.3%/°C
Pressure medium .....	Nitrogen



Order Number Model X Stroke	Stroke		Contact Force		Full Stroke Force		Cylinder Height		Body Height	
	S						Y ±0.25	Y ±0.010	L	
	mm	in	N	lbf.	N	lbf.	mm	in	mm	in
TNKT2400X16	16	0.63	23,300	5,238	37,120	8,345	91	3.58	75	2.95
TNKT2400X19	19	0.75			37,655	8,465	97	3.82	78	3.07
TNKT2400X25	25	0.98			38,410	8,635	109	4.29	84	3.31
TNKT2400X32	32	1.26			38,990	8,765	123	4.84	91	3.58
TNKT2400X38	38	1.50			39,345	8,845	135	5.31	97	3.82
TNKT2400X50	50	1.97			39,810	8,950	159	6.26	109	4.29
TNKT2400X63	63	2.48			40,125	9,020	185	7.28	122	4.80
TNKT2400X75	75	2.95			40,325	9,065	209	8.23	134	5.28
TNKT2400X80	80	3.15			40,390	9,080	219	8.62	139	5.47
TNKT2400X100	100	3.94			40,590	9,125	259	10.20	159	6.26
TNKT2400X125	125	4.92			40,770	9,165	309	12.17	184	7.24
TNKT2400X150	150	5.91			40,880	9,190	370	14.57	220	8.66
TNKT2400X175	175	6.89			40,970	9,210	420	16.54	245	9.65
TNKT2400X200	200	7.87			41,035	9,225	470	18.50	270	10.63

Note: All dimensions are nominal. Data shown are typical. Actual data for any particular unit may vary.



Mounting Possibilities



Top Mount  
FC, FCS



Foot Mount  
SF

Recommended Flanges



FC-1500

235



FCS-1500

238



SF-1500

249

Note!

For dimensions on all mounting flanges, refer to “Flanges” in chapter 3.

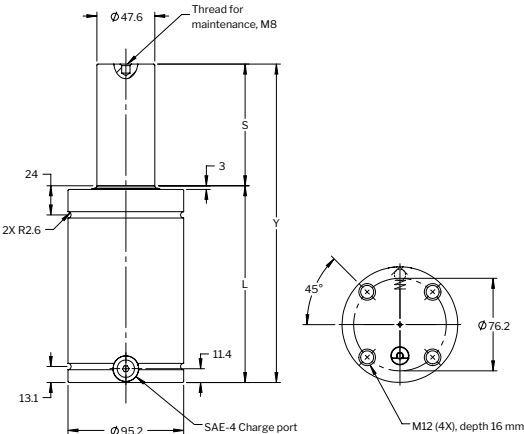
**Providing full stroke force between 68,545 N (15,410 lbf) and 77,330 N (17,385 lbf) TNKT-4200 is available in 10 stroke lengths.**

Strokes 25, 50, 80 and 125 are offered as a part of the Hyson Preferred Program which provides optimal delivery. We recommend stroke lengths of greater than 25 mm should be base or flange mounted.

## Basic Information

For general information see “About Gas Springs”.

Min. charging pressure (at 20°C)	25 bar
Max. charging pressure (at 20°C)	150 bar
Contact Force at max. pressure (N)	42900
Contact Force at max. pressure (lbf)	9645
Recommended max strokes/min (at 20°C)	~ 20-100
Cylinder diameter (mm)	95
Charge port	SAE-4
Repair kit	60-238-7000
Operating temperature	0 to +80°C
Max piston rod velocity	1.6 m/s
Force increase by temperature	±0.3%/°C
Pressure medium	Nitrogen



Order Number Model X Stroke	Stroke		Contact Force		Full Stroke Force		Cylinder Height		Body Height	
	S						Y ±0.25	Y ±0.010	L	
	mm	in	N	lbf.	N	lbf.	mm	in	mm	in
TNKT4200X16	16	0.63	42,900	9,645	68,545	15,410	94	3.70	78	3.07
TNKT4200X19	19	0.75			69,705	15,670	100	3.94	81	3.19
TNKT4200X25	25	0.98			71,370	16,045	112	4.41	87	3.43
TNKT4200X32	32	1.26			72,640	16,330	126	4.96	94	3.70
TNKT4200X38	38	1.50			73,395	16,500	138	5.43	100	3.94
TNKT4200X50	50	1.97			74,440	16,735	162	6.38	112	4.41
TNKT4200X63	63	2.48			75,155	16,895	188	7.40	125	4.92
TNKT4200X75	75	2.95			75,620	17,000	212	8.35	137	5.39
TNKT4200X80	80	3.15			75,775	17,035	222	8.74	142	5.59
TNKT4200X100	100	3.94			76,245	17,140	262	10.31	162	6.38
TNKT4200X125	125	4.92			76,620	17,225	312	12.28	187	7.36
TNKT4200X150	150	5.91			76,890	17,285	375	14.76	225	8.86
TNKT4200X175	175	6.89			77,090	17,330	425	16.73	250	9.84
TNKT4200X200	200	7.87			77,220	17,360	475	18.70	275	10.83
TNKT4200X225	225	8.86			77,330	17,385	525	20.67	300	11.81

Note: All dimensions are nominal. Data shown are typical. Actual data for any particular unit may vary.

Mounting Possibilities



Top Mount  
FC, FCS



Foot Mount  
SF

Recommended Flanges



FC-3000

 235



FCS-3000

 238



SF-3000

 249

Note!

For dimensions on all mounting flanges, refer to “Flanges” in chapter 3.



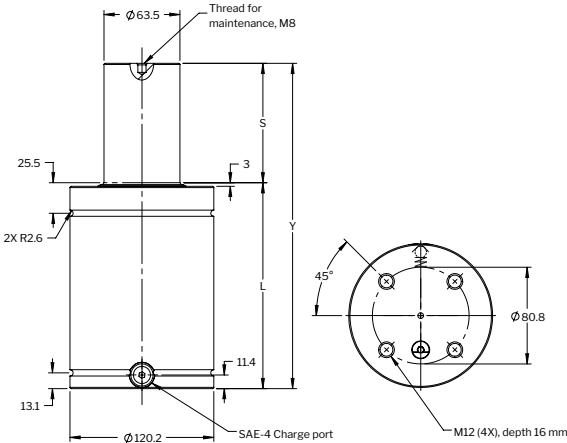
**Providing full stroke force between 99,285 N 22,320 lbf) and 125,705 N (28,260 lbf) TNKT-6600 is available in 10 stroke lengths.**

Strokes 25,50,100 and 150 are offered as a part of the Hyson Preferred Program which provides optimal delivery. We recommend stroke lengths of greater than 25 mm should be base or flange mounted.

## Basic Information

For general information see “About Gas Springs”.

Min. charging pressure (at 20°C)	25 bar
Max. charging pressure (at 20°C)	150 bar
Contact Force at max. pressure (N)	68435
Contact Force at max. pressure (lbf)	15385
Recommended max strokes/min (at 20°C)	~ 20-100
Cylinder diameter (mm)	120
Charge port	SAE-4
Repair kit	60-300-7000
Operating temperature	0 to +80°C
Max piston rod velocity	1.6 m/s
Force increase by temperature	±0.3%/°C
Pressure medium	Nitrogen



Order Number Model X Stroke	Stroke		Contact Force		Full Stroke Force		Cylinder Height		Body Height	
	S						Y ±0.25	Y ±0.010	L	
	mm	in	N	lbf.	N	lbf.	mm	in	mm	in
TNKT6600X16	16	0.63	68,435	15,385	99,285	22,320	104	4.09	88	3.46
TNKT6600X19	19	0.75			101,910	22,910	110	4.33	91	3.58
TNKT6600X25	25	0.98			106,000	23,830	122	4.80	97	3.82
TNKT6600X32	32	1.26			109,495	24,615	136	5.35	104	4.09
TNKT6600X38	38	1.50			111,740	25,120	148	5.83	110	4.33
TNKT6600X50	50	1.97			115,030	25,860	172	6.77	122	4.80
TNKT6600X63	63	2.48			117,455	26,405	198	7.80	135	5.31
TNKT6600X75	75	2.95			119,080	26,770	222	8.74	147	5.79
TNKT6600X80	80	3.15			119,635	26,895	232	9.13	152	5.98
TNKT6600X100	100	3.94			121,370	27,285	272	10.71	172	6.77
TNKT6600X125	125	4.92			122,860	27,620	322	12.68	197	7.76
TNKT6600X150	150	5.91			123,905	27,855	385	15.16	235	9.25
TNKT6600X175	175	6.89			124,660	28,025	435	17.13	260	10.24
TNKT6600X200	200	7.87			125,260	28,160	485	19.09	285	11.22
TNKT6600X225	225	8.86			125,705	28,260	535	21.06	310	12.20

Note: All dimensions are nominal. Data shown are typical. Actual data for any particular unit may vary.



Mounting Possibilities



Top Mount  
FC, FCS



Foot Mount  
SF

Recommended Flanges



FC-5000

235



FCS-5000

238



SF-5000

249

Note!

For dimensions on all mounting flanges, refer to “Flanges” in chapter 3.

Providing full stroke force between 16,280 N (3,660 lbf) and 17,505 N (3,935 lbf) TNKS-1000 is available in 10 stroke lengths.

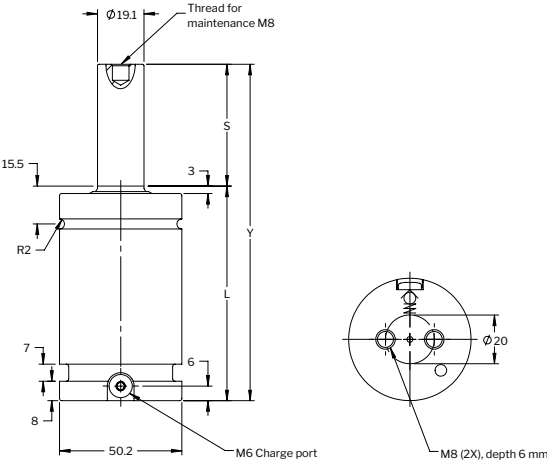
Strokes 25,50,80 and 125 are offered as a part of the Hyson Preferred Program which provides optimal delivery.



## Basic Information

For general information see “About Gas Springs”.

Min. charging pressure (at 20°C)	25 bar
Max. charging pressure (at 20°C)	150 bar
Contact Force at max. pressure (N)	9630
Contact Force at max. pressure (lbf)	2165
Recommended max strokes/min (at 20°C)	~ 20-100
Cylinder diameter (mm)	50
Charge port	M6
Repair kit	60-112-7000
Operating temperature	0 to +80°C
Max piston rod velocity	1.6 m/s
Force increase by temperature	±0.3%/°C
Pressure medium	Nitrogen



Order Number Model X Stroke	Stroke		Contact Force		Full Stroke Force		Cylinder Height		Body Height	
	S						Y ±0.25	Y ±0.010	L	
	mm	in	N	lbf.	N	lbf.	mm	in	mm	in
TNKS1000X13	13	0.51	9,630	2,165	16,280	3,660	64	2.53	51	2.01
TNKS1000X16	16	0.63			16,505	3,710	70	2.76	54	2.13
TNKS1000X19	19	0.75			16,660	3,745	76	2.99	57	2.24
TNKS1000X25	25	0.98			16,860	3,790	88	3.46	63	2.48
TNKS1000X32	32	1.26			17,015	3,825	102	4.02	70	2.76
TNKS1000X38	38	1.50			17,080	3,840	114	4.49	76	2.99
TNKS1000X50	50	1.97			17,215	3,870	138	5.43	88	3.46
TNKS1000X63	63	2.48			17,280	3,885	164	6.46	101	3.98
TNKS1000X75	75	2.95			17,325	3,895	188	7.40	113	4.45
TNKS1000X80	80	3.15			17,350	3,900	198	7.80	118	4.65
TNKS1000X100	100	3.94			17,395	3,910	238	9.37	138	5.43
TNKS1000X125	125	4.92			17,435	3,920	288	11.34	163	6.41
TNKS1000X150	150	5.91			17,460	3,925	351	13.82	201	7.91
TNKS1000X175	175	6.89			17,480	3,930	401	15.79	226	8.90
TNKS1000X200	200	7.87			17,505	3,935	451	17.76	251	9.88

Note: All dimensions are nominal. Data shown are typical. Actual data for any particular unit may vary.



Mounting Possibilities



Top Mount  
FC, FCS



Foot Mount  
FFC



Base Mount  
MP

Recommended Flanges



FFC-750

240



FC-750

235



FCS-750

238



MP-750

246

Note!

For dimensions on all mounting flanges, refer to “Flanges” in chapter 3.

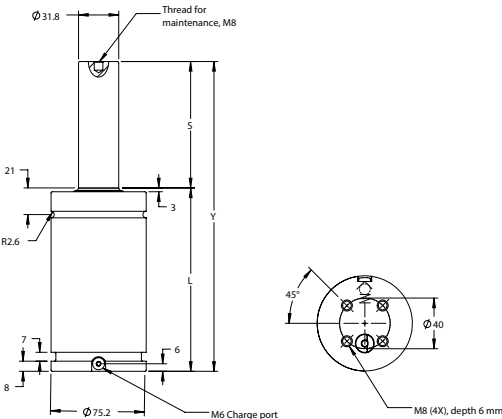
**Providing full stroke force between 37,120 N (8,345 lbf) and 41,035 N (9,225 lbf) TNKS-2400 is available in 10 stroke lengths.**

Strokes 25,50,80 100 and 125 are offered as a part of the Hyson Preferred Program which provides optimal delivery.

## Basic Information

For general information see “About Gas Springs”.

Min. charging pressure (at 20°C)	25 bar
Max. charging pressure (at 20°C)	150 bar
Contact Force at max. pressure (N)	23300
Contact Force at max. pressure (lbf)	5238
Recommended max strokes/min (at 20°C)	~ 20-100
Cylinder diameter (mm)	75
Charge port	M6
Repair kit	60-175-7000
Operating temperature	0 to +80°C
Max piston rod velocity	1.6 m/s
Force increase by temperature	±0.3%/°C
Pressure medium	Nitrogen



Order Number Model X Stroke	Stroke		Contact Force		Full Stroke Force		Cylinder Height		Body Height	
	S						Y ±0.25	Y ±0.010	L	
	mm	in	N	lbf.	N	lbf.	mm	in	mm	in
TNKS2400X16	16	0.63	23,300	5,238	37,120	8,345	77	3.03	61	2.40
TNKS2400X19	19	0.75			37,655	8,465	83	3.27	64	2.52
TNKS2400X25	25	0.98			38,410	8,635	95	3.74	70	2.76
TNKS2400X32	32	1.26			38,990	8,765	109	4.29	77	3.03
TNKS2400X38	38	1.50			39,345	8,845	121	4.76	83	3.27
TNKS2400X50	50	1.97			39,810	8,950	145	5.71	95	3.74
TNKS2400X63	63	2.48			40,125	9,020	171	6.73	108	4.25
TNKS2400X75	75	2.95			40,325	9,065	195	7.68	120	4.72
TNKS2400X80	80	3.15			40,390	9,080	205	8.07	125	4.92
TNKS2400X100	100	3.94			40,590	9,125	245	9.65	145	5.71
TNKS2400X125	125	4.92			40,770	9,165	295	11.61	170	6.69
TNKS2400X150	150	5.91			40,880	9,190	356	14.02	206	8.11
TNKS2400X175	175	6.89			40,970	9,210	406	15.98	231	9.09
TNKS2400X200	200	7.87			41,035	9,225	456	17.95	256	10.08

Note: All dimensions are nominal. Data shown are typical. Actual data for any particular unit may vary.



Mounting Possibilities



Top Mount  
FC, FCS



Foot Mount  
FFC



Base Mount  
MP

Recommended Flanges



FFC-1500

240



FC-1500

235



FCS-1500

238



MP-1500

246

Note!

For dimensions on all mounting flanges, refer to “Flanges” in chapter 3.

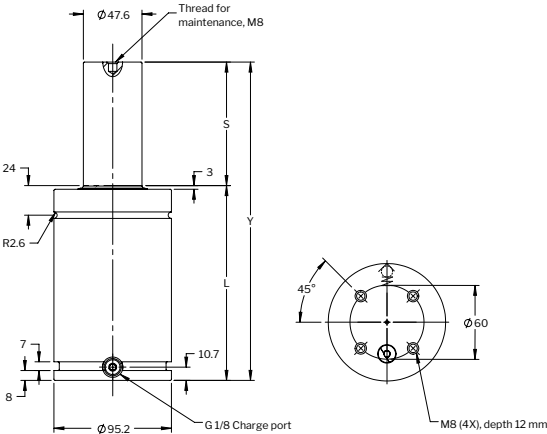
**Providing full stroke force between 68,545 N (15,410 lbf) and 77,330 N (17,385 lbf) TNKS-4200 is available in 10 stroke lengths.**

Strokes 25, 50, 80 and 125 are offered as a part of the Hyson Preferred Program which provides optimal delivery. We recommend stroke lengths of greater than 25 mm should be base or flange mounted.

## Basic Information

For general information see “About Gas Springs”.

Min. charging pressure (at 20°C)	25 bar
Max. charging pressure (at 20°C)	150 bar
Contact Force at max. pressure (N)	42900
Contact Force at max. pressure (lbf)	9645
Recommended max strokes/min (at 20°C)	~ 20-100
Cylinder diameter (mm)	95
Charge port	G 1/8"
Repair kit	60-238-7000
Operating temperature	0 to +80°C
Max piston rod velocity	1.6m/s
Force increase by temperature	±0.3%/°C
Pressure medium	Nitrogen



Order Number Model X Stroke	Stroke		Contact Force		Full Stroke Force		Cylinder Height		Body Height	
	S		N	lbf.	N	lbf.	Y ±0.25	Y ±0.010	L	L
	mm	in								
TNKS4200X16	16	0.63	42,900	9,645	68,545	15,410	90	3.54	74	2.91
TNKS4200X19	19	0.75			69,705	15,670	96	3.78	77	3.03
TNKS4200X25	25	0.98			71,370	16,045	108	4.25	83	3.27
TNKS4200X32	32	1.26			72,640	16,330	122	4.80	90	3.54
TNKS4200X38	38	1.50			73,395	16,500	134	5.28	96	3.78
TNKS4200X50	50	1.97			74,440	16,735	158	6.22	108	4.25
TNKS4200X63	63	2.48			75,155	16,895	184	7.24	121	4.76
TNKS4200X75	75	2.95			75,620	17,000	208	8.19	133	5.24
TNKS4200X80	80	3.15			75,775	17,035	218	8.58	138	5.43
TNKS4200X100	100	3.94			76,245	17,140	258	10.16	158	6.22
TNKS4200X125	125	4.92			76,620	17,225	308	12.11	183	7.20
TNKS4200X150	150	5.91			76,890	17,285	371	14.61	221	8.70
TNKS4200X175	175	6.89			77,090	17,330	421	16.57	246	9.69
TNKS4200X200	200	7.87			77,220	17,360	471	18.54	271	10.67
TNKS4200X225	225	8.86			77,330	17,385	521	20.51	296	11.65

Note: All dimensions are nominal. Data shown are typical. Actual data for any particular unit may vary.



Mounting Possibilities



Top Mount  
FC, FCS



Foot Mount  
FFC



Base Mount  
MP

Recommended Flanges



FFC-3000

240



FC-3000

235



FCS-3000

238



MP-3000

246

Note!

For dimensions on all mounting flanges, refer to “Flanges” in chapter 3.



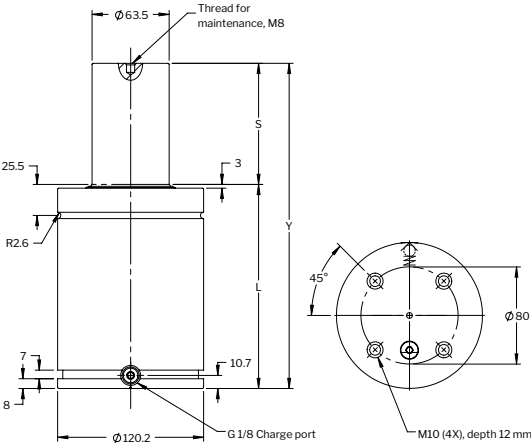
**Providing full stroke force between 99,285 N 22,320 lbf) and 125,705 N (28,260 lbf) TNKS-6600 is available in 10 stroke lengths.**

Strokes 25, 50, 100 and 150 are offered as a part of the Hyson Preferred Program which provides optimal delivery. We recommend stroke lengths of greater than 25 mm should be base or flange mounted.

## Basic Information

For general information see “About Gas Springs”.

Min. charging pressure (at 20°C)	25 bar
Max. charging pressure (at 20°C)	150 bar
Contact Force at max. pressure (N)	68435
Contact Force at max. pressure (lbf)	15385
Recommended max strokes/min (at 20°C)	~ 20-100
Cylinder diameter (mm)	120
Charge port	G 1/8"
Repair kit	60-300-7000
Operating temperature	0 to +80°C
Max piston rod velocity	1.6m/s
Force increase by temperature	±0.3%/°C
Pressure medium	Nitrogen



Order Number Model X Stroke	Stroke		Contact Force		Full Stroke Force		Cylinder Height		Body Height	
	S		N	lbf.	N	lbf.	Y ±0.25	Y ±0.010	L	
	mm	in							mm	in
TNKS6600X16	16	0.63	68,435	15,385	99,285	22,320	100	3.94	84	3.31
TNKS6600X19	19	0.75			101,910	22,910	106	4.17	87	3.43
TNKS6600X25	25	0.98			106,000	23,830	118	4.65	93	3.66
TNKS6600X32	32	1.26			109,495	24,615	132	5.20	100	3.94
TNKS6600X38	38	1.50			111,740	25,120	144	5.67	106	4.17
TNKS6600X50	50	1.97			115,030	25,860	168	6.61	118	4.65
TNKS6600X63	63	2.48			117,455	26,405	194	7.64	131	5.16
TNKS6600X75	75	2.95			119,080	26,770	218	8.58	143	5.63
TNKS6600X80	80	3.15			119,635	26,895	228	8.98	148	5.83
TNKS6600X100	100	3.94			121,370	27,285	268	10.55	168	6.61
TNKS6600X125	125	4.92			122,860	27,620	318	12.52	193	7.60
TNKS6600X150	150	5.91			123,905	27,855	381	15.00	231	9.09
TNKS6600X175	175	6.89			124,660	28,025	431	16.97	256	10.08
TNKS6600X200	200	7.87			125,260	28,160	481	18.94	281	11.06
TNKS6600X225	225	8.86			125,705	28,260	531	20.91	306	12.05

Note: All dimensions are nominal. Data shown are typical. Actual data for any particular unit may vary.



Mounting Possibilities



Top Mount  
FC, FCS



Foot Mount  
FFC



Base Mount  
MP

Recommended Flanges



FFC-5000

240



FC-5000

235



FCS-5000

238



MP-5000

246

Note!

For dimensions on all mounting flanges, refer to “Flanges” in chapter 3.