BPF
Standard
Vertical type



BPF
Standard
Horizontal type



BPFQ
Quick type
5 to 8
tons of
unclamping
force



Specification:

Item \ Specifications	**BPF** Standard type (Vertical type / Horizontal type)	**BPFQ** Quick type
Operating pressure	Compressed air with 0.4MPa~0.6MPa(4kgf/cm^2~6kgf/cm^2)	
Operating oil	CPC-R32 viscosity grade ISO VG32 or equivalent	
Working temperature range	0℃~60℃	
Output capacity	50C.C., 70C.C., 110C.C.	
Voltage	DV24, AC110, 220	

■ Operating pressure (kgf/cm^2)

Have to make sure the operating pressure tolerance to be within ± 0.1MPa (1kgf/cm^2). Suggest to set the operating pressure for 0.6MPa (6kgf/cm^2)

■ Total oil capacity of your hydraulic cylinder or hydraulic unclamping cylinder

Please reserve the total output force of spindle and plus 20% ~ 30%.

■ Voltage of solenoid valve

■ Use with tool magazine BT30#, BT40#, BT50#

■ Push-stroke of spindle (mm)

■ Clamping force of spindle (kgf)

■ Boosting ratio of unclamping booster

BPF Codification key

Codification key

BPF Q - 10 U 39 M 70 FA

1. Air-Oil Unclamping Booster

2. Type

no mark: Standard type
Q: Quick type

3. Pneumatic cylinder diameter

10: ϕ100 / **12**: ϕ125 / **16**: ϕ160 / **20**: ϕ200

4. Suitable for

U: for Machining Centers unclamping use / **E**: other equipments

5. Boosting Ratio

11= 11:1 / **12**= 12.7:1 / **16**= 16:1 / **25**= 25:1
30= 30:1 / **39**= 39:1 / **51**= 51:1

6. Oil level sensing installation

M: with oil level sensing installation
N: without oil level sensing installation

7. Output capacity

50c.c. / **70**c.c. / **110**c.c. (other capacity on request)

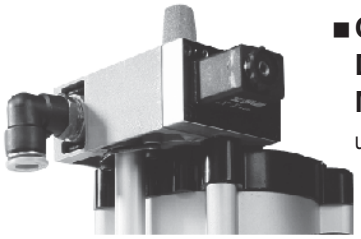
8. Mounting type

FA: Vertical type / **LB**: Horizontal type

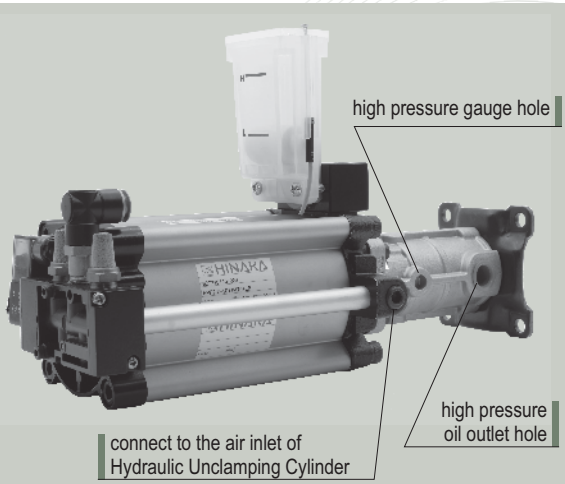
BPF Characters / Circuit

HINAKA
中日流體傳動股份有限公司
精心／精品／精誠／精業

Product features:



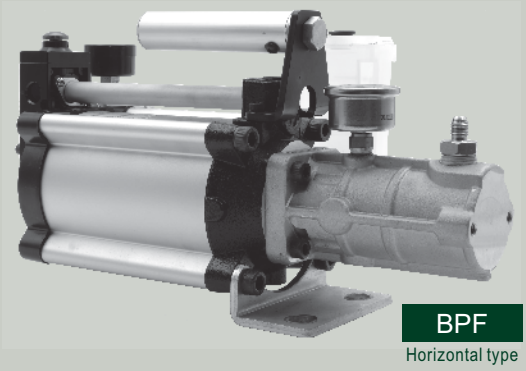
■ **Offer hydraulic power to Direct Drive Spindle and Motor Spindle,**
use with hydraulic unclamping cylinder.

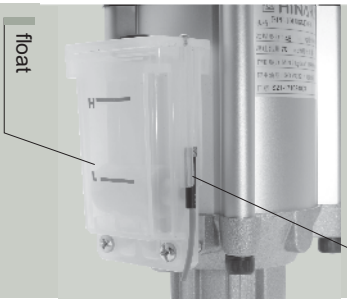


■ **Modulize Design**
Control valve perfectly fits on the rear cover and built-in pipe and circuit therefore not only having great compressed air but also time-saving installation and saving the cost component.

■ **Choose The Most Suitable Seal**
With the experiences and tests of many years, we use the best seals to reduce the oil consumption during operation, don't need to refill oil often, and avoid the harm to spindle due to oil-leakage.





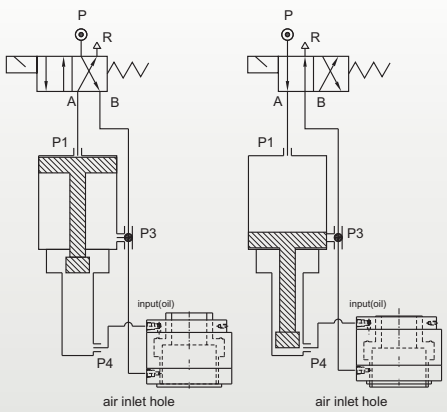


■ **With Oil Level Sensing Installation**
Oil cup is designed to be flat and fit the tube perfectly. It is stable, non-leakage, non-space occupation and non-obliquity. A float inside and the sensor outside the oil cup can sense the oil level and to give the information to the computer in advance to avoid any loss caused by wrong timing between unclamping and clamping and the machine shutdown. Oil cup is made of PC, which is corrosive-resistance, hitting-endurance and see-through.

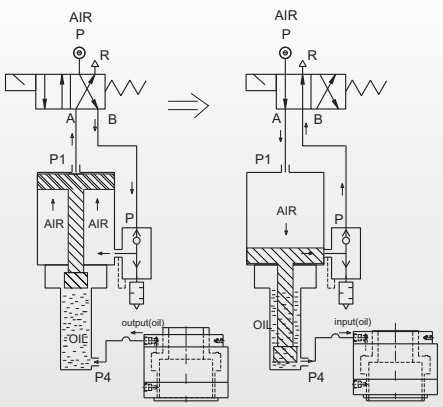
Oil level sensing installation

Circuit:

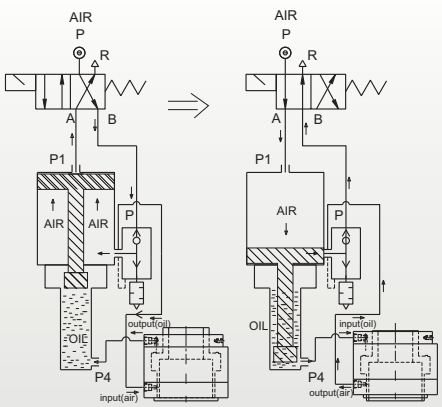
BPF



BPFQ
Single A type

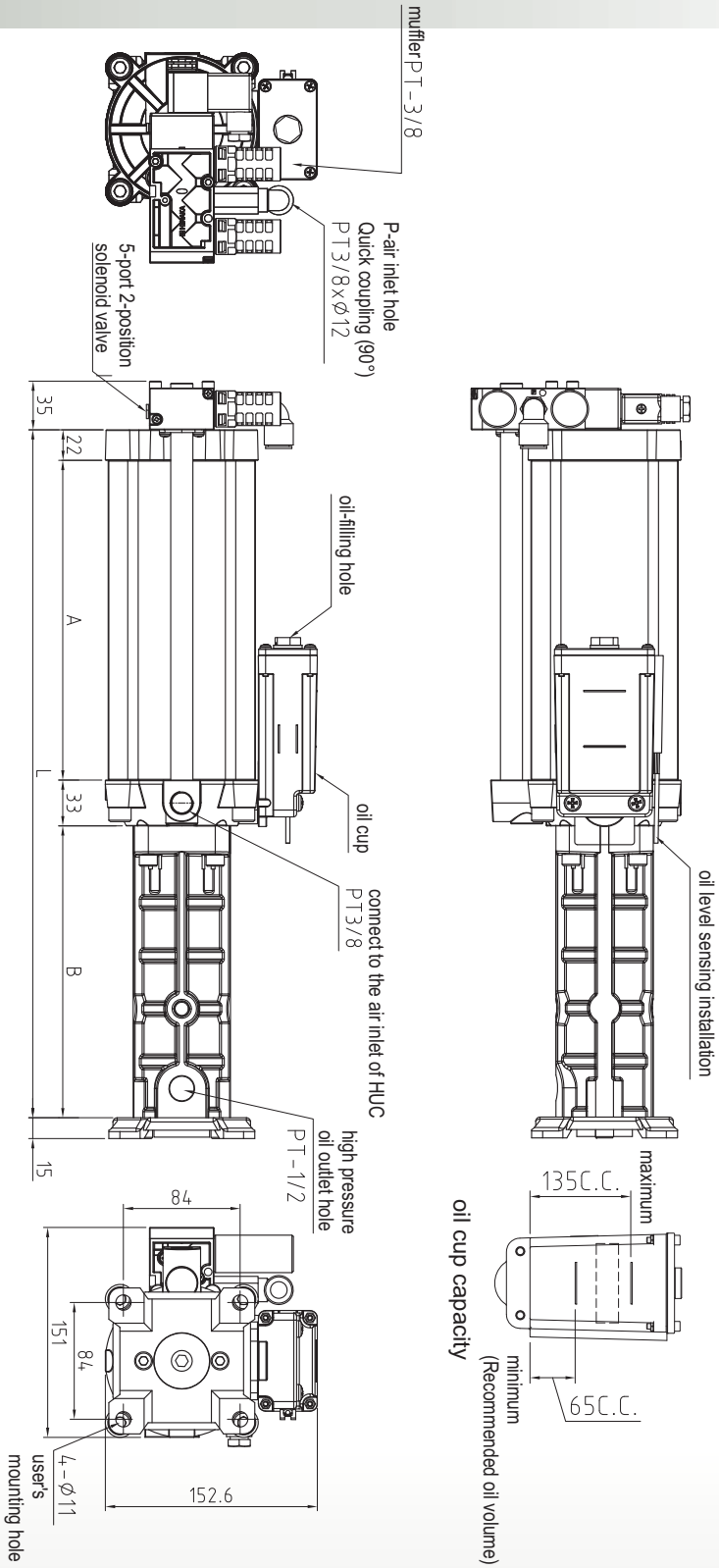


BPFQ
Double A type



BPF

Standard Vertical type
Dimension:

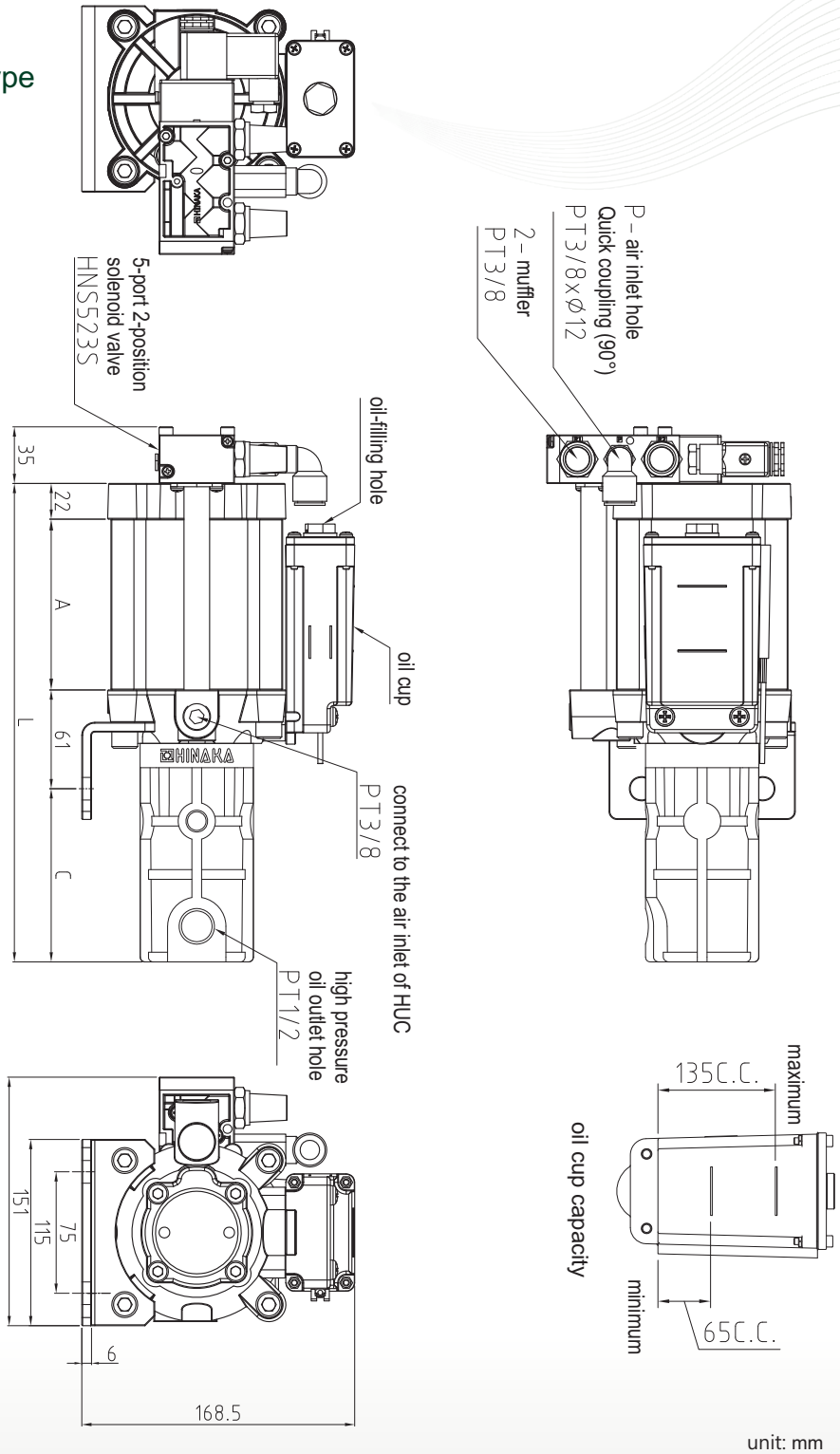


unit: mm

Output capacity	A			B			L			oil pressure output force (kgf/cm²)		
Boosting Ratio	50C.C.	70C.C.	110C.C.	50C.C.	70C.C.	110C.C.	50C.C.	70C.C.	110C.C.	4	5	6
1006	85	101	133	83	83	135	223	239	323	25	31	37
1008	97	118	159	83	83	135	235	256	349	32	40	48
1011	122	150	207	135	135	210	312	325	472	44	55	66
1012	132	165	230	135	135	210	322	355	495	51	63	76
1016	153	194	275	135	210	284	343	459	675	64	80	96
1025	213	276	404	219	283	410	485	612	930	100	125	150

BPF

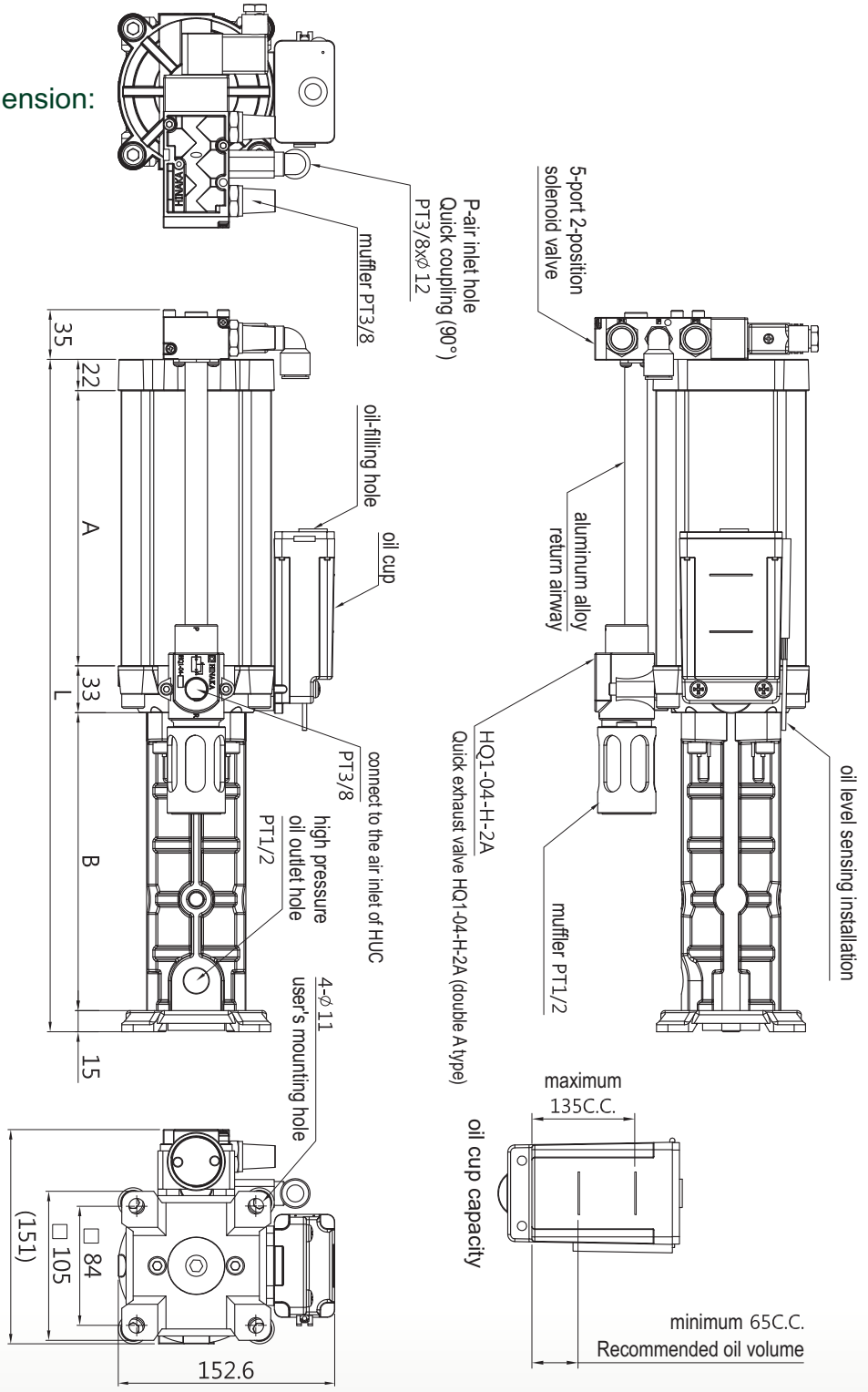
Standard Horizontal type
Dimension:



unit: mm

Output capacity	A			C			L			oil pressure output force (kgf/cm²)		
Boosting Ratio	50C.C.	70C.C.	110C.C.	50C.C.	70C.C.	110C.C.	50C.C.	70C.C.	110C.C.	4	5	6
1006	85	101	133	55	55	107	223	239	323	25	31	37
1008	97	118	159	55	55	107	235	256	349	32	40	48
1011	122	150	207	107	107	182	312	340	472	44	55	66
1012	132	165	230	107	107	182	322	355	495	51	63	76
1016	153	194	275	107	182	257	343	459	675	64	80	96
1025	210	274	402	192	256	383	485	612	870	100	125	150

BPFQ
Quick type Dimension:



unit: mm

Output capacity	A			B			L			oil pressure output force (kgf/cm²)		
Boosting Ratio	50C.C.	70C.C.	110C.C.	50C.C.	70C.C.	110C.C.	50C.C.	70C.C.	110C.C.	4	5	6
1006	85	101	133	83	83	135	223	239	323	25	31	37
1008	97	118	159	83	83	135	235	256	349	32	40	48
1011	122	150	207	135	135	210	312	325	472	44	55	66
1012	132	165	230	135	135	210	322	355	495	51	63	76
1016	153	194	275	135	210	284	343	459	675	64	80	96
1025	213	276	404	219	283	410	485	612	930	100	125	150