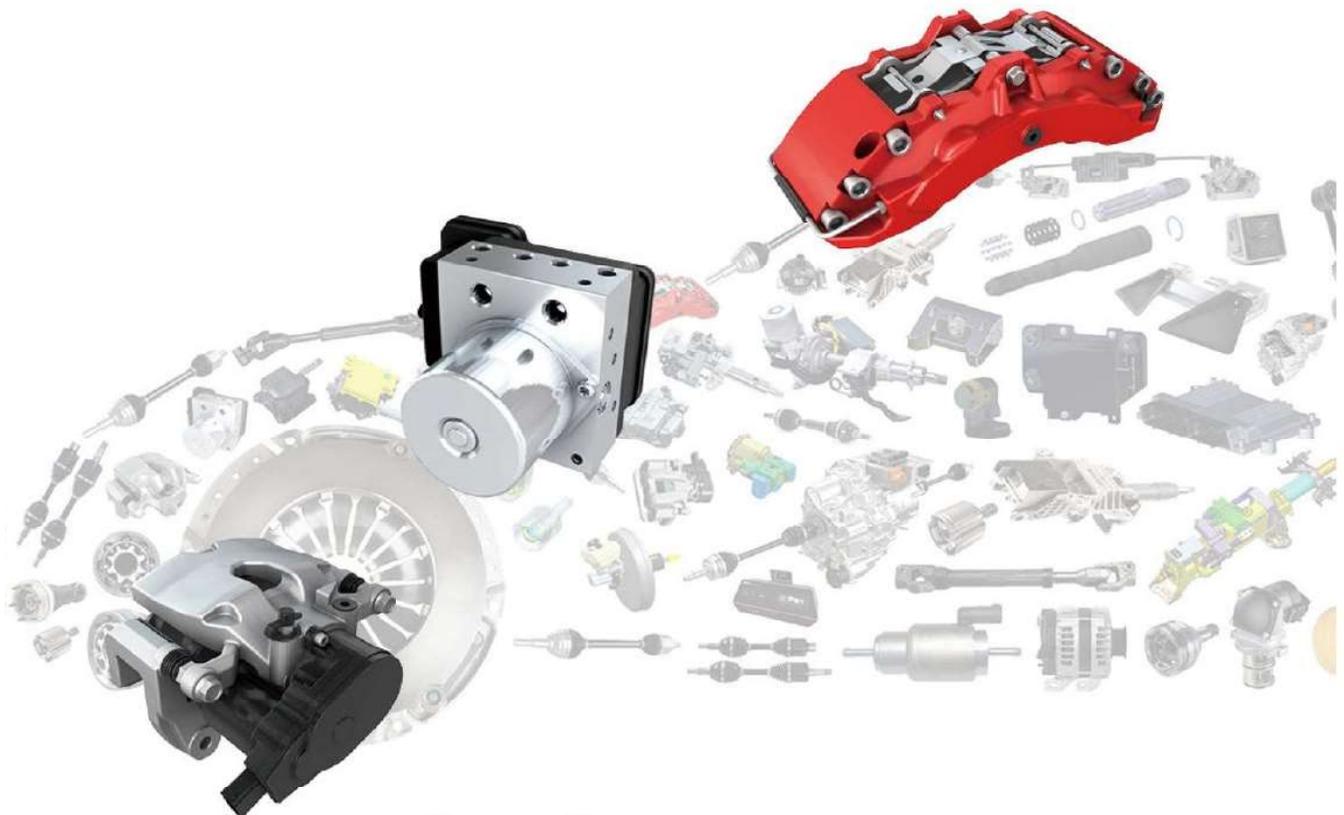




For Technology, Quality & Value

Brake

- Caliper Brake
- Electronic Stability Control (ESC)
- Electric Parking Brake (EPB)
- Power Brake



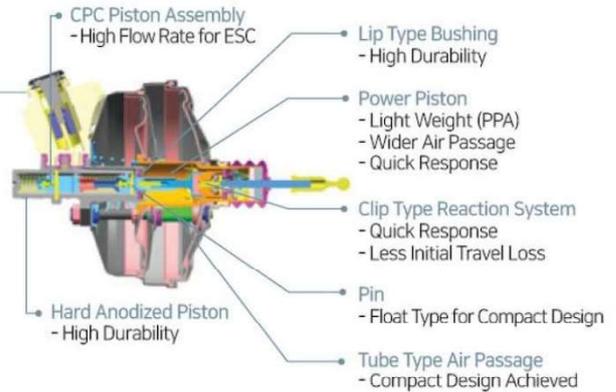
Power Brake

Features

- High stiffness booster : Tie-rod or Thru bolt type
- High flow rate master cylinder :
DCV (Double Center Valve) fixed seal type

Customer Benefits

- Less initial travel loss
- Quick response
- Efficient package size
- High flow rate for ESC



Caliper Brake

Features

- Separated function (Bracket mounted)
- Self-adjusted gap between disc and pad

Customer Benefits

- High performance
- Low residual drag
- Compact size and light weight
- Reduced noise



Electronic Stability Control (ESC)

Features

- Optimized design
- High efficiency and durability
- Available to ADAS like AEB

Customer Benefits

- Low weight and compact package
- High performance and fast response
- Provide driver with various function



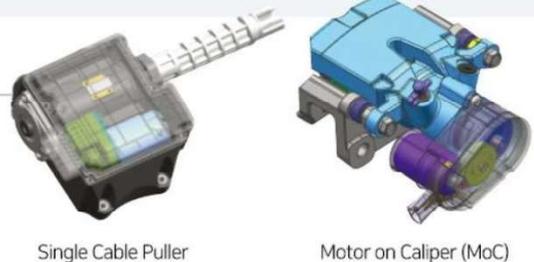
Electric Parking Brake (EPB)

Features

- Optimized response time and clamping force
- High efficiency gear train
- Drive away assist (Auto release)
- Auto apply
- Dynamic braking (Prevent rear wheel locking)
- Integrated parking and service brake (MoC)
- Integrated ECU (Controller, Cable Puller)

Customer Benefits

- Emergency release
- Compact package & fast response
- Provide variety of additional functions for driver comfort and safety
- Mass reduction by aluminum housing and plastic gears (MoC)



Front Caliper



Piston Dia. (mm)	ø51.1	ø51.1	ø52	ø54	ø57	ø57.2	ø60	ø60
Effective Radius (mm)	86.5	86 88	94.5 98 105	102 107 105	105 112.5	122.8	113	111.6 122.8
Pad Area (cm ²)	28	31	42 45	42 45/50	50 58	51.7	52	60.4 63.2
Weight (kg)	2.5	3.1 2.8	4.0 4.0	4.5 4.7 5.0	4.7 5.4	5.6	5.4	6.0 6.4



Piston Dia. (mm)	ø43x2	ø45x2	ø48x2		(ø43+ø48)x2	(ø36+ø38)x2	(ø42+ø44+ø46)x2	(ø38+ø40+ø44)x2	(ø30+ø34+ø38)x2
Effective Radius (mm)	124	133.4	126 / 134	128	135	161	166.5	116.5	157
Pad Area (cm ²)	63	61.3	66 / 70	70	70	90	110	110	100
Housing Material	Cast Iron	Cast Iron	Cast Iron	Aluminum	Aluminum	Aluminum	Cast Iron	Aluminum	Aluminum
Weight (kg)	6.3	7.4	7.0 / 7.7	5.5	5.2	6.5	11.5	8.5	6.3

Rear Caliper



Piston Dia. (mm)	ø32	ø35 / ø38	ø40 / ø42	ø43	ø45
Effective Radius (mm)	113.2	111 / 121	131	130 / 134	130
Pad Area (cm ²)	27.2	30	29	42	41
Housing Material	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Aluminum Cast Iron
Weight (kg)	2.32	2.93 / 3.05	3.15	4.3	3.3 / 4.2

EPB

- MoC Type
- Cable Puller Type



Motor on Caliper (MoC)

Piston Dia. (mm)	ø38	ø45
Effective Radius (mm)	130	132.3
Pad Area (cm ²)	25	35
Housing Material	Cast Iron	Cast Iron
Weight (kg)	4.6	5.5



Cable Puller

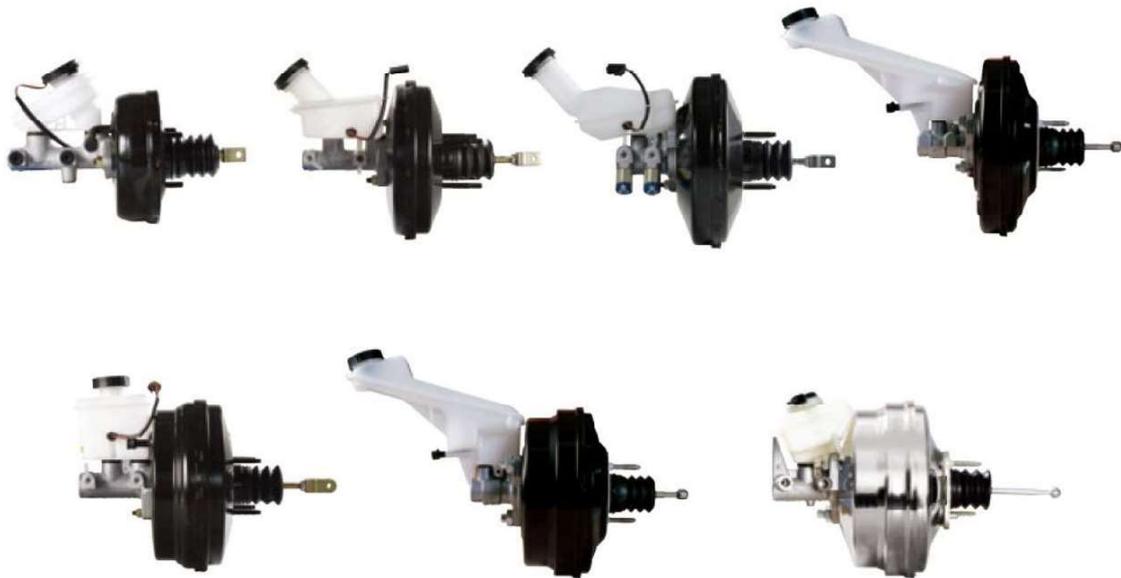
Dimension (mm)	281x158x79
Force (N)	1,600
Stroke (mm)	114
Weight (kg)	1.2

ESC



Dimension (mm)	125x123x100
Motor Capacity (Watt)	270 or 310
LPA Volume (cc)	3.0 ~ 6.0
Weight (kg)	1.9 ~ 2.1

Power Brake



Model	6"S	7"S	8"	9"S	9.5"S	10"S	7"+8"T	8"+9"T	9"+9"T	8"+9"T
Booster Width (mm)	63		75	67.8/90	75	75/90	112.6	112.6/118 119.5	112.6	140
Boosting [Dual Ratio]	3.0 3.7	3.0 3.5 3.7	5	5.0 5.5 6.0	5.0 5.5	6.0 7.5 [5.5/9.0]	6	7.0/7.5/9.0 [8.0/9.5]	7.5	9
M/Cylinder Length (mm)	116 131	131	116.2	85/112.7	110/95	85/110 115		73/81.4/ 101 114.9/130	137	91
M/Cylinder Dia. (mm)	ø19.05 ø20.64	ø20.64	ø20.64	ø20.64 ø22.22	ø22.22	ø20.64 ø22.22 ø23.81	ø23.81	ø23.81 ø25.4 ø26.99	ø25.4	ø25.4
Stroke (Pri. x Sec.) (mm)	16.5x12.0	13.5x15.5	15.4x16.6	15.4x16.6 17.65x18.85	15.4x16.6	15.4x16.6 17.65x18.85	15.4x16.6	15.4x16.6 15.0x16.0 20.0x11.0	15.0x16.0	18.0x18.0
Weight (kg)	2.08	2.62	2.3 2.85	3.0 3.12 3.2 2.5	3.4	3.1 3.4 3.58	4.3	3.8 4.4 4.5	4.7	3.0 (Aluminum)

Contact Point

T. +82 10 2874 9189 E. hocheol.son@hansaemobility.com

T. +82 10 5208 5449 E. heekook.choi@hansaemobility.com



**For Technoligy,
Quality & Value
Start with Hansae Mobility**