

Mounting Components

HYDAC mounting components are used to mount all types of hydro-pneumatic accumulators safely and simply, regardless of the mounting position. Our wide range includes suitable mounting components for every type of static hydro-pneumatic accumulator.

Function

Mounting components are used primarily for the following:

- to fix the accumulator into its position
- to carry the weight of the accumulator
- to counteract the forces exerted by the hydraulic lines

Types

HYDAC offers three styles of clamps:

- HyRac
- Regular Duty (HS)
- Heavy Duty (HSS)

Additionally, for larger accumulators, HYDAC offers:

- Base Brackets (KBK & KMS)
- Mounting Sets (SEB)

Refer to the illustrations and photos to the right.

Construction

They are constructed out of zinc-plated sheet steel or stainless steel strap (depending on style), utilizing a rubber insert to absorb vibration.

The HyRac and regular duty have a one piece construction with center adjustment.

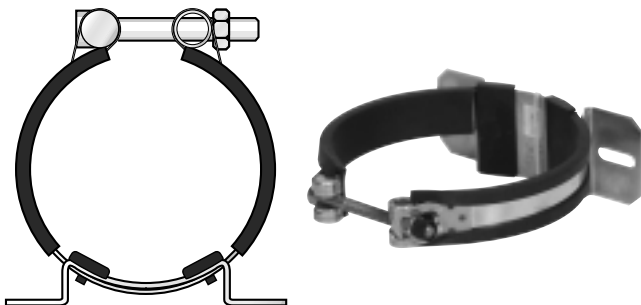
Conversely, the heavy duty clamps have a two piece construction. This allows for easy installation and removal while improving the strength to weight ratio.

HYDAC also offers base brackets for larger accumulators for proper support and isolation from system vibrations. The brackets incorporate a rubber support ring for this reason.

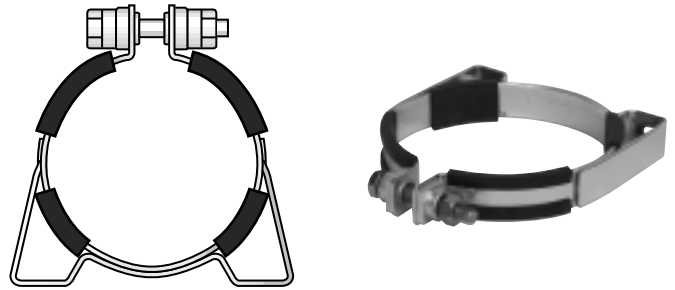
All mounting components can be easily bolted to your system.

Application guides are provided on the following pages to easily match the appropriate mounting components with HYDAC accumulators.

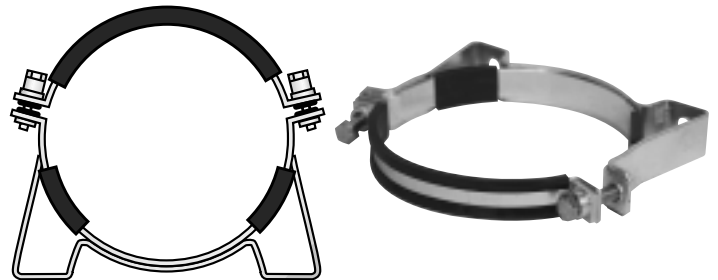
HyRac Clamp:



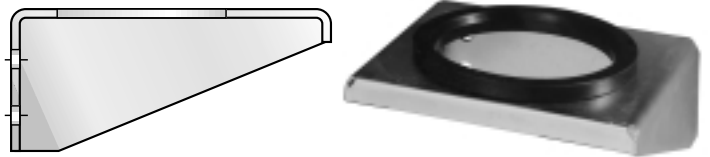
HS - Regular Duty Clamp:



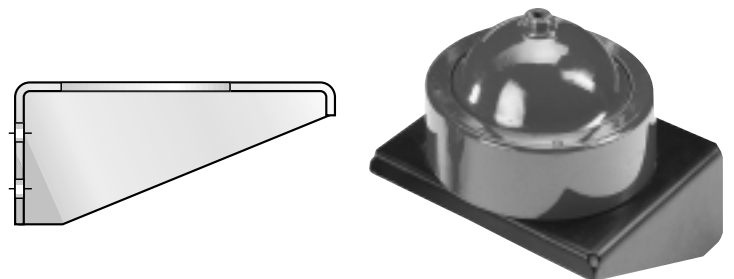
HSS - Heavy Duty Clamp:



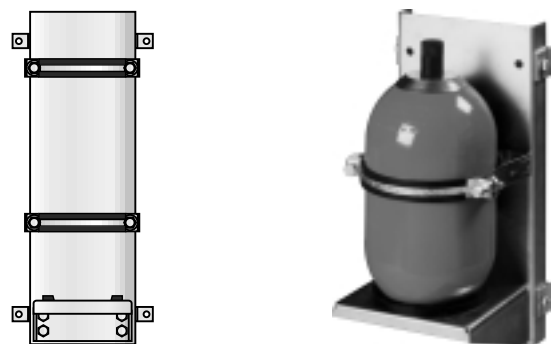
KBK - Base Bracket:



KMS - Base Bracket for threaded diaphragm:



SEB - Complete Mounting Sets:



Mounting Component Selection Guide

These are the mounting solutions that HYDAC recommends for Each Accumulator

Bladder Accumulators and Nitrogen Bottles

SB 330... & SN 330...

Accumulator Size (capacity)	Clamp Type (quantity)	Base Bracket Type
1 (0.25 gal)	HyRac 110-118 ST (1)	None
4 to 6 (1 to 1.5 gal)	HS 167 (1)	KBK 167/G
10 to 20 (2.5 to 5 gal)	HSS 222/229 (1)	KBK 222/G
32 to 54 (10 to 15 gal)	HSS 222/229 (2)	KBK 222/G

SB 600...

Accumulator Size (capacity)	Clamp Type (quantity)	Base Bracket Type
1 (0.25 gal)	HyRac 121-129 ST (1)	None
4 to 6 (1 to 1.5 gal)	HS 175 (1)	KBK 167/G
10 to 20 (2.5 to 5 gal)	HSS 222/229 (1)	KBK 222/G
32 to 54 (10 to 15 gal)	HSS 222/229 (2)	KBK 222/G

Piston Accumulators

SK 350... & SK 600...

Accumulator Piston Size ⁽¹⁾	Clamp Type (quantity)	Base Bracket Type
15 (150 mm)	consult factory	consult factory
18 (180 mm)	HSS 219 (2)	KBK 219
25 (250 mm)	HSS 310 (2)	KBK 310
35 (355 mm)	consult factory	consult factory

1) Example: SK 350 - 20 / 2112 S - 210 FCF - VE - **18** E - 1 (see page 15 for details)

Diaphragm Accumulators

SBO...E...(Welded type)

Accumulator Type	Clamp Type ⁽²⁾
SBO 250-00.075 E	HyRac 62-65 ST
SBO 210-0.16 E	HyRac 73-76 ST
SBO 210-0.32 E	HyRac 89-92 ST
SBO 210-0.5 E	HyRac 100-105 ST
SBO 330-0.6 E	HyRac 110-118 ST
SBO 210-0.75 E	HyRac 121-129 ST
SBO 220-1 E	HyRac 133-142 ST
SBO 140-1.4 E	HyRac 143-151 ST
SBO 210-1.4 E	HyRac 152-159 ST
SBO 100-2 E	HyRac 160-167 ST
SBO 210-2 E	HS 167
SBO 210-2.8 E	HS 167
SBO 250-3.5 E	HS 167
SBO 330-0.75 E	HyRac 121-129 ST
SBO 330-1.4 E	HyRac 143-151 ST
SBO 330-2.0 E	HS 175
SBO 330-3.5 E	HS 175

SBO...A6...(Threaded type)

Accumulator Type	Clamp Type
SBO 350-0.25 A6	HyRac 110-118 ST
SBO 500-0.25 A6	HyRac 110-118 ST
SBO 250-0.6 A6	HyRac 133-142 ST
SBO 330-0.6 A6	HyRac 133-142 ST
SBO 600-0.25 A6	HyRac 143-151 ST
SBO 750-0.25 A6	HyRac 143-151 ST

Accumulator Type	Base Bracket Type
SBO 210-1.3 A6	KMS 200
SBO 400-1.3 A6	KMS 210
SBO 180-2 A6	KMS 220
SBO 250-2 A6	KMS 220

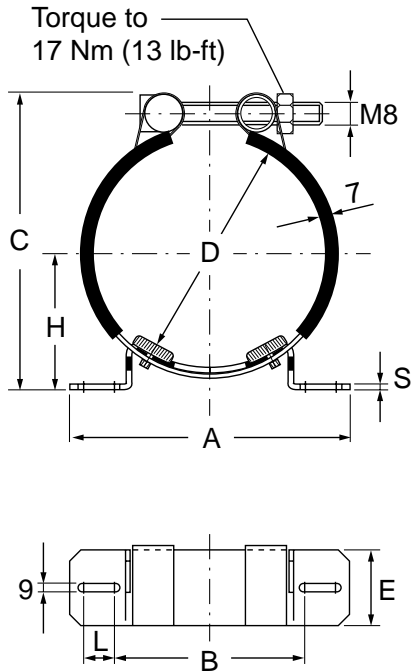
Note: Either one clamp or one Base Bracket is needed for each accumulator listed.

2) Only one clamp is needed for all accumulators listed.

Accumulator Clamps: Dimensions

Use the Selection Guide on page 34 to select the appropriate components.

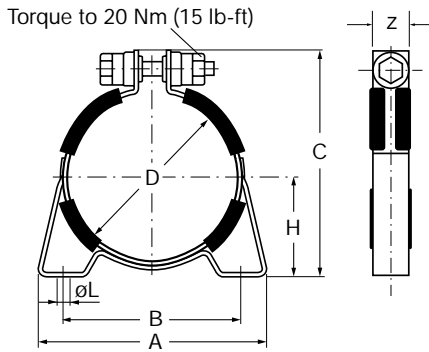
HyRac - Stainless Steel Strap with swivel-bolt adjustment



Clamp Model	A	B	C	D (range)	E	H	L	S	Weight kg.(lbs)
HyRac 62-65 ST	120	85	90	62-65	40	39-40.5	6	3	0.16
HyRac 73-76 ST	120	85	101	73-76	40	49.5-46	6	3	0.16
HyRac 89-92 ST	120	85	116	89-92	40	51.5-53	6	3	0.17
HyRac 100-105 ST	156	100	135	100-105	60	59-62	18	3	0.40
HyRac 106-114 ST	156	100	143	106-114	60	62.5-66	18	3	0.9
HyRac 110-118 ST	156	100	156	110-118	60	72.5-77	18	3	0.42
HyRac 121-129 ST	156	100	165	121-129	60	75.5-80	18	3	0.43
HyRac 133-142 ST	156	100	174	133-142	60	76.5-82	18	3	0.44
HyRac 143-151 ST	156	100	182	143-151	60	83-86.5	18	3	0.45
HyRac 152-159 ST	156	100	191	152-159	60	87-91	18	3	0.46
HyRac 160-167 ST	236	152	197	160-167	60	89-93	32	4	0.7
HyRac 202-210 ST	236	152	245	202-210	60	116-120	32	4	1.68
HyRac 209-217 ST	236	152	255	209-217	60	122.5-126.5	32	4	1.70

Dimensions in mm (inches shown below)

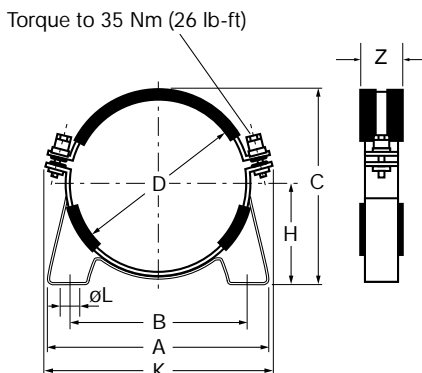
HS - Regular Duty Clamp, with single center adjustment



Clamp Model	D	D (range)	A	B	C(ref.)	H	ØL	Z	Weight kg.(lbs)
HS 167	167	164-170	185	153	211	92.5	9	30	0.9
	6.57	6.46-6.69	7.28	6.02	8.31	3.64	0.35	1.18	2.0
HS 175	175	171-176	193	160	222	99.5	9	30	1.0
	6.89	6.73-6.93	7.60	6.30	8.74	3.92	0.35	1.18	2.2

Dimensions in mm (inches shown below)

HSS - Heavy Duty Clamp with two-piece construction



Clamp Model	D	D (range)	A	B	C(ref.)	H	K	ØL	Z	Weight kg.(lbs)
HSS 219	219	216-222	268	216	240	123	285	15	40	1.7
	8.62	8.50-8.74	10.55	8.50	9.45	4.84	11.22	0.59	1.57	3.8
HSS 222/229	226	220-231	270	216	244	123	295	15	40	1.7
	8.90	8.66-9.10	10.63	8.50	9.61	4.84	11.61	0.59	1.57	3.8
HSS 242	242	231-242	268	216	265	136	305	15	40	1.7
	9.53	9.10-9.53	10.55	8.50	10.43	5.35	12.01	0.59	1.57	3.8
HSS 286	286	283-289	332	280	314	163	355	15	40	2.1
	11.26	11.14-11.38	13.07	11.02	12.36	6.42	13.98	0.59	1.57	4.6
HSS 310	310	307-313	332	280	333	170	380	15	40	2.1
	12.20	12.09-12.32	13.07	11.02	13.11	6.69	14.96	0.59	1.57	4.6

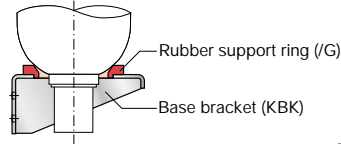
Dimensions in mm (inches shown below)

Accumulator Base Brackets: Dimensions

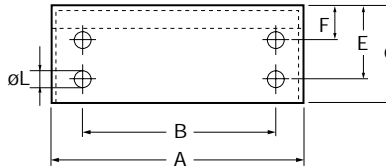
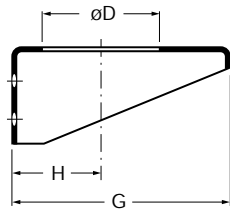
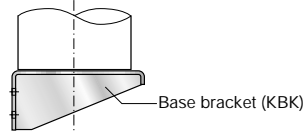
Use the Selection Guide on page 34 to select the appropriate components.

KBK - Base Bracket for Bladder and Piston Accumulators

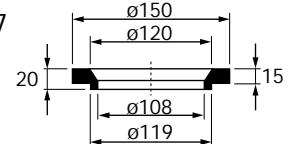
Bladder Accumulator



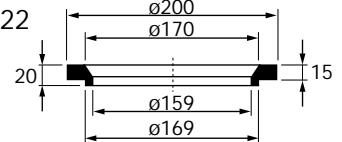
Piston Accumulator



G 167



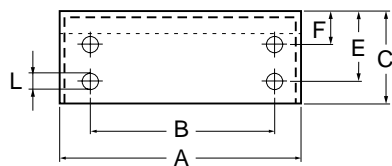
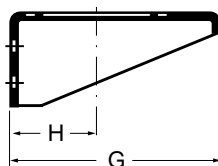
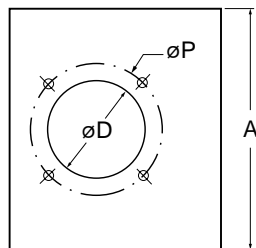
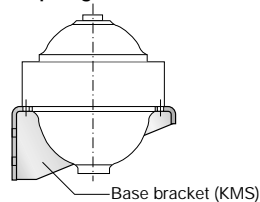
G 222



Base Bracket Model	Dimensions are in millimeters / inches										Weight kg.(lbs)	Rubber Support Ring
	A	B	C	øD	E	F	G	H	øL			
KBK 167/G	260 10.24	200 7.87	100 3.94	120 4.72	75 2.95	35 1.38	225 8.86	92 3.62	14 0.55	2.6 (5.7)	G 167	
KBK 222/G	260 10.24	200 7.87	100 3.94	170 6.69	75 2.95	35 1.38	225 8.86	123 4.84	14 0.55	2.4 (5.3)	G 222	
Base Brackets without Rubber Support Ring												
KBK 126	175 6.89	100 3.94	60 2.36	65 2.56	36 1.42	N/A	150 5.91	77 3.03	14 0.55	1.1 (2.43)	None	
KBK 219	270 10.63	180 7.09	100 3.94	135 5.31	80 3.15	40 1.57	250 9.84	123 4.84	14 0.55	6.5 (14.4)	None	
KBK 310	330 12.99	220 8.66	200 7.87	190 7.48	140 5.51	60 2.36	340 13.39	170 6.69	14 0.55	18.3 (40.4)	None	

KMS - Base Bracket for Threaded Diaphragm Accumulators

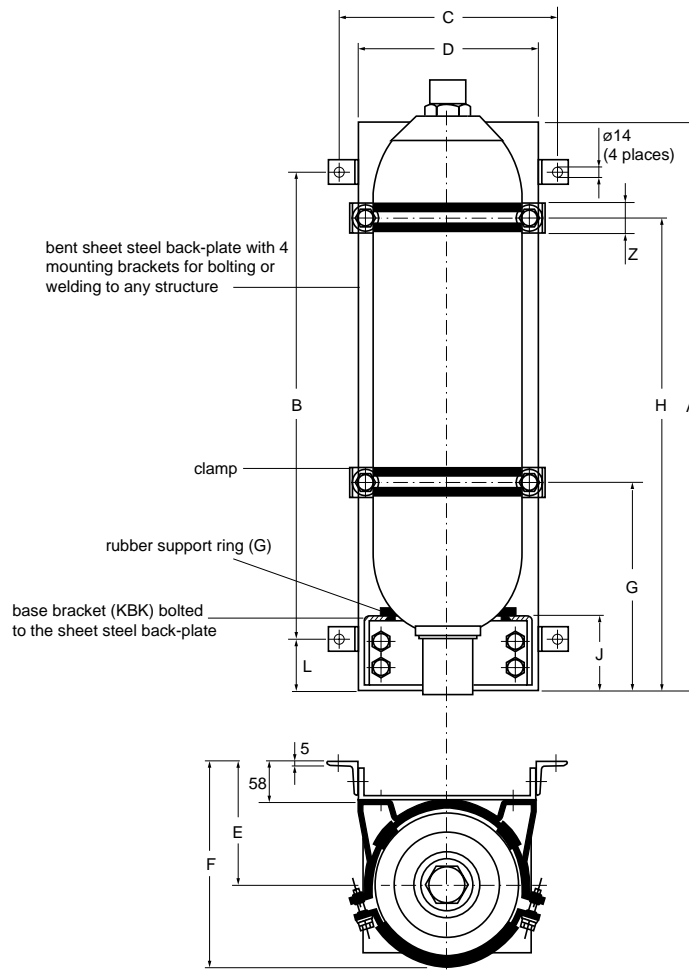
Diaphragm Accumulator



Base Bracket Model	Dimensions are in millimeters / inches										Weight kg.(lbs)
	A	B	C	øD	øP	E	F	G	H	øL	
KMS 200	270 10.63	180 7.09	100 3.94	148 5.83	160 6.30	80 3.15	40 1.57	250 9.84	123 4.84	14 0.55	6.5 (14.4)
KMS 210	260 10.24	200 7.87	100 3.94	170 6.69	180 7.09	75 2.95	35 1.38	225 8.86	123 4.84	14 0.55	2.4 (5.3)
KMS 220	260 10.24	200 7.87	100 3.94	170 6.69	188 7.40	75 2.95	35 1.38	225 8.86	123 4.84	14 0.55	2.4 (5.3)
KMS 250	260 10.24	200 7.87	100 3.94	192 7.56	204 8.03	75 2.95	35 1.38	225 8.86	123 4.84	14 0.55	2.4 (5.3)
KMS 280	330 12.99	220 8.66	200 7.87	215 8.46	230 9.06	140 5.51	60 2.36	340 13.39	170 6.69	22 0.87	18.3 (40.4)
KMS 300	330 12.99	220 8.66	200 7.87	220 8.66	235 9.25	140 5.51	60 2.36	340 13.39	170 6.69	22 0.87	18.3 (40.4)
KMS 310	330 12.99	220 8.66	200 7.87	245 9.65	265 10.43	140 5.51	60 2.36	340 13.39	170 6.69	22 0.87	18.3 (40.4)
KMS 320	330 12.99	220 8.66	200 7.87	290 11.42	305 12.01	140 5.51	60 2.36	340 13.39	170 6.69	22 0.87	18.3 (40.4)

Accumulator Mounting Sets: Components & Dimensions

SEB - Mounting Sets for SB 330 Bladder Accumulators



Sets For Bladder Accumulators SB 330

Set type	Accum. size in gallons	Base bracket		Clamp		Dimensions in mm (inches shown below)									
		Type	Qty.	Type	Qty.	A	B	C	D	E	F (Ref)	G	H	L	J
SEB 4	1	KBK 167/G	1	HS 167	1	410 16.14	320 12.60	330 12.99	270 10.63	152 5.98	265 10.43	-	270 10.63	45 1.77	95 3.74
SEB 10	2.5	KBK 222/G	1	HSS 222/229	1	570 22.44	420 16.54	330 12.99	270 10.63	180 7.09	317 12.48	-	330 12.99	75 2.95	111 4.37
SEB 20	5	KBK 222/G	1	HSS 222/229	1	570 22.44	420 16.54	330 12.99	270 10.63	180 7.09	317 12.48	-	500 19.69	75 2.95	111 4.37
SEB 32	10	KBK 222/G	1	HSS 222/229	2	1340 52.76	1190 46.85	330 12.99	270 10.63	180 7.09	317 12.48	500 19.69	1160 45.67	75 2.95	111 4.37
SEB 54	15	KBK 222/G	1	HSS 222/229	2	1340 52.76	1190 46.85	330 12.99	270 10.63	180 7.09	317 12.48	500 19.69	1160 45.67	75 2.95	111 4.37