#### WATER PROOF CONNECTOR

Lineup of Water Proof connectors suitable for environment resistant fan motors

Water Proof Connector CA01 SERIES

Minebea Connect

#### Spec/Performance IP67

: 2.0mm

: 2A MAX. Current

: -40~105°C Operating Temp

Insulation





### Water Proof Connector CB01 SERIES

2,3,4,5,6,8p

Minebea Connect

### **IP67** Spec/Performance : 2.5mm : 3A MAX. : -40~105°C





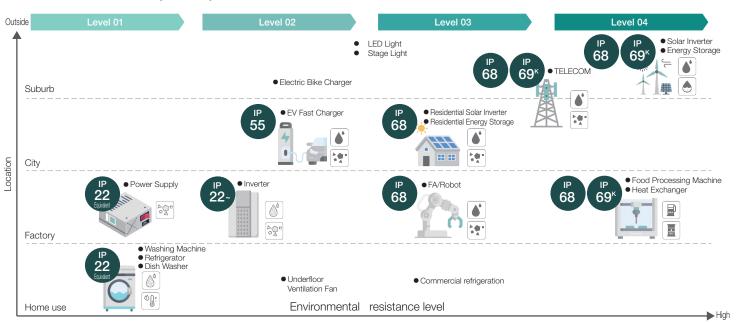


## 4 Environmental Resistance Levels

International Electrotechnical Commission(IEC) and Japanese Industrial Standards(JIS) define the Ingress Protection Code which indicates how well an electrical device, such as a fan motor, is protected against water

and dust. However, such standards do not offer protection requirements for devices used in harsher environmental such as salt water, oxidized gas and oil. For added protection, MinebeaMitsumi offers 4 design options in terms of fan motor with different levels of environmental protection. Please check by actual mounting status for final water resistance, dust resistance, and oil resistance accordingly.









# **Environmental Resistant** Fan Proposal

This leaflet shows the 4 environmental resistance levels by IP grades and the proposed product line up.



MinebeaMitsumi Inc.

## Environment Resistant Fan Motor List





IP22 Equivalent





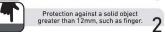








1st Digit - SOLIDS



Protection against a solid object greater than 50mm, such as hand.

Protection against a solid object greater than 2.5mm, such as wire.

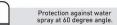
Protection against a solid object greater than 1.0mm, such as a thin strap.

Dust protected. Prevent ingress of dust sufficient to cause harm.

Dust tight. No ingress of dust.



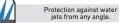
PRATING CHART



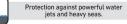












Protection against water drops.

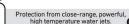
Protection against water drops at a 15 degree angle.

2nd Digit - LIQUID

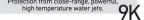


Protection against the effects of permanent submersion in water. (Up to 13 ft.)

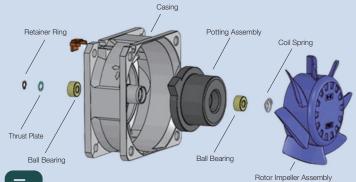
Protection against the effects of temporary submersion in water. (30 min. at 3 ft.)

















Product site



Part Number	□[mm]	L[mm]	Catalog page	Air Flow m³/min	Air Flow CFM	Conformal Coating	Silicon Coating	Palylene Coating	Hotmelt Coating	Potting 2	Potting 1
S Series(for General purpose)											
04010SA	40	10	P17	0.14 ~ 0.19	4.9 ~ 6.7	<b>✓</b>	<b>✓</b>	<b>✓</b>	-	-	-
06020SA	60	20	P25	0.47 ~ 0.86	16.6 ~ 30.4	✓	✓	<b>✓</b>	-	-	-
06025SA	60	25	P27	0.48 ~ 1.07	16.9 ~ 37.8	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	-	-
08020SA	80	20	P32	0.88 ~ 1.13	31.1 ~ 39.9	<b>✓</b>	<b>✓</b>	<b>✓</b>	-	-	-
08025SA	80	25	P34	0.86 ~ 1.70	30.4 ~ 60.0	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	-	-
09225SA	92	25	P36	1.13 ~ 1.84	39.9 ~ 65.0	<b>✓</b>	✓	<b>✓</b>	<b>√</b>	-	-
119225SA	119	25	P38	1.90 ~ 3.63	67.1 ~ 128.2	<b>✓</b>	✓	✓	<b>√</b>	-	-
V&D&R Series(for Industrial)											
04020VA	40	20	P42	0.25 ~ 0.38	8.8 ~ 13.4	<b>✓</b>	<b>✓</b>	<b>✓</b>	-	-	<b>✓</b>
04028VA & DA	40	28	NEW	0.61 ~ 0.68	21.5 ~ 24.0	<b>✓</b>	✓	✓	-	-	<b>✓</b>
06015VA	60	15	P44	0.45 ~ 0.55	15.9 ~ 19.4	<b>√</b>	✓	✓	-	-	<b>✓</b>
06020VA	60	20	P45	0.7	24.6	<b>√</b>	✓	<b>✓</b>	-	-	✓
06025VA	60	25	P46	0.68 ~ 1.11	24 ~ 39.20	<b>✓</b>	✓	<b>√</b>	-	-	<b>✓</b>
06025VE Potting2	60	25	P47	0.68 ~ 0.90	24.0 ~ 31.7	-	-	-	-	✓	-
08025DA	80	25	NEW	TBD	TBD	<b>✓</b>	<b>✓</b>	<b>✓</b>	-	-	<b>✓</b>
08025VE Potting2	80	25	P50	1.48 ~ 2.07	52.2 ~ 73.0	-	-	-	-	✓	-
08038RA	80	38	P58	1.75 ~ 2.60	61.8 ~ 91.8	<b>√</b>	✓	<b>√</b>	-	-	<b>✓</b>
08038XX Potting2	80	38	NEW	TBD	TBD	-	-	-	-	✓	-
09225VA	92	25	P51	1.93 ~ 2.73	68.1 ~ 96.4	<b>✓</b>	✓	<b>✓</b>	-	-	<b>✓</b>
09225VX Potting2	92	25	NEW	2.25 ~ 2.43	76.6 ~ 85.8	-	-	-	-	✓	-
09232VA	92	32	P52	2.60 ~ 3.00	91.8 ~ 105.9	<b>√</b>	✓	<b>√</b>	-	-	<b>√</b>
09238RA	92	32	P59	3.36 ~ 4.00	118.6 ~ 141.2	<b>√</b>	✓	<b>√</b>	-	-	<b>√</b>
09238DX Potting2	92	38	NEW	3.9	137.7	-	-	-	-	✓	-
12038VA	120	38	P53	4.00 ~ 6.90	141.2 ~ 243.6	<b>√</b>	✓	<b>✓</b>	-	-	<b>✓</b>
15050VA	150	50	NEW	11.3 ~ 12.6	400 ~ 445	<b>√</b>	✓	✓	-	-	<b>✓</b>