PED 2014/68/EU

SMC ISO 9001 / ISO 14001

JAS-ANZ

TSP SERIES

NITROGEN GAS SPRING

XTRA HICH POWER

■일반 제원

- 충전재
  질소가스 (N_2)
- 최대 충전 압력
  150~180 bar (at 20℃)
- 최소 충전 압력
  25 bar (at 20℃)
- 작동 온도
  0 to 80℃
- 온도에 따른 압력 증가량
  ±0.3% /℃
- 피스톤 로드 속도
  0~0.8 m/s
- 로드 표면처리
  도금 열처리
- 실린더 표면처리
  흑산화 피막

※ 상기 사양은 성능개선을 위해 예고없이 변경될 수 있습니다.

■Model별 제원

종류 Type	Stroke (mm)	실린더 외경 ø(mm)	Rod 외경 ø(mm)	초기하중 (N)	최대하중 (N)	최대 충전 압력	권장최대 스트로크 (20℃)
TSP0170	7~125	19	11	1,700	2,800	180Bar	~40 to 100
TSP0320	7~125	25	15	3,200	5,500	180Bar	~40 to 100
TSP0350	10~125	32	16	3,600	5,400	180Bar	~50 to 100
TSP0500	10~125	38	20	4,700	7,200	150Bar	~50 to 100
TSP0750	10~125	45	25	7,400	11,700	150Bar	~50 to 100
TSP1000	13~125	50	28	9,200	14,900	150Bar	~50 to 100
TSP1500	13~125	63	36	15,200	24,100	150Bar	~50 to 100
TSP2400	16~125	75	45	23,800	38,400	150Bar	~40 to 100
TSP4200	16~125	95	60	42,200	70,900	150Bar	~30 to 100
TSP6600	16~125	120	75	66,000	108,700	150Bar	~30 to 100
TSP9500	20~125	150	90	95,000	149,100	150Bar	~30 to 100
TSP20000	25~125	195	130	200,000	325,100	150Bar	~15 to 40

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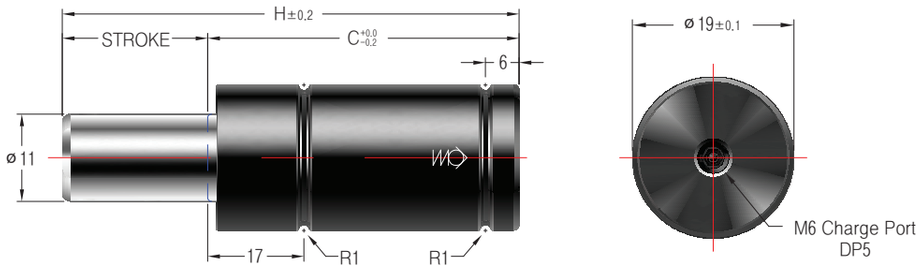


규격표기방법

Catalog No.	STROKE	–	충전압력(Bar)
TSP0170	050	–	100

MOUNT	XP0170
REPAIR KIT	Non-repairable

[주의!] TSP0170은 충전 압력을 별도로 지정하지 않을 경우 표준충전압력(180Bar)으로 출고됩니다.

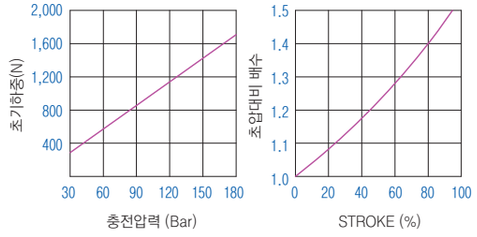
TSP0170

Stroke (mm)	Stroke (inch)	H	C	Force (N) (180 bar/+20℃) Initial	Force (N) (180 bar/+20℃) End force*	Gas vol. (cm^3)	Weight (kg)
7	0.28	44	37	1,700	2,500	2.2	0.06
10	0.39	50	40		2,500	2.9	0.06
13	0.51	56	43		2,600	3.6	0.07
16	0.63	62	46		2,600	4.4	0.07
20	0.79	70	50		2,700	5.3	0.08
25	0.98	80	55		2,700	6.5	0.08
30	1.18	90	60		2,700	7.7	0.09
35	1.38	100	65		2,700	8.9	0.10
38	1.50	106	68		2,700	9.6	0.11
40	1.57	110	70		2,700	10.1	0.11
45	1.77	120	75		2,800	11.3	0.12
50	1.97	130	80		2,800	12.5	0.12
60	2.36	150	90		2,800	14.9	0.14
63	2.48	156	93		2,800	15.6	0.14
70	2.76	175	105		2,800	17.3	0.15
75	2.95	185	110		2,800	18.5	0.15
80	3.15	195	115		2,800	19.7	0.16
90	3.54	215	125		2,800	22.1	0.18
100	3.94	235	135		2,800	24.5	0.20
125	4.92	285	160		2,800	30.4	0.22

*=at full stroke

★*Bottom / Foot Mount* 체결 *Type*
only to be used for
strokes 7-25mm

■충전압력/압축량 대비 하중변화도표



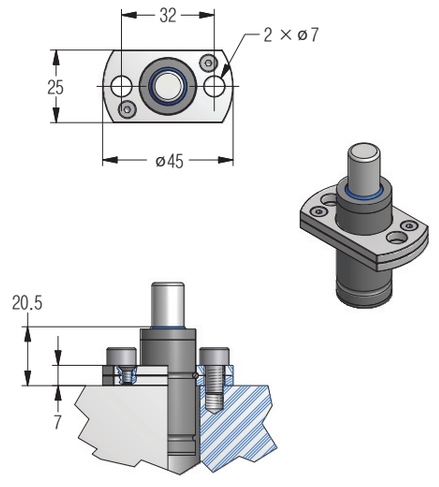
■TSP0170의 충전 압력(Bar) 계산식

$$충전압력(Bar) = \frac{초기하중(N)}{9.5}$$

ex) 필요한 초기하중 1,000N인 GAS SPRING의 충전압력은?

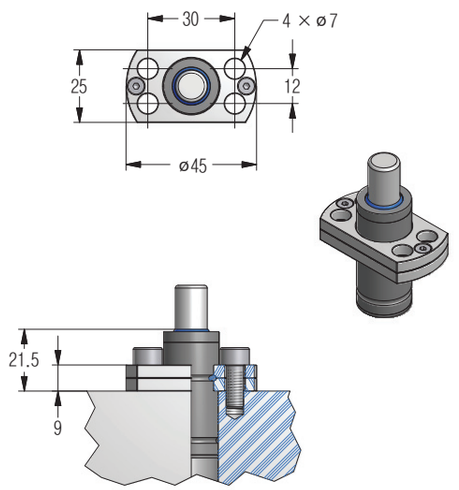
$$105(Bar) = \frac{1{,}000(N)}{9.5}$$

XG0170 MOUNT

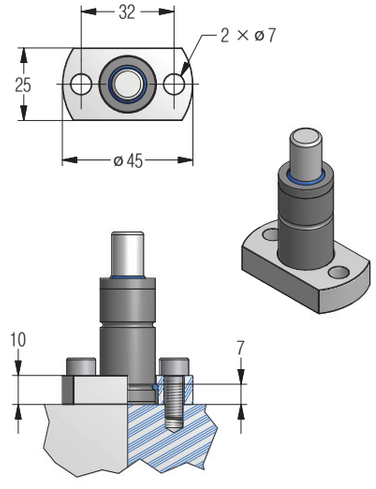


XC0170 MOUNT

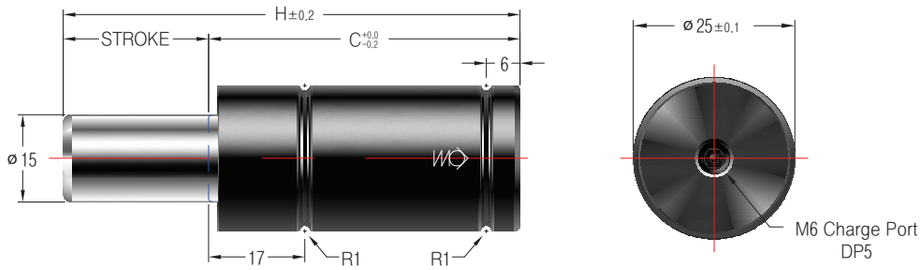
ISO



XP0170 MOUNT



PED ISO
2014/68/EU



규격표기방법

Catalog No.	STROKE	–	충전압력(Bar)
TSP0320	050	–	180

MOUNT	XP0320
REPAIR KIT	Non-repairable

[주의!] TSP0320은 충전 압력을 별도로 지정하지 않을 경우 표준충전압력(180Bar)으로 출고됩니다.

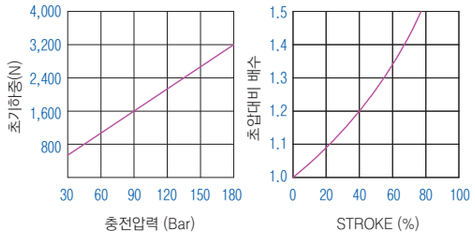
TSP0320

Stroke (mm)	Stroke (inch)	H	C	Force (N) (180 bar/+20℃) Initial	Force (N) (180 bar/+20℃) End force*	Gas vol. (cm^3)	Weight (kg)
7	0.28	44	37	3,200	5,000	3.7	0.09
10	0.39	50	40		5,000	4.9	0.11
13	0.51	56	43		5,100	6.2	0.11
16	0.63	62	46		5,200	7.4	0.12
20	0.79	70	50		5,200	9.0	0.14
25	0.98	80	55		5,300	11.1	0.15
30	1.18	90	60		5,300	13.1	0.16
35	1.38	100	65		5,400	15.2	0.18
38	1.50	106	68		5,400	16.4	0.18
40	1.57	110	70		5,400	17.2	0.19
45	1.77	120	75		5,400	19.3	0.21
50	1.97	130	80		5,400	21.3	0.22
60	2.36	150	90		5,500	25.4	0.25
63	2.48	156	93		5,500	26.6	0.26
70	2.76	175	105		5,500	29.5	0.28
75	2.95	185	110		5,500	31.6	0.28
80	3.15	195	115		5,500	33.6	0.32
90	3.54	215	125		5,500	37.7	0.33
100	3.94	235	135		5,500	41.8	0.36
125	4.92	285	160		5,500	52.0	0.43

*=at full stroke

★*Bottom / Foot Mount* 체결 *Type*
only to be used for
strokes 7-25mm

■충전압력/압축량 대비 하중변화도표



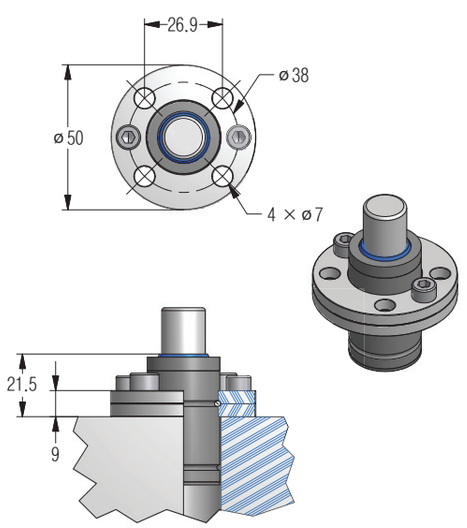
■TSP0320의 충전 압력(Bar) 계산식

$$\text{충전압력(Bar)} = \frac{\text{초기하중(N)}}{17.7}$$

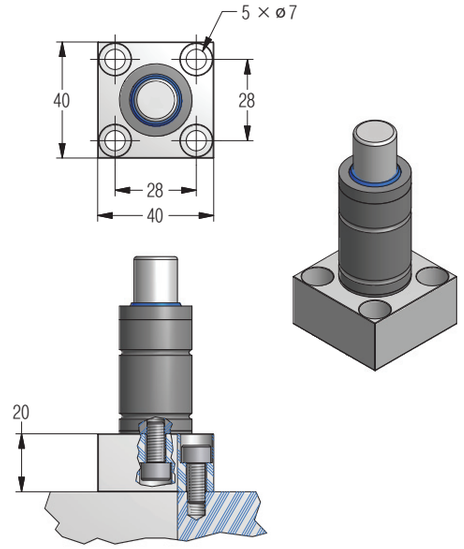
ex) 필요한 초기하중 2,500N인 GAS SPRING의 충전압력은?

$$141\text{(Bar)} = \frac{2{,}500\text{(N)}}{17.7}$$

XR0320(SR0150) MOUNT

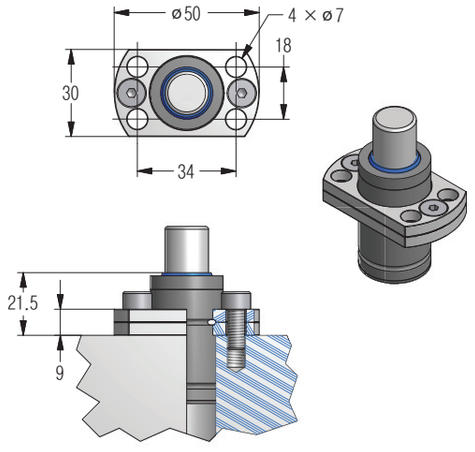


XB0320(SB0150) MOUNT

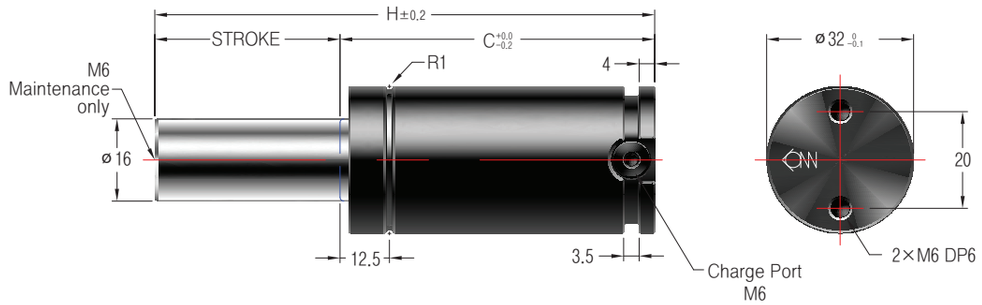


XG0320(SG0150) MOUNT

ISO



PED ISO 2014/68/EU



규격표기방법

Catalog No.	STROKE	–	단독형–S 배관형–F	–	충전압력 (Bar)
TSP0350	050	–	S(F)	–	180

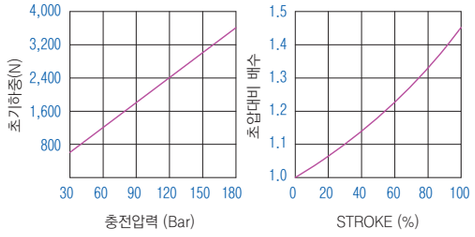
MOUNT	XP0350
REPAIR KIT	RCX0350

[주의!] TSP0350은 충전 압력을 별도로 지정하지 않을 경우 표준충전압력(180Bar)으로 출고됩니다.

TSP0350							
Stroke		H	C	Force (N) (180 bar/+20℃)		Gas vol. (cm^3)	Weight (kg)
(mm)	(inch)			Initial	End force*		
10	0.39	50	40		5,000	7.2	0.20
13	0.51	56	43		5,100	9.0	0.21
16	0.63	62	46		5,200	10.8	0.21
20	0.79	70	50		5,200	13.3	0.23
25	0.98	80	55		5,200	16.3	0.25
30	1.18	90	60		5,300	19.4	0.26
35	1.38	100	65		5,300	22.4	0.28
38	1.50	106	68		5,300	24.2	0.29
40	1.57	110	70		5,300	25.4	0.29
45	1.77	120	75	3,600	5,300	28.5	0.32
50	1.97	130	80		5,300	31.5	0.33
60	2.36	150	90		5,300	37.6	0.37
63	2.48	156	93		5,300	39.5	0.37
70	2.76	170	100		5,300	43.7	0.40
75	2.95	180	105		5,300	46.8	0.41
80	3.15	190	110		5,300	49.8	0.43
90	3.54	210	120		5,300	55.9	0.46
100	3.94	230	130		5,400	62.5	0.49
125	4.92	280	155		5,400	77.2	0.58

*=at full stroke

■충전압력/압축량 대비 하중변화도표



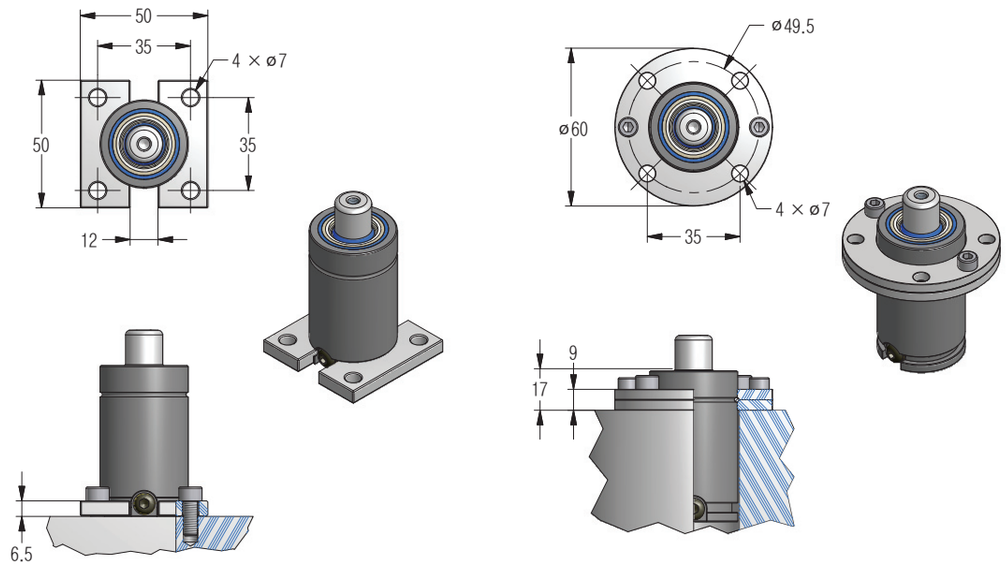
■TSP0350의 충전 압력(Bar) 계산식

$$\text{충전압력(Bar)} = \frac{\text{초기하중(N)}}{20.1}$$

ex) 필요한 초기하중 3,300N인 GAS SPRING의 충전압력은?

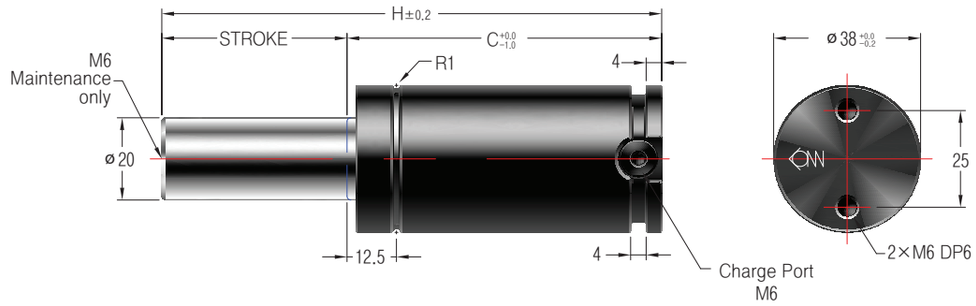
$$164\text{(Bar)} = \frac{3{,}300\text{(N)}}{20.1}$$

XP0350 MOUNT



XR0350 MOUNT

PED 2014/68/EU ISO



규격표기방법

Catalog No.	STROKE	–	단독형–S 배관형–F	–	충전압력 (Bar)
TSP0500	050	–	S(F)	–	150

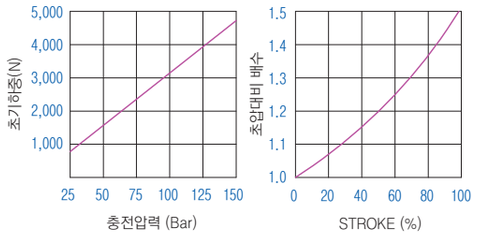
MOUNT	XP0500
REPAIR KIT	RCX0500

[주의!] TSP0500은 충전 압력을 별도로 지정하지 않을 경우 표준충전압력(150Bar)으로 출고됩니다.

TSP0500							
Stroke		H	C	Force (N) (150 bar/+20℃)		Gas vol. (cm^3)	Weight (kg)
(mm)	(inch)			Initial	End force*		
10	0.39	50	40		6,700	10.4	0.26
13	0.51	56	43		6,800	13.1	0.28
16	0.63	62	46		6,900	15.7	0.29
20	0.79	70	50		7,000	19.3	0.31
25	0.98	80	55		7,000	23.7	0.33
30	1.18	90	60		7,100	28.2	0.36
35	1.38	100	65		7,100	32.6	0.38
38	1.50	106	68		7,100	35.3	0.39
40	1.57	110	70		7,100	37.0	0.41
45	1.77	120	75	4,700	7,100	41.5	0.43
50	1.97	130	80		7,200	45.9	0.46
60	2.36	150	90		7,200	54.8	0.51
63	2.48	156	93		7,200	57.4	0.52
70	2.76	170	100		7,200	63.6	0.55
75	2.95	180	105		7,200	68.1	0.57
80	3.15	190	110		7,200	72.5	0.60
90	3.54	210	120		7,200	81.4	0.65
100	3.94	230	130		7,200	90.3	0.70
125	4.92	280	155		7,200	112.4	0.82

*=at full stroke

■충전압력/압축량 대비 하중변화도표



■TSP0500의 충전 압력(Bar) 계산식

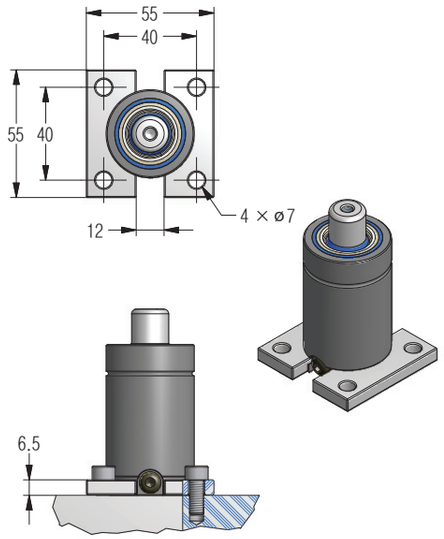
$$충전압력(Bar) = \frac{초기하중(N)}{31.4}$$

ex) 필요한 초기하중 4,000N인 GAS SPRING의 충전압력은?

$$127(Bar) = \frac{4{,}000(N)}{31.4}$$

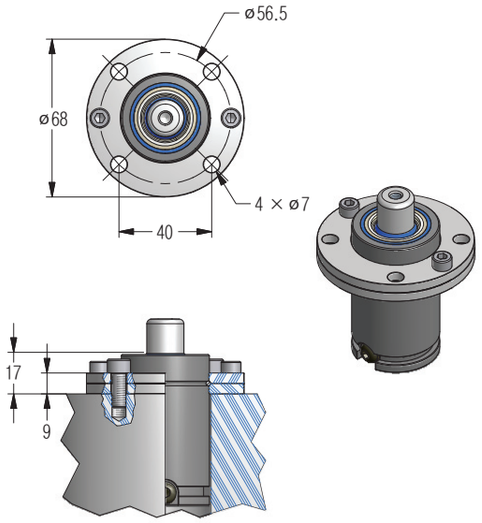
XP0500(SP0300) MOUNT

ISO



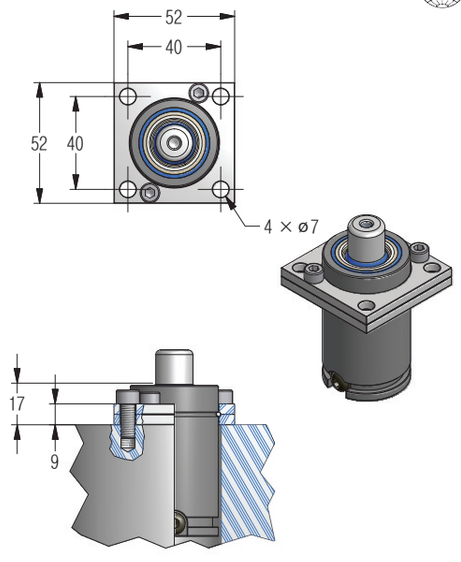
XR0500(SR0300) MOUNT

ISO



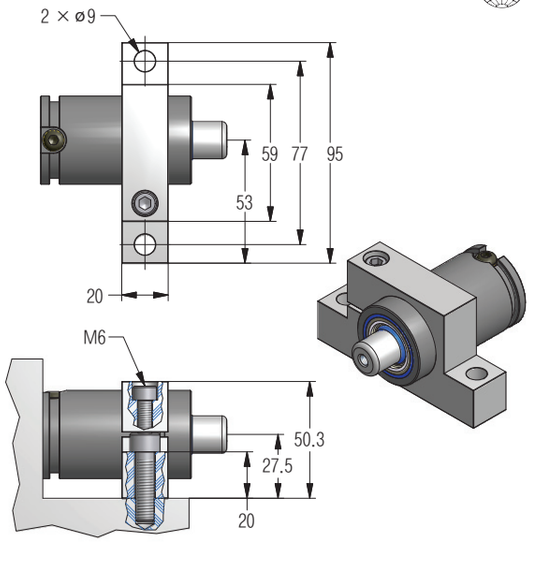
XT0500(ST0300) MOUNT

ISO

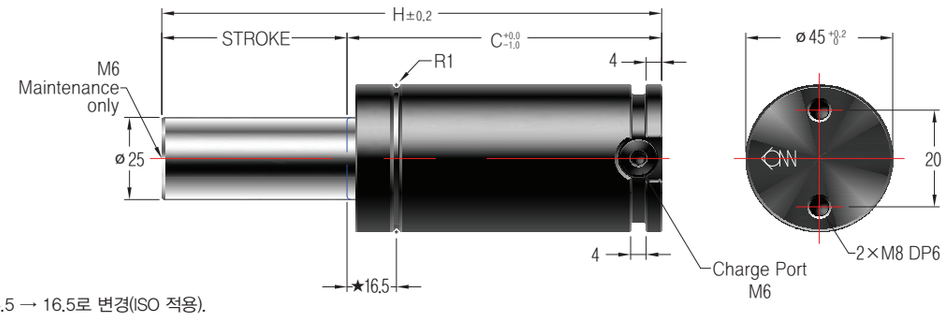


XC0500(SC0300) MOUNT

ISO



PED ISO
2014/68/EU



• ★ 구간은 15.5 → 16.5로 변경(ISO 적용).

규격표기방법

Catalog No.	STROKE	–	단독형–S 배관형–F	–	충전압력 (Bar)
TSP0750	050	–	S(F)	–	150

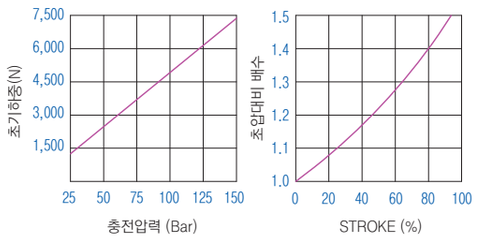
MOUNT	XP0750
REPAIR KIT	RCX0750

[주의!] TSP0750은 충전 압력을 별도로 지정하지 않을 경우 표준충전압력(150Bar)으로 출고됩니다.

TSP0750							
Stroke		H	C	Force (N) (150 bar/+20℃)		Gas vol. (cm^3)	Weight (kg)
(mm)	(inch)			Initial	End force*		
10	0.39	52	42		10,600	15.9	0.40
13	0.51	58	45		10,900	19.8	0.42
16	0.63	64	48		11,000	23.7	0.44
20	0.79	72	52		11,100	28.9	0.47
25	0.98	82	57		11,300	35.4	0.50
30	1.18	92	62		11,300	41.9	0.53
35	1.38	102	67		11,400	48.4	0.56
38	1.50	108	70		11,400	52.3	0.58
40	1.57	112	72		11,400	55.0	0.59
45	1.77	122	77	7,400	11,500	61.5	0.63
50	1.97	132	82		11,500	68.0	0.66
60	2.36	152	92		11,600	81.0	0.72
63	2.48	158	95		11,600	84.9	0.74
70	2.76	172	102		11,600	94.0	0.79
75	2.95	182	107		11,600	100.5	0.82
80	3.15	192	112		11,600	107.0	0.85
90	3.54	212	122		11,600	120.0	0.92
100	3.94	232	132		11,700	133.0	0.98
125	4.92	282	157		11,700	165.6	1.14

*=at full stroke

■충전압력/압축량 대비 하중변화도표



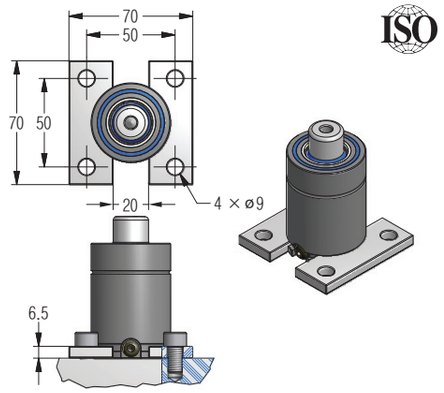
■TSP0750의 충전 압력(Bar) 계산식

$$충전압력(Bar) = \frac{초기하중(N)}{49.1}$$

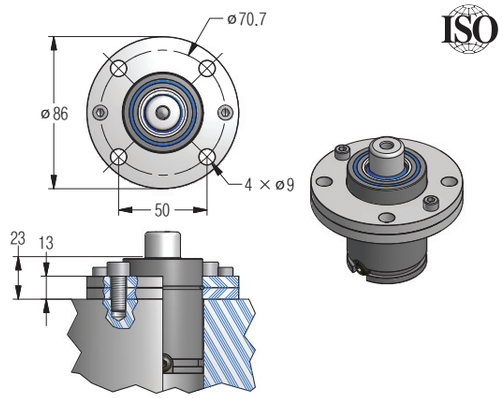
ex) 필요한 초기하중 6,000N인 GAS SPRING의 충전압력은?

$$122(Bar) = \frac{6{,}000(N)}{49.1}$$

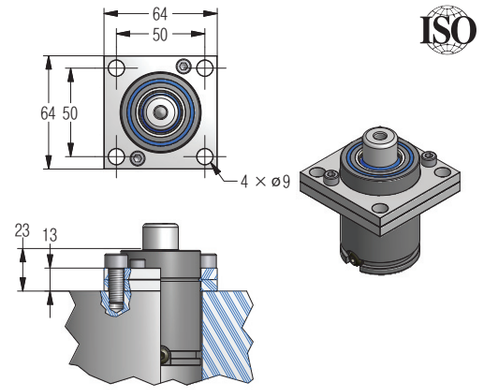
XP0750(SP0500) MOUNT



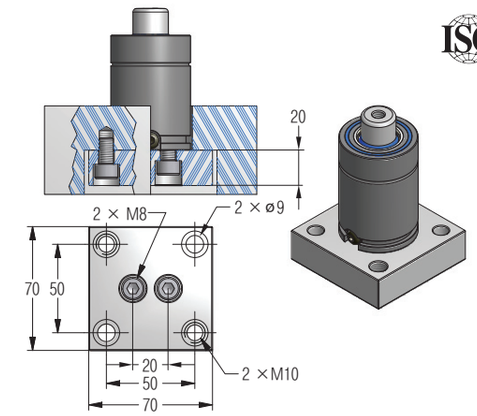
XR0750(SR0500) MOUNT



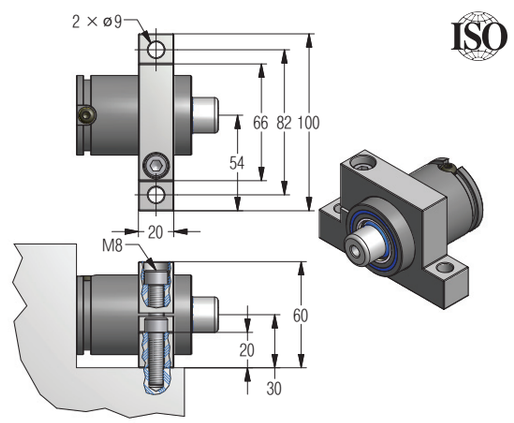
XT0750(ST0500) MOUNT



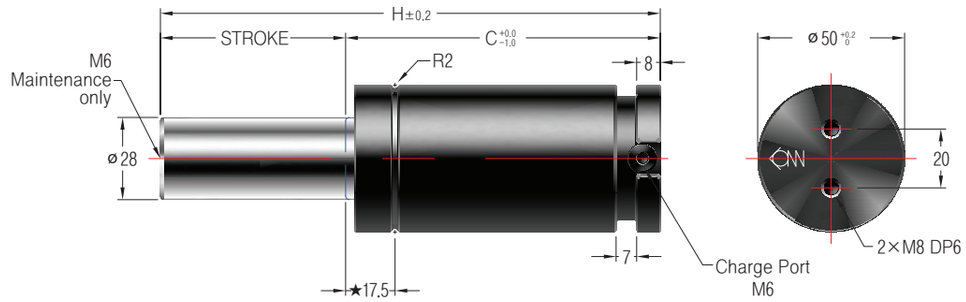
XB0750(SB0500) MOUNT



XC0750(SC0500) MOUNT



PED 2014/68/EU ISO



• ★ 구간은 15.5 → 17.5로 변경(ISO 적용).

규격표기방법

Catalog No.	STROKE	–	단독형–S 배관형–F	–	일체형 마운트 (선택사항)	–	충전압력 (Bar)
TSP1000	050	–	S(F)	–	(MSA)	–	150

MOUNT	XP1000
REPAIR KIT	RCX1000

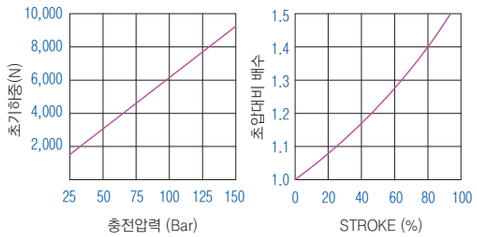
[주의!] TSP1000은 충전 압력을 별도로 지정하지 않을 경우 표준충전압력(150Bar)으로 출고됩니다.

TSP1000

Stroke (mm)	Stroke (inch)	H	C	Force (N) (150 bar/+20℃) Initial	Force (N) (150 bar/+20℃) End force*	Gas vol. (cm^3)	Weight (kg)
13	0.51	64	51	9,200	13,300	27.3	0.58
16	0.63	70	54		13,600	32.0	0.61
20	0.79	78	58		13,800	38.3	0.64
25	0.98	88	63		14,000	46.2	0.68
30	1.18	98	68		14,200	54.0	0.72
35	1.38	108	73		14,300	61.9	0.76
38	1.50	114	76		14,400	66.6	0.78
40	1.57	118	78		14,400	69.7	0.80
45	1.77	128	83		14,500	77.6	0.84
50	1.97	138	88		14,600	85.4	0.89
60	2.36	158	98		14,600	101.1	0.96
63	2.48	164	101		14,700	105.8	0.98
70	2.76	178	108		14,700	116.8	1.04
75	2.95	188	113		14,700	124.7	1.09
80	3.15	198	118		14,800	132.5	1.12
90	3.54	218	128		14,800	148.2	1.21
100	3.94	238	138		14,900	163.8	1.29
125	4.92	288	163		14,900	203.2	1.49

*=at full stroke

■충전압력/압축량 대비 하중변화도표



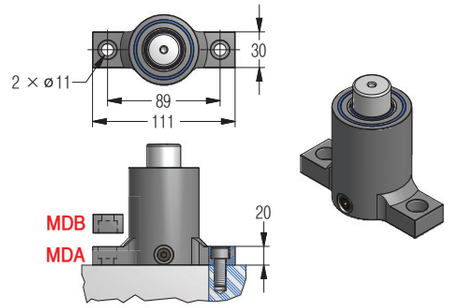
■TSP1000의 충전 압력(Bar) 계산식

$$충전압력(Bar) = \frac{초기하중(N)}{61.5}$$

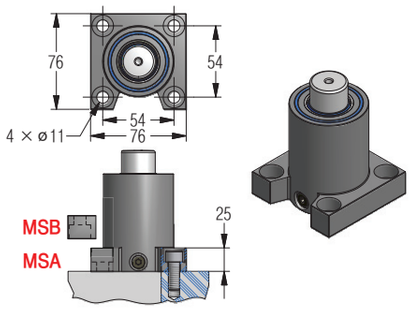
ex) 필요한 초기하중 8,500N인 GAS SPRING의 충전압력은?

$$138(Bar) = \frac{8{,}500(N)}{61.5}$$

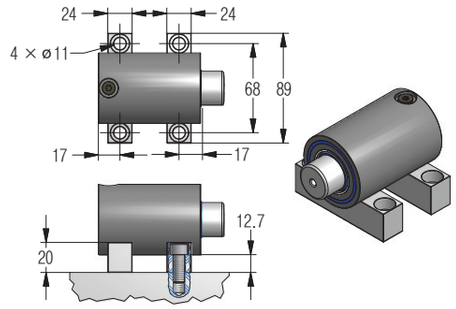
MD MOUNT 일체형



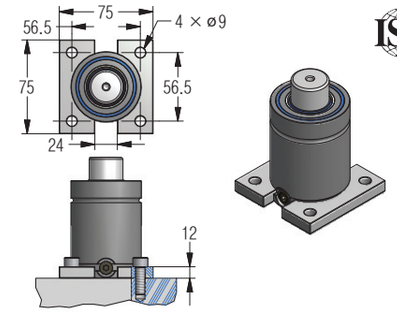
MS MOUNT 일체형



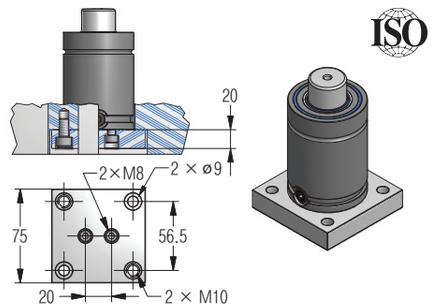
MK MOUNT 일체형



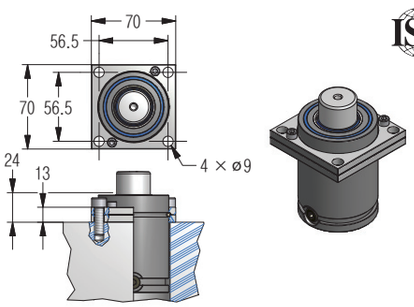
XP1000(SP0750) MOUNT



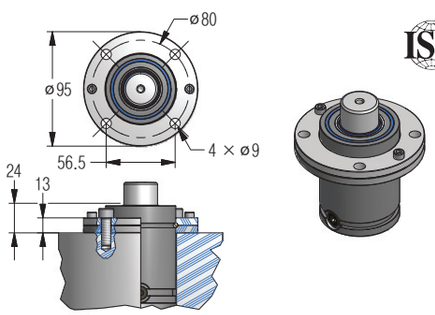
XB1000(SB0750) MOUNT



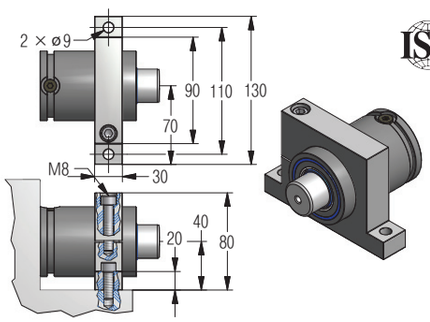
XT1000(ST0750) MOUNT



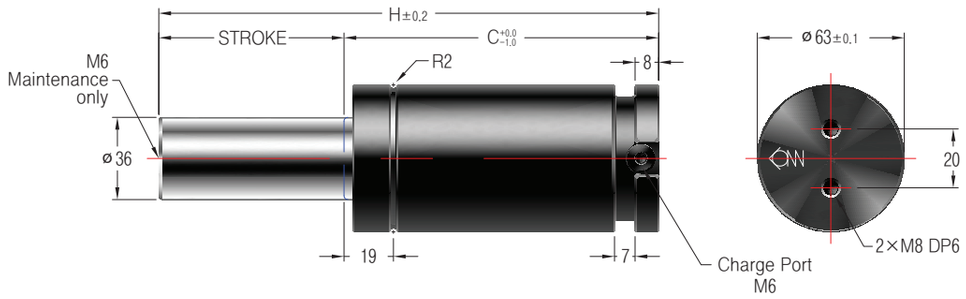
XR1000(SR0750) MOUNT



XC1000(SC0750) MOUNT



PED ISO 2014/68/EU



규격표기방법

Catalog No.	STROKE	–	단독형–S 배관형–F	–	일체형 마운트 (선택사항)	–	충전압력 (Bar)
TSP1500	050	–	S(F)	–	(MSA)	–	150

MOUNT	XP1500
REPAIR KIT	RCX1500

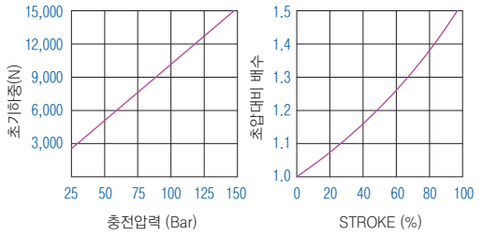
[주의!] TSP1500은 충전 압력을 별도로 지정하지 않을 경우 표준충전압력(150Bar)으로 출고됩니다.

TSP1500

Stroke (mm)	Stroke (inch)	H	C	Force (N) (150 bar/+20℃) Initial	Force (N) (150 bar/+20℃) End force*	Gas vol. (cm^3)	Weight (kg)
13	0.51	70	57	15,200	20,900	48.8	1.04
16	0.63	76	60		21,400	56.8	1.08
20	0.79	84	64		21,900	67.4	1.13
25	0.98	94	69		22,300	80.7	1.20
30	1.18	104	74		22,600	93.9	1.27
35	1.38	114	79		22,900	107.2	1.34
38	1.50	120	82		23,000	115.2	1.37
40	1.57	124	84		23,000	120.5	1.40
45	1.77	134	89		23,200	133.7	1.47
50	1.97	144	94		23,300	147.0	1.58
60	2.36	164	104		23,500	173.5	1.66
63	2.48	170	107		23,600	181.5	1.71
70	2.76	184	114		23,700	200.1	1.80
75	2.95	194	119		23,800	213.3	1.87
80	3.15	204	124		23,800	226.3	1.93
90	3.54	224	134		23,900	252.9	2.07
100	3.94	244	144		24,000	279.5	2.19
125	4.92	294	169		24,100	346.0	2.53

*=at full stroke

■충전압력/압축량 대비 하중변화도표



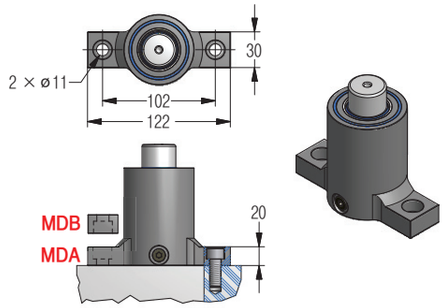
■TSP1500의 충전 압력(Bar) 계산식

$$충전압력(Bar) = \frac{초기하중(N)}{101.7}$$

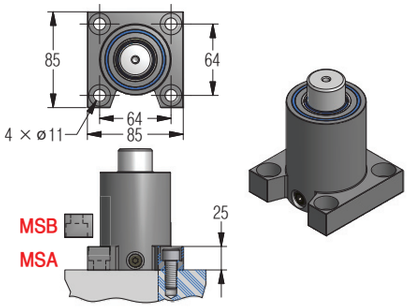
ex) 필요한 초기하중 12,000N인 GAS SPRING의 충전압력은?

$$118(Bar) = \frac{12{,}000(N)}{101.7}$$

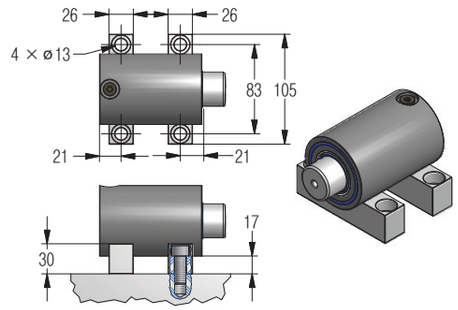
MD MOUNT 일체형



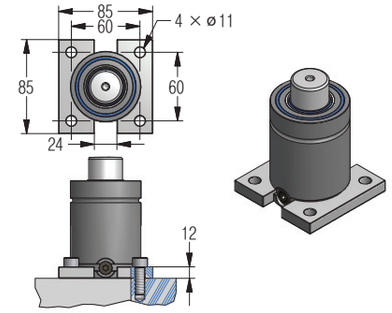
MS MOUNT 일체형



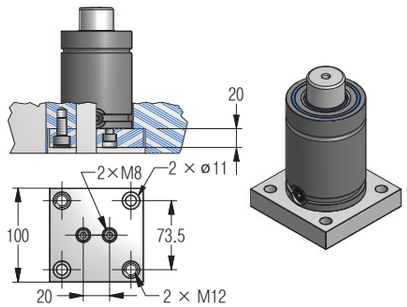
MK MOUNT 일체형



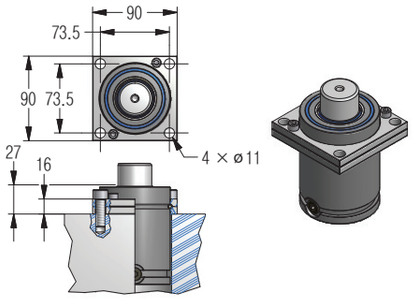
XP1500 MOUNT



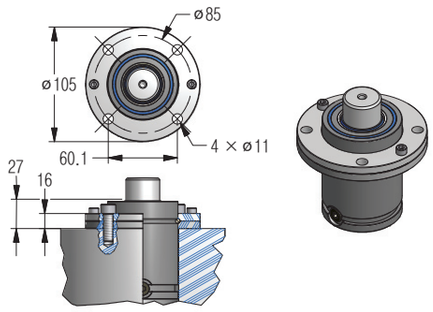
XB1500 MOUNT



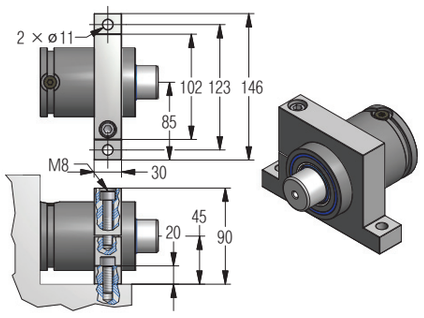
XT1500 MOUNT



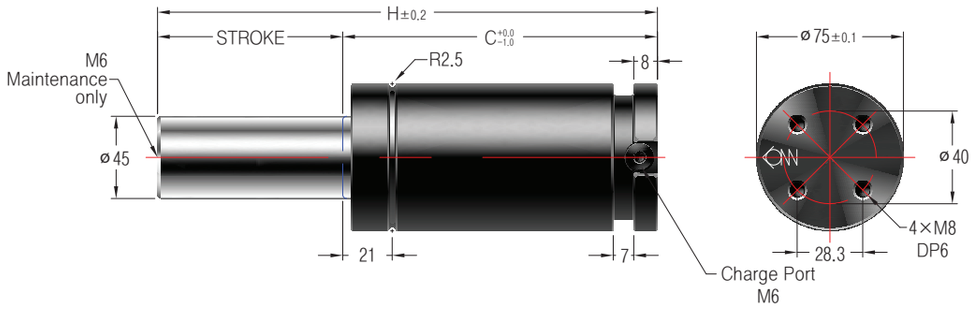
XR1500 MOUNT



XC1500 MOUNT



PED ISO 2014/68/EU



규격표기방법

Catalog No.	STROKE	–	단독형–S 배관형–F	–	일체형 마운트 (선택사항)	–	충전압력 (Bar)
TSP2400	050	–	S(F)	–	(MSA)	–	150

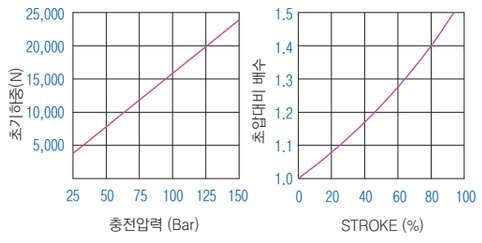
MOUNT	XP2400
REPAIR KIT	RCX2400

[주의!] TSP2400은 충전 압력을 별도로 지정하지 않을 경우 표준충전압력(150Bar)으로 출고됩니다.

TSP2400						
Stroke		H	C	Force (N) (150 bar/+20℃)	Gas vol. (cm^3)	Weight (kg)
(mm)	(inch)			Initial / End force*		
16	0.63	77	61		33,800	86.3	1.58
20	0.79	85	65		34,600	102.4	1.65
25	0.98	95	70		35,300	122.5	1.73
30	1.18	105	75		35,800	142.6	1.81
35	1.38	115	80		36,200	162.7	1.89
38	1.50	121	83		36,400	174.8	1.94
40	1.57	125	85		36,600	182.8	1.97
45	1.77	135	90		36,800	203.0	2.05
50	1.97	145	95	23,800	37,000	223.1	2.13
60	2.36	165	105		37,400	263.3	2.30
63	2.48	171	108		37,500	275.4	2.34
70	2.76	185	115		37,600	303.5	2.47
75	2.95	195	120		37,700	323.6	2.55
80	3.15	205	125		37,800	343.8	2.63
90	3.54	225	135		38,000	384.0	2.79
100	3.94	245	145		38,100	424.2	2.95
125	4.92	295	170		38,400	524.8	3.37

*=at full stroke

■충전압력/압축량 대비 하중변화도표



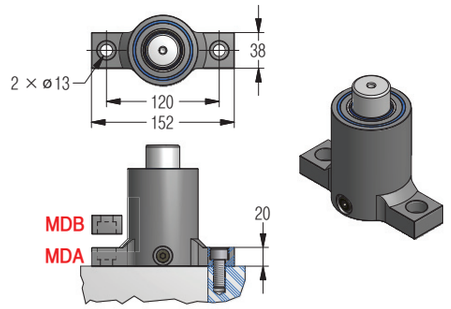
■TSP2400의 충전 압력(Bar) 계산식

$$충전압력(Bar) = \frac{초기하중(N)}{159.0}$$

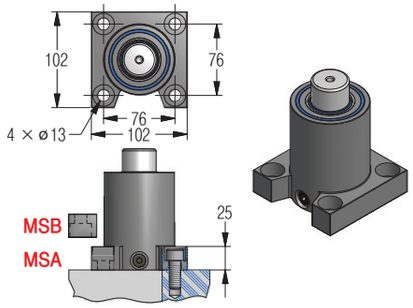
ex) 필요한 초기하중 20,000N인 GAS SPRING의 충전압력은?

$$126(Bar) = \frac{20{,}000(N)}{159.0}$$

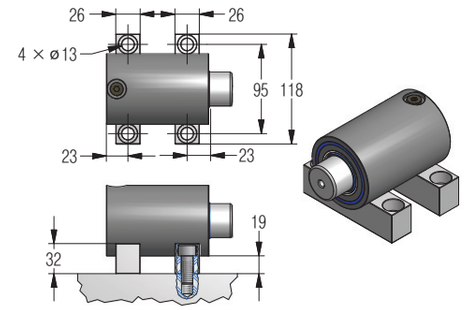
MD MOUNT 일체형



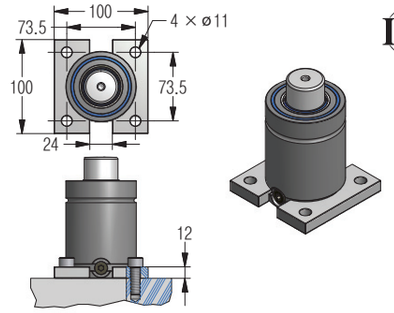
MS MOUNT 일체형



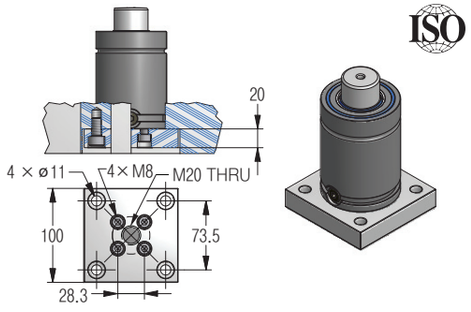
MK MOUNT 일체형



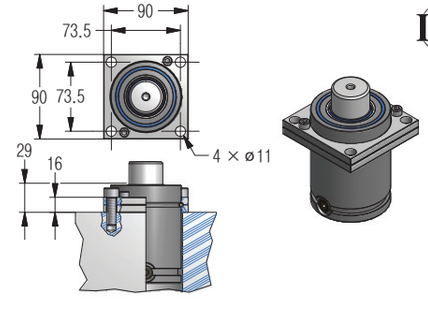
XP2400(SP1500) MOUNT



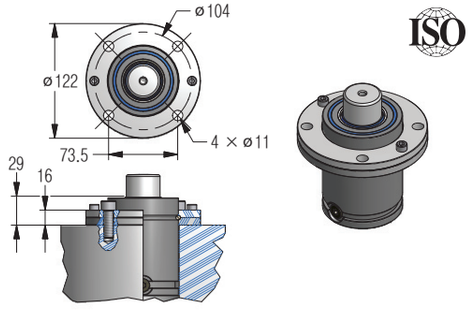
XB2400(SB1500) MOUNT



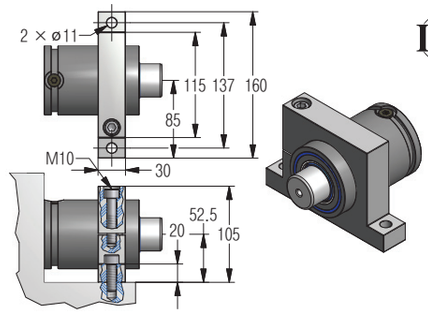
XT2400(ST1500) MOUNT



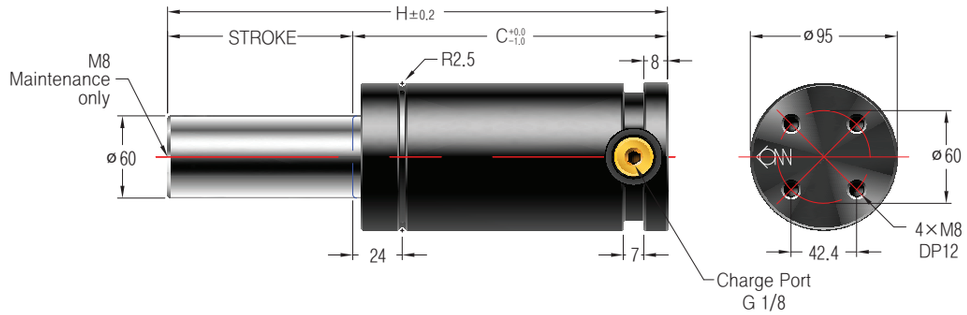
XR2400(SR1500) MOUNT



XC2400(SC1500) MOUNT



PED 2014/68/EU ISO



규격표기방법

Catalog No.	STROKE	–	단독형–S 배관형–F	–	일체형 마운트 (선택사항)	–	충전압력 (Bar)
TSP4200	050	–	S(F)	–	(MSA)	–	150

MOUNT	XP4200
REPAIR KIT	RCX4200

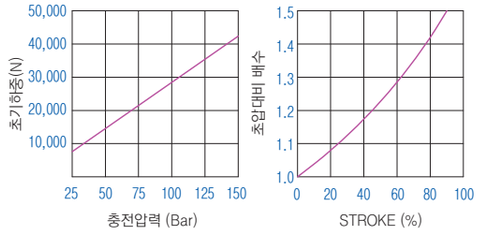
[주의!] TSP4200은 충전 압력을 별도로 지정하지 않을 경우 표준충전압력(150Bar)으로 출고됩니다.

TSP4200

Stroke (mm)	Stroke (inch)	H	C	Force (N) (150 bar/+20℃) Initial	Force (N) (150 bar/+20℃) End force*	Gas vol. (cm^3)	Weight (kg)
16	0.63	90	74	42,200	60,600	150.5	3.21
20	0.79	98	78		62,300	177.8	3.32
25	0.98	108	83		63,800	212.0	3.46
30	1.18	118	88		65,000	246.2	3.60
35	1.38	128	93		65,900	280.3	3.75
38	1.50	134	96		66,400	300.8	3.82
40	1.57	138	98		66,600	314.5	3.88
45	1.77	148	103		67,200	348.7	4.02
50	1.97	158	108		67,700	382.8	4.16
60	2.36	178	118		68,500	451.2	4.44
63	2.48	184	121		68,700	471.7	4.52
70	2.76	198	128		69,100	519.5	4.72
75	2.95	208	133		69,400	553.6	4.86
80	3.15	218	138		69,600	587.8	5.00
90	3.54	238	148		70,000	656.1	5.27
100	3.94	258	158		70,300	724.5	5.56
125	4.92	308	183		70,900	895.3	6.25

*=at full stroke

■충전압력/압축량 대비 하중변화도표



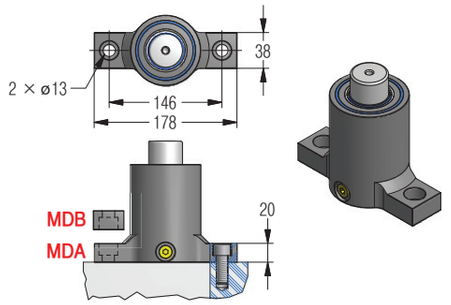
■TSP4200의 충전 압력(Bar) 계산식

$$충전압력(Bar) = \frac{초기하중(N)}{282.6}$$

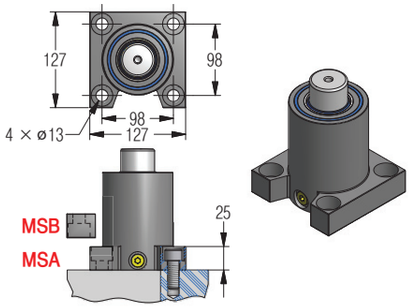
ex) 필요한 초기하중 35,000N인 GAS SPRING의 충전압력은?

$$124(Bar) = \frac{35{,}000(N)}{282.6}$$

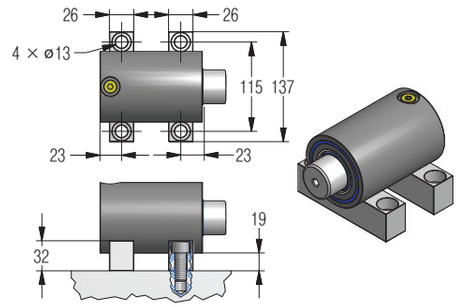
MD MOUNT 일체형



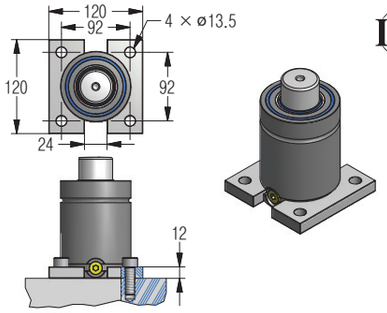
MS MOUNT 일체형



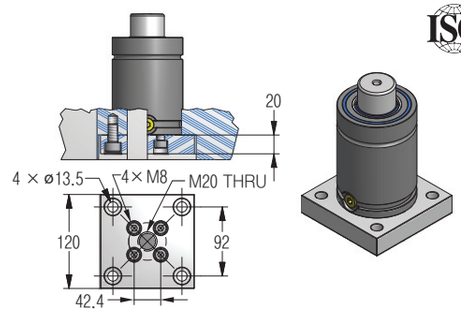
MK MOUNT 일체형



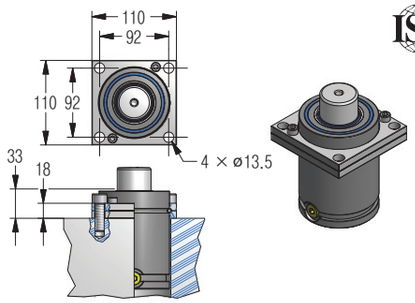
XP4200(SP3000) MOUNT



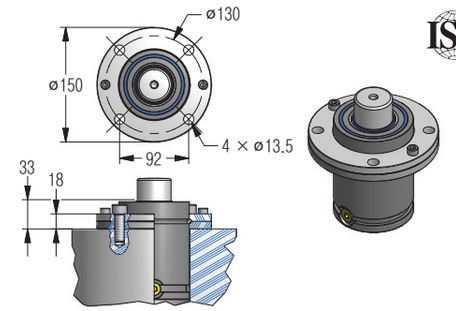
XB4200(SB3000) MOUNT



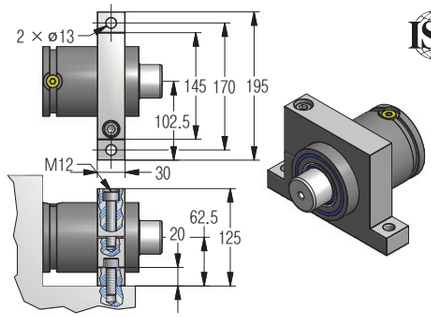
XT4200(ST3000) MOUNT



XR4200(SR3000) MOUNT

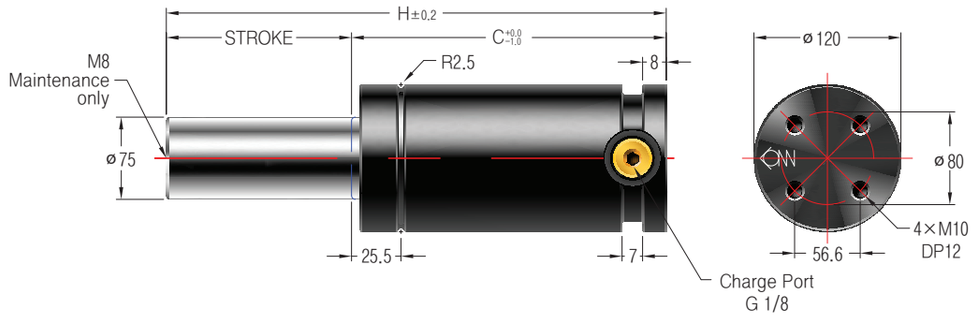


XC4200(SC3000) MOUNT



TOSS GAS SPRING

PED 2014/68/EU ISO



규격표기방법

Catalog No.	STROKE	–	단독형–S 배관형–F	–	일체형 마운트 (선택사항)	–	충전압력 (Bar)
TSP6600	050	–	S(F)	–	(MSA)	–	150

MOUNT	XP6600
REPAIR KIT	RCX6600

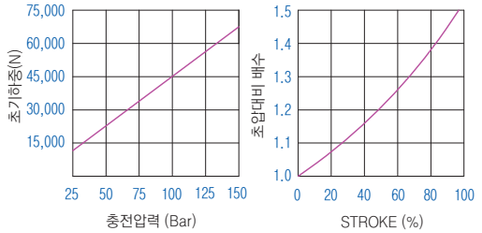
[주의] TSP6600은 충전 압력을 별도로 지정하지 않을 경우 표준충전압력(150Bar)으로 출고됩니다.

TSP6600

Stroke (mm)	Stroke (inch)	H	C	Force (N) (150 bar/+20℃) Initial	Force (N) (150 bar/+20℃) End force*	Gas vol. (cm^3)	Weight (kg)
16	0.63	100	84		91,900	272.3	6.01
20	0.79	108	88		93,700	315.7	6.19
25	0.98	118	93		96,200	370.1	6.42
30	1.18	128	98		98,200	424.4	6.65
35	1.38	138	103		99,700	478.7	6.87
38	1.50	144	106		100,500	511.3	7.01
40	1.57	148	108		101,000	533.1	7.11
45	1.77	158	113		102,100	587.4	7.33
50	1.97	168	118	66,000	103,000	641.8	7.56
60	2.36	188	128		104,400	750.4	8.01
63	2.48	194	131		104,800	783.0	8.15
70	2.76	208	138		105,500	859.1	8.47
75	2.95	218	143		105,900	913.4	8.70
80	3.15	228	148		106,400	967.8	8.93
90	3.54	248	158		107,100	1076.5	9.38
100	3.94	268	168		107,600	1185.1	9.84
125	4.92	318	193		108,700	1456.8	10.98

*=at full stroke

■충전압력/압축량 대비 하중변화도표



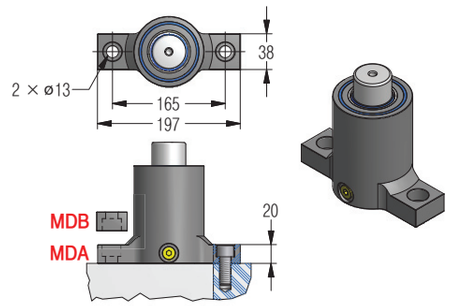
■TSP6600의 충전 압력(Bar) 계산식

$$충전압력(Bar) = \frac{초기하중(N)}{441.6}$$

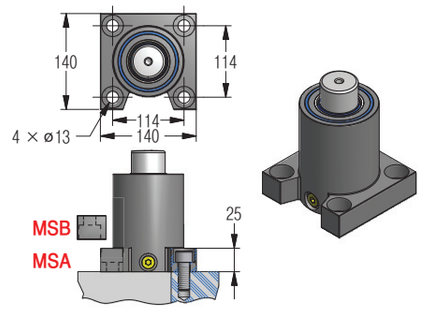
ex) 필요한 초기하중 60,000N인 GAS SPRING의 충전압력은?

$$136(Bar) = \frac{60{,}000(N)}{441.6}$$

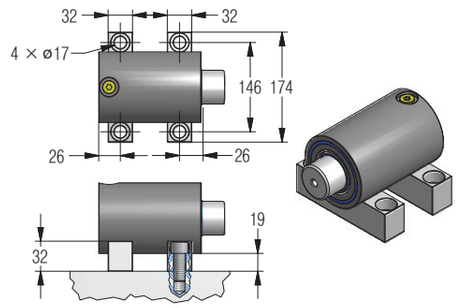
MD MOUNT 일체형



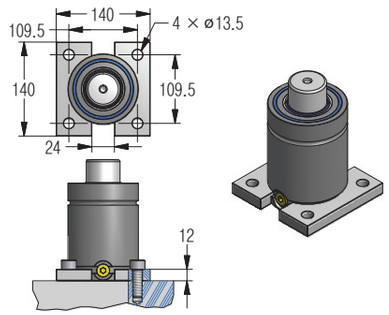
MS MOUNT 일체형



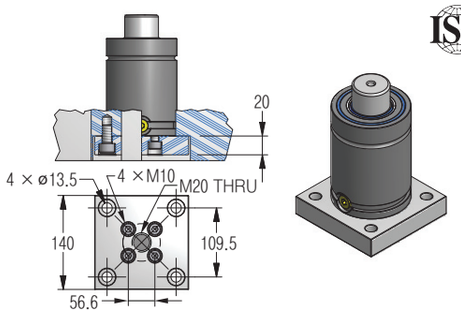
MK MOUNT 일체형



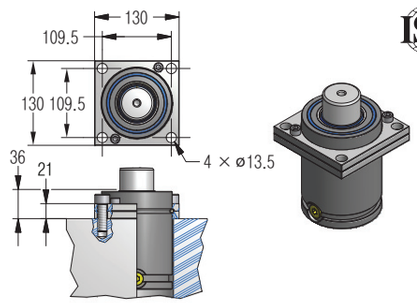
XP6600(SP5000) MOUNT



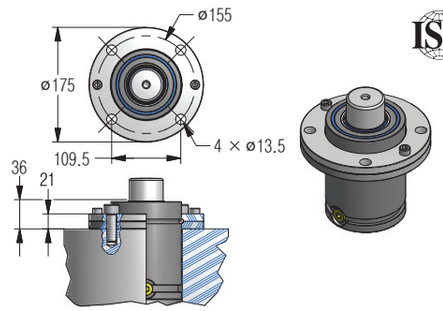
XB6600(SB5000) MOUNT



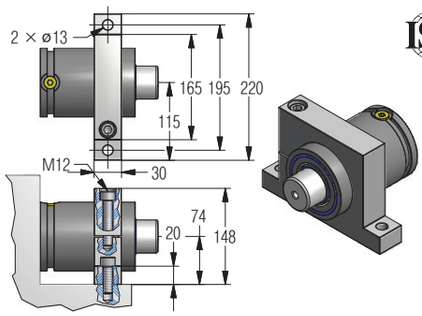
XT6600(ST5000) MOUNT



XR6600(SR5000) MOUNT

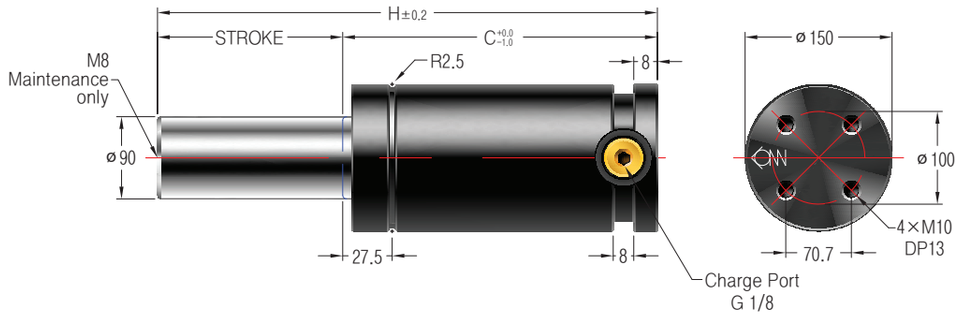


XC6600(SC5000) MOUNT



TOSS GAS SPRING

PED ISO
2014/68/EU



규격표기방법

Catalog No.	STROKE	–	단독형–S 배관형–F	–	일체형 마운트 (선택사항)	–	충전압력 (Bar)
TSP9500	050	–	S(F)	–	(MSA)	–	150

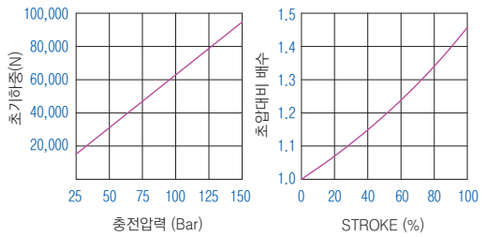
MOUNT	XP9500
REPAIR KIT	RCX9500

[주의] TSP9500은 충전 압력을 별도로 지정하지 않을 경우 표준충전압력(150Bar)으로 출고됩니다.

TSP9500							
Stroke		H	C	Force (N) (150 bar/+20℃)		Gas vol. (cm^3)	Weight (kg)
(mm)	(inch)			Initial	End force*		
20	0.79	118	98	95,000	127,600	509.9	10.78
25	0.98	128	103		131,000	591.6	11.10
30	1.18	138	108		133,700	673.3	11.60
35	1.38	148	113		135,900	755.0	12.84
38	1.50	154	116		137,000	804.0	13.18
40	1.57	158	118		137,700	836.6	13.24
45	1.77	168	123		139,200	918.3	14.48
50	1.97	178	128		140,500	1000.0	14.70
60	2.36	198	138		142,600	1163.3	15.50
63	2.48	204	141		143,100	1212.3	15.64
70	2.76	218	148		144,200	1326.7	16.20
75	2.95	228	153		144,900	1408.4	17.30
80	3.15	238	158		145,500	1490.0	18.10
90	3.54	258	168		146,500	1653.4	19.60
100	3.94	278	178		147,400	1816.7	20.44
125	4.92	328	203		149,100	2225.1	21.20

*=at full stroke

■충전압력/압축량 대비 하중변화도표



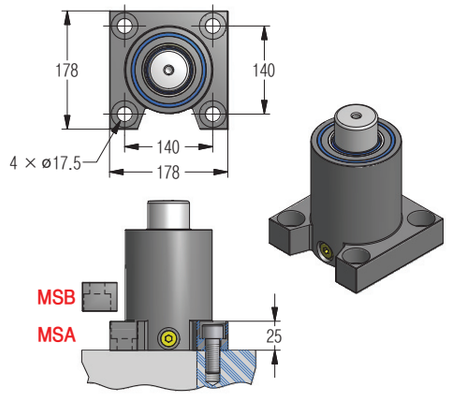
■TSP9500의 충전 압력(Bar) 계산식

$$충전압력(Bar) = \frac{초기하중(N)}{635.9}$$

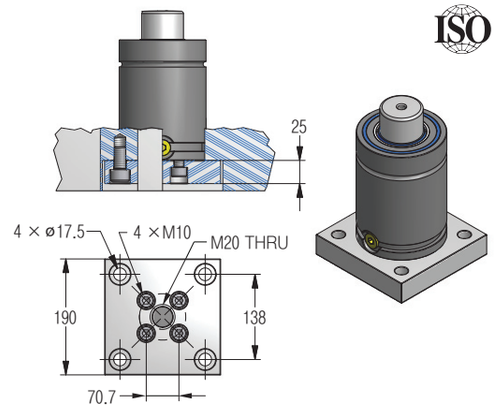
ex) 필요한 초기하중 85,000N인 GAS SPRING의 충전압력은?

$$134(Bar) = \frac{85{,}000(N)}{635.9}$$

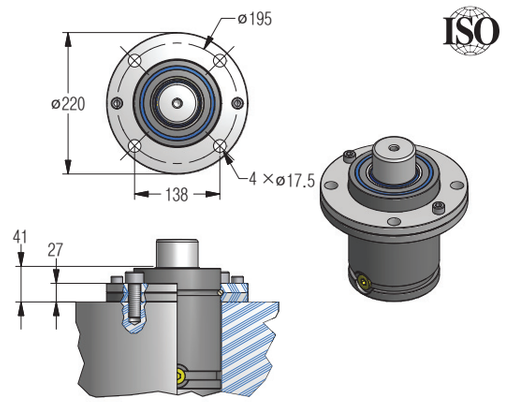
MS MOUNT 일체형



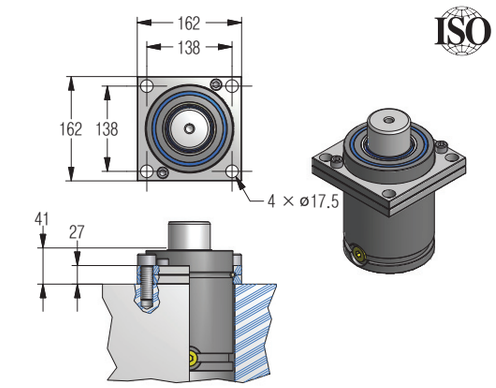
XB9500(SB7500) MOUNT



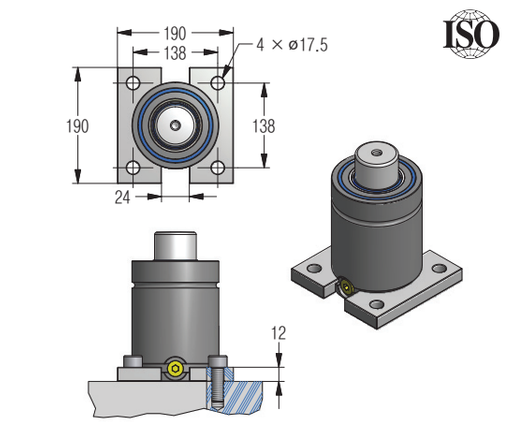
XR9500(SR7500) MOUNT



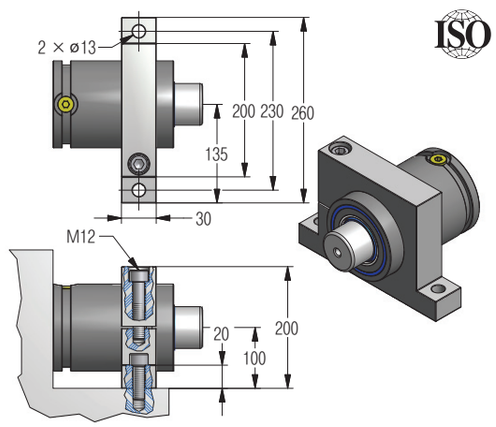
XT9500(ST7500) MOUNT



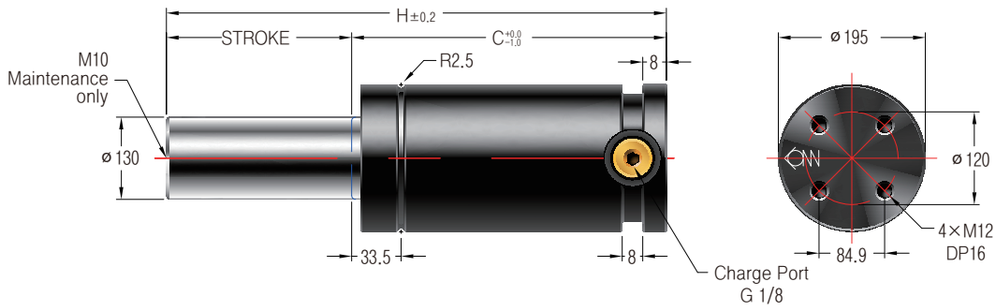
XP9500(SP7500) MOUNT



XC9500(SC7500) MOUNT



PED ISO
2014/68/EU



규격표기방법

Catalog No.	STROKE	–	단독형–S 배관형–F	–	일체형 마운트 (선택사항)	–	충전압력 (Bar)
TSP20000	050	–	S(F)	–	(MSA)	–	150

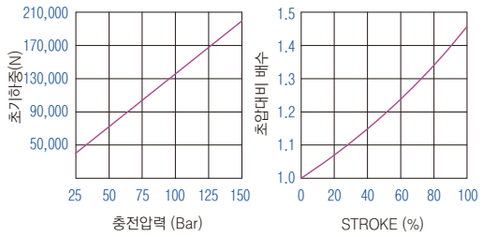
MOUNT	XP20000
REPAIR KIT	RCX20000

[주의] TSP20000은 충전 압력을 별도로 지정하지 않을 경우 표준충전압력(150Bar)으로 출고됩니다.

TSP20000							
Stroke		H	C	Force (N) (150 bar/+20℃)		Gas vol. (cm^3)	Weight (kg)
(mm)	(inch)			Initial	End force*		
25	0.98	160	135	200,000	263,300	1380.0	22.30
38	1.50	185	147.5		279,700	1770.0	23.69
50	1.97	210	160		291,100	2120.0	24.99
63	2.48	235	172.5		300,500	2500.0	26.40
80	3.15	270	190		309,500	3000.0	28.25
100	3.94	310	210		317,800	3580.0	30.42
125	4.92	360	235		325,100	4310.0	33.14

*=at full stroke

■충전압력/압축량 대비 하중변화도표



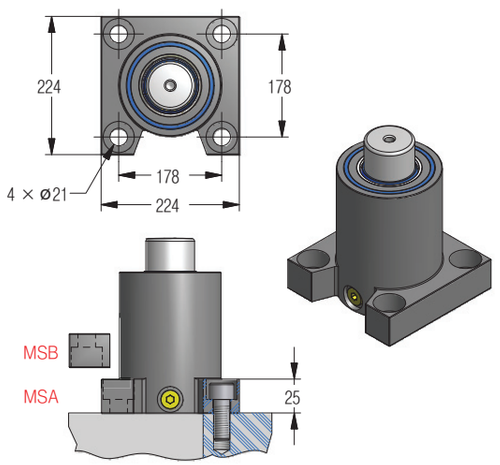
■TSP20000의 충전 압력(Bar) 계산식

$$충전압력(Bar) = \frac{초기하중(N)}{1{,}326.7}$$

ex) 필요한 초기하중 175,000N인 GAS SPRING의 충전압력은?

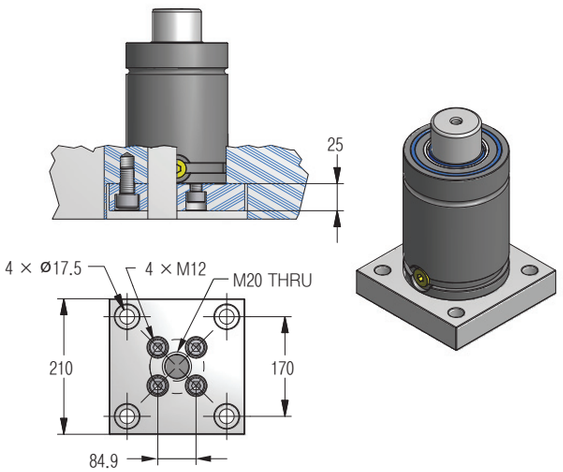
$$132(Bar) = \frac{175{,}000(N)}{1{,}326.7}$$

MS MOUNT 일체형



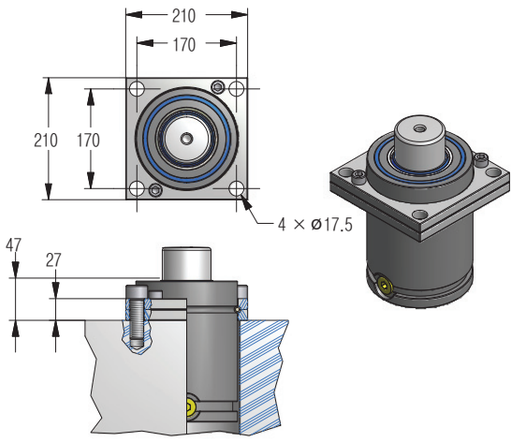
XB20000(SB10000) MOUNT

ISO



XT20000(ST10000) MOUNT

ISO



XP20000(SP10000) MOUNT

ISO