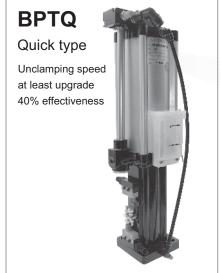
# BPT Technical Information









# Specification:

Specifications Item	BPT Standard type	BPTQ Quick type	BPTH High force output		
Operating pressure	Compressed air with 0.2MPa~0.7MPa (2kgf/cm²~7kgf/cm²)				
Operating oil	CPC-R32 viscosity grade ISO VG32 or equivalent				
Working temperature range	0°C~60°C				
Total stroke	13,15,17				
Voltage		DV24, AC110, 220			

### Please offer us the following information in order to suggest the product to you.

■ Operating pressure (kgf/cm²)

Have to make sure the operating pressure tolerance to be within  $\pm$  0.1MPa(1kgf/cm²). Suggest to set the operating pressure for 0.6MPa(6kgf/cm²)

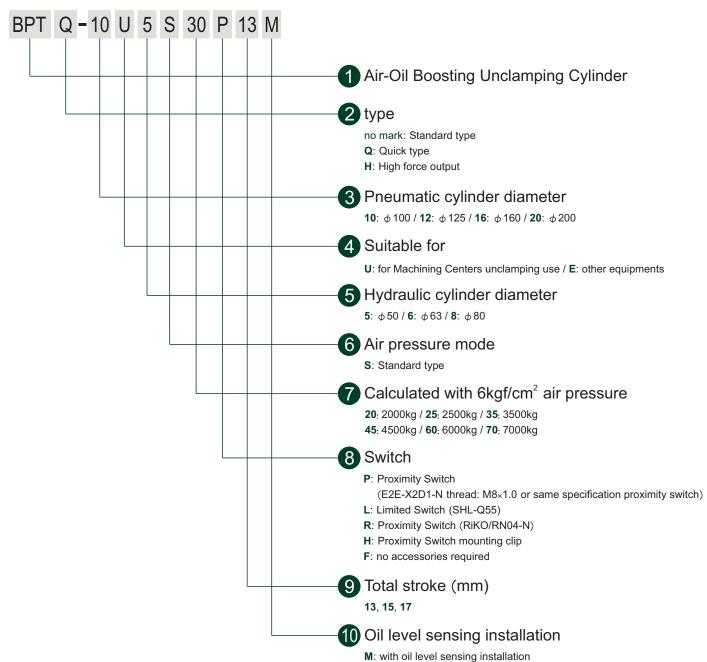
- Unclamping total stroke (mm)
  - Total stroke must include the reserved distance between cylinder hitting head and spindle.
- Reserved distance (mm) between cylinder hitting head and spindle.

The suggested best reserved distance is 0.5mm.

- Total output force (kgf)
  - Please reserve the total output force of spindle and plus  $20\%\sim30\%$
- Voltage of solenoid valve
- Use with tool magazine BT30#, BT40#, BT50#
- Push-stroke of spindle (mm)
- Clamping force of spindle (kgf)

# BPT Codification key

# Codification key



N: without oil level sensing installation

# **BPT** Characters / Circuit



### Product features:



#### ■ Flash Tool Changing

Tool changing is less than 1 second, include 0.17 second unclamping. BT30 T to T: 0.98 second, BT40 T to T: 1~1.2 second.



#### ■ Modulize Design

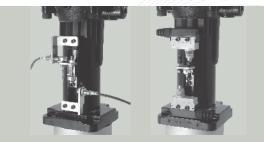
Control valve perfectly fits on the rear cover and built-in pipe and circuit therefore not only having great compressed air but also timesaving installation and saving the cost component.

### ■ Aluminum Material, Integrated

Reduce the burden on Z axis and enhance the lifetime of ballscrew and runway.

### ■ 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.



### ■ Improves Tool-Changing Precision and Speed

Upper and lower unclamping positions sensing mechanism is designed to be simple, steady and precise position adjustment that improves tool-changing precision and speed.



#### ■ Automatic Air Blow Clean Function

The automatic air blow clean function is installed inside the fixed FA mounting no need to install the additional valve for air blow.

■ With the hard treatment to make hitting head have appropriate hardness, easily adjustable left-hand thread.

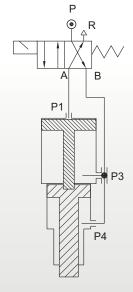


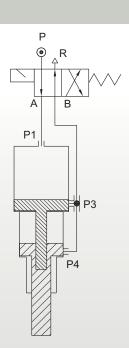
#### ■ With Oil Level Sensing Installation

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 corrosiveresistance, hitting-endurance and see-through.

Oil level sensing installation

# Circuit:

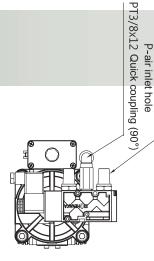




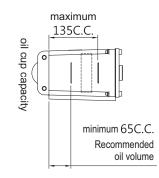


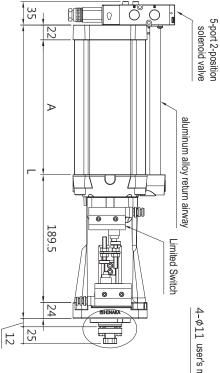
**BPT** 

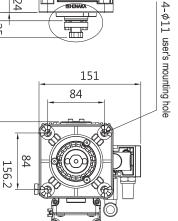
Standard type Dimension:

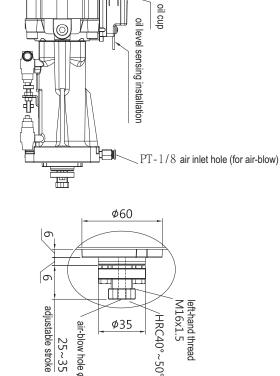


2-muffler PT3/8









ø35

air-blow hole ø5 25~35

unit:	mm

Specifications	A L		theoretical boosted output force (kgf)			Boosting Ratio
•			4	5	6	RallO
2.0T×ST13	103	339				
2.0T×ST15	111	347	1256	1570	1884	16
2.0T×ST17	119	355				
2.5T×ST13	116	352				
2.5T×ST15	126	362	1564	1956	2347	19.9
2.5T×ST17	136	372				
3.0T×ST13	132	367				
3.0T×ST15	145	381	1963	2453	2944	25
3.0T×ST17	157	392				

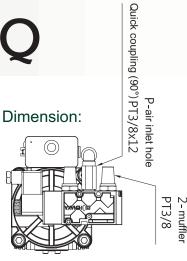
						G		
Specifications	ations A		A L		theoretical boosted output force (kgf)			Boosting Ratio
·			4	5	6	Rallo		
3.5T×ST13	151	386						
3.5T×ST15	167	403	2423	3029	3634	30.8		
3.5T×ST17	182	417						
4.5T×ST13	181	416						
4.5T×ST15	200	435	3066	3833	4600	39		
4.5T×ST17	220	455						

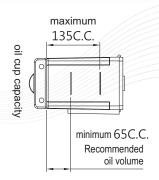
- Remark 1: Without this hole for standard type if this hole is needed, please
- Remark 2: Proximity Switch is optional.

# **BPTQ**

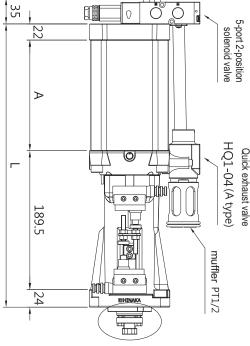


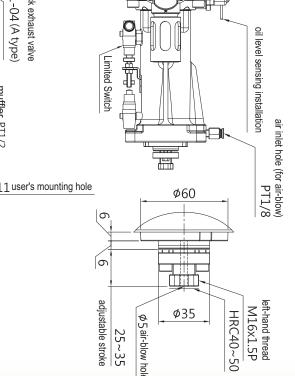
# **BPTQ** Quick type Dimension:





oil-filling hole





	151 4-Ø1
	84
<b>*</b>	
84	
156.2	

Specifications	A L		theoretical boosted output force (kgf)			Boosting Ratio
·			4	5	6	Rallo
2.0T×ST13	103	339				
2.0T×ST15	111	347	1256	1570	1884	16
2.0T×ST17	119	355				
2.5T×ST13	116	352				
2.5T×ST15	126	362	1564	1956	2347	19.9
2.5T×ST17	136	372				
3.0T×ST13	132	367				
3.0T×ST15	145	381	1963	2453	2944	25
3.0T×ST17	157	382				

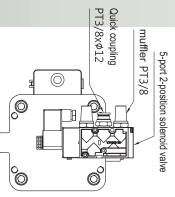
	oretical boos	. f d	
ou	theoretical boosted output force (kgf)		
4	5	6	Ratio
2423	3029	3634	30.8
3066	3833	4600	39
	2423	2423 3029	2423 3029 3634

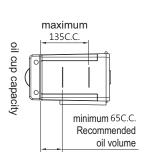
- Remark 1: Without this hole for standard type if this hole is needed, please tell us
- Remark 2: Proximity Switch is optional.

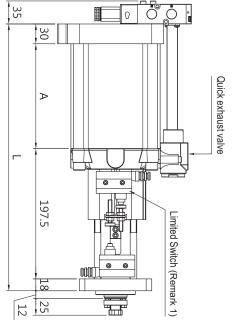
# **BPTH**

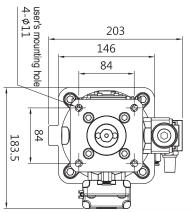
## **BPTH**

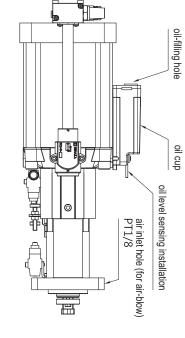
High force output Dimension:

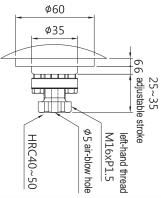












unit: mm

Specifications	Α	L	theoretical boosted output force (kgf)			Boosting Ratio
			4	5	6	Rallo
6.0T×ST13	134	369.5				
6.0T×ST15	149	384.5	3787.6	4734.5	5681.4	48.23
6.0T×ST17	164	399.5				
7.0T×ST13	159	394.5				
7.0T×ST15	179	414.5	4793.7	5992.1	7190.5	61.04
7.0T×ST17	199	434.5				

<sup>•</sup> Remark 1: Proximity Switch is optional.