INOVASISMIK

HIBUILDAM®

Hydraulic vibration damper HIBUILDAM

SENQCIA

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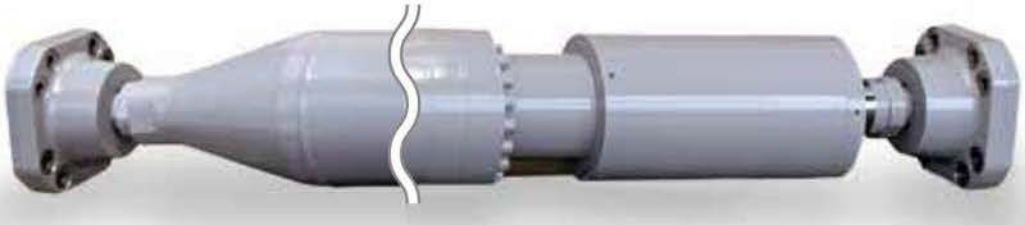
Hydraulic vibration damper HIBUILDAM

Product lineups

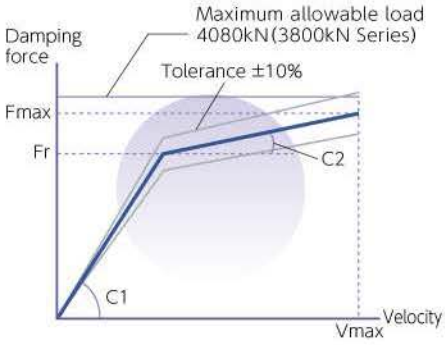
Types	Series of products	Product views
Basic type	500kN 1000kN 1500kN 2000kN 3800kN	Relief valves and other parts are built in a cylinder. 
Bracing type	500kN 1000kN 1500kN 2000kN	Combined type of HIBUILDAM and bracing.   Overall view
Wall stud type	500kN "HIBUILDAM Stud" *	Best suited shape for wall stud and small footprint. 

Standard products

Model number

H 2 0 2 P 1 2 1 5

- Maximum velocity (150mm/sec)
- Stroke (120mm {One side stroke ±60mm})
- Passive hydraulic vibration damper
- Product lineup 2 : Basic type / 4 : Bracing type / 5 : Wall stud type
- Maximum damping force (2000kN)

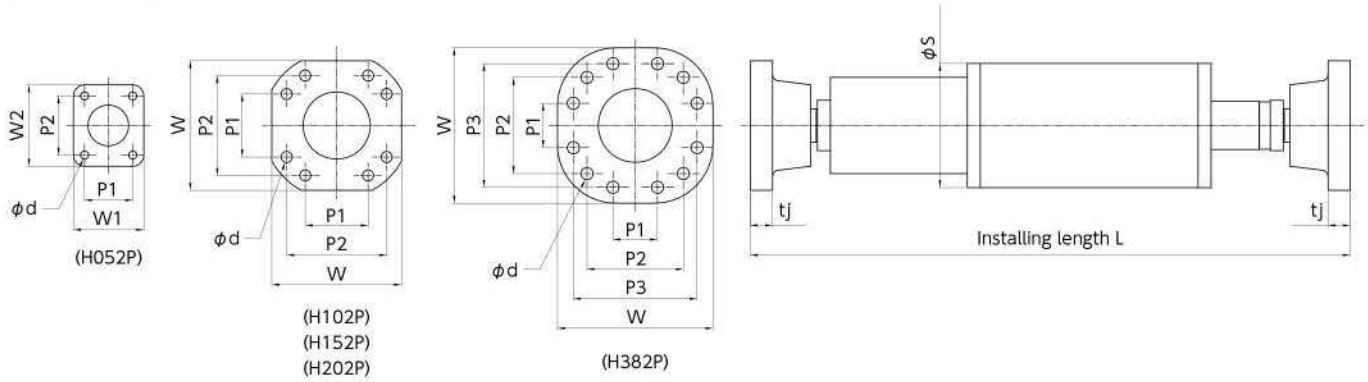


Model	Maximum damping force Fmax (kN)	Relief load Fr (kN)	Maximum velocity Vmax (mm/sec)	First damping coefficient C1 (kN・sec/mm)	Second damping coefficient C2 (kN・sec/mm)
500kN Series H052P H054P H055P	500	400	150	7.5	1.03
				10	0.91
				12.5	0.85
				15	0.81
				17.5	0.79
			300	7.5	0.41
				10	0.38
				12.5	0.37
				15	0.37
				17.5	0.36
1000kN Series H102P H104P	1000	800	150	15	2.07
				20	1.82
				25	1.69
				30	1.62
				35	1.57
			300	15	0.81
				20	0.77
				25	0.75
				30	0.73
				35	0.72
1500kN Series H152P H154P	1500	1200	150	22.5	3.10
				30	2.73
				37.5	2.54
				45	2.43
				52.5	2.36
			300	22.5	1.22
				30	1.15
				37.5	1.12
				45	1.10
				52.5	1.08
2000kN Series H202P H204P	2000	1600	150	30	4.14
				40	3.64
				50	3.39
				60	3.24
				70	3.15
			300	30	1.62
				40	1.54
				50	1.49
				60	1.46
				70	1.44
3800kN Series H382P	3800	3200	150	100	5.08
				140	4.72
			300	100	2.24
				140	2.16

●Please contact us for custom made products.
●Stiffness of products is listed in size chart.

⚠ Warning ● Product specifications must be followed.

Basic type



Specification

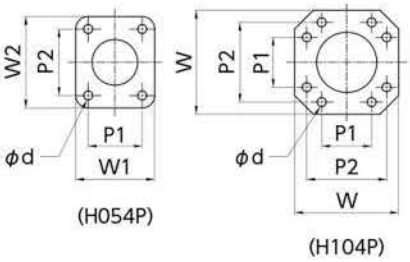
(mm)

Model	St	L	ϕS	tj	P	W	ϕd*1	Stiffness*2 (kN/mm)	Weight (kg)
H052P	± 60	1060	177.8	32	P1:130 P2:160	W1:190 W2:220	4-ϕ22 (M20)	145	135
	± 80	1160						120	140
	± 100	1255						100	150
	± 120	1370						85	160
H102P	± 60	1250	244.5	42	P1:120 P2:192	250	8-ϕ22 (M20)	285	295
	± 80	1345						235	310
	± 100	1480						200	335
	± 120	1560						170	345
H152P	± 60	1340	315	60	P1:170 P2:270	350	8-ϕ26 (M24)	450	560
	± 80	1425						350	580
	± 100	1520						295	605
	± 120	1620						255	635
H202P	± 60	1340	336	60	P1:170 P2:270	350	8-ϕ30 (M27)	500	610
	± 80	1425						405	630
	± 100	1520						350	655
	± 120	1620						300	685
H382P	± 80	1920	432	75	P1:120 P2:260 P3:334	420	12-ϕ33 (M30)	500	1250
	± 120	2140						400	1350

*1 Numbers in ( ) indicates the size of the mounting bolts
*2 -10% or less of tolerance

Bracing type

Figure 1



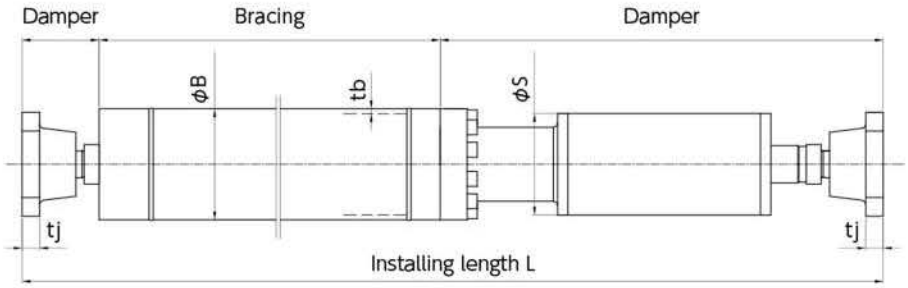
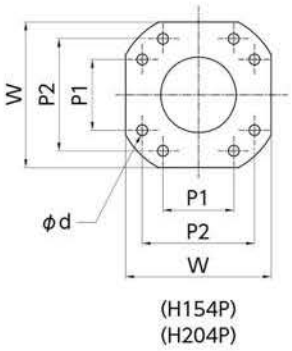
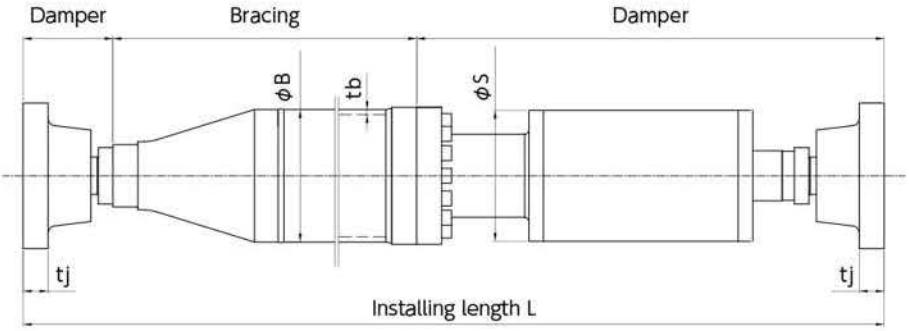


Figure 2





Size of basic type and bracing type (Figure 1 - 4)

(mm)

Model	St	φS	tj	P	W	φd*1	Stiffness*2 (kN/mm)
H054P	± 60	177.8	32	P1:130 P2:160	W1:190 W2:220	4-φ22 (M20)	145
	± 80						120
	±100						100
	±120						85
H104P	± 60	244.5	42	P1:120 P2:192	250	8-φ22 (M20)	285
	± 80						235
	±100						200
	±120						170
H154P	± 60	315	60	P1:170 P2:270	350	8-φ26 (M24)	450
	± 80						350
	±100						295
	±120						255
H204P	± 60	336	60	P1:170 P2:270	350	8-φ30 (M27)	500
	± 80						405
	±100						350
	±120						300

*1 Numbers in ( ) indicates the size of the mounting bolts and F10T or S10T high strength bolts are recommended
*2 -10% or less of tolerance and wight of bracings are not included

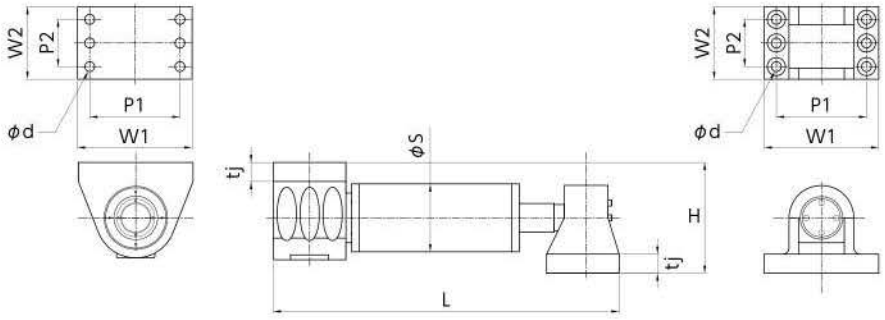
Specification

Standard installation length is 7000 mm and please contact us for longer length

(mm)

Model	St	L	Shape	Brace diameter (tb)	Stiffness Formula (kN/mm)	Weight Formula (kg)
H054P	± 60	L≦7000	Bracing type (Figure 1)	216.3 (8.2)	$15.9\times10^7/(145L+93.9\times10^4)$	142+0.042L
	± 80				$13.2\times10^7/(120L+95.3\times10^4)$	144+0.042L
	± 100				$11.0\times10^7/(100L+96.6\times10^4)$	147+0.042L
	± 120				$9.34\times10^7/(85L+97.5\times10^4)$	152+0.042L
H104P	± 60	L≦6000	Bracing type (Figure 1)	267.4 (9.3)	$44.1\times10^7/(285L+118\times10^4)$	319+0.059L
	± 80				$36.3\times10^7/(235L+122\times10^4)$	322+0.059L
	± 100				$30.9\times10^7/(200L+123\times10^4)$	333+0.059L
	± 120				$26.3\times10^7/(170L+126\times10^4)$	337+0.059L
	± 60	6000<L≦7000		267.4 (12.7)	$59.4\times10^7/(285L+172\times10^4)$	286+0.080L
	± 80				$49.0\times10^7/(235L+176\times10^4)$	287+0.080L
	± 100				$41.6\times10^7/(200L+177\times10^4)$	295+0.080L
	± 120				$35.4\times10^7/(170L+180\times10^4)$	297+0.080L
H154P	± 60	L≦6000	Bracing type (Figure 2)	318.5 (10.3)	$92.0\times10^7/(450L+144\times10^4)$	540+0.078L
	± 80				$71.5\times10^7/(350L+155\times10^4)$	549+0.078L
	± 100				$60.3\times10^7/(295L+160\times10^4)$	560+0.078L
	± 120				$52.1\times10^7/(255L+163\times10^4)$	572+0.078L
	± 60	6000<L≦7000		318.5 (12.7)	$113\times10^7/(450L+190\times10^4)$	506+0.096L
	± 80				$87.5\times10^7/(350L+200\times10^4)$	514+0.096L
	± 100				$73.8\times10^7/(295L+205\times10^4)$	522+0.096L
	± 120				$63.8\times10^7/(255L+209\times10^4)$	533+0.096L
H204P	± 60	L≦5000	Bracing type (Figure 2)	355.6 (11.1)	$123\times10^7/(500L+179\times10^4)$	579+0.094L
	± 80				$99.7\times10^7/(405L+189\times10^4)$	588+0.094L
	± 100				$86.2\times10^7/(350L+193\times10^4)$	599+0.094L
	± 120				$73.9\times10^7/(300L+198\times10^4)$	611+0.094L
	± 60	5000<L≦6000		355.6 (12.7)	$140\times10^7/(500L+213\times10^4)$	540+0.11L
	± 80				$114\times10^7/(405L+223\times10^4)$	548+0.11L
	± 100				$98.2\times10^7/(350L+227\times10^4)$	557+0.11L
	± 120				$84.1\times10^7/(300L+232\times10^4)$	568+0.11L
	± 60	6000<L≦7000		355.6 (16)	$175\times10^7/(500L+283\times10^4)$	531+0.13L
	± 80				$142\times10^7/(405L+292\times10^4)$	537+0.13L
	± 100				$122\times10^7/(350L+297\times10^4)$	544+0.13L
	± 120				$105\times10^7/(300L+301\times10^4)$	552+0.13L

Wall stud type



Specification

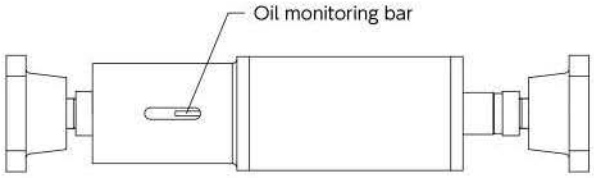
(mm)

Model	St	L	ϕS	H	tj	P1	P2	W1	W2	ϕd*1	Stiffness*3 (kN/mm)	Weight (kg)
H055P	±60	905	177.8	290	50	236	124	300	190	6-ϕ26 (M24*2)	105	210

*1 Numbers in ( ) indicates the size of the mounting bolts
*2 Torque shear extra high strength bolts of M24 are required
*3 -10% or less of tolerance

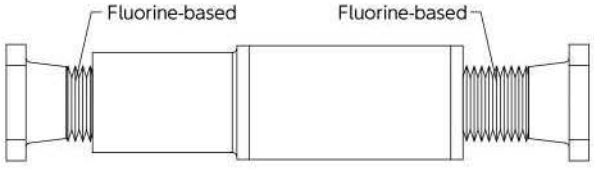
Custom-made

Oil monitoring bar



Oil monitoring bar for checking oil level

Outdoor use



Fluorine-based paint and protectors on shafts

*Oil monitoring bar can only be applied for indoor use

- Micro amplitude
- Large stroke
- Customized performance

*Please contact us for more inquiries